GENERAL NOTES:

- 1. EXISTING ZONING: AG, AGRICULTURE
- TOTAL AREA OF SITE: 18. 2483 ACRES
 TOTAL DEVELOPED AREA: 707,953 SQ. FT.
- 4. THE PROPERTY SHOWN HEREON IS OWNED BY STEVEN BUCHMAN HEIRD BY DEED DATED AUGUST 22, 2023 AND RECORDED AMONG THE LAND RECORDS OF CARROLL COUNTY IN DEED BOOK 1 1099, PAGE 439.
- 5. TAX MAP: 47, BLOCK: 12, PARCEL: 518
- 6. TOPOGRAPHY SHOWN HEREON IS AERIAL TOPOGRAPHY PERFORMED BY COUNTY SURVEYORS IN 2015 AND CARROLL COUNTY LIDAR PRODUCTS AND MAY NOT BE A SUITABLE SUBSTITUTE FOR A FIELD RUN SURVEY. CARROLL COUNTY DOES NOT WARRANT ITS ACCURACY FOR ANY PURPOSE.
- 7. LOCATION OF THE NEAREST WATER SUPPLY AVAILABLE FOR FIRE PROTECTION IS HAMPSTEAD, 2.0 MILES.
- 3. THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF ANY EXISTING UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK
- 9. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 THREE (3)
 WORKING DAYS PRIOR TO BEGINNING ANY WORK IN THE VICINITY OF EXISTING UTILITIES.
 10. THE CONTRACTOR SHALL NOTE THAT IN CASE OF A DISCREPANCY BETWEEN THE
 SCALED AND FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED
- DIMENSIONS SHALL GOVERN.

 1 1. ANY CHANGES TO THIS PLAN WILL REQUIRE AN AMENDED SITE DEVELOPMENT PLAN TO BE APPROVED BY THE CARROLL COUNTY PLANNING AND ZONING COMMISSION
- 12. THIS SITE PLAN SHALL BECOME VOID EIGHTEEN MONTHS AFTER THE DATE OF APPROVAL IF NO BUILDING PERMIT OR ZONING CERTIFICATE HAS BEEN ISSUED FOR THIS PROJECT, UNLESS AN EXTENSION OF THIS TIME LIMIT IS ISSUED BY THE DIRECTOR OF THE DEPARTMENT OF LAND AND RESOURCE MANAGEMENT.
- 13. ALL CONSTRUCTION ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE "DESIGN MANUAL-VOLUME 1-ROADS AND STORM DRAINS", THE "BOOK OF STANDARDS, HIGHWAY AND INCIDENTAL STRUCTURES", "HIGHWAY DRAINAGE MANUAL" OF THE STATE HIGHWAY ADMINISTRATION, "20 1 1 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE, AND ALL ADDENDA AND ERRATA TO ALL OF THE ABOVE
- 14. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEERING OFFICE OF CLSI AT (410) 848-1790 IN THE EVENT OF ANY DISCREPANCIES IN THE PLANS OR IN THE RELATIONSHIPS OF FINISHED GRADES TO EXISTING GRADES PRIOR TO THE BEGINNING WORK.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TRAFFIC ON ANY EXISTING ROADS.
- 16. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- CLEARED BY A MINIMUM OF 2'0" OR TUNNELED IF REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST FOR TUNNELING OR BRACING.

 19. CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITY SERVICES WITHOUT WRITTEN
- PERMISSION FROM THE OWNER OF THE UTILITY.

 20. ALL SAFETY MEASURES TO BE IMPLEMENTED DURING THE CONSTRUCTION OF THIS PROJECT ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 21. THE HORIZONTAL CONTROL SHOWN HEREON IS BASED ON THE "MARYLAND COORDINATE SYSTEM" (NAD-83-91). THE VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- 22. IN FILL AREAS, THE COMPACTION SHALL BE FULL HEIGHT COMPACTION TO THE SPECIFIED ELEVATION. FILL SHALL BE PLACED IN EIGHT (8) INCH (PLUS OR MINUS TWO (2) INCHES), MEASURED LOOSE LIFTS AND EACH LIFT COMPACTED TO NOT LESS THAN NINETY-FIVE PERCENT (95%) OF THE MAXIMUM DRY DENSITY AT PLUS OR MINUS TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT, AS DETERMINED BY THE MODIFIED PROCTOR TEST (AASHTO T- 180) UNLESS SPECIFIED OTHERWISE BY THE GEOTECHNICAL ENGINEER.
- 23. ALL CUT/FILL QUANTITIES SHOWN HEREON ARE FOR INFORMATIONAL PURPOSES ONLY AS REQUIRED BY THE SEDIMENT CONTROL AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL VERIFY SUCH CALCULATIONS TO HIS OWN SATISFACTION FOR BID CONTRACT PURPOSES.
- 24. BUILDINGS WILL BE DESIGNED WITH AUTOMATIC SPRINKLER SYSTEMS.
 25. BOARD OF ZONING APPEALS CASE NUMBER: 6 130. REQUEST FOR CONDITIONAL USE
- FOR A 80-BED ASSISTED LIVING FACILITY.

 APPROVAL DATE: December 8, 2020
- 26. THE SITE SHOWN HEREON CONTAINS PRIVATE STORMWATER MANAGEMENT FACILITIES.
 A "STORMWATER MANAGEMENT EASEMENT AND MAINTENANCE AGREEMENT" IS TO BE
 GRANTED TO THE COUNTY COMMISSIONERS OF CARROLL COUNTY AS AN EASEMENT OF
 ACCESS TO THE COUNTY COMMISSIONERS OR AUTHORIZED REPRESENTATIVES BY A DEED
 TO BE RECORED SIMULTANEOUSLY HEREWITH.
- 27. THE AREA SHOWN HEREON AS REFORESTATION AREA IS INTENDED TO BE RECORDED AND GRANTED TO THE COUNTY COMMISSIONERS OF CARROLL COUNTY, MARYLAND, SIMULTANEOUSLY HEREWITH.
- 28. THIS SITE RESIDES WITHIN A HIGH QUALITY WATERS TIER II WATERSHED AS DEFINED BY MDE.
 29. THE SITE SHALL COMPLY WITH THE REQUIREMENTS OF THE MARYLAND ACCESSIBILITY CODE,
 COMAR 09. 12.53, AS WELL AS THE 20 10 ADA STANDARDS FOR ACCESSIBLE DESIGN.
- 30. THE FRONT MAIN ENTRANCE DOOR SHALL BE ACCESSIBLE; THIS MAY INCLUDE BUT NOT LIMITE TO RAMPS, LANDINGS AT DOORS AND DOOR WIDTH. (COMAR 09. 12. 53, ADAAG).
 31. PROVIDE "ACCESSIBLE" AND "VAN ACCESSIBLE" HANDICAP PARKING WITH AN ACCESSIBLE
- ROUTE TO THE MAIN ENTRANCE. HANDICAP PARKING AND ALL ACCESS ISLES MUST MAINTAIN A MAXIMUM 2% SLOPE THROUGHOUT. ACCESSIBLE ROUTES MUST MAINTAIN A MAXIMUM 2% CROSS SLOPE AND A MAXIMUM RUNNING SLOPE OF 5%.

 32. A "FORM" INSPECTION IS REQUIRED ON ALL ACCESSIBLE RAMPS AND CURP RAMPS PRIOR TO
- PLACEMENT OF FINAL MATERIAL. SLOPES OF RAMPS AND CURB RAMPS SHALL COMPLY
 WITH COMAR 09. 12.53 AND 20 10 ADA STANDARDS OF ACCESSIBLE DESIGN.

 33. ALL "ACCESSIBLE" AND "VAN ACCESSIBLE" PARKING SHALL HAVE PROPER SIGNAGE. SIGNS
 SHALL BEAR THE INTERNATIONAL SYMBOL OF ACCESS AND THE WORDS "RESERVED PARKING
- SHALL BEAR THE INTERNATIONAL SYMBOL OF ACCESS AND THE WORDS "RESERVED PARKING".

 "VAN ACCESSIBLE" PARKING SIGNS SHALL BEAR THE WORDS "VAN ACCESSIBLE". EACH

 "VAN ACCESSIBLE" ACCESS ISLE SIGN SHALL BE IDENTIFIED WITH A SUPPLEMENT "NO PARKING".

 SIGN. ALL SIGNS SHALL CONFORM WITH THE REQUIREMENTS FOR UNIFORM TRAFFIC

 CONTROL DEVICES UNDER TRANSPORTATION ARTICLE 25-104, ANNOTATED CODE OF MARYLAND.

CARROLL SOIL CONSERVATION DISTRICT THE DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE CARROLL SOIL CONSERVATION DIS		
APPROVED	_ CARROLL S.C.D./DATE:	

CARROLL COUNTY PLANNING AND ZONING COMMISSION

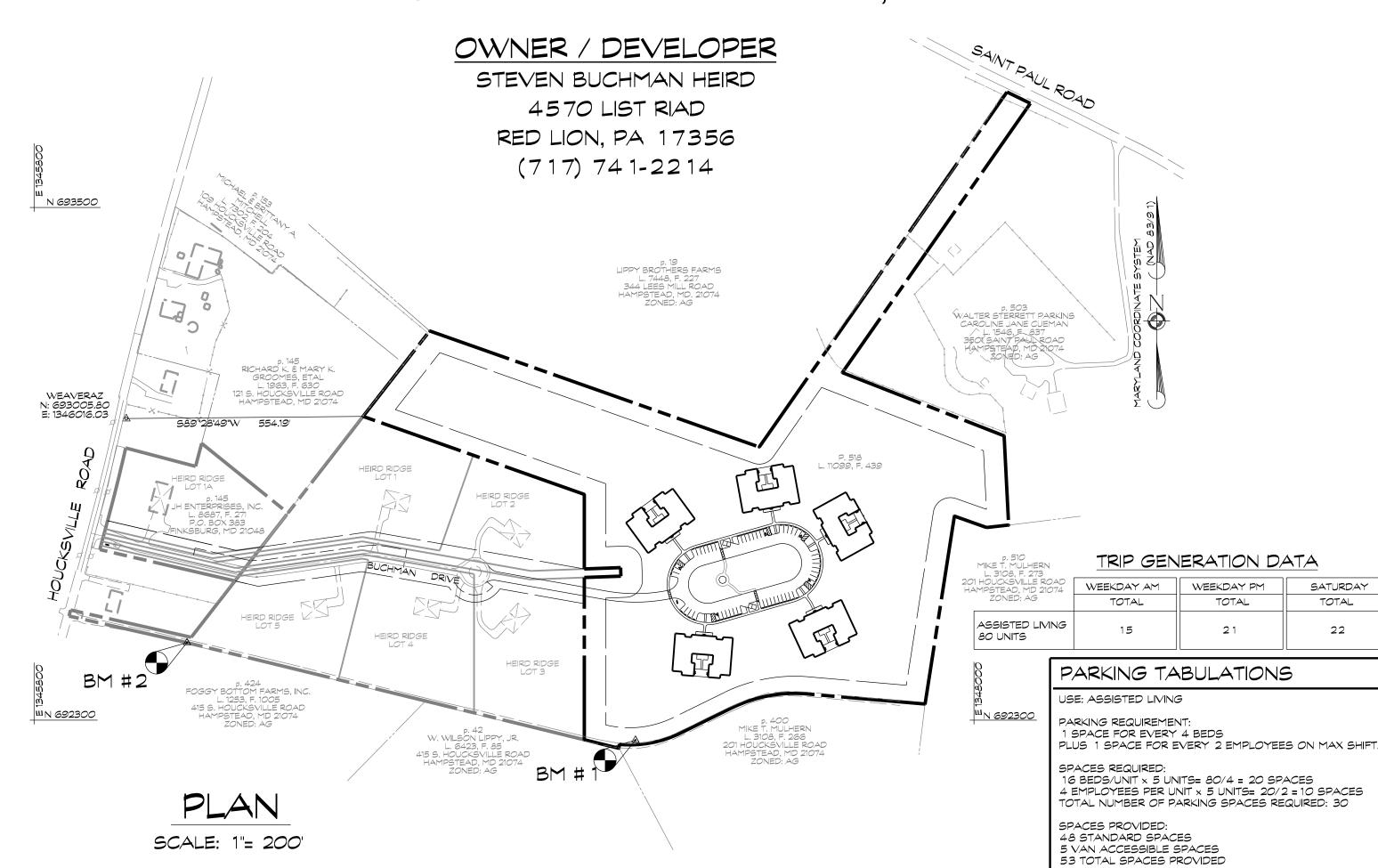
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3Y: _____ DATE: _

FINAL SITE PLAN for

AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF HEIRD PROPERTY

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND



PROJECT CERTIFICATIONS

I CERTIFY THAT THIS PLAN OF SOIL EROSION & SEDIMENT CONTROL WILL BE IMPLEMENTED TO THE FULLEST EXTENT, AND ALL STRUCTURES WILL BE INSTALLED TO THE DESIGN AND SPECIFICATIONS AS SPELLED OUT IN THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN CONSTRUCTION OF THIS PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SOIL EROSION & SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE EVALUATION BY THE CARROLL SOIL CONSERVATION DISTRICT PERSONNEL AND COOPERATING AGENCIES.

DEVELOPER

DATE

DEVELOPER DATE

DEVELOPER COMPANY NAME

DEVELOPER PHONE NUMBER

Engineers · Surveyors

Www.clsi-civileng.com

Www.clsi-civileng.com

Consultation

Con

8/24/2023

DATE

I CERTIFY THAT THIS PLAN OF SEDIMENT CONTROL IS DESIGNED

WITH MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND

HAS BEEN DESIGNED TO THE STANDARDS AND SPECIFICATIONS

ADOPTED BY THE CARROLL SOIL CONSERVATION DISTRICT.

Braton D. Moore, P.E. Professional Engineer Registration No. 51285

439 East Main Street Westminster, MD 21157-5539 (410) 848-1790 FAX (410) 848-1791

I/WE HEREBY CERTIFY THAT ALL PROPOSED

WORK SHOWN ON THESE CONSTRUCTION

DRAWINGS HAS BEEN REVIEWED BY ME/US

AND THAT I/WE FULLY UNDERSTAND WHAT IS

NECESSARY TO ACCOMPLISH THIS WORK AND

THAT THE WORK WILL BE CONDUCTED IN STRICT

ACCORDANCE WITH THESE PLANS. I/WE ALSO

WILL REQUIRE AN AMENDED PLAN TO BE

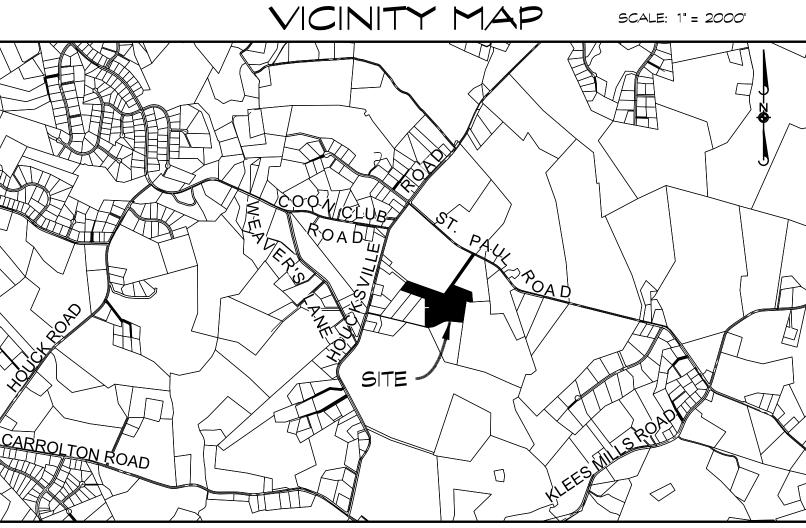
CHANGE IN THE WORK IS MADE.

OWNER

UNDERSTAND THAT ANY CHANGES TO THESE PLANS

REVIEWED AND APPROVED BY THE CARROLL COUNTY

PLANNING AND ZONING COMMISSION BEFORE ANY



LIST OF DRAWINGS

SEDIMENT CONTROL PLAN
SEDIMENT CONTROL NOTES AND DETAILS
LAYOUT PLAN-OVERALL LAYOUT PLAN-PARKING LOT DRIVEWAY PLAN AND PROFILE GRADING PLAN
PARKING LOT GRADING PLAN STORMWATER MANAGEMENT PLAN STORMWATER FACILITIES GEOMETRY STORMWATER MANAGEMENT PROFILES STORMWATER MANAGEMENT NOTES AND DETAILS TORMWATER MANAGEMENT NOTES AND DETAILS TORMWATER MANAGEMENT PROFILES AND SECTIONS STORM DRAIN DRAINAGE AREA MAP STORM DRAIN PROFILES STORM DRAIN PROFILES 18. STORM DRAIN PROFILES AND TABULATIONS LANDSCAPE PLAN LANDSCAPE NOTES AND DETAILS MISCELLANEOUS DETAILS SIMPLIFIED FOREST STAND DELINEATION & FOREST CONSERVATION PLAN FOREST CONSERVATION NOTES AND DETAILS 24. SEPTIC PLAN 25. UNIT # 1 SEPTIC UNIT # 1 SEPTIC NOTES AND DETAILS UNIT #2 SEPTIC NOTES AND DETAILS UNIT #3 SEPTIC NOTES AND DETAILS 28. UNIT #4 SEPTIC NOTES AND DETAILS
29. UNIT #5 SEPTIC NOTES AND DETAILS
30. LIGHTING PLAN BUILDING ELEVATIONS

SITE DEVELOPMENT PLAN INSPECTION SEQUENCE

- CONTRACTOR SHALL NOTIFY THE CARROLL COUNTY BUREAU OF PERMITS AND INSPECTIONS AT (410) 386-2674 AT LEAST
- ONE (1) WORKING DAY PRIOR TO BEGINNING ANY WORK.

 2. SITE COMPLIANCE INSPECTIONS ARE REQUIRED AT THE FOLLOWING STAGES DURING CONSTRUCTION:
- A. PROPOSED STRUCTURES STAKED OUT IN PROPER LOCATIONS AS SHOWN ON THESE APPROVED PLANS. B. PROPOSED FOUNDATIONS INSTALLED FOR ALL BUILDINGS SHOWN ON THESE APPROVED PLANS.
- C. SUB-GRADES ESTABLISHED FOR ALL DRIVES, PARKING LOTS, AND SURROUNDING GRADING.
- D. COMPLETION OF ALL DRIVES, PARKING LOTS, AND SURROUNDING GRADING E. COMPLETION OF ALL WORK SHOWN ON PLANS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CARROLL COUNTY BUREAU OF PERMITS AND INSPECTIONS AT (410) 386-2674 UPON COMPLETION OF EACH PHASE OF CONSTRUCTION.
- AT (410) 586-2674 UPON COMPLETION OF EACH PHASE OF CONSTRUCTION. 3. CONTRACTOR SHALL NOTIFY THE CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT, ENVIRONMENTAL INSPECTION SERVICES DIVISION AT (410) 386-2210 PRIOR TO BEGINNING ANY WORK. ALL FOREST CONSERVATION PLAN DEVICES
- SERVICES DIVISION AT (410) 386-2210 PRIOR TO BEGINNING ANY WORK. ALL FOREST CONSERVATION PLAN DEVICES MUST BE IN PLACE PRIOR TO ANY CONSTRUCTION. . FINAL LANDSCAPING INSPECTION SHALL BE ARRANGED THROUGH BUREAU OF RESOURCE MANAGEMENT, ENVIRONMENTAL
- INSPECTION SERVICES DIVISION AT (410) 386-2210 BY THE CONTRACTOR/DEVELOPER OR AGENT. WRITTEN APPROVAL FROM THE LANDSCAPE REVIEW SPECIALIST, BUREAU OF RESOURCE MANAGEMENT, MUST BE OBTAINED FOR ANY DEVIATIONS FROM THE LANDSCAPING OR FOREST CONSERVATION PLANS OR MODIFICATIONS IN THE PLANT MATERIAL.
- DEVIATIONS FROM THE LANDSCAPING OR FOREST CONSERVATION PLANS OR MODIFICATIONS IN THE PLANT MATERIAL.

 THE CONTRACTOR SHALL NOT PROCEED TO THE NEXT PHASE OF CONSTRUCTION UNTIL GIVEN APPROVAL OF PRIOR

 PHASES.

BENCHMARKS:

1.#2: N 629481.2907, E 1346158.0530 ELEV. 796.56 CLSI PT. #6 REBAR AND CAP FOUND

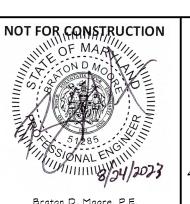
FINAL SITE PLAN

FOR AN ASSISTED LIVING FACILITY

ON THE REMAINING PORTION OF

HEIRD PROPERTY

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





Owner/Developer
MR. STEVEN HEIRD
4570 LIST ROAD
RED LION, PA 17356
(717) 741-2214

ROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY 1E, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

		CHEET: 1 OF 31
8/24/23	REVISED TO REFLECT UPDATED DEED	JOB NO.: 2005 1860
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES AND DETAILS	JOB NO.: 2005186C
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	C.C.FILE NO.: 9- 19-003
1/3 1/23	REVISED PER C.C. COMMENTS	C.C.FILE NO.: S- 19-003
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	DATE: SEPT., 2022
DATE	REVISIONS	DATE: SEPT., 2022
	1 A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND 1, EXPIRATION DATE: DECEMBER 7, 2023	

CARROLL COUNTY HEALTH DEPARTMENT



SEDIMENT & EROSION CONTROL NOTES

- . All erosion/sediment control measures shall comply with the "Maryland Standards and Specifications for Soil Erosion and Sediment Control" by the Maryland Department of the Environment, Water Management Administration in association with the Natural Resources Conservation Service and Maryland Association of Soil Conservation Districts (referenced as the 2011 Standards and Spec's).
- Areas that have been cleared and/or graded, but will not be constructed on or permanently vegetated for more then 5 days (3 days for sediment control measures (steep slopes) must be stabilized with mulch or temporary stabilization. Any areas that are in temporary vegetation for over 6 months will need to be permanently vegetated.
- 3. For specifications on permanent or temporary stabilization see B-4-4 and B-4-5.
- 4. Mulching can only be used on disturbed areas as a temporary cover where vegetation is not feasible or where seeding germination cannot be completed because of weather conditions. For specifications see B-4-3, A.1.B.
- 5. For specifications on the stabilization of cut and fill slopes greater than 3 horizontal to 1 vertical, see Incremental Stabilization B-4-1.
- 6. The existing topsoil from on or off site that is used must meet the minimum specifications in B-4-2.
- 7. The required sequence of construction must be followed during site development. Any change in the sequence of construction must be approved by the Soil
- Conservation District. 8. Any revisions to the sediment control plan not covered under the list of plan modifications that can be approved by the sediment control inspector, need to be
- 9. No proposed slope that is seeded and/or mulched shall be greater than 2:1. Slopes greater that 2:1 shall require an engineered design for stabilization.

submitted to the Soil Conservation District for approval.

- 10. All sediment control structures will be inspected once a week and after each rainfall and will be repaired, as needed, so that the structure meets the minimum specifications as shown in the 2011 Standards and Spec's.
- 11. The contractor is responsible for maintaining all sediment and erosion control

to the soil conservation district by the sediment control inspector.

measures until the disturbed areas are permanently stabilized. 12. The district approval for this sediment control plan is good for 2 years. At the end of 2 years, if construction of the plan has not started, the plan will need to be resubmitted to the soil conservation district for review and re-approval. Any plans that are currently under construction after 2 years may be required to be re-submitted

DUST CONTROL SCHEDULE

May-October - All graded areas not being immediately stabilized as noted in the "Required Sequence of Construction" shall be watered on a continuing basis as necessary to provide for dust proofing. Contractor shall provide tank truck with spray bar on site at any time the disturbed area exceeds three (3) acres.

SITE ANALYSIS

- 1. TOTAL AREA OF SITE: 18.2764 AC.
- 2. AREA DISTURBED: 707,953 SQ. FT.
- 3. TOTAL CUT: 23.548 C.Y.
- 4. TOTAL FILL: 21,786 CY

NOTE: EARTHWORK CUT AND FILL QUANTITIES INDICATED ON THIS PLAN ARE SHOWN FOR PURPOSES OF OBTAINING SEDIMENT CONTROL PLAN APPROVAL AND NOT TO BE USED FOR CONTRACTUAL OBLIGATIONS. CONTRACTOR IS RESPONSIBLE TO VERIFY

REQUIRED SEQUENCE OF CONSTRUCTION

- 1. NOTIFY THE CARROLL COUNTY BUREAU OF SEDIMENT CONTROL (4 10-386-22 10) 24 HOURS PRIOR TO THE START OF CONSTRUCTION. ACTIVITIES. ALL PROTECTION FENCING AND PERMANENT SIGNS REQUIRED UNDER THE CARROLL COUNTY CODE OF PUBLIC LAWS AND ORDINANCES, FOREST CONSERVATION (CHAPTER 150) AND WATER RESOURCE MANAGEMENT (CHAPTER 154) SHALL BE INSTALLED PRIOR TO THE PRE-CONSTRUCTION MEETING WITH THE CARROLL COUNTY SEDIMENT INSPECTOR.
- 2. INSTALL TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT
- 3. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB SITE.
- 4. MASS GRADE SITE. GRADE EXTENDED DETENTION BASIN AND CONSTRUCT OUTLET STRUCTURE PER SEQUENCE OF INSPECTION CHART ON SHEET 12. BUILDING CONSTRUCTION MAY BEGIN AFTER CONSTRUCTION OF EXTENDED DETENTION FACILITY
- 5. CONSTRUCT STORM DRAIN SYSTEM AND ASSOCIATED STRUCTURES. CONTRACTOR
- TO INSTALL STANDARD INLET PROTECTION ON ALL INLETS ONCE INSTALLED. 6. CONSTRUCT MICRO-BIO RETENTION FACILITIES IN ACCORDANCE WITH SEQUENCE

8. GRADE PAVED AREAS TO SUBBASE GRADES AND INSTALL STONE BASE TO

- OF INSPECTION CHARTS FOUND ON SHEET 12. 7. INSTALL REMAINING UTILITIES.
- 9. CONSTRUCT SIDEWALKS AND OTHER CONCRETE AREAS. 10. CONSTRUCT SEPTIC MAINS AND ASSOCIATED STRUCTES PER SHEET 23 AND
- 24 OF THE PLAN SET. 11. FINE GRADE AREAS AND INSTALL BASE PAVEMENT.
- 12. WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING TEMPORARY SEDIMENT CONTROL MEASURES AND STABILIZE
- REMAINING DISTURBED AREAS. 13. PLACE FINAL COURSE PAVING.

STABILIZATION SPECIFICATIONS

TEMPORARY SEEDING NOTES

Scope: Planting short term (no more than 6 Months) vegetation to temporarily stabilize any areas where soil disturbance has occurred, until the area can be permanently stabilized with vegetative or non-vegetative practices.

Standards: The following notes shall conform to Section B-4 of the 20 1 1 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service and the Maryland Association of Soil Conservation Districts.

- 1. The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See section B-4-2. 2. For temporary stabilization, fertilizer shall consist of a mixture of 10-20-20 and be applied at a rate of 436 lb. per acre (10 lb. per 1000 sq. ft.) and will meet the requirements in section B-4-2. Lime shall be applied at a rate of 2 tons per acre (90
- lb. per sa. ft.) and shall meet the requirements in section B-4-2 and B-4-4. 3. Seed type and application shall meet the requirements in section B-4-3 Seed tags shall be made available to the inspector to verify the type and rate of seed used. Mulch type and Its application will meet the requirements in section B-4-3 a, b and c and will be applied
- along with the seed or immediately after seeding 4. Seeding mixtures shall be selected from or will be equal to those on Table B. 1 (page B. 20).

Temporary Seeding Summary The seeding chart below will need to be placed on and filled in on the sediment control plan.

		ne (from Figure E : (from Table B. '			Fertllizer Rate	Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	(10-20-20)	Lime Kate
1	Annual Ryegrass (Lolium perenne ssp. multiflorum)	40 lb/ac	3/15 - 5/31 8/1- 9/30	0.5"		2 tons/ac.
2	Foxtail Millett (Setaria italica)	30 lb/ac	5/16 - 7/31	0.5	436 lb/ac (10 lb/1000 sf)	(90 lb/ 1000 sf)
						ŕ

PERMANENT SEEDING NOTES

Scope: Planting permanent, long lived vegetative cover on graded and/or cleared areas and areas that have been in temporary vegetation for more than 6 months.

Standards: The following notes shall conform to Section B-4 of the "20 1 1 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" published jointly by the Maryland Department of Environment - Water Management Administration, the National Resource Conservation Service and the Maryland Association of Soil Conservation Districts.

The seed bed shall be prepared by loosening the soil to a depth of 3 to 5 inches and incorporating the lime and fertilizer into this loosened layer of soil. See section B-4-2.

For sites over 5 ac. soil tests will be performed. Soil tests will be conducted by the University of Maryland or a recognized commercial laboratory. Minimum soil conditions shall meet the requirements of section B-4-2-A-2-a, otherwise soil amendments or topsoil will need to be applied. Topsoiling may occur when soil conditions meet the minimum requirements as stated in section B-4-2-B. Soil amendments must meet the requirements as set forth in section B-4-2-C and must be applied as indicated by the

For sites of 5 ac. or less of disturbance, the following fertilizer and lime rates shall apply. Fertilizer shall consist of a mixture of 10-20-20 and be applied at the following rates: N = 45 lb. per acre (1 lb. per 1000 sq.ft.) P205 = 90 lb. per acre (2 lb. per 1000 sq.ft.) K20 = 90 lb. per acre (2 lb. per 1000 sq.ft.) Lime shall be applied at a rate of 2 tons per acre (90 lb. per 1000 sq.ft.)

Seed type, turfgrass or sod application shall meet the requirements in section B-4-5. Seed tags shall be made available to the inspector to verify the type and application rate of seed used. Mulch type and its application will meet the requirements in section B-4-3 a, b and c, and will be applied along with seed or immediately after seeding.

Seeding mixtures shall be selected from or will be equal to those on Table B-3. The seeding chart below will need to be placed on and filled in on the sediment control plan.

	•	one (from Figure B. 3): 6B re (from Table B. 3):			Fertilizer Rate (10-20-20)			Lime	
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	Χ	P ₂ O ₅	K ₂ O	Rate	
*9	Improved Tall Fescue (Lolium arundinaceum)	60 lb/ac	3/1 - 5/15 8/1- 10/15	1/4 - 1/2 in	45 pounds	90 lb/ac	90 lb/ac	2 tons/ac.	
	Improved Kentucky Bluegrass	40 lb/ac	3/1 - 5/15 8/1- 10/15	1/4 - 1/2 In	per acre (1.0 b / 1000 sf)	(2.0 lb / 1000 sf)	(2.0 lb / 1000 sf)	(90 Ib/ 1000 sf)	
	Improved Perenial Ryegrass	20 lb/ac	3/1 - 5/15 8/1- 10/15	1/4 - 1/2 in		,	,	ŕ	
* 1	Switch Grass (Panicum virgatum)	10 lb/ac	3/1 - 5/15 5/16 - 6/15	1/4 - 1/2 in	45 pounds	90 lb/ac	90 lb/ac	2 tons/ac.	
	Creeping Red Fescue (Festuca rubra)	15 lb/ac	3/1 - 5/15 5/16 - 6/15	1/4 - 1/2 in	per acre (1.0 b / 1000 sf)	(2.0 lb / 1000 sf)	(2.0 lb / 1000 sf)	(90 lb/ 1000 sf)	
	Partridge Pea (Chamaecrista fascicuata)	4 lb/ac	3/1 - 5/15 5/16 - 6/15	1/4 - 1/2 in		,	,	,	

*9 -use 1 variety on the MD/VA recommended list (TT-77) *1 -use 2-4 varieties on the MD/VA recommended list (TT-77)

Tracking note:

On areas where the slope is 3:1 or steeper and the height is 8' or greater, contractor shall track the slope using cleated dozer prior to placing asphalt binder. Dozer shall run up-and-down so that cleat marks are horizontal. Where tracking is required, it shall be done from existing grade level to finished grade level within the limits established by the 8' height criteria.

UTILITY CONSTRUCTION NOTES

- 1. Place all excavated material on the high side of the trench.
- 2. Only do as much work as can be done in one day so backfilling, final grading, and permanent stabilization can occur.
- 3. Any sediment control measures disturbed by the utility construction will be repaired the same day.

STOCKPILE/TOPSOIL NOTES

- 1. Stockpiling will not be allowed on any impervious area.
- 2. All stockpiles left at the end of the day will need to be temporarily stabilized until
- they are again disturbed, unless they are within existing perimeter sediment controls.
- 3. All stockpile areas shall be confined within perimeter controls. In the event that stockpile areas must be located outside disturbed areas, the location shall be as directed by the inspector in the field.

ENTRANCE MOUNTABLE BERM - EXISTING PAVEMENT AGGREGATE OVER LENGTH PIPE (SEE NOTE 6) PROFILE 50 FT MIN - EDGE OF EXISTINGPAVEMENT <u>PLAN VIEW</u>

DETAIL B- 1 STABILIZED CONSTRUCTION

CONSTRUCTION SPECIFICATIONS

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- 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. IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- . 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 (MITHOU
- 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 REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMENT

DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONT ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REM MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPRI SEDIMENT CONTROL PRACTICE.

A PIPE	FLOW
PUT	
OTHER O	POST DRIVEN INTO GROUND
10VE ROVED	
	SECTION FOR TYPE A AND B

DETAIL E-9-1 STANDARD INLET

2 IN x 4 IN FRAMING

GALVANIZED

/ - WOVEN SLIT FILM

TYPE A

U.S. DEPARTMENT OF AGRICULTURE IATURAL RESOURCES CONSERVATION SERVICE

U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION

SERVICE

GEOTEXTILE

HARDWARE

PROTECTION

-TOP ELEVATION

-NOTCH ELEVATION

SLIT FILM

18 IN INTO GROUND

EDGE OF ROADWAY OR TOP

6 IN MIN.

GEOTEXTILE

LINK FENCE (TYP.)

ISOMETRIC VIEW

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

16 IN MIN.

TYPE A MAXIMUM DRAINAGE AREA = 1/4 ACRE TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE

TYPE B

FENCE POSTS

- TOP ELEVATION

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

PROTECTION

DETAIL E-9-1 STANDARD INLET

- 2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
- 3. FOR TYPE A, USE NOMINAL 2 INCH \times 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 1/2 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,

FOR TYPE B, USE 2^3 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 HE 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.

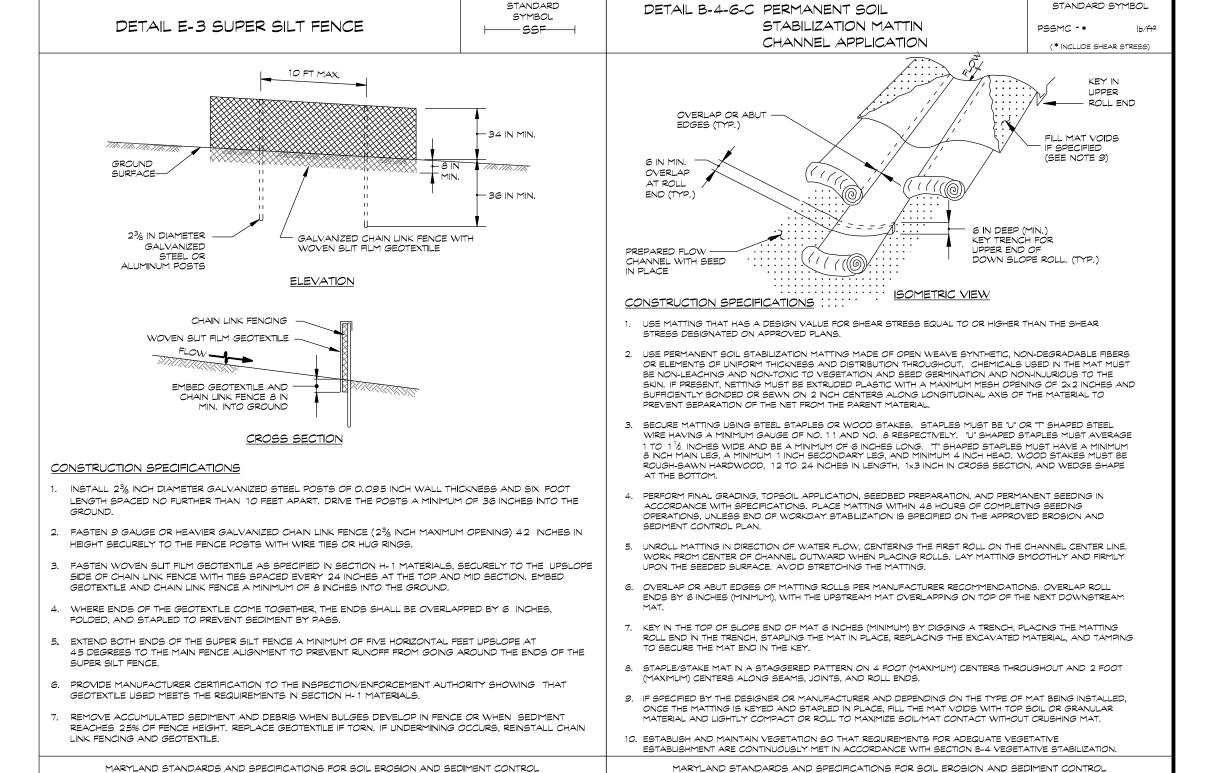
- 4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- 5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE 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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMEN

MARYLAND DEPARTMENT OF ENVIRONMEN

WATER MANAGEMENT ADMINISTRATION



1 OF 2

U.S. DEPARTMENT OF AGRICULTURE

U.S. DEPARTMENT OF AGRICULTURE

NOT FOR CONSTRUCTION

ATURAL RESOURCES CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT

ENVIRONMENT

WATER MANAGEMENT ADMINISTRAT

STANDARD

ALL SEDIMENT CONTROL MEASURES SHOWN HEREON ARE TEMPORARY UNLESS OTHERWISE NOTED.

ALL STOCKPILE AREAS SHALL BE CONFINED WITHIN PERIMETER CONTROLS. IN THE EVENT THAT STOCKPILE AREAS MUST BE LOCATED OUTSIDE OF DISTURBED AREAS, THE LOCATION SHALL BE AS DIRECTED BY THE INSPECTOR IN THE FIELD.

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023 Drawn By: KH Designed By: KH ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS 1/16/23 REVISED PER C.C. COMMENTS Reviewed By: 1/3 1/23 Date: SEPT., 202 REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS 2/24/23 EVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAIL Scale: NTS Job No.: 20051860 REVISED TO REFLECT UPDATED DEED Sheet: 3 of 31

ROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY IE, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF

SEDIMENT CONTROL NOTES & DETAILS

FINAL SITE PLAN

FOR AN ASSISTED LIVING FACILITY

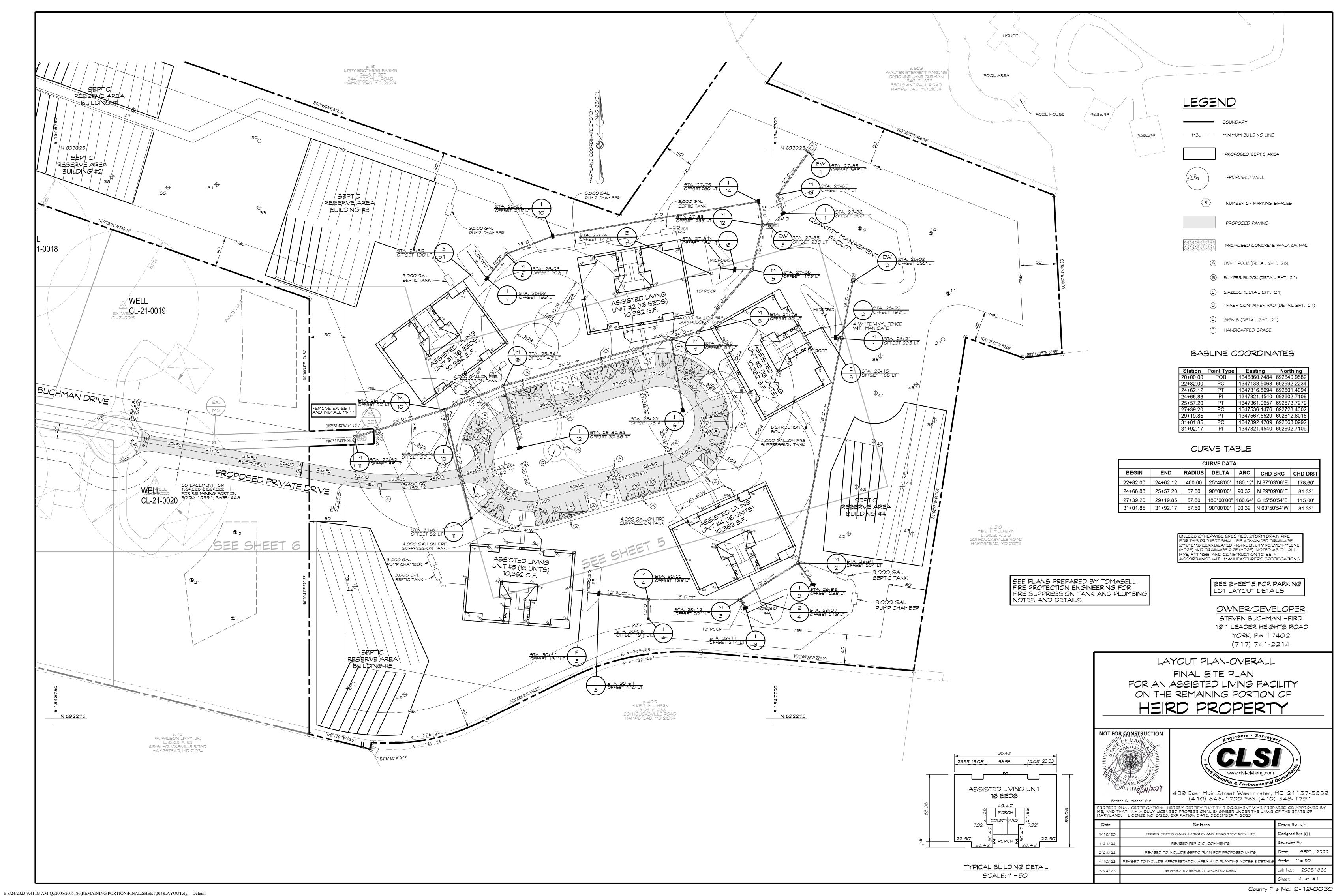
ON THE REMAINING PORTION OF

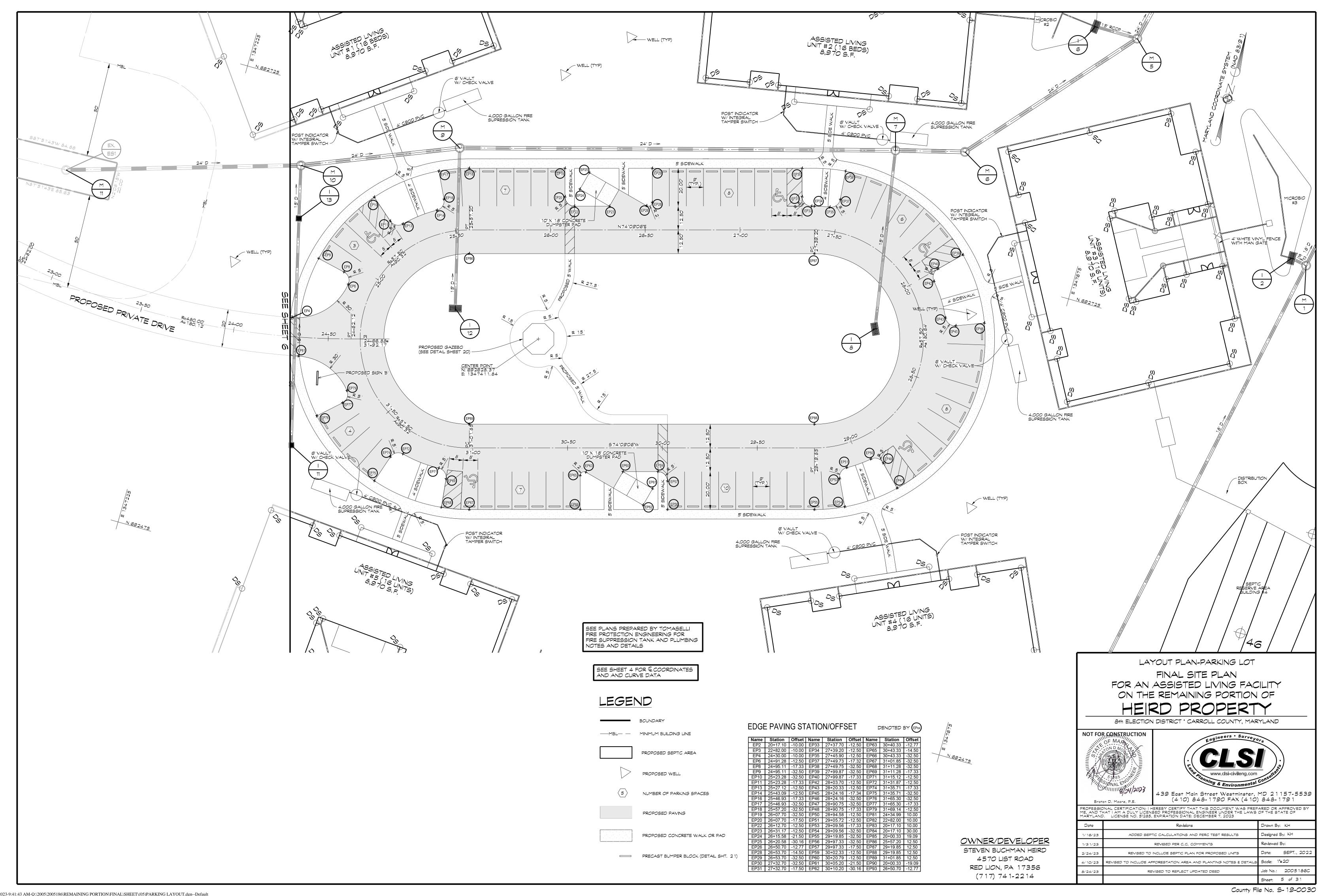
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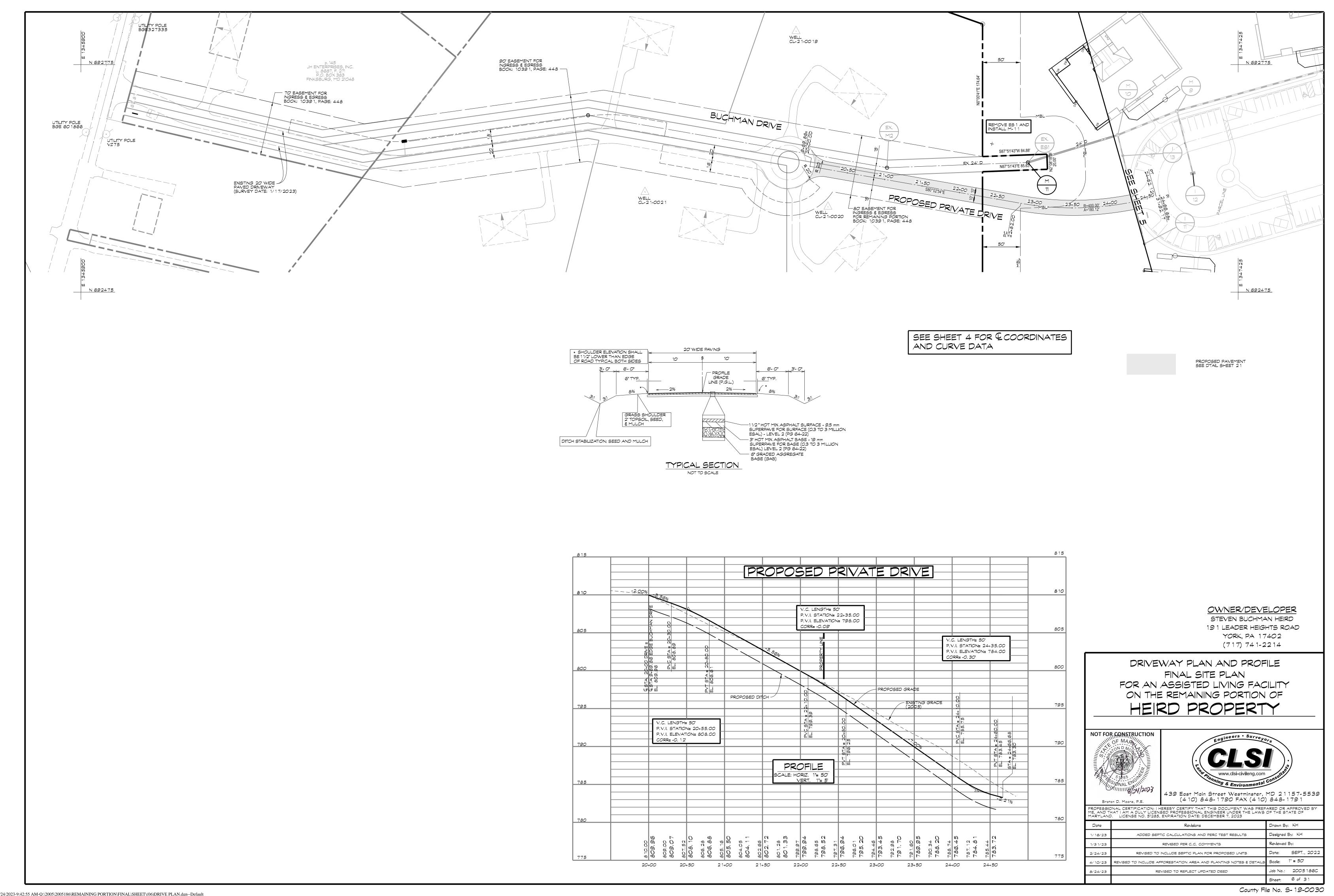
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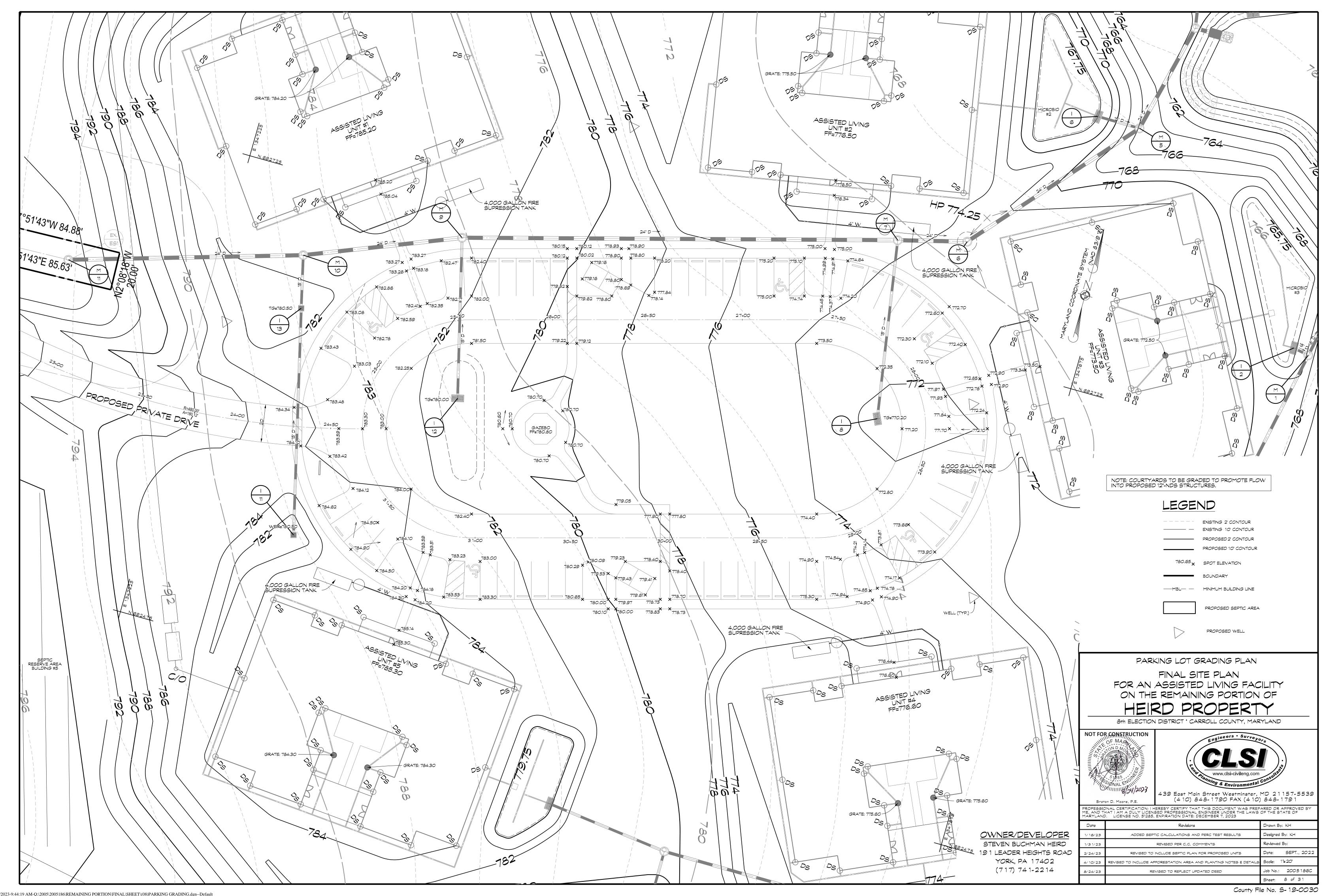
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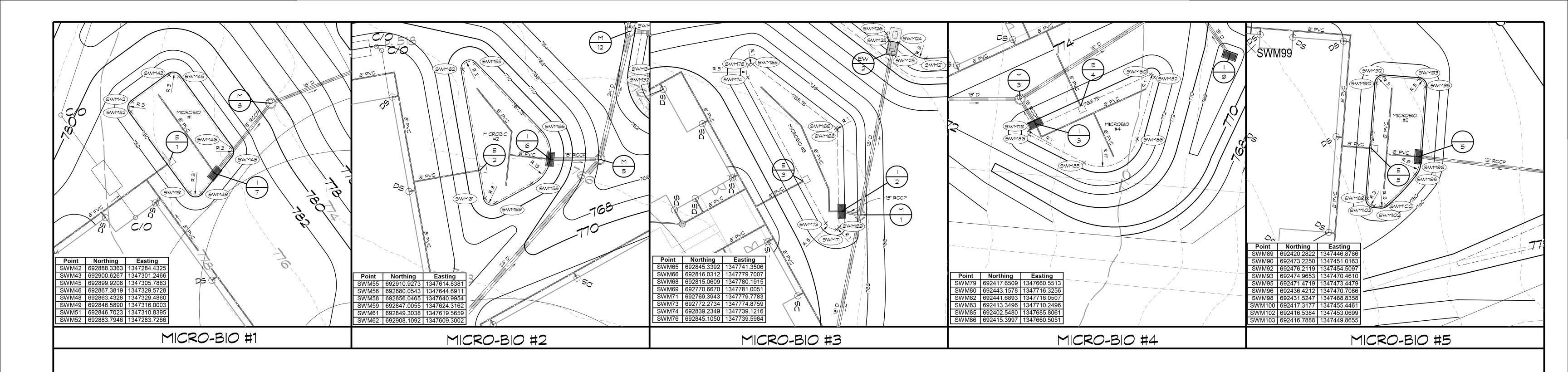


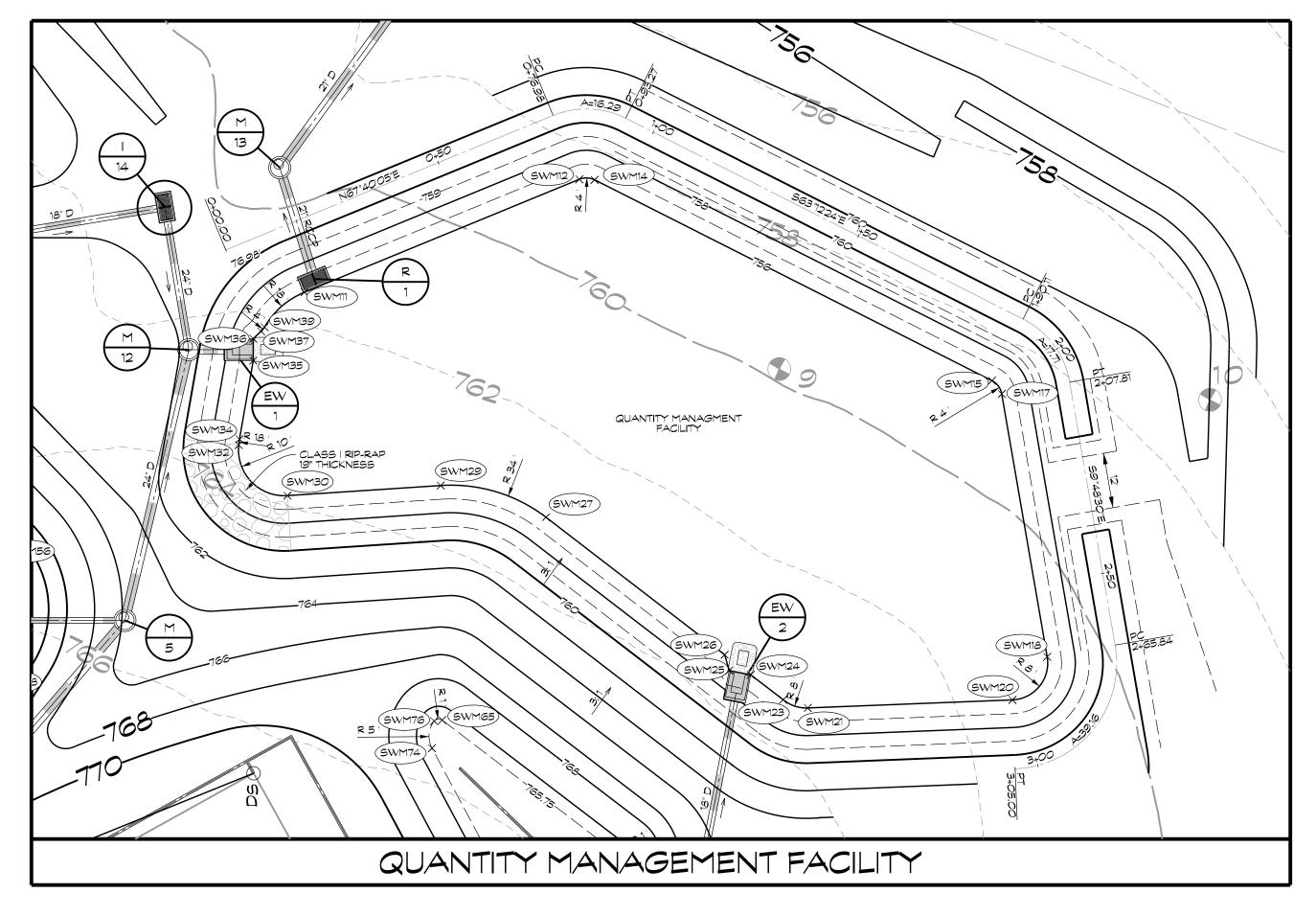












E DAM CURVE DATA

BEGIN STA.	END STA.	RADIUS	DELTA	LENGTH	TANGENT	CHD. BRG	CHD. L
0+76.98	0+93.27	19.00	49°07'31"	16.29	8.68	S 87°46'09" E	15.80
1+90.11	2+07.81	19.00	53°23'54"	17.71	9.56	S 36°30'27" E	17.07
2+65.84	3+05.00	23.00	97°32'47"	39.16	26.25	S 38°57'54" W	34.60

E DAM CURVE COORDINATES

Station	Northing	Easting
0+00.00	692947.5718	1347694.266
0+76.98	692976.8204	1347765.468
0+93.27	692976.2055	1347781.252
1+90.11	692932.5521	1347867.696
2+07.81	692918.8287	1347877.854
2+65.84	692861.6494	1347887.739
3+05.00	692834.7492	1347865.983

756 CONTOUR COORDINATES

Point	Northing	Easting
SWM11	692938.3896	1347711.3893
SWM12	692962.9454	1347771.1676
SWM14	692962.8159	1347774.4906
SWM15	692919.1625	1347860.9346
SWM17	692916.2734	1347863.0730
SWM18	692859.0941	1347872.9582
SWM20	692849.7375	1347865.3908
SWM21	692847.9792	1347820.8754
SWM23	692849.7727	1347815.5044
SWM24	692855.1749	1347808.4805
SWM25	692856.0921	1347803.7690
SWM26	692859.5487	1347802.7937
SWM27	692889.4459	1347763.9216
SWM29	692896.3568	1347741.0245
SWM30	692894.1435	1347707.6819
SWM32	692905.1631	1347697.0739
SWM34	692906.4133	1347697.2494
SWM35	692923.5040	1347700.2299
SWM36	692928.3040	1347700.2299
SWM37	692929.8837	1347701.9387
SWM39	692930.8062	1347702.6790

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

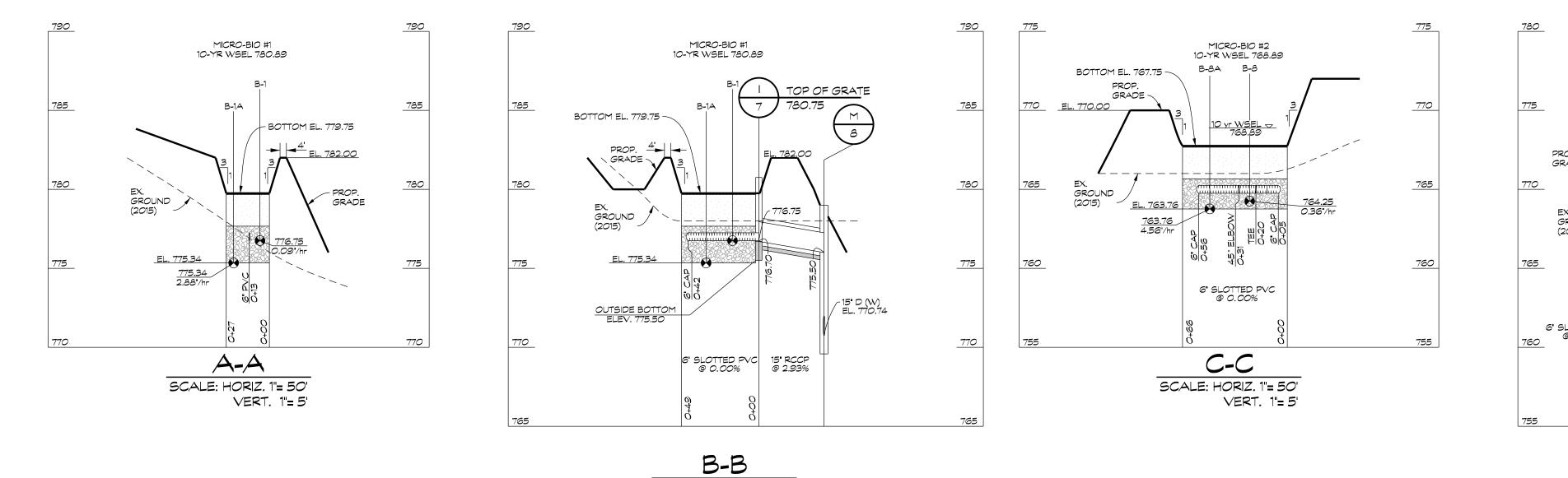
STORMWATER MANAGEMENT FACILITIES GEOMETRY FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

NOT FOR CONSTRUCTION

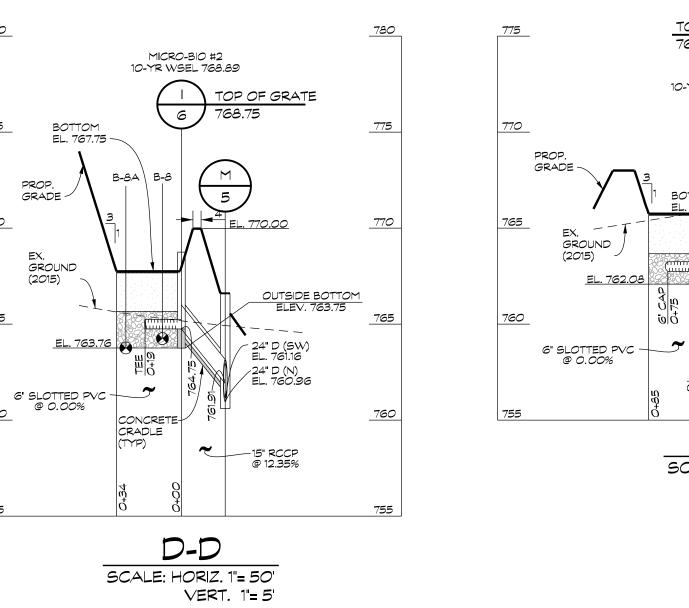


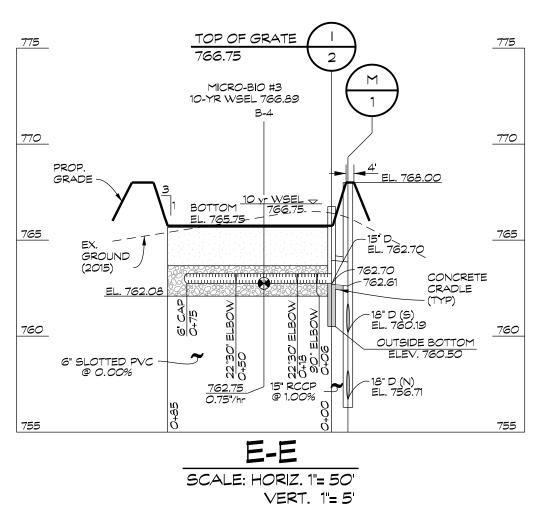
439 East Main Street Westminster, MD 21157-5539 (410) 848-1790 FAX (410) 848-1791 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285. EXPIRATION DATE: DECEMBER 7, 2023

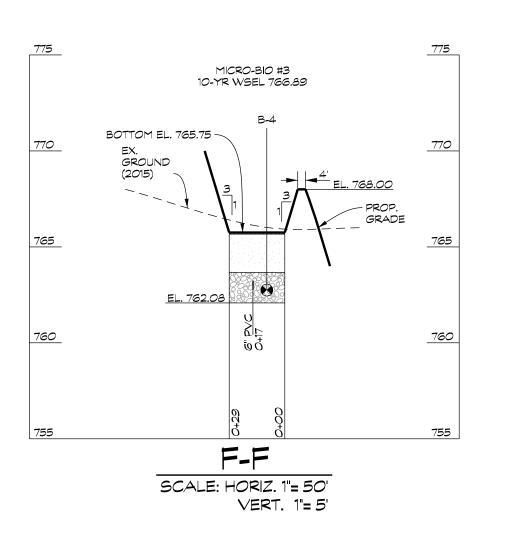
MARYLAND	MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023					
Date	Revisions	Drawn By:	KH			
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed E	By:			
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed B	By: BEW			
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022			
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	1" = <i>20</i> "			
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	20051860			

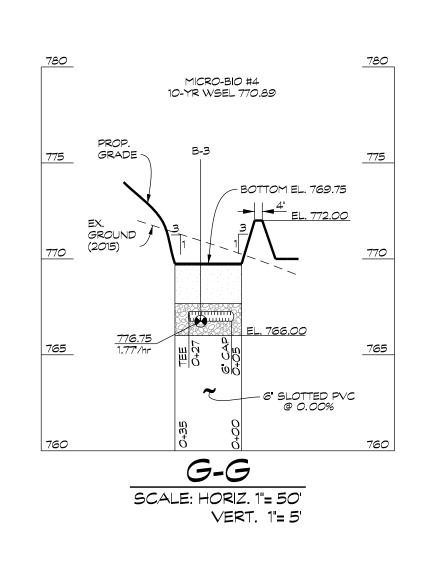


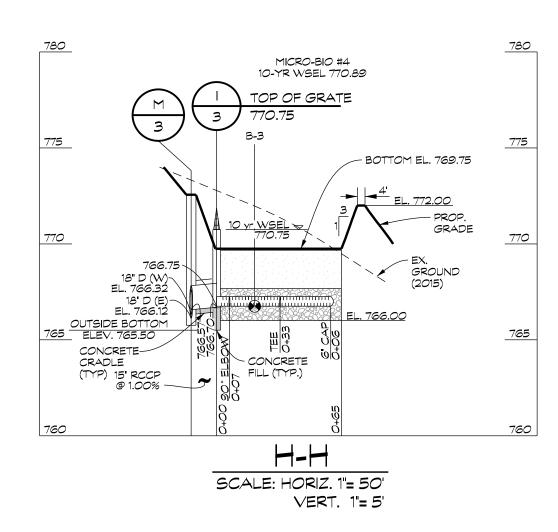
SCALE: HORIZ. 1"= 50' VERT. 1"= 5'

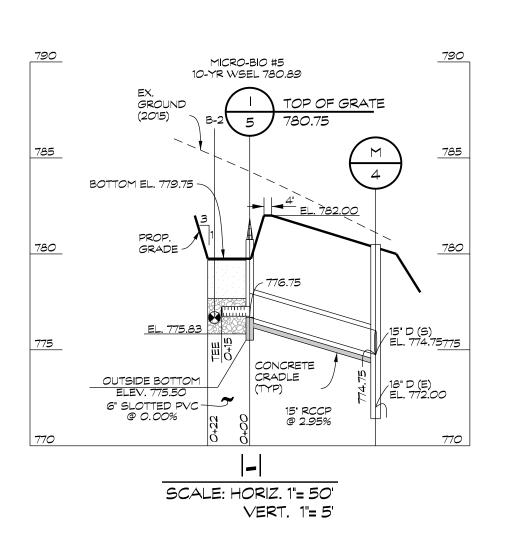


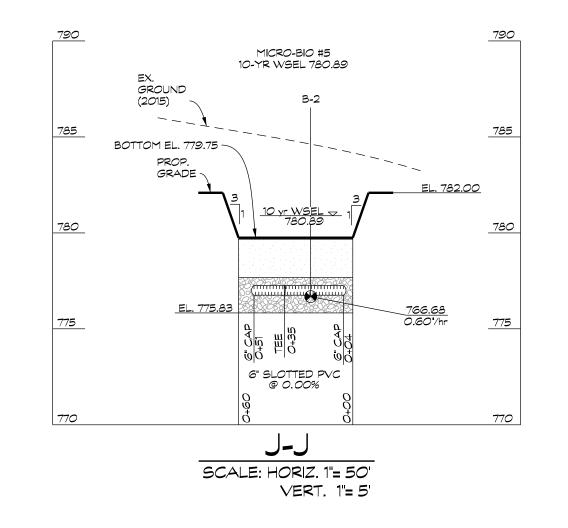




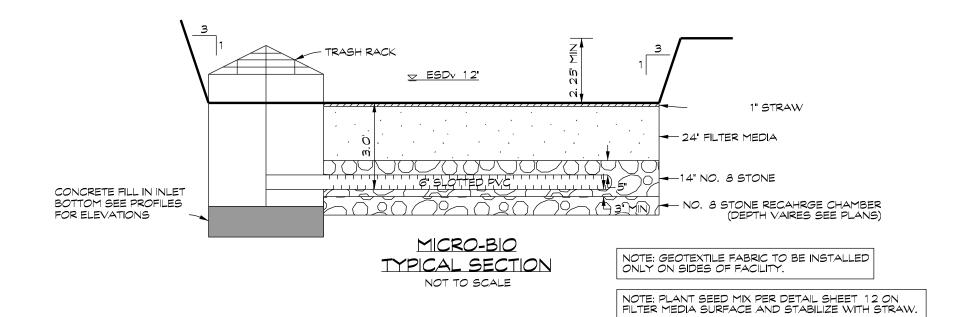








NOTE: FOR CONCRETE CRADLE DETAIL SEE SHEET 13 OF THIS PLAN SET.



OWNER/DEVELOPER
STEVEN BUCHMAN HEIRD
4570 LIST ROAD
RED LION, PA 17356
(717) 741-2214

STORMWATER MANAGMENT PROFILES

FINAL SITE PLAN

FOR AN ASSISTED LIVING FACILITY

ON THE REMAINING PORTION OF

LICIDID DOODEDTY

HEIRD PROPERTY

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





Braton D. Moore, P.E. (410) 848-1790 FAX (410) 848-1791

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Date	Revisions	Drawn By:	втм
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed By	: BTM
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed By	y: BEW
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	1" = <i>50</i> '
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	2005186C

APPROVED UNDERDRAIN PIPES FOR CARROLL COUNTY STORMWATER MANAGEMENT FACILITIES CONTECH A-2000 SLOTTED PVC UNDERDRAIN PIPE ADS N-12 SLOTTED HDPE TYPE "SP" UNDERDRAIN PIPE 3 AT 120° STANDARD LAYING LENGTH 4' THRU 10" DIAMETERS = 12' - 6' 5: 1. ALL PIPES MUST BE CORRUGATED DOUBLE WALLED (SMOOTH CORE) 2. ALL PIPES MUST BE SLOTTED (NO CIRCULAR HOLES) 3. ENGINEER APPROVED EQUIVALENTS MAY BE SUBSTITUTED WITH PRIOR CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT PLAN & PROFILE NOTATION: ___" SLOTTED PIPE SEE DETAIL SHEET ___

EXTENDED DETENTION BASIN INSPECTION CHART

	SEQUENCE OF CONSTRUCTION/INSPECTION CHART	INITIALS	DATE	AGENT
1.	CONTACT MISS UTILITY AT LEAST 3 DAYS AND UTILITY OWNERS AT LEAST 5 DAYS PRIOR TO BEGINNING WORK. NOTIFY CARROLL COUNTY SEDIMENT CONTROL 24 HOURS PRIOR TO BEGINNING WORK AT 4 10-386-22 10 FOR A PRE- CONSTRUCTION MEETING.			CLSI
2.	CONTACT CARROLL COUNTY SEDIMENT CONTROL INSPECTOR FOR APPROVAL OF SEDIMENT CONTROL DEVICES BEFORE PROCEEDING AND PERMISSION TO CONSTRUCT THE EXTENDED DETENTION BASIN. CONTRACTOR TO FOLLOW ALL CONDITIONS SET FORTH BY CARROLL COUNTY SEDIMENT CONTROL INSPECTOR.			CLSI
3.	GRADE FACILITY DOWN TO DESIGN BOTTOM OF 756.00. GRADE SIDE SLOPES TO 3: 1.			CLSI
4.	FACILITY EMBANKMENT TO BE CONSTRUCTED WITH MATERIALS AND COMPACTED TO SPECIFICATIONS SHOWN ON COMPACTION DETAIL THIS SHEET.			GEOTECH
5.	CONSTRUCTION STORM DRAIN SYSTEM FROM M- 12 TO EW-3 AND I-2 TO EW-2.			CLSI
6.	INSTALL RIPRAP STILLING BASINS AT EW-2 AND EW-3			CLSI
7.	INSTALL CAST IN PLACE RISER (R-1) AND 21" RCCP TO EW-1 PER RISER DETAIL SHEET 13.			CLSI
<u>ප</u> .	INSTALL CONCRETE CRADLE FOR 21" RCCP BARREL.			CLSI
9.	WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE PERIMETER SEDIMENT CONTROL MEASURES.			- CL SI
10	FORWARD SIGNED INSPECTION CHART TO CLSI. WITHIN 30 DAYS OF RECEIVING SIGNED INSPECTION CHART, CLSI WILL PREPARE AND SUBMIT PAPER AS- BUILT PRINTS TO C.C. STORMWATER REVIEW FOR APPROVAL. MYLARS TO BE SUBMITTED C.C. BUREAU OF RESOURCE MANAGEMENT UPON APPROVAL OF AS-BUILT.			CLSI

ENGINEER'S NAME: _	CLSI	ENGINEER'S NAME:	ENGINEER'S NAME:
PHONE NUMBER:	(410) 848-1790	PHONE NUMBER:	PHONE NUMBER:

NOTE: INSPECTION CHART SHALL BE SIGNED BY CERTIFYING PROFESSIONAL AS WORK PROGRESSES. ONCE CERTIFYING PROFESSIONAL HAS GIVEN APPROVAL, PROCEED

AS NOTED ABOVE, PLEASE NOTIFY CERTIFYING ENGINEER 48-HOURS PRIOR TO COMMENCING CONSTRUCTION

MICRO-BIO FACILITY INSPECTION CHARTS FOR SWM

	SEQUENCE OF CONSTRUCTION/	MICRO	DBIO #1	MICRO	BIO #2	MICRO	BIO #3	MICRO	BIO #4	MICRO	BIO #5	MICRO	BIO #6	MICRO	BIO #7	
	ENGINEERS INSPECTION CHART	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INSPECTING AGENT
1.	GRADE SITE AND INSTALL STORM DRAIN SYSTEMS INCLUDING ALL NECESSARY ROOF LEADERS, COURT YARD STORM DRAINS, CONCRETE CRADLES, RISERS, CONCRETE INFILL, TRASHRACKS AND OUTFALL PROTECTION/ENDWALLS															CLSI
2.	FACILITY EMBANKMENT TO BE CONSTRUCTED WITH MATERIALS AND COMPACTED TO SPECIFICATIONS SHOWN ON COMPACTION DETAIL THIS SHEET.															GEOTECH
3.	ONCE THE DRAINAGE AREA IS STABILIZED WITH BUILDINGS AND ROADWAYS COMPLETED AND SUPPORTING 2" STAND OF GRASS, EXCAVATE SUBSURFACE DIMENSIONS.															CLSI
4.	INSTALL NO. 8 STONE LAYER TO MINIMUM OF 3" OR TO DEPTH OF RECHARGE RESERVOIR (DEPTH VARIES). SEE CROSS SECTION FOR STONE DEPTH.															CLSI
5.	INSTALL 6" SLOTTED PVC UNDERDRAIN. UNDERDRAIN MUST BE INSPECTED PRIOR TO BACKFILL WITH REMAINING 5" LAYER OF STONE.															CLSI
6.	INSTALL 24" INCHES OF FILTER MEDIA. FILTER MEDIA TO CONFORM TO SPECIFICATIONS THIS SHEET.															CLSI
7.	FINE GRADE AND FULLY STABILIZE DISTURBED AREAS.															CLSI
8.	INSTALL BASIN BOTTOM SEED MIX PER MANUFACTURERS RECOMMENDATIONS. SEE SEED MIX THIS SHEET. STRAW TO BE TOP DRESSED OVER SEEDS TO DEPTH OF 1".															CLSI
9.	SUBMIT AS-BUILT PAPER PRINTS TO THE BUREAU OF RESOURCE MANAGMENT WITHIN 30 DAYS AFTER CONSTRUCTION COMPLETION.															CLSI

PLEASE NOTIFY CERTIFYING ENGINEER 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ENGINEER'S NAME: CLSI PHONE NUMBER: (410) 848-1790

NOTE: WOODY VEGETATION IS PROHIBITED ON THE EMBANKMENTS OF ALL STORMWATER MANAGEMENT FACILITIES.

STORMWATER MAINTENANCE SCHEDULE MICRO-BIORETENTION Modified to Correspond to Carroll County Details

	MONTHLY	INSPECTION
Inspection Item	Inspection Requirements	Remedial Action
Debris and Trash	Check for trash and debris in facility including inlets, outlets, conveyance systems, and area around facility.	Remove all trash and debris and dispose in an acceptable manner. Unclog all openings.
Plant Composition and Health	Compare plant composition with approved plans. Check for invasive species or weeds. Check for dead or dying vegetation.	Remove invasive species and weeds. Replace dead plants in accordance with approved landscaping plan OR Reseed and Remulch per Filter Bed Mix.
Vegetative Cover	Check for channelizing, erosion, and bare spots. Check for vegetation blocking inlet and outlet.	Remove or cut back vegetation around inlet and outlet structures. Mow side slopes when grass exceeds 12 inches in height, but do not mow filter bed. If using Filter Bed Mix, may mow bed twice per year. Remove grass clippings. Re-seed or replant in accordance with approved landscaping plans.
Mulch Layer	Check mulch for adequate cover, sediment accumulation, or discoloration.	Replace and remove old mulch and excess sediment. Provide adequate mulch cover according to approved design.
	SEASONAL INSPECTION A	ND AFTER A MAJOR STORM
Inspection Item	Inspection Requirements	Remedial Action
Dewatering	Check ponding level. Surface storage must dewater within 48 hours of rainfall. Noticeable odors, stained water on the filter surface or at the outlet, or the presence of algae or aquatic vegetation are indicators of anaerobic conditions and inadequate dewatering of the facility.	Remove and replace top few inches of media. If the facility does not function as intended after the above action, excavate, remove, clean, and replace stone, underdrain, media, and plants in accordance with approved plans.
Erosion	Check inlets, filter bed, outlets, and side slopes for erosion, rills, gullies, and runoff channelization.	Re-grading may be required when concentrated flow causes rills or gullying through the facility. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.
Sediment Accumulation	Check for accumulated sediment in conveyance systems and on filter bed. Check for clogged openings (blockages).	When sediment accumulates to 1 inch depth, remove sediment. Remove sediment from clogged openings. Dispose of all sediment in an acceptable location
	ANNUAL II	NSPECTION
nspection tem	Inspection Requirements	Remedial Action
Structural Components	Check for evidence of structural deterioration, spalling, or cracking. Inlet and outlet structures as well as riprap outfalls must be in good condition.	Repair to good condition according to specifications on the approved plans.
Overall	Check that practice is functioning as	Repair to good condition according to specifications on the

approved plans.

- 2" X 3" ROOF LEADER ∕2" X 3" X 6" S\$D DOWNSPOUT ADAPTER 6" SCHEDULE -

Function of

TYPICAL DOWNSPOUT FOR DRAINAGE TO SWM FACILITY

SWM/ WQ FACILITY DATA: MICRO-BIO FACILITY #1

- 1. STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE THEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER.
- 2. STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) 3. TOTAL DRAINAGE AREA =
- D.A. A-1 = 0.39 AC.4. TOTAL IMPERVIOUS AREA =

CARROLL COUNTY, HAMPSTEAD,

WESTMINSTER, MT AIRY, NEW WINDSOR, SYKESVILLE, MANCHESTER PRIVATE FACILITIES CONSTRUCTED BY THE DEVELOPER STORMWATER MANAGEMENT MAINTENANCE AGREEMENT **SCHEDULE**

1. The Stormwater Management Facility/Facilities shown on these plans shall be

2. Owner/his heirs or assigns shall be responsible for continuing maintenance of the

3. Owner, his heirs or assigns shall be responsible for any structural damages or

4. If after notice by the County/Town/City to correct a violation requiring

facility/facilities, which shall include such items as mowing, cleaning and removing sediment, trees, shrubs and debris. Requirements and schedules for specific types of facilities and practices as listed on the plans are hereby included. The time period for this continuing maintenance shall be on "as-needed" basis

failure which may occur as a result of negligence, accident or misuse. In the event of structural damage, owner shall be responsible to make the necessary repairs as

maintenance work, satisfactory corrections are not made by the owner(s) within (30) days the County/Town/City may perform all necessary work to place the facility in proper working condition. The owners of the facility shall be assessed the cost of the work and any penalties. These monies shall be collected from a

bond, which the developer is required to post with the County/Town/City to cover

such expenses until "completion of the facility". "Completion of the facility" is construed to mean that all contributory drainage areas are paved or supporting a

2" stand of dense grass and that the Carroll County Bureau of Resource

Management has inspected construction and a registered professional engineer

has certified that the "As-Built" plans meet the plans and specifications for construction. After "completion of the facility" the moneys may be collected by placing a lien on the property, or by including the costs and penalties on the property tax bill and collecting them as ordinary taxes by the County/Town/City.

5. Owner(s) shall grant right of entry to authorized County/Town/City personnel for

6. This agreement including right-of entry for inspection/maintenance and repair

a.m. to 5:00 p.m. Monday – Friday).

shall be recorded in the Land Records of the County.

purposes of inspection monitoring and/or repair. Site visits for inspection and/or monitoring shall be conducted only during normal County working hours (8:00

constructed and maintained by the owner(s).

but shall not be delayed longer than thirty (30) days.

quickly as possible but in any case within thirty (30) days.

- D.A. A-1 = 0.27 AC5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02130907) AND IS
- CLASSIFIED USE I-P. 6. STORAGE PROVIDED PER ESD CALCULATIONS =
- D.A. A-1 = 2,374 CU. FT. 7. CENTROID OF FACILITY:
- E: 1347306

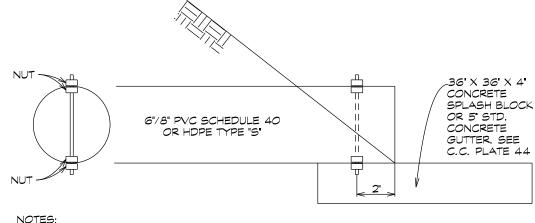
SWM/ WQ FACILITY DATA: MICRO-BIO FACILITY #2

- 1. STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE THEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER.
- STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) TOTAL DRAINAGE AREA = D.A. A-2=0.42 AC.
- 4. TOTAL IMPERVIOUS AREA = D.A. A-2 = 0.27 AC.
- 5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02130907) AND IS CLASSIFIED USE I-P.
- 6. STORAGE PROVIDED PER ESD CALCULATIONS = D.A. A-2 = 2,369 CU. FT.
- 7. CENTROID OF FACILITY: N: 692880 E: 1347629

SWM/ WQ FACILITY DATA: MICRO-BIO FACILITY #5

- 1. STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE
- THEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER. STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) 3. TOTAL DRAINAGE AREA =
- D.A. A-5 = 0.37 AC.
- 4. TOTAL IMPERVIOUS AREA = D.A. A-5 = 0.27 AC.
- 5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02130907) AND IS
- CLASSIFIED USE I-P. 6. STORAGE PROVIDED PER ESD CALCULATIONS = D.A. A-5 = 2,279 CU. FT.
- 7. CENTROID OF FACILITY: N: 692457

E: 1347458



. THE UNDERDRAIN, WHERE IT DISCHARGES ONTO THE GROUND, MUST HAVE A RODENT GUARD AND A SPLASH BLOCK TO PROTECT

RODENT GUARD/DOWNSPOUT OUTFALL TO MICRO-BIO FACILITIES DETAIL

SWM/ WQ FACILITY DATA: MICRO-BIO FACILITY #3

- 1. STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE THEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER.
- STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) 3. TOTAL DRAINAGE AREA =
- D.A. A-3 = 0.42 AC. 4. TOTAL IMPERVIOUS AREA =
- D.A. A-3 = 0.27 AC.

 5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02130907) AND IS
- CLASSIFIED USE I-P. 6. STORAGE PROVIDED PER ESD CALCULATIONS = D.A. A-3 = 2,396 CU. FT.
- 7. CENTROID OF FACILITY: N: 692810
- E: 134776

SWM/ WQ FACILITY DATA: MICRO-BIO FACILITY #4

- 1. STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE THEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER.
- STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) TOTAL DRAINAGE AREA =
- D.A. A-4 = 0.45 AC. 4. TOTAL IMPERMOUS AREA = D.A. A-4 = 0.27 AC.
- 5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02130907) AND IS CLASSIFIED USE I-P.
- 6. STORAGE PROVIDED PER ESD CALCULATIONS = D.A. A-4 = 2,385 CU. FT.
- 7. CENTROID OF FACILITY: N: 692418

E: 134*769* 1

SWM/ WQ FACILITY DATA: QUANTITY MANAGEMENT FACILITY

- STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE HEREFORE SHALL BE CONSTRUCTED AND MAINTAINED BY OWNER.
- STRUCTURE CLASSIFICATION: MICRO-BIORETENTION SWM/WQ FACILITY (AN ESD PRACTICE) . TOTAL DRAINAGE AREA =
- D.A. A = 20.78 AC.4. TOTAL IMPERVIOUS AREA =
- D.A. A = 3.00 AC.5. THIS SITE IS PART OF THE LIBERTY RESERVOIR WATERSHED (02 130907) AND IS
- CLASSIFIED USE I-P. 6. STORAGE PROVIDED PER CALCULATIONS = D.A. A = 59,655.50 CU. FT.
- 7. CENTROID OF FACILITY: N: 692902 E: 1347794

MICROBIO PLANTINGS

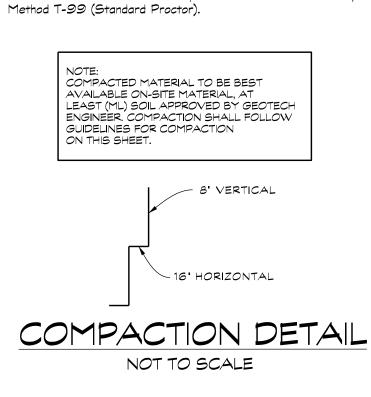
Scientific Name	Common Name	% Composition	Oz.
Carex Iurida	Shallow Sedge	15%	2.08
Elymus virginicus	Virginia Wild Rye	13%	9.08
Juncus effusus	Soft Rush	12%	0.01
Glyceria striata	Fowl Mannagrass	8%	0.17
Lobelia siphilitica	Blue Lobelia	8%	0.24
Carex crinita	Fringed Sedge	6%	0.34
Helenium autumnale	Common Sneezeweed	5%	0.09
Scirpus atrovirens	Green Bulrush	5%	0.03
Vernonia noveboracensis	New York Ironweed	5%	0.39
Mimulus ringens	Monkey Flower	5%	0.01
Veronicastrum virginicum	Culver's Root	4%	0.01
Calamagrostis canadensis	Bluejoint Grass	3%	0.03
Symphyotrichum novae-angliae	New England Aster	3%	0.06
Verbena hastata	Blue Vervain	3%	0.08
Verbesina alternifolia	Wingstem	2.5%	0.87
Asclepias incarnata	Swamp Milkweed	1%	0.4
Hibiscus moscheutos	Swamp Rose-Mallow	0.5%	0.42
Iris versicolor	Blueflag Iris	0.5%	0.78
Kosteletzkya virginica	Virginia Saltmarsh Mallow	0.5%	0.81

NOTE: BASIN BOTTOM MIX CAN BE PURCHASED THROUGH PINELANDS NURSERY & SUPPLY 323 ISLAND ROAD. COLUMBUS. NJ 08022

> The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment

used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

The minimum required density shall not be less than 95% of maximum dry density with a moisture content within plus or minus 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO



STORMWATER MANAGEMENT NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

NOT FOR CONSTRUCTION



439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Date	Revisions	Drawn By	: ВТМ
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed	Ву: ВТМ
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed	By: BEW
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	1" = 1 <i>0</i> '
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	2005186C
		Sheet:	12 of 31

County File No. S- 19-0030

POND STANDARDS/ SPECIFICATIONS (NRCS-MD CODE MD-378)

GENERAL All construction materials, procedures, standards, and specifications shall be in accordance with the "Storm Water Management Pond Design Manual published by by the Maryland Association of Soil Conservation Districts, june 1975 and any addenda thereto. These standards shall apply to permanent storm water management ponds and to temporary sediment basins.

Where storm water management ponds are being used as sediment basins during construction contractors attention is directed to those methods which are temporary and to the clean-out elevation. If and when sediment accumulates in the pond or basin up to the clean-out level it shall be removed and the pond shaped to planned dimensions. Removed sediment shall be placed in non critical areas and spread out. This sediment must be placed in an area which is protected by sediment control devices. Contractors attention is directed to the "Sequence of Construction" and "Pond Conversion Notes" which specify procedures for converting the sediment basin to a permanent storm water management pond.

The embankment and emergency spillway areas shall be stabilized immediately upon completion of their grading - see "Method of soil

SPECIFICATIONS These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the

Areas to be covered by the reservoir will be cleared of all trees,

toe of the embankment.

and other designated areas.

brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared. All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment

The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6' frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other

Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Such special designs must have construction supervised by a geotechnical

materials in the embankment if designed by a geotechnical engineer.

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ± 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Embankment Core The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater

over the structure or pipe. Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi; 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

Pipe Conduits All pipes shall be circular in cross section. Corrugated Metal Pipe All of the following criteria shall apply for corrugated metal pipe: 1. Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTC Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability shall be fully bituminous coated per requirements of AASHTO

Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or

two coats of asphalt. Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated pe requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the ounding soils shall be between 4 and 9. 2. Coupling bands, anti-seep collars, end sections, etc., must be

composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulatina materials at least 24 mils in thickness. 3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight. $A \parallel$ connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled at adequate number of corrugations to accommodate the bandwidth. The following type connections are acceptable for pipes less than 24 inches in diameter: flanges on both ends of the pipe with a circular 3/8 inch closed cell neoprene gasket, pre-punched to the flange bolt circle, sandwiched between adjacent flanges; a 12-inch

wide standard lap type band with 12-inch wide by 3/8-inch thick closed cell circular neoprene gasket; and a 12-inch wide hugger type band with o-ring gaskets having a minimum diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by a 24 inch long annular corrugated band using a minimum of 4 (four) rods and lugs, 2 on each connecting pipe end. A 24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of each . Flanged joints with 3/8 inch closed cell gaskets the full width of the flange is also acceptable. Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal

caulking or a neoprene bead.

4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support. 5. Backfilling shall conform to "Structure Backfill". 6. Other details (anti-seep collars, valves, etc.) shall be as shown on

ReInforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe: 1. Materials - Reinforced concrete pipe shall have bell and spigot oints with rubber gaskets and shall equal or exceed ASTM C-361 2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding /cradle for their entire length. This bedding / cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimun thickness of 6 inches. Where a concrete cradle is not needed for

structural reasons, flowable fill may be used as described in the

"Structure Backfill" section of this standard. Gravel bedding is not 3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be

located within 4 feet from the riser. 4. Backfilling shall conform to "Structure Backfill". 5. Other details (anti-seep collars, valves, etc.) shall be as shown on

- The following criteria shall apply for plastic pipe: 1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S. 2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding -The pipe shall be firmly and uniformly bedded throughout its entire lenath. Where rock or soft, sponay or other unstable soil is encountered, all such material shall be removed and replaced with

suitable earth compacted to provide adequate support. 4. Backfilling shall conform to "Structure Backfill". 5. Other details (anti-seep collars, valves, etc.) shall be as shown on

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock Riprap Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311. Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09,

Care of Water during Construction All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.

All borrow areas shall be graded to provide proper drainage and left in \setminus a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

SWM FACILITIES DATA:

- . STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE STRUCTURE CLASSIFICATIONS: STORMWATER FACILITY, NON MD-378
- TOTAL DRAINAGE AREA = D.A. = 21.29 AC.4. TOTAL IMPERVIOUS AREA =

2-3" x 3" x1/4 FLAT STEEL

WELDED TO #6 BARS-

2'-0" x 3" x 1/4" FLAT STEEL-

2'-3" × 3" × 1/4" FLAT STEEL WELDED TO #6 BARS

#4 BARS EVENLY SPACE

E.W. AND WELDED AT EACH CONTACT POINT

LOCKING HASP WITH LARGEST

- D.A. = 2.91 AC.5. THIS SITE IS PART OF THE LIBERTY RESERVOIR (02130907) AND
- IS CLASSIFIED USE I-P 6. CENTROID OF FACILITIES: N 692911 E 134779

STRUCTURE HYDRAULIC PERFORMANCE SUMMARY ALLOWABLE WATER STORAGE OUTSURFACE RELEASE STORM (AC-FT) Q CFS CFS 10 YR 15.95 13.30 758.31 1.3706

2-0 CLR OPENING

ACCESS PANEL

1" OVERLAP

(2) #4 BARS, 1'-9" LONG TOP AND BOTTOM OF

/- #6 BAR, 2'-3" LONG

WELDED TO #6 BARS

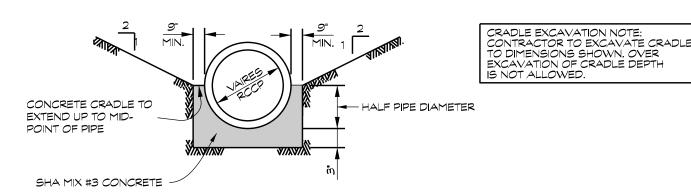
- 2'-0" x 3" x 1/4" FLAT STEEL

TRASH RACK TO RISER AT MAXIMUM SPACING 2' ON CENTER.

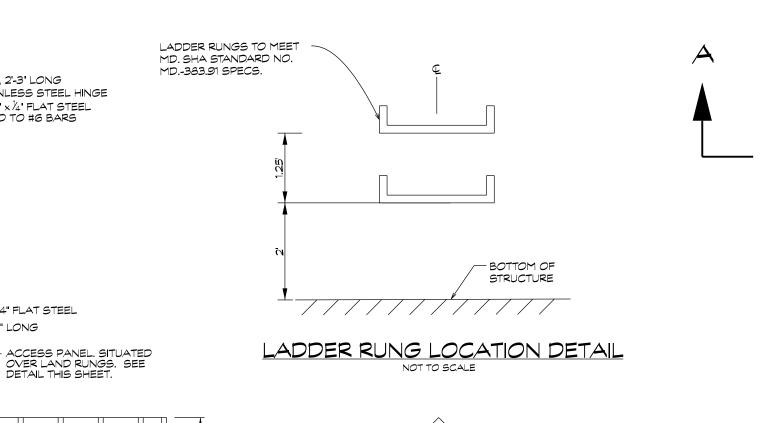
- #6 BAR, 2'-3" LONG

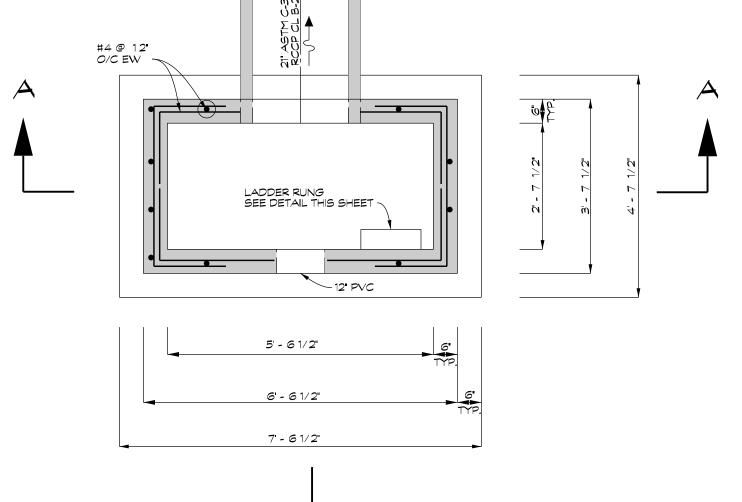
- 3" STAINLESS STEEL HINGE

- 2-3" × 3" × ¼" FLAT STEEL



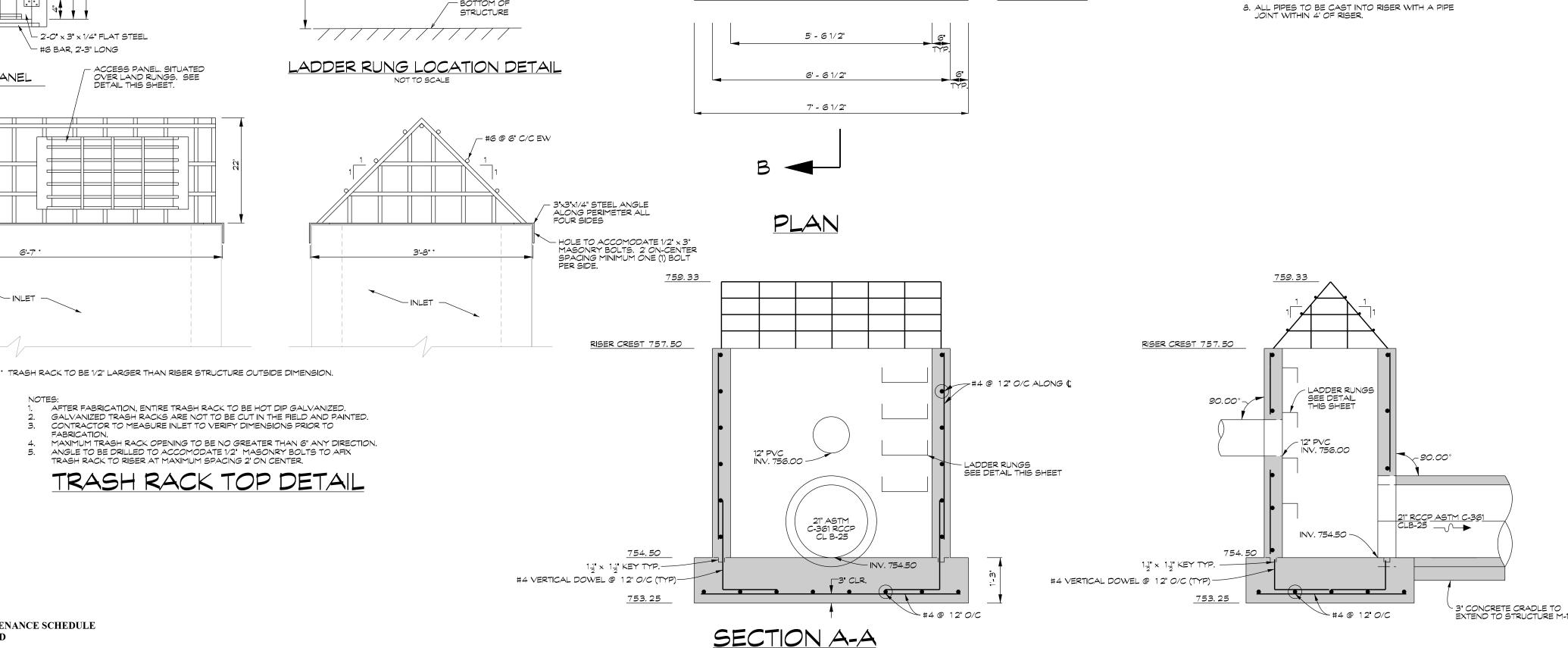
CONCRETE CRADLE NOT TO SCALE





RISER STRUCTURE NOTES:

- 1. RISER STRUCTURE IS TO BE CAST IN PLACE. 2. CONCRETE SHALL MEET CURRENT SHA MIX NO. 3 SPECIFICATIONS. ALL CONCRETE SHALL BE
 AIR ENTRAINED AND HAVE 28 DAY COMPRESSION
 STRENGTH OF 3000 P.S.I. (PC). R-1 SHALL BE
 CAST IN PLACE. CONTRACTOR SHALL BE RESPONSIBLE
 FOR CONCRETE TESTING, AND FOR PROVIDING
 TEST RESULTS TO THE CERTIFYING "AS BUILT"
- 3. ALL ANGLES & BARS USED FOR TRASH RACK TO BE HOT DIPPED GALVANIZED AFTER FABRICATION & PAINTED WITH 2 COATS OF RUST COLORED ENAMEL.
- 4. BACKFILL SHALL BE COMPACTED TO 95% OF T-99. SOIL BEARING CAPACITY TO BE FIELD VERIFIED MINIMUM 2000 PSF.
- 5. CONCRETE WORK SHALL COMPLY WITH THE LATEST ACI 3 18 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- 6. STEM AND FOOTING REINFORCEMENT IS PLAIN STEEL U.N.O. ALL REINFORCING IS ASTM A-615 GRADE 60.
- 7. ALL PIPE CONNECTIONS TO BE SEALED WITH WATERSTOP-RX, FOLLOWING MANUFACTURERS
 SPECIFICATIONS. USE WB-ADHESIVE TO SECURE TO



STORMWATER MAINTENANCE SCHEDULE

Inspection Item	Inspection Requirements	Remedial Action				
Debris and Trash	Check for trash and debris in facility including inlets, forebay, riser, weirs, outlets, conveyance systems, and area around facility.	Remove all trash and debris and dispose in an acceptable manner. Unclog all openings.				
Vegetative Cover	Check for channelizing, erosion, and bare spots. Check for vegetation blocking inlets and outlet. Check for woody growth on embankment.	Remove or cut back vegetation around inlet and outlet structures. Mow side slopes and basin surface when grass exceeds 12 inches in height. Remove grass clippings. Cut trees with 4 inch or smaller diameter flush to ground. Re-seed or re-plant bare areas in accordance with approved landscaping plans. Contact MDE Sediment, Stormwater, and Dam Safety Plan Review Division regarding removal of trees larger than 4 inch diameter.				
	ECTION AND AFTER A MAJOR STORM	I				
Inspection Item	Inspection Requirements	Remedial Action				
Ponding Level/ Dewatering	Check ponding levels. The dry storage volume should dewater within 24 hours of rainfall (12 hours for Use III and IV watersheds). Check low flow device for clogging.	Refurbish low flow device if clogged. Confirm adequate dewatering with follow up inspections.				
Erosion	Check inlets, gravel diaphragm, forebay, filter bed, outlets, and side slopes for erosion, rills, gullies, and runoff channelization.	Re-grade if concentrated flow is causing rills or gullying through the facility. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.				
Sediment Accumulation	Check for accumulated sediment in conveyance systems and forebay. Check for accumulated sediment on basin surface. Check for clogged openings.	When the forebay depth is less than half the approved design, remove sediment. When sediment accumulation on basin surface exceeds 1 inch, remove sediment. Remove sediment from clogged openings. Dispose of all sediment in an acceptable location.				
Blockages	Check overflow inlet (riser) and piping for blockages. Check observation wells for water level.	Clear out any blockages.				
ANNUAL INSPEC	TION					
Inspection Item	Inspection Requirements	Remedial Action				
Maintenance Access	Check for accessibility to pond including riser and spillways.	Remove excessive vegetative growth and obstructions. Repair access way or road to stable condition.				
Woody Vegetation	Check for woody vegetation on zones of concern: the embankment, within 15 feet of the toe of embankment, within a 25 foot radius of the control structure (riser or weir), and within 15 feet of principal spillway pipe.	Mow down woody vegetation within zones of concern. Cut trees with 4 inch or smaller diameter flush to ground. Re-seed bare areas according to plan stabilization requirements. Contact MDE Sediment, Stormwater, and Dam Safety Plan Review Division regarding removal of				

RISER R-1 DETAILS

Inlets	Check for flow blockages, erosion, rills, gullies, and displaced riprap.	Restore grades and re-seed or armor bare areas to provide stable conveyance in accordance with the approved plans.
Trash Rack	Check that trash rack is clear of blockages and in good condition.	Remove any blockages. Repair or replace to good working condition in accordance with the approved plans.
Pond Drain	Check operation. Keep drain chained and locked.	Repair in accordance with approved plans.
Riser and Barrel	Check for evidence of cracks, spalling, and joint failures. Check connection between riser and barrel for water tightness. Check spillway pipe for water tight joints. Check for seepage around and along spillway pipe.	Repair or replace to good working condition in accordance with the approved plans.
Structural Components: Endwalls, Headwalls, Weirs and Abutments.	Check for evidence of structural deterioration, spalling, or cracking. Check for seepage. Check for missing manhole covers or inlet grates.	Repair to good condition according to specifications on the approved plans.
Outfall	Check for displaced riprap, blow outs, unstable conveyance, and erosion below the outlet.	Repair and restore function in accordance with the approved plans and to achieve stable conveyance.
Embankment Integrity	Check upstream face and downstream face for soft spots and boggy areas, boils at the toe, settlements, depressions and bulges, signs of erosion, animal burrows, slope failures, and seepage. Check that ground cover is in good condition. Check for wetland type vegetation.	Repair and stabilize in accordance with the approved plans. Presence of wetland vegetation on embankment may indicate seepage and structural integrity concerns. Contact MDE Sediment, Stormwater, and Dam Safety Plan Review Division MDE Sediment before performing major pond repairs.
Emergency Spillway Channel	Check for evidence of erosion, soft or wet areas, or obstructions. Check for woody vegetation. Check for displaced riprap.	Remove any obstructions. Mow and cut flush trees with 4 inch or smaller diameter. Re-seed or armor bare areas to provide stable conveyance in accordance with the approved plans. Contact MDE Sediment, Stormwater, and Dam Safety Plan Review Division regarding removal of larger trees than 4 inch diameter.
Overall Function of Facility	Check that practice is functioning as designed.	Repair to good condition according to specifications on the approved plans.

STORMWATER MANAGEMENT NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

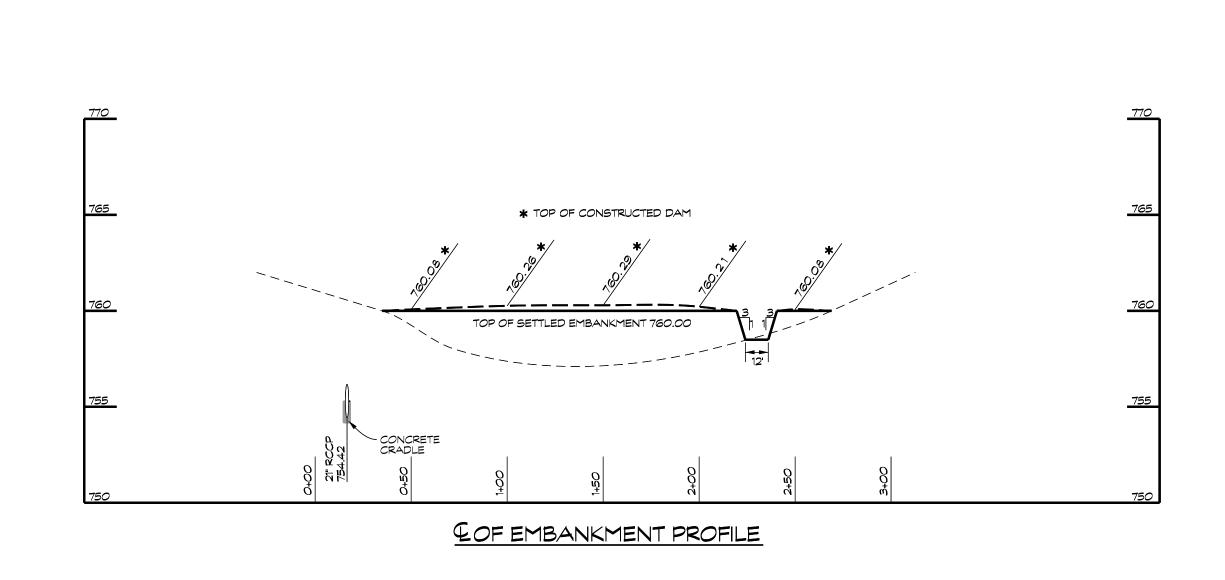


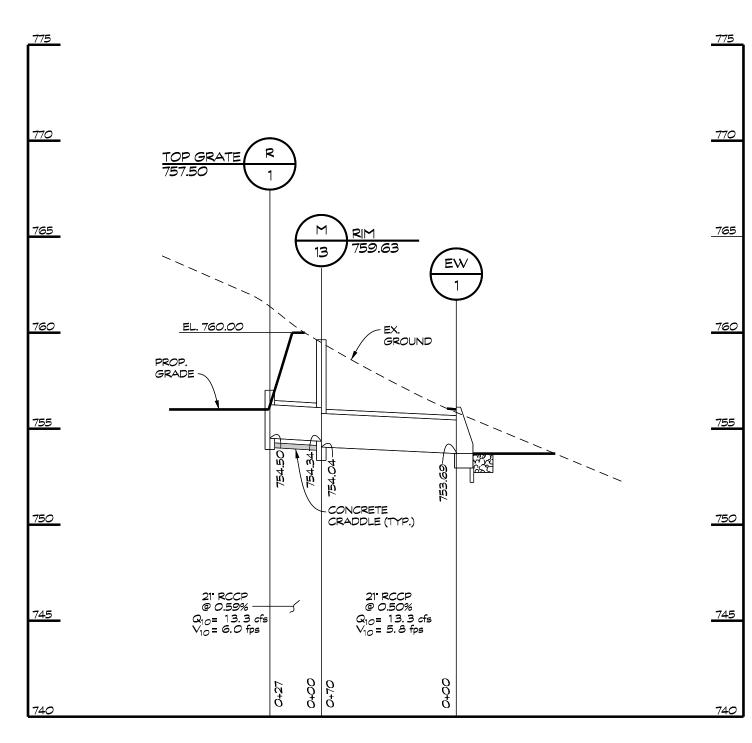


(410) 848-1790 FAX (410) 848-1791 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

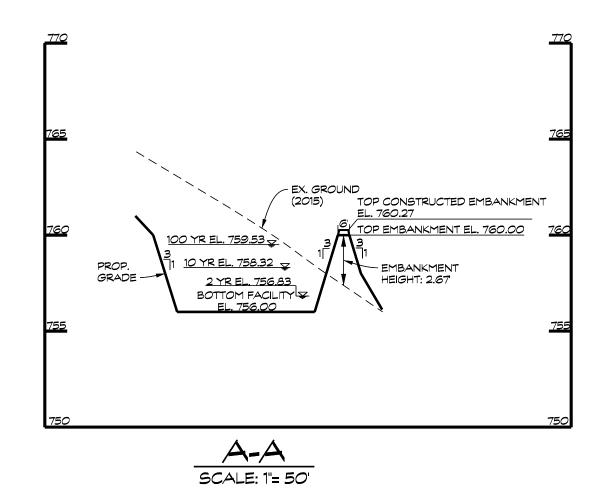
Date	Revisions	Drawn By: BTM
16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed By: BTM
3 1/23	REVISED PER C.C. COMMENTS	Reviewed By: BEW
24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date: SEPT., 2022
10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale: AS SHOWN
24/23	REVISED TO REFLECT UPDATED DEED	Job No.: 2005186C
		Sheet: 13 of 31

b-8/24/2023-9:48:17 AM-Q:\2005\2005186\REMAINING PORTION\FINAL\SHEET\(13\)SWM NOTES AND DETAILS.dgn--Default





PROFILE SCALE: HORIZ. 1"= 50' VERT. 1"= 5'

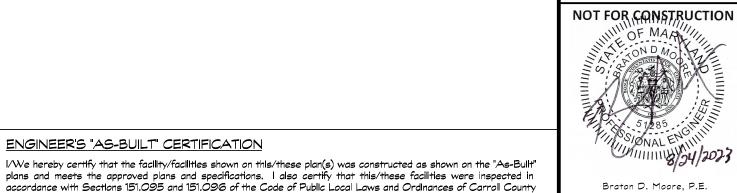


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STORMWATER MANAGEMENT PROFILES AND SECTIONS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1

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8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	20051860
		Sheet:	14 of 31

DEVELOPER'S/LANDOWNER'S CERTIFICATION

SIGNED:

I/We hereby certify that all proposed work shown on these construction drawing(s) will be conducted in strict accordance with these plans. I'We also understand that it is my/our responsibility to have the construction supervised and certified, including the submittal of "As-Built" plans certified by a Registered Professional Engineer or Professional Land Surveyor, as appropriate, within thirty (30) days of completion of work on the stormwater management facility/facilities. I/We also certify that this/these stormwater management facility/facilities will be inspected during construction by a Registered Professional Engineer or Professional Land Surveyor, as appropriate, in accordance with Sections 151.095 and 151.096 of the Code of Public Local Laws and Ordinances of Carroll County.

engineer under the laws of the state of Maryland. LICENSE NO.

ENGINEER'S DESIGN CERTIFICATION I hereby certify that these plans have been designed according to Chapter 151 of the Code of Public Local Laws and Ordinances of Carroll County and I hereby certify that these documents were prepared or approved by me, and I am a duly licensed professional engineer under the laws of the state of Maryland. SIGNED

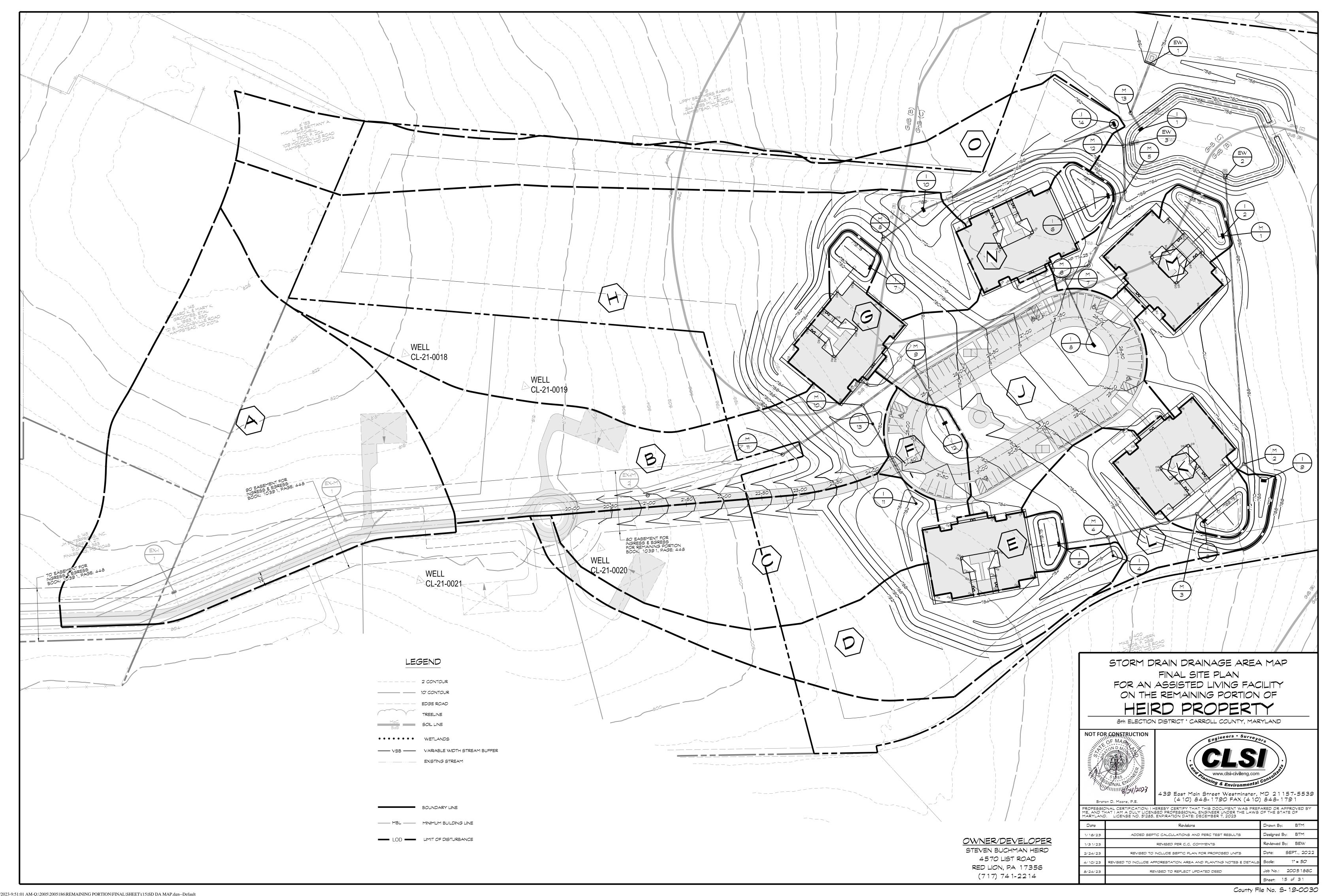
and I hereby certify that these documents were prepared or approved by me, and I am a duly licensed professional

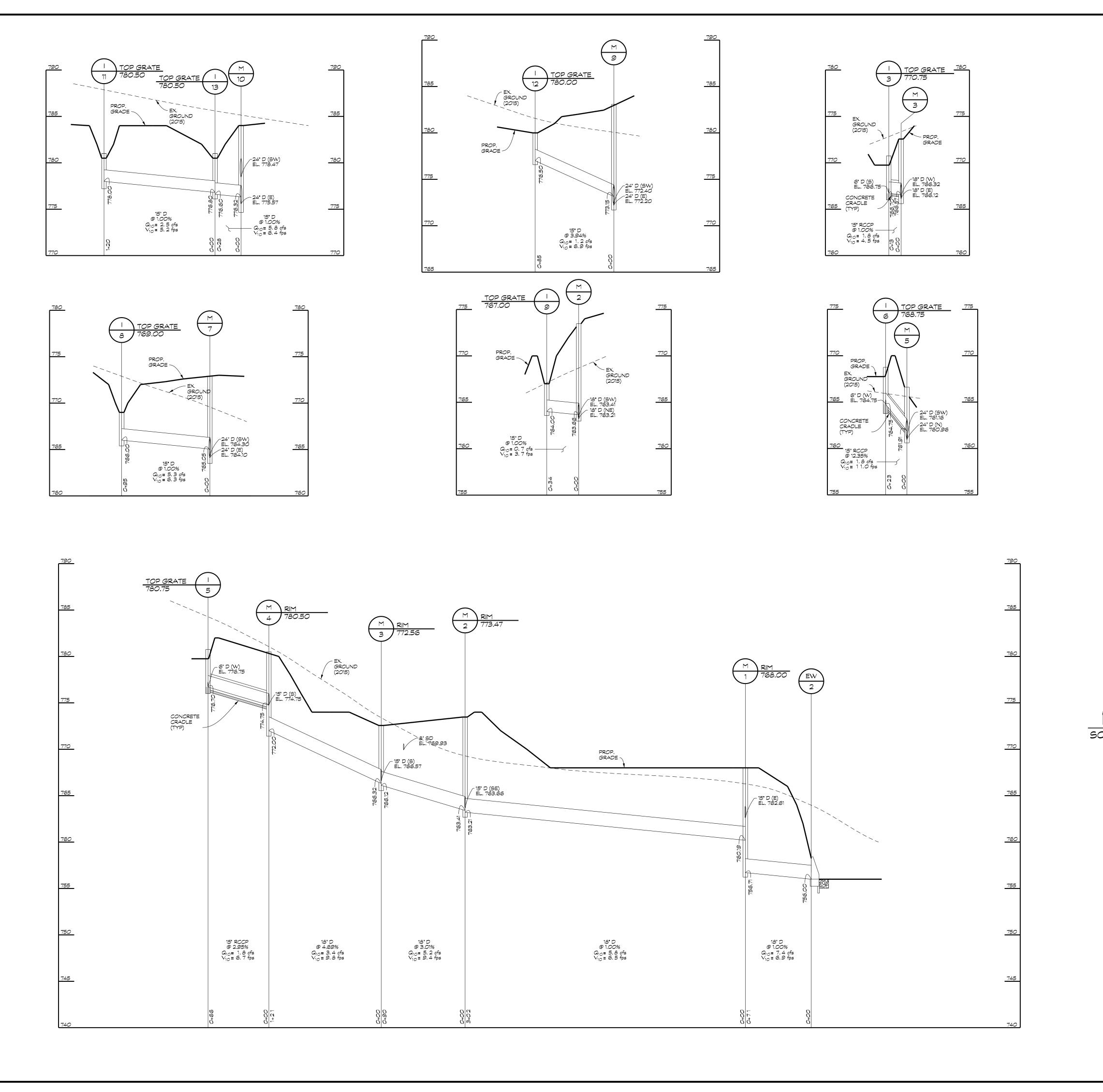
EXPIRATION DATE

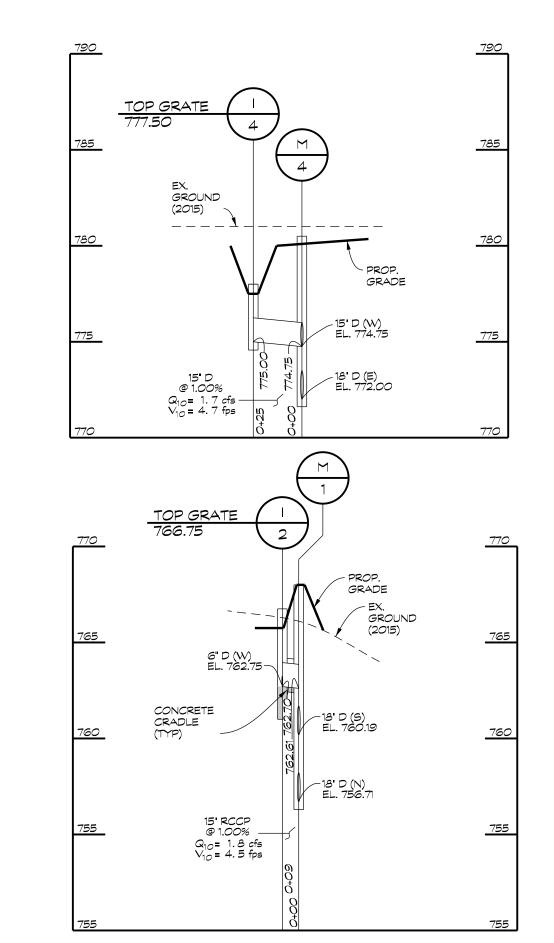
___ DATE _____

DATE 8/24/2023 EXPIRATION DATE 12/7/23 LICENSE NO.

ENGINEER'S "AS-BUILT" CERTIFICATION





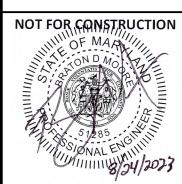


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STORM DRAIN PROFILES FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

HEIRD PROPERTY 8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND



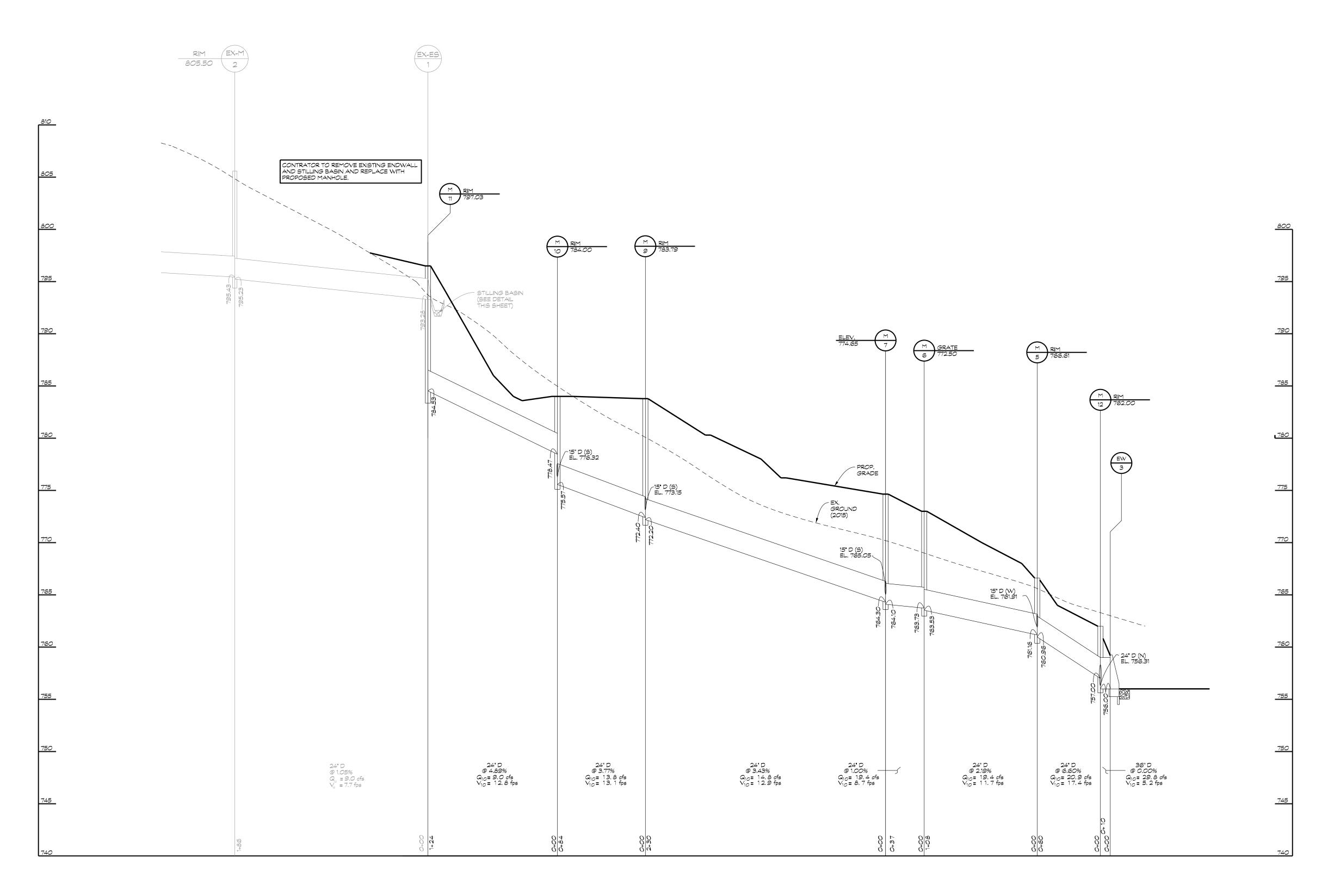


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8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	20051860
		Sheet:	16 of 31

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214



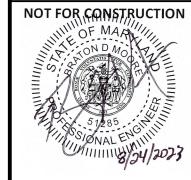


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STORM DRAIN PROFILES FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





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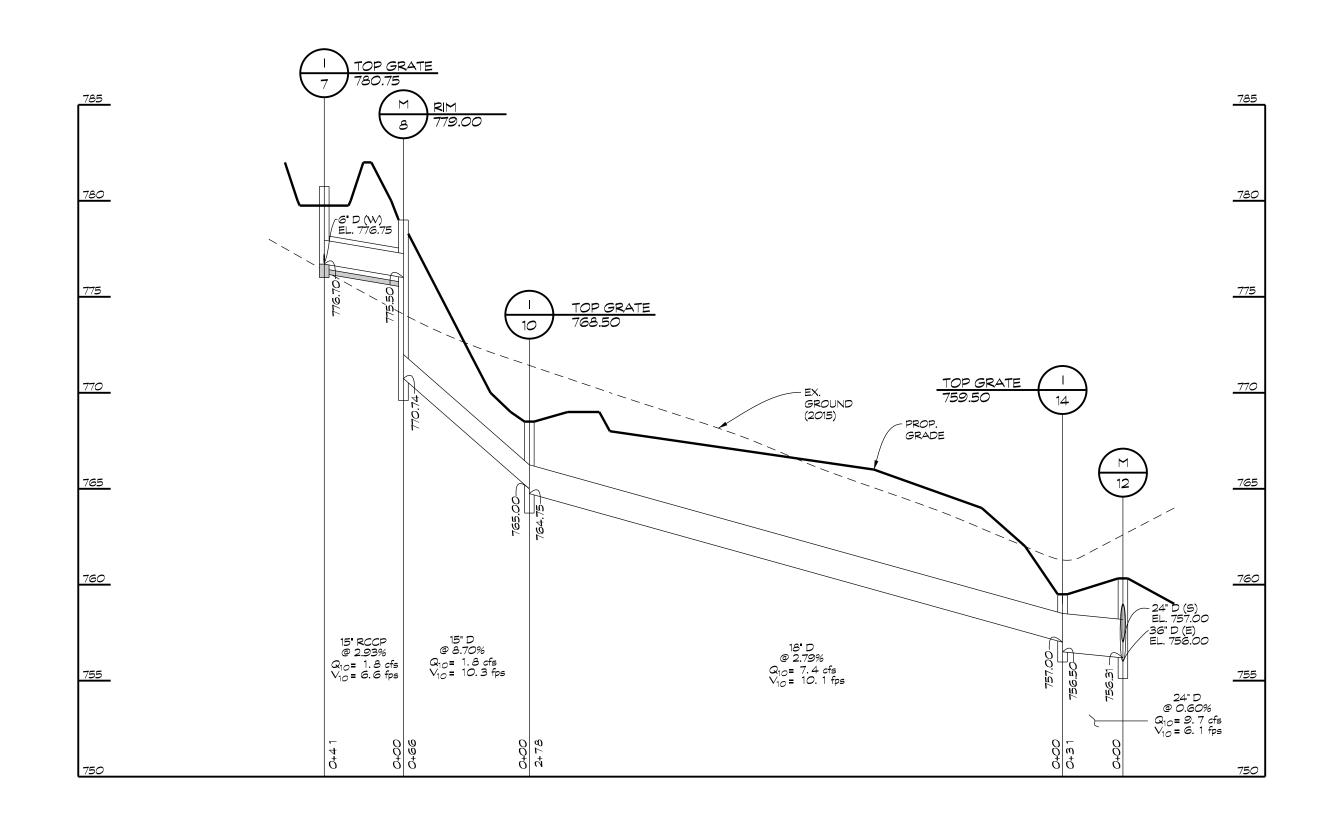
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		Sheet: 17	of 31

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

DES	IGNED BY:	BTM	CONTI	RACT	HEIRD	PROPE		AND S		M SEW			NISTK	ATION			SHEET FALL FA	1 ACTORS	OF 1 10-YR
СНЕ	CKED:		TITLE													DURA	ΓΙΟΝ: 0-	-10 101-4	0 401-150
Struc	cture	Co	ontributii	ng Area			10 Year Runoff							P	ipe				
From	То	C Area (#)	A Area Acres	Runoff Coef	▲ CA	ΣΑ	Σ CA	Tc Time Conc. Min	iif Rainfall Intens In/hr	Q cfs	Size in.	Туре	N Mann- ings's Coef	So Slope %	L Length ft.	Vo Vel. Ft/sec	Time in Pipe min.	Capac Full cfs	Remarks
I-7	M-8	G	0.39	0.64	0.25	-	-	5.00	7.00	1.8	15	RCCP	0.013	2.93%	41	6.6	0.10	11.1	
M-8	I-10	-	-	-	-	0.39	0.25	5.10	-	1.8	15	HDPE	0.012	8.70%	66	10.3	0.10	20.6	
I-10	I-14	Н	5.03	0.16	0.82	5.42	1.07	5.20	6.95	7.4	18	HDPE	0.012	2.79%	278	10.1	0.50	19.0	
I-14	M-12	0	2.07	0.17	0.35	7.49	1.42	5.70	6.84	9.7	24	HDPE	0.012	0.60%	31	6.1	0.10	18.9	
EX-M2	M-11	-	-	-	-	3.30	1.30	6.90	6.56	9.0	24	HDPE	0.012	1.05%	170	7.7	0.40	26.0	FROM PHASE 1
M-11	M-10	-	-	-	-	3.30	1.30	7.30	-	9.0	24	HDPE	0.012	4.89%	124	12.8	0.20	54.2	
I-11	I-13	С	1.54	0.23	0.36	-	-	5.00	7.00	2.5	15	HDPE	0.012	1.00%	120	5.2	0.40	7.0	
I-13	M-10	В	1.91	0.25	0.48	3.45	0.84	5.40	6.91	5.8	15	HDPE	0.012	1.00%	28	6.4	0.10	7.0	
M-10 I-12	M-9 M-9	- F	0.31	0.55	0.17	6.75	2.14	7.50 5.00	6.43 7.00	13.8	24 15	HDPE HDPE	0.012	3.77% 3.94%	84 85	6.9	0.10	47.6 13.9	
M-9	M-7	<u>г</u>	-	-	-	7.09	2.31	7.60	6.40	14.8	24	HDPE	0.012	3.43%	230	12.9	0.20	454	
I-8	M-7	Ī	1.59	0.48	0.76	-	2.31	5.00	7.00	5.3	15	HDPE	0.012	1.00%	95	6.3	0.30	7.5	
M-7	M-6	-	-	-	-	8.68	3.07	7.90	6.33	19.4	24	HDPE	0.012	1.00%	37	8.7	0.10	24.5	
M-6	M-5	-	_	-	-	8.68	3.07	8.00	-	19.4	24	HDPE	0.012	2.19%	108	11.7	0.20	36.3	
I-6	M-5	N	0.42	0.62	0.26	-	-	5.00	7.00	1.8	15	RCCP	0.013	12.35%	23	11.0	0.00	22.7	
M-5	M-12	-	-	-	-	9.10	3.33	8.20	6.28	20.9	24	HDPE	0.012	6.60%	60	17.4	0.10	60.0	
M-12	EW-3	-	-	-	-	16.59	4.75	8.30	6.27	29.8	36	HDPE	0.012	0.00%	10	5.2	0.00	32.3	
I-5	M-4	E	0.37	0.68	0.25		_	5.00	7.00	1.8	15	RCCP	0.013	2.95%	66	6.7	0.20	11.1	
I-4	M-4	D	1.37	0.08	0.25	-	_	5.00	7.00	1.7	15	HDPE	0.013	1.00%	25	4.7	0.20	7.0	
M-4	M-3	-	-	-	-	1.74	0.49	5.20	6.95	3.4	18	HDPE	0.012	4.69%	121	9.8	0.20	24.6	
I-3	M-3	K	0.45	0.58	0.26	-	-	5.00	7.00	1.8	15	RCCP	0.013	1.00%	13	4.5	0.00	6.5	
M-3	M-2	-	-	-	-	2.19	0.75	5.40	6.91	5.2	18	HDPE	0.012	3.01%	90	9.4	0.20	19.7	
I-9	M-2	L	0.60	0.16	0.10	-	-	5.00	7.00	0.7	15	HDPE	0.012	1.00%	34	3.7	0.20	7.0	
M-2	M-1	-	-	-	-	2.79	0.85	5.60	6.86	5.8	18	HDPE	0.012	1.00%	302	6.5	0.80	11.4	
I-2	M-1	M	0.42	0.62	0.26	-	-	5.00	7.00	1.8	15	RCCP	0.013	1.00%	9	4.5	0.00	6.5	
M-1	EW-2	-	-	-	-	3.21	1.11	6.40	6.68	7.4	18	HDPE	0.012	1.00%	71	6.9	0.20	11.4	

STRUCT. NO.	TYPE	PLATE	INVERT IN ELEV.	INVERT IN ELEV.	INVERT OUT ELEV.	TOP ELEV.	NORTH COORD.	EAST COORD.	REMARKS
R- 1	CAST IN PLACE		ı	756.00	754.50	757.50	1347713	692941	SEE RISER DETAIL SHEET 1
I-2	PRECAST WR INLET	MD 374, 21		762.75	762.70	766.75	1347782	692777	TRASH RACK (OUTSIDE BOTTOM EL. 760.5
I-3	PRECAST DBL S INLET	MD 374.70	•	766.75	766.70	770.75	1347663	692420	TRASH RACK (OUTSIDE BOTTOM EL. 765.5
I-4	MODIFIED STANDARD YARD INLET	C.C. PLATE 59	-	1	775.00	777.50	1347534	692406	WEIR EL. 777.00
I-5	PRECAST DBL S INLET	MD 374,70		776.75	776.70	780.75	1347470	692439	TRASH RACK (OUTSIDE BOTTOM EL. 775.5
I-6	PRECAST DBL S INLET	MD 374,70	•	764.75	764.75	768.75	1347649	692867	TRASH RACK (OUTSIDE BOTTOM EL. 773.7
I-7	PRECAST DBL S INLET	MD 374.70	1	776.75	776.70	780.75	1347322	692855	TRASH RACK (OUTSIDE BOTTOM EL. 775.5
1-8	PRECAST DBL S INLET	MD 374.70		-	766.00	769.00	1347581	692681	
I-9	PRECAST DBL S INLET	MD 374.70	-	-	764.00	767.00	1347752	692451	
I- 10	PRECAST DBL S INLET	MD 374.70	1	765.00	764.75	768.50	1347409	692911	
I- 1 1	MODIFIED STANDARD YARD INLET	C.C. PLATE 59	,	-	778.00	780.50	1347301	692538	WEIR EL. 780.00
I- 12	PRECAST DBL S INLET	MD 374.70	•	-	776.50	780.00	1347365	692631	
I- 13	MODIFIED STANDARD YARD INLET	C.C. PLATE 59		776.80	776.60	780.50	1347273	692655	WEIR EL. 780.00
I- 14	PRECAST DBL S INLET	MD 374.70	1	756.70	756.50	759.50	1347682	692957	
M- 1	PRECAST 48" MANHOLE	MD 384.01	762.61	760. 19	756.71	768.00	1347790	692776	
M-2	PRECAST 48" MANHOLE	MD 384.01	763.66	763.41	763.21	773.47	1347732	692479	
M-3	PRECAST 48" MANHOLE	MD 384.01	766.57	766.32	766. 12	772.56	1347656	692431	
M-4	PRECAST 48" MANHOLE	MD 384.01	774.75	774. 75	772.00	780.50	1347535	692431	
M-5	PRECAST 48" MANHOLE	MD 384.01	76 1.9 1	76 1.9 1	760.96	766.61	1347672	692867	
M-6	PRECAST 48" MANHOLE	MD 384.01	,	763.73	763.53	772.50	1347601	692784	GRATE TOP
M-7	PRECAST 48" MANHOLE	MD 384.01	765.05	764.30	764. 10	774.65	1347565	692775	
M-8	PRECAST 48" MANHOLE	MD 384.01	775. 23	775.50	774.74	779.00	1347348	692887	
M-9	PRECAST 48" MANHOLE	MD 384.01	773. 15	772.40	772.20	783. 79	1347344	692713	
M- 10	PRECAST 48" MANHOLE	MD 384.01	778.47	776.32	775.57	784.00	1347266	692682	
M- 1 1	PRECAST 48" MANHOLE	MD 384.01	-	793. 28	784.53	797.03	1347147	692646	
M-12	PRECAST 48" MANHOLE	MD 384.01	756.31	757.00	756.00	762.00	1347686	692925	
M-13	PRECAST 48" MANHOLE	MD 384.01	-	754.34	754.04	759.63	1347706	692965	
EW- 1	TYPE 'C' ENDWALL	MD 354.01	-	-	753.69	-	1347747	693022	
EW-2	TYPE 'G' ENDWALL	MD 360.01	-	-	756.00	-	1347805	692851	
EW-3	TYPE 'G' ENDWALL	MD 360.01	-	-	756.00	-	1347695	692925	



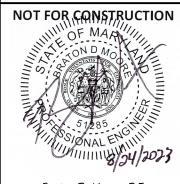
OWNER/DEVELOPER
STEVEN BUCHMAN HEIRD
4570 LIST ROAD
RED LION, PA 17356
(717) 741-2214

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STORM DRAIN PROFILES AND TABULATIONS
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FOR AN ASSISTED LIVING FACILITY
ON THE REMAINING PORTION OF
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8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND



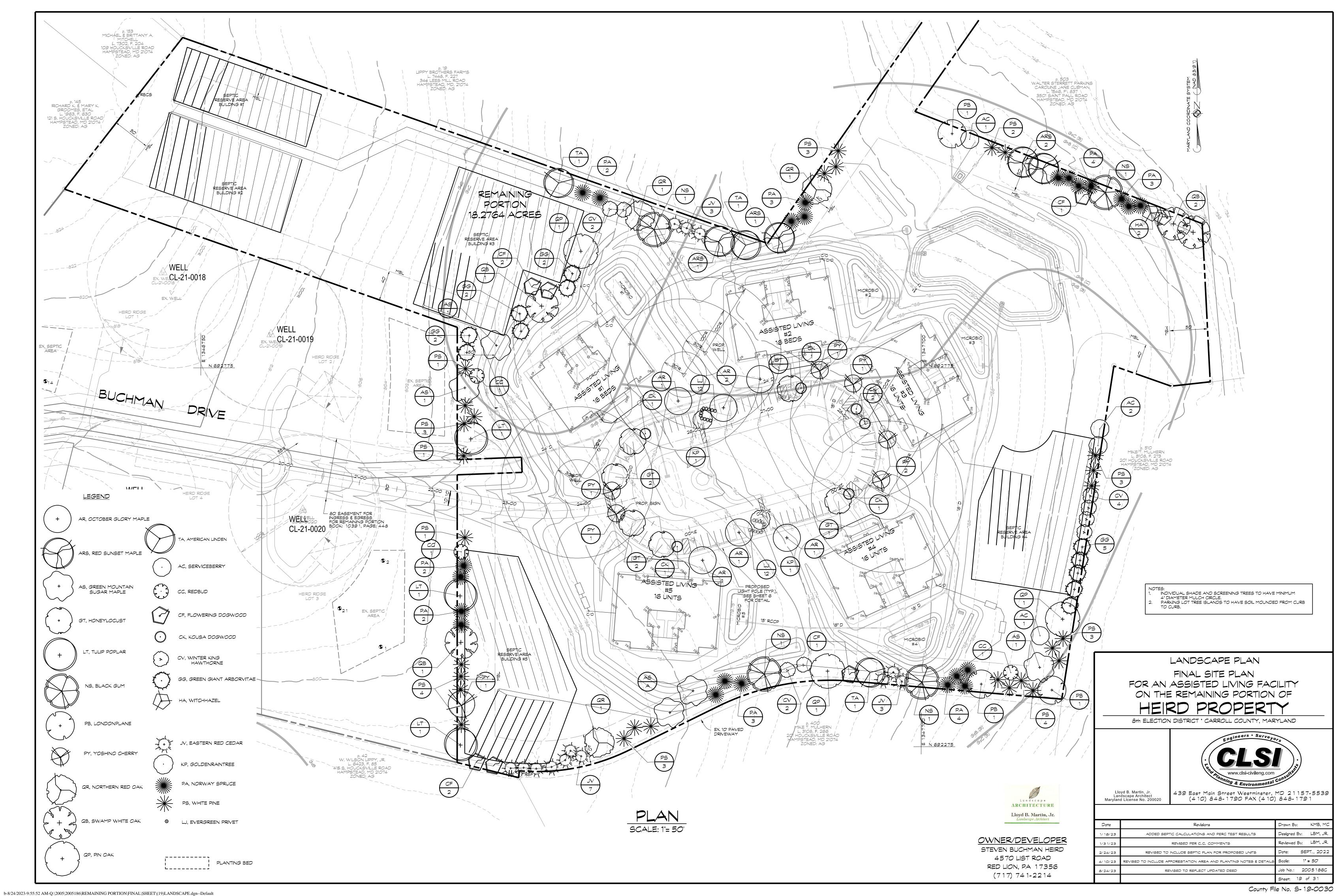


Braton D. Moore, P.E.

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8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	20051860
		Sheet:	18 of 31



LANDSCAPE PLANTING SPECIFICATIONS

GENERAL

Plant materials shall conform to American Standard for Nursery Stock sponsored by American Association of Nurseryman, Inc.

Plants shall be subject to inspection by the Carroll County Office of Landscape & Forest Conservation for quality, size, color, and trueness to species. Plants lacking compactness or proper proportions, plants which are weak or thin, and plants which are not the species or variety called for in the plant list will not be accepted. Right is reserved to reject plants considered unsatisfactory. Rejected plants shall be removed from the site and replaced with plants specified. Pruning plants prior to delivery shall be prohibited.

Substitutions will not be permitted without the consent of the Carroll County
Office of Landscape & Forest Conservation. If proof is submitted that specific plants
or sizes are unobtainable, proposals will be considered for the nearest equivalent
size or variety with equitable adjustment to the contract price.

Plants shall have normal, well developed branches and vigorous fibrous root system. They shall be healthy, vigorous plants free from defect, decay, damaged roots, sun_scald injuries, abrasions of the bark, plant diseases, insect pest's eggs, borers, and forms of infestations and objectionable disfigurements.

Plants shall be nursery grown unless otherwise specifically permitted in each instance and shall have been growing under similar climatic conditions as the location of the project for at least 2 years prior to the date of the planting contract.

REFERENCES

 All plants shall be indentified in accordance with Hortus Third, by L.H. Bailey, 1976.
 All nursery stock shall conform to American Association of Nurserymen, Inc. Standards for Nursery Stock, publication ANSI Z60.1-1980 latest edition.

3. Landscape specifications shall conform to Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas. All nursery stock shall be planted in accordance with the procedures outlined in the guidelines. All nursery stock shall be planted in accordance with the procedure outlined in the guidelines. PLANTING PROCEDURES

Plants shall be freshly dug at time of delivery.

Balled and burlapped plants shall be dug with solid balls of adequate size, the balls securely wrapped with burlap or canvas, tightly bound with rope or wire.

The Planting Seasons for plant material shall be as follows:

Deciduous Trees and Shrubs:

October 15 thru December 15
April 1 thru May 15

Evergreen Trees, Shrubs and Vines: September 1 thru November 15 April 1 thru May 15

At the option and full responsibility of the Contractor, planting operations may be conducted under unseasonable conditions without additional compensation.

Planting and backfill mix shall consist of 3 parts excavated soil, 1 plant mix.

Reasonable care shall be exercised to have pits dug and soil prepared prior to moving plants on site for planting to ensure that they will not be unnecessarily exposed to drying elements or physical damage. Size of pits shall be 11/2 to 2 times the diameter of the root ball and the root ball shall be elevated 1/3 height of the root ball above the ground to allow for drainage. A broad mound of soil shall be left around the base to enable the elevation to blend into the site.

Ground cover areas shall be prepared as specified before. Plant ground cover to within 1'- O" of tree trunks or shrubs.

Plant holes shall be backfilled with soil mix specified above placed in layers around the roots or ball. Each layer shall be carefully tamped to avoid injury to plants and roots. When holes are approximately two-thirds full, the hole shall be filled with water and soils allowed to settle around the roots. After the water has been absorbed the hole shall be filled with backfill mix and lightly tamped. Berms, 3" in height shall then be formed around the hole as shown on the planting details.

All planting beds shall be mulched with peat moss and/or finely shredded and composted bark as follows:

Ground cover beds shall be mulched after planting to a depth of 1 inch. Other plants shall be mulched after planting to a depth of 3 inches.

Mulch shall be applied immediately after planting to retain moisture. Rake surface smooth and even, then soak full depth of mulch thoroughly.

Trees shall be staked and wrapped according to the following:

Wire shall be 12 gauge annealed galvanized. Hose shall be 1/2" diameter, 2-ply reinforced hose. Stakes shall be sound uniform 2" \times 2" redwood or oak, length as shown.

Landscape specifications shall conform to the current edition of the <u>Landscape</u> <u>Specification Guidelines for Baltimore-Washington Metropolitan Areas, developed</u> by the Landscape Contractors Association, MD-DC-VA. All Nursery stock shall be planted in accordance with the procedures outlined in the quidelines with the following exceptions:

- a. If the soil is wet or compacted, all containerized and balled nursery stock should be planted such that the top one-third of the rootball is above the existing grade. This departure in the established procedures has been documented to increase the rate of transplant success in these types of soils.
- b. Wire and nondegradeable materials should be removed as far as practical before backfilling to prevent root girdling.

MAINTENANCE AND REPLACEMENT

Maintenance of plant material shall begin when project commences and continue until the final inspection and acceptance. Planting maintenance shall include all necessary watering, cultivation, weeding, pruning, wound dressing, disease and insect pest control, protective spraying, replacement of unacceptable material, straightening plants which lean or sag, adjustment of plants which settle or are planted too low, and any other procedure consistent with good horticultural practices necessary to insure normal, vigorous, and healthy growth of all work under this contract.

Contractor shall be responsible for the use of all materials, labor and equipment, and any injury to plant material caused by such material, labor, and equipment shall be corrected and repaired by the Contractor at no additional expense to the Owner.

A proving period shall follow the completion of all planting for one year. All plant material found to be unsatisfactory during the proving period shall be replaced by the Contractor, at no additional expense to the Owner. All replacement shall have a one year proving period and shall be installed in accordance with the planting times and specifications specified above.

TREE PROTECTION NOTES

- 1. Upon notification of County approval of the final landscape plan, trees which are to remain shall be marked in the field by the developer and protected in an approved manner. Trees within the construction area which are to remain undisturbed shall be encircled with a fence for protection, (snow fencing or other approved methods). The contractor shall not disturb the area within the fence in any manner deleterious to
- Any trenching operations within the vicinity of trees should be done in a manner to protect the tree roots. Tearing and ripping of tree roots should avoided. Roots should be severed neatly.
- 3. All trees to be removed should be removed in a manner that will not damage the remaining trees. Any trees that are to remain that are damaged during clearing operation must be repaired in an approved manner by a tree expert as soon as final clearing has been completed. After construction is completed, temporary barriers, surplus materials and all trash, debris and rubbish shall be removed from the site. All backfill shall be clear of building material, stone and rubbish.
- 4. Existing trees (particularly mature trees) which are retained will undergo "post operative shock" caused by the construction activity. All possible safeguards should be taken to minimize these effects and to provide optimum growth conditions. Foliage feeding and liquid or root feeding are encouraged. Branch and foliage thinning are also desirable.

LANDSCAPING NOTES

GENERAL

A. ALL PLANT SPECIFICATIONS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE LATEST EDITION OF HORTUS

- THIRD, BY "THE STAFF OF THE HORTORIUM".

 B. ALL NURSERY STOCK SHALL CONFORM TO AMERICAN ASSOCIATION OF NURSERYMEN, INC., STANDARDS AS DESCRIBED IN AMERICAN STANDAR FOR NURSERY STOCK, CURRENT ANSI A-300 SPECIFICATIONS.
- C. LANDSCAPE SPECIFICATIONS SHALL CONFORM TO LANDSCAPE GUIDELINES FOR MARYLAND, WASHINGTON, D.C., AND VIRGINIA, LATEST EDITION. ALL NURSERY STOCK SHALL BE PLANTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE GUIDELINES.
- D. THREE (3) INCHES TOPSOIL ON ALL DISTURBED AREAS TO BE LANDSCAPED, SEEDED OR SODDED IS REQUIRED.
- E. A SEPARATE PLAN LABELED "LANDSCAPE PLAN"

 (MAY BE COMBINED WITH FOREST CONSERVATION PLAN)

 IS REQUIRED. LANDSCAPE REQUIREMENTS MAY NOT BE

 COMBINED WITH THE FOREST CONSERVATION PLAN.

INSTALLATION

- (1) STANDARDS TO CONFORM TO THE MOST RECENT VERSION OF THE ANSI A300 STANDARDS PART 6 TRANSPLANTING AND LANDSCAPE SPECIFICATIONS GUIDELINES OF THE LANDSCAPE CONTRACTORS ASSOCIATION, MARYLAND,
- DISTRICT OF COLUMBIA AND VIRGINIA.

 (2) PLANTING ON INDIVIDUAL LOTS SHALL BE INSTALLED UPON FINAL GRADING INSPECTION. NO FINAL GRADING APPROVAL SHALL BE GIVEN ON THE BUILDING PERMIT UNTIL LANDSCAPING IS COMPLETE.

MAINTENANCE

THE OWNER OF ANY PROPERTY ON WHICH LANDSCAPING HAS BEEN INSTALLED PURSUANT TO THIS CHAPTER SHALL MAINTAIN THE LANDSCAPING IN GOOD CONDITION IN PERPETUITY. A LANDSCAPE MAINTENANCE AGREEMENT SHALL BE REQUIRED. FAILURE TO REPLACE DEAD OR DYING PUS OR THE REMOVAL OF ANY INSTALLED PUS IS A VIOLATION OF THIS CHAPTER.

INSPECTIONS

12 GAUGE GALVANIZED WIRE TWISTED FOR SUPPORT

8' UPRIGHT STAKES ---

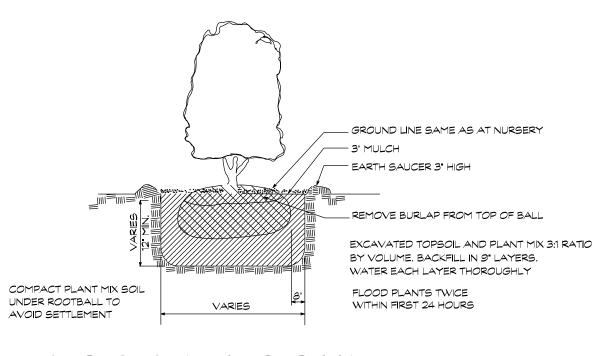
3:1 RATIO EXCAVATED TOPSOIL

PLACE STAKES PARALLEL

TO WALKS AND BUILDINGS

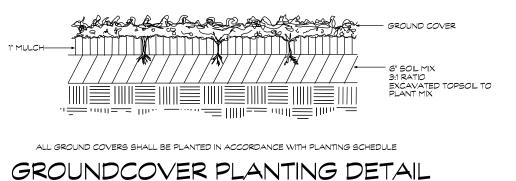
A MINIMUM OF 2 INSPECTIONS WILL BE REQUIRED. NO INSPECTIONS SHALL BE FINALIZED FROM NOVEMBER 1ST TO MARCH 1ST. TO BE CONSIDERED ACCEPTABLE, NO MORE THAN 1/3 OF A PLANT MAY BE

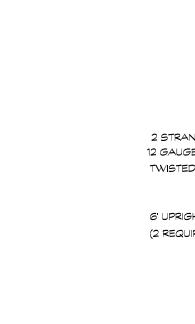
(1) INITIAL INSPECTION. THIS INSPECTION SHALL BE PERFORMED BY THE COUNTY WHEN PLANTING IS COMPLETED TO VERIFY COMPLIANCE WITH THE APPROVED PLANTING PLAN.
 (2) FINAL INSPECTION. THIS INSPECTION SHALL BE PERFORMED BY THE COUNTY 12 MONTHS AFTER THE INITIAL PLANTING.



SHRUB PLANTING DETAIL

NOT TO SCALE







- 1/2" RUBBER HOSE

- BURLAP AND ROPE CUT AWAY FROM TOP OF BALL

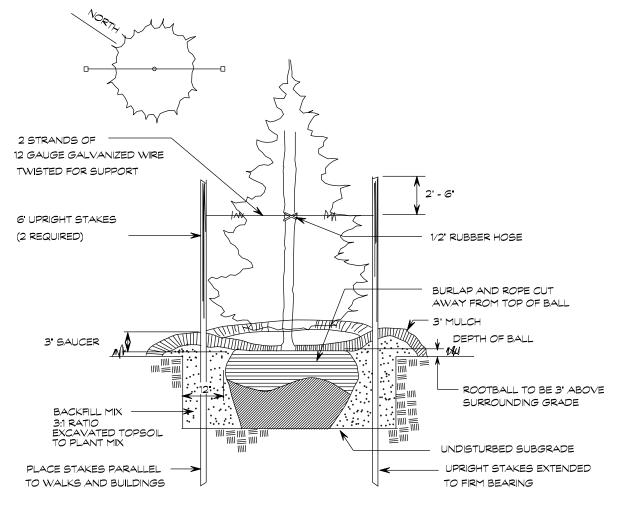
ROOTBALL TO BE 3" ABOVE

SURROUNDING GRADE

UNDISTURBED SUBGRADE

TO FIRM BEARING

UPRIGHT STAKES EXTENDED



EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

COMMERCIAL LANDSCAPE MANUAL CALCULATIONS HEIRD PROPERTY – ASSISTED LIVING FACILITY TOWN OF MANCHESTER CARROLL COUNTY, MARYLAND

No. Description	Quantity	Rate	Req. P.U.	Proposed P.U.
II.A.2.a. Building Adjace Different land		20 LF/ 1 PU	72.75 PU	82.0 PU

II.B.2.a. Interior Landscaping Island Requirements (10% of total parking area) Parking Lot Area: 33,510 SF 10% of Lot Area: 3351 SF

		that percent exceed	ls requireme	ent.
8) 235 15) 2	99			
9) 331 16) 4	76			
10) 123				
11) 191				
12) 221				
13) 163				
14) 249				
Parking Lot Spaces	53 Spaces	12 Spaces/ 1 PU	5.0 PU	23.0 PU
Dumpster Screenin	g – fence encl	osure with gates for d	lumpster sta	ation.
	9) 331 16) 4 10) 123 11) 191 12) 221 13) 163 14) 249 Parking Lot Spaces	9) 331 16) 476 10) 123 11) 191 12) 221 13) 163 14) 249 Parking Lot Spaces 53 Spaces	8) 235 15) 299 9) 331 16) 476 10) 123 11) 191 12) 221 13) 163 14) 249 Parking Lot Spaces 53 Spaces 12 Spaces/ 1 PU	9) 331 16) 476 10) 123 11) 191 12) 221 13) 163 14) 249

92 LF

Required: 82.35 PU

Total Proposed

4.8 PU

109.8 PU

4.6 PU

20 LF/ 1 PU

Landscape Island Total: 4131 SF is 12.13%

LANDSCAPE PLANTING PROPOSED

Landscape Island Bed SF:

No.	Description	Rate	Quantity	Planting Units
1.	Major Trees (2.0" min. cal.)	1 tree/ 1 PU	53	53.0
2.	Minor Deciduous (1.0" min. cal.)	2 trees/1 PU	29	14.5
3.	Evergreen Trees (5' min. ht.)	2 trees/1 PU	75	37.5
4.	Shrubs	5 shrubs/ 1 P	U 24	4.8
5.	Groundcovers	250 SF/ 1 PU		
		Total Planting	Units Propose	ed: 109.8 PU

HEIRD PROPERTY

ID	QUANT	BOTANIC NAME	COMMON NAME	minimum SIZE	ROOT	SPACING	Planti Unit
53	Maior de	ciduous trees					
AR	6.00	Acer rubrum 'October Glory'	October Glory Maple	2" cal.	B&B	random (see plan)	6
ARS	4.00	Acer rubrum "Red Sunset"	Red Sunset Maple	2" cal.	В&В	random (see plan)	4
AS	5.00	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2" cal.	B&B	random (see plan)	5
GT	6.00	Gleditsia triacanthos inermia	Honeylocust	2" cal.	B&B	random	6
KP	2.00	:"Shademaster"	Caldamusintuuss	2" cal.	D.D.	(see plan)	2
KF	2.00	Koelreuteria paniculata	Goldenraintrree	∠ cal.	B&B	random (see plan)	
LT	3.00	Liriodendron tulipifera	Tulip Poplar	2" cal.	B&B	random (see plan)	3
NS	4.00	Nyssa sylvatica	Black Gum	2" cal.	B&B	random (see plan)	4
РВ	3.00	Platanus x acerifolia "Bloodgood"	Londonplane	2" cal.	B&B	random (see plan)	3
PY	7.00	Prunus x yedoensis	Yoshino Cherry	2" cal.	B&B	random (see plan)	7
QR	3.00	Quercus rubra	Northern Red Oak	2" cal.	B&B	random (see plan)	3
QB	4.00	Quercus bicolor	Swamp White Oak	2" cal.	B&B	random (see plan)	4
QP	3.00	Quercus phellos	Willow Oak	2" cal.	B&B	random (see plan)	3
TA	3.00	Tilia americana	American Linden	2" cal.	В&В	random	3
75	Evergree	n Trees					
PA	23.00	Picea abies	Norway Spruce	5'	B&B	random (see plan)	11.
JV	13.00	Juniperus virginiana "Brodie"	Eastern Cedar	5'	B&B	random (see plan)	6.5
PS	28.00	Pinus strobus	White Pine	5'	B&B	8' o/c	14
GG	11.00	Thuja x 'Gigantoides'	Green Giant Arborvitae	5'	В&В	6' o/c	5.5
29	Minor De	ciduous Trees					
AC	4.00	Amelanchier canadensis	Serviceberry	1" cal.	B&B	random (see plan)	2
СС	3.00	Cercis canadensis	Redbud	1" cal.	B&B	random (see plan)	1.5
CF	6.00	Cornus florida	Flowering Dogwood	1" cal.	B&B	random (see plan)	3
CK	6.00	Cornus kousa	Kousa Dogwood	2" cal.	B&B	random (see plan)	3
CV	8.00	Crataegus viridis 'Winter King'	Winter King Hawthorne	1" cal.	B&B	random (see plan)	4
НА	2.00	Hamalmelis x Arnolds Promise	Witchhazel	1" cal.	B&B	random (see plan)	1
117			i			1	
	Shrubs						
24 LJ	Shrubs 24.00	Ligustrum japonicum "Recurvifolium"	Evergreen Privet	36"	cont.	4' o.c.	4.8

OWNER/DEVELOPER
STEVEN BUCHMAN HEIRD
19 1 LEADER HEIGHTS ROAD
YORK, PA 17402
(717) 741 2214



FINAL LANDSCAPE PLAN OWNER CERTIFICATION FORM

I CERTIFY THAT I HAVE REVIEWED THIS FINAL LANDSCAPE PLAN; THAT I HAVE READ AND UNDERSTAND THE REGULATIONS PRESENTED IN THE CARROLL COUNTY LANDSCAPE MANUAL; AND I AGREE TO COMPLY WITH THESE REGULATIONS AND ALL APPLICABLE POLICY, GUIDELINES AND ORDINANCES. I AGREE TO CERTIFY THE IMPLEMENTATION OF THIS APPROVED FINAL LANDSCAPE PLAN NO LATER THAN ONE (1) YEAR FROM THE DATE OF APPROVAL OF THIS PLAN TO THE DEPARTMENT OF PLANNING, ENVIRONMENT AND RESOURCE PROTECTION, ROOM 209, 225 N. CENTER STREET, WESTMINSTER, MD 21157-5194.

APPLICANTS SIGNATURE	DATE	PRINT NAME
ADDRESS (PLEASE PRINT)	STREET	
CITY	STATE	ZIP
FILE:		

YORK, PA 17402 (717) 741-2214 LANDSCAPE NOTES AND DETAILS FINAL SITE PLAN

FOR AN ASSISTED LIVING FACILITY
ON THE REMAINING PORTION OF
HEIRD PROPERTY

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND

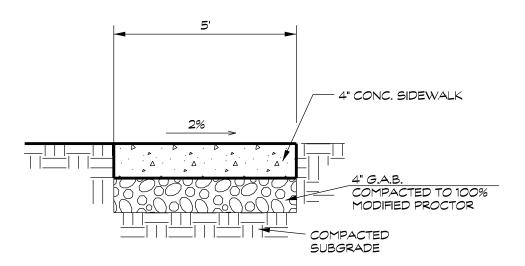


Lloyd B. Martin, Jr.
Landscape Architect

439 East Main Street Westminster, MD 21157-5539 (410) 848-1790 FAX (410) 848-1791

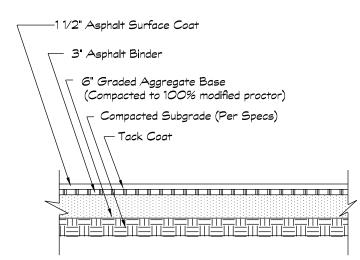
ate	Revisions	Drawn By:	KMB
6/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed By:	LBM, JR.
3 1/23	REVISED PER C.C. COMMENTS	Reviewed By:	LBM, JR.
24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date: S	EPT., 2022
0/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale: A	S SHOWN
24/23	REVISED TO REFLECT UPDATED DEED	Job No.: 2	2005186C
		Sheet: 20	of 31

County File No. S-19-0030

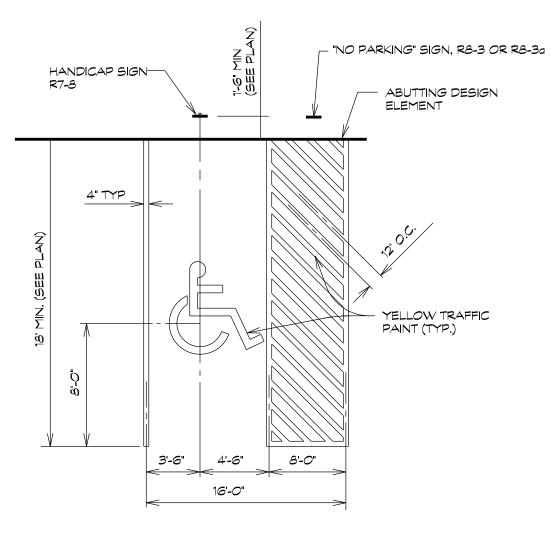


TYPICAL SIDEWALK DETAIL

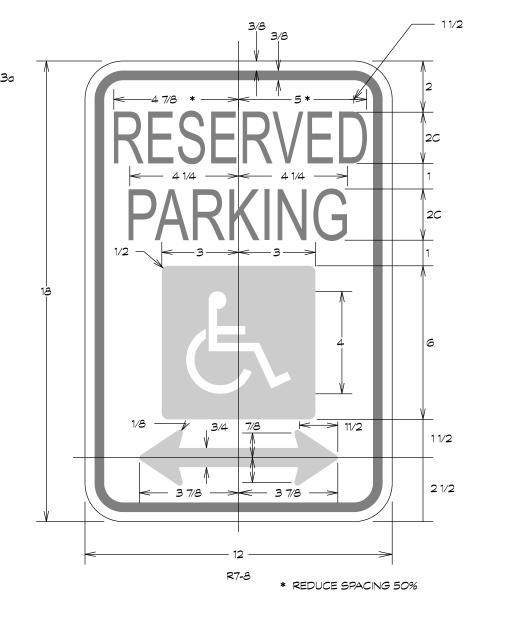
NOT TO SCALE



STANDARD ASPHALT PAVING NOT TO SCALE

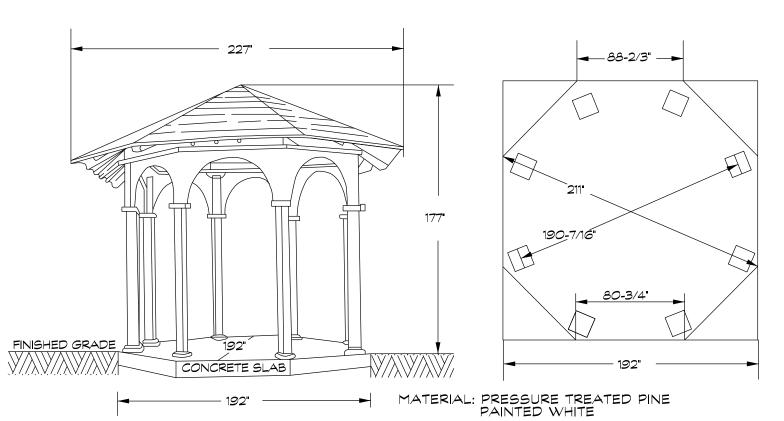


HANDICAP PARKING SPACE NOT TO SCALE

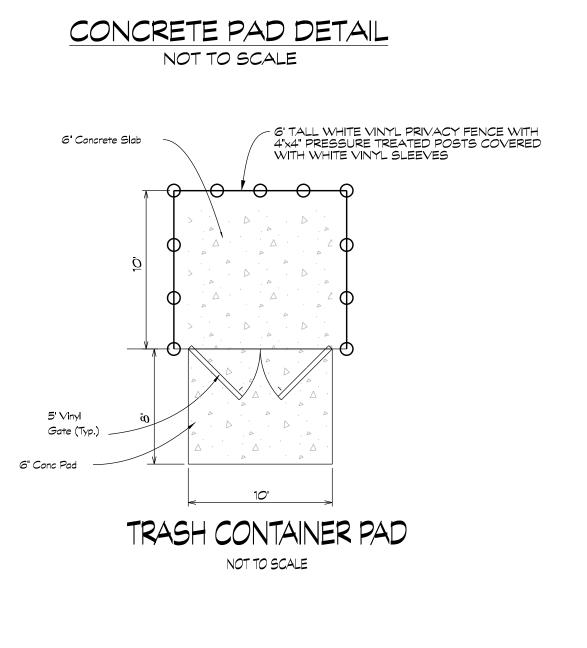


COLORS: LEGEND AND BORDER - GREEN WHITE SYMBOL ON BLUE BACKGROUND BACKGROUND - WHITE

R 7-8 NOT TO SCALE



SAMS GAZEBOS 16' OCTAGON OR EQUAL NOT TO SCALE

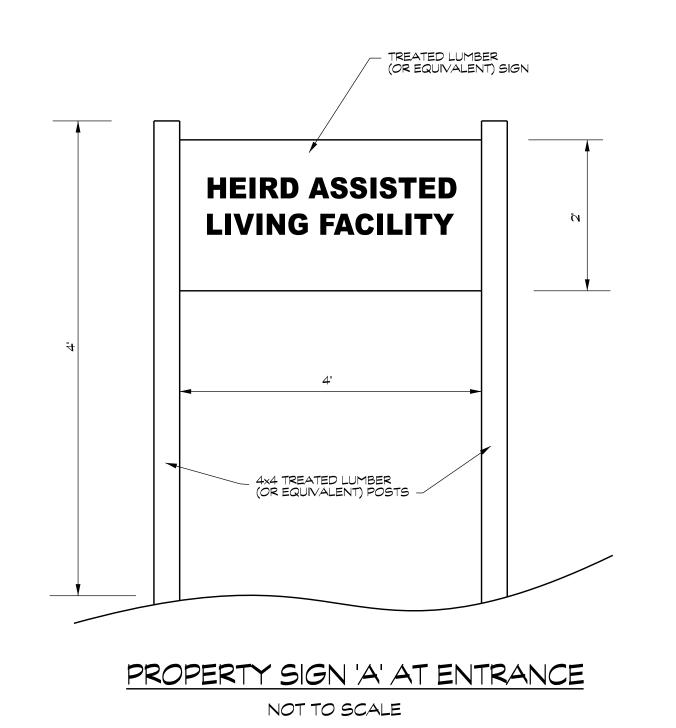


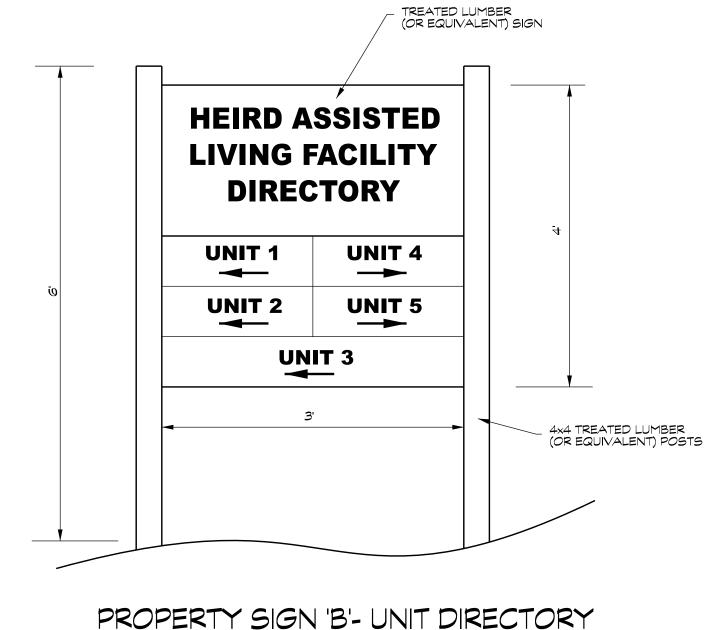
CONCRETE (S.H.A. MIX NO. 3) - BASE COARSE, DGSA

- COMPACTED SUBGRADE

TO TRAFFIC FLOW

HEAVY BROOM FINISH PERPENDICULAR



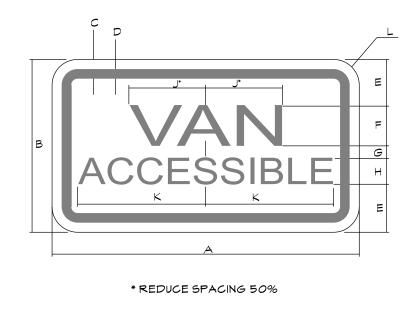


PROPERTY SIGN 'B'- UNIT DIRECTORY NOT TO SCALE

1'-0" x 1'-6" x .080 ALUMINUM HANDICAPPED PARKING SIGN. SIGN TO READ "RESERVED PARKING" W/IDENTIFICATION SYMBOL. BOLT TO STEEL TUBE W/3/8" CADMIUM PLATED BOLTS, NUTS & WASHERS— "VAN ACCESSIBLE" SIGN AS REQUIRED-2" \times 2" \times .188" STEEL TUBE EXTEND INTO CONCRETE FILLED PIPE 2'-0". PROVIDE WELDED WATERTIGHT CAP. PAINT P&L #6118 BLACK COFFEE PAINT PIPE BASE YELLOW-PAVEMENT -6" ϕ STD. STEEL PIPE FILLED W/CONC. #6 - 14" LONG BARS EA WAY THRU PIPE-1'-6" O CONC. BASE

> HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS. "HANDICAPPED PARKING" SIGN

> > NOT TO SCALE



SIGN		DIMENSIONS (INCHES)									
	Α	В	С	D	E	F	G	Н	J	K	L
MIN.	12	6	.375	.438	1.5	1.5 D	.5	1D	1.871	3.859	1.5
STD.	18	9	.375	.438	2.25	2 D	1	1.5 D	2.493	5.784	1.5

COLORS:

REGULATORY (COLORS MAY BE REVERSED) LEGEND: GREEN (RETROREFLECTIVE) OR BLACK BACKGROUND: WHITE (RETROREFLECTIVE)

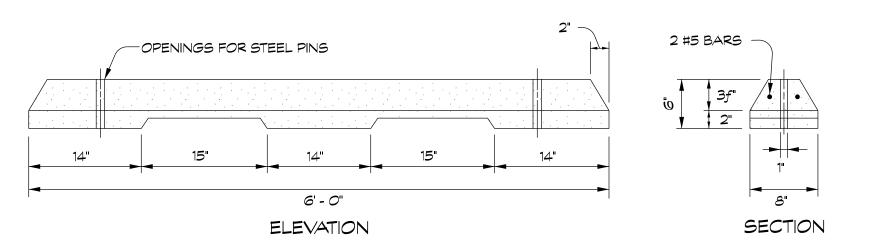
> R 7-8a NOT TO SCALE

REFERENCES MUTCD SECTION - 2B-35 MUTCD SUPLEMENT - 2B-31

COLORS LEGEND BACKGROUND - WHITE



SIGN					DIMENSIO	ONS (IN	CHES)				
SIZE	A	В	C	D	E	F	G	Н	J	K	L
STANDARD	13/4	2 1/2 D	1	2 C	1 1/2 D	12	18	6	3/8	1/4	11/2



PRECAST CONCRETE BUMPER BLOCK DETAIL NOT TO SCALE

MISCELLANEOUS DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY

ON THE REMAINING PORTION OF

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





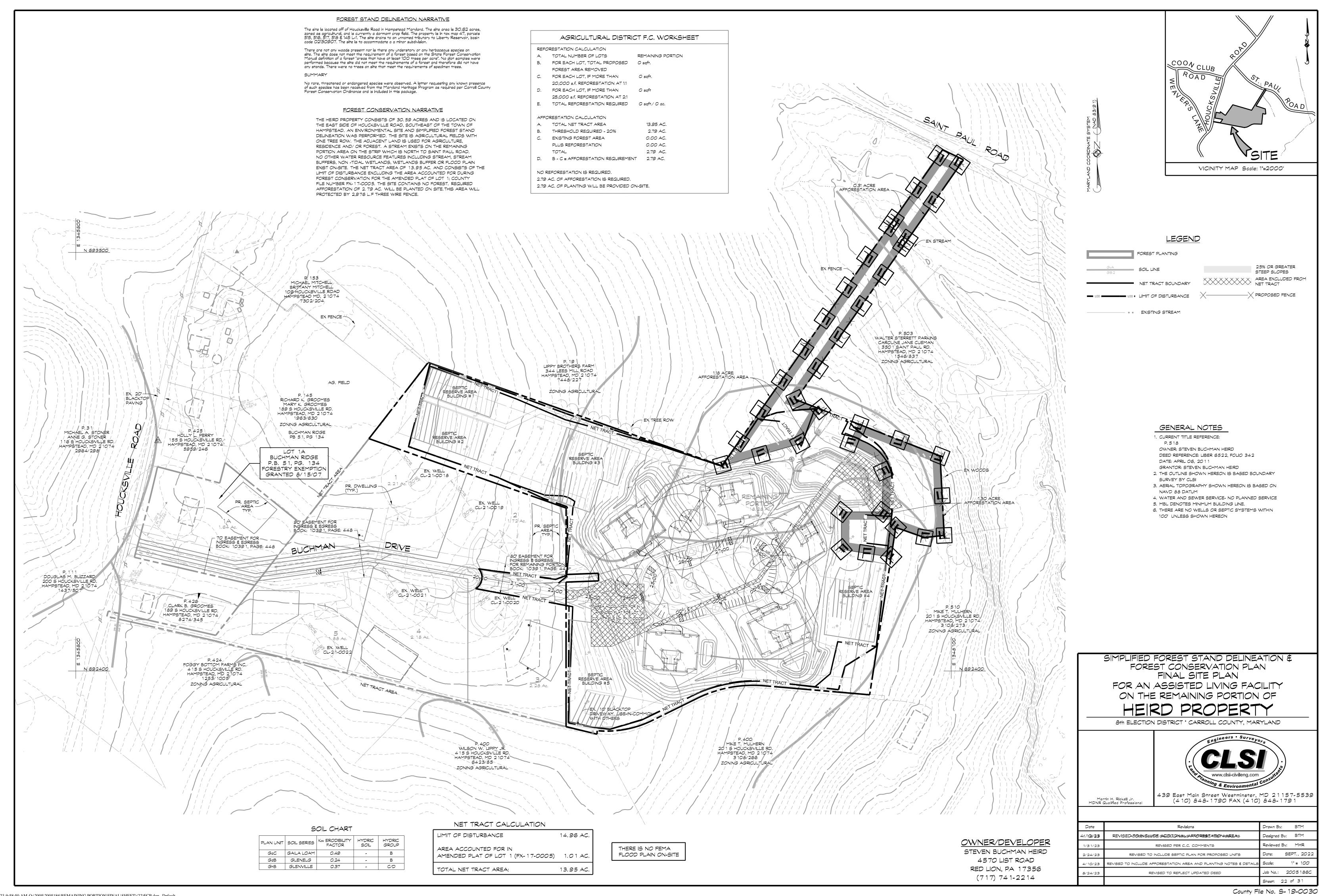
439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Drawn By: KMB ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS Designed By: Reviewed By: JZ REVISED PER C.C. COMMENTS REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS Date: SEPT., 202 2/24/23 AS SHOWN

REVISED TO REFLECT UPDATED DEED

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

Job No.: 2005186C



REPLANTING AREA PLANT SPECIFICATIONS Planting material will conform to the current issue of "The American Standards for Nursery Stock", published by the "American Association of Nurserymen". PLANTING SCHEDULE Planting Area = 2.79 Acres 3 Gallon Container Grown 350 Trees Required (350/Acre) 12' × 12' Spacing Shelters - No

QTY SPECIES (60% overstory: 30/40% understory: 19) 195 Quercus rubra - Red Oak 195 Quercus alba - White Oak 195 Robinia pseudo acacia - Locust

196 Acer rubrum - Red Maple 196 Platanus occidentalis - Sycamore

Mow entire site. Plant Ground Cover Seed Mix Ground Cover - Field & Forest (R) Seed Mix Establishing a non sod forming desirable ground cover will help inhibit the sprouting of volunteer invasive plants and weeds thereby lowering maintenance cost and the need for chemical control. Soil stabilization is another significant benefit in converting cultivated ag-fields to forest cover. Germination of restoration seed mixes is highly dependent on good seed-soil contact. This is best accomplished through site preparation by discing or harrowing. If discing or harrowing are not possible, other techniques such as raking over the seed bed or chain drag over prepared soil are sometimes acceptable substitutes. Hydroseeding can be utilized, but success is dependent

on seed being lodged into very friable soil with abundant interstices between soil particles. Seeding is best March 15 through May 15 for immediate germination and strong stand development. Seeding at other times of the year is acceptable, but will affect the level of germination and density of

the stand developed in successive seasons. Field and Forest Mix(R) is a unique blend of native or naturalized grasses and legumes designed for soil stabilization in reforestation. afforestation, and upland game bird habitat enhancement. The mix includes Red clover (Trifolium pratense), Orchard grass (Dactylis glomeratus), Deer tongue (Panicum clandestinum), Little bluestem (Scharanjium scoparius), and Brome grass (Bromus sp.). Field and Forest Mix Application Rate: 25 lbs per acre \times 4.63 acres = 116 lbs.

TRANSPORTING / HANDLING When transporting your plants it is important that they be carried in a covered vehicle so they do not suffer wind damage and dry out. When planting, proper handling of plants is very important. The trees root systems should be kept moist at all times.

PLANTING

When planting, hold each tree so that the crown or root collar (area where the roots and top meet) is just above the ground. This allows for settling of the soil and roots so that the final depth is the same or slightly above grade. It is very important that the roots not be exposed after the tree is

WATER & MULCH

Water and mulch trees using 2-4 inches to cover in and around the one foot square of mulch. The mulch will help retain moisture and reduce weed competition. Newly planted trees should be given only minimal pruning.

After planting, prune out broken branches or damaged material. **FERTILIZING** Newly planted trees should not be fertilized until after one

full growing season. Never put fertilizers such as dry pellets or spikes containing nitrogen in the backfill, since root injury may CARE AFTER PLANTING

Inspect the plants regularly for invasion from insects and or animals. For most insects an EPA approved insecticide can be used. For deer, rabbits, ground hogs, voles and mice problems Repellex or a similar type product can be effective.

CLEAN UP All debris created from the afforestation activities shall be removed from the site within seven days of completion of MITIGATION MEASURES FOR UNANTICIPATED UNAUTHORIZED INJURY TO TREES

Disturbance within the forest protection areas is not proposed at this time; however, if unauthorized impacts within the forest protection areas were to occur, the following corrective measures will be required, as appropriate, to insure tree health and survival:

ROOT INJURY

If an increase in grade within an identified forest protection area occurs, this may result in root injury. The use of a porous topsoil will be used to allow for exchange of oxygen through the soil. The opposite of this, lowering if the grade within the protected area, shall be mitigated by covering the roots with a fine wood chip or organic mulch material. This will help retain moisture and therefore, stimulate root re-growth into the disturbed

SOIL COMPACTION

Soil compaction is a problem on most construction sites; however, the highly visible orange blaze plastic mesh fence should eliminate the compaction problem. If heavy equipment did come in contact with a critical root zone, a fiber mat should be laid down to increase the weight bearing capacity and minimize soil compaction.

SOIL PH CHANGE

Since designated areas have been established for cement truck wash out and vehicle fueling, little to no change in the soil pH should be seen. Cement and fuel spills are the two main causes of soil pH change.

TREE WOUNDS

Wounds to the tree trunk are unlikely to occur, due to the mesh fence protection device; however, crown branching structures may be damaged by vehicular movement. If this should occur, proper pruning will be initiated, "Crown Reduction".

APPLICATIONS OF FERTILIZERS BY INJECTION As mentioned above, trees inside the protection area shall not be damaged due to the establishment of Forest Protection Devices. If trees are damaged and show signs of stress, they will receive liquid fertilizer injections. Fertilizer injections will improve the health and vigor of the damaged tree and increase the survival potential. For recommended rates and time of application. contact a licensed tree expert.

FOREST PROTECTION NOTES

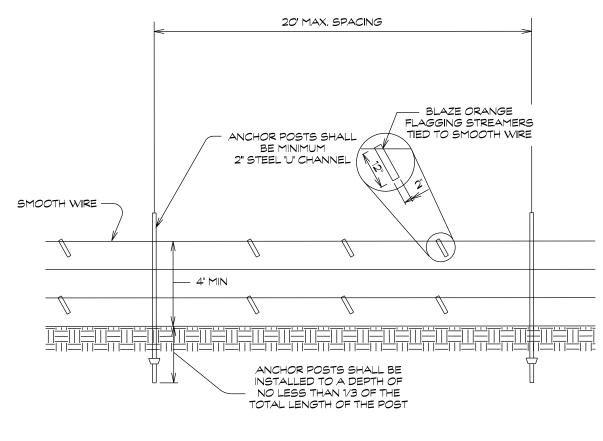
The limit of disturbance (L.O.D.) for construction will be marked by the contractor along the L.O.D. as shown on the plan sheet. The edge of the tree line to remain will be field checked by a qualified professional. After the edge is checked the Critical Root Zone will be flagged using the formula 1" of D.B.H. equals 1' of radius for the critical root zone. During the flagging of the C.R.Z., a tree by tree evaluation will be made along the edge, not only for the root zone establishment but for the trees overall condition as well as survival potential. For Specimen trees the C.R.Z. is 1.5' times the diameter at breast height. Once the C.R.Z. is established, the L.O.D. will be re-adjusted to conform with the field flagging. At this time the contractor will install the following protection devices, see details. The temporary protection device will be (see detail). Blaze Orange plastic mesh protection fence. It will be accompanied by "Retention Forest" signs every 100'. The fence will be installed once the C.R.Z. has been established and the L.O.D. located, as mentioned previously. This protection device will be installed prior to any construction activity. DO NOT PUT SIGNS ON TREES!!!

The metal fence posts will be installed 1/3 into the ground just outside the C.R.Z. or Limit of Disturbance (L.O.D.), as shown on

No equipment, machinery, vehicle, materials or excessive pedestrian traffic will be allowed in the Critical Root Zone Area. Therefore, no openings through the fence will be allowed. Entrance to the protected area will occur only if necessary for repair of accidental injury to the tree. This protective tree device will remain in place and will be maintained throughout the life of the construction project.

To help reduce the possibility of disturbance within an identified forest protection area, a pre-construction meeting will take place after the boundaries of the L.O.D. have been staked and flagged and the forest protection devices have been installed. The employees of the construction crew will be informed of the importance of the tree slated for retention. During the pre-construction meeting the temporary parking location, stockpile area, staging and fueling area will be shown

FOREST PROTECTION FENCE TWO OR THREE STRAND SMOOTH WIRE



NOTES:

1. FOREST PROTECTION DEVICE ONLY

2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS

3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

4. AVOID ROOT DAMAGE WHEN PLACING ANCHOR POSTS. 5. SMOOTH WIRE SHOULD BE SECURELY ATTACHED TO POSTS.
6. DEVICE SHOULD BE PROPERLY MAINTAINED DURING CONSTRUCTION. . PROTECTIVE SIGNS ARE ALSO RECOMMENDED.

FOREST CONSERVATION NOTES 1. Attachment of signs or any other object, to trees is No equipment, machinery, vehicles, materials or excessive pedestrian traffic shall be allowed in conservation areas. eta. $\dot{\mathsf{A}}\mathsf{I}\mathsf{I}$ conservation signage is to be posted as noted on plan sheet. Planting areas will be posted with reforestation signs approx. every 100 feet and will be protected with tree shelters.
 Pre-Construction meeting; Before any disturbance, the developer, contractor or project manager and local inspector shall attend. Temporary parking, stockpile, staging, and fueling area will be shown to all personnel. Any changes made to the Forest Conservation Plan due to on-site conditions shall be made in consultation with a representative of the Bureau of Resource Management.

Afforestation areas will be placed in a Forest Conservation Easement in perpetuity.

8. No burial of discarded materials will occur on-site within the forest conservation areas or planting areas.

No open burning within 100 feet of a wooded area.

Temporary fencing and signs shall be removed after site construction. All fencing on this plan is temporary.

REFORESTATION FENCE & SIGNS

2,976 L.F.

FOREST CONSERVATION PROTECTION FENCE, SIGN DETAIL

NOTE: This estimate for bond purposes only. Contractor is responsible

NOTE: Proposed planting area only requires signs to be installed as

FENCE & WATER RESOURCE PROTECTION FENCE(TOTALS)

Forest Retention Area Fence:

FOREST RETENTION AREA:

WATER RESOURCE PROTECTION SIGNS:

to confirm or provide own estimate for bidding purposes.

REFORESTATION AREA:

SPECIMEN TREE: O

TOTAL SIGNS:

Total Fence:

Reforestation/Afforestation Fence: Isolated Specimen Tree Fence: Water Resource Protection Fence:

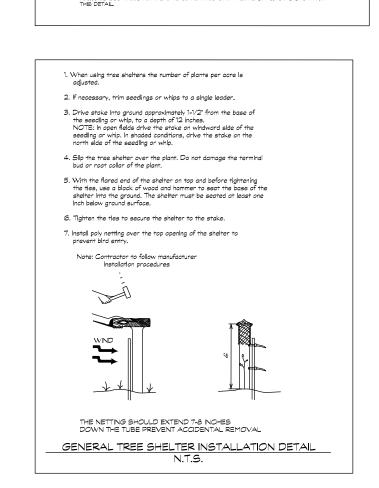
REFORESTATION

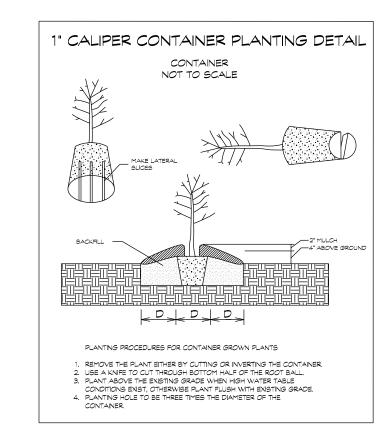
Trees for Your

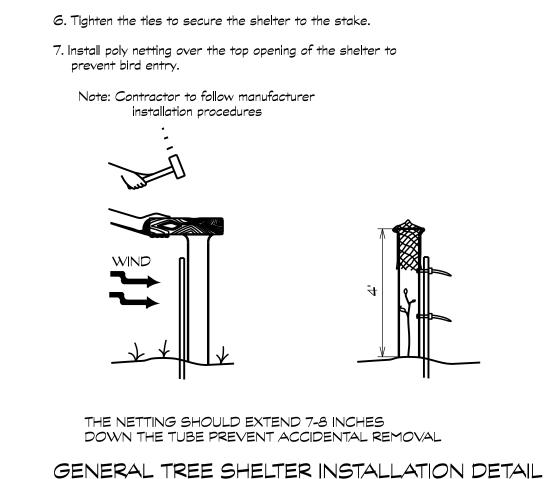
PLACED APPROXIMATELY EVERY 100 FT.

REFORESTATION AND AFFORESTATION AREA PROTECTION SIGN DETAILS

HARDWOOD PLANTING DETAIL \bigcirc TOP VIEW (NOT TO SCALE) OC - ON CENTER LARGE TREE - OVERSTORY SMALL TREE - UNDERSTORY 1) TREES WILL BE MULCHED WITH 2-4 MULCH OVER THE ROOT AREA. AVOID DIRECT CONTACT WITH THE TRUNK. 2) HARDWOOD WHIPS NO LESS THAN 2.1 HEIGHT AND AVERAGING 24" IN HEIGHT WILL BE USED. 3) WATERING AND FERTILIZING WILL BE PERFOMED ON AN AS NEEDED BASIS. 4) PLANTING OF UNDERSTORY TREES SHALL BE IN AN EVEN RANDOM DISTRIBUTION. 5) NOTE TO THE PLANTING CONTRACTOR: THE MARYLAND FOREST CONSERVATION ACT REQUIRES 350 TREES PER ACRE TO BE PLANTED ON A 12x12 SPACING AS SHOWN IN THE DEETAIL







1. When using tree shelters the number of plants per acre is

3. Drive stake into ground approximately 1-1/2" from the base of

NOTE: in open fields drive the stake on windward side of the seedling or whip. In shaded conditions, drive the stake on the

4. Slip the tree shelter over the plant. Do not damage the terminal

5. With the flared end of the shelter on top and before tightening the ties, use a block of wood and hammer to seat the base of the

shelter into the ground. The shelter must be seated at least one

2. If necessary, trim seedlings or whips to a single leader.

the seedling or whip, to a depth of 12 inches.

north side of the seedling or whip.

bud or root collar of the plant.

inch below ground surface.

FOREST CONSERVATION PLAN NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

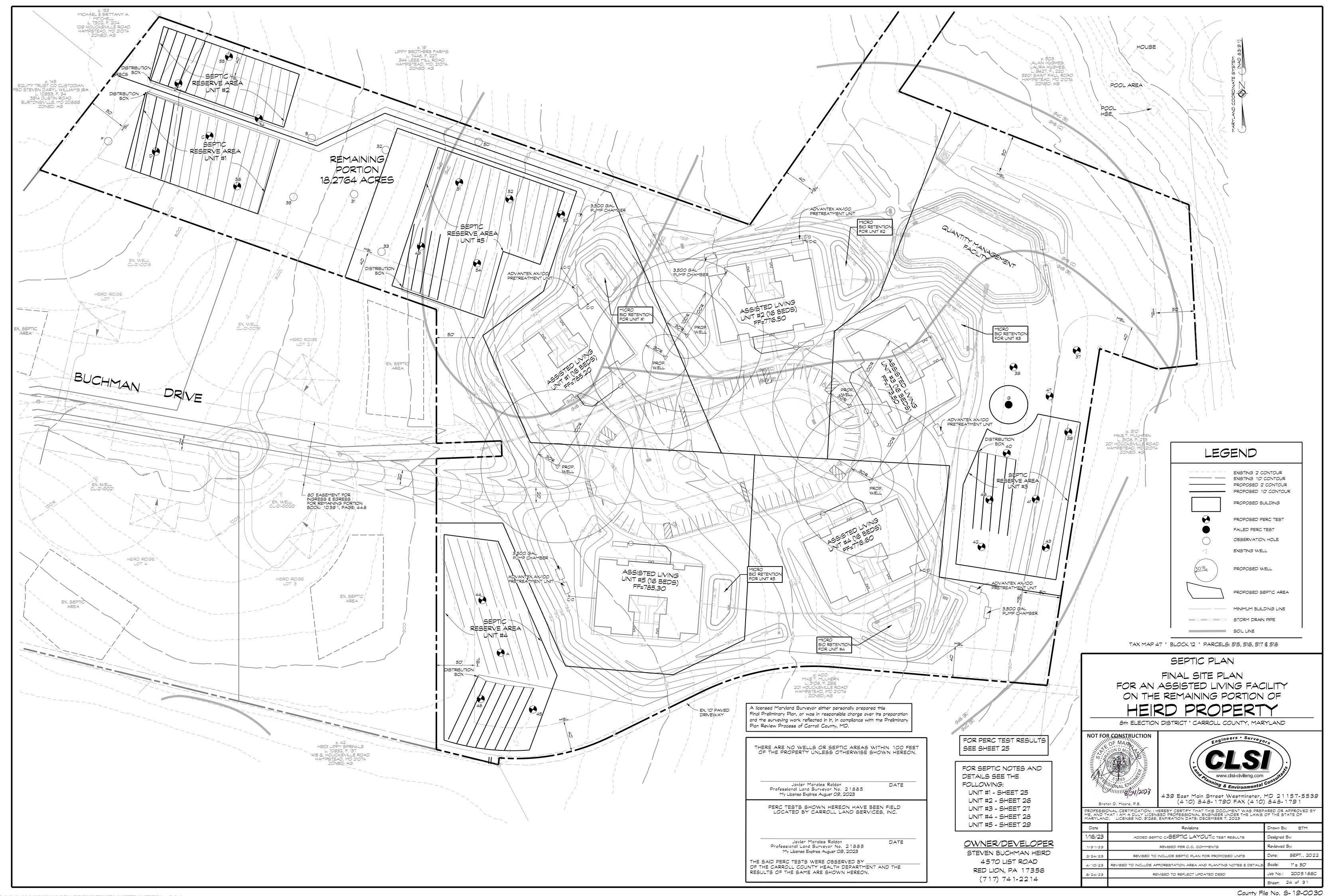
8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND

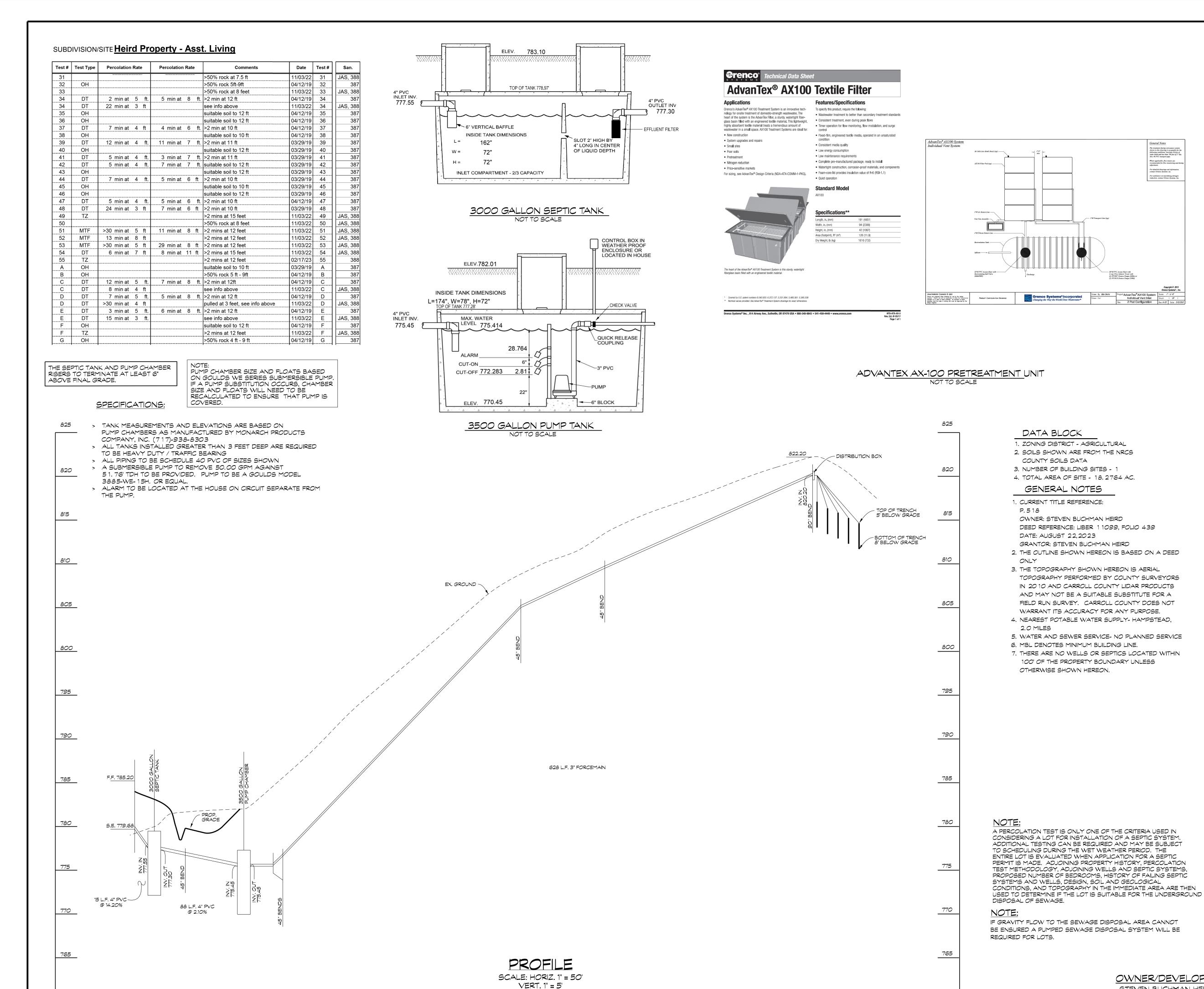
439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1

Revisions Drawn By: ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS Designed By: 1/16/23 Reviewed By: MHR REVISED PER C.C. COMMENTS REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS Date: SEPT., 202 2/24/23 EVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAIL Job No.: 2005186C REVISED TO REFLECT UPDATED DEED Sheet: 23 of 31

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

N.T.S.







GOULDS PUMPS

• $\frac{1}{3}$ – 1 HP models have NEMA three prong grounding **APPLICATIONS** pecifically designed for the following uses: Homes, Farms, Trailer Courts, Motels, Schools, • 1½ HP and larger units have bare lead cord ends. Three phase (60 Hz):

Hospitals, Industry, Effluent Systems SPECIFICATIONS

Solids handling capabilities: ¾" maximum.

 Discharge size: 2" NPT. Capacities: up to 140 GPM. Total heads: up to 128 feet TDH.

104°F (40°C) continuous, 140°F (60°C) intermittent See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer. ■ Class B insulation on $\frac{1}{3} - \frac{1}{2}$ HP models. Class F insulation on 2 HP models.

Single phase (60 Hz): Capacitor start motors for maximum starting torque. • Built-in overload with automatic reset. SJTOW or STOW severe duty oil and water resistant

limits, can be operated continuously without damage when fully submerged. ■ Bearings: Upper and lower heavy duty ball bearing ■ Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary

UNIT #1 TRENCH SIZING

1690 GPD / 0.8 GPDSF = 2112.5 SF ADD 40% ADDITION FOR ONSITE LAUNDRY 2112.5 SF X 1.4 = 2958 SF

W + 2 / W + 1 + 2(D) = DEEP TRENCH 3 + 2 / 3 + 1 + 2(3) = 0.50 986 LF × 0.50 = 493 LF

USE (5) 99 FT TRENCHES PER SYSTEM

2958 SF / 3 = 986 LF OF STANDARD TRENCH

493 LF OF DEEP TRENCH (3 FT STONE DEPTH)

TRENCH SIZING:

separately ordered starter unit.

Class 10 overload protection must be provided in

STOW power cords all have bare lead cord ends.

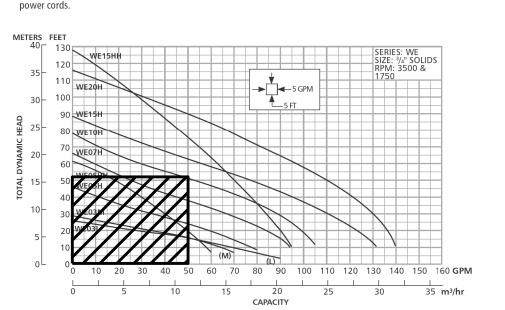
■ Designed for Continuous Operation: Pump ratings are

within the motor manufacturer's recommended working

to prevent oil wicking. Standard cord is 20'. Optional lengths are available. ■ O-ring: Assures positive sealing against contaminants

moisture barrier in case of outer jacket damage and

AGENCY LISTINGS Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR38549 Goulds Pumps is ISO 9001 Registered.



DATA BLOCK

- 1. ZONING DISTRICT AGRICULTURAL 2. SOILS SHOWN ARE FROM THE NRCS COUNTY SOILS DATA
- 3. NUMBER OF BUILDING SITES 1 4. TOTAL AREA OF SITE - 18.2764 AC.

GENERAL NOTES

1. CURRENT TITLE REFERENCE: P.518

- OWNER: STEVEN BUCHMAN HEIRD DEED REFERENCE: LIBER 11099, FOLIO 439 DATE: AUGUST 22,2023 GRANTOR: STEVEN BUCHMAN HEIRD
- 2. THE OUTLINE SHOWN HEREON IS BASED ON A DEED
- 3. THE TOPOGRAPHY SHOWN HEREON IS AERIAL TOPOGRAPHY PERFORMED BY COUNTY SURVEYORS IN 2010 AND CARROLL COUNTY LIDAR PRODUCTS AND MAY NOT BE A SUITABLE SUBSTITUTE FOR A FIELD RUN SURVEY. CARROLL COUNTY DOES NOT WARRANT ITS ACCURACY FOR ANY PURPOSE.
- 4. NEAREST POTABLE WATER SUPPLY- HAMPSTEAD, 2.0 MILES
- 5. WATER AND SEWER SERVICE- NO PLANNED SERVICE 6. MBL DENOTES MINIMUM BUILDING LINE.
- 7. THERE ARE NO WELLS OR SEPTICS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON.

SEPTIC SYSTEM DESIGN CRITERIA

Where applicable, flow meters are recommended for flow menitoring at

For detailed drawings and informatio contact Orenco Systems, inc.

For assistance on maximizing nitrogen reduction, contact Orence Systems, Inc.

USE: ASSISTED LIVING FACILITY (16 BEDS) 6 EMPLOYEES PER BUILDING 16 BEDS @ 100 GALLONS PER BED = 1600 GPD 6 EMPLOYEES @ 15 GALLONS EACH = 90 GPD

1690 GALLONS PER DAY PER BUILDING

SEPTIC TANK AND PUMP CHAMBER SIZING: V = 1125 + 0.75(Q) V = 1125 + 0.75(1690)

V = 2392.5 GALLONS USE MINIMUM 3000 GAL SEPTIC TANK USE MINIMUM 3500 GAL PUMP CHAMBER

<u>PUMP DESIGN:</u>

. DESIGN FLOW: 1690 GPD 2. DESIGN HEAD: STATIC HEAD: 820.20 - 772.28 = 47.92 FRICTION HEAD:

3" FORCEMAIN = 628' (4) 45° BENDS = 24' 1) 90° BENDS = 10° 628 + 24 + 10 = 662 662 × 0.58 / 100 = 3.84 TOTAL HEAD: 47.92' + 3.84' = 51.76' @ 50 GPM

PUMP SYSTEM:

FORCE MAIN VOLUME 628' X 38.4/100 = 241.15 GAL USE 165 GALLON DOSE WITH A CHECK VALVE

2. PUMP CHAMBER CAPACITY ONE DAY STORAGE CAPACITY = 1690 GPD + DOSE = 165 GPD

TOTAL STORAGE = 1855 GPD 3. PUMP ON TO PUMP OFF

D= 165 X 23 1/13,572 = 2.8 1"
4. HIGH WATER ALARM SWITCH TO PUMP CHAMBER R= 1690 X 23 1/13,572 = 28.76"

TAX MAP 47 * BLOCK 12 * PARCEL: 518

UNIT # 1 - SEPTIC NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





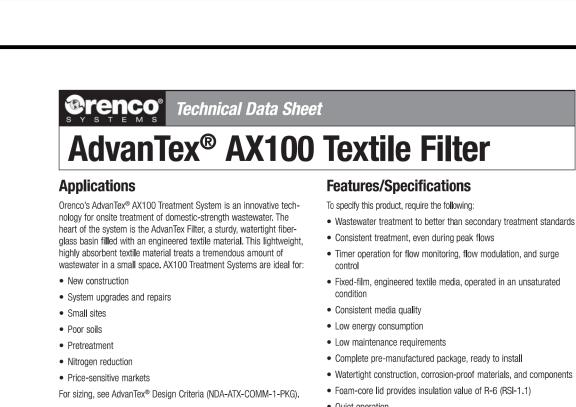
439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Date	Revisions	Drawn By:	MS, BM
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed B	y: MS
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed B	y: MS
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	N.T.S.
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	2005186C
		Sheet: 25	5 of 31

OWNER/DEVELOPER

STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214



Standard Model Specifications** Length, in. (mm) 191 (4851) Width, in. (mm) Area (footprint), ft2 (m2) 128 (11.9) Dry Weight, Ib (kg) 1616 (733)

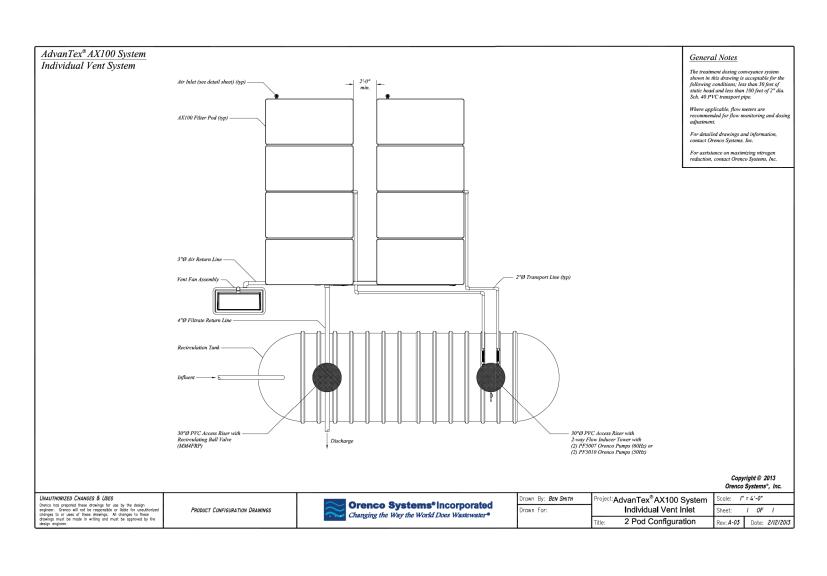
The heart of the AdvanTex® AX100 Treatment System is this sturdy, watertight

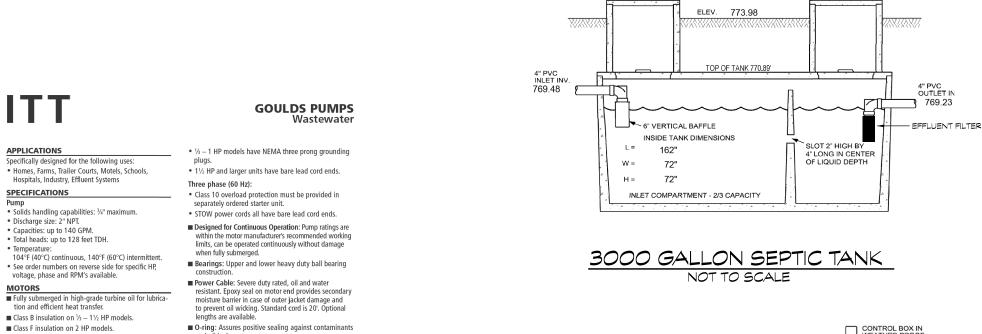
Covered by U.S. patent numbers 6,540,920; 6,372,137; 5,531,894; 5,480,561; 5,360,556

Orenco Systems® Inc. , 814 Airway Ave., Sutherlin, OR 97479 USA • 800-348-9843 • 541-459-4449 • www.orenco.com

* Nominal values provided. See AdvanTex® Treatment System drawings for exact dimensions.

fiberglass basin filled with an engineered textile material.





Single phase (60 Hz):

· Capacitor start motors for maximum starting torque

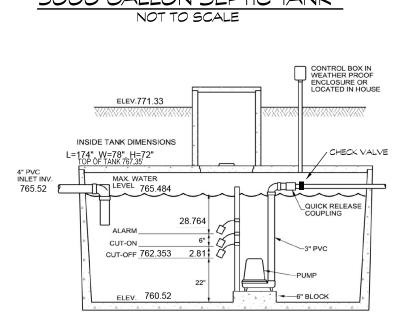
SJTOW or STOW severe duty oil and water resistant

· Built-in overload with automatic reset.

AGENCY LISTINGS

0 5 10 15 20 25 30 35 m³/hr CAPACITY

Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR? Goulds Pumps is ISO 9001 Registered.



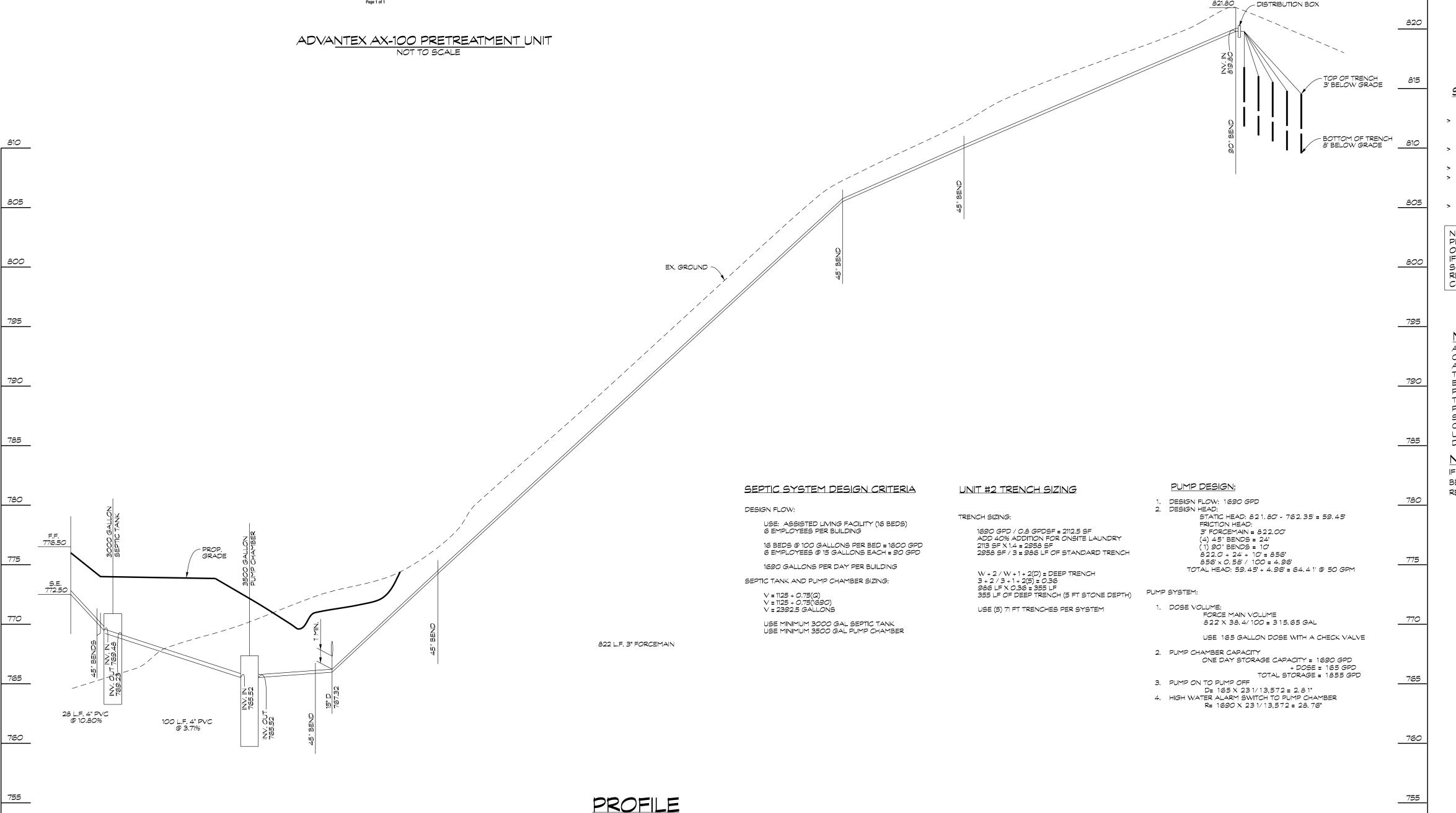
Test # Test Type Percolation Rate Percolation Rate Date Test# San. >50% rock at 7.5 ft >50% rock 5ft-9ft >50% rock at 8 feet 2 min at 5 ft. 5 min at 8 ft. >2 min at 12 ft 22 min at 3 ft see info above suitable soil to 12 f suitable soil to 12 ft 7 min at 4 ft 4 min at 6 ft. >2 min at 10 ft suitable soil to 10 11 min at 7 ft. >2 min at 11 ft suitable soil to 12 ft 3 min at 7 ft. >2 min at 11 ft 5 min at 4 ft. 7 min at 7 ft. suitable soil to 12 ft 5 min at 6 ft >2 min at 10 ft sutiable soil to 10 suitable soil to 12 5 min at 4 ft. 5 min at 6 ft. >2 min at 10 ft 24 min at 3 ft 7 min at 6 ft >2 min at 10 ft >2 mins at 15 feet >50% rock at 8 feet >30 min at 5 ft | 11 min at 8 ft | >2 mins at 12 feet 13 min at 8 ft >2 mins at 12 feet >30 min at 5 ft 29 min at 8 ft >2 mins at 12 feet 6 min at 7 ft 8 min at 11 ft >2 mins at 15 feet >2 mins at 12 feet suitable soil to 10 ft >50% rock 5 ft - 9ft 7 min at 8 ft. >2 min at 12ft 12 min at 5 ft. 8 min at 4 ft 7 min at 5 5 min at 8 ft. >2 min at 12 ft >30 min at 4 ft pulled at 3 feet, see info above 6 min at 8 ft. >2 min at 12 ft 3 min at 5 ft. 15 min at 3 see info above suitable soil to 12 f >2 mins at 12 feet

>50% rock 4 ft - 9 ft

SUBDIVISION/SITE **Heird Property - Asst. Living**

3500 GALLON PUMP TANK NOT TO SCALE

825



SCALE: HORIZ. 1" = 50"

VERT. 1" = 5"

RISERS TO TERMINATE AT LEAST 6" ABOVE FINAL GRADE.

THE SEPTIC TANK AND PUMP CHAMBER

SPECIFICATIONS:

- > TANK MEASUREMENTS AND ELEVATIONS ARE BASED ON PUMP CHAMBERS AS MANUFACTURED BY MONARCH PRODUCTS COMPANY, INC. (717)-938-8303
- ALL TANKS INSTALLED GREATER THAN 3 FEET DEEP ARE REQUIRED TO BE HEAVY DUTY / TRAFFIC BEARING
- > ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN > A SUBMERSIBLE PUMP TO REMOVE 50.00 GPM AGAINST
- 64.41' TDH TO BE PROVIDED. PUMP TO BE A GOULDS MODEL 3885-WE-15HH. OR EQUAL.
- > ALARM TO BE LOCATED AT THE HOUSE ON CIRCUIT SEPARATE FROM THE PUMP.

PUMP CHAMBER SIZE AND FLOATS BASED ON GOULDS WE SERIES SUBMERSIBLE PUMP. IF A PUMP SUBSTITUTION OCCURS, CHAMBER SIZE AND FLOATS WILL NEED TO BE RECALCULATED TO ENSURE THAT PUMP IS COVERED.

P.518

DATA BLOCK

COUNTY SOILS DATA

3. NUMBER OF BUILDING SITES - 1

GENERAL NOTES

1. CURRENT TITLE REFERENCE:

OWNER: STEVEN BUCHMAN HEIRD DEED REFERENCE: LIBER 11099, FOLIO 439 DATE: AUGUST 23, 2023

1. ZONING DISTRICT - AGRICULTURAL

2. SOILS SHOWN ARE FROM THE NRCS

4. TOTAL AREA OF SITE - 18. 2764 AC.

- GRANTOR: STEVEN BUCHMAN HEIRD 2. THE OUTLINE SHOWN HEREON IS BASED ON A DEED
- 3. THE TOPOGRAPHY SHOWN HEREON IS AERIAL TOPOGRAPHY PERFORMED BY COUNTY SURVEYORS
- IN 2010 AND CARROLL COUNTY LIDAR PRODUCTS AND MAY NOT BE A SUITABLE SUBSTITUTE FOR A FIELD RUN SURVEY. CARROLL COUNTY DOES NOT WARRANT ITS ACCURACY FOR ANY PURPOSE. 4. NEAREST POTABLE WATER SUPPLY- HAMPSTEAD,
- 2.0 MILES 5. WATER AND SEWER SERVICE- NO PLANNED SERVICE
- 6. MBL DENOTES MINIMUM BUILDING LINE. 7. THERE ARE NO WELLS OR SEPTICS LOCATED WITHIN

100' OF THE PROPERTY BOUNDARY UNLESS

OTHERWISE SHOWN HEREON.

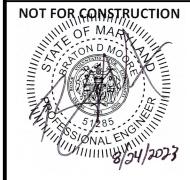
A PERCOLATION TEST IS ONLY ONE OF THE CRITERIA USED IN CONSIDERING A LOT FOR INSTALLATION OF A SEPTIC SYSTEM. ADDITIONAL TESTING CAN BE REQUIRED AND MAY BE SUBJECT TO SCHEDULING DURING THE WET WEATHER PERIOD. THE ENTIRE LOT IS EVALUATED WHEN APPLICATION FOR A SEPTIC PERMIT IS MADE. ADJOINING PROPERTY HISTORY, PERCOLATION TEST METHODOLOGY, ADJOINING WELLS AND SEPTIC SYSTEMS, PROPOSED NUMBER OF BEDROOMS, HISTORY OF FAILING SEPTIC SYSTEMS AND WELLS, DESIGN, SOIL AND GEOLOGICAL CONDITIONS, AND TOPOGRAPHY IN THE IMMEDIATE AREA ARE THEN USED TO DETERMINE IF THE LOT IS SUITABLE FOR THE UNDERGROUND DISPOSAL OF SEWAGE.

IF GRAVITY FLOW TO THE SEWAGE DISPOSAL AREA CANNOT BE ENSURED A PUMPED SEWAGE DISPOSAL SYSTEM WILL BE REQUIRED FOR LOTS.

TAX MAP 47 * BLOCK 12 * PARCEL: 518

UNIT #2 - SEPTIC NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF

8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND





439 East Main Street Westminster, MD 21157-5539 (4 10) 848-1790 FAX (4 10) 848-179 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

	Date	Revisions	Drawn By: N	15, BM
	1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed By: N	15
	1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed By: N	15
	2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date: SEP	T., 2022
	4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale: N	N.T.S.
ı	8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.: 200	05 186C
			Sheet: 26 of	31

(717) 741-2214

SUBDIVISION/SITE Heird Property - Asst. Living

Test #	Test Type	Percolation Rate	Percolation Rate	Comments	Date	Test #	San.
31				>50% rock at 7.5 ft	11/03/22	31	JAS, 388
32	ОН			>50% rock 5ft-9ft	04/12/19	32	387
33				>50% rock at 8 feet	11/03/22	33	JAS, 388
34	DT	2 min at 5 ft.	5 min at 8 ft.	>2 min at 12 ft	04/12/19	34	387
34	DT	22 min at 3 ft		see info above	11/03/22	34	JAS, 388
35	ОН			suitable soil to 12 ft	04/12/19	35	387
36	ОН			suitable soil to 12 ft	04/12/19	36	387
37	DT	7 min at 4 ft	4 min at 6 ft.	>2 min at 10 ft	04/12/19	37	387
38	ОН			suitable soil to 10 ft	04/12/19	38	387
39	DT	12 min at 4 ft.	11 min at 7 ft.	>2 min at 11 ft	03/29/19	39	387
40	ОН			suitable soil to 12 ft	03/29/19	40	387
41	DT	5 min at 4 ft.	3 min at 7 ft.	>2 min at 11 ft	03/29/19	41	387
42	DT	5 min at 4 ft.	7 min at 7 ft.	suitable soil to 12 ft	03/29/19	42	387
43	ОН			suitable soil to 12 ft	03/29/19	43	387
44	DT	7 min at 4 ft.	5 min at 6 ft	>2 min at 10 ft	03/29/19	44	387
45	ОН			sutiable soil to 10 ft	03/29/19	45	387
46	ОН			suitable soil to 12 ft	03/29/19	46	387
47	DT	5 min at 4 ft.	5 min at 6 ft.	>2 min at 10 ft	04/12/19	47	387
48	DT	24 min at 3 ft	7 min at 6 ft	>2 min at 10 ft	03/29/19	48	387
49	TZ			>2 mins at 15 feet	11/03/22	49	JAS, 388
50				>50% rock at 8 feet	11/03/22	50	JAS, 388
51	MTF	>30 min at 5 ft	11 min at 8 ft	>2 mins at 12 feet	11/03/22	51	JAS, 388
52	MTF	13 min at 8 ft		>2 mins at 12 feet	11/03/22	52	JAS, 388
53	MTF	>30 min at 5 ft	29 min at 8 ft	>2 mins at 12 feet	11/03/22	53	JAS, 388
54	DT	6 min at 7 ft	8 min at 11 ft	>2 mins at 15 feet	11/03/22	54	JAS, 388
55	TZ			>2 mins at 12 feet	02/17/23	55	388
А	ОН			suitable soil to 10 ft	03/29/19	Α	387
В	ОН			>50% rock 5 ft - 9ft	04/12/19	В	387
С	DT	12 min at 5 ft.	7 min at 8 ft.	>2 min at 12ft	04/12/19	С	387
С	DT	8 min at 4 ft		see info above	11/03/22	С	JAS, 388
D	DT	7 min at 5 ft.	5 min at 8 ft.	>2 min at 12 ft	04/12/19	D	387
D	DT	>30 min at 4 ft		pulled at 3 feet, see info above	11/03/22	D	JAS, 388
Е	DT	3 min at 5 ft.	6 min at 8 ft.	>2 min at 12 ft	04/12/19	Е	387
Е	DT	15 min at 3 ft.		see info above	11/03/22	Е	JAS, 388
F	ОН			suitable soil to 12 ft	04/12/19	F	387
F	TZ			>2 mins at 12 feet	11/03/22	F	JAS, 388
G	ОН			>50% rock 4 ft - 9 ft	04/12/19	G	387

SEPTIC SYSTEM DESIGN CRITERIA

DESIGN FLOW:

USE: ASSISTED LIVING FACILITY (16 BEDS) 6 EMPLOYEES PER BUILDING 16 BEDS @ 100 GALLONS PER BED = 1600 GPD

6 EMPLOYEES @ 15 GALLONS EACH = 90 GPD 1690 GALLONS PER DAY PER BUILDING

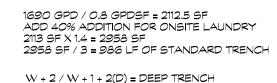
SEPTIC TANK SIZING:

V = 1125 + 0.75(Q)V = 1125 + 0.75(1690) $V = 2392.5 \,GALLONS$

USE MINIMUM 3000 GAL SEPTIC TANK

<u>UNIT #3 TRENCH SIZING</u>

TRENCH SIZING:



W + 2 / W + 1 + 2(D) = DEEP TRENCH3 + 2 / 3 + 1 + 2(3) = 0.50 986 LF × 0.50 = 493 LF 493 LF OF DEEP TRENCH (3 FT STONE DEPTH) USE (5) 99 FT TRENCHES PER SYSTEM

PRETREATMENT UNIT:

1. DESIGN FLOW: 1690 GPD

2. MANUFACTURER:

- 3. MODEL: ADVANTEX AX- 100

SPECIFICATIONS:

- > ALL TANKS INSTALLED GREATER THAN 3 FEET DEEP ARE REQUIRED TO BE HEAVY DUTY / TRAFFIC BEARING.
- > ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN

780 F.F. 773.50 – PROP. GRADE S.E. 767.21 — DISTRIBUTIONBOX EX. GROUND 4' BELOW GRADE 20 L.F. 4" PVC @ 8.75% BOTTOM OF TRENCH 7 BELOW GRADE

> SCALE: HORIZ. 1" = 50' VERT. 1" = 5'

©renco® Technical Data Sheet AdvanTex® AX100 Textile Filter

Applications

Orenco's AdvanTex® AX100 Treatment System is an innovative tech———— To specify this product, require the following: nology for onsite treatment of domestic-strength wastewater. The heart of the system is the AdvanTex Filter, a sturdy, watertight fiberglass basin filled with an engineered textile material. This lightweight, highly absorbent textile material treats a tremendous amount of

wastewater in a small space. AX100 Treatment Systems are ideal for:

 New construction System upgrades and repairs Small sites

 Poor soils Pretreatment Nitrogen reduction

 Price-sensitive markets For sizing, see AdvanTex® Design Criteria (NDA-ATX-COMM-1-PKG).



AX100 Specifications**

Standard Model

Consistent media quality

Low energy consumption

Quiet operation

Low maintenance requirements

Features/Specifications

Consistent treatment, even during peak flows

Wastewater treatment to better than secondary treatment standards

Timer operation for flow monitoring, flow modulation, and surge

Complete pre-manufactured package, ready to install

Foam-core lid provides insulation value of R-6 (RSI-1.1)

Fixed-film, engineered textile media, operated in an unsaturated

Watertight construction, corrosion-proof materials, and components

Length, in. (mm) 191 (4851) Width, in. (mm) 94 (2388) Height, in. (mm) Area (footprint), ft2 (m2) 128 (11.9) Dry Weight, Ib (kg)

fiberglass basin filled with an engineered textile material.

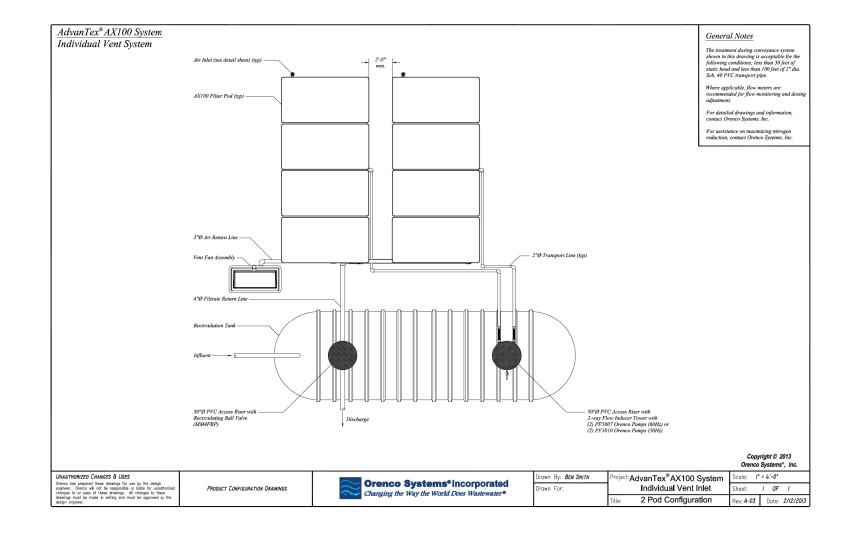
The heart of the AdvanTex $^{\otimes}$ AX100 Treatment System is this sturdy, watertight

Covered by U.S. patent numbers 6,540,920; 6,372,137; 5,531,894; 5,480,561; 5,360,556 * Nominal values provided. See AdvanTex® Treatment System drawings for exact dimensions.

Orenco Systems® Inc. , 814 Airway Ave., Sutherlin, OR 97479 USA • 800-348-9843 • 541-459-4449 • www.orenco.com

THE SEPTIC TANK RISERS TO TERMINATE AT LEAST 6" ABOVE FINAL GRADE.

THE MINIMUM COVER OVER THE TANKS IS 1'.
THE MAXIMUM COVER OVER THE TANKS IS 3'.



ADVANTEX AX-100 PRETREATMENT UNIT NOT TO SCALE

DATA BLOCK

COUNTY SOILS DATA

1. ZONING DISTRICT - AGRICULTURAL

3. NUMBER OF BUILDING SITES - 1

GENERAL NOTES

1. CURRENT TITLE REFERENCE:

DATE: aUGUST 23, 2023

P. 518

ONLY

2.0 MILES

2. SOILS SHOWN ARE FROM THE NRCS

4. TOTAL AREA OF SITE - 18. 2764 AC.

OWNER: STEVEN BUCHMAN HEIRD

GRANTOR: STEVEN BUCHMAN HEIRD

6. MBL DENOTES MINIMUM BUILDING LINE.

OTHERWISE SHOWN HEREON.

DEED REFERENCE: LIBER 11099, FOLIO 439

3. THE TOPOGRAPHY SHOWN HEREON IS AERIAL

2. THE OUTLINE SHOWN HEREON IS BASED ON A DEED

TOPOGRAPHY PERFORMED BY COUNTY SURVEYORS IN 2010 AND CARROLL COUNTY LIDAR PRODUCTS AND MAY NOT BE A SUITABLE SUBSTITUTE FOR A FIELD RUN SURVEY. CARROLL COUNTY DOES NOT WARRANT ITS ACCURACY FOR ANY PURPOSE. 4. NEAREST POTABLE WATER SUPPLY- HAMPSTEAD,

5. WATER AND SEWER SERVICE- NO PLANNED SERVICE

7. THERE ARE NO WELLS OR SEPTICS LOCATED WITHIN

100' OF THE PROPERTY BOUNDARY UNLESS

A PERCOLATION TEST IS ONLY ONE OF THE CRITERIA USED IN CONSIDERING A LOT FOR INSTALLATION OF A SEPTIC SYSTEM. ADDITIONAL TESTING CAN BE REQUIRED AND MAY BE SUBJECT TO SCHEDULING DURING THE WET WEATHER PERIOD. THE ENTIRE LOT IS EVALUATED WHEN APPLICATION FOR A SEPTIC PERMIT IS MADE. ADJOINING PROPERTY HISTORY, PERCOLATION TEST METHODOLOGY, ADJOINING WELLS AND SEPTIC SYSTEMS, PROPOSED NUMBER OF BEDROOMS, HISTORY OF FAILING SEPTIC SYSTEMS AND WELLS, DESIGN, SOIL AND GEOLOGICAL CONDITIONS, AND TOPOGRAPHY IN THE IMMEDIATE AREA ARE THEN USED TO DETERMINE IF THE LOT IS SUITABLE FOR THE UNDERGROUND DISPOSAL OF SEWAGE.

IF GRAVITY FLOW TO THE SEWAGE DISPOSAL AREA CANNOT BE ENSURED A PUMPED SEWAGE DISPOSAL SYSTEM WILL BE REQUIRED FOR LOTS.

TAX MAP 47 * BLOCK 12 * PARCEL: 518

UNIT #3 - SEPTIC NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF



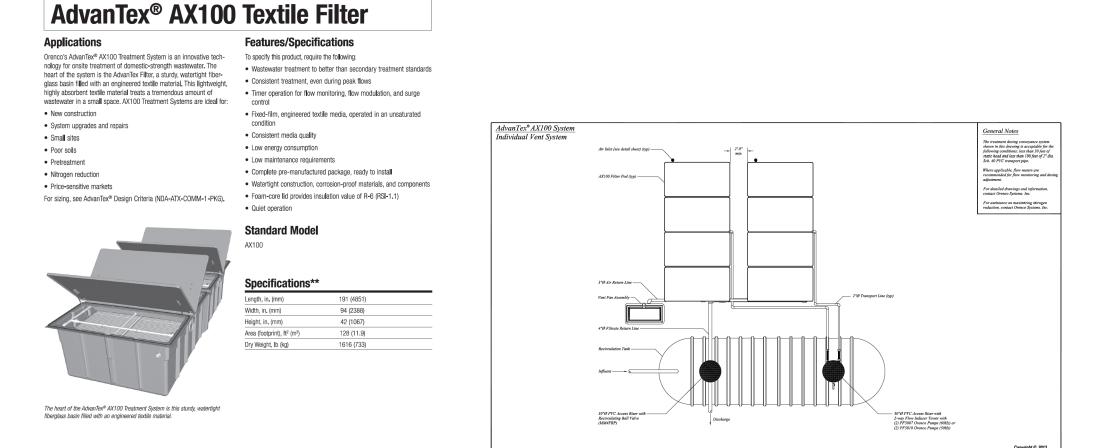


(4 10) 848-1790 FAX (4 10) 848-179 1

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Drawn By: MS, BM Designed By: MS ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS 1/16/23 Reviewed By: MS REVISED PER C.C. COMMENTS Date: SEPT., 202 REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS 2/24/23 REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS N.T.S. Job No.: 2005186C REVISED TO REFLECT UPDATED DEED Sheet: 27 of 31

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214



ADVA<u>NTEX AX-100 PRETREATMENT U</u>NIT NOT TO SCALE

Nominal values provided. See AdvanTex® Treatment System drawings for exact dimension.

800

Orenco Systems® Inc. , 814 Airway Ave., Sutherlin, OR 97479 USA • 800-348-9843 • 541-459-4449 • www.orenco.com



GOULDS PUMPS Wastewater

APPLICATIONS

Specifically designed for the following uses:

Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS Pump

Pump

• Solids handling capabilities: ¾" maximum.

• Discharge size: 2" NPT.

• Capacities: up to 140 GPM.

• Total heads: up to 128 feet TDH.

Total heads: up to 128 feet TDH. Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent. See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ Class B insulation on ½ – 1½ HP models.

■ Class F insulation on 2 HP models.

Single phase (60 Hz):

Single phase (60 Hz):
Capacitor start motors for maximum starting torque.
Built-in overload with automatic reset.
SJTOW or STOW severe duty oil and water resistant power cords.

½ – 1 HP models have NEMA three prong grounding plugs.
 1½ HP and larger units have bare lead cord ends.
 Three phase (60 Hz):
 Class 10 overload protection must be provided in

separately ordered starter unit.
 STOW power cords all have bare lead cord ends.
 Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage

when fully submerged.

Bearings: Upper and lower heavy duty ball bearing construction.

Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary

to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

O-ring: Assures positive sealing against contaminants and oil laskage.

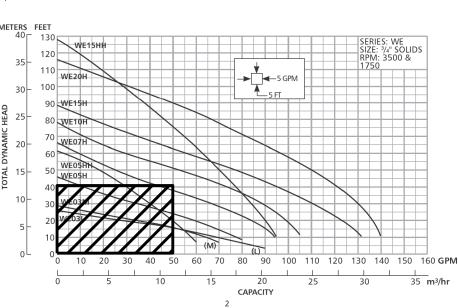
moisture barrier in case of outer jacket damage and

and oil leakage.

AGENCY LISTINGS

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR38549
Goulds Pumps is ISO 9001 Registered.



SPECIFICATIONS:

- > TANK MEASUREMENTS AND ELEVATIONS ARE BASED ON PUMP CHAMBERS AS MANUFACTURED BY MONARCH PRODUCTS
- COMPANY, INC. (717)-938-8303

 > ALL TANKS INSTALLED GREATER THAN 3 FEET DEEP ARE REQUIRED

40.45' TDH TO BE PROVIDED. PUMP TO BE A GOULDS MODEL

- TO BE HEAVY DUTY / TRAFFIC BEARING

 > ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN

 > A SUBMERSIBLE PUMP TO REMOVE 50.00 GPM AGAINST
- 3885-WE- 10H. OR EQUAL.

 > ALARM TO BE LOCATED AT THE HOUSE ON CIRCUIT SEPARATE FROM THE PUMP.

NOTE:
PUMP CHAMBER SIZE AND FLOATS BASED
ON GOULDS WE SERIES SUBMERSIBLE PUMP.
IF A PUMP SUBSTITUTION OCCURS, CHAMBER
SIZE AND FLOATS WILL NEED TO BE
RECALCULATED TO ENSURE THAT PUMP IS
COVERED.

SUBDIVISION/SITE Heird Property - Asst. Living

Test#	Test Type	Percolation Rate	Percolation Rate	Comments	Date	Test #	San.
31			***************************************	>50% rock at 7.5 ft	11/03/22	31	JAS, 388
32	ОН			>50% rock 5ft-9ft	04/12/19	32	38
33				>50% rock at 8 feet	11/03/22	33	JAS, 38
34	DT	2 min at 5 ft.	5 min at 8 ft.	>2 min at 12 ft	04/12/19	34	38
34	DT	22 min at 3 ft		see info above	11/03/22	34	JAS, 38
35	ОН			suitable soil to 12 ft	04/12/19	35	38
36	ОН			suitable soil to 12 ft	04/12/19	36	38
37	DT	7 min at 4 ft	4 min at 6 ft.	>2 min at 10 ft	04/12/19	37	38
38	ОН			suitable soil to 10 ft	04/12/19	38	38
39	DT	12 min at 4 ft.	11 min at 7 ft.	>2 min at 11 ft	03/29/19	39	38
40	ОН			suitable soil to 12 ft	03/29/19	40	38
41	DT	5 min at 4 ft.	3 min at 7 ft.	>2 min at 11 ft	03/29/19	41	38
42	DT	5 min at 4 ft.	7 min at 7 ft.	suitable soil to 12 ft	03/29/19	42	38
43	ОН			suitable soil to 12 ft	03/29/19	43	38
44	DT	7 min at 4 ft.	5 min at 6 ft	>2 min at 10 ft	03/29/19	44	38
45	ОН			sutiable soil to 10 ft	03/29/19	45	38
46	ОН			suitable soil to 12 ft	03/29/19	46	38
47	DT	5 min at 4 ft.	5 min at 6 ft.	>2 min at 10 ft	04/12/19	47	38
48	DT	24 min at 3 ft	7 min at 6 ft	>2 min at 10 ft	03/29/19	48	38
49	TZ			>2 mins at 15 feet	11/03/22	49	JAS, 38
50				>50% rock at 8 feet	11/03/22	50	JAS, 38
51	MTF	>30 min at 5 ft	11 min at 8 ft	>2 mins at 12 feet	11/03/22	51	JAS, 38
52	MTF	13 min at 8 ft		>2 mins at 12 feet	11/03/22	52	JAS, 38
53	MTF	>30 min at 5 ft	29 min at 8 ft	>2 mins at 12 feet	11/03/22	53	JAS, 38
54	DT	6 min at 7 ft	8 min at 11 ft	>2 mins at 15 feet	11/03/22	54	JAS, 38
55	TZ			>2 mins at 12 feet	02/17/23	55	38
Α	ОН			suitable soil to 10 ft	03/29/19	A	38
В	ОН			>50% rock 5 ft - 9ft	04/12/19	В	38
С	DT	12 min at 5 ft.	7 min at 8 ft.	>2 min at 12ft	04/12/19	С	38
C	DT	8 min at 4 ft		see info above	11/03/22	С	JAS, 38
D	DT	7 min at 5 ft.	5 min at 8 ft.	>2 min at 12 ft	04/12/19	D	38
D	DT	>30 min at 4 ft		pulled at 3 feet, see info above	11/03/22	D	JAS, 38
E	DT	3 min at 5 ft.	6 min at 8 ft.	>2 min at 12 ft	04/12/19	E	38
E	DT	15 min at 3 ft.		see info above	11/03/22	E	JAS, 38
F	OH			suitable soil to 12 ft	04/12/19	F	38
F	TZ			>2 mins at 12 feet	11/03/22	F	JAS, 38
G	OH			>50% rock 4 ft - 9 ft	04/12/19		38

DATA BLOCK

800

4' BELOW GRADE

DISTRIBUTION

- ZONING DISTRICT AGRICULTURAL
 SOILS SHOWN ARE FROM THE NRCS COUNTY SOILS DATA
- 3. NUMBER OF BUILDING SITES 1 4. TOTAL AREA OF SITE - 18. 2764 AC.

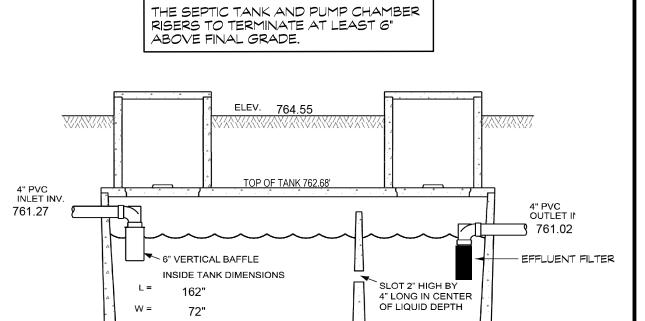
GENERAL NOTES

- 1. CURRENT TITLE REFERENCE: P. 518
- OWNER: STEVEN BUCHMAN HEIRD
 DEED REFERENCE: LIBER 1 1099, FOLIO 439
 DATE: AUGUST 23, 2023
 GRANTOR: STEVEN BUCHMAN HEIRD
- 2. THE OUTLINE SHOWN HEREON IS BASED ON A DEED ONLY
- 3. THE TOPOGRAPHY SHOWN HEREON IS AERIAL TOPOGRAPHY PERFORMED BY COUNTY SURVEYORS IN 20 10 AND CARROLL COUNTY LIDAR PRODUCTS AND MAY NOT BE A SUITABLE SUBSTITUTE FOR A FIELD RUN SURVEY. CARROLL COUNTY DOES NOT
- WARRANT ITS ACCURACY FOR ANY PURPOSE.

 4. NEAREST POTABLE WATER SUPPLY- HAMPSTEAD,

 2.0 MILES
- 5. WATER AND SEWER SERVICE- NO PLANNED SERVICE
 6. MBL DENOTES MINIMUM BUILDING LINE.
- 6. MBL DENOTES MINIMUM BUILDING LINE.

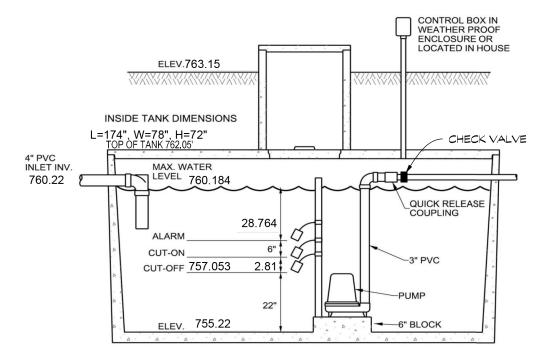
 7. THERE ARE NO WELLS OR SEPTICS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS OTHERWISE SHOWN HEREON.



3000 GALLON SEPTIC TANK NOT TO SCALE

H =

INLET COMPARTMENT - 2/3 CAPACITY



3500 GALLON PUMP TANK

NOTE:

A PERCOLATION TEST IS ONLY ONE OF THE CRITERIA USED IN CONSIDERING A LOT FOR INSTALLATION OF A SEPTIC SYSTEM. ADDITIONAL TESTING CAN BE REQUIRED AND MAY BE SUBJECT TO SCHEDULING DURING THE WET WEATHER PERIOD. THE ENTIRE LOT IS EVALUATED WHEN APPLICATION FOR A SEPTIC PERMIT IS MADE. ADJOINING PROPERTY HISTORY, PERCOLATION TEST METHODOLOGY, ADJOINING WELLS AND SEPTIC SYSTEMS, PROPOSED NUMBER OF BEDROOMS, HISTORY OF FAILING SEPTIC SYSTEMS AND WELLS, DESIGN, SOIL AND GEOLOGICAL CONDITIONS, AND TOPOGRAPHY IN THE IMMEDIATE AREA ARE THEN USED TO DETERMINE IF THE LOT IS SUITABLE FOR THE UNDERGROUND DISPOSAL OF SEWAGE.

NOTE:

IF GRAVITY FLOW TO THE SEWAGE DISPOSAL AREA CANNOT BE ENSURED A PUMPED SEWAGE DISPOSAL SYSTEM WILL BE REQUIRED FOR LOTS.

TAX MAP 47 * BLOCK 12 * PARCEL: 518

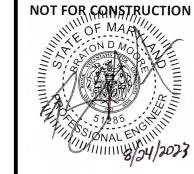


8th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND

CONSTRUCTION

F MARYLAND

Engineers · Surveyors



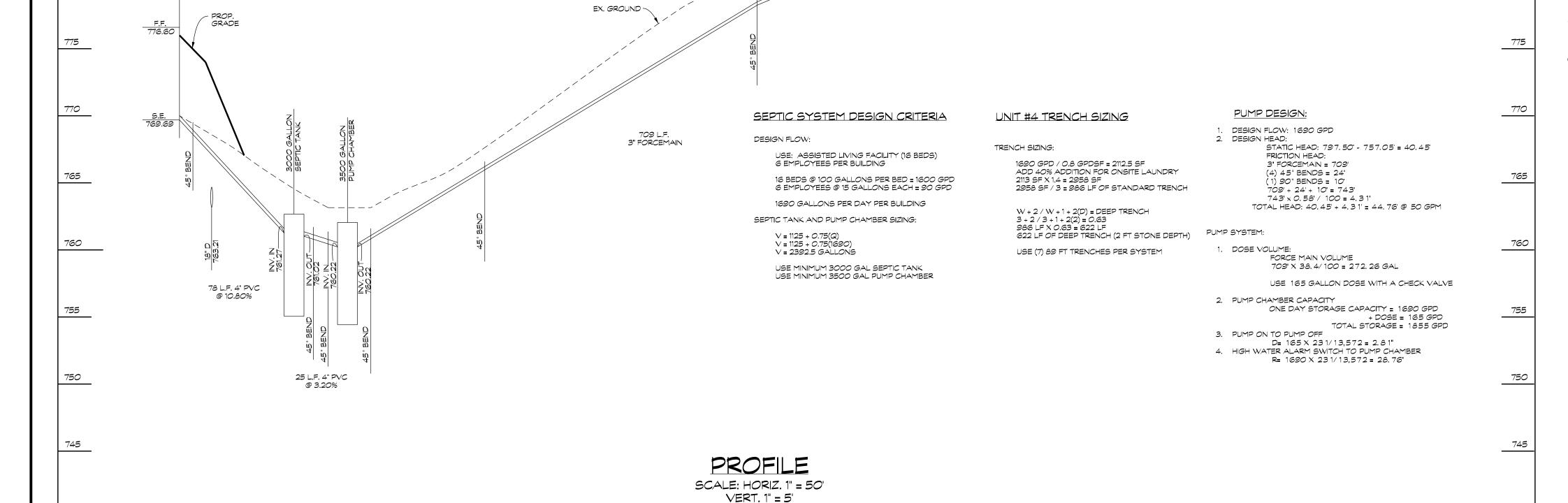


Braton D. Moore, P.E. (410) 848-1790 FAX (410) 848-1791

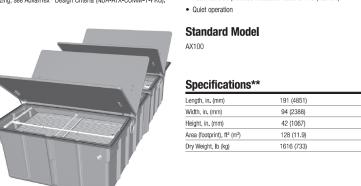
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023

Date	Revisions	Drawn By:	MS, BM
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed By	: MS
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed By	: MS
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	N.T.S.
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	2005186C
		Sheet: 28	3 of 31









Nominal values provided. See AdvanTex® Treatment System drawings for exact dimensions

Where applicable, flow meters are recommended for flow monitoring and For detailed drawings and information, contact Orenco Systems, Inc. For assistance on maximizing nitrogen reduction, contact Orenco Systems, Inc.

ADVANTEX AX-100 PRETREATMENT UNIT

SEPTIC SYSTEM DESIGN CRITERIA

USE: ASSISTED LIVING FACILITY (16 BEDS) 6 EMPLOYEES PER BUILDING 16 BEDS @ 100 GALLONS PER BED = 1600 GPD 6 EMPLOYEES @ 15 GALLONS EACH = 90 GPD

1690 GALLONS PER DAY PER BUILDING SEPTIC TANK AND PUMP CHAMBER SIZING:

V = 1125 + 0.75(Q) V = 1125 + 0.75(1690) V = 2392.5 GALLONS

> USE MINIMUM 3000 GAL SEPTIC TANK USE MINIMUM 3500 GAL PUMP CHAMBER

UNIT #5 TRENCH SIZING

TRENCH SIZING FOR INITIAL AND FIRST REPLACEMENT: 1690 GPD / 0.8 GPDSF = 2112.5 SF ADD 40% ADDITION FOR ONSITE LAUNDRY

2113 SF \times 1.4 = 2958 SF 2958 SF / 3 = 986 LF OF STANDARD TRENCH W + 2 / W + 1 + 2(D) = DEEP TRENCH

3 + 2 / 3 + 1 + 2(4) = 0.42 986 LF X 0.42 = 415 LF 415 LF OF DEEP TRENCH (4 FT STONE DEPTH) USE (5) 83 FT TRENCHES PER SYSTEM

TRENCH SIZING FOR SECOND REPLACEMENT SYSTEM: 1690 GPD / 0.6 GPDSF = 2817 SF ADD 40% ADDITION FOR ONSITE LAUNDRY 2817 SF X 1.4 = 3944 SF 3944 SF / 3 = 1315 LF OF STANDARD TRENCH USE (14) 94 FT TRENCHES PER SYSTEM

<u>PUMP DESIGN:</u>

. DESIGN FLOW: 1690 GPD

2. DESIGN HEAD: STATIC HEAD: 800.5' - 776.77' = 23.73' FRICTION HEAD: 3" FORCEMAIN = 44 1" 1) 45° BENDS = 6' 1) 90° BENDS = 10' 441 + 6 + 10 = 457 457 × 0.58 / 100 = 2.65 TOTAL HEAD: 23.73 + 2.65 = 26.38 @ 50 GPM

PUMP SYSTEM:

FORCE MAIN VOLUME 44 1' X 38.4/ 100 = 169.34 GAL

ONE DAY STORAGE CAPACITY = 1690 GPD

3. PUMP ON TO PUMP OFF D= 165 X 23 1/13,572 = 2.8 1"

DOSE VOLUME:

USE 165 GALLON DOSE WITH A CHECK VALVE

2. PUMP CHAMBER CAPACITY + DOSE = 165 GPD

TOTAL STORAGE = 1855 GPD

4. HIGH WATER ALARM SWITCH TO PUMP CHAMBER R= 1690 X 23 1/13,572 = 28.76"

SUBDIVISION/SITE Heird Property - Asst. Living

>50% rock at 7.5 ft

>50% rock at 8 feet

suitable soil to 12 ft

suitable soil to 12 f

uitable soil to 10 f

suitable soil to 12 f

suitable soil to 12 ft

sutiable soil to 10 f

>2 mins at 15 feet

>2 mins at 12 feet

>2 mins at 12 feet

suitable soil to 10 ft

>50% rock 5 ft - 9f

pulled at 3 feet, see info above

ft. >2 min at 12 ft

ft. >2 min at 12 ft

see info above suitable soil to 12 ft >2 mins at 12 feet

>50% rock 4 ft - 9 ft

>50% rock at 8 feet

suitable soil to 12 ft

ft. >2 min at 11 ft

ft. suitable soil to 12 ft

>50% rock 5ft-9ft

5 min at 8 ft. >2 min at 12 ft

4 min at 6 ft. > 2 min at 10 ft

11 min at 7 ft. >2 min at 11 ft

5 min at 6 ft >2 min at 10 ft

5 min at 6 ft. >2 min at 10 ft

7 min at 6 ft >2 min at 10 ft

11 min at 8 ft >2 mins at 12 feet

29 min at 8 ft >2 mins at 12 feet

8 min at 11 ft >2 mins at 15 feet

7 min at 8 ft. >2 min at 12ft

3 min at

7 min at 7

Test # Test Type Percolation Rate Percolation Rate

2 min at 5 ft.

7 min at 4 ft

5 min at 4 ft.

7 min at 4 ft.

24 min at 3 ft

13 min at 8 ft

>30 min at 5 ft

12 min at 5 ft.

8 min at 4 7 min at 5

>30 min at 4

3 min at 5

15 min at 3

805

6 min at 7 ft

22 min at 3 ft

- > TANK MEASUREMENTS AND ELEVATIONS ARE BASED ON PUMP CHAMBERS AS MANUFACTURED BY MONARCH PRODUCTS
- COMPANY, INC. (717)-938-8303

Date Test# San.

04/12/19 34 11/03/22 34

04/12/19

03/29/19 39

03/29/19 40

03/29/19 41

03/29/19 42

03/29/19 44

03/29/19 45

03/29/19 46

03/29/19 48

03/29/19 A

04/12/19 B

04/12/19 C

JAS, 388

JAS, 388

JAS, 388

JAS, 388

03/29/19

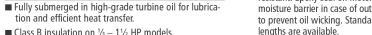
> A SUBMERSIBLE PUMP TO REMOVE 50.00 GPM AGAINST 26.38' TDH TO BE PROVIDED. PUMP TO BE A GOULDS MODEL

PUMP CHAMBER SIZE AND FLOATS BASED ON GOULDS WE SERIES SUBMERSIBLE PUMP. IF A PUMP SUBSTITUTION OCCURS, CHAMBER SIZE AND FLOATS WILL NEED TO BE RECALCULATED TO ENSURE THAT PUMP IS

SPECIFICATIONS:

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- TO BE HEAVY DUTY / TRAFFIC BEARING > ALL PIPING TO BE SCHEDULE 40 PVC OF SIZES SHOWN
- 3885-WE-07H. OR EQUAL.
- > ALARM TO BE LOCATED AT THE HOUSE ON CIRCUIT SEPARATE FROM

COVERED.



tion and efficient heat transfer. ■ Class B insulation on $\frac{1}{3} - \frac{1}{2}$ HP models.

104°F (40°C) continuous, 140°F (60°C) intermittent.

See order numbers on reverse side for specific HP,

Specifically designed for the following uses:

Hospitals, Industry, Effluent Systems

Solids handling capabilities: ³/₄" maximum

SPECIFICATIONS

Temperature:

Discharge size: 2" NPT.

Capacities: up to 140 GPM.

Total heads: up to 128 feet TDH.

voltage, phase and RPM's available.

Homes, Farms, Trailer Courts, Motels, Schools,

■ Class F insulation on 2 HP models.

 Capacitor start motors for maximum starting torque. Built-in overload with automatic reset. SJTOW or STOW severe duty oil and water resistant

Single phase (60 Hz):



• ⅓ – 1 HP models have NEMA three prong grounding 1½ HP and larger units have bare lead cord ends.

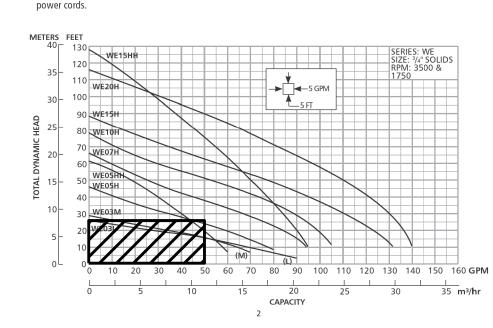
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within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged. ■ Bearings: Upper and lower heavy duty ball bearing

■ Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available. ■ O-ring: Assures positive sealing against contaminant

and oil leakage. **AGENCY LISTINGS**

Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR38549
Goulds Pumps is ISO 9001 Registered.



DATA BLOCK

- 1. ZONING DISTRICT AGRICULTURAL 2. SOILS SHOWN ARE FROM THE NRCS
- COUNTY SOILS DATA
- 3. NUMBER OF BUILDING SITES 1 4. TOTAL AREA OF SITE - 18. 2764 AC.

GENERAL NOTES

1. CURRENT TITLE REFERENCE: P.518

OWNER: STEVEN BUCHMAN HEIRD DEED REFERENCE: LIBER 11099, FOLIO 439 DATE: AUGUST 23, 2023

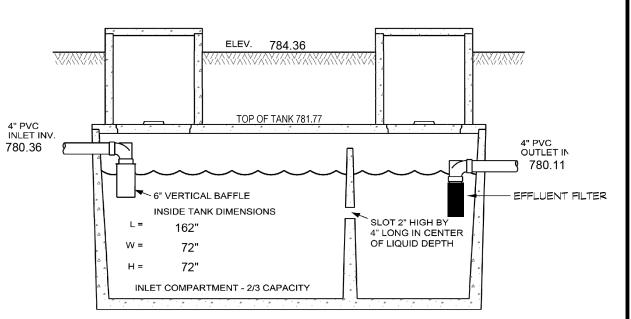
GRANTOR: STEVEN BUCHMAN HEIRD 2. THE OUTLINE SHOWN HEREON IS BASED ON A DEED ONLY

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4. NEAREST POTABLE WATER SUPPLY- HAMPSTEAD, 2.0 MILES

OTHERWISE SHOWN HEREON.

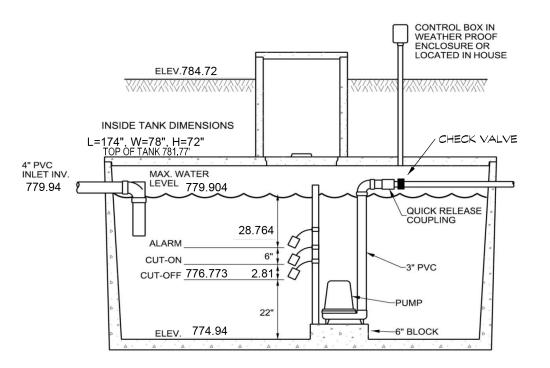
5. WATER AND SEWER SERVICE- NO PLANNED SERVICE 6. MBL DENOTES MINIMUM BUILDING LINE. 7. THERE ARE NO WELLS OR SEPTICS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARY UNLESS



THE SEPTIC TANK AND PUMP CHAMBER RISERS TO TERMINATE AT LEAST 6"

ABOVE FINAL GRADE.

3000 GALLON SEPTIC TANK



3500 GALLON PUMP TANK

NOTE:

A PERCOLATION TEST IS ONLY ONE OF THE CRITERIA USED IN CONSIDERING A LOT FOR INSTALLATION OF A SEPTIC SYSTEM ADDITIONAL TESTING CAN BE REQUIRED AND MAY BE SUBJECT TO SCHEDULING DURING THE WET WEATHER PERIOD. THE ENTIRE LOT IS EVALUATED WHEN APPLICATION FOR A SEPTIC PERMIT IS MADE. ADJOINING PROPERTY HISTORY, PERCOLATION TEST METHODOLOGY, ADJOINING WELLS AND SEPTIC SYSTEMS PROPOSED NUMBER OF BEDROOMS, HISTORY OF FAILING SEPTIC SYSTEMS AND WELLS, DESIGN, SOIL AND GEOLOGICAL CONDITIONS, AND TOPOGRAPHY IN THE IMMEDIATE AREA ARE THEN USED TO DETERMINE IF THE LOT IS SUITABLE FOR THE UNDERGROUND DISPOSAL OF SEWAGE.

IF GRAVITY FLOW TO THE SEWAGE DISPOSAL AREA CANNOT BE ENSURED A PUMPED SEWAGE DISPOSAL SYSTEM WILL BE REQUIRED FOR LOTS.

TAX MAP 47 * BLOCK 12 * PARCEL: 518

UNIT #5 - SEPTIC NOTES AND DETAILS FINAL SITE PLAN FOR AN ASSISTED LIVING FACILITY ON THE REMAINING PORTION OF





(4 10) 848-1790 FAX (4 10) 848-179 1 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 51285. EXPIRATION DATE: DECEMBER 7, 2023

MARYLAND. LICENSE NO. 51285, EXPIRATION DATE: DECEMBER 7, 2023					
Date	Revisions	Drawn By:	MS, BM		
1/16/23	ADDED SEPTIC CALCULATIONS AND PERC TEST RESULTS	Designed E	By: MS		
1/3 1/23	REVISED PER C.C. COMMENTS	Reviewed B	By: MS		
2/24/23	REVISED TO INCLUDE SEPTIC PLAN FOR PROPOSED UNITS	Date:	SEPT., 2022		
4/10/23	REVISED TO INCLUDE AFFORESTATION AREA AND PLANTING NOTES & DETAILS	Scale:	N.T.S.		
8/24/23	REVISED TO REFLECT UPDATED DEED	Job No.:	20051860		

T----800 800.50 800 DISTRIBUTION *79*5 GRADE EX. GROUND ~ 790 785 785.30 780 3" FORCEMAIN 40 L.F. 4" PVC @ 3.20% @ 3.40% SCALE: HORIZ. 1" = 50" VERT. 1" = 5' 765

OWNER/DEVELOPER STEVEN BUCHMAN HEIRD 4570 LIST ROAD RED LION, PA 17356 (717) 741-2214

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