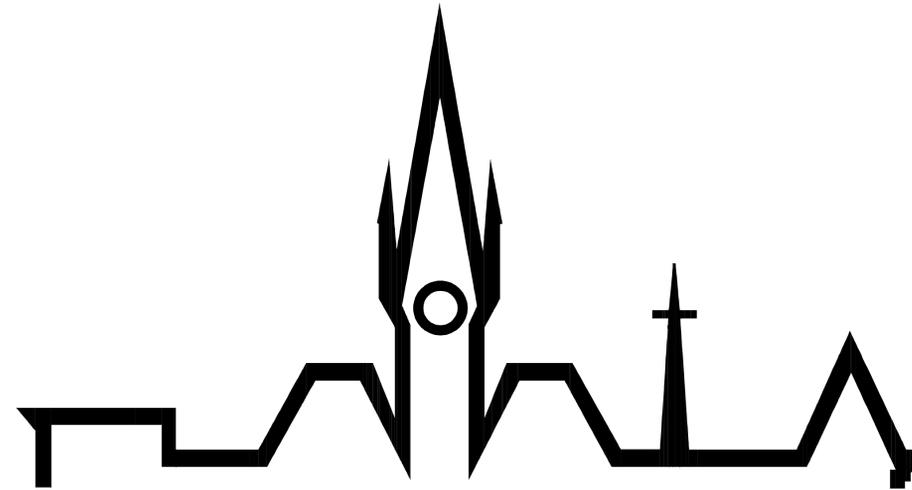


FINAL LAND DEVELOPMENT PLAN GRAYS WOODS PLANNED COMMUNITY GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B

PATTON TOWNSHIP,
CENTRE COUNTY, PA



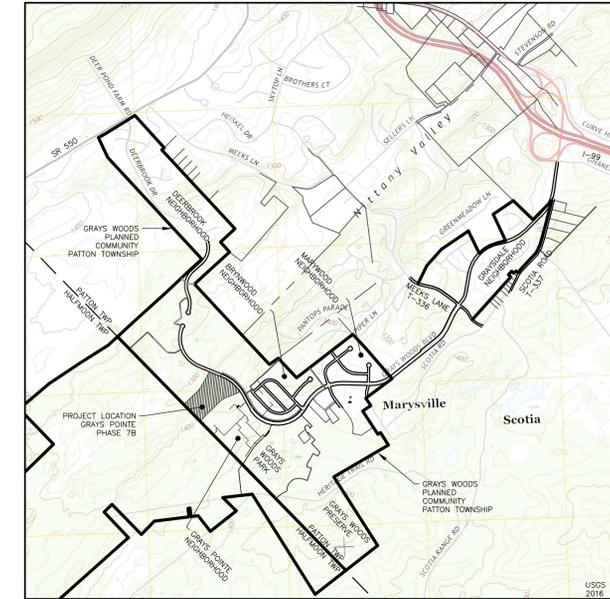
KELLER ENGINEERS

HOLLIDAYSBURG • STATE COLLEGE

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D. DRAINAGE MAP SEDIMENT BASIN, #6



LOCATION MAP
2000' 0' 2000'

EXISTING UTILITY INFORMATION:
1. UTILITY LOCATION: AN EFFORT HAS BEEN MADE TO LOCATE AND ILLUSTRATE APPROXIMATE LOCATION OF EXISTING UNDERGROUND UTILITY LINES. HOWEVER, ALL BURIED UTILITIES ARE NOT NECESSARILY SHOWN.
2. ENGINEER UTILITY NOTIFICATION: THE ENGINEER HAS COMPLIED WITH THE REQUIREMENTS OF ACT 287 (1974) OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA AS AMENDED BY ACT 50 (2017) KNOWN AS THE UNDERGROUND UTILITY LINE PROTECTION LAW. THIS LAW REQUIRES THAT A PRELIMINARY DESIGN NOTIFICATION BE MADE MORE THAN 90-DAYS PRIOR TO FINAL DESIGN COMPLETION AND/OR A FINAL DESIGN NOTIFICATION BE MADE NOT LESS THAN 10 NOR MORE THAN 90 BUSINESS DAYS PRIOR TO FINAL DESIGN COMPLETION.
3. OWNER UTILITY NOTIFICATION: THE OWNER SHALL COMPLY WITH THE REQUIREMENTS OF ACT 287 (1974) OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA AS AMENDED BY ACT 50 (2017) KNOWN AS THE UNDERGROUND UTILITY LINE PROTECTION LAW. THIS LAW REQUIRES THAT AN ADDITIONAL DESIGN NOTIFICATION BE MADE OR CAUSED TO BE MADE BY THE OWNER IF MORE THAN 90-DAYS LAPSES SINCE THE LAST DESIGN NOTIFICATION MADE BY THE ENGINEER. THIS ADDITIONAL DESIGN NOTIFICATION MUST BE MADE NO MORE THAN 90-DAYS PRIOR TO THE PROJECT BID DATE, OR IN ABSENCE OF A BID, NO MORE THAN 90-DAYS PRIOR TO THE CONSTRUCTION START DATE. THE OWNER MUST THEN REACT ACCORDINGLY:
• BY CAUSING THE UPDATED UTILITY FIELD MARKINGS TO BE RE-SURVEYED.
• BY CAUSING THE UPDATED UTILITY FIELD MARKINGS TO BE ADDED TO PROJECT BASE MAPPING AND CONSTRUCTION DOCUMENTS IF CHANGES HAVE OCCURRED SINCE LAST EFFORT.
• BY CAUSING DESIGN ADJUSTMENTS TO BE MADE TO REFLECT UPDATED UTILITY LOCATIONS IF SO REQUIRED.
CONTRACTOR UTILITY NOTIFICATION: THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF ACT 287 (1974) OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA AS AMENDED BY ACT 50 (2017) KNOWN AS THE UNDERGROUND UTILITY LINE PROTECTION LAW. THIS LAW REQUIRES THAT AN EXCAVATION NOTIFICATION BE MADE BY THE CONTRACTOR NOT LESS THAN THREE OR MORE THAN TEN WORKING DAYS NOTICE PRIOR TO EXCAVATION.
4. NOTIFICATION CONTACT INFORMATION:
CALL BEFORE YOU DIG: COMMON GROUND ALLIANCE NATIONAL ONE-CALL: 811
PA ONE-CALL SYSTEM, INC.: 1-800-242-1776
6. NOTIFICATION HISTORY:
• PA ONE-CALL PRELIMINARY DESIGN NOTIFICATION DATE: 2024-10-22
• PA ONE-CALL PRELIMINARY DESIGN SERIAL #: 20242962034
• PA ONE-CALL FINAL DESIGN NOTIFICATION DATE:
• PA ONE-CALL FINAL DESIGN SERIAL #:
7. KNOWN UTILITIES: A LIST OF KNOWN UTILITIES HAVING FACILITIES IN THE GENERAL AREA, PER THE PA ONE CALL SYSTEM PRELIMINARY DESIGN NOTIFICATION SERIAL # _____ CAN BE FOUND BELOW. THESE UTILITY COMPANIES MAY OR MAY NOT HAVE FACILITIES IN THIS SPECIFIC PROJECT LOCATION.

- UTILITY COMPANIES INDICATED WITH PRESENCE IN AREA:
- SANITARY SEWER**
UNIVERSITY AREA JOINT AUTHORITY
1576 SPRING VALLEY ROAD
STATE COLLEGE, PA 16801
CONTACT: DAREN BROWN
814.238.5361 EXT 7715
 - SANITARY SEWER**
PENN STATE UNIVERSITY WASTEWATER TREATMENT PLANT
501 UNIVERSITY DRIVE
STATE COLLEGE, PA 16801
CONTACT: JEFF MCDONALD
JAM@PSU.EDU
814.865.7701
 - PUBLIC WATER**
STATE COLLEGE BOROUGH WATER AUTHORITY
1201 WEST BRANCH ROAD
STATE COLLEGE, PA 16801
CONTACT: JEFF SHETTLER
JSHETTLER@SCWA.ORG
814.238.6765 EXT 125
 - ELECTRIC**
FIRSTENERGY CORPORATION
21 SOUTH MAIN STREET
MORRISVILLE, PA 17053
MELLYSSA@FIRSTENERGYCORP.COM
814.664.4070
 - NATURAL GAS**
COLUMBIA GAS OF PA INC. BETHEL PARK
1600 DUBLIN ROAD
COLUMBIAS, OHIO 43215
CONTACT: LISA COLLINS
LUCOLLIANS@COLUMBIAGAS.COM
614.325.5961
 - CABLE TELEVISION**
COMCAST CABLE COMMUNICATIONS
C/O USG LOCATING SERVICES, INC.
1303 HAMILTON CROSSING BLVD, SUITE 200
CARMEL, IN 46032
CONTACT: GREG OFFICER PERSONNEL
ONE CALL 5-PA-POCC@SMPTICKETS.COM
1.800.762.0592 EXT 1
 - STORMWATER FACILITIES**
PATTON TOWNSHIP
100 PATTON PLAZA
STATE COLLEGE, PA 16803
CONTACT: GLENN COAKLEY
GCOAKLEY@PATTON.PA.US
814.234.0271



PATTON TOWNSHIP BOARD OF SUPERVISORS:
APPROVED BY THE PATTON TOWNSHIP BOARD OF SUPERVISORS ON _____ 20 ____

CHAIR _____ DATE _____

SECRETARY _____ DATE _____

PATTON TOWNSHIP PLANNING COMMISSION:
RECOMMENDED FOR APPROVAL BY THE PATTON TOWNSHIP PLANNING COMMISSION ON _____ 20 ____

CHAIR _____ DATE _____

SECRETARY _____ DATE _____

CERTIFICATION OF OWNERSHIP:
COMMONWEALTH OF PENNSYLVANIA
COUNTY OF CENTRE
DEED BOOK 454 PAGE 890
RECORD BOOK 557 PAGE 921

ON THIS THE _____ DAY OF _____ 20____, BEFORE ME, A NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA, THE UNDERSIGNED OFFICER PERSONALLY APPEARED:

DANIEL R. HAWBAKER, MANAGER
THE GRAY'S WOOD A PENNSYLVANIA GENERAL PARTNERSHIP

WHO ACKNOWLEDGED THAT THEY ARE THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT THEIR DIRECTION, THAT THEY ACKNOWLEDGES THE SAME TO BE THEIR ACT AND PLAN, AND DESIRES THE SAME TO BE RECORDED AS SUCH.

SIGNATURE _____

IN WITNESS WHEREOF, I HERETO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC _____

MY COMMISSION EXPIRES _____ 20____

PROFESSIONAL ENGINEER'S PLAN CERTIFICATION:
I, _____ A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN IS TRUE AND CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, ALLEYS, HIGHWAYS AND INFRASTRUCTURE AS DESIGNED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

JOSEPH G. KELLER, P.E. _____ DATE _____
KELLER ENGINEERS

DESIGN ENGINEER STORMWATER CERTIFICATION:
I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS THE DESIGN CRITERIA AND STANDARDS OF THE PATTON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE AND THE HALFMOON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

JOSEPH G. KELLER, P.E. _____ DATE _____
KELLER ENGINEERS

FIRE COMPANY APPROVAL ACKNOWLEDGEMENT:
RECOMMENDED FOR APPROVAL

APPROVED BY _____ DATE _____

OWNER STORMWATER ACKNOWLEDGEMENT:
I HEREBY ACKNOWLEDGE THAT THE STORMWATER MANAGEMENT SYSTEM IS TO BE MAINTAINED IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PROGRAM AND IS TO REMAIN A PERMANENT FIXTURE WHICH CANNOT BE ALTERED OR REMOVED WITHOUT APPROVAL OF PATTON TOWNSHIPS.

OWNER _____ DATE _____

3500 E. College Avenue
Suite 1100
State College, PA 16801
P: (814) 231-2925

KELLER ENGINEERS
CIVIL • STRUCTURAL • SURVEY
www.keller-engineers.com

| NO. | DATE | REVISION DESCRIPTION |
|-----|------|----------------------|
| | | |
| | | |
| | | |
| | | |

**FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B**

TITLE

PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

PROJECT NO.: 95-82
FILE NAME: TITLE & INDEX
DESIGNED BY: LISA COLLINS
DRAWN BY: LISA COLLINS
CHECKED BY: GLENN COAKLEY

DATE: 2024-11-01

01

| BULK (DENSITY) - GRAYS POINTE PHASE 7B | | | | | | | | | | |
|--|---------------|----------------|---------------|---------------|------------|--------------|------------------|---------------|------------------------------|---|
| EXISTING | LARGE SF LOTS | MEDIUM SF LOTS | SMALL SF LOTS | TOTAL SF LOTS | TOWN HOME | VILLAGE HOME | GARDEN APARTMENT | TOTAL MF LOTS | GRAND TOTAL RESIDENTIAL LOTS | NOTES |
| DEERBROOK 1A | 24 | | | 24 | | | | 0 | 24 | |
| DEERBROOK 2A | 16 | | | 16 | | | | 0 | 16 | |
| DEERBROOK 1C | 6 | 2 | | 8 | | | | 0 | 8 | |
| GRAYSDALE 1A | 27 | | | 27 | | | | 0 | 27 | |
| GRAYSDALE 2A | 49 | | 8 | 57 | | | | 0 | 57 | |
| GRAYSDALE 2B | 43 | | | 43 | | | | 0 | 43 | |
| MARYWOOD 3A | 49 | | | 49 | | | | 0 | 49 | |
| BRYWOOD 3B | | 13 | 74 | 87 | | | | 0 | 87 | |
| BRYWOOD 3C | | 3 | 13 | 16 | | | | 0 | 16 | |
| GRAYS POINTE 6A | | 6 | 6 | 12 | 37 | | | 37 | 43 | |
| GRAYS POINTE 6B | | 26 | 26 | 52 | | | | 0 | 52 | |
| GRAYS POINTE 6C | | | | | 41 | | | 41 | 41 | |
| GRAYS POINTE 6D | | 15 | 15 | 30 | 66 | | | 66 | 83 | |
| GRAYS POINTE 7A | | 36 | 36 | 72 | | | | 0 | 72 | |
| SUBTOTAL EXISTING | 46 | 196 | 100 | 442 | 146 | 0 | 0 | 146 | 588 | |
| | 3% | 10% | 10% | | | | | 3% | 31% | |
| PROPOSED | | | | | | | | | | |
| GRAYS POINTE 7B | 17 | 17 | | | | | | 0 | 17 | |
| FUTURE | | | | | | | | | | |
| PHASE 4 | 49 | 88 | 137 | | | 672 | 672 | 808 | | |
| PHASE 5 | 63 | 50 | 113 | | | | | 0 | 113 | |
| PHASE 6 | 69 | 69 | 138 | | | 48 | 48 | 147 | 147 | |
| PHASE 7 | 60 | 60 | 120 | | | | | 0 | 120 | |
| PHASE 10 | 59 | 59 | 118 | | | | | 0 | 118 | |
| SUBTOTAL FUTURE | 0 | 270 | 237 | 507 | 0 | 48 | 672 | 720 | 1227 | |
| | 0% | 15% | 15% | | | | | 40% | 68% | |
| GRAND TOTAL | 46 | 466 | 434 | 936 | 146 | 48 | 672 | 866 | 1802 | |
| | | | | | | | | | | 1802 Resident/Units 147 Phase 6 Development rights transferred to Patton Township 59 Phase 5 Development rights transferred to Patton Township 59 Phase 10 Development rights transferred to Patton Township 147 Proposed density = 1802 units - 305 transferred unit rights = 1497 units |
| MIN REQUIRED % | 0% | 25% | 25% | | | | | | 25.00% | |
| ACTUAL % | 3% | 25% | 24% | | | | | | 48.00% | |
| TOTAL TRACT AREA: | | | | 600.52 | | | | | | |
| MX ALLOWABLE DENSITY (UNITS PER ACRE): | | | | 3.00 | | | | | | |
| MX ALLOWABLE DENSITY (UNITS): | | | | 1802 | | | | | | |
| ACTUAL GROSS DENSITY (UNITS PER ACRE): | | | | 3.00 | | | | | | |

Tabulations are in accordance with the area, bulk, open space, and parking requirements for Grays Woods Planned Community as specified in 175-23.1

| COVERAGE - GRAYS POINTE PHASE 7B | | | | | | | | | | | | | | | | | | | | |
|--|------|-------------|---------|----------------------------------|-------------------------------|--------------------------------|-----------------------------------|-----------------------------|----------------|----------------|------------------------------|---------------------------------|---------|-------------------|----------------------|---------------------------|------------------------------|---|-----------------------------|--|
| LOCATION | TYPE | # BUILDINGS | # UNITS | MX ALLOWABLE BUILDING COVERAGE % | MX ALLOWABLE TOTAL COVERAGE % | AVERAGE INDIVIDUAL LOT SIZE SF | AVERAGE INDIVIDUAL LOT AREA ACRES | DENSITY CATEGORY UNITS/ACRE | CLASSIFICATION | DRIVEWAY WIDTH | GROUPED LOT ANALYSIS AREA SF | GROUPED LOT ANALYSIS AREA ACRES | # UNITS | DENSITY UNIT/ACRE | BUILDING COVERAGE SF | TOTAL BUILDING COVERAGE % | OTHER IMPERVIOUS COVERAGE SF | TOTAL IMPERVIOUS COVERAGE (BUILDING + OTHER) SF | TOTAL IMPERVIOUS COVERAGE % | |
| EXISTING | | | | | | | | | | | | | | | | | | | | |
| ALL PREVIOUS PHASES OF DEVELOPMENT: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 6A: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| MULTI-FAMILY: TOWN HOMES | | | | | | | | | | | | | | | | | | | | |
| LOTS 7-10 AMICUS DRIVE NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 4 4399.68 1981.28 6370.96 | | | | | | | | | | | | | | | | | | | | |
| LOTS 11-24 AMICUS DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 4 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 4 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 15-19 AMICUS DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 20-26 AMICUS DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 26-28 AMICUS DRIVE NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 4 4399.68 1981.28 6370.96 | | | | | | | | | | | | | | | | | | | | |
| LOTS 29-33 AMICUS DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 34-38 AMICUS DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 39-43 AMICUS DRIVE NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| REQUIRED ADDITIONAL COMMON OPEN SPACE AREA 84272.49 1.60 37 19.13 NO-15 UNI/TSAC 32296.82 38.32% NO-35% 17427.24 49724.06 59.00% OK-65% | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 6B: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 6C: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| LOTS 76-79 JACK PINE WAY NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 4 4399.68 1981.28 6370.96 | | | | | | | | | | | | | | | | | | | | |
| LOTS 80-84 JACK PINE WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| LOTS 100-104 VEERY WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| LOTS 105-109 VEERY WAY NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 110-114 VEERY WAY NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 115-119 VEERY WAY NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 4 4399.68 1981.28 6370.96 | | | | | | | | | | | | | | | | | | | | |
| LOTS 119-122 VEERY WAY NF-SMALL TOWNHOUSE-5-PACK 1 4 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 4 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 123-126 VEERY WAY NF-SMALL TOWNHOUSE-4-PACK 1 4 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 4 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 127-131 VEERY WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| REQUIRED ADDITIONAL COMMON OPEN SPACE AREA 98124.11 2.25 41 18.20 NO-15 UNI/TSAC 38754.84 39.50% NO-35% 19938.42 57693.26 58.80% OK-65% | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 6D: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| LOTS 121-125 JACK PINE WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| LOTS 126-130 JACK PINE WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| LOTS 131-135 JACK PINE WAY NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 12927.01 5 5481.18 2160.60 7641.78 | | | | | | | | | | | | | | | | | | | | |
| LOTS 136-140 DOLOMITE DRIVE NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 141-144 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-4-PACK 1 4 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 4 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 145-148 DOLOMITE DRIVE NF-LARGE TOWNHOUSE-5-PACK 1 4 35% 65% 2181-3191 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10745.38 4 4399.68 1981.28 6370.96 | | | | | | | | | | | | | | | | | | | | |
| LOTS 149-153 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 10309.52 5 3756.77 2332.35 6106.12 | | | | | | | | | | | | | | | | | | | | |
| LOTS 154-158 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 5 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 159-162 DOLOMITE DRIVE NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 1993-2615 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 4 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 163-166 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 5 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 167-168 DOLOMITE DRIVE NF-LARGE TOWNHOUSE-4-PACK 1 4 35% 65% 1993-2615 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 4 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 169-172 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 5 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 173-183 DOLOMITE DRIVE NF-SMALL TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 04-06 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 5 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| LOTS 184-186 DOLOMITE DRIVE NF-LARGE TOWNHOUSE-5-PACK 1 5 35% 65% 1993-2615 05-07 9.01 TO 15.00 HIGH DENSITY MF 16 DOUBLE 8616.64 5 3009.20 1994.68 4903.88 | | | | | | | | | | | | | | | | | | | | |
| REQUIRED ADDITIONAL COMMON OPEN SPACE AREA 136896.94 3.14 68 21.64 NO-15 UNI/TSAC 51328.86 37.49% NO-35% 28145.90 79474.76 58.05% OK-65% | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 7A: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |
| PROPOSED | | | | | | | | | | | | | | | | | | | | |
| GRAYS POINTE 7B: SINGLE FAMILY: ALL SF LOTS STAND ALONE RELATIVE TO BUILDING AND TOTAL IMPERVIOUS COVERAGE LIMITS-REFER TO TYPICAL LOT DETAILS | | | | | | | | | | | | | | | | | | | | |

Tabulations are in accordance with the area, bulk, open space, and parking requirements for Grays Woods Planned Community as specified in 175-23.1

| AREA - GRAYS POINTE PHASE 7B | | |
|------------------------------|-----------|-------|
| | SF | ACRES |
| SINGLE FAMILY LOT AREA | 155178.33 | 3.56 |
| STREET ROW AREA | 32168.68 | 0.74 |
| MIXED USE AREA | 0.00 | 0.00 |
| MISCELLANEOUS AREA | 0.00 | 0.00 |
| GENERAL | 0.00 | 0.00 |
| PARK LAND | 0.00 | 0.00 |
| STORMWATER MANAGEMENT | 534895.36 | 12.28 |
| TOTAL COMMON OPEN SPACE | 534895.36 | 12.28 |
| TOTAL | 722262.37 | 16.58 |

Tabulations are in accordance with the area, bulk, open space, and parking requirements for Grays Woods Planned Community as specified in 175-23.1

| AREA - OVERALL MASTER PLAN | | | | | | | | | |
|---------------------------------------|---------------------------------|-----------------------------------|-----------------------------|-------------------------------|---|---|------------------------|------------------|---|
| EXISTING | GENERAL COMMON OPEN SPACE ACRES | PARK LAND COMMON OPEN SPACE ACRES | SWM COMMON OPEN SPACE ACRES | TOTAL COMMON OPEN SPACE ACRES | NON-RESIDENTIAL OR MIXED USE AREA ACRES | NON RESIDENTIAL OR MIXED USE TYPE | RESIDENTIAL AREA ACRES | TOTAL AREA ACRES | (TOTAL AREA INCLUDES RESIDENTIAL LOT AREA, STREET ROW AREA, COMMON OPEN SPACE AREA) |
| DEERBROOK 1A | 1.39 | 0.00 | 0.48 | 1.87 | 0.00 | | 48.32 | 50.19 | |
| DEERBROOK 2A | 10.27 | 0.00 | 0.00 | 10.27 | 0.00 | | 24.78 | 35.05 | |
| DEERBROOK 1C | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 13.31 | 13.31 | |
| GRAYSDALE 1A | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 12.17 | 12.17 | |
| GRAYSDALE 2A | 0.00 | 0.00 | 2.77 | 2.77 | 0.10 | UTILITY - SEWER PUMP STATION #1 | 21.11 | 23.88 | |
| GRAYSDALE 2B | 0.00 | 0.00 | 3.76 | 3.76 | 7.49 | CHURCH LOTS & UTILITY - SEWER PUMP STATION #2 | 16.73 | 27.98 | |
| GRAYSDALE PARK | 0.00 | 14.10 | 0.00 | 14.10 | 0.00 | | 0.00 | 14.10 | |
| GV BLVD ROW SCOTIA ROAD TO MEERS LANE | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 6.69 | 6.69 | |
| MARYWOOD 3A | 8.34 | 0.00 | 1.66 | 9.99 | 0.37 | UTILITY - SEWER PUMP STATION #3 | 19.21 | 29.57 | |
| FUTURE MARYSVILLE ROAD CONNECTOR ROW | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | | 0.00 | 0.32 | |
| BRYWOOD 3B | 9.92 | 0.00 | 0.00 | 9.92 | 0.00 | | 20.36 | 30.28 | |
| BRYWOOD 3C | 2.08 | 0.00 | 0.00 | 2.08 | 0.00 | | 3.91 | 5.99 | |
| ELEMENTARY SCHOOL | 11.90 | 0.00 | 0.79 | 12.69 | 2.38 | SCHOOL | 0.00 | 15.08 | |
| BRACHEMBOURNE DRIVE ROW | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | |
| DAYCARE | 0.00 | 0.00 | 0.00 | 0.00 | 2.83 | DAYCARE | 0.00 | 2.83 | |
| OPEN SPACE LOT #2 (BRYWOOD SWIM) | 0.00 | 0.00 | 3.38 | 3.38 | 0.00 | | 0.00 | 3.38 | |
| OPEN SPACE LOT #1 (GRAYS WOODS PARK) | 0.00 | 43.46 | 0.00 | 43.46 | 0.00 | | 0.00 | 43.46 | |
| OPEN SPACE LOT #3 (FORMER PH 9 & 10) | 23.91 | 0.00 | 5.90 | 29.81 | 0.19 | UTILITY - SEWER PUMP STATION #5 | 74.54 | 104.63 | |
| GRAYS WOODS BLVD ROW 2000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 2.98 | 2.98 | |
| GRAYS WOODS BLVD ROW 2005 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 1.52 | 1.52 | |
| GRAYS WOODS BLVD ROW 2018 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 2.88 | 2.88 | |
| GRAYS POINTE 6A | 0.68 | 0.00 | 0.00 | 0.68 | 0.00 | | 4.07 | 4.75 | |
| GRAYS POINTE 6B | 1.23 | 0.00 | 0.00 | 1.23 | 0.00 | | 4.33 | 5.56 | |
| GRAYS POINTE 6C | 0.17 | 0.00 | 0.00 | 0.17 | 0.75 | TOWN CENTER AREA | 3.51 | 4.43 | |
| GRAYS POINTE 6D | 0.00 | 0.13 | 0.00 | 0.13 | 0.00 | | 9.08 | 9.21 | |
| GRAYS POINTE 7A | 0.08 | 0.00 | 0.00 | 0.08 | 0.00 | | 8.36 | 8.44 | |
| SUBTOTAL EXISTING | 69.97 | 57.69 | 19.42 | 147.08 | 14.85 | | 296.17 | 460.10 | |
| PROPOSED | | | | | | | | | |
| GRAYS POINTE 7B | 0.00 | 0.00 | 12.28 | 12.28 | 0.00 | | 4.30 | 16.58 | |
| SUBTOTAL EXISTING + PROPOSED | | | | 159.36 | 14.85 | | 302.47 | 476.68 | |
| FUTURE | | | | | | | | | |
| GRAYS WOODS BLVD ROW BALANCE | 0.00 | 0.00 | 0.00 | 0.00 | 5.47 | | 0.00 | 5.47 | |
| GRAYS WOODS BLVD ROW 2018 | 19.18 | 0.00 | 1.49 | 20.67 | 3.00 | UTILITY - SEWER PUMP STATION #4 | 65.18 | 88.85 | |
| PHASE 4 | 2.42 | 0.00 | 0.00 | 2.42 | 0.00 | | 27.10 | 29.52 | |
| PHASE 5 | | | | | | | | | |
| SUBTOTAL FUTURE | 21.60 | 0.00 | 1.49 | 23.09 | 8.47 | | 92.28 | 123.84 | |
| GRAND TOTAL | 91.57 | 57.69 | 33.10 | 182.44 | 23.32 | | 394.75 | 600.52 | |
| | | | | 32% | 18% | | | 3% | |
| REQUIRED BASE % | | | 25% | 25% | 36% | | | 6% | |
| REQUIRED BASE AREA (ACRES) | | | MAX | MAX | MIN | | 180.15 | | |
| REQUIRED ADDITIONAL AREA (ACRES) | | | | | | | 2.29 | | |
| REQUIRED TOTAL AREA (ACRES) | | | | | | | 182.44 | | |
| | | | | | | | 30.38% | OK > 30% | |

Tabulations are in accordance with the area, bulk, open space, and parking requirements for Grays Woods Planned Community as specified in 175-23.1

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FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

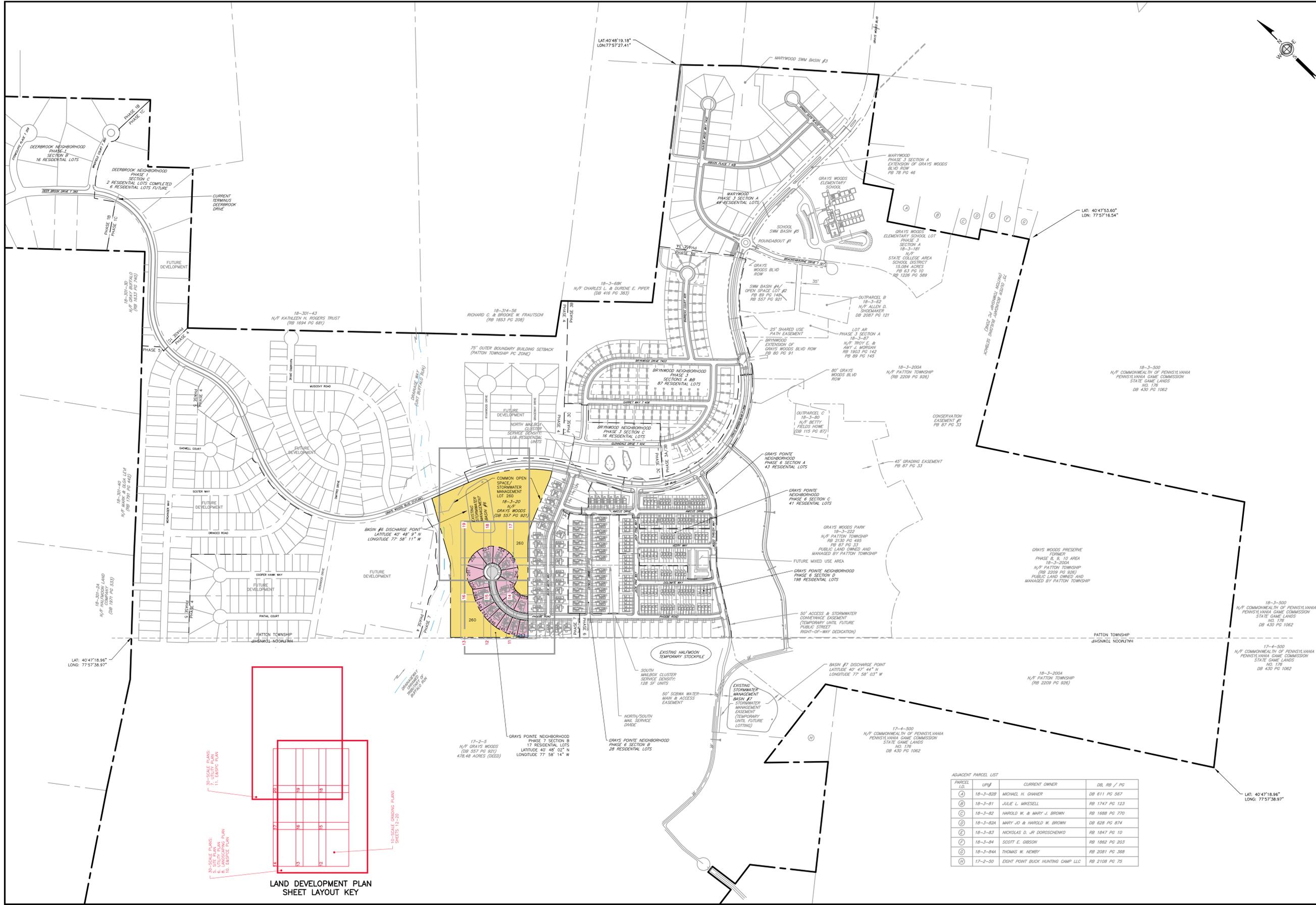
BULK, AREA & COVERAGE
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

PROJECT NO.: 95-82
FILE NAME: TITLE & MEASUREMENTS
DESIGNED BY: 2024-11-01
DRAWN BY:
CHECKED BY:

REVISION DESCRIPTION
DATE

03

KELLER ENGINEERS, INC. COMMON LAW COPYRIGHT AND OTHER RIGHTS CONTAINED IN THESE

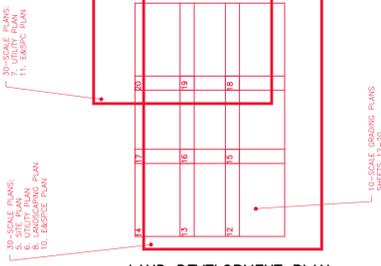


LAT: 40°47'18.96"
LONG: 77°57'38.97"

LAT: 40°48'19.18"
LONG: 77°57'27.41"

LAT: 40°47'53.80"
LONG: 77°57'16.54"

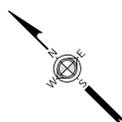
LAT: 40°47'18.96"
LONG: 77°57'38.97"



LAND DEVELOPMENT PLAN SHEET LAYOUT KEY

ADJACENT PARCEL LIST

| PARCEL ID | LRP# | CURRENT OWNER | DB, RB / PG |
|-----------|----------|-----------------------------------|----------------|
| A | 18-3-829 | MICHAEL H. GHANER | DB 611 PG 567 |
| B | 18-3-81 | JULIE L. MIKESSELL | RB 1747 PG 123 |
| C | 18-3-82 | HAROLD W. & MARY J. BROWN | RB 1688 PG 770 |
| D | 18-3-824 | MARY JO & HAROLD W. BROWN | DB 628 PG 874 |
| E | 18-3-83 | NICKOLAS D. JR. DOROSCHENKO | RB 1847 PG 10 |
| F | 18-3-84 | SCOTT E. GIBSON | RB 1862 PG 203 |
| G | 18-3-844 | THOMAS W. NEWBY | RB 2081 PG 388 |
| H | 17-2-50 | EIGHT POINT BUCK HUNTING CAMP LLC | RB 2108 PG 75 |



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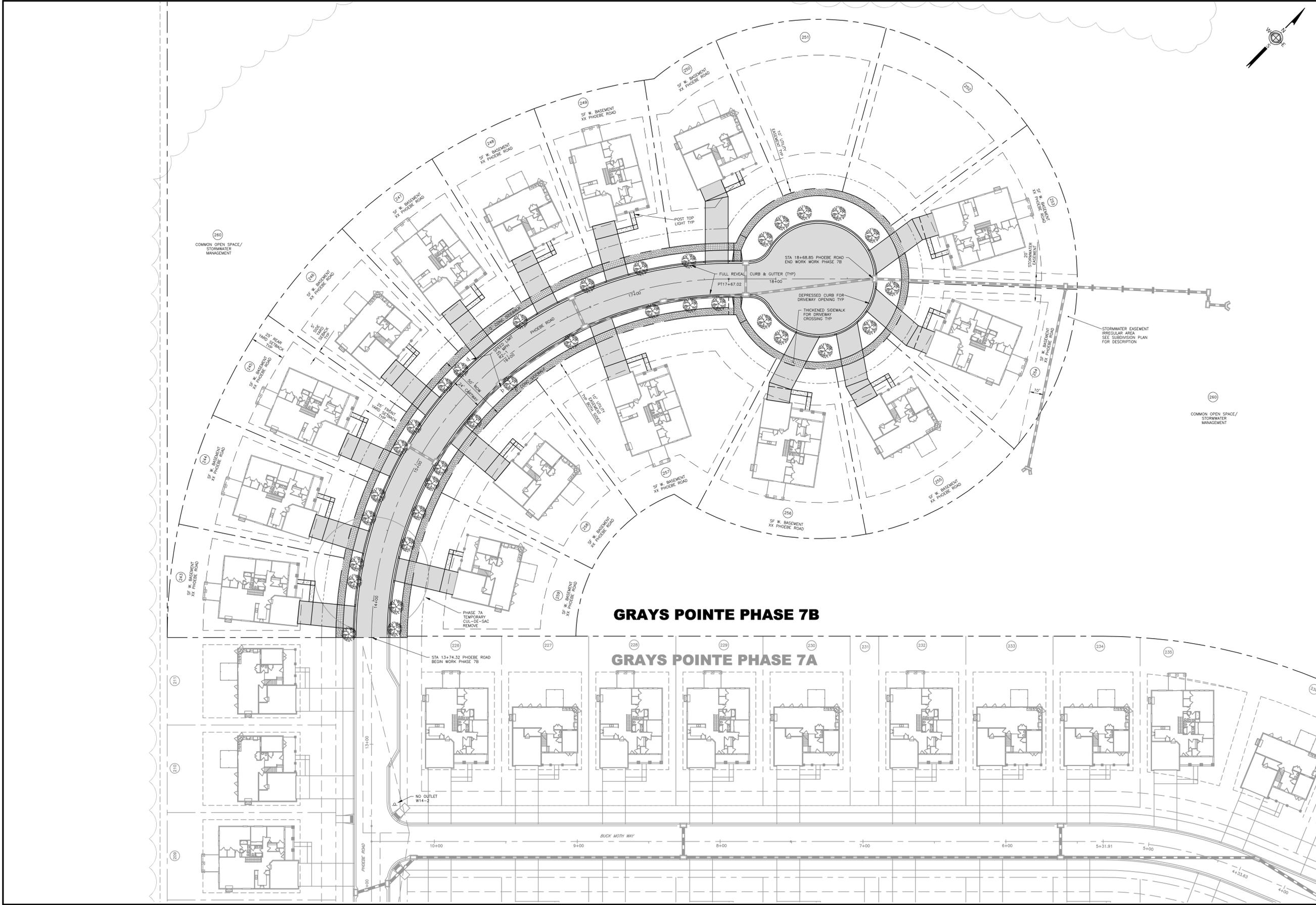
FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

KELLER ENGINEERS, INC.
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AND THE RESULTS THEREOF.
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USED FOR INFORMATION ONLY
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WITHOUT THE WRITTEN
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ENGINEERS, INC.

PROJECT NO.: 56-82
FILE NAME: UMD DEVELOPMENT PLANING
DESIGNED BY: 2024-11-01
DRAWN BY:
CHECKED BY:

04

SITE KEY PLAN
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA



PROJECT NO.: 95-82
 FILE NAME: LAND DEVELOPMENT PLAN
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|------|--------|----------|-------------|
| | 1"=30' | | |
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GRAYS POINTE PHASE 7A

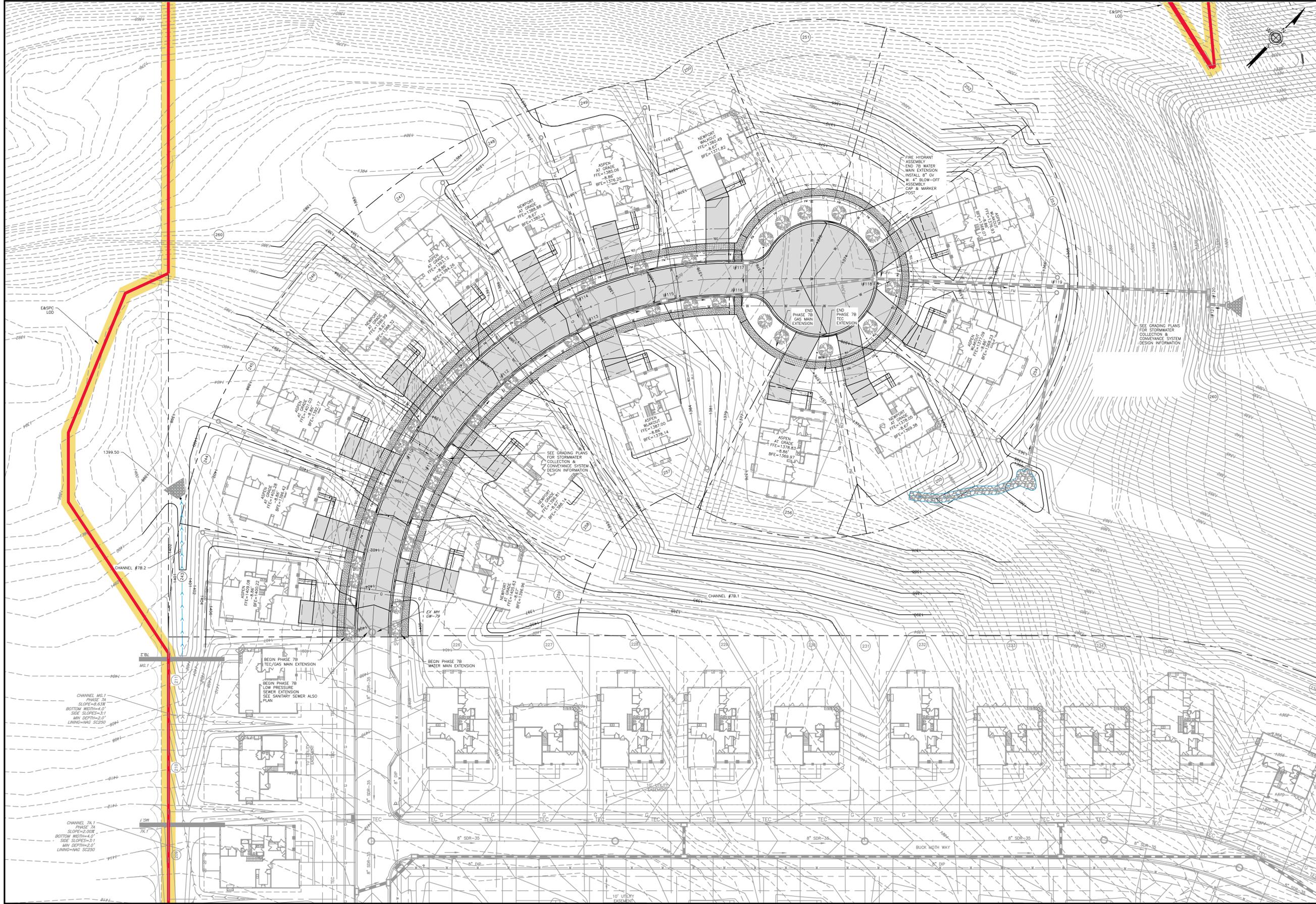
GRAYS POINTE PHASE 7B

FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

SITE PLAN

PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

05



PROJECT NO.: 95-82
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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

UTILITY PLAN
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

| DATE | REVISION | DESCRIPTION |
|------|----------|-------------|
| | 0 | |
| | 30' | |

SCALE:
 1" = 30'

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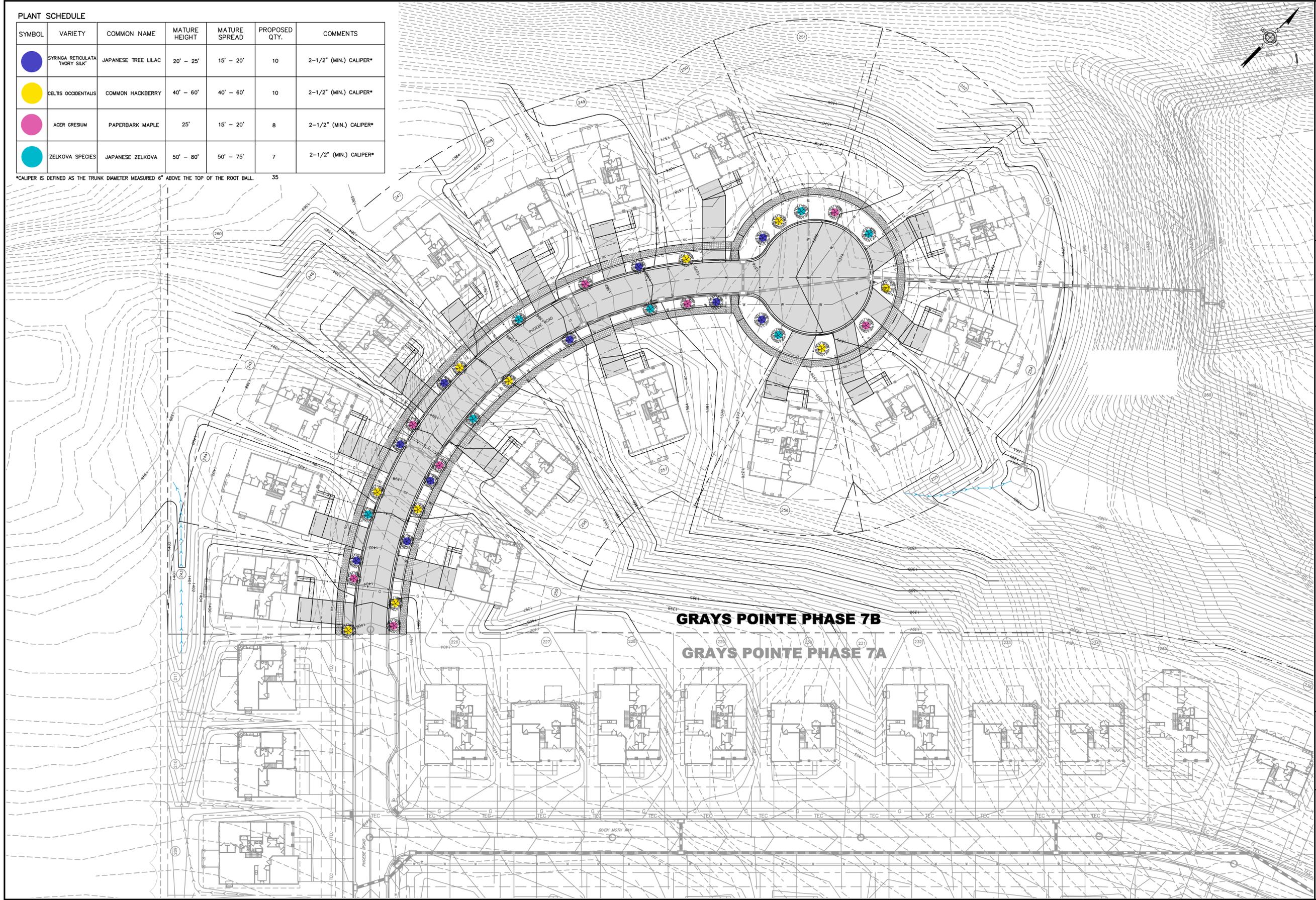
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06

PLANT SCHEDULE

| SYMBOL | VARIETY | COMMON NAME | MATURE HEIGHT | MATURE SPREAD | PROPOSED QTY. | COMMENTS |
|---|---------------------------------|---------------------|---------------|---------------|---------------|------------------------|
|  | SYRINGA RETICULATA 'IVORY SILK' | JAPANESE TREE LILAC | 20' - 25' | 15' - 20' | 10 | 2-1/2" (MIN.) CALIPER* |
|  | CELTIS OCCIDENTALIS | COMMON HACKBERRY | 40' - 60' | 40' - 60' | 10 | 2-1/2" (MIN.) CALIPER* |
|  | ACER GRESIUM | PAPERBARK MAPLE | 25' | 15' - 20' | 8 | 2-1/2" (MIN.) CALIPER* |
|  | ZELKOVA SPECIES | JAPANESE ZELKOVA | 50' - 80' | 50' - 75' | 7 | 2-1/2" (MIN.) CALIPER* |

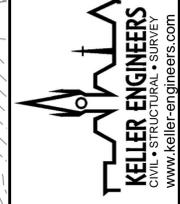
*CALIPER IS DEFINED AS THE TRUNK DIAMETER MEASURED 6" ABOVE THE TOP OF THE ROOT BALL. 35



GRAYS POINTE PHASE 7B

GRAYS POINTE PHASE 7A

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| DATE | SCALE: | REVISION DESCRIPTION |
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| | 1"=30' | |
| | | 30' 0' 30' |

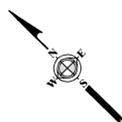
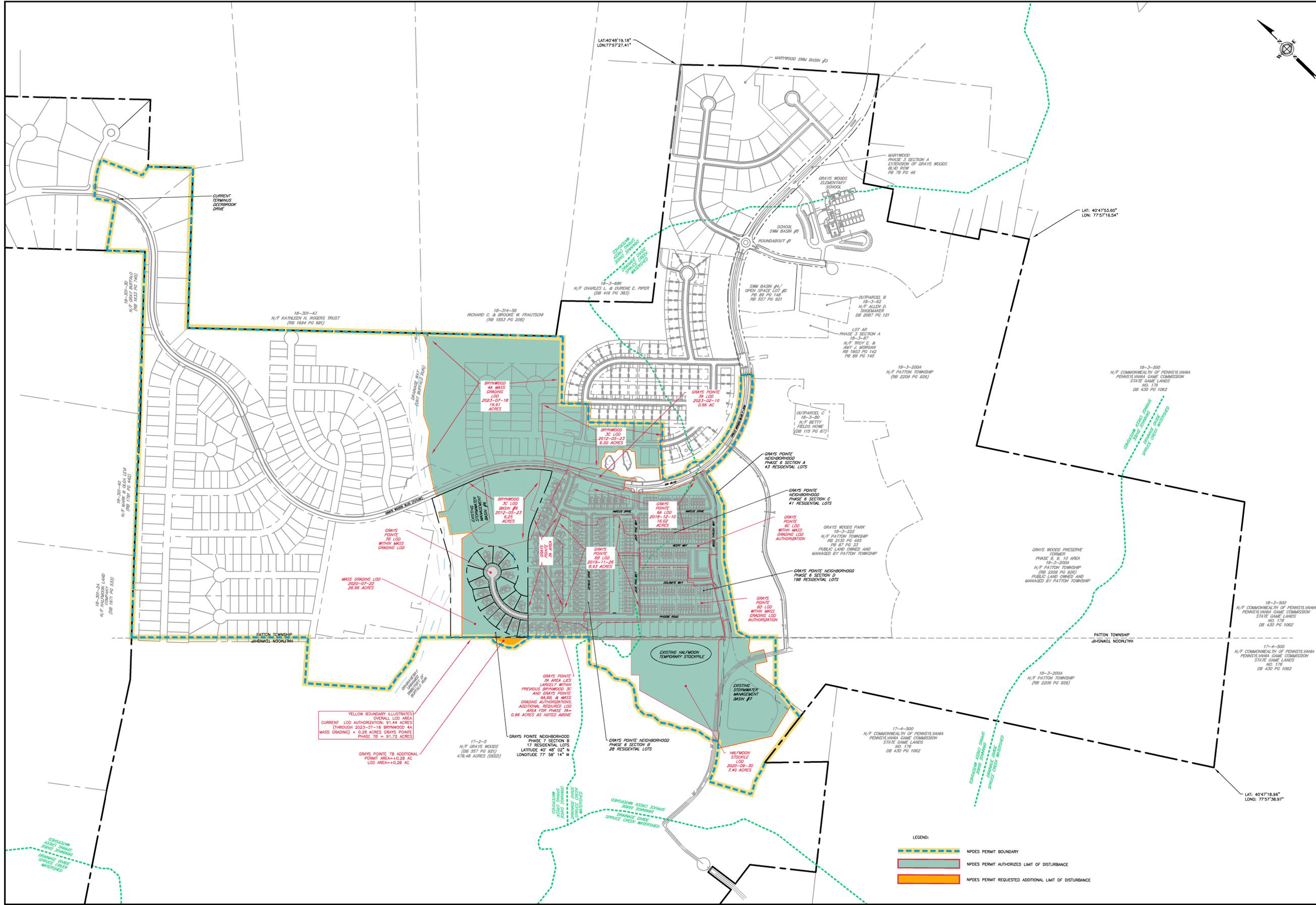
FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

LANDSCAPING PLAN
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

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CHECKED BY:

08

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SCALE: 1"=300'
 0' 300'

FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

E&SPC KEY PLAN
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

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| | |
|------------------------------------|------------------|
| PROJECT NO.: 56-82 | DATE: 2024-11-01 |
| FILE NAME: UMD DEVELOPMENT PLANING | DATE: 2024-11-01 |
| DESIGNED BY: [Name] | DATE: [Date] |
| DRAWN BY: [Name] | DATE: [Date] |
| CHECKED BY: [Name] | DATE: [Date] |

LEGEND:

| | |
|--|--|
| | NPDES PERMIT BOUNDARY |
| | NPDES PERMIT AUTHORIZED LIMIT OF DISTURBANCE |
| | NPDES PERMIT REQUESTED ADDITIONAL LIMIT OF DISTURBANCE |

SOIL DESCRIPTION

SOILS LINE
SOIL TYPE ABBREVIATION

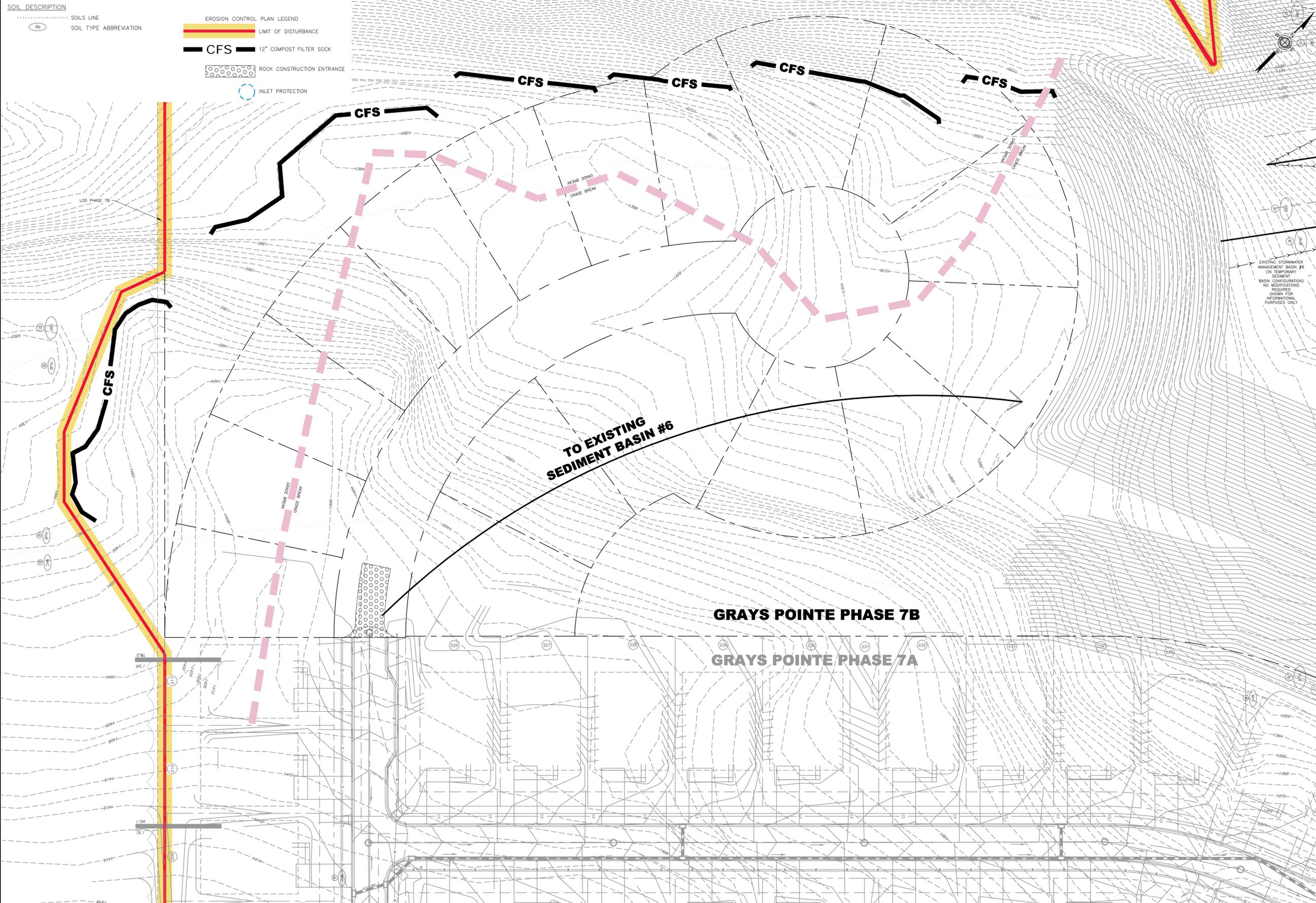
EROSION CONTROL PLAN LEGEND

LIMIT OF DISTURBANCE

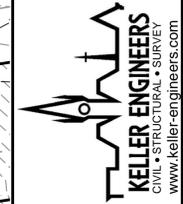
CFS 12" COMPOST FILTER SOCK

ROCK CONSTRUCTION ENTRANCE

INLET PROTECTION



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| DATE | REVISION DESCRIPTION |
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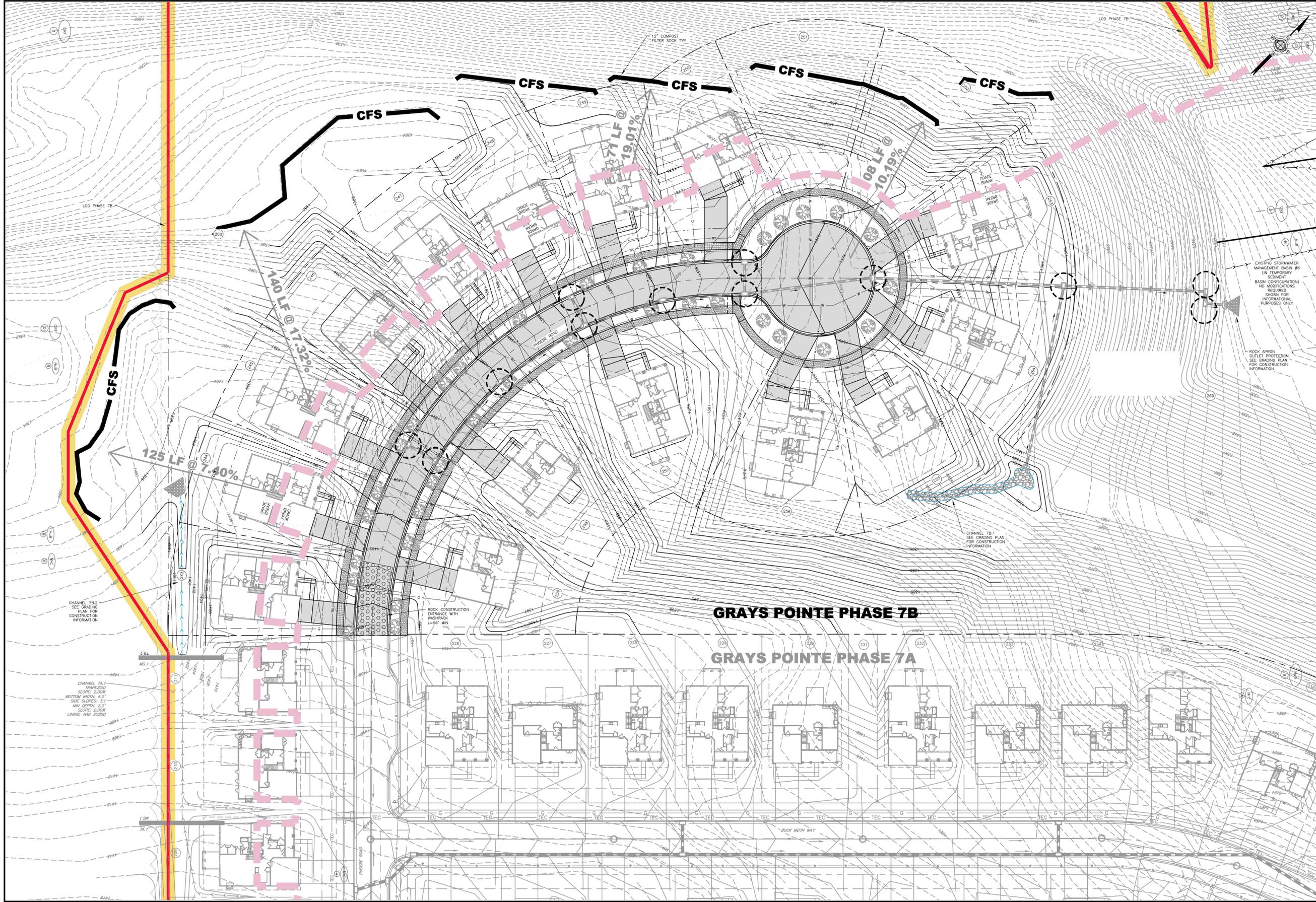
SCALE: 1"=30'
30'
0'
30'

FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
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PHASE 7 SECTION B

E&SPC PLAN - PRE
PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

PROJECT NO.: 95-82
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 DRAWN BY: [blank]
 CHECKED BY: [blank]

KELLER ENGINEERS, INC.
 EXISTING STORMWATER MANAGEMENT BASIN #6 (IN TEMPORARY SEDIMENT BASIN CONFIGURATION) NO MODIFICATIONS REQUIRED SHOWN FOR INFORMATIONAL PURPOSES ONLY.
 ROCK APRON OUTLET PROTECTION SEE GRADING PLAN FOR CONSTRUCTION INFORMATION.
 CHANNEL 7B.1 SEE GRADING PLAN FOR CONSTRUCTION INFORMATION.
 CHANNEL 7B.2 SEE GRADING PLAN FOR CONSTRUCTION INFORMATION.
 CHANNEL 7A.1 TRAPEZOID SLOPE: 2.00% BOTTOM WIDTH: 4.0' SIDE SLOPES: 3:1 MIN. DEPTH: 2.0' SLOPE: 2.00% LINING: VAC. SC2500

FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
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E&SPC PLAN - POST
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

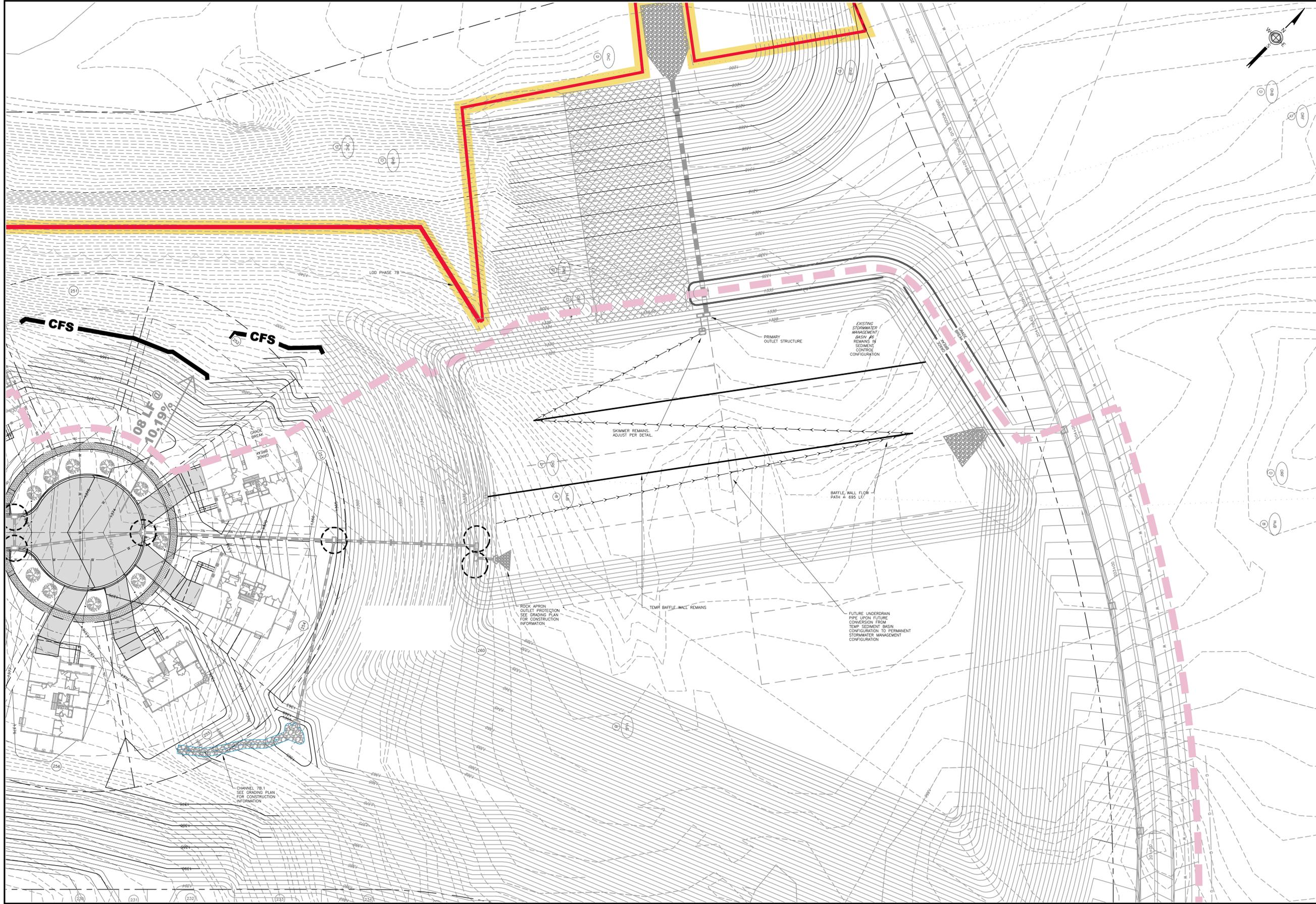
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SCALE: 1"=30'
 0' 30'

11



| PROJECT NO.: 56-82 FILE NAME: LMO DEVELOPMENT PLAN DESIGNED BY: DRAWN BY: CHECKED BY: | KELLER ENGINEERS, INC. CIVIL & STRUCTURAL SURVEY 3500 E. College Avenue Suite 1100 State College, PA 16801 P: (814) 231-2925 www.keller-engineers.com | FINAL LAND DEVELOPMENT PLAN GRAYS WOODS PLANNED COMMUNITY GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B E&SPC PLAN PATTON TOWNSHIP, CENTRE COUNTY PENNSYLVANIA | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">DATE</th> <th style="width: 10%;">SCALE:</th> <th style="width: 10%;">REVISION</th> <th style="width: 10%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td>1"=30'</td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | DATE | SCALE: | REVISION | DESCRIPTION | | 1"=30' | | | | | | | | | | | <div style="text-align: center;"> <p>0' 30' 60'</p> </div> |
|---|---|--|---|------|--------|----------|-------------|--|--------|--|--|--|--|--|--|--|--|--|--|--|
| DATE | SCALE: | REVISION | DESCRIPTION | | | | | | | | | | | | | | | | | |
| | 1"=30' | | | | | | | | | | | | | | | | | | | |
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PROJECT NO.: 56-82
 FILE NAME: L&D DEVELOPMENT PHASE 7 SECTION B
 DESIGNED BY: [Redacted]
 DRAWN BY: [Redacted]
 CHECKED BY: [Redacted]

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FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

| DATE | REVISION | DESCRIPTION |
|------|----------|-------------|
| | | |

SCALE: 1" = 10'
 0' 10'

13



260
COMMON OPEN SPACE/
STORMWATER MANAGEMENT

PHASE 7B
LSD

CHANNEL 7B.2
ROCK APRON OUTLET PROTECTION
INLET WIDTH: 6.0'
OUTLET WIDTH: 16.0'
LENGTH: 10.0'
RIPRAP: R-4
SEE DETAIL

WET WELL
GRADE EL=1396.50
TOP EL=1387.00
HW IN=1382.00
-2.79'
BOT EL=1379.21
DEPTH=7.79'
SEE SEWER ALSO
PLAN

WET WELL
GRADE EL=1394.00
TOP EL=1384.00
HW IN=1382.50
-1.50'
BOT EL=1380.41
DEPTH=3.59'
SEE SEWER ALSO
PLAN

WET WELL
GRADE EL=1396.00
TOP EL=1386.00
HW IN=1382.48
-3.52'
BOT EL=1382.48
DEPTH=3.52'
SEE SEWER ALSO
PLAN

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P: (814) 231-2925



| DATE | REVISION DESCRIPTION |
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SCALE: 1"=10'

FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

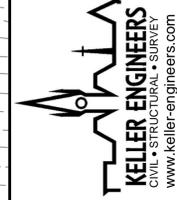
GRADING PLAN
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

PROJECT NO.: 56-82
FILE NAME: L&D DEVELOPMENT PLAN GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B
DESIGNED BY: [Redacted]
DRAWN BY: [Redacted]
CHECKED BY: [Redacted]

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SCALE: 1" = 10'
 10' 0' 10'

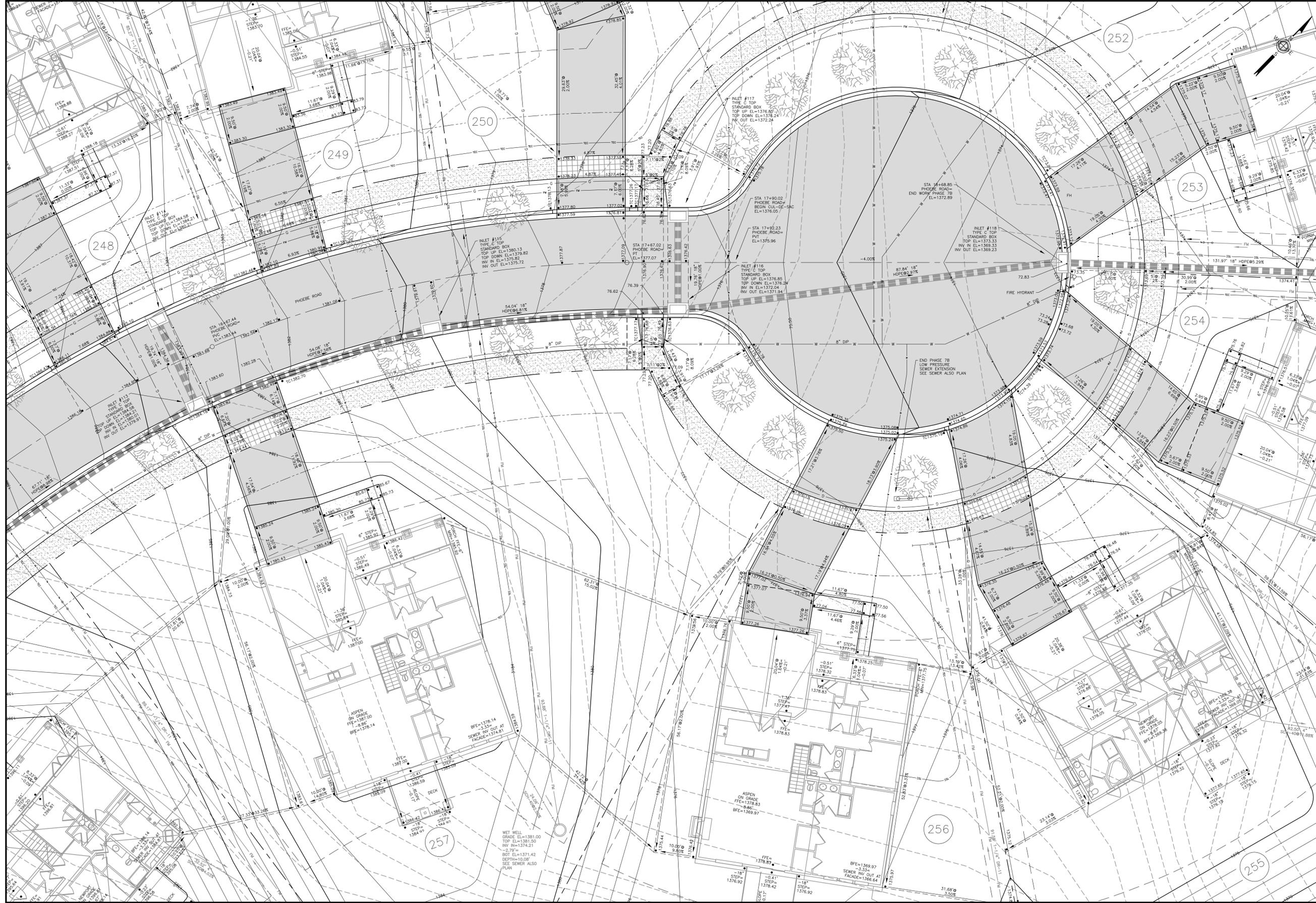
FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

PROJECT NO.: 96-82
 FILE NAME: LMO DEVELOPMENT PLAN
 EXAMINER: [Name]
 DESIGNER BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]

15

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FINAL LAND DEVELOPMENT PLAN
GRAY'S WOODS PLANNED COMMUNITY
GRAY'S POINTE NEIGHBORHOOD
PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

PROJECT NO.: 56-82
 FILE NAME: L&D DEVELOPMENT PHASING
 EXAMINER: J. M. COOPER
 DATE: 2024-11-01
 DESIGNED BY:
 DRAWN BY:
 CHECKED BY:

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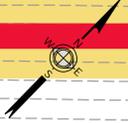
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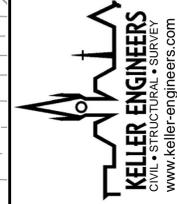
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SCALE: 1" = 10'

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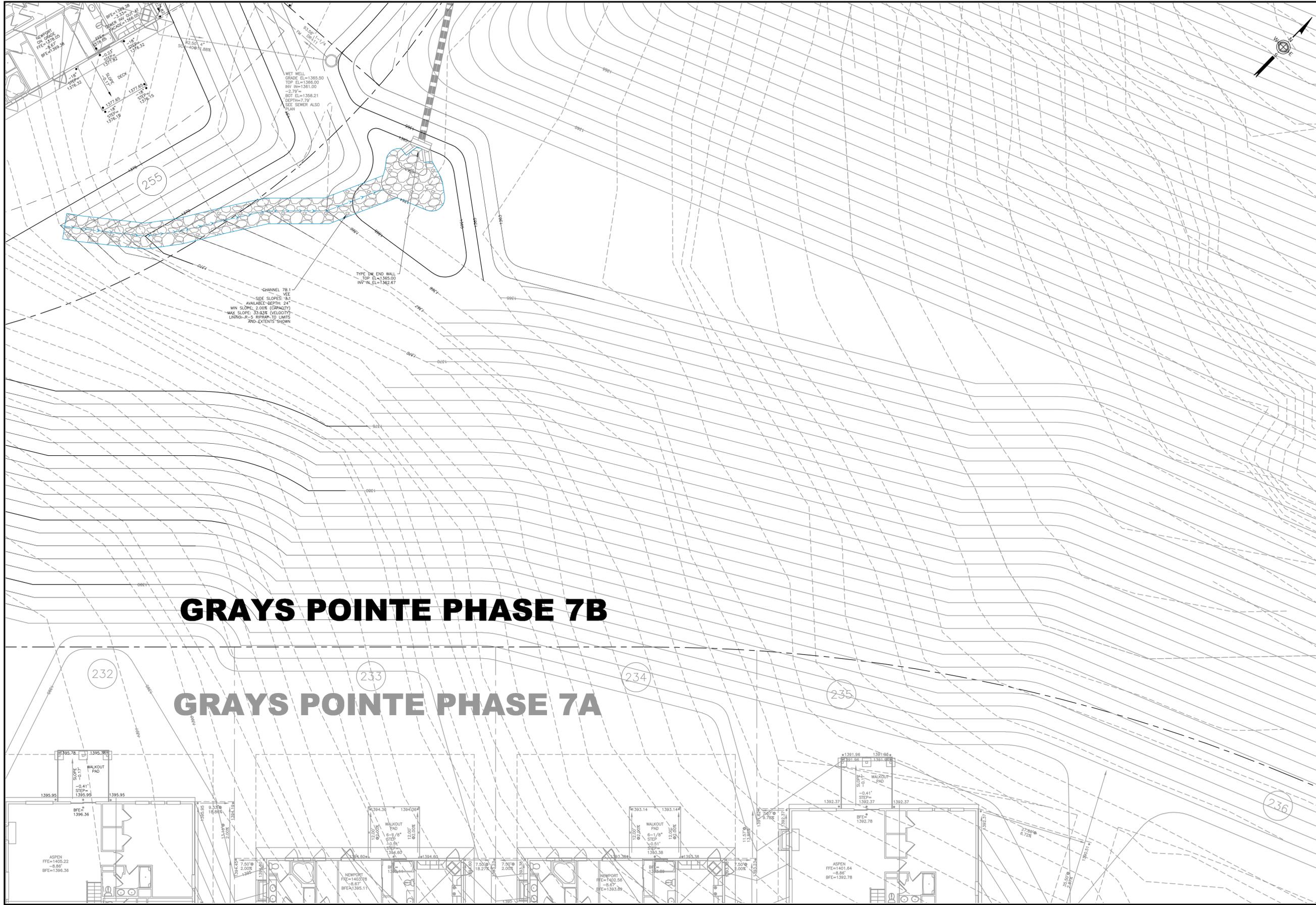
SCALE: 1"=10'
 10' 0' 10'

FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

PROJECT NO.: 56-82
 FILE NAME: LMO DEVELOPMENT PHASING
 EXHIBIT: 1
 DESIGN DATE: 2024-11-01
 DESIGNED BY: [Name]
 DRAWN BY: [Name]
 CHECKED BY: [Name]

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GRAYS POINTE PHASE 7B

GRAYS POINTE PHASE 7A



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SCALE: 1"=10'

FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

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| PROJECT NO.: 56-82 |
| FILE NAME: LAND DEVELOPMENT PLAN |
| DESIGNED BY: 2024-11-01 |
| DRAWN BY: |
| CHECKED BY: |



PROJECT NO.: 95-82
 FILE NAME: LMO DEVELOPMENT PHASING
 DESIGNED BY: [blank]
 DRAWN BY: [blank]
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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

GRADING PLAN
 PATTON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

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SCALE: 1" = 10'
 10' 0' 10'

INLET #119
 GRADE EL=1365.50
 TOP EL=1366.00
 INV IN=1361.00
 -2.79'
 BOT EL=1358.21
 DEPTH=7.79'
 SEE SEWER ALSO PLAN

WET WELL
 GRADE EL=1365.50
 TOP EL=1366.00
 INV IN=1361.00
 -2.79'
 BOT EL=1358.21
 DEPTH=7.79'
 SEE SEWER ALSO PLAN

INLET #120
 SOLID TOP
 (FOR VELOCITY ATTENUATION)
 STANDARD BOX
 TOP EL=1334.00
 INV IN EL=1328.54
 INV OUT EL=1328.44

PIPE INLET #121 TO BASIN #6 INLET
 ROCK ARROW OUTLET PROTECTION
 INLET WIDTH: 4.5'
 OUTLET WIDTH: 14.5'
 LENGTH: 10.0'
 RIM/R-4
 SEE DETAIL

INLET #121
 SOLID TOP
 (FOR VELOCITY ATTENUATION)
 STANDARD BOX
 TOP EL=1334.00
 INV IN EL=1328.54
 INV OUT EL=1328.25

TYPE DW END WALL
 INV OUT EL=1328.00

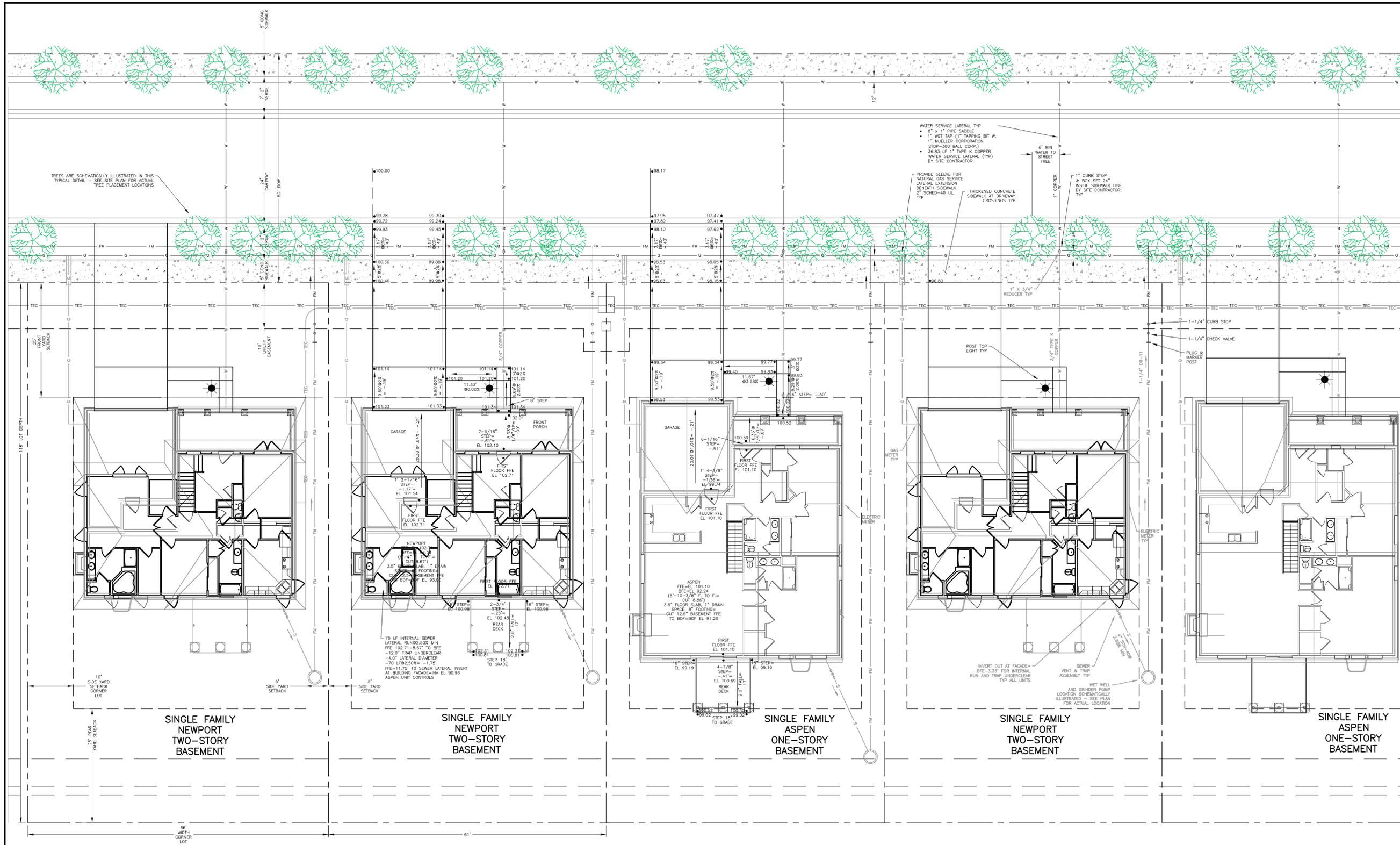
PIPE ANCHORS
 SEE DETAIL

EXISTING STORMWATER
 MANAGEMENT BASIN #6
 (IN TEMPORARY SEDIMENT
 BASIN CONFIGURATION)

COMMON OPEN SPACE/
 STORMWATER MANAGEMENT

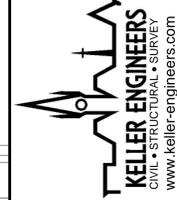


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| PROJECT NO.: 96-82 FILE NAME: LMO DEVELOPMENT PHASING DESIGNED BY: 2024-11-01 DRAWN BY: CHECKED BY: | <p style="text-align: center;"> FINAL LAND DEVELOPMENT PLAN GRAYS WOODS PLANNED COMMUNITY GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B </p> <p style="text-align: center;"> GRADING PLAN PATTON TOWNSHIP, CENTRE COUNTY PENNSYLVANIA </p> | REVISION DESCRIPTION DATE SCALE: 1" = 10' | |
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SINGLE FAMILY LOT LAYOUT

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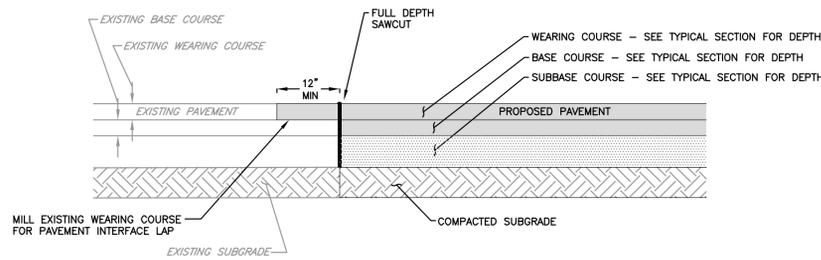
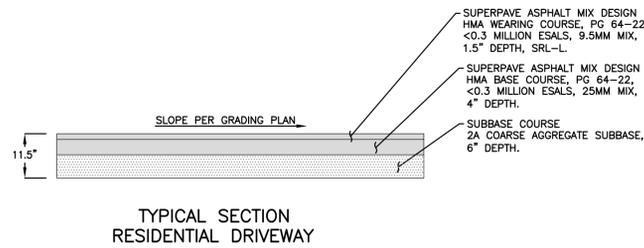
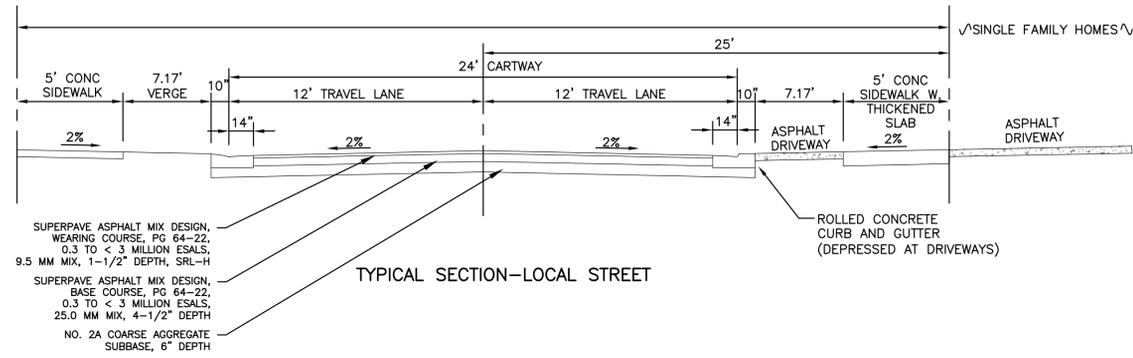


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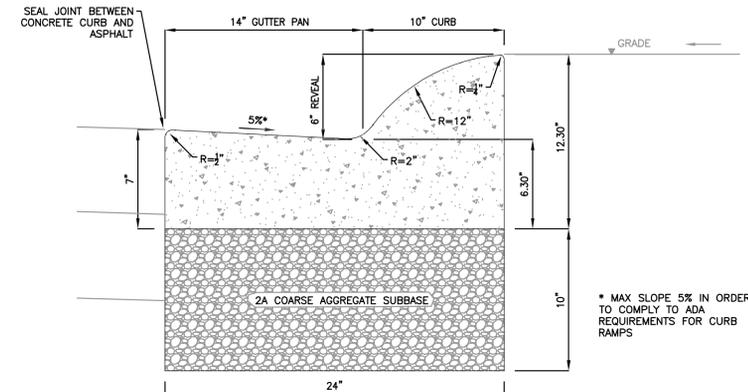
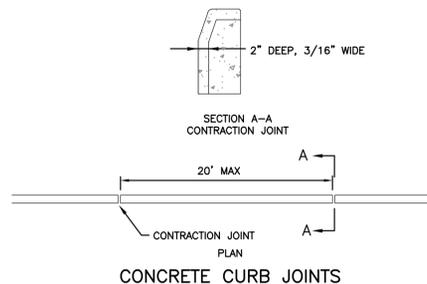
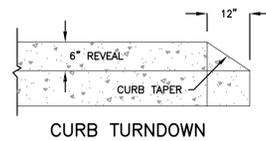
FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 PHASE 7 SECTION B
 TYPICAL DETAILS
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

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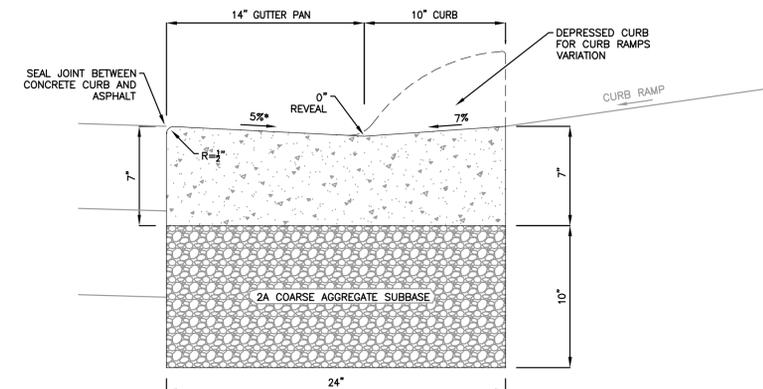
PROJECT NO.: BS-82
 FILE NAME: TYPICAL DETAILS
 DESIGN DATE: 2024-11-01
 DESIGNED BY: [Redacted]
 DRAWN BY: [Redacted]
 CHECKED BY: [Redacted]



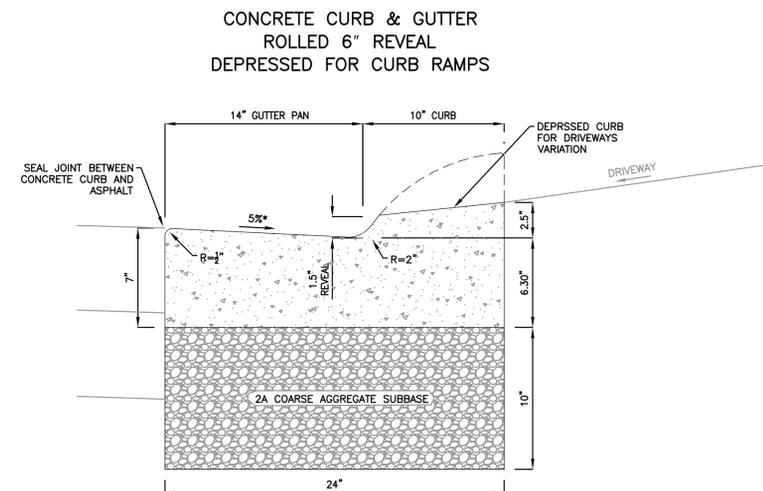
- NOTES:
1. SAWCUT ALL JOINTS VERTICAL AND NEAT.
2. PLACE TACK COAT ON EXISTING SAWCUT BITUMINOUS SURFACES
3. APPLY SEALER MATERIAL ALONG JOINT BETWEEN EXISTING AND NEW BITUMINOUS WEARING SURFACES.



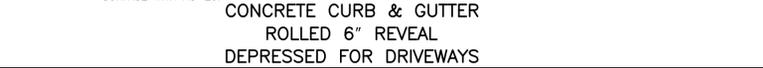
- NOTE:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB.
2. PROVIDE LATERAL CONTRACTION JOINTS AT 6'-0" SPACING UNLESS OTHERWISE NOTED.
3. PROVIDE LONGITUDINAL EXPANSION JOINT WITH SEALANT ALONG CURB/BUILDING WALL INTERFACE, AT INTERFACE WITH EXISTING CURBS, AT COLD JOINTS, AND AT OTHER LOCATIONS WHERE INDICATED ON PLAN.
4. IF WEARING COURSE WILL NOT BE PLACED WITHIN 30 DAYS, SEAL ALONG THE CURB AND ROAD SURFACE WITH AC-20.



- NOTE:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB.
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4. IF WEARING COURSE WILL NOT BE PLACED WITHIN 30 DAYS, SEAL ALONG THE CURB AND ROAD SURFACE WITH AC-20.



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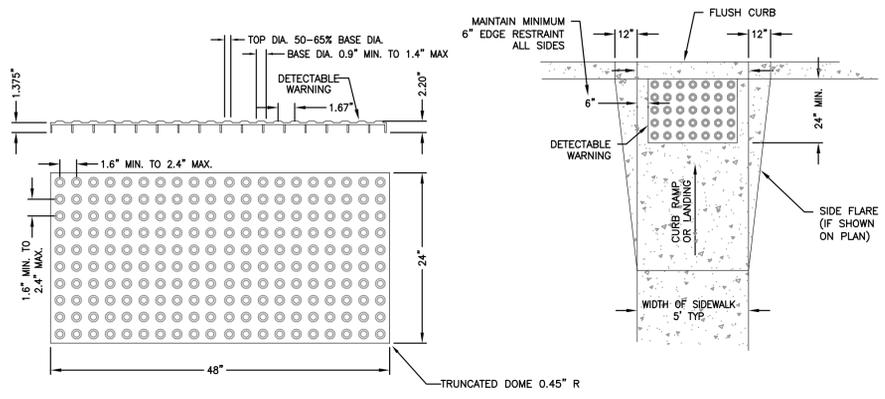
FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

TYPICAL DETAILS
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

PROJECT NO.: BS-82
FILE NAME: TYPICAL DETAILS
DATE: 2024-11-01
DESIGNED BY:
DRAWN BY:
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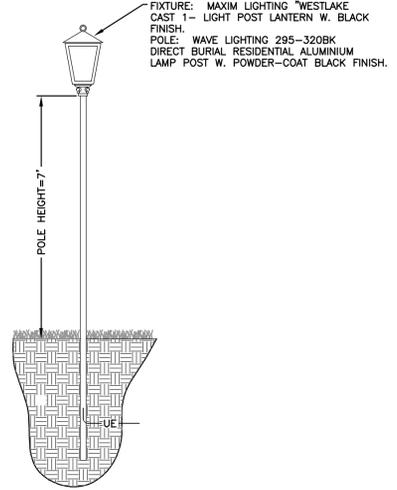
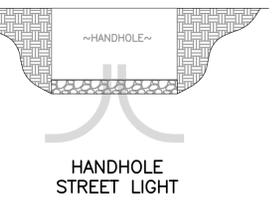
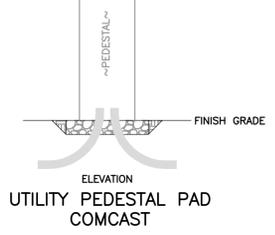
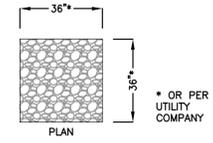
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- ADA DETECTABLE WARNING:**
- MATERIAL: CAST-IN-PLACE POLYMER COMPOSITE, MATTE FINISH EXTERIOR GRADE HOMOGENEOUS GLASS AND CARBON REINFORCED POLYESTER BASED SHEET MOLDING COMPOUND COMPOSITE MATERIAL.
 - COLOR CONTRAST: MIN. 70% LIGHT REFLECTANCE BETWEEN DETECTABLE WARNING AND ADJOINING SURFACE.
 - BASE-TO-BASE SPACING: 0.65" MIN. AS MEASURED BETWEEN THE MOST ADJACENT DOMES ON SQUARE GRID. COLOR: BRICK RED (CONFIRM COLOR SELECTION WITH TOWNSHIP PRIOR TO ORDERING).
 - MANUFACTURER: ADA SOLUTIONS, INC. OR APPROVED EQUAL.

DETECTABLE WARNING

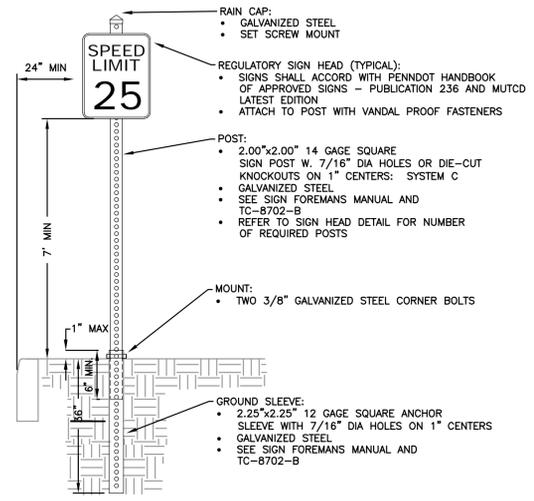


- NOTE:**
- COORDINATE ALL FIXTURE TYPES AND APPURTENANCES WITH OWNER PRIOR TO ORDERING.
 - ALL APPURTENANCES (POLES AND MOUNTS) TO BE COORDINATED WITH FIXTURE FOR PROPER FIELD ASSEMBLY AND INSTALLATION.

RESIDENTIAL LOT POST TOP LIGHT

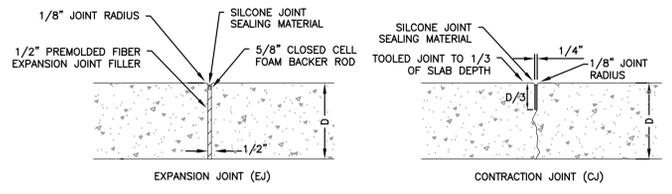
- WEST PENN STANDARD DETAIL - COLONIAL POST TOP 14\"/>**

STREET LIGHT



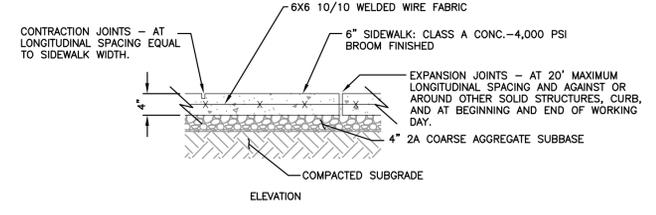
ALL REGULATORY SIGNS MUST BE PLACED SO THAT THE EDGE OF THE SIGN HEAD IS NO CLOSER THAN 2\"/>

REGULATORY SIGN POST-MOUNTED TYPE B POST



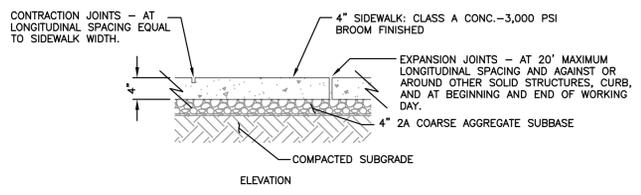
- NOTE:**
- MATCH JOINT SEALING MATERIAL TO COLOR OF ADJOINING CONCRETE SURFACE, OR AS APPROVED BY OWNER.
 - MAKE THE TOP OF THE JOINT SEALING MATERIAL NOT LESS THAN 1/16\"/>

CONCRETE SIDEWALK JOINTS



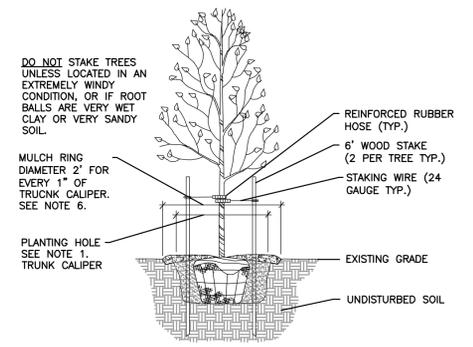
- NOTE:**
- SIDEWALK WIDTH PER PLAN.
 - SIDEWALK CROSS-SLOPE 2% MAX.

CONCRETE SIDEWALK THICKENED SLAB (DRIVEWAY CROSSINGS)



- NOTE:**
- SIDEWALK WIDTH PER PLAN.
 - SIDEWALK CROSS-SLOPE 2% MAX.

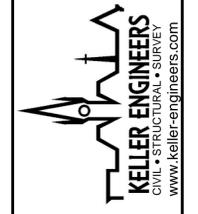
CONCRETE SIDEWALK/ CONCRETE USPS MAILBOX SLAB



- NOTES:**
- EXCAVATE PLANTING HOLE TO A DEPTH NOT TO EXCEED THE DEPTH OF THE ROOT BALL. HOLE DIAMETER TWICE ROOT BALL WIDTH.
 - SET ROOT BALL AT, OR SLIGHTLY ABOVE FINISHED GRADE. DO NOT COVER THE ROOT BALL WITH SOIL.
 - CUT TWINE, OR BURLAP, FROM AROUND TRUNK. CUT WIRE BASKET FROM THE TOP PORTION OF THE ROOT BALL (IF APPLICABLE).
 - BACKFILL WITH EXISTING SOIL. USE OF SOIL AMENDMENTS IS NOT RECOMMENDED.
 - TAMP SOIL AROUND ROOT BALL FIRMLY.
 - MULCH RING WITH HAND CUT EDGE, SHALL BE PLACED AROUND EACH TREE IF NOT LOCATED IN A MULCHED BED, PLACE 3\"/>
 - ONLY PRUNE DEAD, BROKEN, OR CROSSOVER LIMBS.

TREE PLANTING

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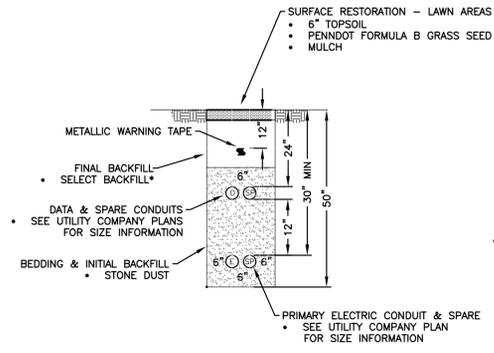
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FINAL LAND DEVELOPMENT PLAN GRAYS WOODS PLANNED COMMUNITY GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B

TYPICAL DETAILS
PATTON TOWNSHIP, CENTRE COUNTY PENNSYLVANIA

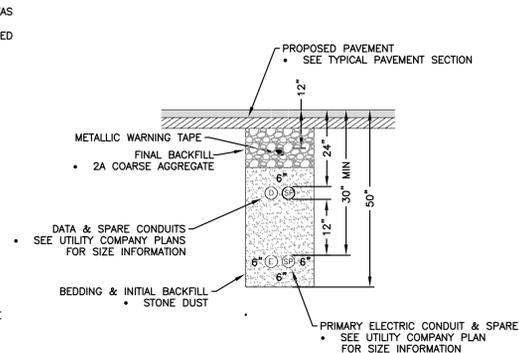
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| PROJECT NO.: 88-82 | DATE: 2024-11-01 |
| FILE NAME: TYPICAL DETAILS | DESIGNED BY: [blank] |
| DRAWN BY: [blank] | CHECKED BY: [blank] |
| 25 | |



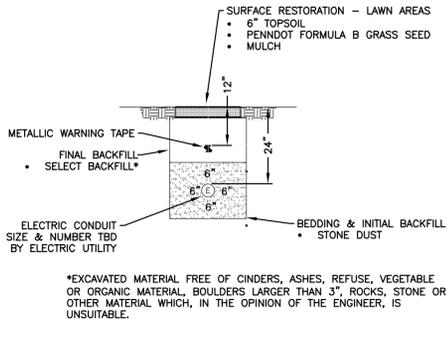
*EXCAVATED MATERIAL FREE OF CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS LARGER THAN 3", ROCKS, STONE OR OTHER MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE.

PRIMARY ELECTRIC/TELEPHONE/CABLE
NON-TRAFFIC AREAS



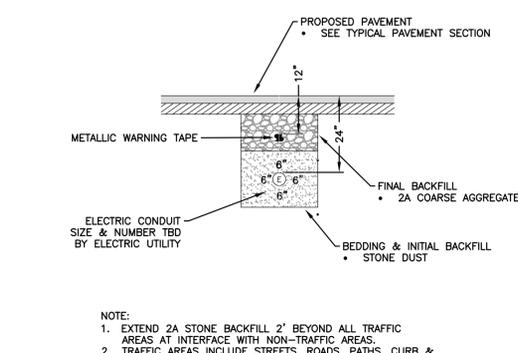
NOTE:
1. EXTEND 2A STONE BACKFILL 2' BEYOND ALL TRAFFIC AREAS AT INTERFACE WITH NON-TRAFFIC AREAS.
2. TRAFFIC AREAS INCLUDE STREETS, ROADS, PATHS, CURB & SIDEWALK.

PRIMARY ELECTRIC/TELEPHONE/CABLE
TRAFFIC AREAS



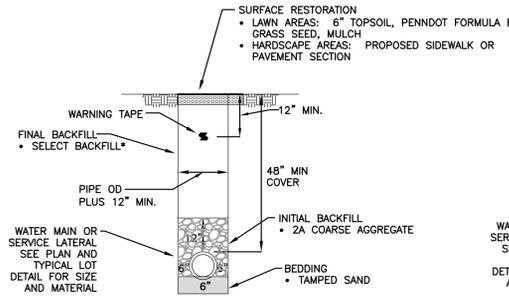
*EXCAVATED MATERIAL FREE OF CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS LARGER THAN 3", ROCKS, STONE OR OTHER MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE.

SECONDARY ELECTRIC
SECONDARY POWER & STREET LIGHTS
NON-TRAFFIC AREAS



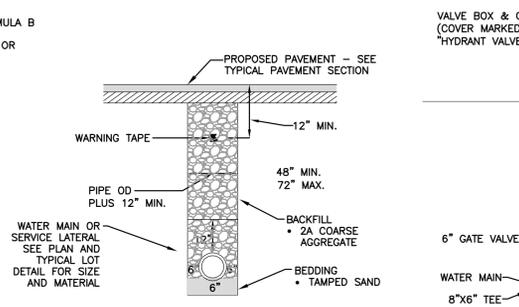
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SECONDARY ELECTRIC
SECONDARY POWER & STREET LIGHTS
TRAFFIC AREAS



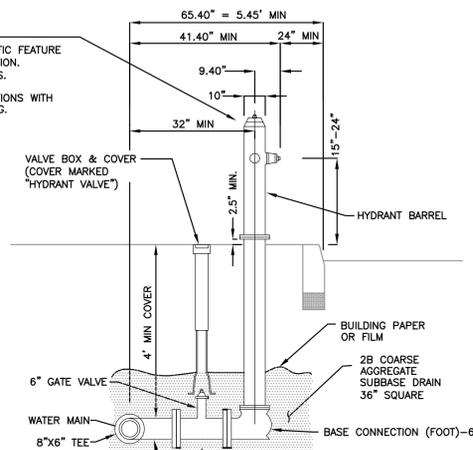
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WATER MAIN & SERVICE LATERAL
NON-TRAFFIC AREAS

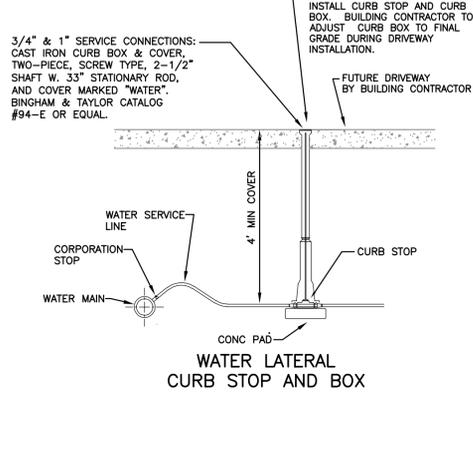


NOTE:
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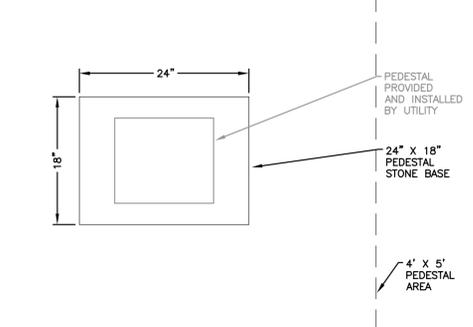
WATER MAIN & SERVICE LATERAL
PROPOSED TRAFFIC AREAS



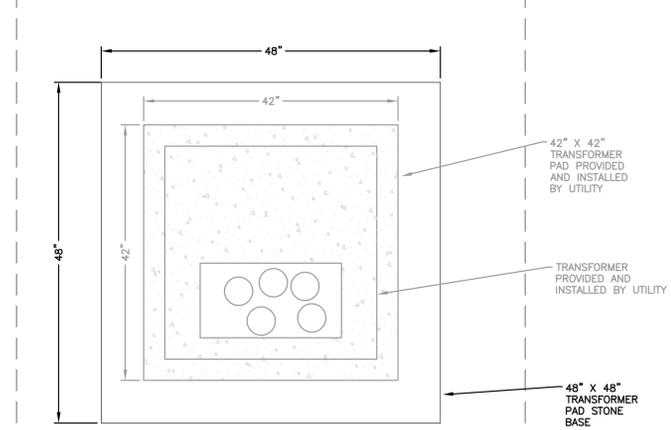
FIRE HYDRANT ASSEMBLY



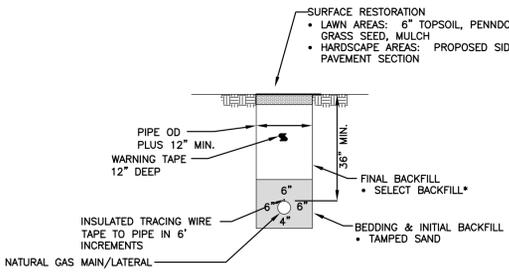
WATER LATERAL
CURB STOP AND BOX



PEDESTAL STONE BASE

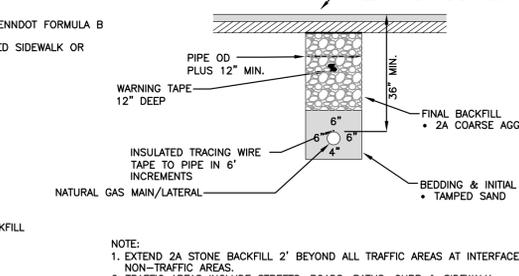


TRANSFORMER PAD STONE BASE



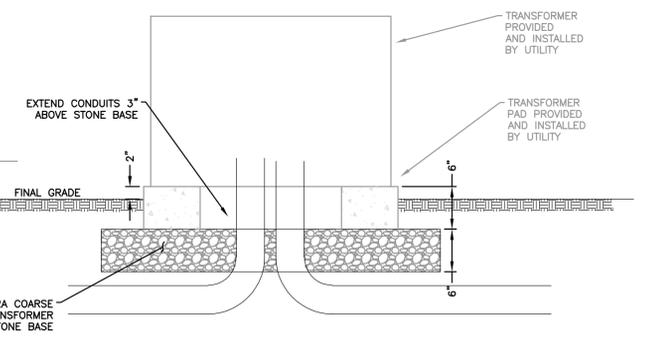
*EXCAVATED MATERIAL FREE OF CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS LARGER THAN 3", ROCKS, STONE OR OTHER MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE.

GAS MAIN & SERVICE LATERAL
NON-TRAFFIC AREAS



NOTE:
1. EXTEND 2A STONE BACKFILL 2' BEYOND ALL TRAFFIC AREAS AT INTERFACE WITH NON-TRAFFIC AREAS.
2. TRAFFIC AREAS INCLUDE STREETS, ROADS, PATHS, CURB & SIDEWALK.

GAS MAIN & SERVICE LATERAL
TRAFFIC AREAS



3500 E. College Avenue
Suite 1100
State College, PA 16801
P: (814) 231-2925



| DATE & INITIALS | REVISION DESCRIPTION |
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FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

TYPICAL DETAILS
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

PROJECT NO.: 88-82
FILE NAME: TYPICAL DETAILS
DESIGNED BY: 2024-11-01
DRAWN BY:
CHECKED BY:

GENERAL STRATEGY:

- THE PHASE 7B AREA LIES ENTIRELY WITHIN THE OVERALL GRAYS POINTE MASS GRADING AREA PREVIOUSLY DESIGNED IN 2020.
- THE PRIMARY EROSION & SEDIMENTATION CONTROL BMP FOR THE PHASE 7 PORTION OF THE GRAYS POINTE MASS GRADING AREA WAS PROVIDED BY A TEMPORARY SEDIMENT BASIN CONFIGURATION WITHIN THE PERMANENT STORMWATER MANAGEMENT BASIN #6 FOOTPRINT INSTALLED IN 2020. THAT TEMPORARY SEDIMENT BASIN CONFIGURATION REMAINS IN PLACE TO THIS DAY AS ALL PROPOSED UPLAND DEVELOPMENT AND DISTURBANCE HAS NOT YET BEEN COMPLETED.
- THE PRIMARY EROSION & SEDIMENTATION CONTROL BMP FOR THE PHASE 7B RESIDENTIAL DEVELOPMENT WILL CONTINUE TO BE TEMPORARY SEDIMENT BASIN #6; NO FURTHER ADJUSTMENTS TO THIS FACILITY ARE REQUIRED.
- BASIN #6 WAS EXPANDED (CUT) AS PART OF THE GRAYS POINTE 7A DEVELOPMENT RELATIVE TO PERMANENT STORMWATER MANAGEMENT VOLUME REQUIREMENTS. THE EXISTING TEMPORARY SEDIMENT BASIN FUNCTION WILL SERVE AS THE PRIMARY EROSION & SEDIMENTATION CONTROL BMP FOR THIS EXPANSION EFFORT AS WELL.

GENERAL NOTES:

- ALL EARTH DISTURBANCE, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED EAS PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- NOT LESS THAN 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL NOTIFY ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE EAS PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMAPPED, THE PENNSYLVANIA ONE CALL SYSTEM SHALL BE NOTIFIED AT 1-800-442-7179 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 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 AT ANY STAGE OR PHASE OF THE PROJECT UNTIL THE EAS BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS EAS PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS BEYOND THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGAIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- NO BUILDING MATERIALS OR WASTES SHALL BE REMOVED FROM THE SITE OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET. SEQ. 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNWANTED BUILDING MATERIALS SHALL BE BURNED, BURIED, COVERED, OR DISCARDED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN EAS PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETURNED BY THE PROPERTY OWNER FOR A BILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL. IT IS TO BE ANALYTICAL TESTING.
- ALL PUMPING OF WATER FORM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, UNDER UNDISTURBED VEGETATED AREAS.
- VEHICLE AND EQUIPMENT MAY NEVER ENTER DIRECTLY NOR EXIT DIRECTLY FROM LOT AREAS ONTO COMPLETED AMIUS DRIVE.
- UNTIL THE SITE IS FULLY STABILIZED, ALL EROSION AND SEDIMENTATION PREVENTION, MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BENTS AFTER EACH RAINFALL EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-SEEDING, RE-MULCHING, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- IF THE EAS BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- EQUIMENTS SHALL BE USED FOR THIS PURPOSE. THE CONTRACTOR SHALL HAVE AN EROSION CONTROL BLANKET INSTALLED IN CONJUNCTION WITH THE PERMANENT VEGETATIVE BMP. TERRA JUTE EROSION CONTROL FABRIC OR FIBER MATS SHALL BE USED FOR THIS PURPOSE.
- BIOERODABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTOERODABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S 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 AROUND THE SOCK.
- REMOVE ACCUMULATED SEDIMENT AS NECESSARY TO MAINTAIN FUNCTIONALITY OF THE COMPOST FILTER SOCK. IN ANY CASE, REMOVE DEPOSITS WHEN SEDIMENT ACCUMULATION REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK. SOCKS SHALL BE INSPECTED FOR DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. PHOTOERODABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTOERODABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
- C. SOIL BINDERS AND ANIONIC POLYACRYLAMIDE**
 - WATER SOLUBLE ANIONIC POLYACRYLAMIDE
 - MORRISON SANDY LOAM SOILS ARE PRESENT IN THE PROJECT AREA. THEREFORE, WATER SOLUBLE ANIONIC POLYACRYLAMIDE SHALL BE UTILIZED AS A TEMPORARY SOIL BINDING AGENT TO REDUCE EROSION OF SUCH SOILS IF NECESSARY OR AS DIRECTED BY CONSERVATION DISTRICT.
 - UTILIZE APPLIED POLYMER SYSTEMS AFS 700 SERIES SILT STOP-OR EQUAL. APPLY AS AN ADDITIVE WITH HYDROSEEDER DURING SEEDING OPERATION.
 - APPLY AT RATE OF 1.5 TO 2.5 GALLONS OF SILT STOP/ EMULSION PER 3000 GALLONS WATER PER ACRE, OR OTHERWISE AT MANUFACTURER'S RECOMMENDED APPLICATION RATES.
 - APPLY CROSS SEEDS AT THE SAME TIME.
 - REAPPLY AFTER EVERY RAINFALL EVENT.
 - OPTIONALLY UTILIZE ANIONIC POLYACRYLAMIDE TO TEMPORARILY STABILIZE TOPSOIL STOCKPILES, BUT REAPPLY ON A 60-DAY CYCLE DUE TO EFFICACY LOSS.
- FLOCCULANTS:**
 - MORRISON SANDY LOAM SOILS ARE PRESENT IN THE PROJECT AREA. THEREFORE, FLOCCULANTS SHALL BE UTILIZED AS A TEMPORARY SOIL BINDING AGENT TO REDUCE EROSION OF SUCH SOILS IF NECESSARY.
 - UTILIZE APPLIED POLYMER SYSTEMS AFS 700 SERIES FLOC LOGS OR EQUAL.
 - INSTALL WITH STABILIZED DITCH SYSTEM AS SHOWN ON PLAN AS CLOSE AS POSSIBLE TO EARTHMOVING ACTIVITIES.
 - INSTALL DITCH CHECKS BELOW THE FLOC LOGS TO ALLOW FLOC LOGS TO COLLECT ACCUMULATED PARTICULATE MATTER.
 - DO NOT ALLOW THE FLOC LOGS TO REST IN MUD OR BECOME COVERED WITH SILT. REPLACE FLOC LOG WHEN IT HAS DIMINISHED TO 25% OF ORIGINAL SIZE.
- D. NET FILTER BAGS:**
 - INSTALL AT LOCATIONS INDICATED ON PLAN.
 - EMPTY BAG WHEN ACCUMULATED DEBRIS/SEDIMENT REACHES 1/2 MAXIMUM CAPACITY. REPLACE IF BAG IS RIPPED OR TORN. EXTRA FILTER BAGS MUST BE MAINTAINED ON SITE FOR THIS PURPOSE. DISPOSE OF ALL SEDIMENT REMOVED FROM DEVICES IN AN APPROVED MANNER.
 - ERODABLE DITCHES:
 - INSTALL AT LOCATIONS INDICATED ON PLAN.
 - MAINTAIN DESIGN CAPACITY AT ALL TIMES. REMOVE ALL SEDIMENT ACCUMULATION AND DISPOSE OF IN AN APPROVED MANNER. REPAIR OR REPLACE PROTECTIVE LININGS AT THE FIRST SIGN OF DETERIORATION.
 - INSTALL AT LOCATIONS INDICATED ON PLAN.
 - PLUMPED WATER SEDIMENT FILTER BAG ONCE SEDIMENT REACHES 1/2 MAXIMUM CAPACITY, OR IF BAG IS RIPPED OR TORN, EXTRA FILTER BAGS MUST BE MAINTAINED ON SITE FOR THIS PURPOSE. DISPOSE OF ALL SEDIMENT REMOVED FROM DEVICES IN AN APPROVED MANNER.
- EROSION CONTROL BLANKETS:**
 - INSTALL ON ALL COMPLETED EMBANKMENT OR EXCAVATIONS WITH SLOPES OF 3:1 OR GREATER.
 - INSTALL ON ALL SEEDED AREAS WITHIN 50' OF A SURFACE WATER AND 100 FEET OF A SPECIAL PROTECTION WATER REGARDLESS OF SLOPE.
 - INSTALL OR APPLY BLANKETS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - FOR ROLLED BLANKETS, AREAS TO BE BLANKETED SHOULD BE SMOOTH AND UNIFORM TO ENSURE CONTINUOUS CONTACT BETWEEN BLANKET AND UNDERLYING SOIL. SMOOTHING OF SURFACE IS NOT REQUIRED FOR SPRAY-ON BLANKETS.
 - SPECIFIC EROSION CONTROL MARKET PRODUCT HAS NOT BEEN IDENTIFIED IN THIS EROSION CONTROL PLAN, THEREFORE, MINIMUM STANDARDS FOR APPLICATION AS INDICATED ON DETAIL MUST BE FOLLOWED.
- TEMPORARY SEEDING & MULCHING:**
 - IN PLANTING SEASON:
 - SEED: PENNODT FORMULA E @ 10 LBS/1000 SF
 - MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
 - APPLICATION DATES: MARCH 15 TO OCTOBER 15
 - OUT OF PLANTING SEASON:
 - TO BE APPLIED IMMEDIATELY UPON COMPLETION OF INSTALLATION OF TEMPORARY SEDIMENT BASINS, TRAPS OR DITCH CHANNELS REQUIRING SUCH STABILIZATION WITHIN SPECIAL PROTECTION WATERSHEDS.
 - TO BE APPLIED IMMEDIATELY TO MOWING OF ANY DISTURBED AREA (INCLUDING STOCKPILES) WHERE DISTURBANCE ACTIVITIES WILL TEMPORARILY EXCEED FOR 24 HOURS OR GREATER WITHIN SPECIAL PROTECTION WATERSHEDS.
 - TO BE APPLIED IMMEDIATELY TO FINAL GRADE OF ANY DISTURBED AREA IF IT IS ACHIEVED DURING A RESTRICTED PERMANENT SEEDING SEASON WITHIN SPECIAL PROTECTION WATERSHEDS.
 - DISTURBED AREAS WHICH ARE NOT AT FINAL GRADE, AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS (PENNODT FORMULA E SEED).
 - FOR SEEDING SPECIFICATIONS AND GERMINATING PERIODS, REFER TO PENNODT PUBLICATION 408, SECTION 804.
 - LAWNS (SLOPES UP TO AND INCLUDING 3:1): USE ON ALL AREAS OF THE PROJECT GRADED AT 3:1 OR LESS THAT WILL BE ROUTINELY MOWED (WITH THE EXCEPTION OF STORMWATER BASIN BOTTOMS - SEE FORMULA W, AND DITCH CHANNELS) - SEE FORMULA D UNLESS PLANTS SPECIFICALLY INDICATE OTHERWISE.
 - SEED: PENNODT FORMULA B @ 21 LBS/1000 SF
 - SOIL SUPPLEMENTS:
 - PULVERIZED AGRICULTURAL LIMESTONE: 800 LB / 1000 SF
 - COMMERCIAL FERTILIZER 10-20-20: 140 LB / 1000 SF
 - UREAFORM FERTILIZER 38-0-0-0: 50 LB / 1000 SF
 - SLOW-RELEASE NITROGEN FERTILIZER: PER PENNODT PUBLICATION 408
 - MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
 - APPLICATION DATES: MARCH 15 TO JUNE 1 & AUGUST 1 TO OCTOBER 15.
 - USE: LAWN AREAS. (DEFAULT SEEDING APPLICATION FOR GENERAL SLOPE AREAS LESS THAN OR EQUAL TO 3:1).
 - STEEPER SLOPES AND OTHER NON-MOWED SURFACES WITH ROCKY CONDITIONS: AS THIS FORMULA CONTAINS INVASIVE VETCH, IT IS NOT TO BE UTILIZED UNLESS SPECIFIC, STEEP (> 3:1), ROCKY CONDITIONS WILL NOT SUPPORT ANY OTHER VARIETY. DO NOT USE FORMULA C UNLESS IT IS SPECIFICALLY CALLED FOR ON PLANS OR FIELD-ORDERED BY ENGINEER.
 - SEED: PENNODT FORMULA C @ 9 LBS/1000 SF
 - SOIL SUPPLEMENTS:
 - PULVERIZED AGRICULTURAL LIMESTONE: 800 LB / 1000 SF
 - COMMERCIAL FERTILIZER 10-20-20: 140 LB / 1000 SF
 - UREAFORM FERTILIZER 38-0-0-0: 50 LB / 1000 SF
 - SLOW-RELEASE NITROGEN FERTILIZER: PER PENNODT PUBLICATION 408
 - MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
 - APPLICATION DATES: MARCH 15 TO OCTOBER 15
 - USE: WETLAND AREAS.
- STORMWATER BASINS AND OTHER FREQUENTLY INUNDATED AREAS:
 - SEED: DRIFT SEEDS (GRAIN LOW RETENTION GRANULAR FLOOM MIX)
 - SOIL SUPPLEMENTS: PER MANUFACTURER'S RECOMMENDATIONS
 - MULCH: PER MANUFACTURER'S RECOMMENDATIONS
 - SOIL TESTING: CONFIRM APPLICATION RATES VIA SOIL TESTING.
 - APPLICATION DATES: MARCH 15 TO JUNE 1 & AUGUST 1 TO OCTOBER 15.
 - USE: STORMWATER CONTROL BASINS (BOTTOM AND INSIDE EMBANKMENT SLOPES) AND OTHER FREQUENTLY INUNDATED AREAS.
 - TO BE APPLIED IMMEDIATELY UPON ACHIEVEMENT OF FINAL GRADES AFTER PLACEMENT OF TOPSOIL.
 - APPLY TO CUT/FILL SLOPES IN REGULAR VERTICAL INCREMENTS (15' MAX) AS THE SLOPE IS BEING CONSTRUCTED.
 - DISTURBED AREAS, WHICH ARE AT FINAL GRADE, OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR, MUST BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
 - APPLY A TACKLER IN CERTAIN AREAS SUCH AS STEEPER SLOPES IF BANK EROSION IS A CONCERN, OR IF BANK EROSION BECOMES PROBLEMATIC DURING THE GERMINATION PERIOD AT NO ADDITIONAL COST TO OWNER.
 - DURING NON-GERMINATING PERIODS APPLY MULCH OR PROTECTIVE BLANKETING.
 - FOR SEEDING SPECIFICATIONS AND GERMINATING PERIODS, REFER TO PENNODT PUBLICATION 408, SECTION 804.

OPERATION, MAINTENANCE AND SEDIMENT OF TEMPORARY BMPs:

- GENERAL:
 - TEMPORARY EROSION & SEDIMENT POLLUTION CONTROL FOR THIS PROJECT IS PROVIDED BY A VARIETY OF BEST MANAGEMENT PRACTICES, INCLUDING ROCK CONSTRUCTION ENTRANCE, INLET FILTERS, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, SOIL BINDERS AND/OR FLOCCULANTS, AND PUMPED WATER FILTER BAGS.
- MAINTENANCE RESPONSIBILITY:
 - DURING CONSTRUCTION: THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF BOTH TEMPORARY AND PERMANENT BMPs FOR THE DURATION OF THE CONSTRUCTION EFFORT. THE PRIME SITE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT BMPs AFTER EACH MEASURABLE RAINFALL EVENT THEREAFTER.
 - REMOVAL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY BMPs UPON ACHIEVEMENT OF A VEGETATIVE COVERAGE WITH A DENSITY OF 70% ACROSS THE DISTURBED AREAS.
 - THEATICAL LOCAL COMPLETION THE FACILITIES WILL BE TURNED OVER TO THE OWNER WHO WILL THEN BECOME RESPONSIBLE FOR CONTINUING MAINTENANCE OF THE PERMANENT BMPs.
- FACILITY INSPECTION SCHEDULE:
 - DURING CONSTRUCTION: THE CONTRACTOR SHALL INSPECT BOTH TEMPORARY AND PERMANENT BMPs ON A WEEKLY BASIS, AND AFTER EACH MEASURABLE RAINFALL EVENT UNTIL STABILIZATION IS ACHIEVED.
 - POST-CONSTRUCTION: THE CONTRACTOR SHALL INSPECT PERMANENT BMPs WEEKLY AND AFTER EACH MEASURABLE RAINFALL EVENT THEREAFTER.
 - REQUIRED MAINTENANCE WORK: ALL REQUIRED PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, SHALL BE PERFORMED BY THE RESPONSIBLE PARTY IMMEDIATELY UPON DISCOVERY OF ANY DEFICIENCIES. A TIME FRAME WILL BE IMPOSED FOR MAKING REPAIRS TO BMPs REQUIRING REPAIRS OR MAINTENANCE.
- GENERAL:
 - ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING MUST BE PERFORMED IMMEDIATELY.
 - AN ADEQUATE SUPPLY OF ADDITIONAL EROSION CONTROL MATERIALS SHALL BE STOCKED ON SITE TO BE USED IN THE EVENT THAT EMERGENCY REPAIRS ARE REQUIRED.
 - DISTRIBUTE ACCUMULATED SEDIMENT REMOVED FROM TEMPORARY STOCKPILES, OR REMOVE FROM SITE AND DISPOSE OF IN APPROVED MANNER AND LOCATION.
 - INLET PROTECTION: ALL STORMWATER INLETS AS SHOWN ON PLAN (EXISTING/PROPOSED), WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS, MUST BE PROTECTED (FILTERED) UNTIL THE TRIBUTARY AREAS ARE STABILIZED.
 - THE COST OF THE CONSTRUCTION OF THE INLET PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAYMENT WILL BE MADE.
 - TEMPORARY STABILIZATION:
 - MUST BE UTILIZED AS NEEDED DURING PLANNED OR UNPLANNED PROJECT SUSPENSION OR IF THE DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE GROWING SEASON.
 - DURING WINTER, TEMPORARY STABILIZATION CONSISTS OF MULCHING AT THE RATE OF 3 TONS/ACRE.
 - AT ALL OTHER TIMES UTILIZE TEMPORARY SEED AND MULCH IN ACCORDANCE WITH THE SEEDING CHART CONTAINED ON THIS PLAN.
 - ANY MATERIAL INCLUDING TOPSOIL NOT IMMEDIATELY PLACED IN THE FINAL PROPOSED POSITION MUST BE TEMPORARILY STOCKPILED. THIS TEMPORARY STOCKPILE MUST BE TRIBURARY TO APPROPRIATE EROSION DEVICES AND APPROVED BY THE ENGINEER.
 - CONSTRUCT STOCKPILE TO FREELY DRAIN SURFACE WATER.
 - STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
 - LONG TERM STOCKPILES MUST BE TEMPORARILY STABILIZED WITH TEMPORARY SEEDING AND MULCHING.
 - STOCKPILE SLOPES MUST NOT EXCEED 3:1 VERTICAL TO HORIZONTAL INCLINATION.
- RECYCLING AND DISPOSAL MEASURES: THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO RECYCLE WASTE AND DEMOLITION MATERIAL. IF THIS MATERIAL CANNOT BE RECYCLED, THE CONTRACTOR SHALL DISPOSE OF THE MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
- STABILIZATION:
 - A STOCKPILED TOPSOIL TO BE UTILIZED ON ALL SPECIFIED PERMANENT STABILIZATION AREAS. SUPPLEMENT STOCKPILES AS REQUIRED.
 - PLACE A MINIMUM DEPTH OF 4" OF TOPSOIL PRIOR TO SEEDING AND MULCHING.
 - SCARIFY AREAS THAT ARE TO BE TOP-SOILED TO A MINIMUM DEPTH OF 3" TO 5" (6" TO 12" ON COMPACTED SOILS) PRIOR TO PLACEMENT.
 - DITCHES SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
 - ALL FINAL CUT, FILL, OR STORMWATER EMBANKMENT SLOPES 3:1 OR STEEPER SHALL HAVE AN EROSION CONTROL BLANKET INSTALLED IN CONJUNCTION WITH THE PERMANENT VEGETATIVE BMP. TERRA JUTE EROSION CONTROL FABRIC OR FIBER MATS SHALL BE USED FOR THIS PURPOSE.
 - TEMPORARY STABILIZATION WILL BE UTILIZED AS NEEDED DURING PLANNED OR UNPLANNED PROJECT SUSPENSION, OR IF THE DISTURBED AREA ACHIEVES FINAL GRADE DURING AN UNFAVORABLE GROWING SEASON. DURING THE WINTER, TEMPORARY STABILIZATION CONSISTS OF MULCHING AT THE RATE OF 3 TONS/ACRE. UTILIZE TEMPORARY SEED AND MULCH IN ACCORDANCE WITH THE DETAIL SHOWN IN THIS PLAN AT ALL OTHER TIMES.
- ROCK CONSTRUCTION ENTRANCES:
 - INSTALL AT LOCATIONS INDICATED ON PLAN.
 - MAINTAIN THE SPECIFIED THICKNESS OF ALL ROCK CONSTRUCTION ENTRANCES BY THE ADDITION OF ROCK. MAINTAIN A STOCKPILE OF ROCK MATERIAL ON SITE FOR THIS PURPOSE. AT THE END OF CONSTRUCTION DAY, REMOVE ALL SEDIMENT DEPOSITS AND RETURN TO THE ROADWAY WITH WATER WILL NOT BE PERMITTED.
- COMPOST FILTER SOCK LAYOUT CONTAINED WITHIN THIS PLAN IS REPRESENTATIVE IN NATURE. CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL INSTALLATION PROCEDURES IDENTIFIED IN THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL AND MANUFACTURERS INSTALLATION REQUIREMENTS. THIS INCLUDES LEVELING, END EXTENSIONS, ANCHORING, SECTION STRENGTHENING, LAPPING, ETC.
- COMPOST FILTER SOCK MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH SOCK SHALL BE EXTENDED AT LEAST 6" UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT.
- TRAPS SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
- DITCHES SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- BIOERODABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTOERODABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S 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 AROUND THE SOCK.
- REMOVE ACCUMULATED SEDIMENT AS NECESSARY TO MAINTAIN FUNCTIONALITY OF THE COMPOST FILTER SOCK. IN ANY CASE, REMOVE DEPOSITS WHEN SEDIMENT ACCUMULATION REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK. SOCKS SHALL BE INSPECTED FOR DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. PHOTOERODABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTOERODABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

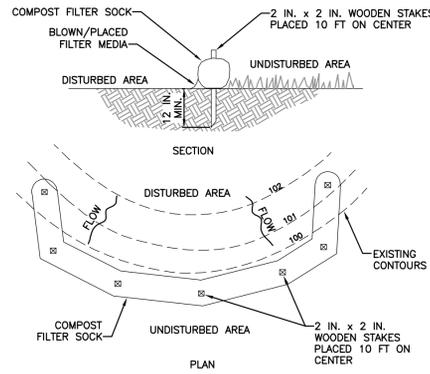
- C. SOIL BINDERS AND ANIONIC POLYACRYLAMIDE**
- WATER SOLUBLE ANIONIC POLYACRYLAMIDE
- MORRISON SANDY LOAM SOILS ARE PRESENT IN THE PROJECT AREA. THEREFORE, WATER SOLUBLE ANIONIC POLYACRYLAMIDE SHALL BE UTILIZED AS A TEMPORARY SOIL BINDING AGENT TO REDUCE EROSION OF SUCH SOILS IF NECESSARY OR AS DIRECTED BY CONSERVATION DISTRICT.
- UTILIZE APPLIED POLYMER SYSTEMS AFS 700 SERIES SILT STOP-OR EQUAL. APPLY AS AN ADDITIVE WITH HYDROSEEDER DURING SEEDING OPERATION.
- APPLY AT RATE OF 1.5 TO 2.5 GALLONS OF SILT STOP/ EMULSION PER 3000 GALLONS WATER PER ACRE, OR OTHERWISE AT MANUFACTURER'S RECOMMENDED APPLICATION RATES.
- APPLY CROSS SEEDS AT THE SAME TIME.
- REAPPLY AFTER EVERY RAINFALL EVENT.
- OPTIONALLY UTILIZE ANIONIC POLYACRYLAMIDE TO TEMPORARILY STABILIZE TOPSOIL STOCKPILES, BUT REAPPLY ON A 60-DAY CYCLE DUE TO EFFICACY LOSS.
- FLOCCULANTS:**
- MORRISON SANDY LOAM SOILS ARE PRESENT IN THE PROJECT AREA. THEREFORE, FLOCCULANTS SHALL BE UTILIZED AS A TEMPORARY SOIL BINDING AGENT TO REDUCE EROSION OF SUCH SOILS IF NECESSARY.
- UTILIZE APPLIED POLYMER SYSTEMS AFS 700 SERIES FLOC LOGS OR EQUAL.
- INSTALL WITH STABILIZED DITCH SYSTEM AS SHOWN ON PLAN AS CLOSE AS POSSIBLE TO EARTHMOVING ACTIVITIES.
- INSTALL DITCH CHECKS BELOW THE FLOC LOGS TO ALLOW FLOC LOGS TO COLLECT ACCUMULATED PARTICULATE MATTER.
- DO NOT ALLOW THE FLOC LOGS TO REST IN MUD OR BECOME COVERED WITH SILT. REPLACE FLOC LOG WHEN IT HAS DIMINISHED TO 25% OF ORIGINAL SIZE.
- D. NET FILTER BAGS:**
- INSTALL AT LOCATIONS INDICATED ON PLAN.
- EMPTY BAG WHEN ACCUMULATED DEBRIS/SEDIMENT REACHES 1/2 MAXIMUM CAPACITY. REPLACE IF BAG IS RIPPED OR TORN. EXTRA FILTER BAGS MUST BE MAINTAINED ON SITE FOR THIS PURPOSE. DISPOSE OF ALL SEDIMENT REMOVED FROM DEVICES IN AN APPROVED MANNER.
- ERODABLE DITCHES:
 - INSTALL AT LOCATIONS INDICATED ON PLAN.
 - MAINTAIN DESIGN CAPACITY AT ALL TIMES. REMOVE ALL SEDIMENT ACCUMULATION AND DISPOSE OF IN AN APPROVED MANNER. REPAIR OR REPLACE PROTECTIVE LININGS AT THE FIRST SIGN OF DETERIORATION.
- INSTALL AT LOCATIONS INDICATED ON PLAN.
- PLUMPED WATER SEDIMENT FILTER BAG ONCE SEDIMENT REACHES 1/2 MAXIMUM CAPACITY, OR IF BAG IS RIPPED OR TORN, EXTRA FILTER BAGS MUST BE MAINTAINED ON SITE FOR THIS PURPOSE. DISPOSE OF ALL SEDIMENT REMOVED FROM DEVICES IN AN APPROVED MANNER.
- EROSION CONTROL BLANKETS:**
- INSTALL ON ALL COMPLETED EMBANKMENT OR EXCAVATIONS WITH SLOPES OF 3:1 OR GREATER.
- INSTALL ON ALL SEEDED AREAS WITHIN 50' OF A SURFACE WATER AND 100 FEET OF A SPECIAL PROTECTION WATER REGARDLESS OF SLOPE.
- INSTALL OR APPLY BLANKETS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- FOR ROLLED BLANKETS, AREAS TO BE BLANKETED SHOULD BE SMOOTH AND UNIFORM TO ENSURE CONTINUOUS CONTACT BETWEEN BLANKET AND UNDERLYING SOIL. SMOOTHING OF SURFACE IS NOT REQUIRED FOR SPRAY-ON BLANKETS.
- SPECIFIC EROSION CONTROL MARKET PRODUCT HAS NOT BEEN IDENTIFIED IN THIS EROSION CONTROL PLAN, THEREFORE, MINIMUM STANDARDS FOR APPLICATION AS INDICATED ON DETAIL MUST BE FOLLOWED.
- TEMPORARY SEEDING & MULCHING:**
- IN PLANTING SEASON:
 - SEED: PENNODT FORMULA E @ 10 LBS/1000 SF
 - MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
 - APPLICATION DATES: MARCH 15 TO OCTOBER 15
- OUT OF PLANTING SEASON:
 - TO BE APPLIED IMMEDIATELY UPON COMPLETION OF INSTALLATION OF TEMPORARY SEDIMENT BASINS, TRAPS OR DITCH CHANNELS REQUIRING SUCH STABILIZATION WITHIN SPECIAL PROTECTION WATERSHEDS.
 - TO BE APPLIED IMMEDIATELY TO MOWING OF ANY DISTURBED AREA (INCLUDING STOCKPILES) WHERE DISTURBANCE ACTIVITIES WILL TEMPORARILY EXCEED FOR 24 HOURS OR GREATER WITHIN SPECIAL PROTECTION WATERSHEDS.
 - TO BE APPLIED IMMEDIATELY TO FINAL GRADE OF ANY DISTURBED AREA IF IT IS ACHIEVED DURING A RESTRICTED PERMANENT SEEDING SEASON WITHIN SPECIAL PROTECTION WATERSHEDS.
 - DISTURBED AREAS WHICH ARE NOT AT FINAL GRADE, AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS (PENNODT FORMULA E SEED).
 - FOR SEEDING SPECIFICATIONS AND GERMINATING PERIODS, REFER TO PENNODT PUBLICATION 408, SECTION 804.
- LAWNS (SLOPES UP TO AND INCLUDING 3:1): USE ON ALL AREAS OF THE PROJECT GRADED AT 3:1 OR LESS THAT WILL BE ROUTINELY MOWED (WITH THE EXCEPTION OF STORMWATER BASIN BOTTOMS - SEE FORMULA W, AND DITCH CHANNELS) - SEE FORMULA D UNLESS PLANTS SPECIFICALLY INDICATE OTHERWISE.
 - SEED: PENNODT FORMULA B @ 21 LBS/1000 SF
 - SOIL SUPPLEMENTS:
 - PULVERIZED AGRICULTURAL LIMESTONE: 800 LB / 1000 SF
 - COMMERCIAL FERTILIZER 10-20-20: 140 LB / 1000 SF
 - UREAFORM FERTILIZER 38-0-0-0: 50 LB / 1000 SF
 - SLOW-RELEASE NITROGEN FERTILIZER: PER PENNODT PUBLICATION 408
 - MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
 - APPLICATION DATES: MARCH 15 TO JUNE 1 & AUGUST 1 TO OCTOBER 15.
 - USE: LAWN AREAS. (DEFAULT SEEDING APPLICATION FOR GENERAL SLOPE AREAS LESS THAN OR EQUAL TO 3:1).
 - STEEPER SLOPES AND OTHER NON-MOWED SURFACES WITH ROCKY CONDITIONS: AS THIS FORMULA CONTAINS INVASIVE VETCH, IT IS NOT TO BE UTILIZED UNLESS SPECIFIC, STEEP (> 3:1), ROCKY CONDITIONS WILL NOT SUPPORT ANY OTHER VARIETY. DO NOT USE FORMULA C UNLESS IT IS SPECIFICALLY CALLED FOR ON PLANS OR FIELD-ORDERED BY ENGINEER.
- SEED: PENNODT FORMULA C @ 9 LBS/1000 SF
- SOIL SUPPLEMENTS:
 - PULVERIZED AGRICULTURAL LIMESTONE: 800 LB / 1000 SF
 - COMMERCIAL FERTILIZER 10-20-20: 140 LB / 1000 SF
 - UREAFORM FERTILIZER 38-0-0-0: 50 LB / 1000 SF
 - SLOW-RELEASE NITROGEN FERTILIZER: PER PENNODT PUBLICATION 408
- MULCH: 3 TONS/ACRE (3 BALES/1000 SF) W. NON-ASPHALTIC EMULSION
- APPLICATION DATES: MARCH 15 TO OCTOBER 15
- USE: WETLAND AREAS.
- STORMWATER BASINS AND OTHER FREQUENTLY INUNDATED AREAS:
- SEED: DRIFT SEEDS (GRAIN LOW RETENTION GRANULAR FLOOM MIX)
- SOIL SUPPLEMENTS: PER MANUFACTURER'S RECOMMENDATIONS
- MULCH: PER MANUFACTURER'S RECOMMENDATIONS
- SOIL TESTING: CONFIRM APPLICATION RATES VIA SOIL TESTING.
- APPLICATION DATES: MARCH 15 TO JUNE 1 & AUGUST 1 TO OCTOBER 15.
- USE: STORMWATER CONTROL BASINS (BOTTOM AND INSIDE EMBANKMENT SLOPES) AND OTHER FREQUENTLY INUNDATED AREAS.
- TO BE APPLIED IMMEDIATELY UPON ACHIEVEMENT OF FINAL GRADES AFTER PLACEMENT OF TOPSOIL.
- APPLY TO CUT/FILL SLOPES IN REGULAR VERTICAL INCREMENTS (15' MAX) AS THE SLOPE IS BEING CONSTRUCTED.
- DISTURBED AREAS, WHICH ARE AT FINAL GRADE, OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR, MUST BE IMMEDIATELY STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- APPLY A TACKLER IN CERTAIN AREAS SUCH AS STEEPER SLOPES IF BANK EROSION IS A CONCERN, OR IF BANK EROSION BECOMES PROBLEMATIC DURING THE GERMINATION PERIOD AT NO ADDITIONAL COST TO OWNER.
- DURING NON-GERMINATING PERIODS APPLY MULCH OR PROTECTIVE BLANKETING.
- FOR SEEDING SPECIFICATIONS AND GERMINATING PERIODS, REFER TO PENNODT PUBLICATION 408, SECTION 804.

RECYCLING AND DISPOSAL PROCEDURES:

- ANTICIPATED CONSTRUCTION WASTE:
 - TEMPORARY EROSION & SEDIMENTATION CONTROL BMPs
 - CONCRETE
 - WASTE FROM CONSTRUCTION
 - RECYCLING AND DISPOSAL: THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO RECYCLE WASTE AND DEMOLITION MATERIAL. IF THE MATERIAL CANNOT BE RECYCLED, THE CONTRACTOR SHALL DISPOSE OF THE MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL GUIDELINES AND REGULATIONS.
 - NO DEMOLITION MATERIALS OR CONSTRUCTION DEBRIS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE PROJECT SITE.
- STAGING OF EARTHMOVING ACTIVITIES/SEQUENCE OF CONSTRUCTION:**
 - PREVIOUSLY INSTALLED EAS BMPs:
 - BASEIN #6 - TEMPORARY SEDIMENT BASIN CONFIGURATION. THIS BASIN WAS LATEST EXPANDED IN ASSOCIATION WITH THE GRAYS POINTE PHASE 7A PROJECT; NO FURTHER ADJUSTMENTS ARE REQUIRED TO SUPPORT THE GRAYS POINTE PHASE 7B PROJECT.
 - PERMANENT INFRASTRUCTURE AREA EAS BMP INSTALLATION.
 - INSTALL ROCK CONSTRUCTION ENTRANCE.
 - INSTALL INLET FILTER BAG PROTECTION AS SHOWN ON PLAN.
 - INSTALL COMPOST FILTER SOCK AS SHOWN ON PLAN.
 - GRUBBING:
 - GRASS PROPOSED FOR DEVELOPMENT AREA REMOVE TEMPORARY MEADOW GRASS COVER PLANTED IN ASSOCIATION WITH PREVIOUS MASS GRADING PHASE.
 - FINISH GRADING: THE PHASE 7B AREA WAS PREVIOUSLY MASS-GRADED DURING AN EARLIER PHASE OF CONSTRUCTION.
 - PERFORM FINE GRADING IN ORDER TO CONVERT PREVIOUSLY MASS GRADED AREA TO PUBLIC STREET SUBGRADE ELEVATION. EXPAND PERMANENT STORMWATER MANAGEMENT FUNCTION.
 - FLOCCULANTS TO BE UTILIZED AS A TEMPORARY SOIL BINDING AGENT TO REDUCE EROSION OF SUCH SOILS IF NECESSARY AND AS DIRECTED BY CONSERVATION DISTRICT.
 - PERFORM FINE GRADING IN ORDER TO CONVERT PREVIOUSLY MASS GRADED AREA TO RESIDENTIAL LOT BUILDING PAD SUBGRADE ELEVATIONS.
 - INSTALL EROSION CONTROL BLANKET ON ALL COMPLETED EMBANKMENT SLOPES 3:1 OR GREATER AT THE END OF EACH WORKDAY, AS SHOWN ON PLANS
 - PERFORM FINE GRADING IN ORDER TO CONVERT PREVIOUSLY MASS GRADED AREA TO RESIDENTIAL LOT BUILDING PAD SUBGRADE ELEVATIONS.
 - SUBSIDED INFRASTRUCTURE AREA CONSTRUCTION:
 - UTILITIES: INSTALL UTILITIES INCLUDING WATER, SANITARY SEWER, ELECTRIC, CABLE, AND GAS. IF WATER ENTERS THE EXCAVATED UTILITY TRENCHES, CONTRACTOR SHALL DETAHER THE EXCAVATION USING A PROPERLY SIZED PUMPED WATER FILTER BAG MUST:
 - BE SIZED SUCH THAT THE PUMP RATE DOES NOT EXCEED THE DESIGN MAXIMUM OF 750 GPM.
 - TRAP PARTICLES LARGER THAN 150 MICRONS.
 - BE REPLACED WITH ACCUMULATED SEDIMENT REACHES BAG CAPACITY.
 - BE PLACED ON A BED OF STRAW OR AGGREGATE.
 - BE PLACED ON A BED OF NO GREATER THAN 6".
 - STORMWATER COLLECTION & CONVEYANCE: INSTALL STORMWATER CONVEYANCE INLETS & PIPING STARTING DOWNSTREAM AND WORKING UPSTREAM. INLET TOP UNITS, GRATES, AND INLET FILTER BAGS TO BE SET ON STORMWATER SLOPES IMMEDIATELY AFTER STORMWATER BOX INSTALLATION AT INLET GRADE.
 - CURB AND GUTTER: INSTALL CONCRETE CURB AND GUTTER.
 - PAVEMENT BASE CONSTRUCTION: INSTALL BITUMINOUS ASPHALT BASE COURSE.
 - PERFORM FINAL SITE GRADING.
 - PAVE DRIVEWAYS.
 - PLACEMENT TOPSOIL AND APPLY PERMANENT SEEDING AND MULCHING WITHIN LOT YARD AREAS.
 - LOT AREA BMP REMOVAL:
 - ALL TEMPORARY EAS MEASURES TO REMAIN IN PLACE UNTIL 70% UNIFORM VEGETATIVE COVER HAS BEEN ATTAINED WITHIN ALL DISTURBED AREAS UPON EACH LOT.
 - REMOVE ALL PERMANENT LOT AREA TEMPORARY EROSION CONTROL MEASURES UPON APPROVAL OF COUNTY CONSERVATION DISTRICT.
 - PAVEMENT WEARING COURSE: INSTALL BITUMINOUS ASPHALT WEARING COURSE.
 - SOILAGE & PAVEMENT MARKINGS: INSTALL PER PLAN.
 - PUBLIC INFRASTRUCTURE AREA EAS BMP REMOVAL:
 - UPON STABILIZATION: ALL TEMPORARY PUBLIC INFRASTRUCTURE EAS MEASURES TO REMAIN IN PLACE UNTIL 70% UNIFORM VEGETATIVE COVER HAS BEEN ATTAINED WITHIN ALL DISTURBED AREAS.
 - BMP REMOVAL: REMOVE ALL PUBLIC INFRASTRUCTURE TEMPORARY EROSION CONTROL MEASURES UPON APPROVAL OF COUNTY CONSERVATION DISTRICT WITH EXCEPTION OF SEDIMENT BASIN UNTIL ALL UPLAND DEVELOPMENT IS COMPLETED.
 - EROSION CONTROL BLANKETS:
 - BMP INSTALLATION: INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCE FOR EACH LOT. INSTALL OTHER LOT CONTROLS INCLUDING INLET FILTER BAG PROTECTION DOWN-SLOPE OF BUILDING SITE, COMPOST FILTER SOCK AT PERIMETER OF DISTURBED AREA AND PROVISION OF CONCRETE WASHOUT AS REQUIRED.
 - GRUBBING & TOPSOIL: GRUB LOT AREAS OF TEMPORARY GRASS COVER AS REQUIRED FOR RESIDENTIAL STRUCTURE AND DRIVEWAY CONSTRUCTION. STRIP AND STOCKPILE EXCAVATED TOPSOIL.
 - LOT CONSTRUCTION:
 - CONCRETE FOUNDATION:
 - LOCATE BUILDING FOUNDATION.
 - EXPOSED PROPOSED UTILITY SERVICES FROM PUBLIC MAINS TO PROPOSED BUILDINGS.
 - CONSTRUCT BUILDINGS.
 - PERFORM FINAL SITE GRADING.
 - PAVE DRIVEWAYS.
 - PLACEMENT TOPSOIL AND APPLY PERMANENT SEEDING AND MULCHING WITHIN LOT YARD AREAS.
 - LOT AREA BMP REMOVAL:
 - ALL TEMPORARY EAS MEASURES TO REMAIN IN PLACE UNTIL 70% UNIFORM VEGETATIVE COVER HAS BEEN ATTAINED WITHIN ALL DISTURBED AREAS UPON EACH LOT.
 - REMOVE ALL PERMANENT LOT AREA TEMPORARY EROSION CONTROL MEASURES UPON APPROVAL OF COUNTY CONSERVATION DISTRICT.

| | | |
|--|---|---|
| 3500 E. College Avenue Suite 1100 State College, PA 16801 P: (814) 231-2925 | |  KELLER ENGINEERS CIVIL & STRUCTURAL SURVEY www.keller-engineers.com |
| PROJECT NO: KS-82 | FINAL LAND DEVELOPMENT PLAN GRAYS WOODS PLANNED NEIGHBORHOOD GRAYS POINTE NEIGHBORHOOD PHASE 7 SECTION B | |
| FILE NAME: 2024-11-01 | DESIGNED BY: [Redacted] | REVISION DESCRIPTION |
| DRAWN BY: [Redacted] | CHECKED BY: [Redacted] | DATE & INITIALS |
| DATE: 10/16/2024 | BY: [Redacted] | TYPICAL DETAILS PATTON TOWNSHIP, CENTRE COUNTY PENNSYLVANIA |

| SOIL LIMITATIONS TABLE | CUTBANKS CAVE | CORROSIVE | COLLUVIAL | PYRITIC | DROUGHTY | EASILY ERODIBLE | FLOOD PRONE | HYDRIC | LOW STRENGTH/ LANDSLIDE | SLOW PERCOLATION | PIPING | POOR TOPSOIL | FROST ACTION | SHRINK SWELL | SINKHOLE PRONE | PONDING PRONE | WETNESS PRONE | POTENTIAL REQUIRED ACTIONS |
|------------------------|------------------|-----------|-----------|---------|----------|--------------------|----------------|--------|-------------------------------|---------------------|--------|-----------------|-----------------|-----------------|-------------------|------------------|------------------|----------------------------------|
| | | | | | | | | | | | | | | | | | | |



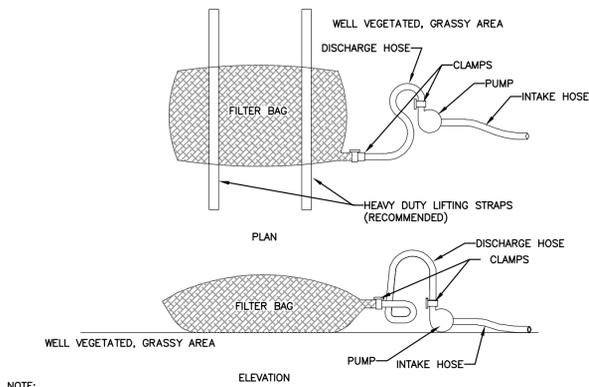
NOTE:
 SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.
 COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE 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 MANUFACTURER'S 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 MANUFACTURER'S 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.

| 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 |
| Sock Diameters | 12" 18" | 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" |
| | 26 psi | 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 | 9 months | 1 year | 2 years |
| Two-ply systems | | | | | |
| Inner Containment Netting | HDPE biaxial net Continuously wound Fusion-welded junctures 3/4"x3/4" 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. | | | | | |

Fitrex & JMD
 Compost should be a well decomposed, weed-free organic matter derived from agriculture, food, stump grindings, and yard or wood/bark organic matter sources. The compost should be aerobically composted. The Compost should possess no objectionable odors and should be reasonable free (<1% by dry weight) of man-made foreign matter. The compost product should not resemble the raw material from which it was derived. Wood and bark chips, ground construction debris or reprocessed wood products are not acceptable as the organic component of the mix.
 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.

| Compost Standards | |
|----------------------------|---------------------------------|
| Organic Matter Content | 25%-100% (dry weight basis) |
| Organic Portion | Fibrous and elongated |
| pH | 5.5-8.5 |
| Moisture Content | 30%-60% |
| Particle Size | 30%-50% pass through 3/8" sieve |
| Soluble Salt Concentration | 5.0 dS/M (mmhos/cm) Maximum |

COMPOST FILTER SOCK

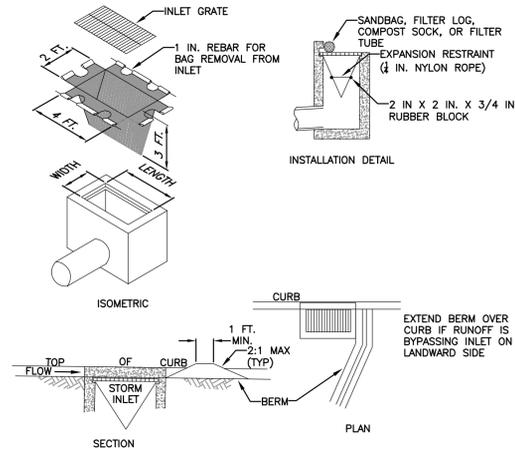


NOTE:
 LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "I" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

| PROPERTY | TEST METHOD | MINIMUM STANDARD |
|--------------------------|-------------|------------------|
| AVG. WIDE WIDTH STRENGTH | ASTM D-4884 | 60 LB/IN |
| GRAB TENSILE | ASTM D-4632 | 205 LB |
| PUNCTURE | ASTM D-4833 | 110 LB |
| MULLEN BURST | ASTM D-3786 | 350 PSI |
| UV RESISTANCE | ASTM D-4355 | 70% |
| AOS % RETAINED | ASTM D-4751 | 80 SIEVE |

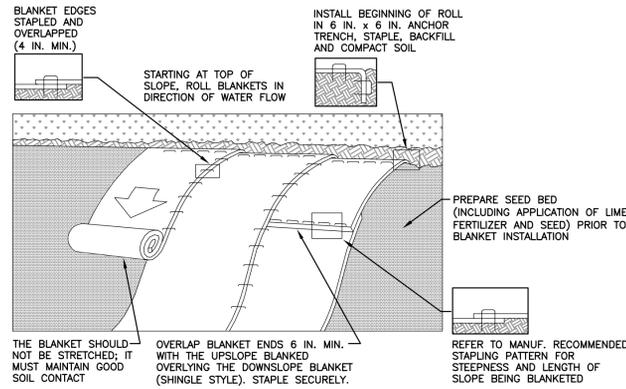
A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
 BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
 NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HO OR BY WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
 THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
 THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
 FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG



NOTE:
 MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
 AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
 DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE C INLET

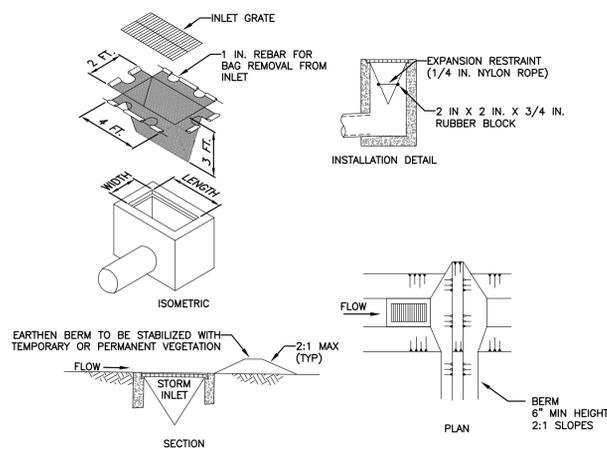


NOTE:
 SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
 SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
 BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY 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.

| EROSION CONTROL BLANKET | PRODUCT | APPLICATION | SLOPE RANGE |
|--------------------------|-----------|-------------------|-------------|
| NORTH AMERICA GREEN S75 | TEMPORARY | 25% TO 33% (3:1) | |
| NORTH AMERICA GREEN S150 | TEMPORARY | 34% TO 50% (2:1) | |
| NORTH AMERICA GREEN S210 | TEMPORARY | 51% TO 100% (1:1) | |
| NORTH AMERICA GREEN S250 | PERMANENT | 100% (1:1) OR > | |

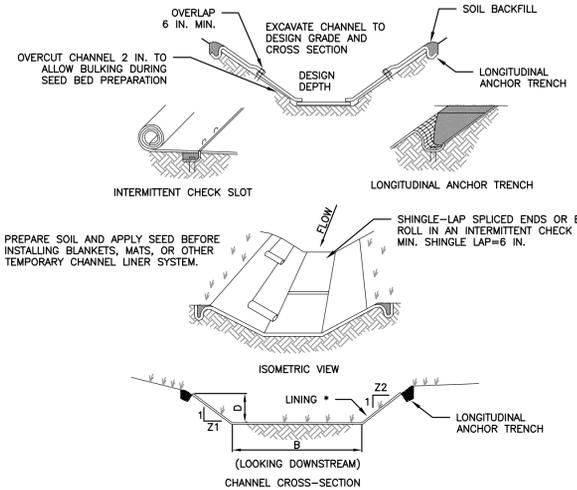
NOTE:
 1. APPLY EROSION CONTROL BLANKET TO ALL CUTS OR FILLS WITH SLOPES OF 25% OR GREATER.
 2. ALL ILLUSTRATED EROSION CONTROL BLANKET NAG S75 UNLESS OTHERWISE NOTED.

EROSION CONTROL BLANKET INSTALLATION



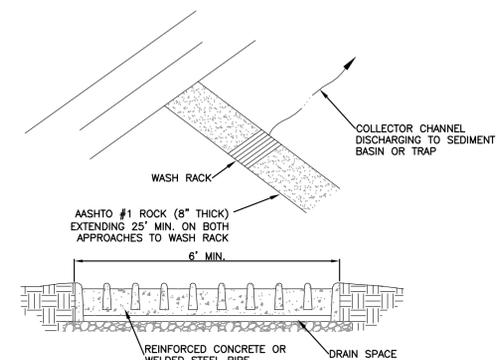
NOTE:
 MAXIMUM DRAINAGE AREA = 1/2 ACRE.
 INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
 ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
 AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
 INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
 DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION - TYPE M INLET



* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION
 NOTE:
 ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.
 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.
 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.

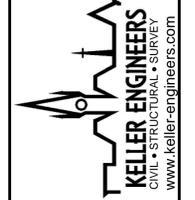
CHANNEL LINING



NOTE:
 WASH RACK SHALL BE 20 FEET (MIN) WIDE OR TOTAL WIDTH OF ACCESS.
 WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
 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.

ROCK CONSTRUCTION ENTRANCE WITH WASH RACK

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 Suite 1100
 State College, PA 16801
 P: (814) 231-2925

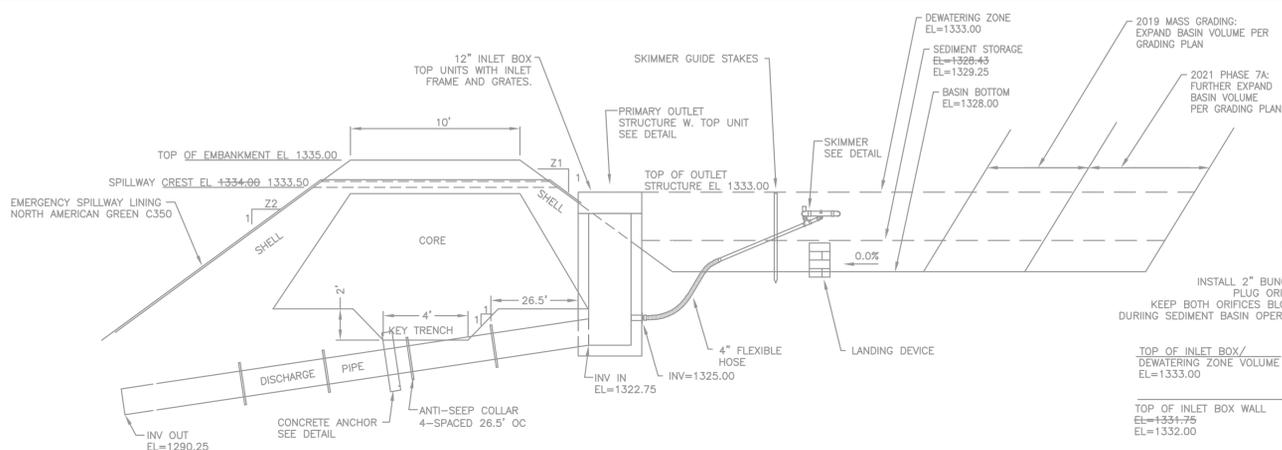


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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS BOONIE NEIGHBORHOOD
 PHASE 7 SECTION B

TYPICAL DETAILS
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

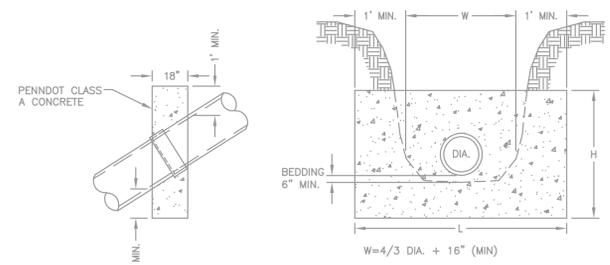
PROJECT NO.: KS-82
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 DESIGNER: JMD
 DRAWN BY: JMD
 CHECKED BY: JMD
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| BASIN | SEDIMENT BASIN | | TOP OF OUTLET STRUCTURE | EMERGENCY SPILLWAY | | EMBANKMENT | | DISCHARGE PIPE | | SKIMMER | | | | | | |
|-------|----------------|---------------------|-------------------------|--------------------|-------|------------|-----------|----------------|--------|---------|---------|-------------|---------|--------|------|------|
| | BOTTOM EL | SEDIMENT STORAGE EL | | CREST EL | WIDTH | TOP ELEV. | TOP WIDTH | DIA. | LENGTH | INV IN | INV OUT | ORIFICE DIA | | | | |
| 3 | 1328.00 | 1329.43 | 1333.00 | 1334.00 | 60' | 3:1 | 1335.00 | 10' | 3 | 36" | 142.0' | 1322.75 | 1306.70 | 22.89% | 5.0' | 4.0" |
| 6 | 1328.00 | 1329.25 | 1333.00 | 1333.50 | 85' | 3:1 | 1335.00 | 10' | 3 | 36" | 142.0' | 1322.75 | 1290.25 | | | |

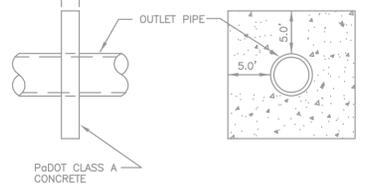
NOTE:
1. PLACE A CLEAN OUT STAKE NEAR THE CENTER OF BASIN. REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES CLEAN-OUT ELEVATION INDICATED ON STAKE.

**EXISTING BASIN #6
TEMPORARY SEDIMENT BASIN FUNCTION
TYPICAL SECTION**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B



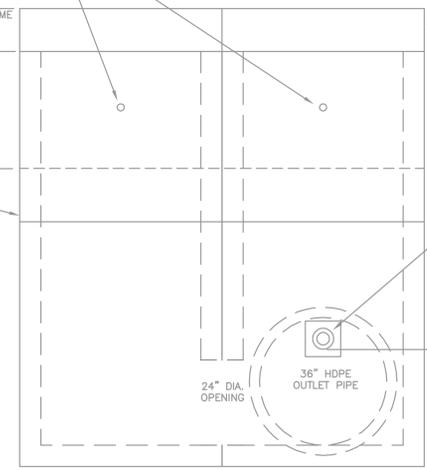
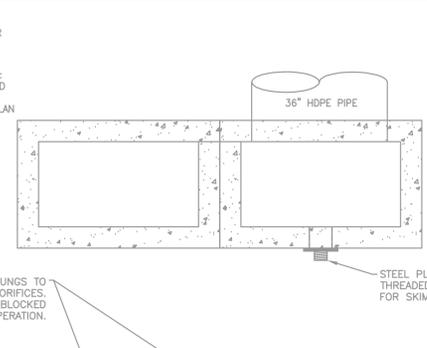
| PIPE SIZE | SLOPE | L | H |
|-----------|-----------|-------|-------|
| 36" | UP TO 35% | 7.33' | 5.50' |

**EXISTING BASIN #6
CONCRETE PIPE ANCHOR**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B

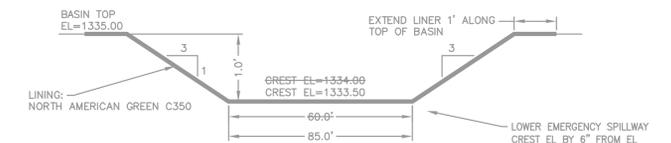


NOTE:
1. COLLARS SHALL NOT BE LOCATED CLOSER THAN 2' FROM A PIPE JOINT.
2. IN LIEU OF CONCRETE COLLAR, A HIGH DENSITY POLYETHYLENE PLASTIC ANTI-SEEP COLLAR MAY BE USED. POLYETHYLENE PLASTIC ANTI-SEEP COLLAR MUST BE BY "SCHEIB DRAINAGE PRODUCTS" OR APPROVED EQUAL.

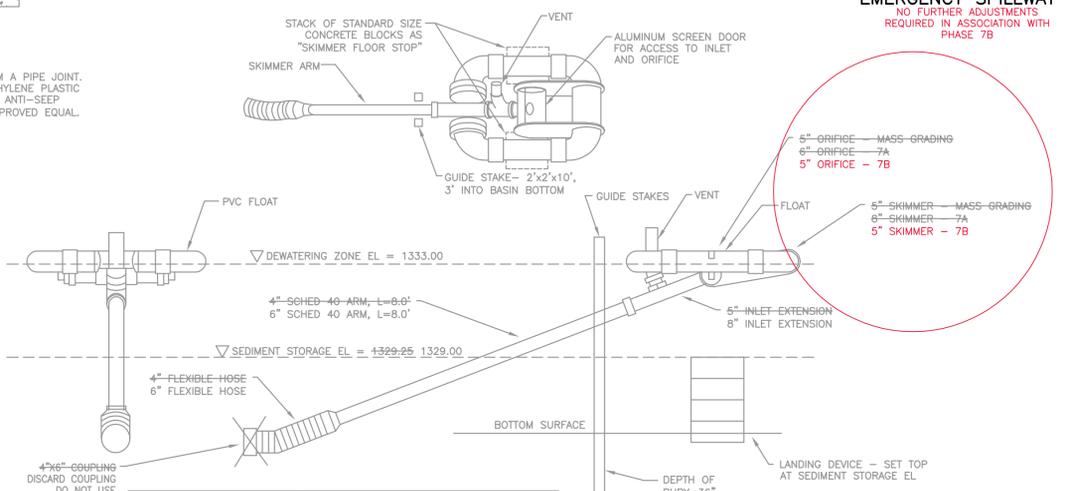
**EXISTING BASIN #6
ANIT-SEEP COLLAR**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B



**EXISTING BASIN #6
TEMPORARY SEDIMENT BASIN FUNCTION
PRIMARY OUTLET STRUCTURE**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B

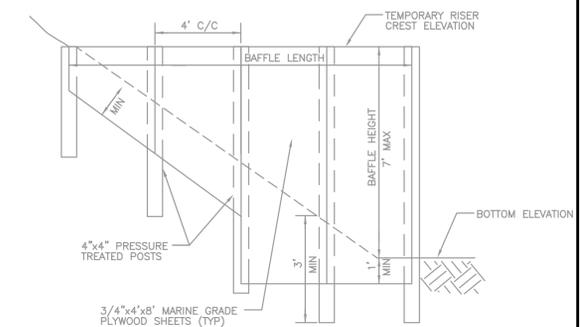


**EXISTING BASIN #6
EMERGENCY SPILLWAY**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B



| YEAR | PHASE | BASIN | SKIMMER | | | | |
|------|----------------|-------|---------|---------|-----------------|------------|-------|
| | | | SKIMMER | ORIFICE | INLET EXTENSION | ARM LENGTH | |
| 2013 | BRYNWOOD 3C | 3 | 5'-6" | 5'-6" | 5'-6" | 4'-6" | 8'-6" |
| 2020 | MASS GRADING | 6 | 8'-0" | 5'-6" | 5'-6" | 4'-6" | 8'-6" |
| 2022 | GRAYS POINT 7A | 6 | 8'-0" | 6'-0" | 8'-0" | 6'-0" | 8'-0" |

**EXISTING BASIN #6
TEMPORARY SEDIMENT BASIN FUNCTION
SKIMMER**
MODIFY AS SHOWN



NOTE:
1. AN ACCEPTABLE ALTERNATIVE IS TO INSTALL A SUPER SILT FENCE AT THE BAFFLE LOCATION.
2. SEE PLAN FOR PROPER LOCATION AND ORIENTATION.
3. BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLANS.
4. DAMAGED OR WARRID BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.
5. BAFFLES REQUIRING SUPPORT POST SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.
6. IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST.

| BAFFLE NO | MIN FLOW LENGTH (FT) | BAFFLE LENGTH (FT) | BAFFLE HEIGHT (FT) | TEMPORARY RISER CREST EL (FT) | BOTTOM EL (FT) |
|-----------|----------------------|--------------------|--------------------|-------------------------------|----------------|
| 1 | 580' | 260' | 4.00' | 1332.00 | 1328.00 |
| 2 | 580' | 260' | 4.00' | 1332.00 | 1328.00 |

MINIMUM FLOW LENGTH BASED ON 4:1 LENGTH TO WIDTH RATIO

**EXISTING BASIN #6
TEMPORARY SEDIMENT BASIN FUNCTION
BAFFLE WALL**
NO FURTHER ADJUSTMENTS
REQUIRED IN ASSOCIATION WITH
PHASE 7B

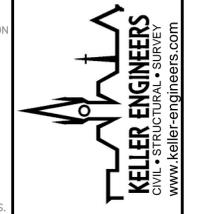
**MODIFICATION
REQUIRED**

NOTE: STORMWATER BASIN #6 (ORIGINALLY DENOTED AS STORMWATER BASIN #3) WAS CONSTRUCTED IN 2013 IN ASSOCIATION WITH THE BRYNWOOD PHASE 3C NEIGHBORHOOD DEVELOPMENT. THIS BASIN WAS DESIGNED TO OPERATE AS A COMBINED RATE & VOLUME CONTROL FACILITY IN PERMANENT CONFIGURATION, AND AS A TEMPORARY SEDIMENT CONTROL FACILITY IN INTERM CONFIGURATION. THIS FACILITY WAS THEN SCHEDULED FOR MODIFICATION IN 2019 IN ASSOCIATION WITH THE GRAYS POINT MASS GRADING EFFORT, AND THEN AGAIN IN 2021 IN ASSOCIATION WITH THE GRAYS POINT PHASE 7A DEVELOPMENT.

A MINOR MODIFICATION OF THE SKIMMER IS REQUIRED FOR THE PHASE 7B DEVELOPMENT.

THIS SHEET ILLUSTRATES INTERIM CONDITION DETAILS ASSOCIATED WITH THE TEMPORARY SEDIMENT CONTROL FUNCTION. SEE ALSO THE POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS IN THIS PLAN SET WHICH ILLUSTRATE ADJUSTMENTS THAT WILL ULTIMATELY BE REQUIRED TO CONVERT THIS BASIN TO THE PERMANENT STORMWATER MANAGEMENT FUNCTION UPON STABILIZATION OF ALL UPLAND TRIB AREA.

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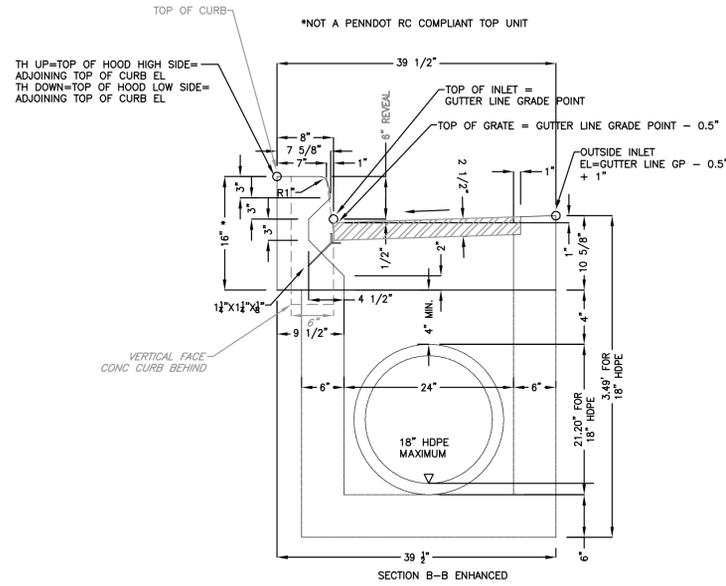


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FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B
TYPICAL DETAILS
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

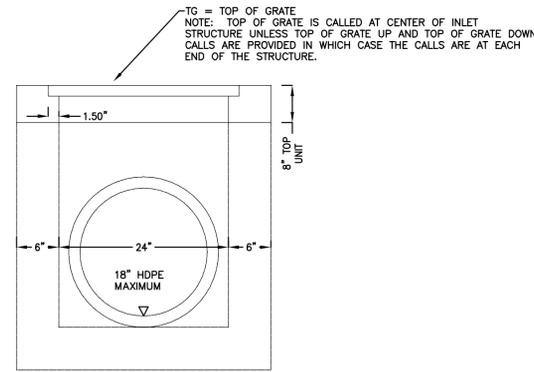
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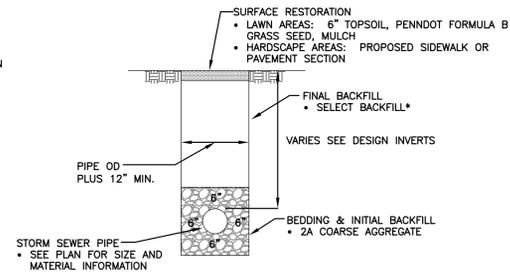
NOTE: DETAIL PROVIDED FOR GENERAL DIMENSIONAL REFERENCE ONLY. REFER TO PENNDOT PUBLICATION 72M STANDARDS FOR ROADWAY CONSTRUCTION (LATEST EDITION) FOR DETAILED FABRICATION INFORMATION

TYPE C INLET
10" TOP UNIT
6" REVEAL



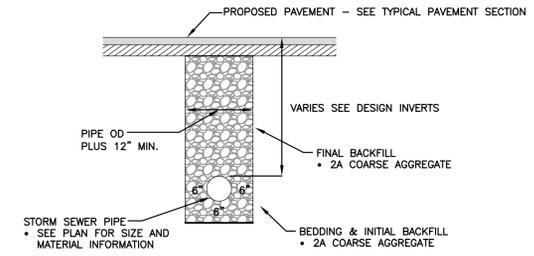
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TYPE M INLET
8" TOP UNIT



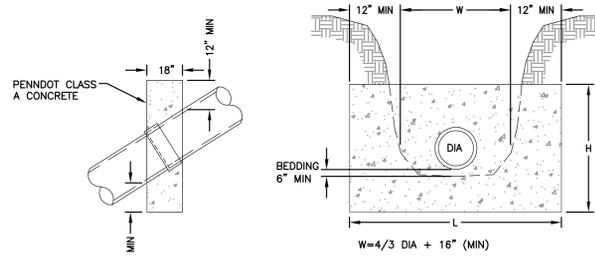
*EXCAVATED MATERIAL FREE OF CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS LARGER THAN 3", ROCKS, STONE OR OTHER MATERIAL WHICH, IN THE OPINION OF THE ENGINEER, IS UNSUITABLE.

STORM SEWER TRENCH
NON-TRAFFIC AREAS



NOTE:
1. EXTEND 2A STONE BACKFILL 2" BEYOND ALL TRAFFIC AREAS AT INTERFACE WITH NON-TRAFFIC AREAS.
2. TRAFFIC AREAS INCLUDE STREETS, ROADS, PATHS, CURB & SIDEWALK.

STORM SEWER TRENCH
PROPOSED TRAFFIC AREAS

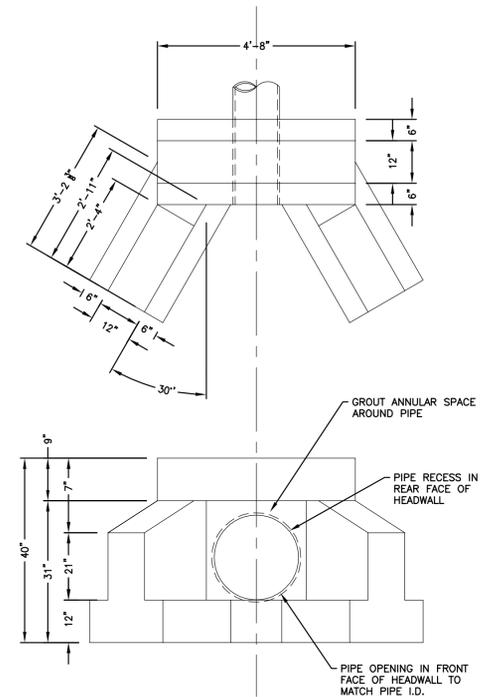


NOTE:
SPACING FOR 13" PIPE LENGTH:
ANCHORS TO BE CENTERED ON PIPE JOINT
EVERY THIRD JOINT FOR 20% TO 35% SLOPE
EVERY OTHER JOINT FOR 35% TO 50% SLOPE
EVERY JOINT FOR 50% OR GREATER SLOPE

SPACING FOR 20" PIPE LENGTH:
ANCHORS TO BE CENTERED ON PIPE JOINT
EVERY OTHER JOINT FOR 20% TO 35% SLOPE
EVERY JOINT FOR 35% OR GREATER SLOPE

| PIPE SIZE | SLOPE | L | H |
|-----------|-----------|-------|-------|
| 36" | UP TO 35% | 7.33' | 5.50' |
| 18" | UP TO 35% | 4.50' | 3.50' |

CONCRETE PIPE ANCHOR



NOTE:
1. ENDWALL TO BE CONSTRUCTED IN ACCORDANCE WITH PENNDOT PUBLICATION 408.
2. CONCRETE TO CONFORM WITH PENNDOT PUBLICATION 408, SECTION 704, CLASS AA.
3. REINFORCING STEEL TO CONFORM TO PENNDOT PUBLICATION 408, SECTION 709.
4. ENDWALL TO BE PROPORTIONED IN ACCORDANCE WITH RC-31 RELATIVE TO PIPE SIZE, EMBANKMENT SLOPE, AND SKEW ANGLE.

SMALL TYPE DW HEADWALL/ENDWALL-12" TO 24" PIPE

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State College, PA 16801
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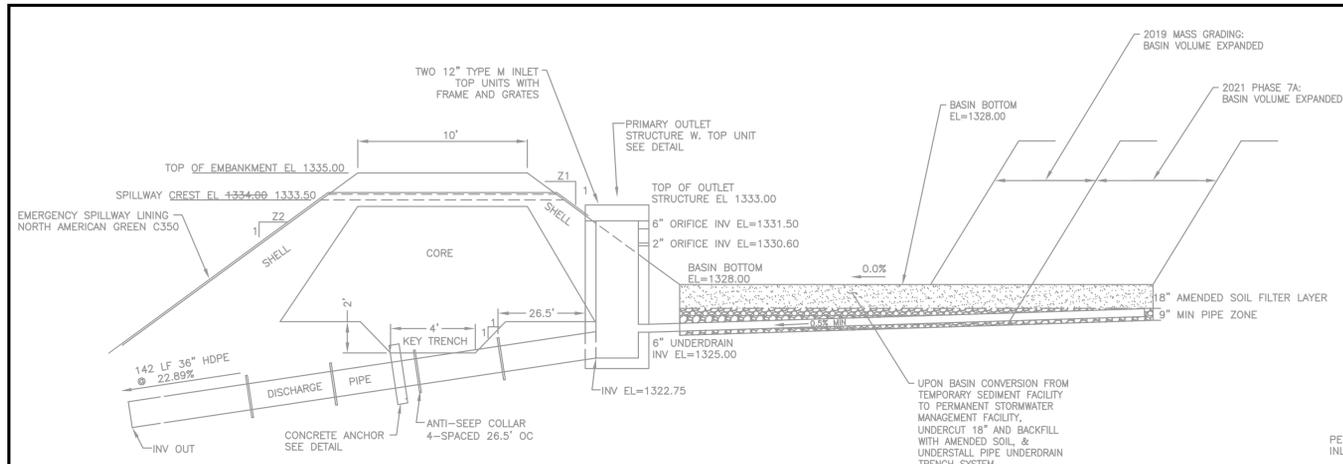
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FINAL LAND DEVELOPMENT PLAN
GRAYS WOODS PLANNED COMMUNITY
GRAYS POINTE NEIGHBORHOOD
PHASE 7 SECTION B

TYPICAL DETAILS
PATTON TOWNSHIP, CENTRE COUNTY
PENNSYLVANIA

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| DRAWN BY: |
| CHECKED BY: |



| BASIN | BOTTOM EL | OUTLET STRUCTURE TOP EL | EMERGENCY SPILLWAY | | EMBANKMENT | | | DISCHARGE PIPE | | | | |
|-------|-----------|-------------------------|--------------------|-------|------------|-----------|------------|----------------|--------|--------|---------|---------|
| | | | CREST EL | WIDTH | TOP EL | TOP WIDTH | SIDE SLOPE | DIA | LENGTH | INV IN | INV OUT | |
| -3 | 1328.00 | 1333.00 | 1334.00 | 60.0' | 1335.00 | 10' | 3 | 3 | 36" | 142.0' | 1322.75 | 1290.25 |
| 6 | | 1333.00 | 1333.50 | 85.0' | | | | | | | | |

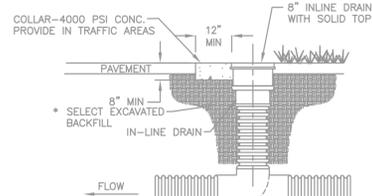
*KEY TRENCH TO BE EXCAVATED BELOW EXISTING GRADE.
 **GATE VALVE AND DRAIN PIPE ARE BEING INSTALL AS AN EMERGENCY DRAIN IN THE EVENT THE BASIN DOES NOT INFILTRATE. THEREFORE THE DRAIN SHOULD BE INSTALLED IN THE CLOSED POSITION AND ONLY OPEN IN THE EVENT THE BASIN IS NOT INFILTRATING.

NOTE:

- AMENDED SOIL SHALL CONSIST OF A UNIFORM MIXTURE OF 60/40 SAND AND/OR ORGANIC COMPOST TO TOPSOIL.
- COMPACTION TEST REPORTS SHALL BE KEPT ON FILE AT THE SITE AND BE SUBJECT TO REVIEW AT ALL TIMES.
- WHEN ROCK IS ENCOUNTERED DURING EXCAVATION OF A POND, IT SHALL BE REMOVED TO AN ELEVATION OF AT LEAST 12 INCHES BELOW THE PROPOSED BASIN FLOOR (FOR MANUFACTURED LINER, 24 INCHES TO 30 INCHES). ALL EXPOSED CRACKS AND FISSURES ARE TO BE STRUCTURALLY FILLED.
- A QUALITY CONTROL PROGRAM IS CRITICAL FOR EMBANKMENT FILLS. THEREFORE, WHENEVER EMBANKMENT FILL MATERIAL IN EXCESS OF THREE FEET IS TO BE USED, EACH LAYER OF COMPACTED FILL SHALL BE TESTED TO DETERMINE ITS DENSITY PER ASTM 2922 OR ASTM 3017. THE DENSITY OF EACH LAYER SHALL BE 98% OF A STANDARD PROCTOR DENSITY ANALYSIS PER ASTM 698.
- SATISFACTORY SOIL MATERIAL FOR THE CONSTRUCTION OF THE CLAY CORE SHALL COMPLY WITH THE FOLLOWING CRITERIA:
 - PERMEABILITY - 1×10^{-6} CM/SEC. COMPLYING WITH THE TEST METHOD ASTM D-2434 OR EQUAL.
 - PLASTICITY INDEX OF CLAY - NOT LESS THAN 15%. COMPLYING WITH TEST METHOD ASTM D-423 & D-424 OR EQUAL.
 - LIQUID LIMIT OF CLAY - NOT LESS THAN 30%. COMPLYING WITH TEST METHOD ASTM D-2216 OR EQUAL.
 - CLAY PARTICLES PASSING - NOT LESS THAN 30%. COMPLYING WITH TEST METHOD ASTM D-422 OR EQUAL.
 - CLAY COMPACTION - 95% OF STANDARD PROCTOR DENSITY. COMPLYING WITH TEST METHOD ASTM D-2216 OR EQUAL.
- UNSATISFACTORY SOIL MATERIALS FOR THE CONSTRUCTION OF THE CLAY CORE ARE DEFINED AS THOSE CONTAINING ORGANICS, TRASH, DEBRIS OR FROZEN MATERIAL.

**EXISTING BASIN #6
 PERMANENT STORMWATER MANAGEMENT FUNCTION
 TYPICAL SECTION**

NO FURTHER ADJUSTMENTS
 REQUIRED IN ASSOCIATION WITH
 PHASE 7B

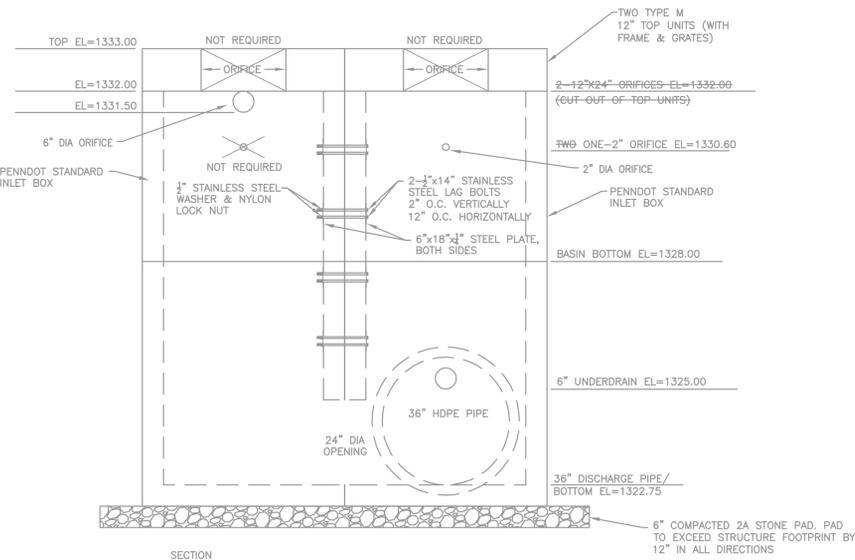
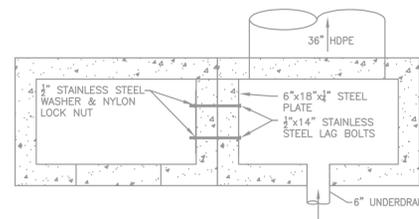


**EXISTING BASIN #6
 STORMWATER CLEANOUT**

NO FURTHER ADJUSTMENTS
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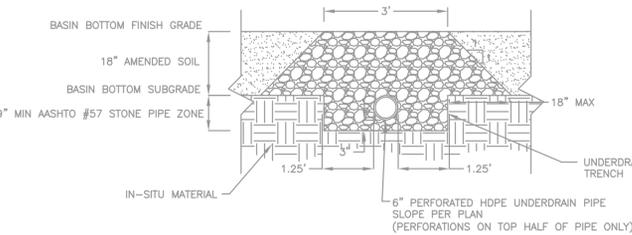
STORMWATER MANAGEMENT BASIN #6 DESIGN/ADJUSTMENT HISTORY:

- 2012-BRYNWOOD 3C: BASIN #6 ORIGINALLY DESIGNED AND CONSTRUCTED IN ASSOCIATION WITH THIS PHASE OF DEVELOPMENT. BASIN WAS TO INITIALLY OPERATE AS A TEMPORARY SEDIMENT CONTROL BASIN, AND THEN UPON STABILIZATION OF ALL UPLAND DEVELOPMENT, BUT CONVERTED TO A PERMANENT STORMWATER MANAGEMENT RATE AND VOLUME CONTROL FACILITY. ORIGINAL CONVERSION CONSISTED OF ADDING PERMANENT TOP UNIT WITH SIDE ORIFICES TO THE OUTLET STRUCTURE BOX, AND UNDERCUTTING BASIN BOTTOM FOR REPLACEMENT WITH AN AMENDED SOIL FILTER LAYER.
- 2012-2018: BASIN #6 REMAINED IN TEMPORARY SEDIMENT CONTROL FACILITY STATE IN ANTICIPATION OF FUTURE UPLAND DEVELOPMENT.
- 2018-GRAYS POINTE PHASE 6A: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. NO FURTHER BASIN ADJUSTMENTS REQUIRED FOR TEMPORARY OR PERMANENT CONDITION.
- 2019-GRAYS POINTE PHASE 6B: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. NO FURTHER BASIN ADJUSTMENTS REQUIRED FOR TEMPORARY OR PERMANENT CONDITION.
- 2019-GRAYS POINTE MASS GRADING: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. ADJUSTMENTS REQUIRED:
 - TEMPORARY SEDIMENT BASIN CONDITION:
 - EXPANSION OF BASIN VOLUME BY CUTTING REAR WALL BACK
 - INSTALLATION OF OUTLET STRUCTURE TO UNIT AT THIS TIME W. ELIMINATION OF PREVIOUSLY PLANNED 12"x24" SIDE ORIFICES.
 - LOWER EMERGENCY SPILLWAY ELEVATION BY 6"
 - PERMANENT STORMWATER MANAGEMENT CONDITION: ADD NEW 6" ORIFICE IN SIDEWALL OUT OUTLET STRUCTURE
- 2020-GRAYS POINTE PHASE 6C: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. NO FURTHER BASIN ADJUSTMENTS REQUIRED FOR TEMPORARY OR PERMANENT CONDITION.
- 2021-GRAYS POINTE PHASE 6D: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. PHASE 6D DID NOT IMPACT BASIN #6.
- 2021-GRAYS POINTE PHASE 7A: BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL FACILITY STATE. ADJUSTMENTS REQUIRED:
 - TEMPORARY SEDIMENT BASIN CONDITION: EXPANSION OF BASIN VOLUME BY CUTTING REAR WALL BACK EVEN FURTHER
 - PERMANENT STORMWATER MANAGEMENT CONDITION: NO FURTHER ADJUSTMENTS
- 2024-GRAYS POINTE PHASE 7B (THIS PLAN): BASIN #6 REMAINS IN TEMPORARY SEDIMENT CONTROL CONFIGURATION. A MINOR MODIFICATION OF THE SKIMMER IS REQUIRED FOR THE PHASE 7B DEVELOPMENT.
- FUTURE: ULTIMATE CONVERSION FROM TEMPORARY SEDIMENT CONTROL FUNCTION TO PERMANENT STORMWATER MANAGEMENT FUNCTION: AFTER COMPLETION OF FUTURE BYRNWOOD PHASE 4 NEIGHBORHOOD DEVELOPMENT.



**EXISTING BASIN #6
 PERMANENT STORMWATER MANAGEMENT FUNCTION
 PRIMARY OUTLET STRUCTURE**

NO FURTHER ADJUSTMENTS
 REQUIRED IN ASSOCIATION WITH
 PHASE 7B



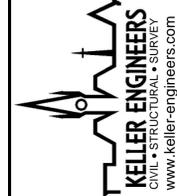
NOTE:

- BASIN OVER-BURDEN LAYER - TO REMAIN DURING INITIAL BASIN CONSTRUCTION:
 - PROTECTS AND CUSHIONS THE CRITICAL INFILTRATION BASIN SUBGRADE DURING INITIAL BASIN CONSTRUCTION.
- UPON FINAL CONSTRUCTION OF BASIN BOTTOM, OVER-BURDEN LAYER IS TO BE UNDERCUT AND REMOVED, AND REPLACED WITH AN EQUIVALENT DEPTH AMENDED SOIL LAYER.
- PURPOSE OF AMENDED SOIL LAYER IS TO PROTECT BASIN INFILTRATION PLANE DURING INITIAL CONSTRUCTION, TO PROVIDE A FILTER LAYER IF BASIN SUBGRADE IS ON ROCK, TO PROMOTE INFILTRATION, AND TO FOSTER PLANT GROWTH.
- AMENDED SOIL MIXTURE TO GENERALLY CONSIST OF:
 - APPROXIMATELY 50% GOOD QUALITY TOPSOIL. UNSATISFACTORY TOPSOIL MATERIALS ARE DEFINED AS THOSE CONTAINING HIGH CLAY COMPOSITION, TRASH, DEBRIS, ROCKS, OR FROZEN MATERIAL. GOOD QUALITY TOPSOIL MAY OR MAY NOT BE AVAILABLE ON SITE.
 - APPROXIMATELY 30% GOOD QUALITY COMPOST. THE PURPOSE OF THE COMPOST COMPONENT IS TO INCREASE ORGANIC CONTENT OF THE AMENDED SOIL MIXTURE TO PROMOTE PLANT MATERIAL GROWTH UPON THE BASIN BOTTOM. DO NOT USE BIO-SOLID COMPOST MIXTURE SOURCES; DO NOT USE COMPOST SOURCES WITH HIGH CLAY CONTENT OR PARTICULATES.
 - APPROXIMATELY 20% CLEAN WASHED SAND. THE PURPOSE OF THE SAND COMPONENT IS TO LOOSEN THE OVERALL AMENDED SOIL MIX TO PROMOTE INFILTRATION.
 - LIME OR GYPSUM FLOCCULATION AGENT AT AN APPROXIMATE APPLICATION RATE OF 1.5 TONS PER ACRE IF AND AS DIRECTED BY PROJECT SOIL SCIENTIST.
 - 1/4" CLEAN WASHED ANTI-SKID MATERIAL LAYER IF REQUIRED TO PROVIDE LEVELING AGAINST EXPOSED ROCK SUBGRADE PLANE AND TO INHIBIT SINKHOLE FORMATION IF AND AS DIRECTED BY PROJECT SOIL SCIENTIST.
- FINAL AMENDED SOIL MIXTURE COMPONENTS AND COMPOSITION SHALL BE DETERMINED BY PROJECT SOIL SCIENTIST BASED ON ON-SITE TEST MIXTURE PREPARATION AND INFILTRATION TESTING.
- PROCURE, MIX, STORE, AND PLACE AMENDED SOIL IN ACCORDANCE WITH POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.
- PROJECT GEOTECHNICAL ENGINEER MUST INSPECT AND TEST AMENDED SOIL FOREIGN BORROW MATERIAL SOURCES PRIOR TO DELIVERY TO PROJECTION SITE. REVIEW MATERIAL CERTIFICATIONS (SAND), AND APPROVE COMPOST SOURCES. MATERIALS THAT HAVE NOT BEEN PRE-APPROVED BY PROJECT SOIL SCIENTIST SHALL BE REMOVED FROM SITE.
- THE PROJECT SOIL SCIENTIST MUST INSPECT THE EXPOSED BASIN SUBGRADE AND PROVIDE MITIGATION RECOMMENDATIONS PRIOR TO PLACEMENT OF AMENDED SOIL MIXTURE. SUCH RECOMMENDATIONS COULD INCLUDE FURTHER UNDERCUT TO REMOVE OBJECTIONABLE SUBGRADE MATERIAL SUCH AS CLAY, FURTHER UNDERCUT TO EXPOSE ROCK PLANE IF PROXIMATE TO FINAL BASIN SUBGRADE ELEVATION, AND SCARIFICATION OR CHISEL PLOWING OF BASIN SUBGRADE MATERIAL TO PROMOTE INFILTRATION.
- THE PROJECT SOIL SCIENTIST SHALL BE PRESENT DURING AMENDED SOIL MIXTURE PREPARATION AND PLACEMENT PROCESS TO PROVIDE QUALITY ASSURANCE AND CONTROL.
- PLACE AMENDED SOIL LOOSE IN 8" LIFTS ON BASIN SUBGRADE, STARTING AT LOWEST END OF BASIN. DO NOT PLACE AMENDED SOIL IN STANDING WATER. DO NOT COMPACT. AVOID RUNNING EQUIPMENT ON COMPLETED BASIN BOTTOM.

**EXISTING BASIN #7
 PERMANENT STORMWATER MANAGEMENT FUNCTION
 UNDERDRAIN SYSTEM**

NO FURTHER ADJUSTMENTS
 REQUIRED IN ASSOCIATION WITH
 PHASE 7B

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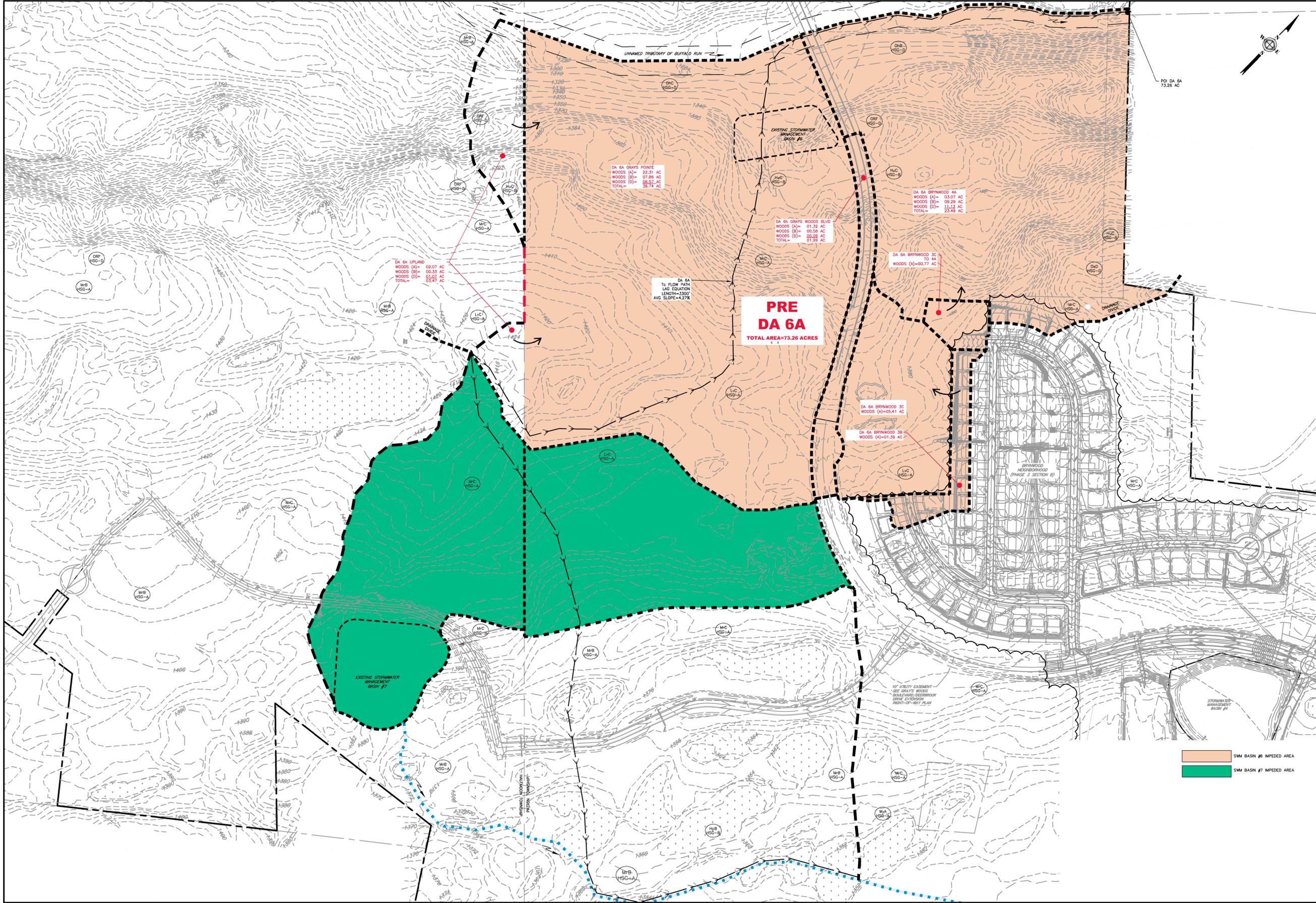
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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

TYPICAL DETAILS
 PATTON TOWNSHIP, CENTRE COUNTY
 PENNSYLVANIA

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|--------------------------------------|-------------------------|
| PROJECT NO.: SB-82 | DATE: 2024-11-01 |
| FILE NAME: TYPICAL UNDERDRAIN SYSTEM | DESIGNED BY: [REDACTED] |
| DRAWN BY: [REDACTED] | CHECKED BY: [REDACTED] |



PROJECT NO.: 55-82
 FILE NAME: DRAINAGE MAPS
 DATE: 2024-11-01
 DESIGNED BY: [Redacted]
 CHECKED BY: [Redacted]

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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 PHASE 7 SECTION B
 DRAINAGE MAP
 RATE & VOLUME CONTROL
 PRE DEVELOPED CONDITION
 PATTON TOWNSHIP, SOUTHEAST COUNTY
 PENNSYLVANIA

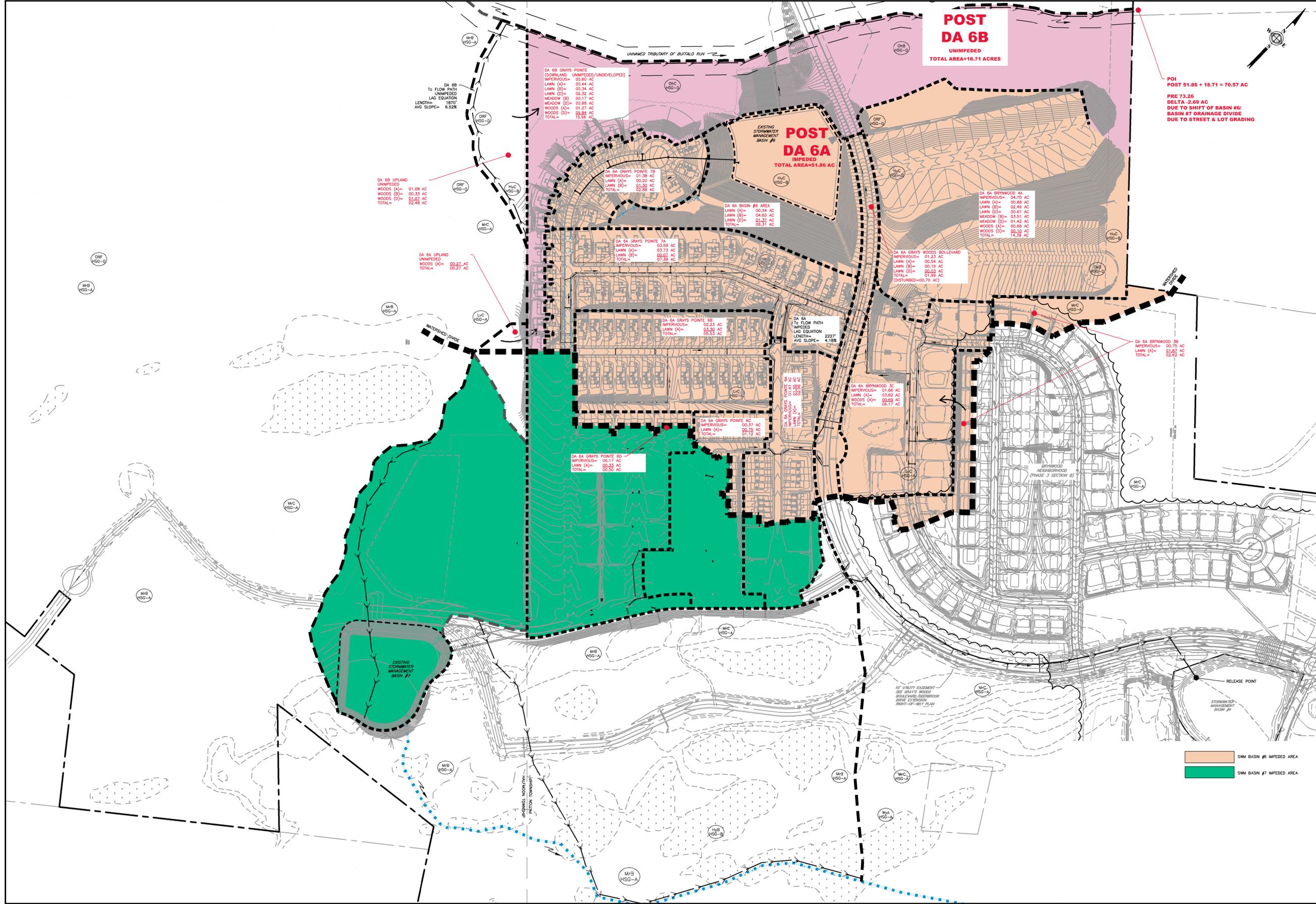
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SWM BASIN #6 IMPEDED AREA
 SWM BASIN #7 IMPEDED AREA

A



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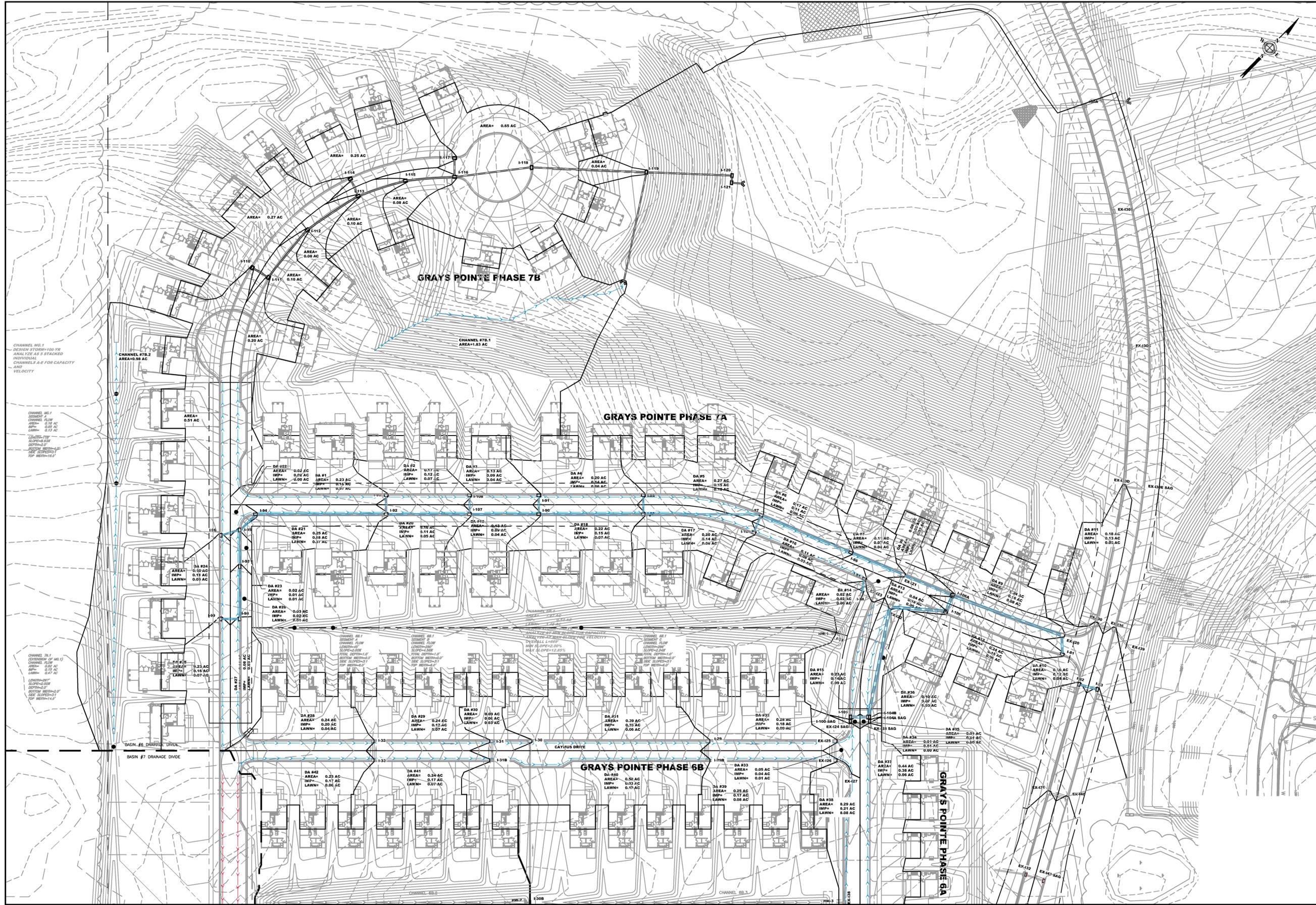
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FINAL LAND DEVELOPMENT PLAN
GRAY'S WOODS PLANNED COMMUNITY
GRAY'S POINTE NEIGHBORHOOD
PHASE 7 SECTION B
DRAINAGE MAP
RATE & VOLUME CONTROL
POST DEVELOPED CONDITION
 PATTON TOWNSHIP, BUTTE COUNTY
 PENNSYLVANIA

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FINAL LAND DEVELOPMENT PLAN
GRAY'S WOODS PLANNED COMMUNITY
GRAY'S POINTE NEIGHBORHOOD
PHASE 7 SECTION B

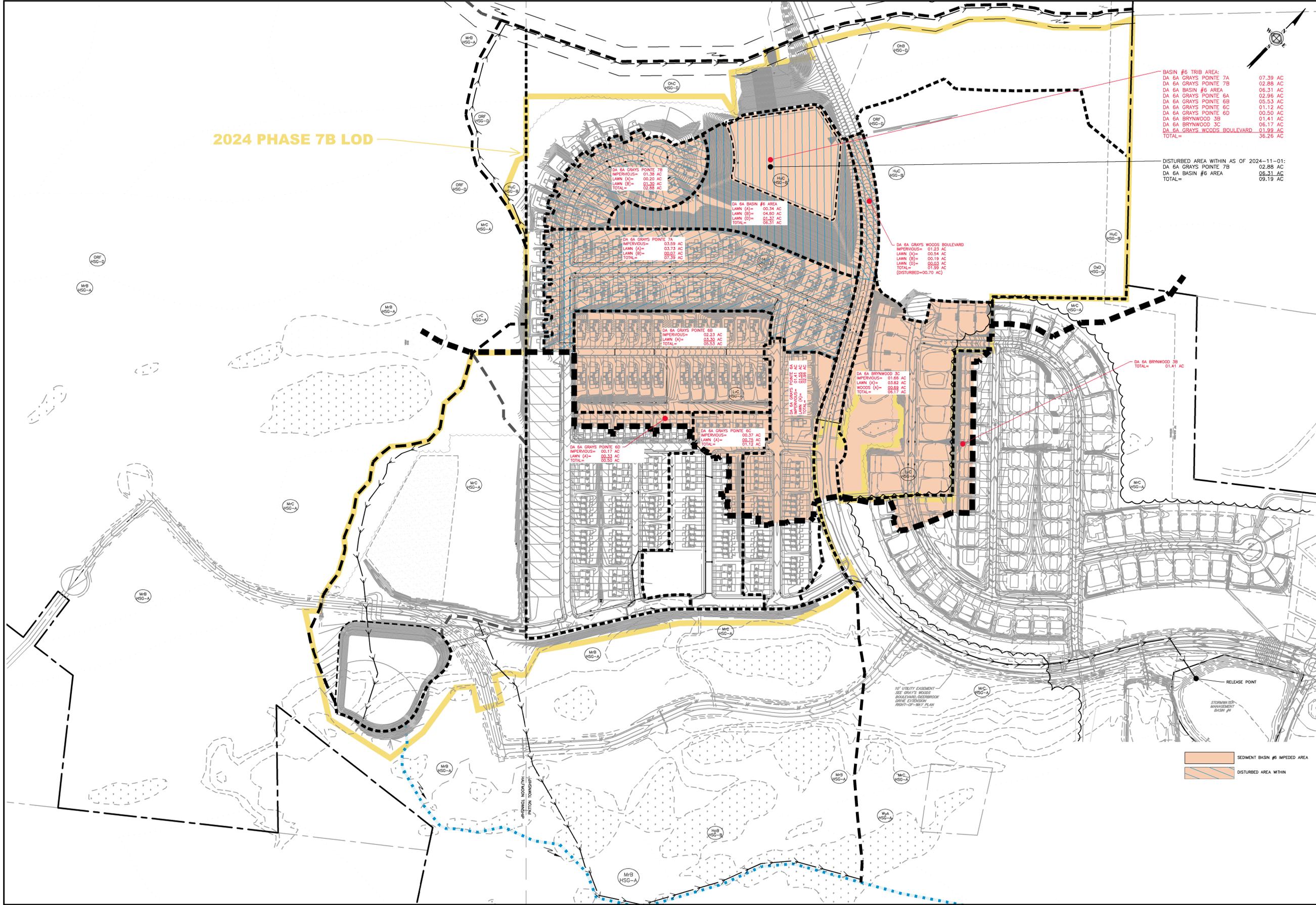
DRAINAGE MAP
CONVEYANCE
 PATTON TOWNSHIP, PENNSYLVANIA

| DATE & INITIALS | REVISION DESCRIPTION |
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C



2024 PHASE 7B LOD

BASIN #6 TRIB AREA:

| | |
|-----------------------------|----------|
| DA 6A GRAYS POINTE 7A | 07.39 AC |
| DA 6A GRAYS POINTE 7B | 02.88 AC |
| DA 6A BASIN #6 AREA | 06.31 AC |
| DA 6A GRAYS POINTE 6A | 02.96 AC |
| DA 6A GRAYS POINTE 6B | 05.53 AC |
| DA 6A GRAYS POINTE 6C | 01.12 AC |
| DA 6A GRAYS POINTE 6D | 00.50 AC |
| DA 6A BRYNWOOD 3B | 01.41 AC |
| DA 6A BRYNWOOD 3C | 06.17 AC |
| DA 6A GRAYS WOODS BOULEVARD | 01.99 AC |
| TOTAL= | 36.26 AC |

DISTURBED AREA WITHIN AS OF 2024-11-01:

| | |
|-----------------------|----------|
| DA 6A GRAYS POINTE 7B | 02.88 AC |
| DA 6A BASIN #6 AREA | 06.31 AC |
| TOTAL= | 09.19 AC |

DA 6A GRAYS POINTE 7B

| | |
|-------------|----------|
| IMPERVIOUS= | 01.38 AC |
| LAWN (A)= | 00.20 AC |
| LAWN (B)= | 01.30 AC |
| TOTAL= | 02.88 AC |

DA 6A BASIN #6 AREA

| | |
|-----------|----------|
| LAWN (A)= | 00.24 AC |
| LAWN (B)= | 04.50 AC |
| LAWN (D)= | 01.37 AC |
| TOTAL= | 06.31 AC |

DA 6A GRAYS POINTE 7A

| | |
|-------------|----------|
| IMPERVIOUS= | 03.59 AC |
| LAWN (A)= | 03.73 AC |
| LAWN (B)= | 00.00 AC |
| TOTAL= | 07.32 AC |

DA 6A GRAYS POINTE 6B

| | |
|-------------|----------|
| IMPERVIOUS= | 02.23 AC |
| LAWN (A)= | 03.30 AC |
| LAWN (B)= | 05.53 AC |
| TOTAL= | 05.53 AC |

DA 6A GRAYS POINTE 6D

| | |
|-------------|----------|
| IMPERVIOUS= | 00.17 AC |
| LAWN (A)= | 00.33 AC |
| TOTAL= | 00.50 AC |

DA 6A GRAYS POINTE 6C

| | |
|-------------|----------|
| IMPERVIOUS= | 00.37 AC |
| LAWN (A)= | 00.75 AC |
| TOTAL= | 01.12 AC |

DA 6A GRAYS POINTE 6A

| | |
|-------------|----------|
| IMPERVIOUS= | 01.66 AC |
| LAWN (A)= | 01.55 AC |
| LAWN (B)= | 01.55 AC |
| TOTAL= | 03.82 AC |

DA 6A BRYNWOOD 3C

| | |
|-------------|----------|
| IMPERVIOUS= | 01.66 AC |
| LAWN (A)= | 03.82 AC |
| LAWN (B)= | 00.59 AC |
| TOTAL= | 06.17 AC |

DA 6A GRAYS WOODS BOULEVARD

| | |
|----------------------|----------|
| IMPERVIOUS= | 01.23 AC |
| LAWN (A)= | 00.54 AC |
| LAWN (B)= | 00.19 AC |
| LAWN (D)= | 00.03 AC |
| TOTAL | 01.99 AC |
| (DISTURBED=00.70 AC) | |

DA 6A BRYNWOOD 3B

| | |
|--------|----------|
| TOTAL= | 01.41 AC |
|--------|----------|

SEDIMENT BASIN #6 IMPEDED AREA
 DISTURBED AREA WITHIN

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FINAL LAND DEVELOPMENT PLAN
 GRAYS WOODS PLANNED COMMUNITY
 GRAYS POINTE NEIGHBORHOOD
 PHASE 7 SECTION B

DRAINAGE MAP
 SEDIMENT BASIN #6
 PATTON TOWNSHIP, YORK COUNTY
 PENNSYLVANIA

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