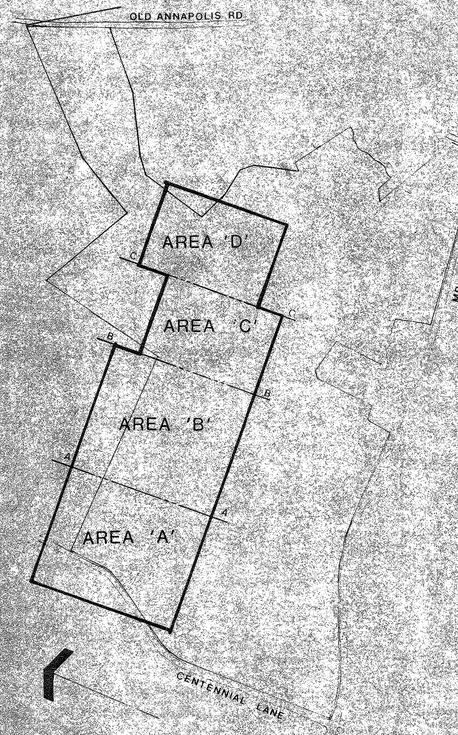

AREA REFERENCE MAP
PHASE TWO

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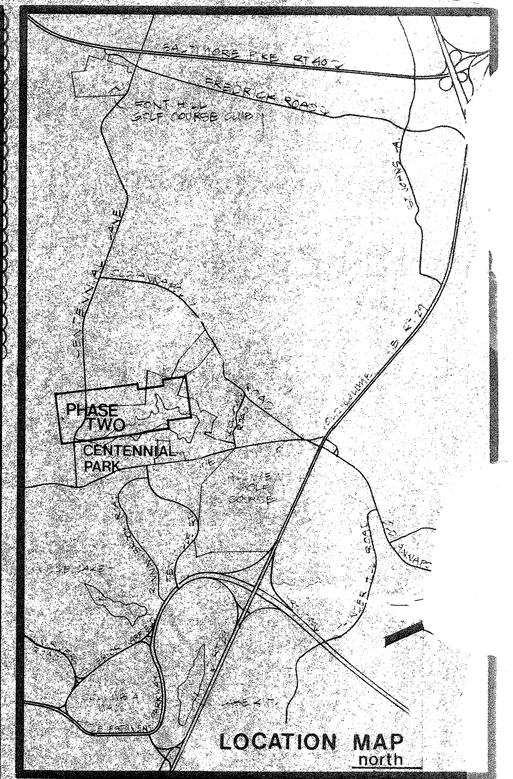
CENTENNIAL PARK

CAPITAL PROJECT NO. N-4-3014

PHASE TWO-CENTENNIAL LANE AREA

DEPT. OF PUBLIC WORKS FOR THE DEPT. OF RECREATION AND PARKS HOWARD COUNTY MARYLAND



APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 4-28-82

APPROVED: For public Water, and Storm Drainage Systems and Roads
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems
HOWARD COUNTY HEALTH DEPARTMENT
HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning
PLANNING DIRECTOR — DATE
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 50999 EXPIRATION DATE 12/9/24

PURPOSE STATEMENT - 05/06/2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL LANE

ORIGINAL MYLAR PLANS FOR SDP-82-109 WERE LOST AND ON 2/10/22 WERE RE-CREATED FROM ARCHIVED PRINTS FROM THE DEPARTMENT OF RECREATION AND PARKS.

ENGINEER'S CERTIFICATE

I CERTIFY THAT THESE CONSTRUCTION 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. 21398, EXPIRATION DATE JULY 15, 1982. I ALSO CERTIFY THAT THE PLANNING AND DESIGN OF THE SEDIMENT CONTROL AND STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS COMPLY WITH THE REQUIREMENTS OF THE ANNOTATED CODE OF MARYLAND, AS AMENDED, AND THE REGULATIONS AND STANDARDS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — DATE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THESE PLANS AND THE APPROVED SEDIMENT AND EROSION CONTROL AND STORMWATER MANAGEMENT PLANS AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION CONTROL BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS.

SIGNATURE OF DEVELOPER — DATE

TITLE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT

SIGNATURE — DATE

U.S. SOIL CONSERVATION SERVICE

SITE ANALYSIS

TOTAL AREA OF SITE	64.06±
TOTAL AREA OF LOT (S)	27.50±
TOTAL AREA OF PREVIOUS PLANS	0.00
TOTAL AREA OF THIS PLAN	5.85±
NET INCREASE IN PREVIOUS AREA	4.55±
TOTAL VEGETATIVE AREA	23.40±
TOTAL IMPERVIOUS AREA	56.75
EXISTING ZONING	R-20

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED — DATE
HOWARD S.C.D.

SHEET INDEX

0	Cover Sheet	25	Roadway & Parking Lot Sections	1A	Restroom Bldg. Foundation Plan Misc. Sections and Details
1	Ext'g. Conditions/Demo. Plan Area "A"	26	Wall Elevations	2A	Restroom Bldg. Floor Plan & Elevation
2	Ext'g. Conditions/Demo. Plan Area "B"	27	Profile-Center Line of Road to Parking Area plus Septic Tank & Tile Field incl. MH & Distribution Box	3A	Framing Plan
3	Ext'g. Conditions/Demo. Plan Area "C"	28	Storm Drain Profiles	4A	Restroom Bldg. Misc. Sections & Details
4	Ext'g. Conditions/Demo. Plan Area "D"	29	Storm Drain Profiles	5A	Restroom Bldg. - Misc. Details
5	Const. Layout Plan Area "A"	30	Storm Drain Profiles	6A	Restroom Bldg. - Misc. Details
6	Const. Layout Plan Area "B"	31	Court Games Blow-Up and Details	7A	Restroom Electrical Plan
7	Const. Layout Plan Area "C"	32	Court Games Play Area	8A	Restroom Bldg. - Plumbing Layout, Misc. Details
8	Const. Layout Plan Area "D"	33	Tri-Plex Blow-Up & Details	9A	Restroom Bldg. - Decking Plan & Sections
9	Grading Plan Area "A"	34	Pedestrian Bridge "A" Plan, Elevation, and Details	10A	Overlook Pavilion Site Plan & Misc. Construction Details
10	Grading Plan Area "B"	35	Pavement Details	11A	Overlook Pavilion/Foundation Plan & Floor Framing Plan
11	Grading Plan Area "C"	36	Misc. Construction Details	12A	Overlook Pavilion/Floor Plan & Roof Framing Plan
12	Grading Plan Area "D"	37	Misc. Construction Details	13A	Elevations/Overlook Pavilion
13	Area "A" Storm Drainage Map, Storm Drains, Sanitary & Cold Water	38	Storm Drain Profiles	14A	Elevations/Overlook Pavilion
14	Area "B" Storm Drainage Map, Storm Drains, Sanitary & Cold Water	39	Planting Plan A	15A	Overlook Pavilion/Construction Details
15	Sediment Erosion Control/Plan Area "A"	40	Planting Plan B	16A	Overlook Pavilion/Construction Details
16	Sediment Erosion Control/Plan Area "B"			17A	Overlook Pavilion/Beam-Seat Connections
17	Sediment Erosion Control/Plan Area "C"				
18	Sediment Erosion Control/Plan Area "D"				
19	Sediment Erosion Control Details				
20	Lighting Plan Area "A"				
21	Lighting Plan Area "B"				
22	Electrical Details				
23	Electrical Details				
24	Electrical Plan-Restrooms Building, Schedules, Wiring Diagram, Symbol List & Details				

REFER TO SHEET INDEX ABOVE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 32.61 ac.±
New Deeded Area 3652, Parcel 295, 6.45 ac.±

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 837 Folio 588, Parcel 7
Sherry L. Holliday
Liber 606 Folio 91, Parcel 21
Gene Mikulsko
Liber 612 Folio 543, Parcel 8

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

COVER SHEET
CENTENNIAL PARK
PHASE TWO-CENTENNIAL LANE AREA

DATE	7/15/82	REVISIONS	
SCALE		1 REVISED SITE DEVELOPMENT PLAN - 05/06/2024	
DRAWN			
CHECKED			

SHEET NO. 1 OF 125
SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

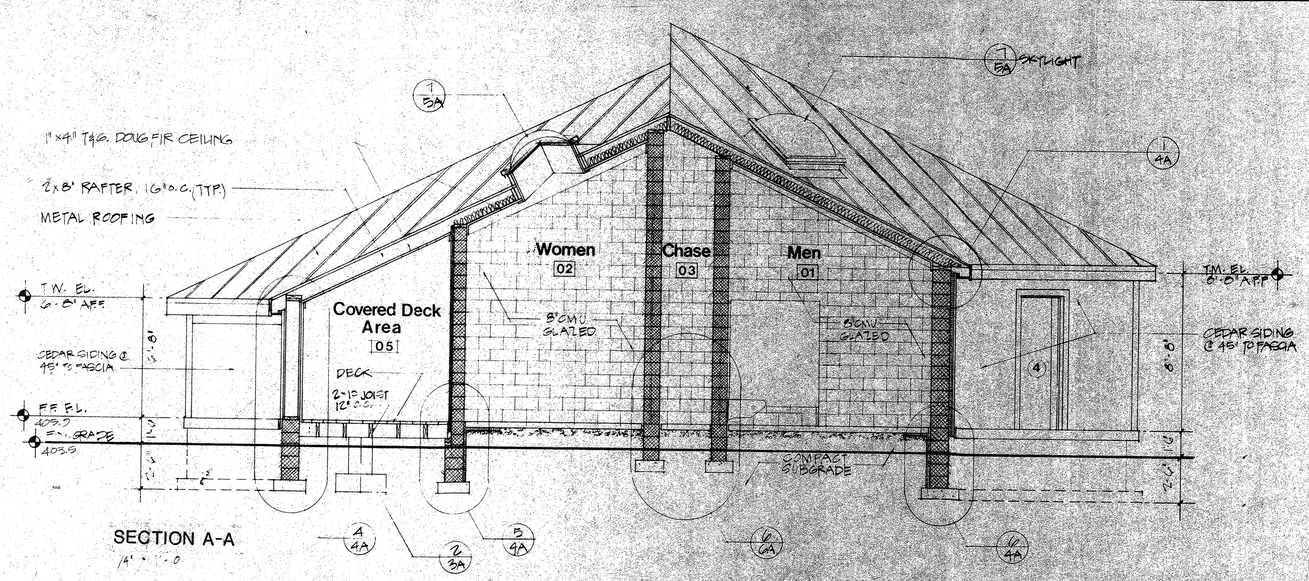
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

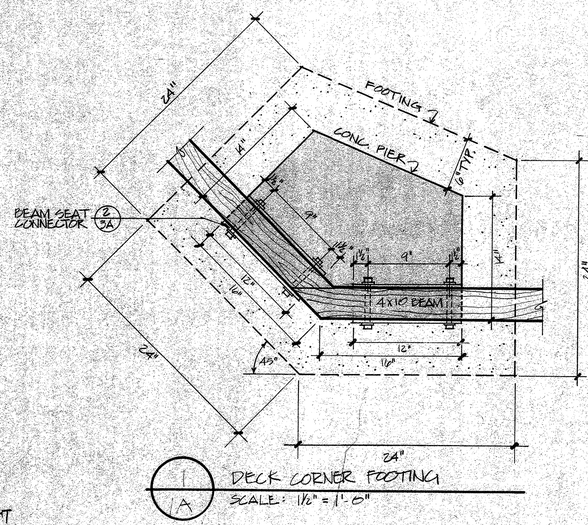
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

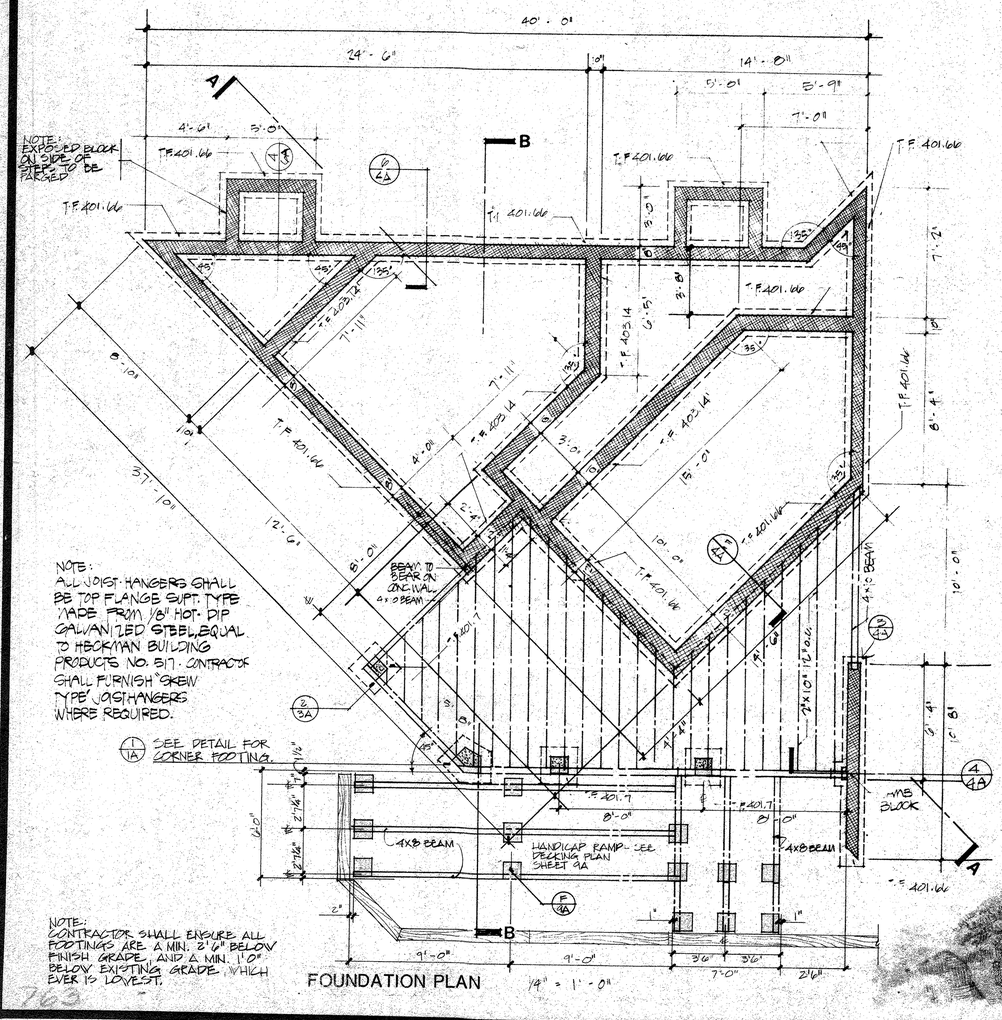
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



SECTION A-A
1/4" = 1'-0"



DECK CORNER FOOTING
SCALE: 1/2" = 1'-0"



APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

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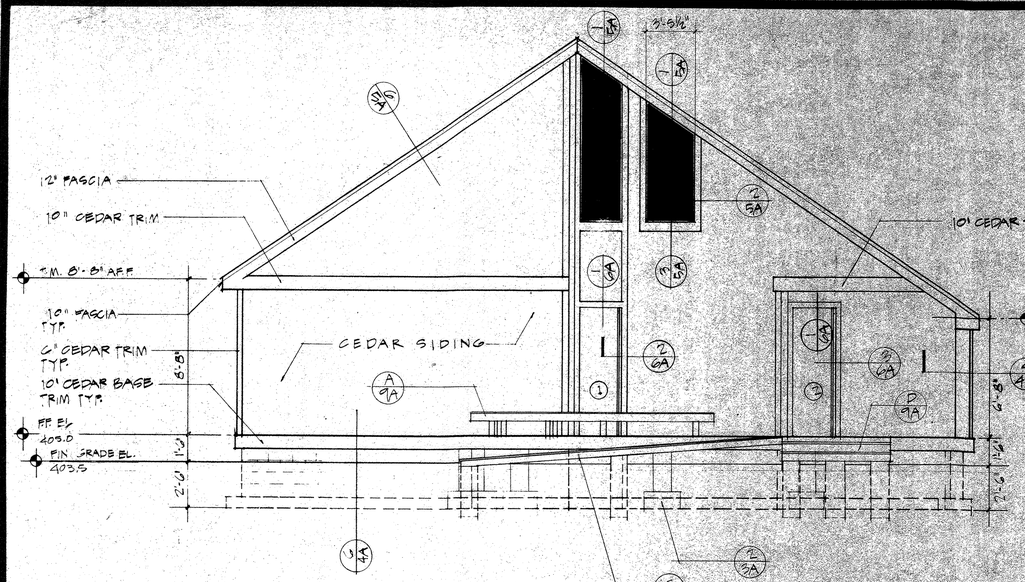
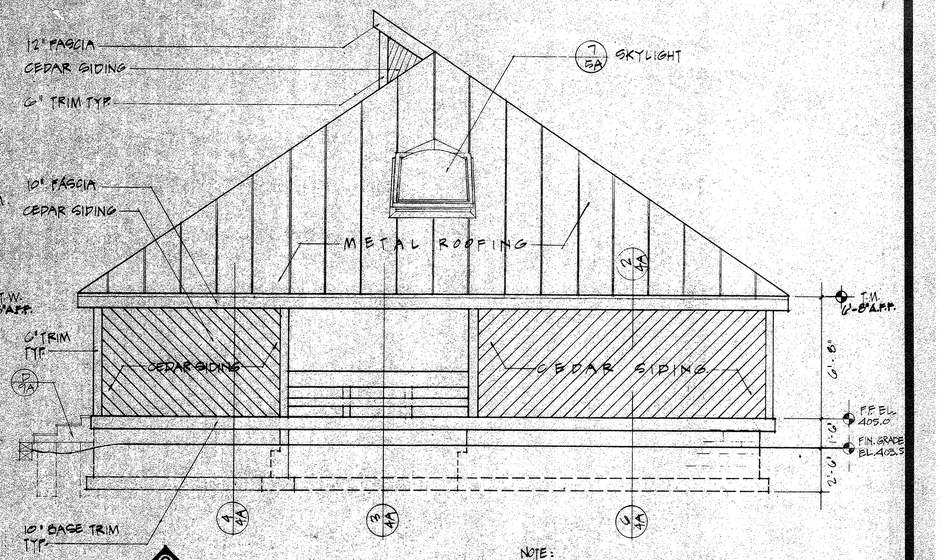


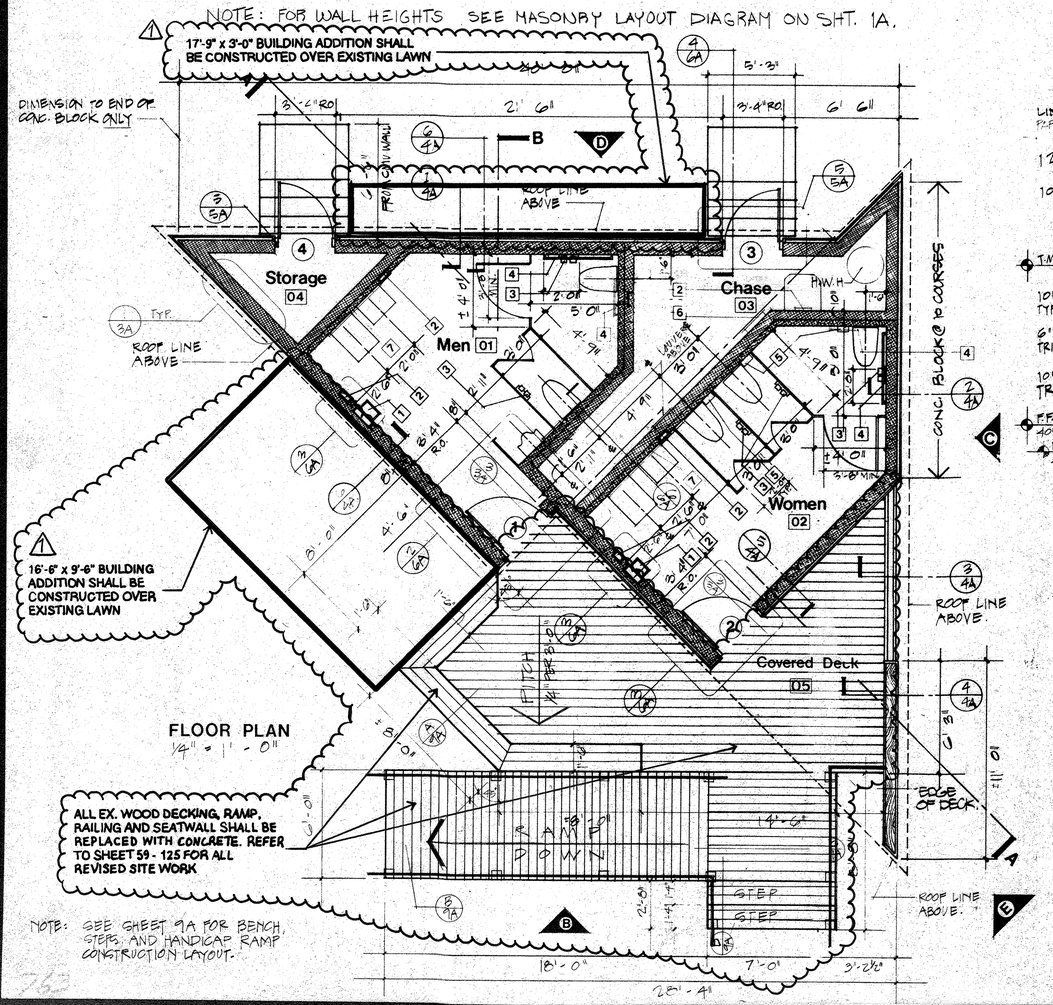
B ELEVATION 1/4" = 1'-0"



C 1/4" = 1'-0"

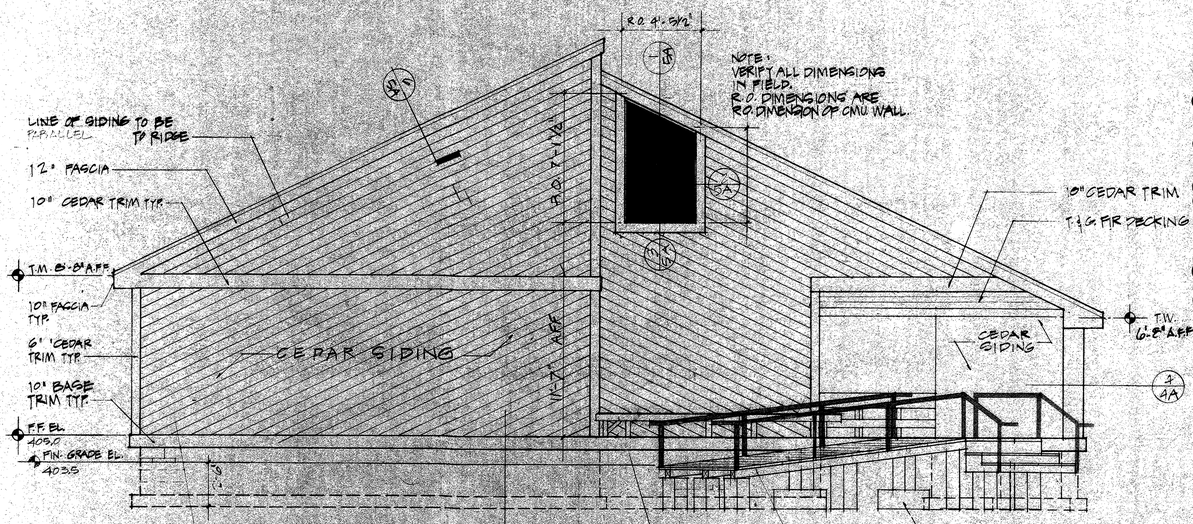
NOTE: CEDAR SIDING @ 45° TO FASCIA.

NOTE: FOR WALL HEIGHTS SEE MASONRY LAYOUT DIAGRAM ON SHT. 1A.



FLOOR PLAN 1/4" = 1'-0"

NOTE: SEE SHEET 9A FOR BENCH, STEPS, AND HANDICAP RAMP CONSTRUCTION LAYOUT.



A ELEVATION 1/4" = 1'-0"

NOTE: VERIFY ALL DIMENSIONS IN FIELD. R.O. DIMENSIONS ARE R.O. DIMENSION OF CMU WALL.

NOTE: 1
CONTRACTOR SHALL INSURE ALL FOOTINGS ARE A MIN. 2'-6" BELOW FINISH GRADE AND A MIN. 1'-0" BELOW EXISTING GRADE WHICH EVER IS LOWEST.

NOTE: 2
CONCRETE BLOCK CARRIED TO 10 COURSES ABOVE FINISH FLOOR AS DIMENSIONED. ALL OTHER BLOCK WORK CARRIED TO UNDERSIDE OF ROOF

NOTE: 3
DIMENSIONS REFER TO C.M.U. WALL WHERE APPLICABLE.

FIXTURE SCHEDULE

MARK	QTY.	FIXTURE	MAKE	MODEL	ROUGH OPENING	REMARKS
1	2	COMBINATION PAPER TOWEL DISP. AND WASTE RECEPTACLE	BOBRICK	B-3947	16" x 54⅜" x 4"	
2	3	RECESSED SOAP DISPENSER	SUPPLIED BY OWNER			ONE OVER SERVICE SINK
3	5	TOILET PAPER DISPENSER	BOBRICK	B-274		
4	2	STAINLESS STEEL GRAB BAR	BOBRICK	B-6106		B-6106 x 42" HORIZONTAL B-6126 x 26" HORIZONTAL
5	3	SURFACE MOUNTED FEMININE DISPOSAL	BOBRICK	B-270		
6	1	SURFACE MOUNTED PAPER TOWEL DISPENSER	BOBRICK	B-262		OVER SERVICE SINK
7	2	STAINLESS STEEL ANGLE FRAME MIRROR	BOBRICK	B-2700 x 1830		BOTTOM OF MIRROR 3'-4" A.F.F.

DOOR SCHEDULE

MARK	SIZE	TYPE	HARDWARE	THRESH.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	REMARKS
1	3'-0" x 7'-2" x 1¾"	H.M.	LOCKSET	ALUMINUM				W/ WEATHERSTRIPPING
2	3'-0" x 7'-2" x 1¾"	H.M.	LOCKSET	ALUMINUM				W/ WEATHERSTRIPPING
3	3'-0" x 7'-2" x 1¾"	H.M.	LOCKSET	ALUMINUM				W/ WEATHERSTRIPPING
4	3'-0" x 7'-2" x 1¾"	H.M.	LOCKSET	ALUMINUM				W/ WEATHERSTRIPPING

* H.M. = HOLLOW METAL ** SEE SPEC'S FOR HARDWARE SCHEDULE.

STATE OF MARYLAND — MARY A. MADDEN — 9868 — PROFESSIONAL ENGINEER — 5/16/24

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THE CHANGES ASSOCIATED WITH REVISIONS DATED 5/16/24 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. 56949 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (6) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

ARCHITECTURAL REGISTRATION BOARD — 8868 — STATE OF MARYLAND

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM BLDG. FLOOR PLAN & ELEVATION
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS: ⚠1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE		
DRAWN		
CHECKED		

SHEET NO. 2A OF ⚠1 12 SHEETS

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
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Liber 805 Folio 588, Parcel 7
Harry L. Holliday
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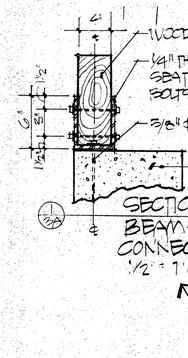


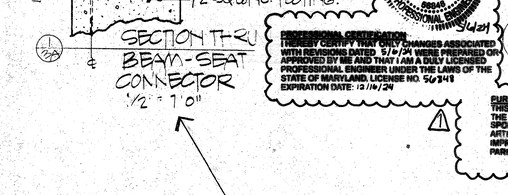
SECTION THRU BEAM-SEAT CONNECTOR
1/2" = 1'-0"

1 / 2A

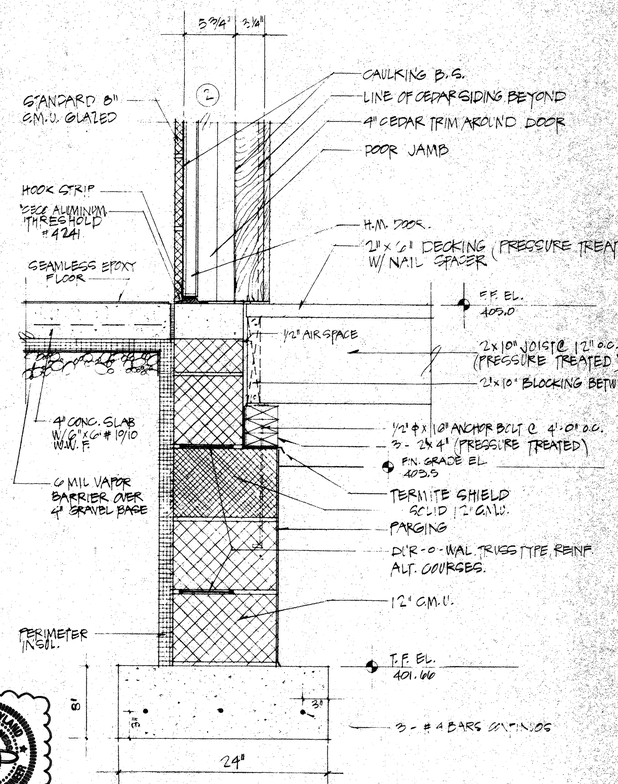
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THE CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 56348 EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

1



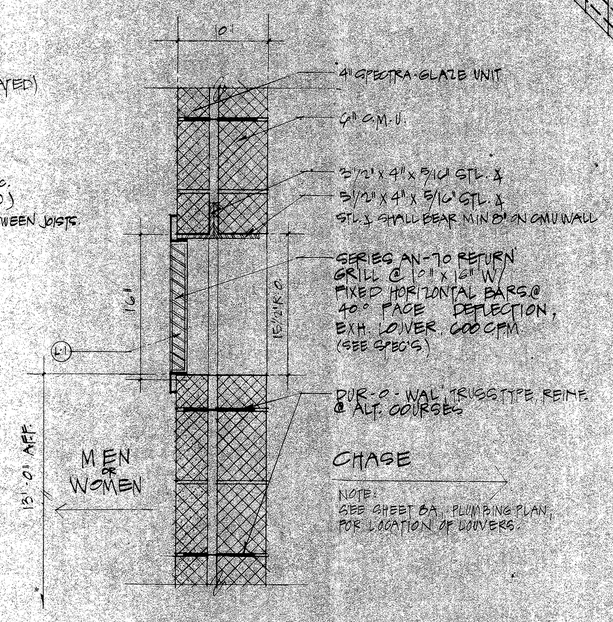
2 / 3A — DECK FOOTING-(TYPICAL)
1 1/2" = 1'-0"



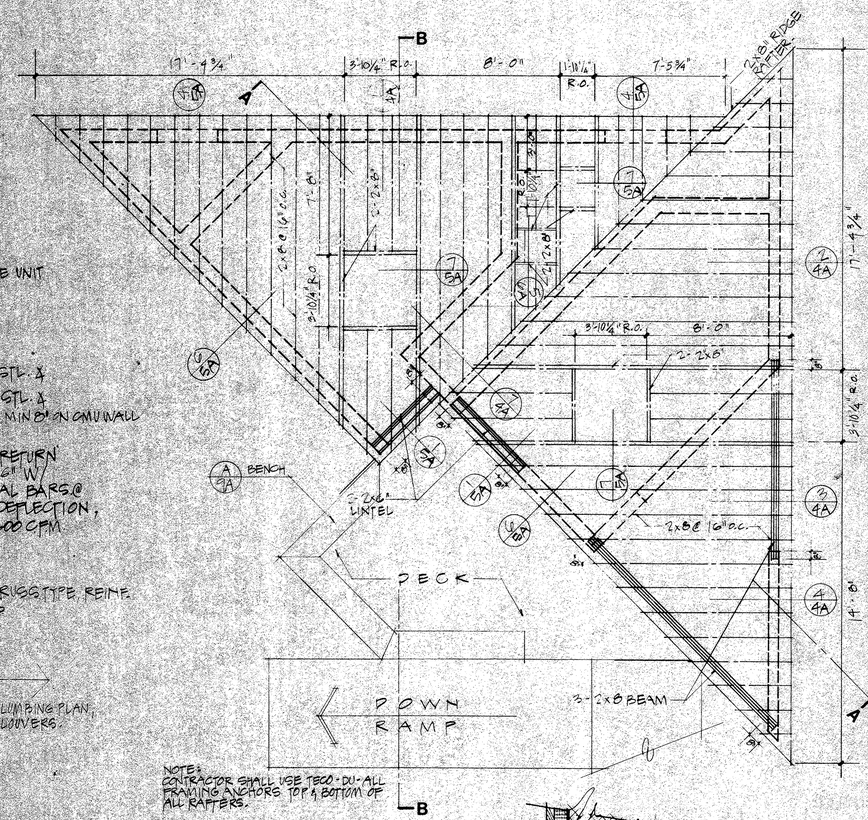
3 / 3A — DETAIL = DOOR SILL # 1 & # 2 (TYP.)
1 1/2" = 1'-0"

LOUVER SCHEDULE

MARK	SIZE	DETAIL	REMARKS
L-1	10"x16"x1 1/8"	4 / 3A	TWO STL. & LINTELS BACK-TO-BACK
L-2	10"x16"x1 1/8"	4 / 3A	TWO STL. & LINTELS BACK-TO-BACK

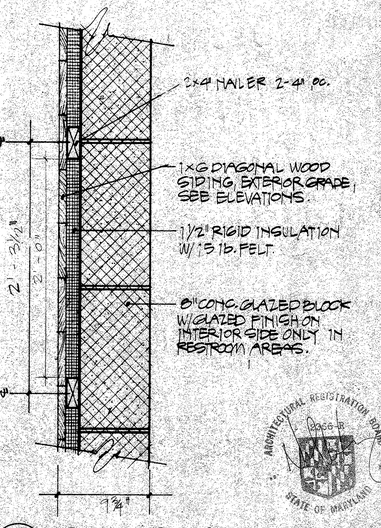


4 / 3A — DETAIL = SECTION THRU LOUVER (TYP.)
1 1/2" = 1'-0"

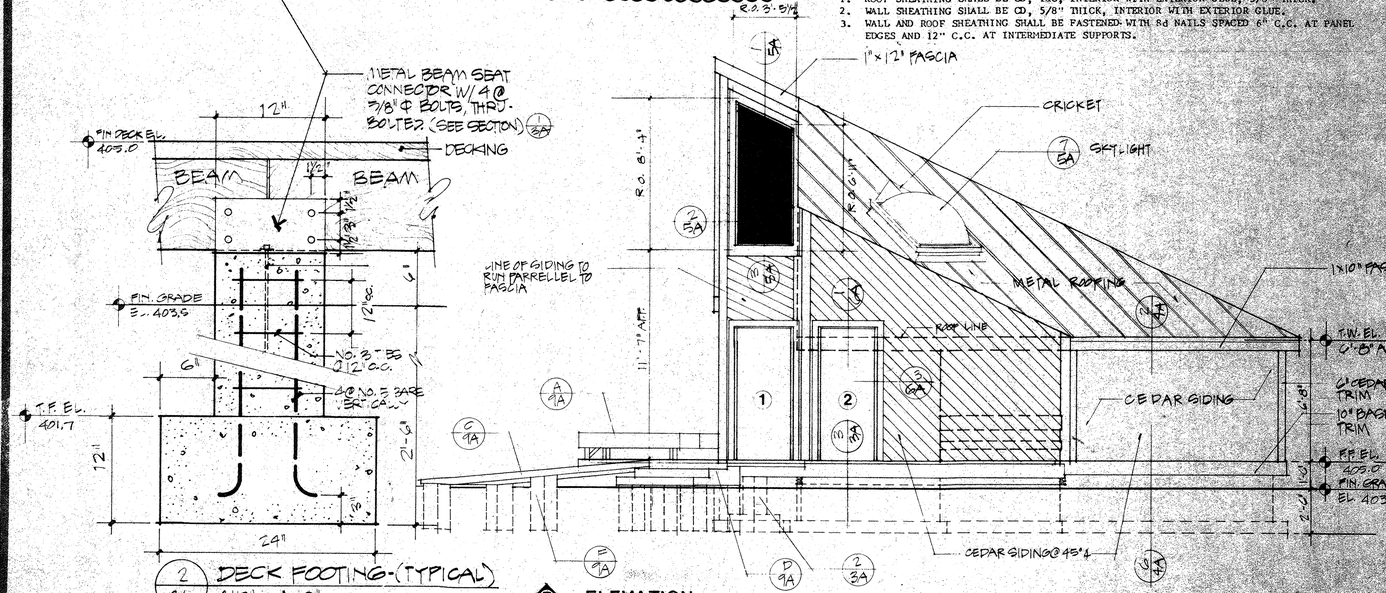


B

ROOF FRAMING PLAN
1/4" = 1'-0"



1 / 3A — DETAIL OF PLAN @ BLOCK WALL
SCALE 1 1/2" = 1'-0"



E ELEVATION

STRUCTURAL NOTES

1. DESIGN LIVE LOADS:
   - A. FLOOR AND DECK: 100 PSF
   - B. ROOF: 20 PSF
   - C. WIND: 15 PSF
2. FOUNDATIONS:
   - A. SOIL BEARING VALUE IS ASSUMED TO BE 3000 PSF. CONTRACTOR SHALL EMPLOY A GEOTECHNICAL ENGINEER TO ASCERTAIN THAT SOIL OF THIS CAPACITY EXISTS AT BOTTOM OF FOOTINGS BEFORE POURING OF CONCRETE. IF SOIL OF THIS CAPACITY OR HIGHER IS FOUND NOT TO EXIST THEN WORK MUST BE SUSPENDED UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.
   - B. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND 1' BELOW EXISTING GRADE.
   - C. BACKFILL SHALL BE PLACED IN 8" LAYERS AND COMPACTED WITH APPROVED MECHANICAL TAMPERS TO MAXIMUM DENSITY.
3. CONCRETE:
   - A. CONCRETE SHALL BE PROPORTIONED TO DEVELOP COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
   - B. 6 X 6 #10/10 WIRE MESH SHALL BE PLACED IN ALL SLABS ON GRADE UNLESS NOTED OTHERWISE. LAPS SHALL BE A MINIMUM OF 6".
4. MASONRY:
   - A. ALL MORTAR IN FOUNDATIONS SHALL BE TYPE-S PER BOCA BASIC BUILDING CODE, SECTION 814, HAVING COMPRESSIVE STRENGTH OF 1,800 PSI IN 28 DAYS.
   - B. CONCRETE BLOCK SHALL BE LOAD BEARING PER ASTM C90-75.
   - C. MASONRY WALL REINFORCING SHALL BE STANDARD GAGE DUR-O-WAL, GALVANIZED, LAID IN EVERY SECOND BED JOINT EXCEPT WHERE NOTED OTHERWISE. TWO CONSECUTIVE JOINTS ABOVE AND BELOW OPENINGS AND TOP THREE COURSES OF ALL WALLS SHALL ALSO BE REINFORCED.
   - D. TOP OF ALL WALLS AND BEARING COURSES UNDER JOIST AND BEAMS SHALL BE SOLID BLOCK A MINIMUM OF 9" HIGH, FULL THICKNESS OF WALL.
5. METALS:
   - A. ALL NAILS, BOLTS, PLATES, HANGERS, ANCHORS, AND IRON OF EVERY DESCRIPTION SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
6. STRUCTURAL WOOD:
   - A. ALL STRUCTURAL WOOD SHALL BEAR THE GRADE MARK OF THE GRADING RULES AGENCY HAVING JURISDICTION.
   - B. ROOF AND WALL FRAMING SHALL BE NO. 2 SOUTHERN PINE, NO. 2 HEM/FIR OR APPROVED EQUAL.
   - C. DECKING, JOIST AND TIMBERS SHALL BE PRESSURE TREATED SOUTHERN PINE. TREATMENT SHALL CONFORM TO AMERICAN WOOD-PRESERVERS' ASSOCIATION STANDARD AWPB LP-22. TREATMENT SHALL BE CCA, CHROMATED COPPER ARSENATE.
     1. DECKING SHALL BE NO. 1, TREATED TO .40 RETENTION.
     2. JOIST AND BEAMS TO 4" THICK SHALL BE NO. 2, TREATED TO .60 RETENTION.
     3. BEAMS THICKER THAN 4" SHALL BE NO. 2 SR (STRESS RATED) TREATED TO .60 RETENTION.

D. ALL FRAMING MEMBERS SHALL HAVE MINIMUM 4" BEARING ON WOOD OR MASONRY OR BE SUPPORTED BY METAL FRAMING DEVICES CAPABLE OF DEVELOPING FULL STRENGTH OF THE MEMBER.

E. BOCA BUILDING CODE, APPENDIX L, RECOMMENDED NAILING SCHEDULE, SHALL BE FOLLOWED FOR ALL WOOD NAILING UNLESS SPECIFIED OTHERWISE.

F. ALL PLYWOOD SHALL BE GRADED PER AMERICAN PLYWOOD ASSOCIATION STANDARDS.

1. ROOF SHEATHING SHALL BE CD, T&G, INTERIOR WITH EXTERIOR GLUE, 5/8" THICK.
2. WALL SHEATHING SHALL BE CD, 5/8" THICK, INTERIOR WITH EXTERIOR GLUE.
3. WALL AND ROOF SHEATHING SHALL BE FASTENED WITH 8d NAILS SPACED 6" C.C. AT PANEL EDGES AND 12" C.C. AT INTERMEDIATE SUPPORTS.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

FRAMING PLAN
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82
SCALE	
DRAWN	
CHECKED	

REVISIONS:
⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 3A OF 56 ⚠ 125

SDP-82-109

763

APPROVED: For public Water, private Sewerage and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-28-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

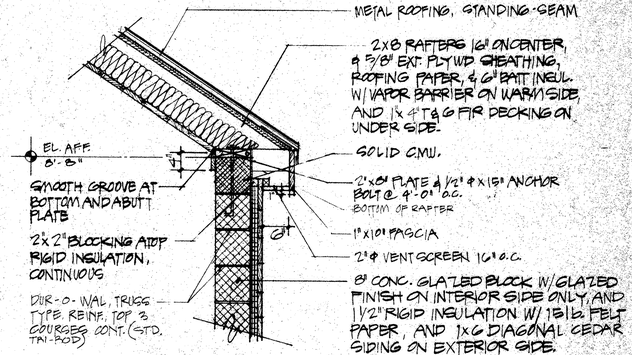
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

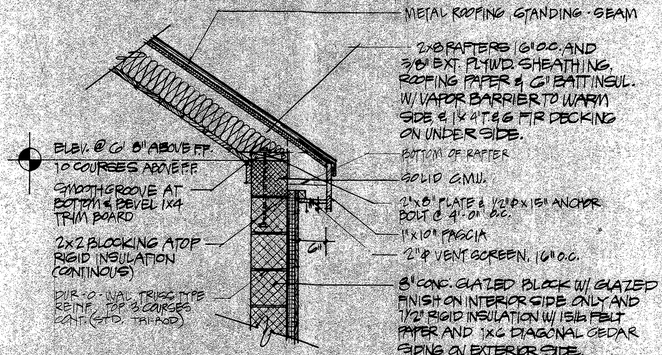
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

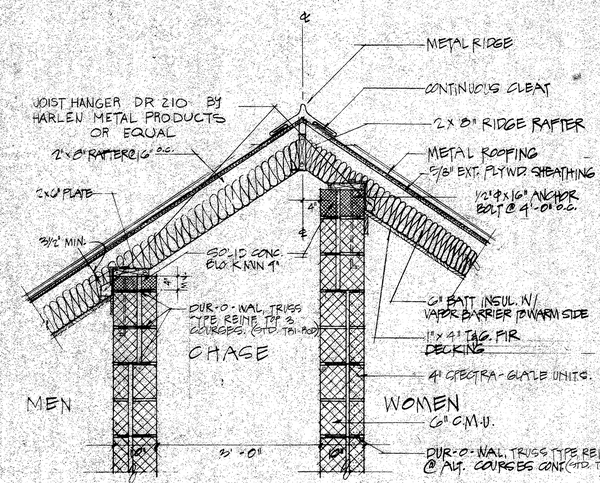
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



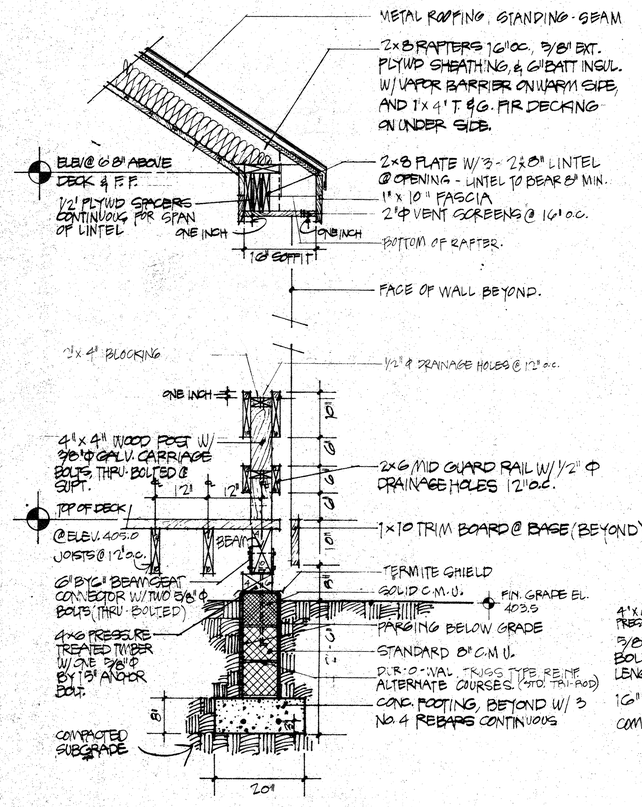
1/4A DETAIL @ HIGHER BLOCK WALL
SCALE 3/4 INCH = ONE FOOT.



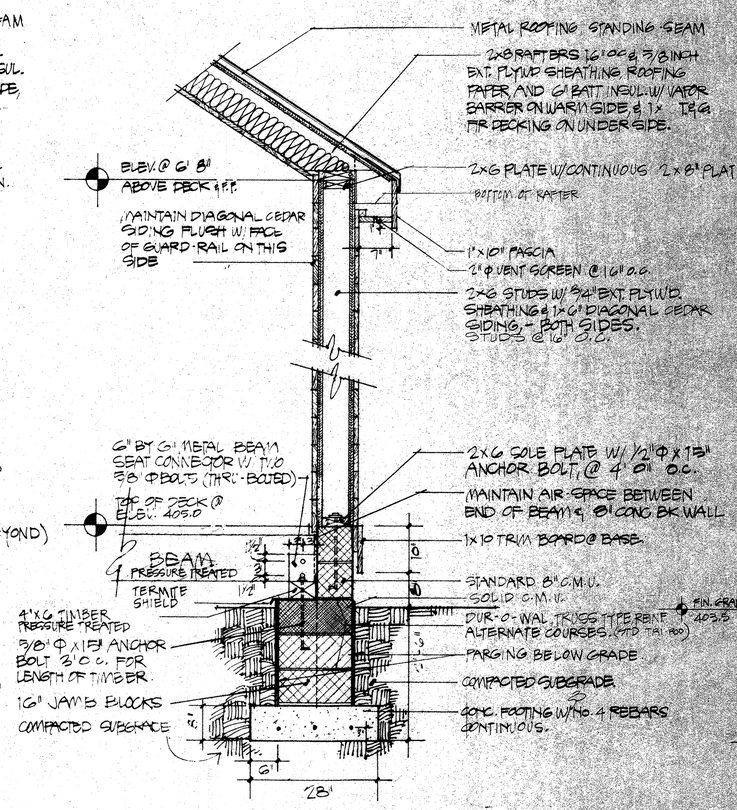
1/4A DETAIL @ LOWER BLOCK WALL
SCALE 3/4 INCH = ONE FOOT.



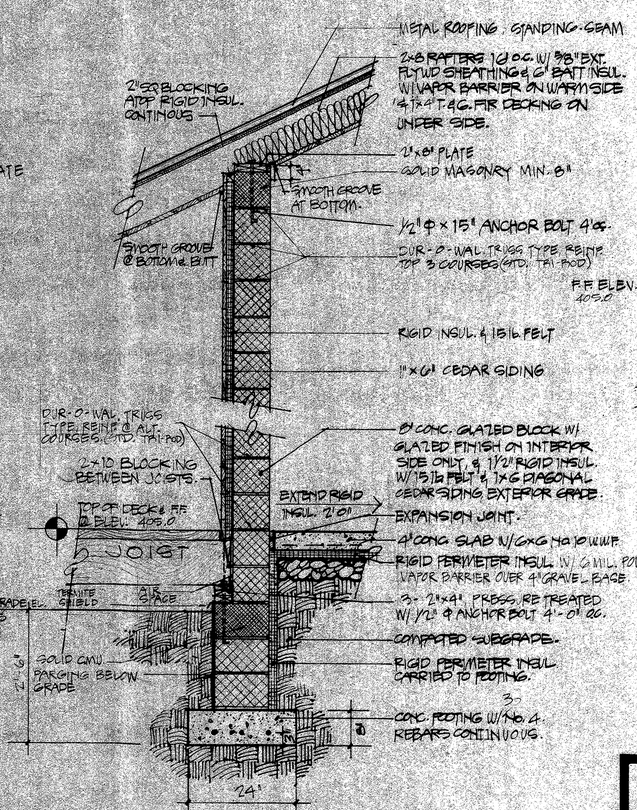
7/4A DETAIL: RIDGE
SCALE 3/4" = 1'-0"



3/4A HEADER DETAIL @ OPENING
SCALE 3/4 INCH = ONE FOOT.



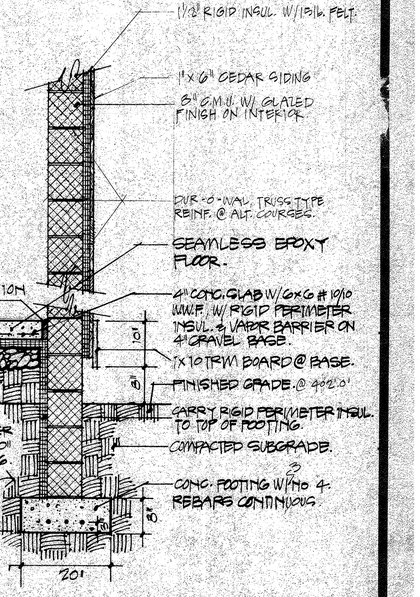
4/4A DETAIL @ WOOD WALL
SCALE 3/4 INCH = ONE FOOT.



5/4A DETAIL @ BLOCK WALL
SCALE 3/4 INCH = ONE FOOT.

NOTE:
ALL DECKING & DECK FRAMING MEMBERS SHALL BE PRESSURE TREATED. (SEE SPEC'S.)

VAPOR BARRIER UNDER 4" CONC. SLAB SHALL BE 4 MIL. (SEE SPEC'S.)



6/4A FOUNDATION @ BLOCK WALL (TYPICAL)
SCALE 3/4" = ONE FOOT

PROFESSIONAL CERTIFICATION
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PURPOSE STATEMENT - 05.06.2024
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LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM BLDG. MISC. SECTIONS & DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS: 4 REVISED SITE DEVELOPMENT PLAN - 05.06.2024	SHEET NO. 4A OF 5
SCALE			
DRAWN			
CHECKED			

SDP-82-109

APPROVED: For public Water, private Sewerage and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING REG. — DATE 7-20-82

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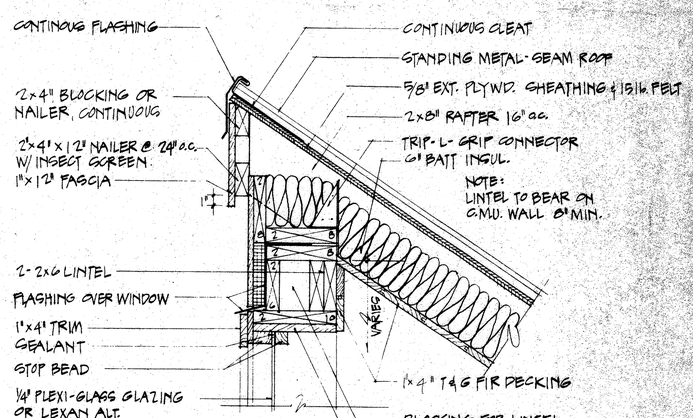
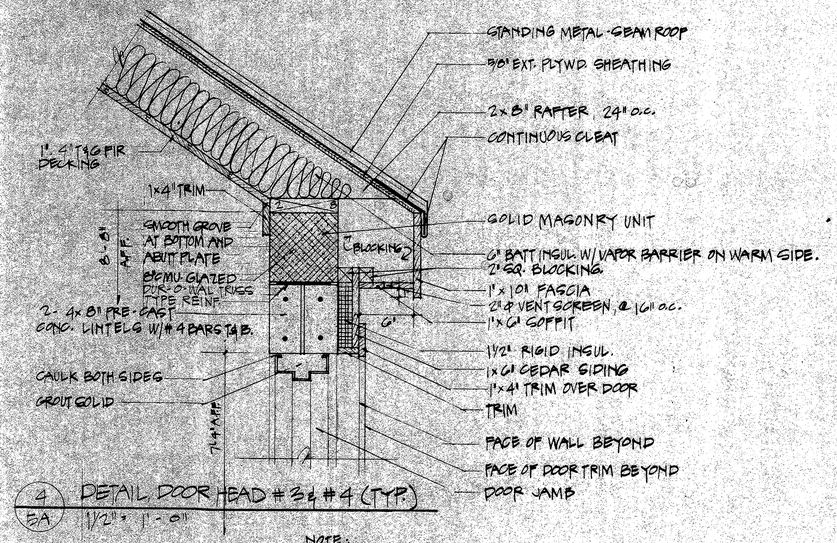
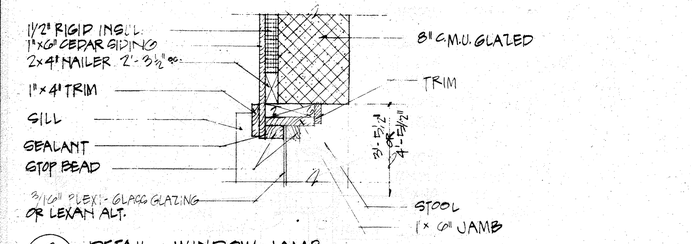


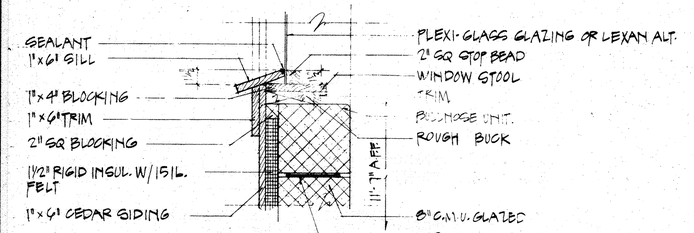
1/5A DETAIL: WINDOW HEAD
1 1/2" = 1'-0"



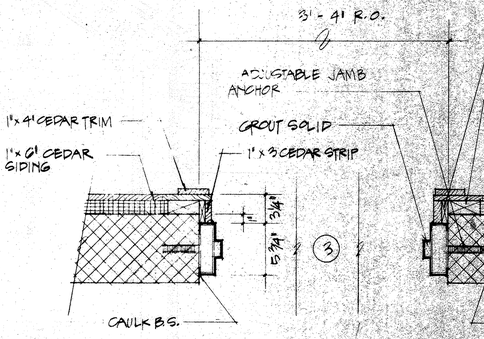
4/5A DETAIL DOOR HEAD #3 & #4 (TYP.)
1 1/2" = 1'-0"



2/5A DETAIL: WINDOW JAMB
1 1/2" = 1'-0"

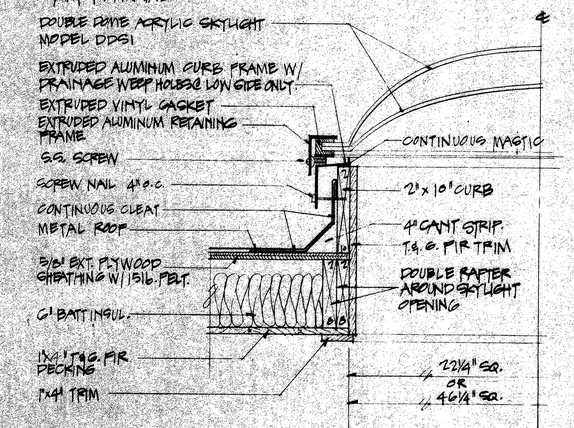


3/5A DETAIL: WINDOW SILL
1 1/2" = 1'-0"



5/5A DETAIL: DOOR JAMB #3 & #4 (TYP.)
1 1/2" = 1'-0"

NOTE:
ACRYLIC PLASTIC DOME SKYLIGHTS SHALL BE WASCO SKYDOME BRAND UNITS, MODEL NO. 61-2020 AND 61-3232. MANUFACTURED BY WASCO PRODUCTS, INC. SANFORD, MAINE.



7/5A DETAIL: SECTION THRU SKYLIGHT
1 1/2" = 1'-0"

FINISH SCHEDULE

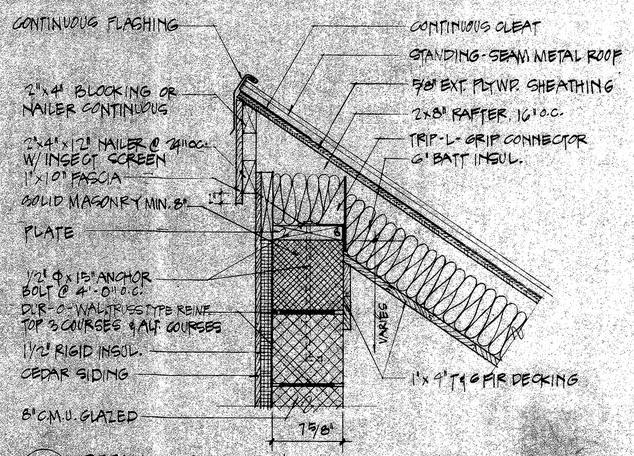
MARK	SPACE	FLOOR: HARDENED CONCRETE SEAMLESS EPOXY FL.	FLOOR: WOOD DECK	BASE: EPOXY	BASE: STRUCTURAL FACING TILE	BASE: NONE	WALL: SPECTRA-GLAZE	WALL: CALL BOARD W/ LAMB	WALL: NONE	CEILING: CEDAR SIDING	CEILING: T.&G. BOARDS W/ FIR	CEILING: EXPOSED STRUCTURE	CEILING: PVC PANELS	REMARKS
01	MEN'S TOILET ROOM		●			●		●	●		●			4' SPECTRA-GLAZE, S.F.T. UNITS
02	WOMENS TOILET ROOM		●			●		●	●		●			4' SPECTRA-GLAZE, S.F.T. UNITS
03	CHASE	●			●			●				●		
04	STORAGE	●			●			●				●		
05	COVERED DECK		●							●	●			

SYMBOLS

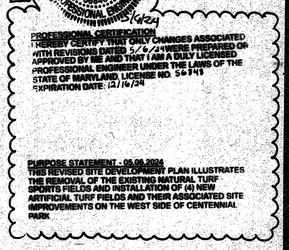
C.M.U.		RIGID INSUL.		GRAVEL	
GLAZED C.M.U.		PLYWOOD		STEEL	
SOLID C.M.U.		ROUGH WOOD		DETAIL	
CONCRETE		FINISH WOOD		DETAIL NO. / SHEET NO.	

ABBREVIATIONS

A.F.F.	ABOVE FINISH FLOOR	REBAR	REINFORCING BAR
ALT.	ALTERNATE	S.F.T.	STRUCTURAL GLAZED FACING TILE
C.M.U.	CONCRETE MASONRY UNIT	STL.	STEEL
CONC.	CONCRETE	T.F.	TOP OF FOOTING
CONT.	CONTINUOUS	T.M.	TOP OF MASONRY
DIA.	DIAMETER	T.W.	TOP OF WALL
EA.	EACH	WD.	WOOD
EL.	ELEVATION	W.W.F.	WIRE WELDED FABRIC
GA.	GUAGE	∠	ANGLE
INSUL.	INSULATION	@	AT
MIN.	MINIMUM	℄	CENTER LINE
O.C.	ON CENTER	φ	DIAMETER
PLYWD	PLYWOOD	O.D.	OUTSIDE DIAMETER
R.O.	ROUGH OPENING	#	NUMBER



6/5A DETAIL: END WALL
1 1/2" = 1'-0"



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EXPIRATION DATE: 12/16/24

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ARCHITECTURAL REGISTRATION BOARD
STATE OF MARYLAND
2560-R

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND

RESTROOM BLDG. - MISC. DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	
DRAWN	
CHECKED	

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 5A OF 1 125

SDP-82-109

APPROVED: For public Water, private Sewerage and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADM. — DATE 7-20-82

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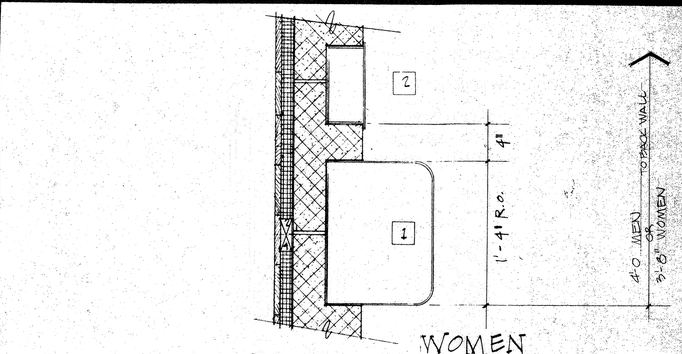
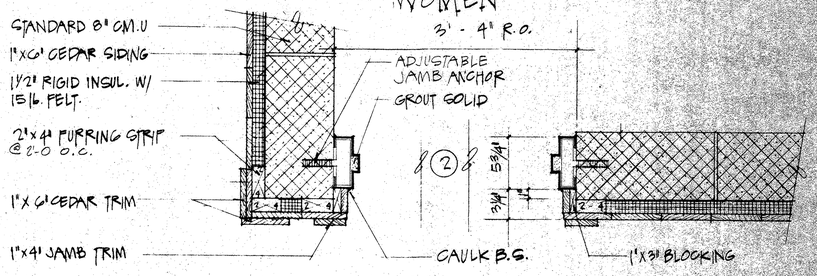
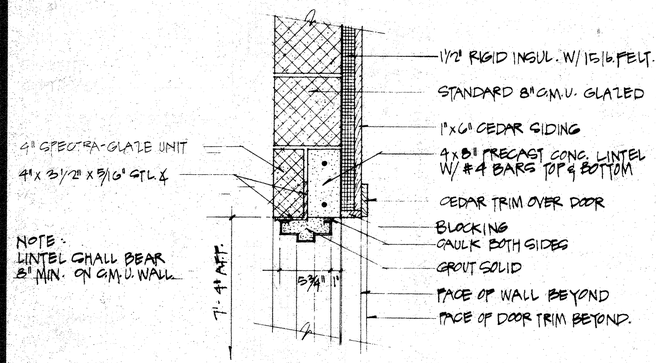
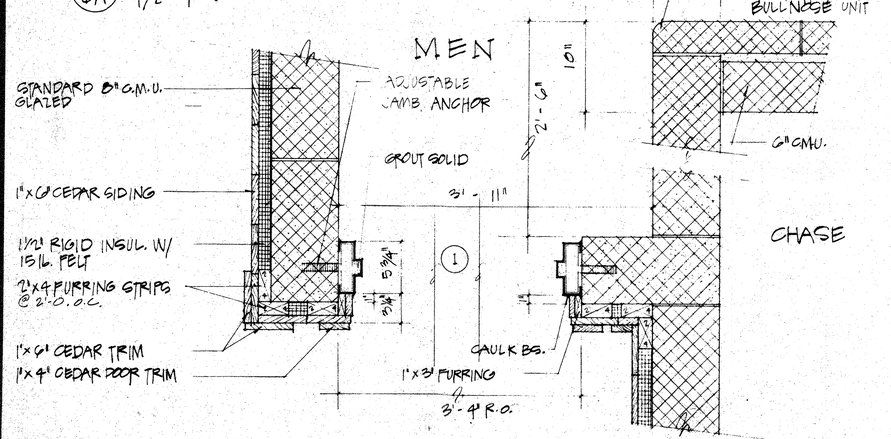




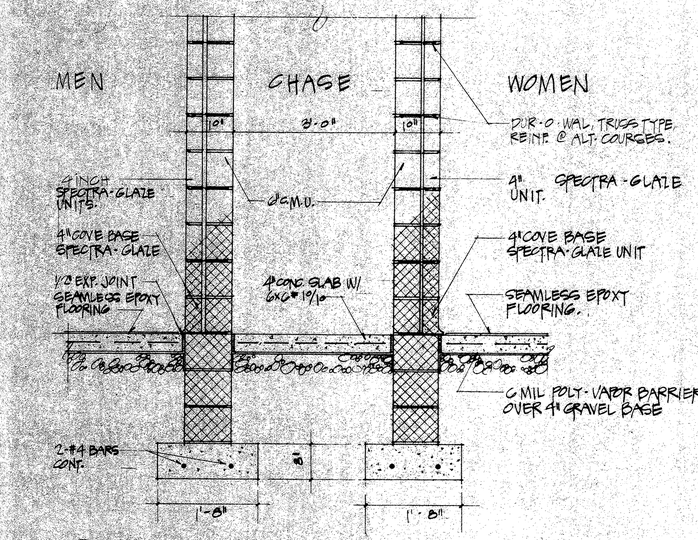
3/6A DETAIL: TOILET ROOM ENTRANCE (JAMB-DOOR #2)
1½" = 1'-0"



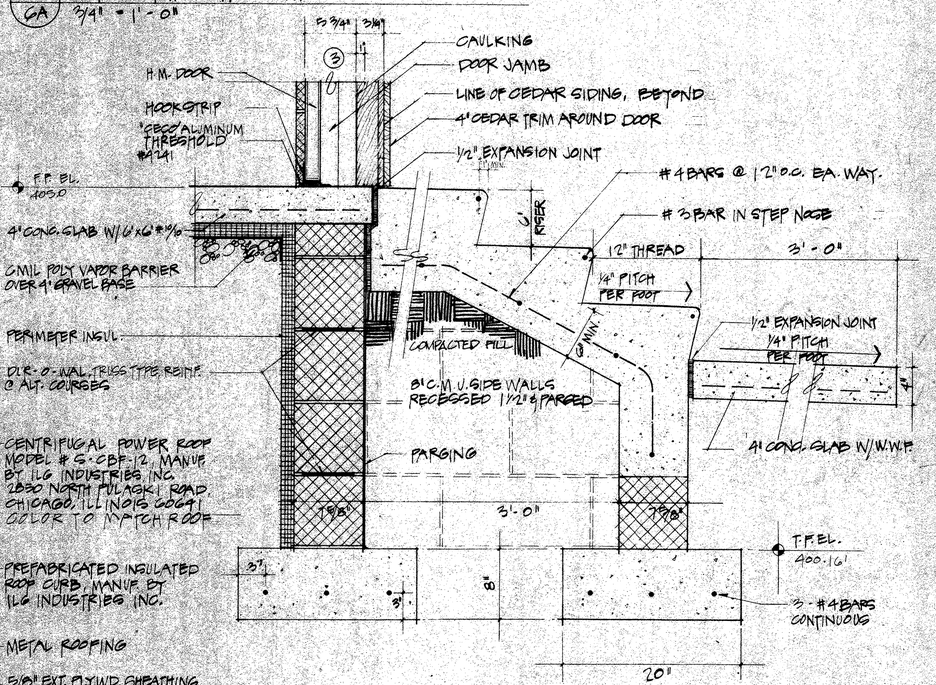
1/6A DETAIL: OF HEAD @ DOOR #1 & 2 (TYP.)
1½" = 1'-0"



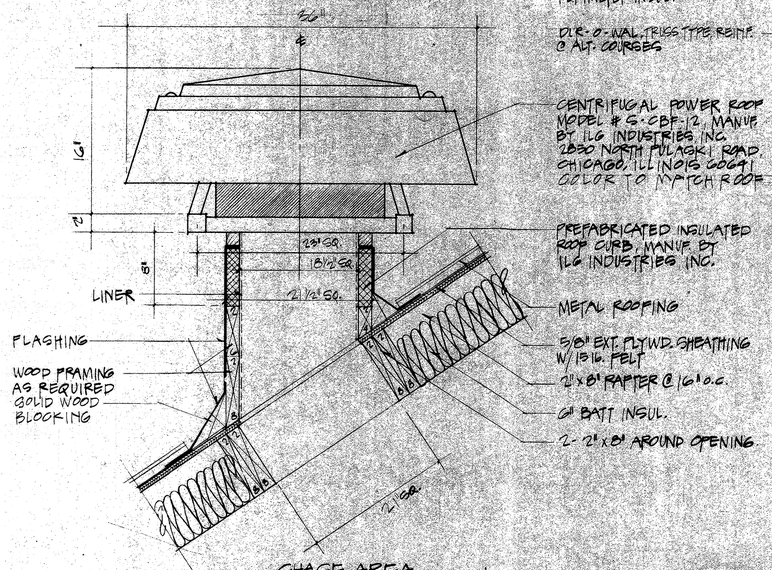
2/6A DETAIL: TOILET ROOM ENTRANCE (JAMB-DOOR #1)
1½" = 1'-0"



6/6A DETAIL: THRU CHASE WALL
3/4" = 1'-0"



4/6A DETAIL: SECTION THRU STEPS & DOOR SILL #3 & #4 (TYP.)
1½" = 1'-0"



CHASE AREA

5/6A DETAIL: SECTION THRU POWER ROOF VENT
1½" = 1'-0"

STATE OF MARYLAND — ANTHONY A. MAZZA — 9818 — PROFESSIONAL ENGINEER — 5/14/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/8/24 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. 9818
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

ARCHITECTURAL REGISTRATION BOARD — 2366-R — STATE OF MARYLAND

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM BLDG. - MISC. DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

		REVISIONS:
DATE	7-15-82	⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE		
DRAWN		
CHECKED		

SHEET NO. 6A OF ⚠ 125

763

SDP-82-109

APPROVED: For public Water, private Sewerage and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

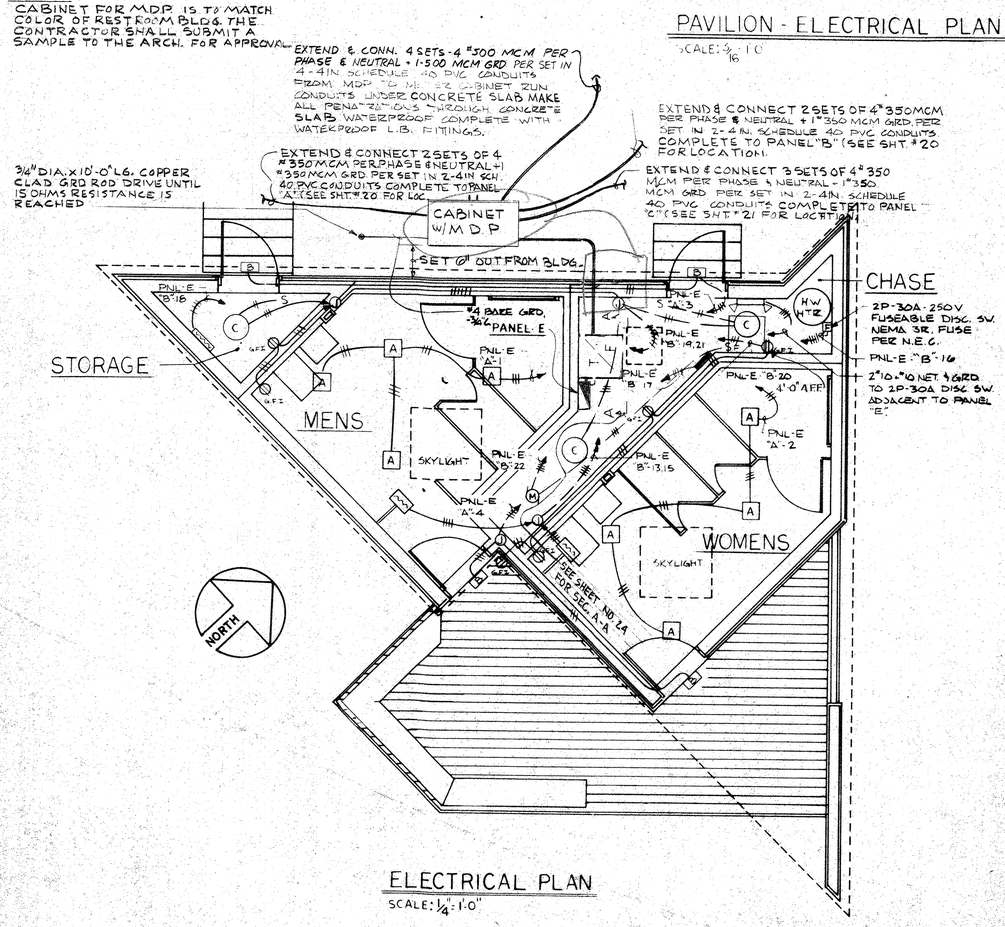
PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADM. — DATE 7-20-82

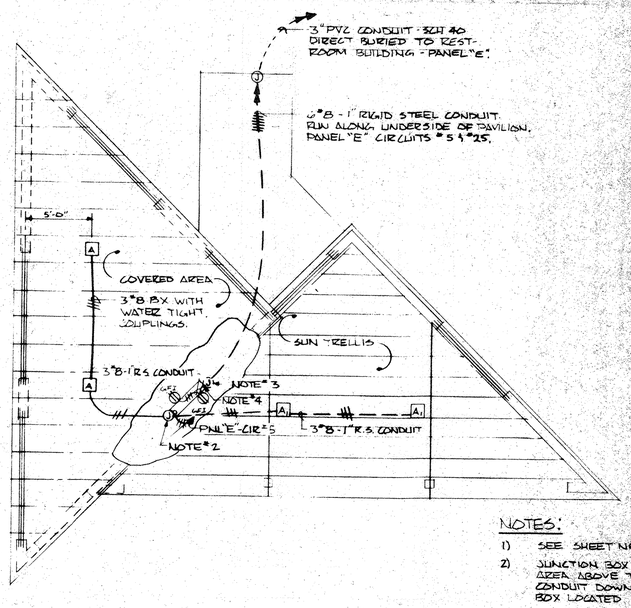
Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

NOTE:
CABINET FOR MDP IS TO MATCH COLOR OF RESTROOM BLDG. THE CONTRACTOR SHALL SUBMIT A SAMPLE TO THE ARCH. FOR APPROVAL.



ELECTRICAL PLAN
SCALE: 1/4"-1'-0"



PAVILION - ELECTRICAL PLAN
SCALE: 1/16" - 1'-0"

NOTES:
1) SEE SHEET NO 24 FOR SYMBOLS.
2) JUNCTION BOX SHALL BE MOUNTED IN THE COVERED AREA ABOVE THE WALL. RUN 3"8-1" RIGID STEEL CONDUIT DOWN THROUGH THE WALL TO THE JUNCTION BOX LOCATED ON THE UNDERSIDE OF PAVILION.
3) . JUNCTION BOX SHALL BE MOUNTED ON THE UNDERSIDE OF THE PAVILION BENEATH THE WALL WITH THE RECEPTACLES
4) DOWN TO JUNCTION BOX WITH 3"8-1" RIGID STEEL CONDUIT PANEL "E" CIRCUIT #25.
5) THE CONTRACTOR SHALL COORDINATE LAYOUT OF ALL ELECTRICAL EQUIP. WITH THE INSPECTION AGENCIES PRIOR TO INSTALLATION & MAKE ANY MODIFICATIONS REQ'D AT NO COST TO HOWARD COUNTY.

REFER TO SHEETS 23 & 24
FOR ADDITIONAL ELECTRICAL INFORMATION

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 8/16/82 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. 5G247 EXPIRATION DATE: 12/10/84 — 8/16/82

PURPOSE STATEMENT: 05-06-2024
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ARCHITECTURAL REGISTRATION BOARD 2355-R STATE OF MARYLAND

LD R LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM ELECTRICAL PLAN
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE		
DRAWN		
CHECKED		

SHEET NO. 7A OF 125 ⚠ 8

763

SDP-82-109 8/16/82 7/14

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

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PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7/20/82

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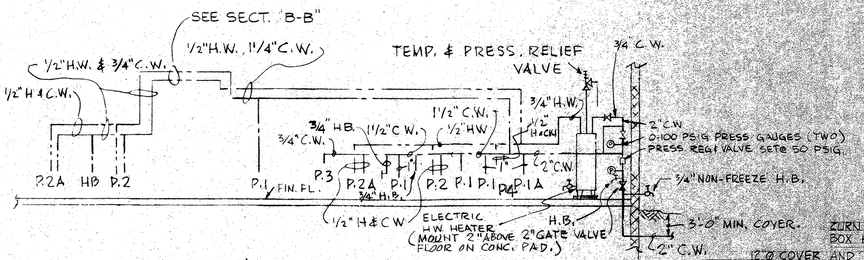
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

PLUMBING FIXTURE SCHEDULE

NO	FIXTURE	WASTE	VENT	C.W.	H.W.	REMARKS
P-1	WATER CLOSET	4"	2"	1"	-	WALL HUNG.
P-1A	WATER CLOSET	4"	2"	1"		SAME AS P-1, EXCEPT MOUNTED AT 20" FROM FLOOR TO TOP OF SEAT.
P-2	LAVATORY	1½"	1½"	½"	½"	WALL MTD.
P-2A	LAVATORY	1½"	1½"	½"	½"	WHEELCHAIR TYPE.
P-3	URINAL	2"	1½"	¾"	-	WALL MTD.,
P-4	SERVICE SINK	3"	1½"	½"	½"	FLOOR MTD. RECEPTOR*

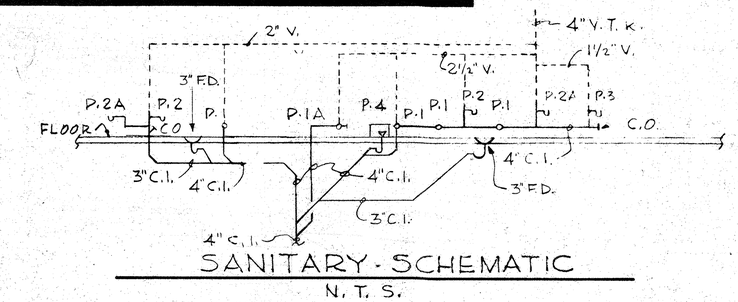
* STERN WILLIAMS MODEL SB-800 24"x24"x12"

NOTE: ALL FIXTURES SHALL BE "WATER SAVING TYPE"



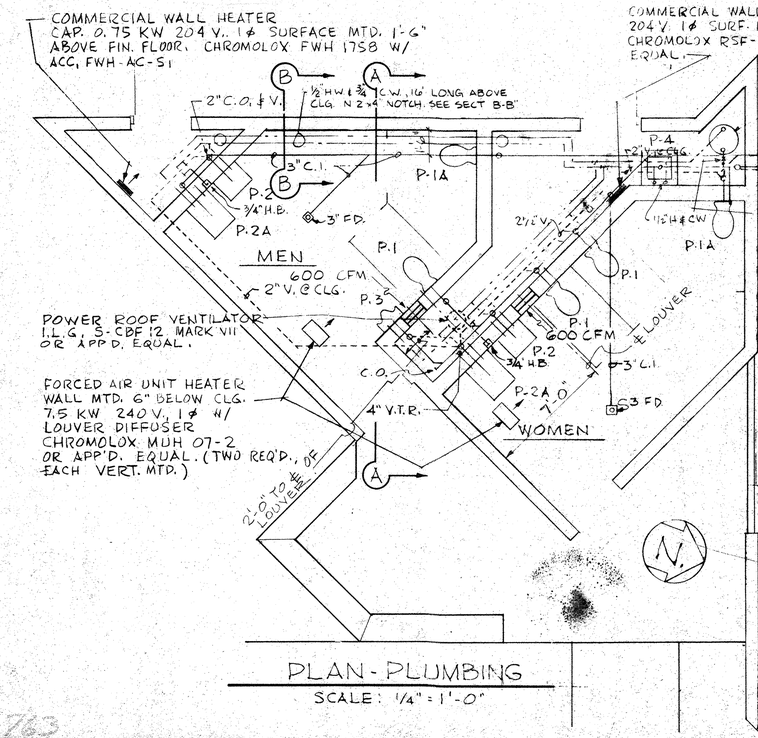
HOT & COLD WATER SCHEMATIC

N. T. S.



SANITARY - SCHEMATIC

N. T. S.

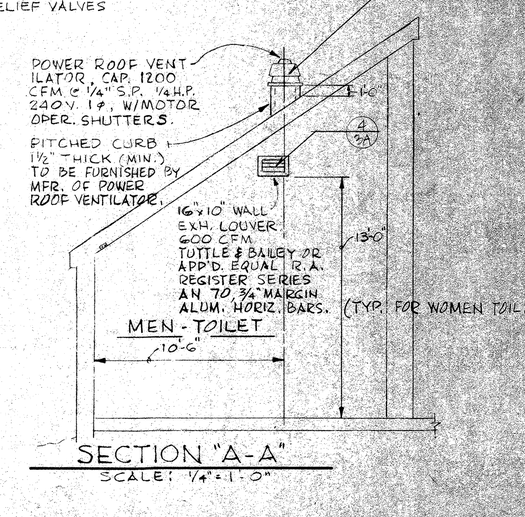


PLAN - PLUMBING

SCALE: 1/4" = 1'-0"

SYMBOLS

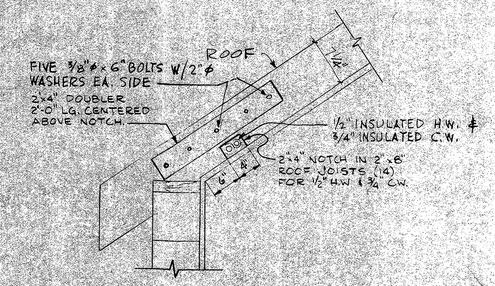
———	SOIL OR WASTE
- - - - - - -	VENT
C.W. ———	COLD WATER
H.W. ———	HOT WATER
H.B. —	HOSE BIBB
N.F. H.B. —	NON FREEZE HOSE BIBB
C.I. —	CAST IRON
V.T.R. —	VENT THRU ROOF
V. —	VENT



SECTION "A-A"

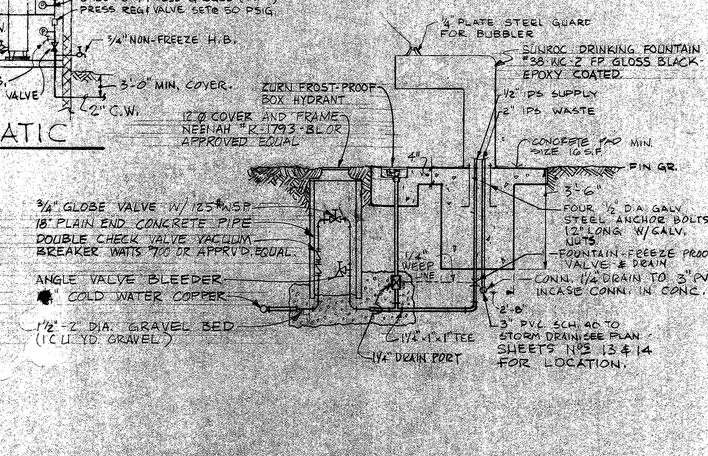
SCALE: 1/4" = 1'-0"

A DRINKING FOUNTAIN
N.T.S.



SECTION B-B

SCALE: 1"=1'-0"



STRUCTURAL NOTES

1. DESIGN LIVE LOADS:
   - A. FLOOR AND DECK: 100 PSF
   - B. ROOF: 20 PSF
   - C. WIND: 15 PSF
2. FOUNDATIONS:
   - A. SOIL BEARING VALUE IS ASSUMED TO BE 3000 PSF. CONTRACTOR SHALL EMPLOY A GEOTECHNICAL ENGINEER TO ASCERTAIN THAT SOIL OF THIS CAPACITY EXISTS AT BOTTOM OF FOOTINGS BEFORE POURING OF CONCRETE. IF SOIL OF THIS CAPACITY OR HIGHER IS FOUND NOT TO EXIST THEN WORK MUST BE SUSPENDED UNTIL INSTRUCTIONS ARE RECEIVED FROM THE ENGINEER.
   - B. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL A MINIMUM OF 2'-6" BELOW FINISHED GRADE AND 1' BELOW EXISTING GRADE.
   - C. BACKFILL SHALL BE PLACED IN 8" LAYERS AND COMPACTED WITH APPROVED MECHANICAL TAMPERS TO MAXIMUM DENSITY.
3. CONCRETE:
   - A. CONCRETE SHALL BE PROPORTIONED TO DEVELOP COMPRESSIVE STRENGTH OF 3000 PSI IN 28 DAYS.
   - B. 6 X 6 #10/10 WIRE MESH SHALL BE PLACED IN ALL SLABS ON GRADE UNLESS NOTED OTHERWISE. LAPS SHALL BE A MINIMUM OF 6".
4. MASONRY:
   - A. ALL MORTAR IN FOUNDATIONS SHALL BE TYPE S PER BOCA BASIC BUILDING CODE, SECTION 816, HAVING COMPRESSIVE STRENGTH OF 1,800 PSI IN 28 DAYS.
   - B. CONCRETE BLOCK SHALL BE LOAD BEARING PER ASTM C90-75.
   - C. MASONRY WALL REINFORCING SHALL BE STANDARD GAGE DUR-O-WAL, GALVANIZED, LAID IN EVERY SECOND BED JOINT EXCEPT WHERE NOTED OTHERWISE. TWO CONSECUTIVE JOINTS ABOVE AND BELOW OPENINGS AND TOP THREE COURSES OF ALL WALLS SHALL ALSO BE REINFORCED.
   - D. TOP OF ALL WALLS AND BEARING COURSES UNDER JOIST AND BEAMS SHALL BE SOLID BLOCK A MINIMUM OF 4" HIGH, FULL THICKNESS OF WALL.
5. METALS:
   - A. ALL NAILS, BOLTS, PLATES, HANGERS, ANCHORS, AND IRON OF EVERY DESCRIPTION SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
6. STRUCTURAL WOOD:
   - A. ALL STRUCTURAL WOOD SHALL BEAR THE GRADE MARK OF THE GRADING RULES AGENCY HAVING JURISDICTION.
   - B. ROOF AND WALL FRAMING SHALL BE NO. 2 SOUTHERN PINE, NO. 2 HEM/FIR OR APPROVED EQUAL.
   - C. DECKING, JOIST AND TIMBERS SHALL BE PRESSURE TREATED SOUTHERN PINE. TREATMENT SHALL CONFORM TO AMERICAN WOOD-PRESERVERS' ASSOCIATION STANDARD AWPB LP-22. TREATMENT SHALL BE CCA, CHROMATED COPPER ARSENATE.
     1. DECKING SHALL BE NO. 1, TREATED TO .40 RETENTION.
     2. JOIST AND BEAMS TO 4" THICK SHALL BE NO. 2, TREATED TO .60 RETENTION.
     3. BEAMS THICKER THAN 4" SHALL BE NO. 2 SR (STRESS RATED) TREATED TO .60 RETENTION.
   - D. ALL FRAMING MEMBERS SHALL HAVE MINIMUM 4" BEARING ON WOOD OR MASONRY OR BE SUPPORTED BY METAL FRAMING DEVICES CAPABLE OF DEVELOPING FULL STRENGTH OF THE MEMBER.
   - E. BOCA BUILDING CODE, APPENDIX L, RECOMMENDED NAILING SCHEDULE, SHALL BE FOLLOWED FOR ALL WOOD NAILING UNLESS SPECIFIED OTHERWISE.
   - F. ALL PLYWOOD SHALL BE GRADED PER AMERICAN PLYWOOD ASSOCIATION STANDARDS.
     1. ROOF SHEATHING SHALL BE CD, T&G, INTERIOR WITH EXTERIOR GLUE, 5/8" THICK.
     2. WALL SHEATHING SHALL BE CD, 5/8" THICK, INTERIOR WITH EXTERIOR GLUE.
     3. WALL AND ROOF SHEATHING SHALL BE FASTENED WITH 8d NAILS SPACED 6" C.C. AT PANEL EDGES AND 12" C.C. AT INTERMEDIATE SUPPORTS.

STATE OF MARYLAND — JEFFREY A. MACKEY — 26848 — PROFESSIONAL ENGINEER — 6/6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26848
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LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM BLDG. - PLUMBING LAYOUT, MISC. DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS NOTED
DRAWN	SZ
CHECKED	PP

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 8A OF 125

STATE OF MARYLAND — JEFFREY A. MACKEY — No. 26848 — PROFESSIONAL ENGINEER

ARCHITECTURAL REGISTRATION BOARD — 2368-R — STATE OF MARYLAND

763

SDP-82-109 9/10

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

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CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

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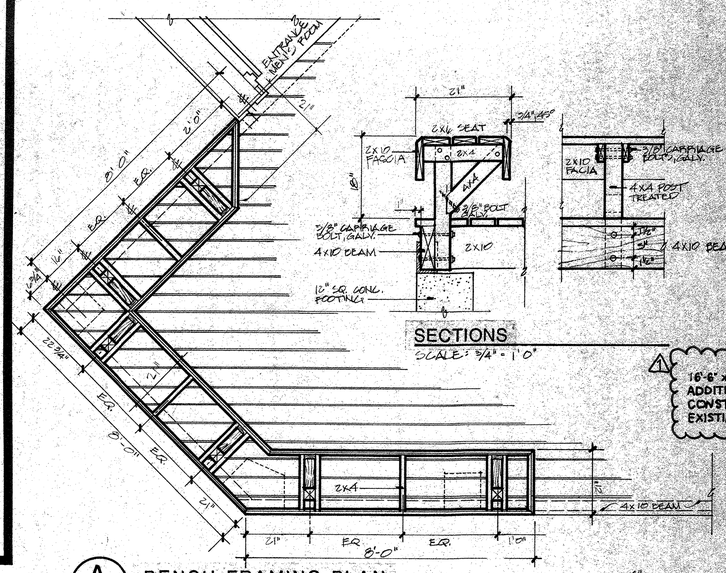
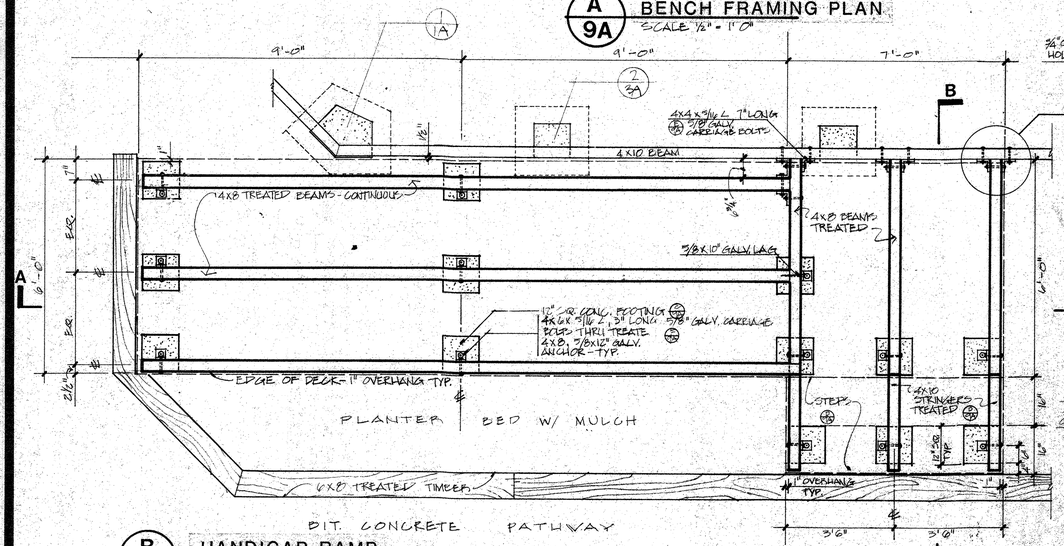
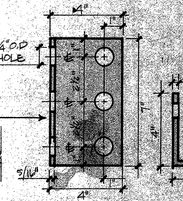


SECTIONS
SCALE: 3/4" = 1'-0"

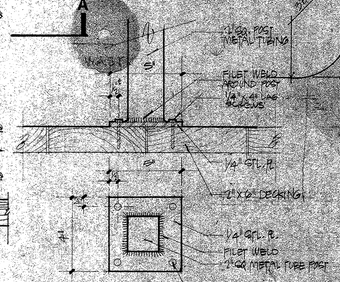
A 9A BENCH FRAMING PLAN
SCALE: 1/2" = 1'-0"



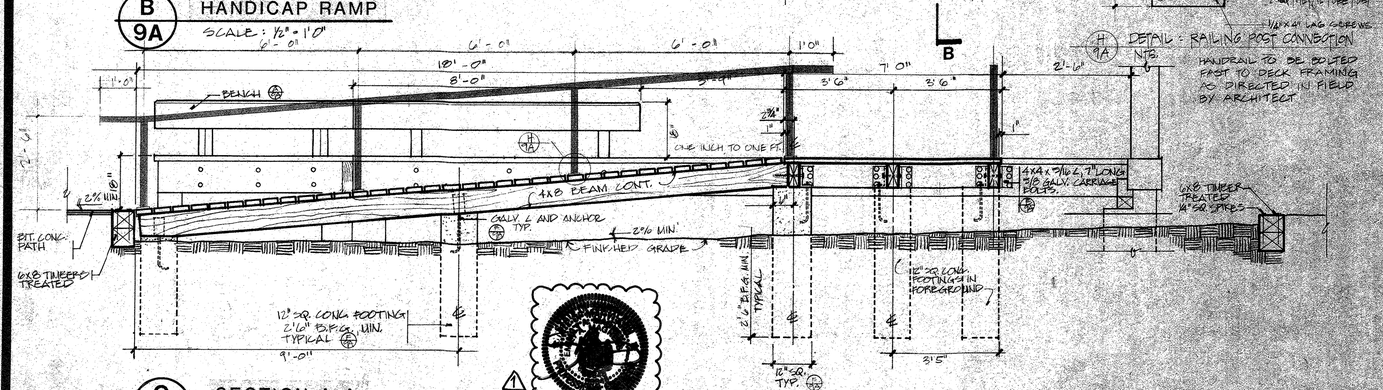
C 9A SECTION A-A
NO SCALE



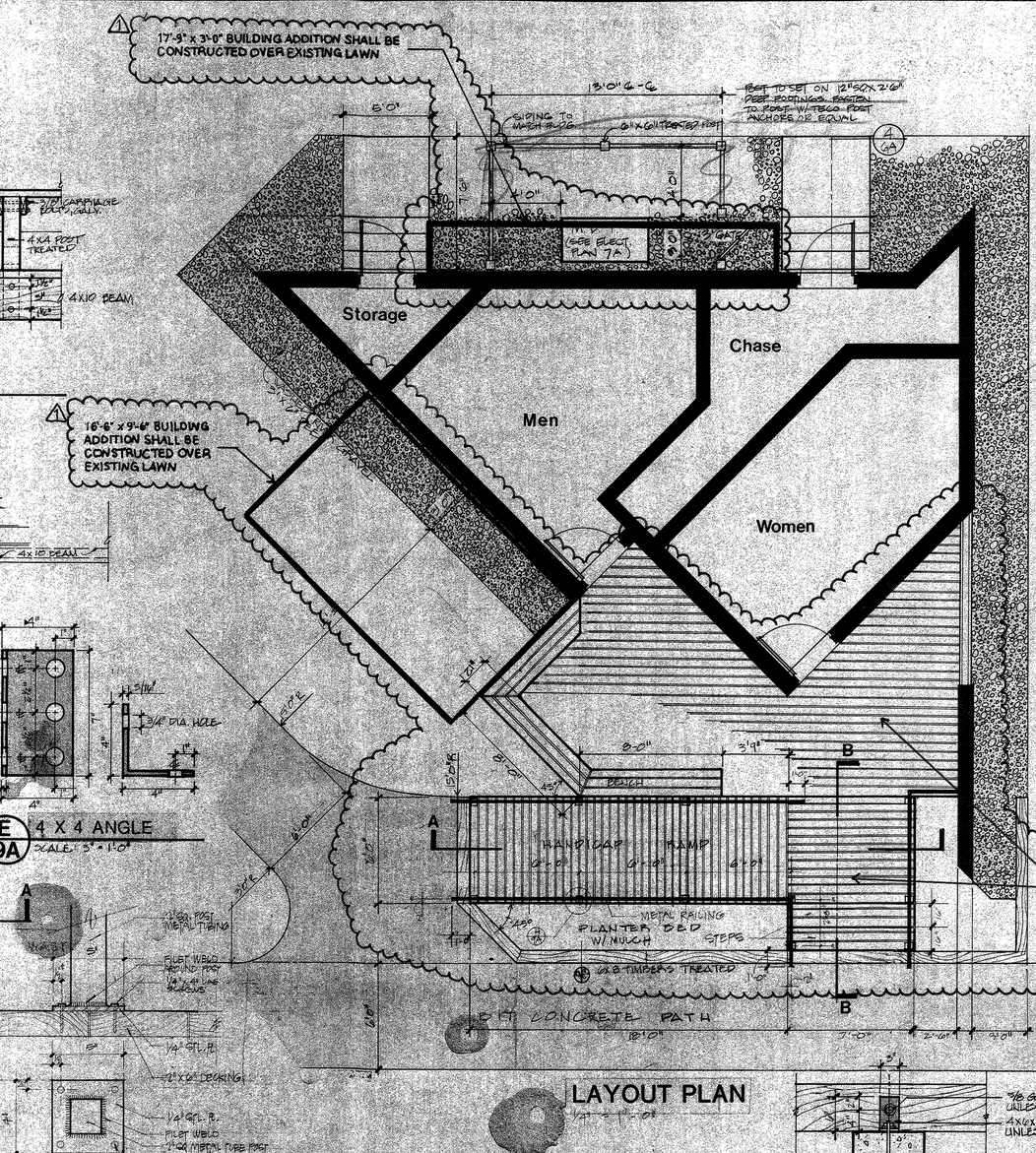
E 9A 4 X 4 ANGLE
SCALE: 3" = 1'-0"



H 9A DETAIL: RAILING POST CONNECTION
NTS.
HANDRAIL TO BE BOLTED FAST TO DECK FRAMING AS DIRECTED IN FIELD BY ARCHITECT

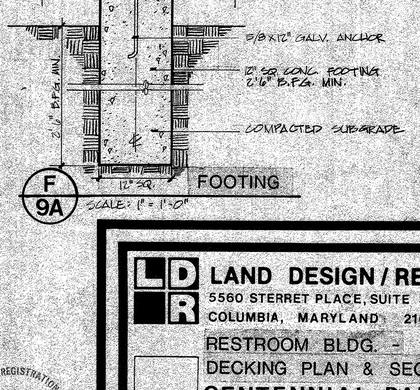


B 9A HANDICAP RAMP
SCALE: 1/2" = 1'-0"

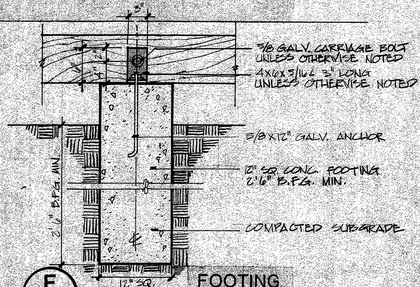


LAYOUT PLAN
1/2" = 1'-0"

ALL EX. WOOD DECKING, RAMP, RAILING AND SEATWALL SHALL BE REPLACED WITH CONCRETE. REFER TO SHEET 59-125 FOR ALL REVISED SITE WORK

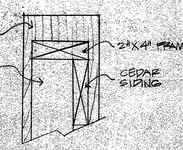


D 9A SECTION B-B
1/2" = 1'-0"



F 9A FOOTING
SCALE: 1" = 1'-0"

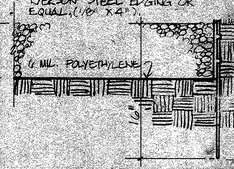
NOTE: ENCLOSURE AROUND M.D.P. SHALL BE STAINED TO MATCH BLDG. EXTERIOR. HANG GATE WITH 3 - 4"X4" BUTT TYPE HINGES SUITABLE FOR EXT. WORK (GALV.). INSTALL HASP FOR LOCKING W/ OWNERS PADLOCK. TOP OF FENCE SHALL BE LEVEL.



TYP. ENCLOSURE SECTION
N.T.S.

PEA GRAVEL PATH - MAX. STONE SIZE 3/4" DIA. MAX. OUTSIDE OF PATH SHALL BE SECURED BY RYERSON STEEL EDGING OR EQUAL (SEE DETAIL 6/9A)

NOTE: PEA GRAVEL PATH MAX. SIZE 3/4" DIA. OUTSIDE OF PATH SHALL BE SECURED BY RYERSON STEEL EDGING OR EQUAL (1/8" X 4").



6 9A DETAIL GRAVEL PATH
N.T.S.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ALL CHANGES ASSOCIATED WITH REVISIONS DATED 5/8/24 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. 56143 EXPIRATION DATE: 12/6/24

1 PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

ARCHITECTURAL REGISTRATION BOARD 2366-R STATE OF MARYLAND

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

RESTROOM BLDG. - DECKING PLAN & SECTIONS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS:	SHEET NO.
SCALE	AS NOTED	1 REVISED SITE DEVELOPMENT PLAN 5-08-2024	9A 10 OF 59 125
DRAWN	DA		
CHECKED			

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Nimmey — 7-10-82
DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 7-20-82 DATE

APPROVED: Howard County Office of Planning and Zoning

N.A.
PLANNING DIRECTOR — DATE

N.A.
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

OVERLOOK PAVILION NOTES:

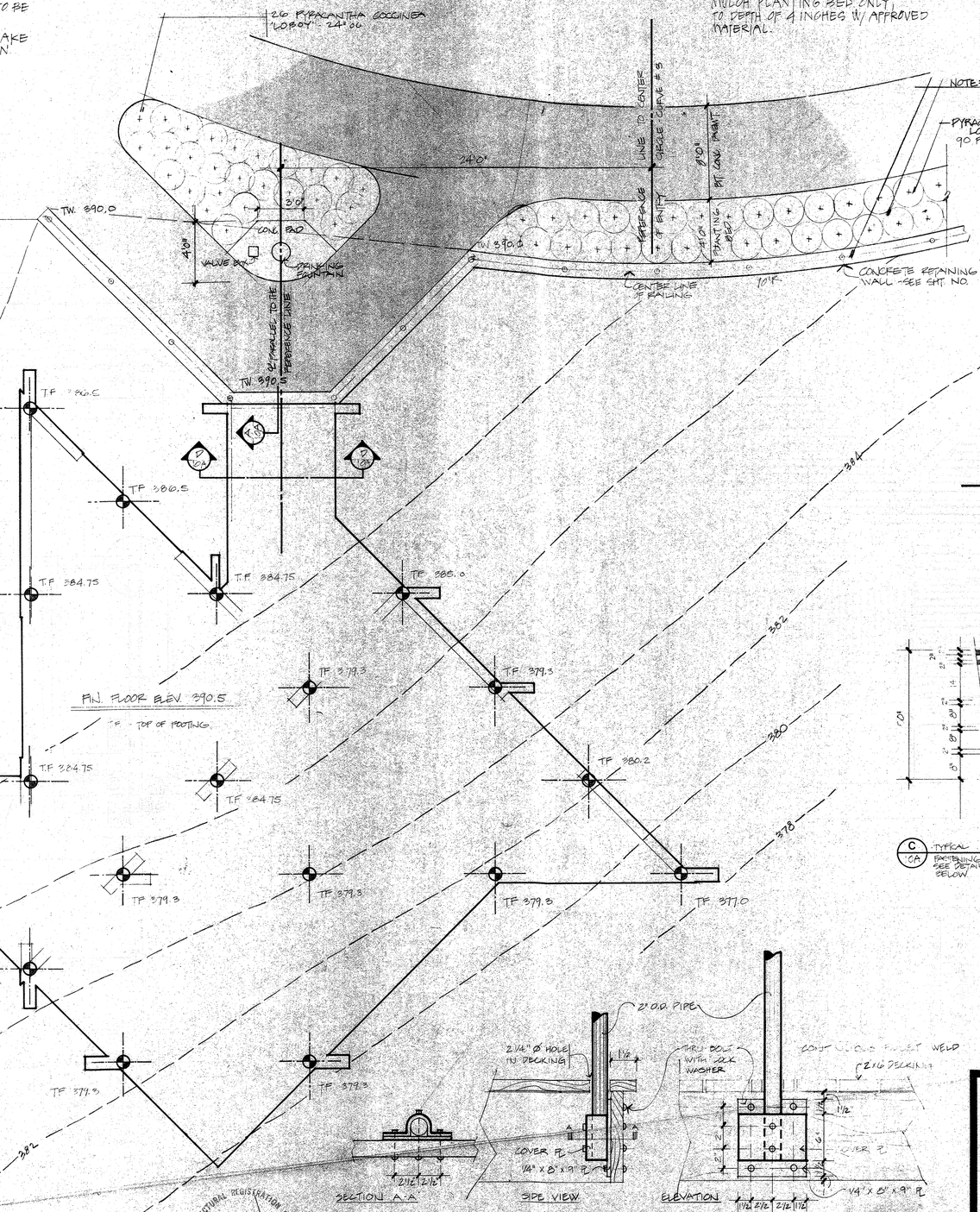
1. CLEAR AREA AROUND PAVILION OF ALL BRUSH & SMALL TREES. 4 INCHES & LESS.
2. STAKE OUT CORNERS OF PAVILION. TO BE APPROVED BY ARCHITECT.
3. ARCHITECT RESERVES THE RIGHT TO MAKE ADJUSTMENTS & CHANGES TO PAVILION LOCATION BASED ON STAKEOUT.

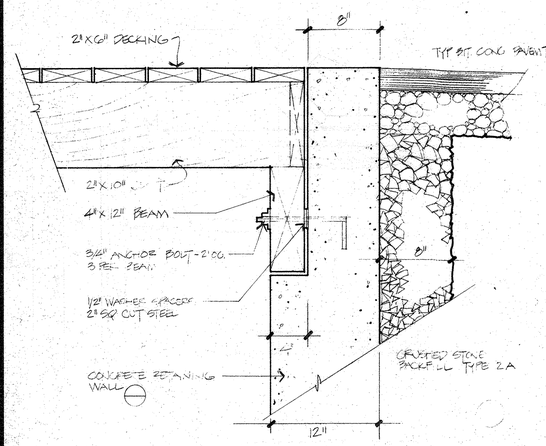
NOTE:
ALL PLANT MATERIAL SHOWN NOT PART OF THIS CONTRACT

MULCH PLANTING BED ONLY TO DEPTH OF 4 INCHES W/ APPROVED MATERIAL.

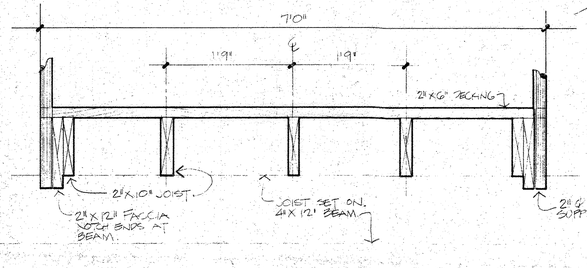
PURPOSE STATEMENT - 05.08.2024
THE REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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 56343 EXPIRATION DATE: 12/6/24





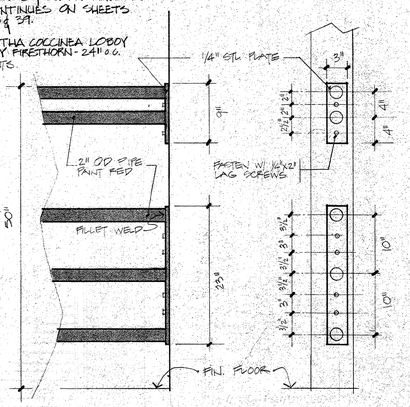
BRIDGE/WALL CONNECTION — A — 1/A
1½" = 1'0"



BRIDGE SECTION D-D — D — 1/A
1" = 1'0"

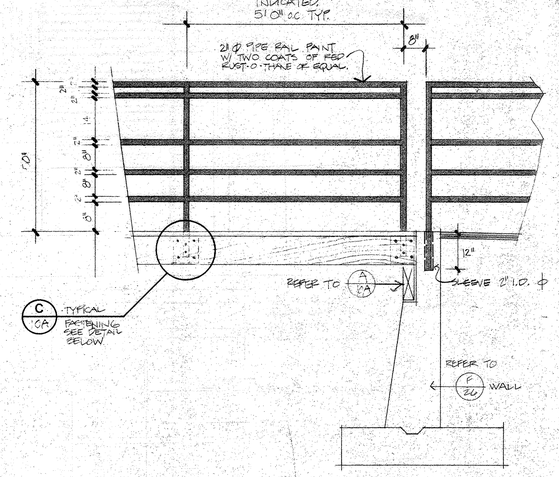
PLAN
1/4" = 1'-0"

PIPE RAILING FACIA PLATE FASTNER — C — 10A
N.T.S.



PIPE RAILING WALL PLATE FASTNER — E — 10A
1" = 1'0"

UNLESS OTHERWISE INDICATED, 5'0" o.c. TYP.



TYP. PIPE RAILING — B — 10A
N.T.S.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION SITE PLAN & MISC. CONSTRUCTION DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 1981	REVISIONS: OVERLOOK SITE DEVELOPMENT PLAN - 05.08.2024
SCALE	AS NOTED	
DRAWN	N.C.	
CHECKED		

SHEET NO 10A OF 55 (A) 125

ARCHITECTURAL REGISTRATION BOARD 2366-R STATE OF MARYLAND

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Herbert F. Nemmy — DIRECTOR — 7-20-82 DATE

[signature] — CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public/private Water and Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — COUNTY HEALTH OFFICER — 7-20-82 DATE

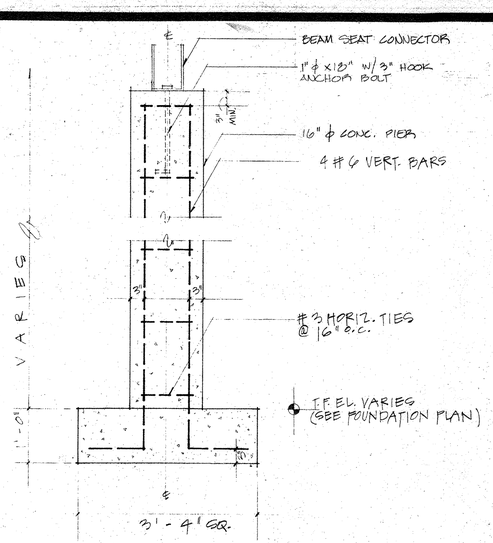
APPROVED: Howard County Office of Planning and Zoning

N.A. — PLANNING DIRECTOR — DATE

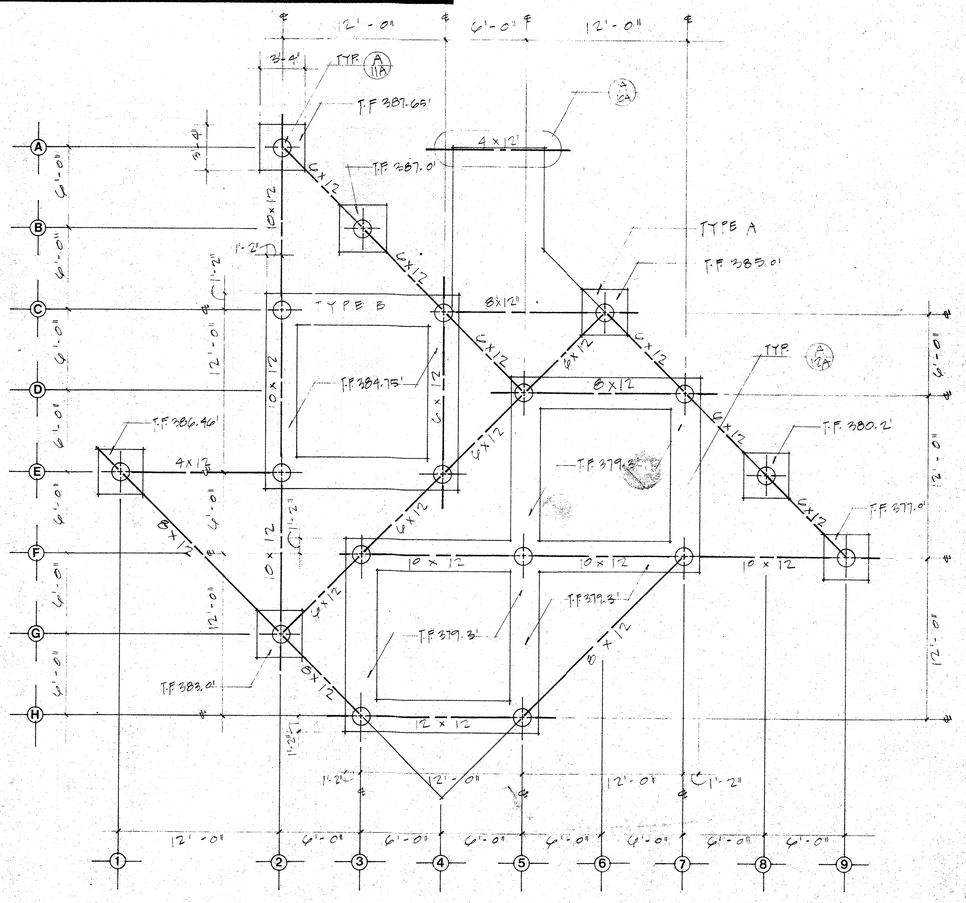
N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

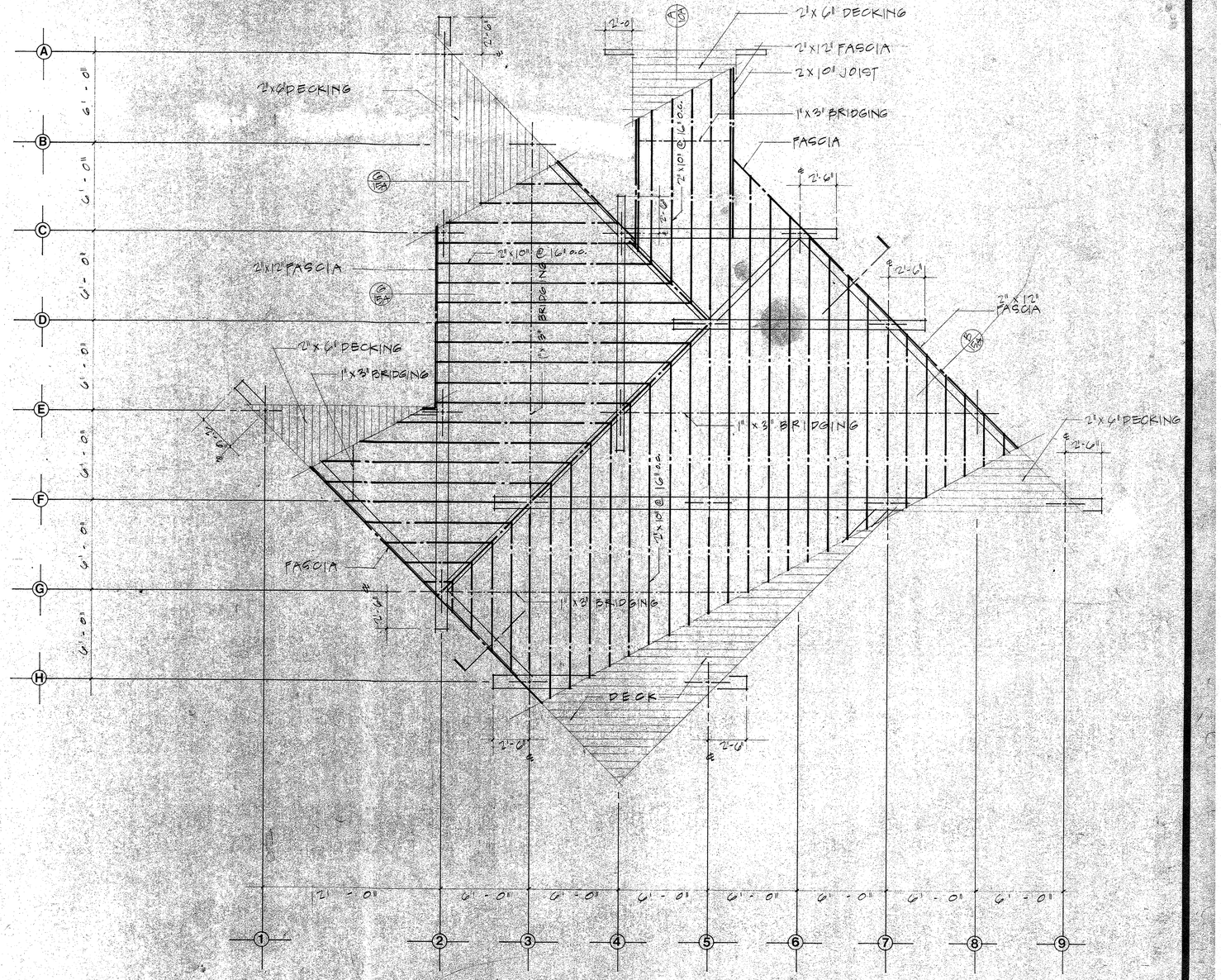


A/1A DETAIL: CONC. FOOTING & PIER, TYPE A
3/4" = 1'-0"



FOUNDATION PLAN
3/16" = 1'-0"

NOTE:
CONTRACTOR SHALL INSURE ALL FOOTINGS ARE A MIN. 3'-0" BELOW FINISHED GRADE AND EXISTING GRADE.



FLOOR FRAMING PLAN
1/4" = 1'-0"

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 3/6/24 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. 56949 EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION
FOUNDATION PLAN & FLOOR FRAMING PLAN
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS: ΔREVISED SITE DEVELOPMENT PLAN -05-06-2024
SCALE	AS NOTED	
DRAWN	T.R.E.	
CHECKED		

SHEET NO. 11A OF 12 SHEETS

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

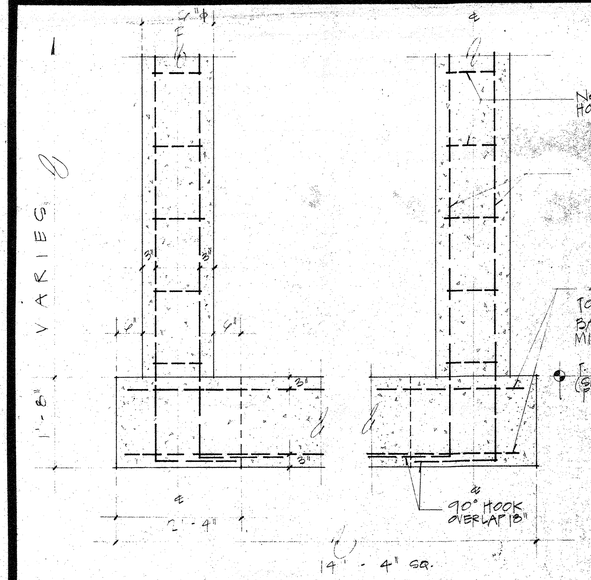
N.A.

PLANNING DIRECTOR — DATE

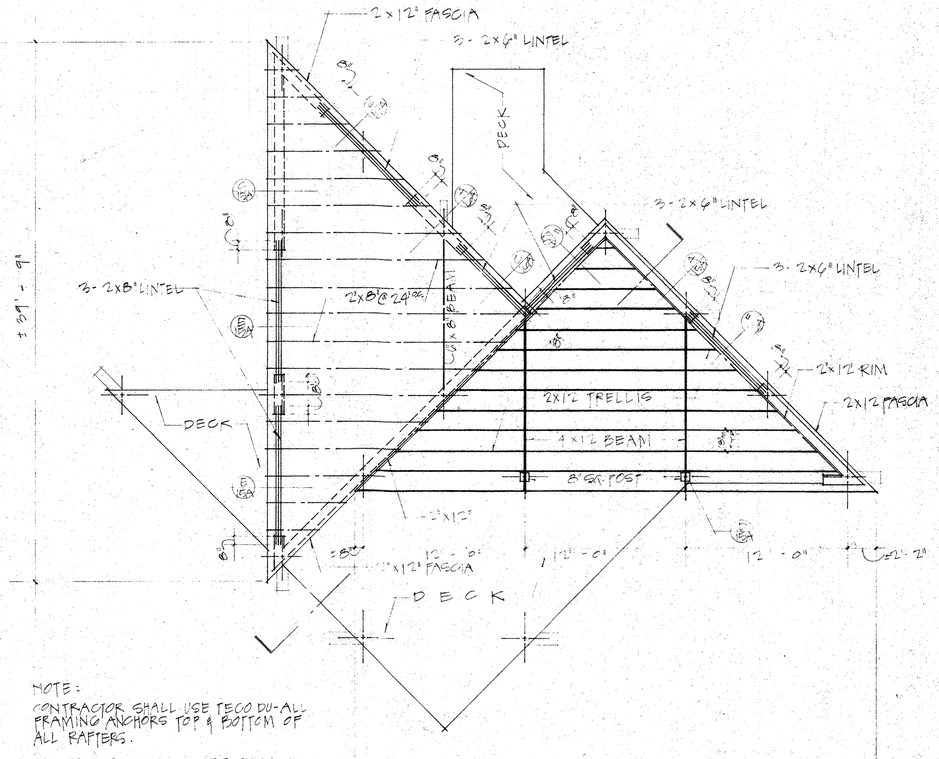
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



(A) 12A DETAIL: CONC. FOOTING & PIER TYPE B.
3/4" = 1'-0"

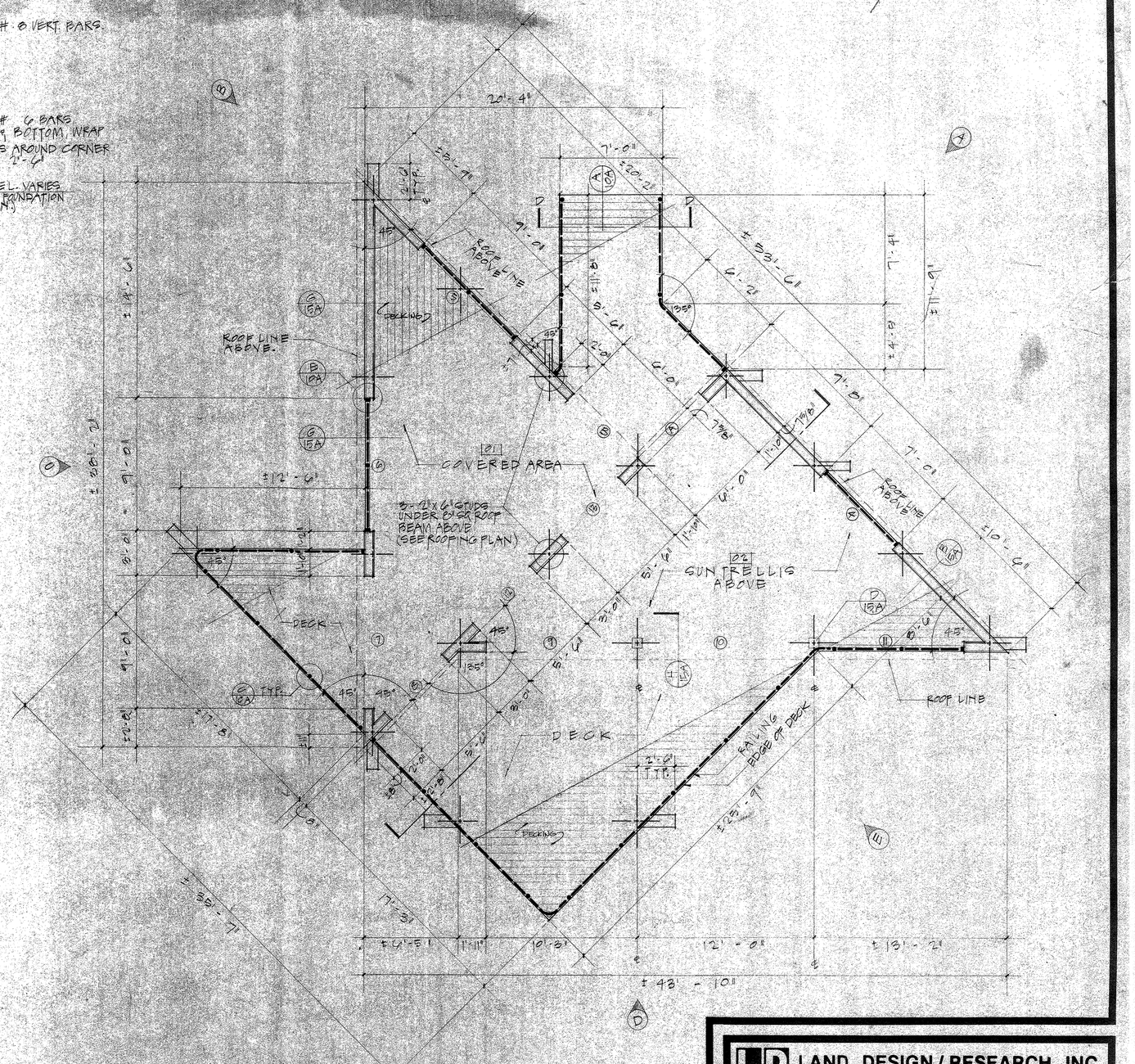


NOTE:
CONTRACTOR SHALL USE TECO DU-ALL FRAMING ANCHORS TOP & BOTTOM OF ALL RAFTERS.

CONTRACTOR SHALL USE TECO- DU-ALL ON DOWN SIDE OF ALL SUN-TRELLIS RAFTERS.

ROOF FRAMING PLAN
3/16" = 1'-0"

NOTES:
1. 2" Ø PIPE RAILING
2" Ø VERT. SUPPORT
WALL PLATE FASTNER
ALL BENDS AT CORNERS SHALL BE A 9" RADIUS.



FLOOR PLAN
1/4" = 1'-0"

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56343 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

ARCHITECTURAL REGISTRATION 2366-R STATE OF MARYLAND

LDR LAND DESIGN / RESEARCH, INC.
3560 STERRET PLACE
COLUMBIA, MARYLAND

OVERLOOK PAVILION
FLOOR PLAN & ROOF FRAMING PLAN
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS:
SCALE	AS NOTED	4 REVISED SITE DEVELOPMENT PLAN - 05.06.2024
DRAWN	T.R.E.	
CHECKED		

SHEET NO. 12A OF 13 SHEETS

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-18-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

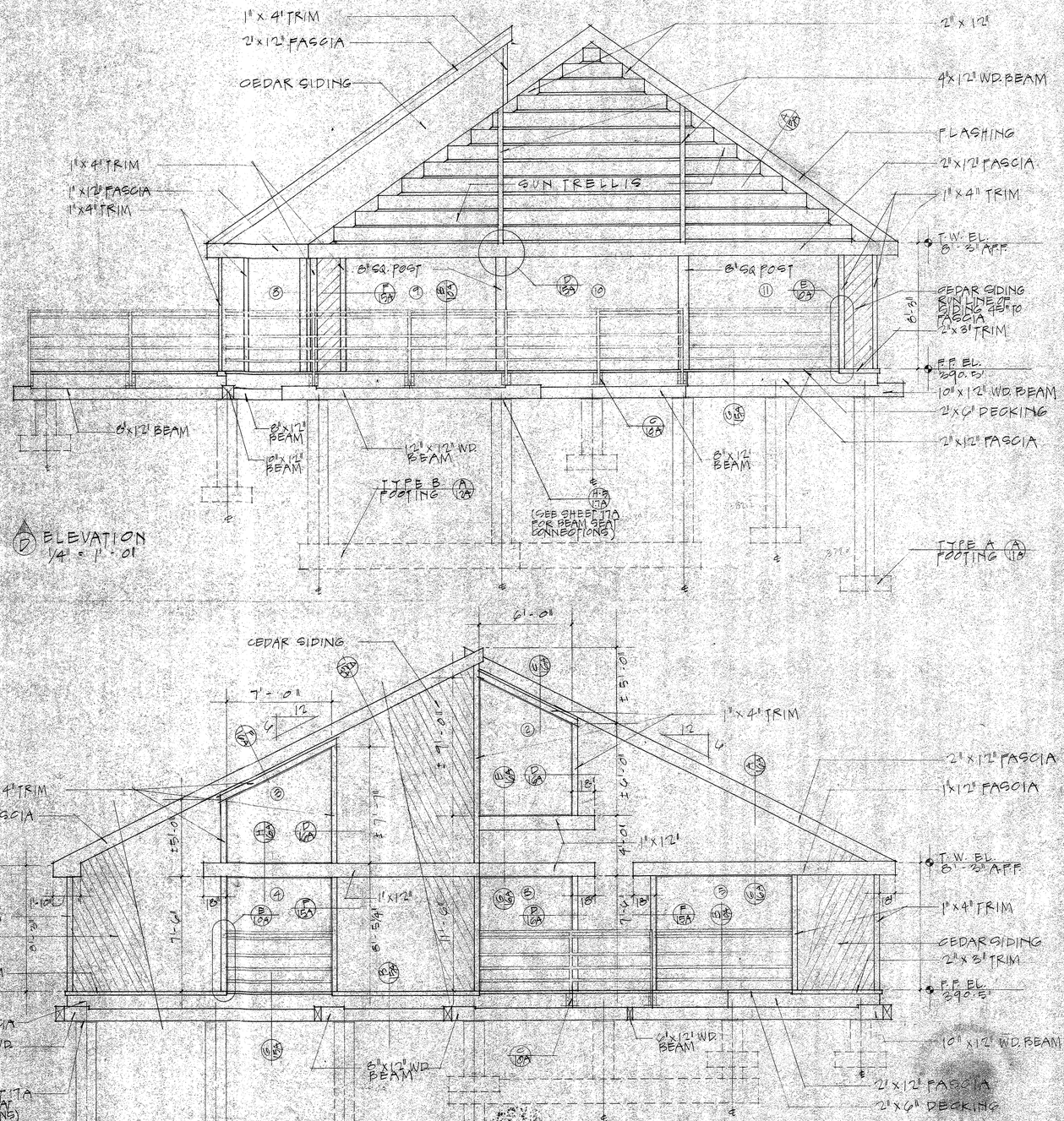
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR N.A. — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. N.A. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



ADP-ALTERNATE NO. 1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56447
EXPIRATION DATE: 12/6/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

ELEVATIONS
OVERLOOK PAVILION
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS: ΔREVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	AS NOTED	
DRAWN	T.R.E.	
CHECKED		

SHEET NO. 13A OF 14

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Newman — DIRECTOR — DATE 7-20-82

[signature] — CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — COUNTY HEALTH OFFICER — DATE 7-29-82

APPROVED: Howard County Office of Planning and Zoning

N.A. — PLANNING DIRECTOR — DATE

N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
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Harry L. Holliday
Liber 606 Folio 91, Parcel 311
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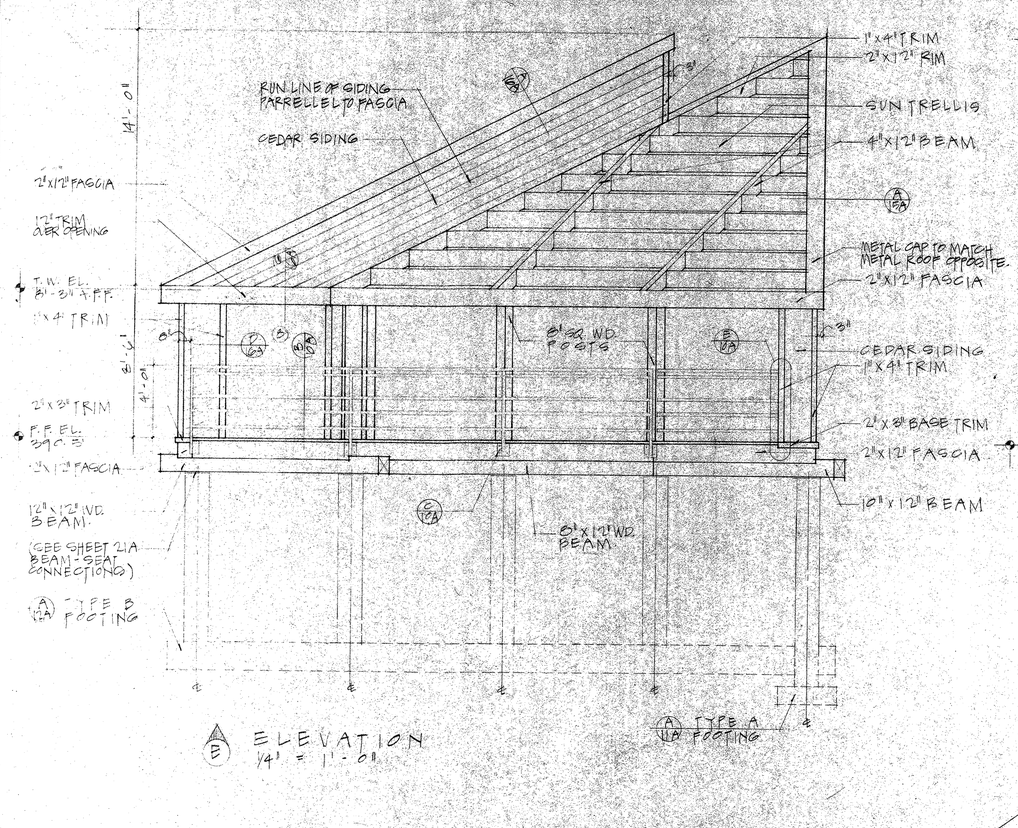
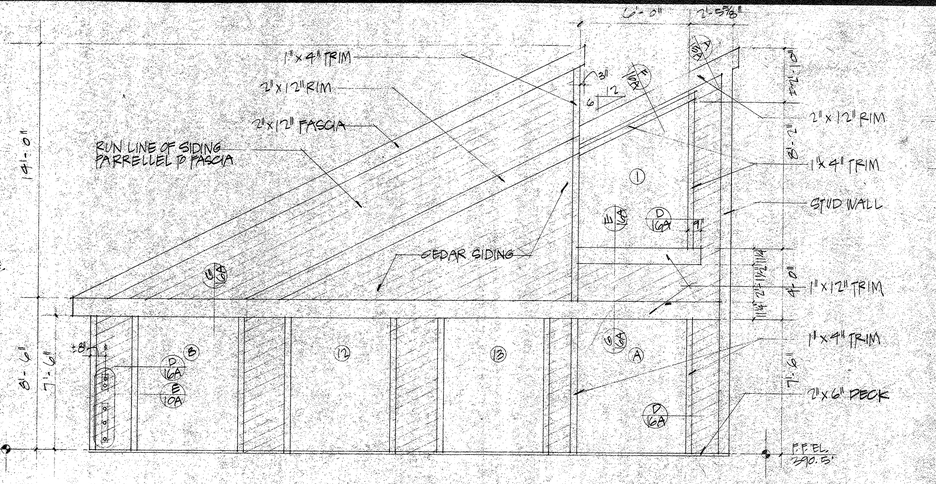
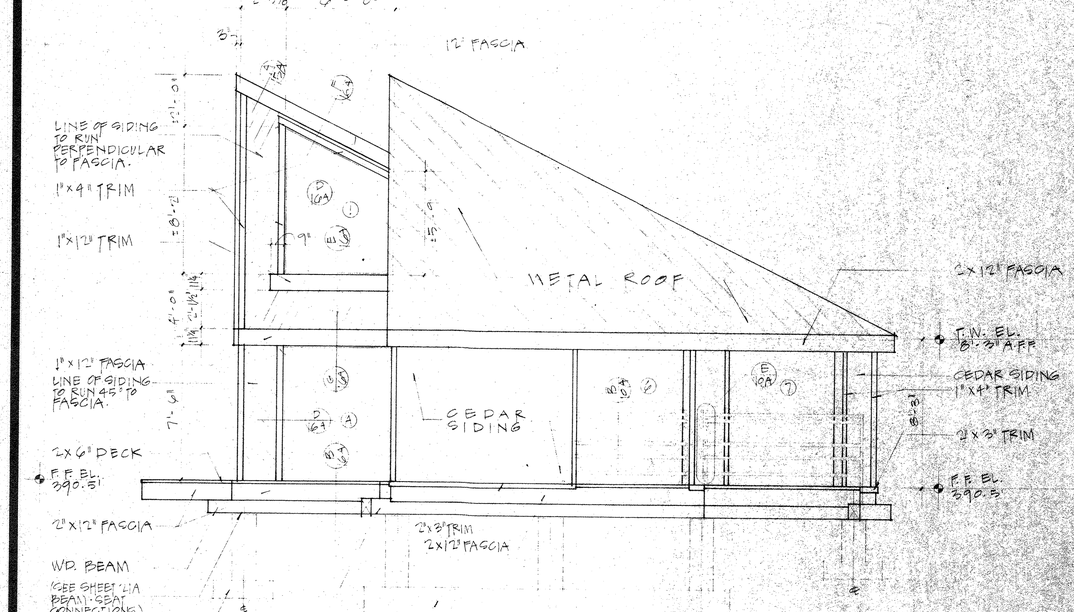


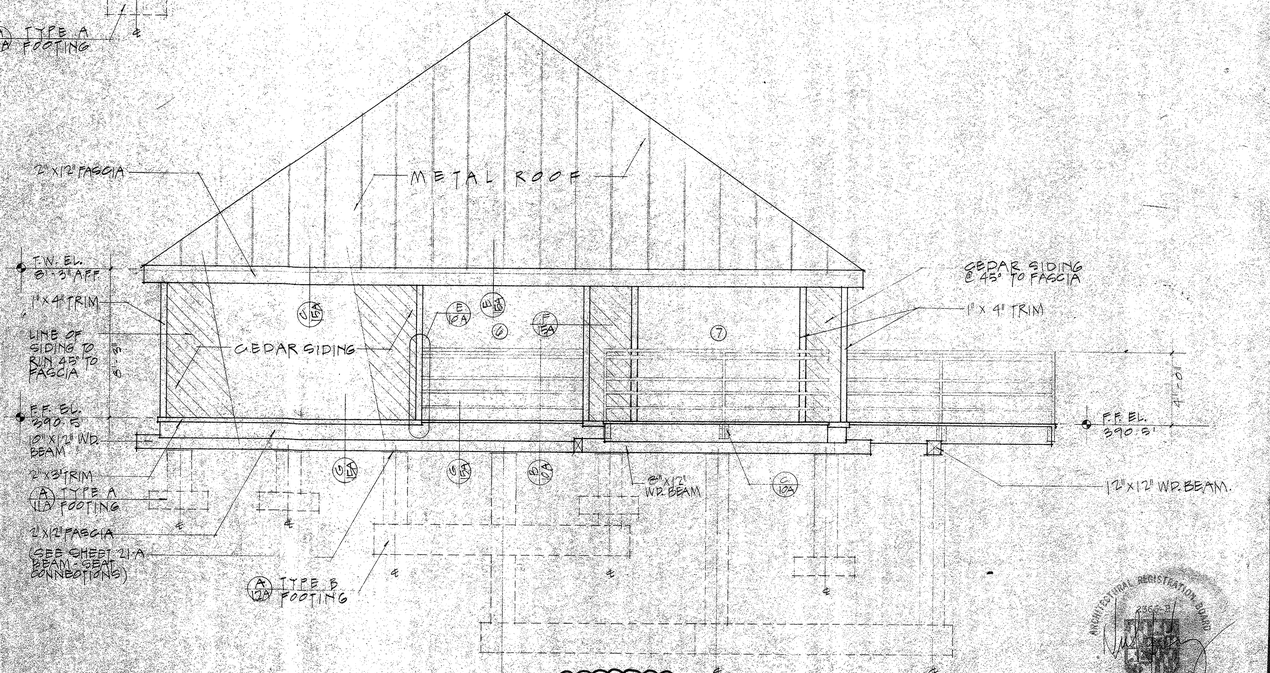
E ELEVATION
1/4" = 1'-0"



PARTICAL SECTION A-A
1/4" = 1'-0"



B ELEVATION
1/4" = 1'-0"



C ELEVATION
1/4" = 1'-0"

ARCHITECTURAL REGISTRATION BOARD
A356-3
STATE OF MARYLAND

STATE OF MARYLAND
DEPARTMENT OF ASSESSMENTS & TAXATION
2024

1 — 12/4/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 7/6/24 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. 56899
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

SDP-ALTERNATE NO. 4

LDR
LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION
ELEVATIONS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS:
SCALE	1/4" = 1'-0"	1 REVISED SITE DEVELOPMENT PLAN - 05.08.2024
DRAWN	T. R. E.	
CHECKED		

SHEET NO. 14A OF 15 SHEETS

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Nemaj — DIRECTOR — 7-20-82 DATE

CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 7-20-82 DATE

APPROVED: Howard County Office of Planning and Zoning

N.A. — PLANNING DIRECTOR — DATE

N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
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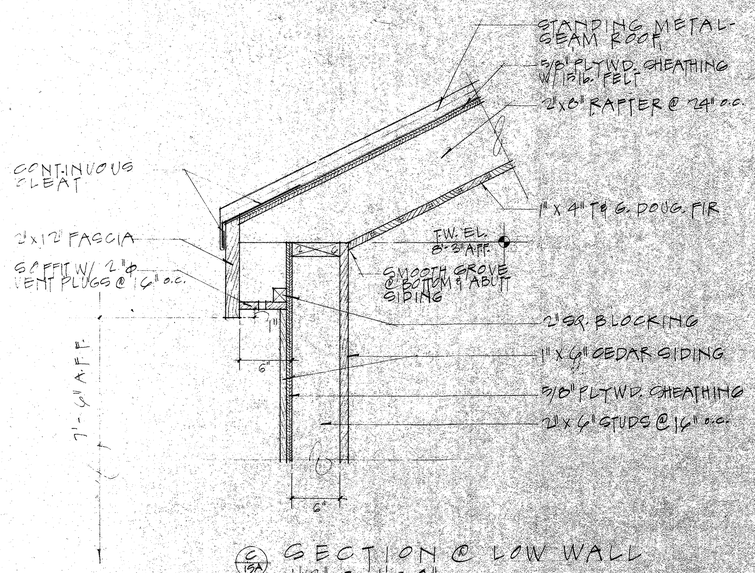
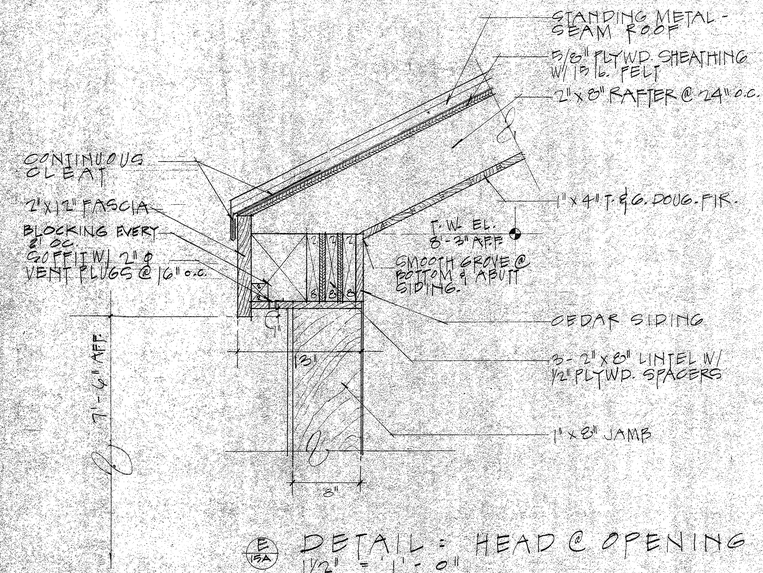
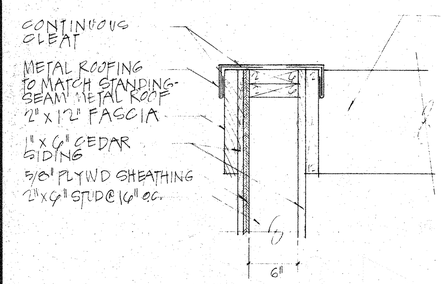


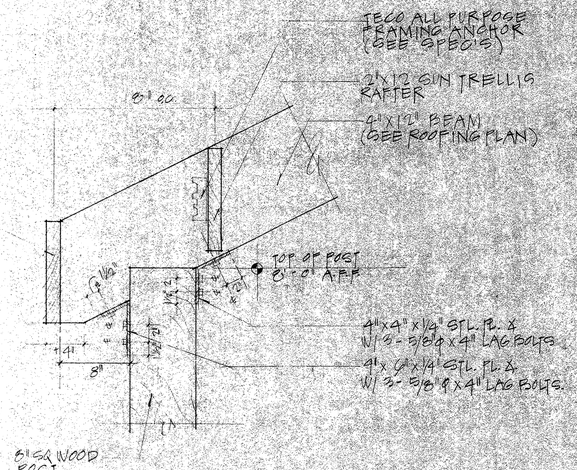
C/15A SECTION @ LOW WALL
1 1/2" = 1'-0"



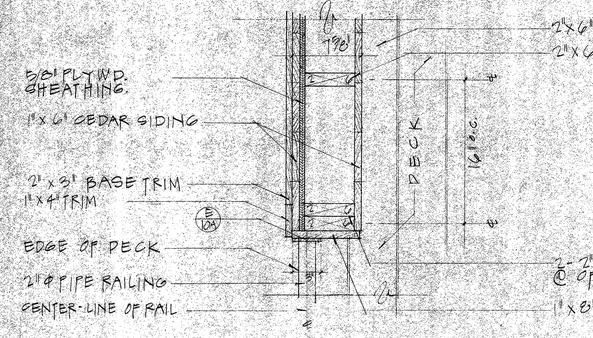
E/15A DETAIL: HEAD @ OPENING
1 1/2" = 1'-0"



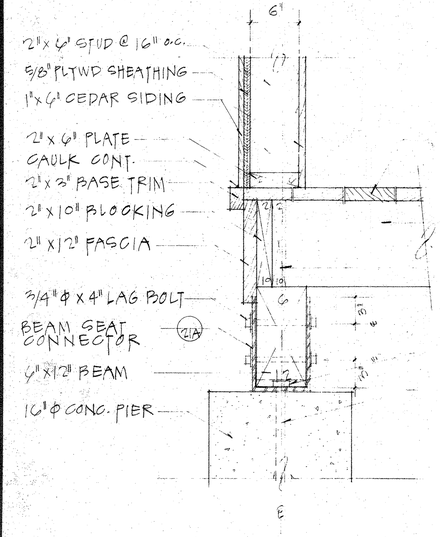
A/15A DETAIL: TOP OF WALL @ GIN TRELLIS
1 1/2" = 1'-0"



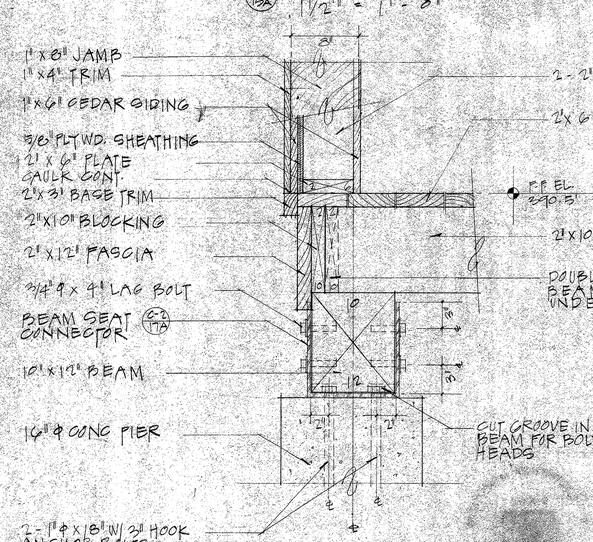
D/15A POST & BEAM CONNECTION
1 1/2" = 1'-0"



F/15A DETAIL: JAMB @ OPENING.
1 1/2" = 1'-0"



B/15A DETAIL: @ 6" BEAM
1 1/2" = 1'-0"



G/15A DETAIL @ 10" BEAM
1 1/2" = 1'-0"

ADD ALTERNATE NO. 4

STATE OF MARYLAND — JAMES T. RAY — 21666 — PROFESSIONAL ENGINEER — 4/24

⚠ PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/8/24 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. 56949, EXPIRATION DATE 12/10/24.

PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

ARCHITECTURAL REGISTRATION BOARD — 2365 R — STATE OF MARYLAND

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION
CONSTRUCTION DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS: ⚠REVISED SITE DEVELOPMENT PLAN - 05.08.2024
SCALE	1 1/2" = 1'-0"	
DRAWN	T.R.E.	
CHECKED		

SHEET NO. 15A OF 125 — 16

SDP-82-109

763

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Thomas F. Newman — DIRECTOR — 7-20-82 DATE

CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 7-20-82 DATE

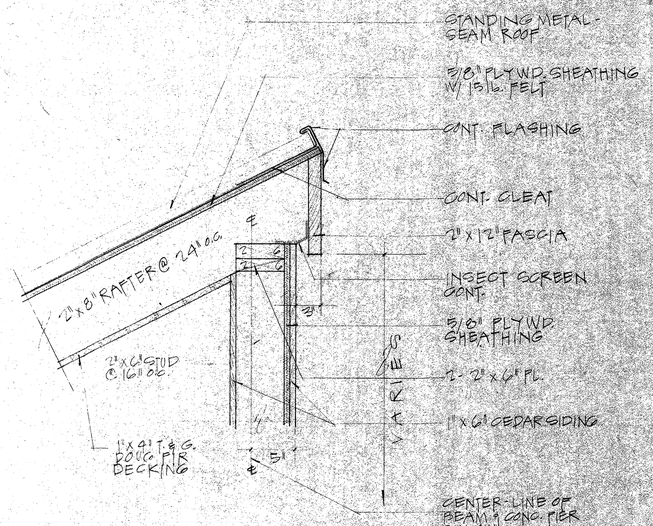
APPROVED: Howard County Office of Planning and Zoning

N.A. — PLANNING DIRECTOR — DATE

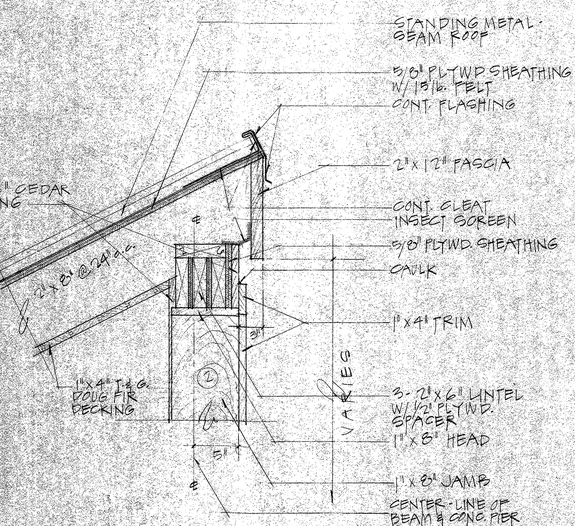
N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

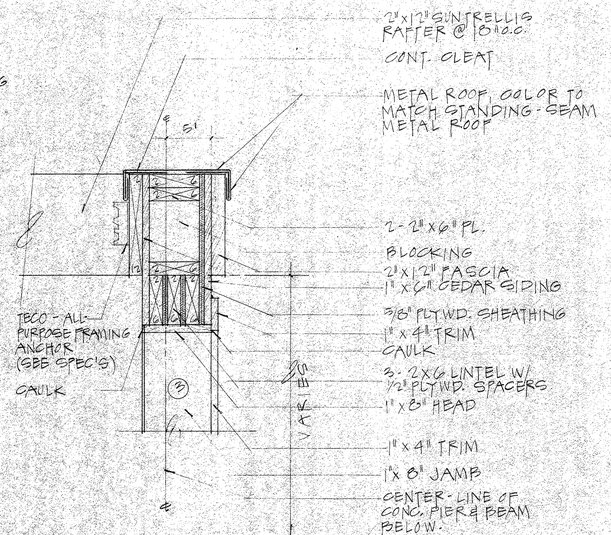
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



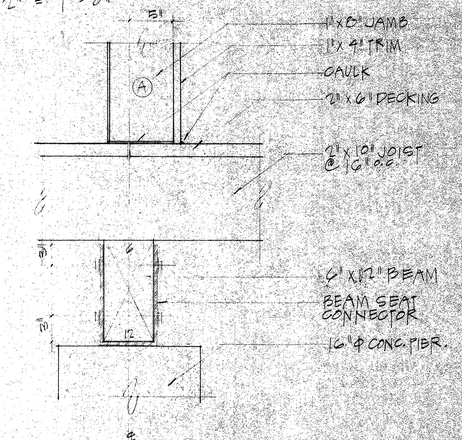
A SECTION @ HIGH WALL
1 1/2" = 1'-0"



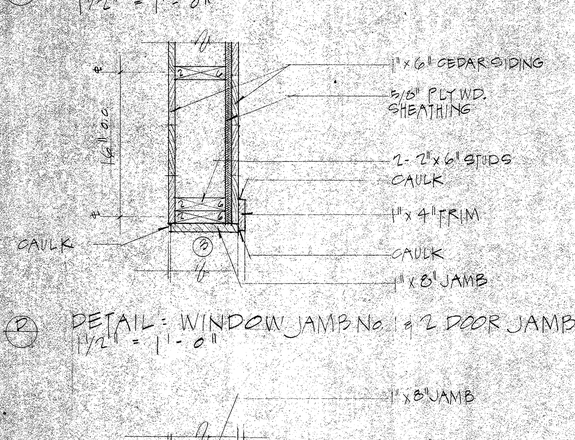
C DETAIL: WINDOW HEAD No. 2
1 1/2" = 1'-0"



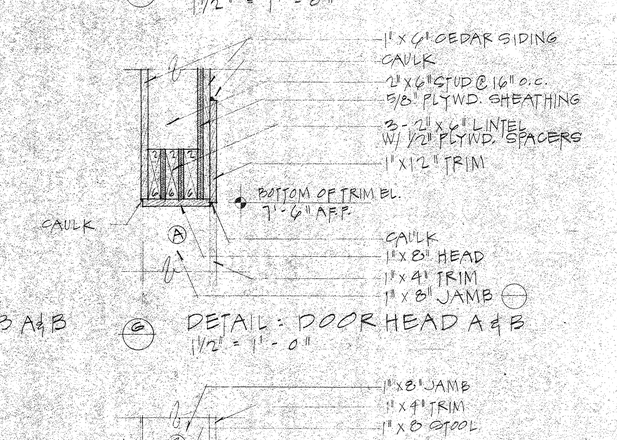
F DETAIL: WINDOW HEAD No. 3
1 1/2" = 1'-0"



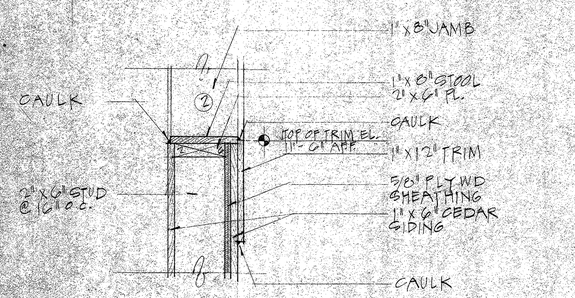
B DETAIL: DOOR SILL A & B
1 1/2" = 1'-0"



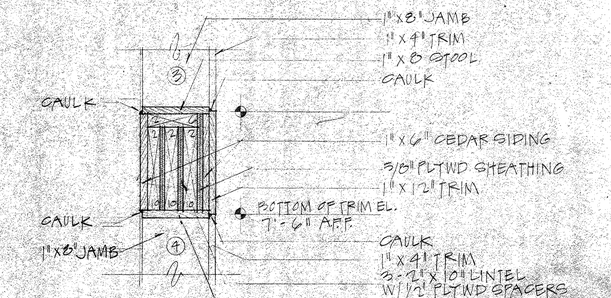
D DETAIL: WINDOW JAMB No. 1 & 2 DOOR JAMB A & B
1 1/2" = 1'-0"



G DETAIL: DOOR HEAD A & B
1 1/2" = 1'-0"



E DETAIL: WINDOW STOOL No. 1 & 2
1 1/2" = 1'-0"



H DETAIL: LINTEL @ OPENING No. 2 & 4
1 1/2" = 1'-0"

STATE OF MARYLAND — GARY A. MARTIN — 29580 — EXPIRES 12/10/24 — PROFESSIONAL ENGINEER

1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 29580
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

ARCHITECTURAL REGISTRATION BOARD — 10365-21 — STATE OF MARYLAND

ADD ALTERNATE NO. 4

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION
CONSTRUCTION DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81
SCALE	1 1/2" = 1'-0"
DRAWN	J.R.E.
CHECKED	

REVISIONS: 1 REVISED SITE DEVELOPMENT PLAN - 05.08.2024

SHEET NO. 16A OF 125

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems ~~and Roads~~

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-84

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-84

APPROVED: For public/ Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-84

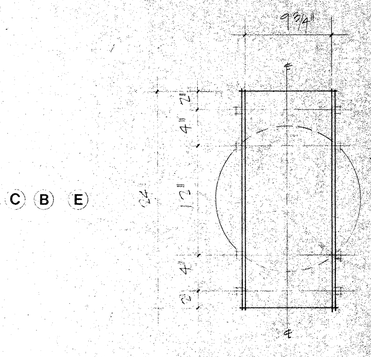
APPROVED: Howard County Office of Planning and Zoning

N.A. — PLANNING DIRECTOR — DATE

N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT ~~& ZONING~~ ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



C B E

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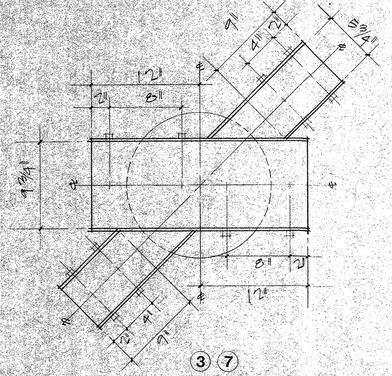

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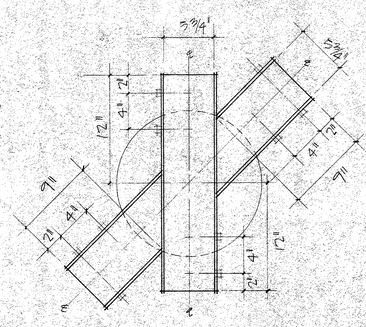

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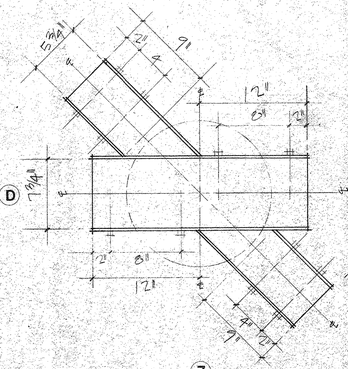

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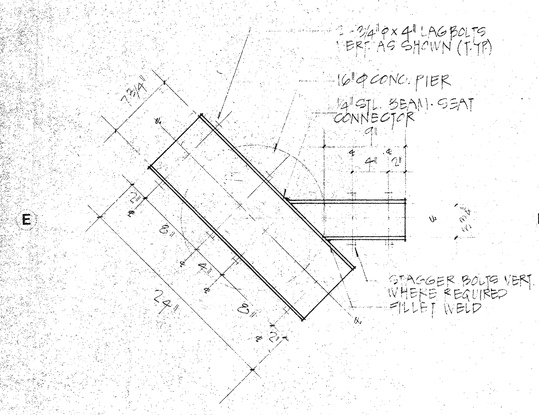
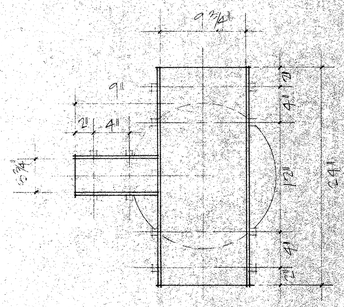


E E

1



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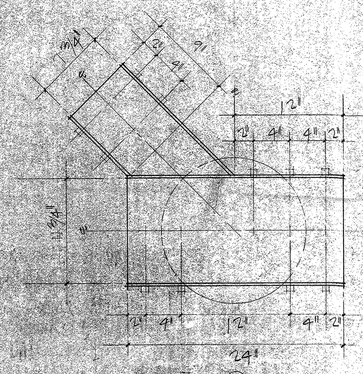

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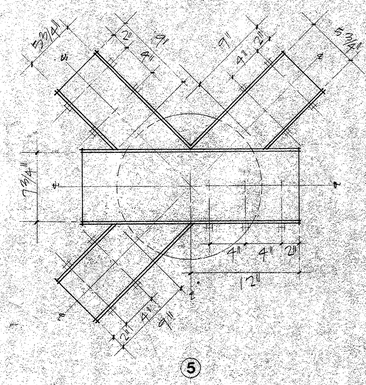
3



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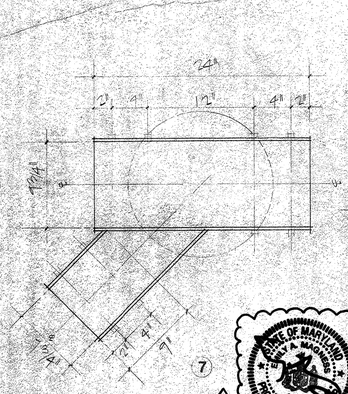
5



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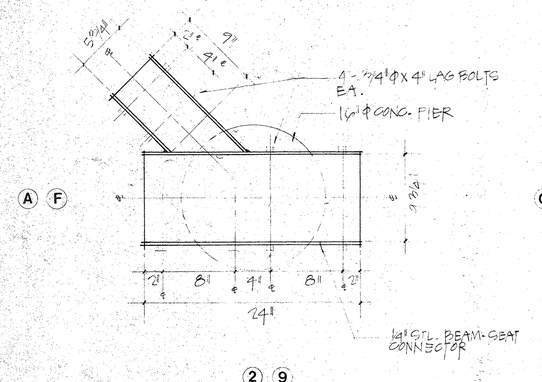
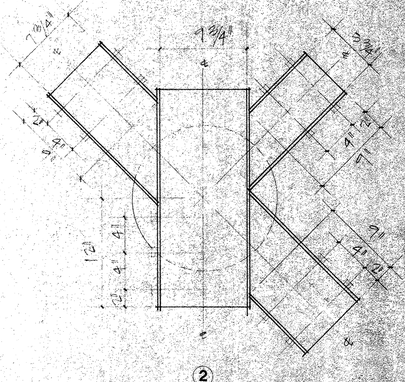
7

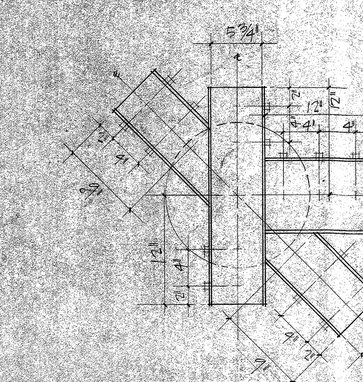


A F G

2 9

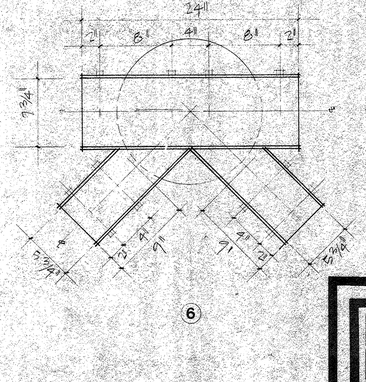


2



C

4



C

6

GENERAL NOTES:
ALL BOLTS 3/4" ø x 4" LAG BOLTS
STAGGER BOLTS VERTICALLY WHERE REQUIRED.

ADD ALTERNATE NO. 1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56843 EXPIRATION DATE: 12/14/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

ARCHITECTURAL REGISTRATION BOARD 2396-B STATE OF MARYLAND

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

OVERLOOK PAVILION
BEAM - SEAT CONNECTIONS.
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	APRIL 81	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	1 1/2" = 1'-0"	
DRAWN	T.R.E.	
CHECKED		

SHEET NO. 17A OF 125 ⚠

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Mary F. Nemazy — 6-28-82 DATE
DIRECTOR

Gordon A. Rice — 7/29/82 DATE
CHIEF, BUREAU OF ENGINEERING

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — 7-20-82 DATE
COUNTY HEALTH OFFICER

APPROVED: Howard County Office of Planning and Zoning

[signature] — 7-21-82 DATE
PLANNING DIRECTOR

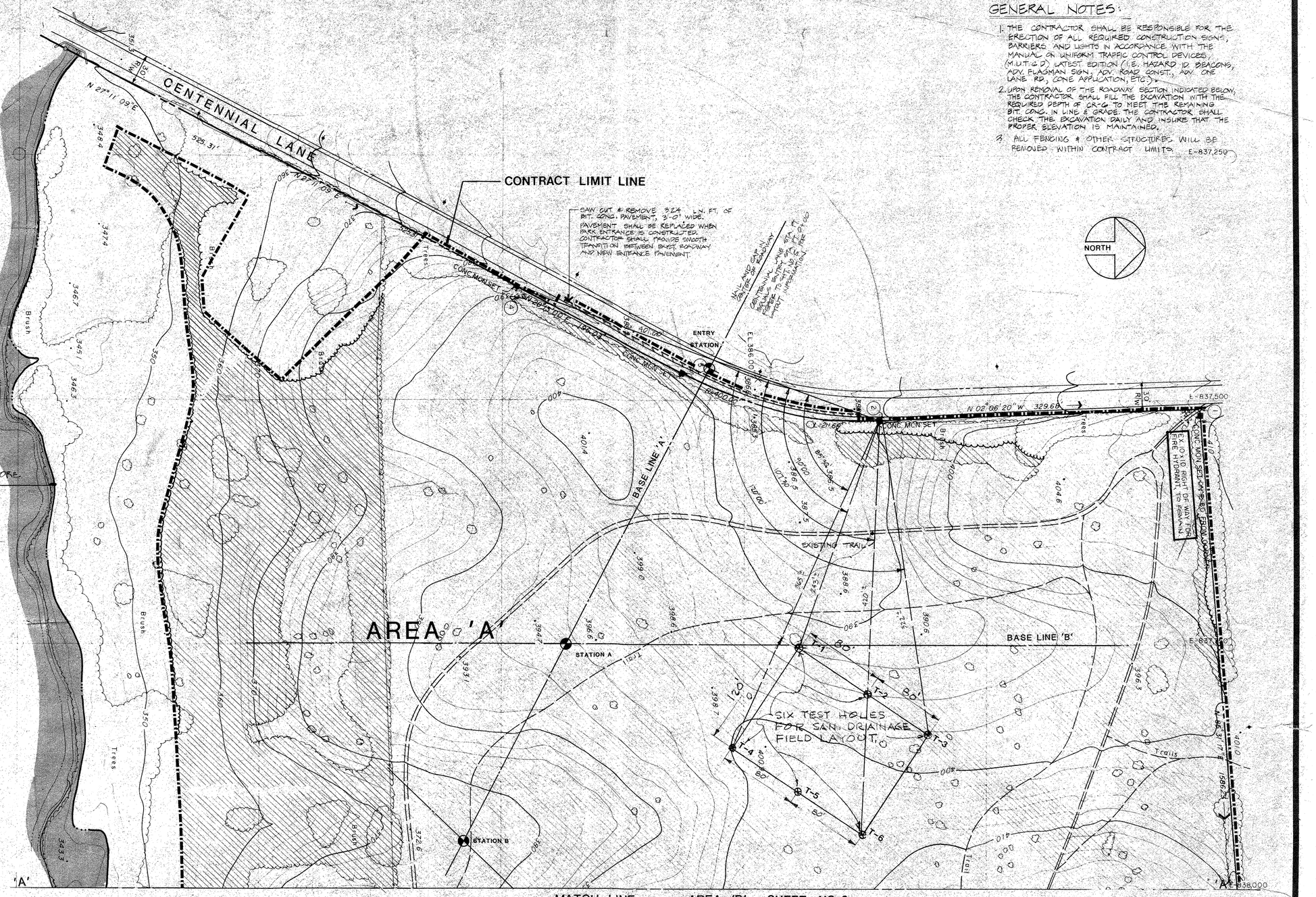
[signature] — 7-20-82 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN.

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 605 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

LEGEND

- CONTRACT LIMIT LINE
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING VEGETATION MASSES TO BE REMOVED
- PROPOSED LAKE EDGE
- EXISTING FENCE
- EXISTING MONUMENT
- BORING LOCATION — B⊗1
- EXIST. BIT CONC. PATH (PHASE I)
- TEST PIT LOCATION — T⊗1



MATCH LINE — AREA 'B' SHEET NO. 2

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ERECTION OF ALL REQUIRED CONSTRUCTION SIGNS, BARRIERS AND LIGHTS IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) LATEST EDITION (I.E. HAZARD ID. BEACONS, ADV. FLAGMAN SIGN, ADV. ROAD CONST., ADV. ONE LANE RD., CONE APPLICATION, ETC.).
2. UPON REMOVAL OF THE ROADWAY SECTION INDICATED BELOW, THE CONTRACTOR SHALL FILL THE EXCAVATION WITH THE REQUIRED DEPTH OF GR'G. TO MEET THE REMAINING BIT. CONC. IN LINE & GRADE. THE CONTRACTOR SHALL CHECK THE EXCAVATION DAILY AND INSURE THAT THE PROPER ELEVATION IS MAINTAINED.
3. ALL FENCING & OTHER STRUCTURES WILL BE REMOVED WITHIN CONTRACT LIMITS.
4. TEST PITS WERE DUG TO DETERMINE THE SUITABILITY FOR THE RESTROOM SEPTIC FIELD. THE RESULTS OF THESE TEST PITS ARE AVAILABLE FOR THE CONTRACTOR'S INSPECTION, AT THE DEPT. OF PUBLIC WORKS.

GENERAL NOTES (CONT.)

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THE ENGINEERING DATA AND REPORTS ASSOCIATED WITH REVISIONS DATED: 5/6/24 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. 56942 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

STATE OF MARYLAND — EDWARD J. GORMAN — REGISTERED PROFESSIONAL ENGINEER

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

EXT'G. CONDITIONS/DEMO. PLAN AREA 'A'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	ONE INCH = 50.0'
DRAWN	DA
CHECKED	EJG

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 19 OF 25

SDP-82-109

163

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Lloyd F. Nimmey — DIRECTOR — 7-28-82 DATE

[signature] — CHIEF, BUREAU OF ENGINEERING — 7/19/82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — COUNTY HEALTH OFFICER — 7-28-82 DATE

APPROVED: Howard County Office of Planning and Zoning

[signature] — PLANNING DIRECTOR — 7-21-82 DATE

[signature] — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — 7-28-82 DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

'A' — MATCH LINE SHEET 1 — AREA 'A' — 'A'

AREA 'B'

CONTRACT LIMIT LINE

EXISTING FENCE TO BE REMOVED

REFER TO SHEET 6 FOR ADDITIONAL CL INFO.

P.C. OF ENTRANCE ROAD

P.C. OF CULDESAC

BASE LINE 'G'

B-3 B-4

E-838,250

E-838,500

E-838,750

N 85° 31' 17" E 1586.23

NORTH

'B' — MATCH LINE SHEET 3 — AREA 'C' — 'B'

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ALL CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56419
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LEGEND:

EXISTING VEGETATION MASS TO BE REMOVED

EXISTING FENCE TO BE REMOVED

PROPOSED FENCE TO BE SET BY OTHERS

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

EXTG. CONDITIONS/DEMO. PLAN AREA 'B'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: △ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	ONE INCH = 50'	
DRAWN	-	
CHECKED	-	

SHEET NO. 20 OF △ 125

SDP-82-069

763

APPROVED: For public Water and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Burl F. Nemmers — DIRECTOR — 7-20-82 DATE

CHIEF, BUREAU OF ENGINEERING — 7/19/82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 7-20-82 DATE

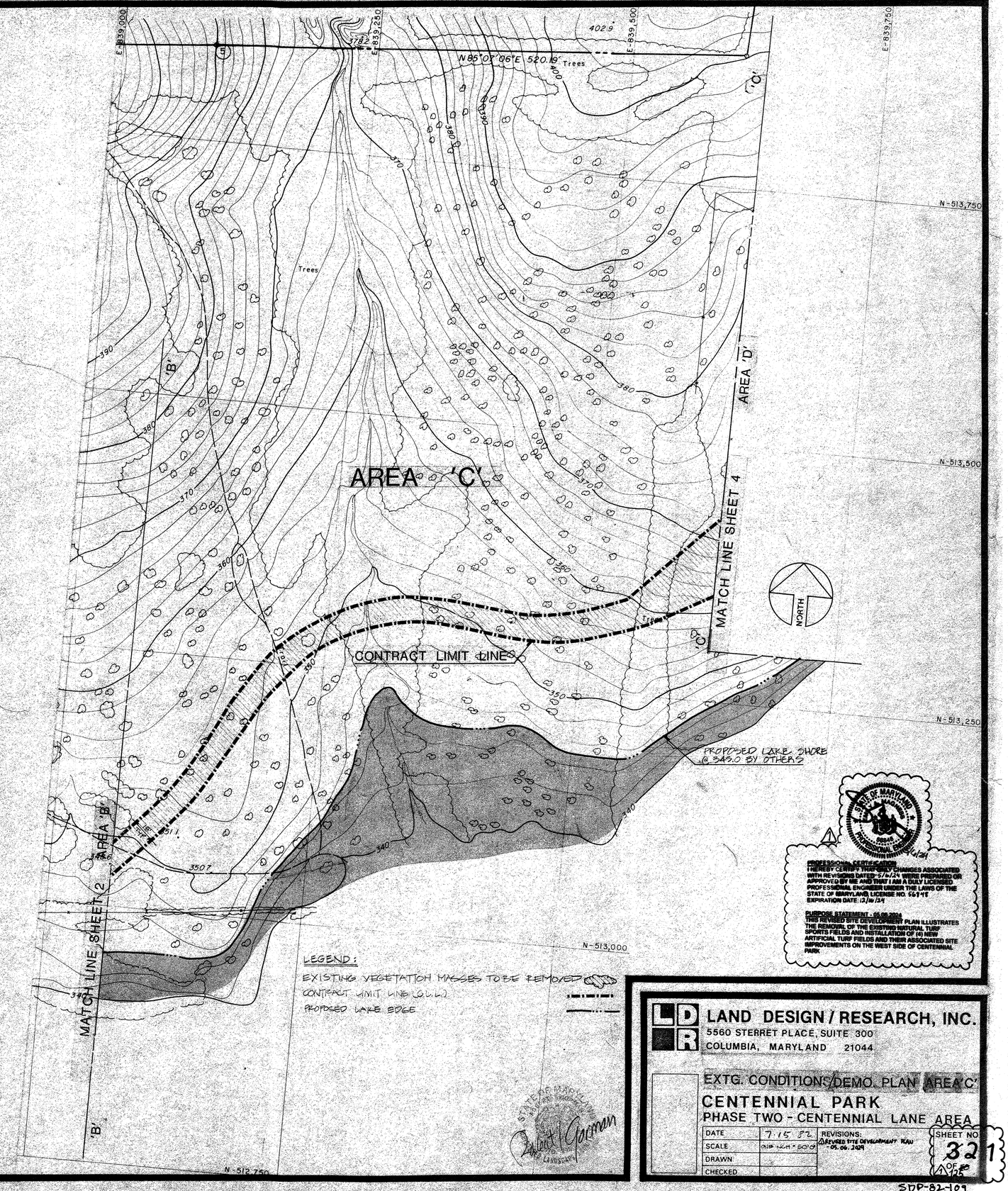
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — 7-21-82 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN — 7-20-82 DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



STATE OF MARYLAND — ROBERT J. GORMAN — LANDSCAPE ARCHITECT

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THE CHANGES ASSOCIATED WITH REVISIONS DATED: 5/6/24, 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. 5614E
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LDR
LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

EXTG. CONDITIONS/DEMO. PLAN AREA 'C'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82
SCALE	1"=100' HOR. 1"=50' VERT.
DRAWN	
CHECKED	

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN 05.06.2024

SHEET NO. 3 OF 12 SHEETS 21

SDP-82-109

263

APPROVED: For public Water and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7/19/82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

E. 839,750 · E. 840,000 · E. 840,250 · E. 840,500 · E. 840,750

N. 513,750 · N. 513,500 · N. 513,250

MATCH SHEET 3

MATCH LINE SHEET 3

AREA 'C'

AREA 'D'

CONTRACT LIMIT LINE

NATURE CNT. STUDY POND CREW. 356.0'

EXIST. WEIR

MH. 209

MH. 208-A

MH. 207

MH. 208

EXTG. 3 STRAND WIRE FENCE

EXISTING 8' WIDE BIT. CONC. PATH PHASE I

TYP. R.O.W. OF PATHWAY SHALL BE 10'-0" UNLESS OTHERWISE INDICATED

20' SEWER R.O.W.

PROPOSED LAKE SHORE L.O. 345.0 BY OTHERS

EXISTING FENCE TO BE REMOVED

Trees · Dense Trees · Trees & Brush · Brush

NORTH

EXISTING VEGETATION MASS TO BE REMOVED
BOFING - LOCATION
CONTRACT LIMIT LINE (C.L.L.)
PROPOSED LAKE EDGE
EXIST. BIT. COND. PATH

STATE OF MARYLAND — ROBERT J. GOODMAN — No. 21324 — REGISTERED LANDSCAPE ARCHITECT

STATE OF MARYLAND — ANDREW A. MARKUS — 26946 — PROFESSIONAL ENGINEER — 5/6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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 26946
EXPIRATION DATE 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

EXTG. CONDITIONS/DEMO. PLAN AREA 'D'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82
SCALE	1"=100'
DRAWN	V.A.
CHECKED	R.J.G.

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 42 OF 135

SDP-82-109

763

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

ENTRY STA. 0+00
NORTH 513,213.00
EAST 837,468.00

ENTRANCE DRIVE CURVE DATA

CURVE	R.	Δ	L	TAN.	D	E
1	305'	48°30'	258.18'	137.39'	18°47'08"	29.52'
2	200'	64°00'	223.40'	124.97'	28°38'52"	35.84'
3	47'	270°00'	221.48'	47.00'	121°54'21"	113.47'

CURVE	STA.	POINT	COORDINATE	
#1	1+30.00	P.C.	N 513,153.22	E 837,583.44
		P.I.	N 513,090.05	E 837,705.44
	3+88.18	P.T.	N 513,139.57	E 837,883.60
#2	4+52.66	P.C.	N 513,162.81	E 837,893.75
		P.I.	N 513,207.85	E 838,010.32
	6+76.06	P.T.	N 513,122.82	E 838,101.90
#3	8+86.06	P.C.	N 512,979.94	E 838,255.80
		P.I.	N 513,011.92	E 838,221.36
	11+07.54	P.T.	N 513,046.36	E 838,259.34

EXISTING CONC. BRIDGE

CONC. MON. SET N 513,013.66 E 837,390.72

BACKSIGHT PT. IN PAVING, PK NAIL & CAP

BASE LINE "A"

℄ STA. 0+00 N 513,213.00 E 837,468.00

NOTE: PROPERTY LINE BEARINGS, DISTANCES, COORDINATES AND MONUMENT INFORMATION ARE FROM A SURVEY DATED 7-8-76 BY WILLIAM G. HARTEL, P.L.S. 9436. THIS SURVEY IS TIED TO HOWARD COUNTY CONTROL # 2840002, CONC. MON. AT MD. RT. 108 & CENTENNIAL LANE.

℄ CENTENNIAL LANE

CONC. MON. SET N 513,186.39 E 837,473.40

CONC. MON. SET N 513,390.21 E 837,520.66

IRON PIPE FOUND N 513,719.67 E 837,508.55

CON. MON. SET

CENTENNIAL LANE

FUTURE R.O.W. CENTENNIAL LA.

MEET BIKE PATH BY OTHERS

End of Path Lt.

STOP CURB AND NOSE DOWN 6" THIS POINT ON EACH SIDE OF 8' TAPER SECTION OF PAVEMENT TO MEET EXIST.

BASE LINE DATA
No Scale

PARALLEL TO BASE LINE 'A'

SITE ENTRANCE

BASE LINE 'M'

EX. NATURAL TURF SPORTS FIELDS AND ASSOCIATED SITE ELEMENTS SHALL BE REPLACED WITH PROPOSED ARTIFICIAL TURF FIELDS AND SITE ENHANCING FEATURES. REFER TO SHEET 59 - 125 FOR ALL REVISED SITE WORK

NORTH

BUILDING SETBACK LINE

8' WIDE BIT. CONC. PATHWAY

(4) TENNIS COURTS

COURT GAMES COMPLEX SEE SHEET NO. 31

MULTI - PURPOSE COURT SEE SHEET # 31

PLAY AREA SEE SHEET #32

CONCRETE RETAINING WALL

GAGA VOLLEY BALL COURT

TOURNAMENT TENNIS COURT SEE SHEET # 31

TYP. BIT. CONC. ROADWAY PAVEMENT

TYP. 8' WIDE BIT. CONC. PATH WAY

STANDARD PLAYER'S BENCH (CONC. APRON 4 EA. - 5'X10')

12' WIDE BIT. CONCRETE PITCHER TAP

SOCCER FIELD 160' x 360'

SEEDED LAWN AREA

SOCCER FIELD 180' x 360'

4' HIGH GALV. CHAIN LINK FENCE

STOP FENCE 26 L.F. SOUTH OF PROPERTY CORNER

CONC. MON. SET (BURIED) FOUND RIGHT OF WAY FOR CORNER

FENCE

CONTRACT LIMIT LINE

BASE LINE 'B'

BASE LINE 'C'

BASE LINE 'A'

PROPOSED LAKE SHORE @ 345.0 BY OTHERS

Brush

Trees

CONC. MON. SET

STA. 'B' N 513,962.20 E 837,952.36

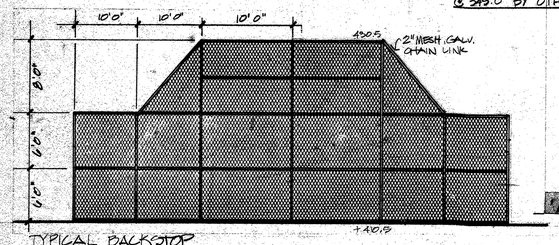
CURVE #2

105° 32' 30"

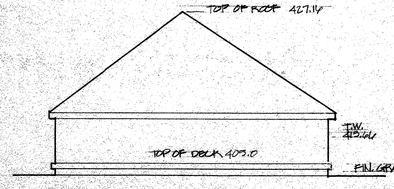
REFER TO SHT. 125 FOR SECTIONS

CONTRACTOR SHALL INSTALL IRON PINS AT CORNERS OF SOCCER FIELDS.

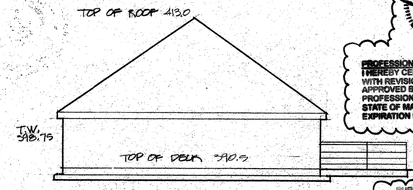
MATCH LINE AREA 'B' SHEET #6



TYPICAL BACKSTOP EAST BALLFIELD



RESTROOM BLDG. ELEVATION 'B' 3/32" = 1'0"

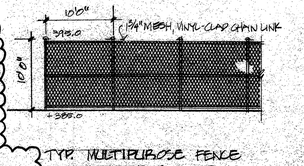


OVERLOOK PAVILION ELEVATION C

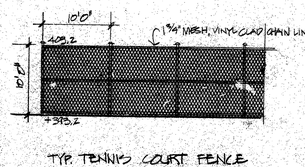
STATE OF MARYLAND — PAUL A. MAGNUS — 26948 — PROFESSIONAL ENGINEER — 12/16/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26948 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.



TYP. MULTIPURPOSE FENCE SOUTH-EAST CORNER



TYP. TENNIS COURT FENCE NORTH-EAST CORNER

REFER TO DETAIL B/37 FOR FENCING INFORMATION. (COLOR, MESH SIZE, HEIGHT, FASTENINGS ETC.)

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

CONST. LAYOUT PLAN AREA "A"

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE		REVISIONS:
SCALE	ONE INCH = 50'	1. Revise Entrance & Storm Drain System. 4-7-83
DRAWN	KHO	2. REVISED SITE DEVELOPMENT PLAN 05.06.2024
CHECKED		

SHEET NO. 32 OF 59 (2) 125

SDP-82-109

8/6/24

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7/19/82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

MATCH LINE SHEET #5 AREA 'A'

'A'

BASE LINE OF TR.

REFER TO SHT. #25 FOR SECTIONS

OVERLOOK PAVILION, SHEET NO. 10A

RESTROOM BLDG. SHEET NO. 4A

FIELD #1

FIELD #2

FIELD #3

REFER TO "TRI-PLEX" BLOW-UP SHEET NO. 33

AREA 'B'

4' HIGH FENCE

END FENCE

20' SETBACK

15' WIDE WARNING TRACK, CONSTRUCT OF SAME MATERIAL AS THE INFIELD SKINNED AREAS. (SEE SPECS.)

15' WIDE WARNING TRACK CONSTRUCT OF SAME MATERIAL AS THE INFIELD SKINNED AREA (SEE SPECS.)

TYPICAL 4' HIGH 2" MESH, 9 ga. GALV. CHAIN LINK FENCE ALONG ALL OUTFIELDS STOP AT FOUL LINES.

⚠1 ALL EX. NATURAL TURF SPORTS FIELDS AND ASSOCIATED SITE ELEMENTS SHALL BE REPLACED WITH PROPOSED ARTIFICIAL TURF FIELDS AND SITE ENHANCING FEATURES. REFER TO SHEET 59 - 125 FOR ALL REVISED SITE WORK

CONTRACT LIMIT LINE

CONTRACT LIMIT LINE

NORTH

8' WIDE ASPHALT PATHWAY TYP.

& OF PATHWAY WILL BE STAKED BY CONTRACTOR FOR APPROVAL BY OWNER & ARCHITECT PRIOR TO CONSTRUCTION.

PROPOSED LAKE SHORE @ 345. - BY OTHERS

10'-WALE CROSSING

'B'

MATCH LINE SHEET #7 AREA 'C'

'B'

OVERLOOK PAVILION NOTES

1. CLEAR AREA AROUND PAVILION OF ALL BRUSH & SMALL TREES & LIMBS & LEGS

2. STAKE OUT CORNERS OF PAVILION, TO BE APPROVED BY ARCHITECT

TYP. PARKING SPACE LAYOUTS

1" = 10'-0"

NOTE:
1. CONTRACTOR SHALL PAINT STANDARD HANDICAP SYMBOL ON CENTER OF PARKING BAY. HANDICAP SPACES ARE NOTED ON DRAWINGS WITH AN 'H' IN THE SPACES TO BE DESIGNATED AS HANDICAP PARKING.

2. THE CONTRACTOR SHALL FURNISH AND INSTALL SEVEN (7), R7-8 SIGNS, DESIGNATING HANDICAP PARKING SPACES IN ACCORDANCE WITH MARYLAND STATE BUILDING CODE FOR THE HANDICAPPED AND ANSI A117.1. LOCATE SIGNS ON CENTERLINE OF SPACE AT THE BACK SIDE OF 5' SIDEWALK.

STATE OF MARYLAND — ROBERT L. GERNON — 20848 — PROFESSIONAL ENGINEER — 5/6/24

PROFESSIONAL CERTIFICATION.
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 20848
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 4-28-82

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

CONST. LAYOUT PLAN AREA 'B'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	ONE INCH = 50'-0"	
DRAWN	KHC	
CHECKED		

SHEET NO. 82 OF ⚠125

SDP-82-109

763

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Henry F. Nemeyer — 7-20-82
DIRECTOR — DATE

[signature] — 7/19/82
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — 7-20-82
COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

[signature] — 7-21-82
PLANNING DIRECTOR — DATE

[signature] — 7-20-82
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

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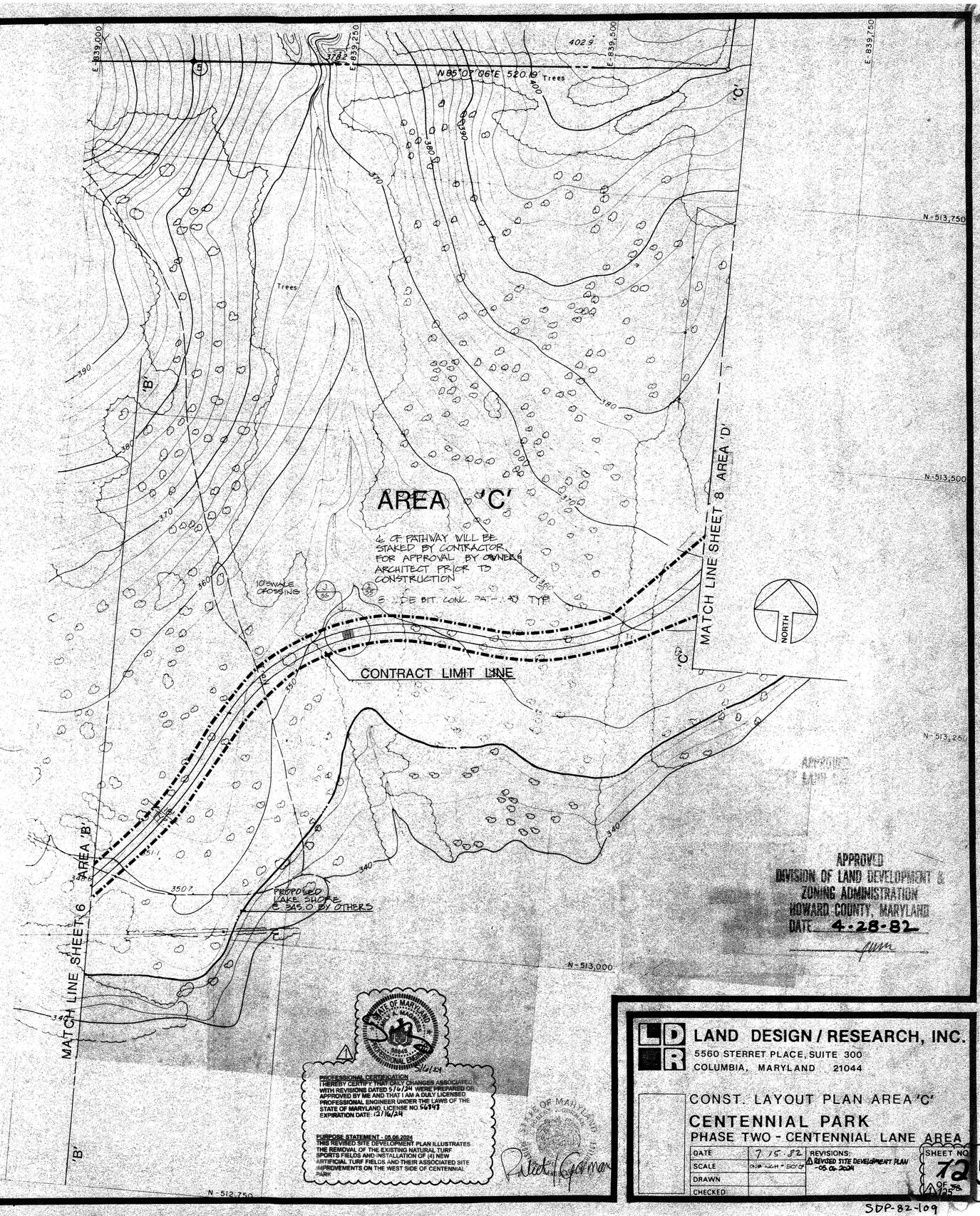
Liber 612 Folio 543, Parcel 8



STATE OF MARYLAND — RICHARD GRAHAM — 50843 — PROFESSIONAL ENGINEER — 5/6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT I AM DULY LICENSED AS A PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 50843, EXPIRATION DATE: 12/16/24. THAT THE REVISIONS DATED 5/6/24 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. 50843

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

STATE OF MARYLAND — RICHARD GRAHAM — PROFESSIONAL ENGINEER

[signature]

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

CONST. LAYOUT PLAN AREA 'C'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	1"=100'
DRAWN	
CHECKED	

REVISIONS:
Δ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 7 OF 25

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-26-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

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Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

MATCH LINE SHEET 3

MATCH LINE SHEET 'C' AREA 'C'

E 839,750 · E 840,000 · E 840,250 · E 840,500 · E 840,750

N 514,043.00
E 840,122.00

B.M. MH 209 ELEV. 352.58

PEDESTRIAN BRIDGE REFER TO SHEET # 34

N 43°37'35" E

CLASS #1 RIP RAP TYPICAL EACH SIDE (D/34)

FENCE TO REMAIN

AREA 'D'

8' WIDE BIT. CONC. PATHWAY TYP. (I/35)

℄ OF PATHWAY WILL BE STAKED BY CONTRACTOR FOR APPROVAL BY OWNER & ARCHITECT PRIOR TO CONSTRUCTION

CONTRACT LIMIT LINE

EXISTING 8' WIDE BIT. CONC. PATH PHASE I

10' SWALE CROSSING (J/35)

FUTURE PATH CONNECTION BY OTHERS

MH 208

PROPOSED LAKE SHORE @ 345.0 BY OTHERS

8' WIDE PATHWAY

EXISTING FENCE TO BE REMOVED

Trees · Dense Trees · Trees & Brush · Brush

N-513,750 · N-513,500 · N-513,250

NORTH

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 4-28-82

STATE OF MARYLAND — ROBERT A. MAGNAN — 5686 — PROFESSIONAL ENGINEER — 5/6/24

1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 5686
EXPIRATION DATE 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

STATE OF MARYLAND — ROBERT A. MAGNAN — 5686 — PROFESSIONAL ENGINEER

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

CONST. LAYOUT PLAN AREA 'D'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: 1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	1" = 50'	
DRAWN		
CHECKED		

SHEET NO. 826 OF 925

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

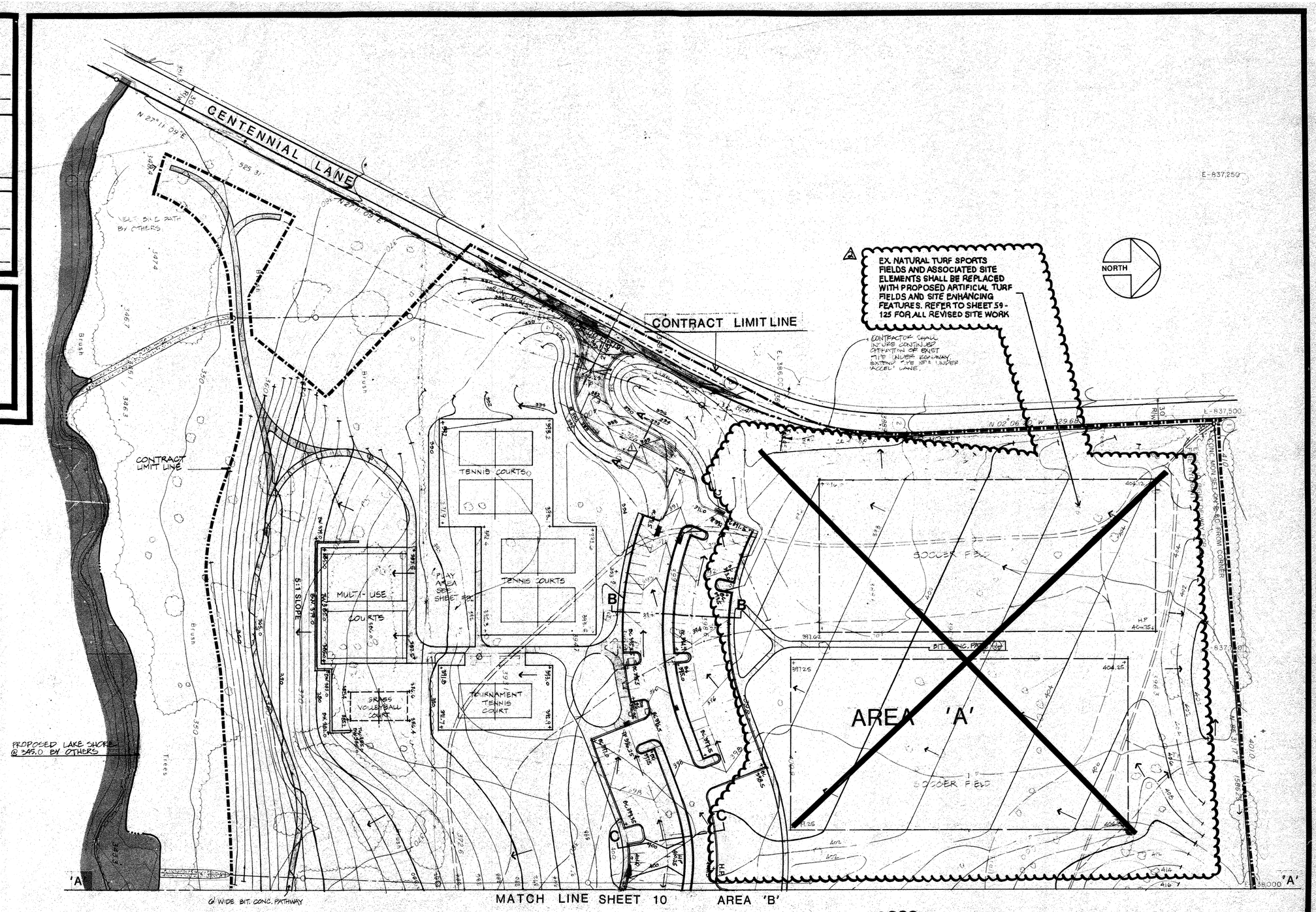
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 605 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 50898
EXPIRATION DATE: 12/01/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

GRADING PLAN AREA 'A'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	
SCALE	ONE INCH = 50'-0"
DRAWN	
CHECKED	

REVISIONS:
1 Revise Entrance & Storm Drain System. 4-7-83
2 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 92 OF 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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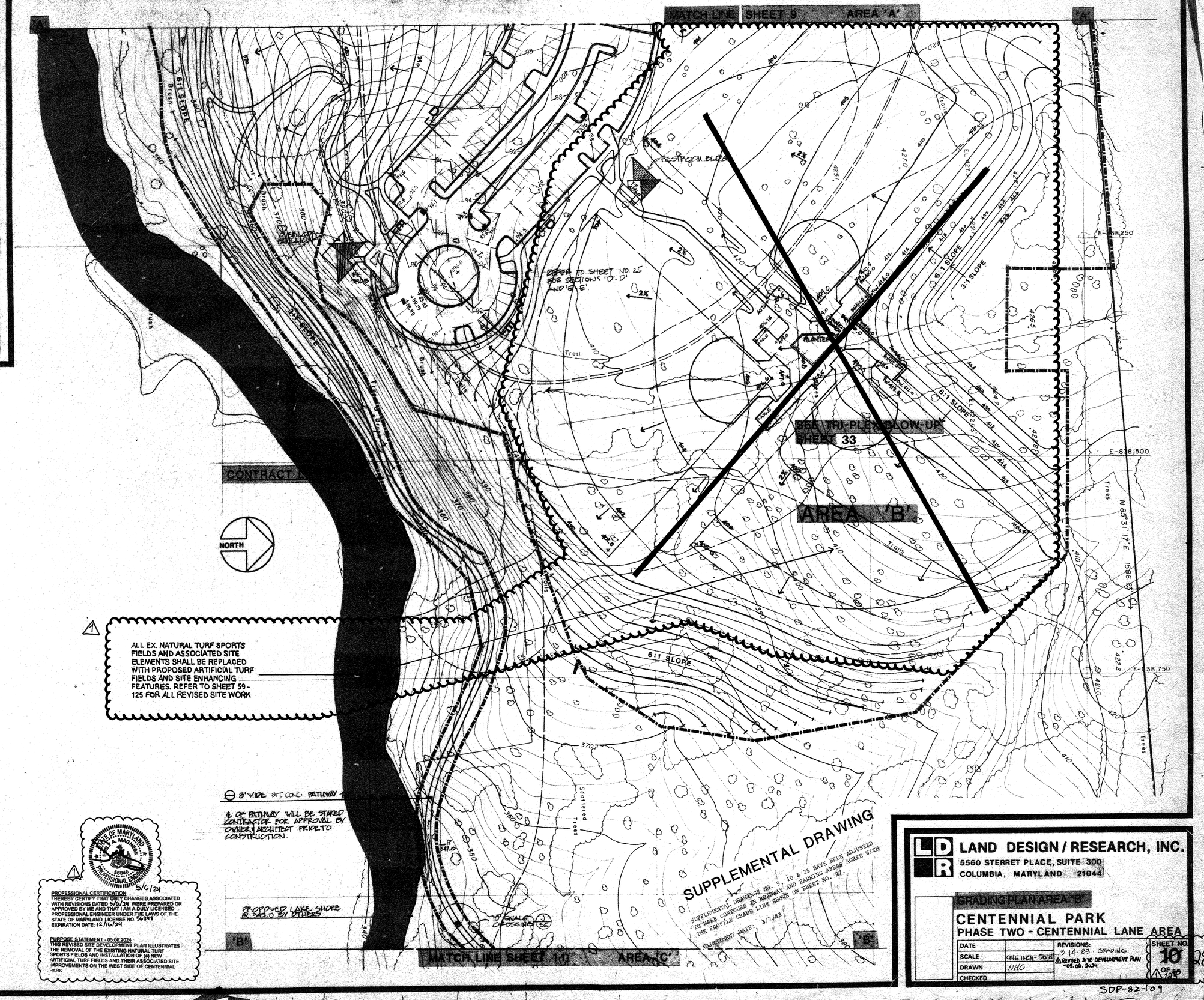
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



STATE OF MARYLAND — JOHN A. MAGNESS — 26846 — PROFESSIONAL ENGINEER — 5/6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26841 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LD R — LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

GRADING PLAN AREA 'B'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

		REVISIONS:
DATE		3-14-83 GRADING
SCALE	ONE INCH= 50 FEET	1 REVISED SITE DEVELOPMENT PLAN -05.06.2024
DRAWN	NHC	
CHECKED		

SHEET NO. 10 OF 72 — 28

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Lloyd F. Nemmy — DIRECTOR — 7-20-82 DATE

[illegible] — CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[illegible] — COUNTY HEALTH OFFICER — 7-22-82 DATE

APPROVED: Howard County Office of Planning and Zoning

[illegible] — PLANNING DIRECTOR — 7-21-82 DATE

[illegible] — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — 7-20-82 DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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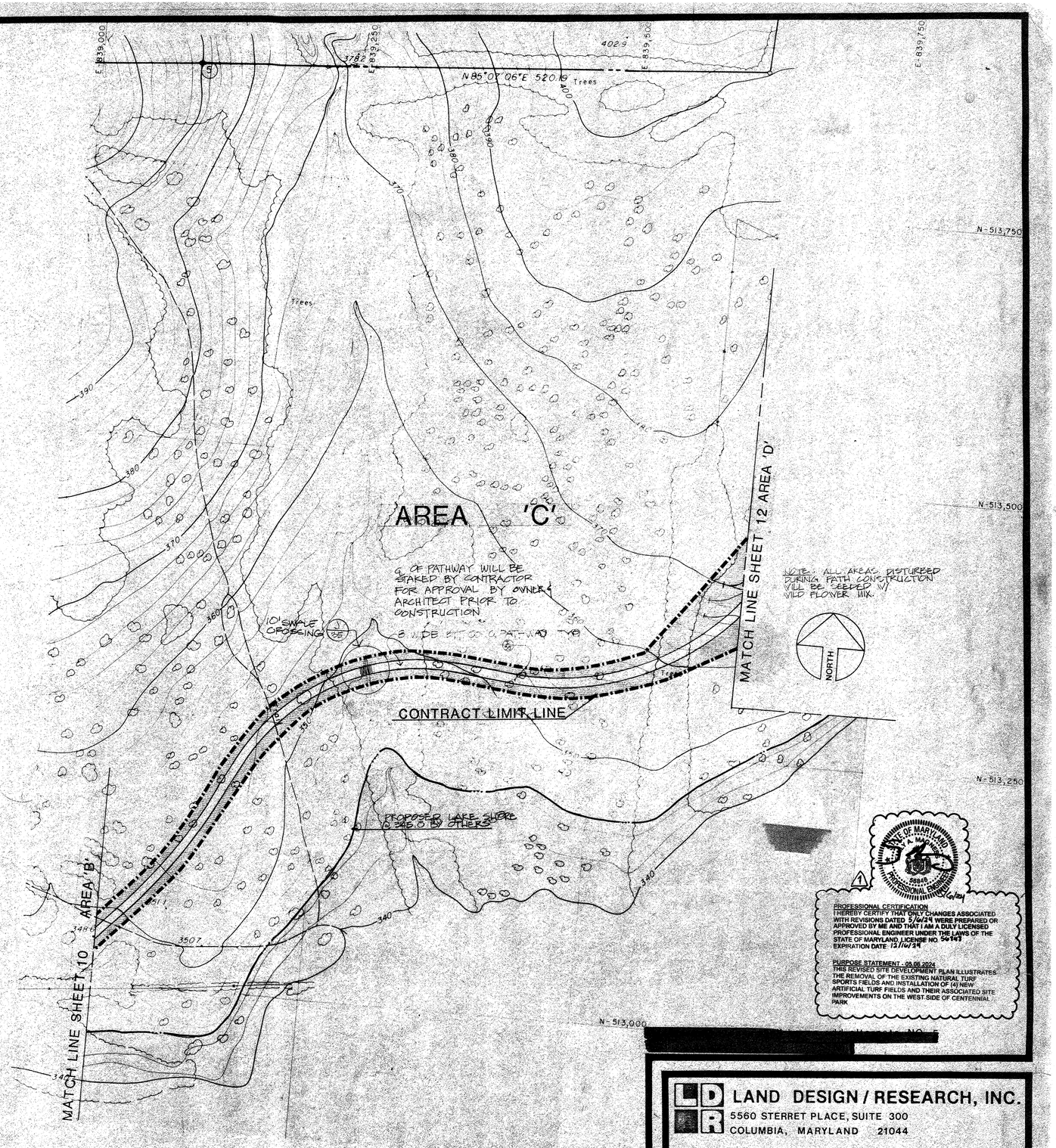

LEGEND:
- CONTRACT LIMIT LINE
- WILD FLOWER MIX. SEE SPECS.

STATE OF MARYLAND — ROBERT L. GORMAN — No. 5884 — REGISTERED PROFESSIONAL ENGINEER — 6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 5884 EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

[redacted]

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

GRADING PLAN AREA 'C'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	1" = 50'	
DRAWN		
CHECKED		

SHEET NO. 11 OF 25 129

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

E. 839,750 | E. 840,000 | E. 840,250 | E. 840,500 | E. 840,750

MATCH SHEET 3

MATCH LINE SHEET 11 AREA 'C'

N. 513,750 | N. 513,500 | N. 513,250

NORTH

AREA 'D'

Trees | Dense Trees | Trees & Brush | Brush

S.M. MH. 209 ELEV. 352.53

FOOTBRIDGE

MH 208-A ELEV. 358.00

MH 208

8' BIT. CONC. ASPHALT PATH - TYPE I - 18'0" R.O.W.

℄ OF PATHWAY WILL BE STAKED BY CONTRACTOR FOR APPROVAL BY OWNER & ARCHITECT PRIOR TO CONSTRUCTION

CONTRACT LIMIT LINE

8' WIDE ASPHALT PATH - TYPE I

NOTE: ALL AREAS DISTURBED DURING PATH CONSTRUCTION WILL BE SEEDED W/ WILD FLOWER MIX

FUTURE PATH CONNECTION BY OTHERS

(PROPOSED) LAKE SHORE ℄ 378.3 BY OTHERS (LAKE CONSTRUCTION NOT AT THIS TIME)

LEGEND

CONTRACT LIMIT LINE

WILD FLOWER MIX - SEE SPECS.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 50193
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

GRADING PLAN AREA 'D'

CENTENNIAL PARK

PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82	REVISIONS: ⚠1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	1" = 100' - 50'-0"	
DRAWN		
CHECKED		

SHEET NO. 12 OF ⚠1 125

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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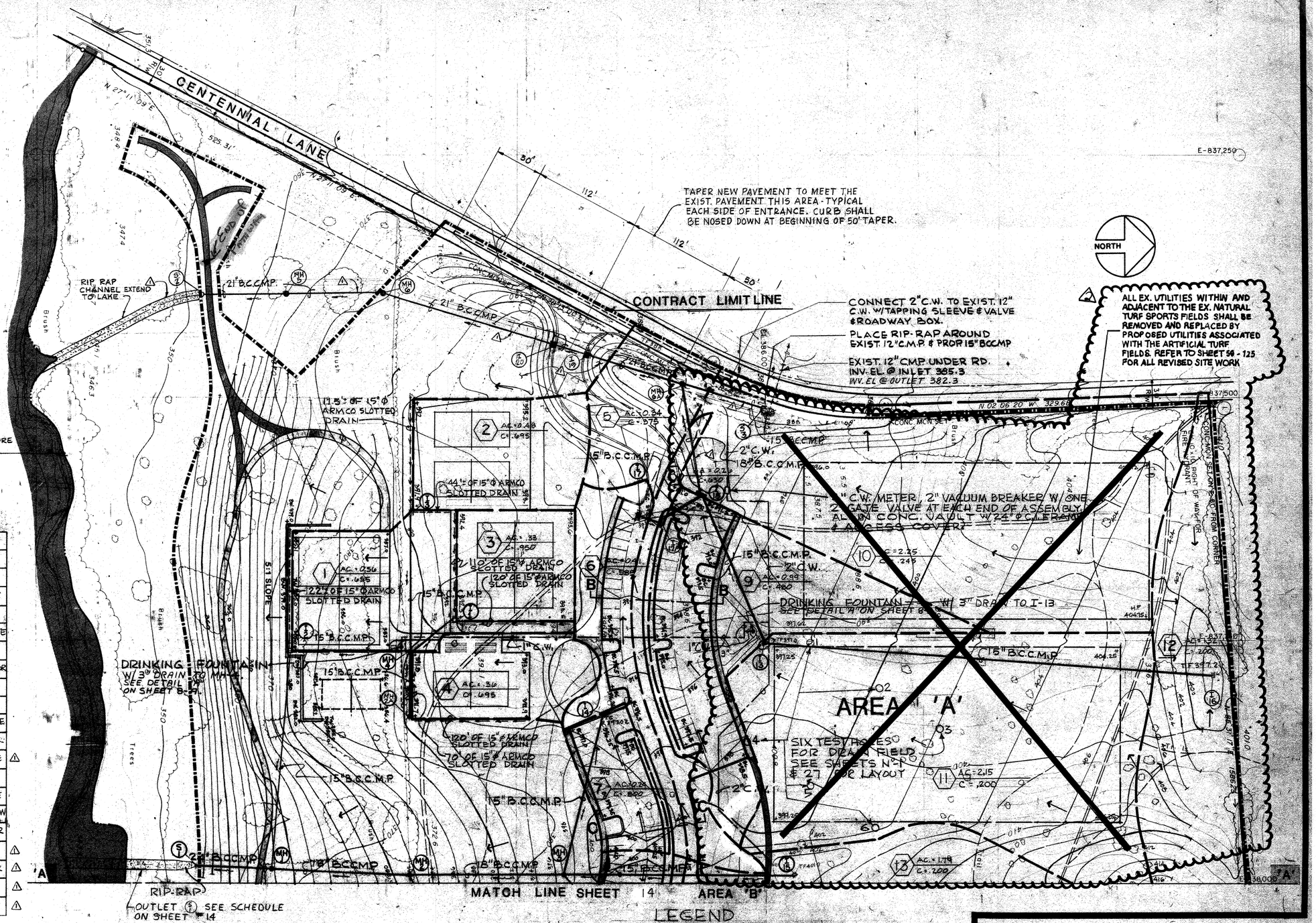
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



STORM DRAIN INLET SCHEDULE

NO	TYPE	Q	INV. OUT	TOP EL.	REMARKS
I-1	'S'	2.10	388.35	392.30	WR GRATE, SD 4.93
I-2	'S'	2.48	374.46	385.00	SD 4.22
I-3	'S'	2.03	387.69	391.80	SD 4.22
I-5	DOUBLE 'S'	2.16	384.74	389.00	SD 4.23 W/WR GRATE
I-6	'A-5'	0.50	384.30	389.80	SD 4.01
I-7	'A-5'	1.86	389.40	395.12	SD 4.01 W/DEFLECTOR
I-8	'A-5'	0.69	388.74	394.21	SD 4.01
I-9	'A-5' DEPRESSED	3.34	383.17	393.27	SD 4.01
I-10	DOUBLE 'S'	2.48	394.80	399.70	SD 4.23 W/WR GRATE
I-11	'A-5'	2.14	393.20	399.60	SD 4.01 W/DEFLECTOR
I-13	DOUBLE 'S'	2.54	388.60	398.00	SD 4.23 W/WR GRATE ⚠
I-14	'A-5'	1.35	391.09	397.02	SD 4.01
I-15	DOUBLE 'S'	1.94	397.00	401.00	SD 4.23 W/WR GRATE
I-16	'K'	1.64	393.50	397.20	SD 4.11, SLOTS N,E,S & W
I-17	'A-5'	1.49	387.32	391.80	SD 4.01 W/DEFLECTOR
I-18	'A-5'	2.85	386.28	390.00	SD 4.01 ⚠
I-19	'A-5'	1.12	380.84	385.98	SD 4.01 W/DEFLECTOR ⚠
I-20	'A-5'	1.09	380.00	385.98	SD 4.01 ⚠
I-17A	A-5	1.49	387.27	391.40	SD 4.01 ⚠

NOTE: FOR WR GRATES, SEE SD. 4.93
FOR INLET DEFLECTORS, SEE SD 4.83.

STRUCTURE SCHEDULE

NO	TYPE	SIZE	INV.	REMARKS
1	END SECTION	24"	350.00	OUTLET
2	END SECTION	21"	349.00	OUTLET ⚠
3	END SECTION	15"	385.00	INLET ⚠

NOTE FOR DETAIL OF METAL END SECTION, SEE H.C. ST'D SD 5.61

MH SCHEDULE

NO	TYPE	INV. OUT	TOP ELEV.
1	A-2	353.74	366.00
2	A-2	374.46	381.00
2-A	A-2	387.33	391.70
3	A-2	389.15	397.00
4	A-2	386.00	391.80
5	A-2	352.60	365.20
6	A-2	350.60	379.30

MH SCHEDULE ⚠

NO	TYPE	INV. OUT	TOP ELEV.
6A	A-2	383.12	392.20 ⚠

NOTE: FOR 'A-2' MH DETAIL SEE H.C. ST'D SD 3.02

LEGEND

- (I) STORM INLET N° 1
- (MH) MANHOLE N° 1
- (S) STRUCTURE N° 1
- C.W. COLD WATER
- (1) AC/C STORM DRAIN AREA N° 1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 54197, EXPIRATION DATE 12/16/24.

PURPOSE STATEMENT: 10/8/2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL LANE.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

AREA 'A' STORM DRAINAGE MAP, STORM DRAINS, SANITARY & COLD WATER
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	
SCALE	ONE INCH = 50 FEET
DRAWN	
CHECKED	

REVISIONS:
⚠ - Revised Entrance & Storm Drain System - 4-7-83
⚠ REVISED SITE DEVELOPMENT PLAN - 05-06-2024

SHEET NO. 131 OF N° 135

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
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Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

STORMWATER OUTLET PROTECTION SCHEDULE

OUTLET CONDUIT	FLOW Q_{10} CFS	CONDUIT SIZE	VEL FPS	W_1	W_2	L	MAX. WT. OF STONE	MIN. MAX. RANGE IN WT. OF STONE	WT. RANGE OF STONE
(S2)	12.6	21"	7.5	3'-6"	6'-0"	10'-0"	SEE NOTES Nos		1, 2 & 3
(S1)	24.0	24"	8.0	4'-0"	10'-0"	20'-0"	SEE NOTES Nos		1, 2 & 3

RIPRAP - SEE NOTES Nos 1, 2 & 3.

CMP PIPE
CMP END SECTION

EXTEND TO EXIST. STREAM

PLAN
N.T.S.

SECTION A-A
OUTLET (S2)
N.T.S.

SECTION A-A
OUTLET (S1)
N.T.S.

NOTES

1. RIPRAP, MIN. THICKNESS OF STONE SHALL BE 9 IN. MEASURED PERPINDICULAR TO FACE OF RIPRAP. NO FACE DIMENSION SHALL BE LESS THAN STONE.
2. RIPRAP SHALL BE IN ACCORDANCE WITH S.R.C.* CLASS I TABLE 20.03-6.1 "MEDIUM RIPRAP. SHALL HAVE NOT LESS THAN 70% OF THE INDIVIDUAL PIECES WEIGHING A MINIMUM OF 150 LBS. ONLY 10% OF INDIVIDUAL PIECES MAY WEIGH LESS THAN 100 LBS."
3. ALL RIPRAP SHALL BE PLACED OVER # UPON MIRAFI-500X OR APP'D. EQUAL UNDERLAYMENT.

*STATE ROADS COMMISSION OF MD. SPECIFICATIONS.

STATE OF MARYLAND — JOHN A. MAGNI — 20848 — PROFESSIONAL ENGINEER — 5/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 20848
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

MATCH LINE SHEET 13 — AREA 'A' — 'A'

CONTRACT LIMIT LINE

NORTH

ALL EX. UTILITIES WITHIN AND ADJACENT TO THE EX. NATURAL TURF SPORTS FIELDS SHALL BE REMOVED AND REPLACED BY PROPOSED UTILITIES ASSOCIATED WITH THE ARTIFICIAL TURF FIELDS. REFER TO SHEET 59-125 FOR ALL REVISED SITE WORK

8' WIDE ASPHALT PATHWAY TYP.

& OF PATHWAY WILL BE STAKED BY CONTRACTOR FOR APPROVAL BY OWNER/ARCHITECT PRIOR TO CONSTRUCTION

PROPOSED LAKE SHORE @ SAS'S BY OTHERS

SEE TRI-PLEX BLOW-UP SHEET 33

AREA 'B'

SEE ADDITIONAL DRAINAGE DRAWINGS BY HOWARD CO. BPW

'B' — MATCH LINE SHEET 17 — AREA 'C' — 'B'

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

AREA 'B' STORM DRAINAGE MAP, STORM DRAINS, SANITARY & COLD WATER
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82
SCALE	ONE INCH = 50'-0"
DRAWN	
CHECKED	

REVISIONS:
△ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 14 OF 32 SHEETS

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
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Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

By the Developer:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

Kenneth J. Smith — 7-20-82
Signature of Developer — Date
Print name below signature
KENNETH J. SMITH

( ) By the Engineer:

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

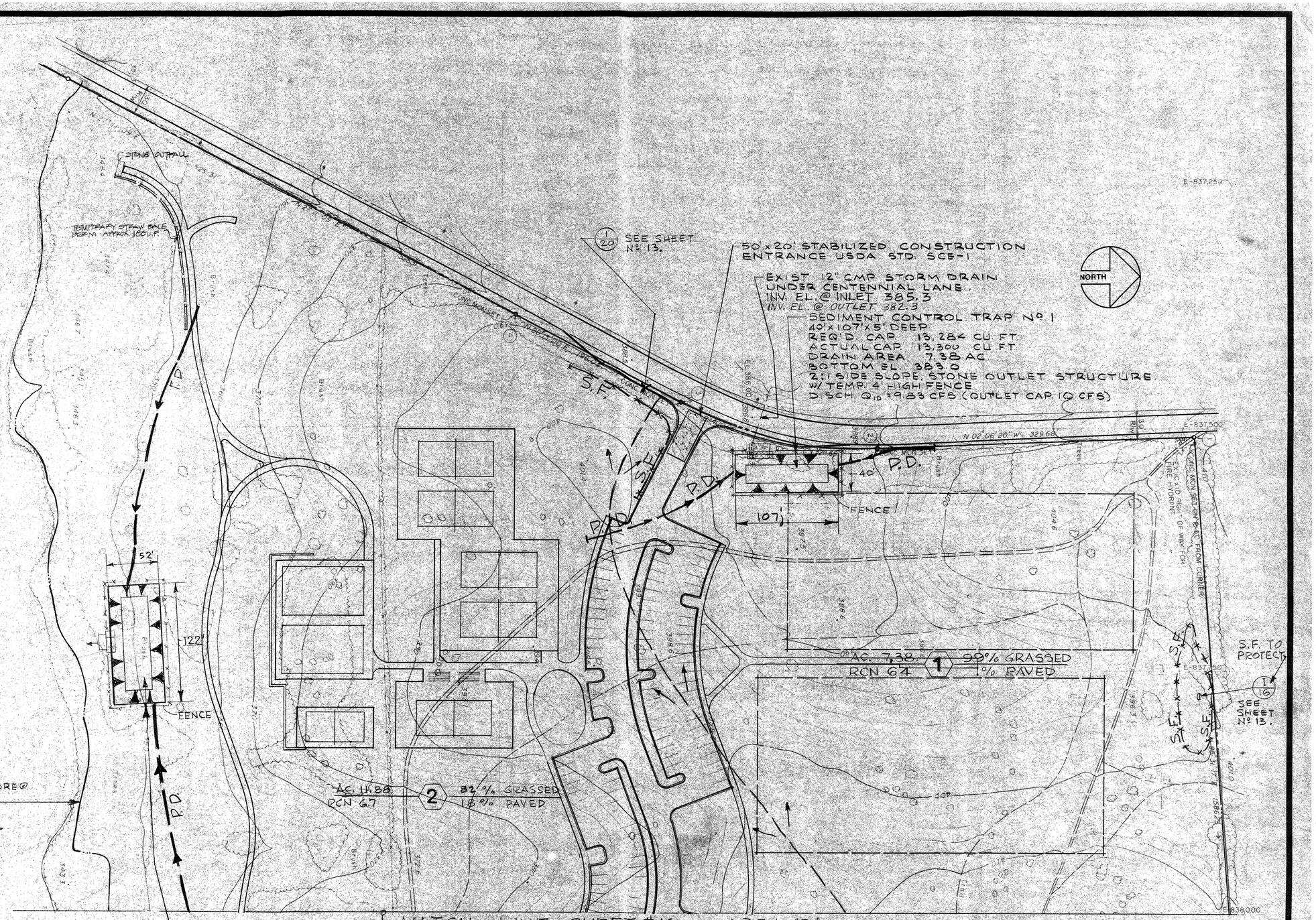
Signature of Engineer — Date Apr. 6, 1982 / July 15, 1982

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements

Signature — Date 7/29/82
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

Approved — Date 7/30/82
Howard S.C.D.



SITE ANALYSIS - SUB AREAS 1, 2, 3 & 4

TOTAL OF SUB AREAS 1, 2, 3, & 4	31.10 ACRES
TOTAL DISTURBED AREA	30.92 AC.
TOTAL EXIST. IMPERVIOUS AREA	0.00 AC.
TOTAL PROPOSED IMPERVIOUS AREA	3.59 AC.
TOTAL REVEGETATED AREA	27.33 AC.
TOTAL SITE AREA INCLUDING SUB AREAS & CONTIGUOUS AREAS	61.25 AC.

LEGEND

P.D. PERIMETER DIKE

DIRECTION OF FLOW

S.F. SILT FENCE

SEDIMENT CONTROL TRAP Nº 2
52' x 122' x 5' DEEP
REQ'D CAP 21,384 CU. FT.
ACTUAL CAP 22,000 CU. FT.
DRAIN AREA 11.88 AC.
BOTTOM EL. 343.0
2:1 SIDE SLOPE, STONE OUTLET STRUCTURE
w/ TEMP. 4' HIGH FENCE
DISCH. Q10 = 18.85 CFS (OUTLET CAP 20 CFS)

MATCH LINE SHEET #16 AREA "B"

STATE OF MARYLAND — DONALD J. MADDOX — 10648 — PROFESSIONAL ENGINEER — 5/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 10648
EXPIRATION DATE 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

STATE OF MARYLAND — JAMES M. HELMAN — 9633 — REGISTERED LANDSCAPE ARCHITECT

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

SEDIMENT EROSION CONTROL
PLAN AREA 'A'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82
SCALE	1" = 50'
DRAWN	
CHECKED	

REVISIONS:
⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 15 OF 25

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

SEDIMENT CONTROL TRAP Nº 3
34'x84' x 5' DEEP
REQ'D. CAP. 7,866 CU. FT.
ACTUAL CAP. 7,920 CU. FT.
DRAIN AREA 4.37 AC.
BOTTOM EL. 337.0
2:1 SIDE SLOPE
STONE OUTLET STRUCTURE
TEMPORARY 4' HIGH FENCE
DISCH. Q_{10} = 7.93 CFS (OUTLET CAP, 10 CFS)

By the Developer:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

Kenneth J. Smith — 7-20-82
Signature of Developer — Date
Print name below signature
KENNETH J. SMITH

( ) By the Engineer:

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Frank B. French — July 15, 1982
Signature of Engineer — Date

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature — Date 7/23/82
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved — Date 7-20-82
Howard S.C.D.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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 56448
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

MATCH LINE SHEET Nº 15 AREA "A"

AC. 7.38 RCN 64 (1) 99% GRASSED 1% PAVED

AC. 1.88 RCN 67 (2) 82% GRASS 18% PAVED

AC. 4.37 RCN 67 (3) 87% GRASS 13% PAVED

AC. 7.29 RCN 61 (4) 97% GRASSED 3% PAVED

9.7AC.

P.D.

C84

FENCE

PROPOSED LAKE SHORE @345.5 BY OTHERS

NORTH

20 L.F. OF MD. #1 STONE TO REPLACE P.D. (TO ACT AS SEDIMENT CONTROL FILTER AT LOW POINT)

SEDIMENT CONTROL TRAP Nº 4
40'x 107' x 5' DEEP
REQ'D. CAP. = 13,122 CU. FT.
ACTUAL CAP. = 13,300 CU. FT.
DRAIN AREA = 7.29 AC.
BOTTOM EL. 365.0
2:1 SIDE SLOPE
STONE OUTLET STRUCTURE
TEMPORARY 4' HIGH FENCE
DISCH. Q_{10} = 11.36 CFS (OUTLET CAP. 15 CFS)

SEE SHEET Nº 19 FOR TYPICAL SECTION OF P.D. ALONG PATHWAY.

SIX FOOT LONG BRIDGE OVER STREAM SEE DETAIL ON SHEET No. 35

20 L.F. OF MD. #1 STONE TO REPLACE P.D.

MATCH LINE SHEET 17 AREA "C"

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

SEDIMENT EROSION CONTROL
PLAN AREA 'B'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82
SCALE	1" = 50'
DRAWN	TWA INC.
CHECKED	

REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 16 OF 34

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

1. By the Developer

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

Kenneth Smith — 7-20-82
Signature of Developer — Date
KENNETH SMITH

By the Engineer:

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

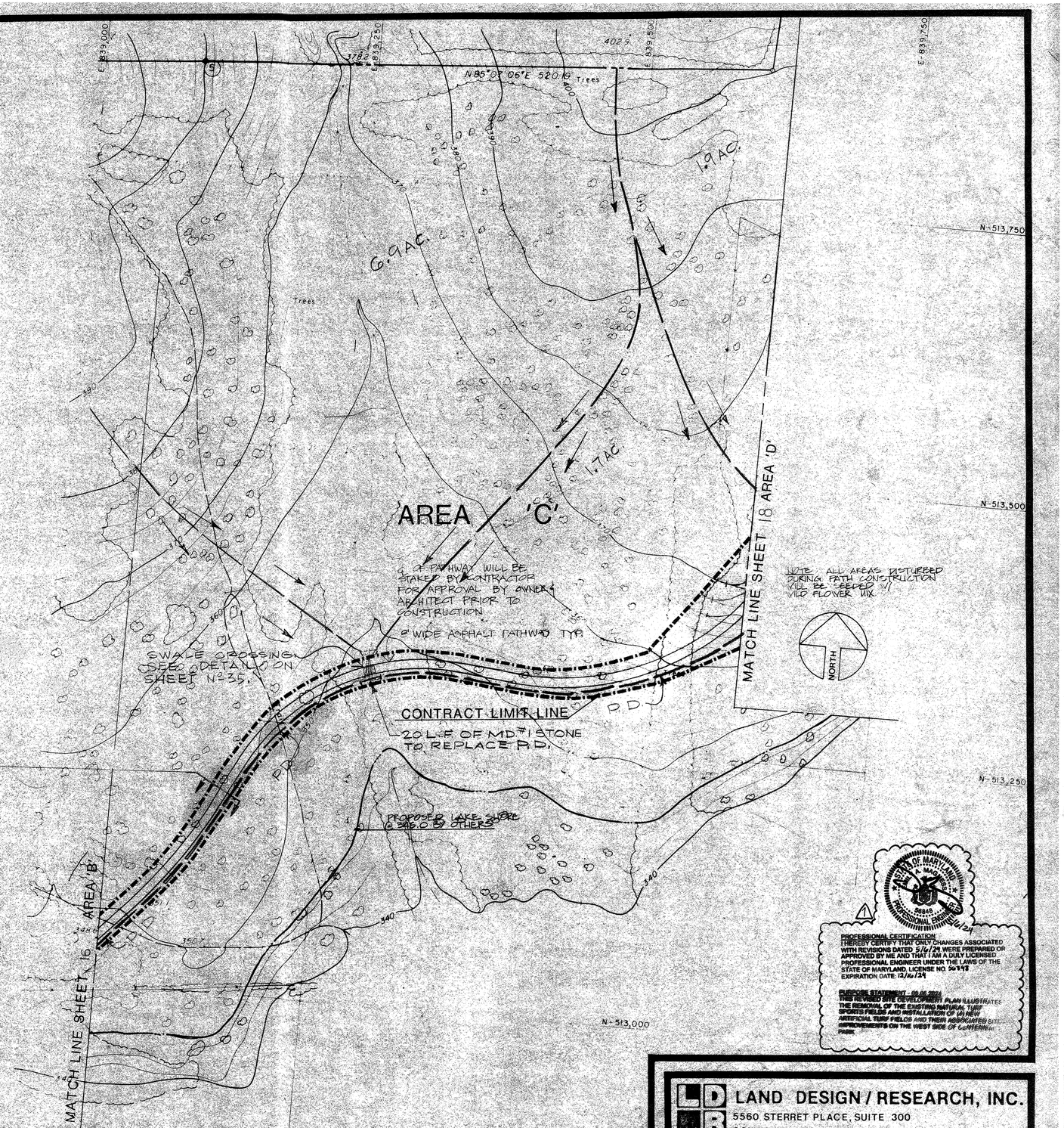
July 15, 1982.
Signature of Engineer — Date

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements

7/30/82
Signature — Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Approved — Date 7-20-82
Howard S.C.D.

SEE SHEET No. 19 FOR TYP. SECTION OF P.D. ALONG PATHWAY.



STATE OF MARYLAND — A. MACKENZIE — 26845 — PROFESSIONAL ENGINEER — 12/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26845 EXPIRATION DATE: 12/01/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (2) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

SEDIMENT / EROSION CONTROL
PLAN AREA 'C'
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	1" = 100'	
DRAWN		
CHECKED		

SHEET NO. 17 OF 35 ⚠ 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-16-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

MATCH SHEET 9 PHASE ONE

E 839,750 E 840,000 E 840,250 E 840,500 E 840,750

N 513,750 N 513,500 N 513,250

MATCH LINE SHEET 11 AREA 'C'

NORTH

2.8 Ac.

2.9 Ac.

1.3 AC.

1.5 AC.

1.4 AC

AREA 'D'

NOTE
PRIOR TO CONSTRUCTION OF THE BRIDGE OVER STREAM, THE CONTRACTOR SHALL EXCAVATE A SEDIMENT TRAP ALONG THE CENTERLINE OF THE EXIST. STREAM. TRAP SIZE SHALL BE 20FT LONG, 5FT WIDE & 4FT DEEP.

SCOTTA DESIGN ELEVATION AT 355.0

8' WIDE ASPHALT PATHWAY TYP.

C OF PATHWAY WILL BE STAKED BY CONTRACTOR FOR APPROVAL BY OWNER & ARCHITECT PRIOR TO CONSTRUCTION

CONTRACT LIMIT LINE

8' WIDE ASPHALT PATH CASE I

SEE SHEET 19 FOR SILT FENCE DETAIL

SEE SHEET 12 FOR TYP. SECTION OF PATHWAY

NOTE ALL AREA NOT USING PATHLANDS TO BE SEEDED W/ WILDFLOWER MIX

FUTURE 8' PATH CONNECTION BY OTHERS

PROPOSED ACE SWORE L @ 345.0 BY OTHERS

20 L.F. OF MD. #1 STONE TO REPLACE RD. AT LOW SPOTS.

MH 209

MH 208

Dense Trees

Trees & Brush

Brush

Trees

P.D.

763

1. By the Developer:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

KENNETH W. SMITH — Signature of Developer — 7-20-82 Date

By the Engineer:

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer — Date Apr 6, 1982. July 15, 1982

Reviewed for HOWARD S.C.D. Name and meets Technical Requirements

Signature — Date 7/6/82

U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved — Howard S.C.D. Date 7/20/82

STATE OF MARYLAND — JOHN M. SCOTTA — 36840 — PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 36 843
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

SEDIMENT / EROSION CONTROL PLAN AREA 'D' CENTENNIAL PARK PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS: APPROVED SITE DEVELOPMENT PLAN 05.06.2024
SCALE	1" = 50'	
DRAWN		

SHEET NO. 18 OF 25 (1 25)

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

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Liber 606 Folio 91, Parcel 311
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By the developer:

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

Kenneth J. Smith — 7-20-82
KENNETH J. SMITH
Signature of Developer — Date
Print name below signature

( ) By the Engineer:

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer — Date Apr. 6, 1982 / July 15, 1982

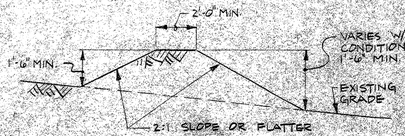
Reviewed for Howard S.C.D.
Name

and meets Technical Requirements

Signature — Date 7/20/82
U.S. Soil Conservation Service

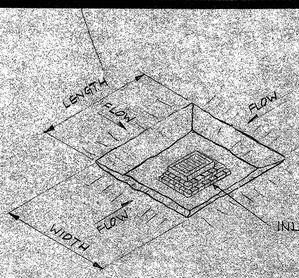
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

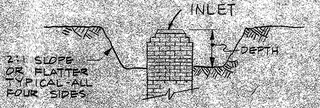
Approved — Date 7-20-82
Howard S.C.D.



DIVERSION PERIMETER DIKE

N.T.S.

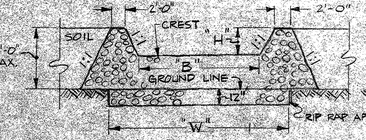




INLET	LENGTH	WIDTH	DEPTH
I-10 I-13, I-15 I-16, I-20	20'-0"	20'-0"	1'-6" MIN.

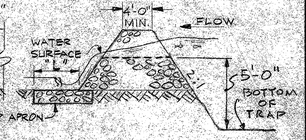
STORM INLET SEDIMENT TRAP

N.T.S.



PROFILE OF STRUCTURE

N.T.S.



CROSS SECT. OF STRUCTURE

N.T.S.

TRAP DESIGNATION	PEAK DISCH. "Q" CFS	VELOCITY @CRITICAL DEPTH FPS	WEIR LENGTH "B"	HEIGHT "H"	ELEV. CREST	RIPRAP APRON WIDTH "W"	RIPRAP APRON LENGTH "L"	ROCK SIZE	Q10 CFS
1.	10	3.3	10'	1.0'	388.0	16'	8'	3"-6"	9.83
2.	20	3.3	20'	1.0'	348.0	26'	8'	SURGE	18.85
3.	10	3.3	10'	1.0'	342.0	16'	8'	OR MD#1	7.93
4.	15	3.3	15'	1.0'	370.0	21'	8'	STONE	11.36

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. All soil erosion and sediment control measures shall be constructed prior to any grading of the site.

2. All sediment control measures shall remain in place until permission for their removal has been obtained from the Howard County Department of Inspections & Permits. Phone: 992-2430.

3. Notify the Howard County Department of Inspections & Permits, at least 24 hours prior to beginning of any work.

4. All sediment control measures shall conform to the standards and specifications in urbanizing areas and as shown and detailed on these plans.

5. Continued inspection & maintenance shall be the responsibility of the Contractor.

6. Seed or sod all exposed soil in grassed areas within 72 hours of grading to finished grade in accordance with S.C.D. standards and specifications. Lay base course in paved areas or protect with bituminous mulch or other methods approved by the Engineer within 72 hours of fine grading.

7. Temporary seeding:

Ground Limestone - 3500 lbs./ac. worked into top 3" of soil.

Fertilizer - 600 lbs./ac. of 10-20-10.

Mulch - 4000 lbs./ac. at the rate of 90 lbs. per 1000 sqr ft.s

Seed - 40 lbs./ac. rye grass.

Binder - Asphalt at the rate of 8 gal./1000 sq. ft. per state roads commission specification section 30-05-9, page 470.

Alternate - Hydroseed-fertilizer seed & mulch using sprayed Hydromulch with terra tack binder or approved equal with applicable notes according to the manufacturers specifications.

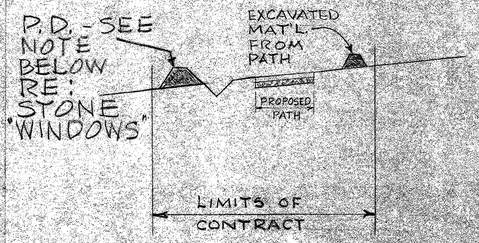
8. Permanent seeding mixtures: See Specifications

SILT SEDIMENT NOTES

1. Sediment shall be removed & trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap removed. Sediment shall be deposited in a suitable area & in such a manner that it will not erode.

2. The trap & dike structures shall be inspected after each rain and repairs made as needed.

3. The trap & dike shall be removed & area stabilized when the remaining drainage area has been properly stabilized.



TYPICAL SECTION THRU 8' WIDE ASPHALT PATHWAY

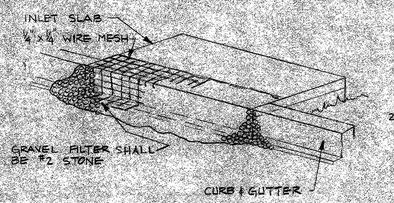
N.T.S.

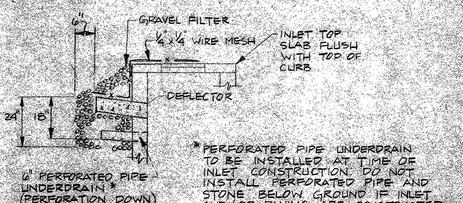
NOTE:

PRIOR TO PAVING OF PATH, EXCAVATED MATERIAL NOT USED SHALL BE PLACED ON THE UPHILL SIDE OF DISTURBED AREA. PROVIDE A PERIMETER DIKE ON THE LOW SIDE WITH STONE "WINDOWS" SIX FOOT (6') LONG, EVERY 200 LINEAR FEET OF PERIMETER DIKE AND OR AT ALL LOW AREAS TO ACT AS A FILTER STONE SHALL BE 3"-6" SURGE OR MD. NO 1

SEQUENCE OF CONSTRUCTION

1. The Contractor shall obtain grading permit.
2. No area shall be cleared until sediment control devices have been provided and installed complete.
3. The Contractor shall construct and maintain all soil erosion and sediment control structures prior to any site grading.
4. Proceed with site grading and construction of storm water drain piping, inlet traps, structures, and blocking of inlets as shown on the contract drawings.
5. As various areas are brought to final grade, place top soil sod/seed grassed areas in conformity with contract drawings and sediment control notes.
6. Construct potable water line as shown on the contract plans.
7. Construct tennis and multi-use courts.
8. Construct road, parking areas and jogging paths.
9. Install all rip-rap channels as indicated. Upon completion of fine grading and stabilization of the site, all stone outlet sediment traps and perimeter dikes shall be filled flush with finished grade.

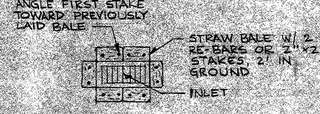




* PERFORATED PIPE UNDERDRAIN TO BE INSTALLED AT TIME OF INLET CONSTRUCTION. DO NOT INSTALL PERFORATED PIPE AND STONE BELOW GROUND IF INLET AND/OR PAVING ARE CONSTRUCTED.

STORM DRAIN INLET PROTECTION DETAILS

N.T.S.

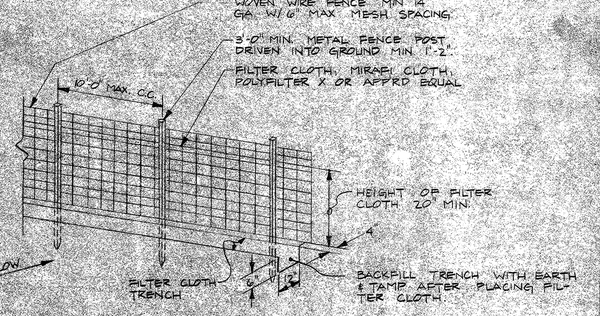


STORM INLET SEDIMENT DETAIL

N.T.S. (AT TENNIS COURTS ONLY)

NOTE:

THIS DETAIL TYPICAL FOR I-1, I-2, I-3, I-4, & I-12



NOTES:

1. WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES.
2. FILTER CLOTH SHALL BE FASTNED SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24" x 24"
3. SEE SHEET "B" FOR LOCATION OF SILT FENCE.

SILT FENCE DETAIL

N.T.S.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/9/24 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. 56299 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

SEDIMENT EROSION CONTROL- DETAILS

CENTENNIAL PARK

PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	AS SHOWN	
DRAWN		
CHECKED		

SHEET NO. 19 OF 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

SYMBOL LIST

A, B, B-1 — (1) 400 WATT METAL HALIDE LUMINAIRE (EL-DISTRIBUTION) WITH 400 WATT UNIVERSAL BURNING METAL HALIDE LAMP (480V). MOUNT ON A 20'-0" + GH. 6" ROUND ALUMINUM POLE. FINISH: BLACK.

B-2 — HOLOPHANE (6) 1000 WATT METAL HALIDE VECTOR FLOOD-LIGHTS WITH 1000 WATT UNIVERSAL BURNING METAL HALIDE LAMP (480V), MOUNT ON A 30'-0" HIGH ROUND TAPERED ALUMINUM POLE. FINISH: BLACK.

C-1 — THREE (3) 1500 WATT METAL HALIDE LUMINAIRES, TYPE II DISTRIBUTION, MOUNT ON A 60'-0" HIGH STEEL POLE COMPLETE WITH SERVICE PLATFORM, CLIMBING STEPS AND SAFETY GEAR, FINISH: BLACK.

C-2 — SIX (6) 1500 WATT METAL HALIDE LUMINAIRES, TYPE II DISTRIBUTION, MOUNT ON A 60'-0" HIGH STEEL POLE COMPLETE WITH SERVICE PLATFORM, CLIMBING STEPS AND SAFETY GEAR, FINISH: BLACK.

B-2 — EIGHT (8) 1500 WATT METAL HALIDE LUMINAIRES, TYPE II DISTRIBUTION, MOUNT ON A 60'-0" HIGH STEEL POLE COMPLETE WITH SERVICE PLATFORM, CLIMBING STEPS AND SAFETY GEAR, FINISH: BLACK.

A-2 — LETTER DESIGNATES PANEL, NUMBER DESIGNATES CIRCUIT IN PANEL.

→ — DESIGNATES GENERAL DIRECTION OF LIGHT FROM THE VECTOR-FLOODLIGHT

P — DESIGNATES PHOTOCELL & PHOTO-RECEPTACLE

—//— DIRECT BURIAL RACEWAY: 3" SCHEDULE 40 PVC CONDUIT - RUN MIN. 2'-6" BELOW GRADE.

—//—▶ DIRECT BURIAL HOMERUN RACEWAY TO PANEL - 3" SCHEDULE 40 P.V.C CONDUIT RUN MIN. 2'-6" BELOW GRADE.

SLASHED LINES INDICATE NUMBER OF CONDUCTORS. ARROWS INDICATE NUMBER OF CIRCUITS TO THE PANEL

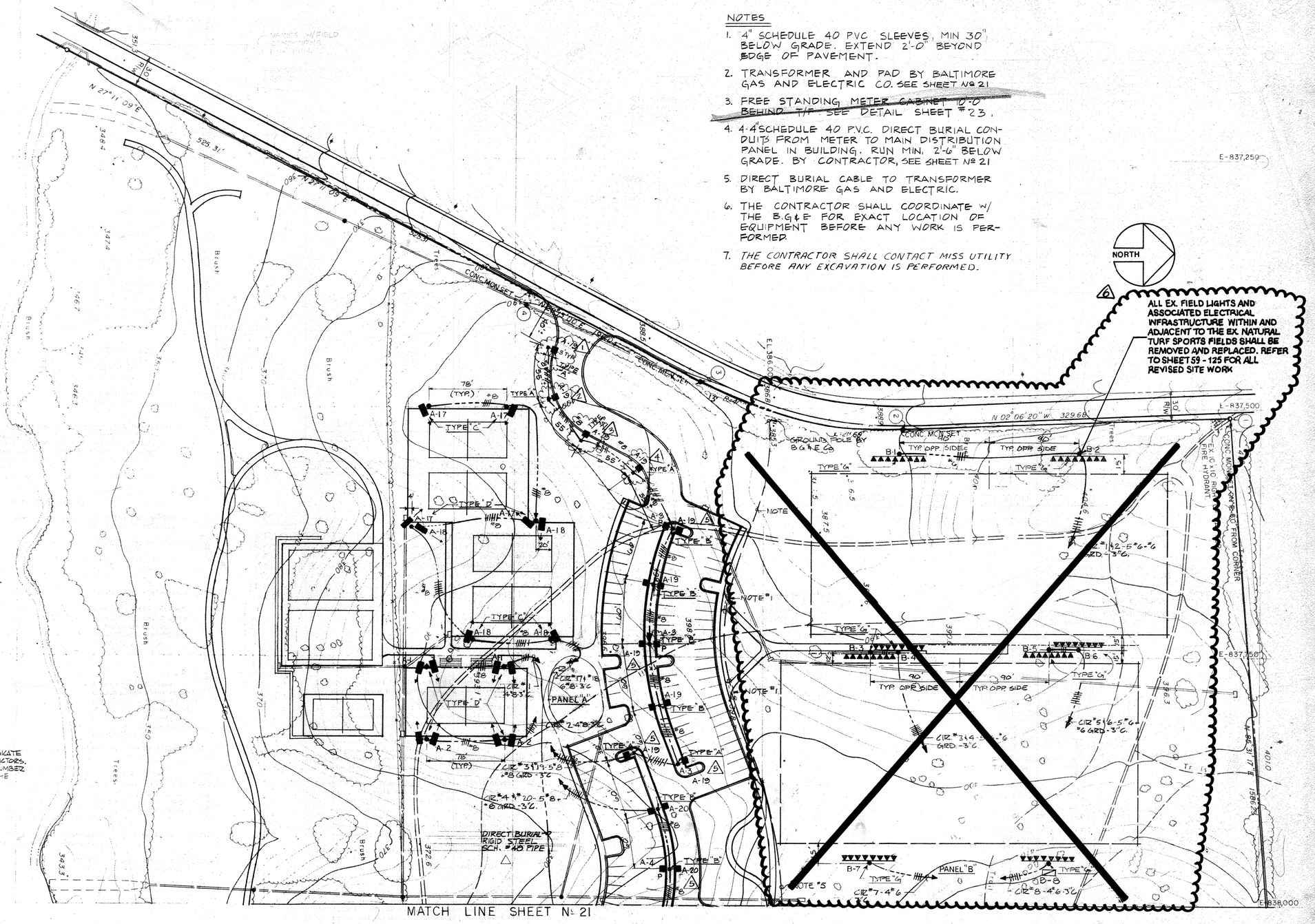
▭ — FREE STANDING PANELBOARD ENCLOSURE - SEE DETAIL SHEET Nº 23

1, 2 — TWO ADDITIONAL TYPE A LUMINAIRES, LAMPS & POLES DUE TO REVISED DRIVE - REVISION

3, 4 — RELOCATED TYPE A LUMINAIRES, LAMPS & POLES (TWO) DUE TO REVISED DRIVE - REVISION

NOTES

1. 4" SCHEDULE 40 PVC SLEEVES, MIN 30" BELOW GRADE. EXTEND 2'-0" BEYOND EDGE OF PAVEMENT.
2. TRANSFORMER AND PAD BY BALTIMORE GAS AND ELECTRIC CO. SEE SHEET Nº 21
3. FREE STANDING METER CABINET 0'-0" BEHIND T/F - SEE DETAIL SHEET # 23.
4. 4-4" SCHEDULE 40 P.V.C. DIRECT BURIAL CONDUITS FROM METER TO MAIN DISTRIBUTION PANEL IN BUILDING. RUN MIN. 2'-6" BELOW GRADE. BY CONTRACTOR, SEE SHEET Nº 21
5. DIRECT BURIAL CABLE TO TRANSFORMER BY BALTIMORE GAS AND ELECTRIC.
6. THE CONTRACTOR SHALL COORDINATE W/ THE B.G.&E FOR EXACT LOCATION OF EQUIPMENT BEFORE ANY WORK IS PERFORMED.
7. THE CONTRACTOR SHALL CONTACT MISS UTILITY BEFORE ANY EXCAVATION IS PERFORMED.



5 - REMOVE PHOTOCELL CONTROL FROM THIS LUMINAIRE AND CONNECT LUMINAIRE TO CIRCUIT INDICATED. PHOTO CELL SHALL BE REMOVED AND PHOTOCELL OUTLET SHALL BE PROVIDED WITH BLANK OFF COVER.

STATE OF MARYLAND — SILVIA K. MAGNUS — 26868 — PROFESSIONAL ENGINEER — 5/6/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26868
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

LIGHTING PLAN AREA A
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	
SCALE	1" = 50'
DRAWN	
CHECKED	

REVISIONS:
6-16-81
6-83
5/6/24 ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 2038 OF 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Hoyle F. Nimey — 7-20-82
DIRECTOR — DATE

Woodrow E. Rice — 7-19-82
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

Joseph Boyle — 7-20-82
COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

Thomas H. Harris Jr. — 7-21-82
PLANNING DIRECTOR — DATE

John W. Musselman — 7-20-82
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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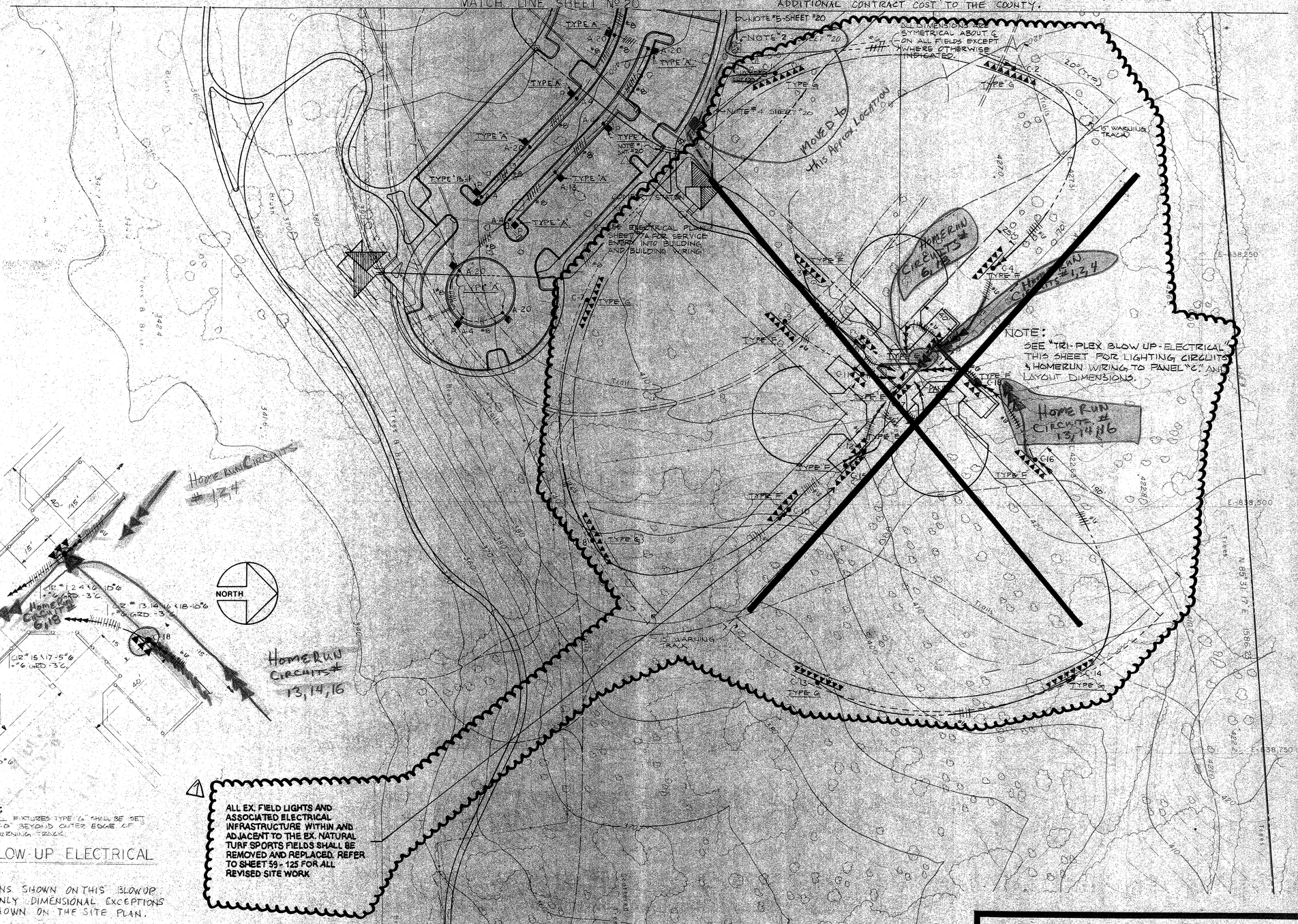
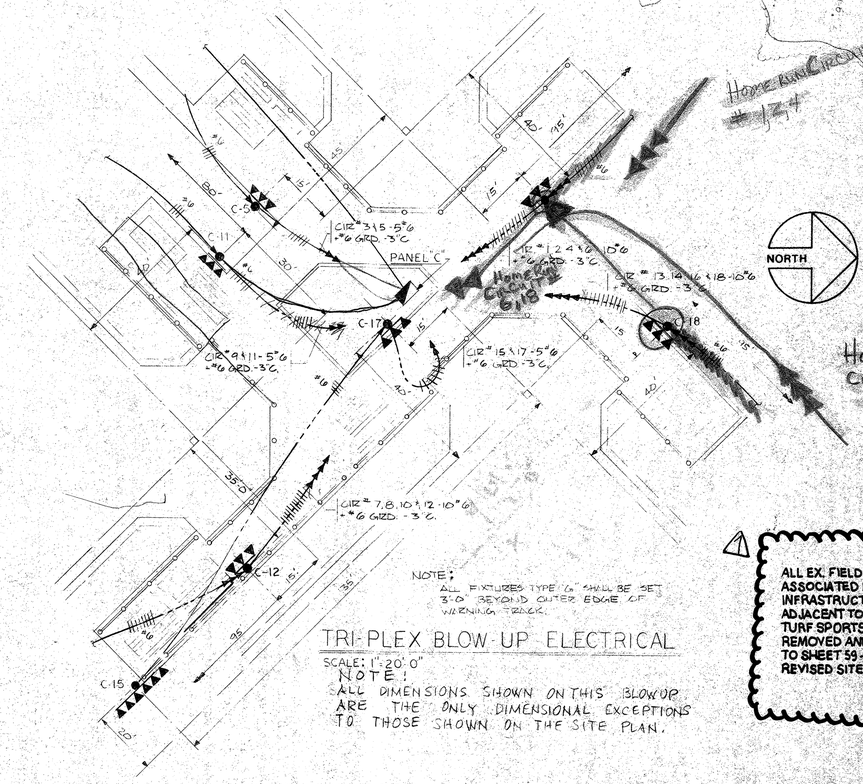
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

NOTE: THE CONTRACTOR SHALL COORDINATE W/ B.G.&E.CO. FOR REQUIRED OVERCURRENT PROTECTION FOR SERVICE ENTRANCE, & PROVIDE & INSTALL ANY REQUIRED DEVICES COMPLETE AT NO ADDITIONAL CONTRACT COST TO THE COUNTY.

MATCH LINE SHEET Nº 20



NOTE:
SEE "TRI-PLEX BLOW UP-ELECTRICAL" THIS SHEET FOR LIGHTING CIRCUITS & HOMERUN WIRING TO PANEL "C" AND LAYOUT DIMENSIONS.



NOTE;
ALL FIXTURES TYPE 'G' SHALL BE SET 3'-0 BEYOND OUTER EDGE OF WARNING TRACK.

TRI-PLEX BLOW-UP ELECTRICAL

SCALE: 1"=20'-0"

NOTE!
ALL DIMENSIONS SHOWN ON THIS BLOWUP ARE THE ONLY DIMENSIONAL EXCEPTIONS TO THOSE SHOWN ON THE SITE PLAN.

⚠ ALL EX. FIELD LIGHTS AND ASSOCIATED ELECTRICAL INFRASTRUCTURE WITHIN AND ADJACENT TO THE EX. NATURAL TURF SPORTS FIELDS SHALL BE REMOVED AND REPLACED. REFER TO SHEET 59 - 125 FOR ALL REVISED SITE WORK.

STATE OF MARYLAND — 5084B — PROFESSIONAL ENGINEER — 5/6/24

⚠ PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 5084B
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

STATE OF MARYLAND — DAVID LEE — 21397 — PROFESSIONAL ENGINEER

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

LIGHTING PLAN AREA B
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82
SCALE	1"=50'
DRAWN	M.B.
CHECKED	D.L.

REVISIONS:
⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 213 OF ⚠ 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Hoyt F. Nunnery — DIRECTOR — 7-20-82 DATE

[signature] — CHIEF, BUREAU OF ENGINEERING — 7/16/82 — 7-19-82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — COUNTY HEALTH OFFICER — 7-20-82 DATE

APPROVED: Howard County Office of Planning and Zoning

[signature] — PLANNING DIRECTOR — 7-21-82 DATE

N.A. — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
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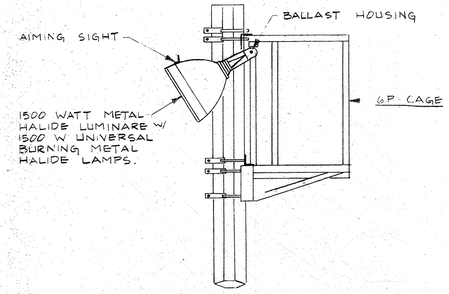
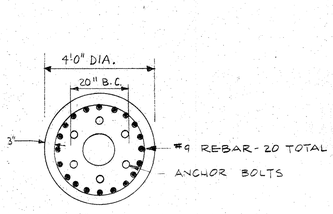
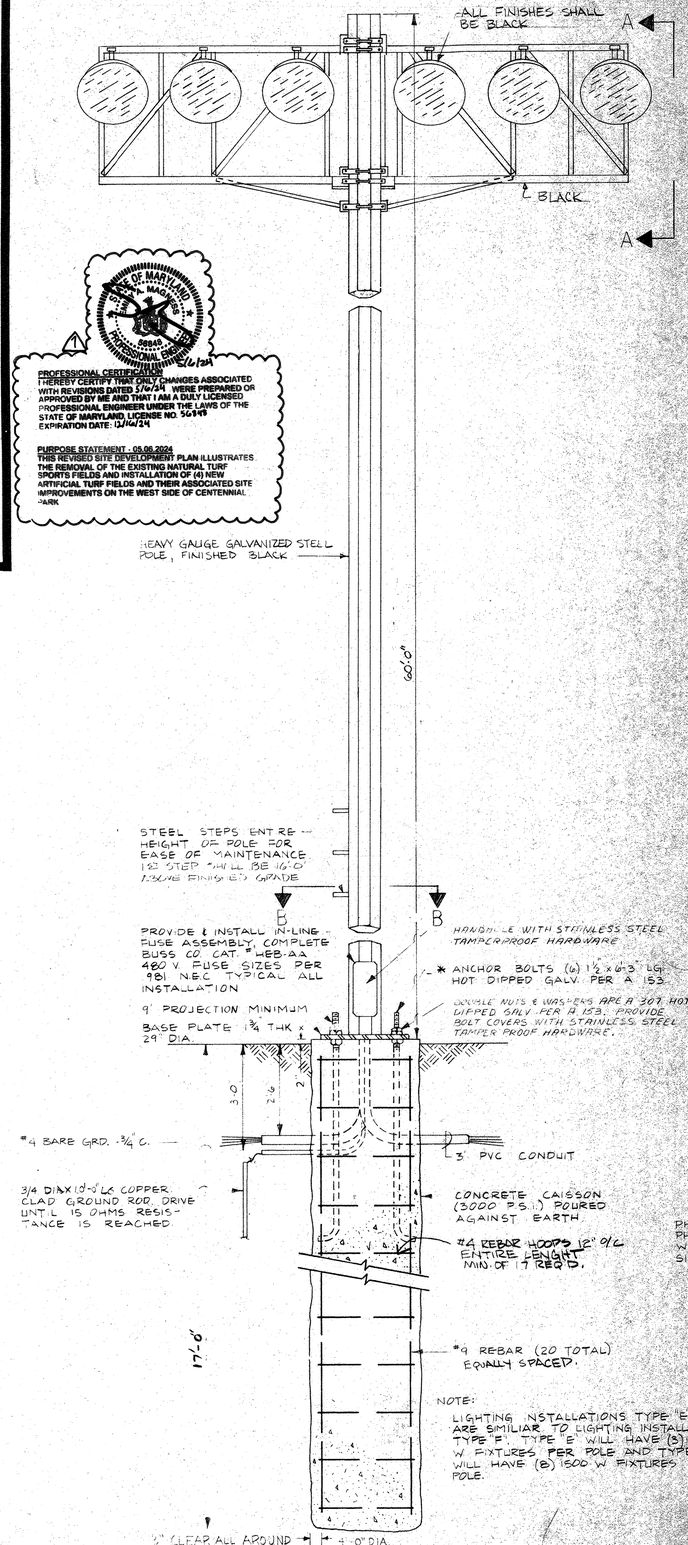


SECTION A-A



SECTION B-B
N.T.S.

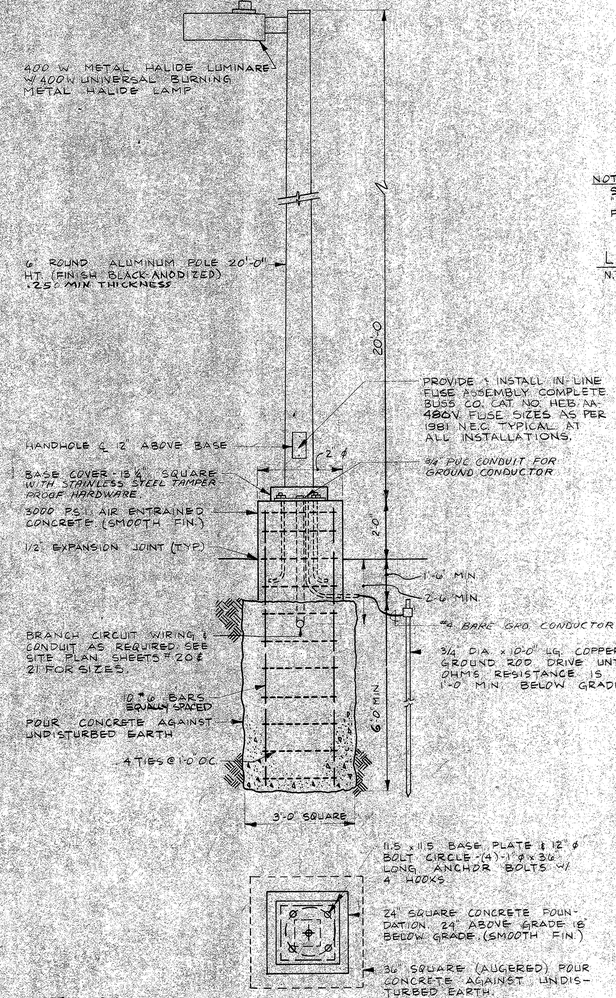
* EXACT ANCHOR BOLT SIZE LOCATION AND PLOJECTION AS PER MANUFACTURERS REQUIREMENTS.



LIGHTING INSTALLATION TYPE "F"
N.T.S

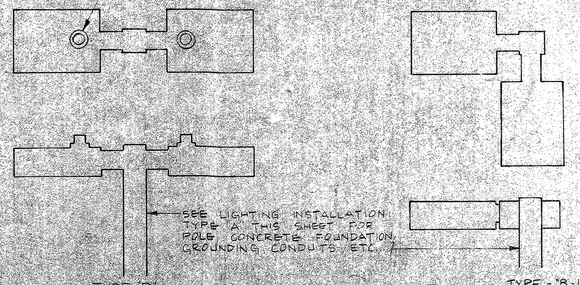
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 56349 EXPIRATION DATE: 12/14/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

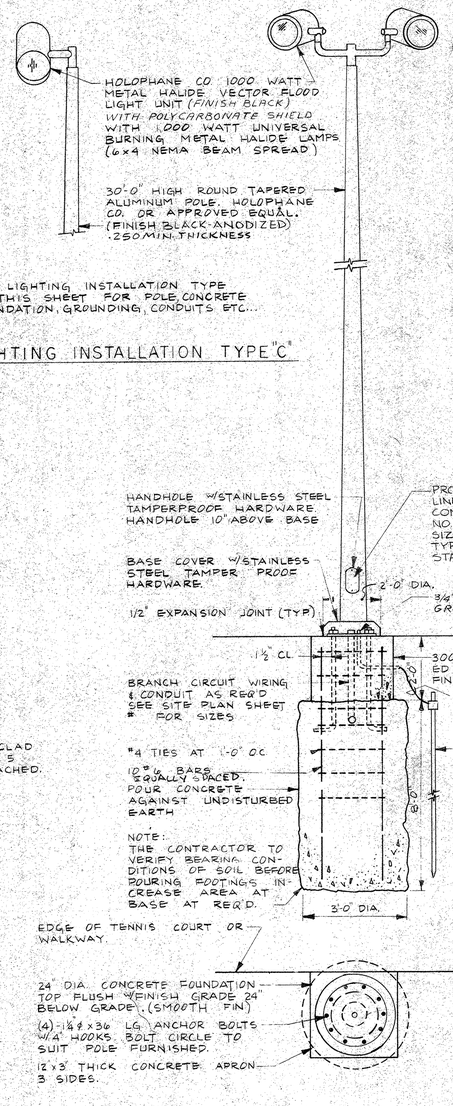


LIGHTING INSTALLATION TYPE A

PHOTO RECEPTACLES & PHOTO CELLS FOR LIGHTS WHERE SHOWN ON SITE PLANS



LIGHTING INSTALLATION B
N.T.S



LIGHTING INSTALLATION TYPE "D"
N.T.S

LIGHTING INSTALLATION TYPE "C"
N.T.S.

NOTE:
SEE LIGHTING INSTALLATION TYPE "D" THIS SHEET FOR POLE, CONCRETE FOUNDATION, GROUNDING, CONDUITS ETC...

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

ELECTRICAL DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS SHOWN
DRAWN	M.B.
CHECKED	D.L.

REVISIONS:
⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 22 OF 36 ⚠ 125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

APPROVED: Howard County Office of Planning and Zoning

N.A. PLANNING DIRECTOR — DATE

N.A. CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

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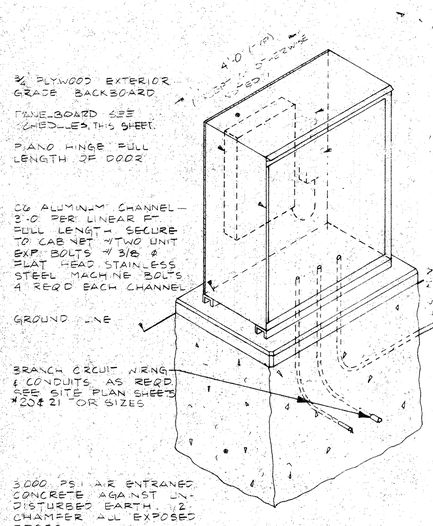


FREE STANDING PANEL ENCLOSURE
N.T.S.

PANELBOARD "A" SCHEDULE

CIRCUIT	RATING	HOMERUN WIRING	SERVING
	2P-40A	#8-3C	TOURNAMENT COURT
	2P-40A	#8-3C	TOURNAMENT COURT
3	2P-30A	#8-3C	PARKING LOT LIGHTING
4	2P-30A	#8-3C	PARKING LOT LIGHTING
5	2P-20A	#10-2C	SECTION B
6	2P-40A	—	SPARE
7-8	2P-		SPACES
9	1P-20A	3/4"C #12-3C	TIME CLOCK
10	1P-20A	3/4"C	RECEPTACLE
11-12	1P-20A	—	SPARES
13-16	1P-	—	SPACES
17	2P-40A	#8-3C	TENNIS COURTS
18	2P-40A	#8-3C	TENNIS COURTS
19	2P-30A	#8-3C	PARKING LOT LIGHTING
20	2P-30A	#8-3C	PARKING LOT LIGHTING
21-22	2P-30A	—	SPARES
23-26	1P-	—	SPACES

SECTION A: 480/277 V, 3Ø 4W+GRD, 40 KA SCCR, 225A MCB @ BOTTOM

SECTION B: 480/277 V, 3Ø 4W+GRD, 40 KA SCCR, 225A MLO

PANELBOARD "B" SCHEDULE

CIRCUIT BREAKER	RATING	HOMERUN WIRING	SERVING
1	2P-60A	#6-3C	WEST SOFTBALL FIELD
2			EAST SOFTBALL FIELD
3			WEST SOFTBALL FIELD
4			EAST SOFTBALL FIELD
5			WEST SOFTBALL FIELD
6			EAST SOFTBALL FIELD
7			EAST SOFTBALL FIELD
8	2P-60A	#6-3C	SOUTH SOFTBALL FIELD
9	2P-60A		SPARE
10		#12 3/4"C	RECEPTACLE
11-13	2P-		SPACES

480/277 V, 3Ø 4W+GRD, 10 KA SCCR, 100A MLO

PANELBOARD "C" SCHEDULE

CIRCUIT BREAKER	RATING	HOMERUN WIRING	SERVING
1	2P-60A	#6-3C	WEST SOFTBALL FIELD OUTFIELD
2	2P-60A	#6-3C	WEST SOFTBALL FIELD OUTFIELD
3-4	2P-40A	#6-3C	WEST SOFTBALL FIELD INFIELD
5	2P-60A	#6-3C	SOUTH SOFTBALL FIELD OUTFIELD
6	2P-60A	#6-3C	SOUTH SOFTBALL FIELD OUTFIELD
7	2P-60A	#6-3C	SOUTH SOFTBALL FIELD INFIELD
8-9	2P-40A	#6-3C	EAST SOFTBALL FIELD INFIELD
10	2P-40A	#6-3C	EAST SOFTBALL FIELD INFIELD
11	2P-40A	—	SPARE
12	2P-40A	#12 3/4"C	

⚠ : FOR PANELBOARD 'B' PROVIDE TWO 4 POLE CONTACTORS EACH WITH A SEPARATE ON OFF PUSHBUTTON SWITCH FOR SEPERATE CONTROL OF EACH FIELD.
FOR PANELBOARD 'C' PROVIDE THREE 6 POLE CONTACTORS EACH WITH A SEPARATE ON OFF PUSHBUTTON SWITCH FOR SEPARATE CONTROL OF EACH FIELD.
CONTACTORS SHALL BE SQUARE D CLASS 8903 MECHANICALLY HELD TYPE MOUNTED WITHIN THE FREE STANDING PANEL ENCLOSURES. PUSHBUTTON SHALL BE SQUARE D CLASS 9001 OIL TIGHT SINGLE POLE DOUBLE THROW MOUNTED IN A PAD LOCKABLE NEMA 4 ENCLOSURE ON THE EXTERIOR OF THE FREESTANDING PANEL ENCLOSURE.

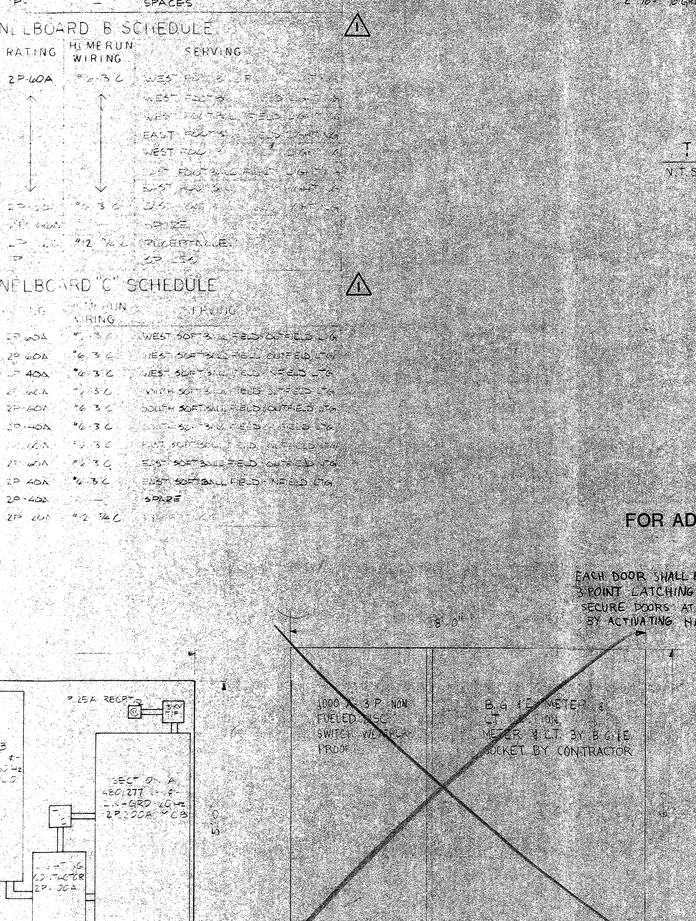
NOTES

A. INTERMATIC ASTRO DIAL CAT # ASD01C WITH SPDT SWITCH RATED 40 AMPS PER POLE 480V W/ SPRING WOUND CARRY OVER FOR 6 HOURS DURING POWER OUTAGE. OPERATION FOR -40°F TO +140°F. UL LISTED IN NEMA 3 ENCLOSURE.

B. ALL BREAKERS SHALL BE OF THE BOLT-IN TYPE WITH 20,000 AIC FOR BRANCH BREAKERS.

C. RUN GROUND CONDUCTOR TO ALL LIGHTING INSTALLATIONS AS REQUIRED.

D. ALL EQUIPMENT ENCLOSURES SHALL BE GROUNDED USING #6 BARE GROUND CONDUCTOR. EXTEND AND CONNECT TO GROUND ROD. DRIVE UNTIL 5 OHMS IS REACHED.


SECTION B
SECTION A
1P-20A-120V G.F.I. DUPLEX RECEPTACLE IN WATER-PROOF ENCLOSURE. P&S OR EQUAL
3 KVA STEP DOWN TRANSFORMER 480/120-240
TIME CLOCK NOTE A
NOTE C
GRD BUSS
NEUTRAL BUSS
LIGHTING CONTACTOR 2P-100A 480V NEMA 3 ENCLOSURE
NOTE C
SEE PNL SCHED
2"ø-6"G GRD 2C
2-#6+#6 GRD
2-#1+#6 GRD
2"ø-4"G GRD 2C
2-#1+#6 GRD
2"ø-4"G GRD 2C
2-#1+#6 GRD
2"ø-4"G GRD 2C

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Numer — 7-20-82
DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

7-24-82
COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

N.A.
PLANNING DIRECTOR — DATE

N.A.
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works Tax Map
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Harry L. Holliday
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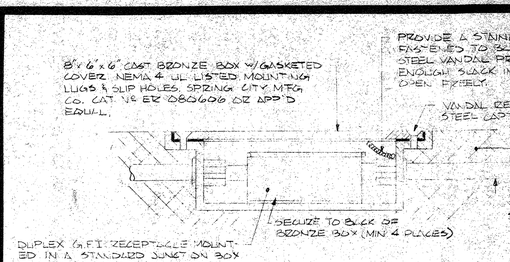
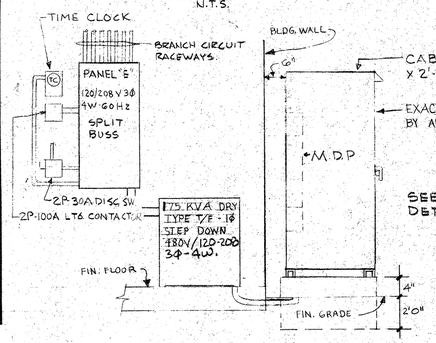
Liber 612 Folio 543, Parcel 8

REFER TO SHEET 7A
FOR ADDITIONAL ELECTRICAL INFORMATION



△ WALL RECEPTACLE DETAIL
N.T.S.



SEE SHEET "23 FOR CABINET DETAILS

SECTION A-A
N.T.S.

SEE SHT. #7A FOR PLAN VIEW

NOTES

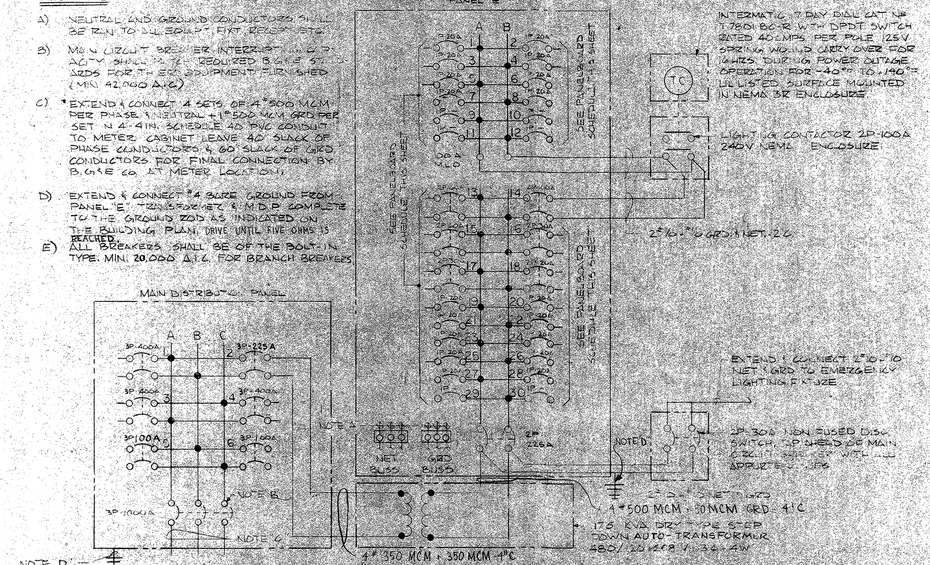
A) NEUTRAL AND GROUND CONDUCTORS SHALL BE RUN TO ALL EQUIPT. FIXT. RECEPT. ETC.

B) M.C.B. CIRCUIT BREAKER INTERRUPTING CAPACITY SHALL BE AS REQUIRED BY LOCAL CODES FOR THE SERVICE EQUIPMENT FURNISHED (MIN. 42,000 A.I.C.)

C) * EXTEND & CONNECT 4 SETS OF 4" 500 MCM PER PHASE, 1 NEUTRAL + 1" 500 MCM GRD PER SET IN 4"-4 IN. SCHEDULE 40 PVC CONDUIT TO METER CABINET. LEAVE 40' SLACK OF PHASE CONDUCTORS & 60' SLACK OF GRD. CONDUCTORS FOR FINAL CONNECTION BY B.G.&E. Co. AT METER LOCATION.

D) EXTEND & CONNECT #4 BARE GROUND FROM PANEL 'E', TRANSFORMER & M.D.P. COMPLETE TO THE GROUNDING ROD AS INDICATED ON THE BUILDING PLAN. DRIVE UNTIL FIVE OHMS IS REACHED.

E) ALL BREAKERS SHALL BE OF THE BOLT-IN TYPE. MIN. 20,000 A.I.C. FOR BRANCH BREAKERS



M.D.P. & PANEL "E" WIRING DIAGRAM
N.T.S.

M.D.P. RATED FOR SERVICE ENTRANCE APPLICATION 42,000 A.I.C. MIN. TO MATCH INTERRUPTING CURRENT OF B.G.&E. EQUIPT. GFI PROTECTION.

PANELBOARD "E" SCHEDULE

120/208V - 3Ø - 3W - 60Hz - 2P 225A BOTTOM FED SPLIT BUSS

SECTION A	CKT.	CIRCUIT BREAKER	RATING	HOMERUN WIRING	SERVING
100A M.L.O.	1	3P-225A	3"Ø 3W	4#4/0 + #6 MES. GRD. IN 3" C.	MAIN DISTRIBUTION PANEL
	2	3P-225A	3"Ø 3W	4#4/0 + #6 MES. GRD. IN 3" C.	
	3	3P-225A	3"Ø 3W	4#4/0 + #6 MES. GRD. IN 3" C.	
	4	1P-20A	3/4" C. 2W	LIGHTING	DOME
	5	1P-20A	3/4" C. 2W	LIGHTING	DOME
	6	1P	—	FOR FUTURE SPARES	
	7	1P	—	SPARES	
SECTION B	8	2P-60A	1" C. 4W	UNIT HEATER	MENS ROOM
225 A M.C.B.	9	2P-30A	1" C. 4W	A/C	A/C UNIT
	10	2P-30A	1" C. 4W	A/C	A/C UNIT
	11	2P-60A	1" C. 4W	UNIT HEATER	WOMENS ROOM
	12	2P-30A	1" C. 4W	HOT WATER HEATER	
	13	2P-30A	1" C. 4W	ELECTRIC RANGE	
	14	1P-20A	3/4" C. 2W	RECEPT.	
	15	1P-20A	3/4" C. 2W	RECEPT.	
	16	1P-20A	3/4" C. 2W	LIGHTING	DOME
	17	1P-20A	3/4" C. 2W	DOOR VIBRATOR MOTOR	
	18	1P-20A		SPARE	
	19	1P-20A	3/4" C. 2W	LIGHTING	DOME
	20	1P-20A	3/4" C. 2W	RECEPT.	
	21	1P-20A	3/4" C. 2W	LIGHTING	DOME
	22	1P-20A	3/4" C. 2W	DOOR VIBRATOR MOTOR	
	23	1P-20A		SPARE	
	24	1P-20A	3/4" C. 2W	LIGHTING	DOME
	25	1P-20A	3/4" C. 2W	LIGHTING	DOME
	26	1P-20A	—	SPARES	
	27	1P —	—	SPARES	

PANELBOARD SCHEDULE FOR M.D.P.

PANEL	CIRCUIT BREAKER	RATING	HOMERUN WIRING	SERVING
480/277V 3Ø 4W 60Hz 3P 1200A M.C.B.	1	3P-400A	*350MCM	PANEL 'E' LOCATION
	2	3P-225A	*350MCM	PANEL 'E' IN BUILDING
	3	3P-	*350MCM	PANEL 'E' LOCATION
	4	3P-600A	†350MCM	PANEL 'E' LOCATION
	5	3P-100A	—	SPARE
	6	3P-100A	—	SPACE
	7	3P-150A	—	SPACE
	8	3P —	—	SPACE

* HOMERUN WIRING FROM THE M.D.P. TO THE RESPECTIVE PANEL SHALL BE 2 SETS 4" 350 MCM PER PHASE 1 NEUTRAL - 1" 350 MCM GRD PER SET.

† HOMERUN WIRING FROM THE M.D.P. TO PANEL 'C' SHALL BE 3 SETS 4" 350 MCM PER PHASE 1 NEUTRAL - 1" 350 MCM GRD PER SET

SYMBOL LIST

S	SINGLE POLE SWITCH 20A., 120 VAC MOUNT BOTTOM 4'-0" A.F.F. ARROW HART & CAT No. 1991-I OR APPROVED EQUAL.
SK	SINGLE POLE ILG-A-TRONIC SOLID STATE MOTOR SPEED CONTROLLER DIAL FOR SPEED CONTROL W/115V ON/OFF ILG INDUSTRIES INC.
J	JUNCTION BOX NEMA 4 W/WATERTIGHT PENTAGONAL BOLTS (SIZE PER N.E.C.)
GFI	DUPLEX GROUND FAULT INDICATING RECEPTACLE 15A-120VAC WITH WEATHERPROOF HINGED ENCLOSURE MTD. IN 6 BRONZE VANDAL PROOF BOX, MOUNT BOTTOM 1'6" A.F.F. P&S Co. CAT No. 1591-WP. SEE "RECEPTACLE DETAIL" THIS SHEET
	CONDUIT RUN CONCEALED ABOVE CEILING, BELOW FLOOR AND/OR W'LLS SLASH LINES INDICATE NUMBER OF CONDUCTORS.
	CONDUIT RUN EXPOSED ALONG CEILING AND/OR W'LLS AT CEILING SLASH LINES INDICATE NUMBER OF CONDUCTORS
	HOMERUN RACEWAY TO PANEL, NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS, SLASH LINES INDICATE NUMBER OF CONDUCTORS.
	PANELBOARD - PANEL 'E' 120/240 V - 1Ø - 3W - 60Hz SPLIT BUS
M.D.P.	MAIN DISTRIBUTION PANEL - 480/277 V - 3Ø - 4W - 60 Hz
F	NEW DISCONNECT SWITCH NEMA 3R 250 V - 3Ø SIZE AS SHOWN, FUSING PER N.E.C.
M	MOTOR - FINAL CONNECTION WITH FLEXIBLE CONDUIT.
	ELECTRIC HEATING UNITS PROVIDE REQUIRED OVERCURRENT FUSING & DISCONNECT SWITCH (EACH UNIT)
	EMERGENCY LIGHT, HOLOPHANE CO CAT NO. EM-12-2-44/3 W/2-35 WATT SEALED BEAM HEADS 12DV. WALL MOUNTED 8'-0" A.F.F.
E.W. H'TR.	ELECTRIC HOT WATER HEATER 6 KW 240V. FINAL CONNECTION W/FLEXIBLE CONDUIT.
A	175 WATT METAL HALIDE 'PARKPAK' LUMINAIRE W/CLEAR POLY-CARBONATE LENS & VANDAL PROOF SCREWS, 240V. CEILING MOUNTED. HOLOPHANE CO. CAT No. 245-CE-240-BZ3-FF-TP WITH UNIVERSAL BURNING METAL HALIDE LAMP - 175 WATT.
B	175 WATT METAL HALIDE PARKPAK LUMINAIRE W/CLEAR POLY-CARBONATE LENS & VANDAL PROOF SCREWS, 240V. WALL BRACKET MOUNTING. HOLOPHANE CO. CAT No. 245-HA-240-BZ3-FF-06973-TP W/UNIVERSAL BURNING METAL HALIDE LAMP - 175 WATT.
C	ABOUT 12" DIA. STANDARD DOME ONE PIECE SOCKET FIXTURE CAT. No. RF 150 W/1-150 WATT INCANDESCENT LAMP 120V MOUNTING SHALL BE PENDANT TYPE 8'-0" A.F.F.
AFF	ABOVE FINISH FLOOR
A	175 WATT METAL HALIDE PARKPAK LUMINAIRE W/CLEAR POLY-CARBONATE LENS & VANDAL PROOF SCREWS, 240V. USE WALL BRACKET TO MOUNT FIXTURE TO TRELLIS RAFTER. HOLOPHANE Co CAT No. 245-CE-240-BZ3-FF-06973-TP W/UNIVERSAL BURNING METAL HALIDE LAMP - 175 WATT.

STATE OF MARYLAND — JAMES E. MAO — 5664 — PROFESSIONAL ENGINEER — 5/16/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 5664 9 EXPIRATION DATE: 12/14/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

ELECTRICAL PLAN RESTROOM BUILDING, SCHEDULES, WIRING DIAGRAMS, SYMBOL LIST AND DETAILS

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS SHOWN
DRAWN	M.B.
CHECKED	D.L.

REVISIONS
△ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 24 OF 125

753

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

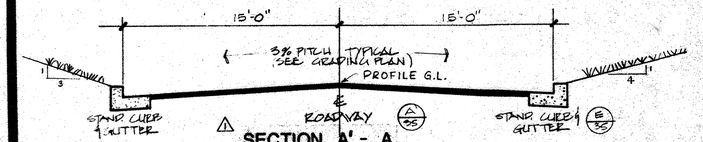
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

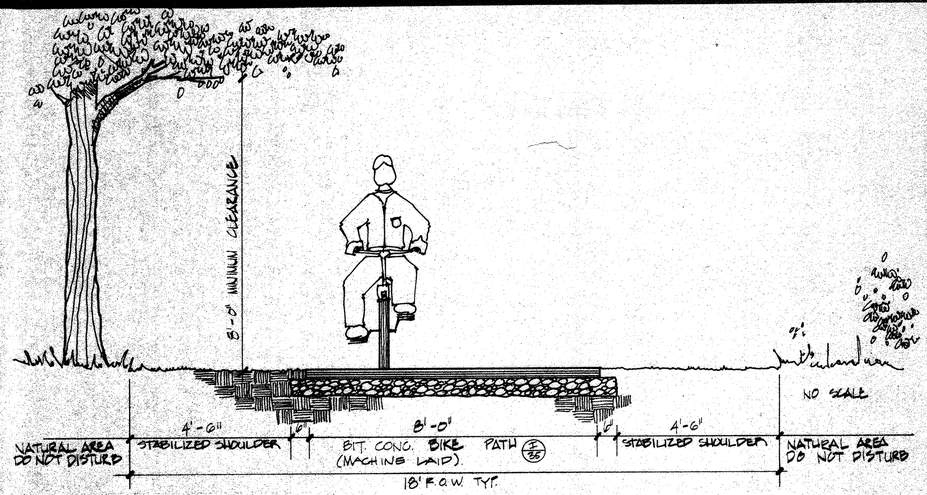
Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.,

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

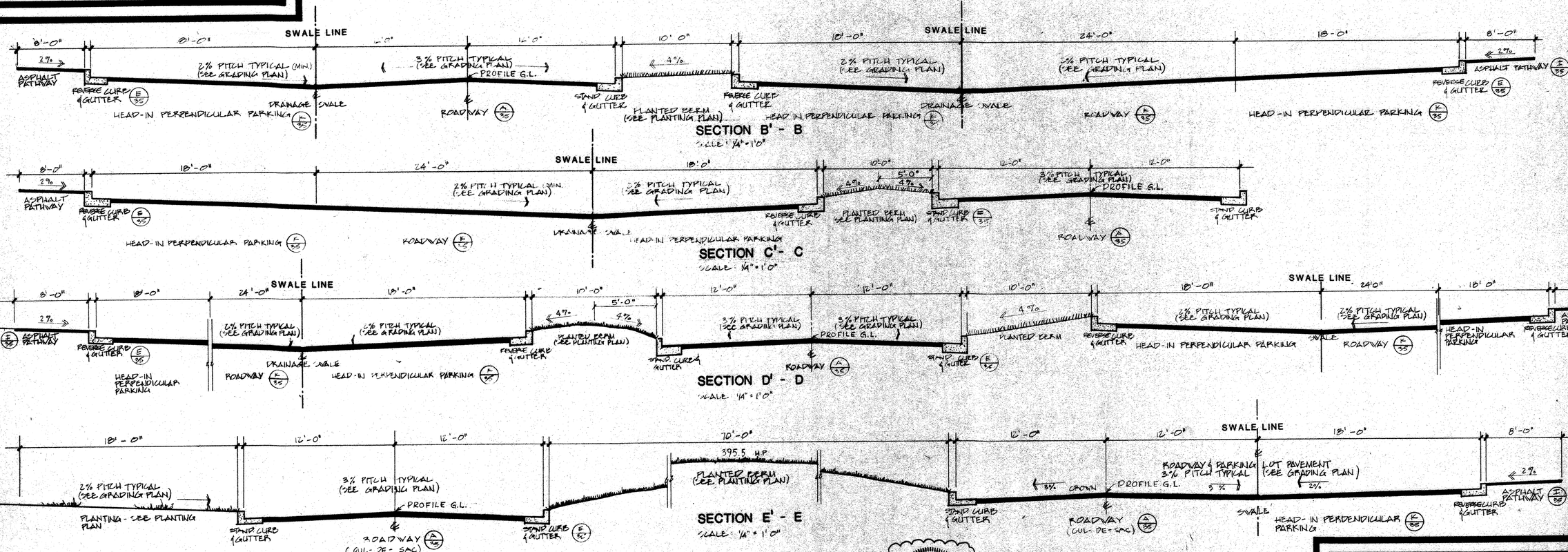


SECTION A' - A

SCALE: 1/4" = 1'0"



A TYPICAL SECTION 8 BIKE PATH



SECTION B' - B

SCALE: 1/4" = 1'0"

SECTION C' - C

SCALE: 1/4" = 1'0"

SECTION D' - D

SCALE: 1/4" = 1'0"

SECTION E' - E

SCALE: 1/4" = 1'0"

B TYPICAL ROADWAY AND PARKING LOT SECTIONS

STATE OF MARYLAND — MICHAEL J. MAGNAN — 5988 — PROFESSIONAL ENGINEER — 5/16/24

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 5988
EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

SUPPLEMENTAL DRAWING

PREVIOUSLY APPROVED SDP-82-109, AS AMENDED, SHOWED 10 YEAR GRADING AND PLANTING AREAS ADJACENT TO THE PARKING AREAS SHOWN ON SHEET NO. 24.

APPROVED DATE: 5/16/24

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

ROADWAY & PARKING LOT SECTIONS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

		REVISIONS:
DATE		3.14.83 - GRADING
SCALE	AS NOTED	Revise Entrance & Storm Drain System 4-7-83
DRAWN	DM	REVISED SITE DEVELOPMENT PLAN 05.08.2024
CHECKED		

SHEET NO. 25 OF 58 SHEETS

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
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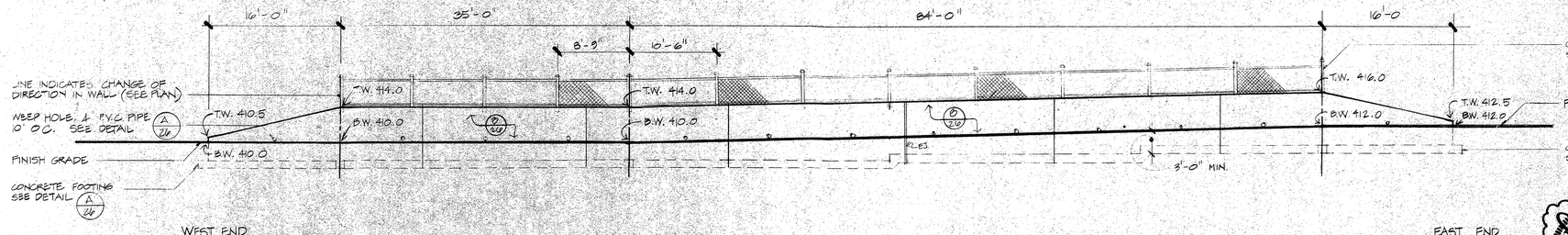
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

GENERAL NOTES:

1. FOOTINGS SHALL REST ON UNDISTURBED SOIL.
2. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI. IN 28 DAYS.
3. CONCRETE SHALL BE AIR ENTRAINED.
4. REINFORCING STEEL SHALL BE ASTM A15 GRADE 60.
5. CONTINUOUS REINFORCING SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE NOTED
6. PROVIDE SPACERS, CHAIRS AND TIES AS REQUIRED TO SUPPORT REINFORCING.

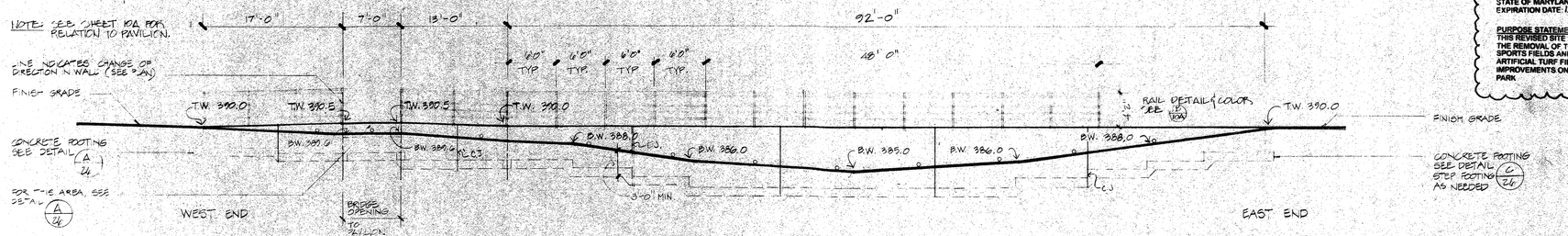
NOTE: SEE SHEET #35 FOR PLAN LOCATION & DIMENSIONS.



E RETAINING WALL ELEVATION — BALL FIELD

SCALE: 1/8" = 1'-0"

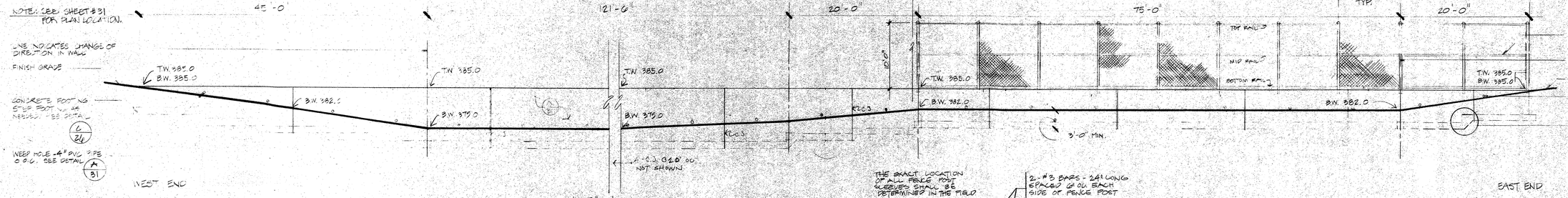
NOTE: SEE SHEET #34 FOR RELATION TO PAVILION.



F RETAINING WALL ELEVATION — OVERLOOK PAVILION

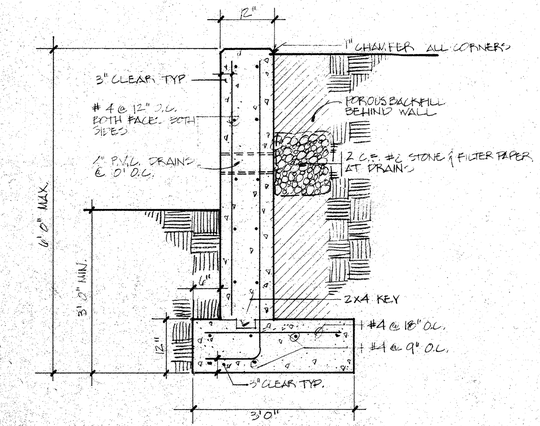
SCALE: 1/8" = 1'-0"

NOTE: SEE SHEET #31 FOR PLAN LOCATION.



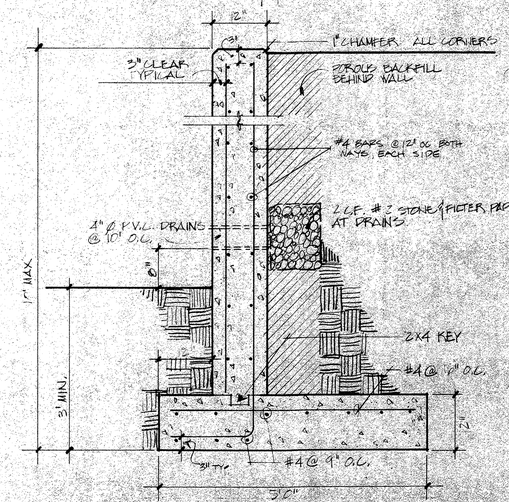
G RETAINING WALL ELEVATION — COURT GAMES

SCALE: 1/8" = 1'-0"



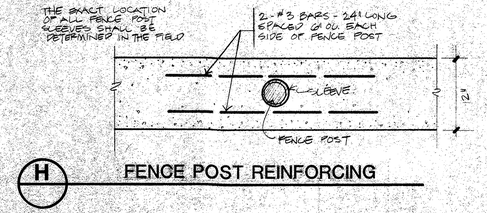
A RETAINING WALL 6' max.

SCALE: 3/4" = 1'0"

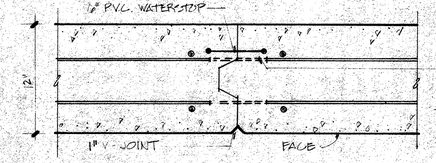


B RETAINING WALL 10' max.

SCALE: 3/4" = 1'0"



H FENCE POST REINFORCING

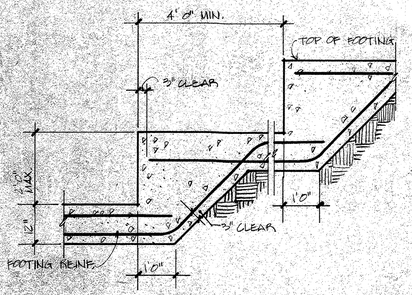


STOP ½ OF HORIZONTAL BARS 3" FROM JOINT REMAINDER TO BE CONTINUOUS, THRU JOINT.

NOTE: LOCATE JOINTS 10'0" FROM EACH END AND 20' O.C. THEREAFTER, EVERY FOURTH JOINT OF APPROX. 80'OC, JOINT SHALL BE EXPANSION JOINT.

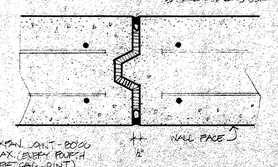
D CONTROL JOINT

SCALE: 1½" = 1'0"



C TYP. STEPPED FOOTING

SCALE: ½" = 1'0"



EXPAN. JOINT

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/16/24, 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. 36949 EXPIRATION DATE: 12/14/24

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

WALL ELEVATIONS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	AS NOTED	
DRAWN	G.W.	
CHECKED	MRC	

SHEET NO. 26 OF 125

SDP-82-109

783

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
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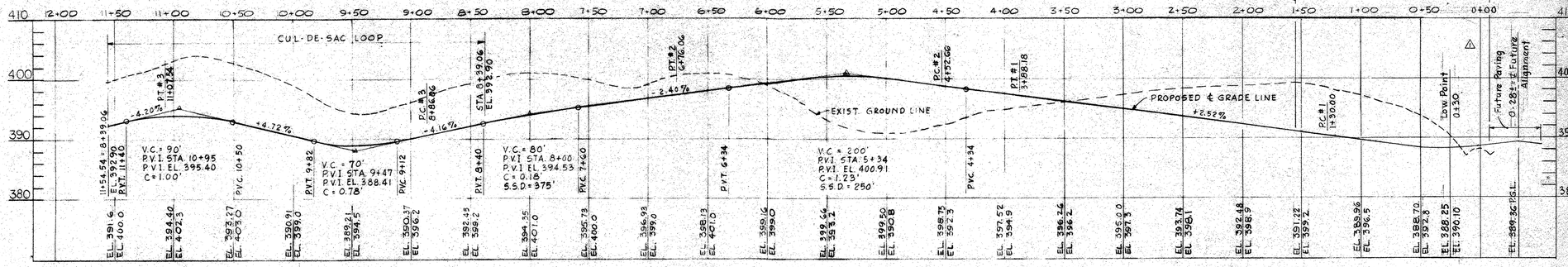
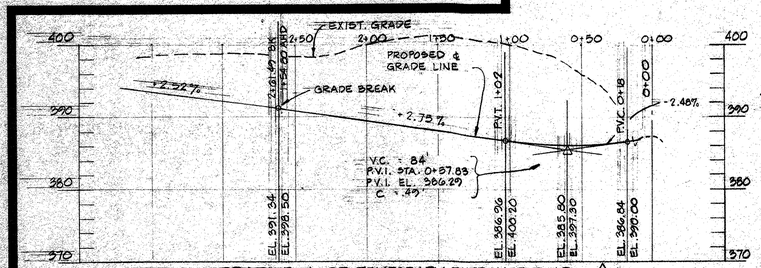


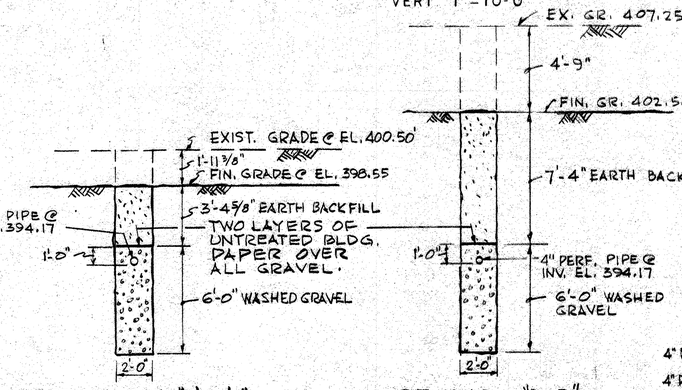
PROFILE-℄ OF ROAD TO PARKING AREA

HORIZ. 1" = 50'-0"
VERT. 1" = 10'-0"



PROFILE-℄ OF TEMPORARY ENTRANCE ROAD ⚠

HORIZ. 1" = 50'-0"
VERT. 1" = 10'-0"

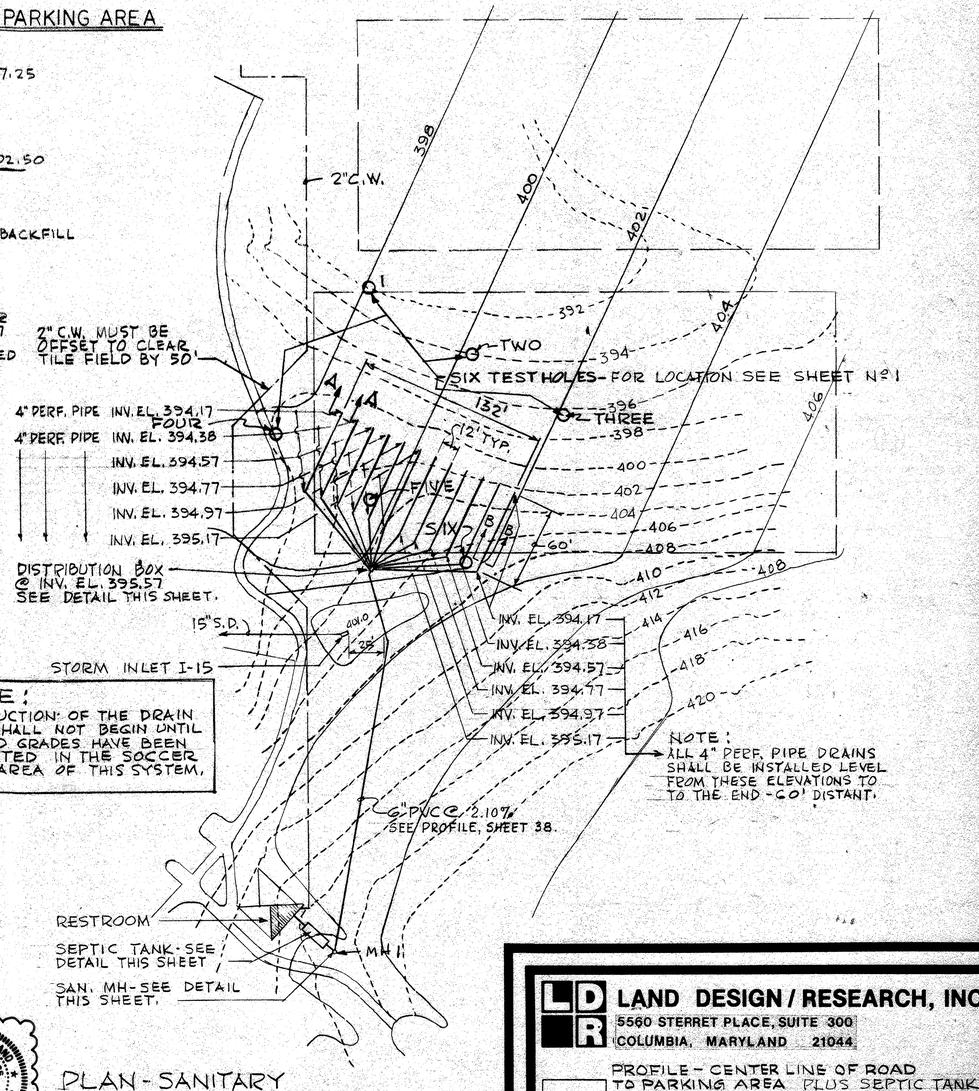


SECTION "B-B"

SCALE: 1/4" = 1'-0"

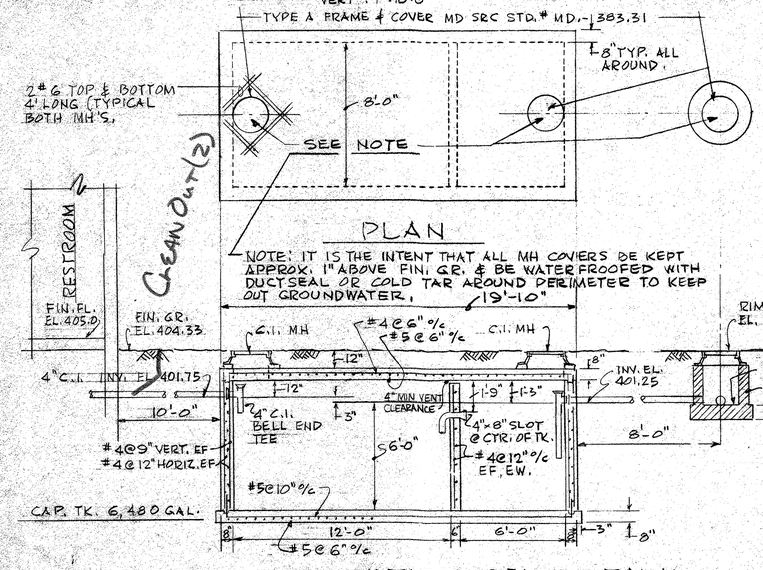
SECTION "A-A"

SCALE: 1/4" = 1'-0"



PLAN - SANITARY

SCALE: 1" = 50'

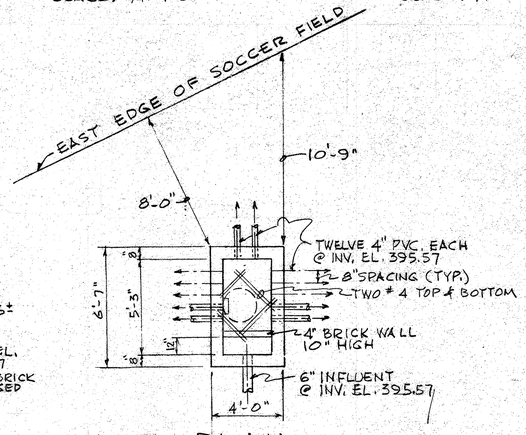


PLAN

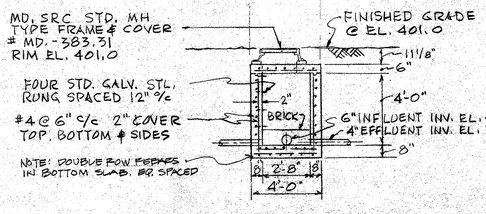
NOTE: IT IS THE INTENT THAT ALL MH COVERS BE KEPT APPROX. 1" ABOVE FIN. GR. & BE WATERPROOFED WITH DUCTSEAL OR COLD TAR AROUND PERIMETER TO KEEP OUT GROUNDWATER.

ELEVATION - SEPTIC TANK

SCALE: 1/4" = 1'-0"



PLAN



ELEVATION DISTRIBUTION CHAMBER

SCALE: 1/4" = 1'-0"

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56 843 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LD R LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

PROFILE - CENTER LINE OF ROAD TO PARKING AREA PLUS SEPTIC TANK & TILE FIELD INCL. MH & DISTRIBUTION BOX.

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE		REVISIONS:
SCALE	AS SHOWN	⚠ Revise Entrance & Storm Drain System 9-7-89
DRAWN	M.H.	⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
CHECKED		

SHEET NO. 27 OF 125

SDP-82-109 5/6/24 JMH

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Sewerage Systems Water and private

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

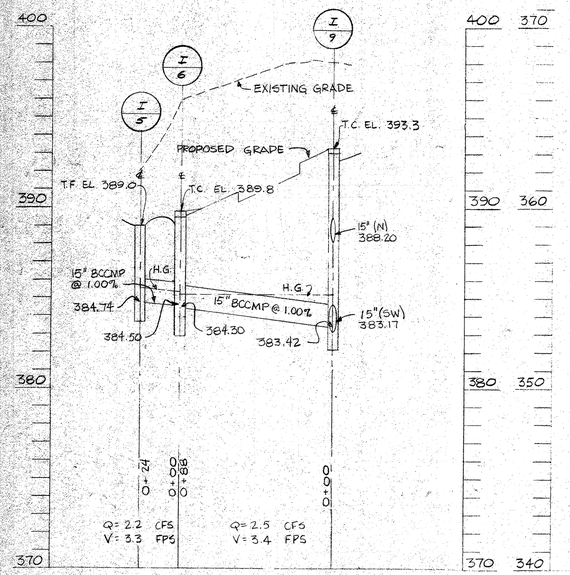
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

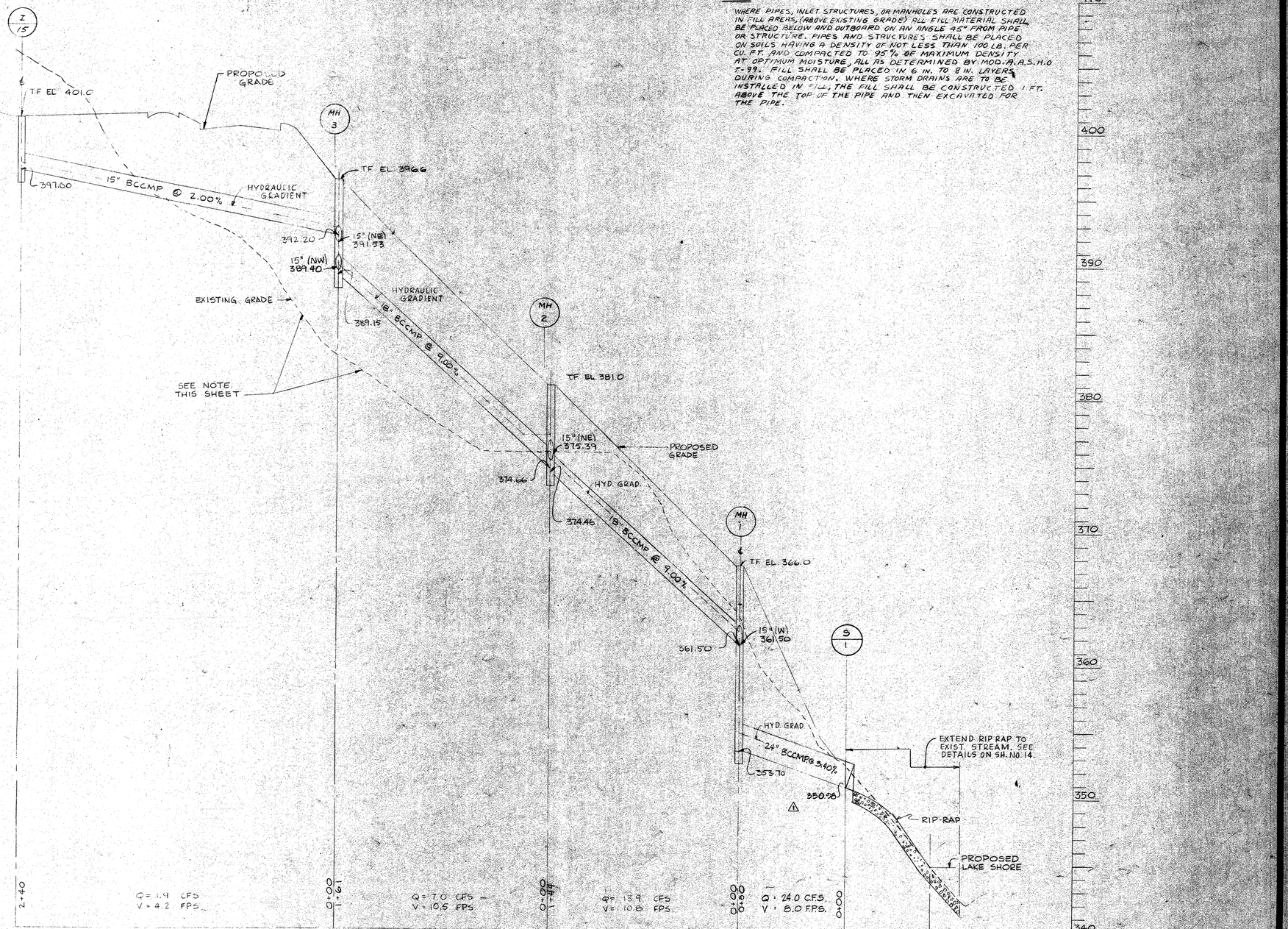
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'

NOTE:

WHERE PIPES, INLET STRUCTURES, OR MANHOLES ARE CONSTRUCTED IN FILL AREAS, (ABOVE EXISTING GRADE) ALL FILL MATERIAL SHALL BE PLACED BELOW AND OUTBOARD ON AN ANGLE 45° FROM PIPE OR STRUCTURE. PIPES AND STRUCTURES SHALL BE PLACED ON SOILS HAVING A DENSITY OF NOT LESS THAN 100 LB. PER CU. FT. AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE, ALL AS DETERMINED BY MOD. A.A.S.H.O. T-99. FILL SHALL BE PLACED IN 6 IN. TO 8 IN. LAYERS DURING COMPACTION. WHERE STORM DRAINS ARE TO BE INSTALLED IN FILL, THE FILL SHALL BE CONSTRUCTED 1 FT. ABOVE THE TOP OF THE PIPE AND THEN EXCAVATED FOR THE PIPE.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 56893 EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

STORM DRAIN PROFILES
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

		REVISIONS:
DATE		
SCALE	AS SHOWN	⚠ Revise Entrance Storm Drain System, 4-7-83
DRAWN	M.H.	⚠ REVISED SITE DEVELOPMENT PLAN -05.06.2024
CHECKED	E.E.	

SHEET NO. 28 OF 46

SDP-82-10T 5/10/18 TKA

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

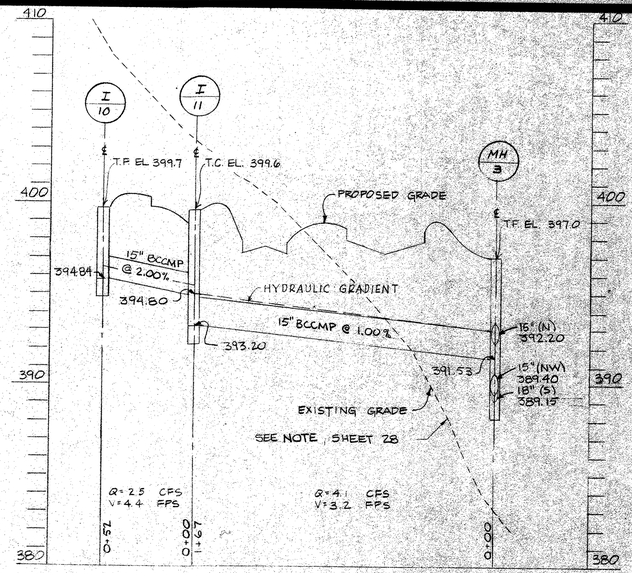
APPROVED: Howard County Office of Planning and Zoning

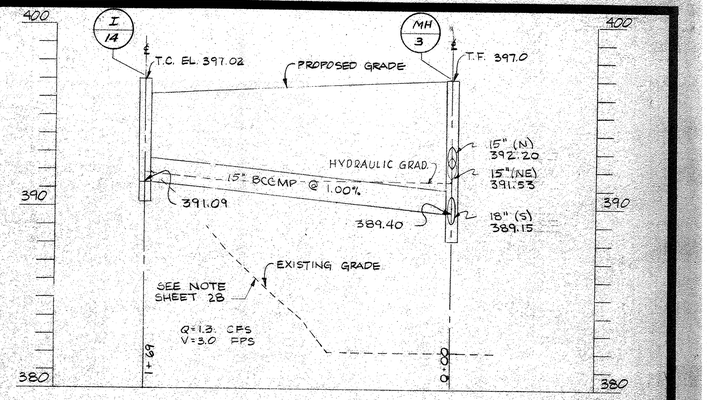
PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

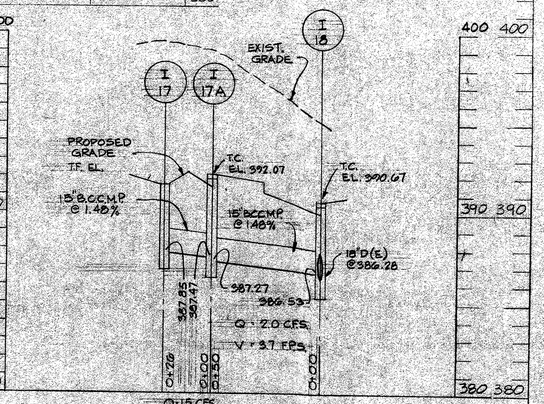
Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

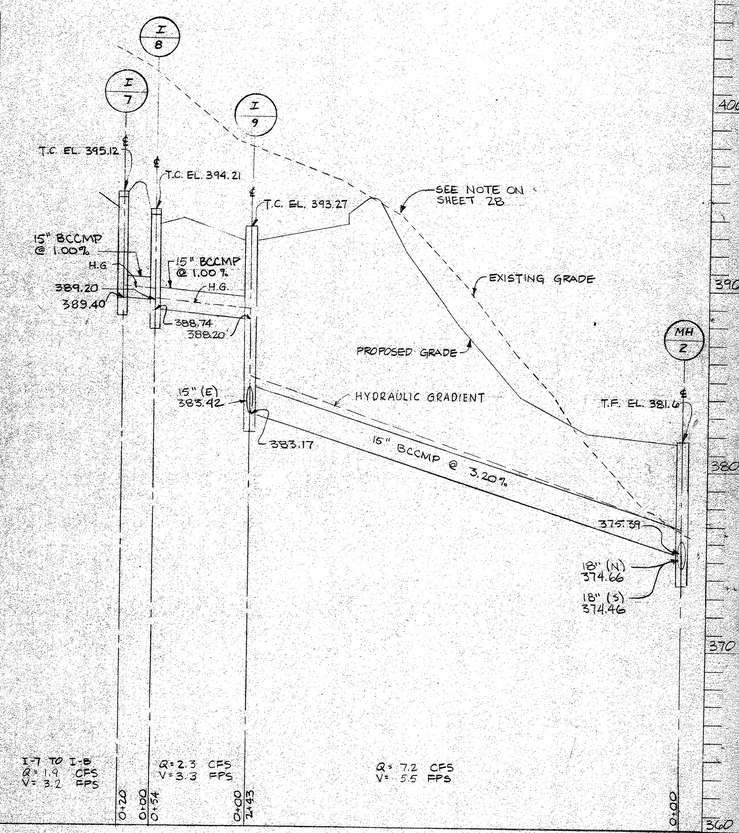
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



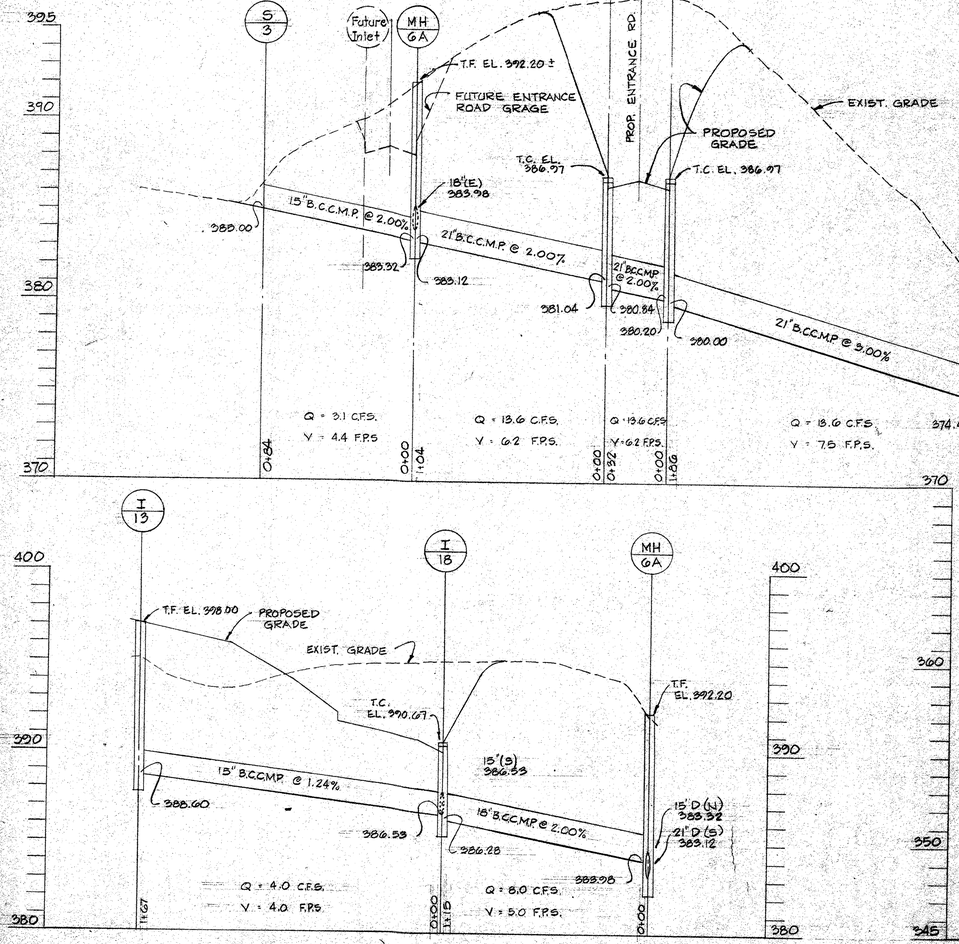


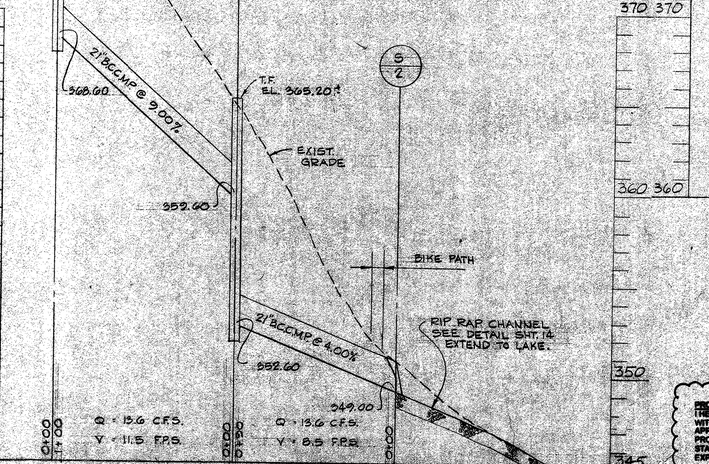
PROFILE - STORM DRAIN
HORIZ: 1"=40'
VERT: 1"=4'





PROFILE - STORM DRAIN
HORIZ: 1"=40'-0"
VERT: 1"=4'-0"





PROFILES - STORM DRAINS ⚠
HORIZ: 1"=40'
VERT: 1"=4'

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 54748, EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

STORM DRAIN PROFILES

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE		REVISIONS: ⚠ - Revise Entrance Storm Drain System 4-7-65 ⚠ REVISED SITE DEVELOPMENT PLAN 05.06.2024 SDP-82-109
SCALE	AS SHOWN	
DRAWN	M.H.	
CHECKED	F.E.	

SHEET NO. 29 OF 38

763

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE

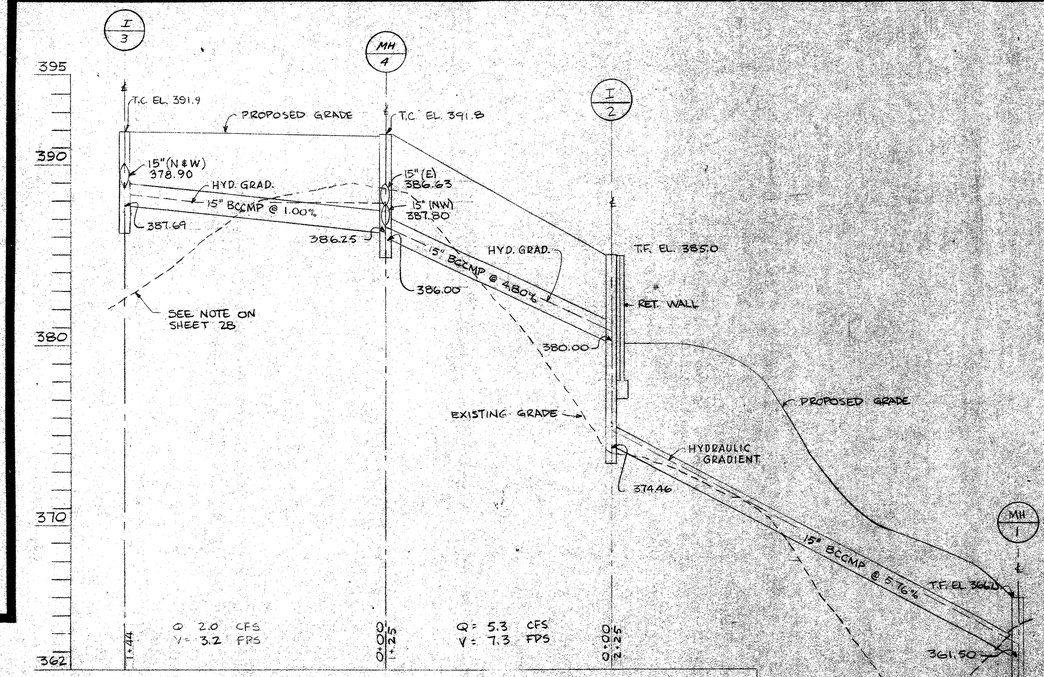
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE

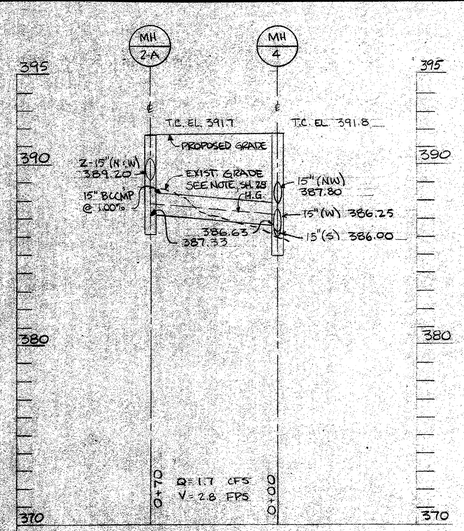
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMN. — DATE

Howard County, Md., Dept. of Public Works for the
Dept. of Rec. and Parks, 3430 Court House Drive,
Ellicott City, Maryland, Elect. Dist. No. 2,
Howard County, Md., Tax Map No. 30
Liber 781 Polio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

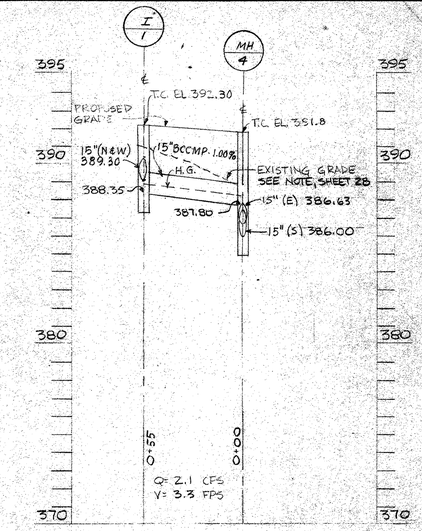
Adjacent Property Owners - North Side
Renneth R. Storie
Liber 805 Polio 588, Parcel 7
Harry L. Holliday
Liber 606 Polio 91, Parcel 311
John Mikolasko
Liber 612 Polio 543, Parcel 8



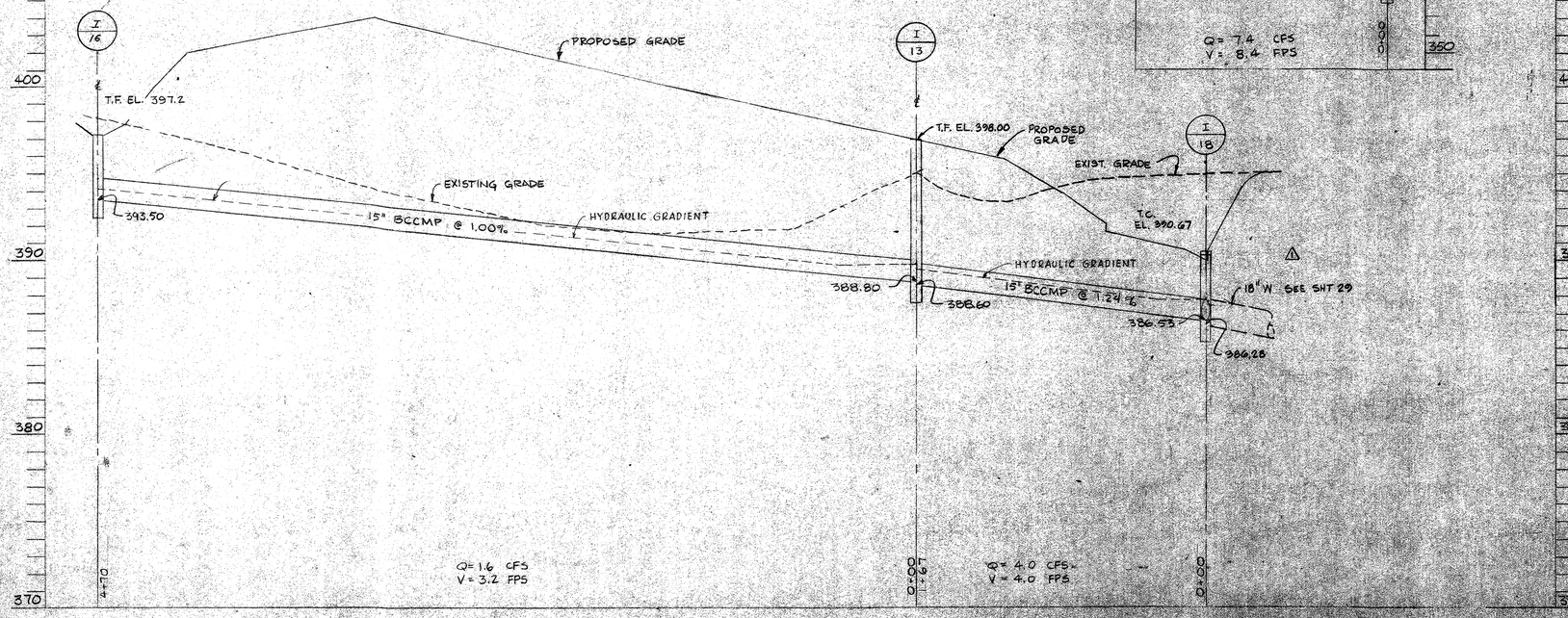
PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



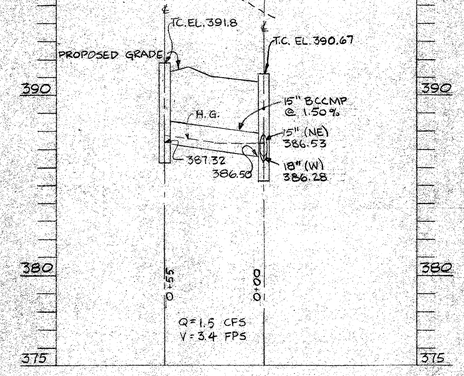
PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24, 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. 36844, EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT: 05-06-2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

STORM DRAIN PROFILES
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE		REVISIONS:
SCALE	AS SHOWN	1 Revise Entrance & Storm Drain System 4-7-88
DRAWN	M.H.	2 Revised Site Development Plan 05-06-2024
CHECKED	E.E.	

SHEET NO. 30 OF 48

763

SDP-82-109/1st/2nd Revs

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Newman — DIRECTOR — 7-20-82 DATE

[signature] — CHIEF, BUREAU OF ENGINEERING — 7-19-82 DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — COUNTY HEALTH OFFICER — 7-20-82 DATE

APPROVED: Howard County Office of Planning and Zoning

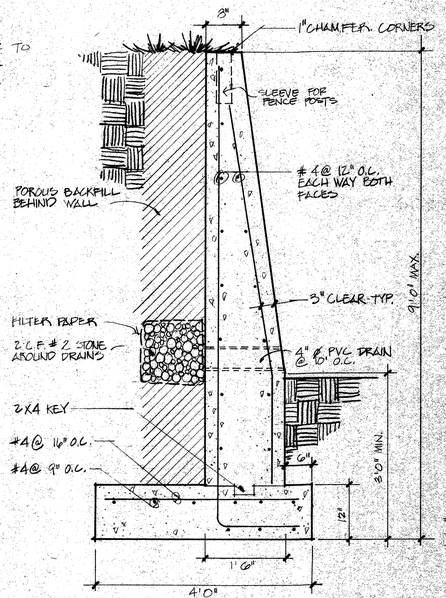
Thomas H. Hanisch — PLANNING DIRECTOR — 7-21-82 DATE

[signature] — CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — 7-20-82 DATE

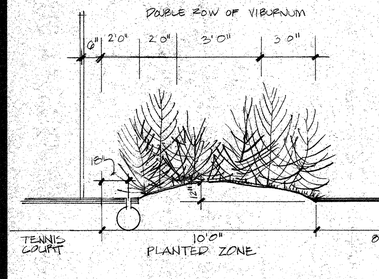
Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

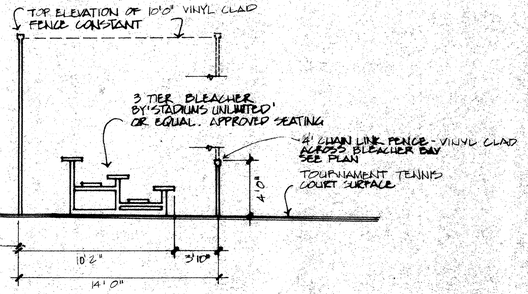
Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

NOTE
ALSO REFER TO SHT #26 FOR ELEVATIONS.

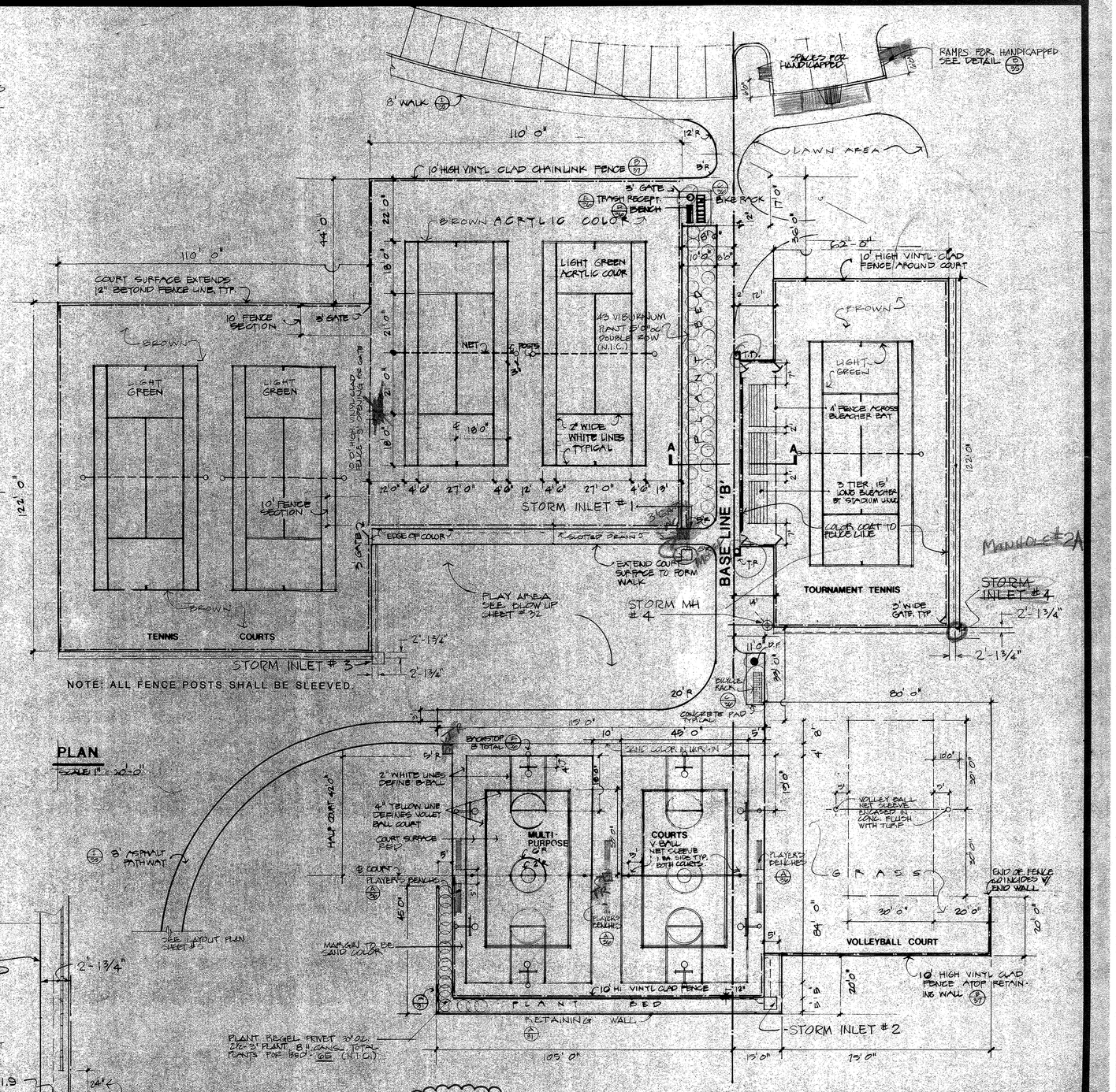


COURT GAMES RETAINING WALL (A)
3/4" = 1'0"

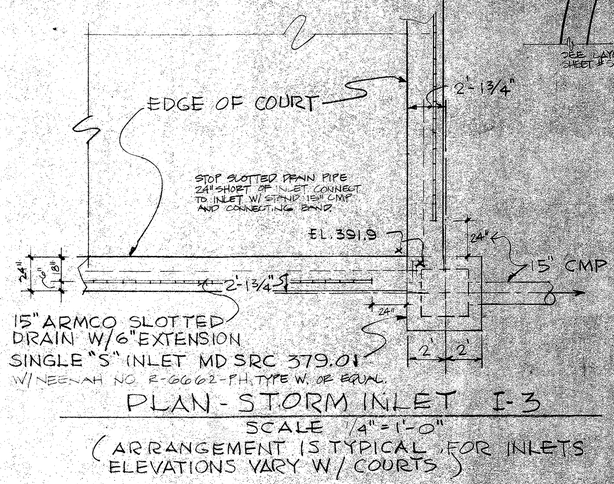




SECTION A-A
SCALE: 1/4" = 1'0"



PLAN
SCALE: 1" = 20'-0"



PLAN - STORM INLET I-3
SCALE 1/4" = 1'-0"
(ARRANGEMENT IS TYPICAL, FOR INLETS ELEVATIONS VARY W/ COURTS)

STATE OF MARYLAND — 20945 — PROFESSIONAL ENGINEER — CHRIS

PROFESSIONAL CERTIFICATION.
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24, 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. 20945, EXPIRATION DATE 12/10/24.

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

STATE OF MARYLAND — HOWARD WARD — PROFESSIONAL ENGINEER

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

COURT GAMES BLOW-UP AND DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82
SCALE	
DRAWN	
CHECKED	

REVISIONS:
△ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 31 OF 49 SHTS
A-135

SDP-82-109

263

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

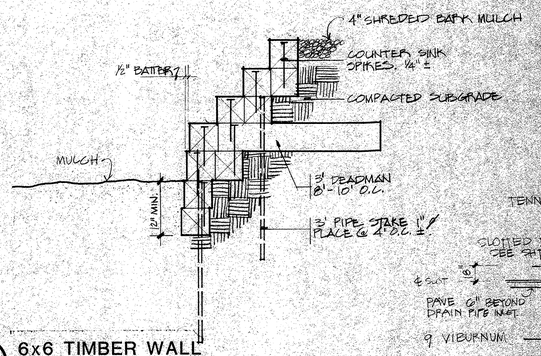
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

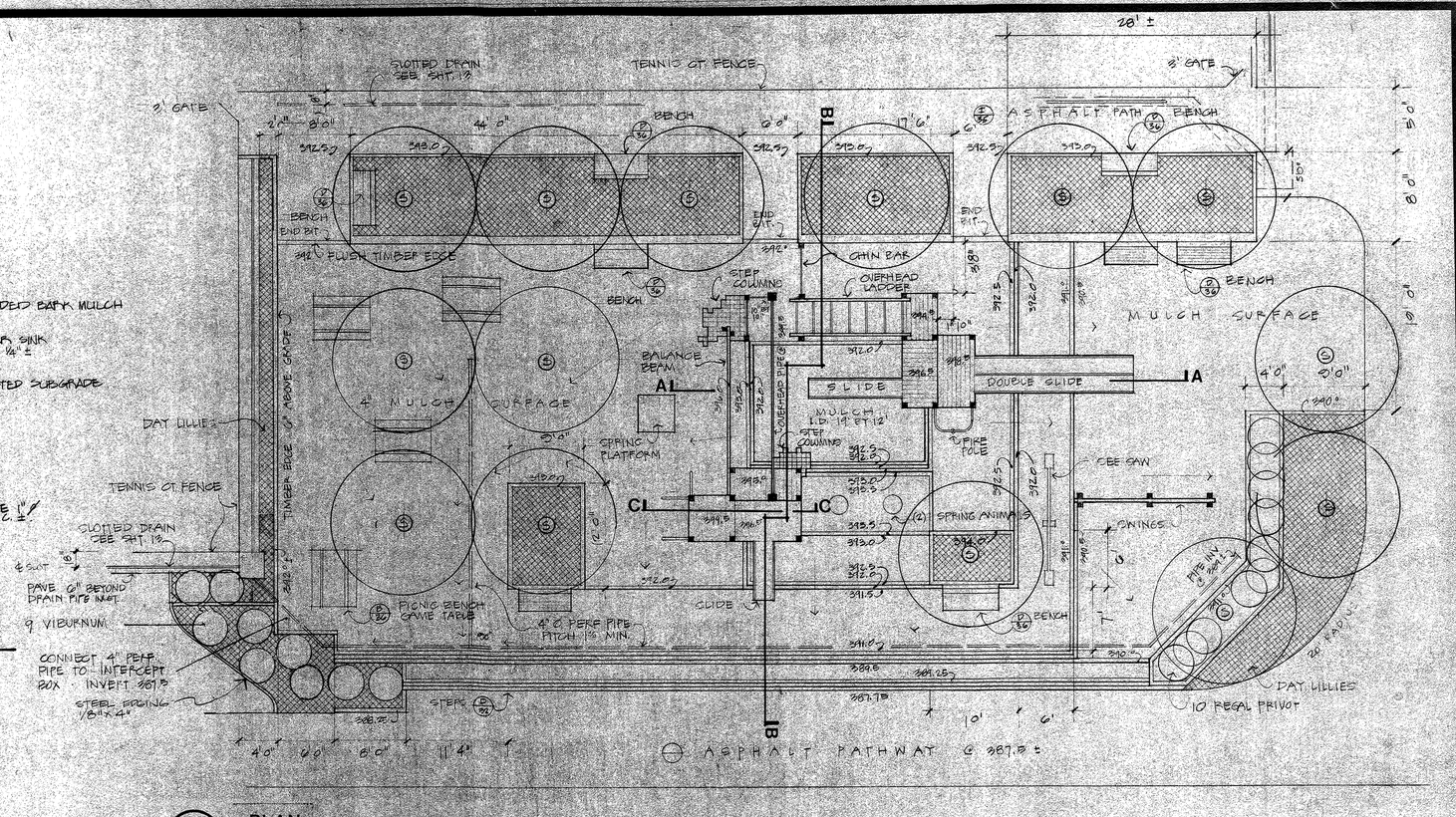
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works For the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 31 Liber 781 Folio 192, Parcel No. 22.63 ac. Law Docket A-852, Parcel 195, 61.49 ac.

Adjoining Property Owners Within 185 Feet Record Ref. Steffi Liber 809 Folio 588, Parcel 9 Harry L. Shellidy, et al Liber 606 Folio 91, Parcel 81 John Mikolusko Liber 612 Folio 543, Parcel 8



A — 6x6 TIMBER WALL
SCALE 3/4" = 1'-0"

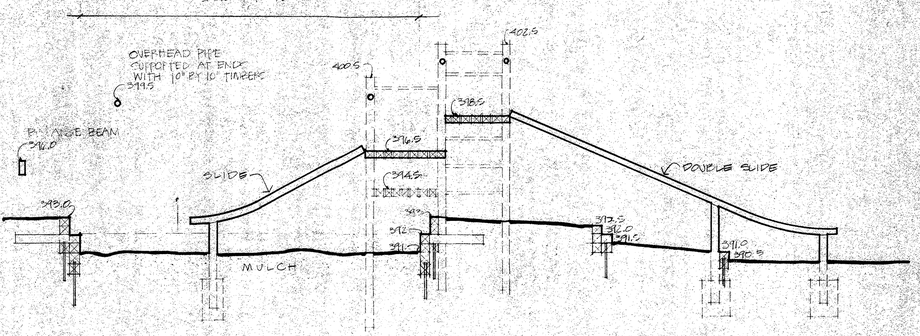


B — PLAN
SCALE: 1/8" = 1'0"

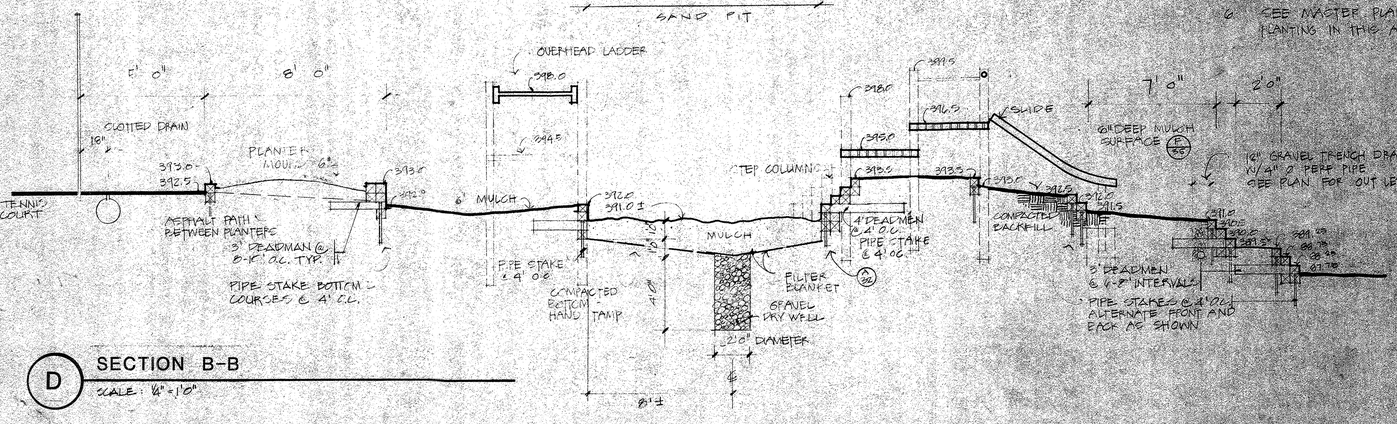
BASKET BALL COURTS

NOTES:

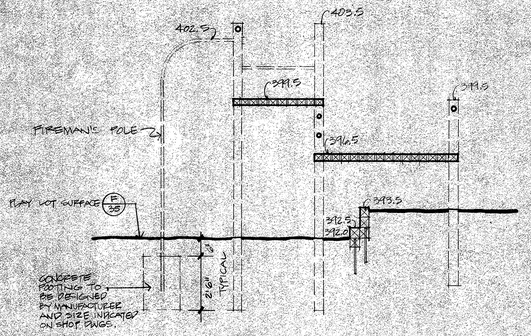
1. ALL TIMBERS FOR PLAY EQUIPMENT, PLANTERS, STEPS, ETC., UNLESS OTHERWISE SPECIFIED, SHALL BE 6"x6" TIMBERS WITH 4 SMOOTH SIDES.
2. ALL WOOD USED SHALL BE TREATED, OSMOSE K 33 0.6 lb. RETENTION, CONTRACTOR SHALL SUPPLY OWNER WITH WRITTEN CERTIFICATION OF PROCESSING.
3. ALL HARDWARE, FASTENERS, PIPE, ETC. SHALL BE HOT DIPPED GALVINIZED. NO THROUGH DRILLING OF WOOD MEMBERS WILL BE ACCEPTABLE. USE SEALED SWIVELS.
4. PLAY EQUIPMENT SHALL BE SUPPLIED BY:
   ACTION PRODUCTS INC.
   BOX 104
   OWINGS MILLS, MD. 21117
   (301) 356-5515
   OR APPROVED EQUAL
5. CONTRACTOR SHALL SUPPLY DETAILED PLANS AND SHOP DRAWINGS FOR PLAY AREA TO INCLUDE PLANTERS, STEPS, FOOTINGS, AND ALL PLAY APPARATUS, FOR ARCHITECT APPROVAL.
6. SEE MASTER PLANT LIST SHT 39 FOR PLANTING IN THIS AREA. (N.I.C.)



C — SECTION A-A
SCALE: 1/4" = 1'-0"



D — SECTION B-B
SCALE: 1/4" = 1'-0"



E — SECTION C-C
SCALE: 1/4" = 1'-0"

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 50998 EXPIRATION DATE: 12/16/24.

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

STATE OF MARYLAND — ROBERT THOMAS GARMAN — REGISTERED LANDSCAPE ARCHITECT

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

COURT GAMES PLAY AREA
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7/15/82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	AS SHOWN	
DRAWN	PJG	
CHECKED	RTG	

SHEET NO. 22 OF 50 ⚠ 125

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-26-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

FIELD #1

FIELD #2

FIELD #3

⚠1 ALL EX. NATURAL TURF SPORTS FIELDS AND ASSOCIATED SITE ELEMENTS SHALL BE REPLACED WITH PROPOSED ARTIFICIAL TURF FIELDS AND SITE ENHANCING FEATURES. REFER TO SHEET 59 - 125 FOR ALL REVISED SITE WORK

PLAN
ONE INCH = 20'0"
north

TYP. FENCING LAYOUT
1" = 20' 0"

TYP. BLEACHER PAD SECTION
NOT TO SCALE

A RAISED PLANTING BED
NOT TO SCALE

C PLAN-RAISED CONCRETE PLANTER
1/8" = 1'0"

B BACKSTOP
SCALE: 1/8" = 1'0"

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 50398, EXPIRATION DATE: 12/16/24

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

TRI-PLEX BLOW-UP & DETAILS

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS NOTED
DRAWN	NHO
CHECKED	

REVISIONS:
⚠1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 335 OF 336 ⚠125

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-26-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

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John Mikolasko
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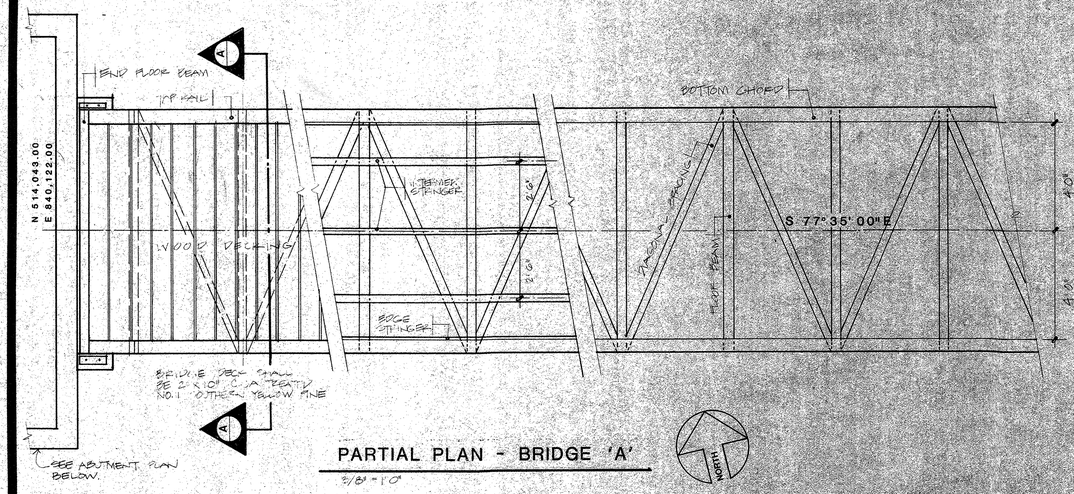
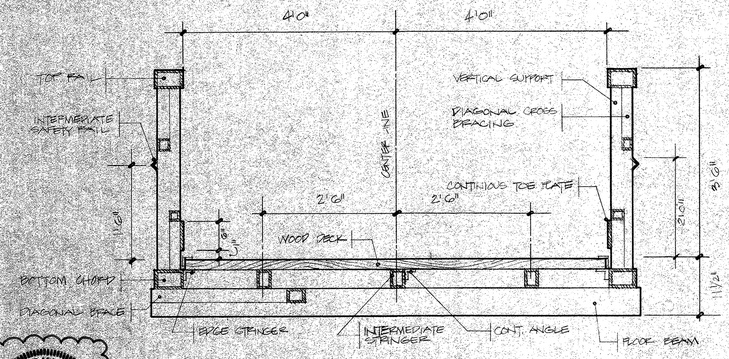


PARTIAL PLAN - BRIDGE 'A'
3/8" = 1'0"



A TYP. SECTION - BRIDGE 'A'
3/4" = 1'0"

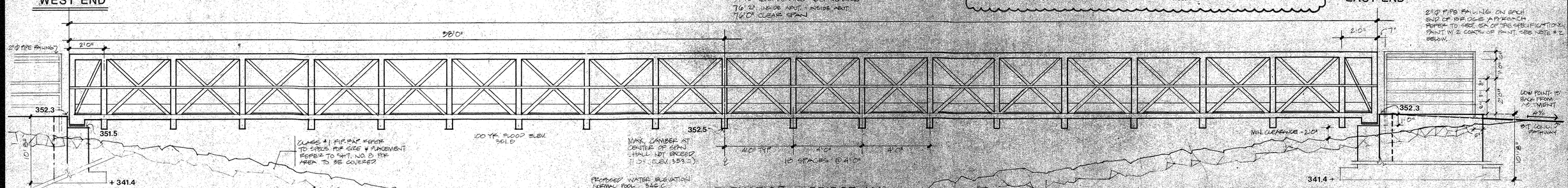
STATE OF MARYLAND — JOHN A. MARSHALL — 26849 — PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 26849
EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

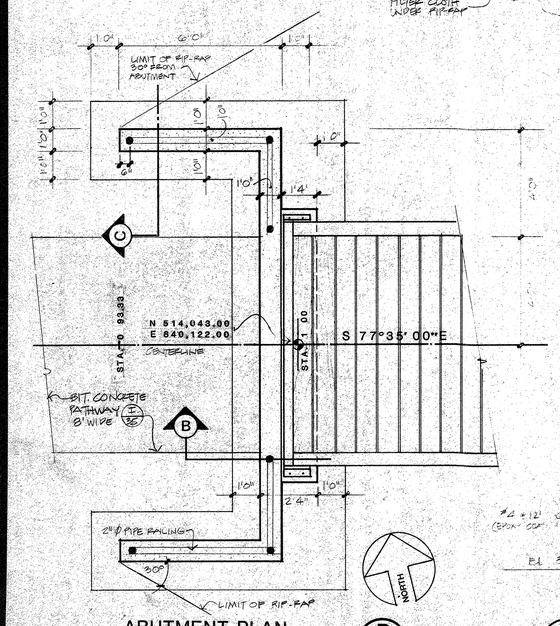
STATE OF MARYLAND — EDWARD — PROFESSIONAL ENGINEER

WEST END

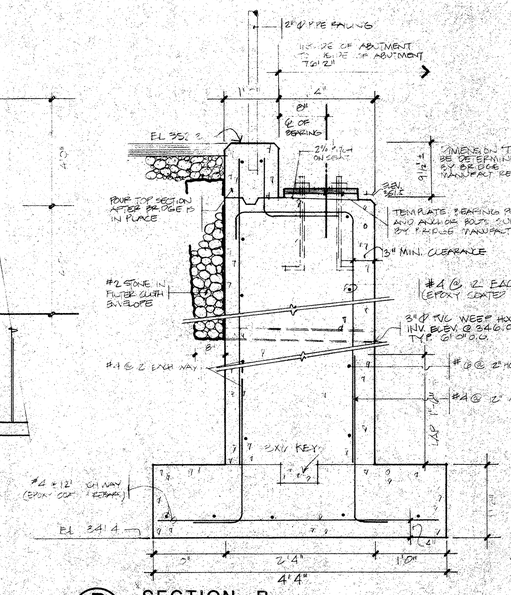


ELEVATION - BRIDGE 'A'
3/8" = 1'0"

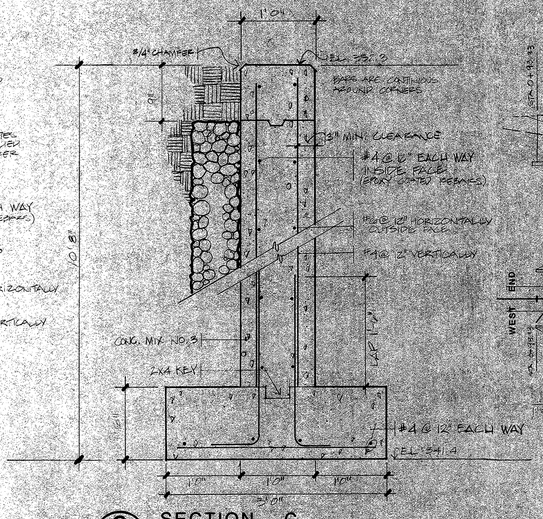
EAST END



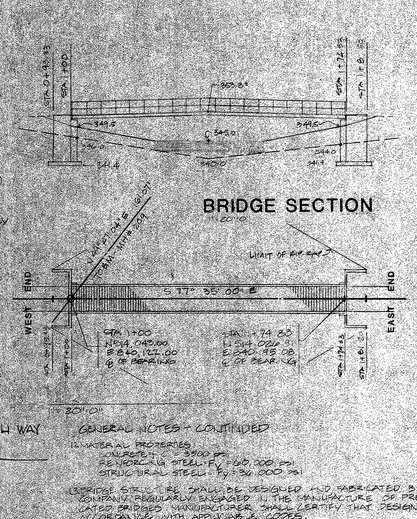
ABUTMENT PLAN
3/8" = 1'0"



B SECTION B
1/2" SCALE



C SECTION C
1/2" SCALE



GENERAL NOTES,

1. BRIDGE HAS BEEN DESIGNED FOR THE FOLLOWING LOADING CONDITIONS.
   a. LIVE LOAD OF 85 LBS. PER SQ. FT.
   b. WIND LOAD OF 30 LBS. PER SQ. FT. ON THE FULL VERT. SURFACE.
   c. VEHICLE LOAD OF 10,000 LBS. PLUS 30% FOR IMPACT. (MIN.)
2. BRIDGE SHALL BE PAINTED RUST-O-THANE #9400 SATIN POLYURETHANE BY RUST-OLEUM, BOSTON COLOR GRAY CONSISTING OF 2 PARTS #9455 AND PART #9425. APPLY ONE (1) COAT OF GRAY OVER ONE (1) COAT OF #9391 PRIMER. BRIDGE SHALL BE SHOP PAINTED ONLY WITH ADDITIONAL PAINT SUPPLIED BY MANUFACTURER FOR FIELD TOUCH-UP, BY THE CONTRACTOR.
3. BRIDGE STEEL SHALL BE CLEANED FOR PAINTING IN ACCORDANCE WITH THE STEEL STRUCTURES PAINTING COUNCIL SURFACE PREPARATION SPECIFICATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR UNLOADING BRIDGE AT POINT OF DELIVERY, UNDER THE SUPERVISION OF THE MANUFACTURER.
5. MANUFACTURER SHALL SUPPLY SHOP DRAWINGS INDICATING THE SIZES OF ALL STRUCTURAL MEMBERS, ANCHORS & PLATES, AND DESIGN CALCULATIONS AS REQUIRED.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, SECTION 23.
7. BRIDGE MANUFACTURER SHALL SUPPLY CONTRACTOR WITH TEMPLATES FOR INSTALLATION OF ANCHOR BOLTS.
8. CONCRETE FOR ABUTMENTS SHALL BE CONCRETE MIX NO. 3.
9. REFER TO SHT NO. 5 FOR ADDITIONAL LAYOUT INFO. & SHT NO. 12 FOR ADDITIONAL GRADES.
10. FOUNDATIONS ARE DESIGNED FOR A MAXIMUM SOIL PRESSURE OF 3000 PSI.
11. REFER TO SHT. NO. 4 AND SPECIFICATIONS FOR BORING INFO.

GENERAL NOTES - CONTINUED

12. MATERIAL PROPERTIES
    CONCRETE f'c = 3500 PSI
    REINFORCING STEEL f'y = 60,000 PSI
    STRUCTURAL STEEL f'y = 36,000 PSI
13. BRIDGE STEEL TO BE DESIGNED AND FABRICATED BY A COMPANY REGULARLY ENGAGED IN THE MANUFACTURE OF PREFABRICATED BRIDGES. MANUFACTURER SHALL CERTIFY THAT DESIGN IS IN ACCORDANCE WITH APPLICABLE CODES.

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

PEDESTRIAN BRIDGE 'A'
PLAN, ELEVATION, AND DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS: 1/29/82
SCALE	AS NOTED	⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
DRAWN	NHC PM	
CHECKED		

SHEET NO. 34 OF ⚠ 35

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-20-82

APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN — DATE 7-20-82

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Liber 781 Folio 592, Parcel 9, 22.63 ac,
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
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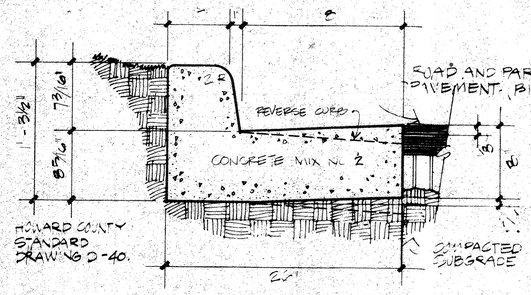
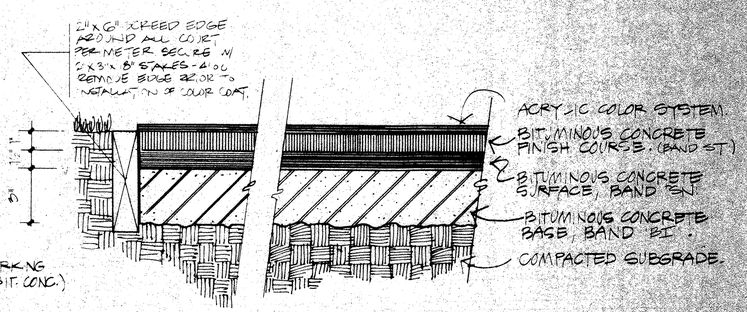
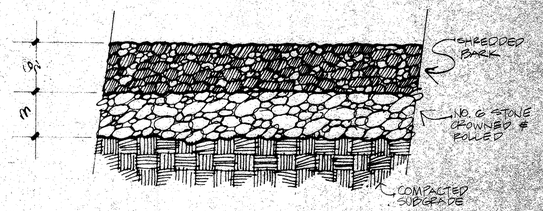
John Mikolasko
Liber 612 Folio 543, Parcel 8



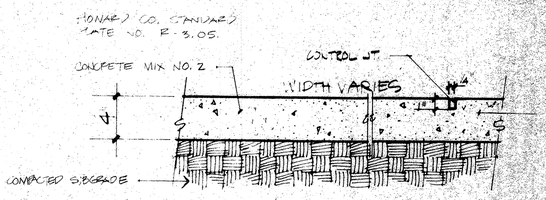
E STANDARD 7" COMBINATION CURB AND GUTTER
SCALE ½" = ONE FOOT.



C COURT GAMES PAVEMENT
NO SCALE

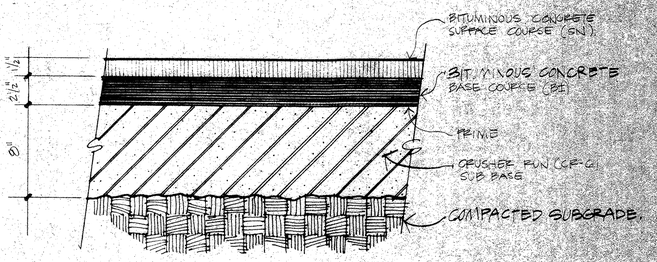


F WOOD CHIP SURFACING-PLAY AREAS ONLY
NO SCALE:



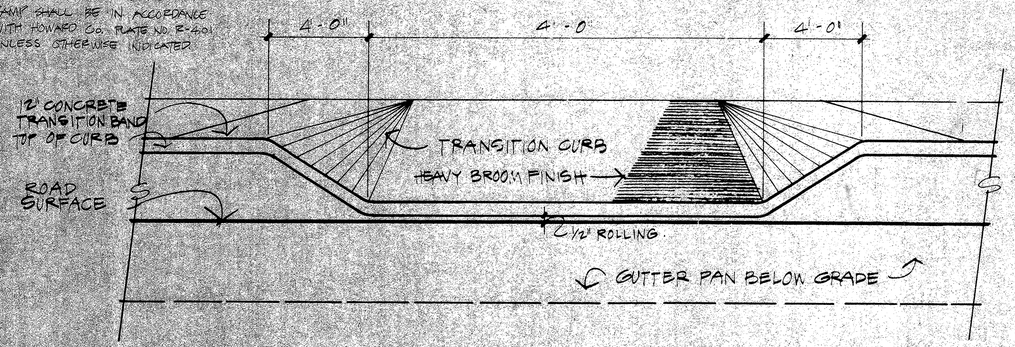
H CONCRETE PAVEMENT
NO SCALE:

DETAIL APPLIES TO PADS FOR DRINKING FOUNTAINS, BENCHES, TRASH RECEPTACLES, HANDICAP RAMPS AND GENERAL CONC. FLATWORK



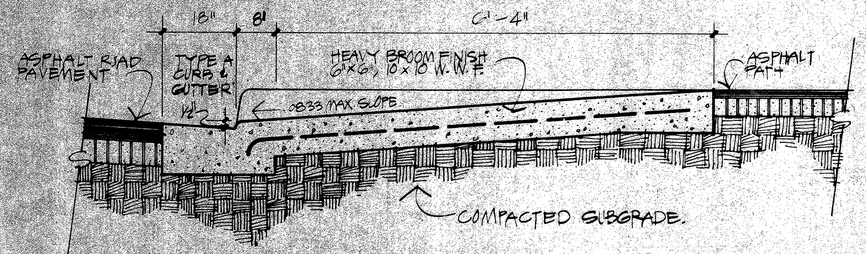
A ROADWAY PAVEMENT - STAND. P-2
NO SCALE:

RAMP SHALL BE IN ACCORDANCE WITH HOWARD CO. PLATE NO. R-4.01 UNLESS OTHERWISE INDICATED

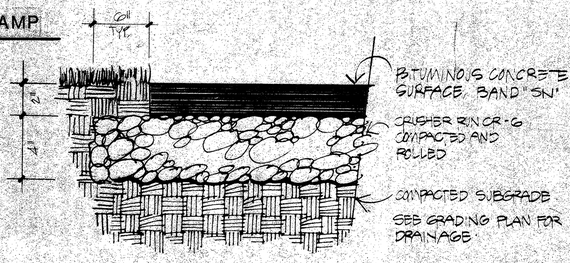


B FRONT ELEVATION HANDICAPPED RAMP
NO SCALE:

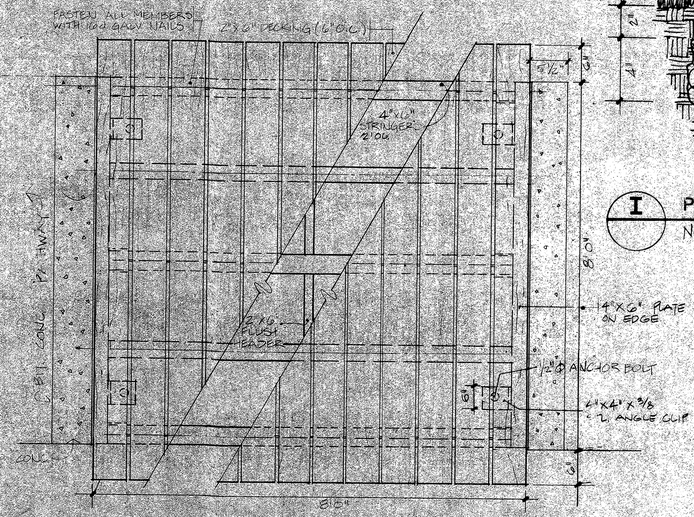
NOTE:
RAMP AND CURB SHALL BE POURED INTEGERALLY.

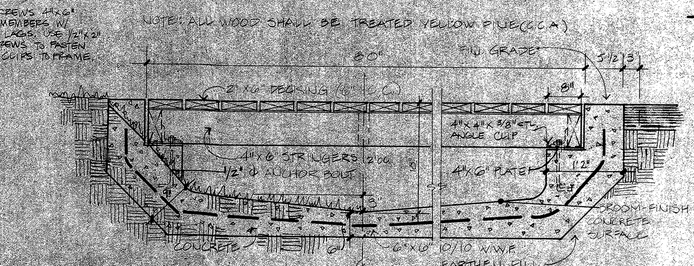


D SECTION HANDICAPPED RAMP
SCALE 1" = ONE FOOT.

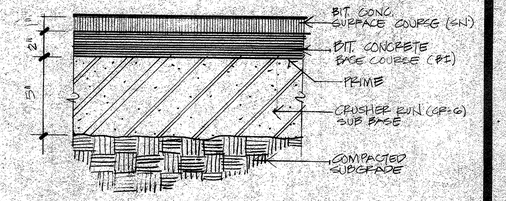


I PATHWAY PAVEMENT
NO SCALE:





J TYP. SWALE CROSSING
NO SCALE:



PARKING LOT PAVEMENT STAND. P-1 K
NO SCALE

PROFESSIONAL CERTIFICATION
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PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

STATE OF MARYLAND — ROBERT J. SOMMAN — 56848 — REGISTERED PROFESSIONAL ENGINEER

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

PAVEMENT DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS NOTED
DRAWN	WHC
CHECKED	

REVISIONS:
⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024

SHEET NO. 35 OF 53 OF 135

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

George F. Newman — 7-26-82
DIRECTOR — DATE

Charles E. Ray — 7-19-82
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

[signature] — 7-20-82
COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

N.A. — DATE
PLANNING DIRECTOR

N.A. — DATE
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN.

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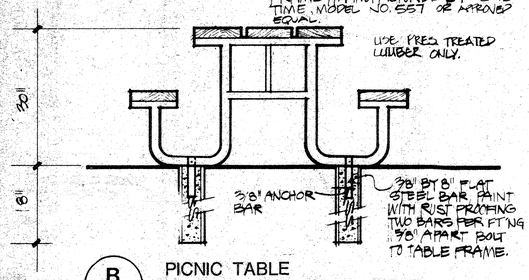
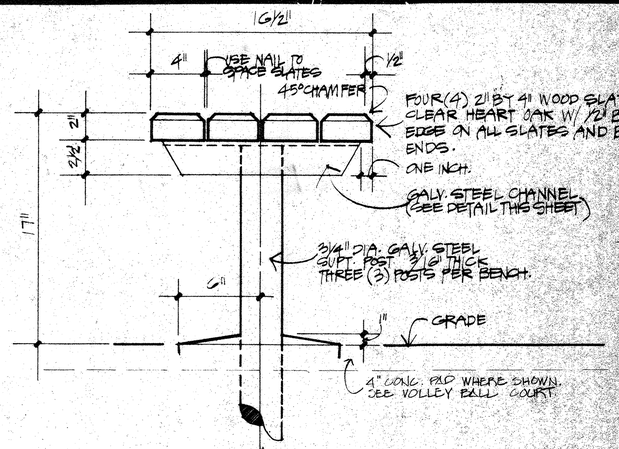
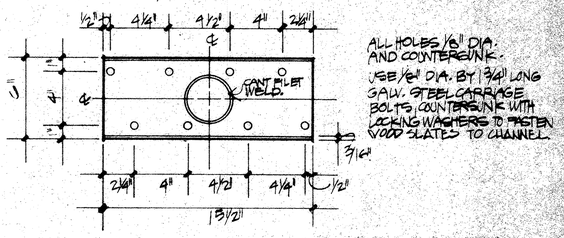


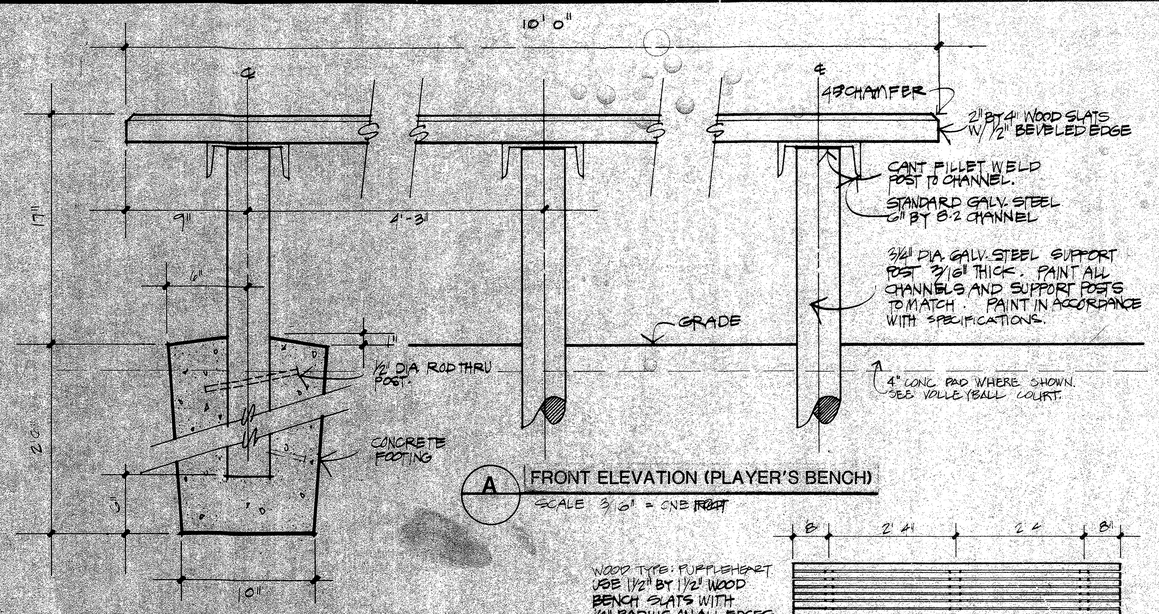
B PICNIC TABLE
SCALE 3/4" = ONE FOOT.



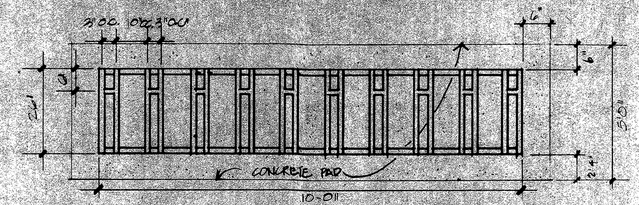
END ELEVATION (PLAYER'S BENCH)
SCALE 3/16" = ONE INCH. HOWARD CO. STANDARD



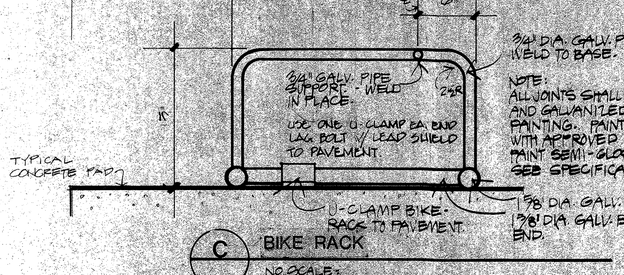
STEEL CHANNEL DETAIL (PLAYER'S BENCH)
SCALE 3/16" = ONE INCH



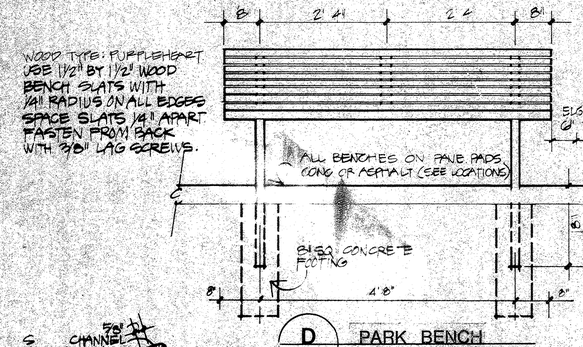
A FRONT ELEVATION (PLAYER'S BENCH)
SCALE 3/8" = ONE FOOT



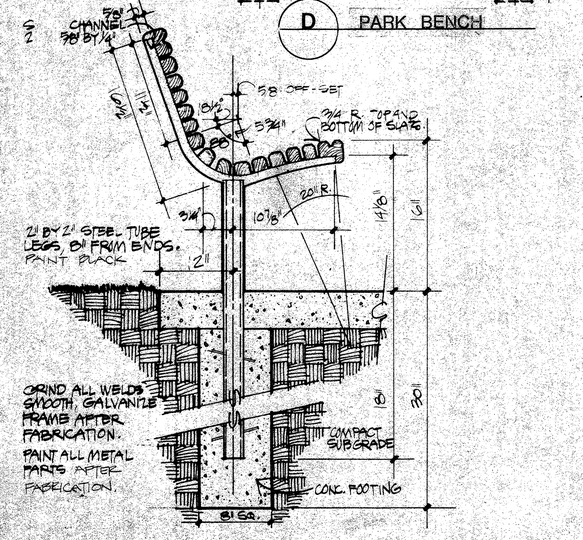
PLAN VIEW BIKE RACK

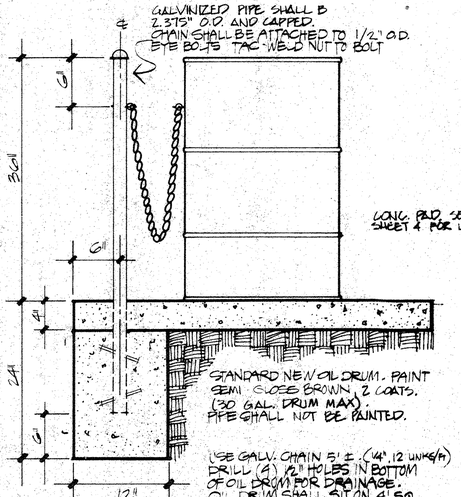


C BIKE RACK
NO SCALE

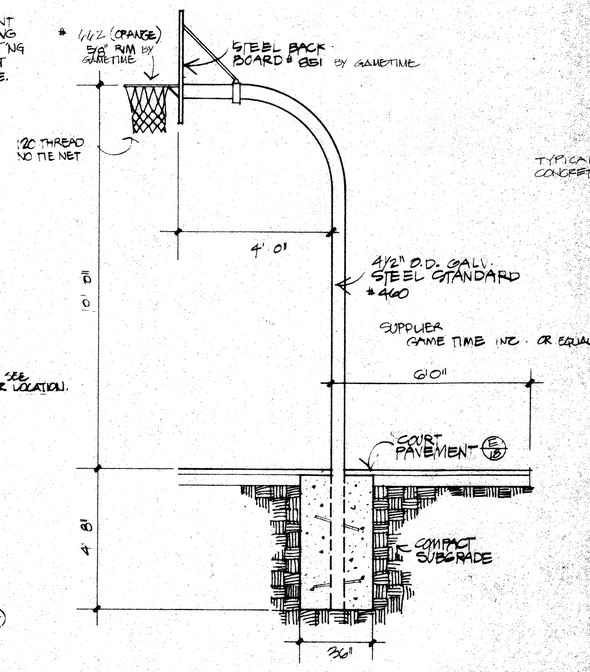


D PARK BENCH





E TRASH RECEPTACLE
NO SCALE



F BASKETBALL BACKSTOP DETAIL
SCALE NONE

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 36 847 EXPIRATION DATE: 12/10/24

PURPOSE STATEMENT - 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

Zachary H. German

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

MISC. CONSTRUCTION DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7.15.82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	AS NOTED	
DRAWN	P.A.	
CHECKED		

SHEET NO. 36 OF 54

SDP-82-109

763

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

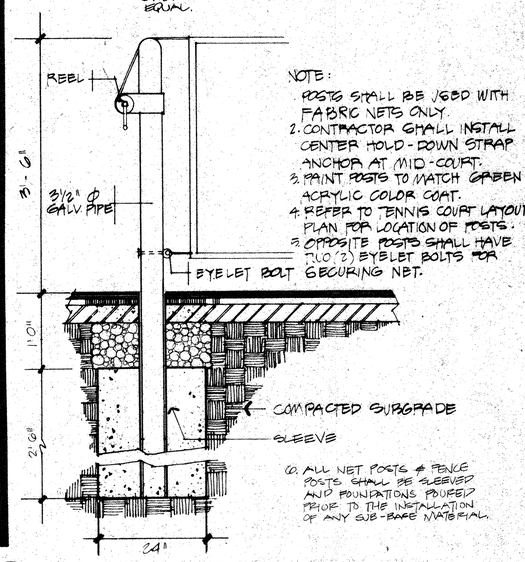
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR N.A. — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. N.A. — DATE

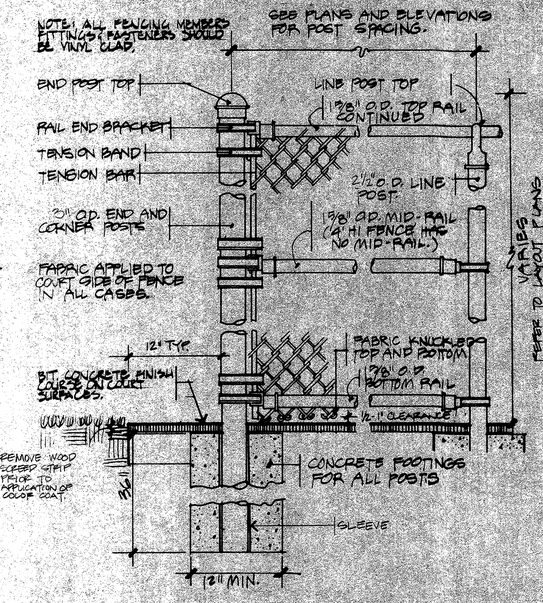
Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



A TENNIS POST W/ RACKET REEL

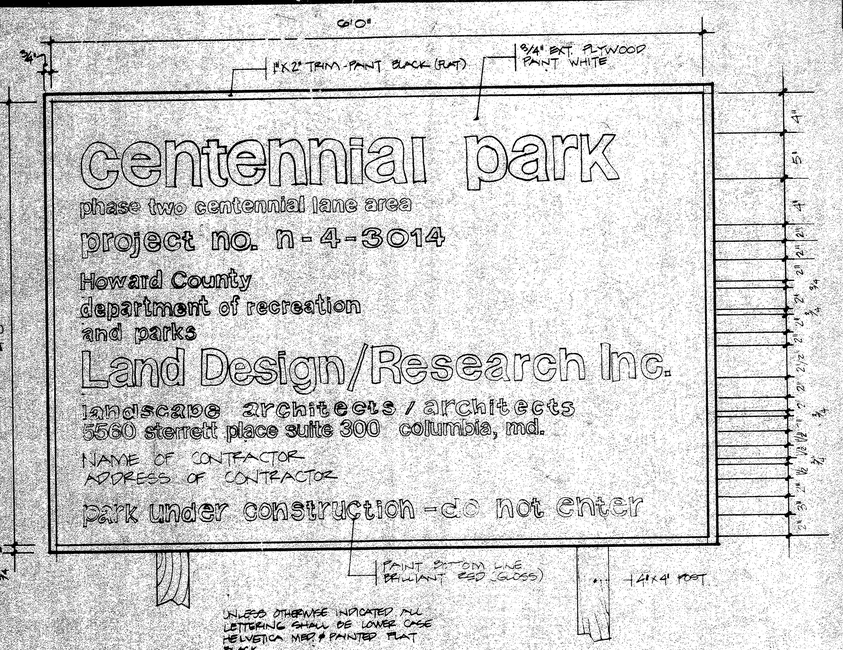
SCALE 3/4" = ONE FOOT



B CHAIN LINK FENCE

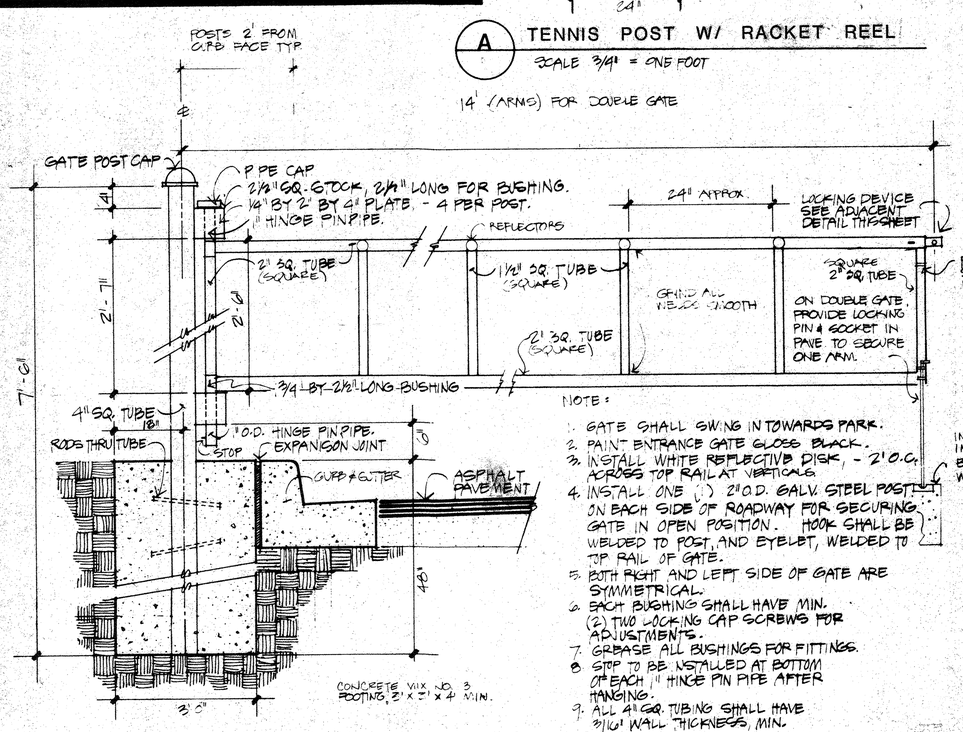
NO SCALE

ALL FENCE MEMBERS AND FITTINGS SHALL MATCH FENCE FABRIC



C PROJECT SIGN

N.T.S.

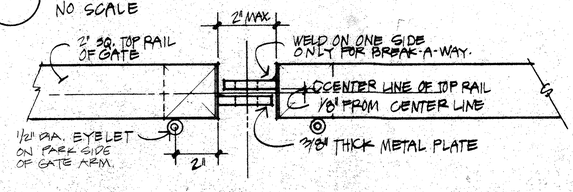


NOTE:

1. GATE SHALL SWING IN TOWARDS PARK.
2. PAINT ENTRANCE GATE GLOSS BLACK.
3. INSTALL WHITE REFLECTIVE DISK, - 2'0.C. ACROSS TOP RAIL AT VERTICALS.
4. INSTALL ONE (1) 2" O.D. GALV. STEEL POST ON EACH SIDE OF ROADWAY FOR SECURING GATE IN OPEN POSITION. HOOK SHALL BE WELDED TO POST, AND EYELET, WELDED TO TOP RAIL OF GATE.
5. BOTH RIGHT AND LEFT SIDE OF GATE ARE SYMMETRICAL.
6. EACH BUSHING SHALL HAVE MIN. (2) TWO LOCKING CAP SCREWS FOR ADJUSTMENTS.
7. GREASE ALL BUSHINGS FOR FITTINGS.
8. STOP TO BE INSTALLED AT BOTTOM OF EACH 1" HINGE PIN PIPE AFTER HANGING.
9. ALL 4" SQ. TUBING SHALL HAVE 3/16" WALL THICKNESS, MIN.

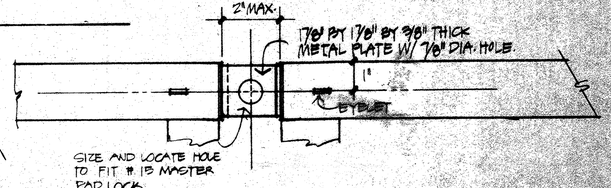
D ENTRANCE GATE TO PARK

NO SCALE



TOP VIEW LOCKING DEVICE

NO SCALE:



FRONT VIEW LOCKING DEVICE

NO SCALE:

E STANDARD STEEL GUIDE POST NO SCALE:

STATE OF MARYLAND — JOHN S. GARMAN — No. 5679 — PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24, 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. 56798, EXPIRATION DATE: 12/16/24.

PURPOSE STATEMENT: 05-06-2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

LDR LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

MISC. CONSTRUCTION DETAILS
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS:	SHEET NO. 37 OF 125
SCALE		1 REVISED SITE DEVELOPMENT PLAN PER DPW 2024	
DRAWN			
CHECKED			

763

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and Private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

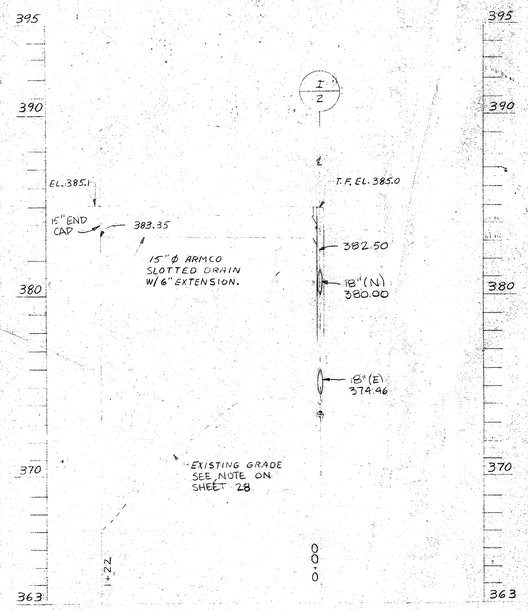
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

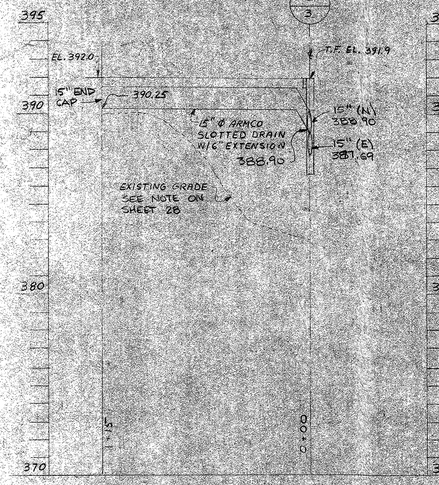
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

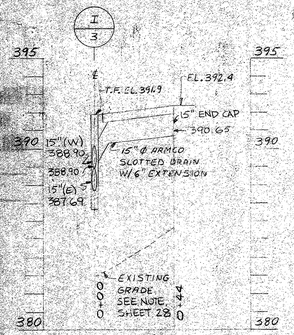
Adjacent Property Owners - North Side
Kenneth R. Storie,
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



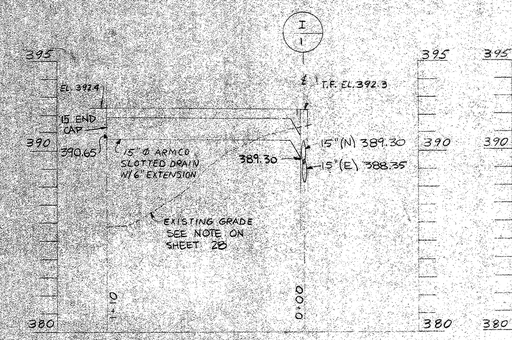
PROFILE: STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'

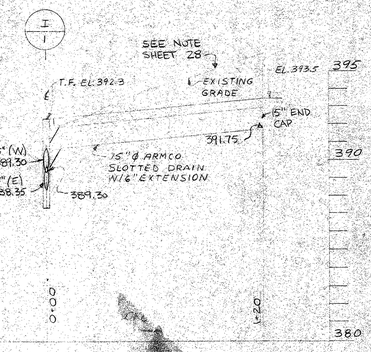


PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'

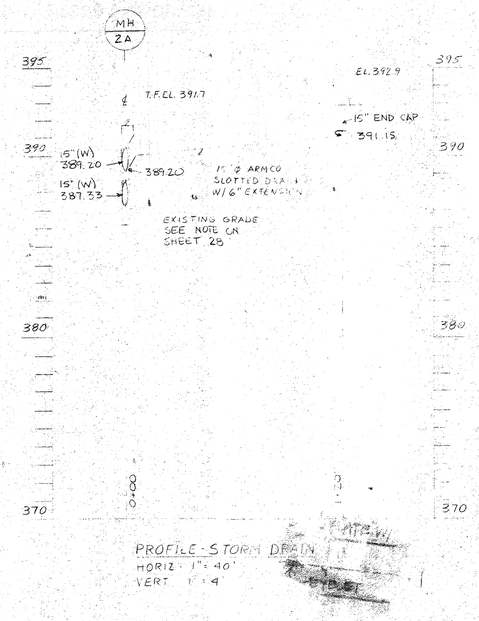


PROFILE: STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'

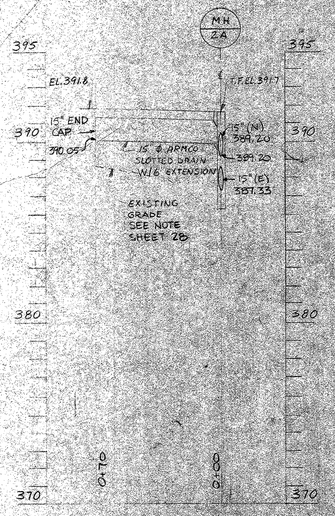




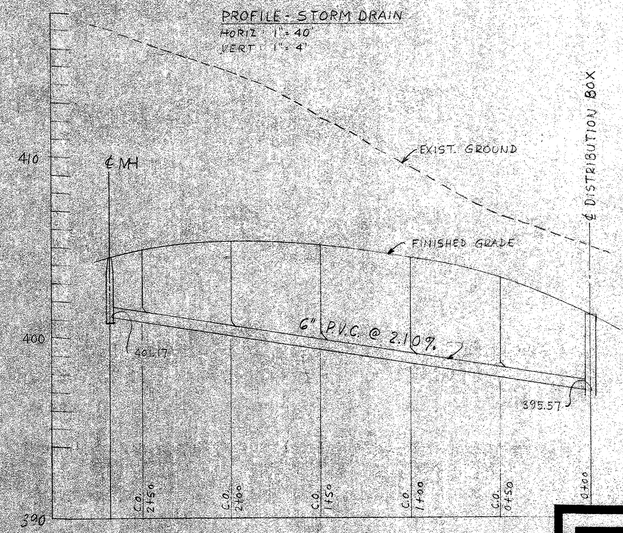
PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - STORM DRAIN
HORIZ: 1" = 40'
VERT: 1" = 4'



PROFILE - SANITARY SEWER
HORIZ: 1" = 40'
VERT: 1" = 4'

STATE OF MARYLAND — MICHAEL W. BOWERS — 36946 — REGISTERED PROFESSIONAL ENGINEER

1

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 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. 36941 EXPIRATION DATE 12/10/24

PURPOSE STATEMENT - 05.08.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

STORM DRAIN PROFILES
CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82
SCALE	AS SHOWN
DRAWN	M.W.B.
CHECKED	

REVISIONS:
1 REVISED SITE DEVELOPMENT PLAN - 05.08.2024

SHEET NO. 38 OF 136

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 7-20-82

CHIEF, BUREAU OF ENGINEERING — DATE 7-19-82

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 7-21-82

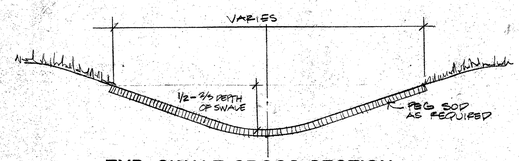
APPROVED: Howard County Office of Planning and Zoning

PLANNING DIRECTOR — DATE 7-21-82

CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE 7-20-82

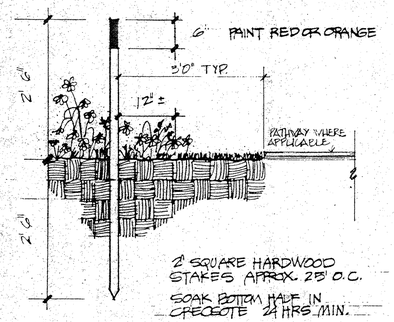
Howard County, Md., Dept. of Public Works for the Dept. of Rec. and Parks, 3430 Court House Drive, Ellicott City, Maryland, Elect. Dist. No. 2, Howard County, Md., Tax Map No. 30
Liber 781 Folio 592, Parcel 9, 22.63 ac.
Law Docket A-3652, Parcel 295, 61.45 ac.

Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8



TYP. SWALE CROSS SECTION
N.T.S.

WILDFLOWER BED MOWED ONCE A YEAR IN LATE FALL — MAINTAINED LAWN AREA



A WILDFLOWER BED STAKES
SCALE 3/4" = 1'-0"

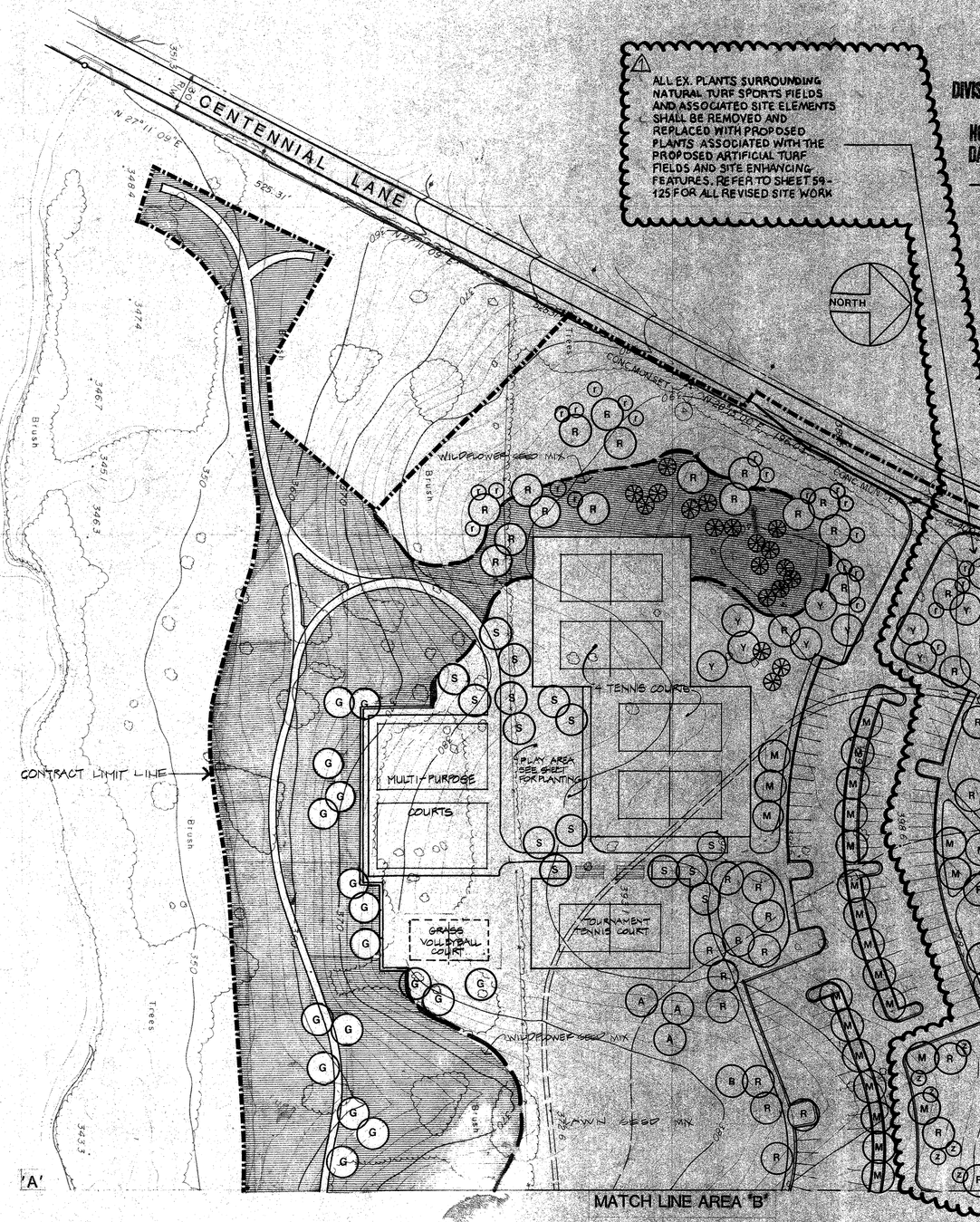
WILDFLOWER MIX

WILDFLOWER SEED MIX SHALL CONSIST OF THE FOLLOWING SEED TYPES AND SHALL BE SUPPLIED BY HERBST BROTHERS SEEDSMEN, INC. (914)-279-2971, AS WILDFLOWER MIXTURE 39906 OR APPROVED EQUAL

RUDBECKIA HIRTA	RUDBECKIA SGL. (CONEFLOWER)
QUEEN ANNS LACE	CHRYSANTHEMUM ALASKA
LINUM PERENE BLUE	PYRETHRUM GT. FL. MIXED
LUNARIA MIXED	POPPY ORIENTALE
ASCLEPIAS SYRIACA	HIBISCUS GT. FL. MIXED
SAPONARIA	RED TOP

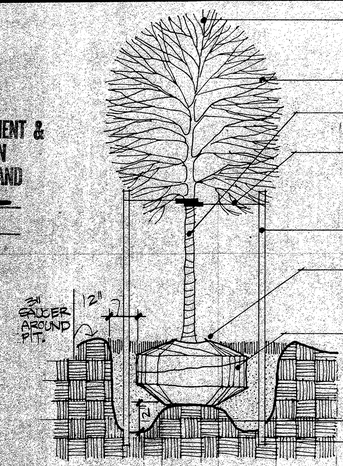
APPLY WILDFLOWER SEED WITH GRASS SEED AT THE RATE OF TEN (10) LBS. WILDFLOWER SEED TO 250 LBS GRASS SEED PER ACRE. MULCH SHALL BE APPLIED TO WILDFLOWER BEDS AT THE SAME TIME AS LAWN AREAS.

763

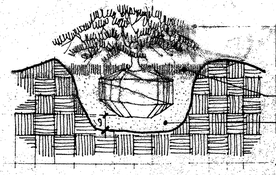


ALL EX. PLANTS SURROUNDING NATURAL TURF SPORTS FIELDS AND ASSOCIATED SITE ELEMENTS SHALL BE REMOVED AND REPLACED WITH PROPOSED PLANTS ASSOCIATED WITH THE PROPOSED ARTIFICIAL TURF FIELDS AND SITE ENHANCING FEATURES. REFER TO SHEET 59-125 FOR ALL REVISED SITE WORK

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 9-28-82



TREE STAKING
SCALE: NONE



THIN BRANCHES OF DECIDUOUS SHRUBS BY 1/3 (NOT ALL END TIPS.) RETAIN NATURAL SHAPE.
2" OF MULCH WITHIN EARTH SAUCER AS SHOWN.
PLANT MIX AS PER SPECS.

SHRUB PLANTING
NO SCALE

NOTE
PLANT MATERIAL SHALL NOT BE A PART OF THIS CONTRACT. LAWN SEEDING, AND WILDFLOWER SEEDING SHALL BE A PART OF THIS CONTRACT. SOD ALL SWALES.

PURPOSE STATEMENT - 09-06-2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1121 EXPIRATION DATE 1/7/25
09-06-2024

STATE OF MARYLAND — ROBERT J. GORMAN — 1121

LAND DESIGN / RESEARCH, INC.
5560 STERRETT PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

PLANTING PLAN AREA 'A'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

DATE	7-15-82	REVISIONS: ⚠ REVISED SITE DEVELOPMENT PLAN -09-06-2024
SCALE	ONE INCH = 50'-0"	
DRAWN		
CHECKED		

SHEET NO. 39 OF 57 SHTS

SDP-82-109

APPROVED: For public Water, and Storm Drainage Systems and Roads

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Brian F. Newman — 7-20-82
DIRECTOR — DATE

R. Richardson & R.S. — 7-19-82
CHIEF, BUREAU OF ENGINEERING — DATE

APPROVED: For public Water and private Sewerage Systems

HOWARD COUNTY HEALTH DEPARTMENT

Maryann Bodmer F.S. — 7-21-82
COUNTY HEALTH OFFICER — DATE

APPROVED: Howard County Office of Planning and Zoning

James H. Harrison — 7-21-82
PLANNING DIRECTOR — DATE

John W. Macheshan — 7-20-82
CHIEF, DIVISION OF LAND DEVELOPMENT & ZONING ADMIN. — DATE

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Adjacent Property Owners - North Side
Kenneth R. Storie
Liber 805 Folio 588, Parcel 7
Harry L. Holliday
Liber 606 Folio 91, Parcel 311
John Mikolasko
Liber 612 Folio 543, Parcel 8

CODE	BOTANICAL / COMMON NAME	QUANT.	SIZE	ROOT	REMARKS
M	ACER RUBRUM 'OCTOBER GLORY'/ OCTOBER GLORY RED MAPLE	46	2½-3" CAL.	B&B	'AUTUMN FLAME' SUBSTITUTION
A	ACER SACCHARUM/ SUGAR MAPLE	35	2½-3" CAL.	B&B	
r	CERCIS CANADENSIS/ EASTERN REDBUD	40	1½-2" CAL.	B&B	HEAVY
Y	CLADRASTIS LUTEA/ AMERICAN YELLOWWOOD	14	3½-4" CAL.	B&B	
P	PACHYSANDRA TERMINALIS/ JAPANESE SPURGE	1300	ONE YEAR	2¼" POTS	PLANT 8" OC.
G	LIQUIDAMBAR STYRACIFLUA/ AMERICAN SWEET GUM	46	3½-4" CAL.	B&B	
Z	MALUS ZUMI CALOCARPA/ ZUMI CRAB	23	1½-2" CAL.	B&B	HEAVY
⊛	PINUS STROBUS/ WHITE PINE	114	4'-6' HT.	B&B	DENSE
O	QUERCUS ALBA/ WHITE OAK	7	2½-3" CAL.	B&B	
R	QUERCUS RUBRA (BOREALIS)/ NORTHERN RED OAK	88	2½-3" CAL.	B&B	
S	SOPHORA/JAPONICA 'REGENT'/ REGENT SCHOLARTREE	15	1½-2" CAL.	B&B	
	VIBURNUM TOMENTOSUM/ DOUBLEFILE VIBURNUM	52	3-4' HT.	B11 CANS	FULL - PLANT 5'0" O.C.
	LIGUSTRUM OBTUSIFOLIUM REGELIANUM/ REGAL PRIVET	75	2½-3' HT.	B11 CANS	PLANT 30" OC
	HEMEROCALLIS SPECIES / DAYLILIES (MIXED VARIETIES)	950		1B11 CANS	PLANT 18" OC
▩	PACHYSANDRA COCCINEA 'LOBOY'/ LOBOY FIRETHORN.	192	18-24" SPR.	B11 CANS	PLANT 24" OC

NOTE:
PLANT MATERIAL SHALL NOT BE A PART OF THIS CONTRACT. LAWN SEEDING, AND WILDFLOWER SEEDING SHALL BE A PART OF THIS CONTRACT. SOD ALL SWALES.

MATCH LINE AREA 'A' — SHT. NO. 39 — 'A'

AREA 'B'

LAWN GRASS LIMITS

RESTROOM BLDG.

OPEN AIR PAVILION

CONTRACT LIMIT LINE

1300 P

LIMITS OF SEEDED LAWN GRASS AREA TO BE MAINTAINED

15' WARNING TRACK

Trails

NORTH

⚠1 ALL EX. PLANTS SURROUNDING NATURAL TURF SPORTS FIELDS AND ASSOCIATED SITE ELEMENTS SHALL BE REMOVED AND REPLACED WITH PROPOSED PLANTS ASSOCIATED WITH THE PROPOSED ARTIFICIAL TURF FIELDS AND SITE ENHANCING FEATURES. REFER TO SHEET 59 - 125 FOR ALL REVISED SITE WORK

WILDFLOWER MIX - SEE SPECS.

Scattered Trees

Brush & Trees

Trees

E-838,250

E-838,500

E-838,750

N 85°31'17" E 1586.23'

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 4-28-82

NOTE:
REFER TO SHEET NOS. 11 AND 12 FOR WILDFLOWER SEEDING ALONG BIT. CONC. PATH.

MATCH LINE AREA 'C' — SHT. NO. 11

'B' — 'B'

STATE OF MARYLAND — ROBERT K. GORMAN — 4184 — LANDSCAPE ARCHITECT

⚠1 5/6/24

PROFESSIONAL CERTIFICATION.
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISIONS DATED 5/6/24 WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 4184 EXPIRATION DATE: 1/7/25

PURPOSE STATEMENT: 05.06.2024
THIS REVISED SITE DEVELOPMENT PLAN ILLUSTRATES THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) NEW ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

LAND DESIGN / RESEARCH, INC.
5560 STERRET PLACE, SUITE 300
COLUMBIA, MARYLAND 21044

PLANTING PLAN AREA 'B'

CENTENNIAL PARK
PHASE TWO - CENTENNIAL LANE AREA

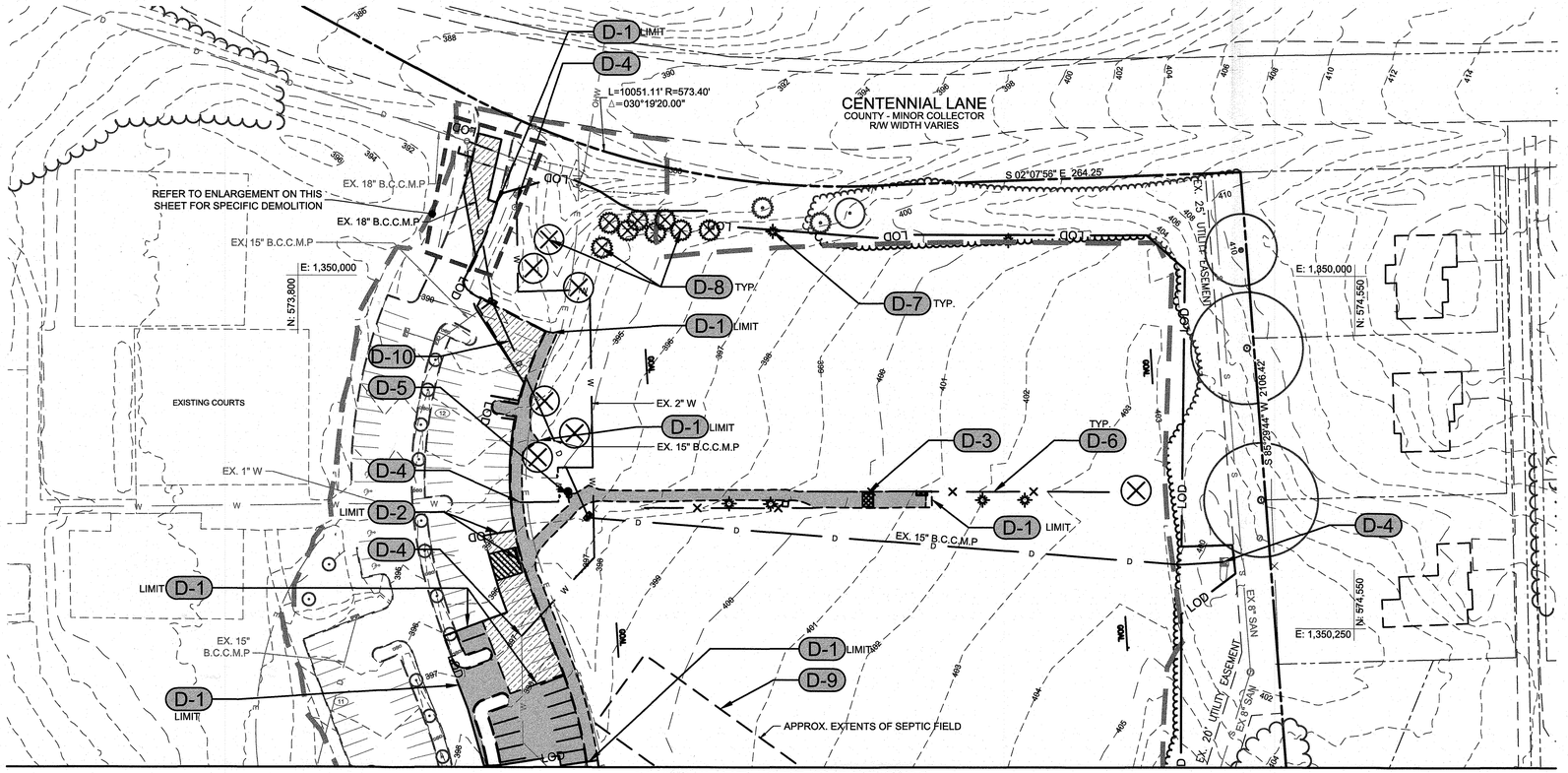
DATE	7-15-82	REVISIONS: ⚠1 REVISED SITE DEVELOPMENT PLAN - 05.06.2024
SCALE	ONE INCH = 50'-0"	
DRAWN		
CHECKED		

SHEET NO. 40 OF ⚠1 125

763

58

SDP-82-109



MATCHLINE - SEE SHEET C102

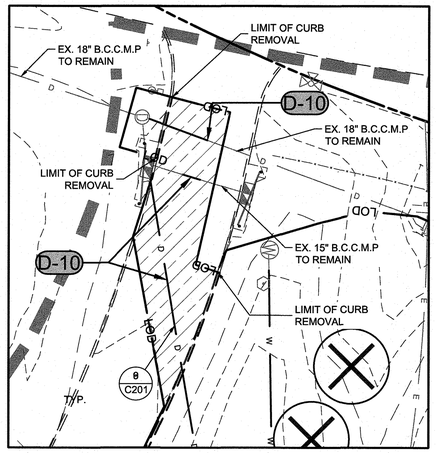
SURVEY NOTE:

1. INFORMATION SHOWN HEREON IS BASED ON HOWARD COUNTY GIS DATA OBTAINED MARCH 18, 2021, FIELD RUN TOPOGRAPHIC SURVEY ENTITLED "CENTENNIAL PARK WEST SURVEY 9-24-23" PERFORMED BY DIETZ SURVEYING, INC. ON SEPTEMBER 11, 2021 AND REVISED ON SEPTEMBER 24, 2023, AND SUBSURFACE UTILITY DESIGNATING PLAT PERFORMED BY A/I/DATA DATED OCTOBER 28, 2021.
2. COORDINATES SHOWN HEREON ARE BASED ON THE MARYLAND COORDINATE SYSTEM, NAD 83-2011, AS ESTABLISHED BY GPS OBSERVATION. THE COMBINED FACTOR IS 0.99997699.
3. ELEVATIONS AND CONTOURS SHOWN HEREON ARE BASED ON THE NGVD-88 VERTICAL DATUM.

BENCHMARKS

MONUMENT	NORTHING	EASTING	ELEVATION
TR 1 MN	573903.6790	1350162.4350	394.60
TR 2 B+C	574410.3260	1350198.3730	403.50
TR 3 B+C	574367.3600	1350444.9220	412.44
TR 4 B+C	574244.1430	1350763.6600	413.39
TR 5 B+C	5784421.2140	1351027.6060	408.16
TR 6 B+C	573980.5350	1351025.2740	400.48
TR 7 B+C	573840.3870	1350814.5230	399.96
TR 8 B+C	573763.6720	1350702.8590	394.50
TR 9 B+C	573957.2220	1350405.9990	399.50
TR NS FLY	574429.9386	1350052.5963	402.92
TR NS FLY	574480.3257	1350173.1066	401.15

MARYLAND COORDINATE SYSTEM NAD83/2011 & NAVD88



DEMOLITION ENLARGEMENT

SCALE : 1" = 20'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

DEMOLITION NOTES:

- **D-1** SAW CUT AT LIMITS SHOWN AND REMOVE EXISTING PAVING, CURB AND BASE MATERIAL.
- **D-2** REMOVE ASPHALT BERM AND MILL EXISTING PAVING AND BASE MATERIAL TO LIMITS SHOWN.
- **D-3** STORE AND PROTECT EXISTING SHED DURING CONSTRUCTION. EXISTING SHED SHALL BE RELOCATED IN PROPOSED CONDITIONS. COORDINATE FINAL RELOCATION WITH OWNER REPRESENTATIVE.
- **D-4** LIMIT OF UTILITY DEMOLITION. PROTECT EXISTING UTILITY TO REMAIN.
- **D-5** SALVAGE EXISTING WATER FOUNTAIN AND RETURN TO OWNER REPRESENTATIVE.
- **D-6** REMOVE FENCING COMPONENTS AND ASSOCIATED FOOTING.
- **D-7** REMOVE EXISTING FIELD LIGHTING, POST, AND ASSOCIATED FOOTING.
- **D-8** REMOVE AND DISPOSE OF INDIVIDUAL TREE, STUMP(S), MAJOR ROOTS, AND ASSOCIATED BRUSH. REPLACE WITH SATISFACTORY FILL MATERIAL.
- **D-9** REMOVE AND DISPOSE OF EXISTING SEPTIC FIELD SOILS AND INFRASTRUCTURE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
- **D-10** DEMOLISH THE DESIGNATED UTILITY TO BE REMOVED TO THE EXTENTS NECESSARY FOR PROPOSED CONSTRUCTION, INSTALL PROPOSED UTILITY, RESTORE ASPHALT PER DETAIL 3/C206.

GENERAL NOTES:

1. PROTECT EXISTING UTILITIES DESIGNATED TO REMAIN THROUGHOUT CONSTRUCTION. UNLESS DIRECTED BY AND COORDINATED WITH OWNER REPRESENTATIVE, ALL EXISTING UTILITIES DESIGNATED TO REMAIN SHALL BE ACTIVE DURING CONSTRUCTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ITEMS DAMAGED BY CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER

ASSOCIATED PROJECT REVIEW FILE NUMBERS

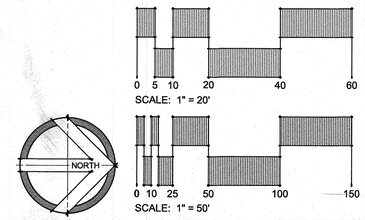
SDP-82-109
CAPITAL PROJECT NO. N-4-3014
SIMPLIFIED ECP FOR CENTENNIAL PARK WEST

HOWARD COUNTY GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY DIETZ SURVEYING, INC. DATED NOVEMBER 11, 2021
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 30AB AND 30DC WERE USED FOR THIS PROJECT.
8. WATER IS PUBLIC: CONTRACT NO. 163-W
9. SEWER IS PUBLIC: CONTRACT NO. 20-1325
10. STORMWATER MANAGEMENT IS ADDRESSED BY INSTALLING (3) ALTERNATIVE SURFACES, (2) MICRO-BIORETENTIONS, (1) BIORETENTION, AND (1) AREA OF NON-ROOFTOP DISCONNECT. ALL FACILITIES ARE PUBLICLY OWNED AND MAINTAINED.
11. EXISTING UTILITIES ARE BASED ON THE ORIGINAL SDP-82-109 AND SUBSURFACE UTILITY DESIGNATING PLAT PERFORMED BY A/I/DATA DATED OCTOBER 28, 2021.
12. THERE IS NO FLOODPLAIN ON THIS SITE.
13. THERE ARE NO WETLANDS ON THIS SITE.
14. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
15. TOTAL SITE AREA IS 137.5 AC AND LOD IS 13.66 AC
16. THIS HOWARD COUNTY CAPITAL IMPROVEMENT PROJECT IS EXEMPT FROM THE REQUIREMENT FOR FOREST CONSERVATION PLANS BECAUSE IT FULFILL THE CRITERIA OF SECTION 16.1202(b)(1)(xii) OF THE HOWARD COUNTY SUBDIVISION REGULATIONS. THIS PROJECTS IS CONDUCTED ON A SINGLE LOT, IMPACTS LESS THAN 20,000 SF OF FOREST, AND THE IMPACTED FOREST IS NOT SUBJECT TO A PREVIOUSLY APPROVED FOREST CONSERVATION PLAN.
17. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

LEGEND

- PROPERTY LINE
- EXISTING FOREST TO REMAIN
- EXISTING FOREST TO BE REMOVED (LOD)
- EXISTING BRUSH LINE TO REMAIN
- EXISTING BRUSH LINE TO BE REMOVED (LOD)
- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED
- EXISTING WALK TO REMAIN
- EXISTING WALK TO BE REMOVED
- EXISTING ROAD TO REMAIN
- EXISTING CURB TO REMAIN
- EXISTING CURB TO BE REMOVED
- EXISTING PAVING TO BE REMOVED
- EXISTING RETAINING WALL TO BE REMOVED
- EXISTING ASPHALT PAVING TO BE MILLED
- EXISTING FENCE TO REMAIN
- EXISTING FENCE TO BE REMOVED
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- EX. 15" SD D — EXISTING STORM DRAIN TO REMAIN
- EX. 15" SD D — EXISTING STORM DRAIN TO BE REMOVED
- EX. 6" W W — EXISTING WATER TO REMAIN
- EX. 6" W W — EXISTING WATER TO BE REMOVED
- EX. 8" SAN S — EXISTING SANITARY SEWER TO REMAIN
- EX. 8" SAN S — EXISTING SANITARY SEWER TO BE REMOVED
- EX. ELEC E — EXISTING ELECTRIC TO REMAIN
- EX. ELEC E — EXISTING ELECTRIC TO BE REMOVED
- EX. FIELD LIGHTING TO BE REMOVED — EXISTING LIGHTING TO REMAIN
- 350 / 348 — EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE



APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6/17/24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.23.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

Howard County RECREATION & PARKS

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410.683.3388 www.siteresourcesinc.com

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. 56848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — JOSEPH A. MAGISER — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 59 OF 125

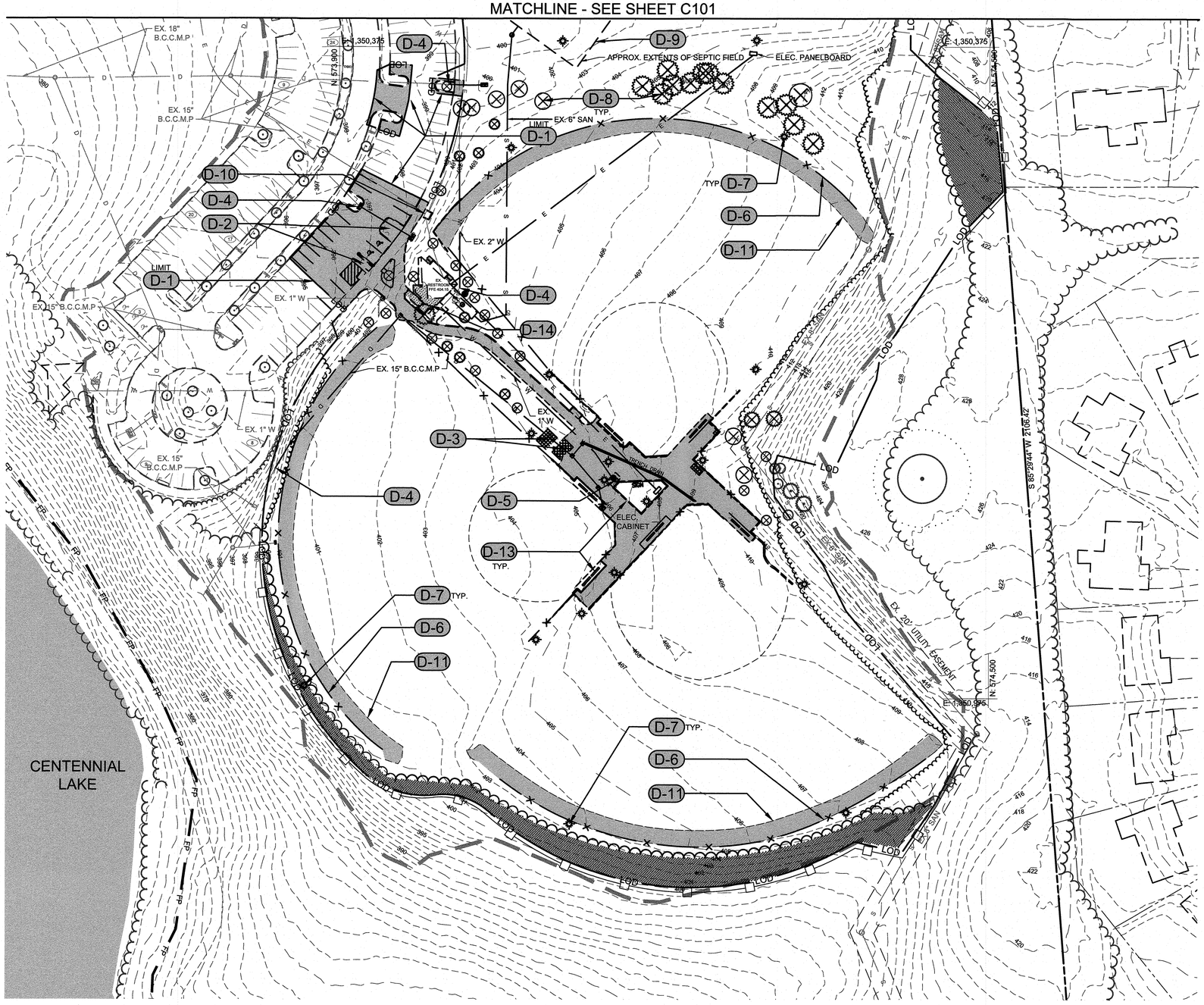
EXISTING CONDITION AND DEMOLITION PLAN

C101

SDP-82-109

© SITE RESOURCES, INC. Z:\21\21075-HCRP Centennial Park West\04-DWG\C101_Ex. Demo.dwg-C101 May 02, 2024 12:08pm HAW

MATCHLINE - SEE SHEET C101



DEMOLITION NOTES:

D-1	SAW CUT AT LIMITS SHOWN AND REMOVE EXISTING PAVING AND BASE MATERIAL.
D-2	REMOVE EXISTING CONCRETE ISLAND/RAMP AND BASE MATERIAL.
D-3	STORE AND PROTECT EXISTING SHED DURING CONSTRUCTION. EXISTING SHED SHALL BE RELOCATED IN PROPOSED CONDITIONS. COORDINATE FINAL LOCATIONS WITH OWNER REPRESENTATIVE.
D-4	LIMIT OF UTILITY DEMOLITION. PROTECT EXISTING UTILITY TO REMAIN.
D-5	SALVAGE EXISTING WATER FOUNTAIN AND RETURN TO OWNER REPRESENTATIVE.
D-6	REMOVE FENCING COMPONENTS AND ALL ASSOCIATED FOOTINGS.
D-7	REMOVE EXISTING FIELD LIGHTING, POST, AND ASSOCIATED FOOTINGS.
D-8	REMOVE AND DISPOSE OF INDIVIDUAL TREE, STUMP(S), MAJOR ROOTS, AND ASSOCIATED BRUSH. REPLACE WITH SATISFACTORY FILL MATERIAL.
D-9	REMOVE AND DISPOSE OF EXISTING SEPTIC FIELD SOILS AND INFRASTRUCTURE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES AND REGULATION.
D-10	PROTECT EXISTING ELECTRICAL TRANSFORMER TO REMAIN AND REPLACE IN KIND ANY OF WOOD RETAINING WALL AROUND TRANSFORMER DAMAGED BY ONGOING CONSTRUCTION ACTIVITIES.
D-11	REMOVE STONE STRIP ADJACENT TO FENCE.
D-12	REMOVE AND DISPOSE OF EXISTING OIL AND GREASE SEPARATOR AND INFRASTRUCTURE IN ACCORDANCE WITH APPLICABLE LOCAL AND STATE CODES AND REGULATION.
D-13	REMOVE ALL EXISTING STRUCTURES AND FEATURES RELATED TO BASEBALL FIELDS (FENCING AND CONCRETE MOW STRIP, BENCHES, BLEACHERS, CONCRETE PADS, FOUNDATIONS, POLE BASES, AND ALL CONCRETE AND WOODEN RETAINING WALLS ETC.)
D-14	REMOVE ALL COMPONENTS OF EXISTING WOOD DECK AT EXISTING RESTROOM INCLUDING, DECKING, RAILING, SEAT WALLS, RAMP, STAIRS, LANDSCAPE EDGING. COORDINATE WITH OWNER'S REPRESENTATIVE REGARDING REMOVAL METHODS AND CONCURRENT ONGOING RESTROOM RENOVATION PRIOR TO DEMOLITION.

GENERAL NOTES:

1. PROTECT EXISTING UTILITIES DESIGNATED TO REMAIN THROUGHOUT CONSTRUCTION. UNLESS DIRECTED BY AND COORDINATED WITH OWNER REPRESENTATIVE, ALL EXISTING UTILITIES DESIGNATED TO REMAIN SHALL BE ACTIVE DURING CONSTRUCTION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ITEMS DAMAGED BY CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST TO THE OWNER

IMPACTED FOREST TABULATION

AREA # 1:	3,260 SF
AREA # 2:	12,570 SF
TOTAL AREA:	15,830 SF

ASSOCIATED PROJECT REVIEW FILE NUMBERS

SDP-82-109
CAPITAL PROJECT NO. N-4-3014
SIMPLIFIED ECP FOR CENTENNIAL PARK WEST

LEGEND

- PROPERTY LINE
- EXISTING FOREST TO REMAIN
- EXISTING FOREST TO BE REMOVED
- EXISTING BRUSH LINE TO REMAIN
- EXISTING BRUSH LINE TO BE REMOVED
- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED
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- EXISTING ROAD TO REMAIN
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- EXISTING TREES TO REMAIN
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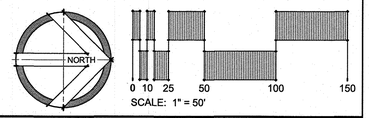
- EX. FIELD LIGHTING TO BE REMOVED
- EXISTING LIGHTING TO REMAIN
- 350 / 348 — EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- TREE PROTECTION FENCE



PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR	DATE 6/17/24
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 5.23.24
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/13/24

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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. 56648, EXPIRATION DATE: 12/15/2024.

STATE OF MARYLAND — MAGNUS — 56648 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 60 OF 125

EXISTING CONDITION AND DEMOLITION PLAN

C102

SDP-82-109

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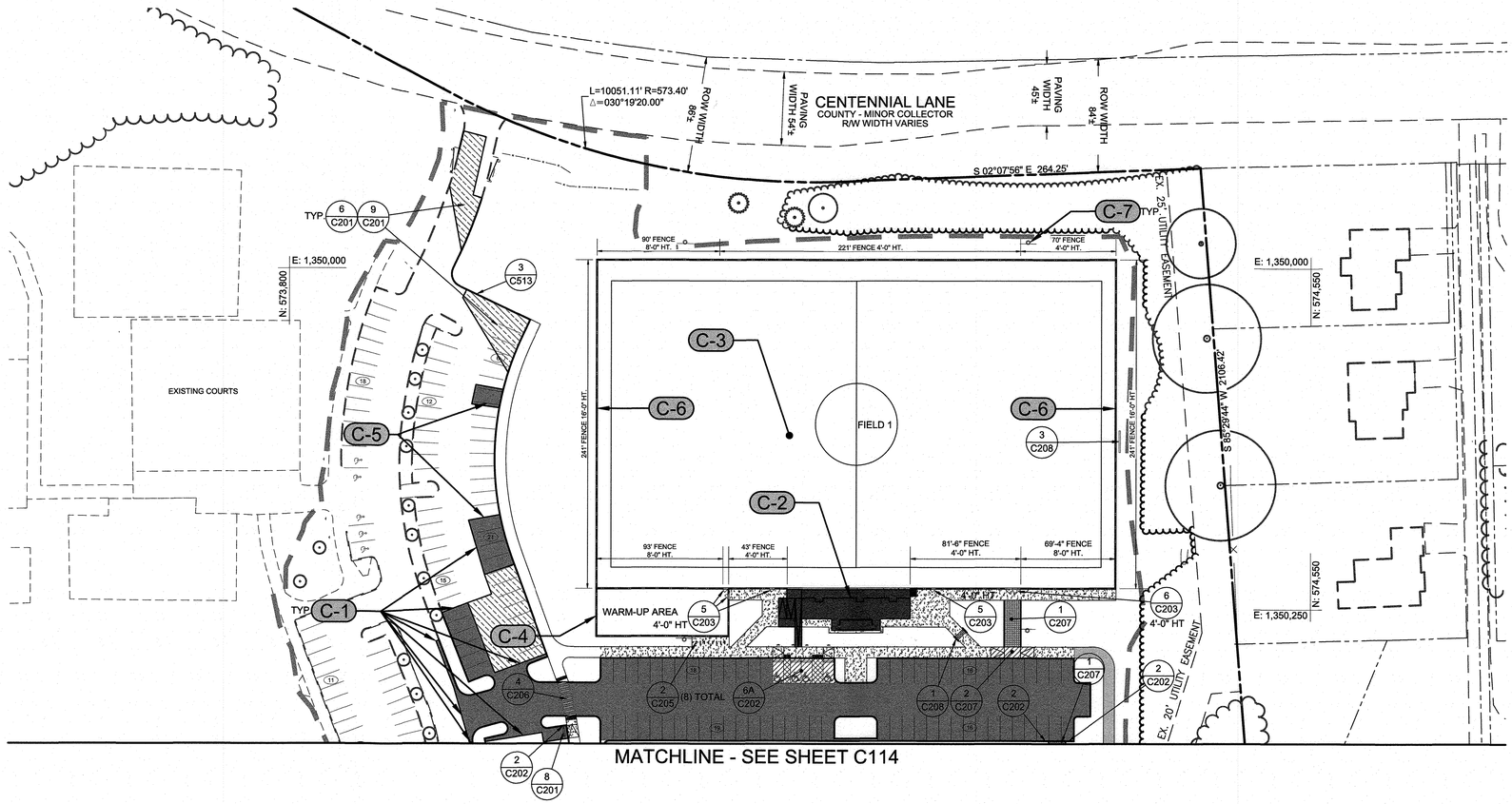
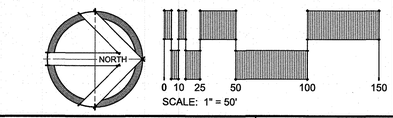


CONSTRUCTION NOTES:

- **C-1** MEET EXISTING PAVING SMOOTHLY IN LINE AND GRADE AT APPLICABLE LOCATION
- **C-2** PROPOSED BLEACHER STAND ON CONCRETE SLAB BLEACHER LAYOUT IS FOR REFERENCE ONLY. MARYLAND STAMPED ENGINEERING DRAWINGS FOR STAND AND PRESSBOX SHALL BE PROVIDED BY OUTDOOR ALUMINUM, INC., GENEVA, AL.
- **C-3** REFER TO SHEET C501-C513 FOR DETAILS AND SECTIONS OF TURF FIELD
- **C-4** 4'-0" HIGH CHAIN LINK FENCE SHALL ENCLOSE THE OUTER THREE SIDES OF WARM-UP AREA.
- **C-5** LINES SHOWN INDICATE THE INTENDED RESTRIPING AFTER PROPOSED PAVING IS COMPLETE AND FOR REFERENCE ONLY. RESTRIPING SHALL BE A MINIMUM OF 18' LONG AND 9' WIDE, AND EQUAL SPACED BETWEEN EXISTING STRIPING.
- **C-6** INSTALL SHOT CLOCK ON CHAIN LINK FENCE POST PER MANUFACTURER'S RECOMMENDATION. OWNER'S REPRESENTATIVE SHALL PROVIDE MODEL/SPECIFICATION DURING CONSTRUCTION. COORDINATE FINAL LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION MANUFACTURER: DAKTRONICS, INC.,
- **C-7** PROPOSED FIELD LIGHT POLE

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- 1 C201 — PROPOSED CONCRETE WALK
- 4 C201 — PROPOSED PEDESTRIAN ASPHALT WALK
- 5 C201 — PROPOSED ASPHALT PAVING
- 3 C201 — PROPOSED HEAVY DUTY CONCRETE
- 1 C202 — PROPOSED CURB
- 4 C203 — PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- # SHT — DETAIL REFERENCE
- SHOT CLOCK POLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- 6 C201 — PROPOSED ASPHALT MILL AND OVERLAY
- LIMITS OF TOPOGRAPHIC SURVEY



PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/18/24

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410.683.3388 www.siteresourcesinc.com

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. 56848, EXPIRATION DATE: 10/18/2024.

STATE OF MARYLAND — MARIA MAGLIONE — 56848 — PROFESSIONAL ENGINEER — 2024

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 61 OF 125

MATERIALS PLAN

C121

SDP-82-109

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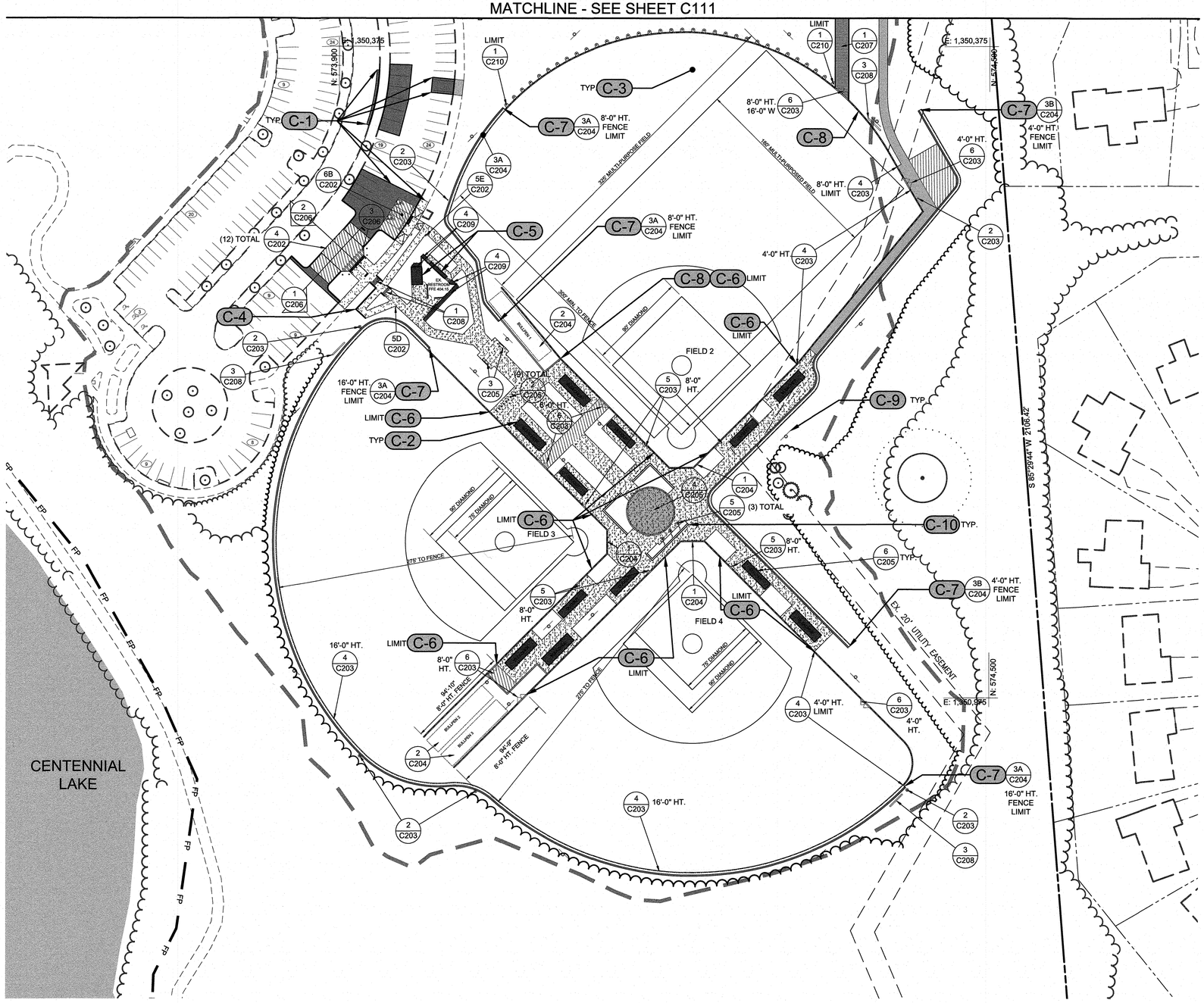

CONSTRUCTION NOTES:

- C-1 MEET EXISTING PAVING SMOOTHLY IN LINE AND GRADE AT APPLICABLE LOCATION
- C-2 PROPOSED BLEACHER ON STAND CONCRETE SLAB BLEACHER LAYOUT IS FOR REFERENCE ONLY. MARYLAND STAMPED ENGINEERING DRAWINGS FOR BLEACHER SHALL BE PROVIDED BY OUTDOOR ALUMINUM, INC., GENEVA, AL.
- C-3 REFER TO SHEET C501-C513 FOR DETAILS AND SECTIONS OF TURF FIELD
- C-4 PROPOSED CAST-IN-PLACE CONCRETE RETAINING WALL REFER TO SHEETS S122-S125 FOR MORE INFORMATION
- C-5 PROPOSED BUILDING ADDITION TO EXISTING RESTROOMS BY CONCURRENT ONGOING RESTROOM BUILDING RENOVATION PROJECT
- C-6 INSTALL 20'-0 HIGH POST IN ACCORDANCE WITH STRUCTURAL FENCE POST AND FOOTING SCHEDULE ON S123 WITH 12'-0" HIGH NETTING ABOVE AN 8'-0" HIGH SECTIONS OF CHAIN LINK FENCE BY FROM END OF BACKSTOP TO LIMITS SHOWN ON PLAN. NETTING SHALL MATCH THE SPECIFICATION OF THE NETTING FOR BULLPEN.
- C-7 PROPOSED SEGMENTAL BLOCK RETAINING WALL REFER TO SHEETS S101-S121 FOR MORE INFORMATION
- C-8 INSTALL SHOT CLOCK ON CHAIN LINK FENCE POST PER MANUFACTURER'S RECOMMENDATION. OWNER'S REPRESENTATIVE SHALL PROVIDE MODEL/SPECIFICATION DURING CONSTRUCTION. COORDINATE FINAL LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION MANUFACTURER: DAKTRONICS, INC.,
- C-9 PROPOSED FIELD LIGHT POLE
- C-10 PROPOSED SEAT WALL (3) TOTAL SEE DETAIL 1/C205

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- 1/C201 PROPOSED CONCRETE WALK
- 4/C201 PROPOSED PEDESTRIAN ASPHALT WALK
- 5/C201 PROPOSED ASPHALT PAVING
- 3/C201 PROPOSED HEAVY DUTY CONCRETE
- 1/C202 PROPOSED CURB
- 4/C203 PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- #/SHT DETAIL REFERENCE
- SHOT CLOCK POLE
- PROPOSED WOODSLINE
- LIMITS OF TOPOGRAPHIC SURVEY

NORTH

0 10 25 50 100 150

SCALE: 1" = 50'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary J. Kendall — DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/29/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56848, EXPIRATION DATE: 12/13/2024.

STATE OF MARYLAND — ERIC A. MAGNUSON — 56848 — PROFESSIONAL ENGINEER — 5/29/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 62 OF 125

MATERIALS PLAN

C122

SDP-82-109

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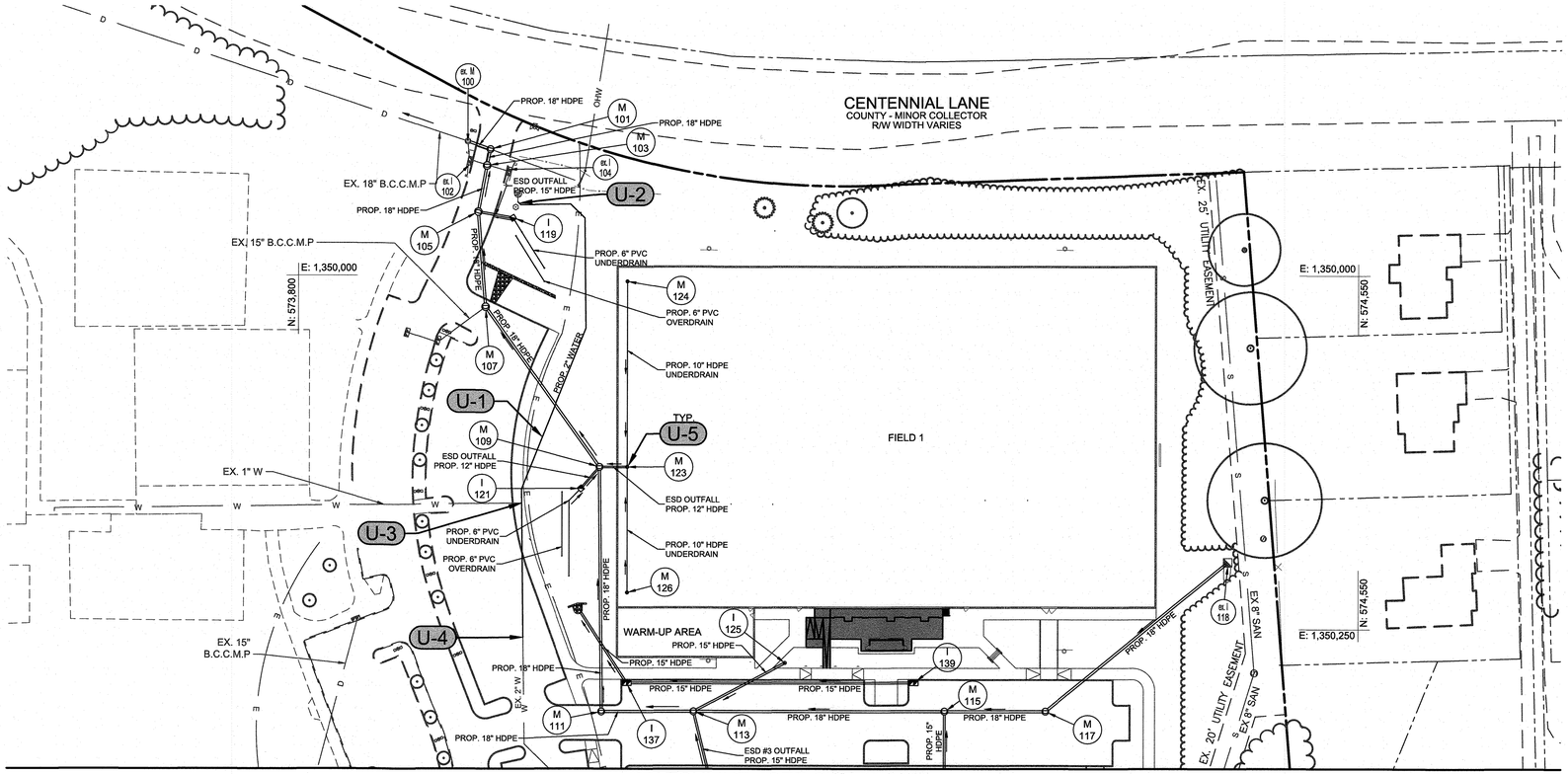

MATCHLINE - SEE SHEET C132

UTILITY NOTES:

U-1 PROPOSED 2" COPPER WATER LINE. WATER LINE SHALL HAVE A MINIMUM 4 FEET OVER COVER FROM FINISHED GRADE AND AT LEAST 1 FOOT OF VERTICAL CLEARANCE FROM ALL UTILITIES.

U-2 CONNECT TO EX. 2" WATER WITH 1/8 HORIZONTAL BEND.

U-3 CONNECT TO EX. 1" WATER WITH TEE. PROVIDE VALVES AND VALVE BOX ON ALL LEGS OF TEE. REFER TO HOWARD COUNTY DETAIL G-8.01 FOR VALVE BOX.

U-4 CONNECT TO EX. 2" WATER.

U-5 ACCESS FROM THE SURFACE TO ALL STORM DRAIN MANHOLES AND CLEANOUT UNDER FIELDS MUST BE PROVIDED. CONTRACTOR SHALL COORDINATE WITH ARTIFICIAL TURF MANUFACTURER TO OBTAIN STANDARDS AND PROCEDURES FOR ACCESS POINTS UNDER TURF AND ADJUST STRUCTURES AS NECESSARY.

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD (D) — EXISTING STORM DRAIN
- EX. 6" W (W) — EXISTING WATER
- EX. 8" SAN (S) — EXISTING SANITARY SEWER
- EX. ELEC (E) — EXISTING ELECTRIC
- EXISTING LIGHTING
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROP. 6" WATER — PROPOSED WATER
- PROPOSED SANITARY SEWER (S)
- PROPOSED ELECTRIC (E)

STORM DRAIN PIPE SCHEDULE

SIZE/TYPE	LINEAR FEET ±
4" HDPE	21 (3' PERFORATED)
6" PVC	273' (240' PERFORATED)
10" HDPE	783 (783' PERFORATED)
12" HDPE	1058 (949' PERFORATED)
15" HDPE	862
15" CONCRETE	19
18" HDPE	922

SANITARY PIPE SCHEDULE

SIZE/TYPE	LINEAR FEET ±
4" PVC	24
8" PVC	331

WATER PIPE SCHEDULE

SIZE/TYPE	LINEAR FEET ±
2" COPPER	499

NOTE:
PIPE SCHEDULES ARE FOR PERMITTING PURPOSES ONLY.

INLET	DA (SF)	% IMP	C FACTOR
I-133	6,434	0%	0.16
I-131	863	0%	0.16
I-125	417	0%	0.16
I-129	1,805	0%	0.16
I-139	6,856	89%	0.78
I-137	9,247	87%	0.77
I-217	2,871	21%	0.30
I-215	3,466	38%	0.42
I-219	18,033	72%	0.66

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 10 25 50 100 150
SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendall — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 6-28-24 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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STATE OF MARYLAND — HAROLD W. GOETZINGER — 56648 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 63 OF 125

UTILITY PLAN

C131

SDP-82-109

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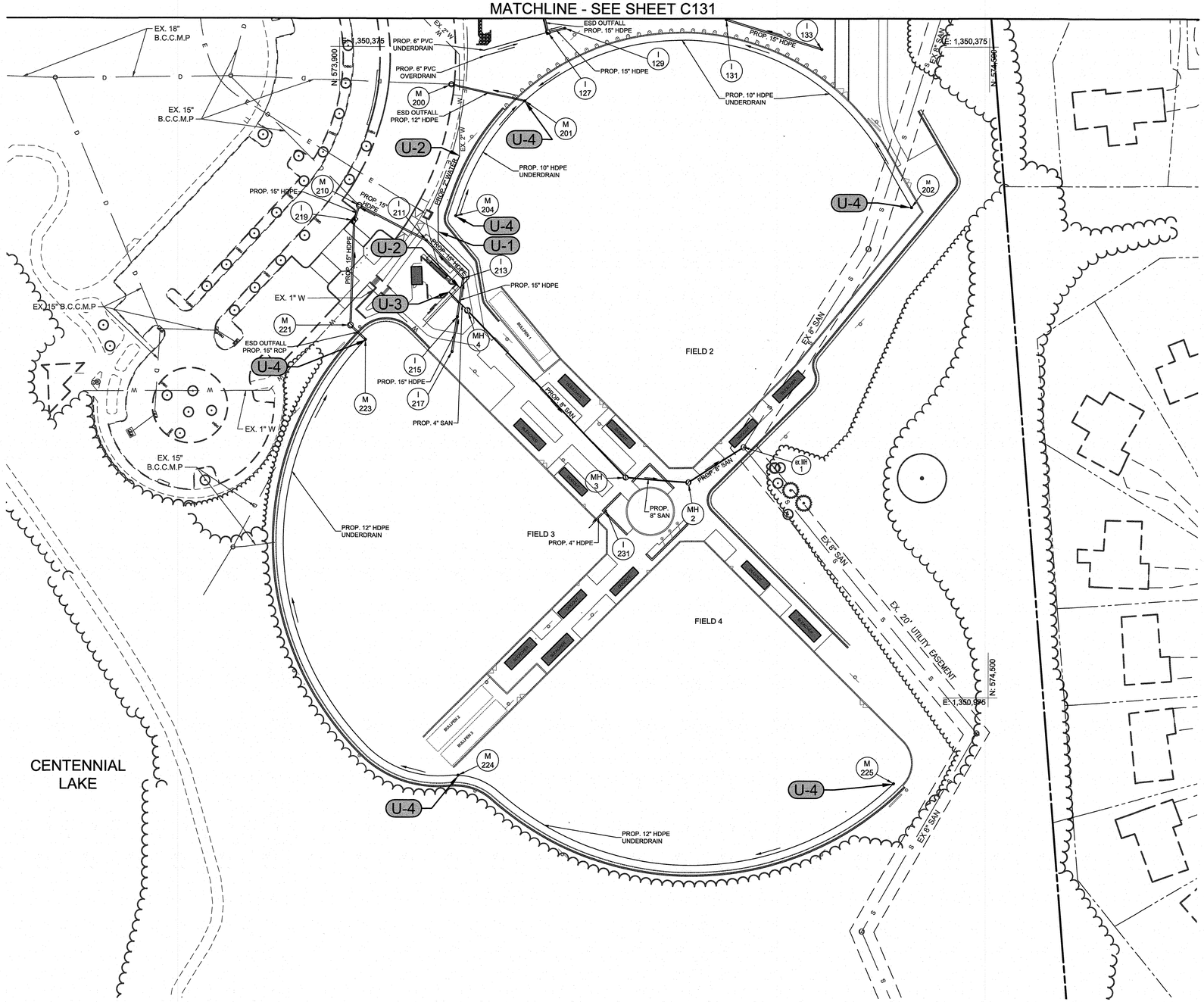

UTILITY NOTES:

- **U-1** PROPOSED 2" COPPER WATER LINE. WATER LINE SHALL HAVE A MINIMUM 4 FEET OVER COVER FROM FINISHED GRADE AND AT LEAST 1 FOOT OF VERTICAL CLEARANCE FROM ALL UTILITIES.
- **U-2** CONNECT TO EX. 2" WATER.
- **U-3** CONNECT TO EX. 4" BUILDING SANITARY LINE.
- **U-4** ACCESS FROM THE SURFACE TO ALL STORM DRAIN MANHOLES AND CLEANOUT UNDER FIELDS MUST BE PROVIDED. CONTRACTOR SHALL COORDINATE WITH ARTIFICIAL TURF MANUFACTURER TO OBTAIN STANDARDS AND PROCEDURES FOR ACCESS POINTS UNDER TURF AND ADJUST STRUCTURES AS NECESSARY.

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING WATER (EX. 6" W)
- EXISTING SANITARY SEWER (EX. 8" SAN)
- EXISTING ELECTRIC (EX. ELEC)
- EXISTING LIGHTING
- LIMITS OF TOPOGRAPHIC SURVEY
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER (PROP. 6" WATER)
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 10 25 50 100 150
SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — MICHAEL A. MAGNELLI — 36848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 64 OF 125

UTILITY PLAN

C132

SDP-82-109

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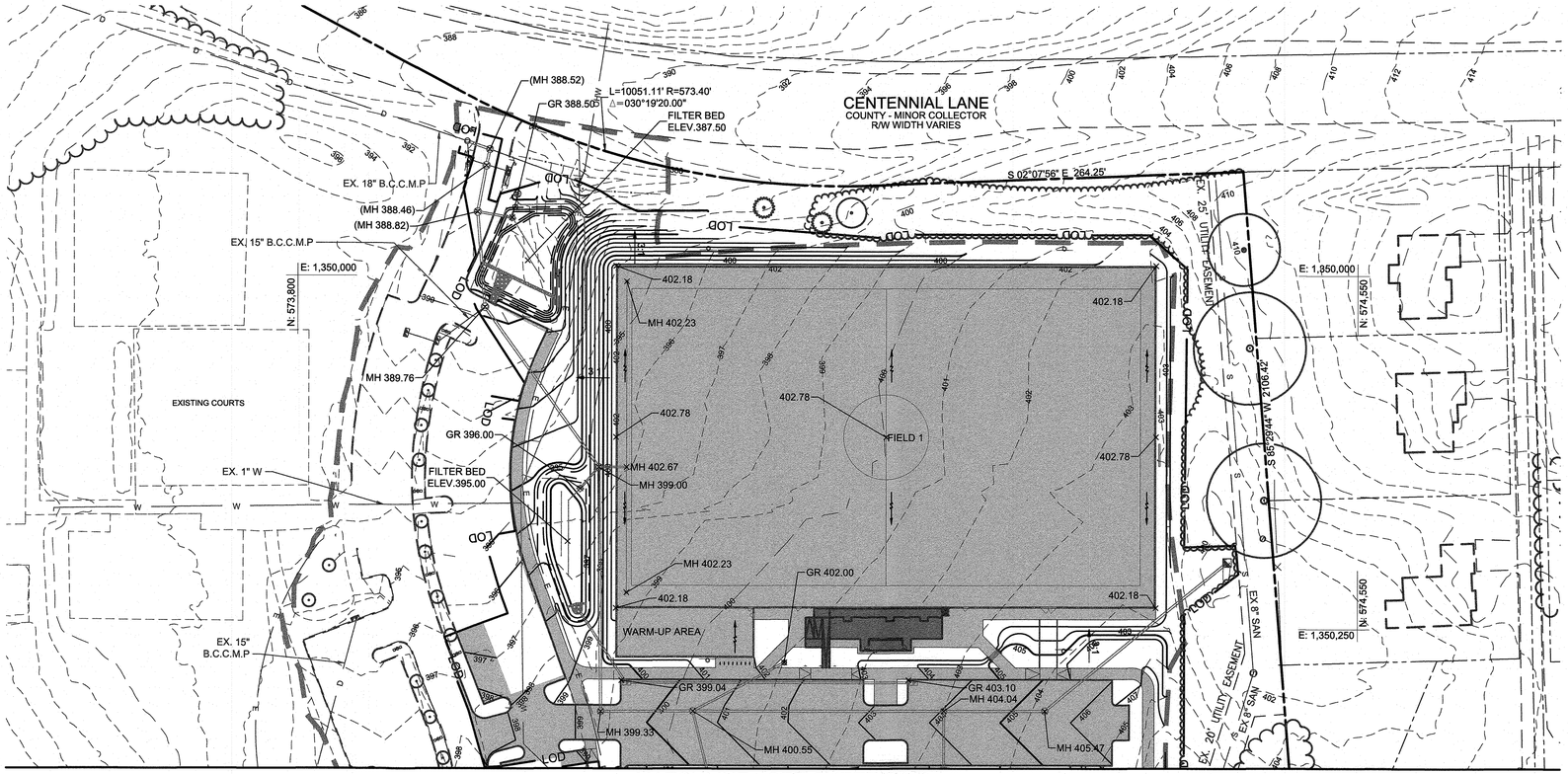


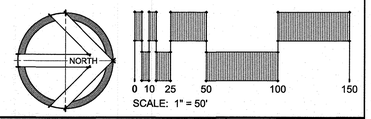
MATCHLINE - SEE SHEET C142

GENERAL NOTE

REFER TO SHEET C145 FOR DETAILED SPOT GRADES FOR PROPOSED PARKING LOT AND WALKWAYS

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 6" W — EXISTING WATER
- EX. 8" SAN — EXISTING SANITARY SEWER
- EX. ELEC — EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- PROPOSED CONTOURS (350 / 348)
- (220.8) — EXISTING
- 220.8 — PROPOSED
- SPOT ELEVATIONS



PURPOSE STATEMENT - 05/06/2024

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APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/17/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — ANTHONY A. MAGLIENTE — 56848 — PROFESSIONAL ENGINEER — 6/17/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 65 OF 125

GRADING PLAN

C141

SDP-82-109

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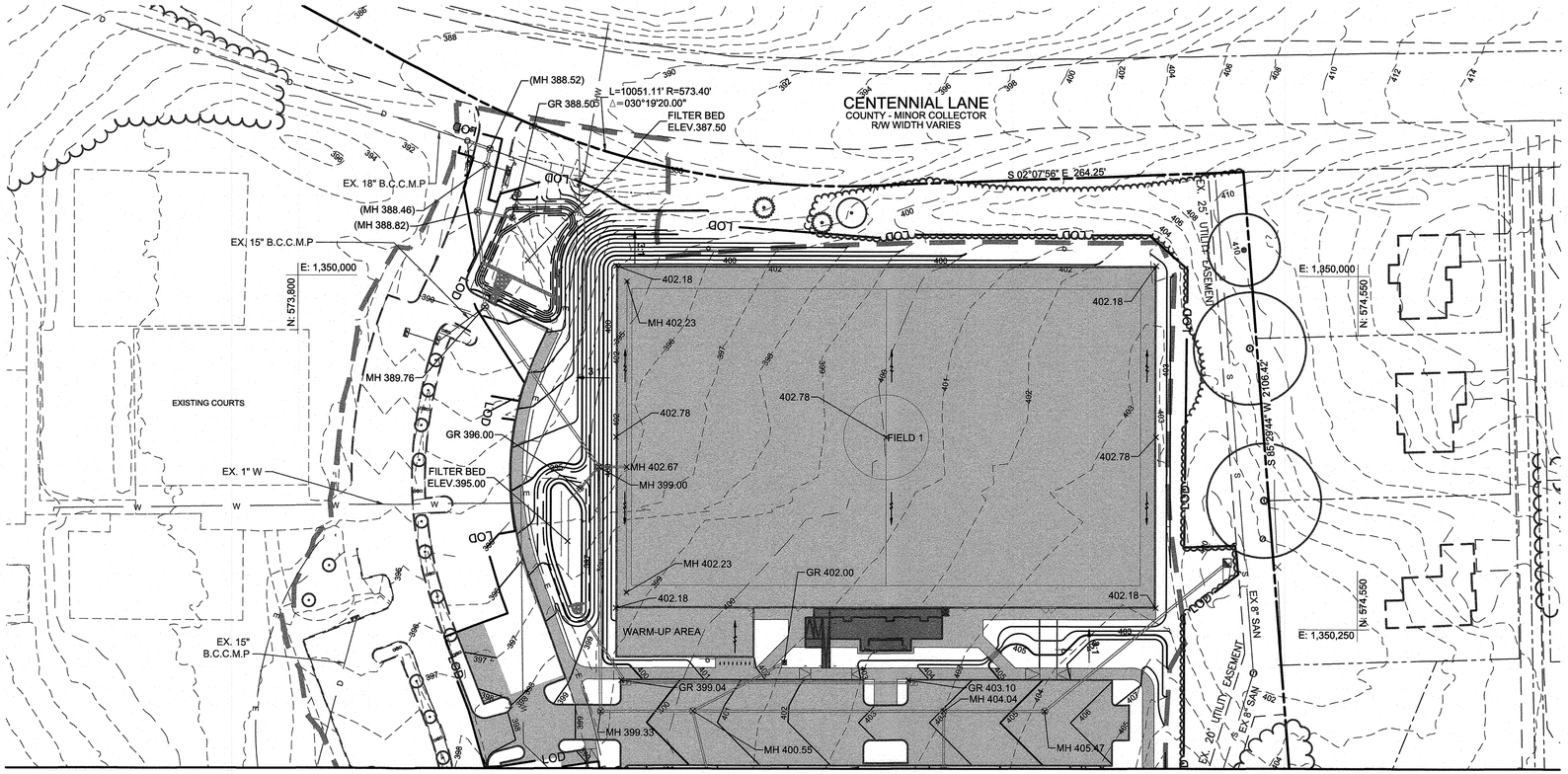


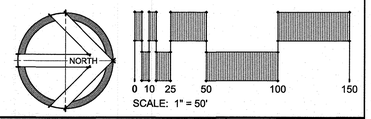
MATCHLINE - SEE SHEET C142

GENERAL NOTE

REFER TO SHEET C145 FOR DETAILED SPOT GRADES FOR PROPOSED PARKING LOT AND WALKWAYS

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 6" W — EXISTING WATER
- EX. 8" SAN — EXISTING SANITARY SEWER
- EX. ELEC — EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- PROPOSED CONTOURS (350 / 348)
- (220.8) — EXISTING
- 220.8 — PROPOSED
- SPOT ELEVATIONS



PURPOSE STATEMENT - 05/06/2024

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APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/17/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — ANTHONY A. MAGLIENTE — 56848 — PROFESSIONAL ENGINEER — 6/17/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 65 OF 125

GRADING PLAN

C141

SDP-82-109

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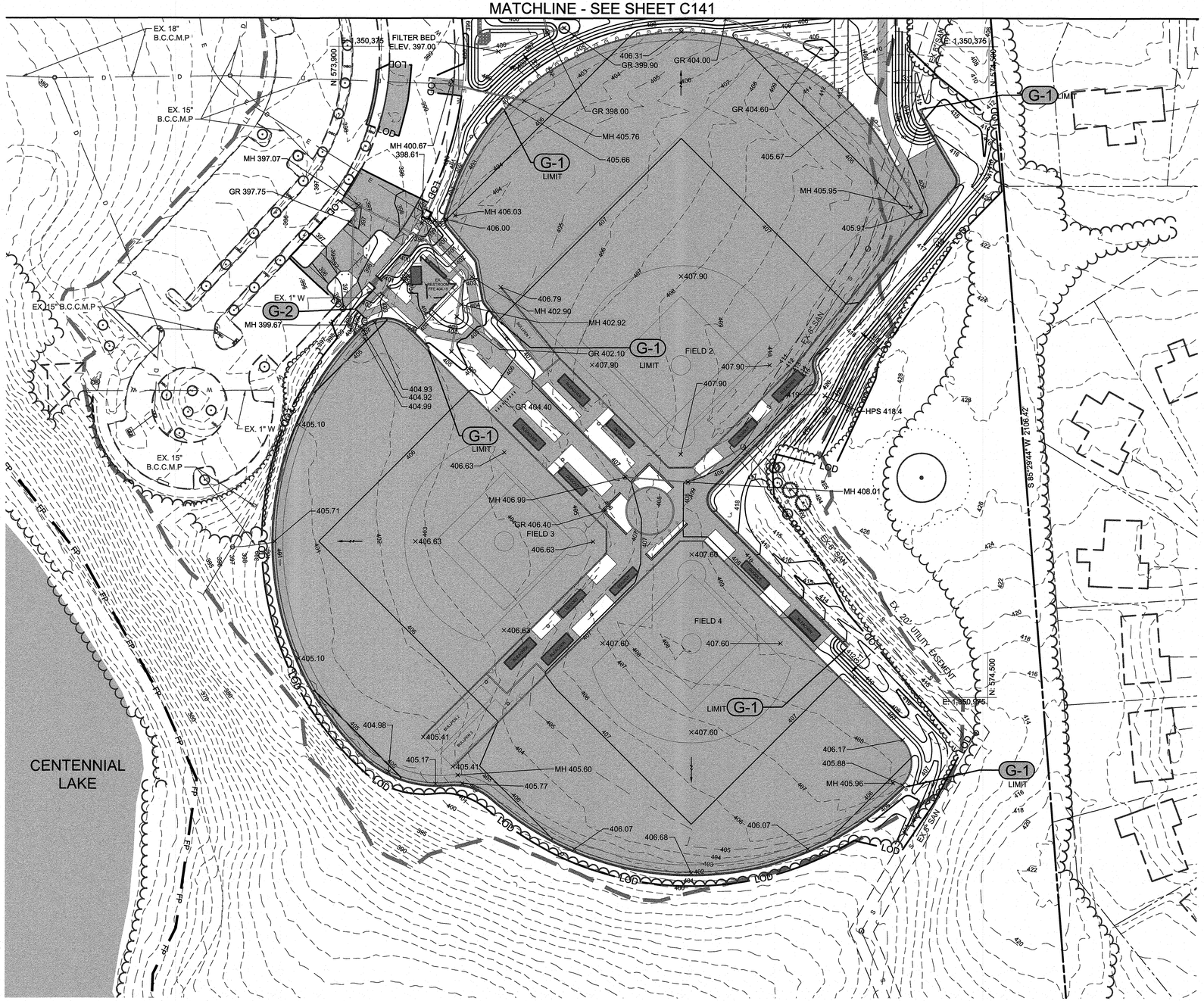
MATCHLINE - SEE SHEET C141



GRADING NOTES:

G-1 REFER TO SHEET S102 FOR SPOT GRADES OF SEGMENTAL BLOCK RETAINING WALL

G-2 REFER TO SHEET S122 FOR SPOT GRADES OF CAST-IN-PLACE RETAINING WALL

GENERAL NOTE

REFER TO SHEET C146 AND 147 FOR DETAILED SPOT GRADES FOR PROPOSED PARKING LOT AND WALKWAYS

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD (D) — EXISTING STORM DRAIN
- EX. 6" W (W) — EXISTING WATER
- EX. 8" SAN (S) — EXISTING SANITARY SEWER
- EX. ELEC (E) — EXISTING ELECTRIC
- EXISTING LIGHTING
- 350 / 348 — EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
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- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROPOSED WATER (W)
- PROPOSED SANITARY SEWER (S)
- PROPOSED ELECTRIC (E)
- 350 / 348 — PROPOSED CONTOURS
- (220.8) — EXISTING
- 220.8 — PROPOSED
- SPOT ELEVATIONS

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 10 25 50 100 150

SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 59646, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — JOSEPH A. MAGNESS — 59646 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 66 OF 125

GRADING PLAN

C142

SDP-82-109

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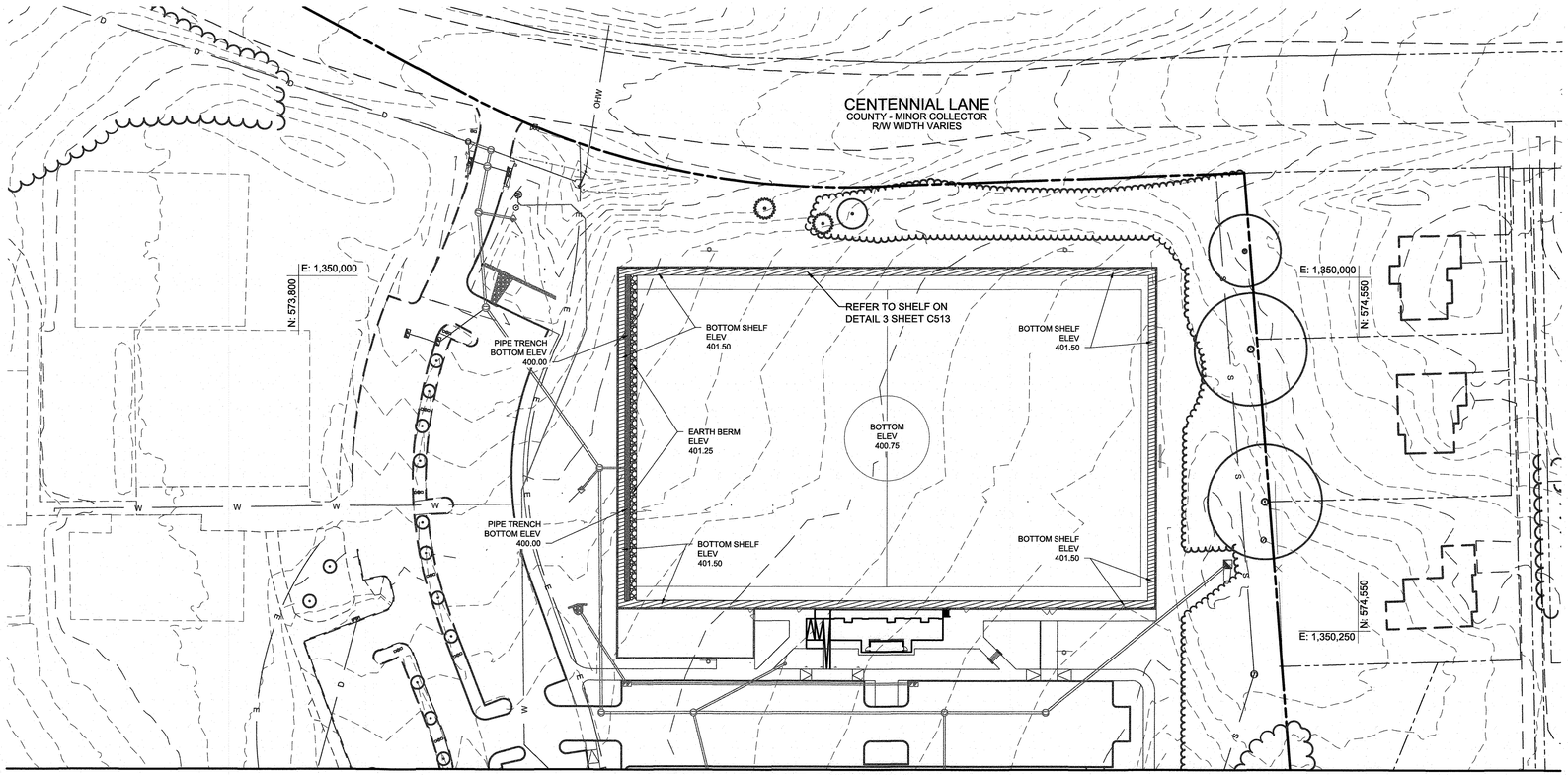
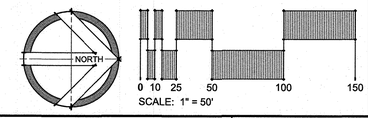


GENERAL NOTE

REFER TO STORMWATER MANAGEMENT PLANS (C501 TO C513) FOR ALTERNATIVE SURFACE (TURF FIELDS) STORMWATER SECTIONS AND DETAILS.

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- SHELF
- EARTH BERM
- PIPE TRENCH



PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — STEVEN A. MAGNUS — 99646 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 67 OF 125

SUBGRADE PLAN

C143

SDP-82-109

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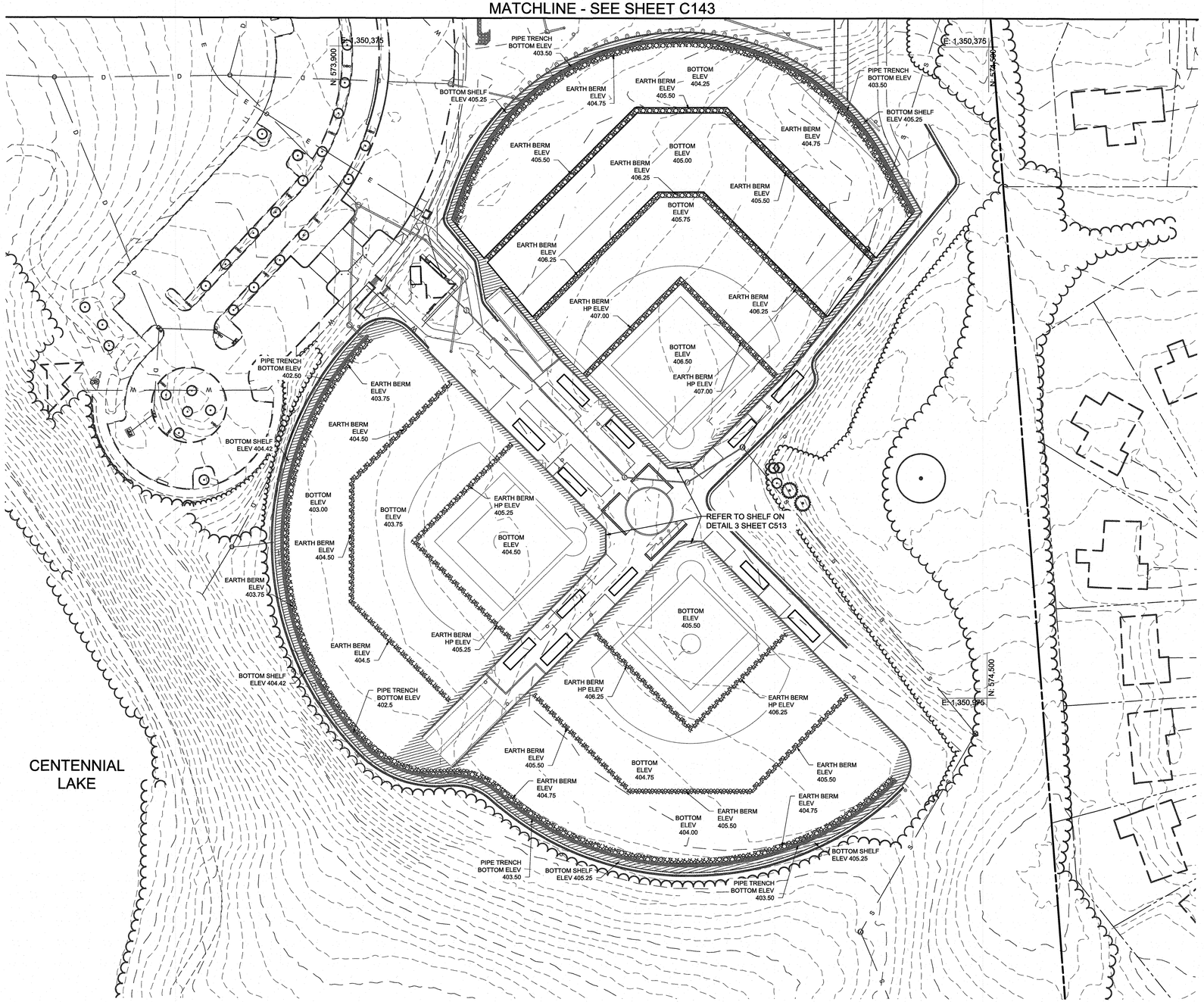

GENERAL NOTE

REFER TO STORMWATER MANAGEMENT PLANS (C501 TO C513) FOR ALTERNATIVE SURFACE (TURF FIELDS) STORMWATER SECTIONS AND DETAILS.

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (D)
- EXISTING WATER (W)
- EXISTING SANITARY SEWER (S)
- EXISTING ELECTRIC (E)
- EXISTING LIGHTING
- EXISTING CONTOURS
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROPOSED WATER (W)
- PROPOSED SANITARY SEWER (S)
- PROPOSED ELECTRIC (E)
- SHELF
- EARTH BERM
- PIPE TRENCH

NORTH

0 10 25 50 100 150

SCALE: 1" = 50'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6/17/24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/20/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56546, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — MARK A. KOPPELMAN — 56546 — PROFESSIONAL ENGINEER — 5/6/2024

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 68 OF 125

SUBGRADE PLAN

C144

SDP-82-109

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FIELD 1
WARM-UP AREA
CONCRETE STAIR #3
6
12
3:1 SLOPES
(388.82)
(389.43)
389.70
389.59
(389.78)
389.58
390.32
391.06
(395.31)
(394.70)
(396.84)
(396.11)
396.28
396.46
396.47
396.54
398.81
(TC 398.66)
(398.32)
398.35
397.87
398.15
(397.84)
398.41
397.38
397.58
397.59
399.10
399.24
399.23
399.09
399.78
399.04
399.40
399.16
399.29
399.64
398.08
398.50
399.00
399.25
399.11
398.75
398.62
398.20
(398.60)
(398.68)
(399.00)
(399.63)
398.38
398.06
398.00
(398.40)
397.88
399.29
399.40
399.32
399.04
399.08
399.18
398.44
398.44
396.75
396.75
TC 402.35
BC 401.47
TC 402.35
BC 402.00
GR 402.00
401.34
401.97
402.00
401.25
401.51
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402.11
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402.32
402.53
402.68
402.76
402.61
403.26
403.56
403.10
402.52
402.47
403.46
402.84
402.82
402.48
402.46
403.12
403.10
403.46
GR 404.00
402.75
BS 402.83
TS 405.00
405.13
405.33
405.13
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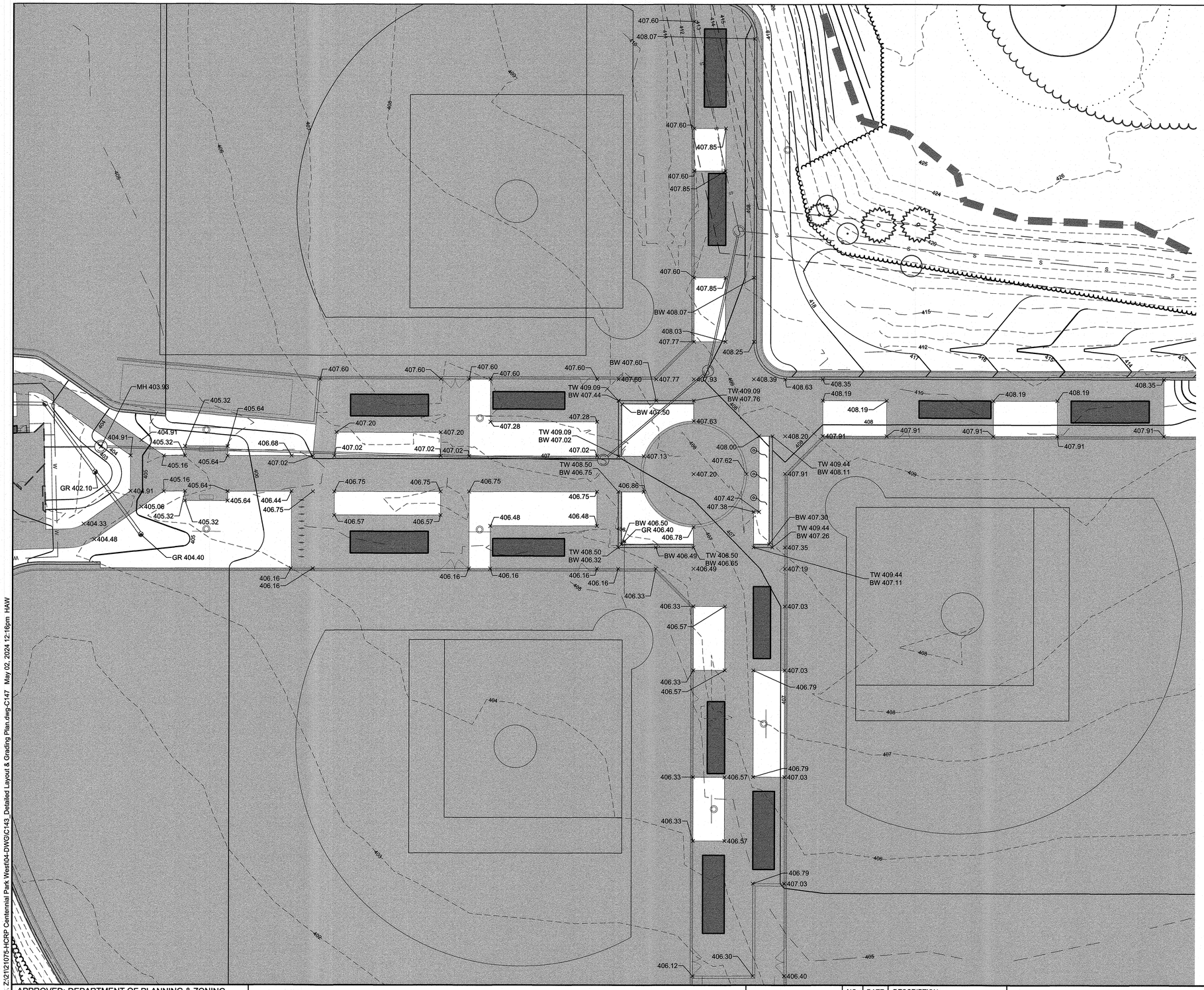

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- D — EXISTING STORM DRAIN
- W — EXISTING WATER
- S — EXISTING SANITARY SEWER
- E — EXISTING ELECTRIC
- EXISTING LIGHTING
- 350 / 348 — EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- D — PROPOSED STORM DRAIN
- W — PROPOSED WATER
- S — PROPOSED SANITARY SEWER
- E — PROPOSED ELECTRIC
- 350 / 348 — PROPOSED CONTOURS
- EXISTING / PROPOSED — SPOT ELEVATIONS

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 5 10 20 40 60

SCALE: 1" = 20'

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kavanagh — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — 6/13/24 DATE

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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. 56840, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — 56840 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 71 OF 125

DETAILED LAYOUT AND GRADING PLAN III

C147

SDP-82-109

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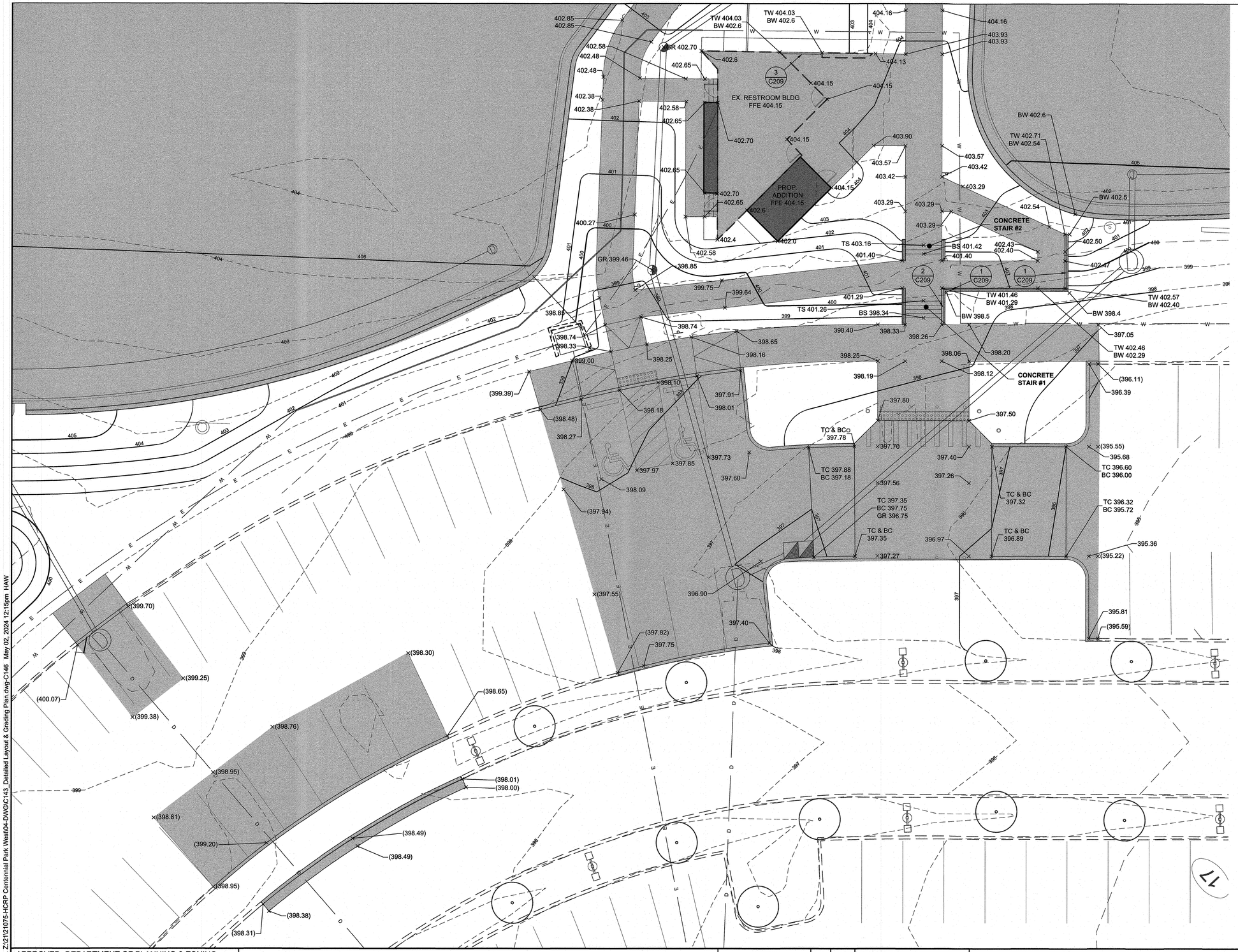

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- PROPOSED CONTOURS
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 2 5 10 20 30

SCALE: 1" = 10'

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Maura A. Rossman 6-17-24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT DD 6/19/24 DATE

Howard County RECREATION & PARKS

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STATE OF MARYLAND — ALYSSA A. MAGNUS — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 70 OF 125

DETAILED GRADING PLAN II

C146

SDP-82-109

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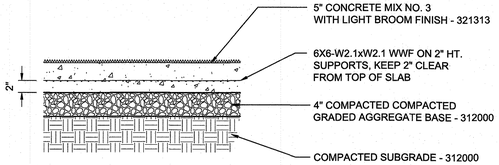
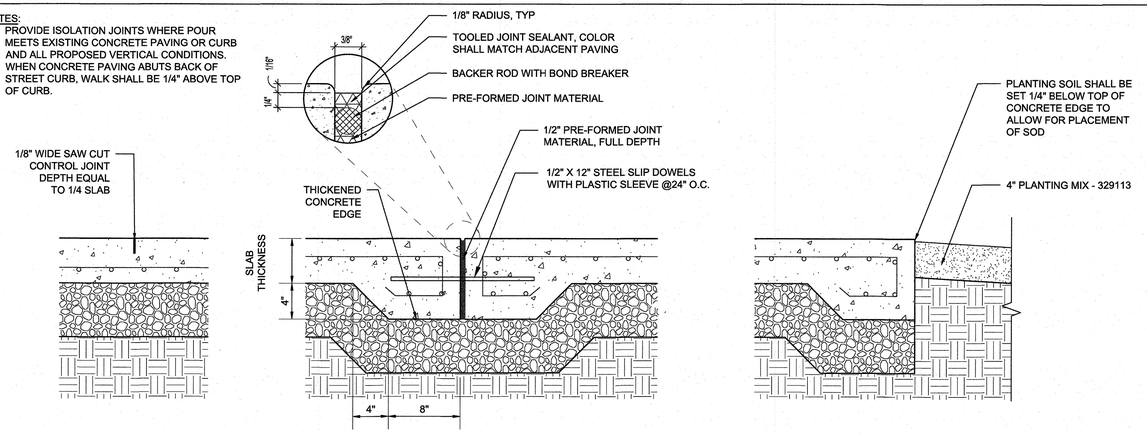


1 CONCRETE SIDEWALK

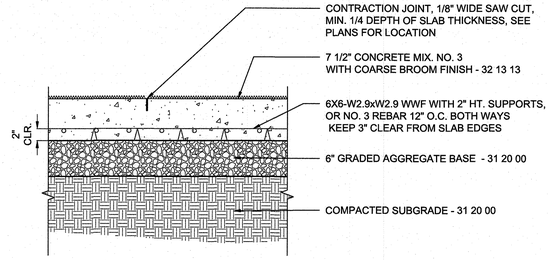
NOT TO SCALE

NOTES:
1. PROVIDE ISOLATION JOINTS WHERE POUR MEETS EXISTING CONCRETE PAVING OR CURB AND ALL PROPOSED VERTICAL CONDITIONS.
2. WHEN CONCRETE PAVING ABUTS BACK OF STREET CURB, WALK SHALL BE 1/4" ABOVE TOP OF CURB.
3.



2 TYPICAL CONCRETE JOINTS

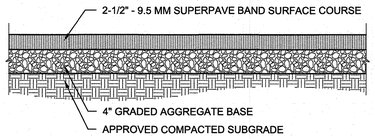
NOT TO SCALE



NOTES:
1. PLACE CONTRACTION JOINTS @ 1/4 DEPTH OF THE SLAB AS SHOWN ON THE PLANS, OR NOT MORE THAN 2X THE SLAB THICKNESS IN FEET.
2. PROVIDE ISOLATION JOINTS WHERE POUR MEETS EXISTING CONCRETE PAVING, AND EXISTING OR PROPOSED BUILDINGS, WALLS, STAIRS, OR CURB AND GUTTER.

3 HEAVY DUTY CONCRETE PAVING

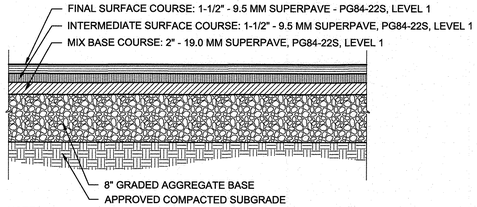
NOT TO SCALE



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.

4 HOT MIX ASPHALT WALK

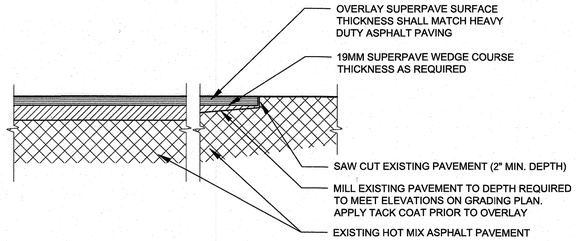
NOT TO SCALE



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.

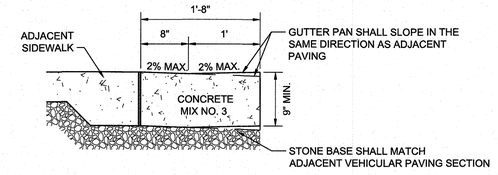
5 HEAVY-DUTY ASPHALT PAVING

NOT TO SCALE



6 MILL AND OVERLAY ASPHALT PAVING

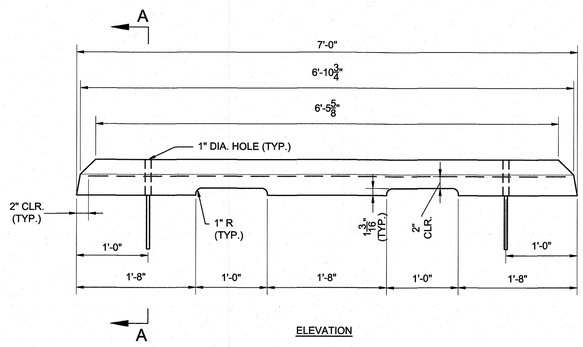
NOT TO SCALE

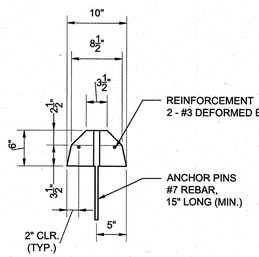


NOTES:
1. JOINT SPACING FOR CURB AND GUTTERS SHALL BE 10'-0"

7 ACCESSIBLE FLUSH CURB & GUTTER

NOT TO SCALE

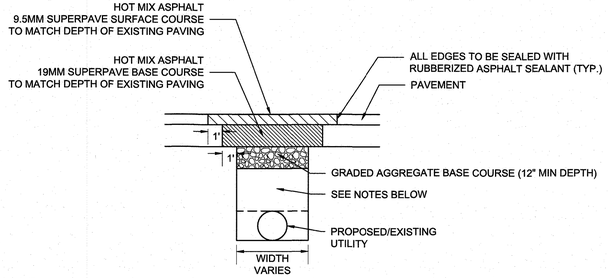




NOTES:
1. 4500 PSI CONCRETE
2. ANCHOR PINS SHALL NOT PROTRUDE ABOVE TOP OF WHEELSTOP
3. INSTALL WHEELSTOPS 24" FROM EDGE OF PAVING.

8 PRECAST CONCRETE WHEEL STOP

SCALE: 1"=1'-0"



NOTE:
1. BACKFILL TRENCH WITH SATISFACTORY SOIL MATERIALS OR ENGINEER FILL UP TO SUBGRADE BENEATH AGGREGATE BASE COURSE IN ACCORDANCE WITH MDSHA SPECIFICATIONS. THOROUGHLY COMPACTED IN 8" LOOSE LAYERS FOR THE FULL DEPTH OF THE TRENCHES BY TAMPING OR OTHER APPROVED METHOD.
2. THE REMAINING DEPTH OF THE TRENCH SHALL BE FILLED AND THOROUGHLY COMPACTED WITH GRAVEL.
3. IF EXCAVATION SUPPORT IS REQUIRED FOR TRENCH EXCAVATION, REMOVE SUPPORT SYSTEM AFTER BACKFILLING HAS BEEN COMPLETED OR CUT OFF AT SUBGRADE ELEVATION AND ABANDON REMAINING PORTION IN PLACE.
4. ALL BACKFILL REPLACED SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH MSHA SPECIFICATIONS.
5. CONTROLLED LOW-STRENGTH MATERIAL (CLSM) MAY BE USED IN LIEU OF SATISFACTORY SOIL MATERIALS OR ENGINEER FILL UP TO SUBGRADE BENEATH AGGREGATE BASE COURSE IN ACCORDANCE WITH MSHA SPECIFICATIONS.

9 UTILITY TRENCHING AND ASPHALT PAVING RESTORATION

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendall 6-13-24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/13/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/13/24

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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. 56848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND · ALEXIS A. MAGNUS · 56848 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 72 OF 125

SITE DETAILS I

C201

SDP-82-109

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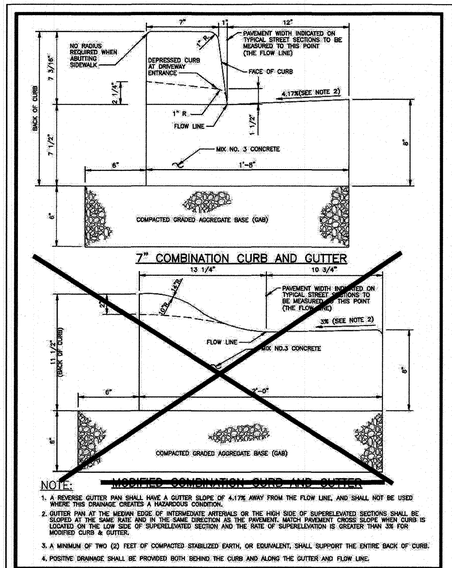


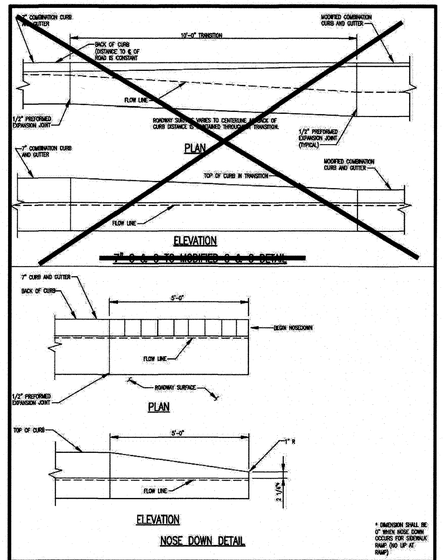
NOTE:

1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.
2. GUTTER PAN AT THE MIDWAY EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB & GUTTER.
3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

Revised	Howard County, Maryland		Detail
5/20/2021	Department of Public Works	CURB AND GUTTER	
Approved	Approval: Thomas J. Luttle	7" & Modified	R-3.01
5/7/2003	Chief, Bureau of Engineering		
Approved			

1 7" CURB AND GUTTER

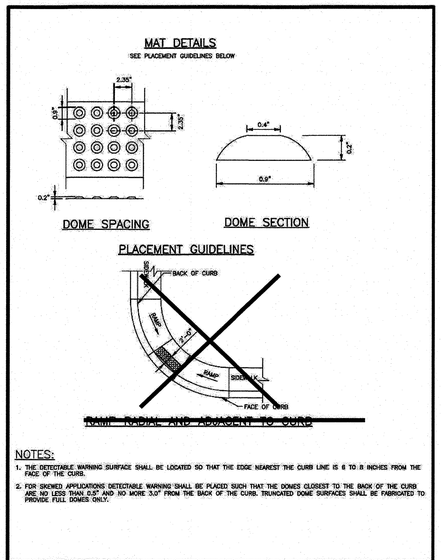
NOT TO SCALE



Revised	Howard County, Maryland		Detail
5/20/2021	Department of Public Works	CURB AND GUTTER	
Approved	Approval: Thomas J. Luttle	7" Transition to Modified & Nose Down	R-3.02
5/7/2003	Chief, Bureau of Engineering		
Approved			

2 NOSE DOWN CURB

NOT TO SCALE



NOTES:

1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
2. FOR SKEWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF THE CURB ARE NO LESS THAN 0.5" AND NO MORE 3.0" FROM THE BACK OF THE CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.

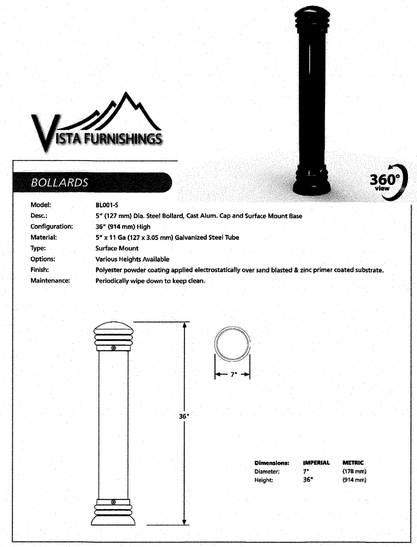
Revised	Howard County, Maryland		Detail
5/20/2021	Department of Public Works	SIDEWALK RAMP	
Approved	Approval: Thomas J. Luttle	Detectable Warning Truncated Domes	R-4.07
5/7/2003	Chief, Bureau of Engineering		
Approved			

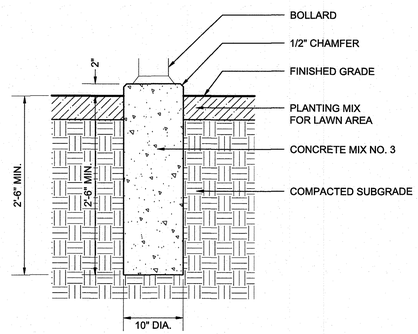
3 DETECTABLE WARNINGS

NOT TO SCALE

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS, AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

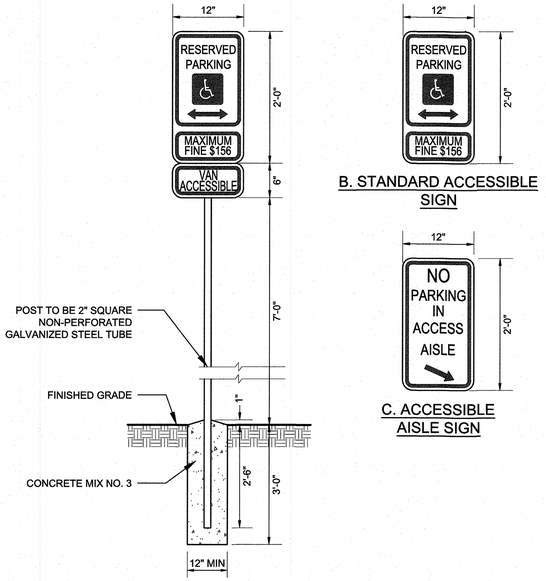




CONCRETE BASE WHEN BOLLARD IS IN LAWN

4 BOLLARD

NOT TO SCALE



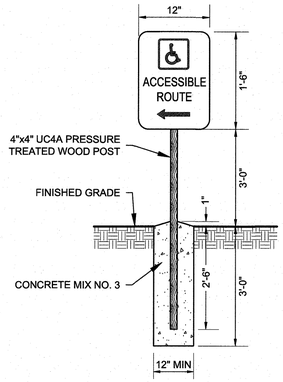
A. VAN ACCESSIBLE SIGN

B. STANDARD ACCESSIBLE SIGN

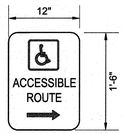
C. ACCESSIBLE AISLE SIGN

NOTES:

1. SIGN LAYOUT AND COLORS TO MATCH THE REQUIREMENTS OF THE MARYLAND ACCESSIBILITY CODE.
2. PLAQUES SHALL BE PLACED SIDE BY SIDE WHEN THEY ARE ATTACHED TO THE SAME POST.
3. SIGNS SHALL BE 0.08" THICK WITH 2 SINGLE POST MOUNTING HOLES.
4. MANUFACTURER TO VERIFY MAXIMUM SIGN AMOUNT WITH LOCAL JURISDICTION.
5. SIGN "B." AND "C." SHALL BE ON A GALVANIZED STEEL TUBE AS SIGN "A." IS SHOWN.
4. SIGN "E." SHALL BE ON A WOOD POST AS SIGN "D." IS SHOWN.
5. ACCESSIBLE ROUTE PLAQUES SHALL COMPLY WITH APPLICABLE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES GUIDELINES. MARKING SHALL HAVE BLUE BACKGROUND AND WHITE BORDERS.



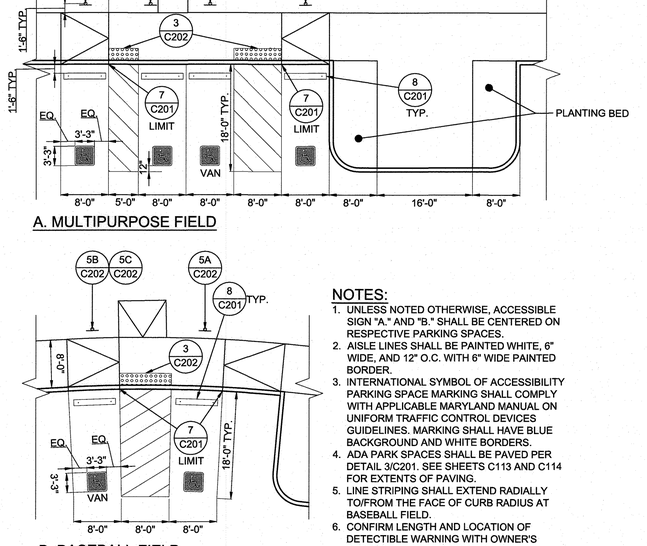
D. ACCESSIBLE ROUTE (LEFT)



E. ACCESSIBLE ROUTE (RIGHT)

5 ACCESSIBLE SIGNAGE

NOT TO SCALE



A. MULTIPURPOSE FIELD

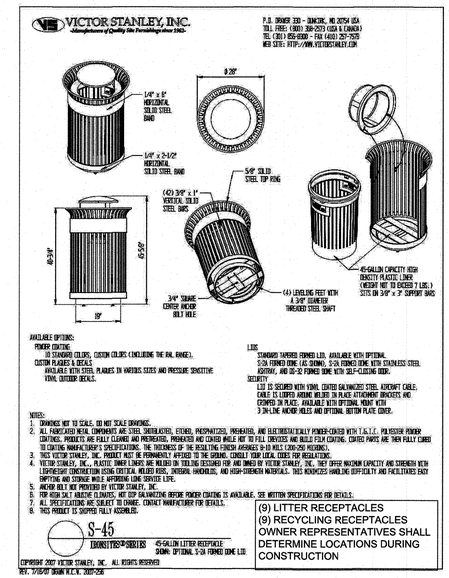
B. BASEBALL FIELD

NOTES:

1. UNLESS NOTED OTHERWISE, ACCESSIBLE SIGN "A." AND "B." SHALL BE CENTERED ON RESPECTIVE PARKING SPACES.
2. AISLE LINES SHALL BE PAINTED WHITE, 6" WIDE, AND 12" O.C. WITH 6" WIDE PAINTED BORDER.
3. INTERNATIONAL SYMBOL OF ACCESSIBILITY PARKING SPACE MARKING SHALL COMPLY WITH APPLICABLE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES GUIDELINES. MARKING SHALL HAVE BLUE BACKGROUND AND WHITE BORDERS.
4. ADA PARK SPACES SHALL BE PAVED PER DETAIL 3/C201. SEE SHEETS C113 AND C114 FOR EXTENTS OF PAVING.
5. LINE STRIPING SHALL EXTEND RADIALLY TO/FROM THE FACE OF CURB RADIUS AT BASEBALL FIELD.
6. CONFIRM LENGTH AND LOCATION OF DETECTIBLE WARNING WITH OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

6 ACCESSIBLE PARKING LAYOUT

NOT TO SCALE



7 LITTER/RECYCLING RECEPTACLES

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — MARK A. MAGINNIS — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART		PERMIT INFORMATION CHART				
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME		SECTION/AREA		LOT/PARCEL NO.
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	CENTENNIAL PARK WEST		N/A		9
		LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
		--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 73 OF 125

SITE DETAILS II

C202

SDP-82-109

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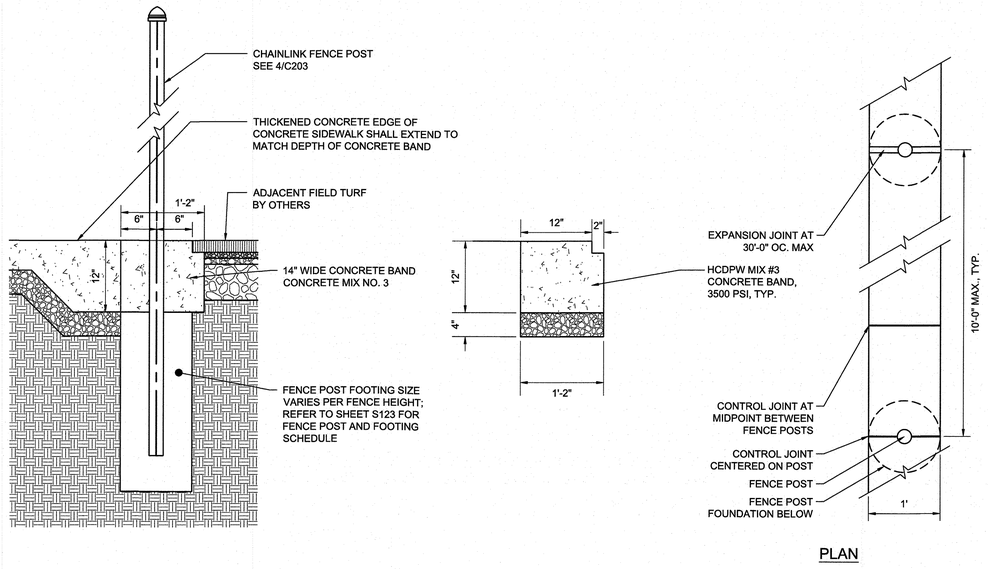
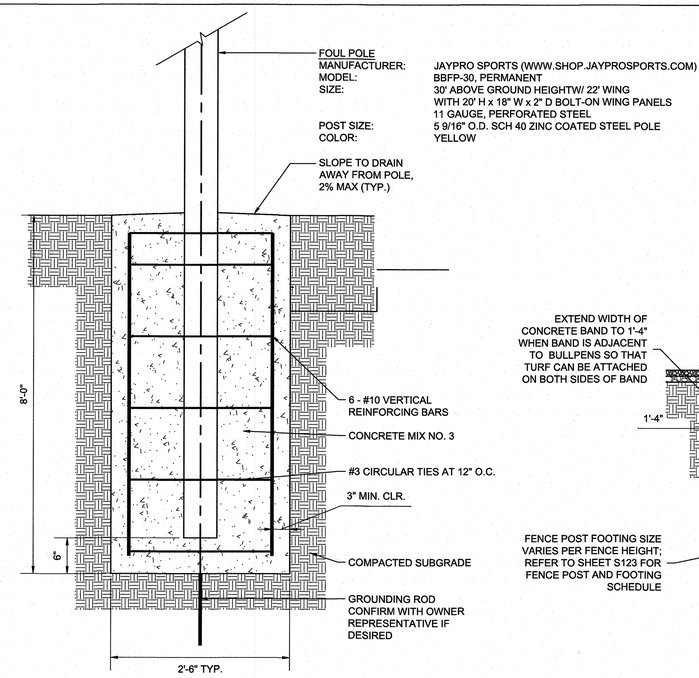


1 CONCRETE BAND

1"=1'-0"

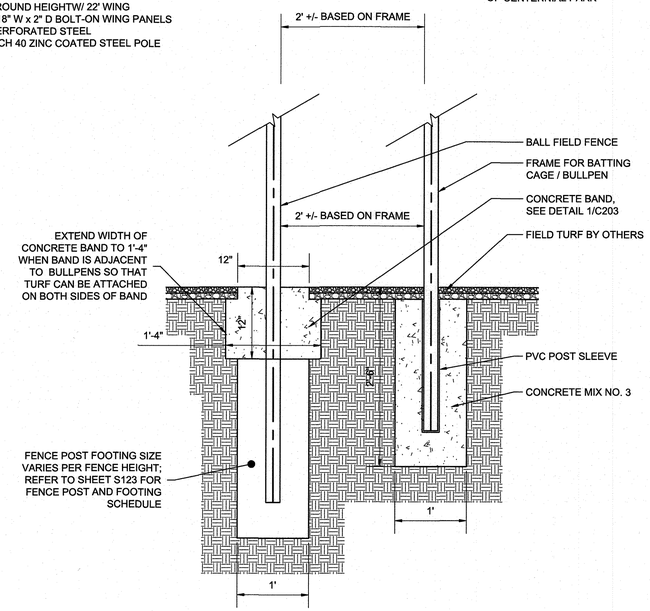


2 FOUL POLE FOOTING

1"=1'-0"

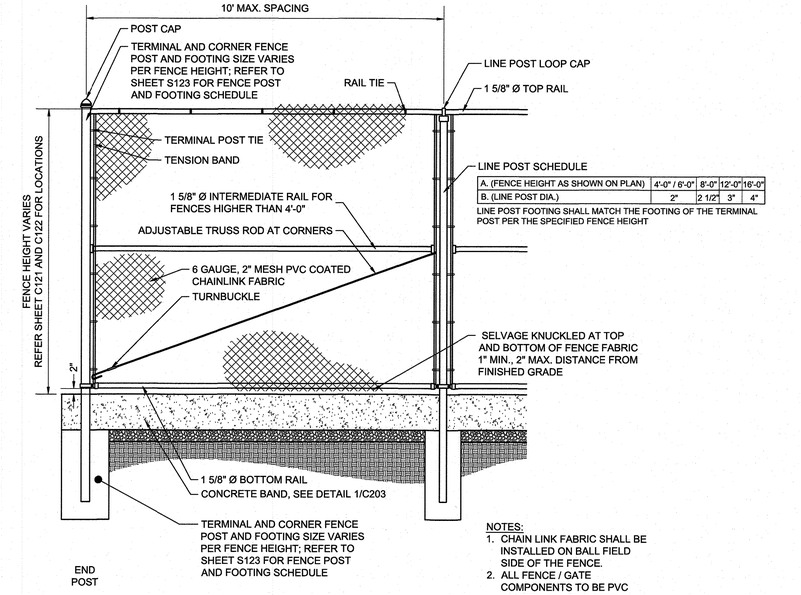
PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS. AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



3 BULL PEN FRAME POST DETAIL

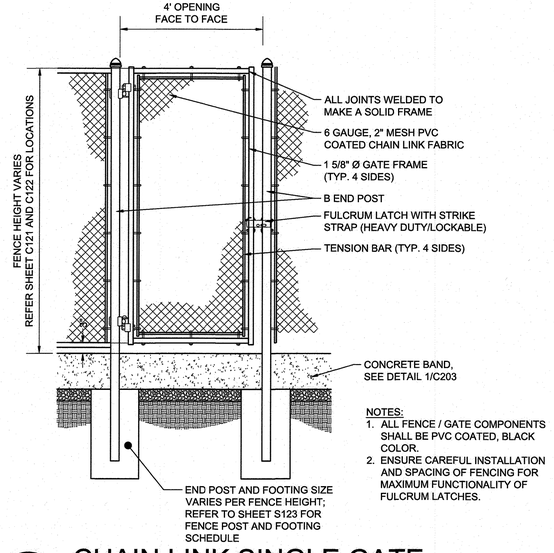
1"=1'-0"



NOTES:
1. CHAIN LINK FABRIC SHALL BE INSTALLED ON BALL FIELD SIDE OF THE FENCE.
2. ALL FENCE / GATE COMPONENTS TO BE PVC COATED, BLACK COLOR.

4 CHAIN LINK FENCE

1/2"=1'-0"

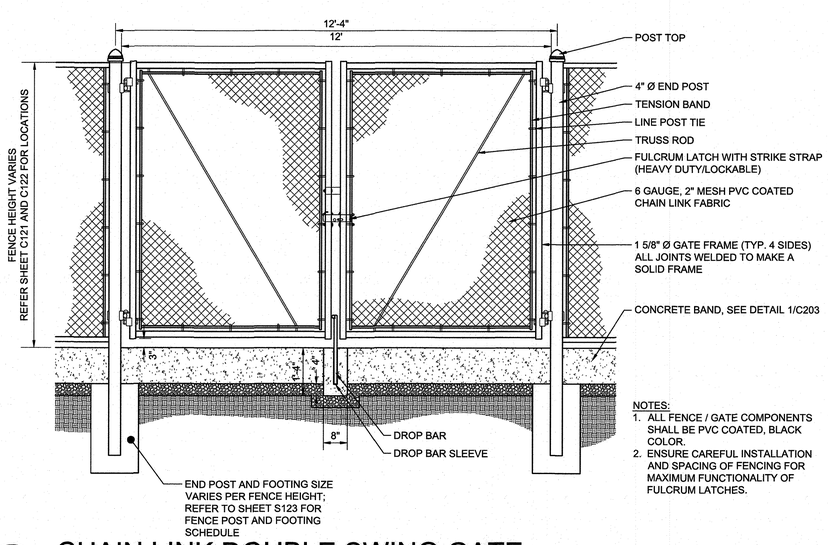


NOTES:
1. ALL FENCE / GATE COMPONENTS SHALL BE PVC COATED, BLACK COLOR.
2. ENSURE CAREFUL INSTALLATION AND SPACING OF FENCING FOR MAXIMUM FUNCTIONALITY OF FULCRUM LATCHES.

5 CHAIN LINK SINGLE GATE

CONFIRM FINAL LOCATION OF GATES WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION

1/2"=1'-0"



NOTES:
1. ALL FENCE / GATE COMPONENTS SHALL BE PVC COATED, BLACK COLOR.
2. ENSURE CAREFUL INSTALLATION AND SPACING OF FENCING FOR MAXIMUM FUNCTIONALITY OF FULCRUM LATCHES.

6 CHAIN LINK DOUBLE SWING GATE

CONFIRM FINAL LOCATION OF GATES WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION

1/2"=1'-0"

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A Kendall — 6-17-24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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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. 36848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — ANDREW A MADDEN — 36848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 74 OF 125

SITE DETAILS III

C203

SDP-82-109

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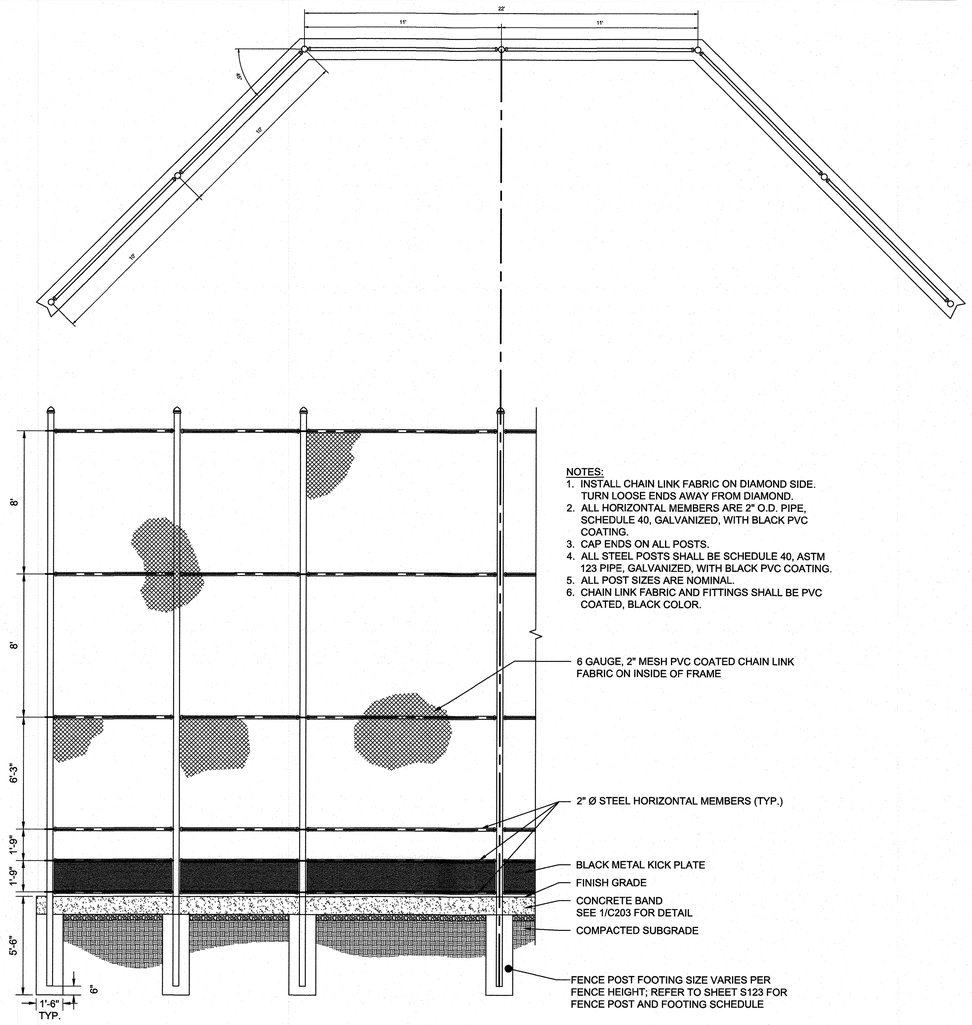
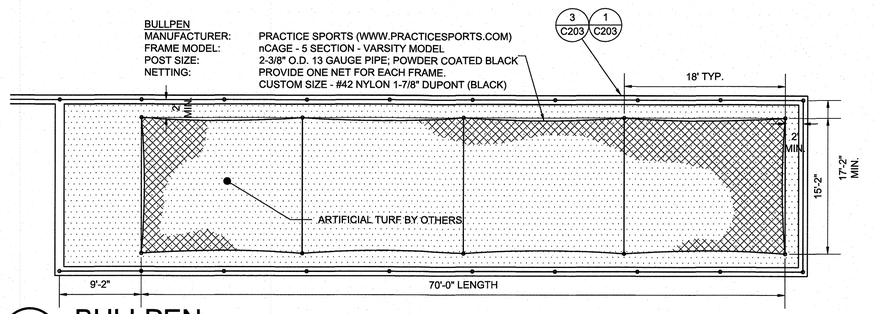


1 BACKSTOP

1/4"=1'-0"



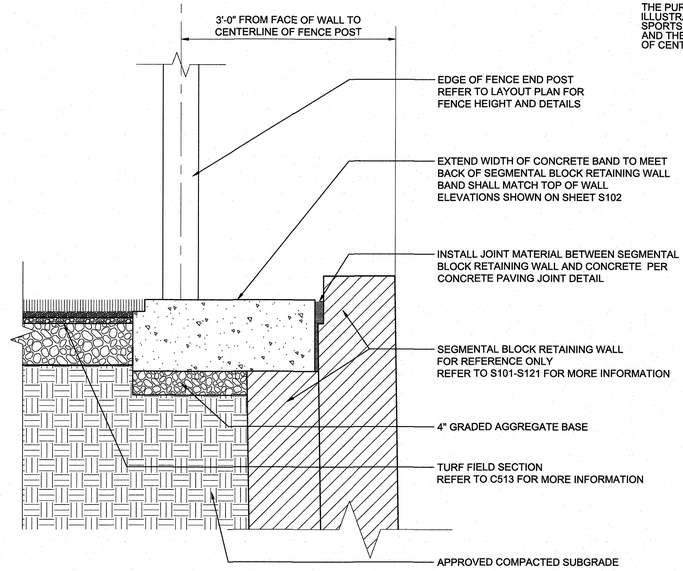
2 BULLPEN

CONFIRM FINAL LOCATION OF BULLPEN NETTING STRUCTURE WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION

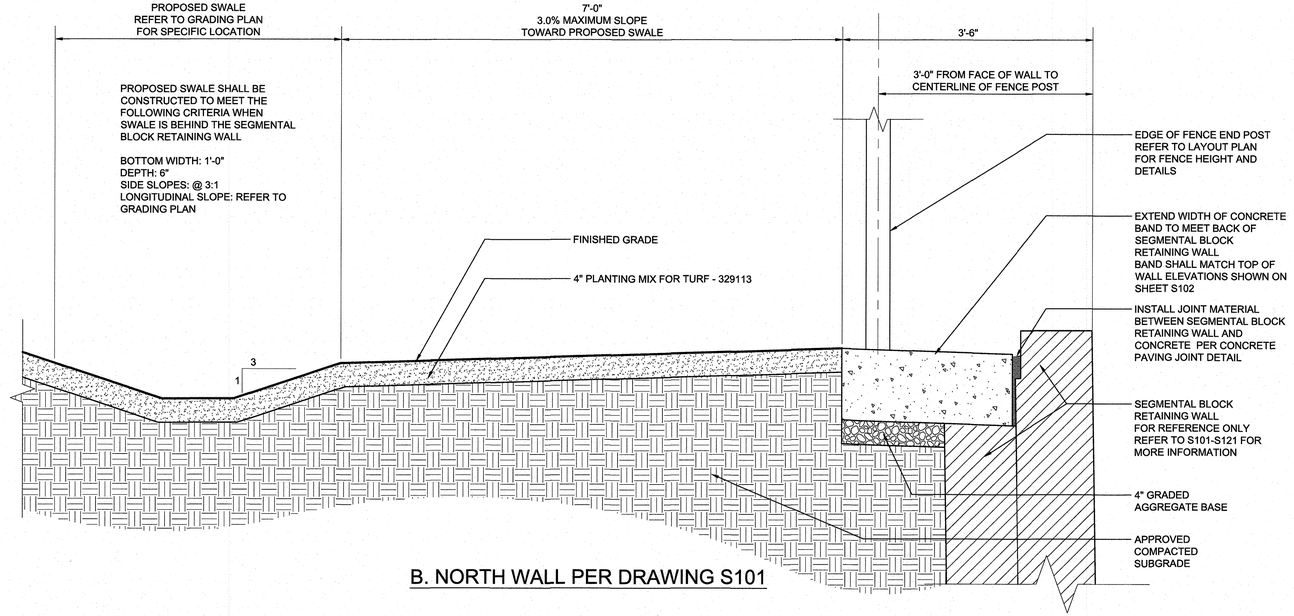
1/8"=1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS, AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



A. EAST AND SOUTH WALL PER DRAWING S101



B. NORTH WALL PER DRAWING S101

3 FENCE AT SEGMENTAL BLOCK RETAINING WALL

SCALE: 1"=1'-0"

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6/17/24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — 86848 — PROFESSIONAL ENGINEER — 5/28/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 75 OF 125

SITE DETAILS IV

C204

SDP-82-109

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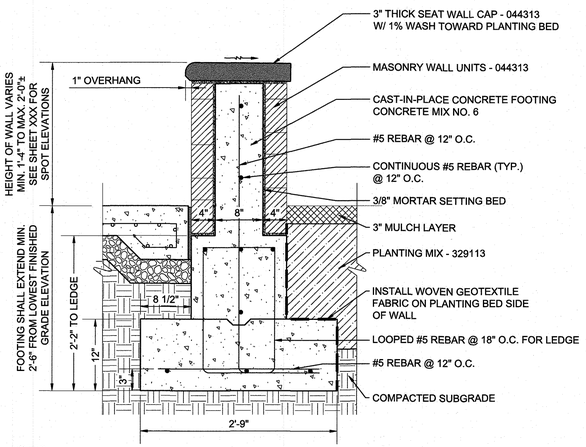

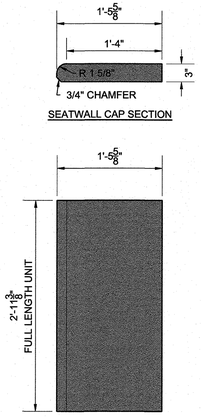

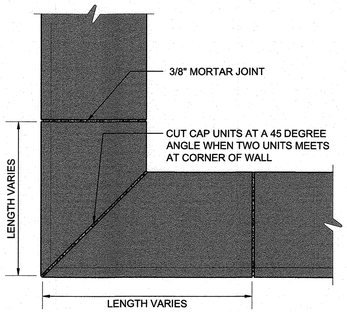

NOTES:
1. SEATWALL CAPS SHALL BE SET STARTING AT ENDS OF WALL USING FULL LENGTH PIECES.
2. INSTALL A 3/8" MORTAR JOINT BETWEEN CAP UNITS
3. EXPOSED END OF CUT MASONRY WALL UNITS SHALL BE CONCEALED BY AN UNCUT OVERLAPPING UNIT AT CORNERS IN WALL

1 SEAT WALL WITH MASONRY VENEER

SCALE: 1"= 1'-0"

MADRAX

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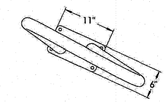
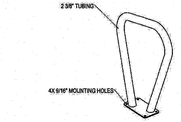
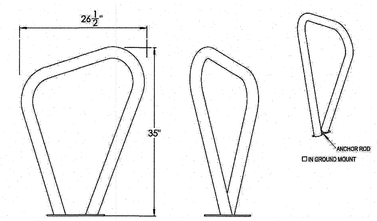
P(800) 448-7281, F(800) 448-7282, E-MAIL: SALES@MADRAX.COM
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM







PART: LBR-2
DESCRIPTION: LOFTY BIKE RACK, 2 BIKE CAPACITY

DATE: 5-27-2020
END: BLW

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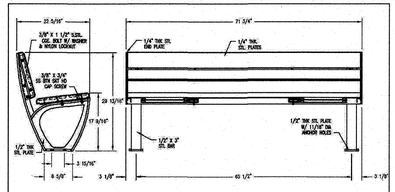
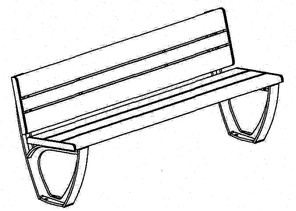
NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR FINISH, SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

2 BIKE RACK

SURFACE MOUNTED — NOT TO SCALE





NOTES
1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED.

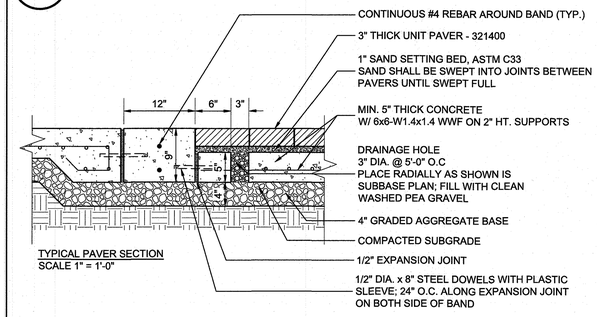
DuMor, Inc.	BENCH	DATE DRWN: 1/29/14	REV.	DRAWING NUMBER	SHEET
		DRAWN BY: LMB	A	472-60HS/S-2	1 OF 2
		DATE REV: 05/05/20			
		REV. BY: LKO			

3 BENCH

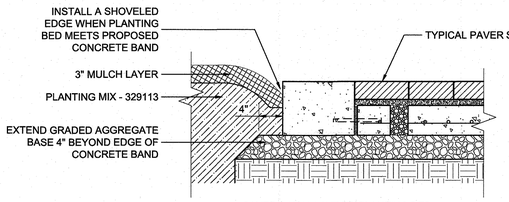
SURFACE MOUNTED — NOT TO SCALE

PURPOSE STATEMENT - 05/06/2024

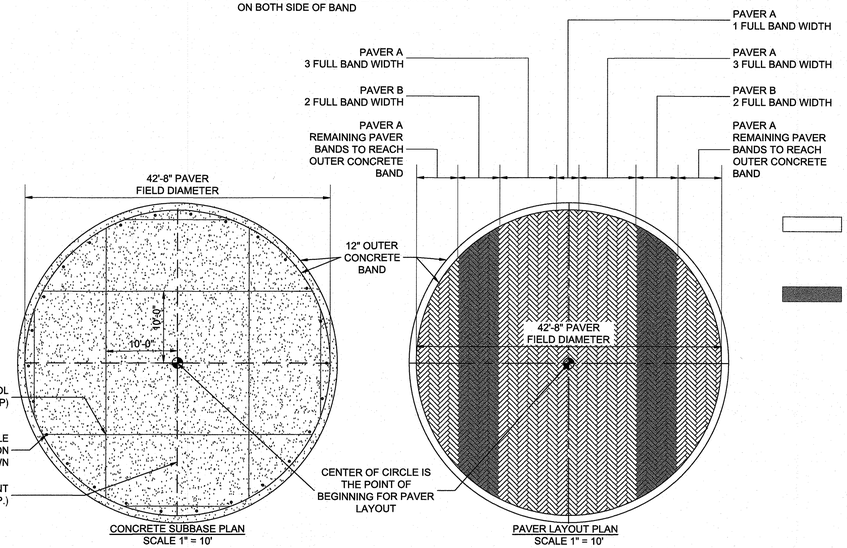
THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



TYPICAL PAVER SECTION
SCALE 1" = 1'-0"



PAVERS ADJACENT TO PLANTING BED
SCALE 1" = 1'-0"



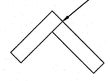
CONCRETE SUBBASE PLAN
SCALE 1" = 10'

PAVER LAYOUT PLAN
SCALE 1" = 10'

PAVER A: STANDARD COLOR 'NATURAL'
TYPE: PLANKSTONE
FINISH: TUDOR
NOMINAL SIZE: 6" x 24" x 3"

PAVER B: STANDARD COLOR 'CHARCOAL'
TYPE: PLANKSTONE
FINISH: TUDOR
NOMINAL SIZE: 6" x 24" x 3"

PAVER COLORS

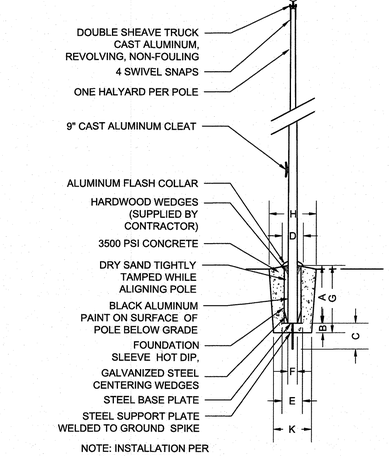


PAVER PATTERNING

4 UNIT PAVING

SCALE: AS SHOWN

FLAG PLACEMENT
AMERICAN FLAG ON SOUTHEAST FLAGPOLE
STATE FLAG ON CENTER FLAGPOLE
HOWARD COUNTY FLAG ON NORTHWEST FLAGPOLE



NOTE: INSTALLATION PER MANUFACTURER'S SPECIFICATIONS

FOUNDATION DIMENSIONS (ELDER FLAGPOLE COMPANY)

EXPOSED HEIGHT	A	B	C	D	E	F	G	H	K	MODEL #
30'	3'-0"	6"	18"	10"	14"	6"	3'-6"	30"	24"	EC 30

5 FLAGPOLE

SURFACE MOUNTED — NOT TO SCALE

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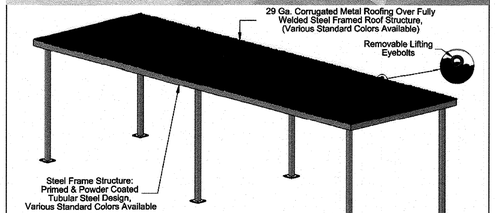

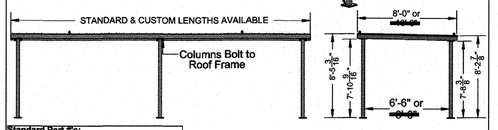

Standard Part #'s:

GD8X32 (LG-GS-08X32-130) - 8'W x 32'L

PESDO - structure & foundation design drawings, stamped by state licensed engineer.

Professionally Pre-Engineered to Meet ASCE 7-10 Wind Rating up to 140 mph Exposure C and 60 PSF Ground Snow Load Requirements

Foundation Requirements Based on Local Codes and Soil Conditions

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6 STEEL FRAME DUGOUT

FOR THE BASIS OF DESIGN OR APPROVED EQUAL — NOT TO SCALE:

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-18-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/10/24

Howard County RECREATION & PARKS

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410.683.3388 www.siteresourcesinc.com

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. 56848, EXPIRATION DATE: 12/15/2024.

STATE OF MARYLAND — E. A. MAGINES — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 76 OF 125

SITE DETAILS V

C205

SDP-82-109

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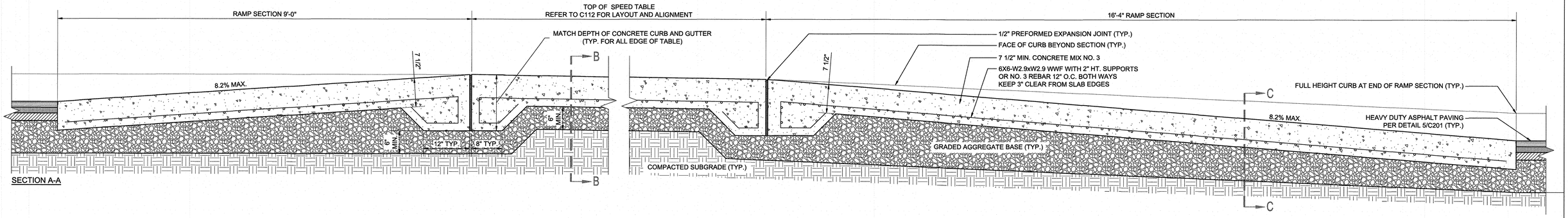
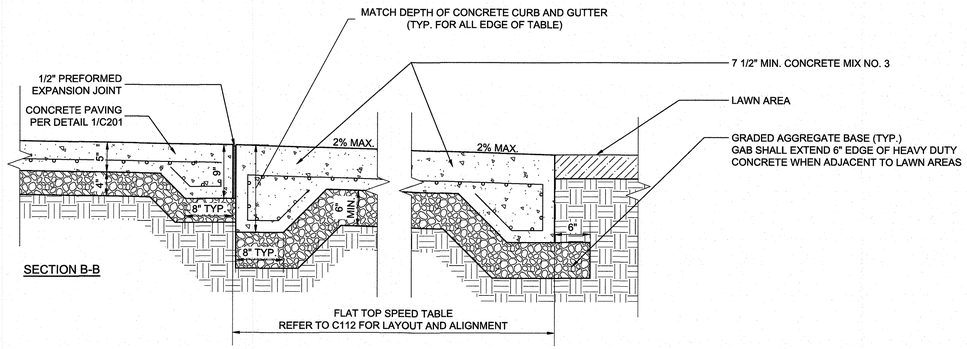


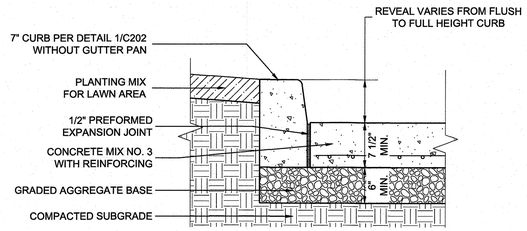
SECTION A-A

1 SPEED TABLE SECTION A-A

SCALE: 1" = 1'-0"



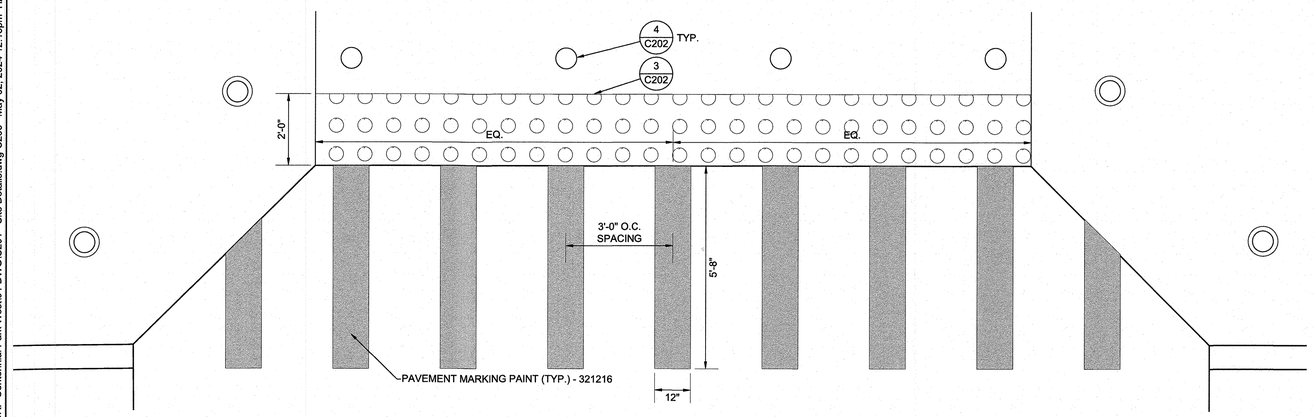
SECTION B-B



SECTION C-C

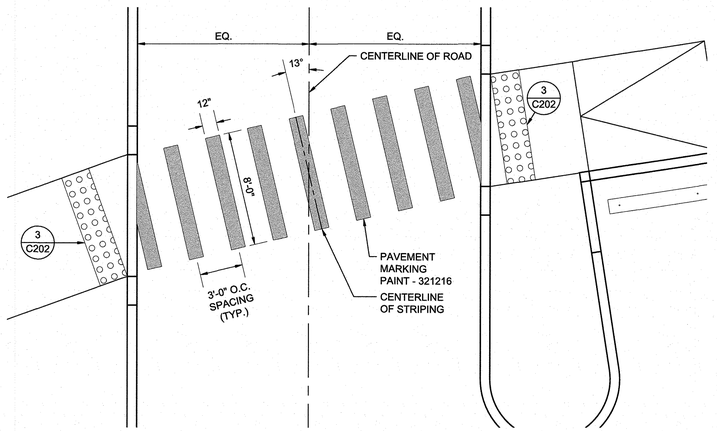
2 SPEED TABLE CROSS SECTION B-B AND C-C

SCALE: 1" = 1'-0"



3 CROSSWALK STRIPING AREA 1

NOT TO SCALE



4 CROSSWALK STRIPING AREA 2

NOT TO SCALE

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR	DATE 6/17/24
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 5.20.24
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/17/24

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STATE OF MARYLAND · LILY A. MAGNER · 58848 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

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MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

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LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
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WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 77 OF 125

SITE DETAILS VI

C206

SDP-82-109

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PURPOSE STATEMENT - 05/06/2024

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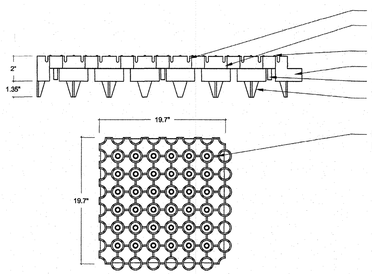
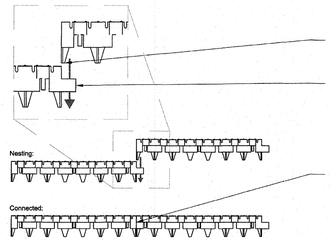
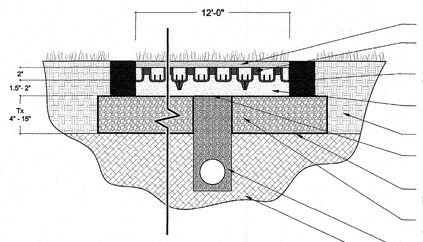


1 BodPave®85 : Grassed Surface Paving Grid
Scale : N.T.S.



2 BodPave®85 : Snap-Fit Connections
Scale : N.T.S.



3 BodPave®85 : Grassed Fire Access Lane : Typical Construction Profile
Scale : N.T.S.

DESIGN NOTES:

Note 1: If geogrid is omitted, the total Granular Sub-Base (GSB) layer thickness (Tx) must be increased by minimum 50%.
Note 2: A'DoT Class 5 sub-base may be used provided that an adequate drainage system is installed. Alternatively, a permeable/open-graded (reduced fines) sub-base layer (i.e DoT Class 7) may be specified, e.g. as part of Low Impact Development (LID) or National Pollutant Discharge Elimination System (NPDES).
Note 3: If construction traffic axle loads will be greater than (approx' 6.5 Tons), minimum sub-base thickness over appropriate geogrid shall be 6". Maximum sub-base particle size should match minimum sub-base thickness but not exceed 3" diameter. For sub-base thickness of around 4", a minimum 1.0" particle size should be adopted to allow effective installation of appropriate geogrid.
Note 4: Where drains are omitted and a 'reduced fines' sub-base is specified for LID/NPDES this must be covered with either a geotextile fabric (i.e. Typar) and/or a clean, suitably graded gravel blinding to avoid the bedding layer leaching into the sub-base.
Note 5: Specific advice on CBR% strengths, ground conditions and construction over weak ground with a CBR less than 1% is available from Polymer Group Inc. Geosynthetics. CBR% = California Bearing Ratio, a measurement of subgrade soil strength.
Note 6: Typical standard drainage detail: 4" diameter perforated pipe drains laid at minimum gradient 1:100, bedded on gravel in trench backfilled with ' 3/4" washed drainage rock' drainage aggregate, trench covered &/or wrapped with a geotextile fabric (i.e Typar), pipes leading to a suitable outfall or soak away. Drains installed down center or one edge of areas up to 16' wide. Wider areas may require additional lateral drains at 16'-32' centers. Drainage design to be determined by the specifier based on specific site conditions.
Note 7: Drainage for a LID/NPDES application will vary according to the site but generally omits the requirement for extensive pipe & trench drainage systems within the sub-base layer and may require an additional layer of Typar geotextile fabric at base of construction.
Note 8: Rootzone bedding and paver fill must be a free-draining, structurally sound propriety blend of sand:soil or sand:compost such as used in sports/golf construction & normally identified as a 60:40 or 70:30 ratio blend. The use of site-won materials or in-situ self-blending is NOT recommended without taking further advice.
Note 9: Maximum advised gradient for traffic applications: 12% (1:8) ??. Bodpave ®85 has specific pegging points if required for steep slope applications. Pegging is not necessary for standard access route applications.

Specific advice on the use of BodPave®85 on steep slopes, drainage suitability and LID/NPDES applications, can be obtained from Polymer Group Inc. Geosynthetics.

Table 1 : Typical Sub-base Thickness (Tx) Requirements - refer to ③ Typical Construction Profile

APPLICATION/LOAD	CBR (%) STRENGTH OF SUBGRADE SOIL	(Tx) DoT SUB-BASE THICKNESS (mm & inches) (see Notes 1-5)		Separation Geotextile
Fire trucks, Coaches and occasional HGV access	≥ 6 = 4 < 6 = 2 < 4 = 1 < 2	100mm 120mm 190mm 380mm	4" 4.75" 7.5" 15"	Typar 3401G Typar 3601G Typar 3801G Typar 3801G
Light vehicle access and overspill car parking	≥ 6 = 4 < 6 = 2 < 4 = 1 < 2	100mm 100mm 135mm 260mm	4" 4" 5.4" 10.3"	Typar 3401G Typar 3401G Typar 3601G Typar 3801G

Table 2 : Paving Grid Specification

Description	Data
Product	BodPave®85
Material	100% recycled polyethylene
Color options	Black, Green & Natural
Paver dimensions	19.7" x 19.7" x 1.97" + 1.37" ground spike
Installed Paver size	19.7" x 19.7" (4 grids per 1.2yd²)
Nominal internal cell size	Castellated 2.6" Plaque & 1.8" Round Shaped
Structure Type	Rigid-walled, flexible semi-closed cell combination
Cell wall thickness	0.1" – 0.2"
Weight (Nominal)	3.4lbs/paver
Load bearing capacity (filled)	< 367 tons/yd²*
Crush Resistance (unfilled)	< 275 tons *
Basal support & Anti-Shear	Integral 1.35" long Cross & T section ground spikes (18 per paver)
Open cell %	Top 92% / Base 75%
Connection type	Overlapping Edge Loop & Cell connection
Interlock Mechanism	Integral self locking Snap-Fit Clips
Chemical resistance	Excellent
UV resistance	High
Toxicity	Non Toxic
Bedding Layer	60:40 rootzone (see Note 8) : 2"-2.75" thick
Paver fill (seed bed)	60:40 rootzone (see Note 8): 1.7" thick
Grass seed or turf	0.01lbs/ft2 amenity blend low maintenance seed or turf as required
Fertilizer	Pre-seed fertilizer followed up with appropriate seasonal fertilizer
Sub-base type	DoT Class 5 or a modified permeable Class 7 reduced Fines sub-base (Table 1 & Notes 1-5)
Sub-base reinforcement	Geogrid as Required

Chart 1: Field guidance for estimating sub-grade strengths

Consistency	Indicator		Strength		
	Tactile (feel)	Visual (observation)	Mechanical (test)	CBR	CU
			SPT	%	kN/sqm
Very Soft	Hand sample squeezes through fingers	Man standing will sink > 3"	<2	<1	<25
Soft	Easily molded by finger pressure	Man walking sinks 2"- 3"	2-4	Around 1	25-40
Medium	Molded by moderate finger pressure	Man walking sinks 1"	4-8	1-2	40-75
Firm	Molded by strong finger pressure	Utility truck ruts 0.5" - 1"	8-15	2-4	40-75
Stiff	Cannot be molded but can be indented by thumb	Loaded construction vehicle ruts by 1"	15-30	4-6	75-150

This field guide is provided as an aid to assessing the mechanical stabilization requirements in commonly encountered site conditions. Polymer Group Inc. accepts no responsibility for any loss or damage resulting from the use of this guide.

*Research carried out by Sheffield University UK Department of Mechanical Engineering. (Rennison/Allen March 2009)

Please note that the information above is given as a guide only. All sizes and weights are nominal figures and may vary to what is published. Polymer Group Inc. cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.

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70 Old Hickory Blvd. Old Hickory, TN 37138
Toll-Free: 1-800-541-5519
e.mail: geo.sales@pgiinc.com
website: www.typargeosynthetics.com

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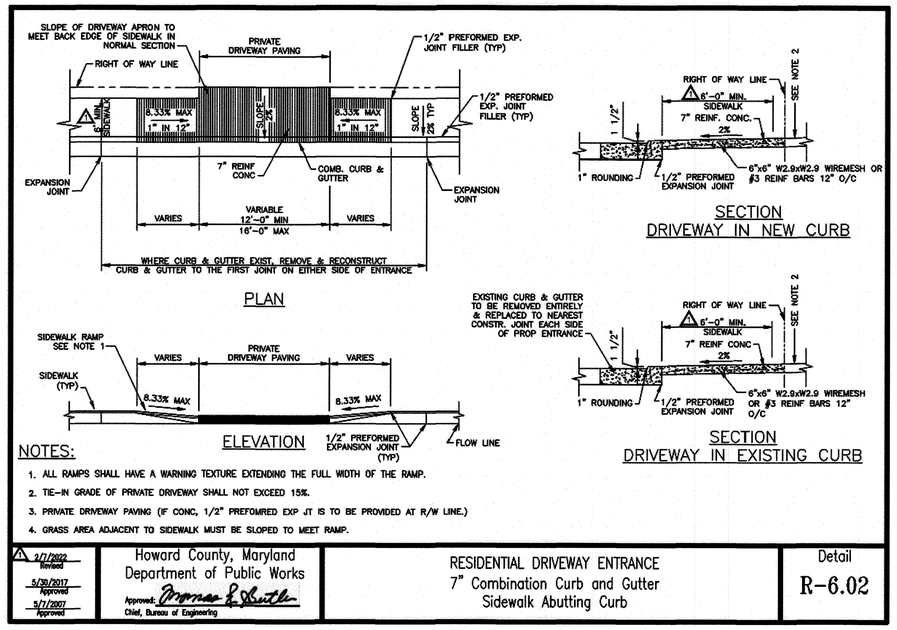
THIS DETAIL IS FOR CONCEPT PURPOSES ONLY AND DOES NOT IMPLY ANY ACTUAL DESIGN OR ENGINEERING HAS BEEN COMPLETED. ENGINEERING MODELING WILL NEED TO BE PERFORMED TO DETERMINE PROPER HYDROLOGICAL AND STRUCTURAL REQUIREMENTS AND COMPONENTS INCLUDING SAND AND AGGREGATE.
ALL MATERIALS ARE SUBJECT TO APPROVAL BY POLYMER GROUP, INC.

BodPave®85 Paving Grids
For Grassed Fire Access Lanes
Specification, Design & Installation Guide



2/7/2022 Revised 5/30/2017 Approved 5/7/2007 Approved	Howard County, Maryland Department of Public Works Approved: Chief, Bureau of Engineering	RESIDENTIAL DRIVEWAY ENTRANCE 7" Combination Curb and Gutter Sidewalk Abutting Curb	Detail R-6.02

1 REINFORCED TURF

FOR THE BASIS OF DESIGN OR APPROVED EQUAL
SEE SHEETS C111 AND C112 FOR PLAN VIEW DIMENSIONS
Tx = 4.0"
SEPARATION GEOTEXTILE = TYPAR 3401G

NOT TO SCALE:

2 DRIVEWAY ENTRANCE

NOT TO SCALE:

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/30/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/6/24

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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. 56848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — ERIC A. MAHNKE — 56848 — PROFESSIONAL ENGINEER — 5/30/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 78 OF 125
SITE DETAILS VII
C207

SDP-82-109

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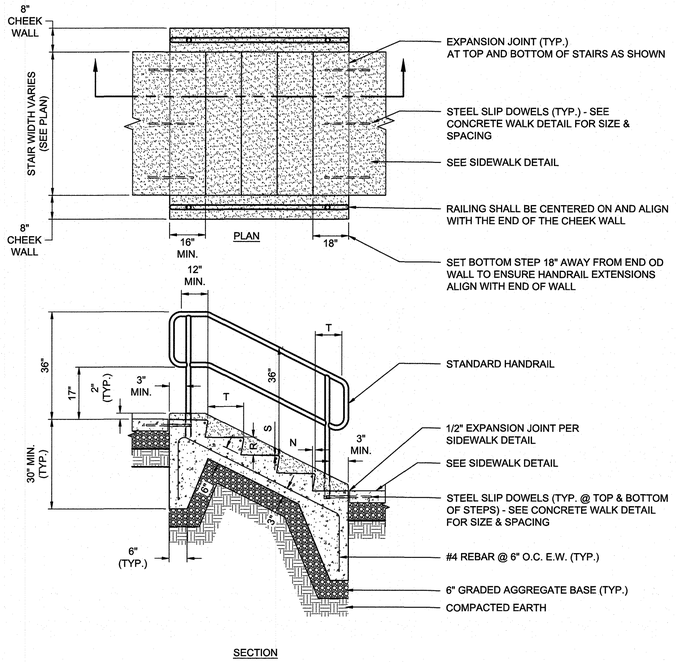
PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



SECTION

CONCRETE STAIR #	LOCATION	RISER (R)	TREAD (T)	SLOPE (S)	OVERHANG (N)
1	BASEBALL FIELDS (LOWER SET)	7	11	1/4	1
2	BASEBALL FIELDS (UPPER SET)	7	11	1/4	1
3	FIELD #1	6 1/2	12	1/4	1

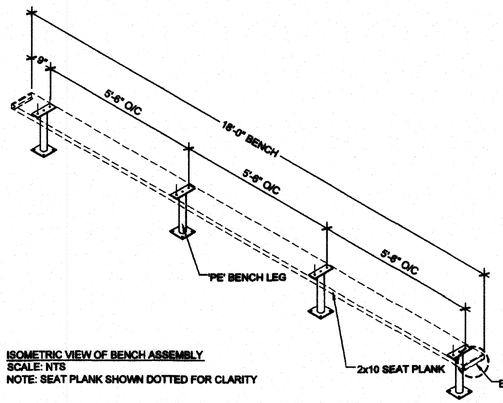
ALL DIMENSIONS IN INCHES

NOTES:

1. RAILINGS & POST TO BE SHOP FABRICATED OF 1-1/2" O.D. STEEL TUBING WITH ALL JOINTS CONTINUOUSLY WELDED AND GROUND SMOOTH. ASSEMBLY SHALL BE ELECTROCHEMICALLY GALVANIZED AFTER FABRICATION.
2. TOP OF RAILING TO BE 36" ABOVE WALKING SURFACE AND STAIR NOSE.
3. STRAIGHT PORTION OF RAILING TO EXTEND A MINIMUM OF 12" HORIZONTALLY BEYOND NOSE OF TOP RISER AND A TREAD WIDTH BEYOND BOTTOM RISER BEFORE TURNING DOWN.
4. ALL CONCRETE TO BE MDSHA MIX NO. 3.
5. ALL CHEEK WALL & STAIR NOSE RADII SHALL BE 1/2".
6. CHEEK WALL SHALL BE 2" ABOVE STAIR NOSE & WALKING SURFACE.
7. ALL RAILING EXTERIOR RADII SHALL BE 4".
8. RAILING POSTS SHALL BE INSTALLED AT A DEPTH OF 8" INTO CONCRETE. WHERE INTERMEDIATE POSTS ARE NECESSARY, INSTALL IN CENTER OF STAIR TREAD. CONCRETE SHALL BE CORE DRILLED AND POST SET WITH NON-SHRINK GROUT. GROUT TO BE FLUSH WITH ADJACENT CONCRETE.
9. STAIR TREADS TO RECEIVE LIGHT BROOM FINISH. (SEE SPECS)
10. UNLESS OTHERWISE SHOWN ON PLAN, ALL REBAR SHALL HAVE A CLEARANCE OF 3" FROM SURFACE.

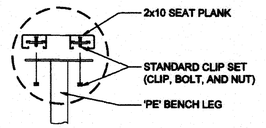
1 CAST-IN CONCRETE STAIRS

NOT TO SCALE

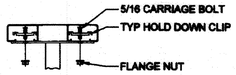


ISOMETRIC VIEW OF BENCH ASSEMBLY
SCALE: NTS
NOTE: SEAT PLANK SHOWN DOTTED FOR CLARITY

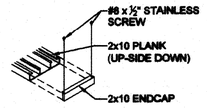
MANUFACTURER:
NATIONAL RECREATION SYSTEMS
5120 INVESTMENT DRIVE,
FORT WAYNE, IN 46808
(888) 568-9064
(OR EQUAL)
MODEL:
'PE' PERMANENT BENCH W/O BACK, 18' LONG



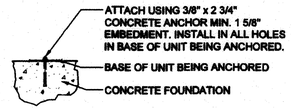
SIDE VIEW OF BENCH ASSEMBLY
SCALE: 1 1/2" = 1' - 0"



TYP. 2x10 PLANK ATTACHMENT
SCALE: NTS



TYP. 2x10 ENDCAP ATTACHMENT
SCALE: NTS

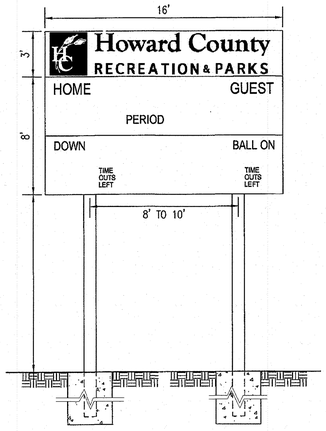


WEDGE ANCHOR DETAIL 2 3/4"
SCALE: NTS

2 BASEBALL DUGOUT PLAYER'S BENCH

COORDINATE FINAL LOCATION WITHIN DUGOUT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION
(6) BENCHES TOTAL

NOT TO SCALE



NOTES

1. CONTRACTOR SHALL PROVIDE SIGNED ENGINEERED DRAWINGS FOR THE FOOTING AND STRUCTURE AND SUBMIT THEM AS SHOP DRAWINGS CONTRACTOR SHALL ALSO OBTAIN THE REQUIRED PERMITS FOR SCOREBOARD.
2. CONTRACTOR SHALL APPLY A SMOOTH CONCRETE FINISH TO EXPOSED CONCRETE FOOTINGS AND TOP OF FOOTING SHALL BE SLOPED AWAY FROM STRUCTURAL BEAMS AT A MIN. OF 1%.

3 SCOREBOARD

MANUFACTURER: DAKTRONICS, INC., OWNER'S REPRESENTATIVE SHALL PROVIDE MODEL/SPECIFICATION DURING CONSTRUCTION
COORDINATE FINAL LOCATION WITHIN DUGOUT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION
(4) SCOREBOARDS TOTAL

NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendrick — 6-17-24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.30.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — ERIC A. MAGNUSON — 56846 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 79 OF 125

SITE DETAILS VIII

C208

SDP-82-109

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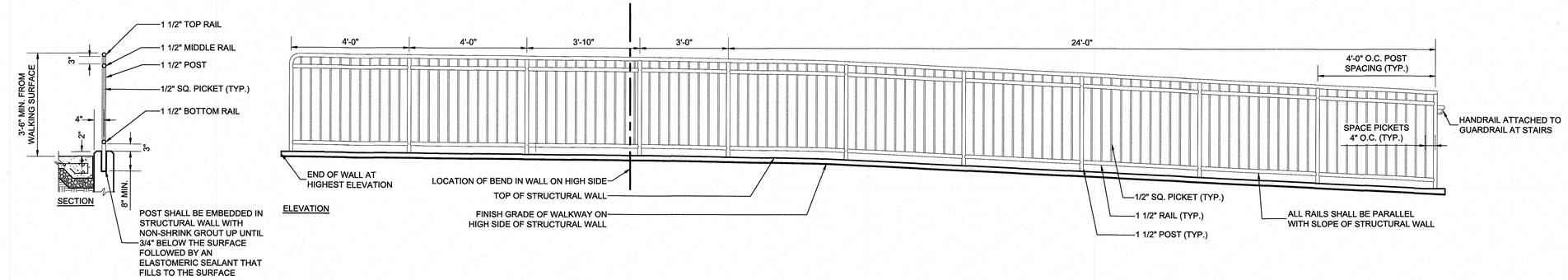
PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

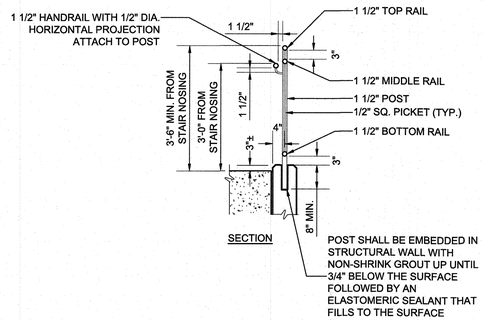
GENERAL NOTES FOR ALL HANDRAILS AND GUARDRAILS:

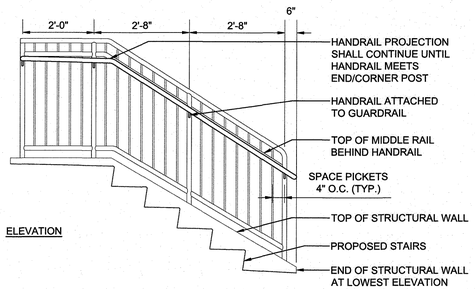
1. RAILINGS & POST SHALL BE SHOP FABRICATED OF 1-1/2" O.D. STEEL TUBING WITH ALL JOINTS CONTINUOUSLY WELDED AND GROUND SMOOTH. ASSEMBLY SHALL BE ELECTROCHEMICALLY GALVANIZED AFTER FABRICATION.
2. TOP OF HANDRAIL SHALL BE 36" ABOVE WALKING SURFACE AND STAIR NOSE. TOP OF GUARDRAIL SHALL BE 42" ABOVE WALKING SURFACE AND STAIR NOSE.
3. STRAIGHT PORTION OF HANDRAIL TO EXTEND A MINIMUM OF 12" HORIZONTALLY BEYOND NOSE OF TOP RISER AND A TREAD WIDTH BEYOND BOTTOM RISER BEFORE TURNING DOWN.
4. ALL RAILING EXTERIOR RADII SHALL BE 4".
5. STRUCTURAL WALLS ELEMENTS ARE FOR REFERENCE ONLY. REFER TO SHEETS S122 - S125 FOR MORE INFORMATION.

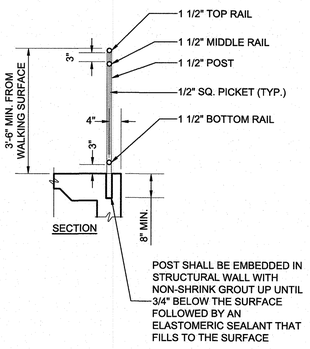


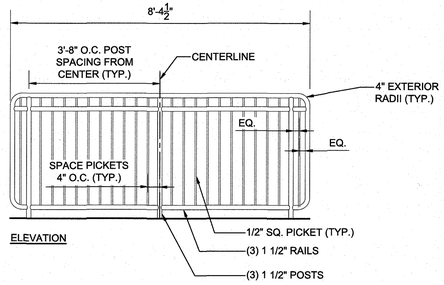
1 GUARDRAIL ALONG SLOPED WALKWAY

SCALE: 1/2" = 1'-0"



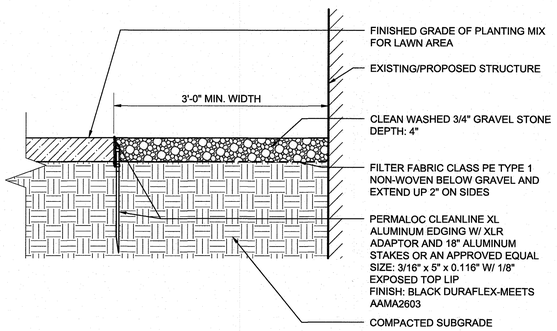






3 GUARDRAIL AT EXISTING RESTROOMS

SCALE: 1/2" = 1'-0"



2 GUARDRAIL AT STAIRS

SCALE: 1/2" = 1'-0"

4 GRAVEL MAINTENANCE STRIP AT EX. RESTROOM

SCALE: 1" = 1'-0"

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kendall — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/19/24

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STATE OF MARYLAND — SILVIA A. MAGNUSON — 56848 — PROFESSIONAL ENGINEER — 5/14/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 80 OF 125

SITE DETAILS IX

C209

SDP-82-109

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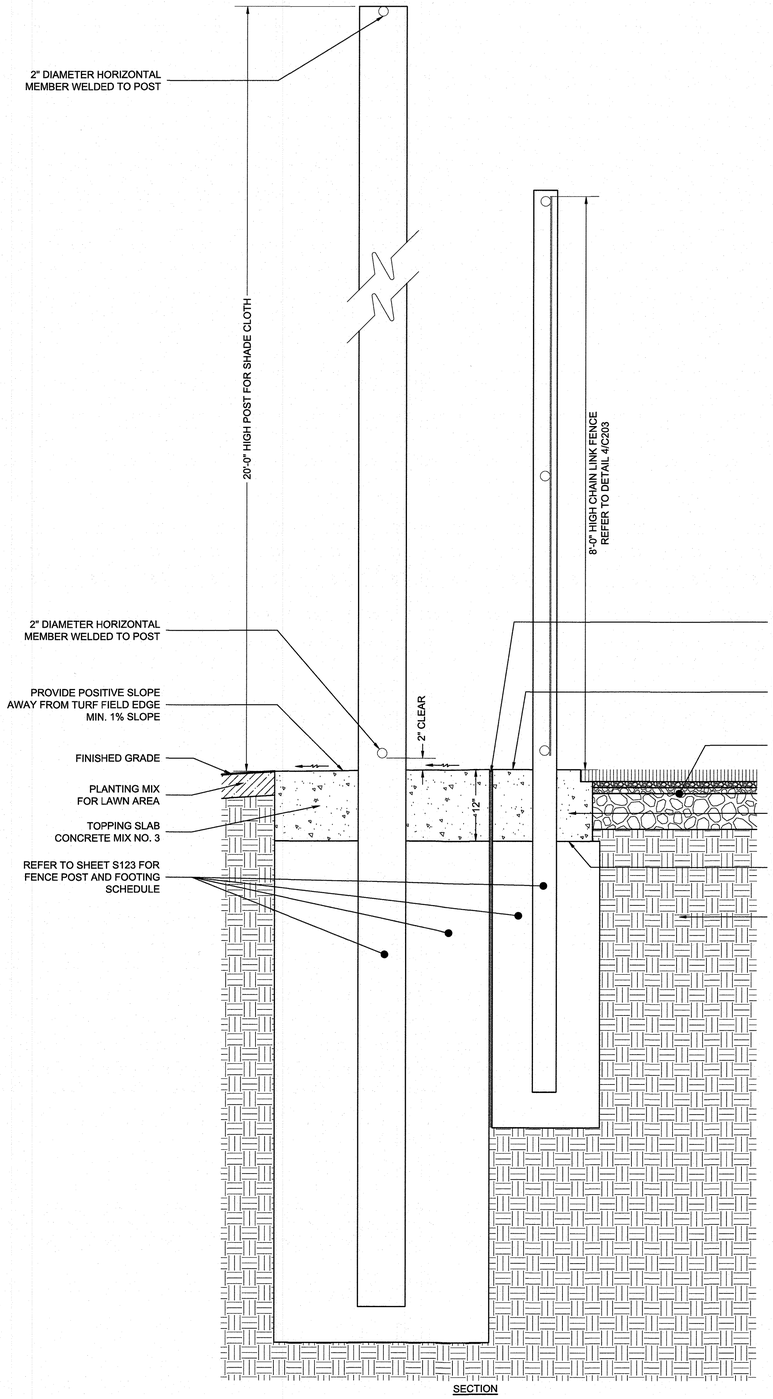
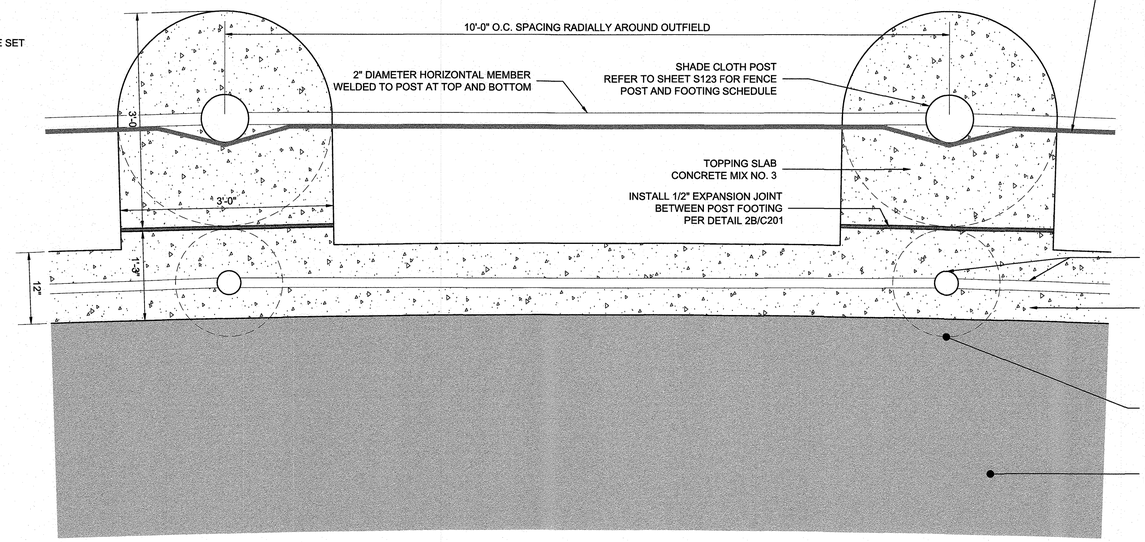
PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



SECTION



PLAN VIEW

SHADE CLOTH OR APPROVED EQUAL

MANUFACTURER:	SHADECLOTH STORE (WWW.SHADECLOTHSTORE.COM)
PRODUCT:	WOVEN SHADE CLOTH - 73%
COLOR:	BLACK
SIZE:	20'-0" WIDE x 40'-0" LONG MIN. PER SHEET
FINISH:	EDGING AROUND PERIMER W/ BRASS GROMMETS EVERY 2'-0"
ATTACHMENT:	SHADE CLOTH SHALL BE ATTACH TO VERTICAL POSTS AND HORIZONTAL MEMBERS USING 7 GAUGE GALVANIZED TENSION WIRE AT ALL GROMMETS. ATTACHMENT METHOD MUST BE VERIFY AND APPROVED BY OWNER'S REPRESENTATIVE IN THE FIELD PRIOR TO INSTALLATION.

1 OUTFIELD SHADE CLOTH

SCALE: 1"=1'-0"

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Marsha S. McLaughlin — DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — DATE 6/17/24

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STATE OF MARYLAND — SHILA A. MAGNUS — 56648 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 81 OF 125

SITE DETAILS X

C210

SDP-82-109

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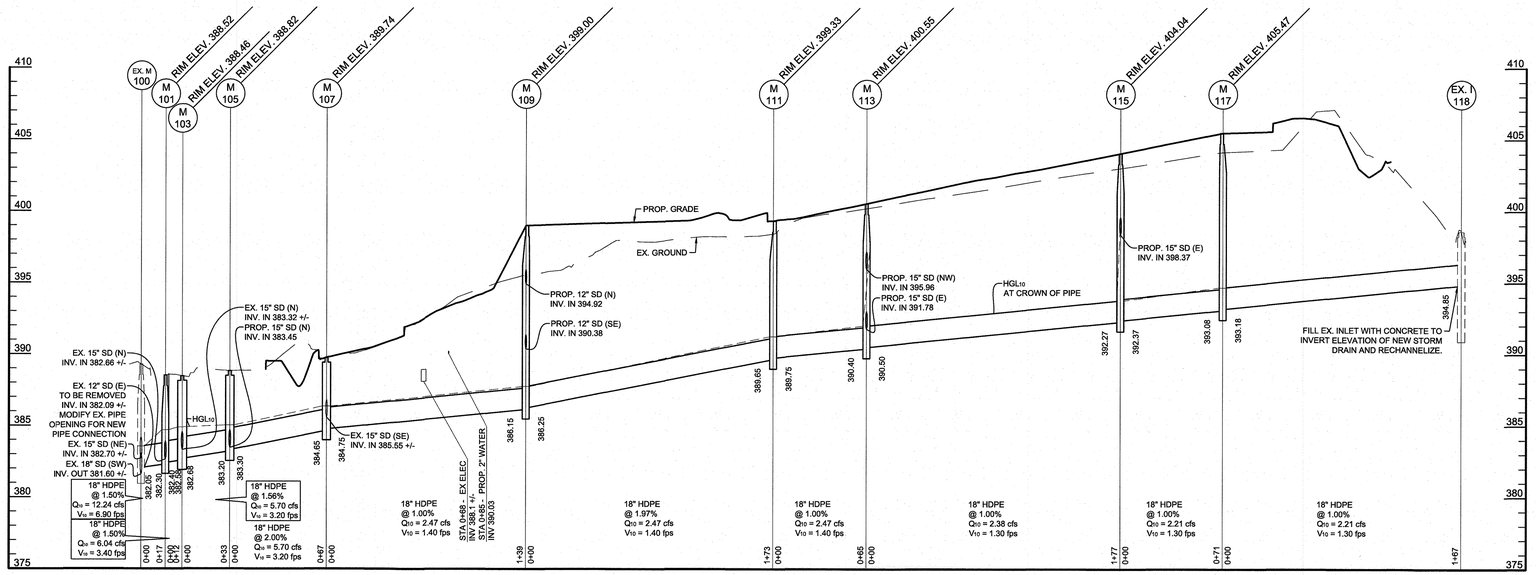
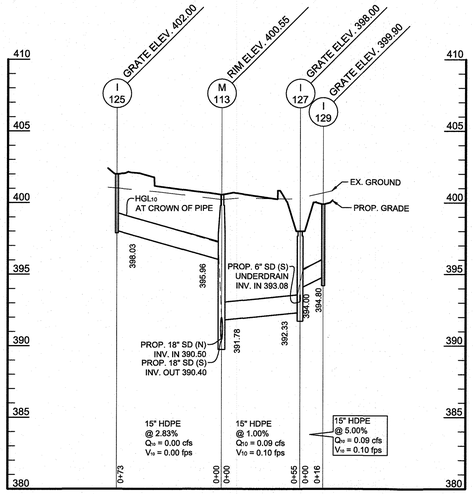


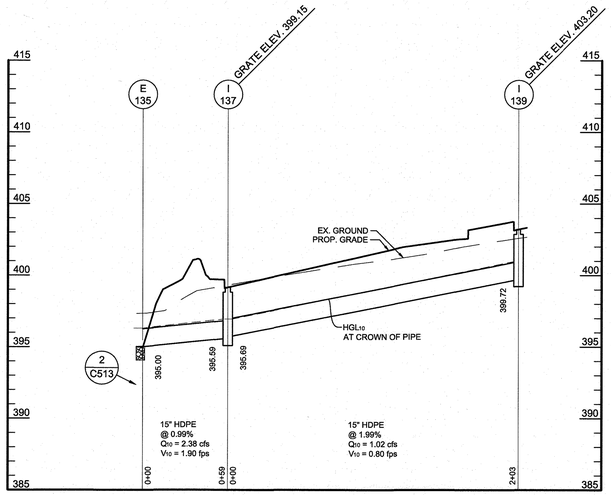
1 SD: Ex. I-118 to Ex. M-100

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



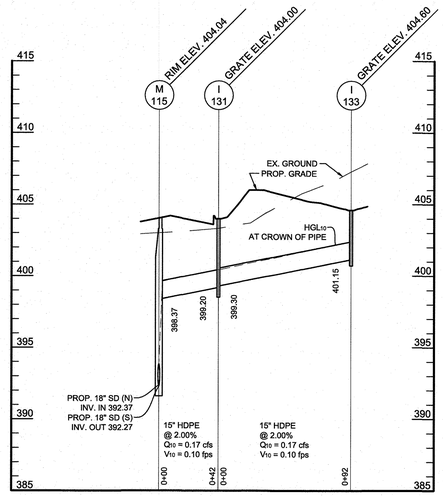
2 SD: I-125 & I-129 to M-113

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



3 SD: I-139 to E-135

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



4 SD: I-133 to M-115

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'

STRUCTURE TABLE

STRUCTURE #	STRUCTURE TYPE	TOP ELEV.	INV. IN	INV. OUT	COORDINATES	NOTES
M-101	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 388.52	18" HDPE (E) 382.40 15" RCP (N) 382.66	18" HDPE (S) 382.30	N: 573,935.28 E: 1,349,910.83	
M-103	SHALLOW PRECAST MANHOLE HOWARD CO. G-5.12	RIM 388.46	15" RCP (N) 383.32 18" HDPE (E) 382.68	18" HDPE (W) 382.58	N: 573,932.86 E: 1,349,922.35	
M-105	SHALLOW PRECAST MANHOLE HOWARD CO. G-5.12	RIM 388.82	18" HDPE (E) 383.30 15" HDPE (N) 383.45	18" HDPE (W) 383.20	N: 573,926.78 E: 1,349,955.07	
M-107	SHALLOW PRECAST MANHOLE HOWARD CO. G-5.12	RIM 389.74	18" HDPE (NE) 384.75 15" CMP (SE) 385.56 +/-	18" HDPE (W) 384.65	N: 573,932.02 E: 1,350,022.35	
M-109	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 399.00	18" HDPE (E) 386.25 12" HDPE (SE) 390.38 12" HDPE (N) 394.92	18" HDPE (SW) 386.15	N: 574,013.03 E: 1,350,135.52	REFER TO NOTE 1
M-111	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 399.33	18" HDPE (N) 389.75	18" HDPE (W) 389.65	N: 574,014.63 E: 1,350,308.40	
M-113	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 400.55	15" HDPE (NW) 395.96 15" HDPE (E) 391.78 18" HDPE (N) 390.50	18" HDPE (S) 390.40	N: 574,079.80 E: 1,350,308.32	REFER TO NOTE 1
M-115	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 404.04	18" HDPE (N) 392.37 15" HDPE (E) 398.37	18" HDPE (S) 392.27	N: 574,257.25 E: 1,350,308.28	REFER TO NOTE 1
M-117	PRECAST STANDARD MANHOLE HOWARD CO. G-5.12	RIM 405.47	18" HDPE (NW) 393.18	18" HDPE (S) 393.08	N: 574,328.70 E: 1,350,308.28	
I-119	TYPE D INLET w/ BEEHIVE GRATE HOWARD CO. D-4.11	GRATE 388.50	6" PVC (NE) 383.58	15" HDPE (S) 383.58	N: 573,951.36 E: 1,349,959.42	REFER TO NOTE 3
I-121	TYPE D INLET w/ BEEHIVE GRATE HOWARD CO. D-4.11	GRATE 396.00	6" PVC (SE) 391.08	12" HDPE (NW) 390.58	N: 573,999.89 E: 1,350,150.89	REFER TO NOTE 3
M-123	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 402.10	10" HDPE (W) 400.25 10" HDPE (E) 400.25	12" HDPE (S) 395.91	N: 574,032.70 E: 1,350,135.52	REFER TO NOTE 3
M-124	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 401.66		10" HDPE (E) 400.25	N: 574,032.70 E: 1,350,004.28	REFER TO NOTE 3
I-125	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 402.00		15" HDPE (SE) 398.03	N: 574,144.42 E: 1,350,273.95	
M-126	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 401.73		10" HDPE (W) 400.25	N: 574,032.70 E: 1,350,224.28	REFER TO NOTE 3
I-127	TYPE D INLET w/ BEEHIVE GRATE HOWARD CO. D-4.11	GRATE 398.00	6" PVC (S) 393.08 15" HDPE (N) 394.00	15" HDPE (W) 392.33	N: 574,092.83 E: 1,350,361.62	
I-129	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 399.90		15" HDPE (S) 394.80	N: 574,108.41 E: 1,350,357.82	
I-131	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 404.00	15" HDPE (N) 399.30	15" HDPE (W) 399.20	N: 574,257.25 E: 1,350,349.82	
I-133	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 404.60		15" HDPE (S) 401.15	N: 574,345.61 E: 1,350,377.10	
E-135	hdpe END SECTION		15" HDPE (NE) 395.00		N: 574,000.01 E: 1,350,238.42	
I-137	PRECAST DOUBLE TYPE 'S' INLET HOWARD CO. D-4.25	GRATE 399.15	15" HDPE (N) 395.69	15" HDPE (SW) 395.59	N: 574,032.54 E: 1,350,288.19	
I-139	PRECAST DOUBLE TYPE 'S' INLET HOWARD CO. D-4.25	GRATE 403.20		15" HDPE (S) 399.72	N: 574,235.47 E: 1,350,288.13	
M-200	PRECAST DOGHOUSE MANHOLE HOWARD CO. G-5.14	RIM 400.68	15" RCP (N) 395.89 12" HDPE (N) 396.14	15" BCCMP (S) 395.89	N: 574,003.88 E: 1,350,409.76	REFER TO NOTE 2
M-201	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 405.19	10" HDPE (SE) 403.75 10" HDPE (NW) 403.75	12" HDPE (S) 396.84	N: 574,071.63 E: 1,350,425.02	REFER TO NOTE 3
M-202	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 405.38		10" HDPE (SW) 403.75	N: 574,428.70 E: 1,350,523.03	REFER TO NOTE 3
M-204	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 405.46		10" HDPE (W) 403.75	N: 574,008.22 E: 1,350,530.98	REFER TO NOTE 3
M-210	SHALLOW PRECAST MANHOLE HOWARD CO. G-5.12	RIM 397.07	15" HDPE (E) 392.91 15" HDPE (NE) 392.91	15" RCP (SW) 392.81	N: 573,918.89 E: 1,350,521.60	
I-211	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 399.46	15" HDPE (NE) 394.00	15" HDPE (SW) 393.90	N: 573,981.07 E: 1,350,553.60	
I-213	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 402.70	15" HDPE (E) 396.89	15" HDPE (SW) 396.44	N: 574,015.21 E: 1,350,588.60	
I-215	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 402.10	15" HDPE (E) 398.78	15" HDPE (W) 398.68	N: 574,009.89 E: 1,350,623.98	
I-217	24" NYLOPLAST DRAIN BASIN STANDARD GRATE	GRATE 404.50		15" HDPE (W) 400.32	N: 574,005.04 E: 1,350,656.24	
I-219	PRECAST DOUBLE WR INLET HOWARD CO. D-4.31	GRATE 396.79	15" HDPE (E) 393.34	15" HDPE (W) 393.24	N: 573,914.29 E: 1,350,535.47	
M-221	SHALLOW PRECAST MANHOLE HOWARD CO. G-5.12	RIM 399.67	15" RCP (NE) 395.27	15" HDPE (W) 395.17	N: 573,911.07 E: 1,350,631.92	REFER TO NOTE 3
M-223	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 404.42	12" HDPE (SE) 402.75	15" RCP (SW) 395.63	N: 573,924.92 E: 1,350,645.01	REFER TO NOTE 2 & 3
M-224	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 405.00	12" HDPE (S) 402.75 12" HDPE (N) 403.75		N: 574,011.46 E: 1,351,046.68	REFER TO NOTE 3
M-225	24" NYLOPLAST DRAIN BASIN SOLID COVER	RIM 405.39		12" HDPE (SE) 403.75	N: 574,413.26 E: 1,351,054.12	REFER TO NOTE 3
I-231	12" NYLOPLAST DRAIN BASIN DOME GRATE	GRATE 406.40		4" HDPE (SE) 404.99	N: 574,147.52 E: 1,350,802.52	

STRUCTURE TABLE NOTES:

1. BOTTOM OF MANHOLE SHALL BE LINED WITH GRANITE BLOCKS PER HOWARD CO. D-4.01 DETAILS AND NOTES.
2. REFER TO SHEET C402 FOR TEMPORARY PIPE CONNECTION FOR EROSION & SEDIMENT CONTROL.
3. REFER TO STORMWATER SECTIONS (SHEET C511 & 512) FOR PROFILES OF STORM DRAIN.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-12-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-20-24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — DATE 6/13/24

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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. 56648, EXPIRATION DATE: 12/15/2024.

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 82 OF 125

STORM DRAIN PROFILES

C301

SDP-82-109

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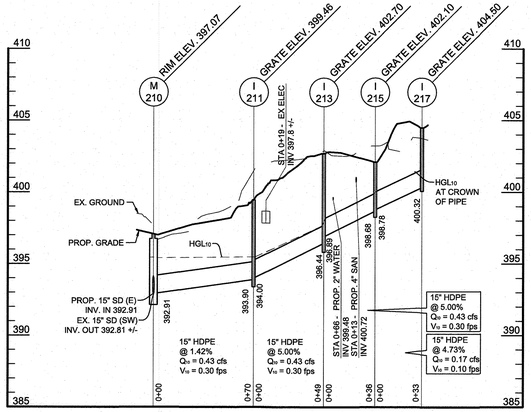
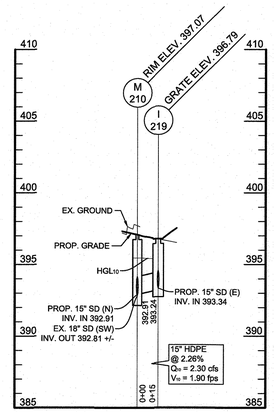


1 SD: I-217 to M-210

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



2 SD: I-219 to M-210

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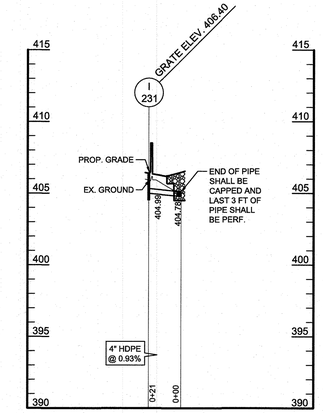
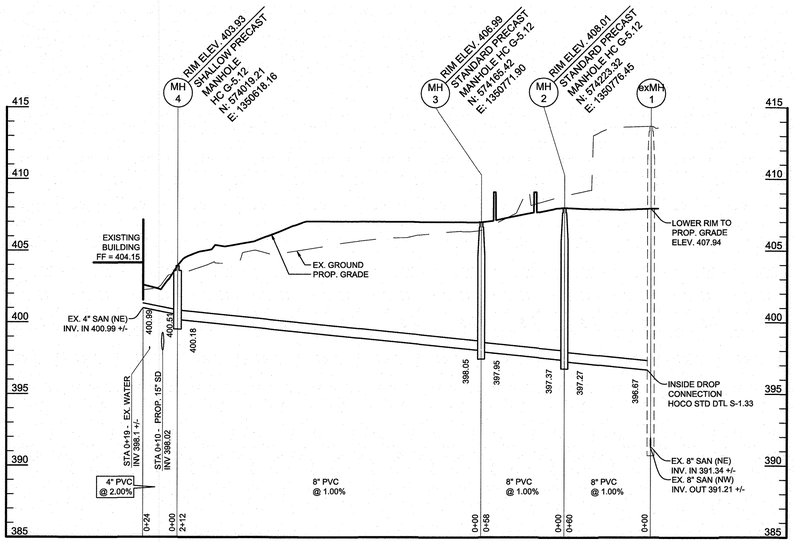
VERT. 1" = 5'



3 SD: I-231 to ESD #6

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



4 SANITARY PROFILE

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Marsha S. Rudawal — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56648, EXPIRATION DATE: 03/16/2024.

STATE OF MARYLAND — WILLIAM S. MAGNESS — 56648 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 83 OF 125

STORM DRAIN & SANITARY PROFILES

C302

SDP-82-109

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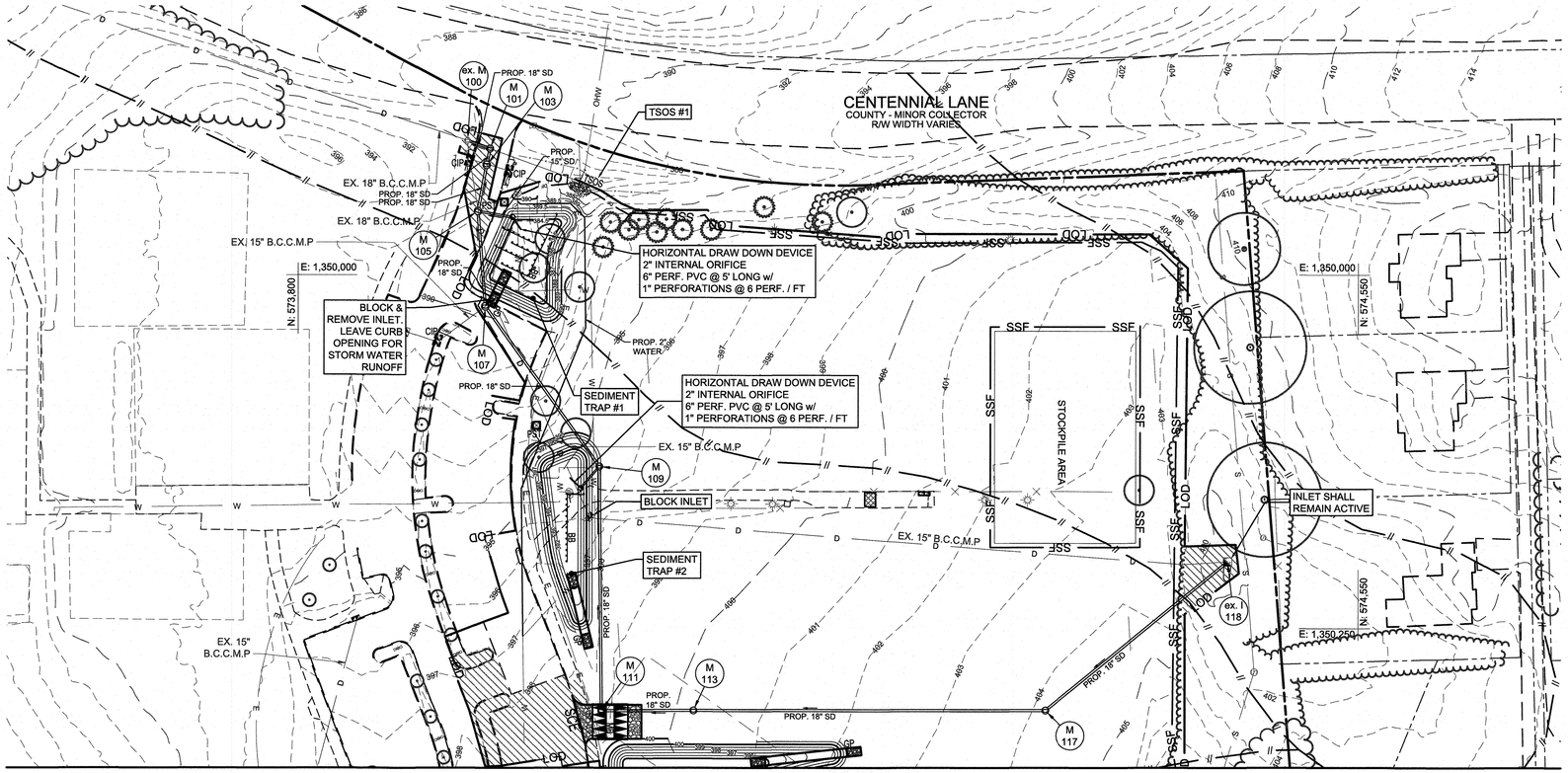


LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- EXISTING SOIL GROUP DELINEATION (UtD / GnG)
- PROPOSED STORM DRAIN
- PROPOSED WATER
- LIMIT OF DISTURBANCE (LOD)
- DIVERSION FENCE (DF)
- SUPER SILT FENCE (SSF)
- TREE PROTECTION FENCE
- INLET PROTECTION (AGIP AT GRADE, CIP CURB, COIP COMBINATION, SIP STANDARD)
- STABILIZED CONSTRUCTION ENTRANCE w/ MOUNTABLE BERM (SCE)
- TEMPORARY STONE OUTLET STRUCTURE (TSOS)
- PORTABLE SEDIMENT TANK (PST)
- GABION INFLOW PROTECTION (GP)
- BASIN BAFFLE (BB)
- ASPHALT BERM (AB)
- SAME DAY STABILIZATION

PIPE OUTLET SEDIMENT TRAP ST-1 TRAP NO. 1

DRAINAGE AREA - INITIAL	2.30 AC
DRAINAGE AREA - FINAL	1.87 AC
TOTAL STORAGE REQUIRED	8,280 CF
TOTAL STORAGE PROVIDED	8,385 CF
WET STORAGE REQUIRED	4,140 CF
WET STORAGE PROVIDED	4,155 CF
DRY STORAGE REQUIRED	4,140 CF
DRY STORAGE PROVIDED	4,230 CF
TRAP BOTTOM ELEVATION	384.50 FT
TRAP BOTTOM DIMENSIONS	30 FT x 50 FT
RISER CREST (DRY STORAGE) ELEVATION	388.00 FT
OUTLET (WET STORAGE) ELEVATION	386.50 FT
CLEANOUT ELEVATION	385.50 FT
TOP OF EMBANKMENT ELEVATION	389.50 FT
SIDE SLOPE	2 : 1
EMBANKMENT TOP WIDTH	4 FT
RISER DIAMETER	42 IN
BARREL DIAMETER	15 IN
BARREL INVERT ELEV. UPSTREAM	383.58 FT
BARREL INVERT ELEV. DOWNSTREAM	383.45 FT
TRASH RACK DIAMETER	60 IN
TRASH RACK HEIGHT	27 IN
BAFFLE LENGTH	140 FT
BAFFLE TOP ELEVATION	387.50 FT

PIPE OUTLET SEDIMENT TRAP ST-1 TRAP NO. 2

DRAINAGE AREA - INITIAL	1.22 AC
DRAINAGE AREA - FINAL	2.01 AC
TOTAL STORAGE REQUIRED	7,236 CF
TOTAL STORAGE PROVIDED	7,937 CF
WET STORAGE REQUIRED	3,618 CF
WET STORAGE PROVIDED	3,725 CF
DRY STORAGE REQUIRED	3,618 CF
DRY STORAGE PROVIDED	4,212 CF
TRAP BOTTOM ELEVATION	392.00 FT
TRAP BOTTOM DIMENSIONS	16 FT x 89 FT
RISER CREST (DRY STORAGE) ELEVATION	395.50 FT
OUTLET (WET STORAGE) ELEVATION	394.00 FT
CLEANOUT ELEVATION	393.00 FT
TOP OF EMBANKMENT ELEVATION	397.00 FT
SIDE SLOPE	2 : 1
EMBANKMENT TOP WIDTH	4 FT
RISER DIAMETER	36 IN
BARREL DIAMETER	12 IN
BARREL INVERT ELEV. UPSTREAM	390.58 FT
BARREL INVERT ELEV. DOWNSTREAM	390.38 FT
TRASH RACK DIAMETER	54 IN
TRASH RACK HEIGHT	25 IN
BAFFLE LENGTH	60 FT
BAFFLE TOP ELEVATION	395.00 FT

TEMPORARY STONE OUTLET STRUCTURE TSOS #1

DRAINAGE AREA			0.04 AC
TOTAL STORAGE REQUIRED			72 CF
WEIR LENGTH			6 FT
WEIR CREST ELEV.			388.00 FT
STAGE STORAGE ELEVATION	AREA	INCREMENT VOLUME	TOTAL VOLUME
386.00	0	N/A	151 CF
387.00	49	24.5	
388.00	204	126.5	

SOILS TABLE

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP	"K" VALUE
GuB	GLENELG-URBAN LAND-UDORTHENTS COMPLEX 0 TO 8% SLOPES	C	.49
GhB	GLENELG-URBAN LAND COMPLEX 0 TO 8% SLOPES	B	.43
MaC	MANOR LOAM 8 TO 15% SLOPES	B	.32
MaD	MANOR LOAM 15 TO 25% SLOPES	B	.32

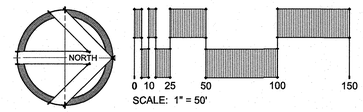
EROSION FACTOR, Kw, FOR SOIL SURVEY OF HOWARD COUNTY, MD 2003. COMAR DEFINES HIGHLY ERODIBLE SOILS AS THOSE SOILS WITH SLOPES GREATER THAN 15% OR SOILS WITH A K FACTOR GREATER THAN 0.35 AND WITH SLOPES GREATER THAN 5%.

UTILITY NOTES:

- CONTRACTOR SHALL INSTALL PROPOSED UTILITIES SHOWN PER SAME DAY STABILIZATION NOTE ON C423.
- ALL EXISTING INLETS WITHIN LOD SHALL BE BLOCKED UNLESS INLET PROTECTION AS SHOWN ON PLAN.
- REMOVE EXISTING UTILITIES NOTED TO BE REMOVED ON DEMOLITION PLAN AS NECESSARY FOR INSTALLATION OF PROPOSED UTILITIES SHOWN PER SAME DAY STABILIZATION NOTE ON C423.
- SEDIMENT TRAPS SHALL NOT BE INSTALLED UNTIL PROPOSED UTILITIES SHOWN ARE INSTALLED AND ACTIVE.

SEEDING & STABILIZATION NOTE

SEEDING AND STABILIZATION ARE TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.



PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

~~SIGNATURE~~ — DATE 5/6/24

EMILY MAGNESS — PRINTED NAME — 56848 P.E. No.

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Brattin — HOWARD SOIL CONSERVATION DISTRICT — 05/15/24 DATE

OWNER'S / DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT, AND/OR MDE."

OWNER'S / DEVELOPER'S SIGNATURE — 5/6/2024 DATE

Nicholas Mooneyhan — PRINTED NAME

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kendall — DIRECTOR — 6.17.24 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.24.24

CHIEF, DIVISION OF LAND DEVELOPMENT pp — 6/17/24 DATE

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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. 56848, EXPIRATION DATE: 12/10/2024.

STATE OF MARYLAND — EMILY A. MAGNESS — 56848 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	CENTENNIAL PARK WEST			N/A		9
		LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 84 OF 125

ESC EXISTING CONDITIONS

C401

SDP-82-109

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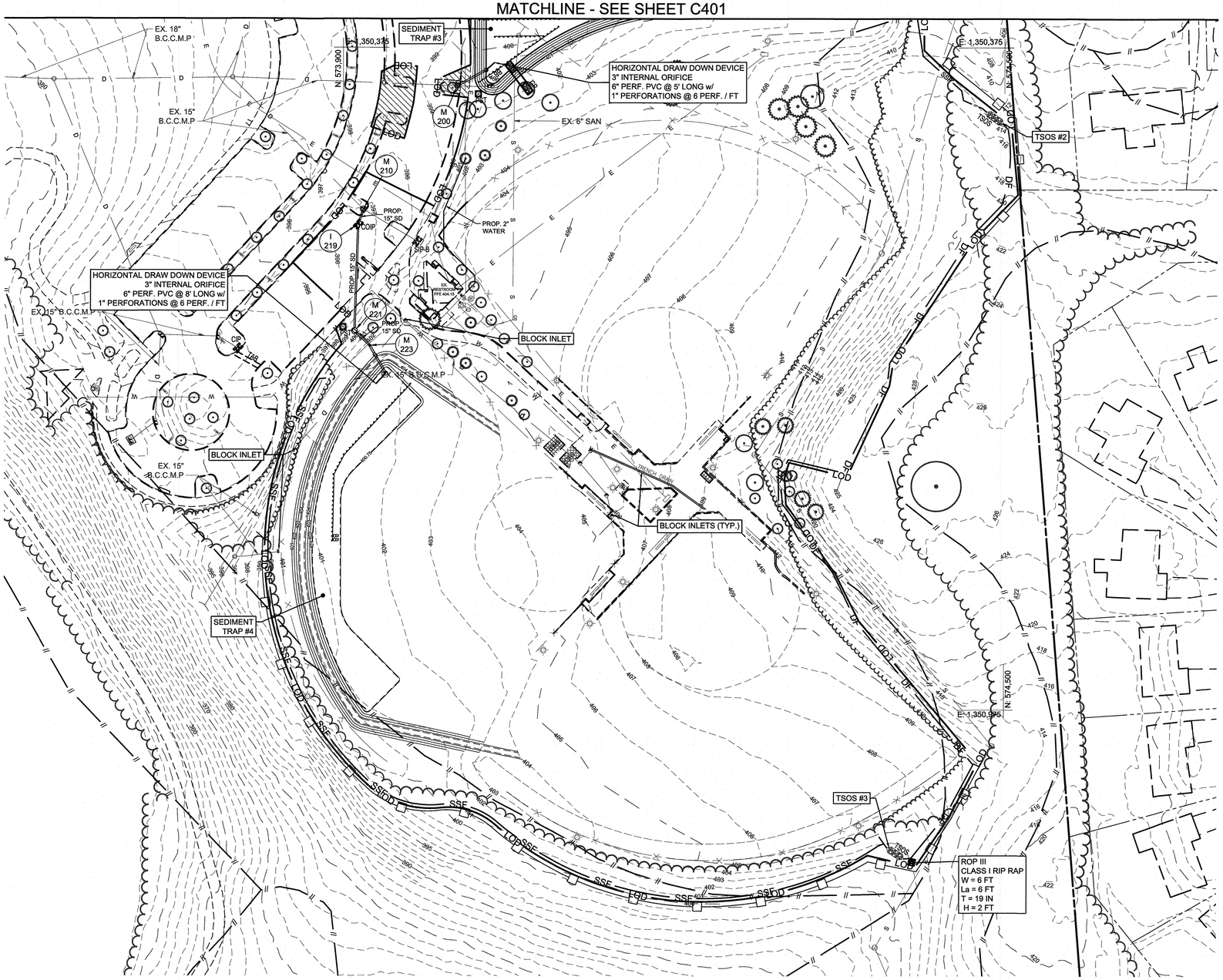


TEMPORARY STONE OUTLET STRUCTURE TSOS #2

DRAINAGE AREA			0.09 AC
TOTAL STORAGE REQUIRED			72 CF
WEIR LENGTH			6 FT
WEIR CREST ELEV.			415.5 FT
STAGE STORAGE ELEVATION	AREA	INCREMENT VOLUME	TOTAL VOLUME
414.00	0	N/A	435 CF
415.00	390	195	
415.50	573	240	

TEMPORARY STONE OUTLET STRUCTURE TSOS #3

DRAINAGE AREA			0.14 AC
TOTAL STORAGE REQUIRED			252 CF
WEIR LENGTH			6 FT
WEIR CREST ELEV.			405.0 FT
STAGE STORAGE ELEVATION	AREA	INCREMENT VOLUME	TOTAL VOLUME
403.50	0	N/A	463 CF
404.00	175	44	
405.00	663	419	

PIPE OUTLET SEDIMENT TRAP ST-1 TRAP NO. 3

DRAINAGE AREA - INITIAL	2.26 AC
DRAINAGE AREA - FINAL	3.58 AC
TOTAL STORAGE REQUIRED	12,888 CF
TOTAL STORAGE PROVIDED	14,822 CF
WET STORAGE REQUIRED	6,444 CF
WET STORAGE PROVIDED	6,996 CF
DRY STORAGE REQUIRED	6,444 CF
DRY STORAGE PROVIDED	7,826 CF
TRAP BOTTOM ELEVATION	395.00 FT
TRAP BOTTOM DIMENSIONS	42 FT x 104 FT
RISER CREST (DRY STORAGE) ELEVATION	398.25 FT
OUTLET (WET STORAGE) ELEVATION	396.75 FT
CLEANOUT ELEVATION	396.00 FT
TOP OF EMBANKMENT ELEVATION	400.00 FT
SIDE SLOPE	2 : 1
EMBANKMENT TOP WIDTH	4 FT
RISER DIAMETER	42 IN
BARREL DIAMETER	15 IN
BARREL INVERT ELEV. UPSTREAM	396.54 FT
BARREL INVERT ELEV. DOWNSTREAM	396.28 FT
TRASH RACK DIAMETER	60 IN
TRASH RACK HEIGHT	27 IN
BAFFLE LENGTH	207 FT
BAFFLE TOP ELEVATION	397.75 FT

PIPE OUTLET SEDIMENT TRAP ST-1 TRAP NO. 4

DRAINAGE AREA - INITIAL	2.71 AC
DRAINAGE AREA - FINAL	4.41 AC
TOTAL STORAGE REQUIRED	15,876 CF
TOTAL STORAGE PROVIDED	24,947 CF
WET STORAGE REQUIRED	7,938 CF
WET STORAGE PROVIDED	12,932 CF
DRY STORAGE REQUIRED	7,938 CF
DRY STORAGE PROVIDED	12,015 CF
TRAP BOTTOM ELEVATION	400.75 FT
TRAP BOTTOM DIMENSIONS	25 FT x 284 FT
RISER CREST (DRY STORAGE) ELEVATION	403.00 FT
OUTLET (WET STORAGE) ELEVATION	402.00 FT
CLEANOUT ELEVATION	401.50 FT
TOP OF EMBANKMENT ELEVATION	404.50 FT
SIDE SLOPE	2 : 1
EMBANKMENT TOP WIDTH	4 FT
RISER DIAMETER	42 IN
BARREL DIAMETER	15 IN
BARREL INVERT ELEV. UPSTREAM	400.00 FT
BARREL INVERT ELEV. DOWNSTREAM	399.73 FT
TRASH RACK DIAMETER	60 IN
TRASH RACK HEIGHT	27 IN
BAFFLE LENGTH	169 FT
BAFFLE TOP ELEVATION	403.00 FT

LEGEND

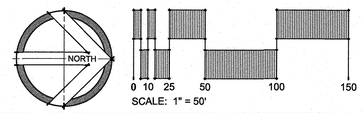
- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (EX. 15" SD)
- EXISTING WATER
- EXISTING SANITARY SEWER
- EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- EXISTING SOIL GROUP DELINEATION (UtD, GnG)
- PROPOSED STORM DRAIN
- LIMIT OF DISTURBANCE (LOD)
- DIVERSION FENCE (DF)
- SUPER SILT FENCE (SSF)
- TREE PROTECTION FENCE
- INLET PROTECTION (AGIP AT GRADE, CIP CURB, COIP COMBINATION, SIP STANDARD)
- STABILIZED CONSTRUCTION ENTRANCE w/ MOUNTABLE BERM (MB, SCE)
- TEMPORARY STONE OUTLET STRUCTURE (TSOS)
- PORTABLE SEDIMENT TANK (PST)
- GABION INFLOW PROTECTION (GP)
- BASIN BAFFLE (BB)
- ASPHALT BERM (TAB)
- SAME DAY STABILIZATION

SEEDING & STABILIZATION NOTE

SEEDING AND STABILIZATION ARE TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

UTILITY NOTES:

- CONTRACTOR SHALL INSTALL PROPOSED UTILITIES SHOWN PER SAME DAY STABILIZATION NOTE ON C423.
- ALL EXISTING INLETS WITHIN LOD SHALL BE BLOCKED UNLESS INLET PROTECTION AS SHOWN ON PLAN.
- REMOVE EXISTING UTILITIES NOTED TO BE REMOVED ON DEMOLITION PLAN AS NECESSARY FOR INSTALLATION OF PROPOSED UTILITIES SHOWN PER SAME DAY STABILIZATION NOTE ON C423.
- SEDIMENT TRAPS SHALL NOT BE INSTALLED UNTIL PROPOSED UTILITIES SHOWN ARE INSTALLED AND ACTIVE.



PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE — DATE 5/6/24

EMILY MAGNESS — PRINTED NAME — 56848 P.E. No.

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 05/15/24

OWNER'S / DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

OWNER'S / DEVELOPER'S SIGNATURE — DATE 5/6/2024

Nicholas Mooneyhan — PRINTED NAME

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendall, DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/24/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

Howard County RECREATION & PARKS

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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. 56848, EXPIRATION DATE: 12/10/2024.

STATE OF MARYLAND — EMILY A. MAGNESS — 56848 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME: CENTENNIAL PARK WEST			SECTION/AREA: N/A		LOT/PARCEL NO.: 9
LIBER / FOLIO #: L. 781/ F. 592	GRID #: 7	ZONING: R-20	TAX MAP NO.: 0030	ELECT DISTRICT: 2nd	CENSUS TRACT: 602304
WATER CODE: --	SEWER CODE: --		PROPERTY IMPROVEMENT: NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 85 OF 125

ESC EXISTING CONDITIONS

C402

SDP-82-109

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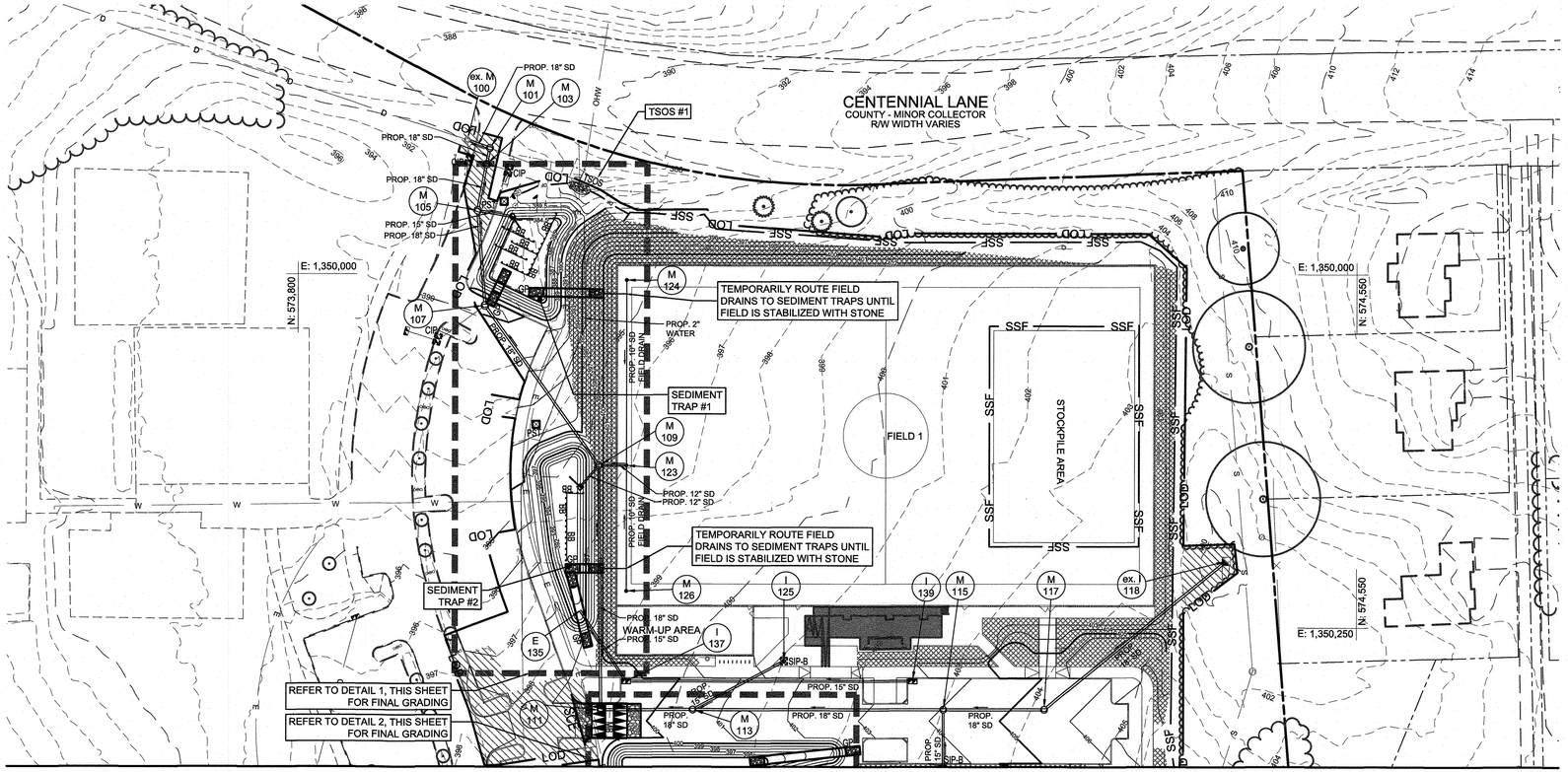
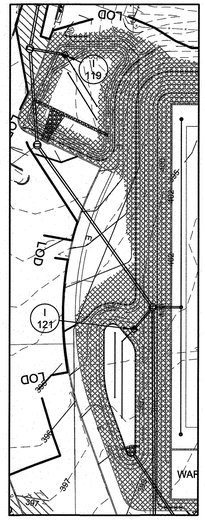
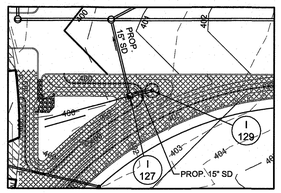


1 FINAL GRADING - ESD 2 & 4





2 FINAL GRADING - ESD 3

FIELD SUBDRAINAGE STONE NOTE

SUBDRAINAGE STONE SHALL BE PROTECTED IMMEDIATELY FROM SEDIMENT-LADEN RUNOFF AS IT IS BEING INSTALLED. PROTECTION OF THE SUBDRAINAGE STONE SHALL INCLUDE, BUT NOT LIMITED TO, A LAYER OF WOVEN SILT FILM GEOTEXTILE FABRIC PLACED ON TOP OF THE STONE. REFER TO TABLE H.1 ON SHEET C424 FOR FABRIC. GEOTEXTILE FABRIC SHALL BE REMOVED PRIOR TO THE TURF FIELD INSTALLATION. EQUIPMENT TRAFFIC OVER THE SUBDRAINAGE STONE SHALL HAVE CLEAN WHEELS AND UTILIZE STEEL PLATES FOR TRAVERSING THE FIELD AREA.

SEEDING & STABILIZATION NOTE

SEEDING AND STABILIZATION ARE TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Brachie — 05/15/24
HOWARD SOIL CONSERVATION DISTRICT — DATE

OWNER'S / DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

OWNER'S / DEVELOPER'S SIGNATURE — 5/6/2024 DATE
Nicholas Mooneyham
PRINTED NAME

DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE — 5/6/24 DATE
EMILY MAGNESS — 56848
PRINTED NAME — P.E. No.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — 6.7.24 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION — 5/28/24 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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410.683.3388 www.siteresourcesinc.com

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. 56848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — EMILY A. MAGNESS — 56848 — PROFESSIONAL ENGINEER — 5/6/24

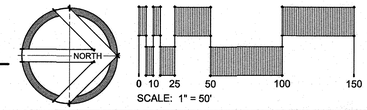
NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

TEMPORARY STONE OUTLET STRUCTURE TSOS #1

DRAINAGE AREA		0.04 AC
TOTAL STORAGE REQUIRED		72 CF
WEIR LENGTH		6 FT
WEIR CREST ELEV.		388.00 FT
STAGE STORAGE		
ELEVATION	AREA	INCREMENT VOLUME / TOTAL VOLUME
386.00	0	N/A
387.00	49	24.5
388.00	204	126.5 — 151 CF

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (D)
- EXISTING WATER (W)
- EXISTING SANITARY SEWER (S)
- EXISTING ELECTRIC (E)
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- EXISTING SOIL GROUP DELINEATION (UtD, GnG)
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROP. 6" WATER
- PROPOSED WATER
- PROPOSED SANITARY SEWER (S)
- PROPOSED ELECTRIC (E)
- LOD — LIMIT OF DISTURBANCE
- DF — DIVERSION FENCE
- SSF — SUPER SILT FENCE
- TREE PROTECTION FENCE
- INLET PROTECTION: AGIP 22 AT GRADE; CIP 22 CURB; COIP 22 COMBINATION; SIP 22 STANDARD
- STABILIZED CONSTRUCTION ENTRANCE w/ MOUNTABLE BERM (SCE)
- TEMPORARY STONE OUTLET STRUCTURE (TSOS)
- PORTABLE SEDIMENT TANK (PST)
- GABION INFLOW PROTECTION (GP)
- BASIN BAFFLE (BB)
- ASPHALT BERM (AB)
- SAME DAY STABILIZATION
- EROSION CONTROL MATTING
- PROPOSED CONTOURS (350 / 348)

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 86 OF 125

ESC PROPOSED CONDITION

C411

SDP-82-109

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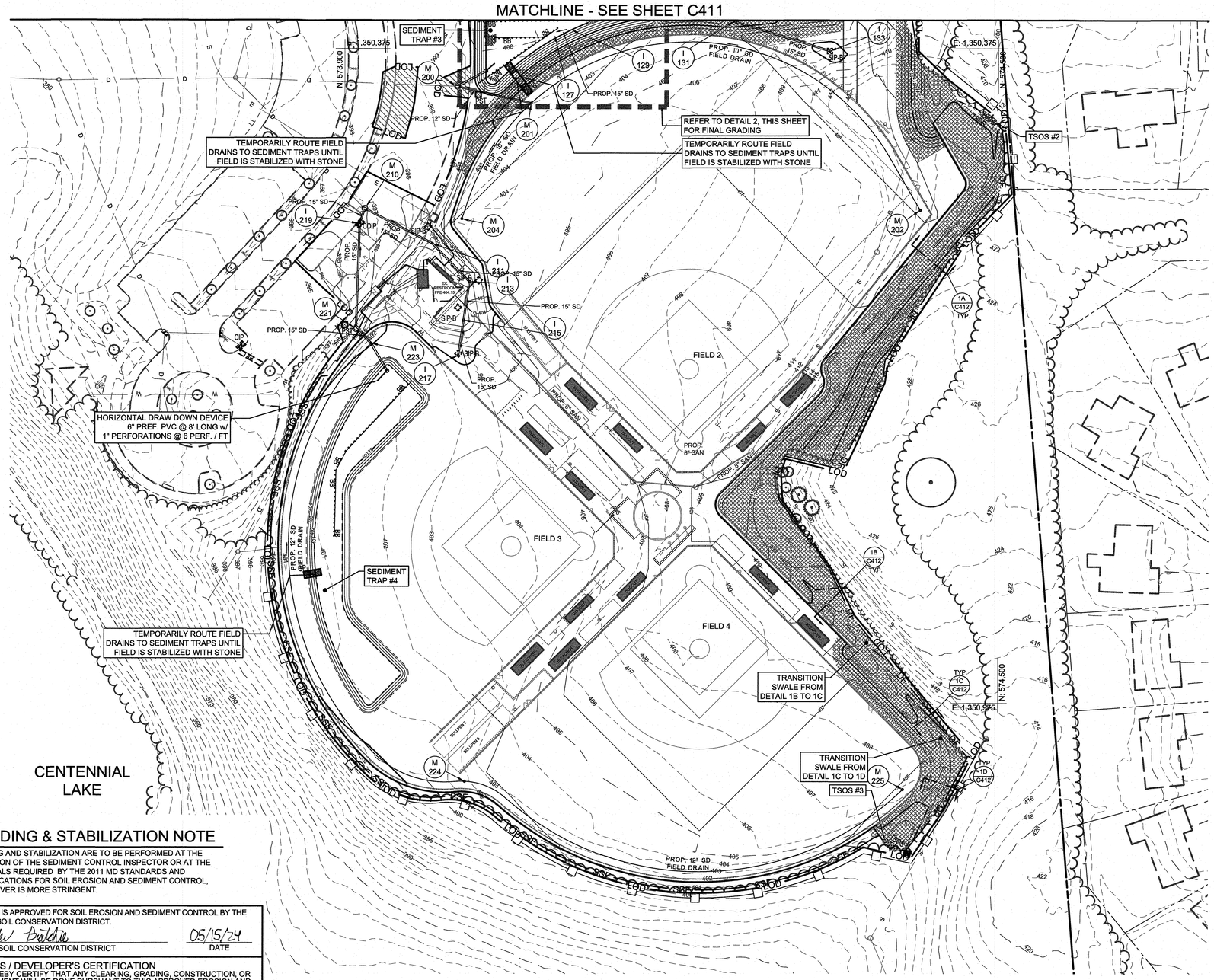

SEEDING & STABILIZATION NOTE

SEEDING AND STABILIZATION ARE TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 MD STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Bratchie — HOWARD SOIL CONSERVATION DISTRICT — 05/15/24 DATE

OWNER'S / DEVELOPER'S CERTIFICATION

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OWNER'S / DEVELOPER'S SIGNATURE — 5/6/2024 DATE

Nicholas Mooneyhan — PRINTED NAME

DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE — 5/6/24 DATE

EMILY MAGNESS — PRINTED NAME — 56848 P.E. No.

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary Kay Sigaty — DIRECTOR — 6-17-24 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — EMILY A. MAGNESS — 56848 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 87 OF 125

ESC PROPOSED CONDITION

C412

SDP-82-109

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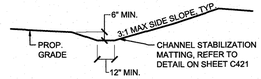
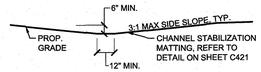
TEMPORARY STONE OUTLET STRUCTURE TSOS #2			
DRAINAGE AREA			0.29 AC
TOTAL STORAGE REQUIRED			522 CF
WEIR LENGTH			6 FT
WEIR CREST ELEV.			415.5 FT
STAGE STORAGE ELEVATION	AREA	INCREMENT VOLUME	TOTAL VOLUME
414.00	0	N/A	625 CF
415.00	435	217	
415.50	1200	408	

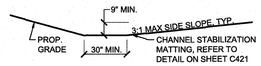
TEMPORARY STONE OUTLET STRUCTURE TSOS #3			
DRAINAGE AREA			0.32 AC
TOTAL STORAGE REQUIRED			576 CF
WEIR LENGTH			6 FT
WEIR CREST ELEV.			405.0 FT
STAGE STORAGE ELEVATION	AREA	INCREMENT VOLUME	TOTAL VOLUME
403.50	0	N/A	1053 CF
404.00	500	250	
405.00	1107	803	



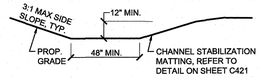
'A' - SWALE W



'B' - SWALE E1



'C' - SWALE E2



'D' - SWALE E3

1 SWALE CROSS-SECTIONS

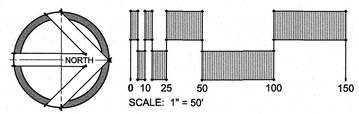
SCALE: 1" = 50'

FIELD SUBDRAINAGE STONE NOTE

SUBDRAINAGE STONE SHALL BE PROTECTED IMMEDIATELY FROM SEDIMENT-LADEN RUNOFF AS IT IS BEING INSTALLED. PROTECTION OF THE SUBDRAINAGE STONE SHALL INCLUDE, BUT NOT LIMITED TO, A LAYER OF WOVEN SILT FILM GEOTEXTILE FABRIC PLACED ON TOP OF THE STONE. REFER TO TABLE H.1 ON SHEET C424 FOR FABRIC. GEOTEXTILE FABRIC SHALL BE REMOVED PRIOR TO THE TURF FIELD INSTALLATION. EQUIPMENT TRAFFIC OVER THE SUBDRAINAGE STONE SHALL HAVE CLEAN WHEELS AND UTILIZE STEEL PLATES FOR TRAVERSING THE FIELD AREA.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

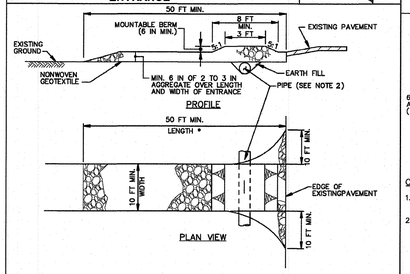


LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- D — EXISTING STORM DRAIN
- W — EXISTING WATER
- S — EXISTING SANITARY SEWER
- E — EXISTING ELECTRIC
- EXISTING LIGHTING
- 348 / 350 — EXISTING CONTOURS
- UtD / GnG — EXISTING SOIL GROUP DELINEATION
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FIELD LIGHTING
- PROPOSED FLAGPOLE
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- D — PROPOSED STORM DRAIN
- PROP. 6" WATER — PROPOSED WATER
- S — PROPOSED SANITARY SEWER
- E — PROPOSED ELECTRIC
- LOD — LIMIT OF DISTURBANCE
- DF — DIVERSION FENCE
- SSF — SUPER SILT FENCE
- TREE PROTECTION FENCE
- AGIP 22 AT GRADE; CIP 22 CURB; COIP 22 COMBINATION; SIP 22 STANDARD — INLET PROTECTION
- MB SCE — STABILIZED CONSTRUCTION ENTRANCE w/ MOUNTABLE BERM
- TSOS — TEMPORARY STONE OUTLET STRUCTURE
- PST — PORTABLE SEDIMENT TANK
- GP — GABION INFLOW PROTECTION
- BB — BASIN BAFFLE
- TAB — ASPHALT BERM
- SAME DAY STABILIZATION
- EROSION CONTROL MATTING
- 348 / 350 — PROPOSED CONTOURS

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



CONSTRUCTION SPECIFICATIONS

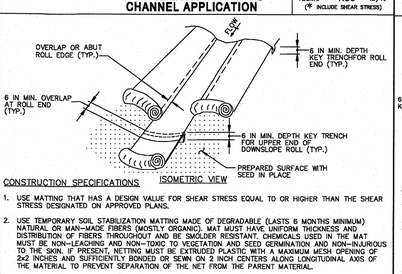
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE TO FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING 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 – 1.50 lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

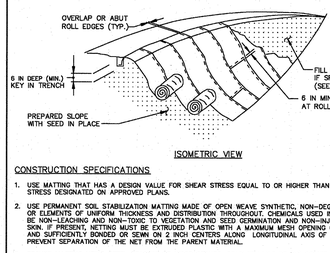
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SHOULDER 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 "I" 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. "I" 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-D PERMANENT SOIL STABILIZATION MATTING SLOPE APPLICATION

STANDARD SYMBOL: PSSMS – 1.50 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 "I" 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. "I" 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 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

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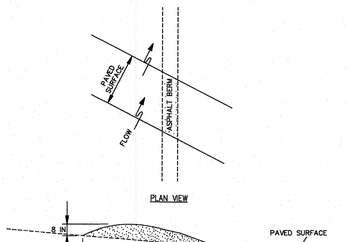
DETAIL C-5 TEMPORARY ASPHALT BERM

STANDARD SYMBOL: TAB



CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT BERM ON AN UNINTERRUPTED, CONTINUOUS GRADE.
2. INSTALL BERM TO CONFORM TO CROSS SECTION DIMENSIONS OF A UNIFORM HEIGHT OF 8 INCHES MINIMUM AND APPROXIMATE WIDTH OF 3½ FEET.
3. PROVIDE OUTLET PROTECTION AS REQUIRED ON PLAN.
4. COMPACT ASPHALT BERM.
5. REPAIR DAMAGED ASPHALT. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.
6. UPON REMOVAL OF ASPHALT BERM, RETURN TO ORIGINAL CONDITIONS OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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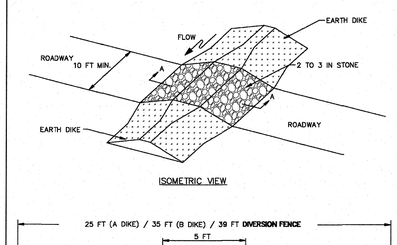
DETAIL C-8 MOUNTABLE BERM

STANDARD SYMBOL: MB



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

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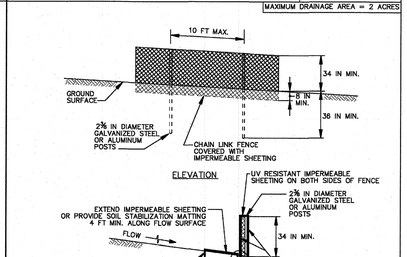
DETAIL C-9 DIVERSION FENCE

STANDARD SYMBOL: DF



CONSTRUCTION SPECIFICATIONS

1. USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2⅜ INCH MAXIMUM OPENING).
2. USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 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 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE.
5. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND. SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.
6. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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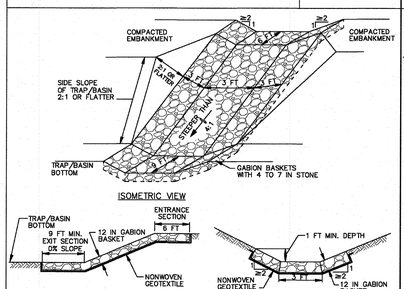
DETAIL D-3-2 GABION INFLOW PROTECTION

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

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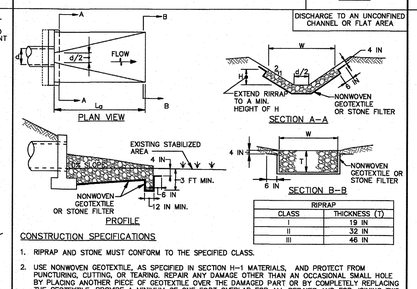
DETAIL D-4-1-C ROCK OUTLET PROTECTION III

STANDARD SYMBOL: ROPIII



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 MINIMUM 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 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 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 RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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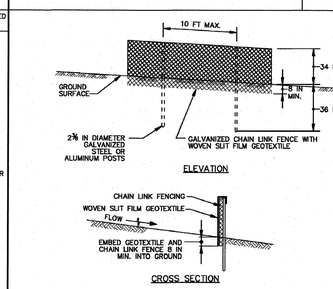
DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL: SSF



CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 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 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HOG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF 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.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER 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 SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT 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 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

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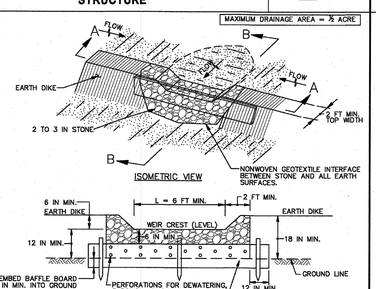
DETAIL E-7 TEMPORARY STONE OUTLET STRUCTURE

STANDARD SYMBOL: TSOS



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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-7 TEMPORARY STONE OUTLET STRUCTURE

STANDARD SYMBOL: TSOS

CONSTRUCTION SPECIFICATIONS

1. PROVIDE STORAGE VOLUME AS SPECIFIED ON APPROVED PLANS.
2. USE NONWOVEN GEOTEXTILE ON INTERFACE BETWEEN GROUND AND STONE.
3. PERFORATE BAFFLE BOARD WITH 3 ROWS OF 1 INCH DIAMETER HOLES 6 INCHES ON CENTER, EMBED A MINIMUM OF 4 INCHES INTO GROUND, AND EXTEND BAFFEL BOARD MINIMUM OF 12 INCHES INTO EARTH DIKE.
4. USE CLEAN 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE. PLACE WOVEN MONOFILAMENT GEOTEXTILE ON UPSTREAM FACE AND COVER WITH A MINIMUM OF 6 INCHES OF ADDITIONAL STONE.
5. USE NONWOVEN AND WOVEN MONOFILAMENT GEOTEXTILES AS SPECIFIED IN SECTION H-1 MATERIALS.
6. SET WEIR CREST OF STONE 6 INCHES LOWER THAN THE TOP OF EARTH DIKE. USE MINIMUM LENGTH OF 6 FEET FOR WEIR CREST.
7. REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO WITHIN 6 INCHES OF WEIR CREST. REPLACE GEOTEXTILE AND STONE FACING WHEN STRUCTURE CEASES TO DRAIN. MAINTAIN LINE, GRADE, AND CROSS SECTION.
8. UPON REMOVAL OF STONE OUTLET STRUCTURE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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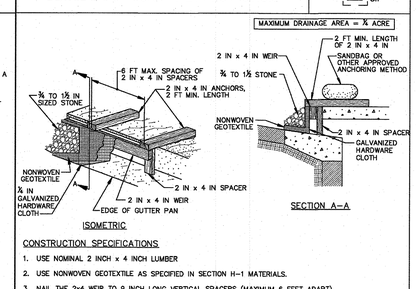
DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL: CIP

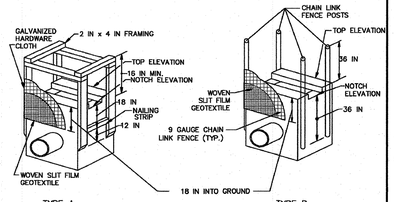


CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS PIECE OF ¾ INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO

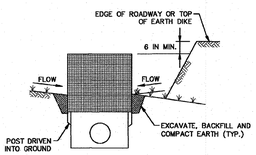
DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL: SIP



TYPE A TYPE B

ISOMETRIC VIEW



SECTION FOR TYPE A AND B

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 SLIT FILM GEOTEXTILE 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 2 INCH X 4 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 FRAME AS SHOWN, STRETCH ¾ 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 2½ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 9 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 ELEVATION 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.

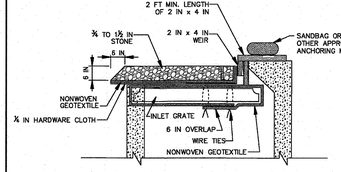
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

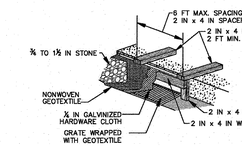
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | 2011 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL: COIP



SECTION



ISOMETRIC 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-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL: COIP

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. LIFT GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, THEN SET GRATE BACK IN PLACE.
4. ATTACH A CONTINUOUS PIECE OF ¾ INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2X4 WEIR, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH IT TO THE WEIR.
6. NAIL THE 2X4 WEIR TO THE TOP OF A 9 INCH LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART).
7. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2X4 ANCHORS (MINIMUM 2 FOOT LENGTHS OF 2x4 INCH TO THE TOP OF THE WEIR AT SPACER LOCATIONS). EXTEND 2X4 ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
8. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND BOTH ENDS OF THE THROAT OPENING.
9. FORM THE ¼ INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
10. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
11. 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.

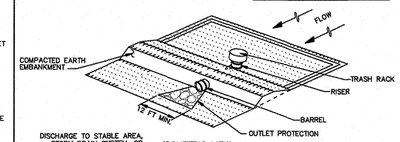
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

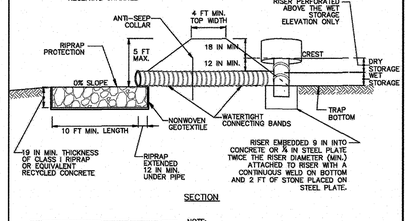
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | 2011 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-I

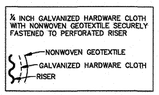
STANDARD SYMBOL: ST-I



ISOMETRIC VIEW



SECTION



NOTE:
REFER TO DETAIL G-2-1 ~ TYPICAL ANTI-SEEP COLLARS
REFER TO DETAIL G-2-2 ~ RISER BASE
REFER TO DETAIL G-2-3 ~ CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE

1 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

DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-I

STANDARD SYMBOL: ST-I

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. PERFORATE THE RISER WITH 1 INCH DIAMETER HOLES SPACED 6 INCHES ON CENTER WITH THE LOWEST PERFORATIONS AT THE WET STORAGE ELEVATION OR PROVIDE A HORIZONTAL OR VERTICAL DRAW-DOWN DEVICE PERFORATED ACCORDING TO APPROVED PLAN. DO NOT PERFORATE THE RISER WITHIN 6 INCHES OF THE TOP OF THE HORIZONTAL BARREL.
4. SET RISER/BARREL ASSEMBLY PRIOR TO EMBANKMENT CONSTRUCTION. MAKE ALL PIPE CONNECTIONS WATERTIGHT. OFFSET RISER FROM EMBANKMENT TO ACCOMODATE PLACEMENT OF THE TRASH RACK. ANCHOR THE RISER WITH EITHER A REINFORCED CONCRETE BASE OR STEEL PLATE BASE TO PREVENT FLOTATION. MAKE CONCRETE BASES AT LEAST TWICE THE RISER DIAMETER AND 18 INCHES THICK WITH THE RISER EMBEDDED 9 INCHES.
5. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
6. HAND COMPACT IN 4 INCH LAYERS FILL MATERIAL AROUND THE PIPE SPILLWAY. PLACE A MINIMUM OF 2 FEET OF HAND COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT.
7. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE RISER CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
8. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
9. WRAP THE RISER WITH ¾ INCH GALVANIZED HARDWARE CLOTH THEN WRAP WITH NONWOVEN GEOTEXTILE. DO NOT WRAP WITH MORE THAN ONE LAYER OF GEOTEXTILE. EXTEND HARDWARE CLOTH AND GEOTEXTILE AT LEAST 6 INCHES ABOVE THE HIGHEST PERFORATIONS AND AT LEAST 6 INCHES BELOW THE LOWEST PERFORATIONS. OVERLAP, FOLD AND FASTEN WHERE ENDS OF GEOTEXTILE COME TOGETHER TO PREVENT BYPASS. REPLACE GEOTEXTILE AS NECESSARY TO PREVENT CLOGGING.
10. USE STRAPS OR CONNECTING BANDS AT THE TOP AND BOTTOM OF THE GEOTEXTILE TO HOLD THE GEOTEXTILE AND HARDWARE CLOTH IN PLACE.
11. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
12. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
13. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO THE APPROVED PLAN AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
14. 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. MAINTAIN WATER TIGHT CONNECTIONS. REPLACE GEOTEXTILE AROUND PERFORATED RISER IF DRY STORAGE VOLUME DOES NOT DRAW DOWN WITHIN 10 HOURS.
15. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
16. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

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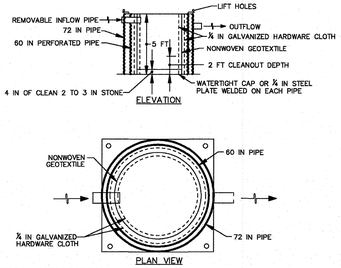
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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

DETAIL F-3 PORTABLE SEDIMENT TANK

STANDARD SYMBOL: ⊠PST



CONSTRUCTION SPECIFICATIONS

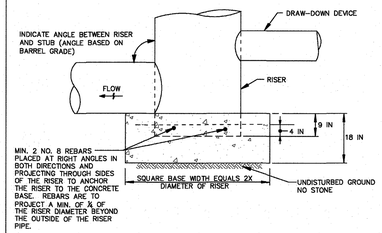
1. PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
2. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER 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 G-2-2 CORRUGATED RISER BASE

STANDARD SYMBOL:



CONSTRUCTION SPECIFICATIONS

1. BOTTOM OF CONCRETE BASE TO BE PLACED ON UNDISTURBED, NATURAL GROUND.
2. NO STONE IS ALLOWED UNDER BASE. IF NECESSARY, TO ACHIEVE STABILITY INCREASE DEPTH OF CONCRETE BASE.

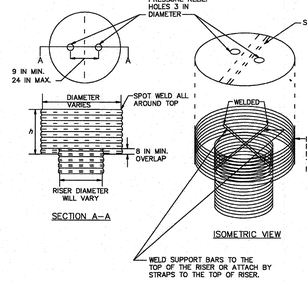
1 OF 2

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 G-2-3 CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE

STANDARD SYMBOL: TR



NOTE:
THE ABOVE TRASH RACK AND ANTI-VORTEX DEVICE INFORMATION IS FOR CORRUGATED METAL PIPE ONLY. CONCRETE RISERS MUST MEET THE REQUIREMENTS OF MD 378.

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-2-3 CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE

STANDARD SYMBOL: TR

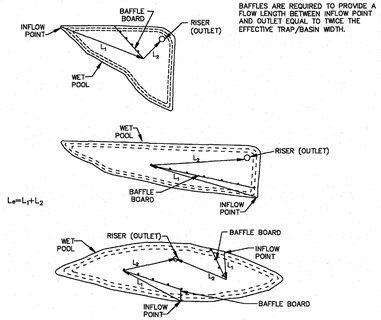
RISER DIAM. (N)	TRASH RACK CYLINDER DIAM. (N)	THICKNESS (GAUGE)	h (N)	MINIMUM SIZE SUPPORT BAR	MINIMUM TOP THICKNESS (GAUGE)	STIFFENER
12	18	16	14	#6 REBAR	16	N/A
15	21	16	15	#6 REBAR	16	N/A
18	27	16	16	#6 REBAR	16	N/A
21	30	16	19	#6 REBAR	16	N/A
24	36	16	21	#6 REBAR	14	N/A
27	42	16	21	#6 REBAR	14	N/A
36	54	14	25	#8 REBAR	12	N/A
42	60	14	27	#8 REBAR	12	N/A
48	72	12	29	1⅜ IN PIPE OR 1¼ x 1¼ x ¼ ANGLE	10	N/A
54	78	12	33	1½ IN PIPE OR 1¼ x 1¼ x ¼ ANGLE	10	N/A
60	90	12	37	1½ IN PIPE OR 1½ x 1½ x ¼ ANGLE	8	N/A
66	96	10	41	2 IN PIPE OR 2 x 2 x 5/16 ANGLE	8	2 x 2 x ¼ ANGLE
72	102	10	44	2 IN PIPE OR 2 x 2 x 5/16 ANGLE	8	2½ x 2½ x ¼ ANGLE
78	114	10	47	2½ IN PIPE OR 2 x 2 x ¼ ANGLE	8	2½ x 2½ x ¼ ANGLE
84	120	10	50	2½ IN PIPE OR 2½ x 2½ x ¼ ANGLE	8	2½ x 2½ x 5/16 ANGLE

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



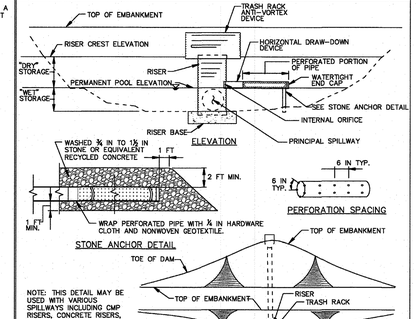
BAFFLES ARE REQUIRED TO PROVIDE A FLOW LENGTH BETWEEN INFLOW POINT AND OUTLET EQUAL TO TWICE THE EFFECTIVE TRAP/BASIN WIDTH.

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

DETAIL G-2-6 SEDIMENT BASIN SCHEMATIC HORIZONTAL DRAW-DOWN DEVICE

STANDARD SYMBOL: HDDD

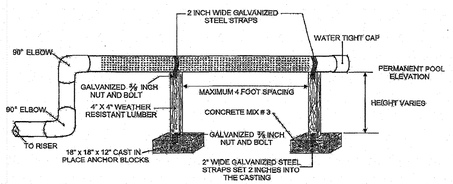


CONSTRUCTION SPECIFICATIONS

1. PERFORATE PIPE WITH 1 INCH DIAMETER PERFORATIONS SPACED 6 INCHES APART LONGITUDINALLY AND RADIALLY OR IN ACCORDANCE WITH APPROVED PLAN.
2. WRAP THE PERFORATED PORTION OF THE DRAW-DOWN DEVICE FIRST WITH ¼ INCH GALVANIZED HARDWARE CLOTH, THEN WITH NONWOVEN GEOTEXTILE. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. DO NOT WRAP WITH MORE THAN ONE LAYER OF GEOTEXTILE.
3. AS AN ALTERNATE TO STONE ANCHORING, SECURE DRAW-DOWN DEVICE WITH TWO 1 INCH STEEL ANGLES SET 3 FEET MINIMUM INTO THE GROUND ATTACHED TO DRAW-DOWN DEVICE BY A 1 INCH WIDE GALVANIZED STEEL STRAP OR 12 GAUGE OR HEAVIER WIRE.
4. REMOVE SEDIMENT WHEN IT ACCUMULATES TO CLEANOUT ELEVATION (50% OF THE WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA IN A SUCH A MANNER THAT IT WILL NOT ERODE. MAINTAIN WATER TIGHT CONNECTIONS. REPLACE GEOTEXTILE AROUND PERFORATED RISER IF DRY STORAGE VOLUME DOES NOT DRAW DOWN WITHIN 10 HOURS.

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



HORIZONTAL DRAW-DOWN DEVICE ANCHOR DETAIL
NOT TO SCALE

APPENDIX B

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Bratchie — 05/15/24
HOWARD SOIL CONSERVATION DISTRICT — DATE

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER — 5/6/2024 DATE

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

EMILY MAGNESS, P.E. - ENGINEER — 5/6/24 DATE

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kendall — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 6.18.24 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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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. 56846, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — EMILY A. MAGNESS — 56846 — PROFESSIONAL ENGINEER — 5-6-24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART		PERMIT INFORMATION CHART				
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME		SECTION/AREA	LOT/PARCEL NO.	SHEET NO.
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	CENTENNIAL PARK WEST		N/A	9	89 OF 125
		LIBER / FOLIO #	GRID # / ZONING	TAX MAP NO. / ELECT DISTRICT	CENSUS TRACT	ESC NOTES AND DETAILS II
		L. 781/ F. 592	7 / R-20	0030 / 2nd	602304	
		WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT		C422
		--	--	NEW ARTIFICIAL TURF FIELDS		

SDP-82-109

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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 ORNEMENTAL 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 6b

SPECIES	APPLICATION RATE (LBS./AC.)	SEEDING DATES	SEEDING DEPTH	FERTILIZER RATE (10-20-20)	LIME RATE
ANNUAL RYEGRASS	40 LBS./AC.	3/1 - 5/15 8/1 - 10/15	½"	436 LB./AC. (10 LB./1000 S.F.)	2 TONS/AC. (90 LB./1000 S.F.)
FOXTAIL MILLET	30 LBS./AC.	5/16 - 7/31	½"		

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 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.

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-4-5 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 WHERERAPID 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 BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. 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 6b

NO.	SPECIES	APPLICATION RATE (LB/AC.)	SEEDING DATES****	SEEDING DEPTHS	FERTILIZER RATE (10-20-20) N	FERTILIZER RATE (10-20-20) P_2O_5	FERTILIZER RATE (10-20-20) K_2O	LIME RATE
***	TALL FESCUE* & KENTUCKY BLUEGRASS*	300 LB/AC**	3/1 - 5/15 8/1 - 10/15	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)

* 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.
*** SEE 2011 MD STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL, SECTION B-4-5, PARAGRAPH A.2.B.III FOR TURFGRASS MIXTURE AND RATE AND PARAGRAPH A.2.C FOR TURFGRASS SEEDING DATES.
**** NOTE THAT DURING SEEDING DATES 5/16 - 8/14, ADD 15.0 LBS PER ACRE OF FOXTAIL MILLET TO SEED MIXTURE.

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 ½ 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 LATARIAL 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.

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.
      iii. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
      iv. 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.
      v. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
      vi. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
      vii. 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; P2O5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
      viii. 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.
      ix. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
      x. 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 MATERIA

HSCD STANDARD SEDIMENT CONTROL NOTES

1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
   a. PRIOR TO THE START OF EARTH DISTURBANCE,
   b. UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING,
   c. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT,
   d. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.

   OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID.
6. SITE ANALYSIS:
   TOTAL AREA OF SITE: 137.50 ACRES
   AREA DISTURBED: 13.66 ACRES
   AREA TO BE ROOFED OR PAVED: 10.40 ACRES
   AREA TO BE VEGETATIVELY STABILIZED: 3.26 ACRES
   TOTAL CUT: 24,500 CU. YDS. +/-
   TOTAL FILL: 19,500 CU. YDS. +/-
   OFFSITE WASTE/BORROW AREA LOCATION: SITE WITH AN ACTIVE GRADING PERMIT
7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HCSCD. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY; AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
   - INSPECTION DATE
   - INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
   - NAME AND TITLE OF INSPECTOR
   - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
   - BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
   - EVIDENCE OF SEDIMENT DISCHARGES
   - IDENTIFICATION OF PLAN DEFICIENCIES
   - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
   - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
   - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
   - PHOTOGRAPHS
   - MONITORING/SAMPLING
   - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
   - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE).
9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
10. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES.
11. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
12. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION.
15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
   - USE I AND IP MARCH 1 - JUNE 15
   - USE III AND IIIP OCTOBER 1 - APRIL 30
   - USE IV MARCH 1 - MAY 31
16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

SOILS TABLE

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP	"K" VALUE
GuB	GLENELG-URBAN LAND-UDORTHENTS COMPLEX 0 TO 8% SLOPES	C	.49
GhB	GLENELG-URBAN LAND COMPLEX 0 TO 8% SLOPES	B	.43
MaC	MANOR LOAM 8 TO 15% SLOPES	B	.32
MaD	MANOR LOAM 15 TO 25% SLOPES	B	.32

EROSION FACTOR, Kw, FOR SOIL SURVEY OF HOWARD COUNTY, MD 2003. COMAR DEFINES HIGHLY ERODIBLE SOILS AS THOSE SOILS WITH SLOPES GREATER THAN 15% OR SOILS WITH A K FACTOR GREATER THAN 0.35 AND WITH SLOPES GREATER THAN 5%.

SITE ANALYSIS DATA

TOTAL PROPERTY AREA	137.5 AC
EXISTING IMPERVIOUS AREA	1.24 AC
EX. WETLANDS / WETLAND BUFFER (LOD)	0.00 AC
EX. FLOODPLAINS / BUFFER (LOD)	0.00 AC
EX. FORESTS (LOD)	0.45 AC
STEEP SLOPES (15% TO 25%) (LOD)	0.61 +/- AC
STEEP SLOPES (> 25%) (LOD)	0.04 +/- AC
LOD AREA	13.66 +/- AC
EXISTING IMPERVIOUS AREA (LOD)	1.24 +/- AC
PROPOSED IMPERVIOUS AREA (LOD)	10.40 +/- AC
EXISTING GREEN OPEN AREA (LOD)	12.42 +/- AC
PROPOSED GREEN OPEN AREA (LOD)	3.26 +/- AC
ERODIBLE SOILS (LOD)	4.09 +/- AC
PROPOSED SITE USAGE	RECREATION

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 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.

DESIGN NARRATIVE

THE PROPOSED DEVELOPMENT SITE IS THE CENTENNIAL PARK WEST IMPROVEMENTS FOR HOWARD COUNTY DEPARTMENT OF RECREATION & PARKS AND IS LOCATED AT 4651 CENTENNIAL LANE IN ELLIOTT CITY. THE PROPOSED SITE IMPROVEMENTS INCLUDE RENOVATING THE EXISTING ATHLETIC FIELDS TO ACCOMMODATE THREE SYNTHETIC TURF BASEBALL FIELDS AND ONE SYNTHETIC SOCCER FIELD, AN ADDITIONAL PARKING LOT, MINOR MODIFICATIONS TO THE EXISTING PARKING LOT, PEDESTRIAN PATHWAYS, NEW STORM WATER FACILITIES, AND ASSOCIATED STORM DRAINAGE. THERE ARE NO STEEP SLOPES, WETLANDS, PERENNIAL AND INTERMITTENT STREAMS, NOR THEIR ASSOCIATED BUFFERS, IMPACTED BY THE DEVELOPMENT. THE SITE LIES OUTSIDE OF THE 100-YEAR FLOODPLAIN.

THIS PROJECT IS CONSIDERED NEW DEVELOPMENT PER THE MARYLAND SWM DESIGN MANUAL BECAUSE THE EXISTING SITE IS LESS THAN 40% IMPERVIOUS. THE EXISTING IMPERVIOUS COVERAGE (1.24 ACRES) FOR THE LOD 13.66 ACRES) IS 8.3%. STORMWATER MANAGEMENT WILL BE ADDRESSED BY THE ENVIRONMENTAL SITE DESIGN (ESD) METHODOLOGY WITHIN THE PROPOSED PROJECT AREA. FOR THIS PROJECT, TREATMENT OF ESD VOLUME (ESD/V) IS REQUIRED FOR 100% OF THE IMPERVIOUS AREA.

SEQUENCE OF CONSTRUCTION

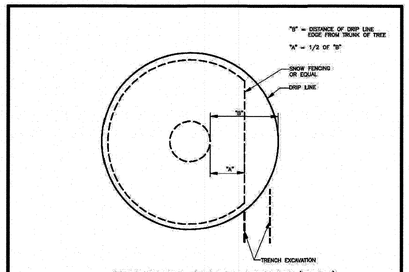
1. ASSURE THAT GRADING PERMIT AND ALL OTHER NECESSARY PERMITS ARE OBTAINED BY OWNER.
2. NOTIFY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS BEFORE START OF WORK. CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST THREE DAYS IN ADVANCE OF STARTING WORK SHOWN ON PLANS.
3. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB AS NECESSARY FOR THE INSTALLATION OF THE INSTALL UTILITIES AS SHOWN ON C401 AND C402 USING THE SAME DAY STABILIZATION METHOD. (2 WEEKS)
4. CLEAR AND GRUB AS NECESSARY FOR THE INSTALLATION OF THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING STABILIZED CONSTRUCTION ENTRANCE (SCE), SEDIMENT TRAPS, DIVERSION FENCE (DF), SUPER SILT FENCE (SSF), INLET PROTECTION AND TEMPORARY STONE OUTLET STRUCTURE (TSOS). FOR INSTALLATION OF SEDIMENT TRAPS AS SHOWN ON C401/C402: FIRST INSTALL SEDIMENT TRAPS INCLUDING INFLOW PROTECTION, BAFFLES AND DEWATERING DEVICE. (4 WEEKS)
5. NOTIFY SEDIMENT CONTROL INSPECTOR AND ENGINEER UPON COMPLETION OF THIS INSTALLATION. (1 DAY)
6. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB REMAINDER OF THE SITE. (2 WEEKS)
7. BEGIN DEMOLITION, ROUGH GRADING, INSTALLATION OF REMAINING UTILITIES AND RETAINING WALL CONSTRUCTION. ANY WALKS, ROADS, CURBS, ETC. OR ANY EXISTING UTILITY OR STRUCTURE DAMAGED DURING CONSTRUCTION, NOT SCHEDULED FOR DEMOLITION, SHALL BE REPAIRED BY THE CONTRACTOR, IN KIND AT THE CONTRACTOR'S EXPENSE. (12 WEEKS)
8. FINE GRADE TO THE EXTENT POSSIBLE WITH SEDIMENT TRAPS IN PLACE. INSTALL BASE COURSE FOR ALL HARDSCAPE AND SUBDRAINAGE STONE FOR ALL PLAYING FIELDS. SUBDRAINAGE STONE SHALL BE PROTECTED IMMEDIATELY FROM SEDIMENT-LADEN RUNOFF AS IT IS BEING INSTALLED. PROTECTION OF THE SUBDRAINAGE STONE SHALL INCLUDE, BUT NOT LIMITED TO, A LAYER OF WOVEN SILT FILM GEOTEXTILE FABRIC PLACED ON TOP OF THE STONE. EQUIPMENT TRAFFIC OVER THE SUBDRAINAGE STONE SHALL HAVE CLEAN WHEELS AND UTILIZE STEEL PLATES FOR TRAVERSING THE FIELD AREA. REMAINING AREAS SHALL BE FINE GRADED WITH AT LEAST 4 INCHES OF TOPSOIL AND PERMANENTLY STABILIZE THOSE AREAS. (12 WEEKS)
9. ONCE THE SITE HAS BEEN COMPLETED TO THE EXTENT POSSIBLE WITH THE SEDIMENT CONTROLS IN PLACE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT TRAPS. THIS STEP CAN HAPPEN IN PHASES AS EACH PLAYING FIELD IS MOSTLY STABILIZED WITH SUBRDRAINAGE STONE. TO REMOVE SEDIMENT TRAPS: FIRST, DEWATER AND CLEAN OUT THE TRAPS AND THEN REMOVE THE SEDIMENT TRAP. TILL/REFRACTURE SOILS TO A MINIMUM DEPTH OF 12 INCHES BELOW THE TRAP BOTTOM. GRADE SEDIMENT TRAP AREA TO FINAL PROPOSED GRADES AS SHOWN ON PLANS INSTALL REMAINING INLETS AND STORM DRAINS. (2 WEEKS).
10. CONSTRUCT MICRO-BIORETENTIONS AND BIORETENTION. (2 WEEKS)
    a. NOTIFY AS-BUILT ENGINEER OF WORK STARTING AT LEAST 3 DAY IN ADVANCE OF SWM FACILITY CONSTRUCTION.
    b. DURING A 3-DAY DRY WEATHER FORECAST, EXCAVATE SWM FACILITIES TO SHAPE AND BOTTOM ELEVATION SHOWN ON PLAN.
    c. BACKFILL SWM FACILITIES WITH MATERIALS AND TO DIMENSIONS SHOWN ON PLAN, INCLUDING UNDERDRAIN PIPE, OBSERVATION WELL / CLEANOUT.
    d. ONCE SOIL IS INSTALLED AND PRIOR TO LANDSCAPING, FLOOD SWM FACILITY WITH CLEAN WATER UNTIL PONDING DEPTH REACHES 6", THEN TIME DRAW-DOWN TO ENSURE DRAW-DOWN IN COMPLETE WITHIN 48 HOURS AND DRAINAGE WITH SWM FACILITY IS FUNCTIONING.
    e. INSTALL MULCH LAYER AND LANDSCAPE IN ACCORDANCE WITH PLANS.
11. PAVE ALL PARKING SURFACES WITH THE FINAL SURFACE COURSE. REMOVE GEOTEXTILE FABRIC FROM TOP OF SUBDRAINAGE STONE IN PLAYING AND INSTALL TURF ON PLAYING FIELDS (12 WEEKS).
12. AFTER PERMANENT STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROL MEASURES OR DEVICES, AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS. (1 WEEK)
13. CONDUCT FINAL AS-BUILT SURVEYS OF THE STORMWATER MANAGEMENT FACILITIES AND SUBMIT AS-BUILT PLANS AND COMPUTATIONS TO HOWARD COUNTY WITHIN 30 DAYS OF COMPLETION.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

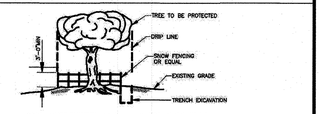
Table H.1: Geotextile Fabrics

		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	



TEMPORARY TREE PROTECTION(PLAN)

NOTES:
FENCING SHALL BE PLACED AT THE DRIP LINE OF TREES TO BE PROTECTED DURING CONSTRUCTION, EXCEPT ON THE SIDE OF THE UTILITY TRENCHING. FENCING SHALL NOT BE PLACED CLOSER TO THE TREE THAN 1/2 THE TOTAL DISTANCE FROM THE TREE TO THE LIMITS OF THE TREE'S DRIP LINE. THIS SPACE IS TO ACCOMMODATE TRENCHING ONLY AND NOT TO ALLOW ADDITIONAL WORKING SPACE.



TEMPORARY TREE PROTECTION
NOTES:
1. GROUPS OF TREES MAY BE FENCED AS ONE.

1/26/2007 Approved 5/1/2007 Approved	Howard County, Maryland Department of Public Works Approved: Director of Public Works Chief, Bureau of Engineering	Temporary Tree Protection Fencing Private

Detail L-9.02

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

EMILY MAGNESS, P.E. - ENGINEER — DATE 5/6/24

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 05/15/24

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER — DATE 5/6/2024

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

Howard County RECREATION & PARKS

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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. 56848, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — EMILY A. MAGNESS — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 91 OF 125

ESC NOTES AND DETAILS IV

C424

SDP-82-109

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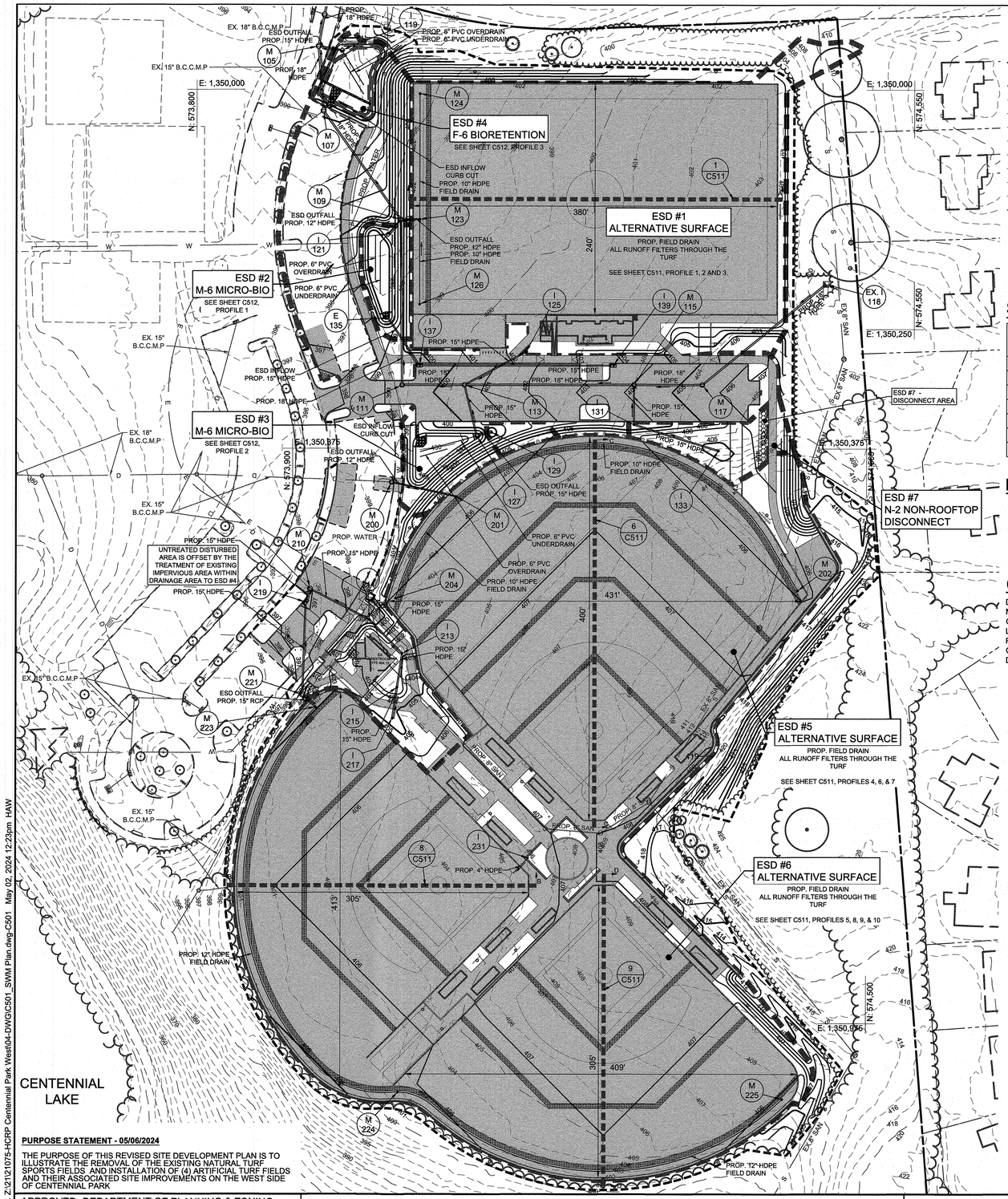

TREATMENT SUMMARY TABLE

ESD #	ESD PRACTICE	DRAINAGE AREA (AC)	PE (IN)	IMP. AREA (AC)	ESD (CF)	RE (CF)
1	ALTERNATIVE SURFACE	2.56	2.06	2.33	16,652	16,652
2	M-6 MICRO-BIORETENTION	0.50	1.60	0.32	1,825	151
3	M-6 MICRO-BIORETENTION	0.45	1.84	0.24	1,615	133
4*	F-6 BIORETENTION	0.86	1.50	0.49	2,600	174
5	ALTERNATIVE SURFACE	2.93	1.91	2.82	18,680	18,680
6	ALTERNATIVE SURFACE	4.41	2.60	4.19	37,858	38,160
7	N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF	0.03	1.00	0.01	40	0
TOTAL PROVIDED			2.25	10.40	79,270	73,950
REQUIRED			2.16	10.40	79,078	8,746

* NOTE: PREVIOUS ESD #4 WAS ELIMINATED AND NEW ESD F-6 SHALL BE PROVIDED. PREVIOUS ESD #4 COULD NOT BE ADEQUATELY SIZED TO MEET THE CONTRIBUTING DRAINAGE AREA DUE TO EXISTING GRADE CONSTRAINTS. NEW ESD F-6 WILL BE LOCATED AT THE END OF THE PARKING LOT AND SIZED TO ACCOMODATE THE EXISTING CONTRIBUTING DRAINAGE AREA.

SITE AREA TABULATION

SWM STUDY AREA	= 13.35 AC +/-
EX. IMPERVIOUS AREA	= 1.24 AC +/- (<40%)
PROP. IMP AREA (IART)	= 10.40 AC

THIS NEW DEVELOPMENT PROJECT IS REQUIRED TO PROVIDE WQ TREATMENT TO A LEVEL EQUIVALENT TO WOODS IN GOOD CONDITION.

IMPERVIOUS AREA REQUIRING TREATMENT = 10.40 AC
VOLUMETRIC RUNOFF COEFFICIENT (Rv) = 0.75

ESDv REQUIRED
PE X Rv X A / 12 = 2.17 X 0.75 X 13.35 X 43560 / 12 = 79,078 CF

THREE ALTERNATE SURFACE ESDs, TWO MICRO-BIORETENTION, ONE BIORETENTION, AND ONE DISCONNECTION OF NON-ROOFTOP RUNOFF PROVIDE THE REQUIRED SWM TREATMENT FOR THIS NEW DEVELOPMENT PROJECT.

SWM INFORMATION CHART

LOT/PARCEL NUMBER	FACILITY NAME & NUMBER	PRACTICE TYPE (QUANTITY)	PUBLIC	PRIVATE	HOA MAINTAINS	MISC.
0009	ESD #1	ALTERNATIVE SURFACE (3)	YES	NO	NO	
0009	ESD #2	MICRO-BIORETENTION (2)	YES	NO	NO	
0009	ESD #3	MICRO-BIORETENTION (2)	YES	NO	NO	
0009	ESD #4	BIORETENTION (1)	YES	NO	NO	
0009	ESD #5	ALTERNATIVE SURFACE (3)	YES	NO	NO	
0009	ESD #6	ALTERNATIVE SURFACE (3)	YES	NO	NO	
0009	ESD #7	NON-ROOFTOP DISCONNECT (1)	YES	NO	NO	

PROJECT SITE OUTFALL

SITE DRAINAGE TIES INTO EXISTING STORM DRAIN SYSTEM. THERE ARE NO PROPOSED OUTFALLS. STORMWATER FACILITIES CAN SAFELY PASS THE HIGHER FREQUENCY STORMS WITHOUT OVEFLOW. THE PROPOSED FLOWS DO NOT EXCEED EXISTING FLOW RATES, REFER TO STORMWATER REPORT.

OPERATION AND MAINTENANCE SCHEDULE

DISCONNECTION OF NON-ROOFTOP RUNOFF AREAS (N-2) (ESD #7) MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREA RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OF DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD D — EXISTING STORM DRAIN
- W — EXISTING WATER
- EX. 8" SAN S — EXISTING SANITARY SEWER
- EX. ELEC E — EXISTING ELECTRIC
- EXISTING LIGHTING
- 350 / 348 — EXISTING CONTOURS
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- 350 / 348 — PROPOSED CONTOURS
- SWM STUDY AREA
- DRAINAGE AREA
- IMPERVIOUS AREA
- EARTH BERM DETAIL 3 / C513

NORTH
0 20 40 60 100 200
SCALE: 1" = 60'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendall — DIRECTOR — DATE 6-17-24
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-28-24
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56848, EXPIRATION DATE: 10/16/2024.

STATE OF MARYLAND — MAGDY EL-SHAFEI — 56848 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT	
--	--		NEW ARTIFICIAL TURF FIELDS	

SHEET NO. 92 OF 125
STORMWATER MANAGEMENT PLAN
C501

SDP-82-109

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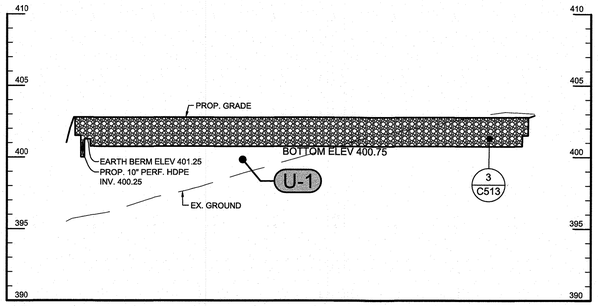
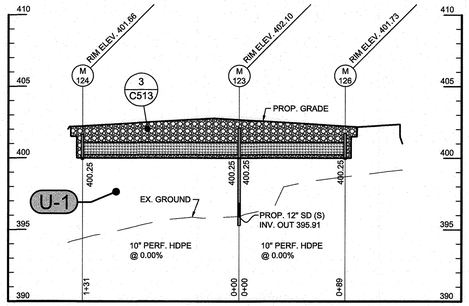


1 ESD #1: SECTION A-A

SCALES: HORIZ. 1" = 60'
VERT. 1" = 5'



2 ESD #1: M-126 & M-124 to M-123

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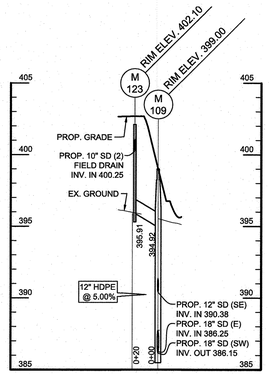
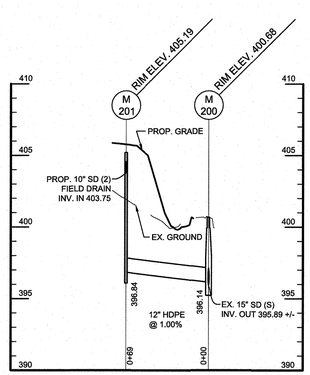


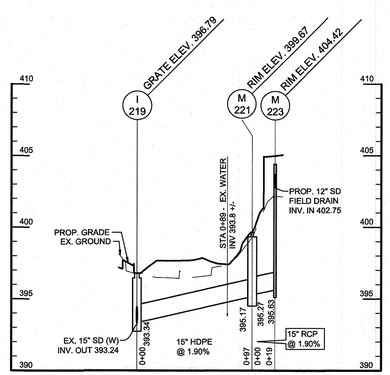
3 ESD #1 OUTFALL

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



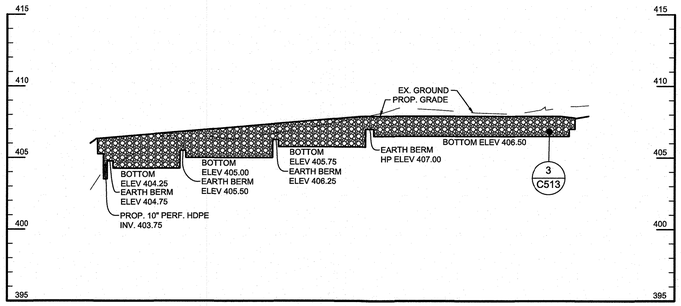
4 ESD #5 OUTFALL

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



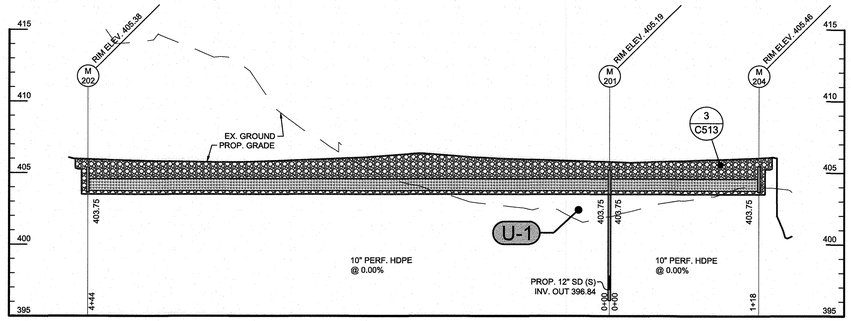
5 ESD #6 OUTFALL

SCALES: HORIZ. 1" = 50'
VERT. 1" = 5'



6 ESD #5: SECTION C-C

SCALES: HORIZ. 1" = 60'
VERT. 1" = 5'



7 ESD #5: M-204 & M-202 to M-201

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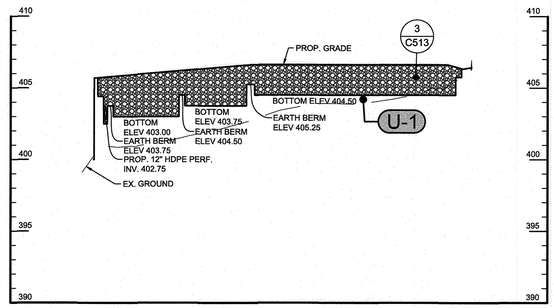
VERT. 1" = 5'



8 ESD #6: FIELD 3 SECTION B-B

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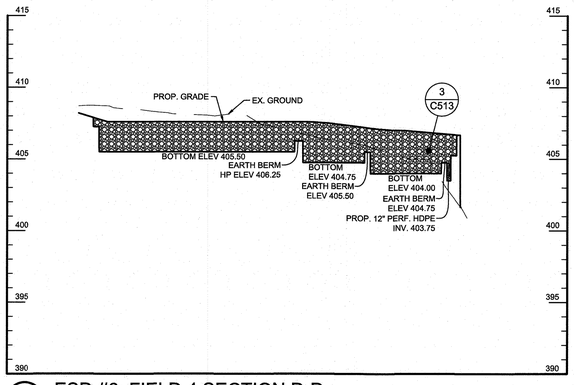
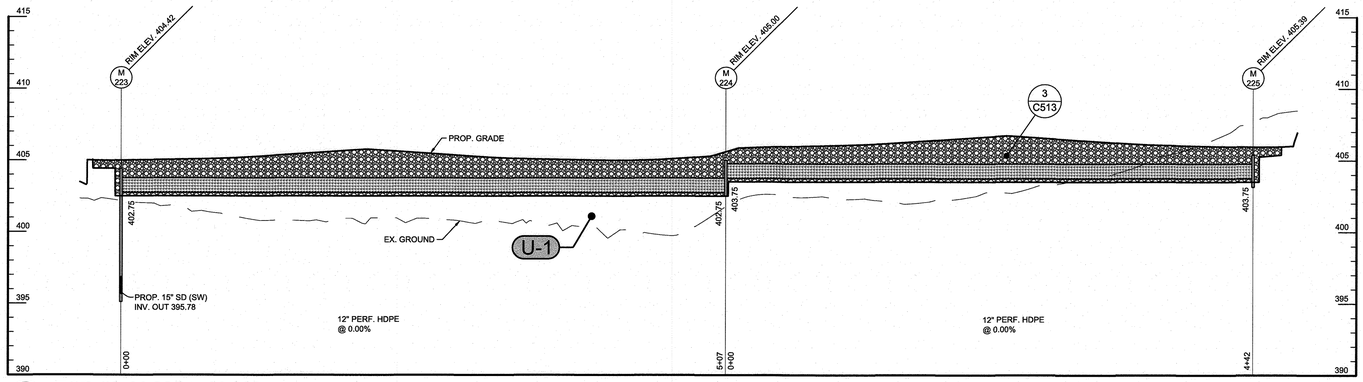


9 ESD #6: FIELD 4 SECTION D-D

SCALES: HORIZ. 1" = 60'
VERT. 1" = 5'



10 ESD #6: M-225 to M-223

SCALES: HORIZ. 1" = 60'
VERT. 1" = 5'

SOIL & COMPACTION NOTE:

C-1 FILL SHALL BE SATISFACTORY SOILS COMPACTED TO 85% COMPACTION PER ASTM D1557. COMPACTION SHALL BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER. SATISFACTORY SOILS SHALL BE ONE OR A COMBINATION OF THESE SOIL CLASSIFICATION GROUPS GP, GW, SP, SW AND SM ACCORDING TO ASTM D2487.

OPERATION AND MAINTENANCE SCHEDULE

ALTERNATE SURFACE (ESD #1,5 AND 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 AND CLEANOUTS SHALL BE OPENED BY THE OWNER ONCE A YEAR. THE OWNER SHALL KEEP NOTES OF EACH INSPECTION.
2. INSPECT THE SURFACING TO ENSURE NO CRACKS, PUNCTURES, OR OTHER DAMAGE HAS OCCURRED THAT WILL REQUIRE REPAIR. LOOK FOR GENERAL WEAR-AND-TEAR, PAYING CLOSE ATTENTION TO HIGH IMPACT AREAS. DAMAGED AREAS SHOULD BE PATCHED BY A CERTIFIED INSTALLATION CREW TO THE SAME STANDARDS OF THE ORIGINAL INSTALLATION.
3. REGULARLY REMOVE LOOSE DEBRIS SUCH AS TRASH AND STONES.
4. ALL REQUIRED MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/20/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND · MICHAEL J. MAGNESS · 56846 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 93 OF 125

SWM TURF FIELD SECTIONS

C511

SDP-82-109

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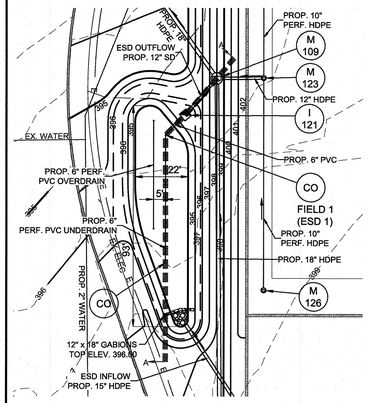
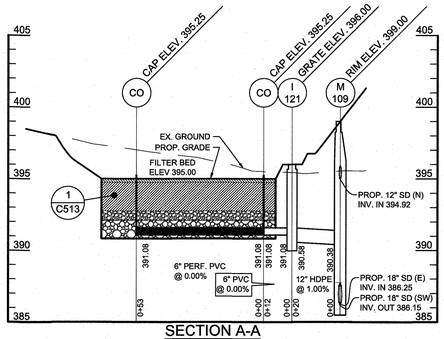
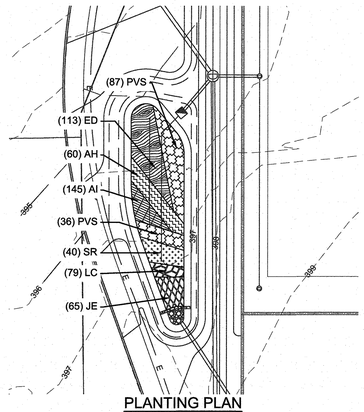




SECTION A-A



PLANTING PLAN

1 ESD #2 - MICRO- BIORETENTION PLAN (M-6)

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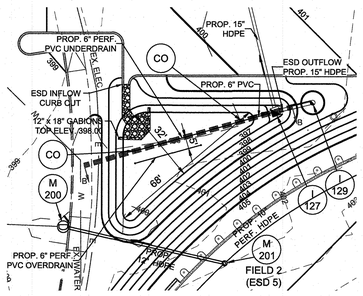
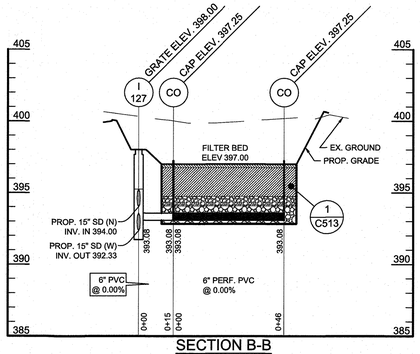
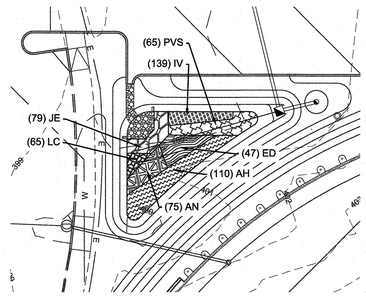
VERT. 1" = 5'





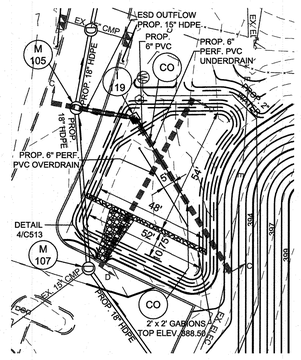
SECTION B-B

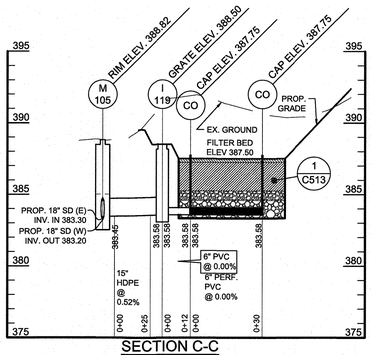


PLANTING PLAN

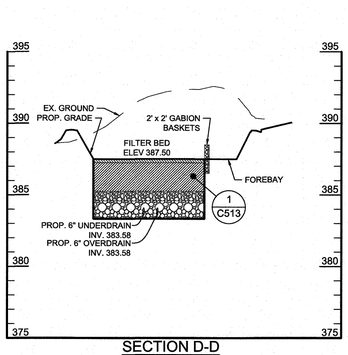
2 ESD #3 - MICRO- BIORETENTION PLAN (M-6)

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

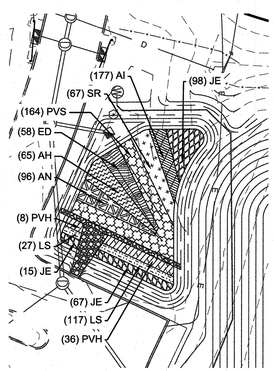




SECTION C-C



SECTION D-D



PLANTING PLAN

3 ESD #4 - BIORETENTION PLAN (F-6)

SCALE: 1"=30'

OPERATION AND MAINTENANCE SCHEDULE

MICRO-BIORETENTION AREAS (M-6) (ESD #2-3) AND BIORETENTION AREA (F-6) (ESD #4)

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. WHEN WATER PONDS FOR MORE THAN 48 HOURS, THE TOP FEW INCHES OF FILTER MEDIA SHOULD BE REMOVED AND REPLACED.
9. ALL REQUIRED MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.

NOTE:

AS-BUILT PLANS AND CERTIFICATION ARE REQUIRED FOR THIS STORMWATER MANAGEMENT FACILITIES. THESE MUST BE PREPARED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. HOWARD 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 PLAN AND CERTIFICATION ARE APPROVED BY HOWARD COUNTY.

IT IS THE CONTRACTOR'S RESPONSIBILITY, ON BEHALF OF THE OWNER, TO ENGAGE A LICENSED PROFESSIONAL ENGINEER TO CERTIFY THE STORMWATER MANAGEMENT FACILITY AND TO PREPARE AND SUBMIT AS-BUILT DRAWINGS. "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.

PROJECT NAME: BGE HOWARD SERVICE CENTER		
AS-BUILT DATA FOR MICRO-BIORETENTION (ESD #2) *TO BE COMPLETED BY THE CONTRACTOR'S CERTIFYING ENGINEER		
TYPE OF FACILITY: MICRO-BIORETENTION		ESD ID: M-6
FEATURE	DESIGN	*AS-BUILT
FILTER BED DIMENSIONS & AREA	22' X 93' (1,754 SF)	
GRATE ELEVATION	396.00	
FINISHED GRADE SURFACE ELEVATION	395.00	
TOP ELEVATION FILTER MEDIA	394.75	
TOP ELEVATION #8 STONE	392.75	
TOP ELEVATION #57 STONE	392.08	
UNDERDRAIN INVERT	391.08	
#57 STONE BOTTOM ELEVATION	390.83	

DATE AS-BUILT ACCEPTED BY COUNTY: _____

PROJECT NAME: BGE HOWARD SERVICE CENTER		
AS-BUILT DATA FOR MICRO-BIORETENTION (ESD #3) *TO BE COMPLETED BY THE CONTRACTOR'S CERTIFYING ENGINEER		
TYPE OF FACILITY: MICRO-BIORETENTION		ESD ID: M-6
FEATURE	DESIGN	*AS-BUILT
FILTER BED DIMENSIONS & AREA	32' X 68' (1,340 SF)	
GRATE ELEVATION	398.00	
FINISHED GRADE SURFACE ELEVATION	397.00	
TOP ELEVATION FILTER MEDIA	396.75	
TOP ELEVATION #8 STONE	394.75	
TOP ELEVATION #57 STONE	394.08	
UNDERDRAIN INVERT	393.08	
#57 STONE BOTTOM ELEVATION	392.83	

DATE AS-BUILT ACCEPTED BY COUNTY: _____

PROJECT NAME: BGE HOWARD SERVICE CENTER		
AS-BUILT DATA FOR BIORETENTION (ESD #4) *TO BE COMPLETED BY THE CONTRACTOR'S CERTIFYING ENGINEER		
TYPE OF FACILITY: BIORETENTION		ESD ID: F-6
FEATURE	DESIGN	*AS-BUILT
FILTER BED DIMENSIONS & AREA	48' X 54' (1,754 SF)	
FOREBAY DIMENSIONS & AREA	10.75' X 52' (638 SF)	
GRATE ELEVATION	388.50	
FINISHED GRADE SURFACE ELEVATION	387.50	
TOP ELEVATION FILTER MEDIA	387.25	
TOP ELEVATION #8 STONE	385.25	
TOP ELEVATION #57 STONE	384.58	
UNDERDRAIN INVERT	383.58	
#57 STONE BOTTOM ELEVATION	383.33	

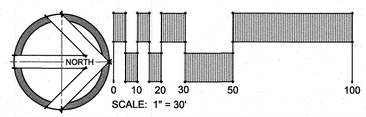
DATE AS-BUILT ACCEPTED BY COUNTY: _____

SWM PLANTING SCHEDULE ONLY

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
PERENNIALS AND GRASSES						
235	AH	AMSONIA HUBRICHTII	THREADLEAF BLUESTAR	#3 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER
322	AI	ASCLEPIAS INCARNATA 'ICE BALLET'	WHITE ICE BALLET SWAMP MILKWEED	#1 CONT.	12" O.C.	FULLY ROOTED IN CONTAINER
171	AN	ASTER NOVAE-ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#1 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
218	ED	EUPATORIUM DUBIUM 'LITTLE JOE'	LITTLE JOE PYE WEED	#3 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER
139	IV	IRIS VERSICOLOR	BLUE FLAG IRIS	#1 CONT.	12" O.C.	FULLY ROOTED IN CONTAINER
325	JE	JUNCUS EFFUSUS	COMMON SOFT RUSH	#1 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
144	LS	LIATRIS SPICATA	DENSE BLAZING STAR	#1 CONT.	12" O.C.	FULLY ROOTED IN CONTAINER
144	LC	LOBELIA CARDINALIS	RED CARDINAL FLOWER	#1 CONT.	12" O.C.	FULLY ROOTED IN CONTAINER
42	PVH	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCHGRASS	#3 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER
352	PVS	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCHGRASS	#3 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER
107	SR	SOLIDAGO RUGOSA 'FIREWORKS'	FIREWORKS GOLDENROD	#1 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK



APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-28-24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56845, EXPIRATION DATE: 12/16/2024.

STATE OF MARYLAND — STEVEN A. MAGNUS — 56845 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 94 OF 125

SWM ENLARGEMENTS

C512

SDP-82-109

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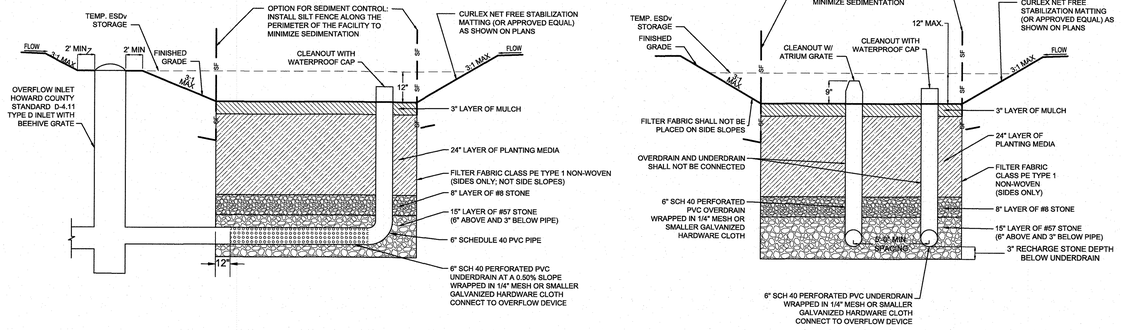
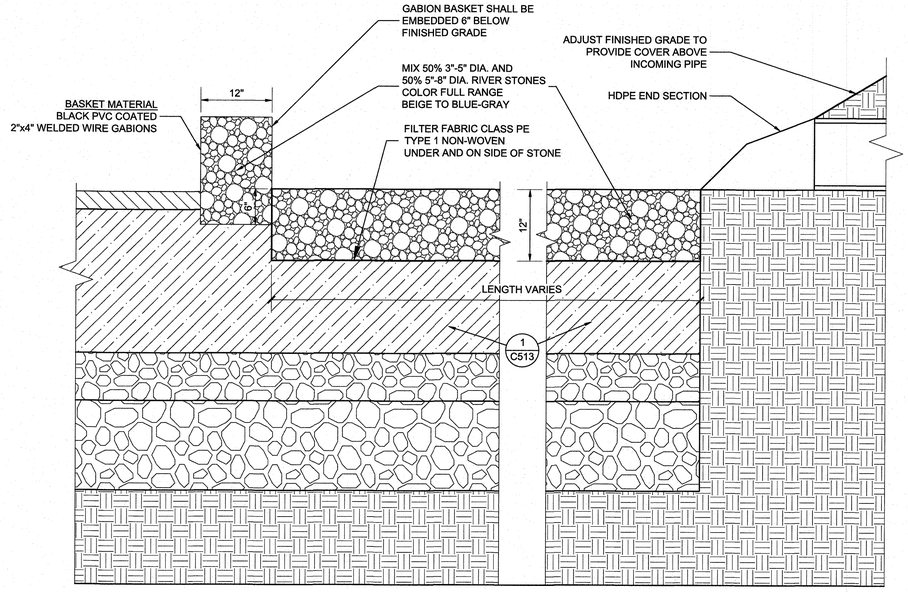


1 M-6 MICRO-BIORETENTION AND F-6 BIORETENTION TYP. SECTION

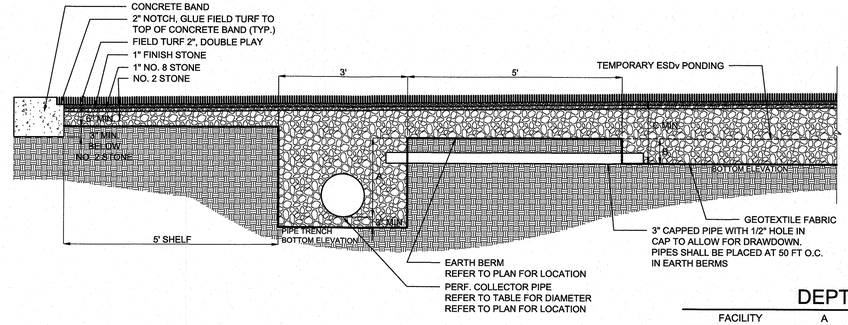
ESD #2,3, & 4

NOT TO SCALE



2 INFLOW PROTECTION

NOT TO SCALE



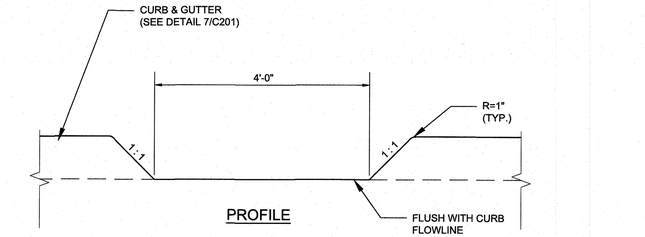
DEPTH TABLE

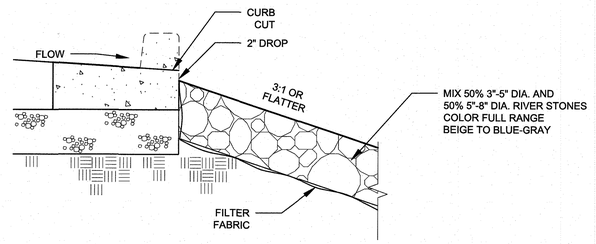
FACILITY	A	B	C (MIN.)	PIPE DIAMETER
ESD 1	12"	6"	15"	10"
ESD 5	12"	6"	15"	10"
ESD 6	12"	9"	21"	12"

3 ALTERNATIVE SURFACE, TYP. (FOR TURF FIELDS)

ESDs #1, 5 & 6

NOT TO SCALE





NOTE:
1. MAINTAIN GUTTER SLOPE THROUGH CURB CUT OPENING.

4 ESD INFLOW CURB CUT

NOT TO SCALE

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary F. Kendall — 6-5-24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.22.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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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. 56845, EXPIRATION DATE: 10/16/2024.

STATE OF MARYLAND — EMILY A. MAGNER — 56845 — PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 95 OF 125

SWM DETAILS

C513

SDP-82-109

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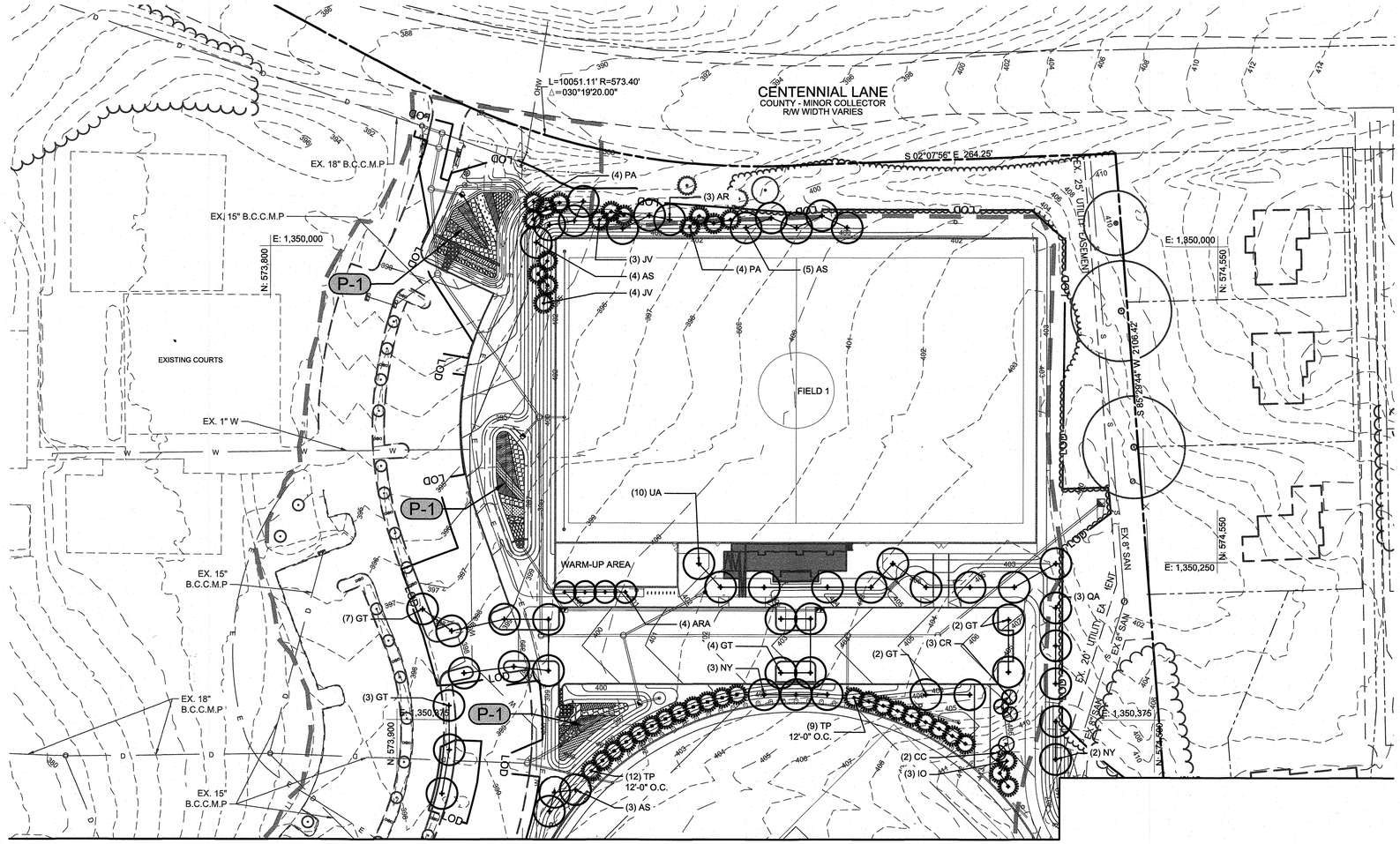

SEE SHEET L102 FOR EAST SIDE OF THE PARK

TREE PLANTING SCHEDULE ONLY FOR L101

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
SHADE TREES						
4	ARA	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
3	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
12	AS	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
18	GT	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER THORNLESS HON. LOCUST	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
5	NY	NYSSA SYLVATICA 'WILDFIRE'	WILDFIRE BLACK GUM	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
3	QA	QUERCUS ALBA	WHITE OAK	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
10	UA	ULMUS AMERICANA 'JEFFERSON'	JEFFERSON AMERICAN ELM	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
EVERGREEN TREES						
3	IO	ILEX OPACA 'SATYR HILL'	SATYR HILL AMERICAN HOLLY	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
7	JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
8	PA	PICEA ABIES	NORWAY SPRUCE	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
21	TP	THUJA STANDISHI X PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	12'-14 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
SMALL DECIDUOUS TREES						
2	CC	CERCIS CANADENSIS	EASTERN REDBUD	6-8' HT.	AS SHOWN	MULTI-STEM, 3-5 STEMS, CONSISTENT FORM
3	CR	CORNUS x 'RUTGAN'	STELLAR PINK DOGWOOD	8-10' HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PLANTING NOTE:

P-1 REFER TO SHEET C512 FOR SWM PLANTING SCHEDULE

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD / D — EXISTING STORM DRAIN
- EX. 6" W / W — EXISTING WATER
- EX. 8" SAN / S — EXISTING SANITARY SEWER
- EX. ELEC / E — EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- PROPOSED CONTOURS (350 / 348)
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SINGLE STEM TREE
- PROPOSED MULTI-STEM TREE
- PROPOSED SHRUB
- PROPOSED PERENNIAL MASSING

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISION 1 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. 4184, EXPIRATION DATE: 01/07/2025.

STATE OF MARYLAND · STEVEN M. SILVER · 4184 · LANDSCAPE ARCHITECT

5.6.24

NORTH

0 10 25 50 100 150
SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendall — DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6.20.24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — DATE 6/17/24

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NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 96 OF 125

LANDSCAPE PLAN

L101

SDP-82-109

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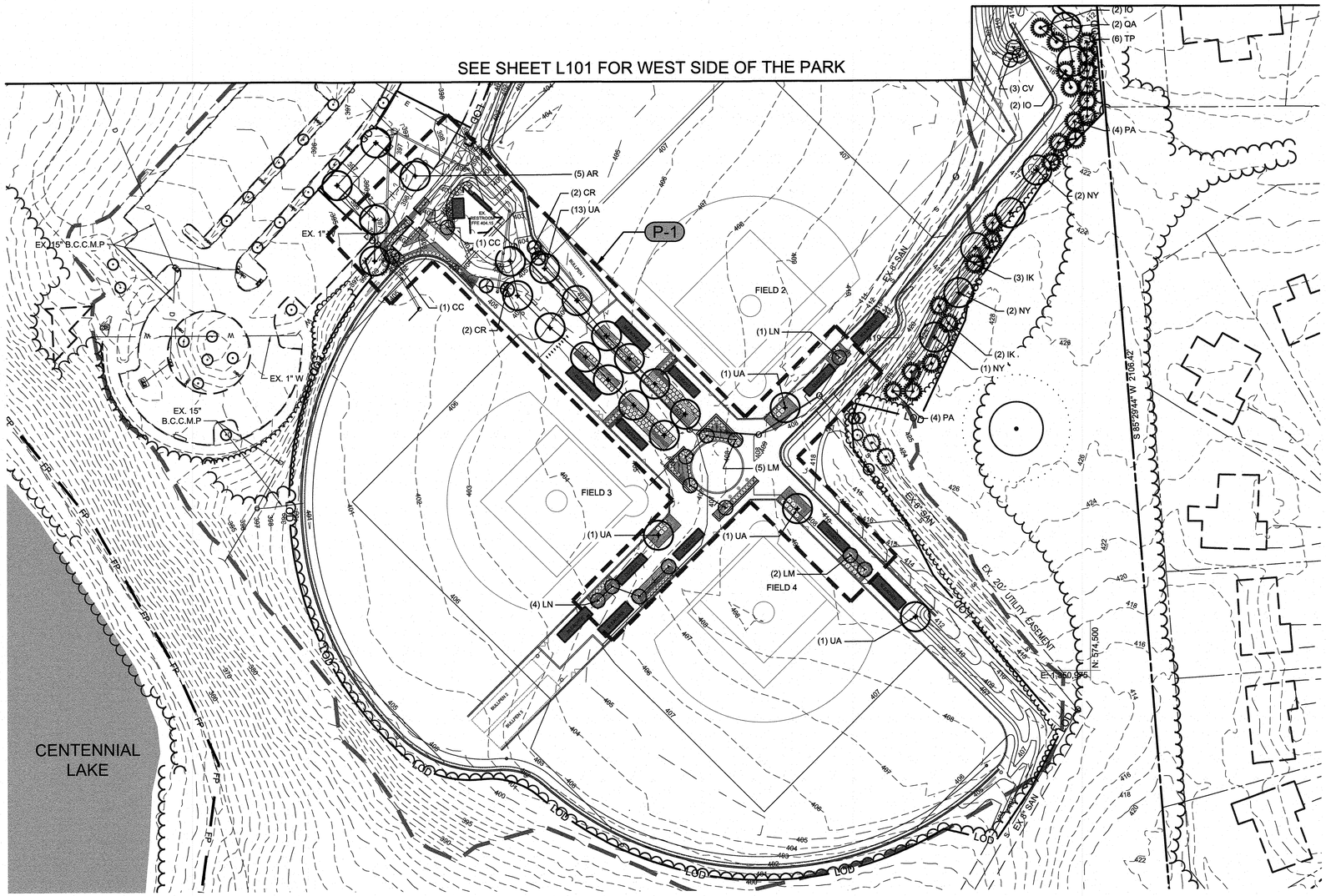

PLANTING NOTES:

P-1 REFER TO SHEET L103 FOR PLANTING ENLARGEMENT

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD — EXISTING STORM DRAIN
- EX. 6" W — EXISTING WATER
- EX. 8" SAN — EXISTING SANITARY SEWER
- EX. ELEC — EXISTING ELECTRIC
- EXISTING LIGHTING
- 350 / 348 — EXISTING CONTOURS
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN
- PROPOSED WATER
- PROPOSED SANITARY SEWER
- PROPOSED ELECTRIC
- 350 / 348 — PROPOSED CONTOURS
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SINGLE STEM TREE
- PROPOSED MULTI-STEM TREE
- PROPOSED SHRUB
- PROPOSED PERENNIAL MASSING

TREE PLANTING SCHEDULE ONLY FOR L102

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
SHADE TREES						
5	AR	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
5	NY	NYSSA SYLVATICA 'WILDFIRE'	WILDFIRE BLACK GUM	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
2	QA	QUERCUS ALBA	WHITE OAK	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
13	UA	ULMUS AMERICANA 'JEFFERSON'	JEFFERSON AMERICAN ELM	2.5" CAL.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
EVERGREEN TREES						
4	IO	ILEX OPACA 'SATYR HILL'	SATYR HILL AMERICAN HOLLY	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
5	IK	ILEX OPACA 'JERSEY KNIGHT'	JERSEY KNIGHT AMERICAN HOLLY	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
8	PA	PICEA ABIES	NORWAY SPRUCE	8'-10 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
6	TP	THUJA STANDISHI X PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	12'-14 HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
SMALL DECIDUOUS TREES						
7	CC	CERCIS CANADENSIS	EASTERN REDBUD	6-8' HT.	AS SHOWN	MULTI-STEM, 3-5 STEMS, CONSISTENT FORM
3	CV	CHIONANTHUS VIRGINICUS	AMERICAN FRINGE TREE	6-8' HT.	AS SHOWN	MULTI-STEM, 3-5 STEMS, CONSISTENT FORM
5	CR	CORNUS x 'RUTGAN'	STELLAR PINK DOGWOOD	8-10' HT.	AS SHOWN	CONSISTENT HT. & FORM, CENTRAL LEADER
5	LM	LAGERSTROEMIA INDICA x FAURIEI 'MUSKOGEE'	MUSKOGEE CRAPE MYTRLE	10-12' HT.	AS SHOWN	MULTI-STEM, 3-5 STEMS, CONSISTENT FORM
8	LN	LAGERSTROEMIA INDICA x FAURIEI 'NATCHEZ'	NATCHEZ CRAPE MYTRLE	10-12' HT.	AS SHOWN	MULTI-STEM, 3-5 STEMS, CONSISTENT FORM

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISION 1 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. 4184, EXPIRATION DATE: 01/07/2025.

STATE OF MARYLAND · THEMA M. WILLIAMS · 4184 · LANDSCAPE ARCHITECT

5.6.24

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

NORTH

0 10 25 50 100 150
SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendrosa — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 97 OF 125

LANDSCAPE PLAN

L102

SDP-82-109

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PLANTING ENLARGEMENT SCHEDULE ONLY

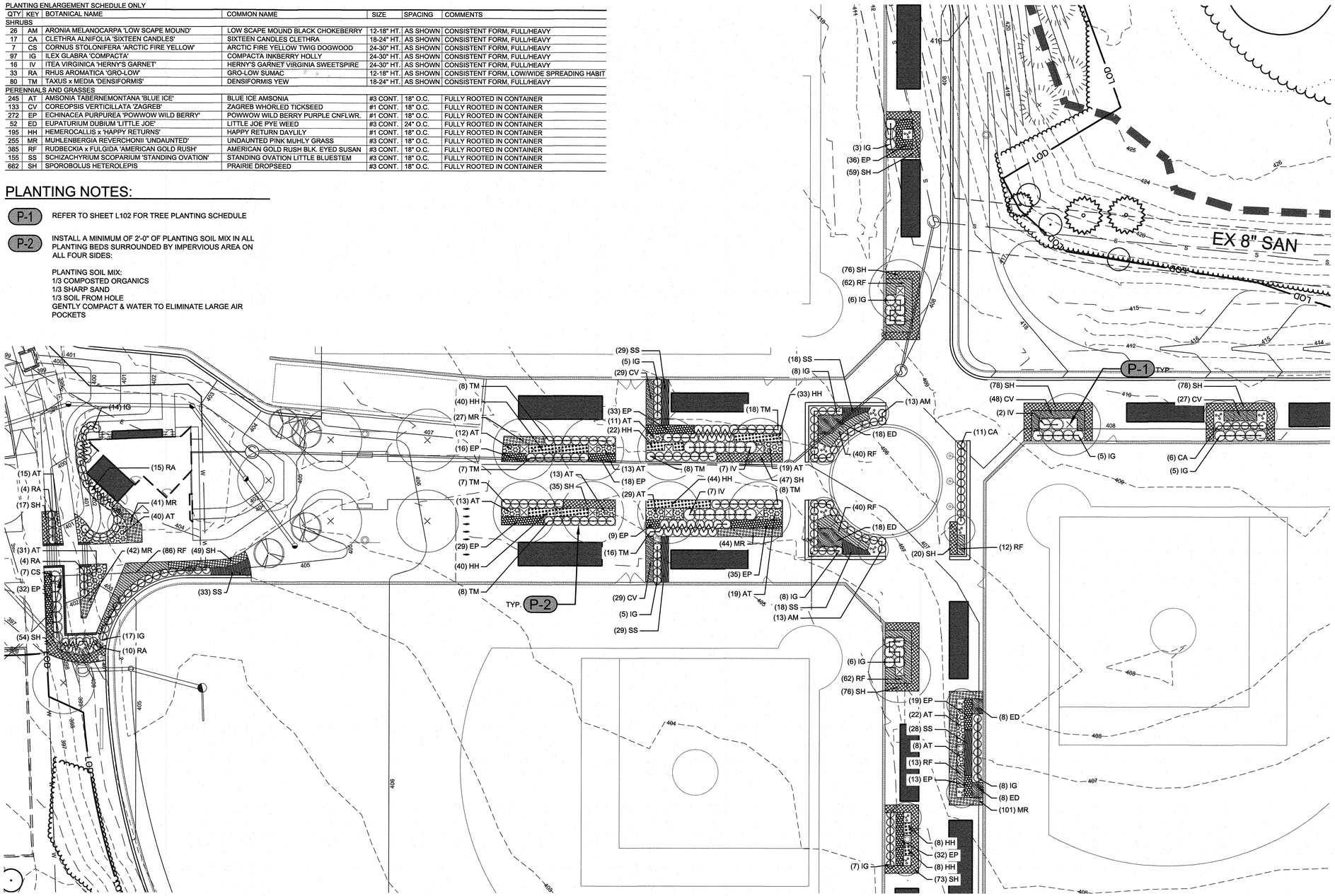
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
SHRUBS						
26	AM	ARONIA MELANOCARPA 'LOW SCAPE MOUND'	LOW SCAPE MOUND BLACK CHOKEBERRY	12-18" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
17	CA	CLETHRA ALNIFOLIA 'SIXTEEN CANDLES'	SIXTEEN CANDLES CLETHRA	18-24" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
7	CS	CORNUS STOLONIFERA 'ARCTIC FIRE YELLOW'	ARCTIC FIRE YELLOW TWIG DOGWOOD	24-30" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
97	IG	ILEX GLABRA 'COMPACTA'	COMPACTA INKBERRY HOLLY	24-30" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
16	IV	ITEA VIRGINICA 'HERNY'S GARNET'	HERNY'S GARNET VIRGINIA SWEETSPIRE	24-30" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
33	RA	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	12-18" HT.	AS SHOWN	CONSISTENT FORM, LOW/WIDE SPREADING HABIT
80	TM	TAXUS x MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	18-24" HT.	AS SHOWN	CONSISTENT FORM, FULL/HEAVY
PERENNIALS AND GRASSES						
245	AT	AMSONIA TABERNEMONTANA 'BLUE ICE'	BLUE ICE AMSONIA	#3 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
133	CV	COREOPSIS VERTICILLATA 'ZAGREB'	ZAGREB WHORLED TICKSEED	#1 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
272	EP	ECHINACEA PURPUREA 'POWWOW WILD BERRY'	POWWOW WILD BERRY PURPLE CNFLWR.	#1 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
52	ED	EUPATURIUM DUBIUM 'LITTLE JOE'	LITTLE JOE PYE WEED	#3 CONT.	24" O.C.	FULLY ROOTED IN CONTAINER
195	HH	HEMEROCALLIS x 'HAPPY RETURNS'	HAPPY RETURN DAYLILY	#1 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
255	MR	MUHLENBERGIA REVERCHONII 'UNDAUNTED'	UNDAUNTED PINK MUHLY GRASS	#3 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
385	RF	RUDBECKIA x FULGIDA 'AMERICAN GOLD RUSH'	AMERICAN GOLD RUSH BLK. EYED SUSAN	#3 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
155	SS	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	STANDING OVATION LITTLE BLUESTEM	#3 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER
662	SH	SPOROBOLUS HETEROLEPIS'	PRAIRIE DROPSEED	#3 CONT.	18" O.C.	FULLY ROOTED IN CONTAINER

PLANTING NOTES:

P-1 REFER TO SHEET L102 FOR TREE PLANTING SCHEDULE

P-2 INSTALL A MINIMUM OF 2'-0" OF PLANTING SOIL MIX IN ALL PLANTING BEDS SURROUNDED BY IMPERVIOUS AREA ON ALL FOUR SIDES:

PLANTING SOIL MIX:
1/3 COMPOSTED ORGANICS
1/3 SHARP SAND
1/3 SOIL FROM HOLE
GENTLY COMPACT & WATER TO ELIMINATE LARGE AIR POCKETS



1 BASEBALL DIAMOND PLANTING ENLARGEMENT

SCALE: 1" = 20'

LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EX. 15" SD (D) — EXISTING STORM DRAIN
- EX. 6" W (W) — EXISTING WATER
- EX. 8" SAN (S) — EXISTING SANITARY SEWER
- EX. ELEC (E) — EXISTING ELECTRIC
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- LIMITS OF TOPOGRAPHIC SURVEY
- LOD — LIMIT OF DISTURBANCE
- PROPOSED SEATING STRUCTURE
- PROPOSED RETAINING WALL
- PROPOSED IMPERVIOUS AREA
- PROPOSED CURB
- PROPOSED FENCE
- PROPOSED SIGN
- PROPOSED FLAGPOLE
- PROPOSED FIELD LIGHTING
- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROPOSED WATER (Ø)
- PROPOSED SANITARY SEWER (S)
- PROPOSED ELECTRIC (E)
- PROPOSED CONTOURS (350 / 348)
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SINGLE STEM TREE
- PROPOSED MULTI-STEM TREE
- PROPOSED SHRUB
- PROPOSED PERENNIAL MASSING

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT ONLY CHANGES ASSOCIATED WITH REVISION 1 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. 4184, EXPIRATION DATE: 01/07/2025.

STATE OF MARYLAND · THERESA A. WILSON · 4184 · LANDSCAPE ARCHITECT

5.06.24

NORTH

0 5 10 20 40 60

SCALE: 1" = 20'

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary F. Kendall — DIRECTOR — 6-17-24 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.20.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/10/24

Howard County RECREATION & PARKS

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410.683.3388 www.siteresourcesinc.com

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART

MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 98 OF 125

PLANTING ENLARGEMENT

L103

SDP-82-109

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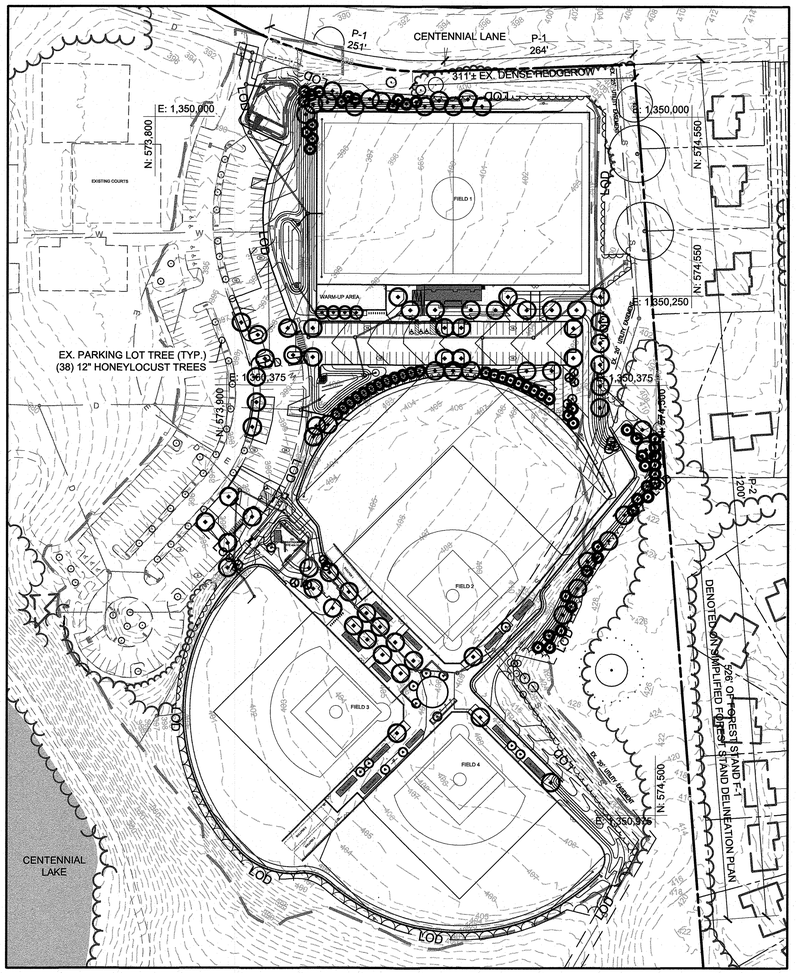

COUNTY LANDSCAPE REQUIREMENTS

SCALE: 1" =100'

SCHEDULE A - PERIMETER LANDSCAPE EDGE

PERIMETER	CATEGORY PROPERTIES / ROADWAYS	LANDSCAPE EDGE TYPE	LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	SHADE TREES REQUIRED B (1:50) C (1:40)	EVERGREEN TREES REQUIRED B (1:40) C (1:20)	SHRUBS REQUIRED TYPE	CREDIT FOR EXISTING TREES	SHADE TREES PROVIDED	EVERGREEN TREES PROVIDED	SHRUBS PROVIDED	SMALL TREES PROVIDED
P-1	NON-RESIDENTIAL FRONT TO ROAD	B	515 LF	11	13	0	() SHADE TREES (2) EVERGREEN TREES	12	11		
P-2	NON-RESIDENTIAL TO RESIDENTIAL	C	674* LF	17	34	0	(2) SHADE TREES (11) EVERGREEN TREES	15	23		

*P-2 REDUCTION OF PERIMETER LENGTH: AN EXISTING FOREST THAT HAS BEEN DENOTED ON THE SIMPLIFIED FOREST STAND DELINEATION PLAN ASSOCIATED WITH THE APPROVED SIMPLIFIED ECP FOR CENTENNIAL PARK WEST SHALL BE PRESERVED. THIS PRESERVATION OF EXISTING VEGETATION SHALL BE USED TOWARD FULFILLING THE PLANTING REQUIREMENT FOR PERIMETER-2 IN ACCORDANCE WITH THE PROVISION ON PAGE 24 OF THE HOWARD COUNTY LANDSCAPE MANUAL.

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	303
NUMBER OF TREES REQUIRED	16
CREDIT FOR EXISTING PARKING LOT TREES	38
NUMBER OF TREES PROVIDED *(SHADE TREES)*	**0**

PURPOSE STATEMENT - 05/06/2024

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LEGEND

- PROPERTY LINE
- EXISTING TREELINE
- EXISTING BRUSH LINE
- EXISTING BUILDING
- EXISTING WALK
- EXISTING ROAD
- EXISTING CURB
- EXISTING FENCE
- EXISTING TREES
- EXISTING STORM DRAIN (D)
- EXISTING WATER (W)
- EXISTING SANITARY SEWER (S)
- EXISTING ELECTRIC (E)
- EXISTING LIGHTING
- EXISTING CONTOURS (350 / 348)
- LIMITS OF TOPOGRAPHIC SURVEY
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- PROPOSED FIELD LIGHTING
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- PROPOSED WOODSLINE
- PROPOSED BRUSHLINE
- PROPOSED STORM DRAIN (D)
- PROPOSED WATER (W)
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- PROPOSED ELECTRIC (E)
- PROPOSED CONTOURS (350 / 348)
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SINGLE STEM TREE
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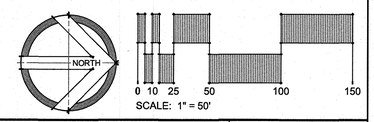
STATE OF MARYLAND · ANDREW A. WOLOSZ · 4184 · LANDSCAPE ARCHITECT

5.06.24



APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR	Per Mary A Kendall	6.17.24 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE 5.20.24
CHIEF, DIVISION OF LAND DEVELOPMENT		6/10/24 DATE

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PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.	
CENTENNIAL PARK WEST			N/A	9	
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

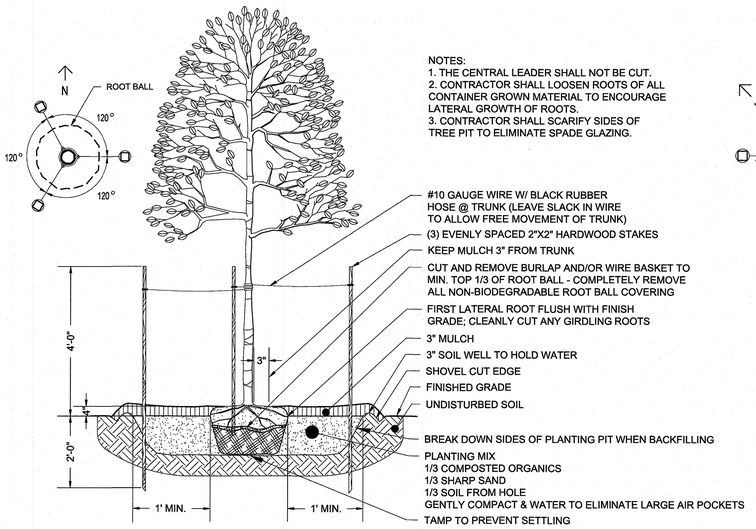
SHEET NO. 99 OF 125

LANDSCAPE REQUIREMENTS

L201

SDP-82-109

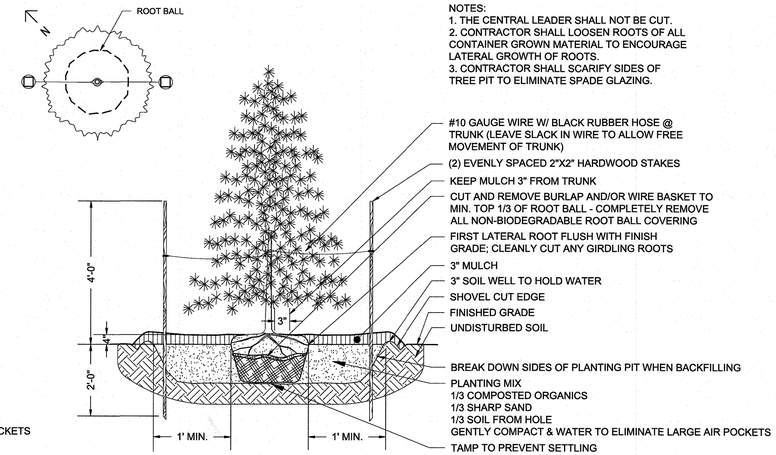
© SITE RESOURCES, INC. Z:\21\21075-HCRP Centennial Park West\04-DWG\L201_Landscape Requirements.dwg-L201 May 02, 2024 12:34pm HAW



NOTES:
1. THE CENTRAL LEADER SHALL NOT BE CUT.
2. CONTRACTOR SHALL LOOSEN 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)
- (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
- 3" 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



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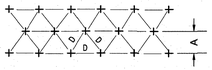
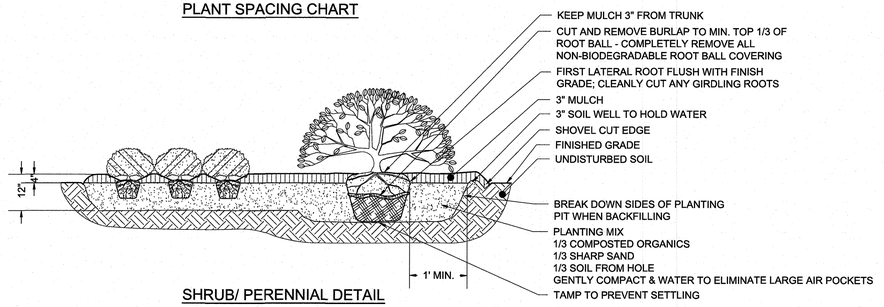
EVERGREEN TREE DETAIL



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

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



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
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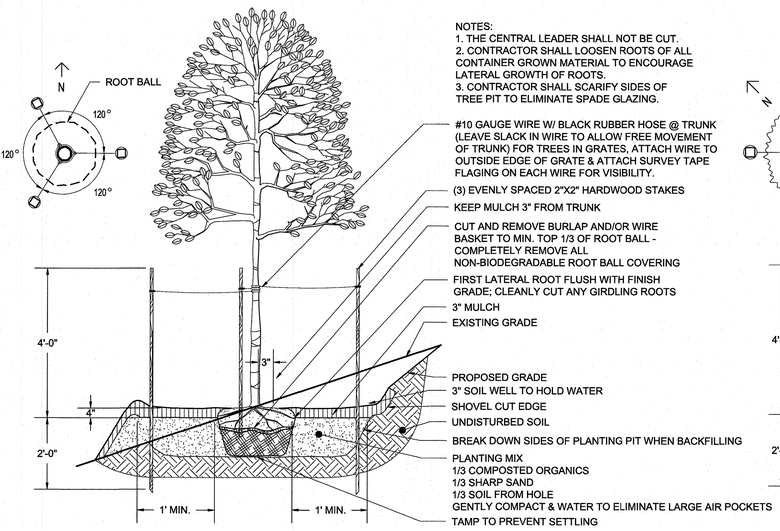
SHRUB/ PERENNIAL DETAIL



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3. CONTRACTOR SHALL SCARIFY SIDES OF TREE PIT TO ELIMINATE SPADE GLAZING.
4. #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
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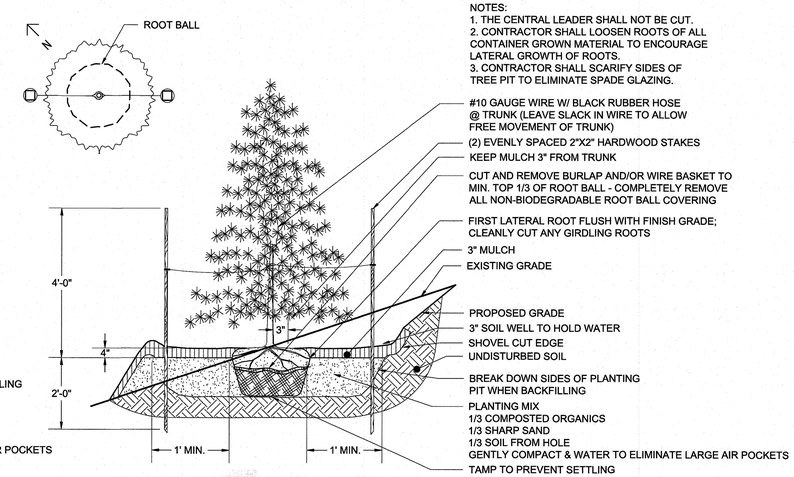
DECIDUOUS TREE ON SLOPE DETAIL



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- TAMP TO PREVENT SETTLING

EVERGREEN TREE ON SLOPE DETAIL

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.

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STATE OF MARYLAND
THERESA M. WOOD
4184
LANDSCAPE ARCHITECT
5.06.24

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APPROVED: DEPARTMENT OF PLANNING & ZONING

FOR: Mary A Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6.17.24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 100 OF 125

PLANTING DETAILS AND NOTES

L202

SDP-82-109

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RETAINING WALL - GENERAL NOTES

1. The following effective strength design parameters were used in the preparation of structural calculations for the retaining wall system:

	Friction Angle	Cohesion	Unit Weight
Reinforced Soil	32°	0 PSF	125 PCF
Retained Soil	28°	0 PSF	120 PCF
Foundation Soil	28°	0 PSF	120 PCF

Soil types and design parameters shall be confirmed by the site geotechnical engineer prior to wall construction. Naylor Structural Engineering accepts no responsibility for the interpretation or verification of subsurface conditions.

2. The system has been evaluated for internal stability and simple external sliding and overturning using Rankine method. Refer to design calculations for specific minimum factors of safety utilized in the wall design.

3. Global stability has been evaluated and considered in the design.

4. The walls have been designed to support the following maximum surcharge loadings:
   - Live Load: 100 psf
   - Dead Load: 0 psf
   - Back Slope: Level
   - Fence Wind Load: 16 psf (Basic Wind Speed = 105 mph, Exposure Cat. B) See civil plans for details.

5. The wall foundation soils at the wall locations shall be capable of safely supporting the bearing pressures indicated on the wall elevations without failure or excessive settlement.

6. The Contractor shall provide surface and subsurface drainage, grading, and erosion control during and after wall construction to avoid damage to the wall structure.

7. The Contractor is responsible for obtaining all permits and easements necessary for wall construction. The Contractor is responsible for protecting adjacent property from wall construction activities.

8. The Grading Plan by others was used in the design of the walls. Naylor Structural Engineering assumes no liability for the accuracy of information provided by others.

9. Retaining wall units shall be Keystone Compac III units as noted in the Specifications.

10. Geogrid shall be TenCate Mirafi Miragrid 3XT.

11. Retaining wall has been designed in the near vertical position.

12. Contractor shall maintain the minimum embedment indicated on the wall elevation and geometry (top of base below grade).

13. All excavation shall be in accordance with OSHA safety standards.

14. Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NICET, WACEL or equivalent) certified soils technician.

15. The required bearing resistance beneath the footing of the wall shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer Test ASTM STP-399.

16. The suitability of fill material shall be confirmed by the on-site soils technician. Each eight-inch lift must be compacted to a minimum of 95% Standard Proctor Density and the testing report shall be made available to the Howard County Inspector upon completion of construction.

QUALITY ASSURANCE PROVISIONS

1. Wall construction shall be monitored by a qualified Engineer to verify field conditions. If this work is not performed by the site geotechnical engineer, the geotechnical engineer shall be consulted in those matters pertaining to soil conditions and wall performance.

2. The foundation soils at the wall location shall be inspected by the Engineer and any unsuitable soils or improperly compacted embankment material removed and replaced as directed by the Engineer prior to wall construction to provide adequate bearing capacity and minimize settlement. The soil within the depth and lateral extent of frost penetration below the wall (30") shall be removed and replaced with nonfrost-susceptible clean granular soil.

3. All wall excavation and retained soils shall be inspected for groundwater conditions and any additional drainage provisions required in the field shall be incorporated into the wall construction as directed by the Engineer.

4. Wall backfill material shall be tested and approved by the Engineer for use in the reinforced soil zone meeting the minimum requirements of the approved design plans.

5. All soil backfill shall be tested by the Engineer for moisture, density, and compaction periodically (every 2' vertically, 100'-200' c/c) and shall meet the minimum requirements of the approved design plans or project specifications.

6. Wall construction shall be periodically inspected by the Engineer to insure the geogrid reinforcement elevations and lengths are installed in accordance with the approved design plans.

7. All wall elevations, grades, and back slope conditions shall be verified by the Engineer in the field for conformance with the approved design plans. Any revisions to the structure geometry or design criteria shall require design modification prior to proceeding with construction.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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. 41431, EXPIRATION DATE: 01/05/2026.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-28-24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

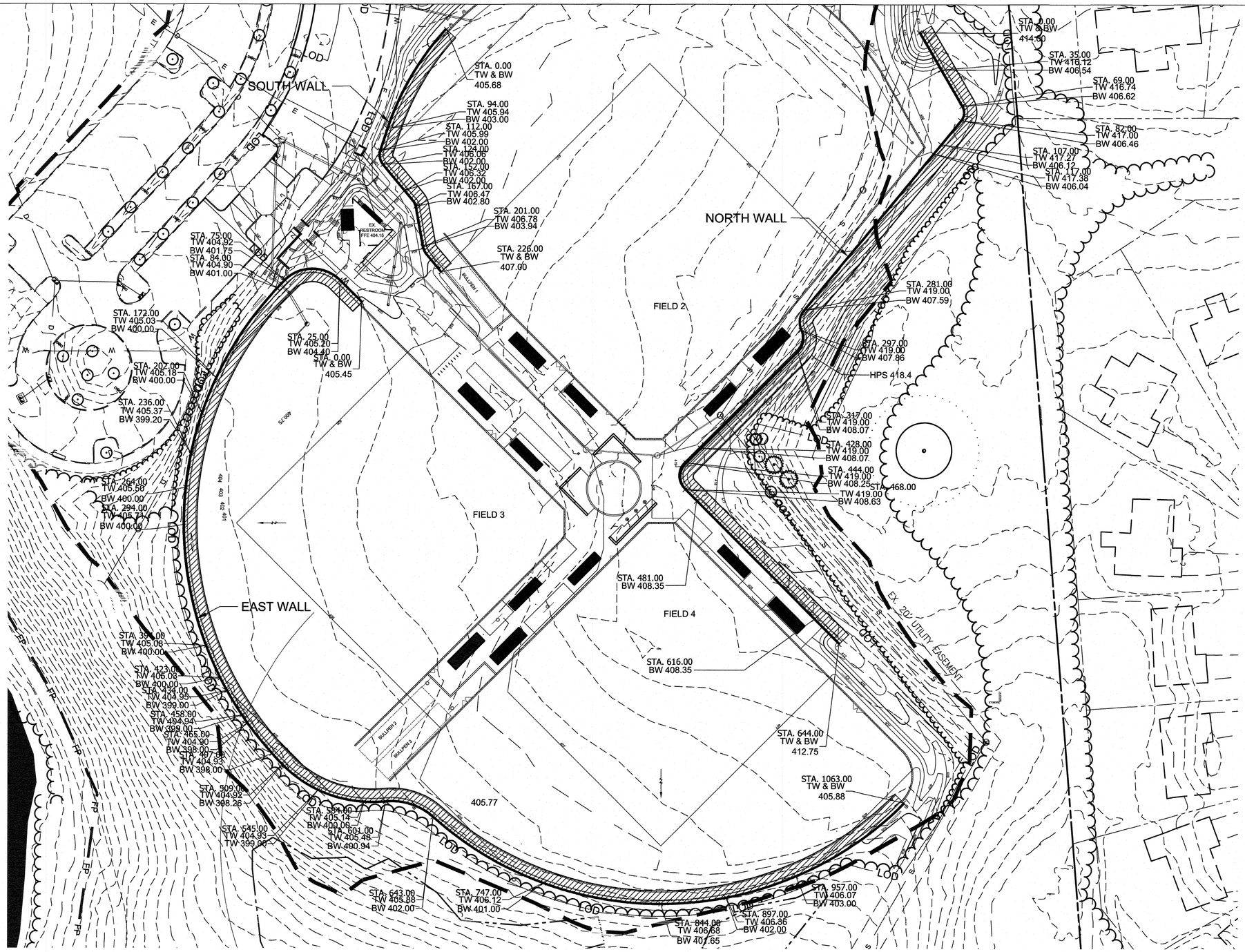
PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 101 OF 125

GENERAL NOTES

S101

SDP-82-109



= NO TREE PLANTING ZONE

SITE PLAN

Scale: 1"= 40'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

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. 41431, EXPIRATION DATE: 01/05/2026.

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendall — 6-17-24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-28-24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

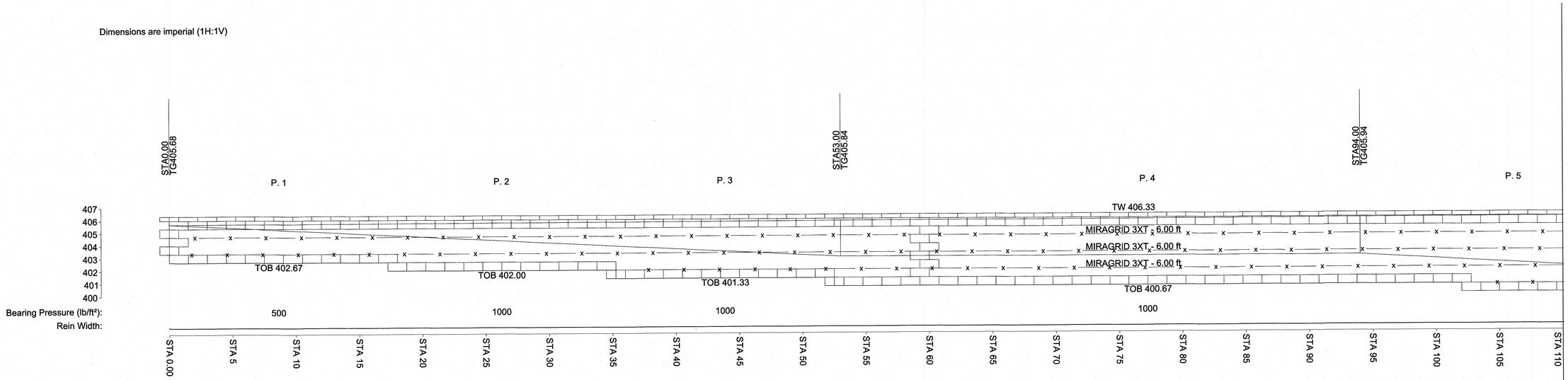
ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART				
PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 102 OF 125
SITE PLAN
S102

SDP-82-109

Dimensions are imperial (1H:1V)



MATCH LINE A-A, STA. 110, SEE SHEET NO. S-4

SOUTH WALL - ELEVATION 1

Scale: 1/4" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	—— x —— x —— x ——

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
1	0.00	405.68	405.68
2	53.00	405.84	403.00
3	94.00	405.94	403.00

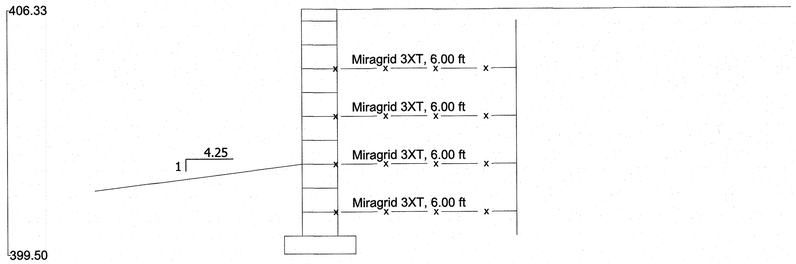
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
1	406.33	402.67	0.00	17.25	11.50
2	406.33	402.00	17.25	35.25	12.00
3	406.33	401.33	35.25	52.50	11.50
4	406.33	400.67	52.50	102.00	33.00
5	406.33	400.00	102.00	152.25	33.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
A	All	6.00	1 - 12	0.00 - 227.25

SOUTH WALL - GEOMETRY 1



Panel 5 : Station 102.00 - 152.25

SOUTH WALL - SECTION 1

Scale: 1/2" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A Kay Coad — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

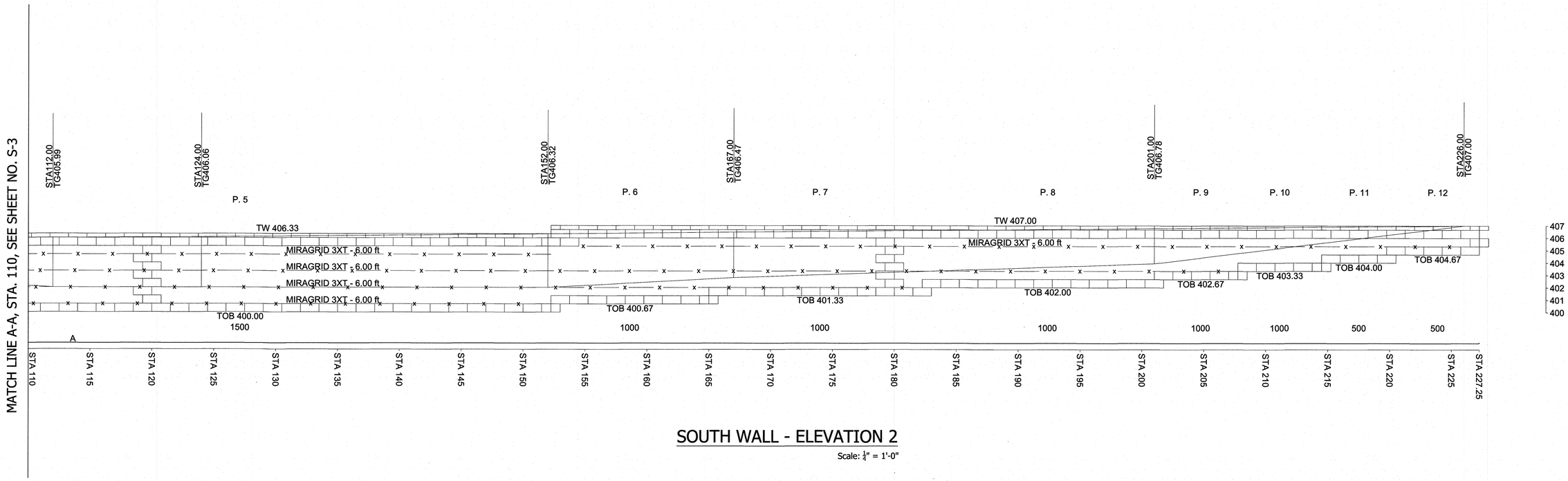
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 103 OF 125

SOUTH WALL - 1

S103

SDP-82-109



SOUTH WALL - ELEVATION 2

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
4	112.00	405.99	402.00
5	124.00	406.06	402.00
6	152.00	406.32	402.00
7	167.00	406.47	402.80
8	201.00	406.78	403.94
9	226.00	407.00	407.00

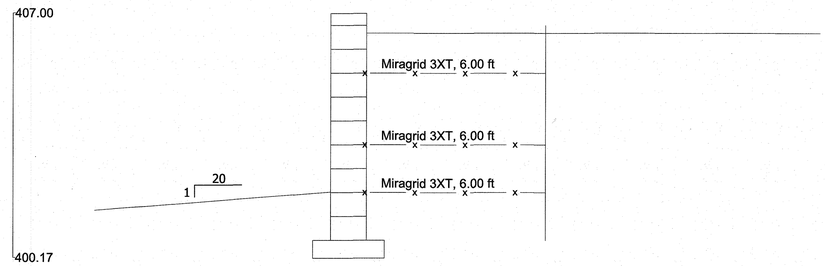
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
5	406.33	400.00	102.00	152.25	33.50
6	407.00	400.67	152.25	165.00	8.50
7	407.00	401.33	165.00	183.00	12.00
8	407.00	402.00	183.00	201.75	12.50
9	407.00	402.67	201.75	207.75	4.00
10	407.00	403.33	207.75	214.50	4.50
11	407.00	404.00	214.50	220.50	4.00
12	407.00	404.67	220.50	227.25	4.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
A	All	6.00	1 - 12	0.00 - 227.25

SOUTH WALL - GEOMETRY 2



Panel 6 : Station 152.25 - 165.00

SOUTH WALL - SECTION 2

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendall — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — DATE 6/19/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR III — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

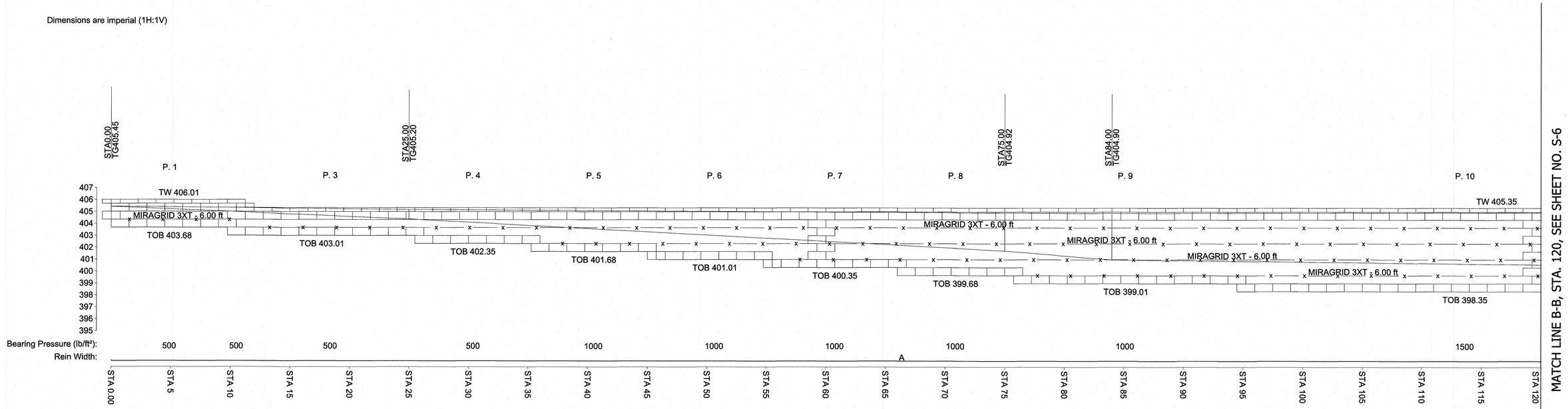
SHEET NO. 104 OF 125

SOUTH WALL - 2

S104

SDP-82-109

Dimensions are imperial (1H:1V)



EAST WALL - ELEVATION 1

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	x x x

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
1	0.00	405.45	405.44
2	25.00	405.20	404.40
3	75.00	404.92	401.75
4	84.00	404.90	401.00

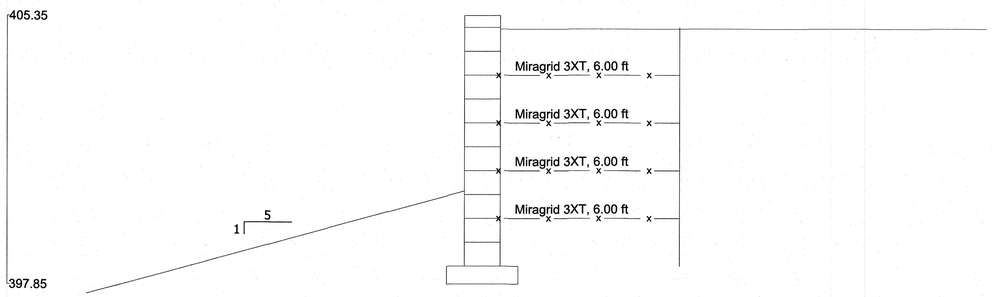
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
1	406.01	403.68	0.00	9.75	6.50
2	406.01	403.01	9.75	11.25	1.00
3	405.35	403.01	11.25	25.50	9.50
4	405.35	402.35	25.50	35.25	6.50
5	405.35	401.68	35.25	45.75	7.00
6	405.35	401.01	45.75	55.50	6.50
7	405.35	400.35	55.50	66.00	7.00
8	405.35	399.68	66.00	75.75	6.50
9	405.35	399.01	75.75	94.50	12.50
10	405.35	398.35	94.50	132.75	25.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
A	All	6.00	1 - 10	0.00 - 132.75
B	All	7.00	11 - 11	132.75 - 171.00

EAST WALL - GEOMETRY 1



Panel 10 : Station 94.50 - 132.75

EAST WALL - SECTION 1

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PROFESSIONAL CERTIFICATION
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APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5-28-24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — No. 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

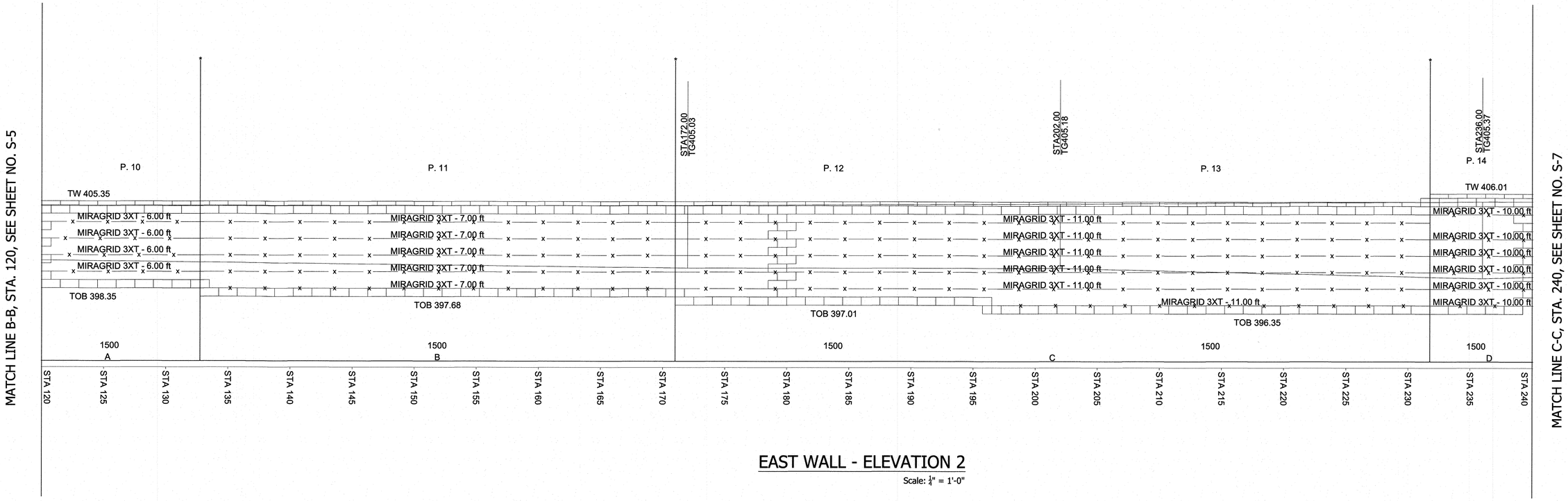
ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 105 OF 125

EAST WALL - 1

S105

SDP-82-109



EAST WALL - ELEVATION 2

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	x x x

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
5	172.00	405.03	400.00
6	202.00	405.18	400.00
7	236.00	405.37	399.20

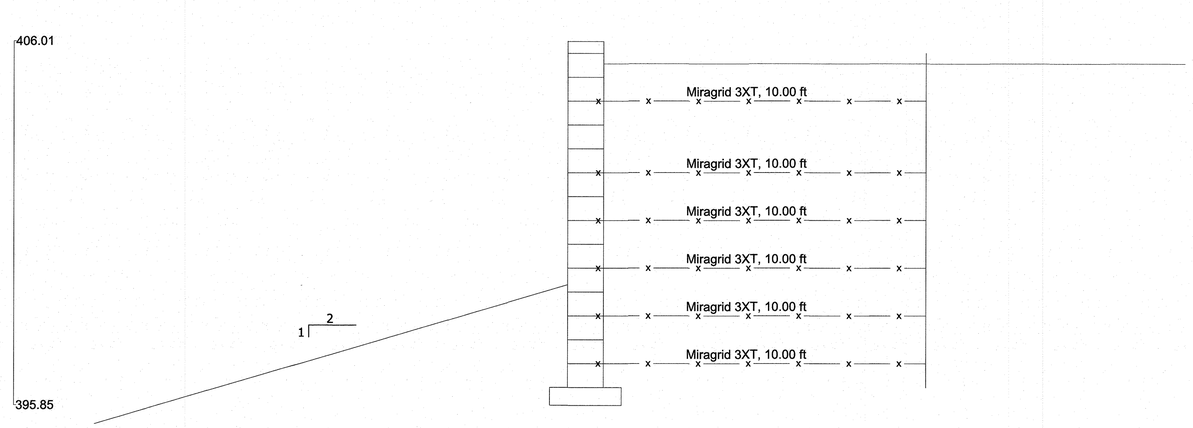
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
10	405.35	398.35	94.50	132.75	25.50
11	405.35	397.68	132.75	171.00	25.50
12	405.35	397.01	171.00	196.50	17.00
13	405.35	396.35	196.50	231.75	23.50
14	406.01	396.35	231.75	239.25	5.00
15	406.01	397.01	239.25	252.00	8.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
A	All	6.00	1 - 10	0.00 - 132.75
B	All	7.00	11 - 11	132.75 - 171.00
C	All	11.00	12 - 13	171.00 - 231.75
D	All	10.00	14 - 16	231.75 - 266.25

EAST WALL - GEOMETRY 2



Panel 14 : Station 231.75 - 239.25

EAST WALL - SECTION 2

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A Kendrick — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.20.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

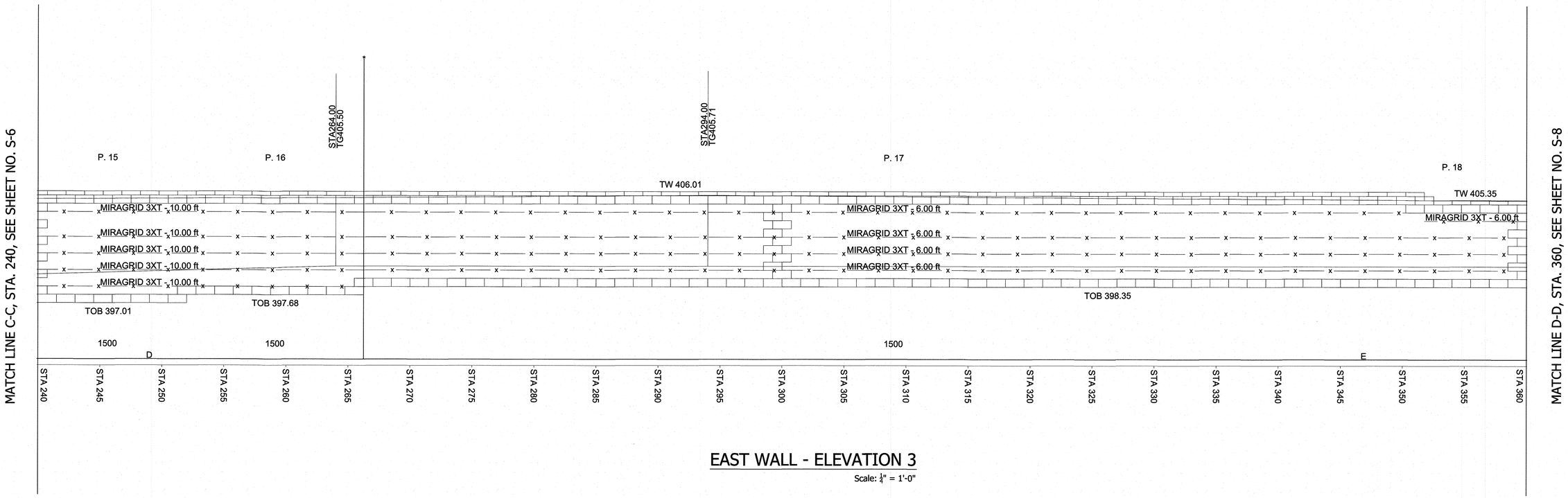
PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 106 OF 125

EAST WALL - 2

S106

SDP-82-109



EAST WALL - ELEVATION 3

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
8	264.00	405.50	400.00
9	294.00	405.71	400.00

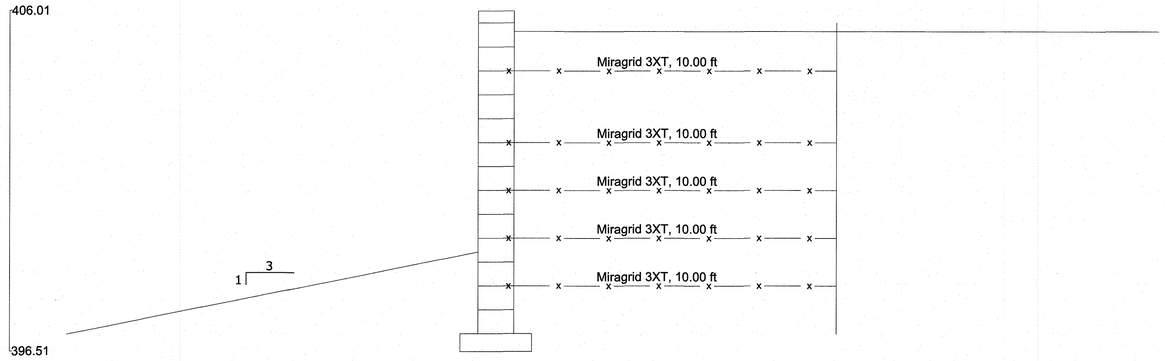
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
15	406.01	397.01	239.25	252.00	8.50
16	406.01	397.68	252.00	266.25	9.50
17	406.01	398.35	266.25	351.75	57.00
18	405.35	398.35	351.75	386.25	23.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
D	All	10.00	14 - 16	231.75 - 266.25
E	All	6.00	17 - 19	266.25 - 427.50

EAST WALL - GEOMETRY 3



Panel 15 : Station 239.25 - 252.00

EAST WALL - SECTION 3

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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. 41431, EXPIRATION DATE: 01/05/2026.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR	DATE 6.13.24
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 5/28/24
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/10/24

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STATE OF MARYLAND · GREGORY GEORGE NAYLOR · 41431 · PROFESSIONAL ENGINEER · 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

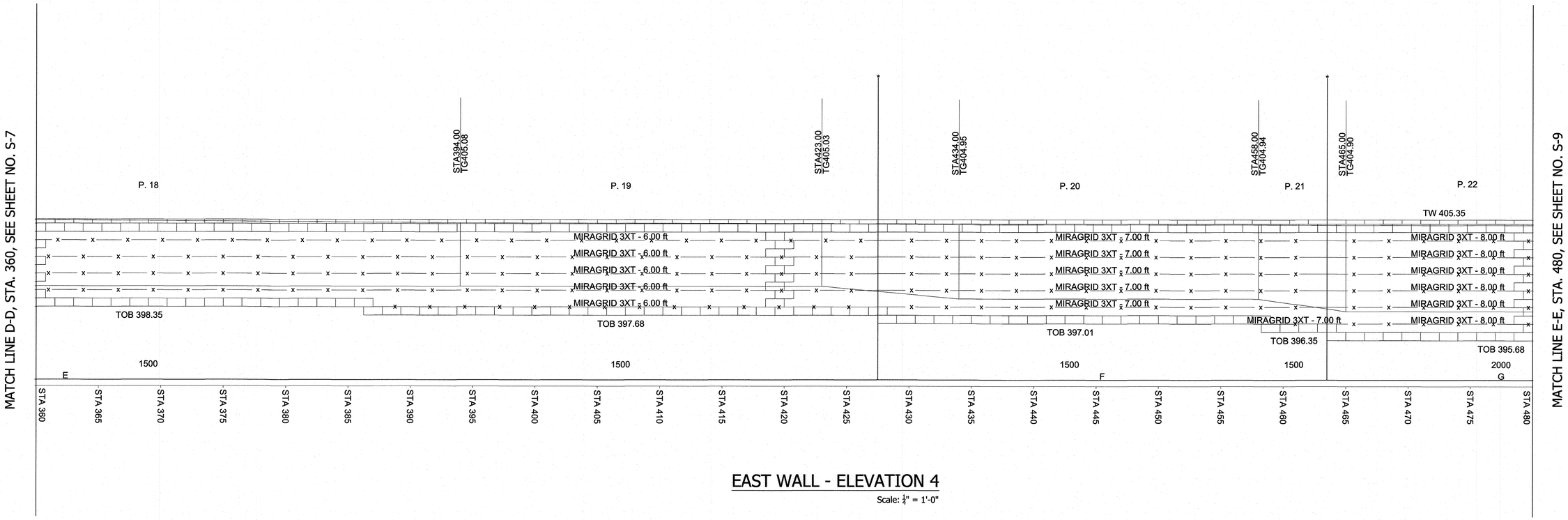
PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 107 OF 125

EAST WALL - 3

S107

SDP-82-109



EAST WALL - ELEVATION 4

Scale: 1" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
10	394.00	405.08	400.00
11	423.00	405.03	400.00
12	434.00	404.95	399.00
13	458.00	404.94	399.00
14	465.00	404.90	398.00

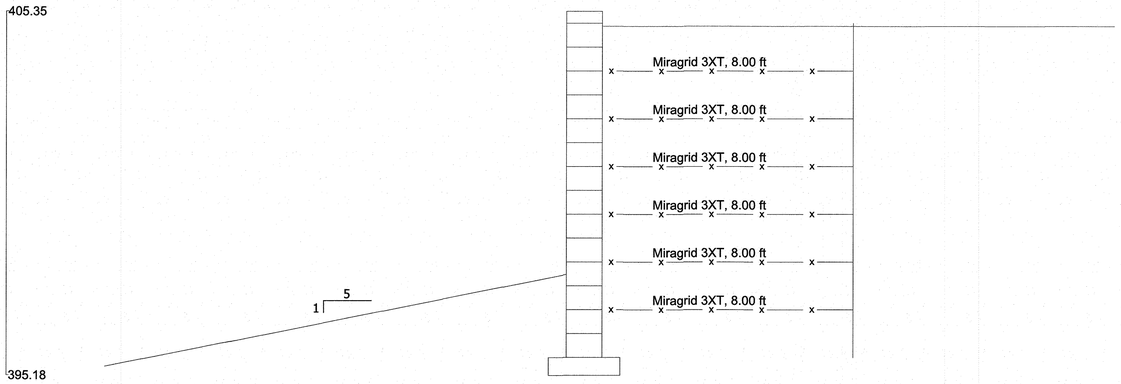
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
18	405.35	398.35	351.75	386.25	23.00
19	405.35	397.68	386.25	427.50	27.50
20	405.35	397.01	427.50	458.25	20.50
21	405.35	396.35	458.25	463.50	3.50
22	405.35	395.68	463.50	504.00	27.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
E	All	6.00	17 - 19	266.25 - 427.50
F	All	7.00	20 - 21	427.50 - 463.50
G	All	8.00	22 - 22	463.50 - 504.00

EAST WALL - GEOMETRY 4



Panel 22 : Station 463.50 - 504.00

EAST WALL - SECTION 4

Scale: 1" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/18/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 6/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

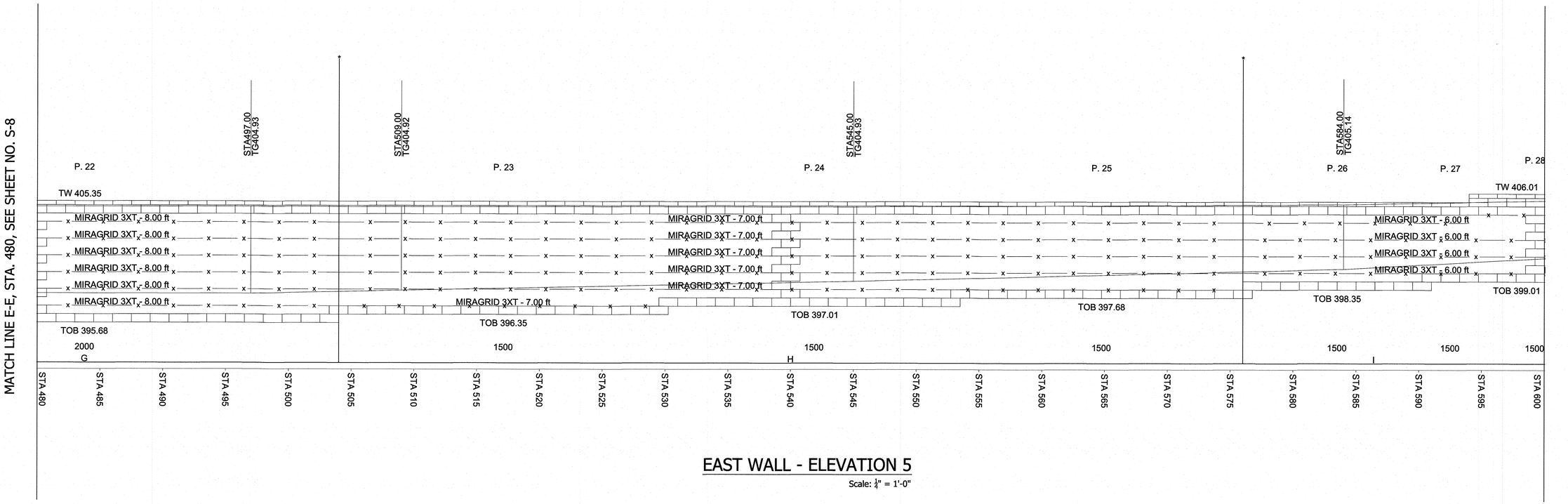
ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 108 OF 125

EAST WALL - 4

S108

SDP-82-109



EAST WALL - ELEVATION 5

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	x x x

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
15	497.00	404.93	398.00
16	509.00	404.92	398.26
17	545.00	404.93	399.00
18	584.00	405.14	400.00

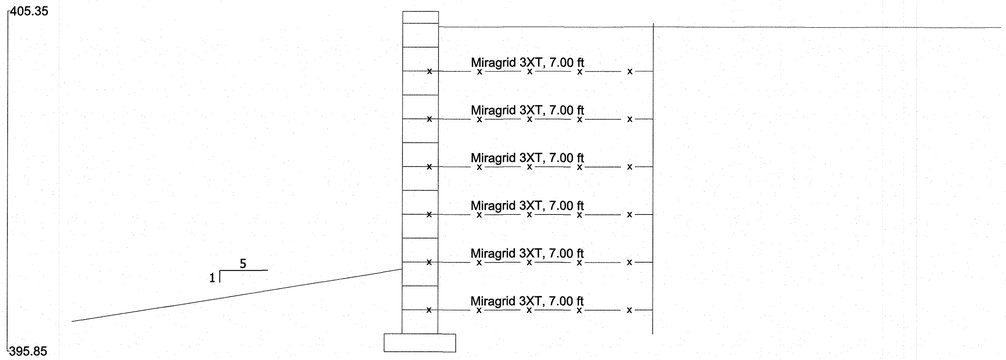
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
22	405.35	395.68	463.50	504.00	27.00
23	405.35	396.35	504.00	530.25	17.50
24	405.35	397.01	530.25	553.50	15.50
25	405.35	397.68	553.50	576.00	15.00
26	405.35	398.35	576.00	591.00	10.00
27	405.35	399.01	591.00	594.00	2.00
28	406.01	399.01	594.00	604.50	7.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
G	All	8.00	22 - 22	463.50 - 504.00
H	All	7.00	23 - 25	504.00 - 576.00
I	All	6.00	26 - 32	576.00 - 730.50

EAST WALL - GEOMETRY 5



Panel 23 : Station 504.00 - 530.25

EAST WALL - SECTION 5

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A Kendall — 6.17.24

DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/28/2024

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

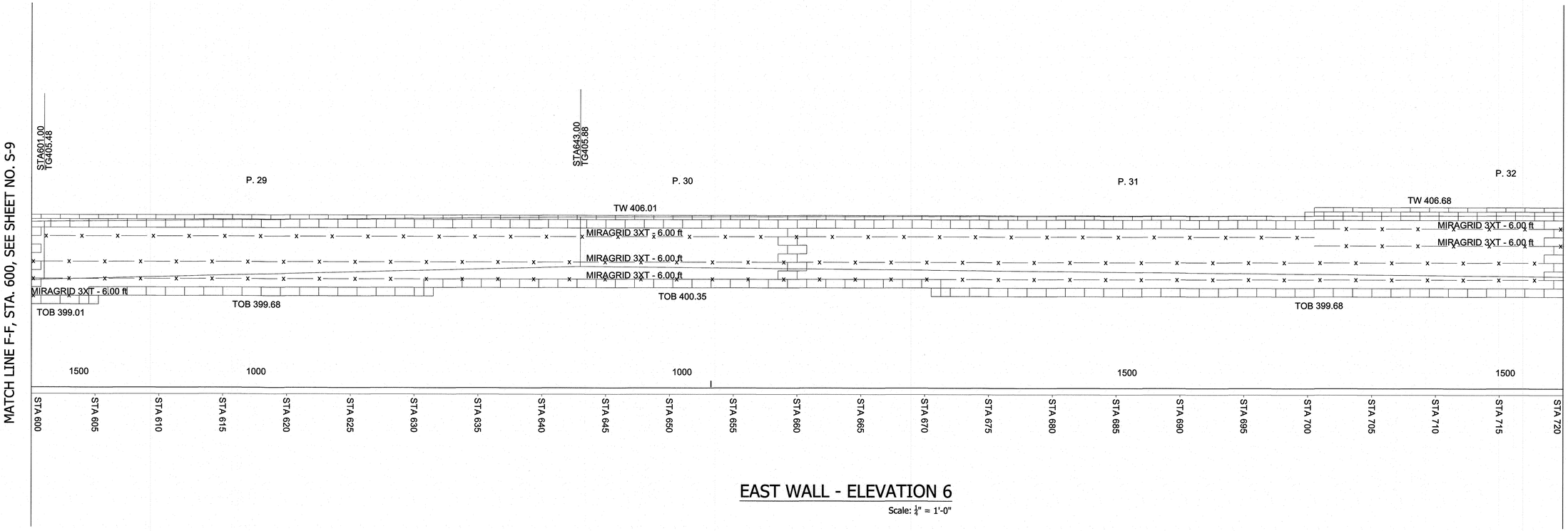
PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 109 OF 125

EAST WALL - 5

S109

SDP-82-109



EAST WALL - ELEVATION 6

Scale: 1/4" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	—— x —— x —— x ——

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
19	601.00	405.48	400.94
20	643.00	405.88	402.00

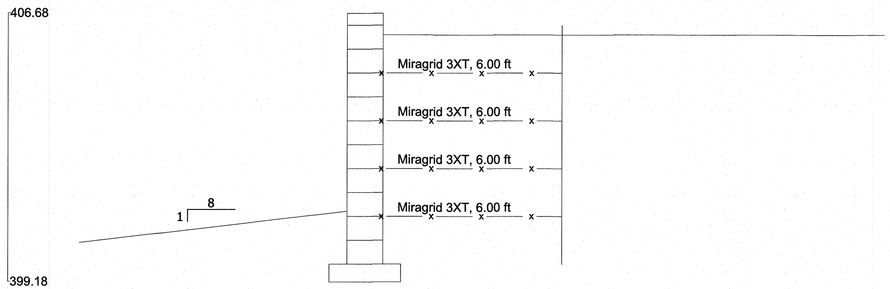
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
28	406.01	399.01	594.00	604.50	7.00
29	406.01	399.68	604.50	630.75	17.50
30	406.01	400.35	630.75	671.25	27.00
31	406.01	399.68	671.25	700.50	19.50
32	406.68	399.68	700.50	730.50	20.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
I	All	6.00	26 - 32	576.00 - 730.50

EAST WALL - GEOMETRY 6



Panel 32 : Station 700.50 - 730.50

EAST WALL - SECTION 6

Scale: 1/2" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary F. Kendall 6-17-24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND · GREGORY GEORGE NAYLOR JR. · No. 41431 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

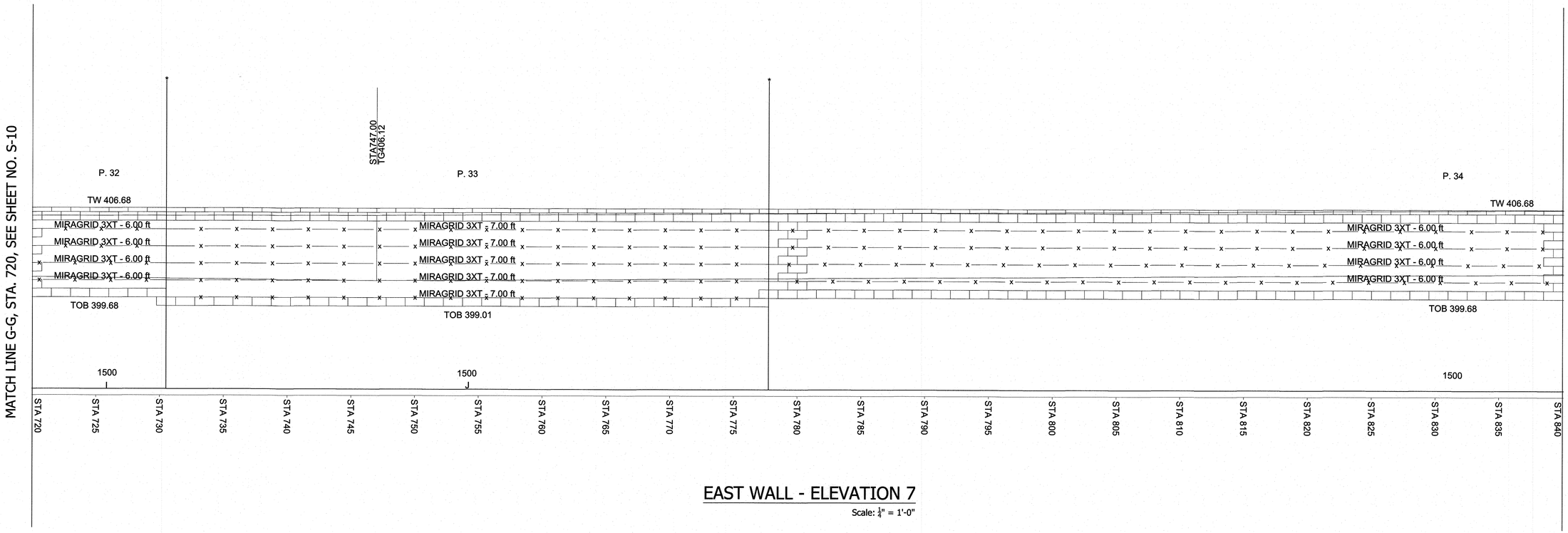
PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 110 OF 125

EAST WALL - 6

S110

SDP-82-109



EAST WALL - ELEVATION 7

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
21	747.00	406.12	401.00

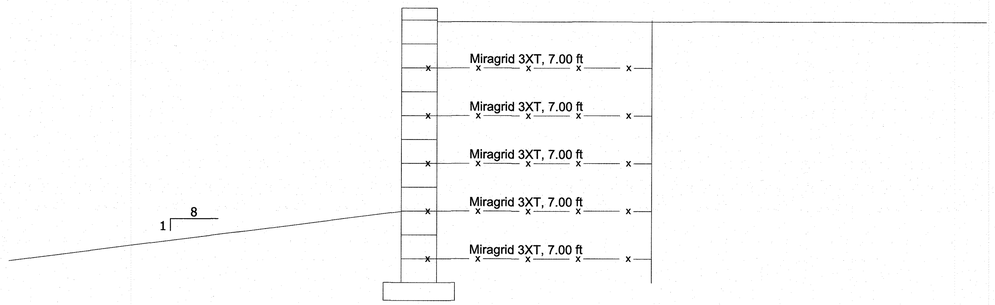
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
32	406.68	399.68	700.50	730.50	20.00
33	406.68	399.01	730.50	777.75	31.50
34	406.68	399.68	777.75	885.00	71.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
I	All	6.00	26 - 32	576.00 - 730.50
J	All	7.00	33 - 33	730.50 - 777.75
K	All	6.00	34 - 41	777.75 - 1056.75

EAST WALL - GEOMETRY 7



Panel 33 : Station 730.50 - 777.75

EAST WALL - SECTION 7

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PROFESSIONAL CERTIFICATION
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APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendrick — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

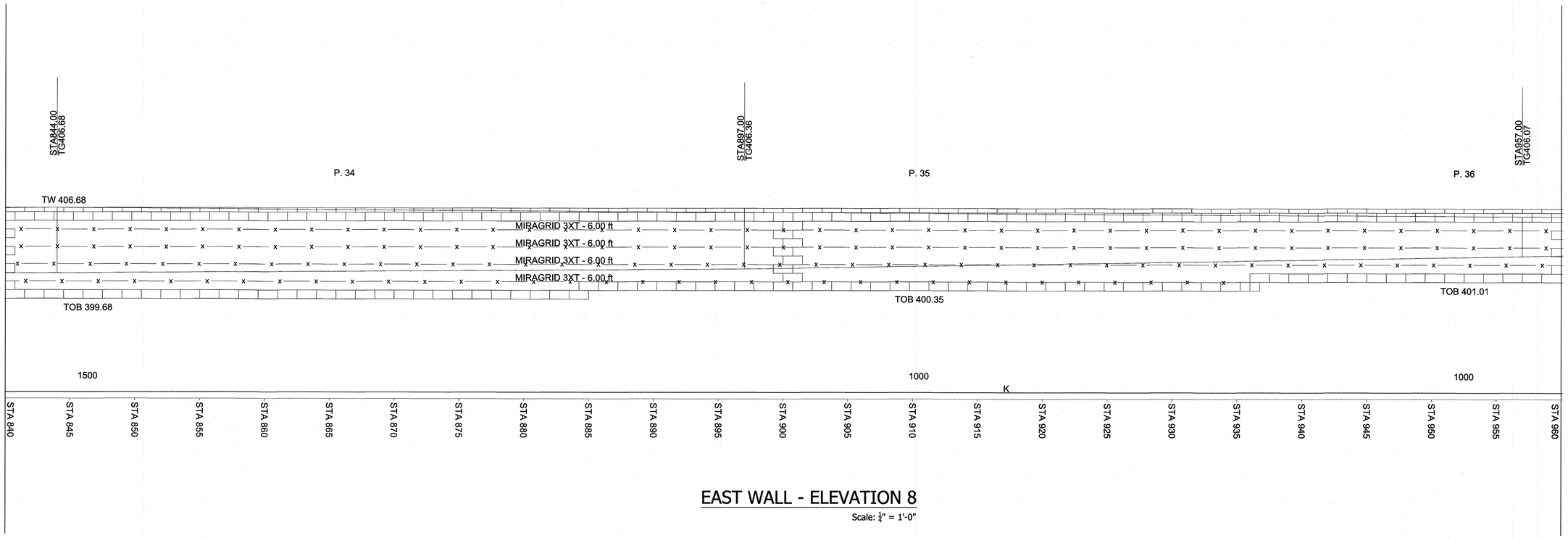
ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 111 OF 125

EAST WALL - 7

S111

SDP-82-109



EAST WALL - ELEVATION 8

Scale: 1" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
22	844.00	406.68	401.65
23	897.00	406.36	402.00
24	957.00	406.07	403.00

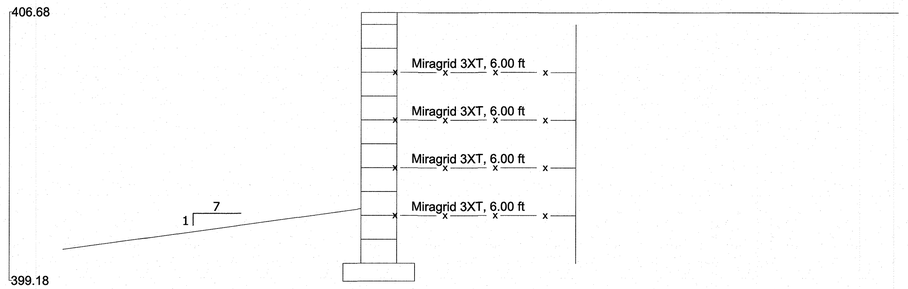
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
34	406.68	399.68	777.75	885.00	71.50
35	406.68	400.35	885.00	936.00	34.00
36	406.68	401.01	936.00	969.00	22.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
K	All	6.00	34 - 41	777.75 - 1056.75

EAST WALL - GEOMETRY 8



Panel 34 : Station 777.75 - 885.00

EAST WALL - SECTION 8

Scale: 1/2" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mindy Cordeo 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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STATE OF MARYLAND · GREGORY GEORGE NAYLOR · 41431 · PROFESSIONAL ENGINEER 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

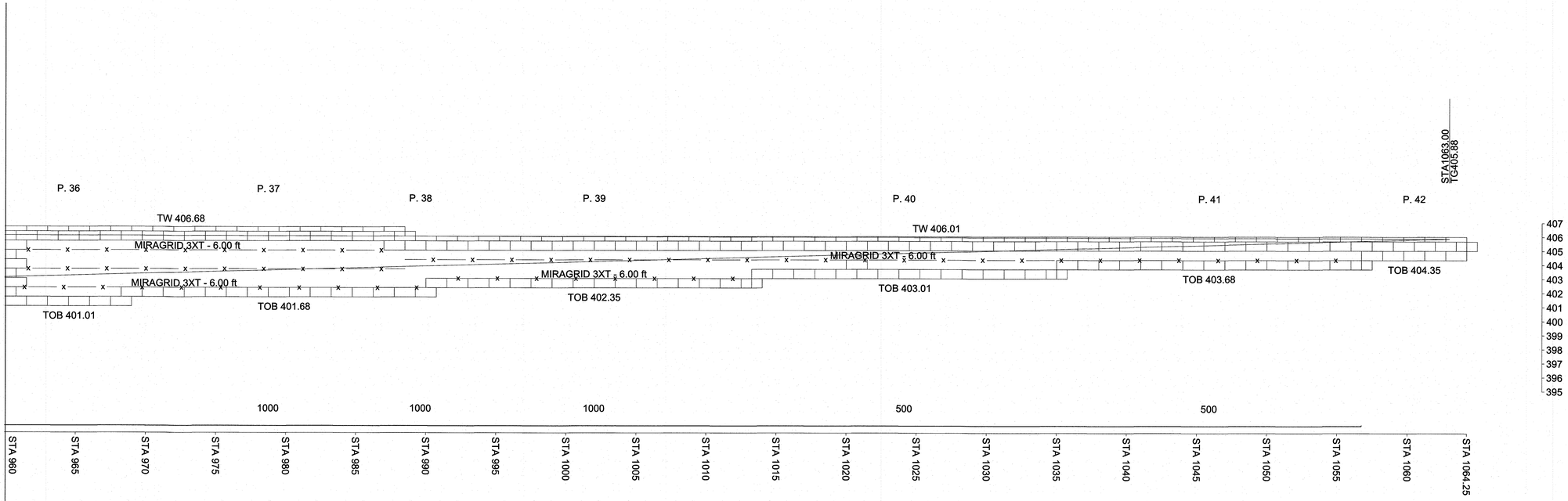
SHEET NO. 112 OF 125

EAST WALL - 8

S112

SDP-82-109

MATCH LINE I-I, STA. 960, SEE SHEET NO. S-12



EAST WALL - ELEVATION 9

Scale: 1/4" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	—— x —— x —— x ——

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
25	1063.00	405.88	405.87

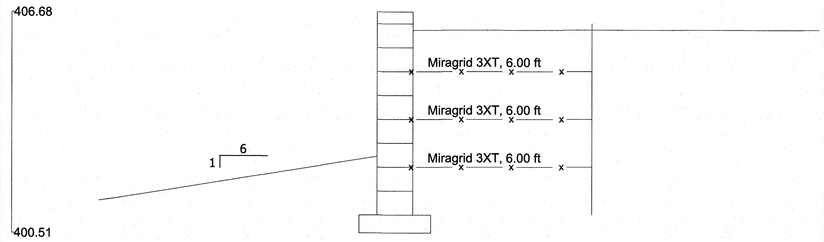
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
36	406.68	401.01	936.00	969.00	22.00
37	406.68	401.68	969.00	988.50	13.00
38	406.01	401.68	988.50	990.75	1.50
39	406.01	402.35	990.75	1013.25	15.00
40	406.01	403.01	1013.25	1035.00	14.50
41	406.01	403.68	1035.00	1056.75	14.50
42	406.01	404.35	1056.75	1064.25	5.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
K	All	6.00	34 - 41	777.75 - 1056.75

EAST WALL - GEOMETRY 9



Panel 36 : Station 936.00 - 969.00

EAST WALL - SECTION 9

Scale: 1/4" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/17/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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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. 41431, EXPIRATION DATE: 01/05/2026.

STATE OF MARYLAND · GREGORY GEORGE NAYLOR JR. · 41431 · PROFESSIONAL ENGINEER
5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

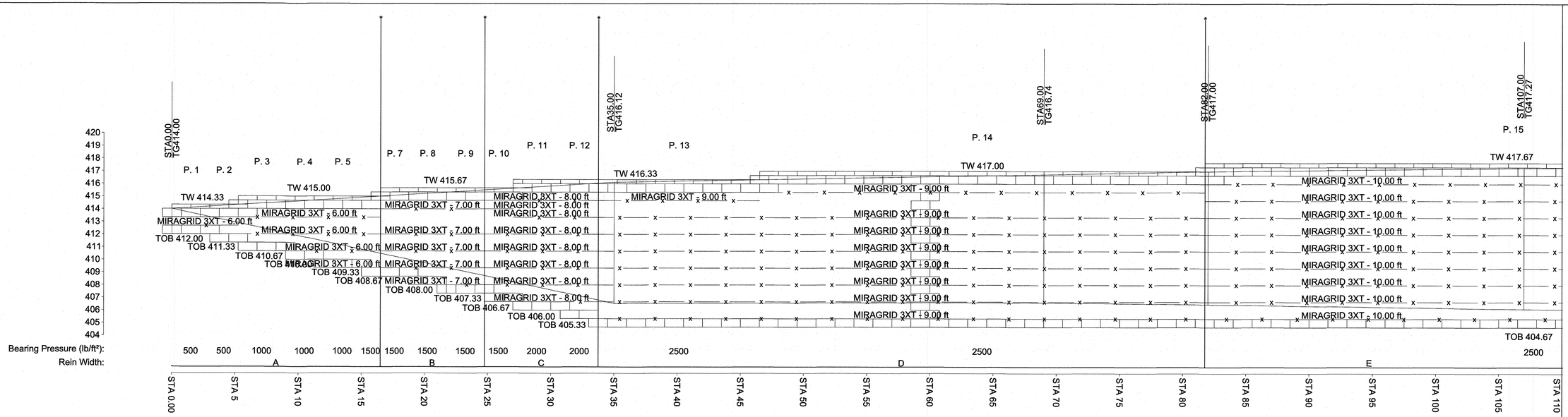
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 113 OF 125

EAST WALL - 9

S113

SDP-82-109



MATCH LINE J-J, STA. 110, SEE SHEET NO. S-15

NORTH WALL - ELEVATION 1

Scale: 1/4" = 1'-0"

Reinforcement Legend

3XT Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
1	0.00	414.00	414.00
2	35.00	416.12	406.54
3	69.00	416.74	406.62
4	82.00	417.00	406.46
5	107.00	417.27	406.12

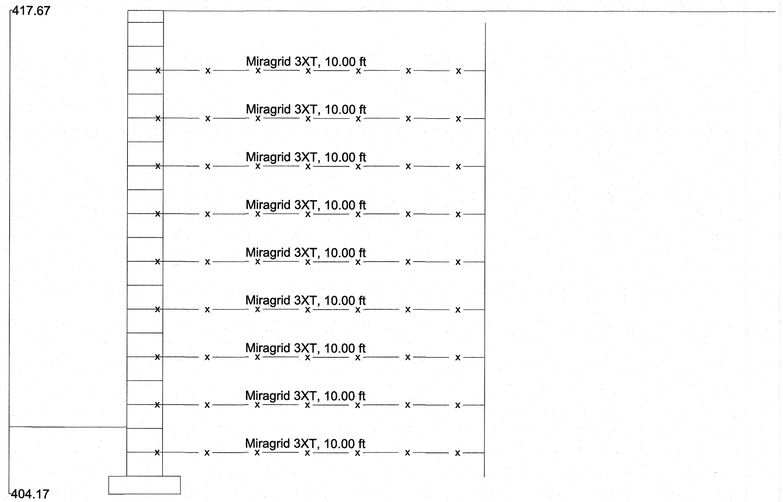
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
1	414.33	412.00	0.00	3.00	2.00
2	414.33	411.33	3.00	5.25	1.50
3	415.00	410.67	5.25	9.00	2.50
4	415.00	410.00	9.00	12.00	2.00
5	415.00	409.33	12.00	15.00	2.00
6	415.00	408.67	15.00	16.50	1.00
7	415.67	408.67	16.50	18.75	1.50
8	415.67	408.00	18.75	21.75	2.00
9	415.67	407.33	21.75	24.75	2.00
10	415.67	406.67	24.75	27.00	1.50
11	416.33	406.00	27.00	30.75	2.50
12	416.33	405.33	30.75	33.75	2.00
13	416.33	404.67	33.75	46.50	8.50
14	417.00	404.67	46.50	81.75	23.50
15	417.67	404.67	81.75	145.50	42.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
A	All	6.00	1 - 6	0.00 - 16.50
B	All	7.00	7 - 9	16.50 - 24.75
C	All	8.00	10 - 12	24.75 - 33.75
D	All	9.00	13 - 14	33.75 - 81.75
E	All	10.00	15 - 19	81.75 - 310.50

NORTH WALL - GEOMETRY 1



Panel 15 : Station 81.75 - 145.50

NORTH WALL - SECTION 1

Scale: 1/2" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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. 41431, EXPIRATION DATE 01/05/2025.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 9.25.24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/10/24

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STATE OF MARYLAND GREGORY GEORGE NAYLOR 41431 PROFESSIONAL ENGINEER 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

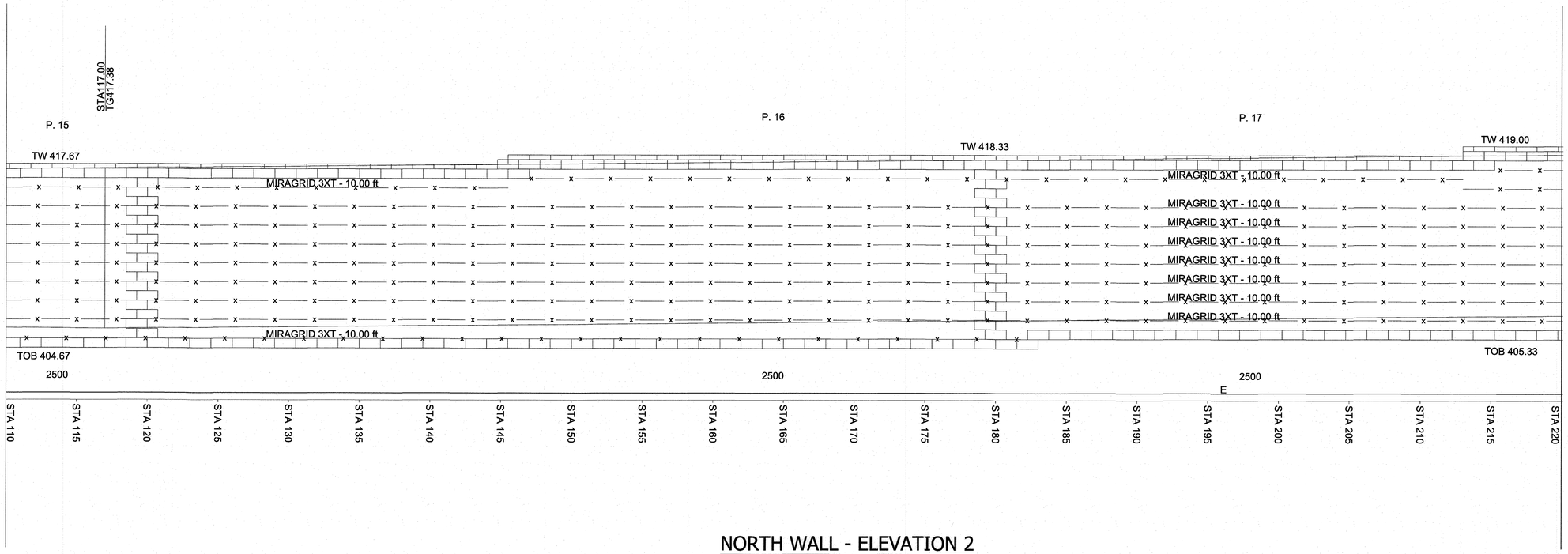
SHEET NO. 114 OF 125

NORTH WALL - 1

S114

SDP-82-109

MATCH LINE J-J, STA. 110, SEE SHEET NO. S-14



MATCH LINE K-K, STA. 220, SEE SHEET NO. S-16

NORTH WALL - ELEVATION 2

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
6	117.00	417.38	406.04

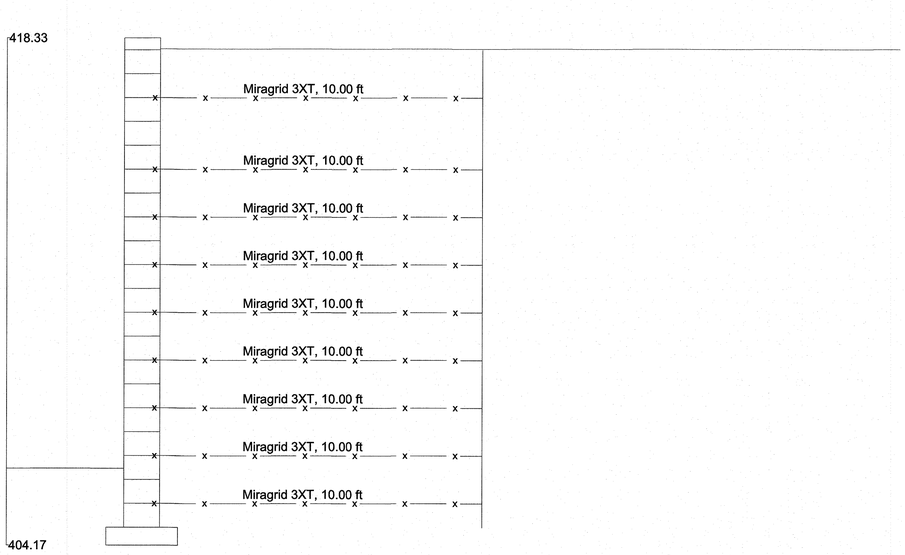
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
15	417.67	404.67	81.75	145.50	42.50
16	418.33	404.67	145.50	183.00	25.00
17	418.33	405.33	183.00	213.00	20.00
18	419.00	405.33	213.00	253.50	27.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
E	All	10.00	15 - 19	81.75 - 310.50

NORTH WALL - GEOMETRY 2



Panel 16 : Station 145.50 - 183.00

NORTH WALL - SECTION 2

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PROFESSIONAL CERTIFICATION
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APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5.24.24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/13/24

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STATE OF MARYLAND · GREGORY GEORGE NAYLOR · No. 41431 · PROFESSIONAL ENGINEER
5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

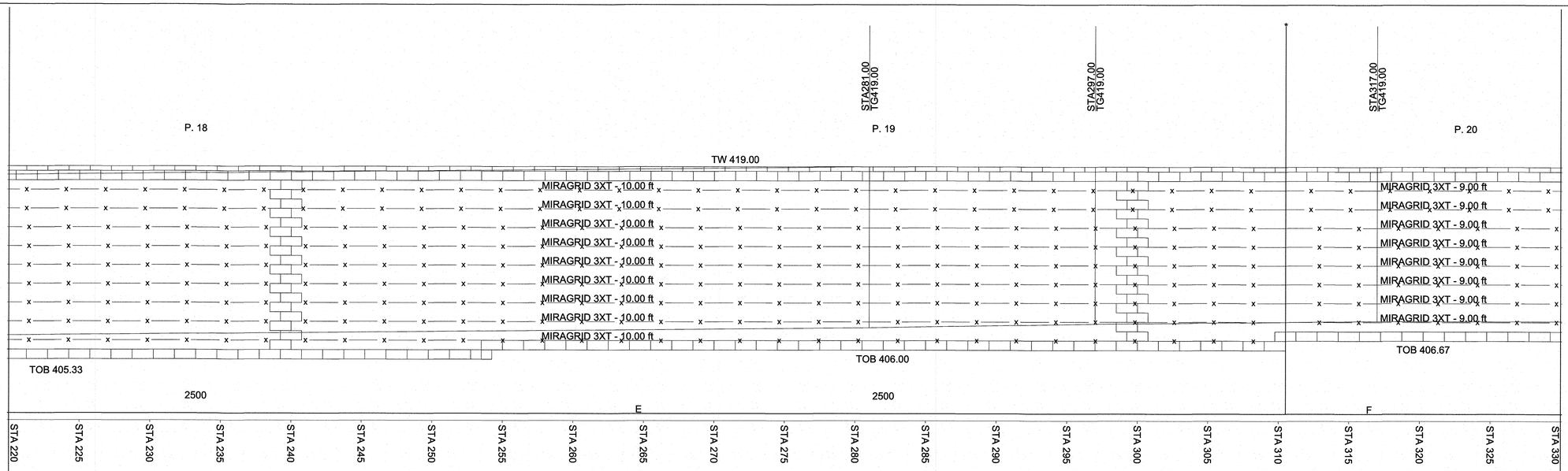
ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 115 OF 125
NORTH WALL - 2
S115

SDP-82-109



NORTH WALL - ELEVATION 3

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
7	281.00	419.00	407.59
8	297.00	419.00	407.86
9	317.00	419.00	408.07

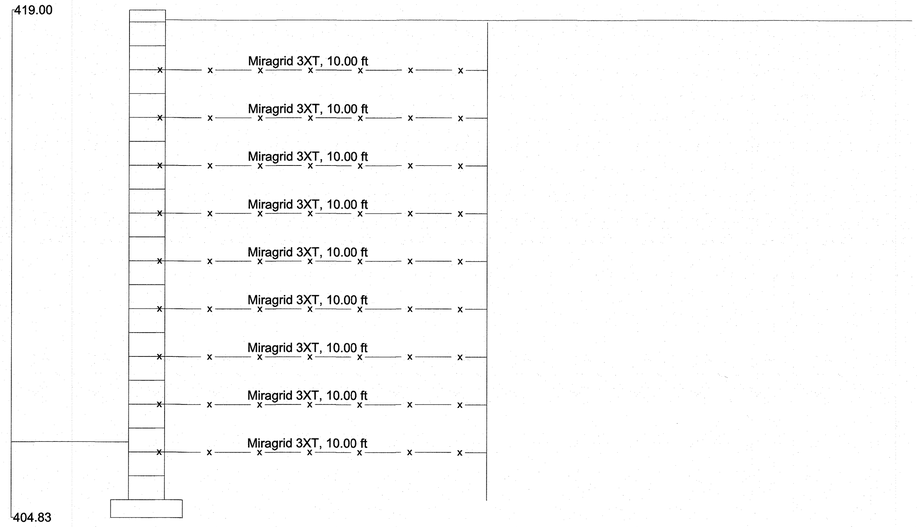
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
18	419.00	405.33	213.00	253.50	27.00
19	419.00	406.00	253.50	310.50	38.00
20	419.00	406.67	310.50	487.50	118.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
E	All	10.00	15 - 19	81.75 - 310.50
F	All	9.00	20 - 21	310.50 - 505.50

NORTH WALL - GEOMETRY 3



Panel 18 : Station 213.00 - 253.50

NORTH WALL - SECTION 3

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

PROFESSIONAL CERTIFICATION
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APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/17/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/17/24

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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — No. 41431 — PROFESSIONAL ENGINEER — 6/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

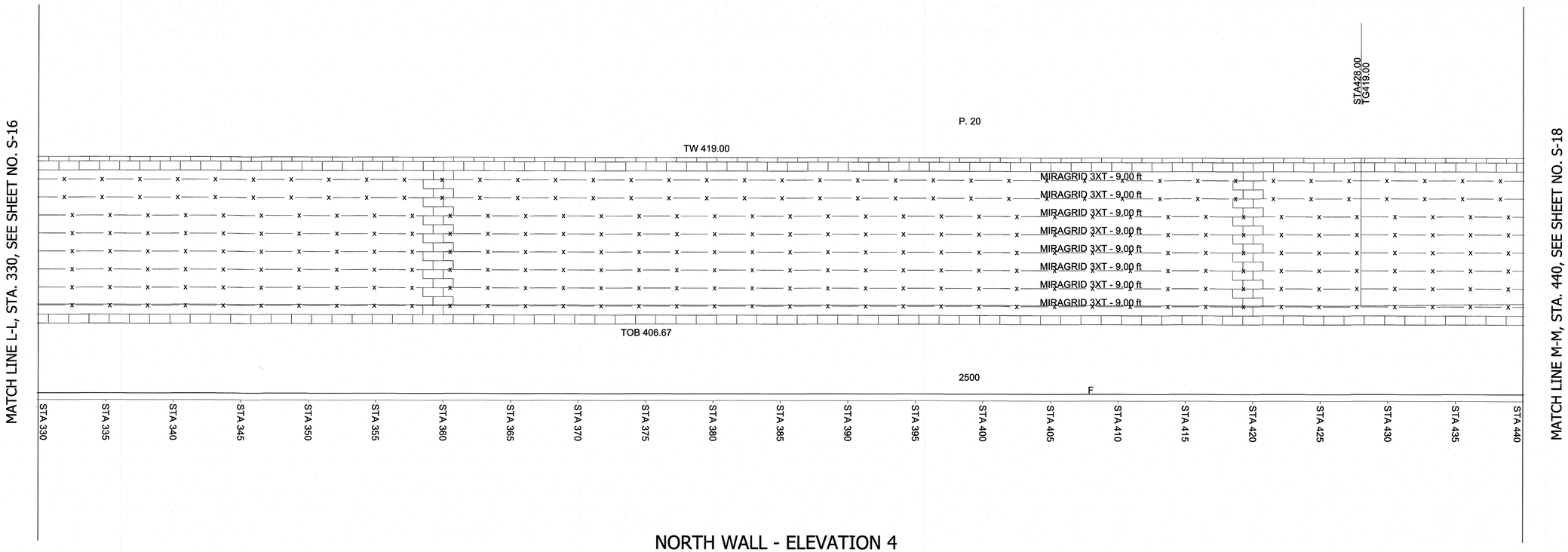
ADDRESS CHART		PERMIT INFORMATION CHART					
MAP/GRID/PARCEL	STREET ADDRESS	PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
		CENTENNIAL PARK WEST			N/A		9
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042	LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
		L. 781/ F. 592	7	R-20	0030	2nd	602304
		WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
		--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 116 OF 125

NORTH WALL - 3

S116

SDP-82-109



NORTH WALL - ELEVATION 4

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	—— x —— x —— x ——

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
10	428.00	419.00	408.07

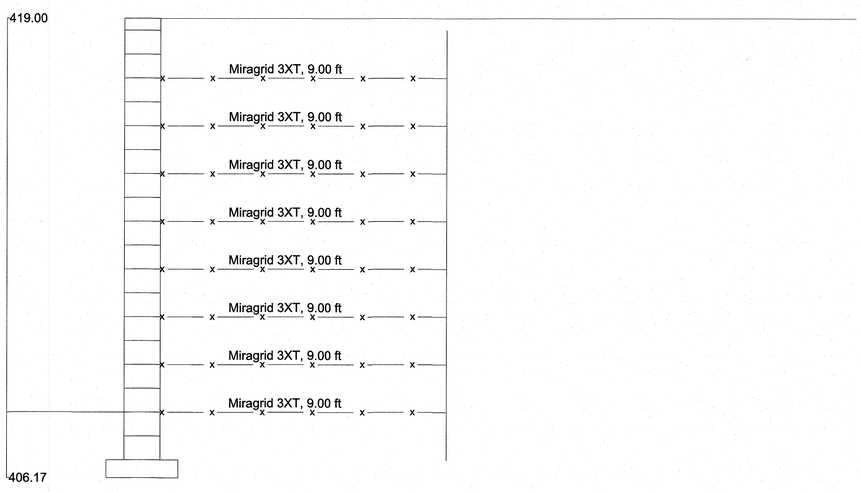
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
20	419.00	406.67	310.50	487.50	118.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
F	All	9.00	20 - 21	310.50 - 505.50

NORTH WALL - GEOMETRY 4



Panel 20 : Station 310.50 - 487.50

NORTH WALL - SECTION 4

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Maya Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/10/24

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STATE OF MARYLAND · GREGORY GEORGE NAYLOR · No. 41431 · PROFESSIONAL ENGINEER — 6/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

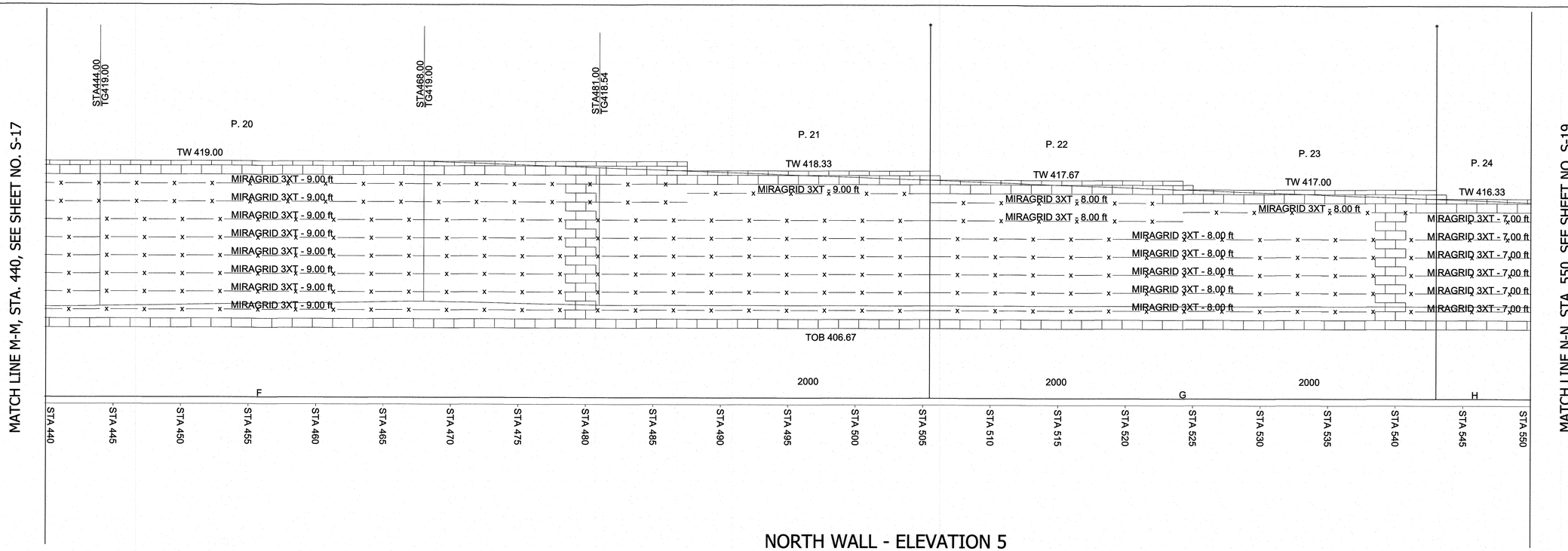
PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 117 OF 125

NORTH WALL - 4

S117

SDP-82-109



NORTH WALL - ELEVATION 5

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT	—— x —— x —— x ——

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
11	444.00	419.00	408.25
12	468.00	419.00	408.63
13	481.00	418.54	408.35

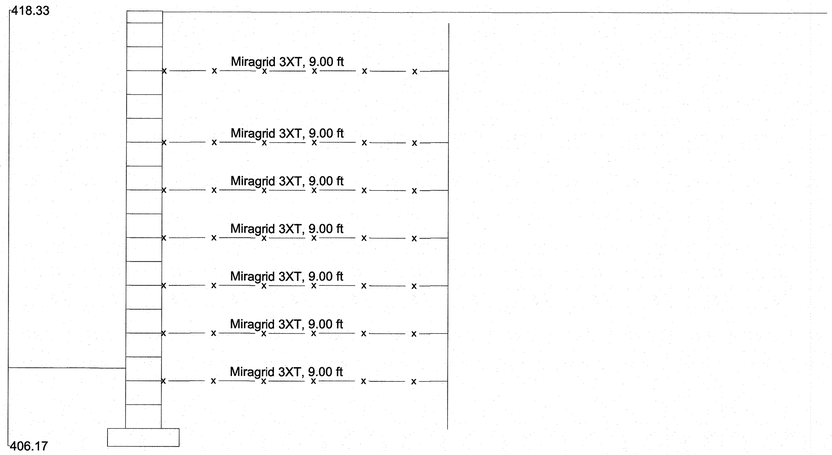
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
20	419.00	406.67	310.50	487.50	118.00
21	418.33	406.67	487.50	505.50	12.00
22	417.67	406.67	505.50	524.25	12.50
23	417.00	406.67	524.25	543.00	12.50
24	416.33	406.67	543.00	561.75	12.50

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
F	All	9.00	20 - 21	310.50 - 505.50
G	All	8.00	22 - 23	505.50 - 543.00
H	All	7.00	24 - 26	543.00 - 598.50

NORTH WALL - GEOMETRY 5



Panel 21 : Station 487.50 - 505.50

NORTH WALL - SECTION 5

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Marsha Kinder — 6.17.24
DIRECTOR — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 5.30.24

CHIEF, DIVISION OF LAND DEVELOPMENT — 6/17/24 DATE

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PROFESSIONAL CERTIFICATION
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STATE OF MARYLAND — GREGORY GEORGE NAYLOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

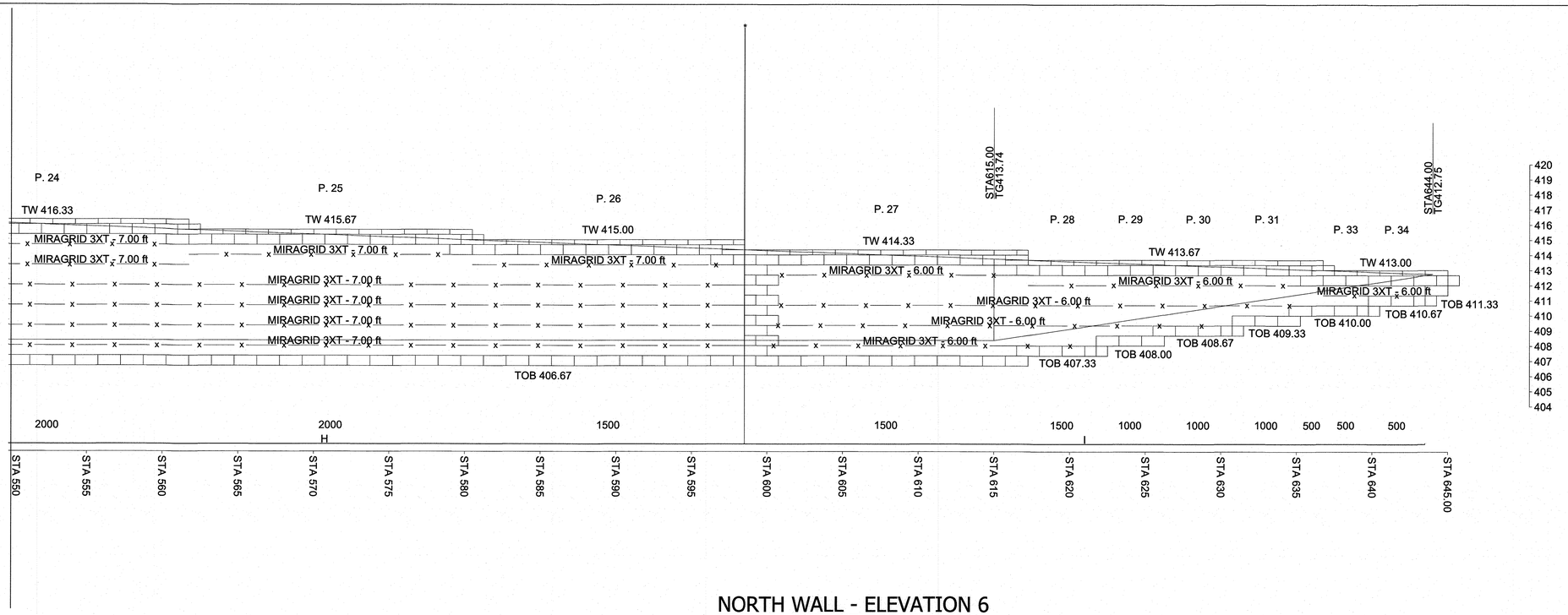
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 118 OF 125

NORTH WALL - 5

S118

SDP-82-109



NORTH WALL - ELEVATION 6

Scale: $\frac{1}{4}$" = 1'-0"

Reinforcement Legend

3XT	Miragrid 3XT

Ground Elevations

Station No.	Origin	Top Elev.	Bottom Elev.
14	615.00	413.74	408.35
15	644.00	412.75	412.75

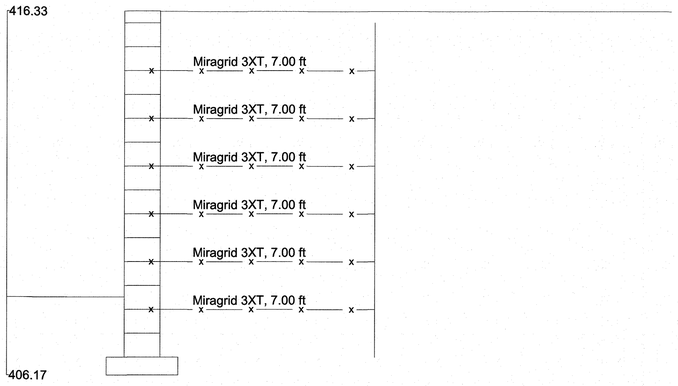
Wall Geometry

Panel No.	Top Elev.	Base Elev.	Left Stn.	Right Stn.	Width in Blocks
24	416.33	406.67	543.00	561.75	12.50
25	415.67	406.67	561.75	580.50	12.50
26	415.00	406.67	580.50	598.50	12.00
27	414.33	406.67	598.50	617.25	12.50
28	413.67	407.33	617.25	621.75	3.00
29	413.67	408.00	621.75	626.25	3.00
30	413.67	408.67	626.25	630.75	3.00
31	413.67	409.33	630.75	635.25	3.00
32	413.67	410.00	635.25	636.75	1.00
33	413.00	410.00	636.75	639.75	2.00
34	413.00	410.67	639.75	643.50	2.50
35	413.00	411.33	643.50	645.00	1.00

Geogroups

Group	Layer	Length (ft)	Panels	Wall Span (ft)
H	All	7.00	24 - 26	543.00 - 598.50
I	All	6.00	27 - 34	598.50 - 643.50

NORTH WALL - GEOMETRY 6



Panel 24 : Station 543.00 - 561.75

NORTH WALL - SECTION 6

Scale: $\frac{1}{2}$" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Maura Rossman 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5-28-24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

Howard County RECREATION & PARKS

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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. 41431, EXPIRATION DATE: 01/05/2026.

STATE OF MARYLAND · GREGORY GEORGE NAYLOR · 41431 · PROFESSIONAL ENGINEER
5/16/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

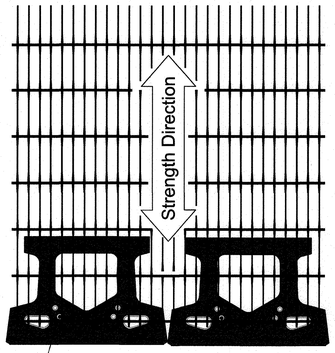
ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA	LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A	9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 119 OF 125
NORTH WALL - 6
S119

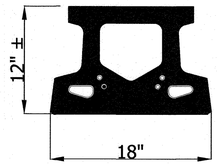
SDP-82-109



Geogrid is to be Placed on Level Backfill and Extended Over the Fiberglass Pins. Place Next Unit. Pull Grid Taught and Backfill. Stake as required.

Grid & Pin Connection

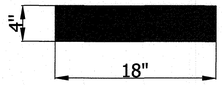
Compac III Elevation



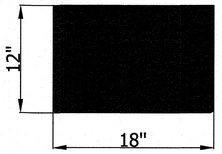
Compac III Plan

Compac III Unit

* Dimensions May Vary by Region



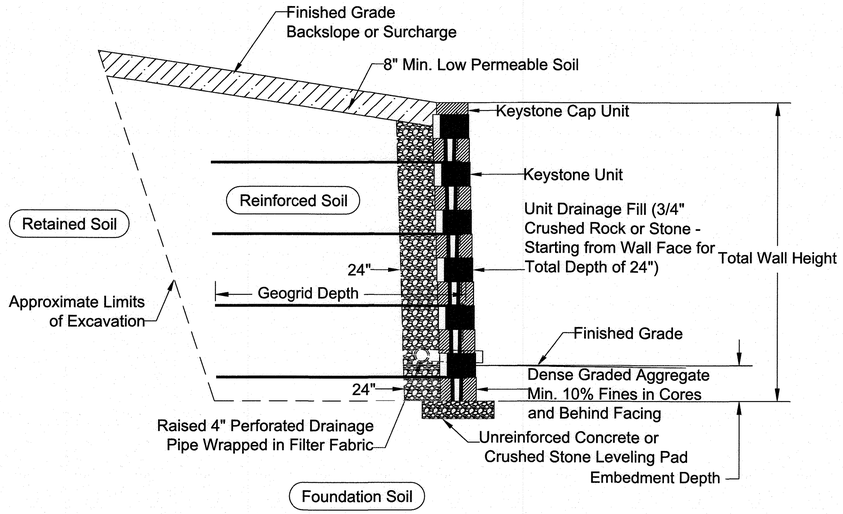
Cap Unit Elevation



Cap Unit Plan

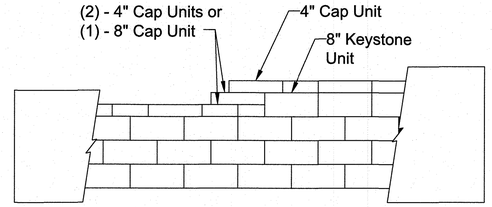
Straight Split Cap Unit

* Dimensions & Availability Will Vary by Region



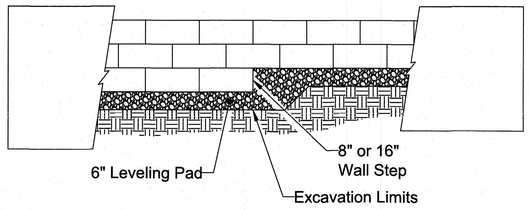
Typical Wall Section

Keystone Unit - Near Vertical Setback



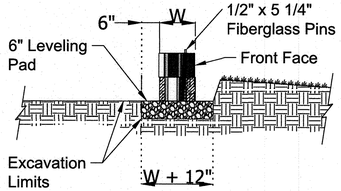
Note:
1. Secure all cap units with Keystone Kapseal or equal.

Top of Wall Steps



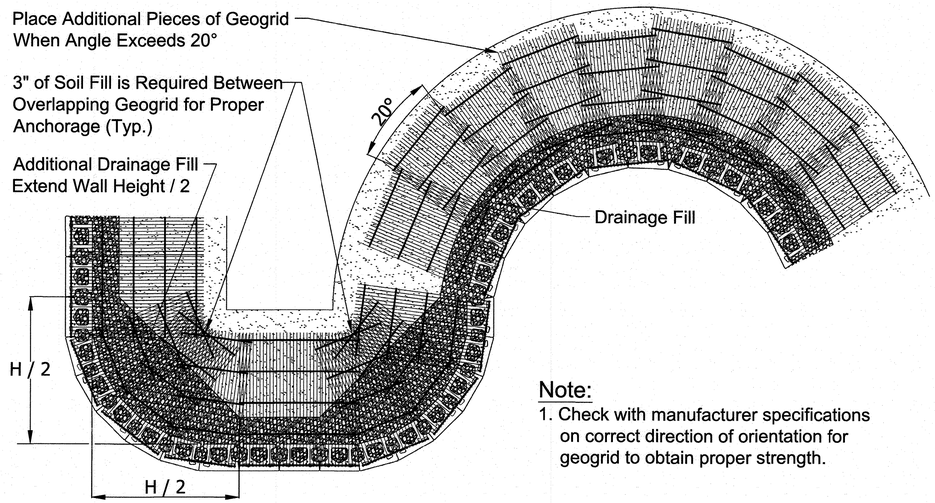
Elevation

Note:
1. The leveling pad is to be constructed of crushed stone or 2000 psi ± unreinforced concrete.



Section

Leveling Pad Detail



Note:
1. Check with manufacturer specifications on correct direction of orientation for geogrid to obtain proper strength.

Geogrid Installation on Curves

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS, AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK.

APPROVED: DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE 6-17-24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5/21/24

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/10/24

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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. 41431, EXPIRATION DATE: 01/05/2026.

STATE OF MARYLAND — GREGORY GEORGE MINOR — 41431 — PROFESSIONAL ENGINEER — 5/6/24

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART

PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 120 OF 125

STANDARD DETAILS

S120

SDP-82-109

Section 32 32 23

Keystone Concrete Retaining Wall

Part 1: GENERAL

1.01 Description

A. Work shall consist of designing, furnishing and construction of a KEYSTONE Compac III unit retaining wall system in accordance with these specifications and in reasonably close conformity with the lines, grades, design and dimensions shown on the plans. No alternate wall systems will be considered.

B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit facing system, unit drainage fill and reinforced backfill to the lines and grades shown on the construction drawings.

C. Work incudes furnishing and installing geogrid soil reinforcement of the type, size, location and lengths designated on the construction drawings.

1.02 Related Sections

A. Section 31 00 00 - Earthwork

1.03 Reference Documents

A. American Association of State Highway and Transportation Officials (AASHTO)

1. AASHTO M 252 Corrugated Polyethylene Drainage Pipe
2. AASHTO M 288 Geotextile Specification for Highway Applications

B. American Society for Testing and Materials (ASTM)

1. ASTM C140 Sampling and Testing Concrete Masonry Units
2. ASTM C1372 Specification for Dry-Cast Segmental Retaining Wall Units
3. ASTM D442 Particle Size Analysis of Soils
4. ASTM D698 Laboratory Compaction Characteristics of Soil - Standard Effort
5. ASTM D1556 Standard Test Method for Density and Unit Weight of Soil In Place by the Sand Cone Method
6. ASTM D1557 Laboratory Compaction Characteristics of Soil - Modified Effort
7. ASTM D2487 Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System)
8. ASTM D2922 Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
9. ASTM D3034 Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer pipe and Fittings
10. ASTM D4318 Liquid Limit, Plastic Limit and Plasticity Index of Soils
11. ASTM D4475 Horizontal Shear Strength of Pultruded Reinforced Plastic Rods
12. ASTM D4476 Flexural Properties of Fiber Reinforced Pultruded Plastic Rods
13. ASTM D4595 Standard Test Method for Tensile Properties of Geotextiles by Wide-Width Strip Method
14. ASTM D4873 Standard Guide for Identification, Storage and Handling of Geosynthetics
15. ASTM D5262 Standard Test Method for Evaluating the Unconfined Tension Creep Behavior of Geosynthetics
16. ASTM D5321 Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method
17. ASTM D5818 Standard Practice for Obtaining Samples of Geosynthetics from a Test Section for Assessment of Installation Damage
18. ASTM D6637 Standard Test Method for Determining Tensile Properties of Geogrids by the Single or Multi-Rib Method
19. ASTM D6638 Standard Test Method for Determining Connection Strength Between Geosynthetic Reinforcement and Segmental Concrete Units
20. ASTM D6706 Standard Test Method for Measuring Geosynthetic Pullout Resistance in Soil
21. ASTM D6916 Standard Test Method for Determining the Shear Strength Between Segmental Concrete Units

C. National Concrete Masonry Association (NCMA)

1. NCMA SRWU-1 Test Method for Determining Connection Strength of SRW
2. NCMA SRWU-2 Test Method for Determining Shear Strength of SRW

1.04 Definitions

A. Compac III Unit - a dry-stacked concrete retaining wall unit machine made from Portland cement, water, aggregates, manufactured by a licensed manufacturer of Keystone.

B. Structural Geogrid - a polymeric material formed by a regular network of connected tensile elements with apertures of sufficient size to allow interlocking with surrounding soil, rock or earth and function primarily as reinforcement.

C. Unit Drainage Fill - drainage aggregate that is placed within and immediately behind the Keystone concrete units.

D. Reinforced Backfill - compacted soil that is placed within the reinforced soil volume as outlined on the plans.

E. Retained Soil - the soil mass behind the reinforced backfill.

F. Foundation Soil - the soil mass below the leveling pad and reinforced backfill.

G. Leveling Pad - crushed stone, sand and gravel or unreinforced concrete material placed to provide a level surface for placement of the Keystone concrete units.

H. Geosynthetic Reinforcement - polymeric material designed specifically for soil reinforcement.

1.05 Submittals and Certification

A. Contractor shall submit a Manufacturer's certification, prior to the start of work, that the retaining wall system components meet the requirements of this specification and the structure design.

B. Contractor shall submit construction drawings and design calculations for the retaining wall system prepared and stamped by a Professional Engineer registered in the state of the project.

1.06 Quality Assurance

A. Contractor shall submit a list of five (5) previously constructed projects of similar size and magnitude by the wall installer where the Compac retaining wall system has been constructed successfully. Contact names and phone numbers shall be listed for each project.

B. Contractor shall provide evidence that the design engineer has a minimum of five years documented experience in the design of reinforced soil structures. The design engineer shall provide proof of current professional liability insurance with an aggregate coverage limit of not less than $1,000,000.

C. Owner shall/may provide quality assurance inspection and testing during earthwork and wall construction operations. Contractor shall provide all quality control testing and inspection not provided by the owner. Owner's quality assurance program does not relieve the contractor of responsibility for quality control and wall performance.

1.07 Delivery Handling and Storage

A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification have been received.

B. Contractor shall protect all materials from damage due to jobsite conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2: PRODUCTS

2.01 Keystone Concrete Retaining Wall Units

A. Compac III retaining wall units shall conform to the following architectural requirements

1. Face color - concrete gray, unless otherwise specified. The Owner may specify standard manufacturers' color.
2. Tri-plane or Straight Face finish - hard split in angular tri-plane or straight face configuration. Other face finishes will not be allowed without written approval of Owner.
3. Bond configuration - running with bonds nominally located at midpoint in vertically adjacent units.
4. Exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 20 feet (6 m) under diffused lighting.

B. Keystone concrete units shall conform to the requirements of ASTM C1372 - Standard Specifications for Segmental Retaining Wall Units.

C. Keystone concrete units shall conform to the following structural and geometric requirements measured in accordance with ASTM C140 Sampling and Testing Concrete Masonry Units:

1. Compressive strength: ≥ 3000 psi (21 MPa).
2. Absorption: ≤ 8 % for standard weight aggregates.
3. Dimensional tolerances: ± 1/8" (3 mm) from nominal unit dimensions not including rough split face.
4. Unit Size: 8" (203 mm) (H) x 18" (457 mm) (W) x 12" (304 mm)(D) minimum.

D. Keystone concrete units shall conform to the following constructability requirements:

1. Vertical setback: 1/8 inch (3 mm) ± per course (near vertical) or 1 1/8 inch (28 mm) + per course, per the design.
2. Alignment and grid attachment mechanism - fiberglass pins, two per unit.
3. Maximum horizontal gap between erected units shall be ≤ 1/2 inch (13 mm).

2.02 Shear and Reinforcement Pin Connectors

A. Shear and reinforcement pin connectors shall be 1/2-inch (12 mm) diameter thermoset isopthalic polyester resin pultruded fiberglass reinforcement rods to provide connection between vertically and horizontally adjacent units and geosynthetic reinforcement, with the following requirements:

1. Flexural Strength in accordance with ASTM D4476: 128,000 psi (882 MPa) minimum.
2. Short Beam Shear in accordance with ASTM D4475: 6,400 psi (44 MPa) minimum.

B. Shear and reinforcement pin connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.

2.03 Base Leveling Pad Material

A. Material shall consist of a compacted crushed stone base, sand and gravel or unreinforced concrete, as shown on the construction drawings.

2.04 Unit Drainage Fill

A. Unit drainage fill shall consist of clean 1 inch (25 mm) minus crushed stone or crushed gravel meeting the following gradation tested in accordance with ASTM D-422:

Sieve Size	Percent Passing
1 inch (25 mm)	100
3/4-inch (19mm)	75 - 100
No. 4 (4.75 mm)	0 - 10
No. 50 (300 um)	0 - 5

B. Drainage fill shall be placed within the cores of, between, and behind the units as indicated on the design drawings. Not less than 1.3 cubic foot (0.036 m^3), of drainage fill shall be used for each square foot (0.093 m^2) of wall face unless otherwise specified.

2.05 Reinforced Backfill

A. Reinforced backfill shall be free of debris and meet the following gradation tested in accordance with ASTM D-422:

Sieve Size	Percent Passing
1 1/2 inch (38 mm)	100
3/4-inch (19 mm)	75 - 100
No. 40 (425 um)	0 - 60
No. 200 (75 um)	0 - 35

Plasticity Index (PI) < 15 and Liquid Limit < 40, per ASTM D4318

B. The maximum aggregate size shall be limited to 3/4 inch (19 mm) unless installation damage tests have been performed to evaluate potential strength reductions to the geogrid design due to increased installation damage during construction.

C. Material can be site-excavated soils where the above requirements can be met. Soils not meeting the above criteria, including highly plastic clays and organic soils, shall not be used in the backfill or reinforced backfill soil mass.

D. Contractor shall submit reinforced fill sample and laboratory test results to the Architect/Engineer for approval, prior to the use of any proposed reinforced backfill material.

2.06 Geogrid Soil Reinforcement

A. Geosynthetic reinforcement shall consist of geogrids manufactured for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn or high density polyethylene. Polyester geogrid shall be made from high tenacity polyester filament yarn with a molecular weight exceeded 25,000 g/m and with a carboxyl end group value less than 30. Polyester geogrid shall be coated with an impregnated PVC coating that resists peeling, cracking and stripping.

B. Ta - Long Term Allowable Tensile Design Load. Ta of the geogrid material shall be determined as follows: Ta = Tult/(RFcr * RFd * RFid * FS). Ta shall be evaluated based on a 75 year design life.

1. Tult - Short Term Ultimate Tensile Strength. Tult shall be determined in accordance with ASTM D4595 or ASTM D6637. Tult is based on the minimum average roll values (MARV).
2. RFcr - Reduction Factor for Long Term Tension Creep. RFcr shall be determined from 10,000 hour creep testing performed in accordance with ASTM D5262. RFcr = 1.45 minimum.
3. RFd - Reduction Factor for Durability. RFd shall be determined from polymer specific durability testing covering the range of expected soil environments. RFd = 1.10 minimum.
4. RFid - Reduction Factor for Installation Damage. RFid shall be determined from product specific construction damage testing performed in accordance with ASTM D5818. Test results shall be provided for each product to be used with project specific or more severe soil types. RFid = 1.05 minimum.
5. FS - Overall Design Factor of Safety. FS hall be 1.5 unless noted for the maximum allowable working stress calculation.

C. The maximum design tensile load of the geogrid shall not exceed the laboratory tested ultimate strength of the geogrid/facing unit connection divided by a factor of safety of 1.5. The connection strength testing and computation procedures shall be in accordance with ASTM D6638 Connection Strength between Geosynthetic Reinforcement and Segmental Concrete Units or NCMA SRWU-1.

D. Ci - Coefficient of Soil Interaction. Ci values shall be determined per ASTM D6706 at a maximum 0.75 inch (19 mm) displacement.

E. The geogrid manufacturer shall have a Manufacturing Quality Control program that includes QC testing by an independent laboratory. The QC testing shall include Tensile Strength testing, Melt Flow Index testing for HDPE geogrids and Molecular Weight testing for polyester geogrids.

2.07 Drainage Pipe

A. If required, drainage pipe shall be perforated or slotted PVC pipe manufactured in accordance with ASTM D3034 or corrugated HDPE pipe manufactured in accordance with AASHTO M252.

2.08 Geotextile Filter Fabric

A. When required, geotextile filter fabric shall be a needle-punched nonwoven fabric that meets the requirements of AASHTO M288.

PART 3: EXECUTION

3.01 Excavation

A. Contractor shall excavate to the lines and grades shown on the construction drawings. The Owner or Contractors QA/QC representative shall inspect the excavation and test the foundation soils and approve prior to placement of the leveling pad material or fill soils. Any over-excavation required to remove unsuitable soils shall be oversized from the front of the leveling pad and back of the geogrid reinforcement.

B. Over-excavation and replacement of unsuitable soils and replacement with approved compacted fill will be compensated as agreed upon with the Owner.

3.02 Base Leveling Pad

A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings to a minimum thickness of 6 inches (150 mm) and extend laterally a minimum of 6 inches in front and behind the Keystone wall unit.

B. Soil leveling pad materials shall be compacted to a minimum of 95% of Standard Proctor density per ASTM D697 or 92% Modified Proctor density per ASTM D1557.

C. Leveling pad shall be prepared to insure full contact with the base surface of the concrete units.

3.03 Keystone Unit Installation

A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.

B. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.

C. Install shear/connecting pins per manufacturer's recommendations.

D. Place and compact drainage fill within and behind wall units. Place and compact reinforced backfill soil behind drainage fill.

E. Maximum stacked vertical height of wall units, prior to drainage fill and backfill placement and compaction, shall not exceed three courses.

3.04 Structural Geogrid Installation

A. Geogrid shall be installed with the highest strength direction perpendicular to the wall alignment.

B. Geogrid reinforcement shall be placed at the strengths, lengths and elevations shown on the construction drawings, or as directed by the engineer.

C. The geogrid shall be laid horizontally on compacted backfill and attached to the Keystone wall unit pins and within 1 inch of the face of the units. Place the next course of Keystone units over the geogrid. The geogrid shall be pulled taut and anchored prior to backfill placement on the geogrid.

D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps greater than 2 inches between adjacent pieces of geogrid are not permitted.

3.05 Reinforced Backfill Placement

A. Reinforced backfill shall be placed, spread and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage to the geogrid.

B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches (150 mm) where hand operated compaction equipment is used, or 8 - 10 inches (200 to 250 mm) where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density, as needed.

C. Reinforced backfill shall be compacted to a minimum of 95% of Standard Proctor density per ASTM D697 or 92% Modified Proctor density per ASTM D1557. The moisture content of the reinforced backfill material during compaction shall be uniformly distributed throughout each layer and shall be dry of optimum by 0 to 3 percentage points of moisture.

D. Only hand operated compaction equipment shall be allowed within 3 feet (1 M) from the back of the Keystone concrete units.

E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches (150 mm) is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging or displacing the Keystone units or geogrid.

F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and turning shall be avoided.

G. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from the wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

3.06 Cap Installation

A. Prior to placement of the cap units, the upper surface of the top course of wall units shall be cleaned of soil and any other material.

B. Cap units shall be adequately glued to the underlying wall units with an all-weather exterior construction adhesive.

3.07 As-built Construction Tolerances

A. Vertical alignment: ± 1.5 inches (40 mm) over any 10 foot (3 m) distance.

B. Wall batter: within 2 degrees of design batter. Overall wall batter shall be ≥ 0 degrees.

C. Horizontal alignment: ± 1.5 inches (40 mm) over any 10 foot (3 m) distance.

D. Corners and curves: ± 1 foot (300 mm) to theoretical location.

E. Maximum horizontal gap between erected units shall be ≤ 1/2 inch (13 mm).

3.08 Field Quality Control

A. Quality Assurance - The owner shall/may engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction. This does not relieve the Contractor from securing the necessary construction quality control testing.

B. Quality assurance should include foundation soil inspection and testing and verification of the geotechnical design parameters and verification that the contractor's quality control testing is adequate as a minimum. Quality assurance shall also include observation of the construction for general compliance with the design drawings and project specifications. Quality assurance is usually best performed by the site geotechnical engineer.

C. Quality Control - The Contractor shall engage independent inspection and testing services to perform the minimum quality control testing described in the retaining wall design plans and specifications. Only qualified and experienced technicians and engineers shall perform quality control testing and inspection services.

D. Quality control testing shall include soil and backfill testing to verify soil types and strengths, compaction and moisture conditions and verification that the retaining wall is being constructed in accordance with the design plans and specifications.

PART 4: MEASUREMENT AND PAYMENT

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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. 41431, EXPIRATION DATE: 01/05/2026.

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary Kay Sadowski 6/17/24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6.20.24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

Howard County RECREATION & PARKS

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greg@naylorstructural.com 410-952-4797 www.naylorstructural.com

STATE OF MARYLAND · GREGORY GEORGE NAYLOR · 41431 · PROFESSIONAL ENGINEER
5/6/24

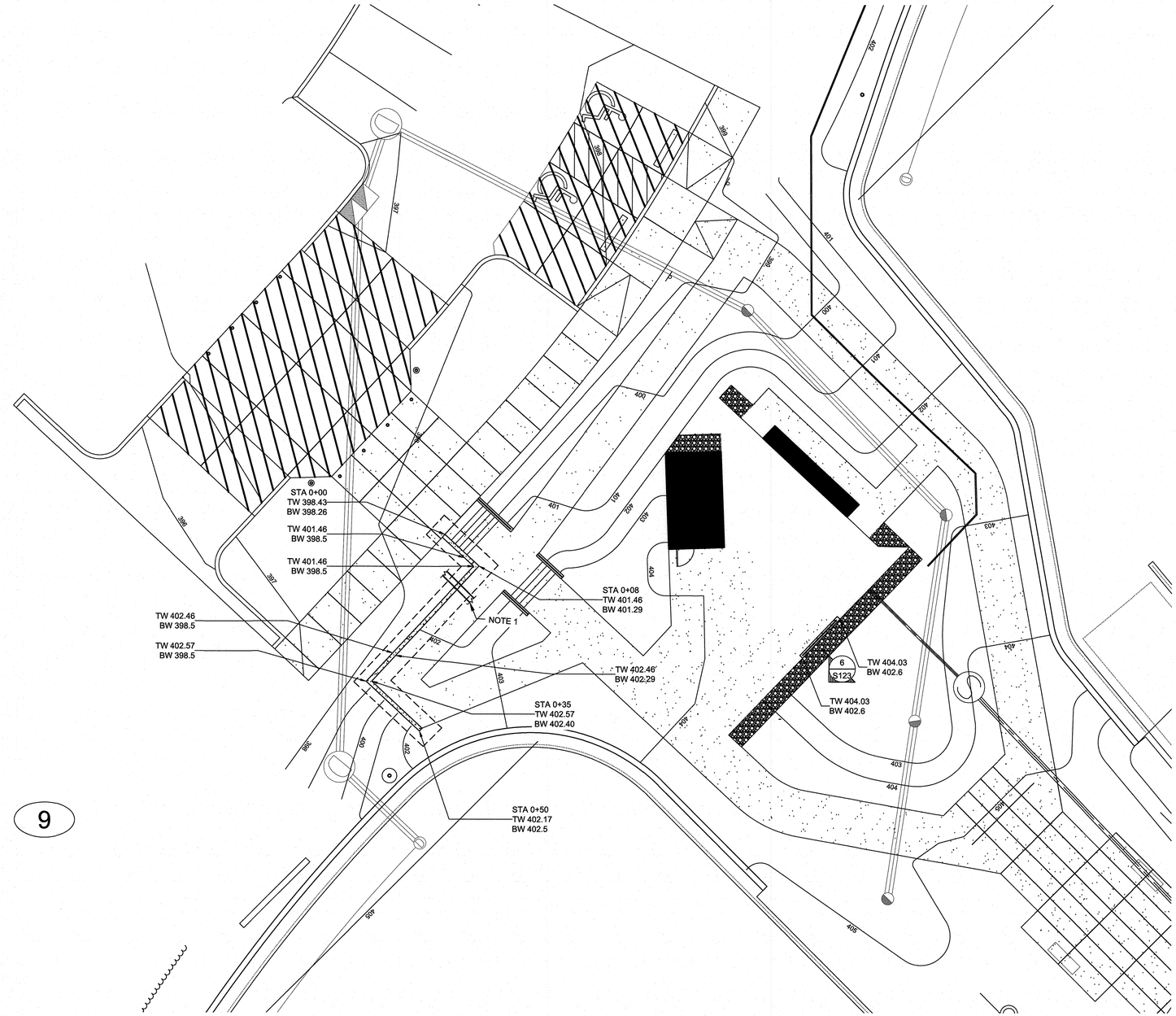
NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 121 OF 125
SPECIFICATIONS
S121

SDP-82-109



WALL LOCATION PLAN
SCALE: 1" = 10'-0"

NOTES:

1. ESTIMATED LOCATION OF WATER LINE, VERIFY ELEVATION IN FIELD. STEP FOOTING PER DETAILS 1, 2, 3,4, AND 5 ON S123.

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Maya A. Rinduca 6.12.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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Structural Engineers | Parking Consultants
952 Ridgebrook Rd | Suite 1700
Sparks, MD 21152-9472
410.467.2377 | www.morabitoconsultants.com
#21333

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. 33099, EXPIRATION DATE: 06/20/2025.

STATE OF MARYLAND · MICHAEL DOMINIC MORABITO · No. 33099 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 122 OF 125

WALL LOCATION PLAN

S122

SDP-82-109

GENERAL NOTES

CONTROLLED FILL AND BACKFILL:
1. SAMPLES OF ALL MATERIALS THAT THE CONTRACTOR PROPOSES TO USE FOR COMPACTED FILL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
2. COMPACTED FILL SHALL CONSIST OF LOCAL MATERIAL FREE OF DELETERIOUS MATTER AND CLASSIFIED SP, SW, SM, SC, SP, SW, GM, OR GC PER ASTM D-2487.
3. THE CONTROL OF THE MOISTURE FOR PLACING THE FILL WILL BE BASED ON THE RESULTS OF COMPACTION TESTS PER ASTM D-698.
4. ALL COMPACTED FILL SHALL HAVE A DENSITY OF AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698.
5. PRIOR TO PLACEMENT OF ANY FILLS, THE SITE SHALL BE STRIPPED OF ALL TOPSOIL, VEGETATION, ROCKS, AND ORGANIC MATERIALS AND THE EXPOSED GROUND SURFACE SHALL BE COMPACTED IN PLACE TO A CONFIRMED DENSITY OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
6. FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8" IN THICKNESS AND SHALL BE MIXED, SPREAD AND PLACED IN SUCH A WAY AS TO PRODUCE A UNIFORM THICKNESS OF MATERIAL AFTER PLACING.
7. EACH LAYER OF FILL SHALL BE COMPACTED WITH A MINIMUM OF 6 COMPLETE PASSES ON ALL PORTIONS OF THE SURFACE OF EACH LIFT OF FILL BY RUBBER-TIRED ROLLERS, SHEEPS-FOOT ROLLERS OR OTHER MECHANICAL EQUIPMENT APPROVED BY THE GEOTECHNICAL ENGINEER.
8. COMPACTED FILL PLACED WITHIN 4 FEET OF STRUCTURES AND PIPES SHOULD BE PLACED IN HORIZONTAL LIFTS NOT TO EXCEED 4 INCHES THICKNESS AND COMPACTED WITH HAND TAMPERS OR LIGHT COMPACTION EQUIPMENT TO THE SAME STANDARD.
9. HEAVY COMPACTION EQUIPMENT SHOULD NOT BE ALLOWED WITHIN 4 FEET OF STRUCTURES UNLESS A MINIMUM 2 FEET DEPTH OF FILL COVERS THE STRUCTURES.
10. WHENEVER IN PLACE DENSITIES ARE FOUND BELOW ACCEPTABLE LIMITS, ADDITIONAL ROLLING TO PRODUCE THE REQUIRED DENSITY SHALL BE PERFORMED.
11. THE CONTRACTOR SHALL TAKE ALL MEASURES REQUIRED TO PROVIDE FOR FREE DRAINAGE OF THE SITE AND TO PREVENT PONDING OF WATER. SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES.
12. PLACING OF FILL CONTAINING ORGANIC MATTER; PLACING OF FILL WITH MOISTURE CONTENT TOO HIGH OR TOO LOW FOR PROPER COMPACTION; PLACING OF FILL WHEN FREE WATER IS STANDING ON THE EXISTING FILL SURFACE; PLACING OF FILL IN A FROZEN CONDITION OR ON TOP OF FROZEN MATTER WILL NOT BE PERMITTED.
13. THE SOILS ENGINEER SHALL SUPERVISE THE PLACING OF THE COMPACTED FILL AND ALL THE MATERIAL AND EQUIPMENT USED FOR THIS PURPOSE AND SHALL MAKE SUCH SOILS TESTS AS MAY BE REQUIRES FOR THE COMPLETION OF THE WORK PERFORMING AT LEAST 6 IN PLACE DENSITY TESTS DURING EACH EIGHT HOUR SHIFT.

FOUNDATIONS-SPREAD FOOTINGS:
1. ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-0" BELOW ORIGINAL GRADE OR PLACED IN APPROVED COMPACTED FILL.
2. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
3. A SOIL BEARING CAPACITY OF 1500 PSF WAS USED IN THE FOUNDATION DESIGN, AND MUST BE FIELD VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER. IF SOIL OF THIS BEARING CAPACITY IS NOT ENCOUNTERED AT THE ELEVATIONS INDICATED ON THE CONTRACT DRAWINGS, FOOTINGS SHALL BE LOWERED OR INCREASED IN SIZE AS DIRECTED BY THE STRUCTURAL ENGINEER.
4. ELEVATIONS SHOWN ON PLAN ARE TO THE BOTTOM OF THE FOOTINGS.

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 0.58 FOR ALL CONCRETE EXCEPT CONCRETE EXPOSED TO WEATHER WHICH SHALL NOT EXCEED 0.45.
8. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED.
9. SLUMP FOR ALL PORTIONS OF CONCRETE SHALL BE 4".
10. CONTRACTOR SHALL SUPPORT ADJACENT STRUCTURES, UTILITIES, AND EXCAVATIONS AS REQUIRED FOR COMPLETION OF WORK.
11. 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.
12. 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. REINFORCING HOOKS ARE TO BE FABRICATED IN ACCORDANCE WITH ACI-SP-66 ACI DETAILING MANUAL AND AS PER DETAILS.
3. PLACE MAIN REINFORCING STEEL SO AS TO PROVIDE 3" MINIMUM COVER FOR FOUNDATIONS POURED ON EARTH, 2" MINIMUM COVER FOR BEAMS AND COLUMNS, 3/4" MINIMUM COVER FOR SLABS AND 1 1/2" FOR ALL REBAR IN EXPOSED CONCRETE (EXCEPT AS OTHERWISE IN DETAILS).
4. LAP DEFORMED BARS IN ACCORDANCE WITH LAP SPLICE SCHEDULE ON THESE DRAWINGS, UNO.
5. HOOKS SHALL BE STANDARD HOOKS, UNO.
6. PROVIDE ACCESSORIES AND BAR SUPPORTS IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315).
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-1064, UNO.
8. WWF REINFORCING SHALL BE PLACED AT MID-DEPTH OF SLABS ON GRADE AND DRAPED OVER SUPPORTS IN CONCRETE ON METAL DECK SLABS.
9. END LAPS OF ALL WWF REINFORCING SHALL BE LAPPED (1) SQUARE.

POST-INSTALLED ANCHORS:
1. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
2. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, FATIGUE, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
3. ANCHOR CAPACITY IS HIGHLY DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE/MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS. IF EDGE DISTANCES OR ANCHOR SPACING IS NOT SPECIFIED ON THE DRAWINGS, ANCHORS SHALL HAVE THE FOLLOWING MINIMUM DISTANCES.
A. EDGE DISTANCES:
   a. ADHESIVE ANCHORS: 2 TIMES THE ANCHOR EMBEDMENT LENGTH
   b. UNDERCUT ANCHORS: 2.5 TIMES THE ANCHOR EMBEDMENT LENGTH
   c. EXPANSION ANCHORS (SLEEVE OR WEDGE): 4 TIMES THE ANCHOR EMBEDMENT LENGTH
B. ANCHOR SPACING
   a. ALL ANCHORS: 3 TIMES THE ANCHOR EMBEDMENT
4. ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE, AND MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).
5. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL POST-INSTALLED ANCHORS HAVE BEEN PROPERLY TRAINED PRIOR TO THE INSTALLATION OF ANY POST-INSTALLED ANCHORS.
6. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS (AS DETERMINED BY THE ENGINEER) SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE ACI-CRSI "ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM".
7. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION BY AN INSPECTOR SPECIALLY APPROVED FOR THAT PURPOSE BY THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL FURNISH A REPORT TO THE STRUCTURAL ENGINEER OF RECORD AND BUILDING OFFICIAL THAT THE WORK COVERED BY THE REPORT HAS BEEN PROPERLY PERFORMED AND THAT THE MATERIALS USED AND THE INSTALLATION PROCEDURES USED CONFORM WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).
8. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. IF HIGH-EARLY STRENGTH CONCRETE MIXES ARE SPECIFIED, CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL OF MINIMUM INSTALLATION AGE.
9. EXISTING REINFORCING BARS OR PRESTRESSING STEEL IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TESTING TO LOCATE THE POSITION AND DEPTH OF THE REINFORCING BARS OR PRESTRESSING AT THE LOCATIONS OF THE CONCRETE ANCHORS, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.
10. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES. ANCHORS EXPOSED TO WEATHER AND AT SILL PLATES SHALL BE STAINLESS STEEL.
   A. MECHANICAL ANCHORS IN CRACKED OR UNCRACKED CONCRETE USE:
      a. HILTI KWIK BOLT-TZ EXPANSION ANCHORS
      b. HILTI KWIK HUS-EZ AND KWIK HUS EZ-I SCREW ANCHORS
   B. ADHESIVE ANCHORS IN CRACKED AND UNCRACKED CONCRETE USE:
      a. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HIT-Z ROD
      b. HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH HAS-E THREADED ROD

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. ALL CONTRACTOR MODIFICATIONS (INCLUDING PRODUCTS SUBMISSION) MUST BE IDENTIFIED IN WRITING AS A CONSTRUCTION DEVIATION FROM THE CONTRACT DOCUMENTS SUBMISSION.
5. IF A CONSTRUCTION DEVIATION FAILS TO ASSURE THAT 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.
6. 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 OWNER SHALL HIRE AN EXPERIENCED QUALIFIED INSPECTOR TO PERFORM ALL REQUIRED INSPECTION WORK.
3. INSPECTION SHALL CONSIST OF VISUAL OBSERVATIONS OF MATERIALS, EQUIPMENT OR CONSTRUCTION WORK FOR CONFORMANCE WITH AND ASSESSMENT THAT THE WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND DESIGN INTENT.
4. THE ENGINEER WILL NOT PERFORM THE REQUIRED INSPECTION AS PART OF THIS PRESENT CONTRACT WITH THE ARCHITECT/OWNER.
5. UNDER THIS PRESENT CONTRACT, THE ENGINEER MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS. HOWEVER, SUCH VISITS SHALL NOT BE RELIED UPON BY OTHERS AS 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. HOWEVER, IF DESIRED, MORABITO CONSULTANTS, INC. MAY BE HIRED UNDER A SEPARATE CONTRACT TO PERFORM THIS INSPECTION WORK.

DESIGN WITHOUT CONSTRUCTION REVIEW:
1. IT IS AGREED THAT IF MORABITO CONSULTANTS, INC.'S PROFESSIONAL SERVICES DO NOT EXTEND TO OR INCLUDE THE REVIEW OR SITE OBSERVATION OF THE CONTRACTOR'S WORK OR PERFORMANCE), 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.
2. 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. NO PORTION OF THE PLANS AND SPECIFICATIONS PREPARED UNDER THIS AGREEMENT SHALL REMAIN THE PROPERTY OF MORABITO CONSULTANTS, INC. UPON COMPLETION OF THE WORK.
3. 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:

CONCRETE
NORMAL WEIGHT CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c) AS FOLLOWS:
ALL CONCRETE = 4000 PSI

REINFORCING STEEL Fy = 60,000 PSI

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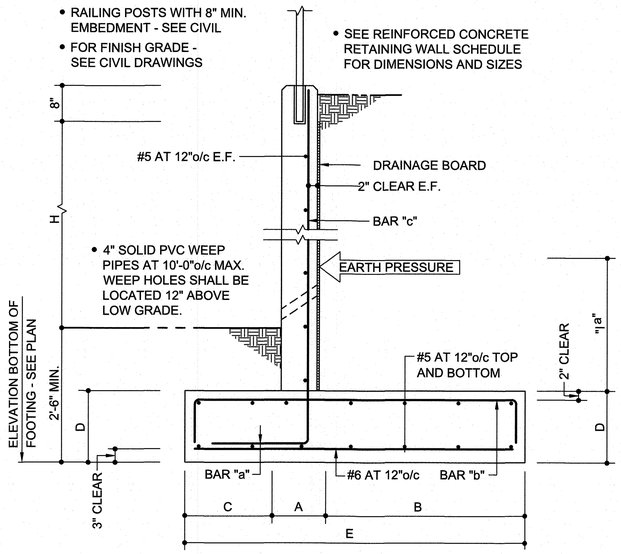
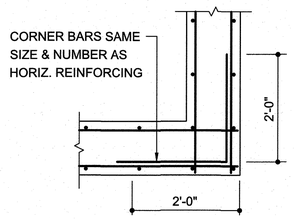


CONCRETE RETAINING WALL SCHEDULE									
MARK	HEIGHT (NOTE 4)	WALL	FOOTING			REINFORCING			
	H	A	E x D	B	C	BAR "a"	l[a]	BAR "b"	BAR "c"
A	5'-0"	8"	4'-6x 12"	2'-4"	1'-6"	#5 AT 12"o/c	19"	#5 AT 12"o/c	#5 AT 12"o/c

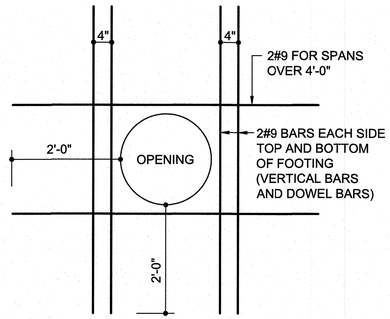
RETAINING WALL NOTES:

1. ALL CONCRETE FOR RETAINING WALLS AND RETAINING WALL FOOTINGS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4500 PSI
2. LATERAL EARTH PRESSURE OF 30H (PSF) AND ALLOWABLE BEARING PRESSURE OF 1,500 PSF WERE USED IN THE DESIGN OF BELOW GRADE SITE WALLS AND FOOTINGS AND MUST BE VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER.
3. DO NOT BACKFILL WALLS UNTIL CONCRETE HAS ATTAINED DESIGN STRENGTH AND SLAB ON GRADE HAS BEEN POURED AND CURED FOR AT LEAST 7 DAYS.
4. RETAINED EARTH SHALL NOT EXCEED THE CORRESPONDING HEIGHT, H, AS NOTED IN SCHEDULE.
5. RETAINING WALL WAS NOT DESIGNED TO SUPPORT THE VEHICULAR GUARDRAIL.

1 TYPICAL CONCRETE RETAINING WALL
SCALE: 3/4" = 1'-0"



2 TYP. CORNER BARS
SCALE: 3/4" = 1'-0"



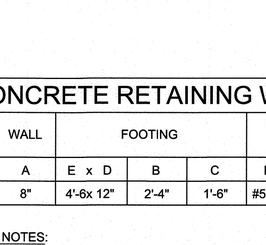
3 TYPICAL OPENING IN CONCRETE WALL
SCALE: 3/4" = 1'-0"

- CONTROL JOINTS AND CONSTRUCTION JOINTS CAN BE INTERCHANGEABLE

4 CONTROL JOINT IN CONCRETE WALLS
SCALE: 3/4" = 1'-0"

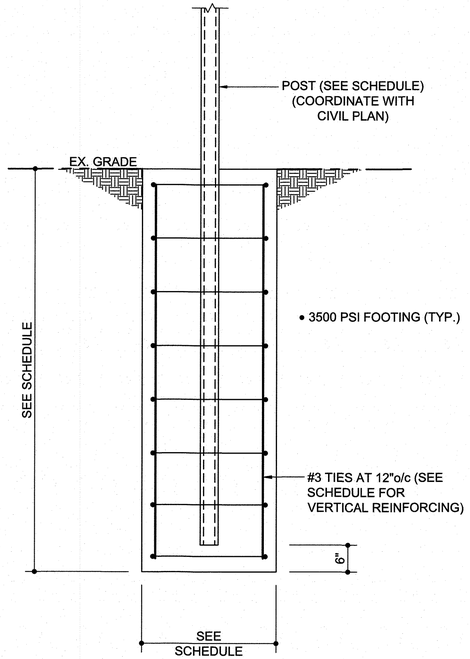
- CUT 50% OF HORIZONTAL REINFORCING
- PROVIDE CONTINUOUS PVC DUMBBELL WATERSTOP AT ALL VERTICAL CONSTRUCTION JOINTS OR APPROVED EQUAL.
- CONTROL JOINTS AND CONSTRUCTION JOINTS CAN BE INTERCHANGEABLE

5 CONSTRUCTION JOINT IN CONCRETE WALLS
SCALE: 3/4" = 1'-0"



- SEE SECTION FOR SIZE OF REINF. BARS

6 TYP. STEPPED FOOTING
SCALE: 3/4" = 1'-0"



FENCE POST AND FOOTING SCHEDULE				
FENCE HEIGHT	POST DIAMETER	FOOTING DIAMETER	FOOTING DEPTH	VERTICAL REINFORCING
4'-0"	2 1/2"	1'-0"	4'-4"	4#5
8'-0"	4"	1'-6"	5'-0"	4#8
16'-0"	6"	2'-0"	5'-0"	6#8
20'-0" (TYP.)	6"	2'-6"	6'-0"	6#10
20'-0" (CLOTH)	8"	3'-0"	8'-0"	8#10
26'-0"	6"(50 KSI)	2'-6"	7'-6"	6#10

7 FENCE/NETTING FOOTING DETAIL
SCALE: 3/4" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO ILLUSTRATE THE REMOVAL OF THE EXISTING NATURAL TURF SPORTS FIELDS AND INSTALLATION OF (4) ARTIFICIAL TURF FIELDS AND THEIR ASSOCIATED SITE IMPROVEMENTS ON THE WEST SIDE OF CENTENNIAL PARK

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. 33099, EXPIRATION DATE: 09/30/2025

APPROVED: DEPARTMENT OF PLANNING & ZONING

for Mary A. Kendall 6/7/24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 5/28/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/7/24

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#21333

STATE OF MARYLAND · RICHARD DOMINIC MORABITO · 33099 · PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
1	5/6/24	REVISED SITE DEVELOPMENT PLAN

ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE	PROPERTY IMPROVEMENT			
--	--	NEW ARTIFICIAL TURF FIELDS			

SHEET NO. 123 OF 125

TYPICAL DETAILS

S123

SDP-82-109

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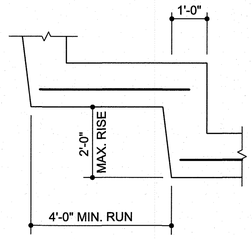
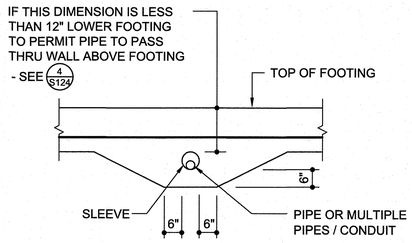


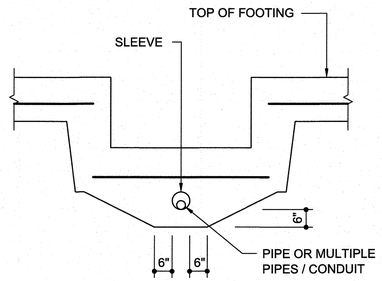
- SEE SECTION FOR SIZE OF REINF. BARS

1 TYP. STEPPED FOOTING
SCALE: 3/4" = 1'-0"



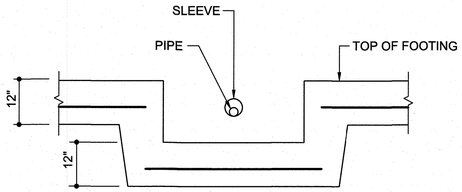
- WHEN PIPE IS MORE THAN 12" BELOW BOTTOM OF FOOTING SHOWN BY ELEVATIONS ON PLAN, STEP FOOTING DOWN TO PERMIT PIPE TO PASS DIRECTLY BELOW FOOTING - SEE 3 S124

2 TYPICAL PIPE THRU FOOTING
SCALE: 3/4" = 1'-0"



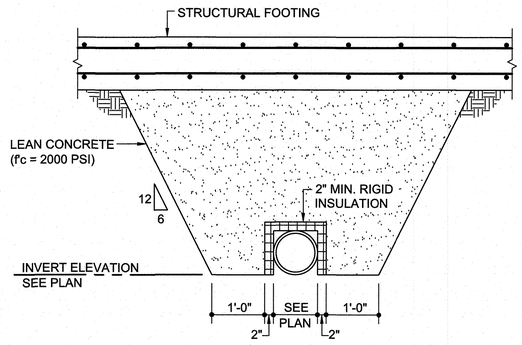
- STEP FOOTING DOWN AS REQUIRED IN ACCORDANCE WITH DETAIL 1 S124

3 FOOTING STEPPED DOWN AT PIPE
SCALE: 3/4" = 1'-0"

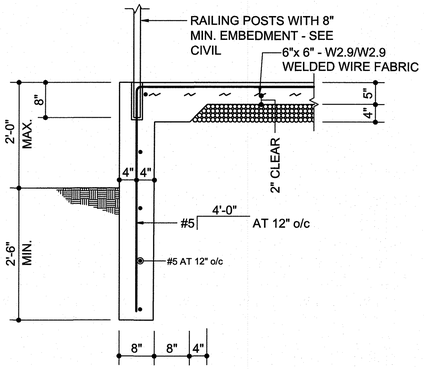


- STEP FOOTING DOWN AS REQUIRED IN ACCORDANCE WITH DETAIL 1 S124

4 FOOTING STEPPED UNDER PIPE
SCALE: 3/4" = 1'-0"



5 PIPE BELOW FOOTING
SCALE: 3/4" = 1'-0"



6 TURN DOWN SLAB
SCALE: 3/4" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

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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. 33099, EXPIRATION DATE: 09/29/2026.

STATE OF MARYLAND — MICHAEL JOSEPH MORABITO — No. 33099 — PROFESSIONAL ENGINEER

APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kendall 6.17.24
DIRECTOR DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/17/24

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/17/24

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NO.	DATE	DESCRIPTION
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ADDRESS CHART	
MAP/GRID/PARCEL	STREET ADDRESS
MAP 0030/GRID 0007 PARCEL 0009	4651 CENTENNIAL LANE, ELLICOTT CITY, MD 21042

PERMIT INFORMATION CHART					
PROJECT NAME			SECTION/AREA		LOT/PARCEL NO.
CENTENNIAL PARK WEST			N/A		9
LIBER / FOLIO #	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
L. 781/ F. 592	7	R-20	0030	2nd	602304
WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 124 OF 125

TYPICAL DETAILS

S124

SDP-82-109

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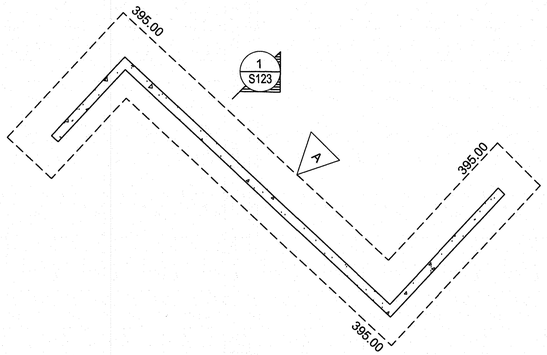
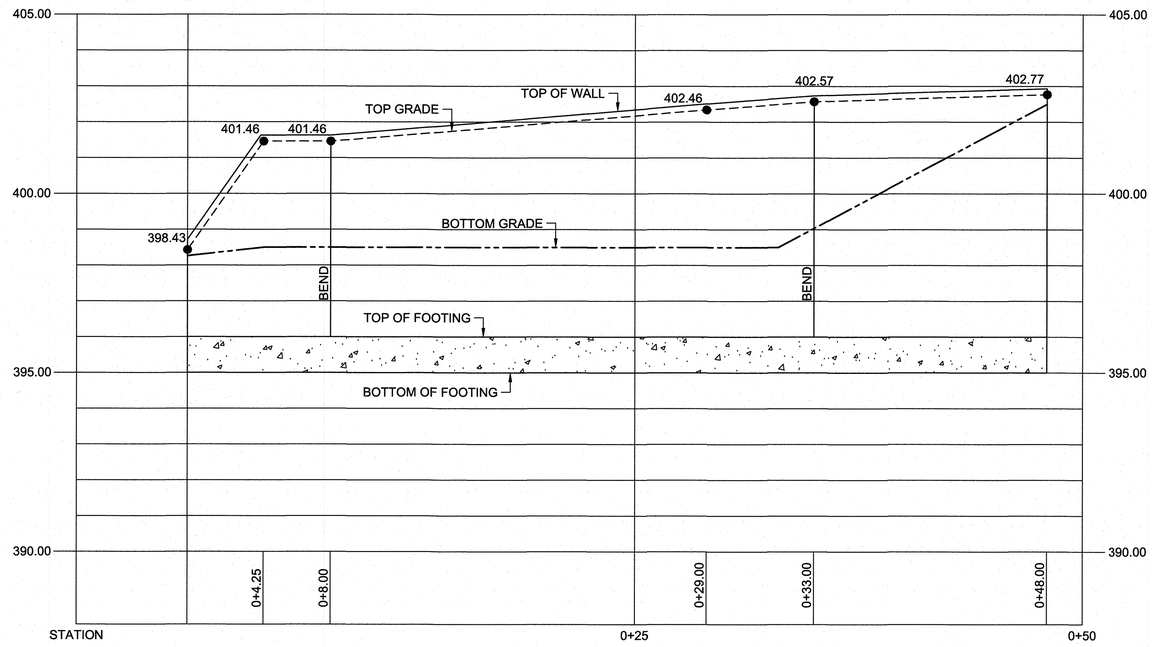


SITE RETAINING WALL PLAN SCALE: 3/16" = 1'-0"

1. ASSUMED SOIL BEARING VALUE =1500 PSF. SEE GEOTECHNICAL REPORT BY SOIL AND LAND USE TECHNOLOGY, INC. DATED AUGUST 4, 2023 FOR ADDITIONAL INFORMATION. SOIL BEARING VALUE SHALL BE VERIFIED IN FIELD BY A REGISTERED GEOTECHINCAL ENGINEER.
2. WALL TYPES ARE INDICATED ON PLAN THUS:

   CONCRETE WALLS (f'c = 4500 PSI)
3. ELEVATION BOTTOM OF FOOTINGS ARE SHOWN ON PLAN.
4. WORK THIS DRAWING WITH CIVIL DRAWINGS AS PREPARED BY SITE RESOURCES.
5. SEE CIVIL DRAWINGS FOR LOCATION AND DETAILS FOR GUARDRAILS.



SITE RETAINING WALL ELEVATION
HORIZONTAL SCALE: 1/2" = 1'-0"
VERTICAL SCALE: 1/4" = 1'-0"

PURPOSE STATEMENT - 05/06/2024

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APPROVED: DEPARTMENT OF PLANNING & ZONING

For Mary A. Kay Coyle — DIRECTOR — DATE 6.17.24

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 5.28.24

CHIEF, DIVISION OF LAND DEVELOPMENT DD — DATE 6/17/24

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STATE OF MARYLAND — DOMINIC RUSSO — 33099 — PROFESSIONAL ENGINEER

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WATER CODE	SEWER CODE		PROPERTY IMPROVEMENT		
--	--		NEW ARTIFICIAL TURF FIELDS		

SHEET NO. 125 OF 125

PLAN AND ELEVATION AT WALL

S125

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