PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

2520 MILL ROAD TOWNHOMES

UPPER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

POST-CONSTRUCTION STORMWATER MANAGEMENT (PSCM) PLAN OPERATION, OWNERSHIP AND MAINTENANCE PROGRAM

THE STORM WATER BEST MANAGEMENT PRACTICES (BMPS) CONSTRUCTED FOR 2520 MILL ROAD LAND DEVELOPMENT PLAN WILL BE MAINTAINED TO FUNCTION AS DESIGNED AND SHALL IMPLEMENT THE PROCEDURES DESCRIBED BELOW. THIS SHALL BE IN THE DEED OF THE LOT WHENEVER THE LOT IS SOLD TO ANOTHER. THE OWNER OF THE LOT SHALL OWN AND MAINTAIN THE STORMWATER FACILITIES WITHIN THE LOT.

THE APPROVED FACILITIES ARE TO BE PERMANENT AND CAN ONLY BE REMOVED OR ALTERED AFTER APPROVAL BY ONE OR MORE OF THE FOLLOWING ENTITIES WHICH HAVE JURISDICTION: UPPER ALLEN TOWNSHIP; CUMBERLAND COUNTY CONSERVATION DISTRICT, AND/OR PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PA DEP).

THE FOLLOWING PHYSICAL FACILITIES SHALL BE MAINTAINED TO THE ORIGINAL DESIGN AND DIMENSIONS SHOWN ON THE DESIGN PLANS APPROVED BY UPPER ALLEN TOWNSHIP, UNTIL SUCH TIME AS AN AMENDED PLAN IS APPROVED BY THE TOWNSHIP:
-- STORMWATER INLETS, CONVEYANCE PIPES AND OUTLET CONTROLS
-- STORMWATER PIPE OUTLETS
-- STORMWATER INFILTRATION BASINS
-- SOIL AMENDMENT AREA FOR BASIN FLOOR

INSPECTION REQUIREMENTS FOR ALL FACILITIES:

- THE OWNER SHALL COMPLETE A VISUAL INSPECTION OF THE FACILITIES AT A MINIMUM ONCE EVERY 12 MONTHS FOR THE FIRST FIVE YEAR AND ONCE EVERY THREE YEARS THEREAFTER OR DURING OR IMMEDIATELY AFTER THE CESSATION OF A MAJOR STORM EVENT.
- THE OWNER IS RESPONSIBLE TO SUBMIT A REPORT TO UPPER ALLEN TOWNSHIP WITHIN ONE MONTH FOLLOWING COMPLETION OF AN INSPECTION. THE REPORT WILL PRESENT DOCUMENTATION REGARDING THE CONDITION OF BMPS, AND RECOMMEND ANY NECESSARY REPAIRS. ANY NEEDED REPAIRS SHALL COMMENCE WITHIN 60 DAYS OF THE REPORT ISSUANCE DATE.
- THE OWNER SHALL IMMEDIATELY NOTIFY UPPER ALLEN TOWNSHIP PRIOR TO INITIATING ANY "MAJOR" REPAIR ACTIVITIES (SUCH REPAIRS THAT MAY BE REQUIRED AS A RESULT OF SETTLEMENT, SINKHOLES, SEEPS, STRUCTURAL CRACKING, FOUNDATION MOVEMENT). ALL "MAJOR" REPAIRS SHALL BE CONDUCTED UNDER THE DIRECTION AND SUPERVISION OF A QUALIFIED ENGINEER, GEOLOGIST, AND/OR HYDROGEOLOGIST.

INSPECTION AND MAINTENANCE PROCEDURES FOR EACH FACILITY SHALL BE CONDUCTED AS FOLLOWS:

1. STORMWATER INLETS, DETENTION AND CONVEYANCE PIPES AND OUTLET CONTROLS

GENERAL OBJECTIVES OF INSPECTION AND MAINTENANCE IS TO PREVENT CLOGGING OF INLET GRATES, PIPES AND OUTLET CONTROL ORIFICES, OVER ACCUMULATION OF SEDIMENT WITHIN PIPES, INLETS AND MANHOLES, STANDING WATER AND STRUCTURAL FAILURE.

INSPECTION PROCEDURES:

- INSPECTION SHALL INVOLVE AN EXAMINATION OF ON-LOT STORMWATER MANAGEMENT SYSTEM(S) FOR DEBRIS DEPOSITION (SUCH DEBRIS MAY INCLUDE, BUT SHALL NOT BE LIMITED TO AGGREGATE MATERIAL, LEAVES, GRASS CLIPPINGS, AND SOIL MATERIAL), SETTLEMENT, SINKHOLES, SEEPS, AND STRUCTURAL CRACKING.
- INSPECT ALL PIPE INLETS AND OUTLETS AND OUTLET CONTROL ORIFICES WITHIN THE INLET AND MANHOLES BOXES. ALSO INSPECT ALL INLET GRATES. ANY TRASH, DEBRIS OR SEDIMENT WHICH MAY CAUSE CLOGGING OR STANDING WATER SHALL BE REMOVED.
- INSPECT GENERAL CONDITION OF INLETS AND MANHOLES FOR CRACKING OF CONCRETE OR SETTLING.
- INSPECT PIPE CONNECTIONS WITHIN INLET AND MANHOLE BOXES FOR PIPES DISPLACEMENT.
- INSPECT AREAS ON THE GROUND SURFACE FOR ASPHALT SETTLING OVER PIPES.

2. STORMWATER PIPE OUTLETS

GENERAL OBJECTIVES OF INSPECTION AND MAINTENANCE IS TO PREVENT EROSION AND SEDIMENTATION IMMEDIATELY DOWN-SLOPE OF PIPE OUTLETS.

INSPECTION PROCEDURES:

- INSPECT ALL PIPE OUTLETS. ANY TRASH, DEBRIS OR SEDIMENT WHICH MAY CAUSE CLOGGING OR BACK UP OF WATER WITHIN THE PIPE SHALL BE REMOVED.
- INSPECT GENERAL CONDITION OF ENDWALLS FOR CRACKING OF CONCRETE OR SETTLING.
- INSPECT AREA DOWN-SLOPE OF PIPE FOR EROSION OR SETTLING OF GROUND SURFACE OR DISPLACEMENT OF STONE FROM THE ROCK APRON.

3. STORMWATER INFILTRATION BASIN:

GENERAL OBJECTIVES OF INSPECTION AND MAINTENANCE IS TO PREVENT LONG TERM STANDING WATER AFTER RAINFALL EVENTS, PREVENT WEEDS AND NOXIOUS PLANTS. ALSO, CONDUCT INSPECTION AND MAINTENANCE PROCEDURES FOR INLETS AND OUTFLOW PIPES WITHIN THE BASINS AS OUTLINED ABOVE WITHIN THE "STORMWATER INLETS, DETENTION AND CONVEYANCE PIPES AND OUTLET CONTROLS" SECTION.

INSPECTION PROCEDURES:

- INSPECT FACILITIES AFTER MAJOR RAINFALL EVENTS FOR STANDING WATER WHICH REMAINS IN THE BASIN FOR OVER TWO (2) DAYS.
- INSPECT CONDITION OF GRASS COVER. GRASSES WITHIN THE FLOOR OF THE FACILITY SHOULD BE DENSE AND MAINTAINED AT A MINIMUM LENGTH OF 6" AND MAXIMUM LENGTH OF 12". THE EXISTENCE OF INVASIVE SPECIES SHOULD BE MINIMAL.
- INSPECT FLOOR OF FACILITY FOR THE EXISTENCE OF GROUND SETTLING OR SINKHOLES.
- INSPECT FOR THE PRESENCE OF TRASH, DEBRIS OR SEDIMENT.

4. SOIL AMENDMENT AREA FOR BASIN FLOOR AREA:

- YEAR 1: FIRST GROWING SEASON MAINTENANCE
- WHENEVER CANOPY HEIGHT (OVERALL VEGETATION) REACHES 18"-24", USE A STRING TRIMMER TO TRIM THE BASIN FLOOR AND SWALE TO A HEIGHT OF 8". A LAWN MOWER IS NOT RECOMMENDED FOR TRIMMING AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS WILL BE KILLED. TRIMMING SHOULD CEASE BY MID-SEPTEMBER.
- PROBLEM WEEDS SHOULD BE HAND PULLED OR SPOT SPRAYED WITH AN APPROVED HERBICIDE, SUCH AS RODEO.
- YEAR 2: SECOND & SUBSEQUENT GROWING SEASON MAINTENANCE
- PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2", STRING TRIM ANY MATERIAL STANDING FROM PREVIOUS YEAR CLOSE TO THE GROUND. IF MIX CONTAINS SEDGES, TRIMMING SHALL BE NO LOWER THAN 2" ABOVE THE CROWNS THAT PRODUCED THE PRIOR YEARS GROWTH.
- IF A HEAVY INFESTATION OF RAGWEED OR FOXTAIL IN THE SECOND GROWING SEASON IS NOTICED, TRIM PLANT MATERIAL TO A HEIGHT OF 8".
- MAINTAIN GROUNDCOVER VEGETATION. STRING TRIM VEGETATION TO ENSURE SAFETY, AESTHETICS, PROPER SWALE OPERATION, AND TO SUPPRESS WEEDS AND INVASIVE / EXOTIC VEGETATION. STRING TRIM ONLY WHEN DRY, TO AVOID SOIL COMPACTION.
- FOR ANY EROSION, RILLS AND GULLIES, CORRECT AS NEEDED. RE-VEGETATE AND REPAIR AREAS IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN THE APPLICABLE EROSION AND SEDIMENT POLLUTION CONTROL PLAN; AND IMMEDIATELY REPAIR ANY EROSION DAMAGE BY REPLACING TOPSOIL ON ALL AREAS THAT EXPERIENCE MINOR EROSION, AND SEEDING, MULCHING AND MATTING SUCH AREAS IMMEDIATELY IN ACCORDANCE WITH THE SPECIFICATIONS CONTAINED IN THE APPLICABLE EROSION AND SEDIMENT POLLUTION CONTROL PLAN.

GENERAL PROVISIONS:

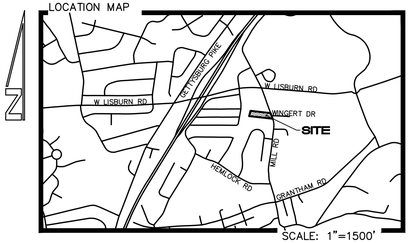
- A WRITTEN REPORT DOCUMENTING EACH INSPECTION SHALL BE RETAINED BY THE DESIGNEE, INCLUDING DATES OF INSPECTION, DATES OF REPAIR, LIST OF ITEMS INSPECTED, LIST OF ITEMS REPAIRED, LIST OF ITEMS REPLACED, COSTS OF REPLACED ITEMS, LIST OF MAINTENANCE TASKS PERFORMED, NAME AND ORGANIZATION OF THE PERSON CONDUCTING THE INSPECTION, AND THE CONTRACTOR(S) INFORMATION.
- THE OWNER SHALL COMPLETE A VISUAL INSPECTION OF THE FACILITIES AT A MINIMUM ONCE EVERY 12 MONTHS FOR THE FIRST FIVE YEAR AND ONCE EVERY THREE YEARS THEREAFTER OR DURING OR IMMEDIATELY AFTER THE CESSATION OF A MAJOR STORM EVENT.
- THE OWNER IS RESPONSIBLE TO SUBMIT A REPORT TO UPPER ALLEN TOWNSHIP WITHIN ONE MONTH FOLLOWING COMPLETION OF AN INSPECTION. THE REPORT WILL PRESENT DOCUMENTATION REGARDING THE CONDITION OF BMPS, AND RECOMMEND ANY NECESSARY REPAIRS. ANY NEEDED REPAIRS SHALL COMMENCE WITHIN 60 DAYS OF THE REPORT ISSUANCE DATE.
- FOR ANY STRUCTURAL FACILITY (PIPE, INLET, MANHOLE), IT MUST BE REPAIRED OR REPLACED IF DAMAGED MORE THAN SUPERFICIALLY, IN A WAY THAT IS A SAFETY HAZARD, IF STRUCTURALLY UNSOUND, OR IF NOT SUBSTANTIALLY PERFORMING AS IT IS INTENDED PER THE ORIGINAL DESIGN.
- THE OWNER SHALL IMMEDIATELY NOTIFY UPPER ALLEN TOWNSHIP PRIOR TO INITIATING ANY "MAJOR" REPAIR ACTIVITIES (SUCH REPAIRS THAT MAY BE REQUIRED AS A RESULT OF SETTLEMENT, SINKHOLES, SEEPS, STRUCTURAL CRACKING, FOUNDATION MOVEMENT). ALL "MAJOR" REPAIRS SHALL BE CONDUCTED UNDER THE DIRECTION AND SUPERVISION OF A QUALIFIED ENGINEER, GEOLOGIST, AND/OR HYDROGEOLOGIST.
- ALL IMPERVIOUS SURFACES SHALL BE MAINTAINED CLEAN OF OIL, FUEL OR OTHER TOXIC SPILLS, IN ACCORDANCE WITH STATE, FEDERAL OR LOCAL REGULATIONS.
- UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY CONSERVATION DISTRICT, AND/OR PA DEP SHALL HAVE THE RIGHT TO:
  a. INSPECT THE FACILITIES AT ANY TIME;
  b. REQUIRE THE OWNER(S) TO TAKE CORRECTIVE MEASURES, AND ASSIGN THE OWNER(S) REASONABLE TIME PERIODS FOR ANY NECESSARY ACTION; AND
  c. AUTHORIZE MAINTENANCE TO BE DONE BY THE TOWNSHIP OR AN AGENT OR CONTRACTOR OF THE TOWNSHIP, AND THE LIENING OF THE COST OF THE WORK AGAINST THE PROPERTIES OF THE PRIVATE ENTITY RESPONSIBLE FOR THE MAINTENANCE.

NOTE: ALL AREAS PROPOSED FOR INFILTRATION BMP'S SHALL BE PROTECTED FROM SEDIMENTATION AND COMPACTION DURING THE CONSTRUCTION PHASE TO MAINTAIN THEIR MAXIMUM INFILTRATION CAPACITY.

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAN IS THE LAND DEVELOPMENT OF SIX TOWNHOME UNITS (SINGLE-FAMILY ATTACHED) AND A STORAGE BUILDING WITH ASSOCIATED PARKING AND STORMWATER IMPROVEMENTS. THERE IS NO SUBDIVISION PROPOSED WITH THIS PLAN.
2. NO LANDS OR FACILITIES ARE PROPOSED FOR DEDICATION TO PUBLIC USE. STORMWATER FACILITIES SHALL BE OWNED AND MAINTAINED BY THE OWNER OF THE LOT; SEE THE DETAILED OPERATION AND MAINTENANCE PROGRAM ON THIS SHEET.
3. NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN THE AREA OF AN EASEMENT OR PLANTING STRIP THAT WOULD ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT OR PLANTING STRIP OR CONFLICT WITH AN EASEMENT AGREEMENT. NO STRUCTURES SHALL BE PLACED IN ANY EASEMENT OR PLANTING STRIP UNLESS OTHERWISE NOTED IN AN AGREEMENT.
4. NO PARKING IS PERMITTED ALONG ACCESS DRIVES.
5. THIS PROJECT SHALL BE COMPLETED IN ONE PHASE.
6. NO PROTECTIVE COVENANTS ARE PROPOSED WITH THIS PLAN.
7. STORMWATER MANAGEMENT PLANS APPROVED BY THE TOWNSHIP SHALL BE ON THE SITE THROUGHOUT THE DURATION OF THE REGULATED CONSTRUCTION ACTIVITY. A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND ANY REQUIRED PERMITS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
8. SANITARY SEWER PLANS AND PROFILES AND AS-BUILT DRAWINGS SHALL BE BASED ON A HORIZONTAL DATUM OF NAD 83 PA SOUTH GRID (3702) AND A VERTICAL DATUM OF NAVD 88.
9. BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED UPON A FIELD SURVEY BY ALPHA CONSULTING ENGINEERS, INC. AS OF FEBRUARY 27, 2020.
10. UPPER ALLEN TOWNSHIP IS HEREBY GRANTED USE OF THE ACCESS DRIVES TO ACCESS DRAINAGE EASEMENTS FOR OBSERVATION, AND EMERGENCY MAINTENANCE.
11. THERE ARE NO WETLANDS, FLOODPLAIN/FLOODWAY, ROCK OUTCROPS, OR CONTAMINATED SOILS KNOWN TO EXIST ON THIS SITE.
12. WITHIN CLEAR SIGHT TRIANGLES SHOWN HEREON, NO FENCE, SIGN OR OTHER ABOVE GRADE STRUCTURE SHALL BE ERECTED, AND NO HEDGE, TREE, SHRUB OR OTHER GROWTH SHALL BE MAINTAINED OR PERMITTED WHICH MAY CAUSE DANGER TO TRAFFIC BY OBSCURING THE VIEW BETWEEN THREE FEET AND NINE FEET ABOVE THE GRADE OF THE STREET OR DRIVEWAY.
13. THE SITE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION SITE MEETING WITH THE UPPER ALLEN TOWNSHIP ENGINEER AND THE CUMBERLAND COUNTY CONSERVATION DISTRICT AT LEAST 48 HOURS PRIOR TO STARTING SITE CONSTRUCTION ACTIVITIES.
14. CONSTRUCTION OF ALL WORK RELATED TO STORM DRAINAGE REQUIRES INSPECTION BY THE TOWNSHIP. THE CONTRACTOR MUST PROVIDE MINIMUM 48 HOURS OF NOTICE TO THE TOWNSHIP BEFORE STARTING WORK.
15. AS-BUILT MYLAR PLANS AND ELECTRONIC DATA FILES SHALL BE PROVIDED TO THE TOWNSHIP. ALL DRAWINGS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR LAND SURVEYOR ATTESTING TO THE CORRECTNESS OF THE FACILITY INFORMATION SHOWN, IN ACCORDANCE WITH SECTION 220-4.2.C(3) OF THE CODIFIED ORDINANCES OF UPPER ALLEN TOWNSHIP.
16. ALL SANITARY SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR UPPER ALLEN TOWNSHIP, LATEST EDITION.
17. ANY PROPOSED SIGNS MUST BE IN ACCORDANCE WITH THE UPPER ALLEN TOWNSHIP ZONING ORDINANCE SECTION 245 OF ARTICLE XVIII. PROPOSED SIGNS WILL BE SUBMITTED WITH A SEPARATE APPLICATION.
18. THE CONTRACTOR SHALL REFERENCE FINAL ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS, UTILITY CONNECTIONS AND ELEVATIONS.
19. ALL ELEVATIONS ARE REFERENCED TO THE BENCHMARK SHOWN, AND SHALL BE VERIFIED BY THE SITE CONTRACTOR PRIOR TO GROUNDBREAKING. ALL PROPOSED ELEVATIONS SHOWN HEREIN REFER TO THE FINISH GROUND SURFACE.
20. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE SITE PRIOR TO CONSTRUCTION, AND BY DOING SO, SHALL BE RESPONSIBLE FOR ALL DIMENSIONS AT THE PROJECT SITE.
21. ALL PROPOSED SANITARY SEWER MAINS SHALL BE OFFERED FOR DEDICATION TO UPPER ALLEN TOWNSHIP. UPON COMPLETION OF THE SANITARY SEWER EXTENSION AND BEFORE RELEASE OF INSTALLATION FINANCIAL SECURITY AND BEFORE ACCEPTANCE OF MAINTENANCE FINANCIAL SECURITY, DEVELOPER MUST PREPARE A SEPARATE SANITARY SEWER DEED OF DEDICATION AND EASEMENT AGREEMENT (FOR SANITARY SEWERS TO BE LOCATED OUTSIDE OF TOWNSHIP RIGHTS-OF-WAY) FOR THE SANITARY SEWER EXTENSION FOR TOWNSHIP REVIEW, FOLLOWED BY RECORDING OF SAME BY THE DEVELOPER.

LOCATION MAP



SCALE: 1"=1500'

INDEX OF DRAWINGS :

DATE :
APRIL 30, 2021

REVISED :
JUNE 16, 2021
JULY 23, 2021
SEPTEMBER 14, 2021

ZONING REQUIREMENTS:

SITE IS ZONED R-2: MEDIUM DENSITY RESIDENTIAL

FOR SINGLE-FAMILY ATTACHED (TOWNHOUSE) USE:
MINIMUM LOT AREA: 2,000 SF / UNIT (PUBLIC WATER & SEWER)
MINIMUM FRONT YARD: 25 FEET
MINIMUM SIDE YARD: 10 FEET
MINIMUM REAR YARD: 15 FEET
MINIMUM STREET FRONTAGE: 20' INTERIOR, 35' EXTERIOR UNIT
MAXIMUM BUILDING COVERAGE: 30%
MAXIMUM IMPERVIOUS COVERAGE: 45%
MAXIMUM PRINCIPAL BUILDING HEIGHT: 35 FEET

SITE DATA:

1. APPLICANT:
   NEIDIG, INC.
   C/O RHONDA NEIDIG
   209 FAIRWAY DRIVE
   MECHANICSBURG, PA 17055
   PHONE: (717) 697-0269

   OWNER:
   RM DIGGER LLC
   2520 MILL ROAD
   MECHANICSBURG, PA 17-55
   SOURCE OF TITLE:
   INSTRUMENT # 201905061
2. TOTAL SITE AREA: 1.116 ACRES (48,625.05 SF)
3. SITE IS ZONED R-2: MEDIUM-DENSITY RESIDENTIAL
   (SEE SHEET 2 FOR ADJACENT ZONING)
4. THIS SITE IS IDENTIFIED BY THE CUMBERLAND COUNTY TAX ASSESSMENT OFFICE AS PARCELS 42-30-2110-010
5. CURRENT SITE ADDRESS IS 2520 MILL ROAD, MECHANICSBURG, PA 17055
6. EXISTING BUILDING COVERAGE: 0% (0 ACRES)
7. EXISTING IMPERVIOUS COVERAGE: 0.45% (0.005 ACRES)
8. PROPOSED BUILDING COVERAGE: 10.9% (5,232 SF)
9. PROPOSED IMPERVIOUS COVERAGE: 34.4% (16,728 SF)
10. PROPOSED LANDSCAPED AREA: 65.6%
11. PROPOSED BUILDING HEIGHT: 35 FEET
12. REQUIRED AND PROPOSED OFF-STREET PARKING:

    2 SPACES PER UNIT (6 x 2 = 12 SPACES)
    + 1 SPACE/4 UNITS FOR GUESTS (6 / 4 = 1.50 ; 2 SPACES)
    =14 SPACES REQUIRED

    EACH UNIT WILL HAVE:
    1 ONE-CAR GARAGE = 6 SPACES
    1 SPACE IN DRIVEWAY TO UNIT = 6 SPACES
    1 ADJACENT SPACE FOR PARKING = 6 SPACES
    PLUS 6 ADDITIONAL PARKING STALLS =24 SPACES PROVIDED
8. EXISTING WATER SUPPLY: PUBLIC (SUEZ WATER)
9. EXISTING SEWAGE DISPOSAL: PUBLIC (UPPER ALLEN TOWNSHIP)

THE FOLLOWING WAIVER IS REQUESTED FROM THE UPPER ALLEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

ORDINANCE SECTION	DESCRIPTION	DATE OF WAIVER / MODIFICATION REQUEST	BOARD OF COMMISSIONERS APPROVAL DATE
220-5.2.D(2)c	MINIMUM LENGTH OF VERTICAL CURVE SHALL BE 100 FEET	6/16/2021	7/21/2021

THE FOLLOWING DEFERRAL IS REQUESTED FROM THE UPPER ALLEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

ORDINANCE SECTION	DESCRIPTION	DATE OF WAIVER / MODIFICATION REQUEST	BOARD OF COMMISSIONERS APPROVAL DATE
220-5.3.B	REQUIRING SIDEWALKS ALONG MILL ROAD	7/21/2021	7/21/2021

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

PA ONE-CALL FOR THIS PROJECT:
SERIAL NUMBER: 20172983072

UTILITY LISTING FOR UPPER ALLEN TOWNSHIP:

- CABLE — COMCAST CABLE COMMUNICATIONS INC. 4601 SMITH ST. HARRISBURG, PA 17109 TELEPHONE: 717-651-1915
- ELECTRIC — PPL ELECTRIC UTILITIES 642 S 20TH ST. HARRISBURG, PA 17104-2222 TELEPHONE: 1-570-348-1509
- GAS — UGI UTILITIES INC. 1301 AIP DR. MIDDLETOWN, PA 17057-5987 TELEPHONE: 717-930-0223
- SANITARY SEWER — TOWNSHIP OF UPPER ALLEN 100 GETTYSBURG PIKE MECHANICSBURG, PA 17055 TELEPHONE: 717-766-0756
- TELEPHONE — VERIZON PENNSYLVANIA LLC 15 E MONTGOMERY AVE PITTSBURGH, PA 15212
- WATER SERVICE — SUEZ WATER 6310 ALLENTOWN BOULEVARD SUITE 104 HARRISBURG, PA 17112 TELEPHONE: (717) 564-3664

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

ON THIS, THE ___ DAY OF _____, 202__, BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED RHONDA NEIDIG, BEING OWNER OF THE PROPERTY, WHO BEING DULY SWORN ACCORDING TO LAW, DISPOSES AND SAYS THAT _____ IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT ITS DIRECTION, THAT IT ACKNOWLEDGES THE SAME TO BE ITS ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED, AND THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION") ARE HEREBY DEDICATED TO THE PUBLIC USE.

* _____

** _____

* SIGNATURE OF THE INDIVIDUAL

** SIGNATURE AND SEAL OF THE NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ACKNOWLEDGE DEEDS

MY COMMISSION EXPIRES _____, ____

I, JOHN K. MURPHY, P.E., P.L.S., HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, OR REGISTERED ENGINEER IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY IN AREA OF DEVELOPMENT COMPLETED BY ME ON FEB - MARCH 2020; THAT ALL THE MONUMENTS SHOWN THEREON ACTUALLY EXIST; AND THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

_____

I, JOHN K. MURPHY, P.E., P.L.S. ON _____ 20__,
HAVE REVIEWED AND HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE UPPER ALLEN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE, AND THAT ACCORDING TO GEOLOGIC MAPPING, THIS SITE IS UNDERLAIN BY KARST FEATURES.
I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN, AND THAT ALL ELEMENTS OF THE PLAN ARE IN CONFORMITY WITH TOWNSHIP CODE AND ANY APPLICABLE STATE REGULATIONS.

_____

CONDITIONALLY APPROVED BY THE BOARD OF COMMISSIONERS OF UPPER ALLEN TOWNSHIP THIS 21 DAY OF, JULY 2021.

CHAIRMAN _____

SECRETARY _____

THE CONDITIONS OF APPROVAL WERE SATISFIED
THIS _____ DAY OF, _____ 20__.

THIS PLAN RECOMMENDED FOR APPROVAL BY THE UPPER ALLEN TOWNSHIP PLANNING COMMISSION
THIS 24 DAY OF, MAY 2021.

CHAIRMAN _____

SECRETARY _____

STORMWATER MANAGEMENT PLAN CERTIFICATE:

IT IS HEREBY CERTIFIED THAT THE STORMWATER MANAGEMENT FACILITIES AND BMP'S ARE PERMANENT FIXTURES AND CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY UPPER ALLEN TOWNSHIP.

APPLICANT/OWNER _____

THIS PLAN REVIEWED BY THE TOWNSHIP ENGINEER OF UPPER ALLEN TOWNSHIP
THIS _____ DAY OF, _____ 20__.

ENGINEER _____

CUMBERLAND COUNTY PLANNING DEPARTMENT REVIEW STATEMENT:

REVIEWED ON MAY 14, 2021 BY THE CUMBERLAND COUNTY PLANNING DEPARTMENT.

_____
DIRECTOR OF PLANNING

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR CUMBERLAND COUNTY
THIS _____ DAY OF, _____ 20__.

RECORDED IN INSTRUMENT # _____

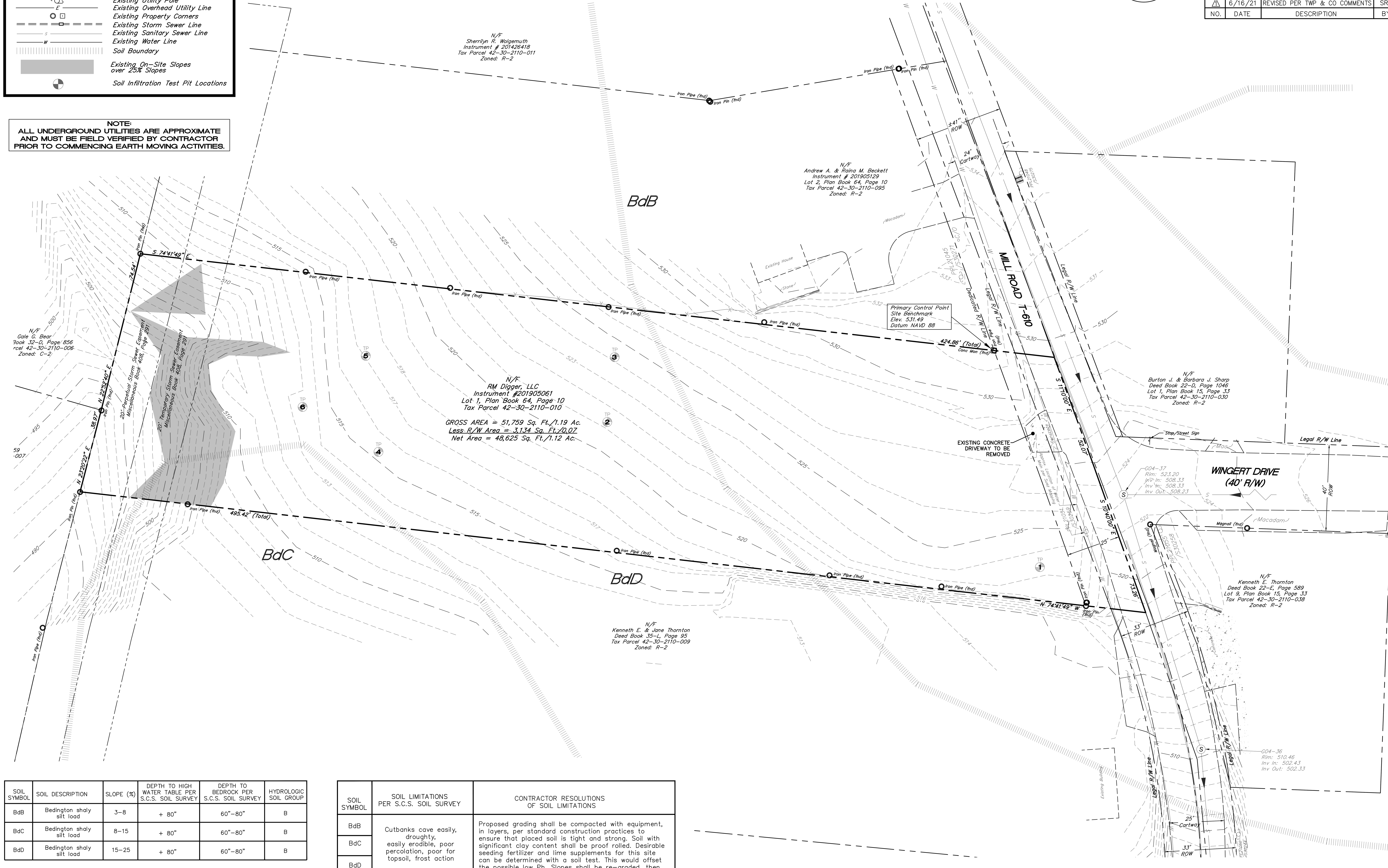
APPLICANT/DEVELOPER
NEIDIG, INC.
209 FAIRWAY DRIVE
MECHANICSBURG, PA 17055
PHONE: (717) 697-0269

ALPHA CONSULTING ENGINEERS, INC.
PLANNING • ENGINEERING • SURVEYING
115 LIMEKILN RD, P.O. BOX 'G'
NEW CUMBERLAND, PA 17070
PHONE: (717) 770 - 2500
FAX: (717) 770 - 2400
WWW.ALPHACEI.COM

LEGEND

- Existing Property Line
- Existing Easement
- Existing 5' Contour (175)
- Existing 1' Contour (171)
- Existing Curb
- Existing Edge Of Pave
- Existing Utility Pole
- Existing Overhead Utility Line (E)
- Existing Property Corners
- Existing Storm Sewer Line
- Existing Sanitary Sewer Line (S)
- Existing Water Line (W)
- Soil Boundary
- Existing On-Site Slopes over 25% Slopes
- Soil Infiltration Test Pit Locations

NOTE:
ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING EARTH MOVING ACTIVITIES.



SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	DEPTH TO HIGH WATER TABLE PER S.C.S. SOIL SURVEY	DEPTH TO BEDROCK PER S.C.S. SOIL SURVEY	HYDROLOGIC SOIL GROUP
BdB	Bedington shaly silt load	3–8	+ 80"	60"–80"	B
BdC	Bedington shaly silt load	8–15	+ 80"	60"–80"	B
BdD	Bedington shaly silt load	15–25	+ 80"	60"–80"	B

SOIL SYMBOL	SOIL LIMITATIONS PER S.C.S. SOIL SURVEY	CONTRACTOR RESOLUTIONS OF SOIL LIMITATIONS
BdB BdC BdD	Cutbanks cave easily, droughty, easily erodible, poor percolation, poor for topsoil, frost action	Proposed grading shall be compacted with equipment, in layers, per standard construction practices to ensure that placed soil is tight and strong. Soil with significant clay content shall be proof rolled. Desirable seeding fertilizer and lime supplements for this site can be determined with a soil test. This would offset the possible low Ph. Slopes shall be re-graded, then stabilized with topsoil, seed and mulch, and matted if steep. Topsoil can be imported from other sources, as it is readily available in the area.In general, there are no unusual site characteristics here that are unlike those found elsewhere in the region where similar soils are present. No special construction methods or procedures seem necessary.

NO.	DATE	DESCRIPTION	BY
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

ALPHA CONSULTING ENGINEERS, INC.
PLANNING•ENGINEERING•SURVEYING
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SEAL

SEAL

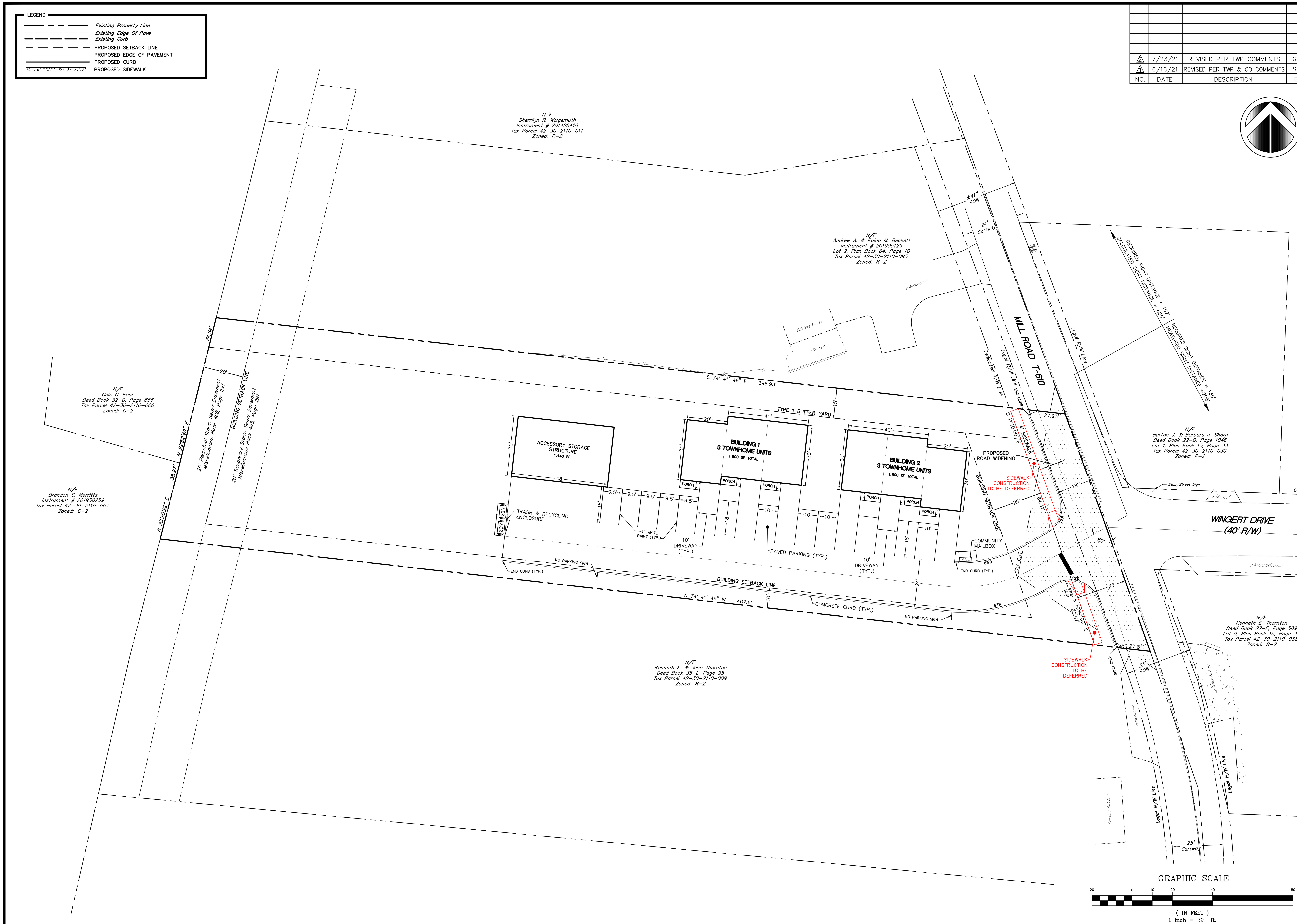
PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

EXISTING FEATURES PLAN

2520 MILL ROAD

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\02-EXISTING


LEGEND
Existing Property Line
Existing Edge Of Pave
Existing Curb
PROPOSED SETBACK LINE
PROPOSED EDGE OF PAVEMENT
PROPOSED CURB
PROPOSED SIDEWALK
N/F
Sherrilyn R. Wolgemuth
Instrument # 201426418
Tax Parcel 42-30-2110-011
Zoned: R-2
N/F
Andrew A. & Raina M. Beckett
Instrument # 201905129
Lot 2, Plan Book 64, Page 10
Tax Parcel 42-30-2110-095
Zoned: R-2
Macadam
Existing House
Stone
S 74° 41' 49" E 396.93'
15'
TYPE 1 BUFFER YARD
74.54'
20'
BUILDING SETBACK LINE
20' Perpetual Storm Sewer Easement
Miscellaneous Book 408, Page 291
20' Temporary Storm Sewer Easement
Miscellaneous Book 408, Page 291
N 22°52'40" E
38.97'
N 23°20'22" E
N/F
Gale G. Bear
Deed Book 32-D, Page 856
Tax Parcel 42-30-2110-006
Zoned: C-2
N/F
Brandon S. Merritts
Instrument # 201930259
Tax Parcel 42-30-2110-007
Zoned: C-2
ACCESSORY STORAGE STRUCTURE
1,440 SF
30'
48'
BUILDING 1
3 TOWNHOME UNITS
1,800 SF TOTAL
BUILDING 2
3 TOWNHOME UNITS
1,800 SF TOTAL
20'
40'
PORCH
9.5'
18'
10'
2CY
TRASH & RECYCLING ENCLOSURE
4" WHITE PAINT (TYP.)
10' DRIVEWAY (TYP.)
PAVED PARKING (TYP.)
24'
NO PARKING SIGN
END CURB (TYP.)
BUILDING SETBACK LINE
N 74° 41' 49" W 467.61'
CONCRETE CURB (TYP.)
N/F
Kenneth E. & Jane Thornton
Deed Book 35-L, Page 95
Tax Parcel 42-30-2110-009
Zoned: R-2
±41" ROW
24' Cartway
MILL ROAD T-610
Legal R/W Line
Dedicated R/W Line
END CURB
27.93'
S 11°10'00" E
4' SIDEWALK
64.41'
PROPOSED ROAD WIDENING
SIDEWALK CONSTRUCTION TO BE DEFERRED
25'
15'R
COMMUNITY MAILBOX
MAIL
63'R
75' CST
80°
STOP SIGN
S 10°40'00" E
60.97'
87'R
27.81'
33' ROW
REQUIRED SIGHT DISTANCE = 157'
CALCULATED SIGHT DISTANCE = 600'
REQUIRED SIGHT DISTANCE = 135'
MEASURED SIGHT DISTANCE =205'
N/F
Burton J. & Barbara J. Sharp
Deed Book 22-D, Page 1046
Lot 1, Plan Book 15, Page 33
Tax Parcel 42-30-2110-030
Zoned: R-2
Stop/Street Sign
Mac.
WINGERT DRIVE
(40' R/W)
N/F
Kenneth E. Thornton
Deed Book 22-E, Page 589
Lot 9, Plan Book 15, Page 33
Tax Parcel 42-30-2110-038
Zoned: R-2
Concrete
Existing Building
25' Cartway
GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO.	DATE	DESCRIPTION	BY
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

ALPHA
ALPHA CONSULTING ENGINEERS, INC.
PLANNING●ENGINEERING●SURVEYING
115 LIMEKILN RD, P.O. BOX 'G'
NEW CUMBERLAND, PA 17070
PHONE: (717) 770 - 2500
FAX: (717) 770 - 2400
WWW.ALPHACEI.COM

SEAL

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PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

SITE PLAN

2520 MILL ROAD

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

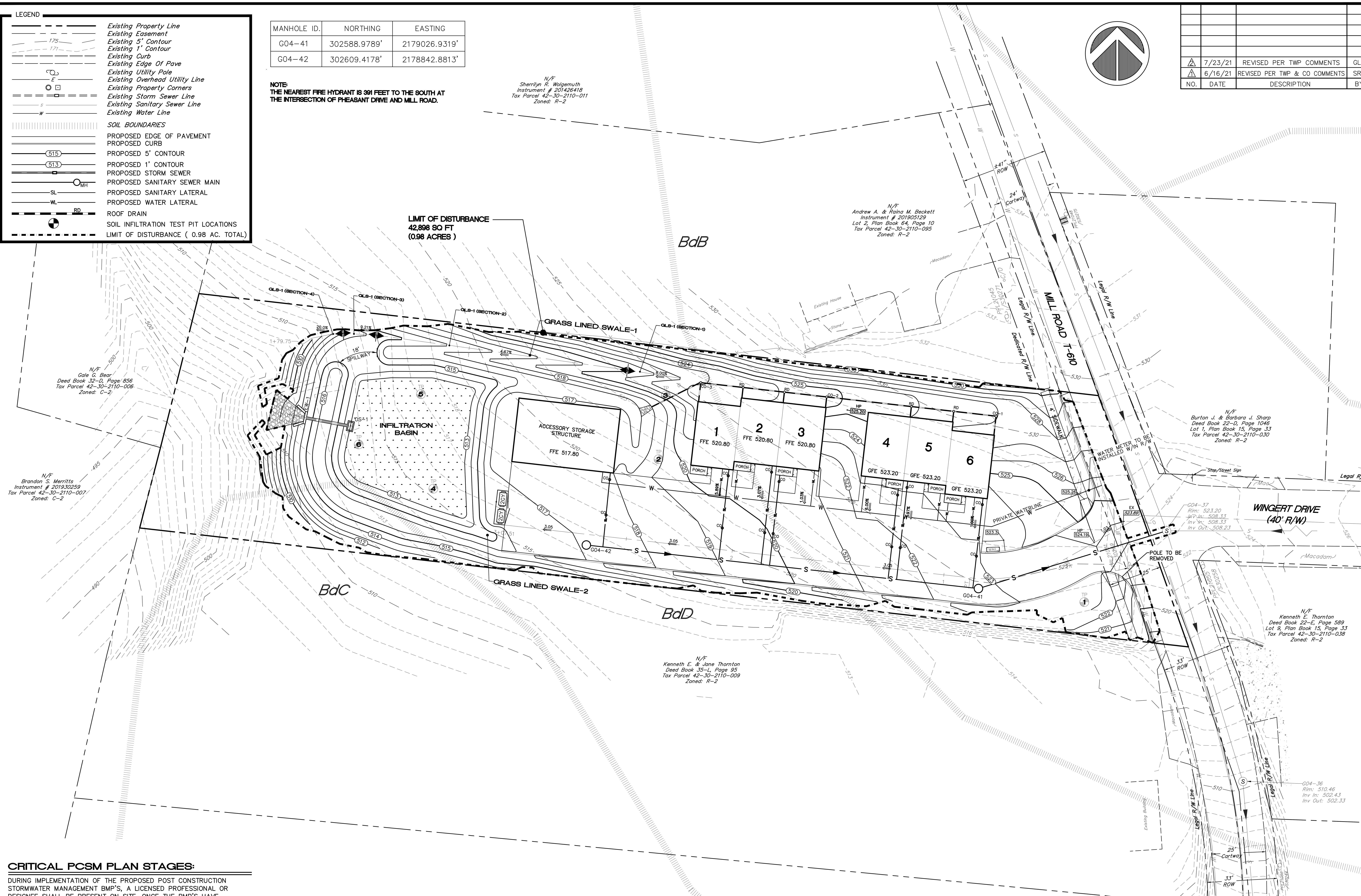
PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\03-SITE PLAN

LEGEND

- Existing Property Line
- Existing Easement
- Existing 5' Contour (175)
- Existing 1' Contour (171)
- Existing Curb
- Existing Edge Of Pave
- Existing Utility Pole
- Existing Overhead Utility Line (E)
- Existing Property Corners
- Existing Storm Sewer Line
- Existing Sanitary Sewer Line (S)
- Existing Water Line (W)
- SOIL BOUNDARIES
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED 5' CONTOUR (515)
- PROPOSED 1' CONTOUR (513)
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER MAIN (MH)
- PROPOSED SANITARY LATERAL (SL)
- PROPOSED WATER LATERAL (WL)
- ROOF DRAIN (RD)
- SOIL INFILTRATION TEST PIT LOCATIONS
- LIMIT OF DISTURBANCE (0.98 AC. TOTAL)

MANHOLE ID.	NORTHING	EASTING
G04-41	302588.9789'	2179026.9319'
G04-42	302609.4178'	2178842.8813'

NOTE:
THE NEAREST FIRE HYDRANT IS 391 FEET TO THE SOUTH AT THE INTERSECTION OF PHEASANT DRIVE AND MILL ROAD.



CRITICAL PCSM PLAN STAGES:

DURING IMPLEMENTATION OF THE PROPOSED POST CONSTRUCTION STORMWATER MANAGEMENT BMP'S, A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON SITE. ONCE THE BMP'S HAVE BEEN CONSTRUCTED AND STABILIZED, AT NO TIME SHALL CONSTRUCTION VEHICLES BE PERMITTED ACCESS IN THESE AREAS UNLESS AUTHORIZED BY A LICENSED PROFESSIONAL OR DESIGNEE.

CRITICAL STAGES LISTED BELOW:

CONSTRUCTION OF INFILTRATION BASIN

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO.	DATE	DESCRIPTION	BY
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

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SEAL

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PRELIMINARY / FINAL LAND DEVELOPMENT PLAN
GRADING & UTILITY PLAN
2520 MILL ROAD
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\04-GRADE PLAN

LEGEND

- Existing Property Line
- Existing Edge Of Pave
- Existing Curb
- PROPOSED SETBACK LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED SIDEWALK
- PROPOSED STORM DRAINAGE EASEMENT
- PROPOSED SANITARY SEWER EASEMENT

DRAINAGE EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
DEL1	20.00'	S15°18'11"W
DEL2	78.46'	N73°06'30"W
DEL3	6.54'	S46°10'59"W
DEL4	24.21'	S15°18'11"W
DEL5	28.82'	S6°19'09"W
DEL6	7.00'	S74°41'49"E
DEL7	13.93'	S15°18'11"W
DEL8	29.02'	N63°20'36"W
DEL9	9.84'	N72°19'21"W
DEL10	34.14'	N60°43'21"W
DEL11	27.12'	N70°36'02"W
DEL12	20.00'	N21°03'29"E
DEL13	26.96'	S70°36'02"E
DEL14	10.65'	N20°46'43"E
DEL15	24.27'	S83°02'14"W
DEL16	20.00'	N6°57'46"W
DEL17	25.43'	N83°02'14"E
DEL18	16.76'	S77°59'25"E
DEL19	151.85'	S73°06'40"E

DRAINAGE EASEMENT CURVE TABLE				
CURVE	LENGTH	RADIUS	BEARING	CHORD
DEC1	18.06'	11.50'	S60°18'11"W	16.26'
DEC2	37.36'	25.00'	N17°54'30"W	33.98'
DEC3	14.50'	25.62'	N44°19'23"E	14.31'

SANITARY EASEMENT LINE TABLE		
LINE	LENGTH	BEARING
SANL1	62.57'	N81°46'21"E
SANL2	198.29'	S74°49'56"E
SANL3	30.00'	S15°10'04"W
SANL4	192.08'	N74°49'56"W
SANL5	55.08'	S81°46'21"W
SANL6	30.03'	N10°40'00"W

N/F
Sherrilyn R. Wolgemuth
Instrument # 201426418
Tax Parcel 42-30-2110-011
Zoned: R-2

N/F
Andrew A. & Raina M. Beckett
Instrument # 201905129
Lot 2, Plan Book 64, Page 10
Tax Parcel 42-30-2110-095
Zoned: R-2

N/F
Gale G. Bear
Deed Book 32-D, Page 856
Tax Parcel 42-30-2110-006
Zoned: C-2

N/F
Brandon S. Merritts
Instrument # 201930259
Tax Parcel 42-30-2110-007
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N/F
Kenneth E. & Jane Thornton
Deed Book 39-L, Page 95
Tax Parcel 42-30-2110-009
Zoned: R-2

N/F
Burton J. & Barbara J. Sharp
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Lot 1, Plan Book 15, Page 33
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Zoned: R-2

N/F
Kenneth E. Thornton
Deed Book 22-E, Page 589
Lot 9, Plan Book 15, Page 33
Tax Parcel 42-30-2110-038
Zoned: R-2

20' Perpetual Storm Sewer Easement
Miscellaneous Book 408, Page 291

20' Temporary Storm Sewer Easement
Miscellaneous Book 408, Page 291

SWM EASEMENT

ACCESSORY STORAGE STRUCTURE
1,440 SF

BUILDING 1
3 TOWNHOME UNITS
1,800 SF TOTAL

BUILDING 2
3 TOWNHOME UNITS
1,800 SF TOTAL

PORCH

PRIVATE WATERLINE

SANITARY SEWER EASEMENT

MILL ROAD T-610

±41' ROW

24' Cartway

Legal R/W Line

Dedicated R/W Line

4' SIDEWALK

WATER METER TO BE INSTALLED W/IN R/W

Stop/Street Sign

WINGERT DRIVE
(40' R/W)

33' ROW

25' Cartway

Existing House
(Stone)

Existing Building

(Macadam)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NO.	DATE	DESCRIPTION	BY
3	7/23/21	REVISED PER TWP COMMENTS	GLM
2	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

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NEW KINGSTOWN, PA 17072
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SEAL

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PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

EASEMENT PLAN

2520 MILL ROAD

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG \\...\320014.dph\320014\FILE
SHEET 5 of 10

LEGEND

- Existing Property Line
- Existing Easement
- 175 Existing 5' Contour
- 171 Existing 1' Contour
- Existing Curb
- Existing Edge Of Pave
- Existing Utility Pole
- E Existing Overhead Utility Line
- Existing Property Corners
- Existing Storm Sewer Line
- S Existing Sanitary Sewer Line
- W Existing Water Line
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- 515 PROPOSED 5' CONTOUR
- 513 PROPOSED 1' CONTOUR
- PROPOSED STORM SEWER
- MH PROPOSED SANITARY SEWER MAIN
- SL PROPOSED SANITARY LATERAL
- WL PROPOSED WATER LATERAL
- RD ROOF DRAIN

NOTE:

1. THIS PLAN REPRESENTS REQUIRED LANDSCAPING PER THE UPPER ALLEN TOWNSHIP CODIFIED ORDINANCES. THE OWNER/APPLICANT MAY INSTALL ADDITIONAL AND SUPPLEMENTAL LANDSCAPING AROUND THE BUILDINGS AND WITHIN THE THE LANDSCAPE AREAS.
3. FOR ANY OF THE REQUIRED LANDSCAPING BELOW, THE DEVELOPER IS PERMITTED TO SUBSTITUTE SPECIES LISTED WITH OTHER OPTIONS, PROVIDED THEY ARE RECOMMENDED / ACCEPTABLE SPECIES LISTED IN THE TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, OR ARE OTHERWISE APPROVED BY THE TOWNSHIP.

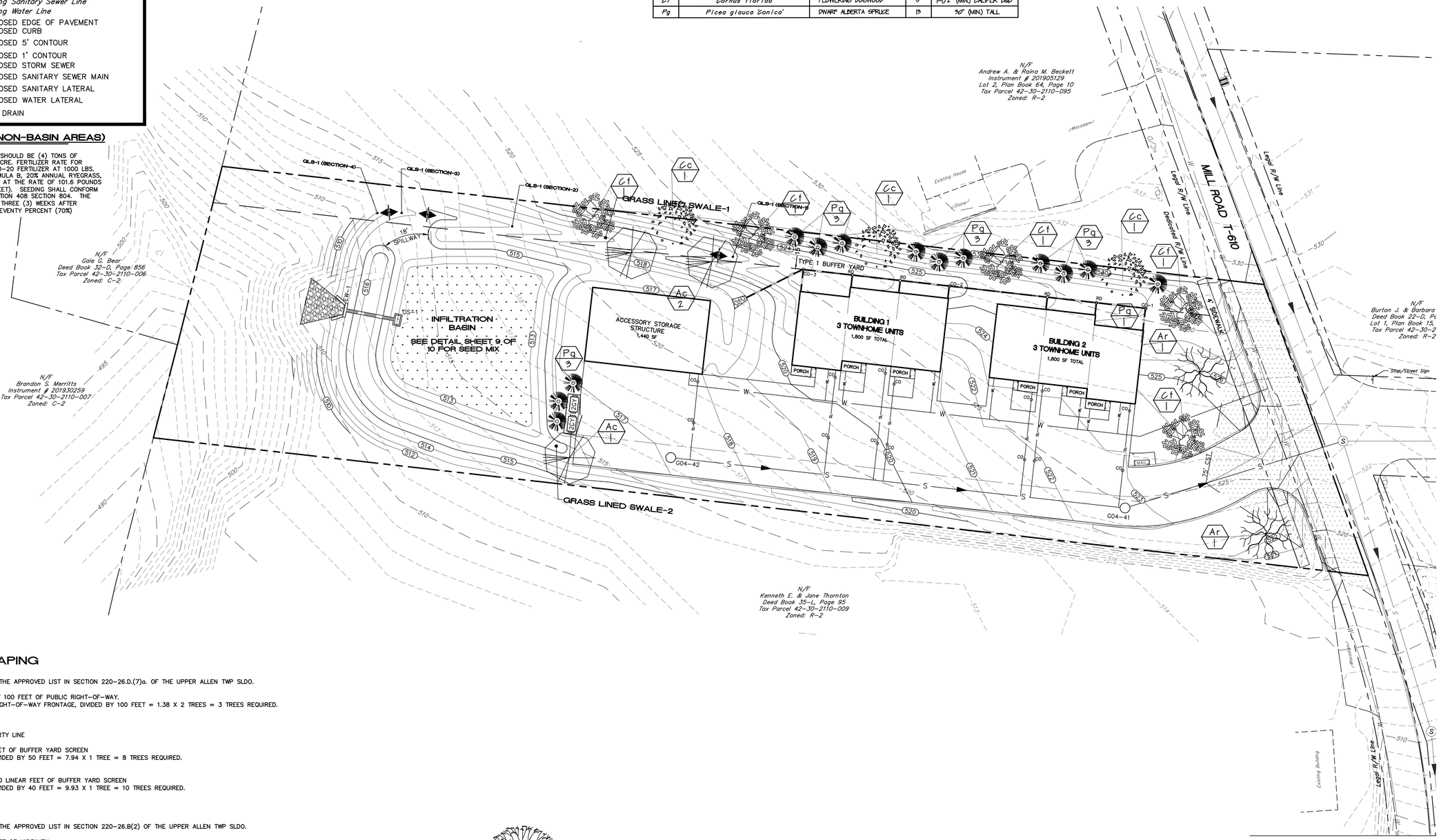
Ns = Scientific Name; 8 = Quantity

LANDSCAPE TREE PLANTING SCHEDULE

SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY	SIZE
Ar	Acer rubrum	RED MAPLE	2	2-1/2" (MIN) CALIPER B&B
Ac	Amelanchier canadensis	SERVICEBERRY	3	1-1/2" (MIN) CALIPER B&B
Cc	Cercis canadensis	EASTERN REDBUD	3	1-1/2" (MIN) CALIPER B&B
Cf	Cornus florida	FLOWERING DOGWOOD	5	1-1/2" (MIN) CALIPER B&B
Pg	Picea glauca 'conica'	DWARF ALBERTA SPRUCE	13	30" (MIN) TALL

PERMANENT SEEDING : (NON-BASIN AREAS)

LIMING RATE FOR PERMANENT STABILIZATION SHOULD BE (4) TONS OF PULVERIZED AGRICULTURAL LIMESTONE PER ACRE. FERTILIZER RATE FOR PERMANENT STABILIZATION SHOULD BE 10-20-20 FERTILIZER AT 1000 LBS. PER ACRE. PERMANENT SEED SHALL BE FORMULA B, 20% ANNUAL RYEGRASS, 30% FESCUS, AND 50% BLUEGRASS APPLIED AT THE RATE OF 101.6 POUNDS PER ACRE (21 POUNDS PER 1000 SQUARE FEET). SEEDING SHALL CONFORM TO THE REQUIREMENTS OF PENNDOT PUBLICATION 408 SECTION 804. THE CONTRACTOR SHALL INSPECT SEEDED AREAS THREE (3) WEEKS AFTER APPLICATION. ANY AREA WITH LESS THAN SEVENTY PERCENT (70%) COVERAGE SHALL BE RESEEDED.



REQUIRED LANDSCAPING

STREET TREES :
DEVELOPER MAY CHOOSE ANY TREES FROM THE APPROVED LIST IN SECTION 220-26.D.(7)a. OF THE UPPER ALLEN TWP SLDO.

REQUIREMENT: MINIMUM 2 TREES FOR EVERY 100 FEET OF PUBLIC RIGHT-OF-WAY.
CALCULATION: 138 LF OF PUBLIC STREET RIGHT-OF-WAY FRONTAGE, DIVIDED BY 100 FEET = 1.38 X 2 TREES = 3 TREES REQUIRED.
COMPLIANCE: 3 TREES ARE PROPOSED.

TYPE 1 BUFFER YARD :
IN 15 FOOT STRIP ALONG NORTHERN PROPERTY LINE

REQUIREMENT: ONE SHADE TREE PER 50 FEET OF BUFFER YARD SCREEN
CALCULATION: 397 LF OF BUFFER YARD, DIVIDED BY 50 FEET = 7.94 X 1 TREE = 8 TREES REQUIRED.
COMPLIANCE: 8 TREES ARE PROVIDED.

REQUIREMENT: ONE EVERGREEN TREE PER 40 LINEAR FEET OF BUFFER YARD SCREEN
CALCULATION: 397 LF OF BUFFER YARD, DIVIDED BY 40 FEET = 9.93 X 1 TREE = 10 TREES REQUIRED.
COMPLIANCE: 10 TREES ARE PROVIDED.

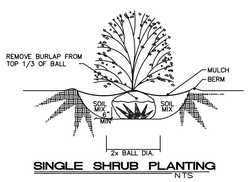
DUMPSTER SCREENING :
DEVELOPER MAY CHOOSE ANY TREES FROM THE APPROVED LIST IN SECTION 220-26.B(2) OF THE UPPER ALLEN TWP SLDO.

REQUIREMENT: ONE SHADE TREE PER 40 FEET OF VISIBILITY.
CALCULATION: 14 LINEAR FEET OF VISIBILITY TO STREET, DIVIDED BY 40 FEET = 0.35 X 1 TREE = 1 TREE REQUIRED.
COMPLIANCE: ONE SHADE TREE IS PROPOSED.

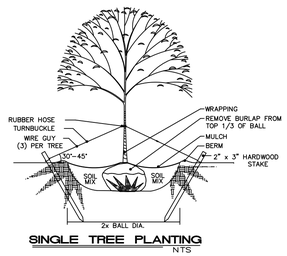
REQUIREMENT: ONE EVERGREEN TREE PER 5 FEET OF VISIBILITY.
CALCULATION: 16 LINEAR FEET OF VISIBILITY TO STREET, DIVIDED BY 5 FEET = 3.2 X 1 TREE = 3 TREES REQUIRED.
COMPLIANCE: 3 EVERGREEN TREES ARE PROPOSED.

REQUIREMENT: MINIMUM 6-FOOT HIGH SOLID ENCLOSURE.
COMPLIANCE: AN ENCLOSURE WALL/ FENCE WITH GATE IS PROVIDED.

STORMWATER MANAGEMENT BUFFERING & SCREENING :
THE PROPOSED TYPE 1 BUFFER WILL SCREEN THE BASIN FROM THE PROPERTY TO THE NORTH.
THE INFILTRATION BASIN WILL NOT BE VISIBLE FROM THE STREET.



SINGLE SHRUB PLANTING
NTS



SINGLE TREE PLANTING
NTS

SHORT TERM MAINTENANCE :
1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING PLANTS DURING AND AFTER INSTALLATION UNTIL ACCEPTANCE OF PLANTINGS BY THE TOWNSHIP AND THE OWNER.
2. NEWLY INSTALLED PLANTINGS SHALL BE SELECTIVELY PRUNED IF NECESSARY TO PROVIDE A NEAT AND UNIFORM APPEARANCE. ANY DEAD OR BROKEN BRANCHES SHALL BE REMOVED. ALL NOTICEABLY DISEASED OR DAMAGED PLANTS SHALL BE REPLACED PRIOR TO FINAL ACCEPTANCE.
3. NEW GRASS AREAS SHALL ALSO BE MAINTAINED BY THE LANDSCAPE CONTRACTOR UNTIL FINAL ACCEPTANCE.
4. ALL GUYING AND STAKING TO BE MAINTAINED REGULARLY FOR A MINIMUM OF ONE YEAR FROM PLANTING.
5. GRASS AREAS SHALL BE WATERED ONCE A WEEK DURING DRY PERIODS OF THE FIRST GROWING SEASON TO ESTABLISH A HEALTHY TURF. WATER DURING THE EARLY PART OF THE DAY TO AN EVEN SATURATION OF ONE INCH.
6. NEWLY PLANTED TREES AND SHRUBS SHALL BE WATERED REGULARLY DURING DRY PERIODS TO COMPLETELY SATURATE THE ROOT BALL DURING THE FIRST GROWING SEASON.
7. DISEASE, INSECT AND WEED CONTROL AND PREVENTION TO BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR NEWLY PLANTED LANDSCAPES DURING THE FIRST SEASON.
8. ANY TREE OR SHRUB WHICH DIES WITHIN 18 MONTHS OF PLANTING SHALL BE REPLACED. ANY TREE OR SHRUB WHICH, WITHIN 18 MONTHS OF PLANTING OR REPLANTING, IS DEEMED, IN THE OPINION OF THE TOWNSHIP, NOT TO HAVE SURVIVED OR TO HAVE GROWN IN A MANNER UNCHARACTERISTIC OF ITS TYPE SHALL BE REPLACED. SUBSTITUTIONS FOR CERTAIN SPECIES OF PLANTS MAY BE MADE ONLY WHEN APPROVED BY THE TOWNSHIP.

LONG TERM MAINTENANCE :
1. ANNUAL LANDSCAPE MAINTENANCE SHALL BE PERFORMED BY QUALIFIED INDIVIDUALS KNOWLEDGEABLE IN PRUNING TECHNIQUES, FERTILIZER APPLICATION, PEST CONTROL AND LAWN CARE.
2. THE OWNER SHALL BE RESPONSIBLE FOR REGULAR MOWING OF ALL GRASS AREAS.
3. ANY PLANTINGS SHOWN ON THE APPROVED PLAN WHICH DOES NOT SURVIVE OR IS DAMAGED SHALL BE REPLACED IN KIND BY THE OWNER WITHIN A SIX MONTH PERIOD.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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DESIGN : MH
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CHECKED : RAC
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ALPHA CONSULTING ENGINEERS, INC.

SEAL

R.L.A. (for landscape design only)

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN
LANDSCAPE PLAN
2520 MILL ROAD
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

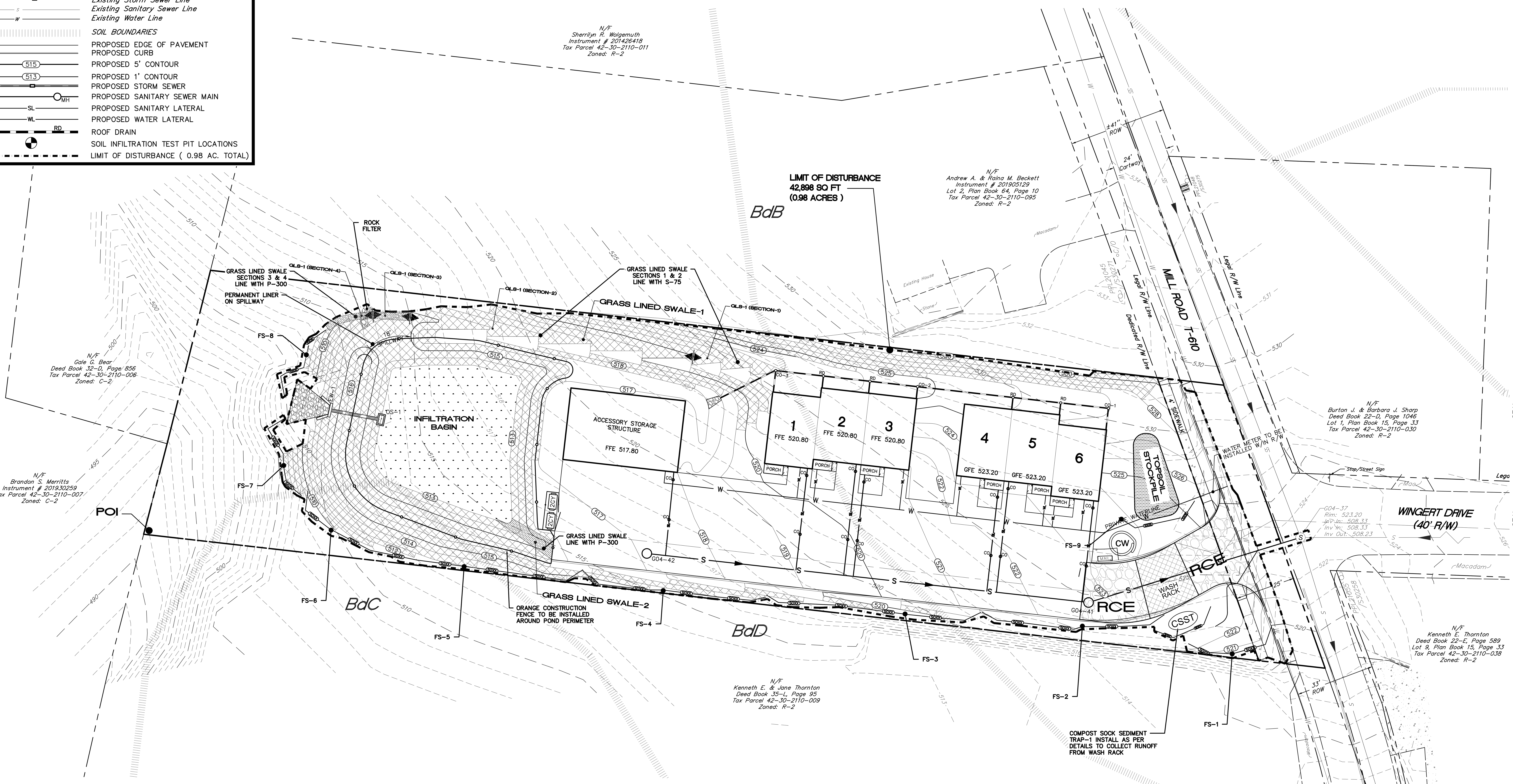
PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG N:\2020\320014.apw\320014\FILE dwg\Plans\Final\06-LSCAPE PLAN
SHEET 6 of 10

NO.	DATE	DESCRIPTION	BY
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

LEGEND

- Existing Property Line
- Existing Easement
- Existing 5' Contour
- Existing 1' Contour
- Existing Curb
- Existing Edge Of Pave
- Existing Utility Pole
- Existing Overhead Utility Line
- Existing Property Corners
- Existing Storm Sewer Line
- Existing Sanitary Sewer Line
- Existing Water Line
- SOIL BOUNDARIES
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER MAIN
- PROPOSED SANITARY LATERAL
- PROPOSED WATER LATERAL
- ROOF DRAIN
- SOIL INFILTRATION TEST PIT LOCATIONS
- LIMIT OF DISTURBANCE (0.98 AC. TOTAL)



E & S LEGEND

- 12" FILTREXX SILT SOXX
- LIMIT OF DISTURBANCE (0.98 AC. TOTAL)
- CONCRETE WASHOUT
- EROSION CONTROL BLANKET (AS NOTED)
- EROSION CONTROL BLANKET (AS NOTED)
- WASH RACK
- ROCK CONSTRUCTION ENTRANCE
- ROCK FILTER

PERMIT TERMINATION REQUIREMENTS

UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES UNDER § 102.22(a)(2), AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH § § 102.4 AND 102.8, THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE DEPARTMENT OR CONSERVATION DISTRICT.

THE NOTICE OF TERMINATION MUST INCLUDE:
a. The facility name, address and location.
b. The operator name and address.
c. The permit number.
d. The reason for permit termination

UNTIL THE PERMITTEE OR CO-PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMIT TERMS AND CONDITIONS INCLUDING LONG TERM OPERATION AND MAINTENANCE OF ALL PCSM BMPS ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE. THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OR THE COUNTY CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

PCSM LONG TERM OPERATION AND MAINTENANCE REQUIREMENTS

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPs.

FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER § 102.7(b)(5)

FOR COMMONWEALTH OWNED PROPERTY, A COVENANT THAT RUNS WITH THE LAND IS NOT REQUIRED UNTIL THE TRANSFER OF THE LAND CONTAINING A PCSM BMP OCCURS. UPON TRANSFER OF THE COMMONWEALTH-OWNED PROPERTY CONTAINING A PCSM BMP, THE DEED MUST COMPLY WITH THIS SUBSECTION.

THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.

A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY.

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

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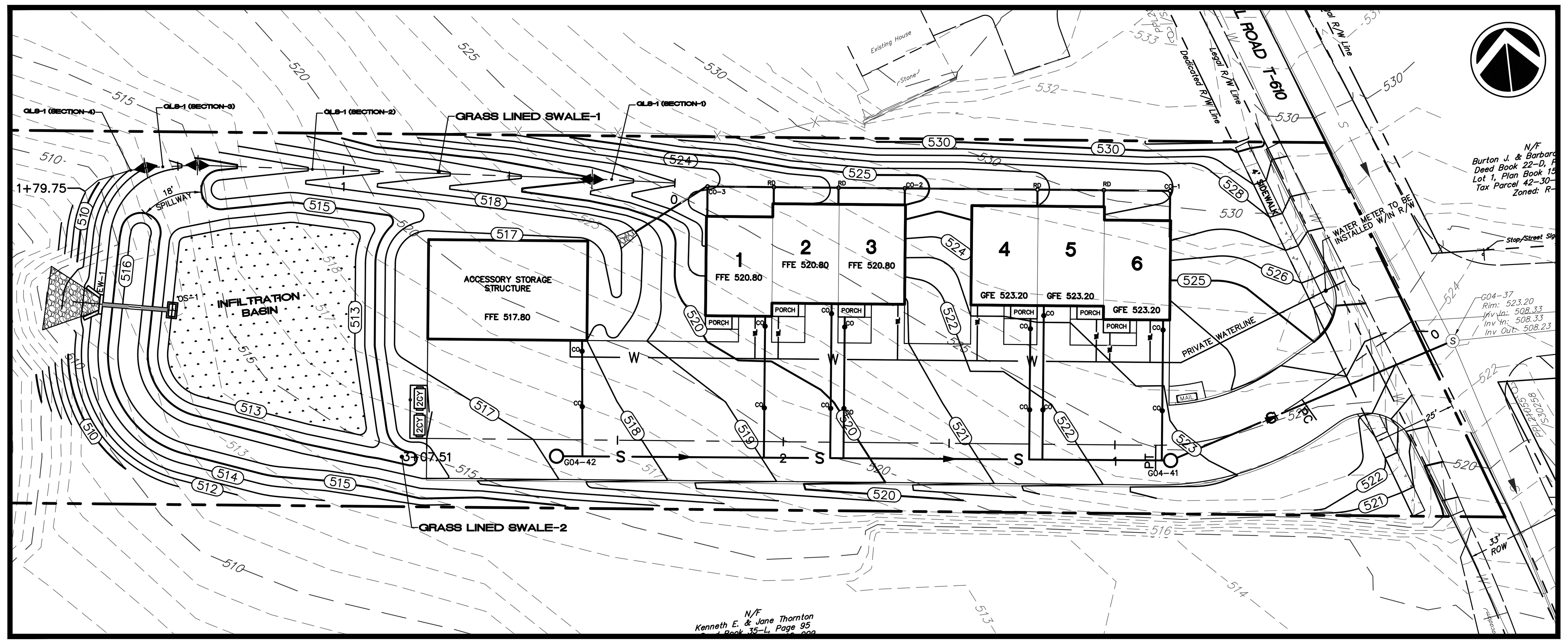
PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

EROSION CONTROL PLAN

2520 MILL ROAD

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

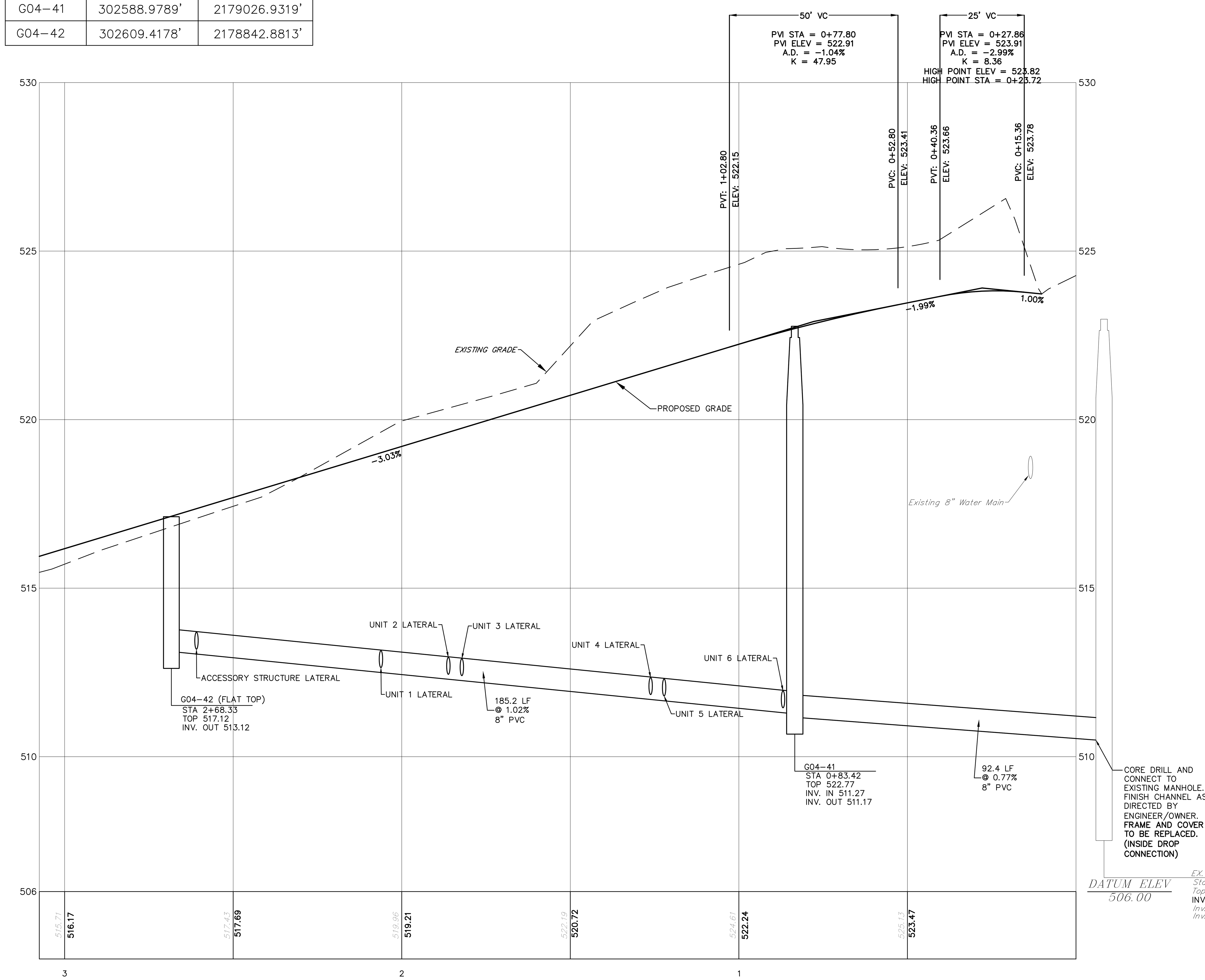
PROJECT NO. 320014
SURVEY BOOK :
SCALE : 1" = 20'
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\07-E&S PLAN



PLAN VIEW

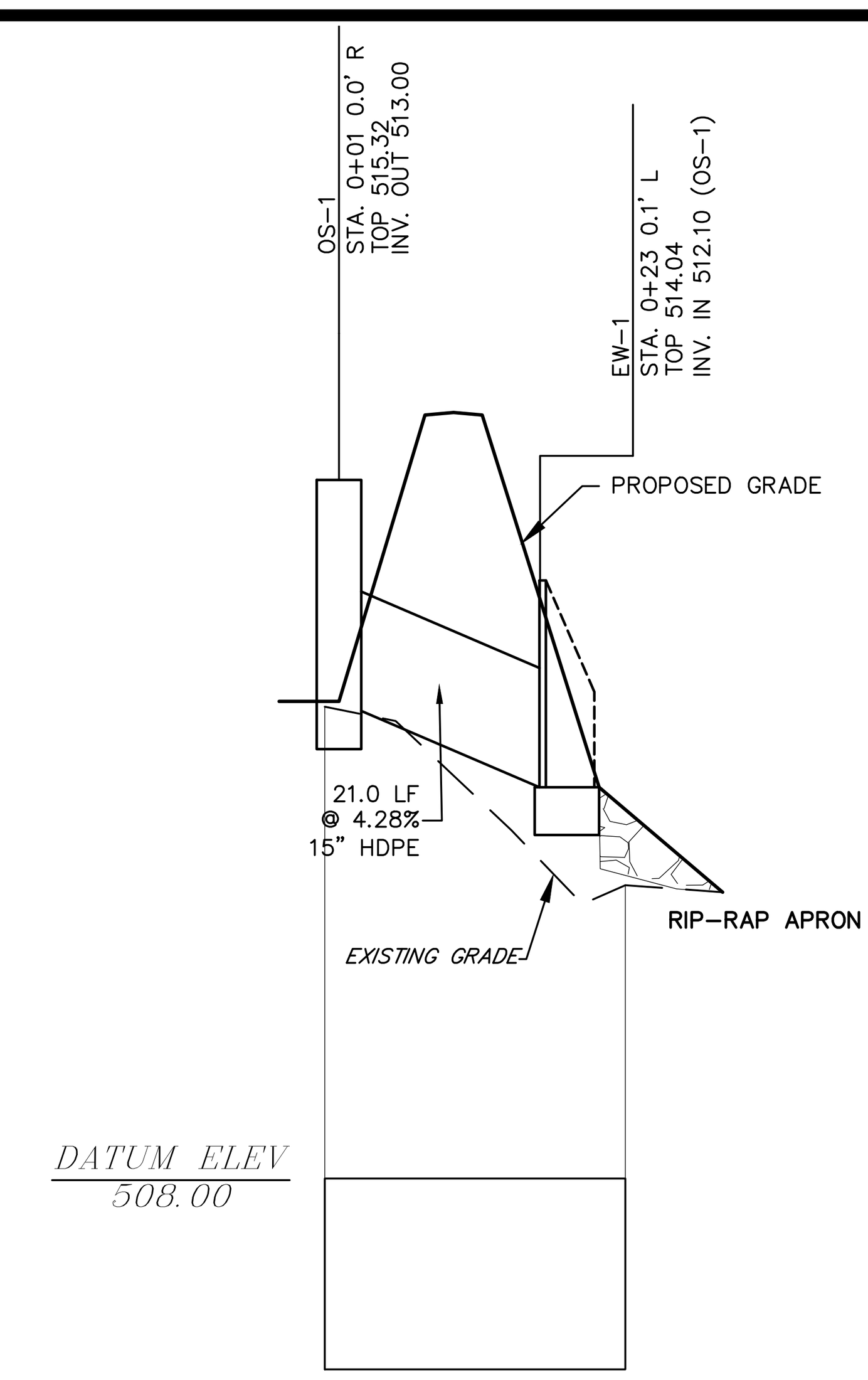
SCALE: 1:30

MANHOLE ID.	NORTHING	EASTING
G04-41	302588.9789'	2179026.9319'
G04-42	302609.4178'	2178842.8813'



ACCESS DRIVEWAY PROFILE

SCALE: H=20' V=2'



OS-1 TO EW-1 PROFILE

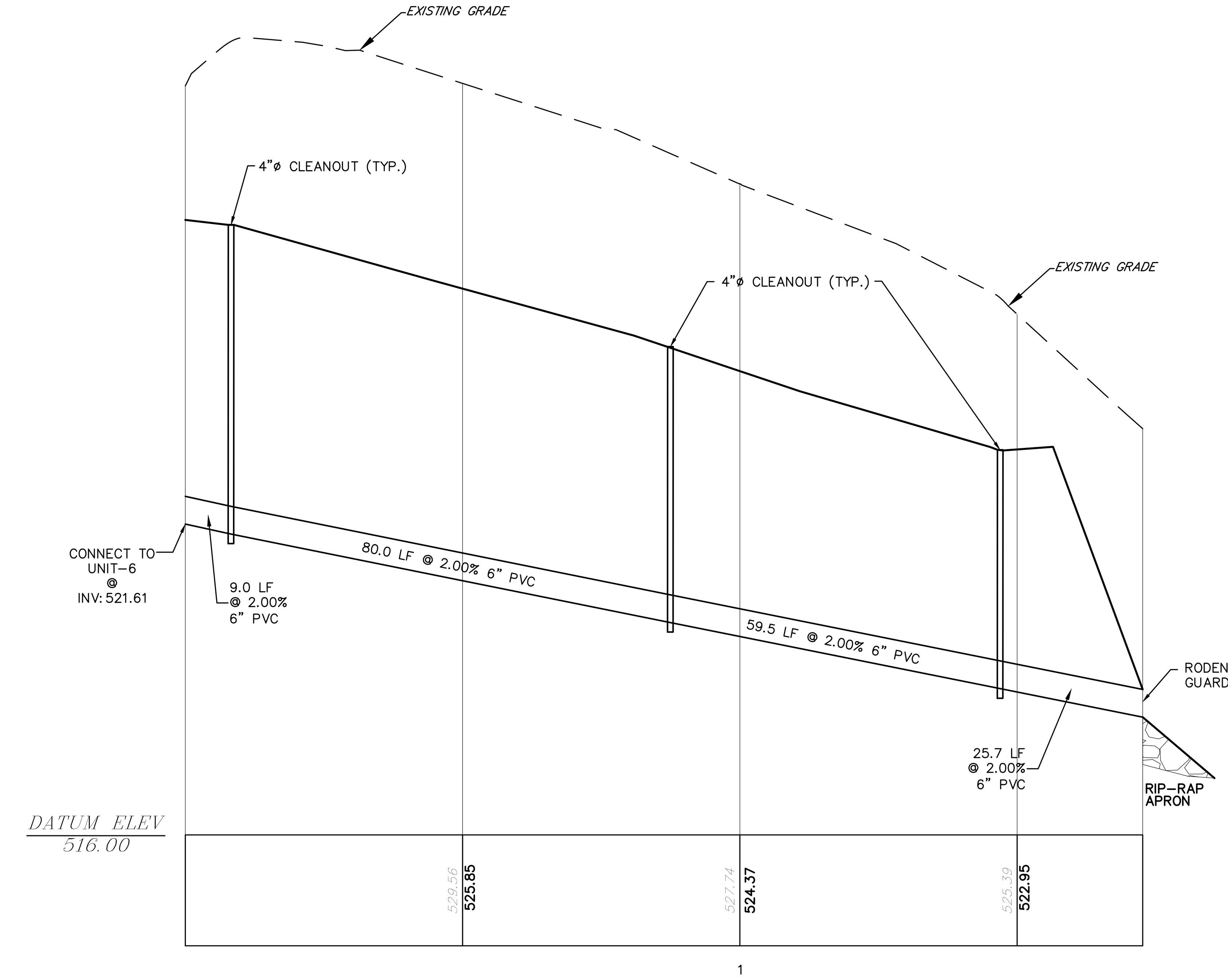
SCALE: H=20' V=2'

SANITARY SEWER NOTES:

- PIPE LENGTH SHOWN ON PROFILE REPRESENTS DISTANCE FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE SLOPE SHOWN ON PROFILE IS CALCULATED BASED ON DISTANCE FROM INSIDE FACE OF MANHOLE TO INSIDE FACE OF MANHOLE.

NO.	DATE	DESCRIPTION	BY
3	9/14/21	REVISED PER SEWER COMMENTS	SRR
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021



ROOF DRAIN PROFILE

SCALE: H=20' V=2'

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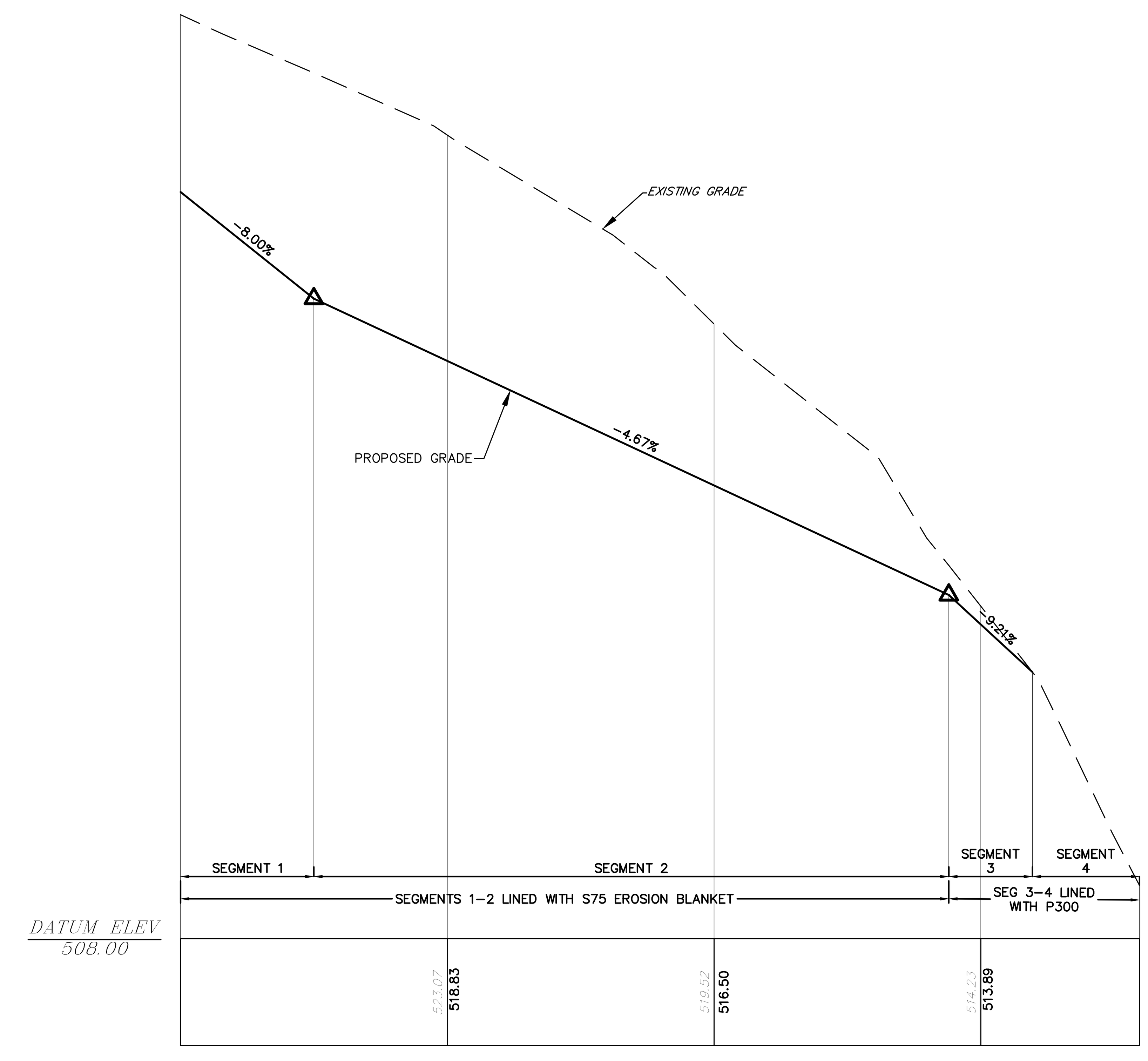


GRASS LINED SWALE PROFILE

SCALE: H=20' V=2'

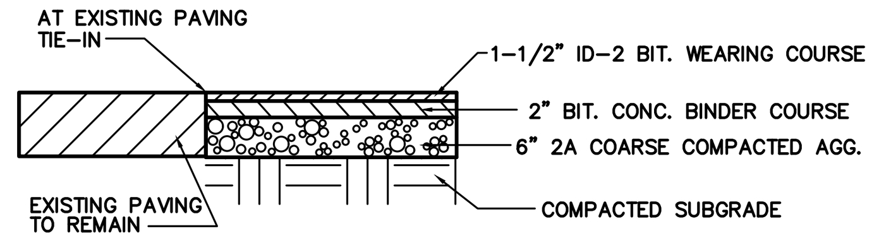
PRELIMINARY / FINAL LAND DEVELOPMENT PLAN

PROFILES

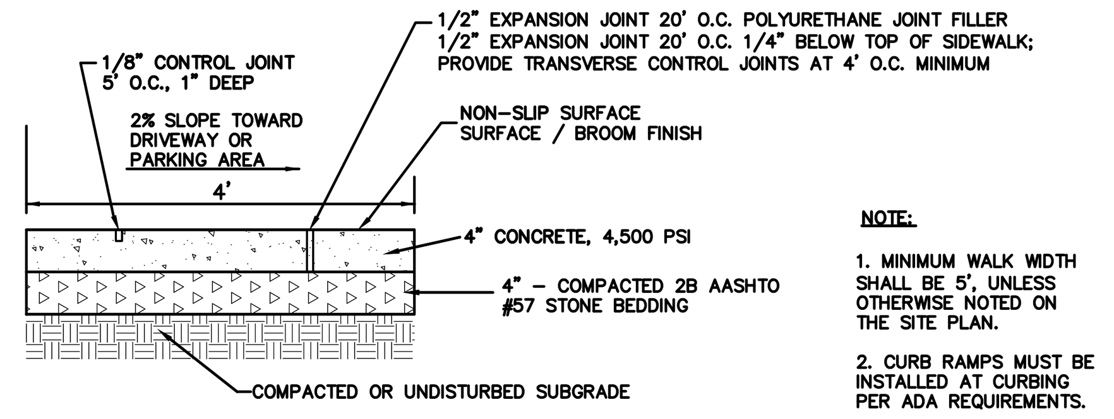
2520 MILL ROAD

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE : AS NOTED
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\08-PROFILE
SHEET 8 of 10



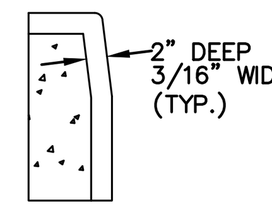
TYPICAL PAVING SECTION
NTS



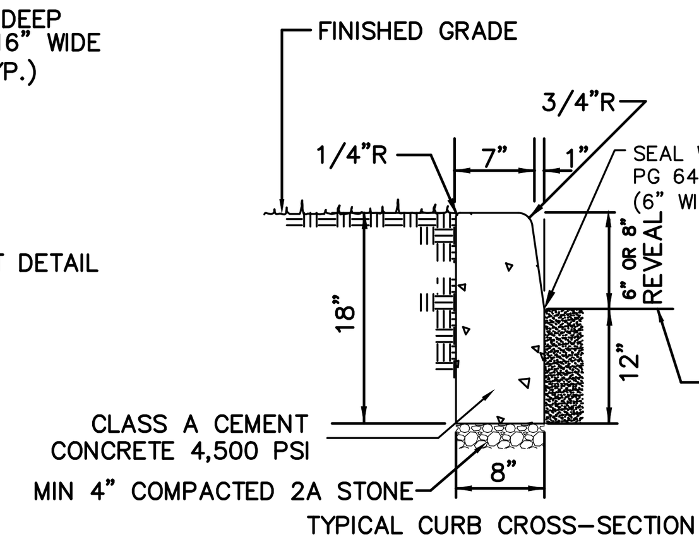
NOTE:

1. MINIMUM WALK WIDTH SHALL BE 5', UNLESS OTHERWISE NOTED ON THE SITE PLAN.
2. CURB RAMPS MUST BE INSTALLED AT CURBING PER ADA REQUIREMENTS.

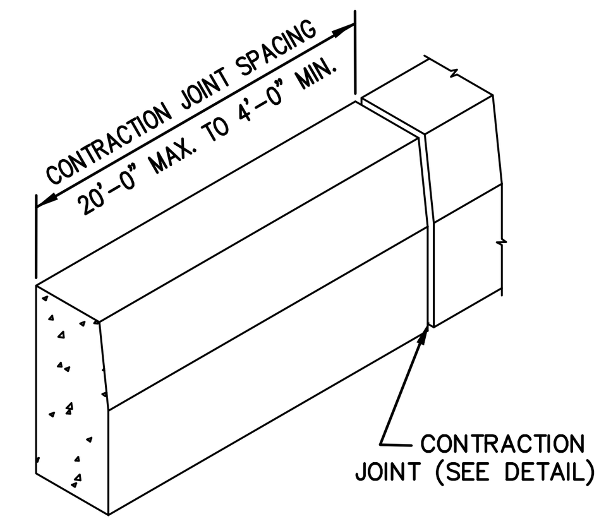
CONCRETE SIDEWALK DETAIL
* SIDEWALK CONSTRUCTION TO BE DEFERRED
NTS



CONTRACTION JOINT DETAIL



TYPICAL CURB CROSS-SECTION

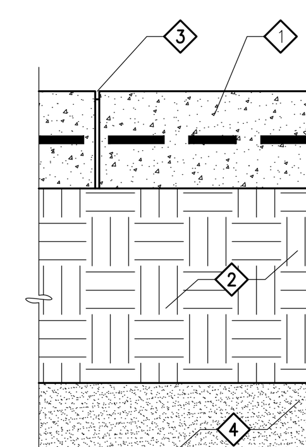


PLAIN CEMENT CONCRETE CURB

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND PLAIN CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. EXPANSION JOINTS SHALL BE INSTALLED AT 60' INTERVALS, AT STRUCTURES, AND AT THE END OF EACH WORK DAY.

6" OR 8" VERTICAL CONCRETE CURB DETAIL
NTS

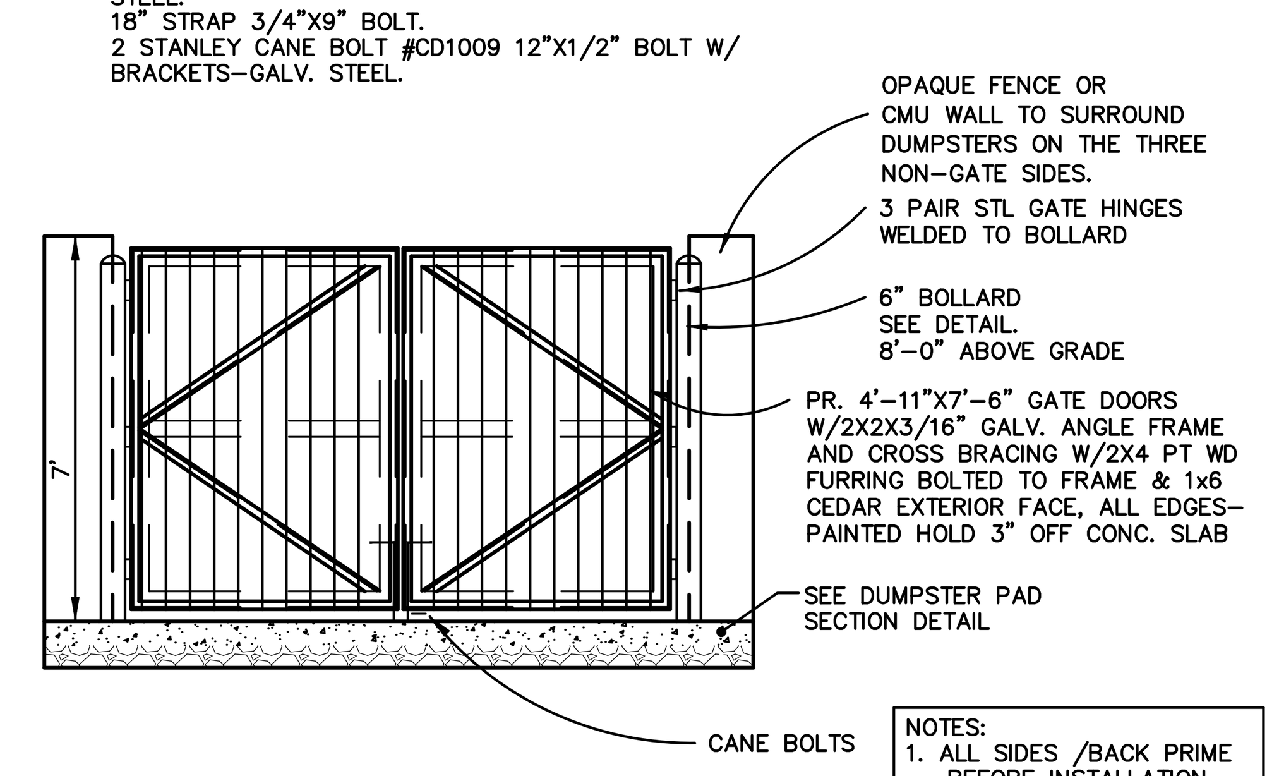


1. 8" – 4000 PSI CONCRETE W/6x6 W/2.1x2.1 WWF.
2. 12" STABILIZED BASE COMPACTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557)
3. 1/4" PREMOLDED ASPHALT EXPANSION JOINT STRIP. SET 1/2" BELOW PAVEMENT TOP @ 20'-0" O.C. MAXIMUM. PROVIDE A GEOTECHNICAL FABRIC SUCH AS MIRAFI 140N, OR EQUAL, BELOW ALL CONTROL JOINTS.
4. CLEAN FILL OR EXISTING SUBBASE MATERIAL FREE OF ORGANIC MATTER COMPACTED TO A MINIMUM DENSITY OF 95% OF THE MODIFIED PROCTOR DRY DENSITY.

DUMPSTER PAD PAVING SECTION
NTS

TRASH GATE HARDWARE

1. DUMPSTER GATE:
   3 PR. STANLEY BOLT HOOK AND STRAP HINGE-GALV. STEEL.
   18" STRAP 3/4"X9" BOLT.
   2 STANLEY CANE BOLT #CD1009 12"X1/2" BOLT W/ BRACKETS-GALV. STEEL.



NOTES:

1. ALL SIDES /BACK PRIME BEFORE INSTALLATION
2. ALL HARDWARE TO BE HEAVY-DUTY GALVANIZED STEEL.
3. GATE MUST BE SELF-LATCHING.

TRASH ENCLOSURE DETAIL
NTS

NO.	DATE	DESCRIPTION	BY
3	9/14/21	REVISED PER SEWER COMMENTS	SRR
2	7/23/21	REVISED PER TWP COMMENTS	GLM
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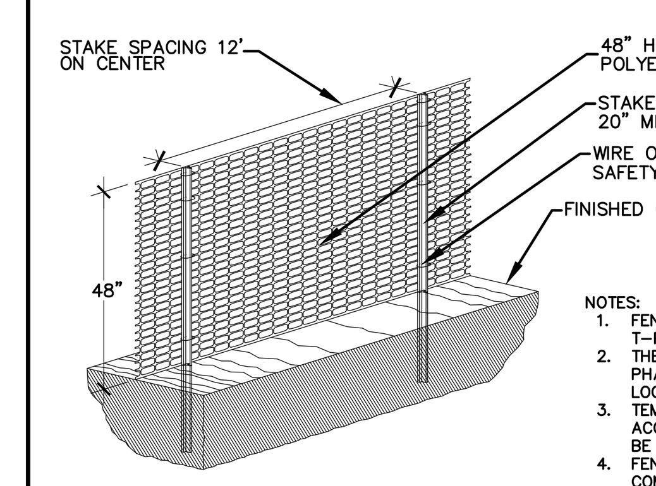

NOTES:

1. FENCING SHALL BE FASTENED SECURELY TO THE T-POSTS.
2. THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE LOCATION OF THE FENCING MUST BE APPROVED.
3. TEMPORARY GATES MAY BE UTILIZED TO ALLOW ACCESS TO CONSTRUCTION EQUIPMENT, BUT MUST BE CLOSED WHEN NOT IN USE.
4. FENCING SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHMOVING.
5. FENCING SHALL REMAIN UNTIL ALL AREAS OF DISTURBANCE IS PERMANENTLY STABILIZED.
6. ANY DAMAGED FENCE SHALL BE REPAIRED IMMEDIATELY.
7. ANY EARTH DISTURBANCE WITHIN THE FENCE NECESSARY FOR FINAL SEEDING OR MINOR SHAPING SHALL BE MINIMIZED AND STABILIZED IMMEDIATELY.

ORANGE CONSTRUCTION FENCING DETAIL
NTS

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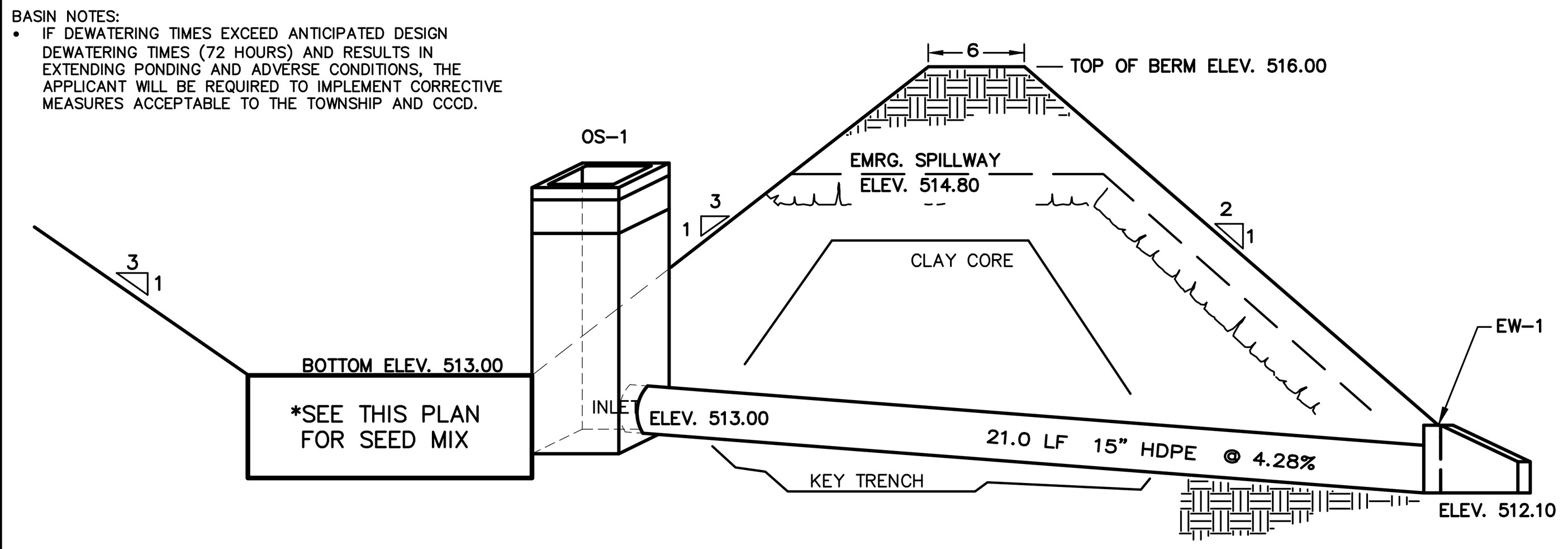
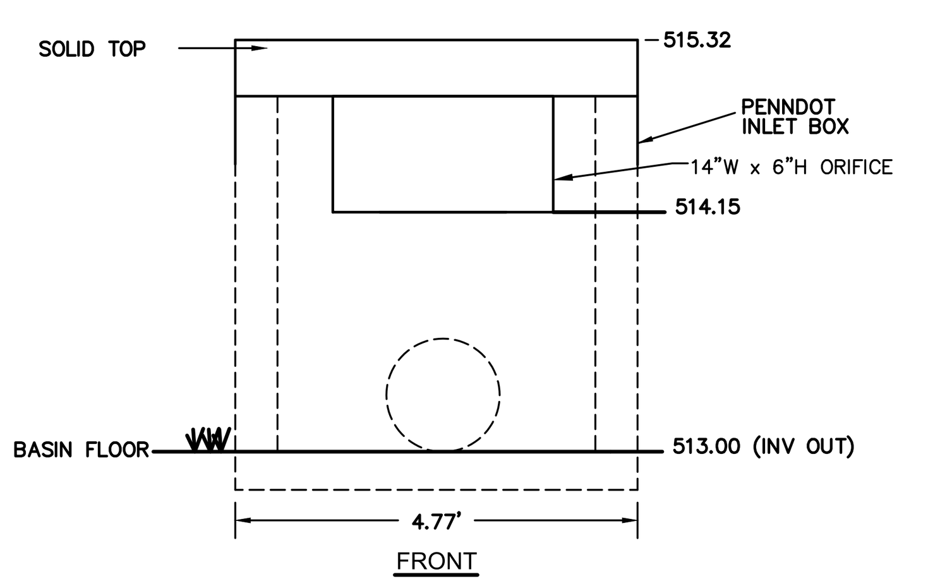
BASIN NOTES:

- IF DEWATERING TIMES EXCEED ANTICIPATED DESIGN DEWATERING TIMES (72 HOURS) AND RESULTS IN EXTENDING PONDING AND ADVERSE CONDITIONS, THE APPLICANT WILL BE REQUIRED TO IMPLEMENT CORRECTIVE MEASURES ACCEPTABLE TO THE TOWNSHIP AND CCCD.



INFILTRATION BASIN DETAIL
NTS



INFILTRATION BASIN OUTLET STRUCTURE
NTS

INFILTRATION BASIN (BASIN FLOOR SEED MIX)

Low Maintenance Grass & Grass-like Species Mix : ERNMX-126 (or approved equivalent)

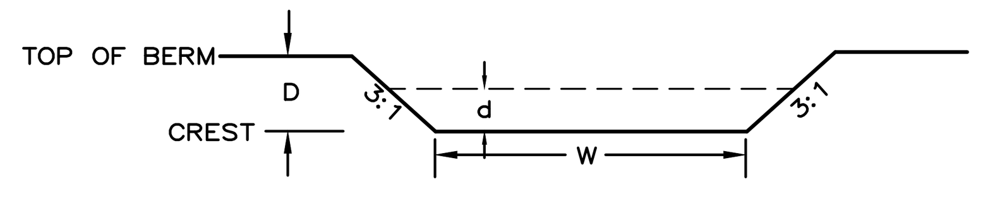
Rate	Botanical Name	Common Name
18%	*Elymus virginicus*	Virginia Wildrye (PA Ecotype)
20%	*Puccinellia distans 'Fults'*	Alkaligrass 'Fults'
15%	*Agrostis stolonifera*	Creeping Bentgrass
20%	*Panicum clandestinum 'Tioga'*	Deertongue 'Tioga'
15%	*Poa palustris*	Fowl Bluegrass
10%	*Carex vulpinoidea*	Fox Sedge
1%	*Juncus effusus*	Soft Rush
1%	*Carex scoparia*	Blunt Broom Sedge (PA Ecotype)
100%		

Application Rate: 20-40 lb per acre, or 1 lb per 1,000 sqft.

YEAR 1: FIRST GROWING SEASON MAINTENANCE
WHENEVER CANOPY HEIGHT (OVERALL VEGETATION) REACHES 18"-24", USE A STRING TRIMMER TO TRIM THE BASIN FLOOR AND SWALE TO A HEIGHT OF 8". A LAWN MOWER IS NOT RECOMMENDED FOR TRIMMING AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS WILL BE KILLED. TRIMMING SHOULD CEASE BY MID-SEPTEMBER.
PROBLEM WEEDS SHOULD BE HAND PULLED OR SPOT SPRAYED WITH AN APPROVED HERBICIDE, SUCH AS RODEO.

YEAR 2: SECOND & SUBSEQUENT GROWING SEASON MAINTENANCE
PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2", STRING TRIM ANY MATERIAL STANDING FROM PREVIOUS YEAR CLOSE TO THE GROUND. IF MIX CONTAINS SEDGES, TRIMMING SHALL BE NO LOWER THAN 2" ABOVE THE CROWNS THAT PRODUCED THE PRIOR YEARS GROWTH.

IF A HEAVY INFESTATION OF RAGWEED OR FOXTAIL IN THE SECOND GROWING SEASON IS NOTICED, TRIM PLANT MATERIAL TO A HEIGHT OF 8".

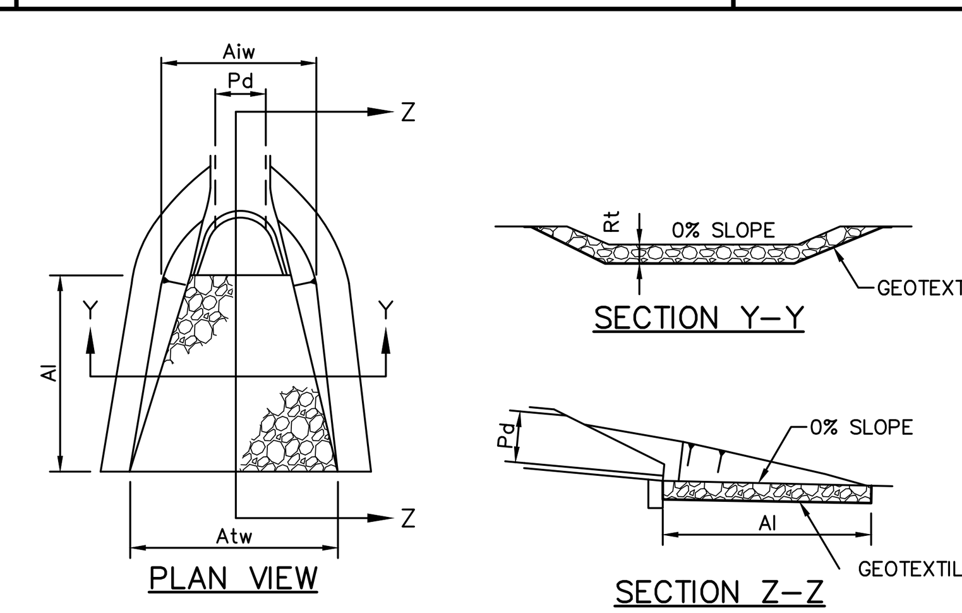


NOTES:

- ALL SPILLWAYS TO BE GRASS LINED WITH ERONET S-75 LINING.
- WATER DEPTH (d) REPRESENTS WATER DEPTH THROUGH SPILLWAY IN THE EVENT OF A CLOGGED OUTLET STRUCTURE

BASIN	TOP OF BERM	CREST ELEV.	CREST WIDTH, W	D	d	CHANNEL LINING
–	516.00	514.80	18	1.20'	0.21'	S-75

EMERGENCY SPILLWAY DETAIL
NTS



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R-__	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
EW-1	15	4	18	16'	3.75	19.75
R Drain	6	3	9	6'	1.50	7.50

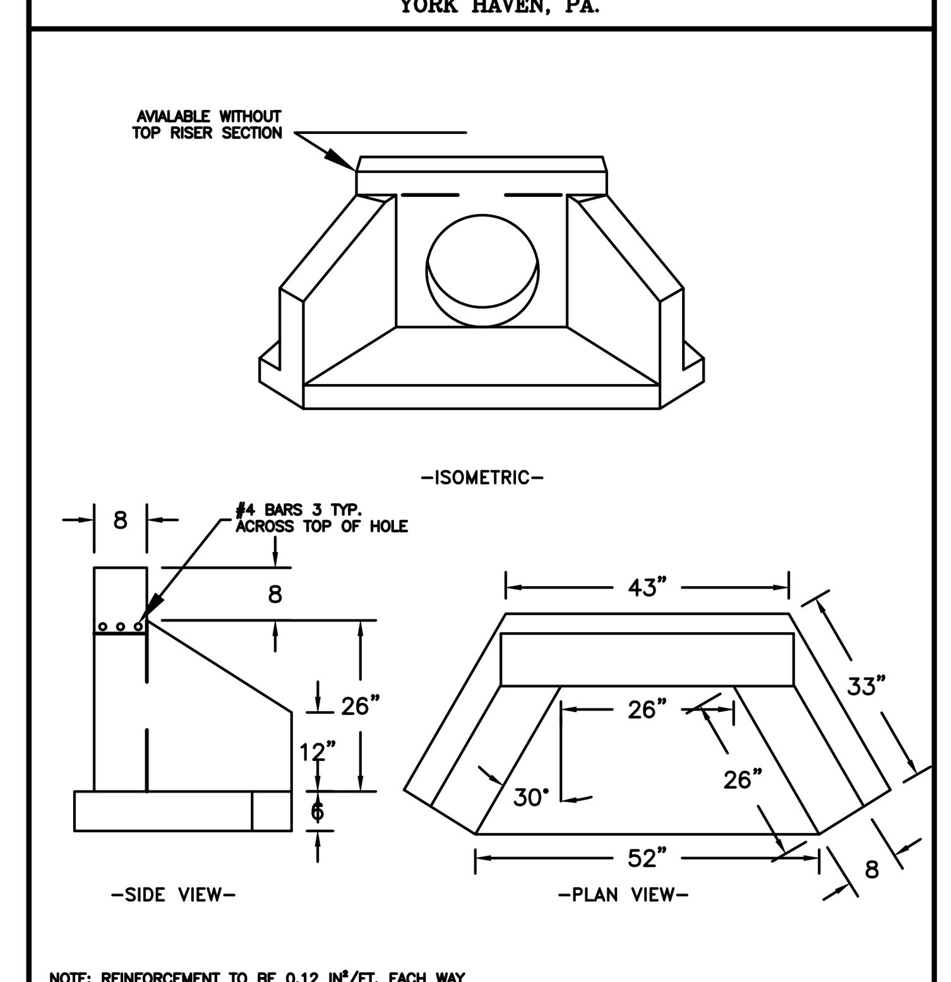
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

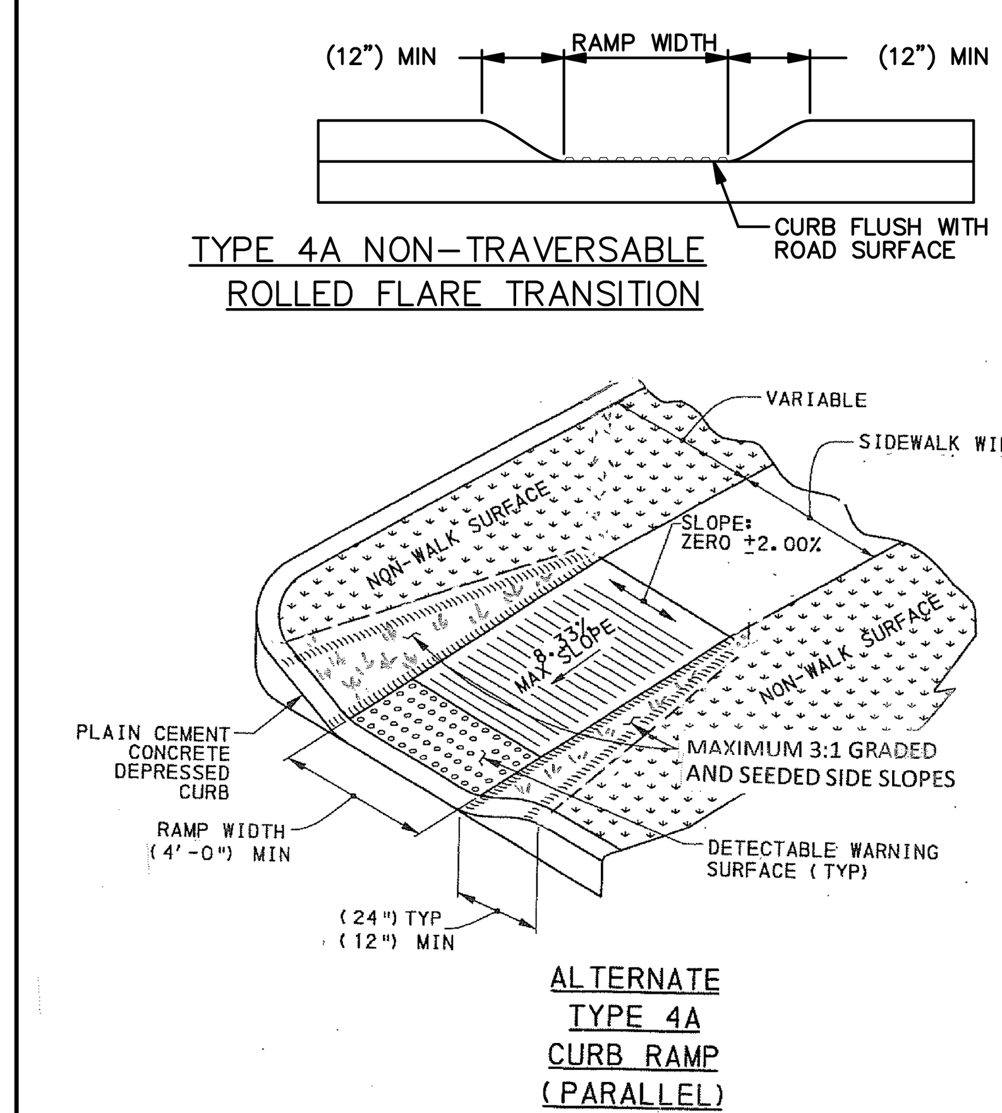
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL
NTS

MONARCH
MONARCH PRODUCTS COMPANY, INC.
YORK HAVEN, PA.

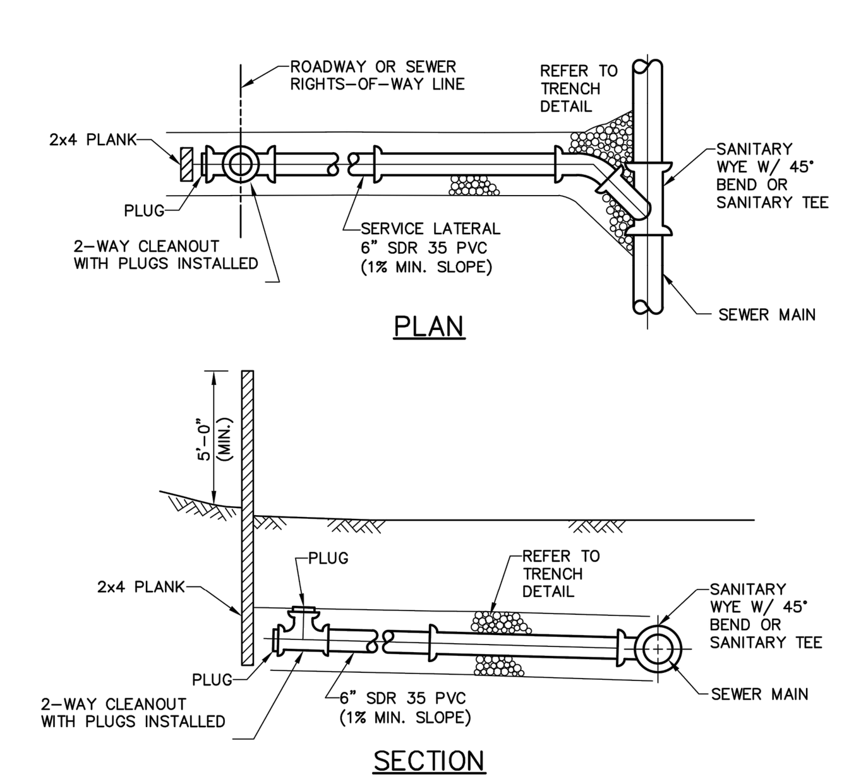


NOTE: REINFORCEMENT TO BE 0.12 IN²/FT. EACH WAY

TYPE D-W ENDWALL
MAXIMUM PIPE SIZE – 21" C.M.P.
DWG. OS-1



HANDICAMP RAMP DETAIL
NTS



NOTES:

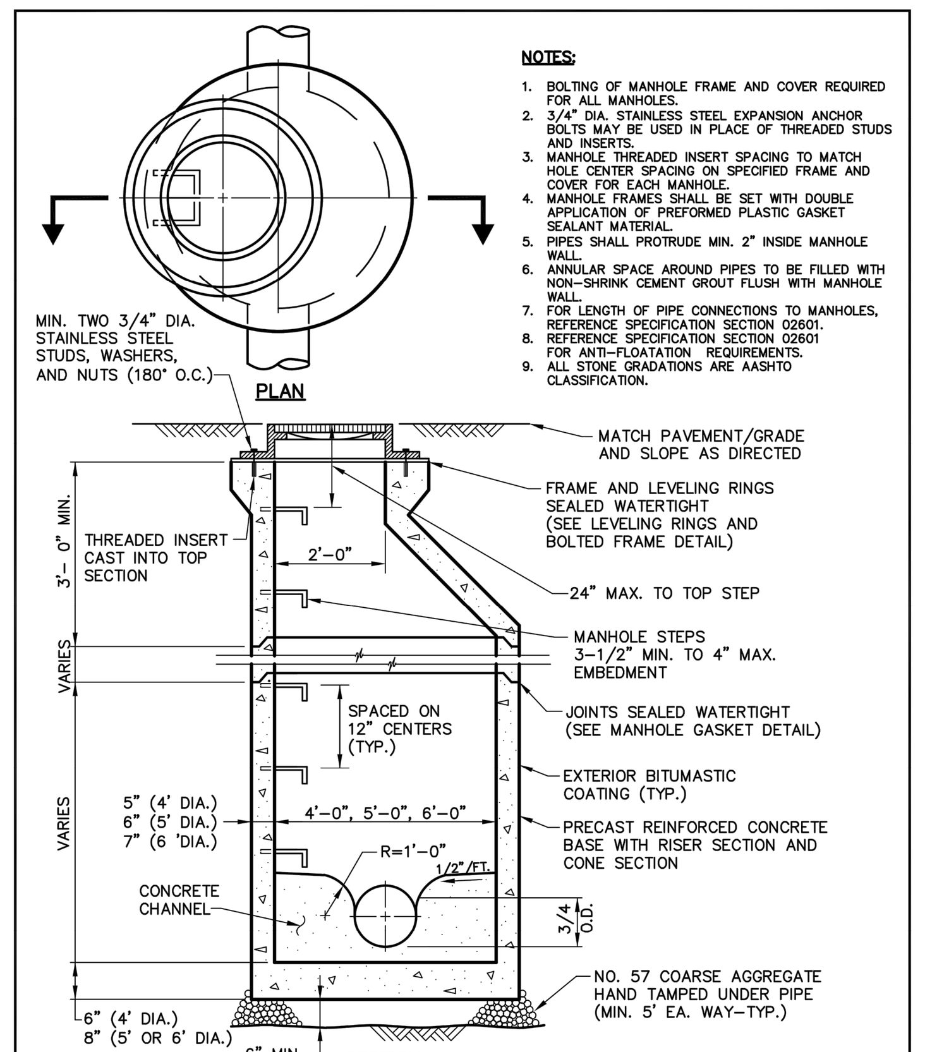
1. 2-WAY CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURB LINE UTILITIES.
2. THERE SHALL BE A 10 FOOT HORIZONTAL SEPARATION BETWEEN THE WATER SERVICE AND THE SERVICE LATERAL/BUILDING SEWER.
3. 2-WAY CLEANOUT TO BE LOCATED ON TOWNSHIP R/W LINE AND LOCATION TO BE SITE SPECIFIC WITH RESPECT TO CURB AND SIDEWALK.
4. WHERE 2-WAY CLEANOUT IS NOT REQUIRED, SERVICE CONNECTION SHALL BE EXTENDED TO THE RIGHTS-OF-WAY LINE AND PLUGGED.
5. DETECTION TAPE REQUIRED IN PIPE TRENCH AT A DEPTH OF NO MORE THAN 12-INCHES BELOW FINAL SURFACE GRADE OR PAVEMENT SUBGRADE.
6. 2-WAY CLEANOUTS MAY ALSO BE USED FOR TESTING AND OBSERVATION.

FILE NAME: LAT-1-SHALLOW.DWG

STANDARD DETAILS
SERVICE LATERAL – SHALLOW SEWER
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	DWG./NOTE REVISIONS

SCALE: NO SCALE — DWG. NO. LAT-1



NOTES:

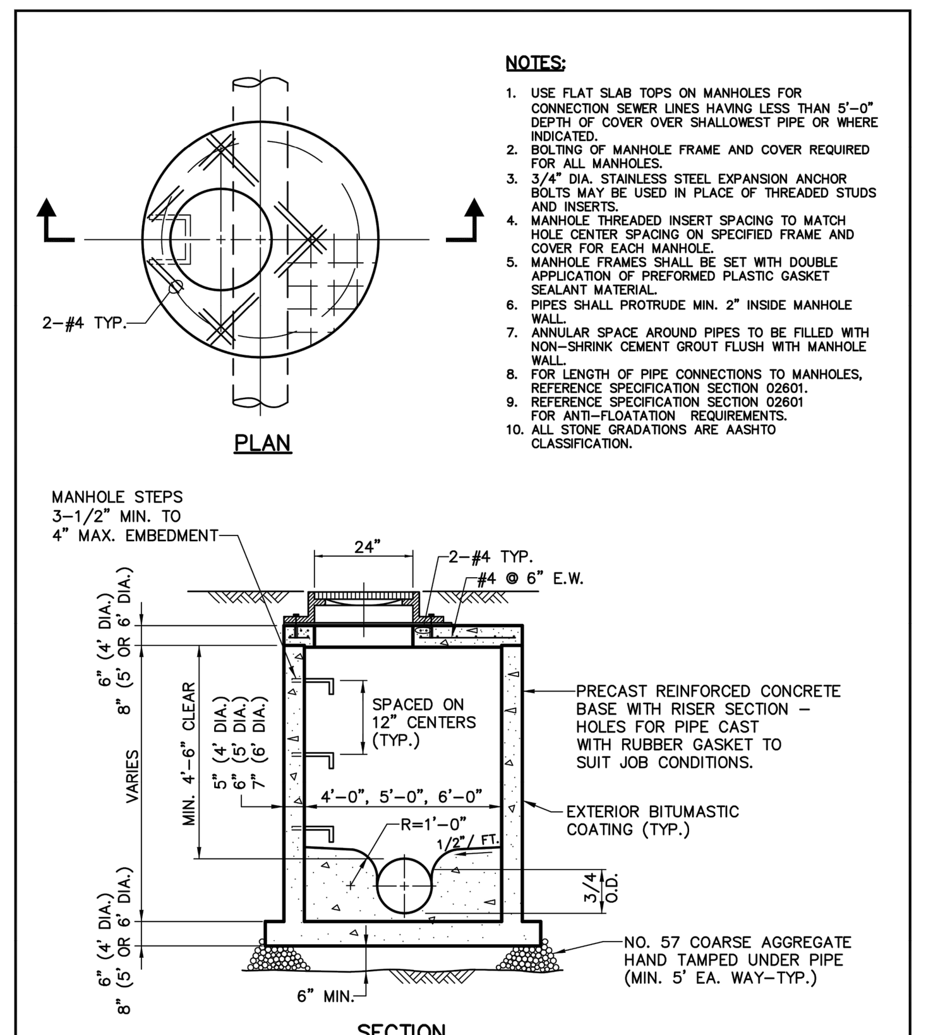
1. BOLTING OF MANHOLE FRAME AND COVER REQUIRED FOR ALL MANHOLES.
2. 3/4" DIA. STAINLESS STEEL EXPANSION ANCHOR BOLTS MAY BE USED IN PLACE OF THREADED STUDS AND INSERTS.
3. MANHOLE THREADED INSERT SPACING TO MATCH HOLE CENTER SPACING ON SPECIFIED FRAME AND COVER FOR EACH MANHOLE.
4. MANHOLE FRAMES SHALL BE SET WITH DOUBLE APPLICATION OF PREFORMED PLASTIC GASKET SEALANT MATERIAL.
5. PIPES SHALL PROTRUDE MIN. 2" INSIDE MANHOLE WALL.
6. ANNULAR SPACE AROUND PIPES TO BE FILLED WITH NON-SHRINK CEMENT GROUT FLUSH WITH MANHOLE WALL.
7. FOR LENGTH OF PIPE CONNECTIONS TO MANHOLES, REFERENCE SPECIFICATION SECTION 02601.
8. REFERENCE SPECIFICATION SECTION 02601 FOR ANTI-FLOATATION REQUIREMENTS.
9. ALL STONE GRADATIONS ARE AASHTO CLASSIFICATION.

FILE NAME: MH-4-PRECASTCONC-1.dwg

STANDARD DETAILS
STANDARD PRECAST CONCRETE MANHOLE WITH PRECAST CONCRETE BASE
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
12/16	NOTE REVISIONS

SCALE: NO SCALE — DWG. NO. MH-4



NOTES:

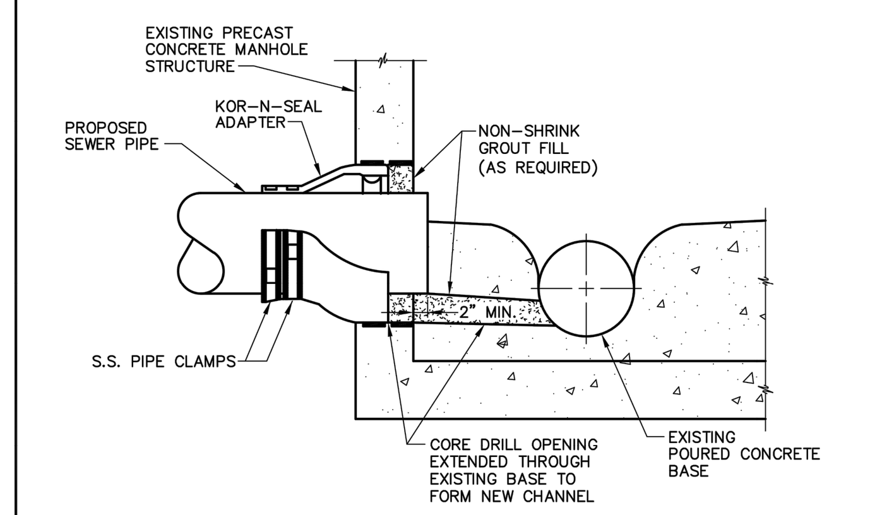
1. USE FLAT SLAB TOPS ON MANHOLES FOR CONNECTION SEWER LINES HAVING LESS THAN 5'-0" DEPTH OF COVER OVER SHALLOWEST PIPE OR WHERE INDICATED.
2. BOLTING OF MANHOLE FRAME AND COVER REQUIRED FOR ALL MANHOLES.
3. 3/4" DIA. STAINLESS STEEL EXPANSION ANCHOR BOLTS MAY BE USED IN PLACE OF THREADED STUDS AND INSERTS.
4. MANHOLE THREADED INSERT SPACING TO MATCH HOLE CENTER SPACING ON SPECIFIED FRAME AND COVER FOR EACH MANHOLE.
5. MANHOLE FRAMES SHALL BE SET WITH DOUBLE APPLICATION OF PREFORMED PLASTIC GASKET SEALANT MATERIAL.
6. PIPES SHALL PROTRUDE MIN. 2" INSIDE MANHOLE WALL.
7. ANNULAR SPACE AROUND PIPES TO BE FILLED WITH NON-SHRINK CEMENT GROUT FLUSH WITH MANHOLE WALL.
8. FOR LENGTH OF PIPE CONNECTIONS TO MANHOLES, REFERENCE SPECIFICATION SECTION 02601.
9. REFERENCE SPECIFICATION SECTION 02601 FOR ANTI-FLOATATION REQUIREMENTS.
10. ALL STONE GRADATIONS ARE AASHTO CLASSIFICATION.

FILE NAME: MH-6-PRECASTCONC-SHALLOW.DWG

STANDARD DETAILS
SHALLOW PRECAST CONCRETE MANHOLE WITH PRECAST CONCRETE BASE
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
12/16	NOTE REVISION
5/18	ANTI-FLOATATION COLLAR ADD.

SCALE: NO SCALE — DWG. NO. MH-6



NOTE:

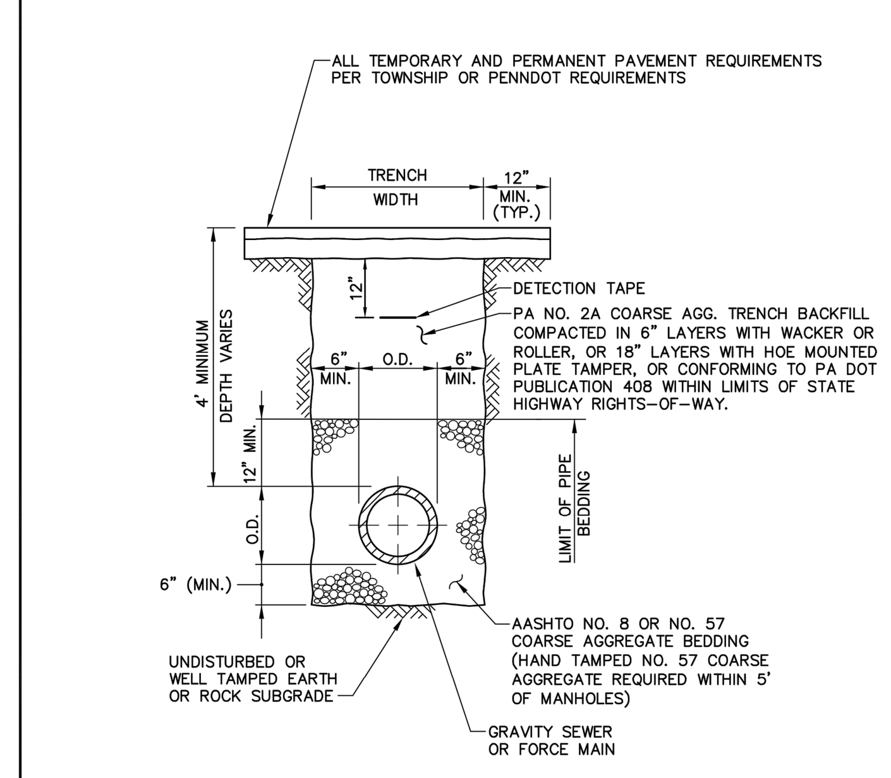
1. NEW PIPE CHANNEL RECONSTRUCTION IN ACCORDANCE WITH TOWNSHIP REQUIREMENTS.
2. NON-SHRINK CEMENT GROUT MUST CONTAIN TYPE II PORTLAND CEMENT FOR SULFATE RESISTANCE.

FILE NAME: MH-12-PIPE-KOR-N-SEAL.DWG

STANDARD DETAILS
CONNECTION TO EXISTING MANHOLE
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
12/16	DWG./NOTE REVISIONS

SCALE: NO SCALE — DWG. NO. MH-12



NOTE:

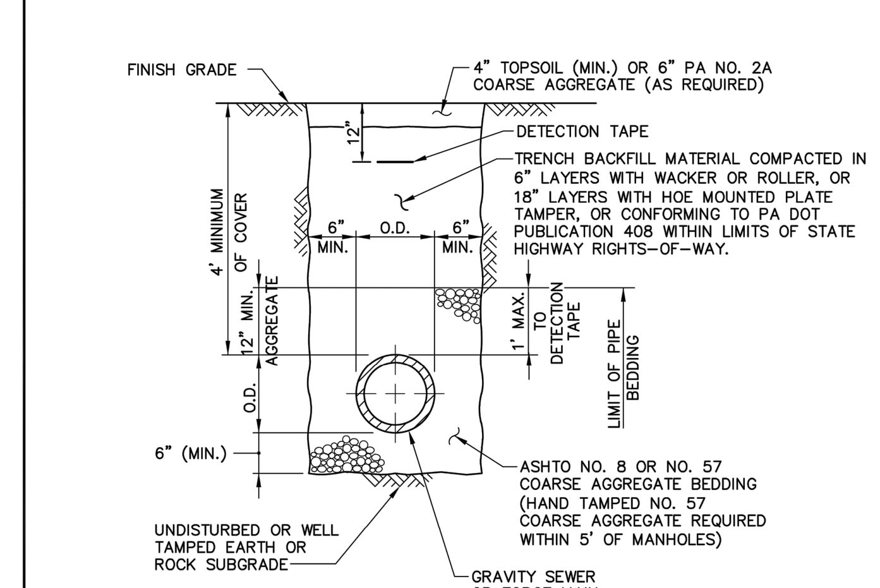
1. BACKFILL AND COMPACTION REQUIREMENT APPLIES TO PAVED ROADWAYS AND SHOULDERS OF PROPOSED AND EXISTING STREETS (OTHER THAN STATE HIGHWAYS), PAVED DRIVEWAYS, AND SIDEWALKS.

FILE NAME: TRENCH-1-PAVED.DWG

STANDARD DETAILS
TRENCH BACKFILL DETAIL IN PAVED AREAS
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS

SCALE: NO SCALE — DWG. NO. TR-1



BACKFILLING REQUIREMENTS:

1. UNPAVED AREAS OUTSIDE ROADWAYS – SUITABLE ON-SITE BACKFILL COMPACTED AS INDICATED ABOVE TO BOTTOM OF TOPSOIL. REPLACE TOPSOIL TO APPROXIMATE DEPTH OF EXISTING OR MIN. 4".
2. UNPAVED AREAS WITHIN R/W LIMITS OF STATE HIGHWAYS – CONFORMING TO REQUIREMENTS OF PA DOT PUBLICATION 408.
3. UNPAVED SHOULDERS OF PROPOSED AND EXISTING STREETS OTHER THAN STATE HIGHWAYS – AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
4. STONE DRIVEWAYS AND PARKING AREAS – PA NO. 2A COARSE AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
5. UNIMPROVED STREETS – AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.

FILE NAME: TRENCH-2-ROW.DWG

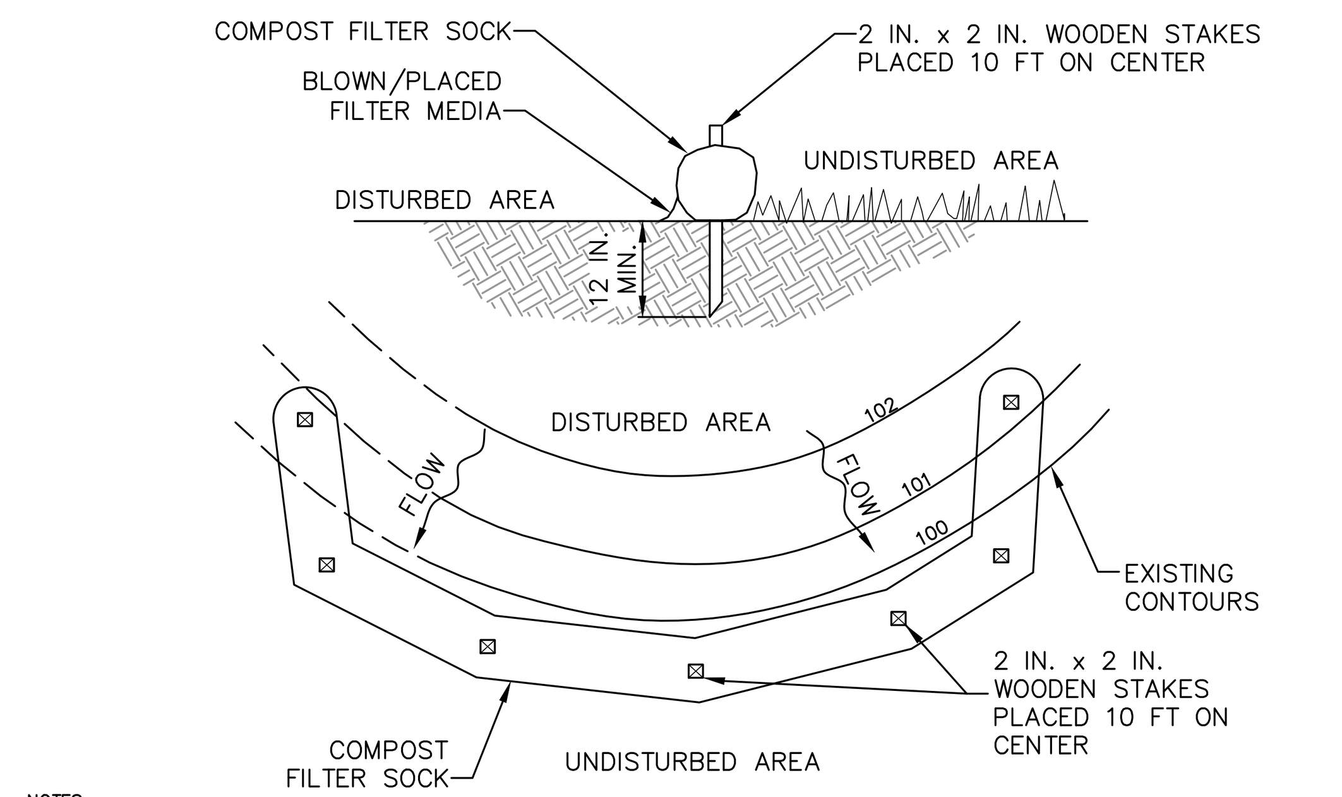
STANDARD DETAILS
TRENCH BACKFILL DETAIL IN UNPAVED AREAS
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS

SCALE: NO SCALE — DWG. NO. TR-2

PRELIMINARY / FINAL LAND DEVELOPMENT PLAN
STORMWATER, SITE AND SANITARY DETAILS
2520 MILL ROAD
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE AS NOTED
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\ 09-DETAILS



NOTES:

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

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

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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

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

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

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

WHERE SOCK CROSSES PAVEMENT, ANCHOR SOCK IN PLACE WITH A FILLED SANDBAG BUTTED ON EACH SIDE OF THE SOCK, EVERY 30 FEET OF SOCK.

THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2. THE STANDARDS CONTAINED IN THE PENNDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

ORGANIC MATTER CONTENT	80% – 100% (dry weight basis)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 – 8.0
MOISTURE CONTENT	35% – 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK

NOT TO SCALE

TABLE 4.1
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

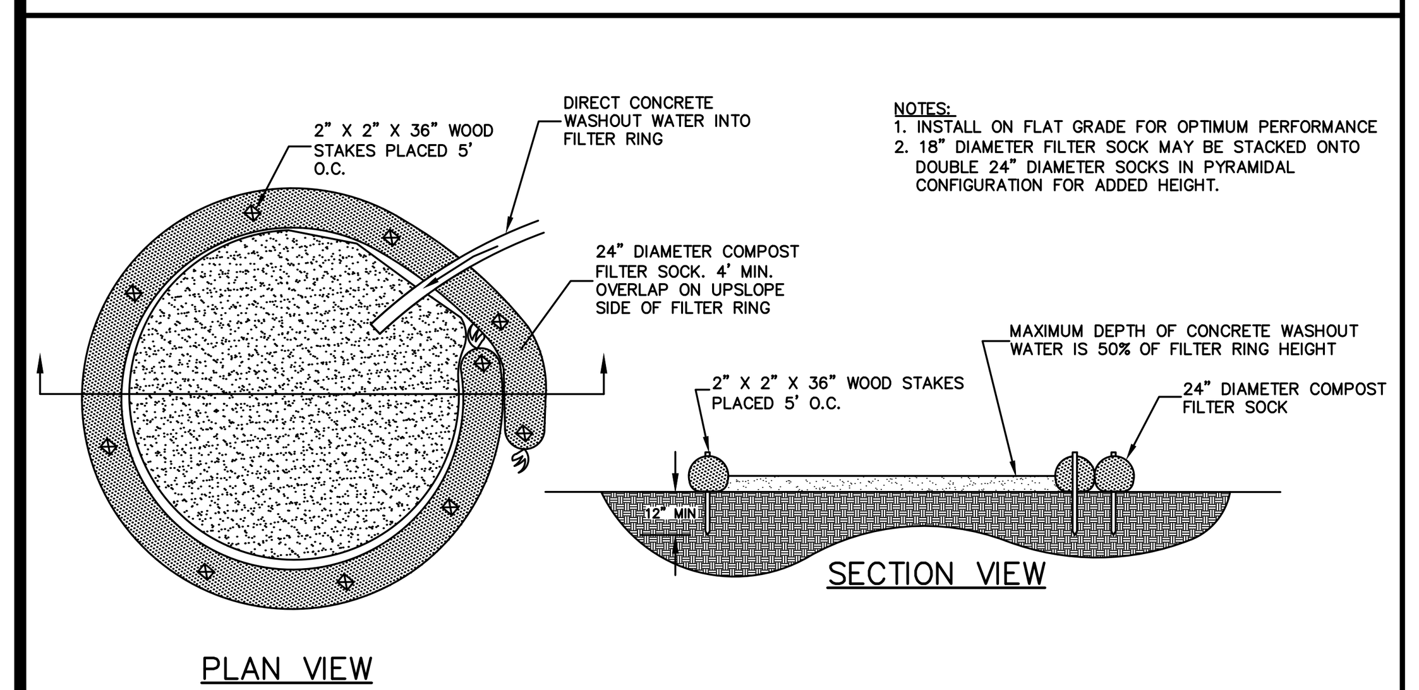
MATERIAL TYPE	3 MIL HDPE	5 MIL HDPE	5 MIL HDPE	MULTI–FILAMENT POLYPROPYLENE (MFPP)	HEAVY DUTY MULTI–FILAMENT POLYPROPYLENE (HDMFPP)
MATERIAL CHARACTERISTICS	PHOTO–DEGRADABLE	PHOTO–DEGRADABLE	BIO–DEGRADABLE	PHOTO–DEGRADABLE	PHOTO–DEGRADABLE
MATERIAL CHARACTERISTICS	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
MESH OPENING	3/8"	3/8"	3/8"	3/8"	1/8"
TENSILE STRENGTH		26 PSI	26 PSI	44 PSI	202 PSI
ULTRAVIOLET STABILITY % ORIGINAL STRENGTH (ASTM G–155)	23% AT 1000 HR.	23% AT 1000 HR.		100% AT 1000 HR.	100% AT 1000 HR.
MINIMUM FUNCTIONAL LONGEVITY	6 MONTHS	9 MONTHS	6 MONTHS	1 YEAR	2 YEAR
TWO–PLY SYSTEMS					
INNER CONTAINMENT NETTING			HDPE BIAXIAL NET CONTINUOUSLY WOUND FUSION–WELDED JUNCTURES 3/4" X 3/4" MAX. APERTURE SIZE		
OUTER FILTRATION MESH			COMPOSITE POLYPROPYLENE FABRIC (WOVEN LAYER AND NON–WOVEN FLEECE MECHANICALLY FUSED VIA NEEDLE PUNCH) 3/16" MAX. APERTURE SIZE		
SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS.					

FILTREXX & JMD

SOCK NO.	DIA. IN.	LOCATION	SLOPE (%)	SLOPE LENGTH ABOVE BARRIER (FT)
FS–1	18"	SOUTH EAST CORNER OF PROPERTY	10.0%	50'
FS–2	18"	SOUTHERN EDGE OF PROPERTY	10.0%	140'
FS–3	18"	SOUTHERN EDGE OF PROPERTY	8.30%	120'
FS–4	18"	SOUTHERN EDGE OF PROPERTY	10.0%	90'
FS–5	18"	SOUTHERN EDGE OF BASIN	33.3%	10'
FS–6	18"	SOUTH WEST CORNER OF BASIN	50.0%	15'
FS–7	18"	WESTERN EDGE OF BASIN	50.0%	20'
FS–8	18"	WESTERN EDGE OF BASIN	50.0%	20'
FS–9	18"	TOPSOIL STOCKPILE	50.0%	35'

COMPOST FILTER SOCK TABLE

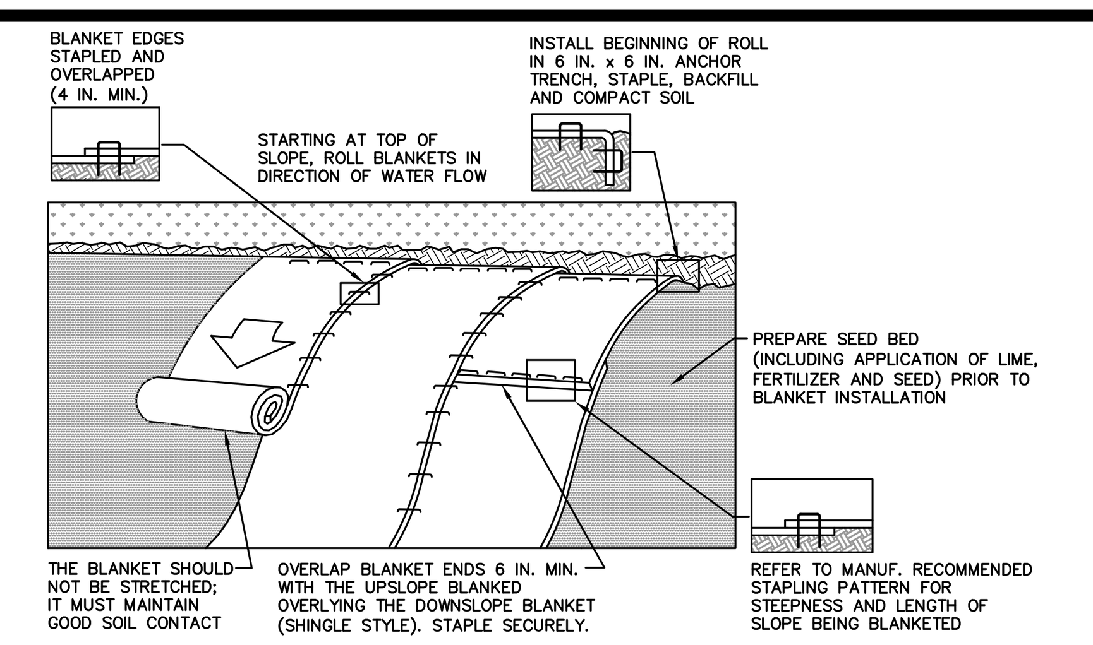
SUBSTITUTION OF FILTER SOCKS SHALL BE APPROVED BY CCD BEFORE INSTALLATION.



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

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

STANDARD CONSTRUCTION DETAIL
EROSION CONTROL CONCRETE WASHOUT
NOT TO SCALE



NOTES:

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

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

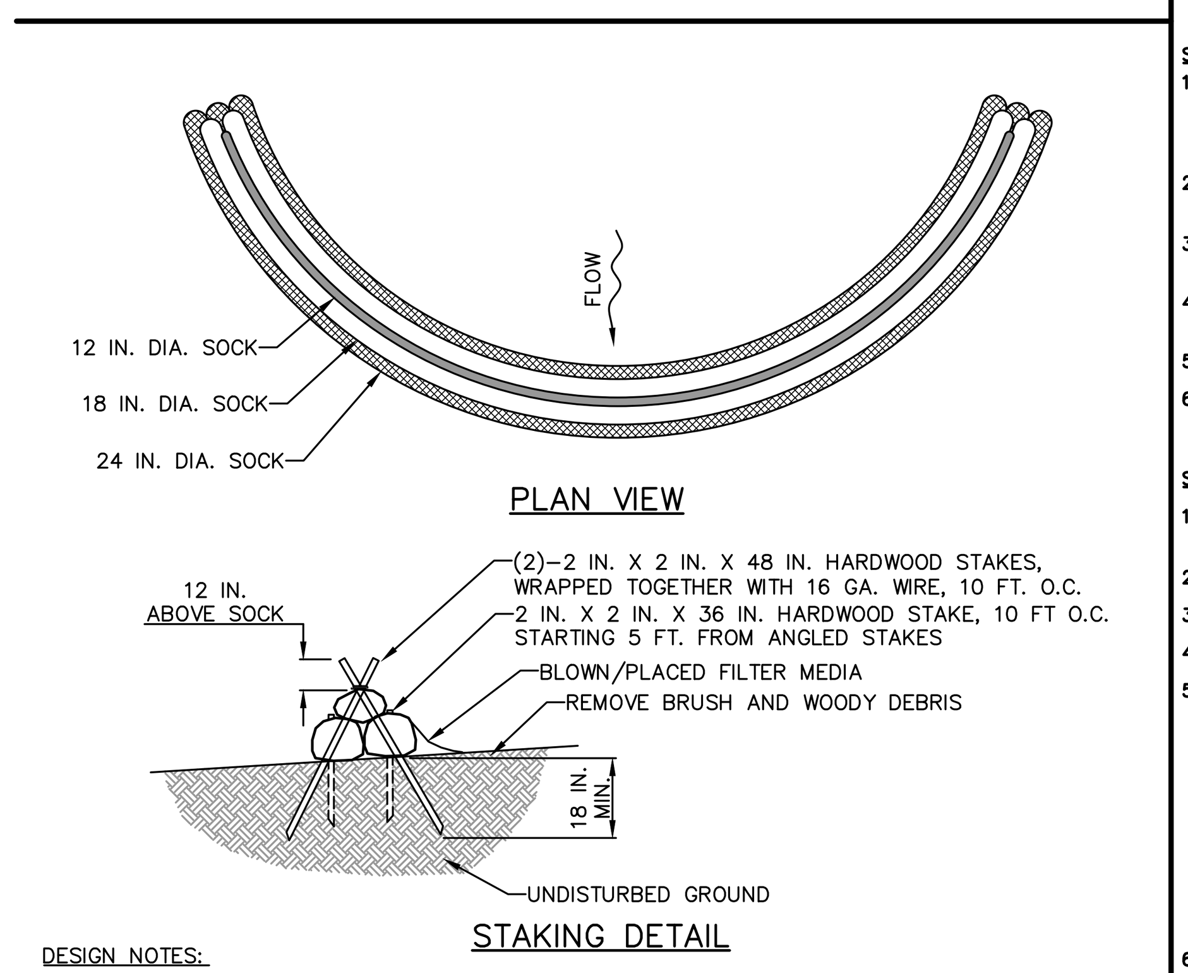
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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

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

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

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NOT TO SCALE



DESIGN NOTES:

1. COMPOST SOCK SEDIMENT TRAP SHALL BE SIZED TO PROVIDE 2000 CUBIC FEET OF STORAGE CAPACITY FOR EACH ACRE TRIBUTARY TO THE TRAP.
2. MINIMUM BASE WIDTH IS EQUAL TO THE HEIGHT.
3. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/3 THE TOTAL HEIGHT OF THE TRAP.
4. SOCKS SHALL BE OF LARGER DIAMETER AT THE BASE OF THE TRAP AND DECREASE IN DIAMETER FOR SUCCESSIVE LAYERS AS SHOWN ON THE PLAN VIEW.
5. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID–SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.

NOTES:

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

COMPOST SOCK SEDIMENT TRAPS SHALL NOT EXCEED THREE SOCKS IN HEIGHT AND SHALL BE STACKED IN PYRAMIDAL FORM AS SHOWN ABOVE. MINIMUM TRAP HEIGHT IS ONE 24" DIAMETER SOCK. ADDITIONAL STORAGE MAY BE PROVIDED BY MEANS OF AN EXCAVATED SUMP 12" DEEP EXTENDING 1 TO 3 FEET UPSLOPE OF THE SOCKS ALONG THE LOWER SIDE OF THE TRAP.

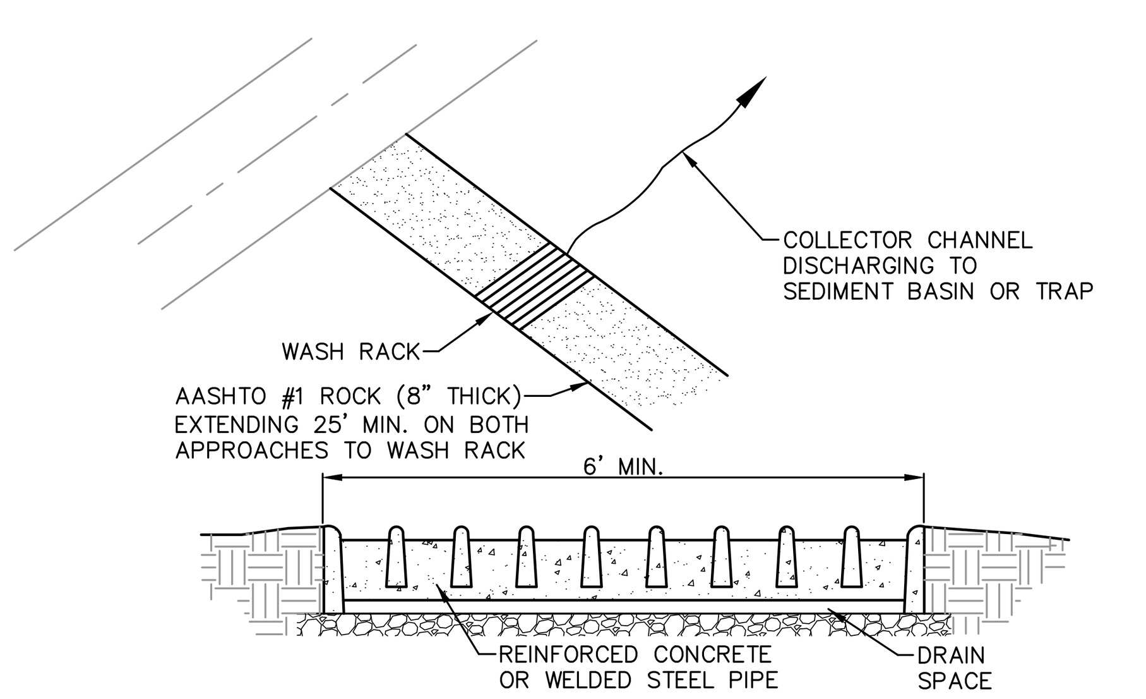
COMPOST SOCK SEDIMENT TRAPS SHALL PROVIDE 2,000 CUBIC FEET STORAGE CAPACITY WITH 12" FREEBOARD FOR EACH TRIBUTARY DRAINAGE ACRE. (SEE MANUFACTURER FOR ANTICIPATED SETTLEMENT.)

THE MAXIMUM TRIBUTARY DRAINAGE AREA IS 5.0 ACRES. SINCE COMPOST SOCKS ARE "FLOW–THROUGH," NO SPILLWAY IS REQUIRED.

COMPOST SOCK SEDIMENT TRAPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCKS.

PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN 1 YEAR.

STANDARD CONSTRUCTION DETAIL #3-11
COMPOST SOCK SEDIMENT TRAP
NOT TO SCALE



NOTES:
1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.

2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK
NOT TO SCALE

DETAILED SEQUENCE OF CONSTRUCTION:

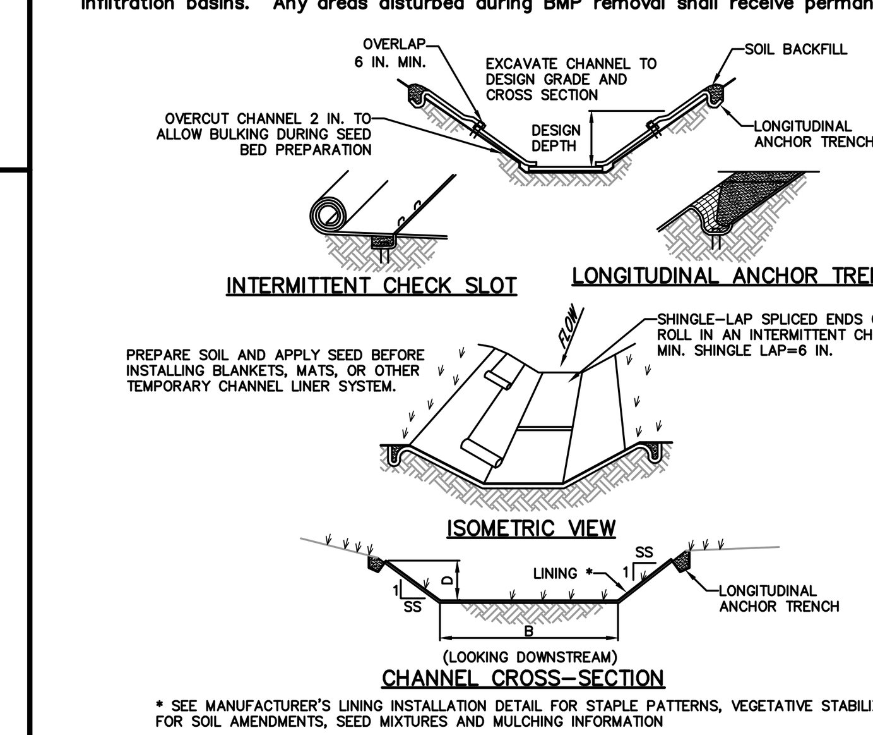
SEQUENCE OF CONSTRUCTION
1. Representatives of Upper Allen Township shall be notified prior to the commencement of any construction activity.
2. Notify Cumberland County Conservation District (CCCD) 48 hours prior to starting any activity.
3. Contractor to verify locations of existing utilities in all areas of the project prior to demolition and construction.
4. Contractor shall follow intent of sequence of construction but can shift steps within each stage as appropriate for the work involved or as needed to meet Owner's construction schedule.
5. Immediately repair/restore any BMP that is damaged or disturbed during construction activities.
6. Mark out and protect all designated infiltration area with construction fencing ensuring protection of infiltration bed elevation. If interim staged construction activities must occur on or adjacent to infiltration bed, a minimum of 1 foot in situ soil must remain on top of proposed bed to protect infiltration properties.

STAGE 1
1. Clear and grub areas for E&S measures on work site. Clear and grub only those areas where erosion control devices will be installed.
2. Install all erosion and sediment control BMPs in Stage 1 to include perimeter controls, earthmoving activities and the remainder of the clearing and grubbing, as indicated on the E&S Plans.
3. Install Rock Construction Entrance as shown on the plan. All construction vehicles must access each work site via an approved rock construction entrance.
4. Locate staging/parking areas along the southern property line near the proposed storage structure just below the proposed activity buildings. Contractor to utilize the proposed access drive for access to the site.
5. Install and maintain erosion protection at any designated topsoil stockpile areas in Stage 1. All possible locations are not shown on the plan but should be located and when needed protected accordingly with erosion control BMPs. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
6. Identify and mark infiltration bed area to protect those areas prior to main grading work. It may be necessary to remark as main grading proceeds ensuring that one foot of soil remains undisturbed on top of infiltration bed areas.
7. Strip topsoil and stockpile for later use.
8. Commences main grading operation.
9. Install proposed grass lined swales as needed to adjust existing grading to rough grading of proposed pad areas.
10. Complete main grading of both proposed multi residential building pads sites and a single Accessory storage structure. Establishing rough grade for each Activity building pad site and Accessory storage pads at proposed buildings provide reasonable vehicle approach from rock construction entrance to each pad site.

STAGE 2
1. Proceed with constructing building footings and foundations. Seepage may be encountered during construction Contractor shall select appropriate means, methods and sequence to protect excavation site from slope instability. Any water pumped from footing operations or foundation construction must be pumped directly to temporary compost sock sediment trap.
2. Construct gravity sanitary sewer main of development to existing sanitary sewer system in Mill Road (T–610).
3. Commence building construction of multi residential buildings. Construct underground utilities within footprint and outside footprint. Coordinate with interior footing construction.
4. When interior pad site is at rough grade elevation and substantial internal activity completed within building footprint, stabilize the building pad site with stone.
5. Complete rough grading of site to reach plan subgrades.
6. Upon stabilizing Stage 1 and 2 disturbances verify that perimeter controls will adequately capture sediment laden runoff. Adjust all temporary BMPs as necessary to protect against release of sediment.

STAGE 3
1. Clean and verify all erosion controls are in working order prior to commence of Stage 3. Remark/protect all infiltration bed areas.
2. Construct proposed stormwater detention facility area to final grades. Stabilize areas.
3. Construct sanitary sewer main from Mill road to proposed building pads.
4. Extend Water main for Mill Road to Proposed building pad sites.
5. Construct stormwater detention facility .BMP areas at activity building pads and proposed building sites. A licensed professional shall be on–site to inspect the critical stages of all permanent BMPs, including:
   - Site observation of bed bottom.
   - Subsoil bed areas.
   - Verification of dimensions.
   - Embankment construction.
   - Checking excavation and installation of infiltration media at inverts.
   - Installation of outlet control structures and outfall pipes, along with bedding and backfill material.
6. Excavate infiltration bed area for BMP's following instructions on PCSM Plans, complete installation of geotextile, structure and piping. Ensure no runoff enters BMPs at this vulnerable stage. Connect and clean all piping before construction of any BMP. Still protect against sediment laden runoff until upstream area is stabilized.
7. Complete grading of site to subgrade and proceed with stabilizing paved areas with stone base.
8. Place erosion control mat on disturbed surfaces with slopes equal to or greater than 3:1.
9. Adjust local site controls as construction progresses.
10. Complete flat work around site.
11. Install maintenance access/parking area including walkways.
12. Complete first application of paving.
13. Areas at finished grade shall receive permanent stabilization. Areas not receiving permanent stabilization shall receive temporary stabilization. Complete temporary stabilization on all exposed earth areas and redress all erosion control facilities around the site.
14. Clean and maintain local stormwater management controls/filters to intercept sediment laden runoff before it gets to infiltration basin.

STAGE 4
1. Complete fine grading of site.
2. Place topsoil on site.
3. Complete any landscaping and permanent stabilization work.
4. Complete second application of paving.
5. Remove/restore staging/parking areas.
6. Upon completion of all stages and having brought all disturbed areas to permanent stabilization in accordance with these plans and with the approval of Engineer and Department of Environmental Protection, all remaining temporary E&S control facilities may be dismantled and removed from the project area. Prior to removal, all drainage piping is to be flushed and clean of sediment taking care not to allow any sediment to reach the underground stormwater network and infiltration basins. Any areas disturbed during BMP removal shall receive permanent stabilization.



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL–1 CROSS–SECTION (25–YEAR)

CHANNEL NO.	CHANNEL SLOPE	SS	B (FT)	D (MIN.) (FT)	LINING
GLS–1 (SECTION–1)	8.00%	3:1	1.00	0.75	ERONET S–75
GLS–1 (SECTION–2)	4.67%	3:1	1.00	1.00	ERONET S–75
GLS–1 (SECTION 3)	9.20%	3:1	1.00	1.00	ERONET P–300
GLS–1 (SECTION 4)	16.0%	5:1	1.00	0.75	ERONET P–300
GLS–2	11.3%	3:1	2.00	0.75	ERONET P–300

1. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTION SUCH AS FILL GROUND, FALLEN LEAVES AND WOODY DEBRIS, ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIALS / WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH (UNLESS PART OF THE LANDSCAPE PLAN). ANY UNDERGROUND UTILITIES RUNNING ACROSS / THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS–SECTION DETAIL.
2. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER–EXCAVATED MINIMUM OF 6" TO ALLOW FOR PLACEMENT OF TOPSOIL.
3. CHANNELS MUST BE STABILIZED WITH INDICATED LINING IMMEDIATELY UPON CONSTRUCTION.
4. CHANNEL MAINTENANCE: CHANNELS MUST BE MAINTAINED TO ENSURE THAT THE SPECIFIED DESIGN DIMENSIONS AND STABILIZATION ARE AVAILABLE AT ALL TIMES.
5. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
6. CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.
7. NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL
NOT TO SCALE

EROSION CONTROL PLAN GENERAL NOTES:

1. The site contractor shall be responsible for implementation of this Erosion Control Plan.
2. The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.
3. Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.
4. A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site during at all times.
5. At least 7 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the owner and/or operator shall invite all contractors involved in those activities, the landowner, appropriate municipal officials, the erosion control plan preparer, the post construction plan preparer, and a representative of the County Conservation District to an on–site pre–construction meeting.
6. At least 3 days before starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call system Incorporated shall be notified at 1–800–242–1776 for the location of existing underground utilities.
7. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing, and topsoil stripping shall be limited only to those areas described in each stage. Deviation from that sequence must be approved in writing from the County Conservation District prior to implementation.
8. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E & S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document.
9. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operation begin.
10. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.
11. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices (BMPs) to minimize the potential for erosion and sediment pollution, and notify the Conservation District and/or the regional office of PA DEP.
12. Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management regulations at 25 Pa. Code 260, 260.1 et seq., 271.1, and 287.1 et seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
13. All off–site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.
14. The contractor is responsible for ensuring that any material brought onto the site is Clean Fill. Form FP–001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as Clean Fill due to analytical testing.
15. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.
16. Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes shall have a minimum of 2 inches of topsoil.
17. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures, conduits, etc. shall be compacted in accordance with local requirements or codes. All fills shall be placed in compacted layers not to exceed 9 inches in thickness. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills. Fill shall not be placed on saturated or frozen surfaces.
18. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
19. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.
20. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non–germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent stabilization specifications.
21. Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non–vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
22. All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.
23. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and / or operator shall contact the Conservation District for an inspection prior to removal / conversion of the E & S BMPs.
24. After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Ares disturbed during removal or conversion of the BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.
25. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and / or operator shall contact the Conservation District to schedule a final inspection.
26. Failure to correctly install E & S BMPs, failure to prevent sediment–laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E & S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Pennsylvania Department of Environmental Protection as defined in Section 602 of the Pennsylvania Clean Streams law. The Clean Streams law provides for up to $10,000 per day in civil penalties, up to $10,000 in summary criminal penalties, and up to $25,000 in misdemeanor criminal penalties for each violation.
27. Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.
28. If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.
29. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, in all areas with concentrated flows as noted on the drawings.
30. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross–section and protective lining. Any base flow within the channel shall be conveyed past the work in the manner described in this plan until such restoration is complete.

MAINTENANCE PLAN:

1. The contractor shall be responsible for the ongoing maintenance of all erosion and sediment pollution control facilities throughout the period of construction and until such time that the site is deemed permanently stabilized.
2. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re–grading, reseeding, re–mulching, and re–netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.
2. A log showing dates that E & S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials at the time of inspection.
3. Any sediment removed from BMPs during construction will be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.
4. See the construction details and seeding specifications for maintenance procedures for the various control measures.
5. Mud must be removed from vehicle tires before they exit the site. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer or surface water.
6. The rock construction entrances shall be inspected at the end of each construction day. rock construction entrances with wash racks should be maintained to the specified dimensions by adding rock when necessary at the end of each workday. the rock pile shall be maintained at a thickness of 8 inches. a stockpile of rock shall be maintained on site for this purpose. any sediments that have been deposited on public roads shall be removed immediately. drain space under the wash rack shall be kept open at all times. damage to the wash rack shall be repaired prior to further use of the rack.
7. Compost sock sediment trap shall be inpected at the end of each workday, weekly, and after each rainfall. sediment collected from the wash rack runoff shall be removed when it reaches 1/3 height of the socks.
8. All compost filter socks shall be inspected weekly and after each runoff for washouts, overtopping, and physical damage. any damage shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection. biodegradable filter socks shall be replace after 6 months; photodegradable socks after 1 year. polypropylene socks shall be replaced according to manufacturer's recommendation. accumulated sediments shall be removed when it reaches half the aboveground height of the sock and disposed in the manner as described in this plan.
9. All concrete washout facilities shall be inspected daily. damaged or leaking washouts should be deactivated and repaired or replaced immediately.
10. The proper timing of the installation and removal of all facilities as herein specified shall be assured. the operator shall remove from the site, recycle or dispose of all building materials and waste in accordance with the department's solid waste management regulations at 25 pa code 260.1 et seq., 271.1 et seq. the contractor shall not bury, dump, or discharge any building material or waste at the site. sediment removed from erosion and sedimentation control measures is to be placed with the topsoil stockpile areas on site.

E&S GENERAL NOTES CON'T:

31. Fill Materials––
The erosion and sediment pollution control plan covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials." If the site will need to have fill imported from an off site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the site is Clean Fill. Any placement of clean fill that has been affected by a spill or release of a regulated substance must use form FP–001 to certify the origin of the fill material and the results of the analytical testing to qualify the material as clean fill. Form FP–001 must be retained by the owner of the property receiving the fill.

Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258–2182–773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents– Final." Then type the document number 258–2182–773 into the search window and conduct the search. Click on "Management of Fill."

Clean Fill is defined as: Uncontaminated, non–water soluble, non–decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re–use.)

Clean Fill affected by a spill or release of a regulated substance: Fill materials affected by a spill or release of a regulated substance still qualifies as clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in Tables FP–1a and FP–1b found in the Department's policy "Management of Fill."

Environmental due diligence: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the past land use of the property indicates that the fill may have been subjected to a spill or release of regulated substance. If the fill may have been affected by a spill or release of a regulated substance, it must be tested to determine if it qualifies as clean fill. Testing should be performed in accordance with Appendix A of the Department's policy "Management of Fill."

Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapters 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable.

32. The erosion and sediment pollution control plan must be approved by the County Conservation District prior to any earthmoving activities on this site.
33. All channels must be kept free of obstructions such as fill ground, fallen leaves and woody debris, accumulated sediment, and construction wastes/materials. Channels should be kept mowed and/or free of all weedy, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross–section detail.
34. Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over–excavated to allow for the placement of topsoil.
35. The permittee and co–permittee must ensure that visual site inspections are conducted weekly, and after each measurable precipitation event by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that the Erosion and Sediment Control (E&S) BMPs are operational and effective in preventing pollution to the waters of the Commonwealth. A written report of each inspection shall be kept, and include:
   1) a summary of the site conditions, E&S BMPs, and compliance; and
   2) the date, time, and the name of the person conducting the inspection.
36. The contractor shall be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.

TEMPORARY SEEDING SCHEDULE:

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species:	annual rye grass
% Live Seed:	98%
Application rate:	10 lbs./1,000 sq. yds.
Fertilizer type:	general purpose granular, 10–20–20
Fertilizer application rate:	11 lbs./1,000 sq. yds.
Liming rate:	per soil test; minimum of 4 tons per acre.
Strawbale mulch rate:	1,200 lbs/1,000 sq. yds.
Seeding dates:	no seeding between 1 1/1 and 3/15
Mulch anchoring:	Asphalt, either emulsified or cut–back, containing no solvents or other diluting agents toxic to plan or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non–toxic to plant and animal species.

Seed shall conform to the requirements of PennDOT Publication 408. Section 804.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawbales at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

Maintenance procedure:
1) Maintain a minimum 70% soil surface coverage with grass and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

PERMANENT SEEDING SCHEDULE:

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

FOR GENERAL LAWN PLANTING––

Species:	30% Kentucky bluegrass, 40% Pennlawn Creeping Red Fescue, 20% Norlea Perennial ryegrass, 10% annual ryegrass
% Pure live seed:	98%
Application rate:	6 lbs./1,000 sq. ft.
Fertilizer type:	general purpose granular, 10–20–20
Fertilizer application rate:	11 lbs./1,000 sq. yds.
Liming rate:	per soil test; minimum of 6 tons per acre
Seeding dates:	between 4/1 and 10/15
Strawbale mulching rate:	3 tons per acre
Mulch anchoring:	Asphalt, either emulsified or cut–back, containing no solvents or other diluting agents toxic to plan or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non–toxic to plant and animal species.

Seed shall conform to the requirements of PennDOT Publication 408. Section 804.

MULCHING

Mulch material shall be hay or straw as defined in Section 805 of PennDOT Publication 408 and shall be free from foreign material, coarse stems, and any substance toxic to plant growth, also free from mature seed bearing stalks or roots of prohibited or noxious weeds, both as defined by law. Place mulch immediately after seeding in a uniform continuous blanket at a minimum rate of 1,200 pounds per 1,000 square yards (3 tons per acre).

Straw mulch should be anchored immediately after application to prevent being windblown. A tractor–drawn implement may be used to "crimp" the straw into the soil. This method is limited to slopes no steeper than 3:1. The machinery should be operated on the contour. (Note: crimping of straw by running over it with tracked machinery is not recommended).

Asphalt, either emulsifies or cut–back, containing no solvents or other diluting agents toxic to plant or animal life, uniformly applied at the rate of 31 gallons per 1000 sq. yd. may be used to tack mulch.

Synthetic binders (chemical binders) may be used as recommended by the manufacturer to anchor mulch provided sufficient documentation is provided to show they are non–toxic to native plant and animal species.

Lightweight plastic, fiber, or paper nets may be stapled over the mulch according to manufacturer's recommendations.

CLEAN FILL/ DUE DILIGENCE NOTES

Applicants and/or operators must use environmental due dilligence to ensure that the fill material associated with this project qualifies as clean fill. definitions of clean fill and environmental due diligence are provided below. all fill material must be used in accordance with the department's policy "management of fill", document number 258–2182–773. a copy of this policy is available online at www.depweb.state.pa.us <http://www.dep.state.pa.us.

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Clean fill affected by a spill or release of a regulated substance:
fill materials affected by a spill or release of a regulated substance still qualifies as clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in table fp–1a and fp–1b found in the department's policy "management of fill". any person placing clean fill that has been affected by a spill or release of a regulated substance must use form fp–001 to certify the origin of the fill material and the results of the analytical testing to qualify the material as clean fill. form fp–001 must be retained by the owner of the property receiving the fill. a copy of form fp–001 can be obtained from the department.

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Fill material that does not qualify as clean fill is regulated fill. regulated fill is waste and must be managed in accordance with the department's municipal or residual waste regulations based on 25 pa code chapters 287 residual waste management or 271 municipal waste management, whichever is applicable.

NO.	DATE	DESCRIPTION	BY
2	7/23/21	REVISED PER TWP COMMENTS	GLM
1	6/16/21	REVISED PER TWP & CO COMMENTS	SRR

DESIGN : MH
DRAWN : MH
CHECKED : RAC
DATE : 04/30/2021

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SEAL

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PRELIMINARY / FINAL LAND DEVELOPMENT PLAN
EROSION CONTROL DETAILS
2520 MILL ROAD
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 320014
SURVEY BOOK :
SCALE AS NOTED
DWG FILE Y:\2020\320014.aph\320014\dwg\Plans\Final\10–DETAILS.dwg