FINAL SUBDIVISION PLANS FOR –

NEWCASTLE

CONSERVATION RESIDENTIAL OVERLAY

DATE: MAY 12, 2025

PETERS TOWNSHIP
WASHINGTON COUNTY, PENNSYLVANIA

OWNER:

339 JUSTABOUT LAND CO., LLC
333 TECHNOLOGY DRIVE SUITE 108
CANNONSBURG, PA 15317

LANDSCAPE ARCHITECT:

VICTOR–WETZEL ASSOCIATES
409 BROAD STREET, SUITE 270
SEWICKLEY, PA. 15143
PHONE# (412) 741–2290

GEOTECHNICAL ENGINEER

ACA ENGINEERING, INC
410 N BALPH AVENUE
PITTSBURGH, PA 15202
PHONE# (412) 761–1990

ENGINEERS:

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
PHONE: (878) 295–8914

ENVIRONMENTAL

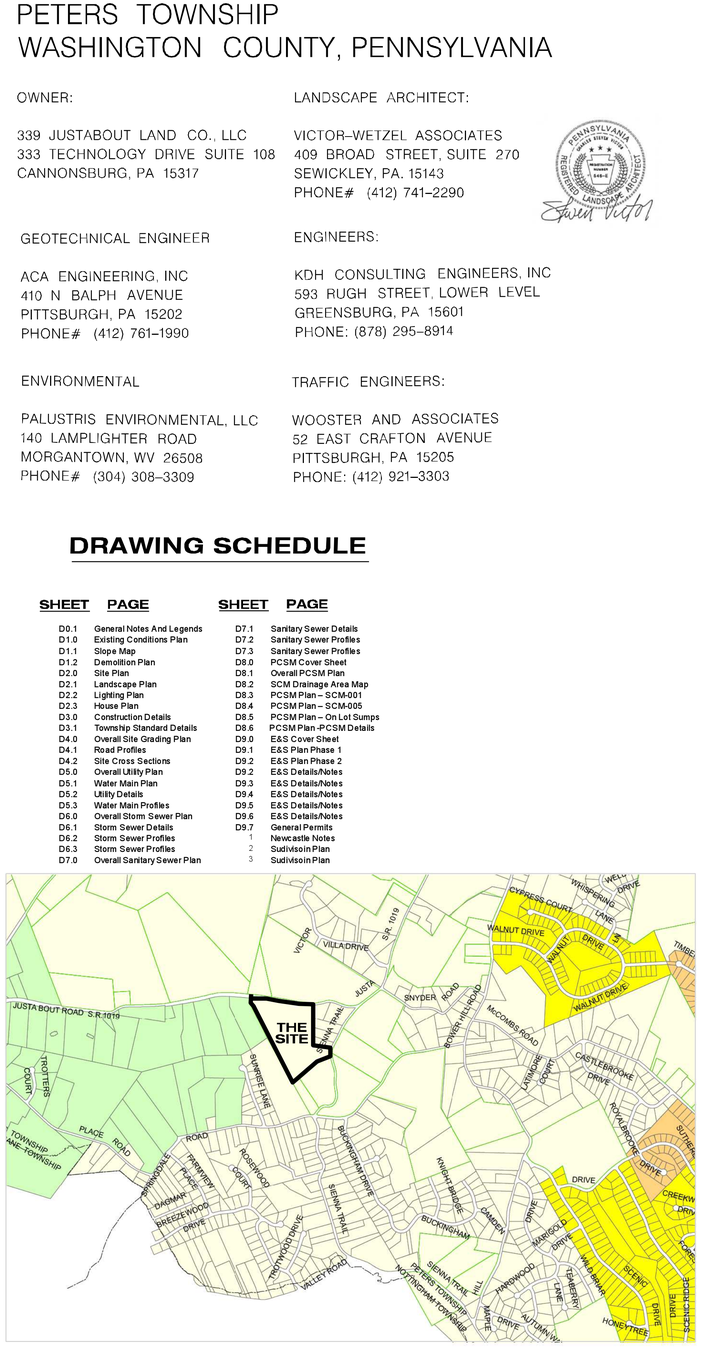
PALUSTRIS ENVIRONMENTAL, LLC
140 LAMPLIGHTER ROAD
MORGANTOWN, WV 26508
PHONE# (304) 308–3309

TRAFFIC ENGINEERS:

WOOSTER AND ASSOCIATES
52 EAST CRAFTON AVENUE
PITTSBURGH, PA 15205
PHONE: (412) 921–3303

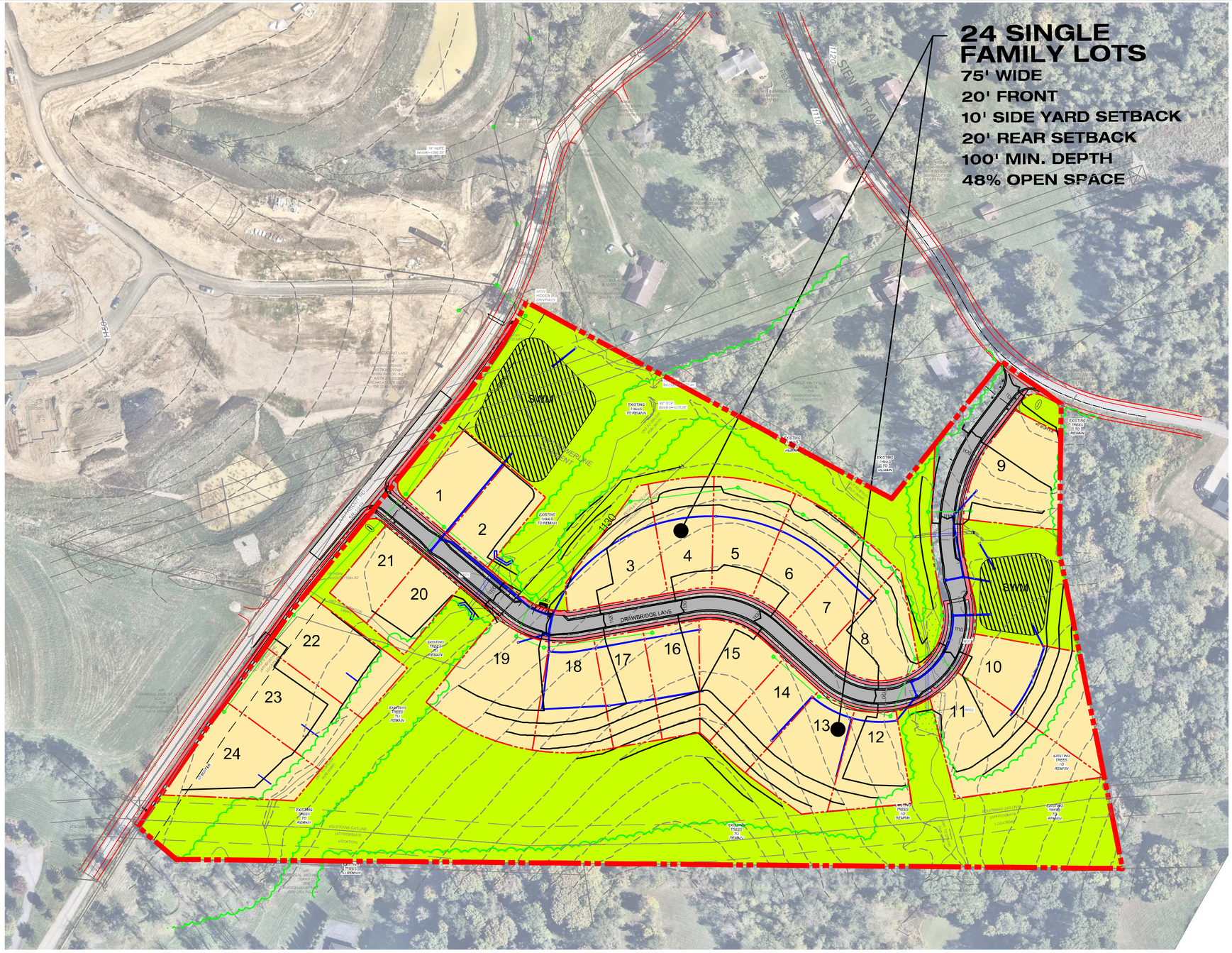
DRAWING SCHEDULE

SHEET	PAGE	SHEET	PAGE
D0.1	General Notes And Legends	D7.1	Sanitary Sewer Details
D1.0	Existing Conditions Plan	D7.2	Sanitary Sewer Profiles
D1.1	Slope Map	D7.3	Sanitary Sewer Profiles
D1.2	Demolition Plan	D8.0	PCSM Cover Sheet
D2.0	Site Plan	D8.1	Overall PCSM Plan
D2.1	Landscape Plan	D8.2	SCM Drainage Area Map
D2.2	Lighting Plan	D8.3	PCSM Plan – SCM-001
D2.3	House Plan	D8.4	PCSM Plan – SCM-005
D3.0	Construction Details	D8.5	PCSM Plan – On Lot Sumps
D3.1	Township Standard Details	D8.6	PCSM Plan -PCSM Details
D4.0	Overall Site Grading Plan	D9.0	E&S Cover Sheet
D4.1	Road Profiles	D9.1	E&S Plan Phase 1
D4.2	Site Cross Sections	D9.2	E&S Plan Phase 2
D5.0	Overall Utility Plan	D9.2	E&S Details/Notes
D5.1	Water Main Plan	D9.3	E&S Details/Notes
D5.2	Utility Details	D9.4	E&S Details/Notes
D5.3	Water Main Profiles	D9.5	E&S Details/Notes
D6.0	Overall Storm Sewer Plan	D9.6	E&S Details/Notes
D6.1	Storm Sewer Details	D9.7	General Permits
D6.2	Storm Sewer Profiles	1	Newcastle Notes
D6.3	Storm Sewer Profiles	2	Sudivisoin Plan
D7.0	Overall Sanitary Sewer Plan	3	Sudivisoin Plan



LOCATION MAP
SCALE: NOT TO SCALE

N



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SCALE: 1" = 80'

0 40' 80' 160'

STANDARD GENERAL NOTES:

1. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE RESPONSIBILITY FOR JOB SAFETY OF ALL PERSONS AND PROPERTY.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS NECESSARY TO PERFORM THE WORK SHOWN IN THESE PLANS FROM THE APPROPRIATE AGENCIES.
3. CONTRACTOR IS REQUIRED TO COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, RESOLUTIONS, POLICIES, AND PROCEDURES, IN GENERAL.
4. CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS.
5. CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE SAFETY.
6. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO IT'S ORIGINAL CONDITION, AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR SHALL REMOVE ANY SUBSURFACE OBSTRUCTIONS OR ABANDONED UTILITY LINES WITHIN THE DEMOLITION AREA AS PART OF THIS PROJECT.
8. WARNING: THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE LOCATIONS INDICATED. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXACT LOCATIONS OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES, AND TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 72 HOURS BEFORE YOU DIG, DRILL OR BLAST.
9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND PROPERLY DISPOSE, OFF SITE, ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL OTHER FOREIGN SUBSTANCES. REMOVE PETROCHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
11. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THE JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
12. THE CONTRACTOR IS REQUIRED TO HAVE COPIES OF ALL PERMITS AND PLANS ON SITE AT ALL TIMES.
13. CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
14. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED WRITTEN APPROVAL OF THE OWNER OR THE OWNER'S REPRESENTATIVE.
15. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR THE OWNER'S REPRESENTATIVE, SHALL BE REPLACED AT THE CONTRACTORS EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
17. THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM FAILURE TO DO SO.
18. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED, AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE PROTECTED FROM DAMAGE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH AND/OR STRUCTURE IS FOUR FEET OR MORE IN DEPTH, ADEQUATE METHODS FOR PROTECTION OF WORKERS IS REQUIRED.
19. STATIONING HEREIN IS ALONG STREET CENTERLINE UNLESS OTHERWISE SHOWN OR INDICATED.
20. ALL RETURN RADII AND CURB DATA ARE TO BACK OF WEDGE CURB, AND TO THE FRONT FACE OF CONCRETE CURB UNLESS OTHERWISE NOTED.
21. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE UTILITY OWNER. NOTIFY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO THE EXISTING SYSTEM IS MADE.
22. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE PROJECT ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE.
23. LENGTHS AND PERCENT SLOPE OF SANITARY SEWERS AND STORM DRAINS, AS WELL AS ALL POTENTIAL CONFLICTS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTING SUCH ENTITIES.
24. IF ARCHEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHEOLOGIST HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY.
25. CONTRACTOR SHALL PROVIDE TRAFFIC MAINTENANCE AND PROTECTION AS PER PADOT PUBLICATION 203.
26. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY OTHERS.
27. ALL PHASES OF SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE OWNER/DEVELOPER SITE WORK SPECIFICATIONS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR RAZING AND REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, UNDERGROUND STORAGE TANKS AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
29. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
30. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
31. SAFETY NOTICE TO CONTRACTOR: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.
32. ALL CONSTRUCTION IN STATE HIGHWAY DEPARTMENT RIGHT-OF-WAY SHALL BE COORDINATED WITH THE LOCAL PENNSYLVANIA D.O.T. OFFICE.
33. LENGTHS AND PERCENT SLOPE OF SANITARY SEWERS AND STORM DRAINS, AS WELL AS ALL POTENTIAL CONFLICTS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTING SUCH ENTITIES.
34. ALL UTILITIES SHALL BE INSTALLED, DISCONNECTED, AND/OR RELOCATED IN ACCORDANCE WITH THE CODES AND SPECIFICATIONS OF THAT UTILITY AUTHORITY.
35. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH INSTALLATION AND INSPECTION OF UTILITY UNLESS OTHER ARRANGEMENTS ARE MADE WITH OWNER.
36. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANIES PRIOR TO LOCATION, RELOCATION, REMOVAL AND/OR INSTALLATION OF SITE UTILITIES.
37. PLUMBING CONTRACTOR SHALL CONTACT LOCAL HEALTH DEPARTMENT CONCERNING FILING OF UTILITY PLAN, AND PAYMENT OF FEES RELATED TO WATER AND SANITARY SEWER LINE CONSTRUCTION.
38. CONTRACTOR SHALL ADJUST ANY FRAMES AND GRATES FOR EXISTING INLETS, MANHOLES, AND VALVES TO REMAIN.
39. ALL UTILITY LINES REQUIRING TESTING SHALL BE TESTED IN ACCORDANCE WITH THE UTILITY COMPANY CODES AND SPECIFICATIONS.
40. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
41. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE UTILITY OWNER. NOTIFY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO THE EXISTING SYSTEM IS MADE.
42. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE PROJECT ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE.

LEGEND

Symbol	Description
—1170—	EXISTING CONTOUR LINE
	PROPERTY LINE
	YARD SETBACK
S	EXISTING SANITARY MANHOLE
S	PROPOSED SANITARY MANHOLE
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
GV	EXISTING VALVE
E	ELECTRIC SERVICE LINE
W	WATERLINE
G	GASLINE
	PROPOSED STORM SEWER
	PROPOSED SANITARY LINE
UGT	EXISTING TELEPHONE LINE
	EXISTING UTILITY EASEMENT
	PROPOSED CONTOUR
LOD	LIMITS OF DISTURBANCE
	EXISTING EDGE OF PAVEMENT
	PROPOSED EDGE OF PAVEMENT

S: \PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

CONSTRUCTION SEQUENCE

PROJECT SCHEDULE
THE PROJECT IS EXPECTED TO BEGIN WITHIN 2 WEEKS OF RECEIPT OF ALL NECESSARY APPROVALS AND THE CONSTRUCTION SCHEDULE IS WEATHER DEPENDENT.

PHASE 1 - E&S BMP INSTALLATION AND GP-7 STREAM CROSSINGS

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION AND CONTACT THE ENGINEER.

A WRITTEN REPORT MUST BE KEPT BY THE CONTRACTOR DOCUMENTING INSPECTIONS AND REPAIRS TO ALL BMPS. THE CONTRACTOR SHALL INSPECT AND LOG ALL ACTIVITIES ONTO DEP FORM 3800-FM-BCW0271D (DATED 12/2024) AND KEPT ON SITE AT ALL TIMES.

THE SITE IS LOCATED WITHIN THE BRUSH RUN WATERSHED, HAVING A CHAPTER 93 WATERSHED CLASSIFICATION OF WARM WATER FISHERY. BRUSH RUN WATERSHED IS AN IMPAIRED WATERSHED, ALL BMPS ARE TO FOLLOW ABACT DETAILS AND NOTES.

SEDIMENT REMOVED FROM BMP'S SHALL BE SPREAD IN AN AREA PROTECTED BY EXISTING BMP'S (PRIOR TO FINAL STABILIZATION) OR REMOVED TO AN APPROVED WASTE SITE.

1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING, AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S 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 WASHINGTON COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
2. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH WORK DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM, INC. SHALL BE NOTIFIED AT 1-800-242-1776 OR 811 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
3. LAYOUT THE LIMITS OF THE CONSTRUCTION SITE AND ESTABLISH BENCHMARKS AND REFERENCE POINTS.
4. STAKE OUT THE LIMIT OF DISTURBANCE (LOD) AS INDICATED ON THE CONSTRUCTION PLANS.
5. INSTALL THE ROCK CONSTRUCTION ENTRANCES IN THE LOCATIONS SHOWN ON THE PLAN AND IN ACCORDANCE WITH STANDARD DETAIL. INSTALL ANY CULVERTS AND/OR STORM DRAIN CONVEYANCE SYSTEM UNDER THE ENTRANCE AS SHOWN ON THE PLANS.
6. CLEAR ONLY THOSE AREAS NECESSARY TO REACH AND INSTALL PERIMETER E&S CONTROLS WITHIN THE NORTHERN SIDE OF THE PROJECT EARTH MOVING LIMITS. INSTALL COMPOST FILTER SOCKS AS SHOWN ON THE E&S CONTROL PLAN DRAWINGS AND IN ACCORDANCE WITH THE STANDARD DETAILS. ALL COMPOST FILTER SOCKS SHALL BE INSTALLED PARALLEL TO THE CONTOURS WITH THE ENDS OF THE SOCKS TURNED UPSLOPE AT A 45-DEGREE ANGLE. TREES SHALL NOT BE REMOVED IN ORDER TO INSTALL COMPOST FILTER SOCKS. SLIGHT DEVIATION FROM INSTALLATION PARALLEL TO CONTOURS IS ACCEPTABLE TO AVOID TREES.
7. BEGIN THE INSTALLATION OF THE STREAM CULVERT CROSSING FOR GP-7.1 AT STREAM R001. THE CROSSINGS WILL BE INSTALLED ONE AT A TIME. THE CONTRACTOR SHALL INSTALL THE CULVERT PIPES USING THE PUMP BYPASS METHOD. THE STREAM WILL BE DAMMED ON THE UPSTREAM AND DOWNSTREAM SIDE OF THE CROSSING USING SANDBAGS. ONCE THE STREAM IS DAMMED, A PUMP WILL BE USED TO BYPASS THE STREAM AROUND THE WORK AREA AND DISCHARGE IT BELOW THE DOWNSTREAM DAM. ANY WATER ACCUMULATING IN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG PRIOR TO DISCHARGING BACK INTO THE STREAM. ONCE THE WORK AREA IS DRY, EXCAVATION FOR THE CULVERT INSTALLATION MAY TAKE PLACE. ANY EXCAVATED MATERIAL FROM THE STREAM SHALL BE STOCKPILE AT LEAST 10 FEET BACK FROM THE TOP OF THE STREAM BANK WITH COMPOST FILTER SOCK PLACED AROUND THE STOCKPILE ON THE LOW SIDE. THE CULVERT IS TO BE EMBEDDED INTO THE STREAM CHANNEL 6" TO ALLOW STREAM CHANNEL FLOW. THE CULVERT WILL THEN BE BACK FILLED WITH CLEAN STONE AND COMPACTED. AFTER THE CULVERT PIPE IS INSTALLED AND CAPABLE OF ALLOWING FLOW, THE SANDBAG DAM DOWNSTREAM OF THE CROSSING SHALL BE REMOVED AND THEN THE SANDBAG DAM UPSTREAM OF THE CULVERT INSTALLATION SHALL BE REMOVED.
8. AFTER THE CULVERT IS INSTALLED AND WORKING PROPERLY, THE ACCESS OVER THE PIPE SHALL BE STONED AT LEAST 10' BACK FROM THE TOP OF THE BANK IN EACH DIRECTION.
9. ONCE GP-7.1 IS INSTALLED, THE CONTRACTOR MAY START THE INSTALLATION OF THE PERIMETER CONTROLS IN THIS SECTION OF THE PROJECT. THIS WOULD BE THE INSTALLATION OF THE COMPOST FILTER SOCKS LOCATED ON THE EASTERN SIDE OR DOWN SLOPE SIDE OF THE PROJECT.
10. NEXT THE CONTRACTOR SHALL START TO CLEAR AND GRUB THE AREA NECESSARY TO INSTALL THE STREAM CROSSING FOR GP-7.2 AT STREAM R003.
11. AFTER THE AREA IS CLEARED AND GRUBBED, THE CONTRACTOR MAY START THE INSTALLATION OF THE STREAM CROSSING. THE CONTRACTOR SHALL INSTALL THE CULVERT PIPES USING THE PUMP BYPASS METHOD. THE STREAM WILL BE DAMMED ON THE UPSTREAM AND DOWNSTREAM SIDE OF THE CROSSING USING SANDBAGS. ONCE THE STREAM IS DAMMED, A PUMP WILL BE USED TO BYPASS THE STREAM AROUND THE WORK AREA AND DISCHARGE IT BELOW THE DOWNSTREAM DAM. ANY WATER ACCUMULATING IN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG PRIOR TO DISCHARGING BACK INTO THE STREAM. ONCE THE WORK AREA IS DRY, EXCAVATION FOR THE CULVERT INSTALLATION MAY TAKE PLACE. ANY EXCAVATED MATERIAL FROM THE STREAM SHALL BE STOCKPILE AT LEAST 10 FEET BACK FROM THE TOP OF THE STREAM BANK WITH COMPOST FILTER SOCK PLACED AROUND THE STOCKPILE ON THE LOW SIDE. THE CULVERT IS TO BE EMBEDDED INTO THE STREAM CHANNEL 6" TO ALLOW STREAM CHANNEL FLOW. THE CULVERT WILL THEN BE BACK FILLED WITH CLEAN STONE AND COMPACTED. AFTER THE CULVERT PIPE IS INSTALLED AND CAPABLE OF ALLOWING FLOW, THE SANDBAG DAM DOWNSTREAM OF THE CROSSING SHALL BE REMOVED AND THEN THE SANDBAG DAM UPSTREAM OF THE CULVERT INSTALLATION SHALL BE REMOVED.
12. AFTER THE CULVERT IS INSTALLED AND WORKING PROPERLY, THE ACCESS OVER THE PIPE SHALL BE STONED AT LEAST 10' BACK FROM THE TOP OF THE BANK IN EACH DIRECTION.
13. ONCE GP-7.2 IS INSTALLED, THE CONTRACTOR MAY START THE INSTALLATION OF THE PERIMETER CONTROLS IN THIS SECTION OF THE PROJECT. THIS WOULD BE THE INSTALLATION OF THE COMPOST FILTER SOCKS LOCATED ON THE NORTHERN SIDE OR DOWN SLOPE SIDE OF THE PROJECT.
14. NEXT THE CONTRACTOR SHALL START TO CLEAR AND GRUB THE AREA NECESSARY TO INSTALL THE STREAM CROSSING FOR GP-7.3 AT STREAM R007.
15. AFTER THE AREA IS CLEARED AND GRUBBED, THE CONTRACTOR MAY START THE INSTALLATION OF THE STREAM CROSSING. THE CONTRACTOR SHALL INSTALL THE CULVERT PIPES USING THE PUMP BYPASS METHOD. THE STREAM WILL BE DAMMED ON THE UPSTREAM AND DOWNSTREAM SIDE OF THE CROSSING USING SANDBAGS. ONCE THE STREAM IS DAMMED, A PUMP WILL BE USED TO BYPASS THE STREAM AROUND THE WORK AREA AND DISCHARGE IT BELOW THE DOWNSTREAM DAM. ANY WATER ACCUMULATING IN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG PRIOR TO DISCHARGING BACK INTO THE STREAM. ONCE THE WORK AREA IS DRY, EXCAVATION FOR THE CULVERT INSTALLATION MAY TAKE PLACE. ANY EXCAVATED MATERIAL FROM THE STREAM SHALL BE STOCKPILE AT LEAST 10 FEET BACK FROM THE TOP OF THE STREAM BANK WITH COMPOST FILTER SOCK PLACED AROUND THE STOCKPILE ON THE LOW SIDE. THE CULVERT IS TO BE EMBEDDED INTO THE STREAM CHANNEL 6" TO ALLOW STREAM CHANNEL FLOW. THE CULVERT WILL THEN BE BACK FILLED WITH CLEAN STONE AND COMPACTED. AFTER THE CULVERT PIPE IS INSTALLED AND CAPABLE OF ALLOWING FLOW, THE SANDBAG DAM DOWNSTREAM OF THE CROSSING SHALL BE REMOVED AND THEN THE SANDBAG DAM UPSTREAM OF THE CULVERT INSTALLATION SHALL BE REMOVED.
16. AFTER THE CULVERT IS INSTALLED AND WORKING PROPERLY, THE ACCESS OVER THE PIPE SHALL BE STONED AT LEAST 10' BACK FROM THE TOP OF THE BANK IN EACH DIRECTION.
17. NOW THAT THE CONTRACTOR HAS INSTALLED ALL THREE-STREAM CROSSING AND THE PERIMETER CONTROLS ARE INSTALLED AND WORKING PROPERLY. THE CONTRACTOR MAY START TO CLEAR AND GRUB THE REMAINING TREES ALONG THE EASTERN SIDE OF THE PROJECT NEAR SIENNA TRAIL.
18. THE CONTRACTOR MAY ALSO INSTALL THE SECOND ROCK CONSTRUCTION ENTRANCE OFF OF SIENNA TRAIL.

PHASE 2 - SITEWORK AND CONSTRUCTION

1. BEGIN CUT/FILL GRADING OPERATIONS AS FOLLOWS: BEGIN THE CUT ON THE WESTERN SIDE OF THE PROJECT (LOTS 10, 11, 12, 13, 14, 15, 16, 17, 18, AND 19). CONTINUE MOVING EAST WITH THE EARTHWORK OPERATIONS AND USING THE GENERATED CUT ON THE EASTERN SIDE OF THE DEVELOPMENT AS FILL MATERIAL. THE INFILTRATION BASINS CAN BE CONSTRUCTED AS PART OF THE EARTHWORK. THESE ARE CONSIDERED CRITICAL STAGES SINCE THEY WILL BE USED AS PCSM BMPS AND SHOULD BE INSPECTED AS THEY ARE INSTALLED. HOWEVER, THEY ARE NOT TO BE USED AS SEDIMENT TRAPS DURING CONSTRUCTION.
2. AS THE EARTHWORK IS PROGRESSING AND THE CUT AND FILL SLOPES ARE TAKING SHAPE AND HAVE REACHED FINAL GRADE, THEY SHALL HAVE TOPSOIL PLACED AND BE SEEDED.
3. ONCE THE SLOPES HAVE BEEN SEEDED, THEY SHALL HAVE EROSION CONTROL BLANKETS PLACED ON THE SLOPES. EROSION CONTROL BLANKETS SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND DETAILS.

NOTE:

CONTRACTOR SHALL GRADE SUCH THAT ALL CUT, AND FILL EARTHWORK CONTINUE TO PROMOTE SHEET FLOW AS IN THE EXISTING CONDITIONS. CONTRACTOR SHALL NOT GRADE IN ANY WAY THAT CAUSES CHANNELIZATION OF RUNOFF FLOW EXCEPT FOR AT THE TOP-OF-SLOPE BERMS. ANY CHANNELIZATION SHALL BE CORRECTED TO ENSURE SHEET FLOW DURING SITE GRADING.

4. SITE UTILITIES INCLUDING WATER AND SEWER, STORM SEWER, GAS, AND ELECTRIC/COMMUNICATIONS WITHIN THE LIMIT OF DISTURBANCE CAN BE INSTALLED PER THE APPROVED GP PLANS AT THE CONTRACTOR'S DISCRETION TO AVOID RE-DISTURBING AREAS LATER AS THE SITE REACHES GRADE, PROVIDE DOWNSTREAM BMPS ARE IN PLACE AS PER PLANS. UTILIZE TRENCH PLUGS AND COMPOST FILTER SOCK AS NECESSARY AND REFER TO THE STANDARD DETAILS PROVIDED ON THE DETAIL SHEET. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACKFILLED IN ONE WORKING DAY. UTILIZE A PUMPED WATER FILTER BAG, AS NECESSARY. WATER FILTER BAGS MUST BE SURROUNDED BY COMPOST FILTER SOCK TO TREAT FOR ADDITIONAL SEDIMENT REMOVAL PRIOR TO BEING DISCHARGED TO SURFACE WATERS OR STORMWATER INLETS.

NOTE:

THE CONSTRUCTION OF ANY UTILITIES (SPECIFICALLY STORM AND SANITARY SEWERS) SHALL BE DONE DURING EXPECTED PERIODS OF DRY WEATHER AND ONLY THE AMOUNT OF TRENCH THAT CAN BE COMPLETED IN ONE DAY SHALL BE OPENED AT ANY TIME. THE BASIN SHALL BE INSPECTED TO ENSURE THAT IT IS FUNCTIONING PROPERLY. AS THE UTILITY IS INSTALLED, THE DISTURBANCE SHALL BE SEEDED AND MULCHED IMMEDIATELY TO ENSURE VEGETATION GROWTH AND LIMIT THE POSSIBILITY OF EROSION. AS THE WORK IS COMPLETED, THE BASIN SHOULD BE INSPECTED FOR ANY DAMAGE CAUSED BY THE UTILITY INSTALLATION AND ANY NECESSARY REPAIRS ARE TO BE MADE IMMEDIATELY.

ONCE INSTALLED, ALL STORMWATER INLETS SHALL BE PROTECTED FROM ENTERING SEDIMENT BY THE USE OF INLET PROTECTION AS SHOWN ON THE PLANS TO PREVENT SEDIMENT FROM ENTERING THE PREVIOUSLY CONSTRUCTED SEDIMENT BASIN THAT WILL BE CONVERTED TO AN INFILTRATION POND. PLEASE NOTE SEDIMENT SHALL BE PREVENTED FROM ENTERING THE INFILTRATION BASIN BY THE INSTALLATION OF COMPOST SILT SOCK ON THE UPHILL SIDE OF THE BMP. INLET PROTECTION MUST BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT THROUGHOUT THE DURATION OF CONSTRUCTION. BAGS CAN BE EMPTIED, AND RINSED OR REPLACED WHEN FILTER BAGS ARE HALF FULL AND FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING.

5. AS DISTURBED AREAS WITHIN THE PROJECT APPROACH THE FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR THE SEEDING AND MULCHING TO BEGIN. IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET WHICH IS TO BE STABILIZED BY VEGETATION REACH THE FINAL GRADE WITHOUT BEING SEEDED OR MULCHED. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS -15 TO 25 FEET MAXIMUM - AS FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATION BUFFERING AT THE BOTTOM OF THE SLOPE.
6. INSTALL THE CONCRETE WASHOUT FACILITIES IN ACCORDANCE WITH THE STANDARD DETAIL.
7. FINE GRADE AND STABILIZE ALL AREAS OF THE SITE. STABILIZE ROADS WITH STONE BASE IMMEDIATELY AFTER SUBGRADE IS REACHED. UTILIZE PROPER SLOPE AND TRENCH SHORING METHODS TO ALLEVIATE CUTBANK CAVING. ALL UNPAVED DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY WITH SEED AND MULCH ONCE GRADING IS COMPLETE WITHIN FOUR DAYS ONCE THE CONSTRUCTION HAS BEEN COMPLETED.
8. INSTALL ALL PROPOSED PAVING AND CONCRETE SITE WORK.
9. ALL AREAS NOT PAVED SHALL RECEIVE A MINIMUM OF 6" OF TOPSOIL. INSTALL PLANTINGS IN ACCORDANCE WITH THE LANDSCAPE PLAN.

PHASE 3 -PCSM INSTALLATION AND SITE STABILIZATION

10. AS THE SITE WORK IS TAKING PLACE, THE TWO INFILTRATION BASINS, SCM-001 AND SCM-005, WILL ALSO BE CONSTRUCTED AT THIS TIME. BOTH INFILTRATION BASINS ARE CRITICAL STAGE ACTIVITIES AND ADVANCED NOTIFICATION SHOULD BE GIVEN TO THE ENGINEER TO ALLOW FOR INSPECTION OF THE INSTALLATION.
11. SCM-1 IS LOCATED ALONG JUSTABOUT ROAD BEHIND LOT 1 AND LOT 2. THIS AREA SHOULD BE PROTECTED FROM COMPACTION PRIOR TO THE INSTALLATION STARTS. SCM-001 WILL HAVE THE NORTHWESTERN PORTION OF THE BASIN IN CUT, WHILE THE SOUTHEASTERN SIDE WILL BE CONSTRUCTED BY FILL PLACEMENT.
12. AS THE CUT SLOPES START TO BE CUT IN, THE AREA ABOVE THE SLOPES SHALL HAVE COMPOST FILTER SOCKS PLACED ON THE TOP OF SLOPE TO PROTECT THE BASIN FROM RECEIVING ANY SEDIMENT FROM UPSLOPE AREAS.
13. AFTER THE EARTHWORK FOR SCM-001 HAS BEEN COMPLETED, STORM HW-2 SHALL HAVE THE RIPRAP APRON INSTALLED TO HELP ELIMINATE AND POSSIBLE EROSION ISSUES. ONCE THE RIPRAP HAS BEEN INSTALLED, THE CONTRACTOR SHALL START THE INSTALLATION OF OUTLET-SCM-001.
14. AS THE OUTLET BARREL IS INSTALLED THROUGH THE BERM, AN ANTISEEP COLLAR SHALL BE INSTALLED IN ACCORDANCE TO THE PLANS.
15. AFTER STORM HW 1 IS INSTALLED, THE RIPRAP APRON SHALL BE INSTALLED TO ENSURE THAT NO EROSION SHALL TAKE PLACE FROM THE OUTLET TO THE RECEIVING SURFACE WATERS.
16. AFTER THE OUTLET BARREL IS INSTALLED, CSM-001 SHALL BE STABILIZED. IT SHOULD BE SEEDED AND MULCHED IN ACCORDANCE TO THE SEEDING SPECIFICATIONS PROVIDED IN THE PLAN SET. ALSO, THE EMERGENCY SPILLWAY SHALL RECEIVE THE TURF REINFORCED MATTING.
17. SCM-5 IS LOCATED ALONG DRAWBRIDGE LAND BETWEEN LOT 9 AND LOT 10. THIS AREA SHALL BE PROTECTED FROM COMPACTION PRIOR TO THE INSTALLATION STARTS. SCM-5 WILL BE LOCATED IN AN AREA OF CUT. ONCE THE HILLSIDE IS CUT DOWN TO THE TOP OF BERM ELEVATION, THE CONTRACTOR SHALL INSTALL THE COMPOST FILTER SOCK AT THE TOE OF CUT SLOPE AND ALONG THE REMAINDER OF THE CSM IN ORDER TO PREVENT SILT FROM ENTERING THE PROPOSED INFILTRATION BASIN.
18. AFTER THE COMPOST FILTER SOCKS ARE INSTALLED, THE CONTRACTOR MAY START THE EXCAVATION OF THE INFILTRATION BASIN.
19. ONCE THE BASIN HAS REACHED DESIGN ELEVATION, THE CONTRACTOR MAY START THE INSTALLATION OF THE OUTLET STRUCTURE - OUTLER CSM-005 ALONG WITH INSTALLING THE RIPRAP APRONS ON STORM HW 4, STORM HW 5, AND STORM HW 6.
20. AS THE OUTLET BARREL IS INSTALLED THROUGH THE BERM, AN ANTISEEP COLLAR SHALL BE INSTALLED IN ACCORDANCE TO THE PLANS.
21. AFTER THE OUTLET BARREL IS INSTALLED, CSM-005 SHALL BE STABILIZED. IT SHOULD BE SEEDED AND MULCHED IN ACCORDANCE TO THE SEEDING SPECIFICATIONS PROVIDED IN THE PLAN SET. ALSO, THE EMERGENCY SPILLWAY SHALL RECEIVE THE TURF REINFORCED MATTING.
22. SCM-2, SCM-3, AND SCM-4 ARE LOCATED ON LOT 24, LOT 23, AND LOT 22. THESE LOTS ARE LOCATED ALONG JUSTABOUT ROAD. THESE SCMS SHALL BE INSTALLED AT THE SAME TIME THE HOUSE ON THESE LOTS ARE CONSTRUCTED. THE SCMS ARE A CRITICAL STAGE IN THE STORMWATER MANAGEMENT SYSTEM AND THE ENGINEER NEEDS TO BE NOTIFIED BEFOREHAND OF ITS INSTALLATION SO THE INSTALLATION CAN BE INSPECTED.

NOTE: THE SCM'S ARE INTENDED TO CONTROL THE INCREASE RUNOFF CREATED BY THE HOUSE ROOF. THESE SCMS SHALL BE SPECIFICALLY DESIGNED FOR EACH LOT.

23. THE AREA OF THE SCMS SHALL BE PROTECTED FROM COMPACTION DURING CONSTRUCTION. AND THE SCMS SHALL BE INSTALLED AFTER THE HOUSE IS COMPLETED.
24. THE ROCK SUMP SHALL HAVE A BOTTOM THAT IS UNIFORM, LEVEL UNCOMPACTED SUBGRADE THAT IS FREE FROM ROCKS AND DEBRIS.
25. ONCE THE CSM IS EXCAVATED, THE SUMP SHALL HAVE NONWOVEN GEOTEXTILE PLACED SUCH TO WRAP THE EXCAVATION TO PREVENT SEDIMENT FROM ACCUMULATING.
26. AFTER THE GEOTEXTILE HAS BEEN INSTALLED, THE PERFORATED PIPE AND OBSERVATION WELL AND ALL OTHER DRY WELL STRUCTURES SHALL BE INSTALLED ACCORDING TO PLANS.
27. ONCE THE PIPING IS IN PLACE, THE CONTRACTOR CAN START TO PLACE UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 6" LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
28. ONCE THE STONE HAS REACHED THE DESIGN ELEVATION, FOLD AND SECURE THE NONWOVEN GEOTEXTILE OVER THE TRENCH.
29. ONCE THE ROCK SUMP HAS BEEN COMPLETELY WRAPPED, PLACE 12 " OF APPROVED TOPSOIL OVER THE SUMP AS INDICATED ON THE PLANS. SEED AND STABILIZE THE TOPSOIL.
30. ONCE A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ACHIEVED ON ALL DISTURBED AREAS. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES INVOLVED WITH THE SUBDIVISION INFRASTRUCTURE, REMOVAL OF ALL TEMPORARY BMPS, AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OPERATOR SHALL CONTRACT THE WASHINGTON COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION AND A NOTICE OF TERMINATION (NOT) SHALL BE FILED FOR THE PROJECT.

PHASE 4 -BMP REMOVAL

DISPOSAL DIRECTIONS FOR SEDIMENT

1. SEDIMENT REMOVED FORM BMPS SHALL BE SPREAD IN AN AREA PROTECTED BY EXISTING BMPS (PRIOR TO FINAL STABILIZATION) OR REMOVED TO AN APPROVED WASTE SITE.

SOIL LIMITATIONS & RESOLUTIONS:

SYMBOL	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE / SEASONAL HIGH WATER TABLE	HYDRIC / HYDRIC INCLUSIONS	LOW STRENGHT / LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
CaC	X	C/S		X				X	X	X	X	X				
CaD	X	C/S		X				X	X	X	X	X				
DoC	X	C/S		X		X	X	X	X	X	X	X	X	X		X
DtD	X	C/S	X	X	X	X	X	X		X		X				
DtF	X	C/S	X	X	X	X	X	X		X		X				
Fa	X	C/S	X	X	X	X	X			X		X				
Nw	X	S		X	X	X	X	X	X	X	X	X		X		

NOTE: DUE TO SOIL LIMITATION ALL EARTHWORK SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER.

RESOLUTIONS TO SOIL LIMITATIONS:

CUTBANKS CAVE:
REMEDIAL ACTIONS:
- PREVENT SATURATION OF SLOPES
- PROVIDE ANCHORING OR RETAINING SYSTEMS
- PROVIDE BENCHING TO CATCH FALLING DEBRIS
- PROVIDE TRENCH BOXES FOR UTILITY INSTALLATIONS

CORROSIVE TO CONCRETE\STEEL
REMEDIAL ACTIONS:
- MINIMIZE THE AMOUNT OF SOIL DISTURBANCE
- PROVIDE PROTECTIVE COATING TO CONCRETE AND STEEL
- PROVIDE EXTRA CONCRETE AND STEEL THICKNESS

DROUGHTY OR EASILY ERODIBLE
REMEDIAL ACTIONS:
- LIMIT TIME OF EXPOSURE
- USE EROSION CONTROL BLANKETS
- SELECTION OF SEED MIXTURES WITH RAPIDLY GERMINATING SPECIES
-

SEASONAL HIGH WATER TABLES, PIPING, SEEPING, SLOW PERCOLATION
REMEDIAL ACTIONS:
- PROVIDE PUMPED WATER SEDIMENT REMOVAL FACILITIES
- USE CLAY EMBANKMENT CORES
- UTILIZE ANTI-SEEP COLLARS OR GRAVEL PACKS

LOW STRENGTH, LANDSLIDE PRONE
REMEDIAL ACTIONS:
- PREVENT SATURATION OF SLOPES
- PROVIDE ANCHORING OR RETAINING SYSTEMS
- PROVIDE BENCHING TO CATCH FALLING DEBRIS
- PERFORM SOIL TESTING AND FOLLOW GEOTECHNICAL RECOMMENDATIONS

FROST ACTION
REMEDIAL ACTIONS:
- MINIMIZE THE AMOUNT OF SOIL DISTURBANCE
- PROVIDE EFFECTIVE DRAINAGE
- CONTROL DEPTH OF FROST PENETRATION
- REPLACE AND/OR MODIFY FROST-SUSCEPTIBLE SOILS

POOR SOURCE OF TOPSOIL
REMEDIAL ACTIONS:
- PERFORM SOIL TESTING TO DETERMINE PROPER APPLICATION OF SOIL AMENDMENTS AND PROPER MOISTURE CONTENT FOR PROPER VEGETATION COVER
- IMPORT TOPSOIL AS NEEDED

WETNESS, HYDRIC INCLUSIONS
REMEDIAL ACTIONS:
- ENSURE THAT THE SOILS ARE WELL DRAINED AND PREVENT SATURATION OF SOILS
- CONDITIONS MAY REQUIRE SOILS TO BE EXTENSIVELY AIR DRIED, MIXED WITH DRIER MATERIALS, AND/OR DISKED TO MODIFY MOISTURE CONTENT FOR PROPER COMPACTION.
- IN SEVERE SITUATIONS, SUBSTITUTE APPROPRIATE FILL MATERIAL.
- PROVIDE PUMPED WATER SEDIMENT REMOVAL FACILITIES

LAND USE:

PAST USE LAND USES FOR PAST 50-YEARS: WOODED AND FARM
PRESENT USE FOR PAST 5-YEARS : WOODED AND FARM
PROPOSED USE: RESIDENTIAL SUBDIVISION

TOWNSHIP ACCESS:

THE OWNER WILL GRANT ACCESS TO THE TOWNSHIP FOR PERIODIC INSPECTIONS.

FLOOD PLAIN NOTE:

THE SITE IS LOCATED IN ZONE X - AREA OF MINIMAL FLOOD HAZARD PER FIRM MAP NUMBER 42125C0214E WITH AN EFFECTIVE DATE OF 9/30/2015.

WATERSHED AND RUNOFF:

THE SITE IS LOCATED WITHIN THE BRUSH RUN WATERSHED, HAVING A CHAPTER 93 WATERSHED CLASSIFICATION OF WARM WATER FISHERY (WWF). BRUSH RUN WATERSHED IS AN IMPAIRED WATERSHED, ALL BMP'S ARE TO FOLLOW ABACT DETAILS AND NOTES.

WETLANDS:

THERE ARE WETLANDS DELINEATED WITHIN THE PROJECT BOUNDARIES.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

KDH CONSULTING ENGINEERS, INC
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-060435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
GENERAL NOTES AND LEGENDS

SHEET NO.
D0.1

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PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
EXISTING CONDITIONS PLAN

SHEET NO.
D1.0

FLOOD PLAIN NOTE:
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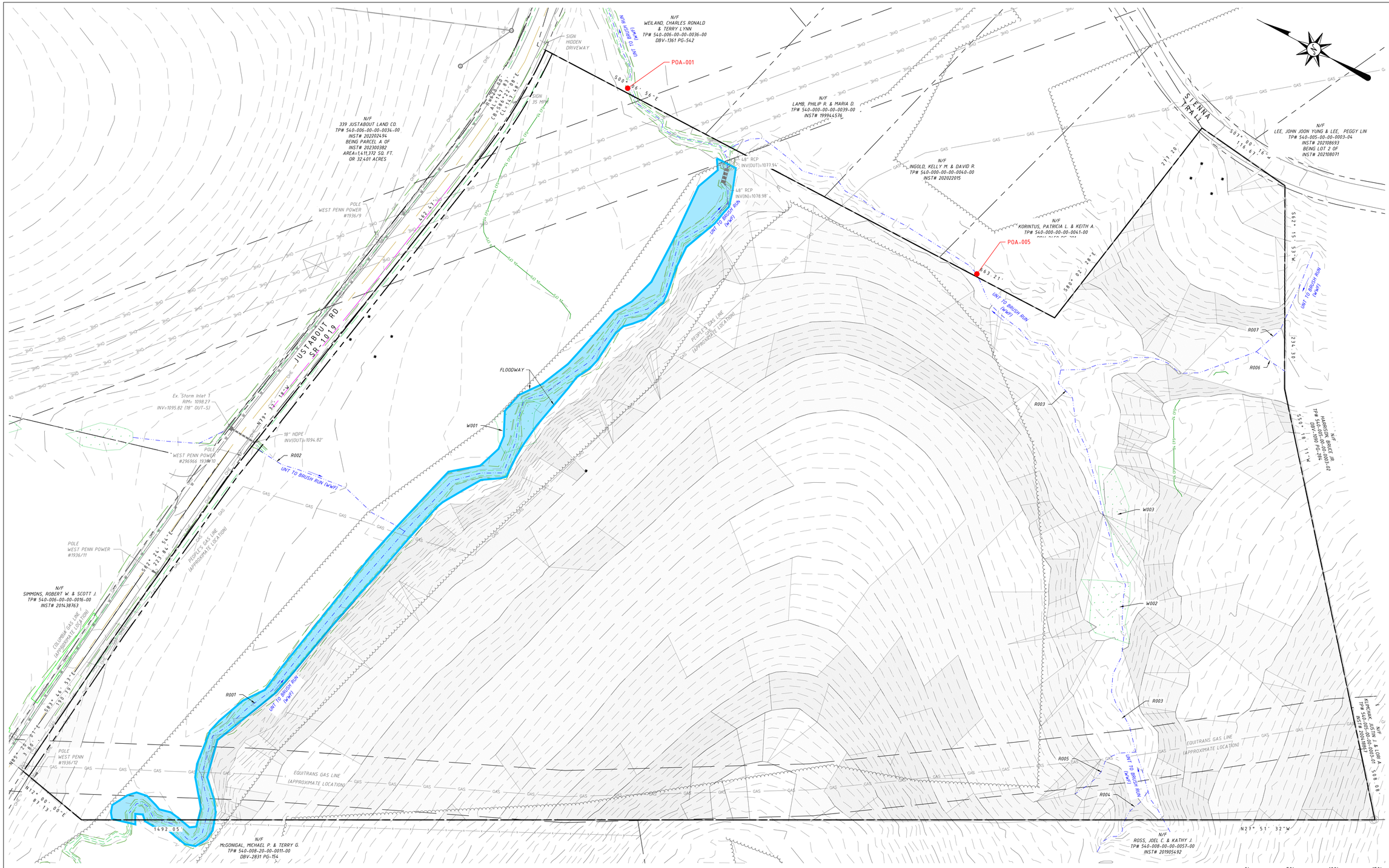
WETLANDS:
THERE ARE WETLANDS DELINEATED WITHIN THE PROJECT BOUNDARIES.

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

Know what's below. Call before you dig.

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG



SLOPES LEGEND:

- 0% TO 15% SLOPES
- 15% TO 20% SLOPES
- 20% TO 25% SLOPES
- 25% TO 30% SLOPES
- OVER 30% SLOPES

FLOOD PLAIN NOTE:
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REGISTERED PROFESSIONAL
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ENGINEER
PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO:	291-002-21
DATE:	1/10/2025
DRAWN BY:	RAM
CHECKED BY:	CWH

SHEET TITLE:
SLOPE MAP

SHEET NO.
D1.1

GENERAL DEMOLITION NOTES:

1. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.

2. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS AND FOOTINGS. IN ADDITION, ALL EXISTING UTILITY SERVICES TO BE TERMINATED PER UTILITY PROVIDER REQUIREMENTS.

3. CONTRACTOR SHALL CONTACT ONE CALL SYSTEM AND THE APPROPRIATE UTILITY COMPANIES AT LEAST THREE (3) DAYS PRIOR TO THE INITIATION OF EARTH MOVING AND DEMOLITION ACTIVITIES.

4. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.

5. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS NOT USED AS FILL MATERIAL, SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.

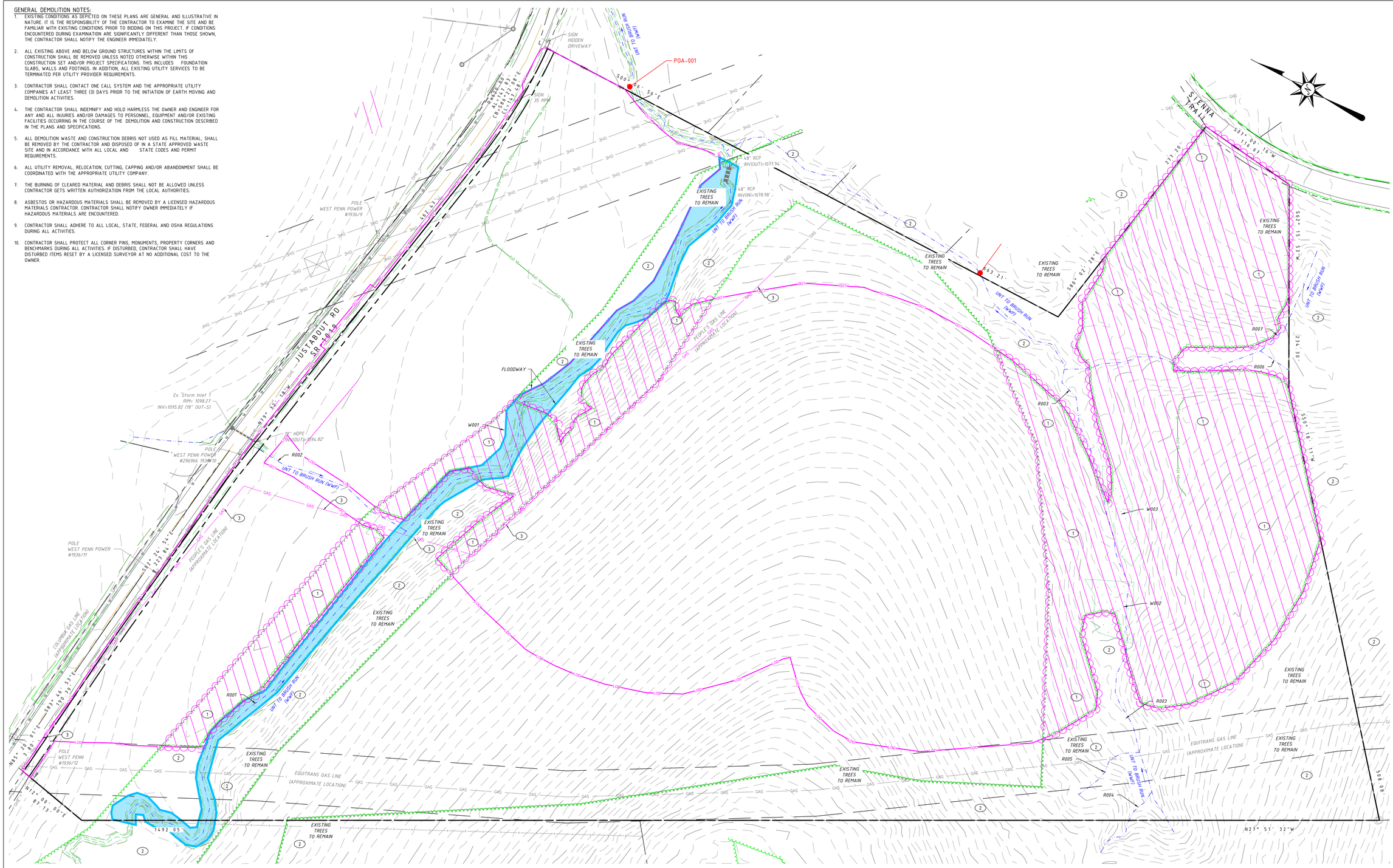
6. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

7. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.

8. ASBESTOS OR HAZARDOUS MATERIALS SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.

9. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS DURING ALL ACTIVITIES.

10. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING ALL ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.



SITE DEMOLITION NOTES:

(1) CONTRACTOR SHALL REMOVE EXISTING TREES AND VEGETATION AS SHOWN.

(2) EXISTING TREES TO REMAIN IN THIS AREA.

(3) EXISTING GAS LINE TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH PEOPLES NATURAL GAS.

0' 50' 100' 150'

GRAPHIC SCALE 1" = 50'

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NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
DEMOLITION PLAN

SHEET NO.
D1.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

ZONING COMPARISON

	LOW DENSITY RESDENTIAL	CONSERVATION RESIDENTIAL OVERLAY OPTION A	NEWCASTLE
allowed use	SINGLE	SINGLE	SINGLE
min lot area	21,780 sq.ft.	NONE	10,526 sq ft
min lot width	100 ft	75 ft	75 ft
min front yard	50 ft	25 ft	25 ft
max front yard	.- ft	30 ft	.- ft
min rear yard	15 ft	20 ft	20 ft
min side yard (Two Story)	15 ft	7.5 ft	7.5 ft
max bldg height	35	37 ft	37 ft
Lot coverage	15%	30%	30%
Density	1.2	2.0 or 2.5 or 3.0	1.1 du/ac
Open space		2du/ac=25%	48%

PARKING REQUIREMENTS:

REQUIRED: SINGLE FAMILY DETACHED: 2.0 PER UNIT 24 LOTS x 2 = 48 SPACES
VISITOR SPACES : 1.5 PER UNIT 24 LOTS x 1.5 = 36 SPACES
TOTAL REQUIRED: 84 SPACES

PROPOSED: SINGLE FAMILY DETACHED: 4 SPACES PER LOT = (2 IN GARAGE MIN+2 IN DRIVEWAY)
24 x 4 = 96 SPACES

CONSERVATION RESIDENTIAL 1 SPACE PER 5 LOTS + 1 GUEST SPACE PER EVERY 5 UNIT 24/5 = 5 SPACES

TOTAL PROVIDED: 101 SPACES

PENN DOT PERMITS

A HIGHWAY OCCUPANCY PERMIT WILL BE REQUIRED FOR DRAWBRIDGE LANE TO JUST ABOUT ROAD.

INDIVIDUAL HIGHWAY OCCUPANCY PERMIT FOR MINIMUM USE DRIVEWAYS WILL BE REQUIRED FOR LOTS 22, 23, AND 24.

NOTES:

1. TOTAL GROSS SITE AREA ACRES = 21.3 ACRES
   TAX ID. 540-006-00-00-0034-00
2. THERE IS NO 100 YEAR FLOODPLAIN LOCATED ON THE PROPERTY.
3. ZONING DISTRICT: LD LOW DENSITY RESIDENTIAL
4. THE PROPOSED DEVELOPMENT WILL USE THE CONSERVATION RESIDENTAIL (CR) OVERLAY DEVELOPMENT OPTION.
5. EXISTING LAND USE WAS USED FOR SINGLE AGRICULTURE AND UNDEVELOPED LOT.
6. SITE FIEID SURVEY WAS COMPLETED BY KDH ENGINEERING.
7. BASE TOPOGRAPHY SURVEY INFORMATION IS BASED ON FILES PROVIDED BY THE PENNSYLVANIA SPATIAL DATA ACCESS (PASDA).
8. 0.95 ACRES OF WETLANDS EXIST ON THE PROPERTY.
9. ALL EARTHWORK SHALL BE MONITORED BY A GEOTECHNICAL ENGINEER.
10. SURVEY MONUMENTS WILL BE PROVIDED/SHOWN ON THE FINAL SUBDIVISION PLAN.
11. OPEN SPACE REQUIRED: 25% OR 5.33 ACRES
    OPEN SPACE PROVIDED: 48% OR 10.13 ACRES
12. ALL OPEN SPACE ARE A FUNCTION OF CONSERVATIVE/PASSIVE AREAS AND SHALL BE PRIVATE AND OWNED AND MAINTAINED BY A HOMEOWNERS ASSOCIATION.
13. THE TRAFFIC IMPACT FEE FOR EACH LOT IS $1,750.

SCALE: 1" = 50'
0 25' 50' 100'

REVISIONS:

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Landscape Architects
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Suite 210
Sewickley, PA 15143
Office| 412-741-2290
Fax| 412-741-2299
E-mail| vwla@vwla.net

P.M. SCV
D.B. CMS
C.B.

NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY, PA
PREPARED FOR:
THREE THIRTY-NINE JUSTABOUT LAND COMPANY
333 TECHNOLOGY DRIVE
SUITE 108
CANONSBURG, PA 15317

FINAL SITE PLAN

D2.0

SCALE: 1" = 50' – 0"
ISSUE DATE: 5-12-25
JOB NO. 2022-014

LANDSCAPING REQUIREMENTS:

STREET TREE REQUIREMENTS

	TREES
PLANTS REQUIRED:	0
PLANTS PROVIDED:	46

STORMWATER #1 BUFFER: 600 L.F.**

(TREE PLANTED EVERY 30 LF, COMPRISED OF 1/3 EVERGREEN & 2/3 DECIDUOUS

7 – EVERGREEN TREES (6' HT.)
13 – DECIDUOUS TREES (2" CAL.)

STORMWATER #2 BUFFER: 390 L.F.**

(TREE PLANTED EVERY 30 LF, COMPRISED OF 1/3 EVERGREEN & 2/3 DECIDUOUS

4 – EVERGREEN TREES (6' HT.)
9 – DECIDUOUS TREES (2" CAL.)

SWM SEEDING SPECIFICATION:

ALL SWM FACILITY FLOORS & INSIDE BANKS TO BE SEEDED W/RAIN GARDEN MIX – ERNMX-180 (OR APPROVED EQUAL) SEEDING RATE: 20 LB PER ACRE W/COVER CROP @30 LB PER ACRE (SEE INFO SHEET FOR RECOMENDATIONS) ERNST SEED: 800–873–3321

SWM FACILITY TO BE SEEDED W/RAIN GARDEN MIX - ERNMX-180 (SEE LANDSCAPE REQUIREMENTS.):

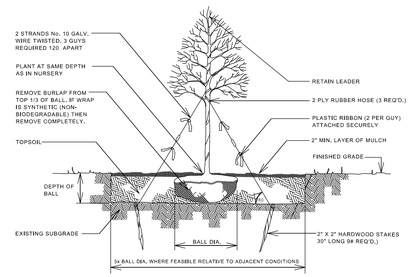
LANDSCAPE LEGEND

STREET TREES

SWM FACILITY BUFFER PLANTING

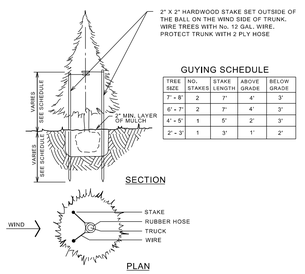
OVERALL PLANT LIST

SYM.	QTY.	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
CANOPY TREES					
CM	48	Celebration Maple	ACER x freemanii 'Celebration'	2" cal	B & B
SM	7	Sugar Maple	ACER saccharum	2" cal	B & B
SB	4	Autumn Brilliance Serviceberry	AMELANCHIER x grandiflora 'Autumn Brilliance'	2" cal	B & B
HT	3	Winterking Hawthorn	CRATAEGUS virdis 'Winter King'	2" cal	B & B
TP	8	Tuliptree	LIRIODENDRON tulipifera	2" cal	B & B
EVERGREEN TREES					
JV	6	Eastern Red Cedar	JUNIPERUS virginiana	6' ht.	B & B
DF	5	Douglas Fir	PSEUDOTSUGA menziesii	6' ht.	B & B



TREE PLANTING DETAIL

NOT TO SCALE

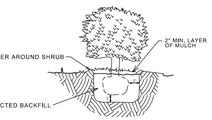


GUYING SCHEDULE

TREE SIZE	NO. STAKES	STAKE LENGTH	ABOVE GRADE	BELOW GRADE
7' - 8'	2	7'	4'	3'
6' - 7'	2	7'	4'	3'
4' - 5'	1	5'	2'	3'
2' - 3'	1	3'	1'	2'

EVERGREEN TREE GUYING

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE

SCALE: 1" = 50'

0 25' 50' 100'

REVISIONS:

PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NUMBER 544-E

Victor–Wetzel Associates Landscape Architects

409 Broad Street
Suite 210
Sewickley, PA 15143
Office | 412-741-2290
Fax | 412-741-2294
E-mail | vwla@vwla.net

P.M. SCV
D.B. CMS
C.B.

NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY, PA
PREPARED FOR:
THREE THIRTY-NINE JUSTABOUT LAND COMPANY
333 TECHNOLOGY DRIVE
SUITE 108
CANONSBURG, PA 15317

FINAL LANDSCAPE PLAN

D2.1

SCALE: 1" = 50' – 0"
ISSUE DATE: 5-12-25
JOB NO. 2022-014

LED Streetlight *Fact Sheet*

Post Top Roadway Lighting

To help lower municipal energy usage and maintenance costs, West Penn Power now offers LED street lighting.

LED streetlights provide many advantages over traditional lighting, including:

- Longer life span – projected 50,000+ hours
- Greater energy efficiency
- Reduced maintenance costs
- Faster turn on and turn off

Currently, the approved manufacturers are Acuity and Cooper Lighting Products. The initial term of the contract is 10 years and can be renewed annually thereafter. Each LED fixture will appear on the municipality's bill as a fixed monthly charge. The municipality's decision to install street lighting will not affect its ability to choose an alternate electricity supplier.

The costs shown below are for the installation of LED streetlights at new locations or replacement of existing streetlights. The monthly expense includes energy, labor and fixture costs associated with the installation of a new LED streetlight. (Some installation costs are not included – See FAQs.)

Colonial Post Top

Colonial Post Top

Watts/kWh per month	50	18	90	32
Lumens	2,500		5,000	
Energy @ $0.08/kWh*	$1.44		$2.56	
Fixture	$11.12		$12.24	
Total Monthly Cost**	**$12.56**		**$14.80**	

*The costs shown are based on an average total price of $0.08 per kWh. These costs could fluctuate depending on the actual rate, the current price-to-compare and if the customer chooses an alternate electricity supplier. For more information on customer choice, visit www.PAPowerSwitch.com.

**In addition to Total Monthly Cost, the customer is responsible for additional rider charges per the streetlight tariff.

(over)

COMM6830-2-1YGS
Produced by FirstEnergy's Communications & Marketing Department

WestPennPower
A FirstEnergy Company

SPECIFICATIONS:
FIXTURE: COLONIAL LANTERN
COLOR: BLK
POLE: 12' FIBERGLASS FROM FINISHED GRADE
BULB: LED LIGHT FIXTURE

PROPOSED STREET LIGHT

NOT TO SCALE

SCALE: 1" = 50'
0 25' 50' 100'

REVISIONS:

PENNSYLVANIA LANDSCAPE ARCHITECT REGISTERED — Steven Victor

Victor-Wetzel Associates
Landscape Architects

409 Broad Street
Suite 210
Sewickley, PA 15143
Office | 412-741-2290
Fax | 412-741-2299
E-mail | wva@vwla.net

P.M. SCV
D.B. CMS
C.B.

NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY, PA
PREPARED FOR:
THREE THIRTY-NINE JUSTABOUT LAND COMPANY
333 TECHNOLOGY DRIVE
SUITE 108
CANONSBURG, PA 15317

FINAL LIGHTING PLAN

D2.2

SCALE: 1" = 50'-0"
ISSUE DATE: 5-12-25
JOB NO. 2022-014

SCALE: 1" = 50'
0 25' 50' 100'

REVISIONS:

PENNSYLVANIA REGISTERED LANDSCAPE ARCHITECT
LA-000616
CERTIFICATE NUMBER
Steven Victor

Victor-Wetzel Associates
Landscape Architects

409 Broad Street
Suite 210
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P.M. SCV
D.B. CMS
C.B.

NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY, PA

PREPARED FOR:
THREE THIRTY-NINE JUSTABOUT LAND COMPANY
333 TECHNOLOGY DRIVE
SUITE 108
CANONSBURG, PA 15317

FINAL HOUSE PLAN

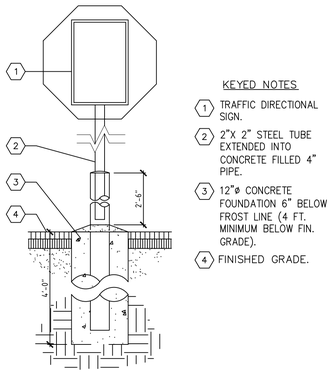
D2.3

SCALE: 1" = 50'-0"
ISSUE DATE: 5-12-25
JOB NO. 2022-014

JUSTABOUT RD
SR-1019
DRAWBRIDGE LANE
SIENNA XING
1150
POLE WEST PENN POWER #1936/9
POLE WEST PENN POWER #1936/11
POLE WEST PENN POWER #296366 1436/10
POLE WEST PENN POWER #375293
SIGN HIDDEN DRIVEWAY
SIGN 35 MPH
ROAD CURVE AL=138.65' CB=N86°27'06"E CH=138.36'
N/F 339 JUSTABOUT LAND CO. TP# 540-006-00-00-0034-00 INST# 202202494 BEING PARCEL A OF INST# 202300382 AREA=1,411,372 SQ. FT. OR 32.401 ACRES
N/F WEILAND, CHARLES RONALD & TERRY LYNN TP# 540-006-00-00-0036-00 DBV-3341 PG-542
N/F LAMB, PHILIP B. & MARIA D. TP# 540-000-00-00-0039-00 INST# 199914376
N/F INGOLD, KELLY M. & DAVID R. TP# 540-000-00-00-0040-00 INST# 202022015
N/F KORINTUS, PATRICIA L. & KEITH A. TP# 540-000-00-00-0041-00 DBV-2458 PG-391
N/F LEE, JOHN JOON YUNG & LEE, PEGGY LIN TP# 540-005-00-00-0003-04 INST# 202108693 BEING LOT 2 OF INST# 202108071
N/F SIMMONS, ROBERT W. & SCOTT J. TP# 540-006-00-00-0016-00 INST# 201438763
N/F McGONIGAL, MICHAEL P. & TERRY G. TP# 540-008-20-00-0011-00 DBV-2831 PG-154
N/F ROSS, JOEL C. & KATHY J. TP# 540-008-00-00-0057-00 INST# 201905492
N/F HARRISON, BRUCE E. TP# 540-005-00-00-0003-05 DBV-2458 PG-388
N/F PLYMOUTH ROCK JUSTAB & JUSTA TP# 540-000-00-00-0042-00
100' POWERLINE EASEMENT
40' BUFFER
EXISTING TREES TO REMAIN
NEWCASTLE 24 LOTS 10.13 ACRES OPEN SPACE (48%)
48" RCP INV(OUT)=1077.94'
48" RCP INV(IN)=1078.98'
18" HDPE INV(OUT)=1094.82'
5/8" IRON PIN & CAP FOUND
5/8" IRON PIN & CAP FOUND (HELD)
1-1/2" IRON PIPE IN CONCRETE FOUND
AXLE FOUND (HELD)
CONC. MON. W/ IRON PIN FOUND
BOLT FOUND (HELD)
CBU
S00° 06' 56"E
S80° 06' 28"E
S27° 51' 32"W
S62° 24' 54"E 23.84'
S80° 46' 59"E 190.19'
N85° 26' 01"E 87.13'
N12° 00' 00"E 67.13'
663.21'
277.20'
1492.05'
N27° 51' 32"W 116.82'
224.30'
S62° 51' 32"W
S27° 51' 32"W
S58° 08' 28"E
S58° 08'
N/F SIMMONS, ROBERT W. & SCOTT J. TP# 540-006-00-00-0016-00 INST# 201438763

30" X 30"

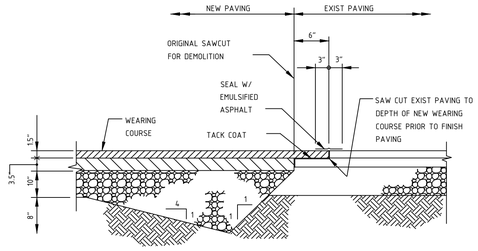
PADOT R1-1 "STOP"



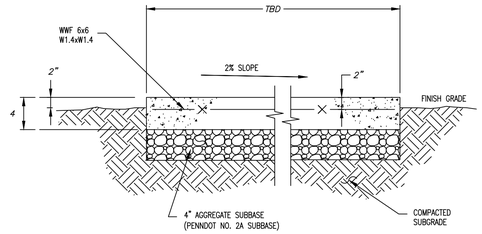
KEYED NOTES

1. TRAFFIC DIRECTIONAL SIGN.
2. 2"X 2" STEEL TUBE EXTENDED INTO CONCRETE FILLED 4" PIPE.
3. 12"ø CONCRETE FOUNDATION 6" BELOW FROST LINE (4 FT. MINIMUM BELOW FIN. GRADE).
4. FINISHED GRADE.

STOP SIGN — NOT TO SCALE — 1 / D4.0



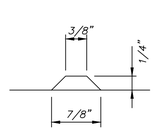
NEW/EXISTING PAVEMENT JOINT — NOT TO SCALE — 2 / D4.0



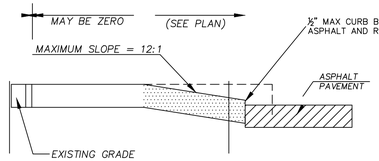
6" WITHIN DRIVEWAY ENTRANCE

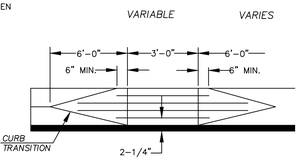
PROVIDE TRANSVERSE GROOVE JOINTS @ 5'-0" OC (MAX) AND EXPANSION JOINTS @ 20'-0" OC (MAX) AND WHERE ABUTTING CURBS, STRUCTURES, AND EXISTING CONCRETE PAVEMENT.

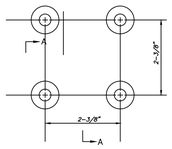
TYPICAL SIDEWALK — NOT TO SCALE — 3 / D4.0



SECTION A-A – TYPE 2

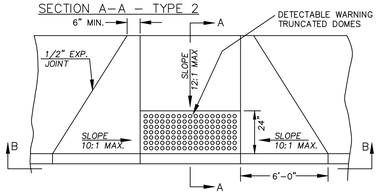






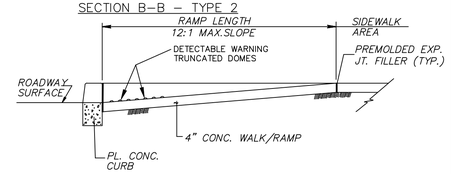
PLAN VIEW – TYPE 2

SECTION A-A – TYPE 2



TYPE 2 RAMP

SECTION B-B – TYPE 2

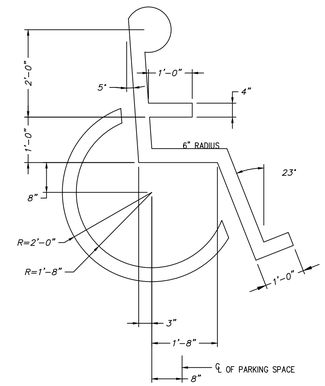


SECTION C-C – TYPE 2

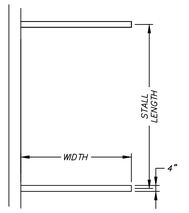
DETECTABLE WARNING TRUNCATED DOME DETAIL

NOTES

1. RAMPS WILL BE CONSTRUCTED IN COMPLIANCE WITH 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN SPECIFICATIONS
2. RAMPS WILL BE CONSTRUCTED TO THE SAME CONCRETE SPECIFICATION AS CONCRETE SIDEWALKS.
3. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
5. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB ALTERATIONS WHERE THE CURB IS LESS THAN THE STANDARD 6" HEIGHT.
7. CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK PITCH.
8. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN THE DOMES.
9. PROVIDE DETECTABLE WARNING SURFACES THAT CONTRAST (70%) IN LIGHT REFLECTANCE WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT OR SAFETY YELLOW.
10. THE LOCATION OF CROSS WALK LINES AND STOP BARS, WHEN REQUIRED, WILL BE COORDINATED WITH THE LOCATION OF THE RAMPS.

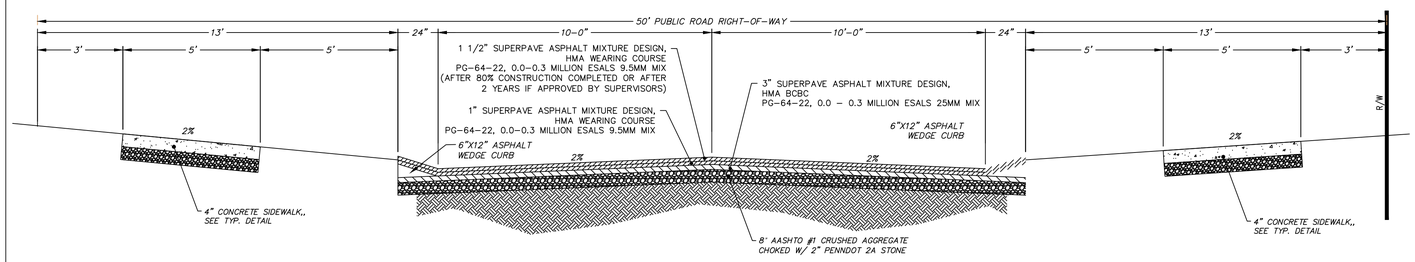


HANDICAP ACCESSIBLE PAVEMENT SYMBOL — NOT TO SCALE — 4 / D4.0

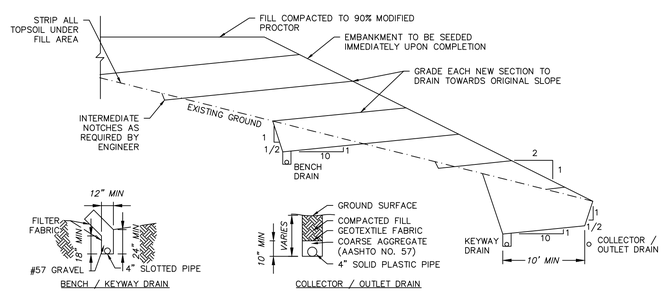


NOTES:
1. ALL LINES SHALL BE 4" IN WIDTH.
2. ALL PARKING SPACE LINES SHALL BE WHITE.
3. ALL HANDICAP MARKINGS INCLUDING LOADING ZONE SHALL BE PAINTED BLUE.

LINE STRIPPING — NOT TO SCALE — 5 / 4.0



TYPICAL ROADWAY CROSS SECTION — NOT TO SCALE — 7 / D4.0



KEYWAY / BENCH DETAIL — NOT TO SCALE — 8 / D4.0

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878-295-8914 F:724-514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CHRISTOPHER W. HAMM — ENGINEER PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

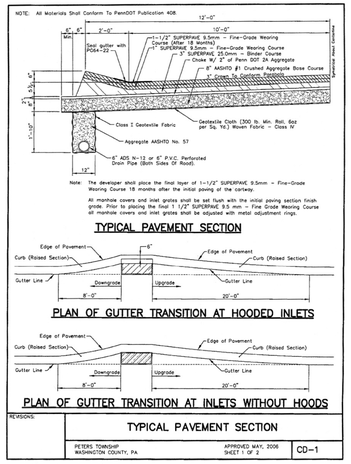
PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NO.
D3.0

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

SUBDIVISION AND LAND DEVELOPMENT



Note: The developer shall place the final layer of 1-1/2" SUPERPAVE 9.5mm - Fine-Grade Wearing Course 18 months after the initial paving of the carbway.

All manhole covers and inlet grates shall be set flush with the initial paving section finish grade. Prior to placing the final 1 1/2" SUPERPAVE 9.5 mm - Fine Grade Wearing Course all manhole covers and inlet grates shall be adjusted with metal adjustment rings.

TYPICAL PAVEMENT SECTION

PLAN OF GUTTER TRANSITION AT HOODED INLETS

PLAN OF GUTTER TRANSITION AT INLETS WITHOUT HOODS

REVISIONS:	TYPICAL PAVEMENT SECTION		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA.	APPROVED MAY, 2006 SHEET 1 OF 2	CD-1

PETERS TOWNSHIP CODE

The components of the pavement structure shall be designed and constructed in accordance with PennDOT publication 408 Specifications (most recent addition).

Superpave materials must be designed with a minimum of 0 – 0.3 million equivalent single – axle loads (ESALs) and have a minimum skid resistance level (SRL) of H. Performance Grade Binder for mix designs shall be PG 64–22.
The Township Engineer may require project specific pavement designs with higher ESAL counts based on traffic studies or road classifications.

Core samples shall be taken prior to placing the wearing course to verify depth. The acceptable tolerance will be one quarter inch (1/4") per lift. If deficiencies exist, the contractor, will be required to remove, replace or otherwise satisfactorily correct the deficient areas.
The cutting of the test holes, refilling and compacting with hot mix or acceptable material shall be done by and at the expense of the contractor within 24 hours of taking the cores.

Once the final wearing course is placed, the contractor shall seal the gutter line with PG 64–22 asphalt cement by overlapping 3" on to the wedge curb and extending 9" onto the cartway, around all inlets, manholes, water and gas valve boxes etc. in accordance with PennDOT Publication 408 Specifications (most recent addition)

The contractor shall provide the following certifications daily during the paving operation:

1. Bill of lading for the liquid asphalt.
2. Certified design mix formula from PennDOT. (2 weeks prior to paving)
3. Certifications of density testing.
4. PENN DOT Certification 4171.

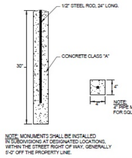
NOTE:
When paving roads in the township, the contractor may be required to reduce the loads of asphalt to reduce the stress on the existing township roads or post a bond for any repairs required because of damage due to hauling over the township roads. The contractor shall contact the township for any restrictions that may apply to the project.

The township representative will be required to perform the testing of the bituminous pavement as part of their inspection service to the township. The testing of the material will be in accordance with PennDOT Publication 408 and the township's standard details and ordinance requirements. The testing will be performed to verify the density of the bituminous pavement for proper compaction. The engineering inspection rates will be in accordance with the rate schedule posted with the township.

- All aggregate sizes shown are AASHTO numbers unless otherwise noted. All material must be PennDOT approved.
- All utility crossings must be installed prior to placing bituminous pavement.
- Additional subgrade drains may be required by the township engineer where underground water is encountered.
- If the subbase is not installed by November 1, the bituminous pavement must be delayed until the next paving season.

REVISIONS:	TYPICAL PAVEMENT SECTION		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA.	APPROVED MAY, 2006 SHEET 2 OF 2	CD-1

PETERS TOWNSHIP CODE



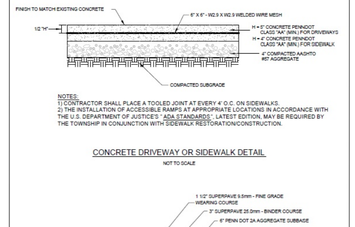
NOTE: MONUMENTS SHALL BE INSTALLED AT TRANSITIONS AT DESIGNATED LOCATIONS, WITHIN THE STREET RIGHT OF WAY, GENERALLY 0.5' OFF THE PROPERTY LINE.

CONCRETE SURVEY MONUMENT DETAIL

NOTE
2" MIN. MAYBE USED AS A SUBSTITUTE FOR SQUARE CROSS SECTION

REVISIONS: January, 2019	CONCRETE SURVEY MONUMENT DETAIL PETERS TOWNSHIP		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA.	APPROVED _____	CD-16

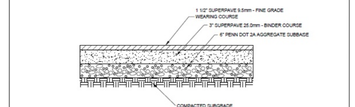
SUBDIVISION AND LAND DEVELOPMENT



NOTES:
1) CONTRACTOR SHALL PLACE A TOOLED JOINT AT EVERY 4' O.C. ON SIDEWALKS.
2) THE INSTALLATION OF ACCESSIBLE RAMPS AT APPROPRIATE LOCATIONS IN ACCORDANCE WITH THE U.S. DEPARTMENT OF JUSTICES " ADA STANDARDS ", LATEST EDITION, MAY BE REQUIRED BY THE TOWNSHIP IN CONJUNCTION WITH SIDEWALK RESTORATION/CONSTRUCTION.

CONCRETE DRIVEWAY OR SIDEWALK DETAIL

NOT TO SCALE



BITUMINOUS DRIVEWAY

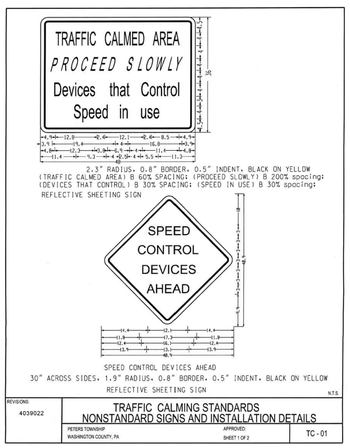
NOT TO SCALE

Superpave materials must be designed with a minimum of 0 - 0.3 million equivalent single - axle loads (ESALs) and have a minimum skid resistance level (SRL) of H. Performance Grade Binder for mix designs shall be PG 64-22.

REVISIONS: January, 2019	DRIVEWAY AND SIDEWALK RESTORATION PETERS TOWNSHIP		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA	APPROVED _____	CD-5

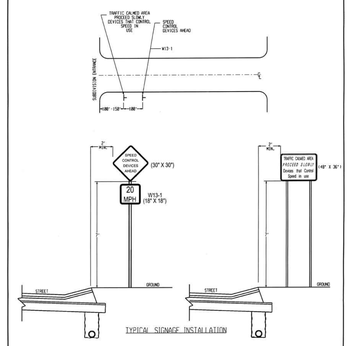
SUBDIVISION AND LAND DEVELOPMENT

TC-01
Traffic Calming Standards
Nonstandard Signs and Installation Details



REVISIONS: 4039022	TRAFFIC CALMING STANDARDS NONSTANDARD SIGNS AND INSTALLATION DETAILS		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA.	APPROVED: SHEET 1 OF 2	TC-01

PETERS TOWNSHIP CODE



REVISIONS: 4039022	TRAFFIC CALMING STANDARDS NONSTANDARD SIGNS AND INSTALLATION DETAILS		
	PETERS TOWNSHIP WASHINGTON COUNTY, PA.	APPROVED: SHEET 2 OF 2	TC - 01

KDH CONSULTING ENGINEERS, INC
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAHN
ENGINEER
PE-080435

REVISIONS:												ADDRESS WCCD NPDES COMMENTS	
												4/14/2025	DATE
												1	REV

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE. SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

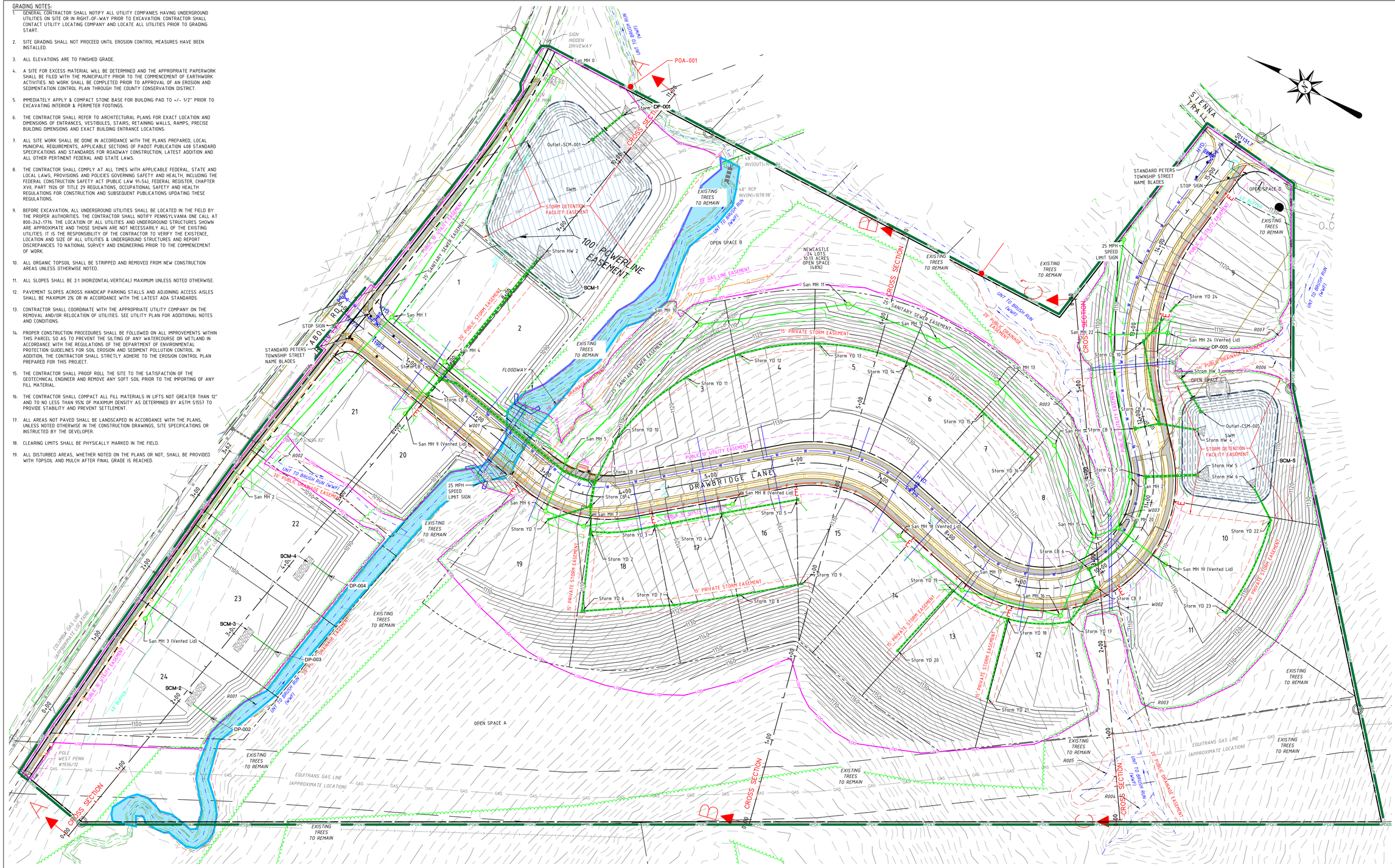
SHEET TITLE:
TOWNSHIP STANDARD DETAILS

SHEET NO.
D3.1

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

GRADING NOTES:

1. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
2. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. ALL ELEVATIONS ARE TO FINISHED GRADE.
4. A SITE FOR EXCESS MATERIAL WILL BE DETERMINED AND THE APPROPRIATE PAPERWORK SHALL BE FILED WITH THE MUNICIPALITY PRIOR TO THE COMMENCEMENT OF EARTHWORK ACTIVITIES. NO WORK SHALL BE COMPLETED PRIOR TO APPROVAL OF AN EROSION AND SEDIMENTATION CONTROL PLAN THROUGH THE COUNTY CONSERVATION DISTRICT.
5. IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.
6. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF ENTRANCES, VESTIBULES, STAIRS, RETAINING WALLS, RAMPS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING ENTRANCE LOCATIONS.
7. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED, LOCAL MUNICIPAL REQUIREMENTS, APPLICABLE SECTIONS OF PADOT PUBLICATION 408 STANDARD SPECIFICATIONS AND STANDARDS FOR ROADWAY CONSTRUCTION, LATEST ADDITION AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
8. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
9. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PENNSYLVANIA ONE CALL AT 800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL OF THE EXISTING UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND SIZE OF ALL UTILITIES & UNDERGROUND STRUCTURES AND REPORT DISCREPANCIES TO NATIONAL SURVEY AND ENGINEERING PRIOR TO THE COMMENCEMENT OF WORK.
10. ALL ORGANIC TOPSOIL SHALL BE STRIPPED AND REMOVED FROM NEW CONSTRUCTION AREAS UNLESS OTHERWISE NOTED.
11. ALL SLOPES SHALL BE 2:1 (HORIZONTAL-VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE.
12. PAVEMENT SLOPES ACROSS HANDICAP PARKING STALLS AND ADJOINING ACCESS AISLES SHALL BE MAXIMUM 2% OR IN ACCORDANCE WITH THE LATEST ADA STANDARDS.
13. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY ON THE REMOVAL AND/OR RELOCATION OF UTILITIES. SEE UTILITY PLAN FOR ADDITIONAL NOTES AND CONDITIONS.
14. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLAND IN ACCORDANCE WITH THE REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR SOIL EROSION AND SEDIMENT POLLUTION CONTROL. IN ADDITION, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION CONTROL PLAN PREPARED FOR THIS PROJECT.
15. THE CONTRACTOR SHALL PROOF ROLL THE SITE TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AND REMOVE ANY SOFT SOIL PRIOR TO THE IMPORTING OF ANY FILL MATERIAL.
16. THE CONTRACTOR SHALL COMPACT ALL FILL MATERIALS IN LIFTS NOT GREATER THAN 12" AND TO NO LESS THAN 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM S1557 TO PROVIDE STABILITY AND PREVENT SETTLEMENT.
17. ALL AREAS NOT PAVED SHALL BE LANDSCAPED IN ACCORDANCE WITH THE PLANS, UNLESS NOTED OTHERWISE IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE DEVELOPER.
18. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD.
19. ALL DISTURBED AREAS, WHETHER NOTED ON THE PLANS OR NOT, SHALL BE PROVIDED WITH TOPSOIL AND MULCH AFTER FINAL GRADE IS REACHED.



0' 50' 100' 150'

GRAPHIC SCALE 1" = 50'

Know what's below. Call before you dig.

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
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(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

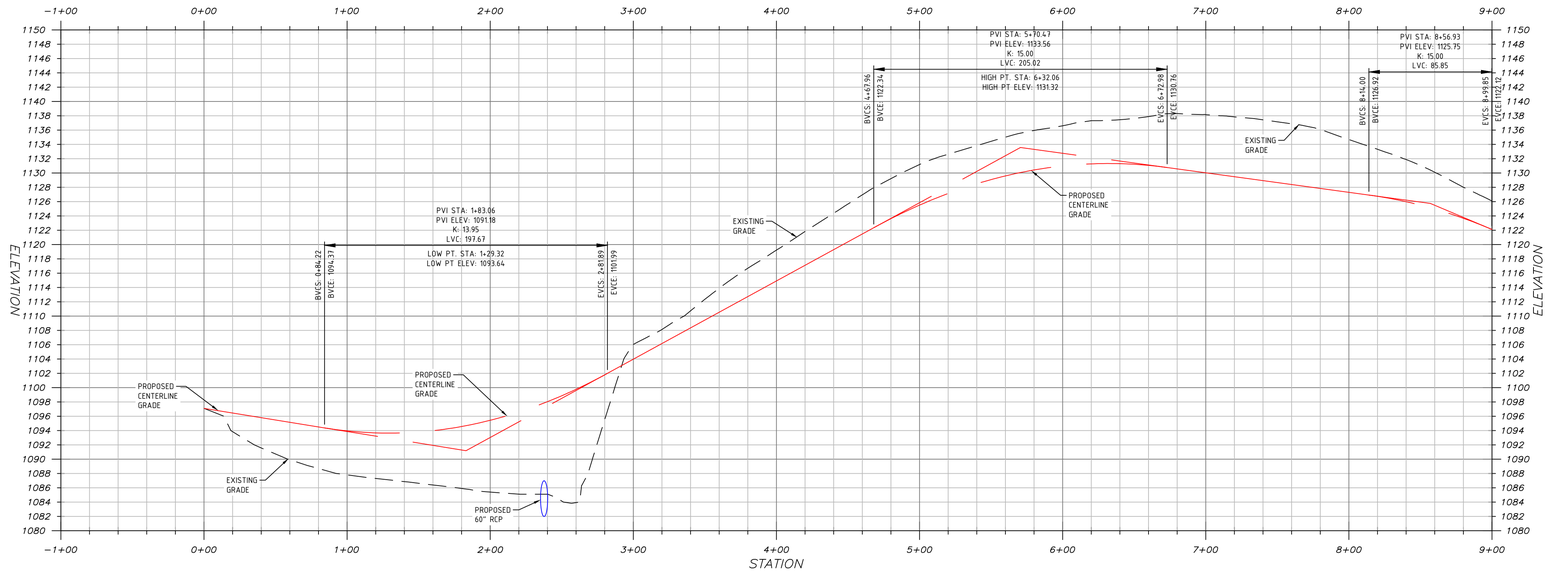
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO:	291-002-21
DATE:	1/10/2025
DRAWN BY:	RAM
CHECKED BY:	CWH

SHEET TITLE:
OVERALL SITE GRADING PLAN

SHEET NO.
D4.0

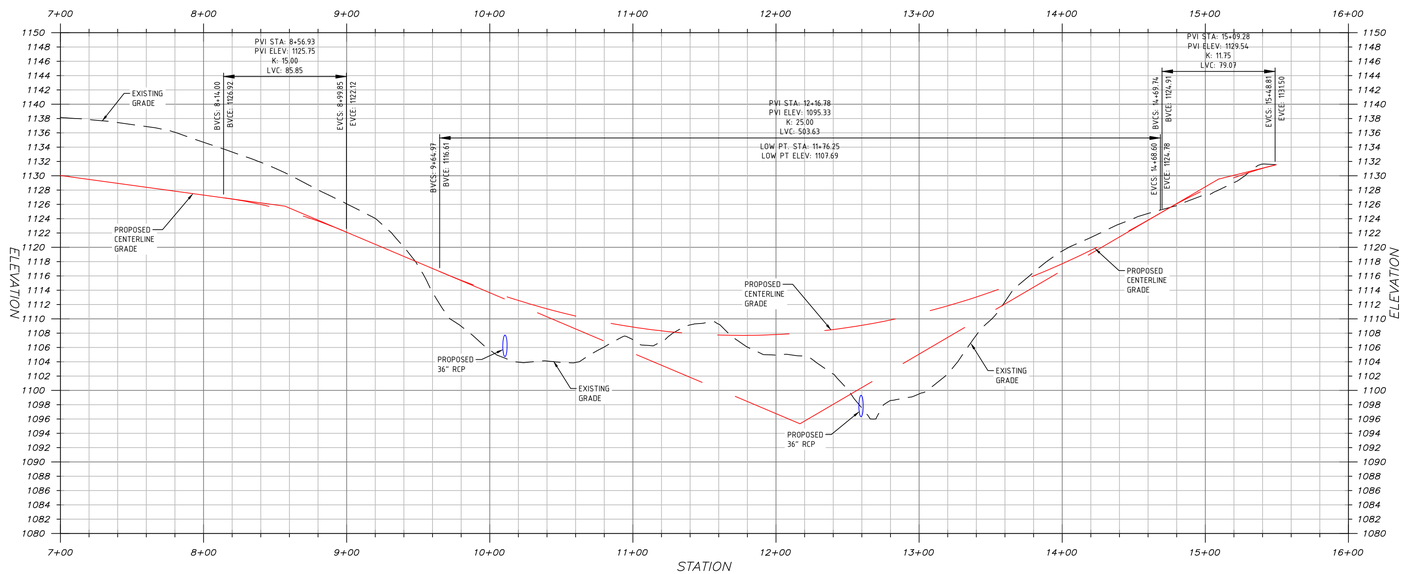
Drawbridge Lane – Sta. 0+00 to Sta. 9+00



VERTICAL GRAPHIC SCALE 1" = 10'

HORIZONTAL GRAPHIC SCALE 1" = 50'

Drawbridge Lane – Sta. 7+00 to End



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333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:

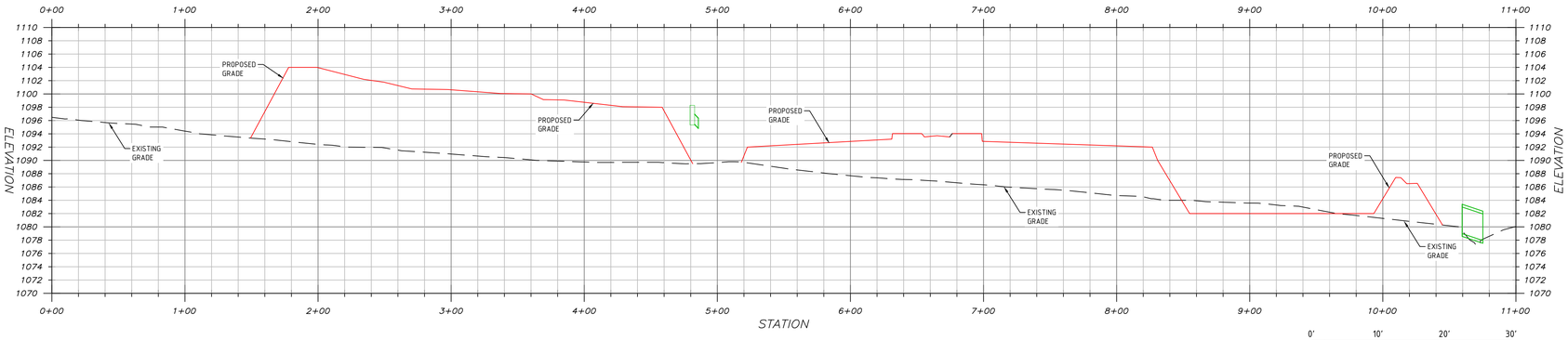
ROAD PROFILES

SHEET NO.

D4.1

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

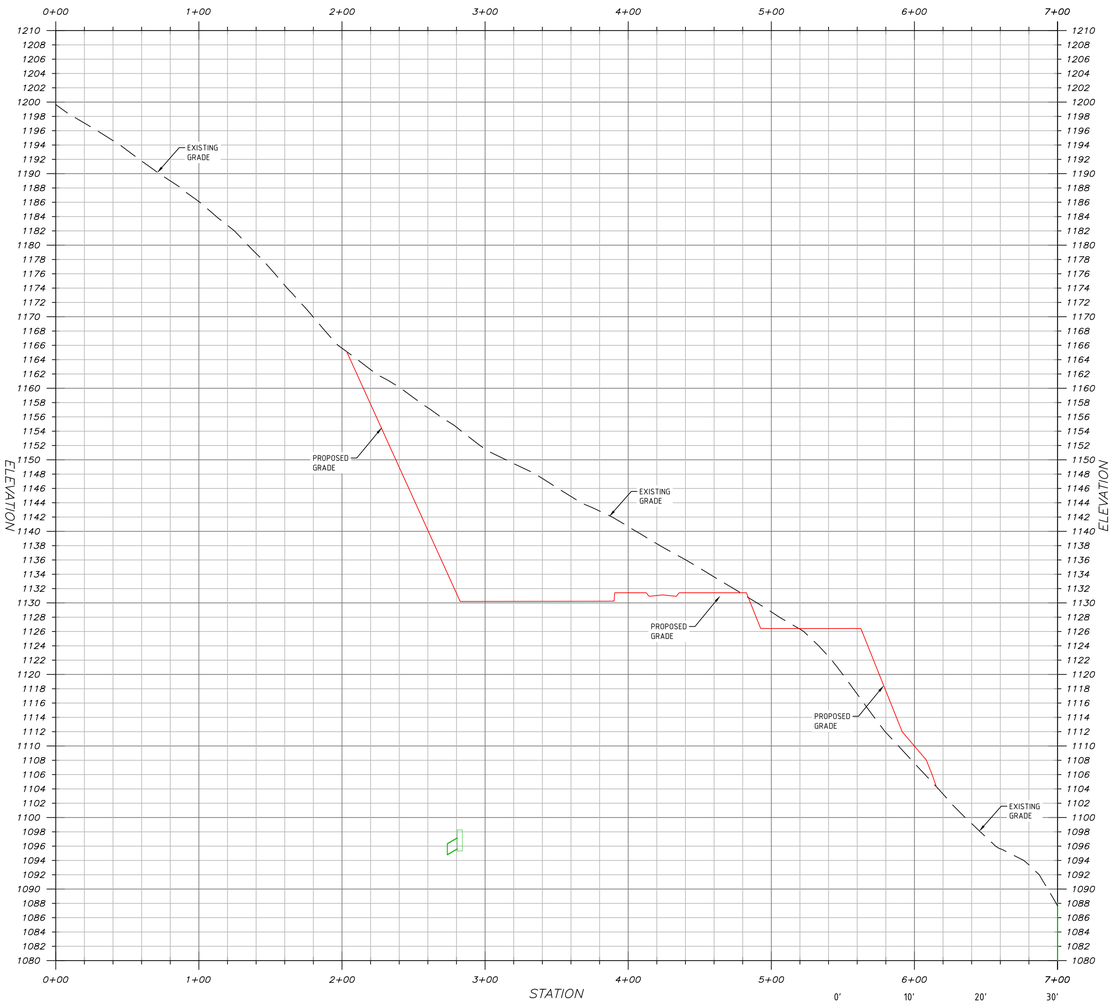
SITE CROSS SECTION A–A



0' 10' 20' 30'
VERTICAL GRAPHIC SCALE 1" = 10'

0' 50' 100' 150'
HORIZONTAL GRAPHIC SCALE 1" = 50'

SITE CROSS SECTION B–B



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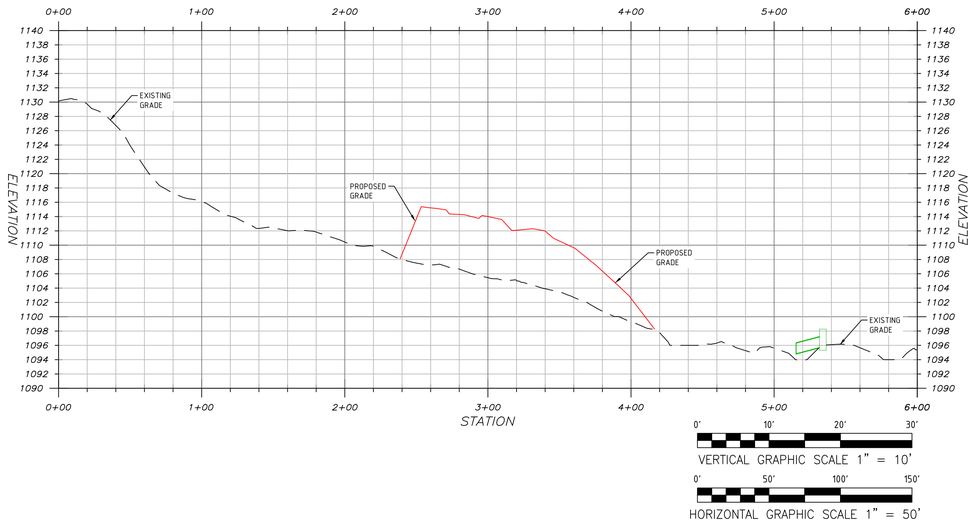
VERTICAL GRAPHIC SCALE 1" = 10'

0' 50' 100' 150'
HORIZONTAL GRAPHIC SCALE 1" = 50'

SITE CROSS SECTION C–C



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NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
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SHEET TITLE:
SITE CROSS SECTIONS

SHEET NO.
D4.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

UTILITY NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK SHOWN.
2. THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION, HORIZONTAL AND VERTICAL, AND SIZE OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK. THE CONTRATRACTOR SHALL PLACES A PENNSYLVANIA ONE CALL TO NOTIFY THE UTILITIES OF HIS INTENTIONS AND TO REQUEST REQUIRED FIELD STAKING OF EXISTING UTILITIES.
4. THE CONTRACTOR SHALL CONSTRUCT ALL SANITARY SEWER FACILITIES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND ANY OTHER LOCAL STATE OR FEDERAL CODES.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY SERVICE CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANY/OWNER, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
6. TRENCH RESPONSIBILITY INCLUDES EXCAVATIONS, BACKFILL, COMPACTION AND MAINTENANCE OF THE TRENCH.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE CONSTRUCTION SAFETY SIGNAGE WHILE WORKING IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
8. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
10. ALL PIPE LENGTHS ARE MEASURED FROM INSIDE WALL OF STRUCTURE.
11. CONTRACTOR TO EXCAVATE AT ALL UTILITY CROSSINGS PRIOR TO INSTALLATION TO CONFIRM CROSSING CAN BE INSTALLED AS SHOWN.
12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.

UTILITY TRENCHING NOTES:

1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

0' 50' 100' 150'

GRAPHIC SCALE 1" = 50'

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

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REGISTERED PROFESSIONAL
CHRISTOPHER W. HAHN
ENGINEER
PE-090435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
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333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
OVERALL UTILITY PLAN

SHEET NO.
D5.0

UTILITY NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK SHOWN.
2. THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION, HORIZONTAL AND VERTICAL, AND SIZE OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL CALL PENNSYLVANIA ONE CALL AT 1-800-242-1776 TO NOTIFY THE UTILITIES OF HIS INTENTIONS AND TO REQUEST REQUIRED FIELD STAKING OF EXISTING UTILITIES.
4. THE CONTRACTOR SHALL INSTALL ALL SANITARY SEWER FACILITIES TO MEET THE REQUIREMENTS OF THE PETERS TOWNSHIP SANITARY AUTHORITY'S RULES AND REGULATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING PROPOSED CONNECTIONS TO EXISTING FACILITIES WITH THE APPROPRIATE AGENCY, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
6. TRENCH RESPONSIBILITY INCLUDES EXCAVATIONS, BACKFILL, COMPACTION AND MAINTENANCE OF THE TRENCH.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE CONSTRUCTION SAFETY SIGNAGE WHILE WORKING IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
8. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
10. ALL PIPE LENGTHS ARE MEASURED FROM INSIDE WALL OF STRUCTURE.
11. CONTRACTOR TO EXCAVATE AT ALL UTILITY CROSSINGS PRIOR TO INSTALLATION TO CONFIRM CROSSING CAN BE INSTALLED AS SHOWN.
12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
13. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
14. DUE TO THE PROXIMITY TO THE STREAM SAN MH 26 AND SAN MH 4 SHALL HAVE WATERTIGHT LIDS.
15. ALL TERMINAL MANHOLES SHALL HAVE VENTED MANHOLE LIDS.
16. IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, SECTION 715, WHERE THE FLOOD LEVEL OF RIMS OF PLUMBING DRAINAGE FIXTURES (DENOTED BY LOWEST FINISHED FLOOR ELEVATION) ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE, BACKWATER VALVES ARE REQUIRED.
17. ALL CUT AND FILLS SHALL BE COMPLETED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER.

UTILITY NOTES:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY OF OBSERVED EVIDENCE ONLY. THE PLANS MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE PLANS FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

UTILITY TRENCHING NOTES:

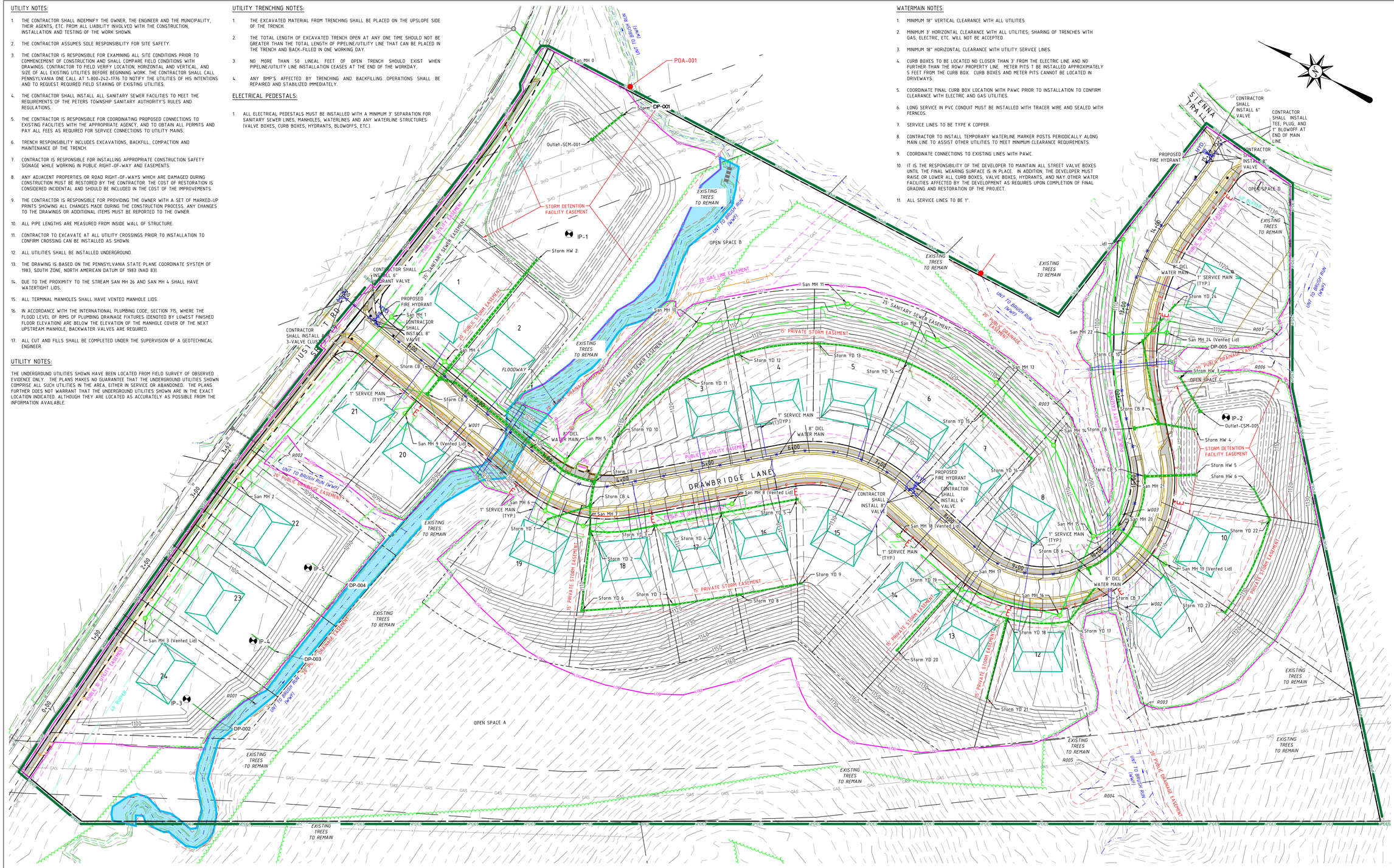
1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

ELECTRICAL PEDESTALS:

1. ALL ELECTRICAL PEDESTALS MUST BE INSTALLED WITH A MINIMUM 3' SEPARATION FOR SANITARY SEWER LINES, MANHOLES, WATERLINES AND ANY WATERLINE STRUCTURES (VALVE BOXES, CURB BOXES, HYDRANTS, BLOWOFFS, ETC.).

WATERMAIN NOTES:

1. MINIMUM 18" VERTICAL CLEARANCE WITH ALL UTILITIES
2. MINIMUM 3' HORIZONTAL CLEARANCE WITH ALL UTILITIES; SHARING OF TRENCHES WITH GAS, ELECTRIC, ETC. WILL NOT BE ACCEPTED.
3. MINIMUM 18" HORIZONTAL CLEARANCE WITH UTILITY SERVICE LINES.
4. CURB BOXES TO BE LOCATED NO CLOSER THAN 3' FROM THE ELECTRIC LINE AND NO FURTHER THAN THE ROW/ PROPERTY LINE. METER PITS T BE INSTALLED APPROXIMATELY 5 FEET FROM THE CURB BOX. CURB BOXES AND METER PITS CANNOT BE LOCATED IN DRIVEWAYS.
5. COORDINATE FINAL CURB BOX LOCATION WITH PAWC PRIOR TO INSTALLATION TO CONFIRM CLEARANCE WITH ELECTRIC AND GAS UTILITIES.
6. LONG SERVICE IN PVC CONDUIT MUST BE INSTALLED WITH TRACER WIRE AND SEALED WITH FERNCOS.
7. SERVICE LINES TO BE TYPE K COPPER.
8. CONTRACTOR TO INSTALL TEMPORARY WATERLINE MARKER POSTS PERIODICALLY ALONG MAIN LINE TO ASSIST OTHER UTILITIES TO MEET MINIMUM CLEARANCE REQUIREMENTS.
9. COORDINATE CONNECTIONS TO EXISTING LINES WITH PAWC.
10. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO MAINTAIN ALL STREET VALVE BOXES UNTIL THE FINAL WEARING SURFACE IS IN PLACE. IN ADDITION, THE DEVELOPER MUST RAISE OR LOWER ALL CURB BOXES, VALVE BOXES, HYDRANTS, AND NAY OTHER WATER FACILITIES AFFECTED BY THE DEVELOPMENT AS REQUIRES UPON COMPLETION OF FINAL GRADING AND RESTORATION OF THE PROJECT.
11. ALL SERVICE LINES TO BE 1".



0' 50' 100' 150'

GRAPHIC SCALE 1" = 50'

811 Know what's below. Call before you dig.

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P: 878.295.8914 F:724.514.7047
www.kdhengineers.com

REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE-080435 COMMONWEALTH OF PENNSYLVANIA

REVISIONS:	REV	DATE	DESCRIPTION
	1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

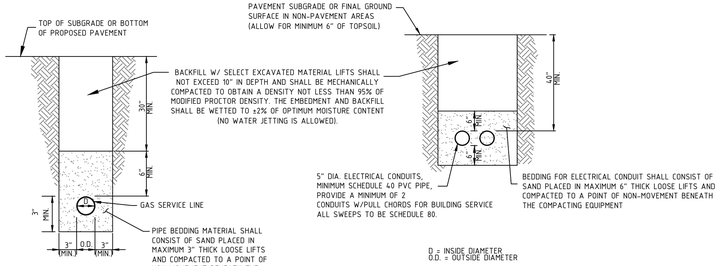
NEWCASTLE

PETERS TOWNSHIP, WASHINGTON COUNTY, PA

PROJ NO:	291-002-21
DATE:	1/10/2025
DRAWN BY:	RAM
CHECKED BY:	CWH

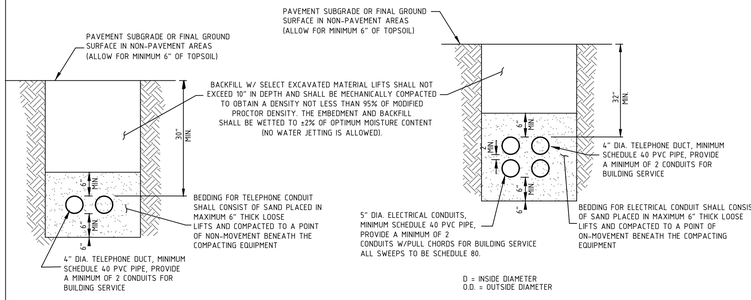
SHEET TITLE:
WATER MAIN PLAN

SHEET NO.
D5.1



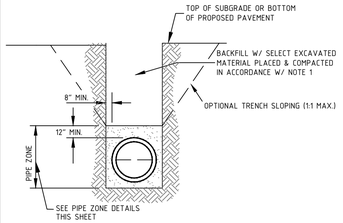
GAS SERVICE LINE

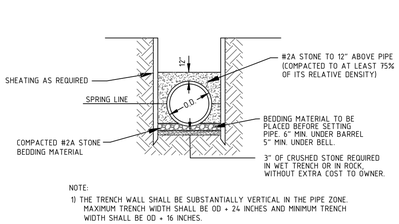
ELECTRIC SERVICE LINE



TELEPHONE SERVICE LINE

COMBINED ELECTRIC AND TELEPHONE SERVICE LINE





STORM SEWER TRENCH SECTION

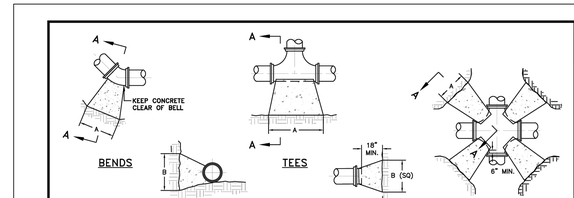
NOTE:
1) THE TRENCH WALL SHALL BE SUBSTANTIALLY VERTICAL IN THE PIPE ZONE. MAXIMUM TRENCH WIDTH SHALL BE OD + 24 INCHES AND MINIMUM TRENCH WIDTH SHALL BE OD + 16 INCHES.

1. LIFTS SHALL NOT EXCEED 10" IN DEPTH AND SHALL BE MECHANICALLY COMPACTED TO OBTAIN A DENSITY NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY. THE EMBEDMENT AND BACKFILL SHALL BE WETTED TO ±2% OF OPTIMUM MOISTURE CONTENT (NO WATER JETTING IS ALLOWED).
2. THE TRENCH WALL SHALL BE SUBSTANTIALLY VERTICAL IN THE PIPE ZONE. MAXIMUM TRENCH WIDTH (W) SHALL BE O.D. + 24" AND MINIMUM TRENCH SHALL BE O.D. + 16".

PIPE ZONE FOR STORM SEWER

3. NO ROCK WILL BE PERMITTED IN BACKFILL IN THE ZONE FROM BOTTOM OF TRENCH TO 2' ABOVE THE PIPE NOR IN THE TOP 18" OF TRENCH BACKFILL AT THE GROUND SURFACE. ROCK MAY BE PLACED ELSEWHERE IN THE BACKFILL PROVIDED THE SIZE OF PIECES IN THE LARGEST DIMENSION DOES NOT EXCEED 12".
4. SLOPING OF THE TRENCH SIDES ABOVE THE PIPE ZONE WILL BE ALLOWED.

TYPICAL UTILITY TRENCH DETAILS — NOT TO SCALE — 1 / D5.2



REQUIRED BEARING AREA ON UNDISTURBED SOIL AND TYPICAL DIMENSIONS

SIZE	CROSSES/90° BENDS			45° BENDS			11–1/4° BENDS			22–1/2° BENDS			TEES & PLUGS		
	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"	AREA SQ. FT.	"A"	"B"
6"	4.0	32"	18"	2.2	18"	16"	0.6	5"	18"	1.1	9"	18"	2.8	23"	18"
8"	7.0	42"	24"	3.8	23"	24"	1.0	6"	24"	2.0	12"	24"	5.0	30"	24"
10"	11.0	53"	30"	6.3	30"	30"	1.6	8"	30"	3.1	15"	30"	8.0	38"	30"
12"	16.1	64"	36"	10.0	40"	36"	2.2	9"	36"	4.4	18"	36"	11.3	45"	36"
14"	21.6	74"	42"	12.5	43"	42"	3.0	10"	42"	6.0	21"	42"	15.5	53"	42"
16"	28.3	85"	48"	17.7	53"	48"	4.0	12"	48"	7.7	23"	48"	20.1	60"	48"

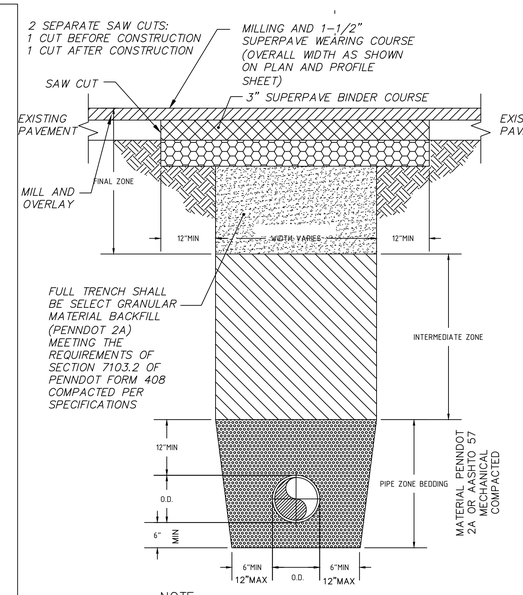
* SURFACE AREA OF BEARING SOIL IS PROVIDED FOR 200 PSI MAXIMUM PRESSURE (INCLUDING SURGE) AND 2000 PSF SOIL BEARING. IF PRESSURE IS HIGHER OR SOIL BEARING IS POTENTIALLY LOWER, CONSULT THE ENGINEER FOR ADJUSTMENTS.

NOTES:

1. COVER OVER TOP OF PIPE SHALL BE BELOW THE FROST LINE OR 30" MINIMUM, 72" MAXIMUM ACCORDING TO REGULATORY REQUIREMENTS. IF GRADING PLANS RECEIVED BY THE ENGINEER/OWNER WITH THE REQUEST FOR WATER MAIN LAYOUT INDICATE ADJUSTMENTS TO EXISTING GRADE, THEN PIPE SHALL BE INSTALLED TO MEET MINIMUM AND MAXIMUM COVER FROM PROPOSED GRADES SHOWN ON THE SAID PLANS.
2. THRUST BLOCKS SHALL BE BUILT AGAINST UNDISTURBED SOIL WITH ADEQUATE BACKING TO PREVENT MOVEMENT OF FITTING.
3. NO THRUST BLOCKS TO BE PLACED IN SEWER LATERAL DITCHES.
4. THRUST BLOCKING MUST FIT WITHIN THE EASEMENT.
5. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED BASED ON 150 PSI STATIC PRESSURE, PLUS 50 PSI WATER HAMMER AND 2000 PSF SOIL BEARING.
6. POLYETHYLENE ENCASEMENT IS REQUIRED ON ALL D.I. PIPE AND FITTINGS.
7. THRUST BLOCKING SHALL BE PERFORMED SUCH THAT PIPE JOINTS AND BOLTS ARE ACCESSIBLE.
8. SUFFICIENT CLEARANCE SHALL BE ALLOWED BETWEEN CONCRETE AND BOLTS FOR FUTURE MAINTENANCE.
9. ALL ANCHOR BOLTS SHALL BE STAINLESS STEEL, MINIMUM 3/4" DIAMETER.
10. ALL M.J. AND FLG. FITTINGS TO RECEIVE THRUST BLOCKS SHALL BE WRAPPED IN POLYWRAP. CONTRACTOR SHALL ENSURE THAT POLYWRAP EXTENDS FAR ENOUGH BEYOND THE FITTING TO ENCLOSE ALL BOLTS WITHIN THE POLYWRAP.
11. THRUST BLOCKING DETAILS ARE SHOWN HERE FOR TYPICAL INSTALLATIONS. IN SOME CASES, ADDITIONAL RESTRAINT MAY BE REQUIRED.
12. PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN 3000 PSI CONCRETE.
13. FOR UNSTABLE SOIL CONDITIONS, CHECK WITH ENGINEER FOR THRUST BLOCK DIMENSIONS.
14. FOR MAIN SIZES GREATER THAN 16", SEE ENGINEER FOR THRUST BLOCK DIMENSIONS.

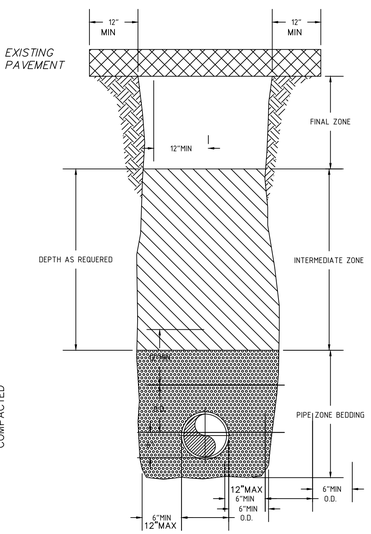
THRUST BLOCK DETAIL

REVISIONS	AMERICAN WATER MILITARY SERVICES GROUP CIVIL THRUST BLOCK DETAILS
1/16 – MSG EDITS	AMERICAN WATER MILITARY SERVICES GROUP CAMDEN, NJ 08102
	AMERICAN WATER M.S.G. 1 WATER STREET CAMDEN, NJ 08102 — AMERICAN WATER
	DRAWN BY J. ALAM PROJECT ENG'R PDK APPROVED — DATE 05-03-2010 PROJECT N/A — USE DIMENSIONS ONLY SCALE N.T.S.
	USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES — MSG-W-08
	FINAL — MSG-W-08



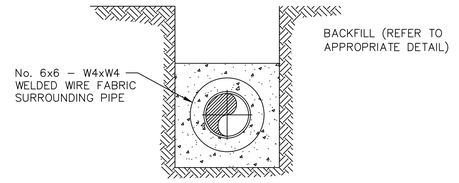
NOTE:
ALL ROADWAY TRAFFIC LINES AND MARKINGS SHALL BE REPLACED IN KIND (WORK IS INCIDENTAL TO CONSTRUCTION)

BITUMINOUS PAVEMENT TRENCH RESTORATION TYPICAL CROSS SECTION

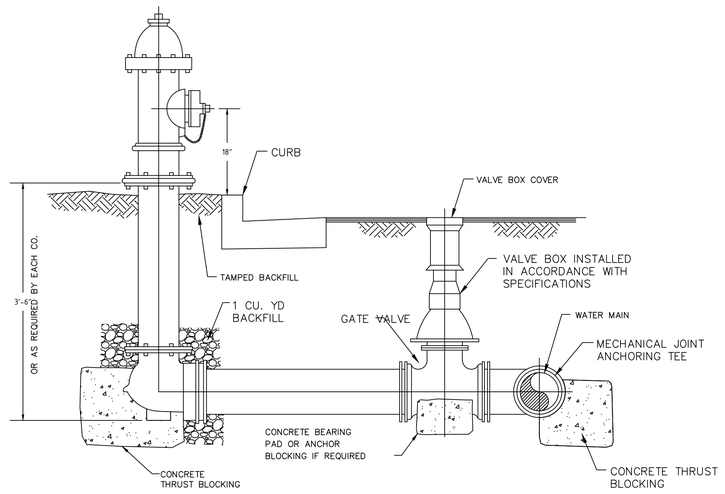


RESTORATION DETAILS
VBRATORY COMPACTED (4" LIFTS) PENNDOT 2A OR AASHTO 57 TRENCH BACKFILL (IMPROVED AREAS) APPROVED TRENCH BACKFILL (UNIMPROVED AREA)

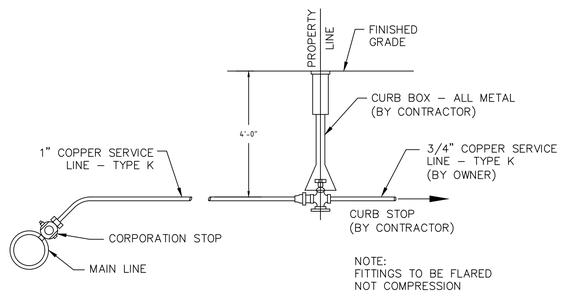
TYPICAL TRENCH AND PIPE ZONE



REINFORCED CONCRETE ENCASEMENT AROUND LINE (IF NEEDED)

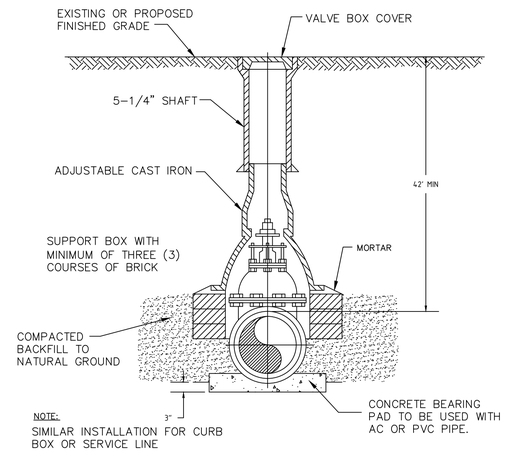


FIRE HYDRANT DETAIL



NOTE:
FITTINGS TO BE FLARED NOT COMPRESSION

SERVICE LINE INSTALLATION DETAIL



NOTE:
SIMILAR INSTALLATION FOR CURB BOX OR SERVICE LINE

TYPICAL VALVE BOX INSTALLATION DETAIL

KDH CONSULTING ENGINEERS, INC
593 ROUGH STREET
GREENSBURG, PA 15601
P: 878-295-8914 F:724-514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CHRISTOPHER W. HAMM — ENGINEER — PE-080435

REVISIONS:			
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	
REV	DATE	DESCRIPTION	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP, WASHINGTON COUNTY, PA

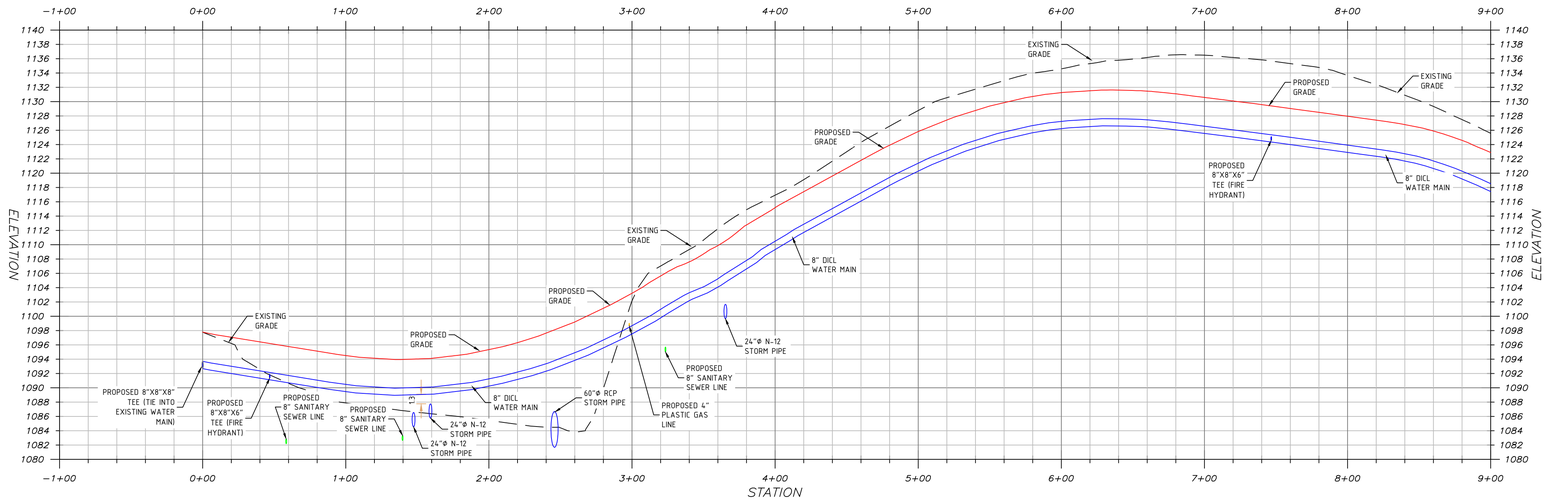
PROJ NO: 291–002–21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

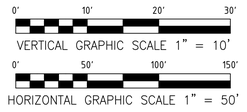
SHEET TITLE:
UTILITY DETAILS

SHEET NO.
D5.2

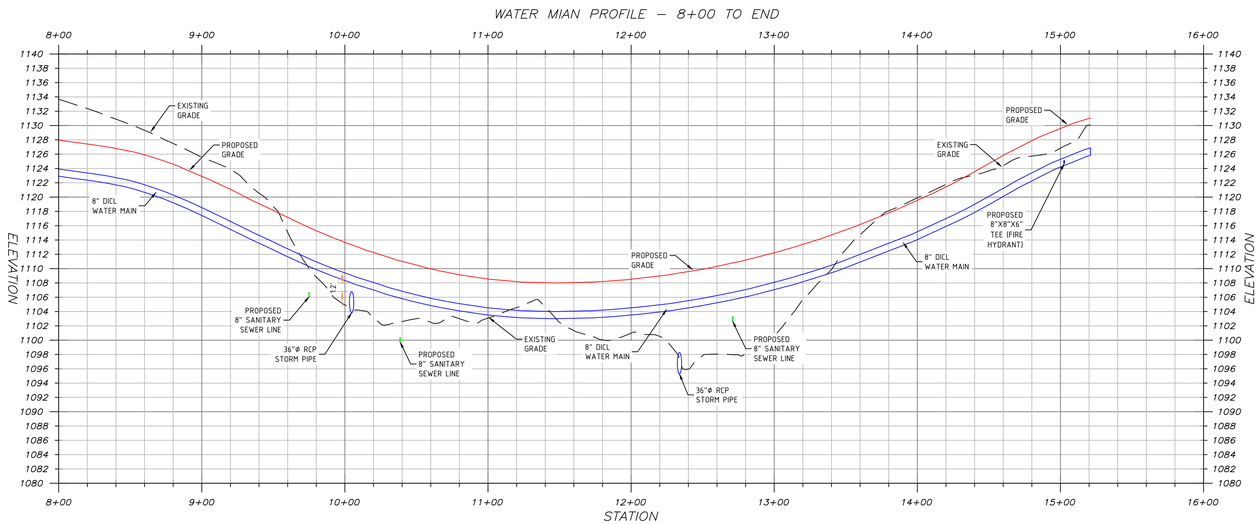
S:\PROJECTS\291–002–21–HABEN PROPERTY –NEW CASTLE\DRAWINGS\291–002–21–BASE–250407.DWG

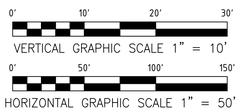
WATER MIAN PROFILE – 0+00 TO 9+00





WATER MIAN PROFILE – 8+00 TO END





WATERMAIN NOTES:

1. MINIMUM 18" VERTICAL CLEARANCE WITH ALL UTILITIES
2. MINIMUM 3' HORIZONTAL CLEARANCE WITH ALL UTILITIES; SHARING OF TRENCHES WITH GAS, ELECTRIC, ETC. WILL NOT BE ACCEPTED.
3. MINIMUM 18" HORIZONTAL CLEARANCE WITH UTILITY SERVICE LINES.
4. CURB BOXES TO BE LOCATED NO CLOSER THAN 3' FROM THE ELECTRIC LINE AND NO FURTHER THAN THE ROW/ PROPERTY LINE. METER PITS T BE INSTALLED APPROXIMATELY 5 FEET FROM THE CURB BOX. CURB BOXES AND METER PITS CANNOT BE LOCATED IN DRIVEWAYS.
5. COORDINATE FINAL CURB BOX LOCATION WITH PAWC PRIOR TO INSTALLATION TO CONFIRM CLEARANCE WITH ELECTRIC AND GAS UTILITIES.
6. LONG SERVICE IN PVC CONDUIT MUST BE INSTALLED WITH TRACER WIRE AND SEALED WITH FERNCOS.
7. SERVICE LINES TO BE TYPE K COPPER.
8. CONTRACTOR TO INSTALL TEMPORARY WATERLINE MARKER POSTS PERIODICALLY ALONG MAIN LINE TO ASSIST OTHER UTILITIES TO MEET MINIMUM CLEARANCE REQUIREMENTS.
9. COORDINATE CONNECTIONS TO EXISTING LINES WITH PAWC.
10. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO MAINTAIN ALL STREET VALVE BOXES UNTIL THE FINAL WEARING SURFACE IS IN PLACE. IN ADDITION, THE DEVELOPER MUST RAISE OR LOWER ALL CURB BOXES, VALVE BOXES, HYDRANTS, AND NAY OTHER WATER FACILITIES AFFECTED BY THE DEVELOPMENT AS REQUIRES UPON COMPLETION OF FINAL GRADING AND RESTORATION OF THE PROJECT.
11. ALL SERVICE LINES TO BE 1".

KDH CONSULTING ENGINEERS, INC
593 ROUGH STREET
GREENSBURG, PA 15601
P: 878-295-8914 F:724-514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-090435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
WATER MAIN PROFILES

SHEET NO.
D5.3

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

STORMWATER SYSTEM NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK SHOWN.
2. THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION, HORIZONTAL AND VERTICAL, AND SIZE OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL CALL PENNSYLVANIA ONE CALL AT 1-800-242-1776 TO NOTIFY THE UTILITIES OF HIS INTENTIONS AND TO REQUEST REQUIRED FIELD STAKING OF EXISTING UTILITIES.
4. THE CONTRACTOR SHALL CONSTRUCT ALL STORM DRAINAGE FACILITIES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND ANY OTHER LOCAL STATE OR FEDERAL CODES.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING PROPOSED CONNECTIONS TO EXISTING FACILITIES WITH THE APPROPRIATE AGENCY, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
6. TRENCH RESPONSIBILITY INCLUDES EXCAVATIONS, BACKFILL, COMPACTION AND MAINTENANCE OF THE TRENCH.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE CONSTRUCTION SAFETY SIGNAGE WHILE WORKING IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
8. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
10. ALL PIPE LENGTHS ARE MEASURED FROM INSIDE WALL OF STRUCTURE.
11. THE ORIENTATION OF THE INLETS SHALL REMAIN CONSISTENT, AS SHOWN ON THE PLANS, TO PROVIDE OPTIMUM DRAINAGE CONTROL. ANY ACCOMMODATIONS REQUIRED FOR LARGER PIPE SIZES AND/OR PIPE CONFIGURATION SHALL BE ADDRESSED BY USING MODIFIED STRUCTURES IN ACCORDANCE WITH THE RC STANDARDS.
12. SEE "PADOT STANDARDS FOR ROADWAY CONSTRUCTION" CURRENT EDITION FOR DETAILS PERTAINING TO TYPE C AND TYPE M INLETS AND STORM SEWER MANHOLES. MATERIALS AND SIZING OF STRUCTURES SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
13. CONTRACTOR TO EXCAVATE AT ALL UTILITY CROSSINGS PRIOR TO INSTALLATION TO CONFIRM CROSSING CAN BE INSTALLED AS SHOWN.
14. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATION SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICA DATUM OF 1983 (NAD 83).
15. INLETS AT LOW POINTS ARE REQUIRED TO BE HOODED, SE CD-9 ON SHEET D6.x. HOODED INLETS SHALL BE INSTALLED WITH A 4' SPECIAL INLET X (2'-10" X 4'). STORM INLETS XXXXX WILL BE REQUIRED TO BE HOODED.
16. ALL CUTS AND FILLS SHALL BE COMPLETED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER.

STORMWATER FACILITY OWNERSHIP & OPERATION REQUIREMENTS:

1. THE STORM WATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS SHALL BE CONSTRUCTED, MAINTAINED AND OPERATED BY THE OWNER / DEVELOPER OF THE PROPERTY, EASEMENT AND/OR LAND CONTAINING SAID FACILITIES. IT IS INTENDED THAT THE OWNERSHIP AND/OR MAINTENANCE OF THE FACILITIES INCLUDE ALL ON-SITE BMPS, BE RETAINED BY THE OWNER / DEVELOPER. THE MAINTENANCE RESPONSIBILITIES SPECIFIED HEREON SHALL BE TRANSFERRED WITH ANY FUTURE CHANGE IN OWNERSHIP. ANY DEED TRANSFER OF SAID PROPERTY CONTAINING STORMWATER FACILITIES AND/OR EASEMENTS SHALL SPECIFICALLY REFERENCE THE MAINTENANCE REQUIREMENTS ASSOCIATED WITH THIS PLAN.
2. MAINTENANCE AND OPERATION REQUIREMENTS FOR EACH FACILITY ARE SPECIFIED HEREON WHERE APPROPRIATE AS PART OF THESE PLANS.

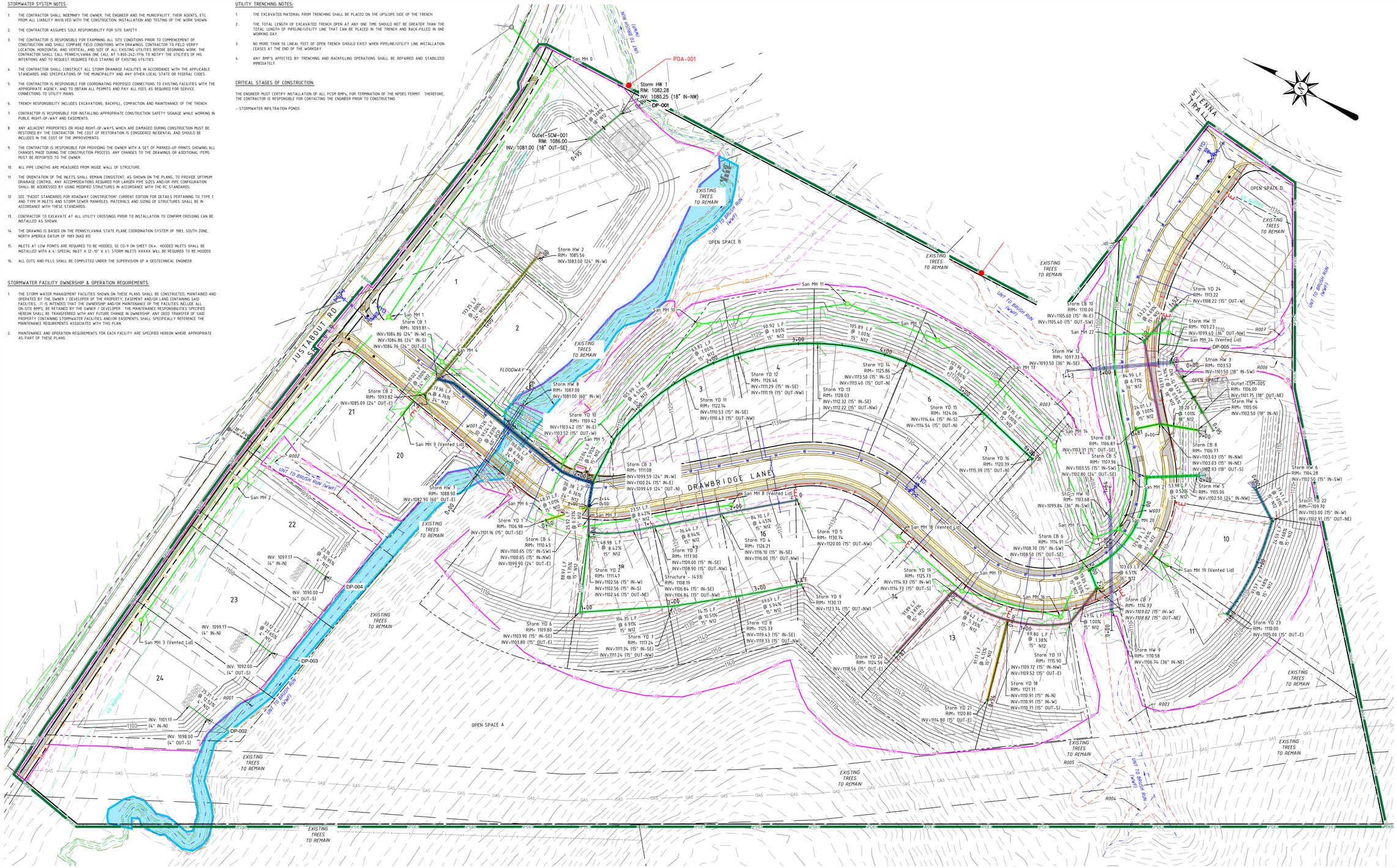
UTILITY TRENCHING NOTES:

1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

CRITICAL STAGES OF CONSTRUCTION:

THE ENGINEER MUST CERTIFY INSTALLATION OF ALL PCSM BMPs, FOR TERMINATION OF THE NPDES PERMIT. THEREFORE, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEER PRIOR TO CONSTRUCTING:

- STORMWATER INFILTRATION PONDS



0' 50' 100' 150'

GRAPHIC SCALE 1" = 50'

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

Know what's below. Call before you dig.

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878 295 8914 F:724 514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAHN
ENGINEER
PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

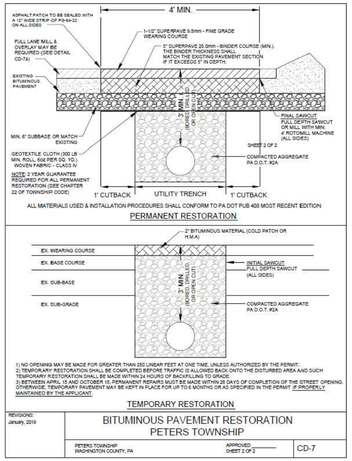
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO:	291-002-21
DATE:	1/10/2025
DRAWN BY:	RAM
CHECKED BY:	CWH

SHEET TITLE:
OVERALL STORM SEWER PLAN

SHEET NO.
D6.0

SUBDIVISION AND LAND DEVELOPMENT



REVISIONS: January, 2019

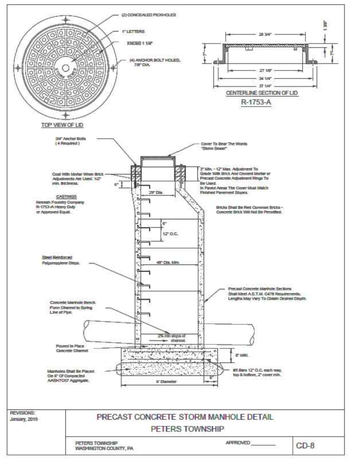
BITUMINOUS PAVEMENT RESTORATION
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____
SHEET 2 OF 2

CD-7

PETERS TOWNSHIP CODE



REVISIONS: January, 2019

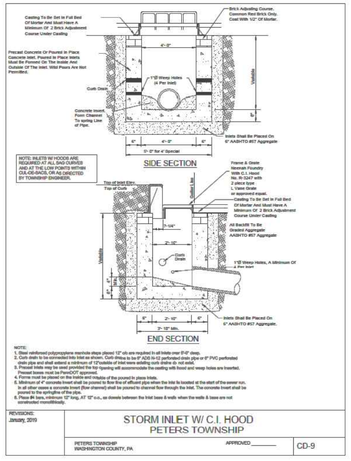
PRECAST CONCRETE STORM MANHOLE DETAIL
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-8

SUBDIVISION AND LAND DEVELOPMENT


Casting To Be Set In Full Bed Of Mortar And Adjustments Shall Be Made With Brick Adjustments. Minimum Of 2 Brick Adjustment Course Under Casting
Precast Concrete Or Poured In Place Concrete Inlet, Poured In Place Walls Shall Be Used If Inlet Is Greater Than 6' Outside Of Pipe Inlet. Mild Plans Are Not Permitted.
Curb Grate
Concrete Invert Form Channel To spring Line of Pipe.
1"Ø Weep Holes In Pre Inlet
SIDE SECTION
Inlets Shall Be Placed On 6" AASHTO #57 Aggregate
NOTE: INLETS W/ HOODS ARE REQUIRED AT ALL END CURVES AND AT THE LOW POINTS WITHIN THE STREET UNLESS NOTED BY TOWNSHIP ENGINEER.
Trap w/ Inlet Extension
Trap w/ Curb Opening
Brick Adjusting Course, Common Red Brick Only, Coat With 1/2" Of Mortar.
Frame & Grate: Neenah Foundry R-3067-A Type C, No. W-1247 with 2 piece type Curb Box Hood or equivalent Hood.
Casting To Be Set In Full Bed Of Mortar And Adjust Here A Minimum Of 2 Brick Adjustment Course Under Casting
All Backfill To Be Compacted Aggregate AASHTO #57 Aggregate
1"Ø Weep Holes, A Minimum Of 4 Per Inlet
Curb Grate
Inlets Shall Be Placed On 6" AASHTO #57 Aggregate.
END SECTION
NOTE:
1. Steel reinforced polypropylene manhole steps placed 12" o/c are required in all inlets over 5'-0" deep.
2. Curb inlet grates shall be Neenah Foundry R-3067-A, Curb Pintle is be 8" ACS to 12 perforated invert pipe or 8" PVC perforated pipe and shall extend a minimum of 6" outside of inlet were existing curb drains do not exist.
3. Precast Inlets may be used provided that top opening will accommodate the casting with hood and weep holes are inverted.
4. Precast bases must be PennDOT approved.
5. Forms must be placed on the inlets and outlets of the pyramid to place inlets.
6. Pipe shall be centered in the inlet wall and the invert of the pipe shall be even with the inlet its located at the-start of the sewer run. In all other cases a concrete invert (floor channel) shall be poured to channel flow through the inlet. The concrete invert shall be poured to the springline of the pipe.
7. Pipe Sizes Shall Be 12" Reg. &12" o.c., as closely between the inlet base & walls when the walls & bases are not constructed monolithically.

REVISIONS: January, 2019

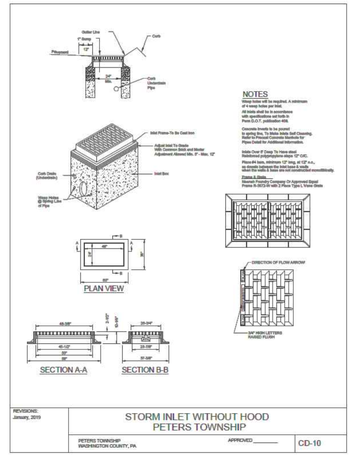
STORM INLET W/ C.I. HOOD
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-9

PETERS TOWNSHIP CODE



REVISIONS: January, 2019

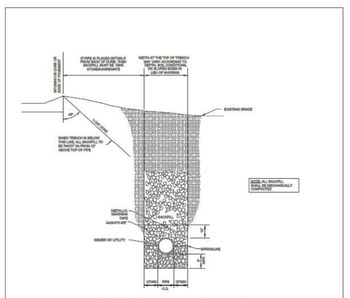
STORM INLET WITHOUT HOOD
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-10

SUBDIVISION AND LAND DEVELOPMENT



REVISIONS: January, 2019

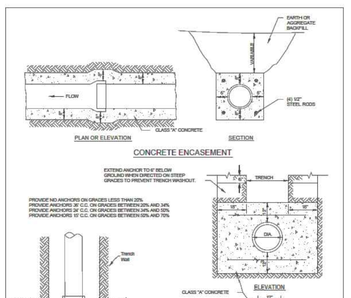
PIPE TRENCHING & BEDDING DETAIL
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-11

PETERS TOWNSHIP CODE



REVISIONS: January, 2019

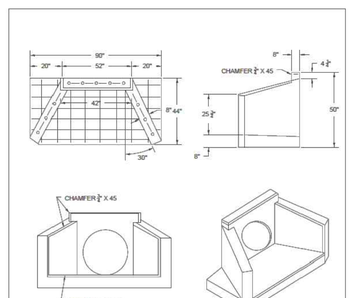
CONCRETE ENCASEMENT & ANCHORS FOR SEWERS
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-12

PETERS TOWNSHIP CODE



REVISIONS: January, 2019

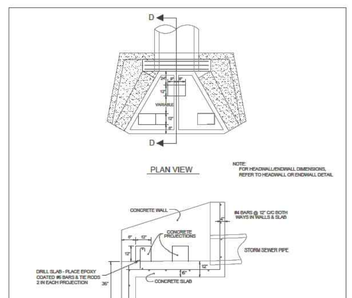
ENDWALL OR HEADWALL DETAIL
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-14

SUBDIVISION AND LAND DEVELOPMENT



REVISIONS: January, 2006 January, 2019

CONCRETE ENDWALL WITH ENERGY DISSIPATER
PETERS TOWNSHIP

PETERS TOWNSHIP
WASHINGTON COUNTY, PA.

APPROVED _____

CD-15

KDH CONSULTING ENGINEERS, INC
593 ROUGH STREET
GREENSBURG, PA 15601
P: 878-295-8914 F:724-514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAHN
ENGINEER
PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

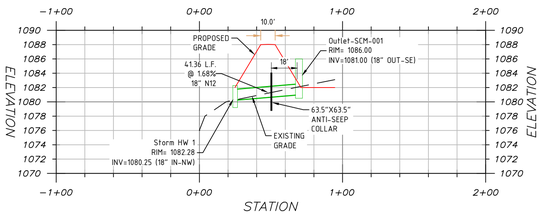
PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
STORM SEWER DETAILS

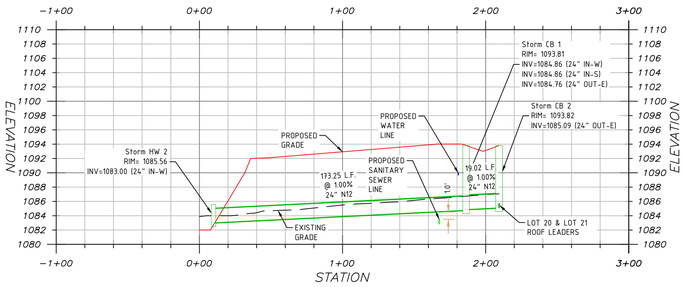
SHEET NO.
D6.1

S: \PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

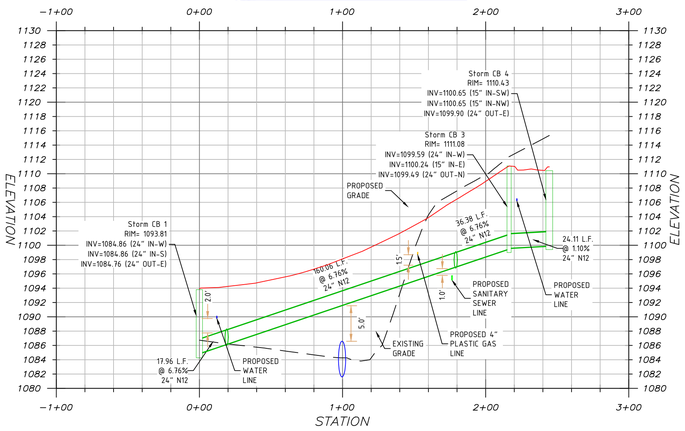
Storm HW 1 to Outlet – Pond 1



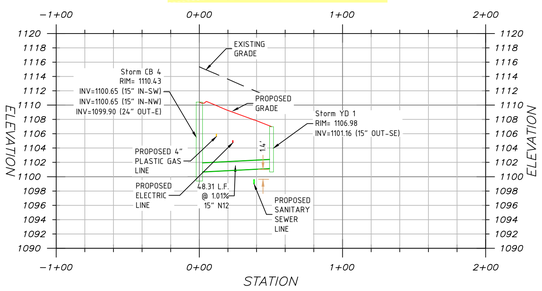
Storm HW 2 to Storm CB 2



Storm CB 1 to Storm CB 4



Storm CB 4 to Storm YD 1



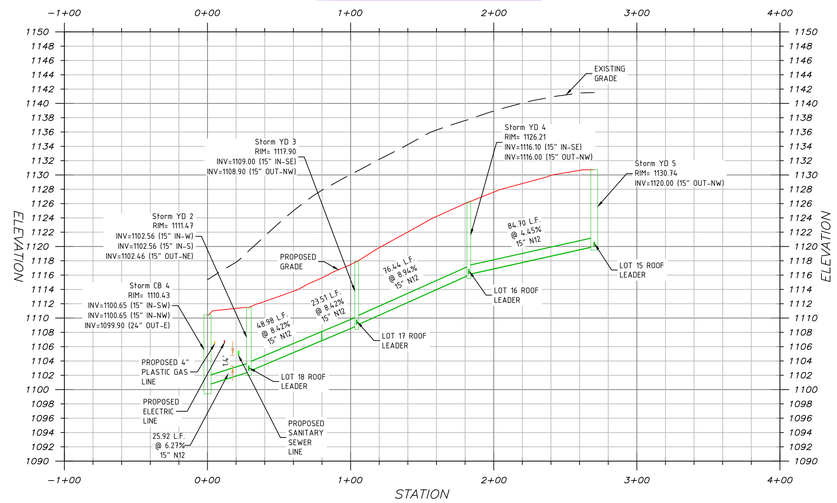
0' 10' 20' 30'

VERTICAL GRAPHIC SCALE 1" = 10'

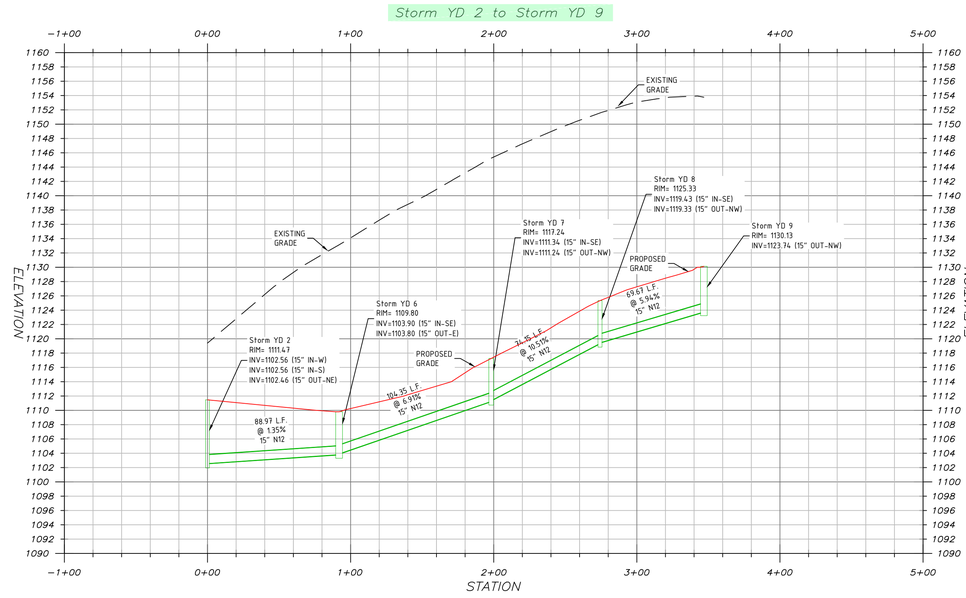
0' 50' 100' 150'

HORIZONTAL GRAPHIC SCALE 1" = 50'

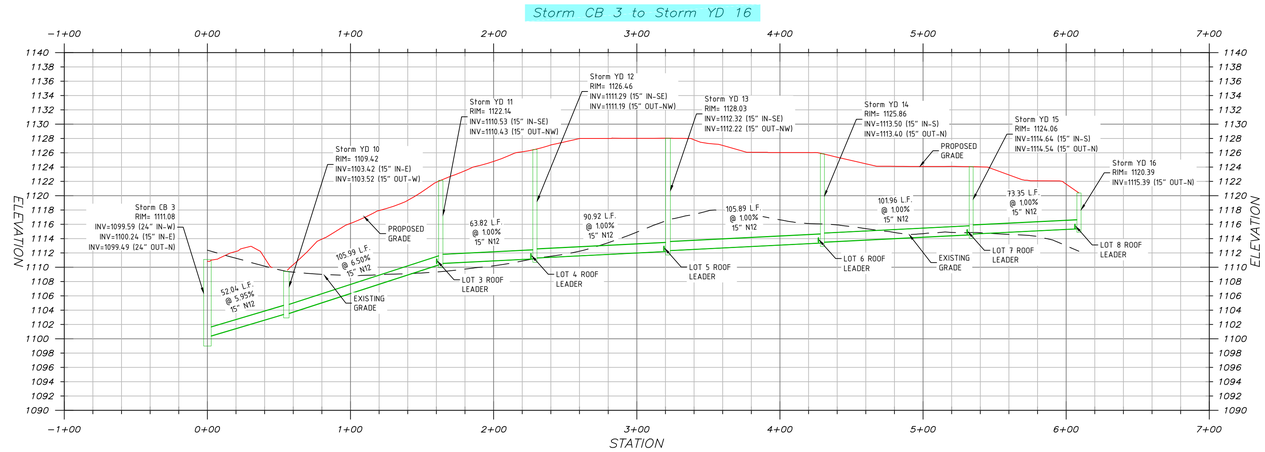
Storm CB 4 to Storm YD 5



Storm YD 2 to Storm YD 9



Storm CB 3 to Storm YD 16



KDH CONSULTING ENGINEERS, INC
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COMMONWEALTH OF PENNSYLVANIA
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CHRISTOPHER W. HAUN
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REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

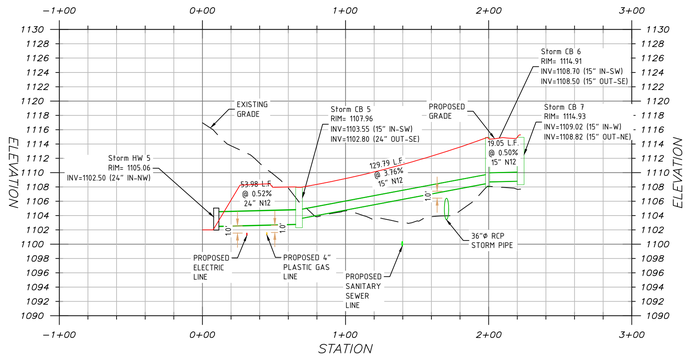
PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
STORM SEWER PROFILES

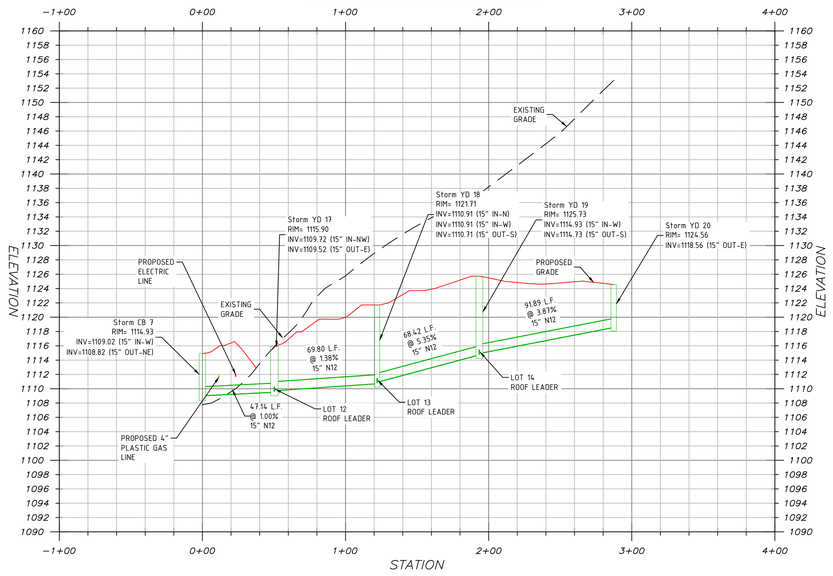
SHEET NO.
D6.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

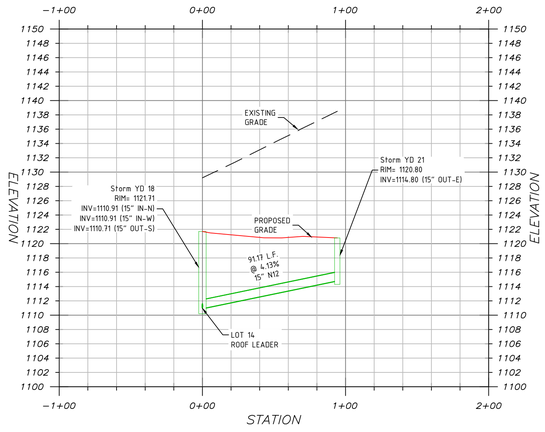
Storm HW 5 to Storm CB 7



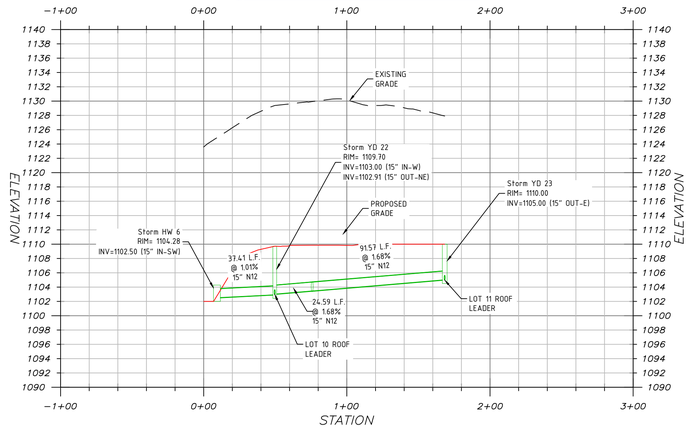
Storm CB 7 to Storm YD 20



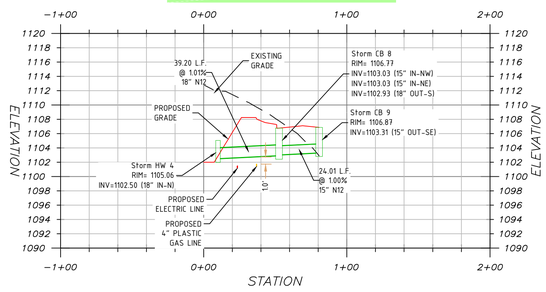
Storm YD 18 to Storm YD 21



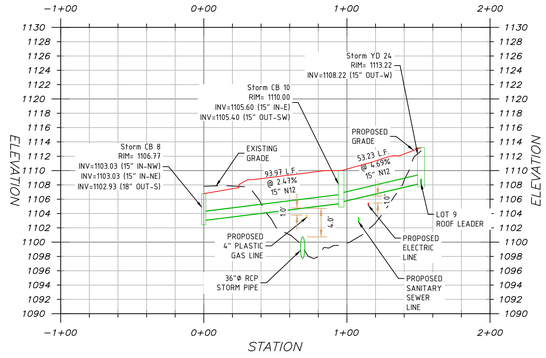
Storm HW 6 to Storm YD 23



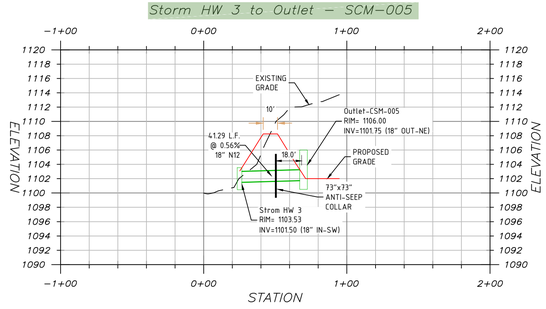
Storm HW 4 to Storm CB 9



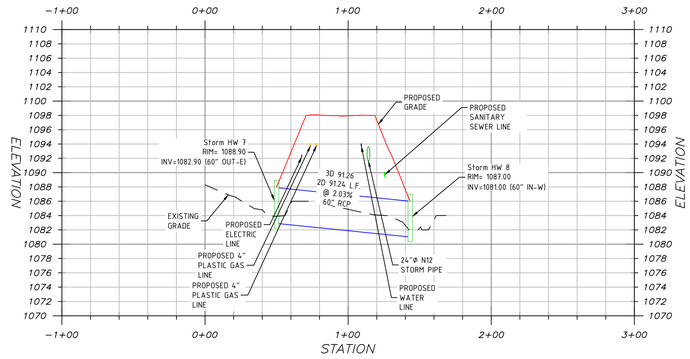
Storm CB 8 to Storm YD 24



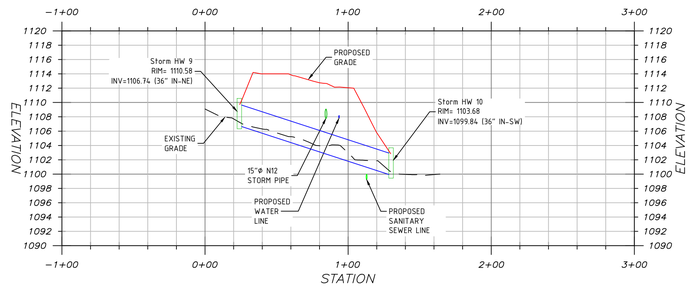
Storm HW 3 to Outlet – SCM-005



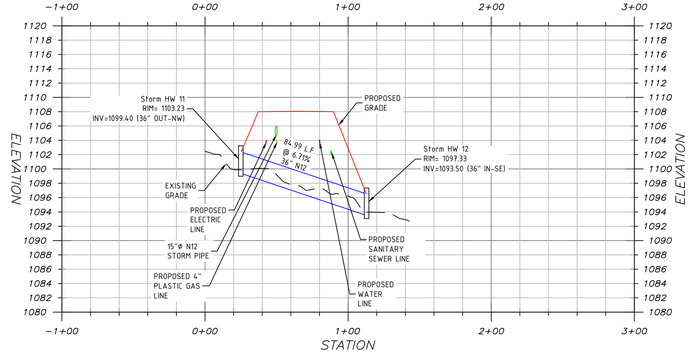
Stream Crossing #1



Stream Crossing #2



Stream Crossing #3



0' 10' 20' 30'
VERTICAL GRAPHIC SCALE 1" = 10'

0' 50' 100' 150'
HORIZONTAL GRAPHIC SCALE 1" = 50'

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COMMONWEALTH OF PENNSYLVANIA
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REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
STORM SEWER PROFILES

SHEET NO.
D6.3

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

UTILITY NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK SHOWN.
2. THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION, HORIZONTAL AND VERTICAL, AND SIZE OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL CALL PENNSYLVANIA ONE CALL AT 1-800-242-1776 TO NOTIFY THE UTILITIES OF HIS INTENTIONS AND TO REQUEST REQUIRED FIELD STAKING OF EXISTING UTILITIES.
4. THE CONTRACTOR SHALL CONSTRUCT ALL SANITARY SEWER FACILITIES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND ANY OTHER LOCAL STATE OR FEDERAL CODES.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY SERVICE CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANY/OWNER, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
6. TRENCH RESPONSIBILITY INCLUDES EXCAVATIONS, BACKFILL, COMPACTION AND MAINTENANCE OF THE TRENCH.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE CONSTRUCTION SAFETY SIGNAGE WHILE WORKING IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
8. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
10. ALL PIPE LENGTHS ARE MEASURED FROM INSIDE WALL OF STRUCTURE.
11. CONTRACTOR TO EXCAVATE AT ALL UTILITY CROSSINGS PRIOR TO INSTALLATION TO CONFIRM CROSSING CAN BE INSTALLED AS SHOWN.
12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.

UTILITY TRENCHING NOTES:

1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

CONSTRUCTION SEQUENCING IN FILL AREAS:

1. FILL SHALL BE PLACED IN STRICT ACCORDANCE WITH GEOTECHNICAL ENGINEERING REPORT'S RECOMMENDATIONS.
2. FILL SHALL BE PLACED A MINIMUM OF FOUR (4) FEET ABOVE PROPOSED SEWER INVERTS PRIOR TO INSTALLATION OF FACILITIES.
3. PROVIDE COMPACTION TESTING RESULTS OF FILLING ALONG PROPOSED SEWER ALIGNMENTS TO PTSA AND HRG.
4. ONCE COMPACTION TESTING RESULTS ARE APPROVED BY HRG/PTSA, SANITARY SEWER INSTALLATION MAY COMMENCE.

ELECTRICAL PEDESTALS:

1. ALL ELECTRICAL PEDESTALS MUST BE INSTALLED WITH A MINIMUM 3' SEPARATION FOR SANITARY SEWER LINES AND MANHOLES.

SANITARY SEWER NOTES:

1. ALL TERMINAL MANHOLES SHALL HAVE VENTED MANHOLE LIDS.
2. IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, SECTION 715, WHERE THE FLOOD LEVEL OF RIMS OF PLUMBING DRAINAGE FIXTURES (DENOTED BY LOWEST FINISHED FLOOR ELEVATION) ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE, BACKWATER VALVES ARE REQUIRED.
3. UPON APPROVAL OF THE SUBDIVISION PLANS AND PRIOR TO CONSTRUCTION, THE DEVELOPER SHALL PROVIDE THE PTSA WITH ALL REQUIRED SHOP DRAWING SUBMITTALS.
4. THE INVERTS OF EXISTING MANHOLES THAT DO NOT ADEQUATELY ACCOMMODATE THE PROPOSED SEWER EXTENSIONS SHALL BE REMOVED AND REFORMED IN ACCORDANCE WITH PTSA REQUIREMENTS TO ACCOMMODATE THE NEW SEWERS EXTENDING FROM THE EXISTING MANHOLES.
5. IN UNIMPROVED AREAS, MANHOLE LIDS SHALL BE SET TO AN ELEVATION ONE (1) FOOT ABOVE THE FINAL GROUND SURFACE. THIS IS TO INCLUDE, BUT NOT LIMITED TO SAN. MH. 0, 5, 10, 11, 12, 13, 14, 20, 21, 22, AND 23.

GEOTECHNICAL COMPACTION REQUIREMENTS:

1. THE FIRST LIFT OF MATERIAL SHOULD BE ONLY APPROXIMATELY FOUR (4) INCHES THICK IN THE LOOSE STATE. EACH LIFT OF SOIL THEREAFTER SHOULD BE PLACED IN MAXIMUM EIGHT (8) INCH LOOSE THICKNESS AND SHOULD BE WITHIN PLUS OR MINUS TWO (2) PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
2. ALL FILL SHOULD BE COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
3. DURING FILL CONSTRUCTION AND/OR SUBGRADE PREPARATION, THE CONTRACTOR SHOULD BE MAINTAIN GOOD SITE DRAINAGE. EXPOSED SURFACES SHOULD BE POSITIVELY SLOPED TO CAUSE RUNOFF TO FLOW AWAY FROM THE SITE. IF WATER DOES POND IN ANY SECTORS, THOSE AREA SHOULD BE DRAINED AND ALL MUD ZONES OR SOFTENED SOILS SHOULD BE AERATED AND RECOMPACTED BEFORE FURTHER CONSTRUCTION PHASE.
4. ALL CUT AND FILLS SHALL BE COMPLETED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER.

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

Know what's below. Call before you dig.

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878.295.8914 F:724.514.7047
www.kdhengineers.com

REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-080435
COMMONWEALTH OF PENNSYLVANIA

REVISIONS:			
REV	DATE	DESCRIPTION	
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CLIENT:
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333 TECHNOLOGY DRIVE SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

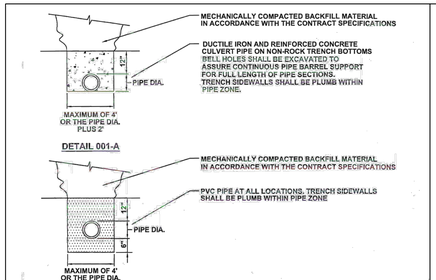
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

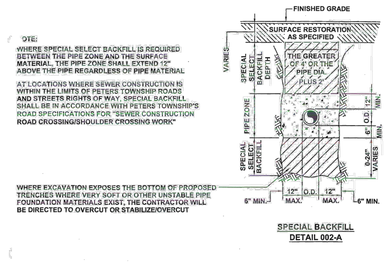
SHEET TITLE:
OVERALL SANITARY SEWER PLAN

SHEET NO.
D7.0

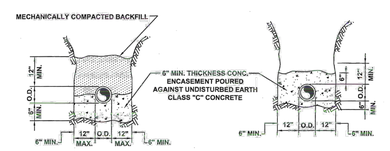
S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG



PETERS TOWNSHIP SANITARY AUTHORITY		SEWER TRENCH PIPE ZONE DETAILS
Not to scale	March 2004	Standard Detail SD-001



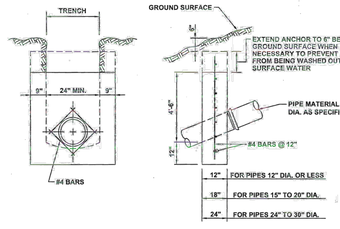
SPECIAL BACKFILL
DETAIL 002-A



TYPICAL CONCRETE CRADLE
DETAIL 002-B

TYPICAL CONCRETE ENCASEMENT
DETAIL 002-C

PETERS TOWNSHIP SANITARY AUTHORITY		TRENCH DETAILS
Not to scale	March 2004	Standard Detail SD-002



CONCRETE ANCHORS FOR PIPES ON STEEP GRADES

PROVIDE NO ANCHORS ON GRADES LESS THAN 20% UNLESS NOTED
PROVIDE ANCHORS MAXIMUM 36" C-C ON GRADES BETWEEN 20% AND 34%
PROVIDE ANCHORS MAXIMUM 24" C-C ON GRADES BETWEEN 34% AND 50%
PROVIDE ANCHORS MAXIMUM 16" C-C ON GRADES BETWEEN 50% AND 70%
WITH APPROVAL FROM P.T.S.A.

FOR CONDITIONS OTHER THAN SHOWN HEREON ANCHORS SHALL BE PROVIDED AS REQUIRED BY THE CONTRACT PLANS OR ORDERED IN THE FIELD BY THE OWNER'S REPRESENTATIVE.

ANCHOR SPACING SHALL POSITION EACH ANCHOR DOWNSTREAM OF A PIPE BELL

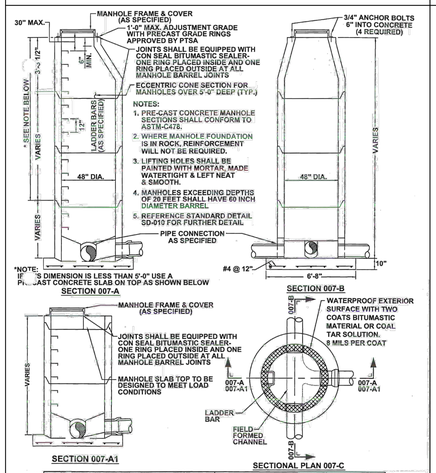
PETERS TOWNSHIP SANITARY AUTHORITY		CONCRETE ANCHORS FOR PIPELINES
Not to scale	March 2004	Standard Detail SD-005

SANITARY SEWER CONNECTION CONSTRUCTION SEQUENCE:

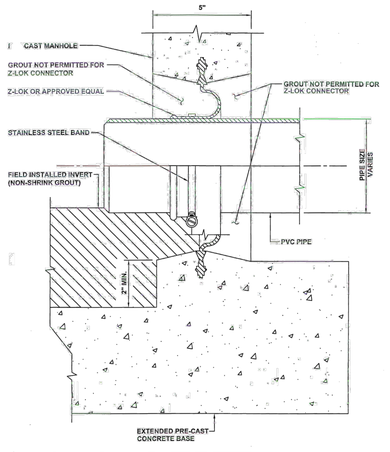
1. WHEN BYPASS PUMPING IS REQUIRED, THE PUMPING SHALL BE FROM THE MANHOLE UPSTREAM OF THE CONSTRUCTION AREA TO THE MANHOLE BELOW THE CONSTRUCTION AREA.
2. THE CONTRACTOR SHALL CONTACT THE PTSA TO COORDINATE THE CONSTRUCTION ACTIVITY, SIZE OF PUMP(S) REQUIRED, PIPE SIZES AND THE START OF WORK.
3. ONCE, PTSA HAS BEEN NOTIFIED AND GIVEN NOTE TO PROCEED. THE CONTRACTOR WILL MOBILIZE ON SITE.
4. AFTER MOBILIZATION, THE CONTRACTOR WILL DETERMINE THE PROPER SIZE, LOCATION, AND TYPE OF PLUG TO BE USED ON THE UPSTREAM MANHOLE OUTFLOW PIPE.
5. ONCE THE PROPER PLUG IS DETERMINED AND THE PUMP(S) AND BYPASS LINE IS IN PLACE, THE CONTRACTOR MAY START THE BYPASS PUMPING.
6. AFTER THE PUMPING HAS STARTED, THE PLUG SHALL BE INSTALLED IN THE UPSTREAM MANHOLE OUTLET. THEN THE CONSTRUCTION AREA SHALL BE FLUSHED AND ALLOWED TO DRAIN TO REMOVE ANY EXISTING FLOW IN THE PIPE.
7. AFTER THE PIPE IS FLUSHED, THE DOWNSTREAM MANHOLE INLET SHALL BE PLUGGED TO INSURE NO BYPASS FLOW ENTERS THE CONSTRUCTION AREA PIPE.
8. THE CONTRACTOR MAY START THE INSTALLATION OF THE NEW SANITARY SEWER CONNECTIONS. THE CONTRACTOR MAY BYPASS THE EXISTING SYSTEM TO ALLOW THE INSTALLATION OF ALL SERVICE MAIN CONNECTIONS.

CONNECTIONS OF SANITARY MAINS INTO EXISTING MANHOLES:

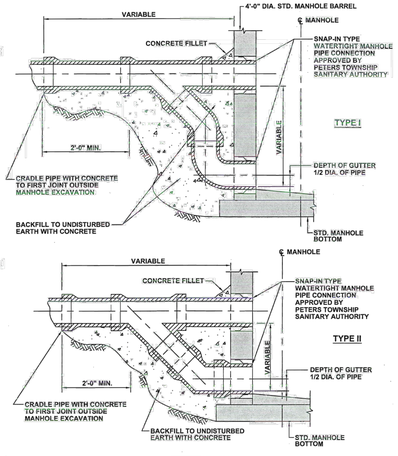
1. WITH THE BYPASS IN PLACE AND WORKING PROPERLY, THE CONTRACTOR MAY START THE EXCAVATION TO EXPOSE THE EXISTING SANITARY SEWER MANHOLE AT THE PROPER INVERT ELEVATION OF THE NEW CONNECTION.
2. ONCE THE EXCAVATION HAS EXPOSED THE EXISTING MANHOLE, THE CONTRACTOR WILL HAVE TO CORE DRILL THE EXISTING MANHOLE TO ALLOW FOR THE NEW CONNECTION.
3. ONCE THE NEW SANITARY LINE IS CONNECTED TO THE EXISTING MANHOLE, THE PIPE WILL HAVE TO BE PROPERLY SEALED ACCORDING TO PTSA SPECIFICATIONS.
4. AFTER THE PIPE IS INSTALLED, THE CONTRACTOR MUST CREATE NEW FLOW CHANNELS FOR THE CONNECTION IN THE MANHOLE.
5. THE NEW CHANNELS NEEDED BUILT UP CAN BE CREATED BY PLACING CONCRETE IN THE BOTTOM AS NEEDED. IF, THE FLOW CHANNELS NEED TO BE RECESSED INTO THE EXISTING MANHOLE BOTTOM, THE BOTTOM SHALL BE SAW CUT AND REBUILT AS NEEDED TO ENSURE PROPER FLOW IN AND OUT OF THE EXISTING MANHOLE.



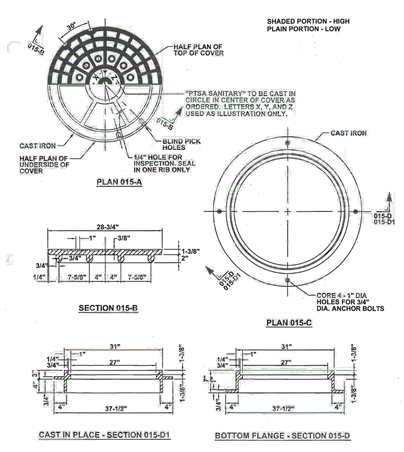
PETERS TOWNSHIP SANITARY AUTHORITY		PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" TO 18"
Not to scale	March 2004	Standard Detail SD-007



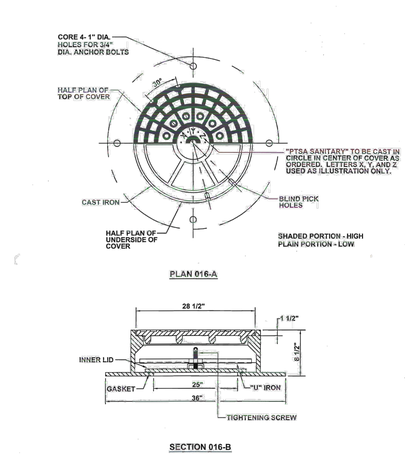
PETERS TOWNSHIP SANITARY AUTHORITY		MANHOLE CONNECTION FOR PVC PIPE (PRE-CAST BASE)
Not to scale	March 2004	Standard Detail SD-012



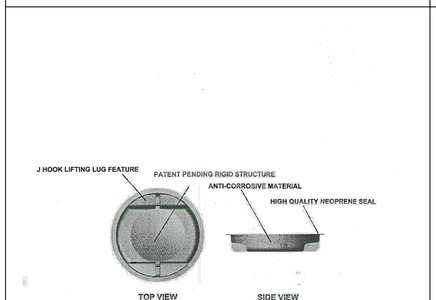
PETERS TOWNSHIP SANITARY AUTHORITY		OUTSIDE MANHOLE DROP CONNECTION
Not to scale	March 2004	Standard Detail SD-014



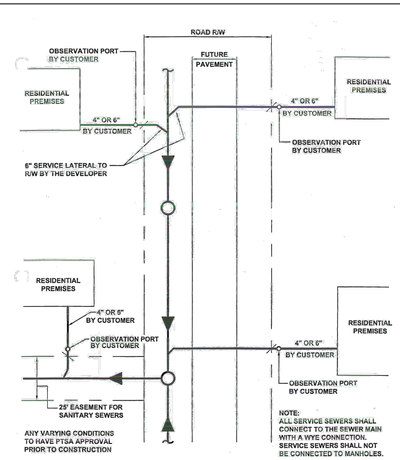
PETERS TOWNSHIP SANITARY AUTHORITY		STANDARD CAST IRON MANHOLE FRAME AND COVER
Not to scale	March 2004	Standard Detail SD-015



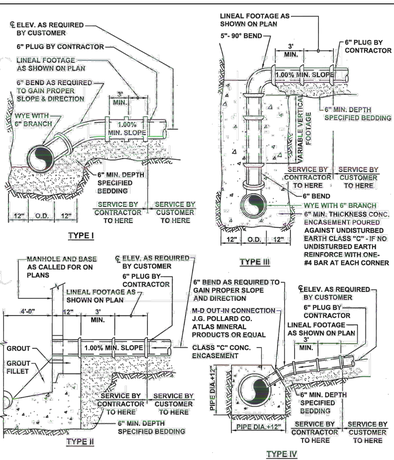
PETERS TOWNSHIP SANITARY AUTHORITY		WATERTIGHT MANHOLE (WT) FRAME AND COVER
Not to scale	March 2004	Standard Detail SD-016



PETERS TOWNSHIP SANITARY AUTHORITY		MANHOLE INFLOW PROTECTOR
Not to scale	March 2004	Standard Detail SD-017



PETERS TOWNSHIP SANITARY AUTHORITY		SERVICE LINE CONNECTIONS
Not to scale	March 2004	Standard Detail SD-019



PETERS TOWNSHIP SANITARY AUTHORITY		SERVICE CONNECTIONS
Not to scale	March 2004	Standard Detail SD-021

GENERAL NOTES:

1. PROVIDE 0.2' DROP ACROSS MANHOLE UNLESS OTHERWISE SPECIFIED.
2. INSTALL PIPE STUBS AT MANHOLES FOR FUTURE EXTENSIONS A MINIMUM OF 4 FEET LONG. DO NOT GROUT EXTENSION STUB PIPE INSIDE OR OUTSIDE THE MANHOLE.
3. PROVIDE VENT HOLE IN CENTER OF LID OF END-OF-LINE MANHOLES.
4. ALL PVC PIPES SHALL BE ASTM-D3034 SDR 35 UNLESS OTHERWISE SPECIFIED.
5. FLAT TOP MANHOLES ARE NOT PERMITTED UNLESS OTHERWISE SPECIFIED.
6. EXISTING MANHOLES THAT DO NOT ADEQUATELY ACCOMMODATE THE PROPOSED SEWER EXTENSIONS SHALL BE REQUIRED TO BE CLEANLY CORE DRILLED AND A FLEXIBLE BOOT INSTALLED AS WELL AS ANY REQUIRED MODIFICATIONS OF THE INVERT OR FLOW CHANNEL TO ENSURE A SMOOTH TRANSITION AND TO THE AUTHORITY'S SATISFACTION.
7. MAXIMUM DISTANCE BETWEEN MANHOLES SHALL BE 400 FEET.
8. CONCRETE ANCHORS SHALL BE PROVIDED WHEN PIPE SLOPES EXCEED 20%. THE REQUIRED NUMBER AND SPACING OF THE ANCHORS SHALL BE COMMENSURATE WITH THE PREVAILING PADEP PUBLISHED REQUIREMENTS.
9. THE DETAIL SHEET IDENTIFIES THE MOST COMMONLY USED DETAILS, HOWEVER, THE FULL SPECIFICATIONS AND OTHER STANDARD DETAILS CONTAINED IN APPENDIX A OF THE AUTHORITY'S MOST CURRENT RULES AND REGULATIONS APPLY.

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAHN
ENGINEER
PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

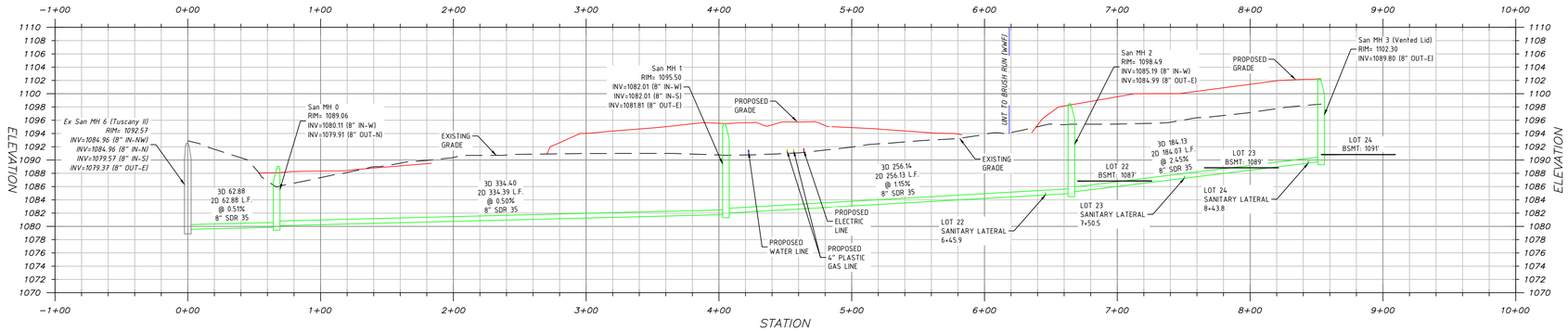
PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
SANITARY SEWER DETAILS

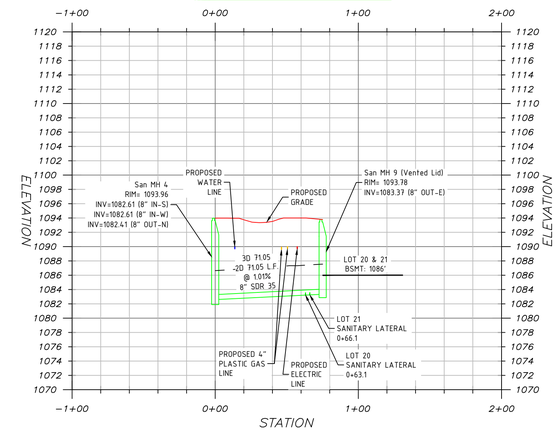
SHEET NO.
D7.1

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

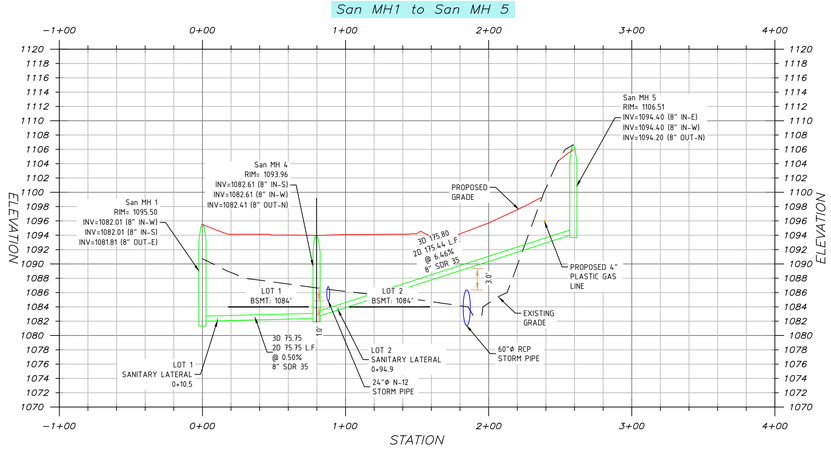
Ex San MH 6 (Tuscany II) to San MH 3



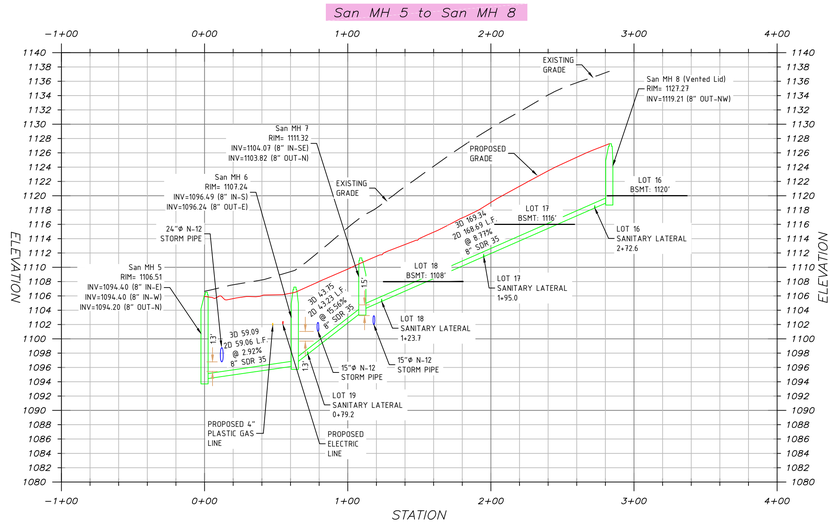
San MH 4 to San MH 9



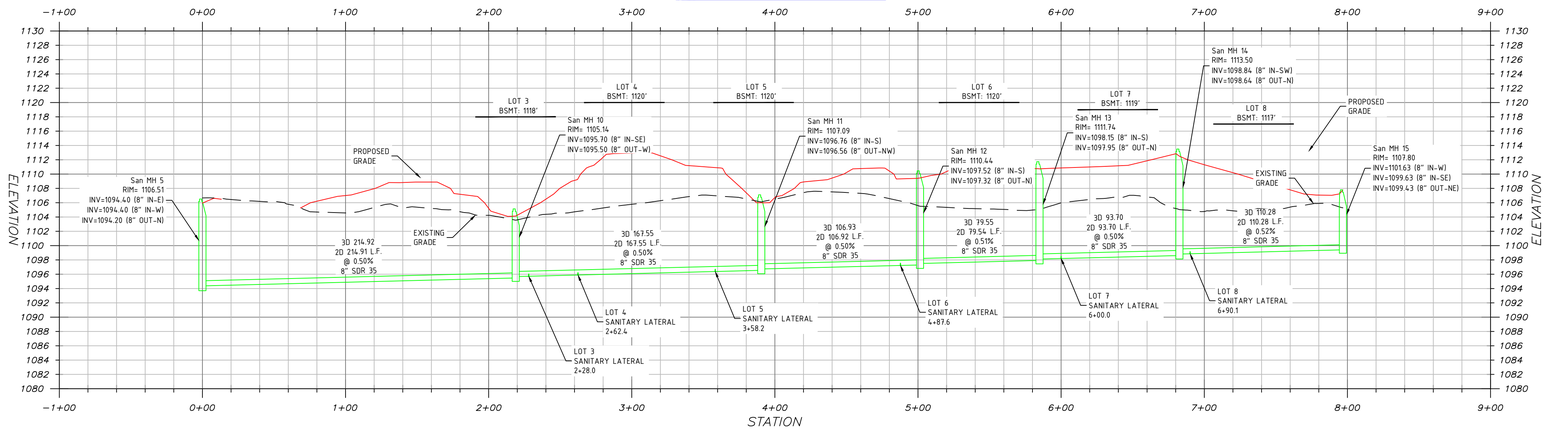
San MH1 to San MH 5



San MH 5 to San MH 8



San MH 5 to San MH 15



UTILITY NOTES:

1. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER AND THE MUNICIPALITY, THEIR AGENTS, ETC. FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK SHOWN.
2. THE CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR SITE SAFETY.
3. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE FIELD CONDITIONS WITH DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION, HORIZONTAL AND VERTICAL, AND SIZE OF ALL EXISTING UTILITIES BEFORE BEGINNING WORK. THE CONTRACTOR SHALL CALL PENNSYLVANIA ONE CALL AT 1-800-242-1776 TO NOTIFY THE UTILITIES OF HIS INTENTIONS AND TO REQUEST REQUIRED FIELD STAKING OF EXISTING UTILITIES.
4. THE CONTRACTOR SHALL CONSTRUCT ALL SANITARY SEWER FACILITIES IN ACCORDANCE WITH THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND ANY OTHER LOCAL STATE OR FEDERAL CODES.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY SERVICE CONNECTIONS WITH THE APPROPRIATE UTILITY COMPANY/OWNER, AND TO OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED FOR SERVICE CONNECTIONS TO UTILITY MAINS.
6. TRENCH RESPONSIBILITY INCLUDES EXCAVATIONS, BACKFILL, COMPACTION AND MAINTENANCE OF THE TRENCH.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING APPROPRIATE CONSTRUCTION SAFETY SIGNAGE WHILE WORKING IN PUBLIC RIGHT-OF-WAY AND EASEMENTS.
8. ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHOULD BE INCLUDED IN THE COST OF THE IMPROVEMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED-UP PRINTS SHOWING ALL CHANGES MADE DURING THE CONSTRUCTION PROCESS. ANY CHANGES TO THE DRAWINGS OR ADDITIONAL ITEMS MUST BE REPORTED TO THE OWNER.
10. ALL PIPE LENGTHS ARE MEASURED FROM INSIDE WALL OF STRUCTURE.
11. CONTRACTOR TO EXCAVATE AT ALL UTILITY CROSSINGS PRIOR TO INSTALLATION TO CONFIRM CROSSING CAN BE INSTALLED AS SHOWN.
12. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.

UTILITY TRENCHING NOTES:

1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

CONSTRUCTION SEQUENCING IN FILL AREAS:

1. FILL SHALL BE PLACED IN STRICT ACCORDANCE WITH GEOTECHNICAL ENGINEERING REPORT'S RECOMMENDATIONS.
2. FILL SHALL BE PLACED A MINIMUM OF FOUR (4) FEET ABOVE PROPOSED SEWER INVERTS PRIOR TO INSTALLATION OF FACILITIES.
3. PROVIDE COMPACTION TESTING RESULTS OF FILLING ALONG PROPOSED SEWER ALIGNMENTS TO PTSA AND HRG.
4. ONCE COMPACTION TESTING RESULTS ARE APPROVED BY HRG/PTSA, SANITARY SEWER INSTALLATION MAY COMMENCE.

ELECTRICAL PEDESTALS:

1. ALL ELECTRICAL PEDESTALS MUST BE INSTALLED WITH A MINIMUM 3' SEPARATION FOR SANITARY SEWER LINES AND MANHOLES.

SANITARY SEWER NOTES:

1. ALL TERMINAL MANHOLES SHALL HAVE VENTED MANHOLE LIDS.
2. IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, SECTION 715, WHERE THE FLOOD LEVEL OF RIMS OF PLUMBING DRAINAGE FIXTURES (DENOTED BY LOWEST FINISHED FLOOR ELEVATION) ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE, BACKWATER VALVES ARE REQUIRED.
3. UPON APPROVAL OF THE SUBDIVISION PLANS AND PRIOR TO CONSTRUCTION, THE DEVELOPER SHALL PROVIDE THE PTSA WITH ALL REQUIRED SHOP DRAWING SUBMITTALS.
4. THE INVERTS OF EXISTING MANHOLES THAT DO NOT ADEQUATELY ACCOMMODATE THE PROPOSED SEWER EXTENSIONS SHALL BE REMOVED AND REFORMED IN ACCORDANCE WITH PTSA REQUIREMENTS TO ACCOMMODATE THE NEW SEWERS EXTENDING FROM THE EXISTING MANHOLES.
5. IN UNIMPROVED AREAS, MANHOLE LIDS SHALL BE SET TO AN ELEVATION ONE (1) FOOT ABOVE THE FINAL GROUND SURFACE. THIS IS TO INCLUDE, BUT NOT LIMITED TO SAN. MH. 0, 5, 10, 11, 12, 13, 14, 20, 21, 22, AND 23.

GEOTECHNICAL COMPACTION REQUIREMENTS:

1. THE FIRST LIFT OF MATERIAL SHOULD BE ONLY APPROXIMATELY FOUR (4) INCHES THICK IN THE LOOSE STATE. EACH LIFT OF SOIL THEREAFTER SHOULD BE PLACED IN MAXIMUM EIGHT (8) INCH LOOSE THICKNESS AND SHOULD BE WITHIN PLUS OR MINUS TWO (2) PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
2. ALL FILL SHOULD BE COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
3. DURING FILL CONSTRUCTION AND/OR SUBGRADE PREPARATION, THE CONTRACTOR SHOULD BE MAINTAIN GOOD SITE DRAINAGE. EXPOSED SURFACES SHOULD BE POSITIVELY SLOPED TO CAUSE RUNOFF TO FLOW AWAY FROM THE SITE. IF WATER DOES POND IN ANY SECTORS, THOSE AREA SHOULD BE DRAINED AND ALL MUD ZONES OR SOFTENED SOILS SHOULD BE AERATED AND RECOMPACTED BEFORE FURTHER CONSTRUCTION PHASE.
4. ALL CUT AND FILLS SHALL BE COMPLETED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER.

0' 10' 20' 30'
VERTICAL GRAPHIC SCALE 1" = 10'
0' 50' 100' 150'
HORIZONTAL GRAPHIC SCALE 1" = 50'

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333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
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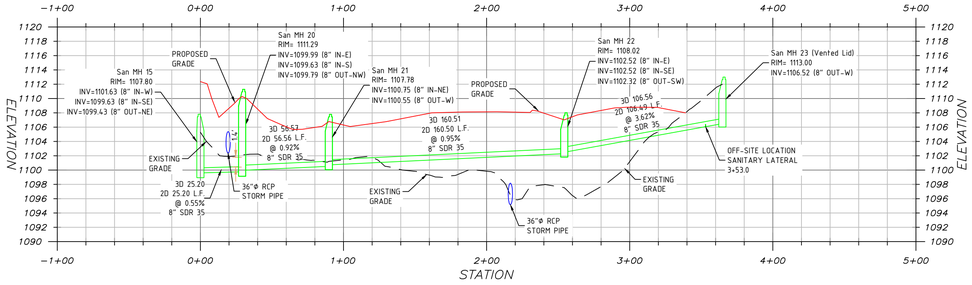
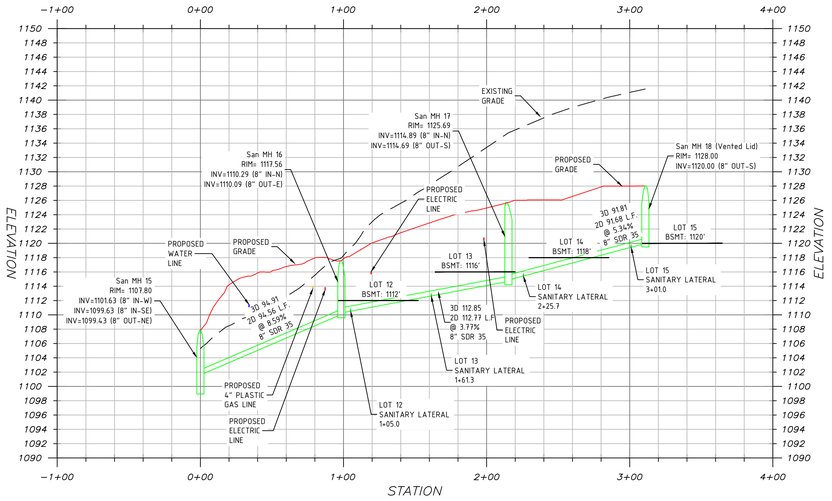
SHEET NO.
D7.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

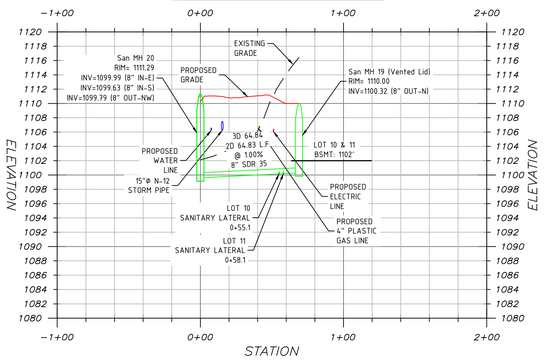
San MH 15 to San MH 23



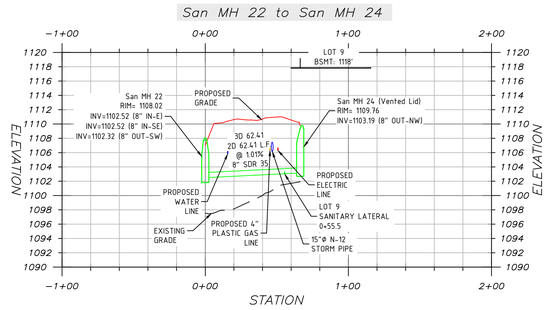
San MH 15 to San MH 18

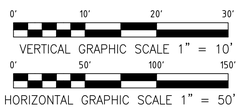


San MH 20 to San MH 19



San MH 22 to San MH 24





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1. FILL SHALL BE PLACED IN STRICT ACCORDANCE WITH GEOTECHNICAL ENGINEERING REPORT'S RECOMMENDATIONS.
2. FILL SHALL BE PLACED A MINIMUM OF FOUR (4) FEET ABOVE PROPOSED SEWER INVERTS PRIOR TO INSTALLATION OF FACILITIES.
3. PROVIDE COMPACTION TESTING RESULTS OF FILLING ALONG PROPOSED SEWER ALIGNMENTS TO PTSA AND HRG.
4. ONCE COMPACTION TESTING RESULTS ARE APPROVED BY HRG/PTSA, SANITARY SEWER INSTALLATION MAY COMMENCE.

ELECTRICAL PEDESTALS:

1. ALL ELECTRICAL PEDESTALS MUST BE INSTALLED WITH A MINIMUM 3' SEPARATION FOR SANITARY SEWER LINES AND MANHOLES.

SANITARY SEWER NOTES:

1. ALL TERMINAL MANHOLES SHALL HAVE VENTED MANHOLE LIDS.
2. IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, SECTION 715, WHERE THE FLOOD LEVEL OF RIMS OF PLUMBING DRAINAGE FIXTURES (DENOTED BY LOWEST FINISHED FLOOR ELEVATION) ARE BELOW THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE, BACKWATER VALVES ARE REQUIRED.
3. UPON APPROVAL OF THE SUBDIVISION PLANS AND PRIOR TO CONSTRUCTION, THE DEVELOPER SHALL PROVIDE THE PTSA WITH ALL REQUIRED SHOP DRAWING SUBMITTALS.
4. THE INVERTS OF EXISTING MANHOLES THAT DO NOT ADEQUATELY ACCOMMODATE THE PROPOSED SEWER EXTENSIONS SHALL BE REMOVED AND REFORMED IN ACCORDANCE WITH PTSA REQUIREMENTS TO ACCOMMODATE THE NEW SEWERS EXTENDING FROM THE EXISTING MANHOLES.
5. IN UNIMPROVED AREAS, MANHOLE LIDS SHALL BE SET TO AN ELEVATION ONE (1) FOOT ABOVE THE FINAL GROUND SURFACE. THIS IS TO INCLUDE, BUT NOT LIMITED TO SAN. MH. 0, 5, 10, 11, 12, 13, 14, 20, 21, 22, AND 23.

GEOTECHNICAL COMPACTION REQUIREMENTS:

1. THE FIRST LIFT OF MATERIAL SHOULD BE ONLY APPROXIMATELY FOUR (4) INCHES THICK IN THE LOOSE STATE. EACH LIFT OF SOIL THEREAFTER SHOULD BE PLACED IN MAXIMUM EIGHT (8) INCH LOOSE THICKNESS AND SHOULD BE WITHIN PLUS OR MINUS TWO (2) PERCENT OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
2. ALL FILL SHOULD BE COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557).
3. DURING FILL CONSTRUCTION AND/OR SUBGRADE PREPARATION, THE CONTRACTOR SHOULD BE MAINTAIN GOOD SITE DRAINAGE. EXPOSED SURFACES SHOULD BE POSITIVELY SLOPED TO CAUSE RUNOFF TO FLOW AWAY FROM THE SITE. IF WATER DOES POND IN ANY SECTORS, THOSE AREA SHOULD BE DRAINED AND ALL MUD ZONES OR SOFTENED SOILS SHOULD BE AERATED AND RECOMPACTED BEFORE FURTHER CONSTRUCTION PHASE.
4. ALL CUT AND FILLS SHALL BE COMPLETED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER.

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
SANITARY SEWER PROFILES

SHEET NO.
D7.3

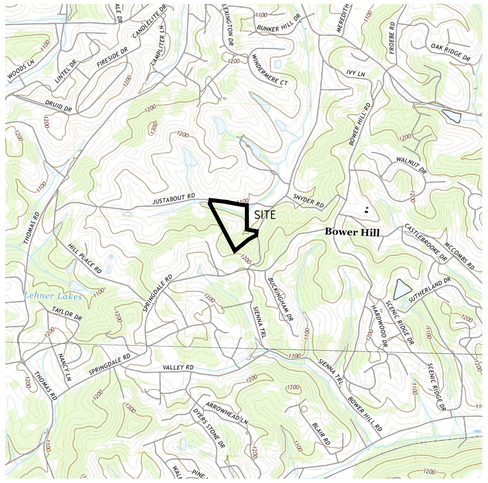
S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

POST CONSTRUCTION STORMWATER MANAGEMENT
NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY
PENNSYLVANIA

PREPARED FOR:

339 JUSTABOUT LAND COMPANY, LLC.

VICINITY MAP
SCALE: 1"=500'



USGS MAP
SCALE: 1"=2000'

NOTE
THE MERIDIAN OF THE PROJECT IS THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

NOTES:
1. ALL PROPOSED GRADES, ELEVATIONS, AND SLOPES, AS WELL AS ALL ASSOCIATED ENGINEERING ASSUMPTIONS, ARE BASED SOLELY AND EXCLUSIVELY UPON LOCAL AND NATIVE SOIL CONDITIONS FOUND ARE FOR THE SPECIFIC PROJECT LOCATION, AND SUPPORTING INFORMATION FROM THE SOIL SURVEY PREPARED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, AS WELL AS ADDITIONAL INFORMATION FROM THE NRCS'S WEB SOIL SURVEY WEBSITE.
2. ANY AND ALL CONSTRUCTION WORK RELATED TO EARTH MOVING OR OTHER EXCAVATION SHALL ONLY BE PERFORMED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER, OR OTHER APPROVED PROFESSIONAL REPRESENTATIVE, WITH EXTENSIVE KNOWLEDGE AND EXPERIENCE IN THE INTERPRETATION OF ALL ISSUES RELATED TO GEOTECHNICAL ENGINEERING AND CONSTRICTION ACTIVITIES.
3. IN ADDITION, INFILTRATION CAPACITY OF NATIVE SOILS HAVE BEEN ASSUMED AND EVALUATED (BY OTHERS) BASED UPON THE ABOVE REFERENCED SOURCES. DUE TO THE NATURE OF STRUCTURAL BMP'S DESIGNED FOR INSTALLATION AND UTILIZATION ON THE PROJECT SITE EXTENSIVELY MINIMAL INFILTRATION IS ANTICIPATED. THE CONTRACTOR SHALL TAKE EXTREME CAUTION AND CARE WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE AREAS OF STRUCTURAL BMP IMPLEMENTATION, AND SHALL ADHERE TO THE RECOMMENDED CONSTRUCTION PROCEDURES AND AVOIDANCE MEASURES CONTAINED WITHIN THE APPROVED CONSTRUCTION DOCUMENTS.
4. ALL STORM DRAIN/CATCH BASIN/INLET STRUCTURES TO BE CONSTRUCTED AND FITTED WITH BICYCLE SAFE FRAME AND GRATING, UNLESS NOTED OTHERWISE.
5. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAND NAD).

STORMWATER MANAGEMENT NOTES:

NO PERSON, INCLUDING THE LANDOWNER, SHALL ALTER OR REMOVE THE STORMWATER MANAGEMENT FIXTURES WITHOUT PRIOR WRITTEN APPROVAL BY NORTH STRABANE TOWNSHIP.

THE OPERATION AND MAINTENANCE (O&M) AGREEMENT FOR THE STORMWATER MANAGEMENT CONTROLS IS PART OF THE STORMWATER MANAGEMENT PLAN.

RECORD DRAWINGS AND DOCUMENTATION WILL BE PROVIDED FOR ALL STORMWATER MANAGEMENT FACILITIES PRIOR TO THE RELEASE OF THE SURETY BOND AND AN ISSUANCE OF AN OCCUPANCY PERMIT.

PCSM DESIGN NOTE:

THIS PLAN HAS BEEN PREPARED BY KDH ENGINEERS, WHO'S EMPLOYEES HAVE DECADES OF COMBINED EXPERIENCE PREPARING AND DESIGNING POST CONSTRUCTION STORMWATER MANAGEMENT PLANS IN PENNSYLVANIA AND SURROUNDING STATES.

THE PCSM BMP'S WILL BE INSTALLED TO PRESERVE THE INTEGRITY OF DOWNSTREAM STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL AND CHEMICAL QUALITIES OF THE RECEIVING STREAMS.

MINIMIZE IMPERVIOUS AREAS
KDH WORKED CLOSELY WITH THE OWNER TO MINIMIZE THE IMPERVIOUS AREA, TO THE MAXIMUM EXTENT PRACTICAL, WHILE STILL MEETING THE REQUIREMENTS OF THE PROJECT.

MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE.
TO MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE THE CONSTRUCTION SEQUENCE REQUIRES IMMEDIATE INSTALLATION OF THE PAVEMENT SUB BASE UPON REACHING FINAL GRADE, TO STABILIZATION THE SITE QUICKLY.

THE CONSTRUCTION SEQUENCE STATES THAT " UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY FOR 4-DAYS THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED."

MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
VEGETATION WILL ONLY BE REMOVED FROM AREAS WHICH ARE INSIDE THE LIMIT OF DISTURBANCE. PROTECTION OF THE EXISTING DRAINAGE FEATURES WILL BE PERFORMED THROUGH E&S BMP PERIMETER CONTROLS, SUCH AS SILT SOCKS.

MINIMIZE SOIL COMPACTION.
THE LOCATION OF THE PCSM INFILTRATION AREAS, WHICH WILL BE USED AS PCSM INFILTRATION DEVICE(S), IS SHOWN ON THE PLAN. THE LOCATION IS MARKED AS "AREA TO BE PROTECTED FROM EXCESSIVE COMPACTION."

RECYCLING AND DISPOSAL METHODS:
ALL BUILDING AND CONSTRUCTION WASTE MATERIALS MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. NO BUILDING MATERIALS, WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE. BUILDING AND CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO: EXCESS SOIL AND ROCK, MISC. BUILDING MATERIALS, CONCRETE AND CONCRETE WASH WATER, SANITARY WASTE AND ANY OTHER MATERIAL THAT COULD HAVE ADVERSE AFFECTS.

SHEET NO.	SHEET TITLE
D8.0	PCSM COVER SHEET
D0.1	GENERAL NOTES AND LEGENDS
D1.0	EXISTING CONDITIONS PLAN
D3.0	CONSTRUCTION DETAILS
D3.1	TOWNSHIP STANDARD DETAILS
D4.0	OVERALL SITE GRADING PLAN
D4.1	ROAD PROFILES
D5.0	OVERALL UTILITY PLAN
D6.0	OVERALL STORM SEWER PLAN
D6.1	STORM SEWER DETAILS
D6.2	STORM SEWER PROFILES
D6.3	STORM SEWER PROFILES
D8.1	OVERALL PCSM PLAN
D8.2	SCM DRAINAGE AREA MAP
D8.3	PCSM PLAN – POND 1
D8.4	PCSM PLAN – POND 2
D8.5	PCSM PLAN – ON LOT SUMPS
D8.6	PCSM DETAILS
D9.0	E&S COVER SHEET
D9.1	E&S PLAN PHASE 1
D9.2	E&S PLAN PHASE 2
D9.3	E&S DETAILS/NOTES
D9.4	E&S DETAILS/NOTES
D9.5	E&S DETAILS/NOTES
D9.6	E&S DETAILS/NOTES
D9.7	GENERAL PERMITS

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
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(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

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COMMONWEALTH OF PENNSYLVANIA
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CHRISTOPHER W. HAMM
ENGINEER
PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
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CANONSBURG, PA 15317

NEWCASTLE
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
PCSM COVER SHEET

SHEET NO.
D8.0

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

NOTE:
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3. IN ADDITION, INFILTRATION CAPACITY OF NATIVE SOILS HAVE BEEN ASSUMED AND EVALUATED (BY OTHERS) BASED UPON THE ABOVE REFERENCED SOURCES. DUE TO THE NATURE OF STRUCTURAL BMP'S DESIGNED FOR INSTALLATION AND UTILIZATION ON THE PROJECT SITE EXTENSIVELY MINIMAL INFILTRATION IS ANTICIPATED. THE CONTRACTOR SHALL TAKE EXTREME CAUTION AND CARE WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE AREAS OF STRUCTURAL BMP IMPLEMENTATION, AND SHALL ADHERE TO THE RECOMMENDED CONSTRUCTION PROCEDURES AND AVOIDANCE MEASURES CONTAINED WITHIN THE APPROVED CONSTRUCTION DOCUMENTS.

4. ALL STORM DRAIN/CATCH BASIN/INLET STRUCTURES TO BE CONSTRUCTED AND FITTED WITH BICYCLE SAFE FRAME AND GRATING, UNLESS NOTED OTHERWISE.

LEGEND

- LOD — LIMITS OF DISTURBANCE
- NPDES — NPDES PERMIT BOUNDARY
- INFILTRATION AREA: AREA TO BE PROTECTED FROM EXCESSIVE SOIL COMPACTION
- FLOODWAY

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

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CONTACT: CHRISTOPHER W. HAMM, P.E.

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1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

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NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
OVERALL PCSM PLAN

SHEET NO.
D8.1

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LEGEND

- LOD — LIMITS OF DISTURBANCE
- NPDES — NPDES PERMIT BOUNDARY
- INFILTRATION AREA: AREA TO BE PROTECTED FROM EXCESSIVE SOIL COMPACTION
- FLOODWAY

SURVEYOR:
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PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE-080435

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PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
SCM DRAINAGE AREA MAP

SHEET NO.
D8.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

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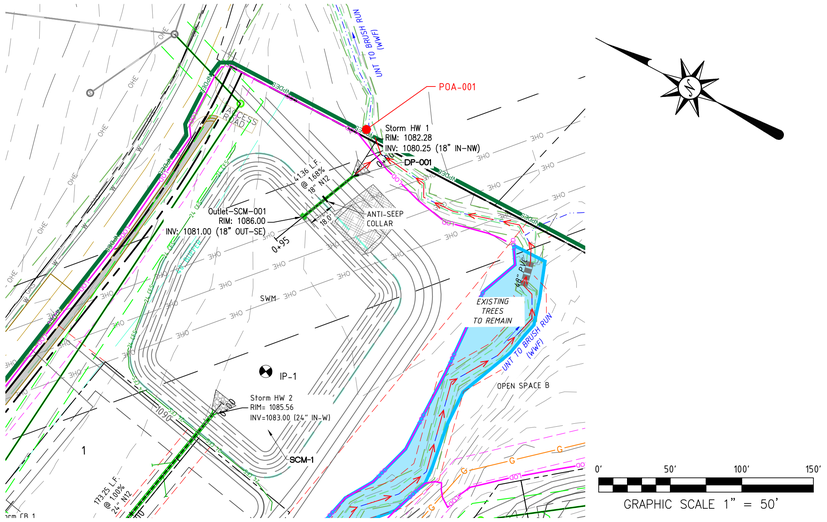
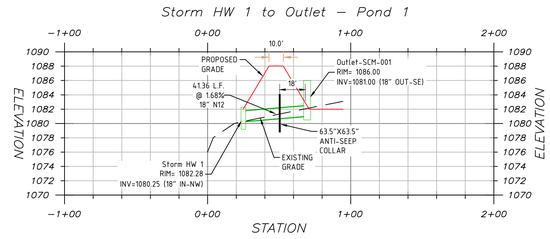
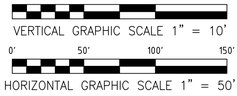


INFILTRATION BASIN (SCM-001)(DP-001)

SCALE : 1" = 50'





CONSTRUCTION SEQUENCE

1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENT LADEN WATER FROM ENTERING INLETS AND PIPES.
3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
4. IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE.
5. INSTALL OUTLET CONTROL STRUCTURES.
6. SEED AND STABILIZE TOPSOIL (VEGETATE IF APPROPRIATE WITH NATIVE PLANTINGS.)
7. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

MAINTENANCE ISSUES

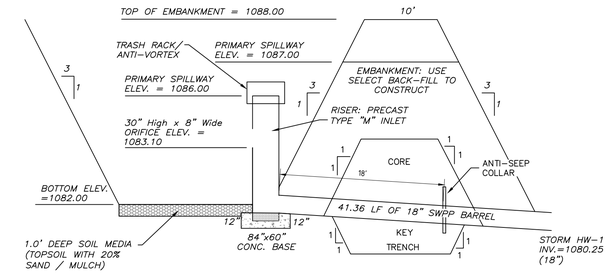
1. CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST FOUR TIMES PER YEAR AND AFTER RUNOFF EVENTS.
2. VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON AN INFILTRATION BASIN, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.
3. INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 – 96 HOURS. MOSQUITOES SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 – 96 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
4. ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.
5. MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.
6. REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT.

DEWATERING ISSUES

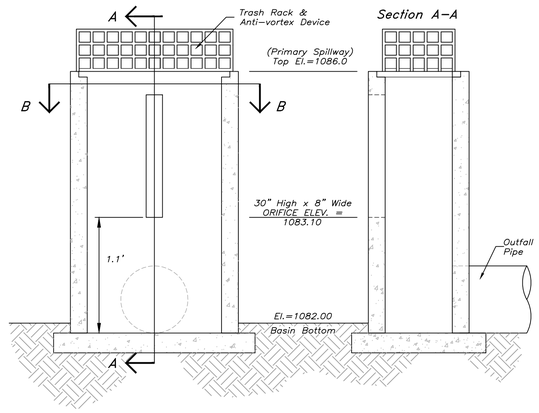
1. INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72–96 HOURS. MOSQUITO'S SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72–96 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
2. IF THE BASIN HAS NOT DRAINED DOWN COMPLETELY WITHIN THE 72–96 HOURS AFTER THE RUNOFF EVENT ENDS. THE VALVE ON THE UNDERDRAIN SHALL BE OPENED TO ALLOW FOR THE UNDERDRAIN TO RELEASE THE REMAINING VOLUME OF WATER IN THE BASIN.
3. ONCE THE BASIN HAS DRAINED, THE VALVE ON THE UNDERDRAIN SHALL BE CLOSED.
4. BASIN SHALL BE MONITORED DURING FUTURE RUNOFF EVENTS TO ENSURE DEWATERING ISSUES DO NOT CONTINUE.

NOTES:

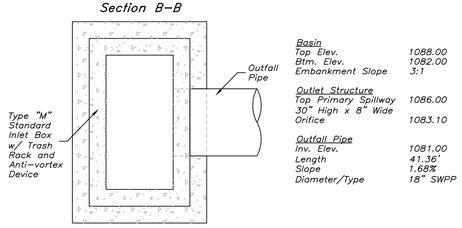
1. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).



TYPICAL POND SECTION
NOT TO SCALE
1 / D7.2



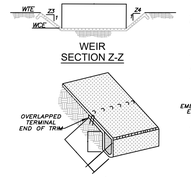
OUTLET STRUCTURE
NOT TO SCALE
2 / D8.2

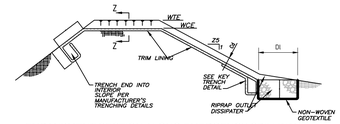


Basin
Top Elev. 1088.00
Btm. Elev. 1082.00
Embankment Slope 3:1

Outlet Structure
Top Primary Spillway 1086.00
30" High x 8" Wide Orifice 1083.10

Outfall Pipe
Inv. Elev. 1081.00
Length 41.36'
Slope 1.68%
Diameter/Type 18" SWPP





EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY
SECTION X-X

BASIN NO.	WEIR Z3 (FT)	WEIR Z4 (FT)	WEIR TOP ELEV WTE (FT)	WEIR CREST ELEV WCE (FT)	WEIR WIDTH Ww (FT)	LINING TRM Type	LINING STAPLE PATTERN	CHANNEL Z5 (FT)	CHANNEL DEPTH Cd (FT)	DISSIPATER LENGTH DI (FT)	DISSIPATER WIDTH Dw (FT)	DISSIPATER RIPRAP SIZE (Ib_)	DISSIPATER RIPRAP THICK. DR (IN)
1	3	3	1088	1087	30	P550	MPG	3	1	5	30	4	18

HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.

DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.

THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

7 / 13 BASIN EMERGENCY SPILLWAY WITH TRM LINING (N.T.S.)

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

Know what's below. Call before you dig.

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P: 878.295.8914 F:724.514.7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

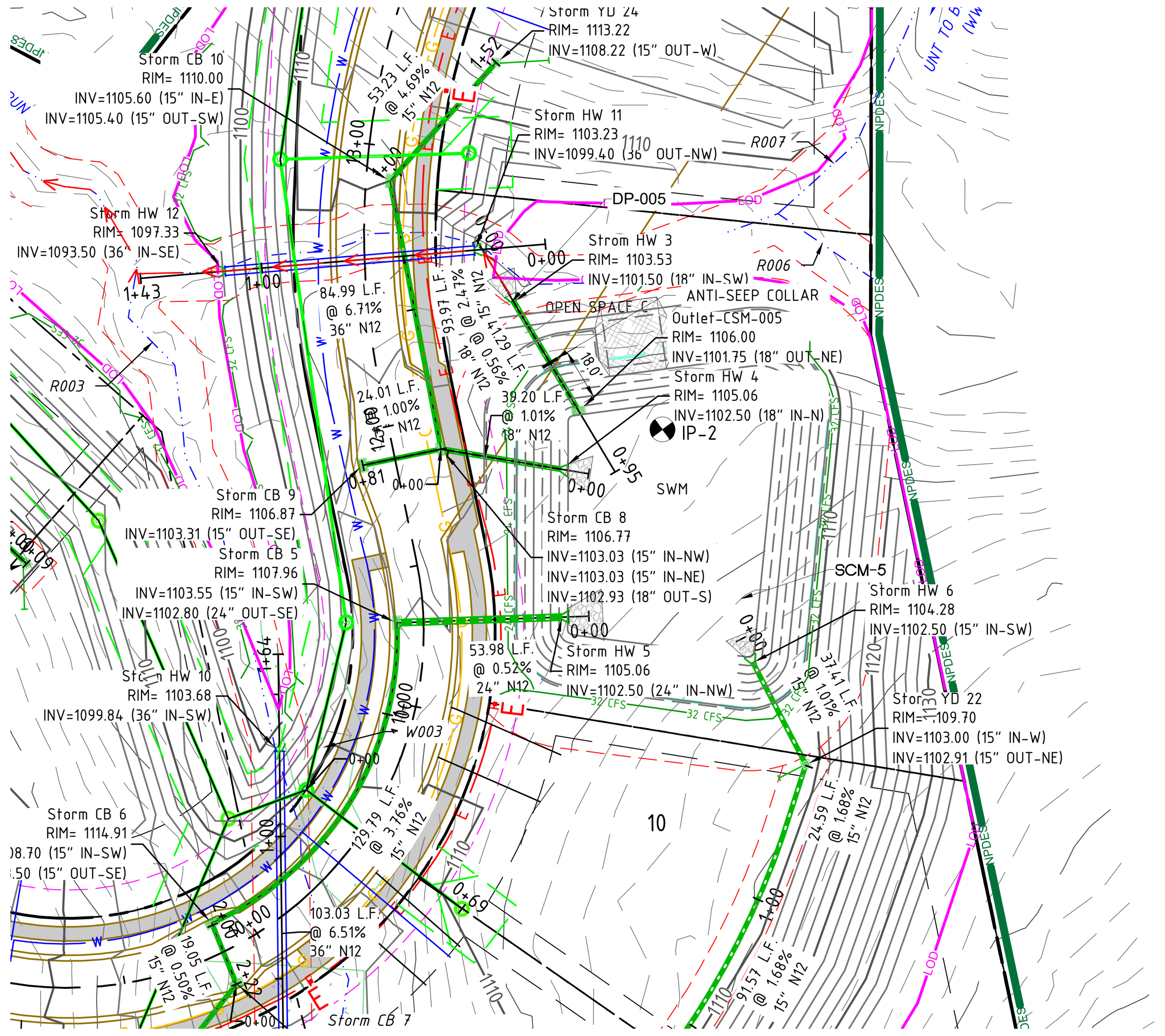
PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
PCSM PLAN - SCM-001

SHEET NO.
D8.3

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

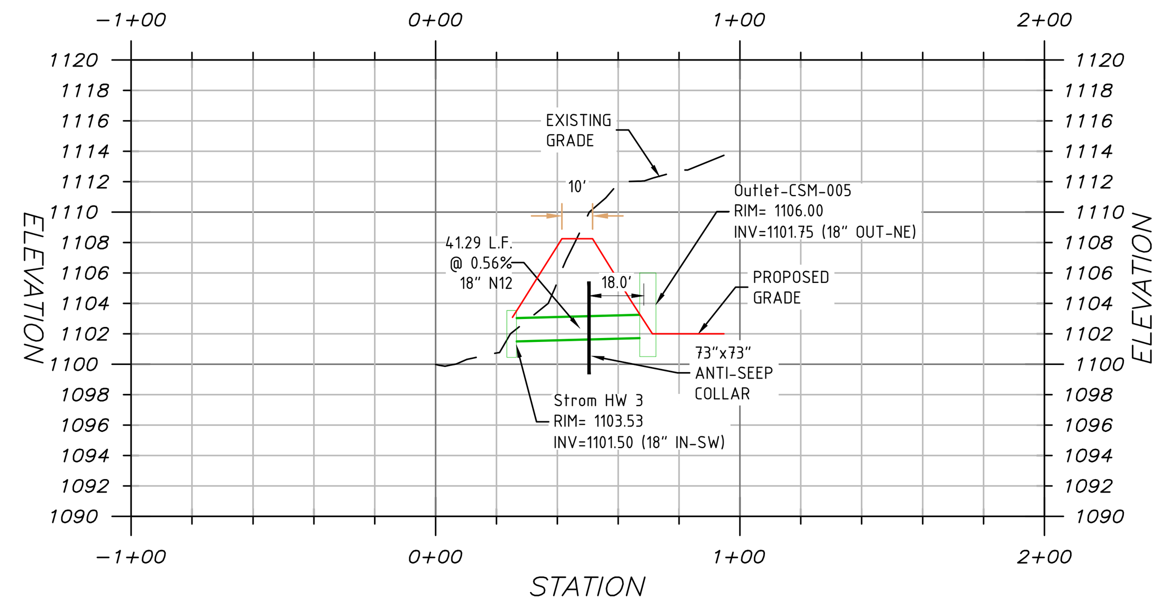
NOTE:
THIS PLAN IS FOR POST CONSTRUCTION STORMWATER MANAGEMENT PURPOSES ONLY. THE CONTRACTOR SHALL REFER TO THE APPROPRIATE UTILITY PLAN FOR FINAL LOCATION AND DETAILS.



0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

INFILTRATION BASIN (SCM-005)(DP-005)

SCALE : 1" = 50'



0' 10' 20' 30'
VERTICAL GRAPHIC SCALE 1" = 10'

0' 50' 100' 150'
HORIZONTAL GRAPHIC SCALE 1" = 50'

CONSTRUCTION SEQUENCE

1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL INFILTRATION BASIN DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENT LADEN WATER FROM ENTERING INLETS AND PIPES.
3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
4. IF NECESSARY, EXCAVATE INFILTRATION BASIN BOTTOM TO AN UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE.
5. INSTALL OUTLET CONTROL STRUCTURES.
6. SEED AND STABILIZE TOPSOIL (VEGETATE IF APPROPRIATE WITH NATIVE PLANTINGS.)
7. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

MAINTENANCE ISSUES

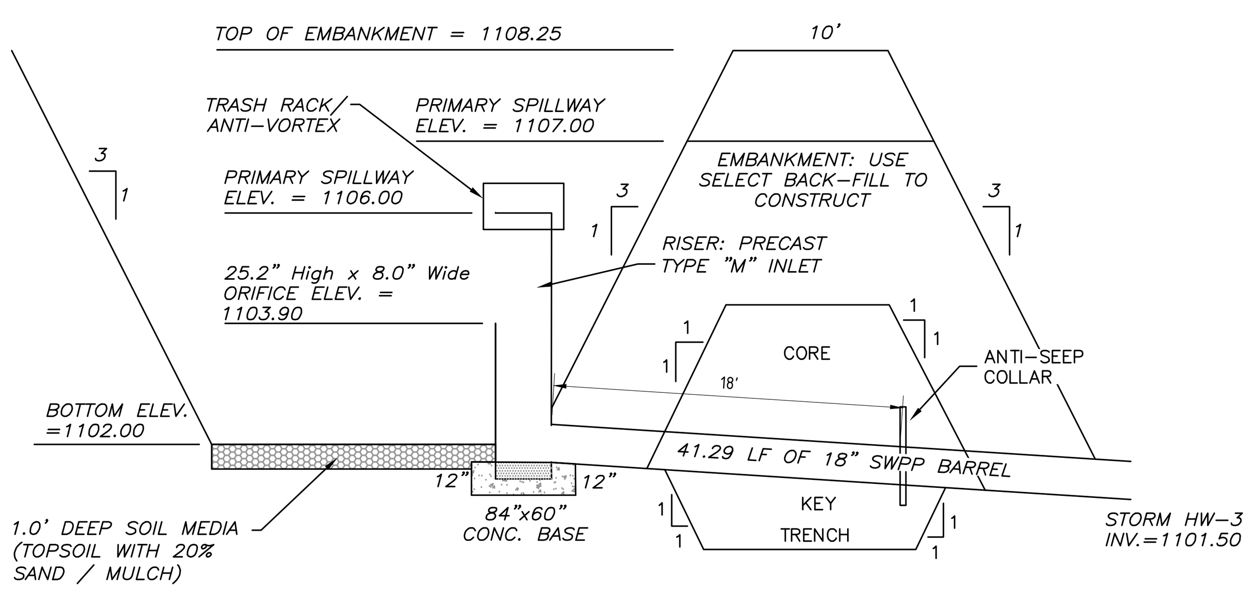
1. CATCH BASINS AND INLETS (UPGRADIENT OF INFILTRATION BASIN) SHOULD BE INSPECTED AND CLEANED AT LEAST FOUR TIMES PER YEAR AND AFTER RUNOFF EVENTS.
2. VEHICLES SHOULD NOT BE PARKED OR DRIVEN ON AN INFILTRATION BASIN, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS.
3. INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 – 96 HOURS. MOSQUITOES SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72 – 96 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
4. ALSO INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION CONTROL MEASURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SLOPE STABILITY IN THE BERMS.
5. MOW ONLY AS APPROPRIATE FOR VEGETATIVE COVER SPECIES.
6. REMOVE ACCUMULATED SEDIMENT FROM BASIN AS REQUIRED. RESTORE ORIGINAL CROSS SECTION AND INFILTRATION RATE. PROPERLY DISPOSE OF SEDIMENT.

DEWATERING ISSUES

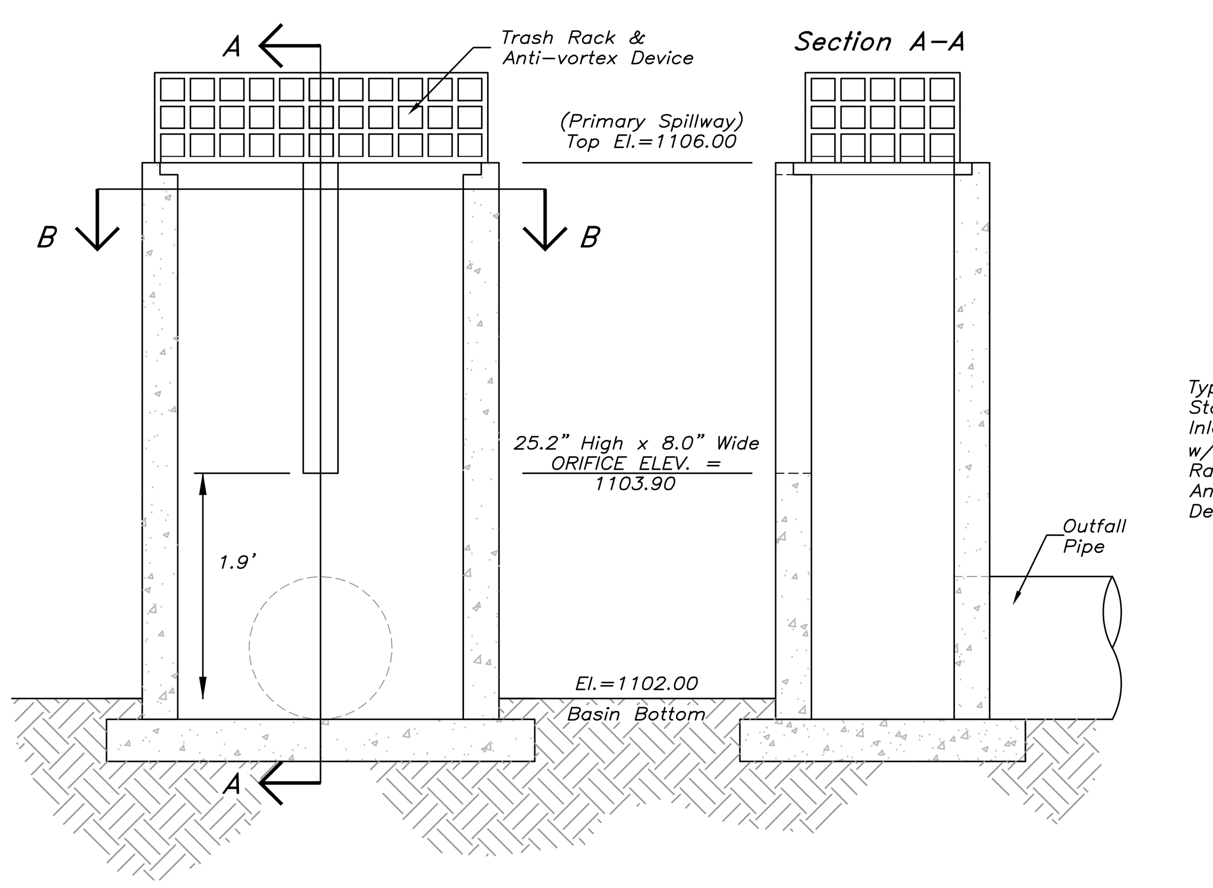
1. INSPECT THE BASIN AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72–96 HOURS. MOSQUITO'S SHOULD NOT BE A PROBLEM IF THE WATER DRAINS IN 72–96 HOURS. MOSQUITOES REQUIRE A CONSIDERABLY LONG BREEDING PERIOD WITH RELATIVELY STATIC WATER LEVELS.
2. IF THE BASIN HAS NOT DRAINED DOWN COMPLETELY WITHIN THE 72–96 HOURS AFTER THE RUNOFF EVENT ENDS. THE VALVE ON THE UNDERDRAIN SHALL BE OPENED TO ALLOW FOR THE UNDERDRAIN TO RELEASE THE REMAINING VOLUME OF WATER IN THE BASIN.
3. ONCE THE BASIN HAS DRAINED, THE VALVE ON THE UNDERDRAIN SHALL BE CLOSED.
4. BASIN SHALL BE MONITORED DURING FUTURE RUNOFF EVENTS TO ENSURE DEWATERING ISSUES DO NOT CONTINUE.

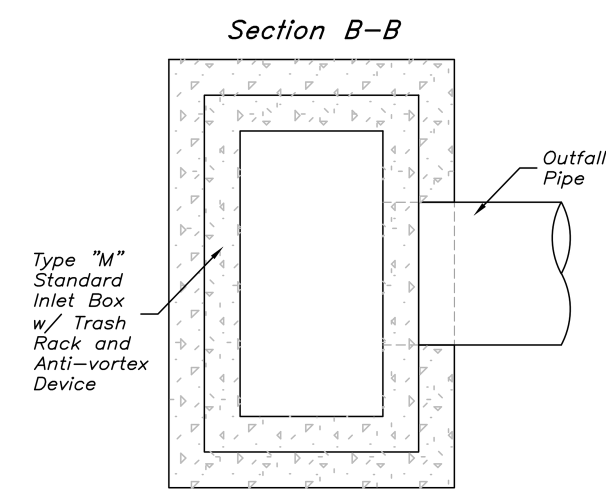
NOTES:

1. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).



TYPICAL POND SECTION
NOT TO SCALE
1 / D7.2



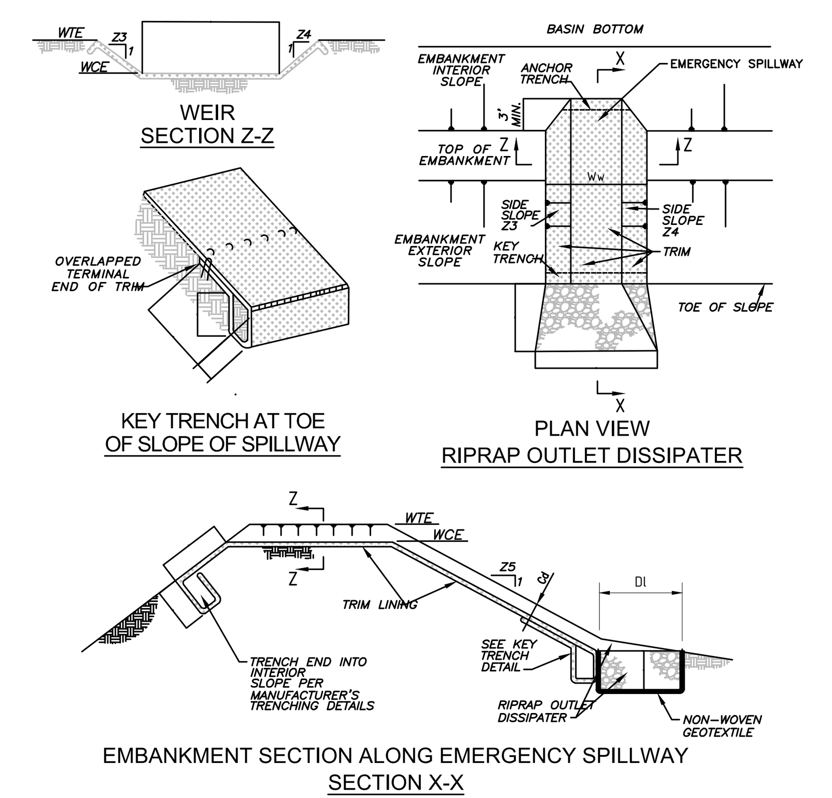


Basin
Top Elev. 1108.25
Btm. Elev. 1102.00
Embankment Slope 3:1

Outlet Structure
Top Primary Spillway 1106.00
25.2" High x 8" Wide.
Orifice 1103.90

Outfall Pipe
Inv. Elev. 1101.50
Length 41.29
Slope 0.56%
Diameter/Type 18" SWPP

OUTLET STRUCTURE
NOT TO SCALE
2 / D8.2



	WEIR					LINING		CHANNEL		DISSIPATER			
BASIN NO.	Z3 (FT)	Z4 (FT)	TOP ELEV WTE (FT)	CREST ELEV WCE (FT)	WIDTH Ww (FT)	TRM Type	STAPLE PATTERN	Z5 (FT)	DEPTH Cd (FT)	LENGTH Dl (FT)	WIDTH Dw (FT)	RIPRAP SIZE (R-_)	RIPRAP THICK. DRt (IN)
2	3	3	1108.25	1107	20	P550	MFG	3	1	5	20	4	18

HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.

DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.

THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

7 / 13
BASIN EMERGENCY SPILLWAY WITH TRM LINING
(N.T.S.)

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514–7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO
THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880–1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295–8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

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www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE-060435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

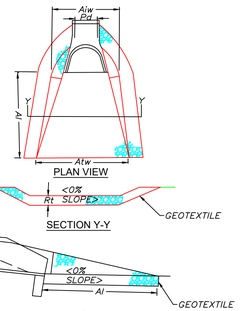
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291–002–21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
PCSM PLAN - SCM-005

SHEET NO.
D8.4

S: \PROJECTS\291–002–21–HABEN PROPERTY –NEW CASTLE\DRAWINGS\291–002–21–BASE–250407.DWG



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE (R-___)	RIPRAP THICK. Rt (IN)	RIPRAP LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
Storm HW 1	18	R-4	18	8.0	4.5	12.5
Storm HW 2	24	R-4	18	12.0	6.0	18.0
Storm HW 3	18	R-4	18	8.0	4.5	12.5
Storm HW 4	18	R-4	18	8.0	4.5	12.5
Storm HW 5	24	R-4	18	12.0	6.0	18.0
Storm HW 6	15	R-4	18	8.0	3.75	11.75
DA #1 (SCM-002)	4	R-3	9	6.0	1.0	7.0
DA #1 (SCM-003)	4	R-3	9	6.0	1.0	7.0
DA #1 (SCM-004)	4	R-3	9	6.0	1.0	7.0

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

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

9 - 1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL (N.T.S.)

NOTE:
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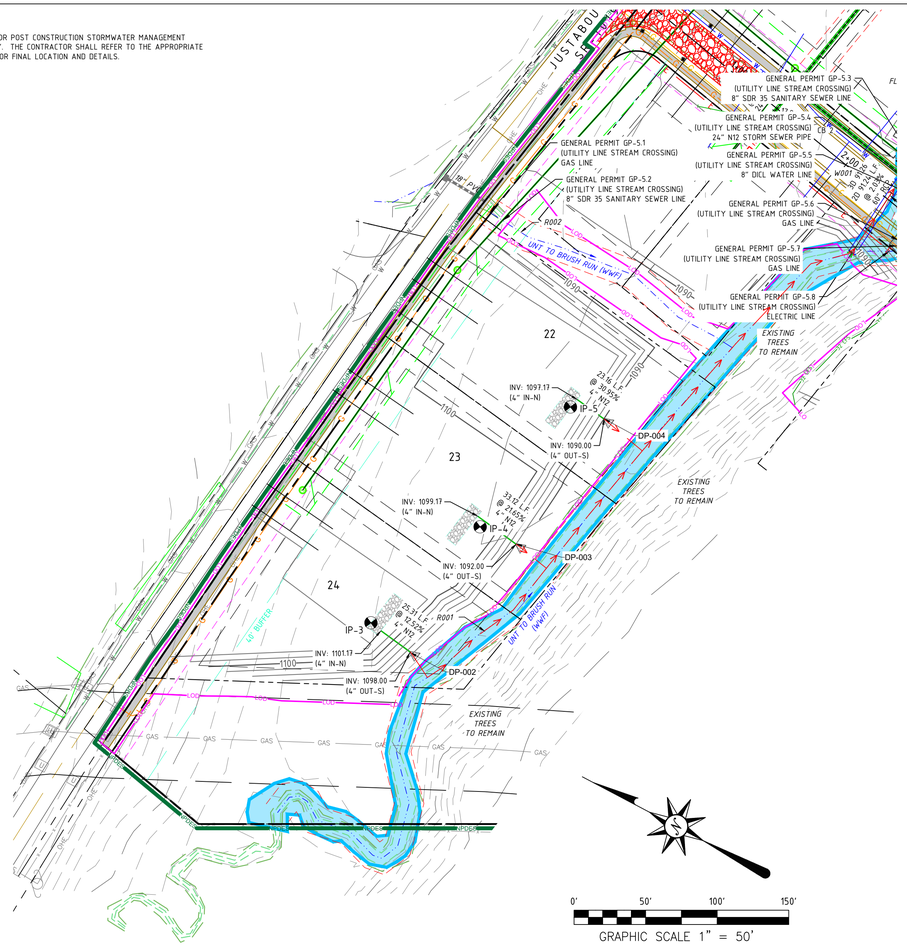
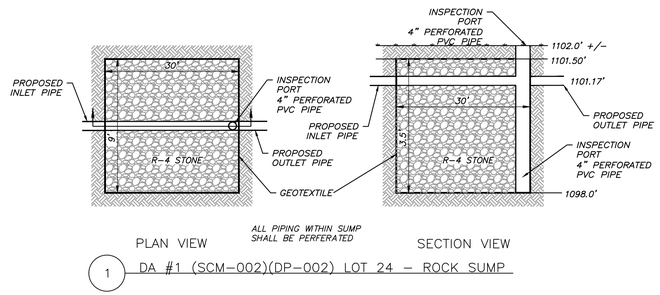
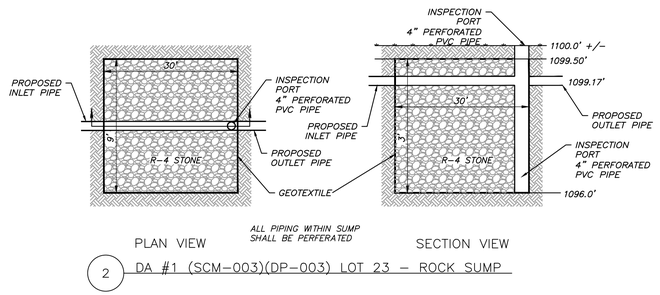


ON LOT SUMPS (SCM-002, SCM-003, AND SCM-004)

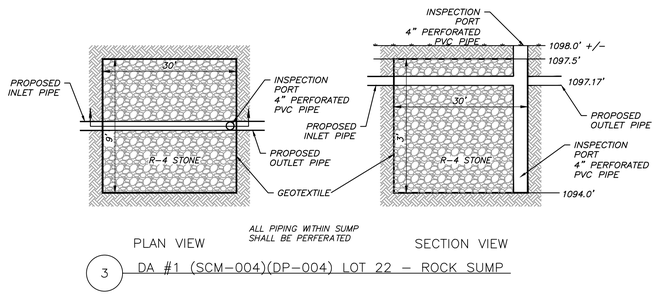
SCALE : 1" = 50'



1 DA #1 (SCM-002)(DP-002) LOT 24 - ROCK SUMP



2 DA #1 (SCM-003)(DP-003) LOT 23 - ROCK SUMP



3 DA #1 (SCM-004)(DP-004) LOT 22 - ROCK SUMP

CONSTRUCTION SEQUENCE

1. PROTECT INFILTRATION BASIN AREA FROM COMPACTION PRIOR TO INSTALLATION.
2. IF POSSIBLE, INSTALL DRY WELLS DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENT AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY.
3. INSTALL AND MAINTAIN PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
4. EXCAVATE DRY WELL BOTTOM IN A UNIFORM, LEVEL UNCOMPACTED SUBGRADE FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. TO THE GREATEST EXTENT POSSIBLE, EXCAVATION SHOULD BE PERFORMED WITH THE LIGHTEST PRACTICAL EQUIPMENT. EXCAVATION EQUIPMENT SHOULD BE PLACED OUTSIDE THE LIMITS OF THE DRY WELL.
5. COMPLETELY WRAP DRY WELL WITH NONWOVEN GEOTEXTILE. (IF SEDIMENT AND/OR DEBRIS HAVE ACCUMULATED IN DRY WELL BOTTOM, REMOVE PRIOR TO GEOTEXTILE PLACEMENT.) GEOTEXTILE ROLLS SHOULD OVERLAP BY A MINIMUM OF 24 INCHES WITHIN THE TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTIL DURING STONE PLACEMENT.
6. INSTALL CONTINUOUSLY PERFORATE PIPE, OBSERVATION WELLS, AND ALL OTHER DRY WELL STRUCTURES. CONNECT ROOF LEADERS TO STRUCTURES AS INDICATED ON PLANS.
7. PLACE UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 6" LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
8. FOLD AND SECURE NONWOVEN GEOTEXTILE OVER TRENCH, WITH MINIMUM OVERLAP OF 12-INCHES.
9. PLACE 12-INCH LIFT OF APPROVED TOPSOIL OVER TRENCH, AS INDICATED ON THE PLANS.
10. SEED AND STABILIZE TOPSOIL.
11. CONNECT SURCHARGE PIPE TO ROOF LEADERS AND POSITION OVER SPLASH BOARD.

MAINTENANCE ISSUES

1. INSPECT DRY WELLS AT LEAST FOUR TIMES A YEAR, AS WELL AS AFTER EVERY STORM EXCEEDING 1 INCH.
2. DISPOSE OF SEDIMENT, DEBRIS/TRASH, AND ANY OTHER WASTE MATERIAL REMOVED FROM A DRY WELL AS SUITABLE DISPOSAL/RECYCLING SITES AND IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL WASTE REGULATIONS.
3. EVALUATE THE DRAIN-DOWN TIME OF THE DRY WELL TO ENSURE THE MAXIMUM TIME OF 72 HOURS IS NOT BEING EXCEEDED. IF DRAIN-DOWN TIMES ARE EXCEEDING THE MAXIMUM, DRAIN THE DRY WELL VIA PUMPING AND CLEAN OUR THE PERFORATED PIPING, IF INCLUDED. IF SLOW DRAINING PERSISTS, THE SYSTEM MAY NEED REPLACING.
4. REGULARLY CLEAN OUT GUTTERS AND ENSURE PROPER CONNECTIONS TO FACILITATE THE EFFECTIVENESS OF THE DRY WELL.
5. REPLACE FILTER SCREEN THAT INTERCEPTS ROOF RUNOFF AS NECESSARY.

NOTES:

1. THE DRAWING IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM OF 1983, SOUTH ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
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333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

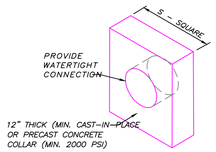
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
PCSM PLAN - ON LOT SUMPS

SHEET NO.
D8.5

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

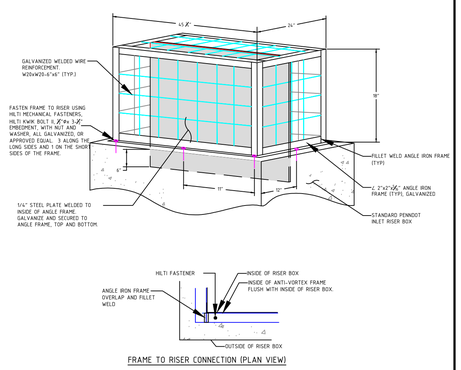


ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

COLLAR SIZE AND SPACING SHALL BE AS INDICATED BELOW.

Basin No.	Pipe Size (in)	S (in)	No. of Collars	Distance Riser to 1st Collar (ft)	Collar Spacing (ft)
SCM-001	18	63.5	1	18	9.5
SCM-005	18	73	1	18	11.45

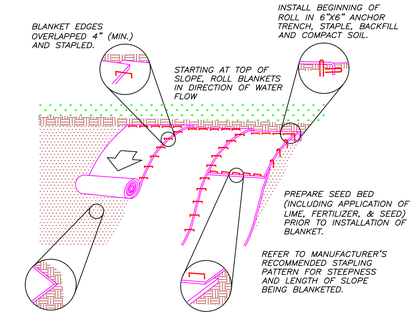
7/16 CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS (N.T.S.)



FRAME TO RISER CONNECTION (PLAN VIEW)

NOTES:
1. STEEL ANTI-VORTEX PLATE SHALL EXTEND INTO RISER 6".
2. STEEL ANTI-VORTEX PLATE SHALL BE WELDED AT THE MIDPOINT OF THE SHORT SIDE OF THE FRAME.
3. TRASH RACK MAY BE CONSTRUCTED OF ALUMINUM. DESIGN MUST BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
4. WELDED WIRE REINFORCING TO CONFORM TO ASTM A185.
5. STEEL ANGLES AND PLATE TO CONFORM TO ASTM A36.

S/3E PERMANENT STORMWATER FACILITY TRASH RACK & ANTI-VORTEX DEVICE (N.T.S.)



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

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

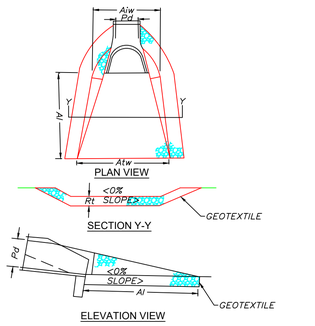
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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

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

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

11-1 EROSION CONTROL BLANKET INSTALLATION (N.T.S.)



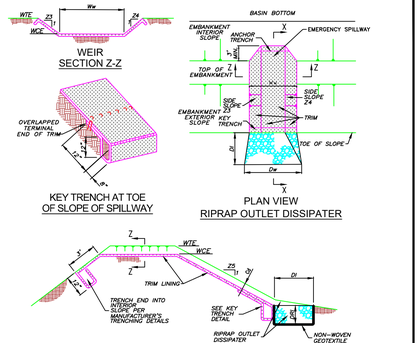
ELEVATION VIEW

OUTLET NO.	PIPE DIA Pid (IN)	RIPRAP SIZE (R-___)	RIPRAP THICK. Rt (IN)	APRON LENGTH Ai (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
Storm HW 1	18	R-4	18	8.0	4.5	12.5
Storm HW 2	24	R-4	18	12.0	6.0	18.0
Storm HW 3	18	R-4	18	8.0	4.5	12.5
Storm HW 4	18	R-4	18	8.0	4.5	12.5
Storm HW 5	24	R-4	18	12.0	6.0	18.0
Storm HW 6	15	R-4	18	8.0	3.75	11.75
DA #1 (SCM-002)	4	R-3	9	6.0	1.0	7.0
DA #1 (SCM-003)	4	R-3	9	6.0	1.0	7.0
DA #1 (SCM-004)	4	R-3	9	6.0	1.0	7.0

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

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

9-1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL (N.T.S.)



EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY
SECTION X-X

BASIN NO.	WEIR Z3 (FT)	WEIR Z4 (FT)	WEIR TOP ELEV WTE (FT)	WEIR CREST ELEV WCE (FT)	WEIR WIDTH Ww (FT)	LINING TRM TYPE	LINING STAPLE PATTERN	CHANNEL Z5 (FT)	CHANNEL DEPTH Cd (FT)	DISSIPATER LENGHT Di (FT)	DISSIPATER WIDTH Dw (FT)	DISSIPATER RIPRAP SIZE (R-__)	DISSIPATER RIPRAP THICK DRI (IN)
SCM-001	3	3	1088	1087	30	P550	MFG	3	1	5	30	4	18
SCM-005	3	3	1108.25	1107	20	P550	MFG	3	1	5	20	4	18

HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.

DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.

THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

BASIN EMERGENCY SPILLWAY WITH TRM LINING (N.T.S.)

ERNEST 180 RAIN GARDEN MIX

Mix Composition

33.4% Schizachyrium scoparium, 'Itasca', MN Ecotype (Little Bluestem, 'Itasca', MN Ecotype)
20.0% Elymus virginicus, 'Madison' (Virginia Wildrye, 'Madison')
7.0% Carex vulpinoidea, PA Ecotype (Fox Sedge, PA Ecotype)
5.6% Chasmanthium latifolium. WV Ecotype (River Oats, WV Ecotype)
5.5% Echinacea purpurea (Purple Coneflower)
3.0% Chamaecrista fasciculata, PA Ecotype (Partridge Pea, PA Ecotype)
3.0% Coreopsis lanceolata (Lanceleaf Coreopsis)
3.0% Panicum clandestinum, Tioga (Deertongue, Tioga)
3.0% Panicum rigidulum, PA Ecotype (Redtop Panicgrass, PA Ecotype)
3.0% Rudbeckia hirta (Blackeyed Syusan)
3.0% Verbena hastat, PA Ecotype (Blue Vervain, PA Ecotype)
2.0% Helliopsis helianthoides, PA Ecotype (Oxeye Sunflower, PA Ecotype)
1.8% Asclepias incarnate, PA Ecotype (Swamp Milkweed, PA Ecotype)
1.0% Carex scoparia, PA Ecotype (Blunt Broom Sedge, PA Ecotype)
1.0% Senna hebecarpa, VA & WV Wcotype (Wild Senna, VA & WV Ecotype)
0.7% Pycnanthemum tenuifolium (Narrowleaf Mountainmint)
0.5% Aster novae-anglia, PA Ecotype (New England Aster, PA Ecotype)
0.5% Aster prenanthoides, PA Ecotype (Zigzag Aster, PA Ecotype)
0.5% Baptisia australis, Southern WV Ecotype (Blue False Indigo, Southern WV Ecotype)
0.5% Zizia aurea (Golden Alexanders)
0.4% Monarda fitulosa, Fort Indiantown Gap-PA Ecotype (Wild Bergamot, Fort Indiantown Gap-PA Ecotype)
0.3% Helenium autumnale, PA Ecotype (Common Sneezeweed, PA Ecotype)
0.3% Juncus tenuis, PA Ecotype (Path Rush, PA Ecotype)
0.2% Eupatorium perfoliatum, PA Ecotype (Boneset, PA Ecotype)
0.2% Juncus effusus (Soft Rush)
0.2% Oenothera fruiticosa var, fruticose (Sundrops)
0.2% Solidago nemoralis, PA Ecotype (Gray Goldenrod, PA Ecotype)
0.2% Solidago rugosa, PA Ecotype (Wrinkleaf Goldenrod, PA Ecotype)

General Product Information:
The native perennial forbs and grasses provide food and cover for rain garden biodiversity. Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Item Number: ERNMX-180
Height: 0.3 - 5.0 Feet
Seeding Rate: 20 lb per acre with a cover crop of grain rye at 30 lb per acre

Ernest Conservation Seeds, Inc. | 8884 Mercer Pike, Meadville PA 16335

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878 295 8914 F:724 514-7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
PCSM DETAILS

SHEET NO.
D8.6

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

811 Know what's below. Call before you dig.

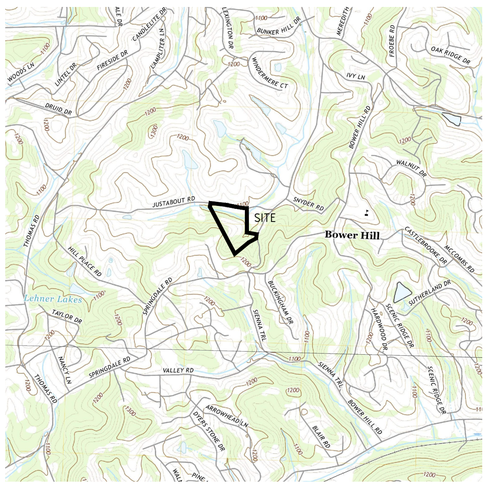
S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

EROSION & SEDIMENTATION CONTROL PLANS
NEWCASTLE
PETERS TOWNSHIP, WASHINGTON COUNTY
PENNSYLVANIA

PREPARED FOR:

339 JUSTABOUT LAND COMPANY, LLC.

VICINITY MAP
SCALE: 1"=500'



USGS MAP
SCALE: 1"=2000'

NOTE
THE MERIDIAN OF THE PROJECT IS THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

FILL MATERIAL NOTICE:
THE CONSTRUCTION OF THIS SITE WILL NOT REQUIRE EXCESS FILL MATERIAL FROM AN OFFSITE FACILITY. ANY EXCESS FILL MATERIAL (IF REQUIRED) SHALL BE FROM A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN APPROVED AND ON FILE AT THE COUNTY CONSERVATION DISTRICT.

1. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.).

2. ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

3. ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF CLEAN FILL."

EROSION & SEDIMENT CONTROL MAINTENANCE & INSPECTION SCHEDULE:
1. THE SPECIFIC INSPECTION AND MAINTENANCE REQUIREMENTS FOR EACH BMP IS LISTED WITH EACH DETAIL.
2. THE SOIL EROSION FACILITIES SHOWN ON THESE PLANS SHALL BE CONSTRUCTED AND MAINTAINED BY THE OWNER, HIS HEIRS OR ASSIGNS.
3. ADDITIONAL MAINTENANCE REQUIREMENTS ARE LOCATED WITH PLAN DETAILS AS APPLICABLE.
4. THE OWNER, THE CONTRACTOR OR ASSIGNS SHALL BE RESPONSIBLE FOR CONTINUING MAINTENANCE OF THE FACILITIES WHICH SHALL INCLUDE SUCH ITEMS AS MOWING, CLEANING AND REMOVING SEDIMENT AND/OR DEBRIS. ALL SEDIMENTS SHALL BE STOCKPILED AND SEEDED AND WILL BE USED IN FINAL GRADING. ALL DEBRIS SHALL BE RECYCLED OR DISPOSED OF IN A LANDFILL.
5. THE OWNER, CONTRACTOR OR ASSIGNS SHALL INSPECT AND/OR REPAIR THE FACILITIES WEEKLY AND AFTER EACH STORM EVENT. THE OWNER, CONTRACTOR OR ASSIGNS SHALL ALSO BE RESPONSIBLE FOR REPARATION OF ANY STRUCTURAL DAMAGES OR FAILURE WHICH MAY OCCUR AS A RESULT OF NEGLIGENCE, ACCIDENT OR MISUSE. IN THE EVENT OF STRUCTURAL DAMAGE, THE OWNER SHALL BE RESPONSIBLE TO MAKE THE NECESSARY REPAIRS AS QUICKLY AS POSSIBLE, BUT IN ANY CASE WITHIN 5 DAYS.
6. A WRITTEN REPORT MUST BE KEPT BY THE CONTRACTOR DOCUMENTING INSPECTIONS AND REPAIRS TO ALL BMPS. THE CONTRACTOR SHALL INSPECT AND LOG ALL ACTIVITIES ONTO DEP FORM 3150-FM-BWEW0083 (DATED 2/2012) AND KEPT ON SITE AT ALL TIMES.

RECYCLING AND DISPOSAL METHODS:
ALL BUILDING AND CONSTRUCTION WASTE MATERIALS MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. NO BUILDING MATERIALS, WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE. BUILDING AND CONSTRUCTION WASTE INCLUDES, BUT IS NOT LIMITED TO: EXCESS SOIL AND ROCK, MISC. BUILDING MATERIALS, CONCRETE AND CONCRETE WASH WATER, SANITARY WASTE AND ANY OTHER MATERIAL THAT COULD HAVE ADVERSE AFFECTS.

UTILITY TRENCHING NOTES:
1. THE EXCAVATED MATERIAL FROM TRENCHING SHALL BE PLACED ON THE UPSLOPE SIDE OF THE TRENCH.
2. THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF PIPELINE/UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY.
3. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN PIPELINE/UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
4. ANY BMP'S AFFECTED BY TRENCHING AND BACKFILLING OPERATIONS SHALL BE REPAIRED AND STABILIZED IMMEDIATELY.

GENERAL E&S PLAN NOTES:
1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) 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.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S 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.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. 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 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE 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.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED 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 UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY ONTO THE ROADWAY, EXCEPT FOR THE LOCATION OF THE ROCK CONSTRUCTION ENTRANCE.
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES -- 6 TO 12 INCHES ON COMPACTED SOILS -- PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
29. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
33. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
34. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
35. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.

SHEET NO.	SHEET TITLE
D9.0	E&S COVER SHEET
D0.1	GENERAL NOTES AND LEGENDS
D1.0	EXISTING CONDITIONS PLAN
D4.0	OVERALL SITE GRADING PLAN
D4.1	ROAD PROFILES
D5.0	OVERALL UTILITY PLAN
D6.0	OVERALL STORM SEWER PLAN
D7.0	OVERALL SANITARY SEWER PLAN
D8.0	PCSM PLAN COVER SHEET
D8.1	OVERALL PCSM PLAN
D8.2	SCM DRAINAGE AREA MAP
D8.3	PCSM PLAN – POND 1
D8.4	PCSM PLAN – POND 2
D8.5	PCSM PLAN – ON LOT SUMPS
D8.6	PCSM DETAILS
D9.1	E&S PLAN PHASE 1
D9.2	E&S PLAN PHASE 2
D9.3	E&S DETAILS/NOTES
D9.4	E&S DETAILS/NOTES
D9.5	E&S DETAILS/NOTES
D9.6	E&S DETAILS/NOTES
D9.7	GENERAL PERMITS

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878.295.8914 F:724.514.7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-090435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE
PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
E&S COVER SHEET

SHEET NO.
D9.0

S: \PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

LEGEND

- PROPERTY LINE
- LOT LINE
- YARD SETBACK
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING GAS MARKER
- EXISTING TELEPHONE PEDESTAL
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- 8" SDR 35 — EXISTING SANITARY SEWER LINE
- EXISTING STORM PIPE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING WATERLINE
- EXISTING GASLINE
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING TREE LINE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- STREAM FLOODWAY
- 18 CFS — 18 CFS — 18" COMPOST FILTER SOCK
- 24 CFS — 24 CFS — 24" COMPOST FILTER SOCK
- 32 CFS — 32 CFS — 32" COMPOST FILTER SOCK

NOTE:
THIS PLAN IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY. THE CONTRACTOR SHALL REFER TO THE APPROPRIATE UTILITY PLAN FOR FINAL LOCATION AND DETAILS.

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

EROSION AND SEDIMENT CONTROL NOTES:

1. ROCK CONSTRUCTION ENTRANCE
2A. 18" COMPOST FILTER SOCK
2B. 32" COMPOST FILTER SOCK
3. TOPSOIL STOCK PILE (CAN BE RELOCATED BY CONTRACTOR, ENGINEER TO BE NOTIFIED
4. DIVERSION CHANNEL

FLOOD PLAIN NOTE:
THE SITE IS LOCATED IN ZONE X - AREA OF MINIMAL FLOOD HAZARD PER FIRM MAP NUMBER 42125C0214E WITH AN EFFECTIVE DATE OF 9/30/2015.

WATERSHED AND RUNOFF:
THE SITE IS LOCATED WITHIN THE BRUSH RUN WATERSHED, HAVING A CHAPTER 93 WATERSHED CLASSIFICATION OF WARM WATER FISHERY (WWF). BRUSH RUN WATERSHED IS AN IMPAIRED WATERSHED, ALL BMP'S ARE TO FOLLOW ABACT DETAILS AND NOTES.

WETLANDS:
THERE ARE WETLANDS DELINEATED WITHIN THE PROJECT BOUNDARIES.

0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

Know what's below. Call before you dig.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CHRISTOPHER W. HAMM — ENGINEER — PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

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CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO:	291-002-21
DATE:	1/10/2025
DRAWN BY:	RAM
CHECKED BY:	CWH

SHEET TITLE:
E&S PLAN
PHASE 1

SHEET NO.
D9.1

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

LEGEND

- PROPERTY LINE
- LOT LINE
- YARD SETBACK
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING GAS MARKER
- EXISTING TELEPHONE PEDESTAL
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- EXISTING SANITARY SEWER LINE (8" SDR 35)
- EXISTING STORM PIPE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING WATERLINE
- EXISTING GASLINE
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING TREE LINE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- STREAM FLOODWAY
- 18" COMPOST FILTER SOCK
- 24" COMPOST FILTER SOCK
- 32" COMPOST FILTER SOCK
- PROPOSED 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED CATCH BASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED ELECTRIC/TELEPHONE LINE
- PROPOSED ELECTRIC PEDESTAL
- PROPOSED WATERLINE
- PROPOSED GASLINE
- PROPOSED STORM SEWER (15")
- PROPOSED SANITARY LINE
- SANITARY SEWER EASEMENT
- STORM SEWER EASEMENT
- UTILITY EASEMENT
- ASPHALT CURB
- LIMITS OF DISTURBANCE
- NPDES BOUNDARY
- WETLANDS

NOTE:
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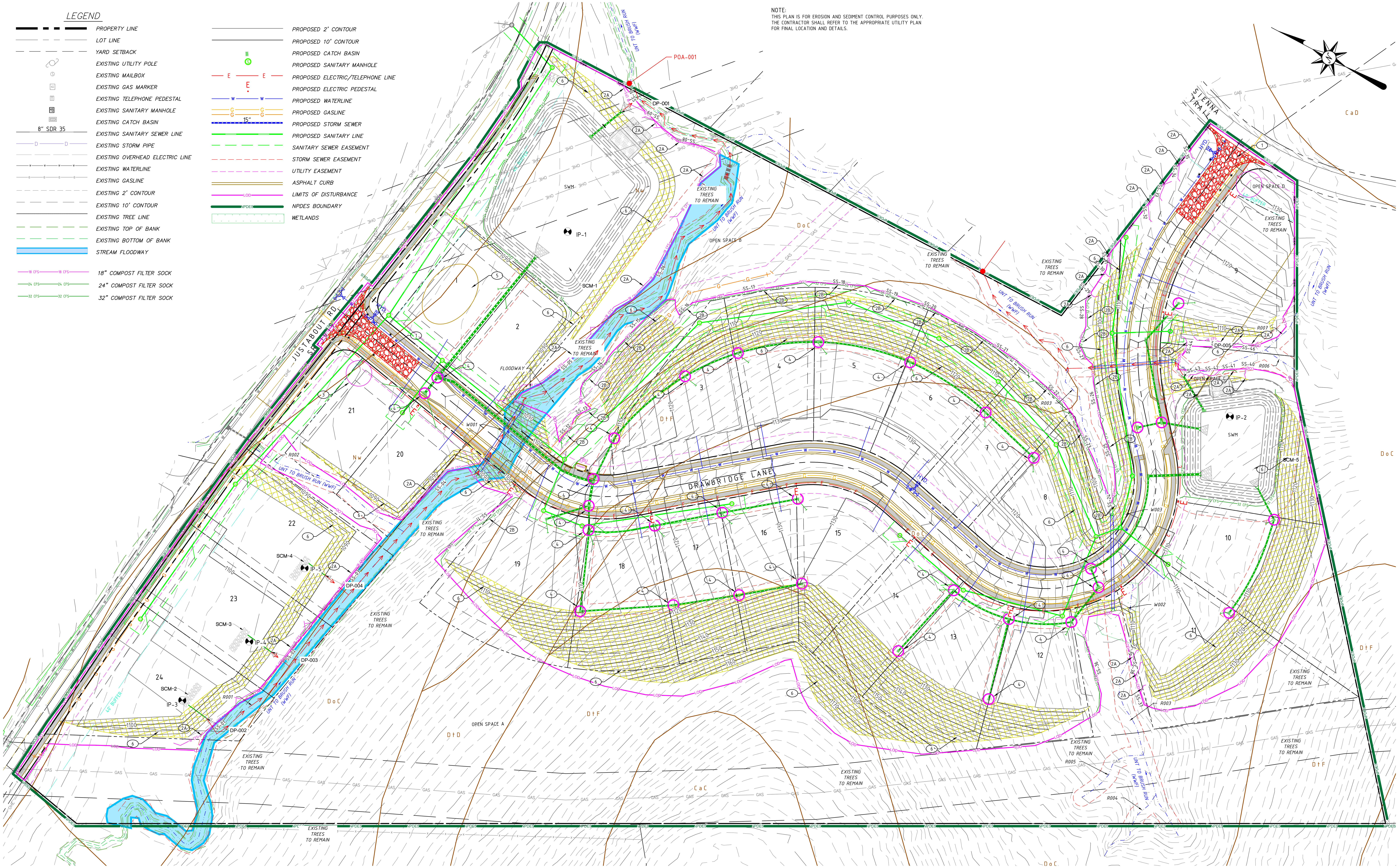
THE CONTRACTOR SHALL REFER TO THE APPROPRIATE UTILITY PLAN FOR FINAL LOCATION AND DETAILS.



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PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

EROSION AND SEDIMENT CONTROL NOTES:

1. ROCK CONSTRUCTION ENTRANCE
2A. 18" SILT SOCK
2B. 32" SILT SOCK
3. CONCRETE WASHOUT (CAN BE RELOCATED BY CONTRACTOR, ENGINEER TO BE NOTIFIED
4. INLET PROTECTION
5. TOPSOIL STOCK PILE (CAN BE RELOCATED BY CONTRACTOR, ENGINEER TO BE NOTIFIED
6. EROSION CONTROL BLANKET

GRAPHIC SCALE 1" = 50' (0' 50' 100' 150')

DEVELOPER:
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER W. HAMM PE-060435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

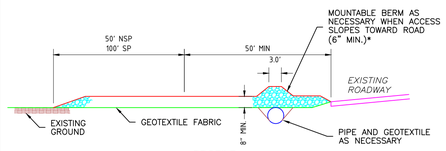
PETERS TOWNSHIP, WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

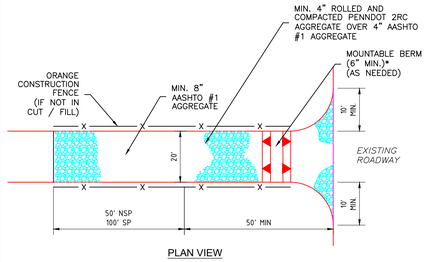
SHEET TITLE: E&S PLAN PHASE 2

SHEET NO. D9.2

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG



PROFILE



PLAN VIEW

*MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NSP – NON SPECIAL PROTECTION WATERSHED
SP – SPECIAL PROTECTION WATERSHED

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ALTERNATIVE METHOD LANGUAGE

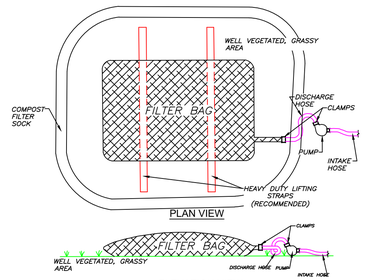
REASONABLE METHODS WHICH ARE SANCTIONED BY THE PADEP AS ALTERNATIVES TO INSTALLATION OF TIRE WASH STATIONS ON PUBLIC ROAD ACCESS POINTS FOR PROJECTS IN EV/HQ WATERSHEDS INCLUDE:

1. *FOR PAVED SURFACE PUBLIC ROADS: USE OF A VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT.*
2. *FOR DIRT OR GAVEL SURFACE PUBLIC ROADS: RIGOROUS MANUAL REMOVAL OF MUD/DIRT FROM VEHICLE/EQUIPMENT TIRES PRIOR TO EXITING CONSTRUCTION SITE, SUPPLEMENTED BY IMMEDIATE RECOVERY, BY MANUAL OR MECHANICAL MEANS, OF SOIL WHICH MAY BECOME DISCHARGED ONTO PUBLIC ROADWAYS. DUST CONTROL AND/OR COMPACTION VIA ROLLING OF THE DIRT PUBLIC ROAD SURFACE WILL BE IMPLEMENTED AS NEEDED.*

A PREDICATE FOR UTILIZING ALTERNATIVE 1 AND 2 ABOVE IS THAT THE ROCK PAD CONSTRUCTION ENTRANCE MUST BE EXTENDED TO A MINIMUM TOTAL LENGTH OF 100 FEET AND MUST BE CONSTANTLY MAINTAINED INCLUDING STRUCTURE THICKNESS TO INSURE ITS EFFECTIVENESS REMAINS INTACT AT ALL TIMES.

FREQUENCY OF MECHANICAL AND /OR MANUAL CONTROLS WILL BE DEPENDENT UPON CONSTRUCTION TRAFFIC INTENSITY, WEATHER AND SOIL MOISTURE CONDITIONS. THE CONSTRUCTION ENTRANCE SHALL HAVE CONTINUAL MAINTENANCE AND IMMEDIATE REMOVAL OF SEDIMENT TRACKED ONTO THE ROADWAY. THE VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT SHALL CLEAN THE ROAD WAY. THE REQUIREMENT IS TO NOT INTRODUCE SEDIMENT LOAD FROM CONSTRUCTION TRAFFIC ONTO PUBLIC ROAD SURFACES AND INTO ROAD DITCHES WHICH WILL FLOW INTO THE EV/HQ WATER RESOURCES WHICH ARE THE SUBJECT OF THE INCREASED PROTECTION MEASURES.

3–1 ALTERNATE ROCK CONSTRUCTION ENTRANCE (HQ)



PLAN VIEW

ELEVATION VIEW

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON–WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" 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 ½ 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.

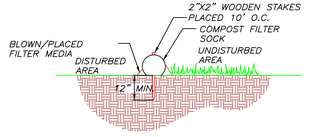
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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.

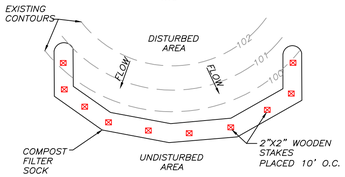
THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR ½ THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

3–16 PUMPED WATER FILTER BAG (HQ) (N.T.S.)



SECTION VIEW
NTS



PLAN VIEW
NTS

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED MAXIMUM PERMISSIBLE SLOPE LENGTH ABOVE COMPOST FILTER SOCKS. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

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 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.

4–1 COMPOST FILTER SOCK (N.T.S.)

TABLE 4.1

Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12"	12"	12"	12"	12"
	18"	18"	18"	18"	18"
		24"	24"	24"	24"
		32"	32"	32"	32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctures				
	3/4" X 3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)				
	3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

TABLE 4.2

Compost Standards

Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.0
Moisture Content	35% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL CHRISTOPHER W. HAMM ENGINEER PE–080435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:

339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

STANDARD E&S WORKSHEET #1
Compost Filter Socks

PROJECT NAME: Tuscany II
LOCATION: Peters Township, Washington County, PA
PREPARED BY: RAM DATE: 10/25/2024
CHECKED BY: DATE:

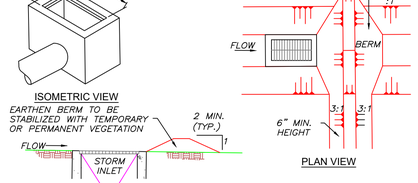
Sock Number	Sock Length (ft)	Diameter (in)	Approximate Location	Slope (%)	Slope Length Above Sock (ft)
SS-1	78	18 IN. CFS	Above R001	5	168
SS-2	127	18 IN. CFS	Above R001	6	184
SS-3	135	18 IN. CFS	Above R001	7	184
SS-4	124	18 IN. CFS	Above R001	4	113
SS-5	145	18 IN. CFS	Above R001	5	227
SS-6	168	18 IN. CFS	Above R001	4	249
SS-7	89	18 IN. CFS	Above R001	4	285
SS-8	89	18 IN. CFS	Above UNT Brush Run	5	233
SS-9	23	18 IN. CFS	Above UNT Brush Run	7	158
SS-10	52	18 IN. CFS	Above UNT Brush Run	9	122
SS-11	128	32 IN. CFS	Above R001	19	269
SS-12	43	32 IN. CFS	Above R001	15	350
SS-13	35	32 IN. CFS	Above R001	13	362
SS-14	75	32 IN. CFS	Above R001	19	400
SS-15	91	32 IN. CFS	Above R001	17	429
SS-16	26	32 IN. CFS		15	350
SS-17	133	32 IN. CFS		15	312
SS-18	76	32 IN. CFS		14	441
SS-19	46	32 IN. CFS		18	216
SS-20	58	32 IN. CFS		17	303
SS-21	114	32 IN. CFS		16	322
SS-22	58	32 IN. CFS	Above R003	15	376
SS-23	107	32 IN. CFS	Above R003	15	364
SS-24	16	32 IN. CFS	Above R003	15	244
SS-25	90	32 IN. CFS	Above R003	13	275
SS-26	54	32 IN. CFS	Above R003	12	308

STANDARD E&S WORKSHEET #1
Compost Filter Socks

PROJECT NAME: Tuscany II
LOCATION: Peters Township, Washington County, PA
PREPARED BY: RAM DATE: 10/25/2024
CHECKED BY: DATE:

Sock Number	Sock Length (ft)	Diameter (in)	Approximate Location	Slope (%)	Slope Length Above Sock (ft)
SS-27	46	32 IN. CFS		14	306
SS-28	39	32 IN. CFS		16	271
SS-29	11	18 IN. CFS		23	103
SS-30	10	18 IN. CFS		18	136
SS-31	19	18 IN. CFS		16	126
SS-32	28	18 IN. CFS		13	110
SS-33	29	18 IN. CFS		12	144
SS-34	28	18 IN. CFS		15	96
SS-35	15	18 IN. CFS		18	44
SS-36	98	32 IN. CFS	Above R003	21	218
SS-37	29	18 IN. CFS	Above R003	23	62
SS-38	19	18 IN. CFS	Above R003	23	80
SS-39	15	18 IN. CFS	Above R003	21	121
SS-40	12	18 IN. CFS	Above R007	6	52
SS-41	20	18 IN. CFS	Above R007	15	166
SS-42	25	18 IN. CFS	Above R007	15	200
SS-43	20	18 IN. CFS	Above R007	14	208
SS-44	30	18 IN. CFS	Above R007	0	0
SS-45	56	18 IN. CFS	Above R007	16	159
SS-46	25	18 IN. CFS	Above R007	17	166

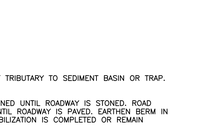
STANDARD E&S WORKSHEET #1



ISOMETRIC VIEW

ELEVATION VIEW

INSTALLATION DETAIL



PLAN VIEW

MAXIMUM DRAINAGE AREA = ½ ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

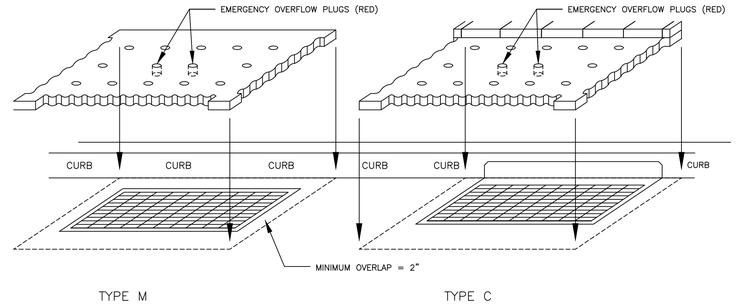
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

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 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.

4–16 FILTER BAG INLET PROTECTION – TYPE M INLET (N.T.S.)



TYPE M TYPE C

NOTES:

–PRIOR TO INSTALLATION, INLET GRATE SURFACE AND SURROUNDING AREA SHALL BE CLEANED AND CLEARED OF DEBRIS. INLET FILTER MAT SHALL BE INSTALLED WITH A MINIMUM 2" OVERLAP FROM EDGE OF GRATE TO EDGE OF MAT WITH STRAIGHT EDGE FLUSH TO CURB FACE. ADJUST MAT BY HAND UNTIL PLACEMENT ALLOWS FOR OPTIMAL MAGNETIC ADHESION TO GRATE SURFACE.

– PREINSTALLED RED EMERGENCY OVERFLOW PLUGS CAN BE REMOVED IN THE EVENT OF FLOODING TO ALLOW FOR RAPID DEWATERING. AFTER DEWATERING, THE INLET FILTER MAT SHALL BE LIFTED AND THOROUGHLY CLEANED OR REPLACED AND THE AND THE EMERGENCY OVERFLOW PLUGS SHALL BE REINSTALLED. IF GRATE IS AT LOWEST POINT OF STREET, REMOVAL OF ONE PLUG WILL ALLOW FOR EXPECTED DEWATERING AT ALL TIMES.

–INLET FILTER MATS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. AS NEEDED, INLET FILTER MATS SHALL BE LIFTED AND RINSED OR REPLACED. WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET OR THE INLET FILTER MAT BECOMES COMPRESSED DUE TO HEAVY TRAFFIC, REPLACEMENT IS REQUIRED.

–A SUPPLY OF SPARE INLET FILTER MATS SHALL BE MAINTAINED ON SITE. ALL NECESSARY REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED MATS ACCORDING TO THE PLAN NOTES.

BLACKHAWK INLET FILTER SYSTEM (N.T.S.)

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

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NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291–002–21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
E&S DETAILS/NOTES

SHEET NO.
D9.3

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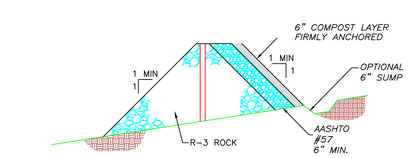
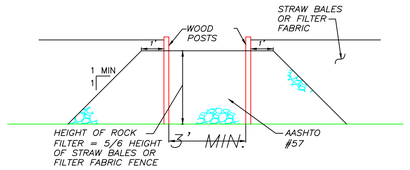


OUTLET CROSS-SECTION

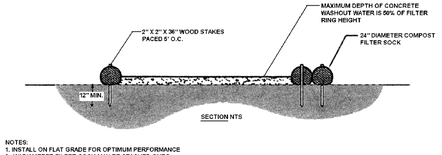


UP-SLOPE FACE

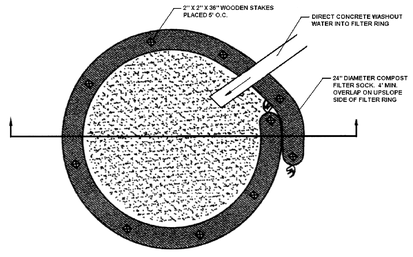
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

4–6 ROCK FILTER OUTLET (HQ) (N.T.S.)

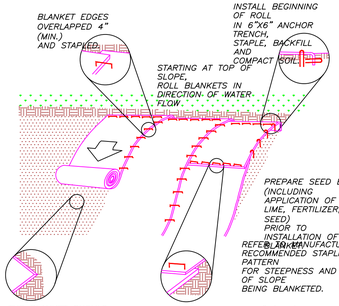


NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 16" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



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

TYPICAL COMPOST SOCK WASHOUT INSTALLATION (N.T.S.)



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

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

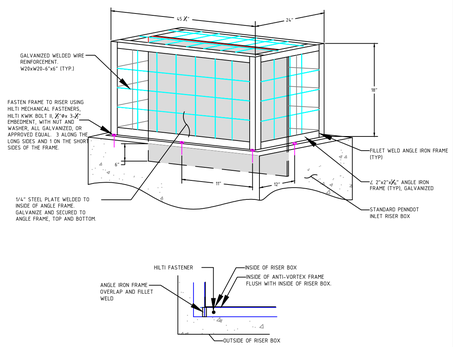
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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

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

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

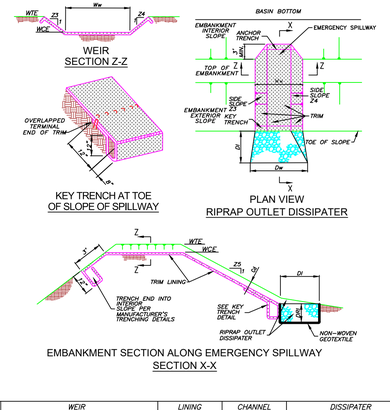
11–1 EROSION CONTROL BLANKET INSTALLATION (N.T.S.)



FRAME TO RISER CONNECTION (PLAN VIEW)

NOTES:
1. STEEL ANTI-VORTEX PLATE SHALL EXTEND INTO RISER 6".
2. STEEL ANTI-VORTEX PLATE SHALL BE WELDED AT THE MIDPOINT OF THE SHORT SIDE OF THE FRAME
3. TRASH RACK MAY BE CONSTRUCTED OF ALUMINUM DESIGN MUST BE APPROVED BY ENGINEER PRIOR TO CONSTRUCTION.
4. WELDED WIRE REINFORCING TO CONFORM TO ASTM A185.
5. STEEL ANGLES AND PLATE TO CONFORM TO ASTM A36.

PERMANENT STORMWATER FACILITY TRASH RACK & ANTI–VORTEX DEVICE (N.T.S.)



EMBANKMENT SECTION ALONG EMERGENCY SPILLWAY
SECTION X-X

BASIN NO.	WEIR Z3 (FT)	WEIR Z4 (FT)	WEIR TOP ELEV WTE (FT)	WEIR CREST ELEV WCE (FT)	WEIR WIDTH Ww (FT)	LINING TRM TYPE	LINING STAPLE PATTERN	CHANNEL Z5 (FT)	DISSIPATER DEPTH Cd (FT)	DISSIPATER LENGHT Di (FT)	DISSIPATER WIDTH Dw (FT)	DISSIPATER RIPRAP SIZE (R–__)	DISSIPATER RIPRAP THICK DPt (IN)
SCM–001	3	3	1088	1087	30	P550	MFG	3	1	5	30	4	18
SCM–005	3	3	1108.25	1107	20	P550	MFG	3	1	5	20	4	18

HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT TRM LINING.

DISPLACED LINER WITHIN THE SPILLWAY AND/OR OUTLET CHANNEL SHALL BE REPLACED IMMEDIATELY.

RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.

THE USE OF BAFFLES THAT REQUIRE SUPPORT POSTS ARE RESTRICTED FROM USE IN BASINS REQUIRING IMPERVIOUS LINERS.

BASIN EMERGENCY SPILLWAY WITH TRM LINING (N.T.S.)

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

COLLAR SIZE AND SPACING SHALL BE AS INDICATED BELOW.

Basin No.	Pipe Size (in)	S (in)	No. of Collars	Distance Riser to 1st Collar (ft)	Collar Spacing (ft)
SCM-001	18	63.5	1	18	9.5
SCM-005	18	73	1	18	11.45

7/16 CONCRETE ANTI–SEEP COLLAR FOR PERMANENT BASINS (N.T.S.)

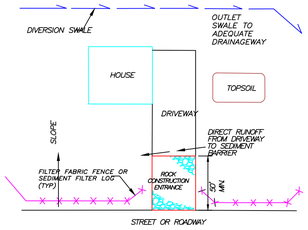
OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE (R–__)	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aw (FT)	APRON TERMINAL WIDTH Atw (FT)
Storm HW 1	18	R–4	18	8.0	4.5	12.5
Storm HW 2	24	R–4	18	12.0	6.0	18.0
Storm HW 3	18	R–4	18	8.0	4.5	12.5
Storm HW 4	18	R–4	18	8.0	4.5	12.5
Storm HW 5	24	R–4	18	12.0	6.0	18.0
Storm HW 6	15	R–4	18	8.0	3.75	11.75
DA #1 (SCM–002)	4	R–3	9	6.0	1.0	7.0
DA #1 (SCM–003)	4	R–3	9	6.0	1.0	7.0
DA #1 (SCM–004)	4	R–3	9	6.0	1.0	7.0

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

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

9–1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL (N.T.S.)

WHEREVER A LOT IS SLOPING TOWARD THE ROADWAY, A LAYOUT AS SHOWN BELOW SHOULD BE USED.

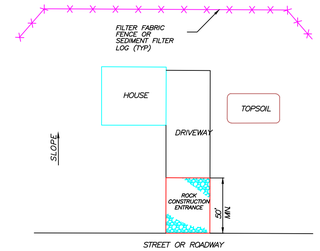


NTS

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER THE LOT EXTENDS MORE THAN 150 FEET ABOVE THE ROADWAY OR WHERE RUNOFF FROM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER MUST EXPERIENCE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING THE DISCHARGE POINT FOR THIS CHANNEL.

10–1 TYPICAL ON–LOT BMPs FOR LOT ABOVE ROADWAY (N.T.S.)

WHEREVER A LOT IS SLOPING TOWARD THE ROADWAY, A LAYOUT AS SHOWN BELOW SHOULD BE USED.

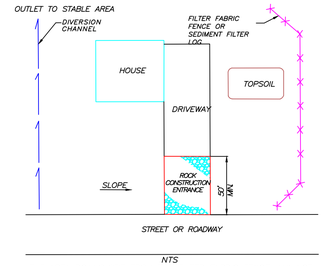


NTS

THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

10–2 TYPICAL ON–LOT BMPs FOR LOT BELOW ROADWAY (N.T.S.)

WHEREVER A LOT IS SLOPING TOWARD THE ROADWAY, A LAYOUT AS SHOWN BELOW SHOULD BE USED.



NTS

THE AREA DOWNSLOPE FROM THE FILTER FABRIC FENCE MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER RUNOFF FROM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING.

IN AREAS WHERE SLOPE IS AT AN OBLIQUE ANGLE TO THE ROADWAY, BMPs SHALL BE ADJUSTED ACCORDINGLY.

DIVERSION CHANNEL MAY OUTLET TO ROADSIDE DITCH OR STORM SEWER SYSTEM, BUT NOT ONTO STREET OR ROADWAY

10–3 TYPICAL ON–LOT BMPs FOR LOT ALONG ASCENDING OR DESCENDING ROADWAY (N.T.S.)

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

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REVISIONS: REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

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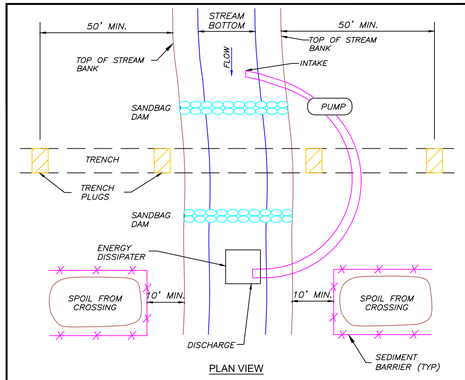
NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291–002–21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
E&S DETAILS/NOTES

SHEET NO.
D9.4



PLAN VIEW

GRUBBING SHALL NOT TAKE PLACE WITHIN 50 FEET OF TOP-OF-BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE AND PIPE IS READY FOR INSTALLATION.

BYPASS PUMP INTAKE SHALL BE MAINTAINED A SUFFICIENT DISTANCE FROM THE BOTTOM TO PREVENT PUMPING OF CHANNEL BOTTOM MATERIALS.

TRENCH PLUGS SHALL BE INSTALLED WITHIN THE TRENCH ON BOTH SIDES OF THE STREAM CHANNEL (SEE TYPICAL TRENCH PLUG INSTALLATION).

WATER ACCUMULATING WITHIN THE WORK AREA SHALL BE PUMPED TO A WATER FILTER BAG OR SEDIMENT TRAP PRIOR TO DISCHARGING INTO ANY SURFACE WATER.

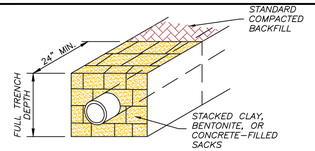
HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF STREAM BANK.

ALL EXCESS EXCAVATED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE STREAM CROSSING AREA.

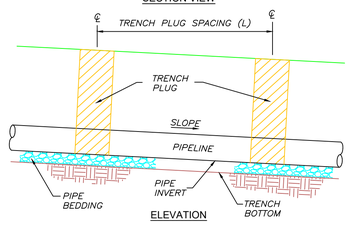
ALL DISTURBED AREAS WITHIN 50 FEET OF TOP-OF-BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR STREAMS OR 48 HOURS OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED.

APPROPRIATE STREAM BANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.

13-2 TYPICAL UTILITY LINE STREAM CROSSING WITH PUMP BYPASS (N.T.S.)



SECTION VIEW



ELEVATION

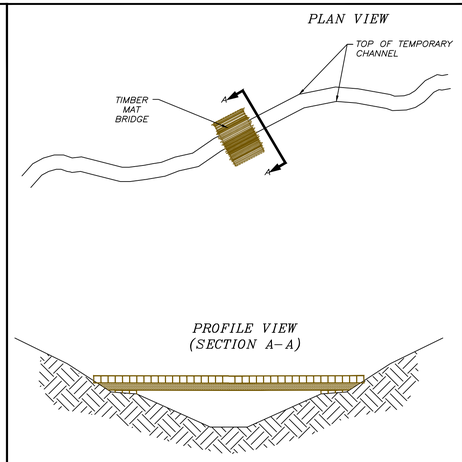
TABLE 13.1
Maximum Spacing and Materials for Trench Plugs

Trench Slope (%)	Spacing L (FT)	Plug Material
< 5	1,000	* Clay, Bentonite, or Concrete Filled Sacks
5 - 15	500	* Clay, Bentonite, or Concrete Filled Sacks
15 - 25	300	* Clay, Bentonite, or Concrete Filled Sacks
25 - 35	200	* Clay, Bentonite, or Concrete Filled Sacks
35 - 100	100	* Clay, Bentonite, or Concrete Filled Sacks
> 100	50	Cement Filled Bags (Wetted) or Mortared Stone

*TOPSOIL MAY NOT BE USED TO FILL SACKS.

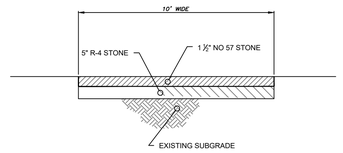
IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND OR OTHER WATER BODY CROSSINGS.

13-4 TYPICAL TRENCH PLUG INSTALLATION (N.T.S.)



NOTES
1. *BRIDGES MUST BE A SINGLE SPAN FROM TOP OF BANK TO TOP OF BANK AND STRUCTURALLY STABLE.*
2. *REMOVE ANY DIRT OR OTHER MATERIAL FROM BRIDGE DECK DAILY*

TIMBER MAT BRIDGE FOR CHANNEL CROSSING (N.T.S.)



SEDIMENT BASIN ACCESS ROAD
NOT TO SCALE

INFILTRATION BASIN ACCESS ROAD (N.T.S.)

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

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REGISTERED PROFESSIONAL
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ENGINEER
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REVISIONS:			
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NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
E&S DETAILS/NOTES

SHEET NO.
D9.5

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TABLE 11.2
Soil Amendment Application Rate Equivalents
Per DEP "Erosion and Sediment Pollution Control Program Manual", revised March 2012

Soil Amendment	Permanent Seeding Application Rate			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Agricultural Lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields
10-20-20 fertilizer	1,000 lb.	25 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields
Temporary Seeding Application Rate				
Agricultural Lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles
10-10-10 fertilizer	500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles

Adapted from Penn State. "Erosion Control and Conservation Plantings on Noncropland"

Note: A compost blanket which meets the standards of Erosion and Sediment Pollution Control Program Manual", revised March 2012 Chapter 11 may be substituted for the soil amendments shown in Table 11.2.

Mulching – Cellulose Fiber Mulch: Degradable green dyed wood cellulose fiber or 100% recycled long fiber pulp, free from weeds or other foreign matter toxic to seed germination and suitable to hydra mulching.

Place mulch, of the kind indicated, immediately after seeding or within 48 hours after seeding is completed. Use mulch blanket rate of 2-1/2 tons per acre. Mulching should conform to specifications in table below.

NOTE:

CONTRACTOR SHALL SELECT APPROPRIATE FERTILIZATION AND SEED MIXTURE BASED UPON SOIL CONDITIONS AND SEASON.

TABLE 11.3
PLANT TOLERANCES OF SOIL LIMITATION FACTORS

Species	Growth Habit	Tolerates				Minimum Seed Specifications[3]				
		Wet Soil	Dry Site	Low Fertility	Acid Soil (pH 5.5-5)[2]	Purity (%)	Ready Germ (%)	Hard Seed (%)	Total Germ (%)	Seeds/lb (1,000s)
Warm-Season Grasses										
Deertongue	bunch	yes	yes	yes	yes	95	75		75	250
Weeping lovegrass	bunch	no	yes	yes	yes	97	75		75	1,500
Switchgrass	bunch	yes	yes	yes	yes		(60 PLS)			390
Big bluestem	bunch	no	yes	yes	yes		(60 PLS)			150
Cool-Season Grasses										
Fine fescues	sod	no	no	yes	no	95	80		80	400
Perennial ryegrass	bunch	yes	no	no	no	95	85		85	227
Annual ryegrass	bunch	yes	no	yes	no	95	85		85	227
Kentucky bluegrass	sod	no	no	no	no	85	75		75	2,200
Timothy	bunch	yes	no	yes	yes	95	80		80	1,230
Smooth bromegrass	sod	no	yes	yes	no	95	80		80	136
Legumes[5]										
Flatpea	sod	no	no	yes	yes	98	55	20	75	10
Sereicia lespedeza	bunch	no	yes	yes	yes	98	80	20	80	335
Cereals										
Winter wheat	bunch	no	no	no	no	98	85		85	15
Winter rye	bunch	no	no	yes	yes	98	85		85	18
Spring oats	bunch	no	no	no	no	98	85		85	13
Sundangrass	bunch	no	yes	no	no	98	85		85	55
Japanese millet	bunch	yes	no	yes	yes	98	80		80	155

[1] Growth habit refers to the ability of the species to either form a dense sod by vegetative means (stolons, rhizomes, or roots) or remain in a bunch or single plant form. If seeded heavily enough, even bunch formers can produce a very dense stand. This is sometimes called a sod, but not in the sense of a sod formed by vegetative means.

[2] Once established, plants may grow at a somewhat lower pH, but cover generally is only adequate at pH 6.0 or above.

[3] *Minimum seed lots are truly minimum, and seed lots to be used for revegetation purposes should equal or exceed these standards.* Thus, deertongue grass should germinate 75% or better. Crownvetch should have at least 40% readily germinable seed and 30% hard seed. Commonly, seed lots are available that equal or exceed minimum specifications. Remember that disturbed sites are adverse for plant establishment. Ready germination refers to seed that germinates during the period of the germination test and that would be expected, if conditions are favorable, to germinate rapidly when planted. The opposite of ready germination is dormant seed, of which hard seed is one type.

[4] Switchgrass seed is sold only on the basis of PLS.

[5] Need specific legume inoculant. Inoculant suitable for garden peas and sweetpeas usually is satisfactory for flatpea.

Penn State, "Erosion Control and Conservation Plantings on Noncropland,"

TABLE 11.4
Recommended Seed Mixtures
Per DEP "Erosion and Sediment Pollution Control Program Manual", revised March 2012

Mixture Number	Species	Seeding Rate-Pure Live Seed[1]	
		Most Sites	Adverse Sites
1[1]	Spring oats (spring), or	64	96
	Annual ryegrass (spring or fall), or	10	15
	Winter wheat (fall), or	90	120
	Winter rye (fall)	56	112
11	Deertongue, plus	15	20
	Birdsfoot trefoil	6	10
12[2]	Switchgrass, or	15	20
	Big Bluestem, plus	15	20
	Birdsfoot trefoil	6	10
13	Orchardgrass, or	20	30
	Smooth bromegrass, plus	25	35
	Birdsfoot trefoil	6	10

Penn State, "Erosion Control and Conservation Plantings on Noncropland"

1. If high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre and winter rye at 1 bushel per acre. If germination is below 90%, increase these suggested seeding rates by 0.5 bushels per acre.
2. Do not mow shorter than 9 to 10 inches.

TABLE 11.5
Recommended Seed Mixtures for Stabilizing Disturbed Areas
Per DEP "Erosion and Sediment Pollution Control Program Manual", revised March 2012

Site Condition	Nurse Crop	Seed Mixture (Select One Mixture)
Slopes and Banks (not mowed)		
Well-drained	1 plus	12[1]
Slopes and banks (grazed / hay)		
Well-drained	1 plus	2,3, or 13
Gullies and Eroded Areas		
Erosion Control Facilities (BMPs)		
For hay or silage on diversion channels and Occasional water flow areas	1 plus	13
Utility Right-of-Way		
Well-drained	1 plus	12[1]
Well-drained areas for grazing/hay	1 plus	13

Penn State, "Erosion Control and Conservation Plantings on Noncropland"

1. For seed mixtures 11 and 12, only use spring oats or weeping lovegrass (included in mix) as nurse crop.

TABLE 11.6
Mulch Application Rates
Per DEP "Erosion and Sediment Pollution Control Program Manual", revised March 2012

Mulch Type	Application Rate(min.)			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Straw	3 tons	140 lb	1,240 lb.	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb.	1,240 lb.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4 – 6 tons	185 – 275 lb.	1,650 – 2,500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitations below[1]

Notes:

Straw and hay mulch should be anchored or tackified immediately after application to prevent being windblown. A tractor-drawn implement may be used to "crimp" the straw or hay into the soil — about 3 inches. This method should be limited to slopes no steeper than 3H:1V. The machinery should be operated on the contour. Note: Crimping of hay or straw by running over it with tracked machinery is not recommended.

Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations may be used to tack mulch. Avoid application during rain and on windy days. A 24-hour curing period and a soil temperature higher than 45o F are typically required. Application should generally be heaviest at edges of seeded areas and at crests of ridges and banks to prevent loss by wind. The remainder of the area should have binder applied uniformly. Binders may be applied after mulch is spread or sprayed into the mulch as it is being blown onto the soil. Applying straw and binder together is generally more effective.

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

Mulch on slopes of 8% or steeper should be held in place with netting. Lightweight plastic, fiber, or paper nets may be stapled over the mulch according to manufacturer's recommendations.

Shredded paper hydromulch should not be used on slopes steeper than 5%. Wood fiber hydromulch may be applied on steeper slopes provided a tackifier is used. The application rate for any hydromulch should be 2,000 lb/acre at a minimum.

SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER

1. SITE PREPARATION
- *A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.*
- *B. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.*
- *C. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3–5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.*

2. APPLYING TOPSOIL
- *A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.*
- *B. ALL DISTURBED TOPSOIL ON–SITE IS TO BE REDISTRIBUTED ON–SITE IN AREAS NOT COVERED BY IMPERVIOUS SURFACES. NO REMOVAL OF TOPSOIL IS ALLOWED UNLESS APPROVED BY THE TOWNSHIP. UNIFORM APPLICATION TO A DEPTH OF 6–8 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.*

ONSITE SEDIMENT CONTROL PLAN MAINTENANCE SCHEDULE

CONTROL MEASURE	INSPECT	PROBLEMS	POSSIBLE REMEDIES (TO BE PERFORMED WITHIN 24 HOURS OR AS SOON AS NOTED.)
VEGETATION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT AT TOE OF SLOPE	CHECK FOR TOE OF SLOPE DIVERSION AND INSTALL IF NEEDED
		RILL & GULLIES FORMING	FILL RILLS AND REGRADE GULLIED SLOPES
		BARE SOIL PATCHES	RESEED, FERTILIZE AND MULCH BARE AREAS
COMPOST FILTER SOCK	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	RUNOFF ESCAPING AROUND BARRIER	SECURELY ANCHOR WITH PROPER STAPLES. EXTEND BARRIER AS NEEDED.
		SEDIMENT LEVEL BUILDUP	REMOVE SEDIMENT WHEN LEVEL REACHES HALF (1/2) OR MORE THE HEIGHT OF THE BARRIER.
INLET PROTECTION	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT BUILD-UP-REDUCE LOW CAP	REMOVE ACCUMULATED SEDIMENT WHEN LEVEL REACHES 1/2" OR MORE THE HEIGHT OF THE BMP. REPLACE INLET PROTECTION.
		MISSING MATERIAL	REPAIR OR REPLACE PROTECTION MATERIALS AS NEEDED.
		FLOODING AROUND OR BELOW INLET	REMOVE ACCUMULATED SEDIMENT; OR CONVERT SEDIMENT BARRIER TO AN EXCAVATED SEDIMENT TRAP; OR REROUTE RUNOFF TO A MORE SUITABLE OUTLET SUCH AS A SEDIMENT TRAP.
PUMPED WATER FILTER BAG	DAILY AND AFTER EACH USE	BAG IS HALF FULL	REPLACE BAG.
		BAG IS CLOGGED OR FLOW IS REDUCED	REPLACE BAG.
ROCK CONSTRUCTION ENTRANCE	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	LOST AND/OR DISLODGED STONES	REPLACE MISSING STONES SO AS TO MAINTAIN SPECIFIED DIMENSIONS.
		SEDIMENT DEPOSITED IN PAVED ROADWAYS	AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE RETURNED TO THE CONSTRUCTION SITE.
CONCRETE WASHOUT	DAILY	MATERIAL BUILDUP	MATERIAL SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY
		LINERS FAIL	LINERS SHOULD BE REPLACED WITH EACH CLEANING OR WHEN DAMAGE HAS OCCURRED
TRASH RACK	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	DAMAGE	SHALL BE REPLACED IMMEDIATELY
		CLOGGED	SHALL BE CLEANED IMMEDIATELY
WATERBARS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	DAMAGED OR ERODED WATERBARS	SHALL BE RESTORED TO ORIGINAL DIMENSIONS
EROSION CONTROL BLANKETING	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	DAMAGED OR DISPLACED BLANKETS	SHALL BE RESTORED OR REPLACED WITHIN 4 DAYS
RIPRAP APRONS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	DISPLACED RIPRAP	SHALL BE REPLACED IMMEDIATELY
SEDIMENT BASINS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT LEVEL BUILDUP	SEDIMENT SHALL BE REMOVED
		ANY VISIBLE DAMAGE (EROSION, PIPING, SETTLEMENT)	SHALL BE REPAIRED IMMEDIATELY
SEDIMENT TRAPS	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	SEDIMENT LEVEL BUILDUP	SEDIMENT SHALL BE REMOVED
		ANY VISIBLE DAMAGE (EROSION, PIPING, SETTLEMENT)	SHALL BE REPAIRED IMMEDIATELY
BAFFLES	ONCE A WEEK AND AFTER EVERY RUNOFF EVENT	DAMAGED OR WARPED BAFFLES	SHALL BE REPLACED WITHIN 7 DAYS

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

E&S CONTROL FACILITIES PROPOSED FOR THE PROJECT ARE SHOWN ON THE E&S CONTROL PLANS. CONTROL MEASURES SHOWN ON THIS PLAN ARE MINIMUM CONTROLS TO PROTECT OFFSITE AREAS FROM SEDIMENT–LADEN RUNOFF. ADDITIONAL CONTROLS MAY BE REQUIRED DEPENDING ON THE PROGRESS OF CONSTRUCTION AND VARYING CONDITIONS ENCOUNTERED.

ROCK CONSTRUCTION ENTRANCE:
A ROCK CONSTRUCTION ENTRANCE WILL BE INSTALLED TO PROVIDE A BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PUBLIC ROADS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL.

INSTALLATION: TO CONSTRUCT THE PAD, PLACE A LAYER OF 6 INCHES OF STONE ACROSS THE FULL WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA. THE STONE PAD SHOULD BE AT LEAST 100 FEET IN LENGTH, 25 FEET IN WIDTH, AND 6 INCHES THICK.

MAINTENANCE: ADDITIONAL STONE MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE PAD.

COMPOST FILTER SOCK:
COMPOST FILTER SOCKS ARE A TYPE OF CONTAINED COMPOST FILTER BERM. THEY CONSIST OF A BIODEGRADABLE OR PHOTODEGRADABLE MESH TUBE FILLED (TYPICALLY USING A PNEUMATIC BLOWER) WITH A COARSE COMPOST FILTER MEDIA THAT MEETS CERTAIN PERFORMANCE CRITERIA AS SPECIFIED ON THE DETAIL DRAWINGS.

INSTALLATION: COMPOST SOCKS SHALL BE PLACED ON A LEVEL CONTOUR WITH BOTH ENDS OF THE SOCK EXTENDING AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. FILTER SOCKS ARE FLEXIBLE AND CAN BE FILLED IN PLACE OR FILLED AND MOVED INTO POSITION. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

MAINTENANCE: ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE SOCK FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE THE SEDIMENT ACCUMULATION HAS REACHED ½ THE ABOVE GROUND HEIGHT OF THE SOCK. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING SOCK DUE TO WEATHERING.

DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE FILTER SOCK 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.

EROSION CONTROL BLANKET:
EROSION CONTROL BLANKETS SHOULD BE USED ON ALL SLOPES THAT ARE 3H:1V OR STEEPER AND WHERE POTENTIAL EXISTS FOR SEDIMENT POLLUTION TO RECEIVING SURFACE WATERS. SINCE ROCK SLOPES POSE LITTLE, IF ANY, POTENTIAL FOR EROSION, CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILL SLOPES NEED NOT BE BLANKETED. EROSION CONTROL BLANKETS SHOULD BE USED FOR ALL SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER –– 100 FEET OF A SPECIAL PROTECTION WATER –– REGARDLESS OF SLOPE.

INSTALLATION: 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.

MAINTENANCE: 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.

TRENCH PLUGS:
TRENCH PLUGS SHOULD BE INSTALLED ON BOTH SIDES OF ALL CROSSINGS TO PREVENT DRAINING STREAMS OR WETLANDS, AND TO PREVENT CHANGES TO THEIR HYDROLOGY. TRENCH PLUGS SHOULD ALSO BE INSTALLED PER THE SPACING TABLE SHOWN IN THE DETAILS.

INSTALLATION: TRENCH PLUGS SHALL BE INSTALLED PER THE DETAIL SHOWN WITHIN THE PLANS.

MAINTENANCE: TRENCH PLUGS SHALL BE INSPECTED REGULARLY TO ENSURE THEY ARE FUNCTIONING PROPERLY. IF A MALFUNCTION IS NOTICE, THE PLUG SHALL BE EXCAVATED AND REPLACED.

TEMPORARY VEGETATIVE STABILIZATION:
TEMPORARY VEGETATIVE STABILIZATION SHALL BE PLACED IN THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS PROVIDED TO TEMPORARILY COVER DISTURBED AREAS THAT WILL BE EXPOSED FOR A PERIOD OF MORE THAN FOUR WORKING DAYS. THE TEMPORARY VEGETATION WILL REDUCE PROBLEMS OF MUD AND DUST PRODUCTION FROM BARE SOIL SURFACES DURING CONSTRUCTION.

INSTALLATION: FERTILIZING, SEEDING, AND MULCHING WILL BE USED AS A TEMPORARY E&S CONTROL MEASURE ON ALL NON–PAVED DISTURBED AREAS. EXPOSED SOILS, NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL NOT REMAIN UNSEEDED OR COVERED BY MULCH FOR MORE THAN FOUR DAYS, INCLUDING STOCKPILED SOIL MATERIALS. WITH REGARD TO THE TEMPORARY SEED MIX, REFER TO THE SEEDING MIXTURE TABLE PROVIDED ON THE E&S CONTROL PLAN DETAIL SHEET.
SOIL PREPARATION AND SEEDING PROCEDURES, TO BE APPLIED IN THE ORDER PRESENTED, ARE AS FOLLOWS:
UNLESS APPROVED SOIL TEST RESULTS INDICATE OTHERWISE, EVENLY APPLY THE FOLLOWING SOIL AMENDMENTS:
- *560 POUNDS PER ACRE 18–46–0 DIAMMONIUM PHOSPHATE;*
- *335 POUNDS PER ACRE 0–0–60 MURIATE OF POTASH;*
- *6 TONS PER ACRE PULVERIZED AGRICULTURAL LIMESTONE; AND*
- *4 POUNDS PER ACRE "BIO–PAK" MICROBIAL INOCULANT*.*

WHERE SLOPES PERMIT, PROMPTLY DISK ALL AMENDMENTS UNDER TO A 3 TO 6–INCH DEPTH. WHERE SLOPES DO NOT PERMIT TILLAGE, TRACK SLOPE WITH A DOZER AS DESCRIBED UNDER SEEDBED PREPARATION. ON EXTREMELY STEEP SLOPES, AMENDMENTS MAY BE APPLIED WITH THE SEED AND MULCH USING A HYDRO SEEDER AS LONG AS SEED AND INOCULANT IS NOT IN A SLURRY WITH FERTILIZERS FOR MORE THAN ONE HOUR.

PREPARE SEEDBED BY CULTIPACKING OR TRACKING WITH A DOZER USING EQUIPMENT (SUCH AS A LIGHT TRACTOR) AND TECHNIQUE THAT MINIMIZES RUTTING OF THE SURFACE. IF TRACKING IS DONE, RUN DOZER SO TRACK MARKS ARE PARALLEL TO SITE CONTOURS. IF A BRILLION SEEDER IS USED, THIS STEP MAY BE SKIPPED.

JUST BEFORE SEEDING, INOCULATE BIRDSFOOT TREFOIL SEED (WHERE APPLICABLE) WITH LEGUME INOCULANT APPROPRIATE FOR BIRDSFOOT TREFOIL USING AT LEAST FIVE TIMES THE MANUFACTURER'S MINIMUM INOCULANT APPLICATION RATES, THEN EVENLY APPLY THE APPROPRIATE SEED MIXTURE (REFER TO TABLES 1–3 ON DETAILS SHEETS).

LIGHTLY CULTIPACK TO PRESS SEED INTO SEEDBED USING EQUIPMENT (SUCH AS A LIGHT TRACTOR) AND TECHNIQUE THAT MINIMIZES RUTTING OF THE SURFACE. IF A BRILLION SEEDER IS USED, THIS STEP MAY BE CONSIDERED COMPLETE. IF SLOPES ARE TOO STEEP TO PERMIT SEED PREPARATION AND PLACEMENT, USE HYDROSEEDING TECHNIQUES.

PROMPTLY AND EVENLY APPLY STRAW (NOT HAY) MULCH AT A RATE OF 3 TONS PER ACRE USING A BALE–BUSTER OR USING WOOD CELLULOSE FIBER (NOT PAPER PULP) HYDROMULCH AT A RATE OF 2,500 POUNDS PER ACRE. PROMPTLY TACK STRAW INTO PLACE USING ONE OF THE FOLLOWING METHODS: 1) APPLY 800 TO 1,000 POUNDS PER ACRE APPLICATION OF WOOD CELLULOSE FIBER MULCH WITH A HYDROSEEDER OVER THE STRAW; OR, 2) USE A CRIMPER DISK (A SPECIALLY DESIGNED HEAVY DISK WITH NO OFFSET TO THE DIRECTION OF TRAVEL). MAKE MULTIPLE PASSES WITH THE CRIMPER AS NECESSARY TO SECURE THE STRAW.

**NOTE:BIOPAK INOCULANT IS NOT NEEDED FOR TEMPORARY SEEDING. BIOPAK WATER SOLUBLE POWDER IS A MIXTURE OF BENEFICIAL NITROGEN–FIXING AND PHOSPHORUS–SOLUBILIZING BACTERIA (180 BILLION CFU PER POUND) COMBINED WITH BIOCATALYST INGREDIENTS, AS MANUFACTURED BY PLANT HEALTH CARE, INC., 440 WILLIAM PITT WAY, PITTSBURGH, PENNSYLVANIA 15238; 1–800–421–9051.*

CONSTRUCTION WASTE RECYCLING/DISPOSAL:
CONSTRUCTION WASTES AND REFUSE MATERIALS GENERATED DURING THE COURSE OF CONSTRUCTION AND INCLUDE, BUT ARE NOT LIMITED TO, PAPER, PLASTIC, WOOD, FOOD, TEXTILE, AND METAL PRODUCTS.

INSTALLATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING WASTE RECYCLING/DISPOSAL AREAS ON THE EROSION AND SEDIMENT CONTROL PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL WASTE RECYCLING/DISPOSAL PERMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MAINTENANCE: ALL CONSTRUCTION WASTE SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF AT A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. THE BURNING OF WASTE MATERIALS SHALL NOT BE PERMITTED.

CONCRETE WASHOUT:
FOR ANY PROJECT ON WHICH CONCRETE WILL BE POURED OR OTHERWISE FORMED ON SITE, A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS, AND HOPPERS OF THE DELIVERY VEHICLES UNLESS SUCH A FACILITY WILL BE USED AT THE SOURCE OF THE CONCRETE. UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS. MAKE SURE THAT PROPER SIGNAGE IS PROVIDED TO DRIVERS SO THAT THEY ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.

INSTALLATION: WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. THEY SHOULD BE IN A CONVENIENT LOCATION FOR THE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS. WHEREVER POSSIBLE, THEY SHOULD BE LOCATED ON SLOPES NOT EXCEEDING A 2% GRADE.
IF COMPOST FILTER SOCKS ARE USED, COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITH THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER. CARE SHOULD BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A TRIANGULAR CROSS–SECTION.

MAINTENANCE: ONCE MATERIAL REACHES 50% OF THE HEIGHT OF THE WASHOUT IT SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE CONSTRUCTION WASTE RECYCLING/DISPOSAL METHODS SPELLED OUT IN THE REPORT.

PUMPED WATER FILTER BAG:
FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS PRIOR TO DISCHARGING TO SURFACE WATERS. THEY MAY ALSO BE USED TO FILTER WATER PUMPED FROM TRENCHES AND OTHER LOW SPOTS COLLECTING WATER.

INSTALLATION: 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.

MAINTENANCE: FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. THIS MAY INCLUDE REPLACEMENT OF THE BAG OR REPOSITIONING OF THE BAG.

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880–1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — CHRISTOPHER W. HAMM — ENGINEER — PE–090435

REVISIONS:

REV	DATE	DESCRIPTION
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PROJ NO: 291–002–21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
E&S DETAILS/NOTES

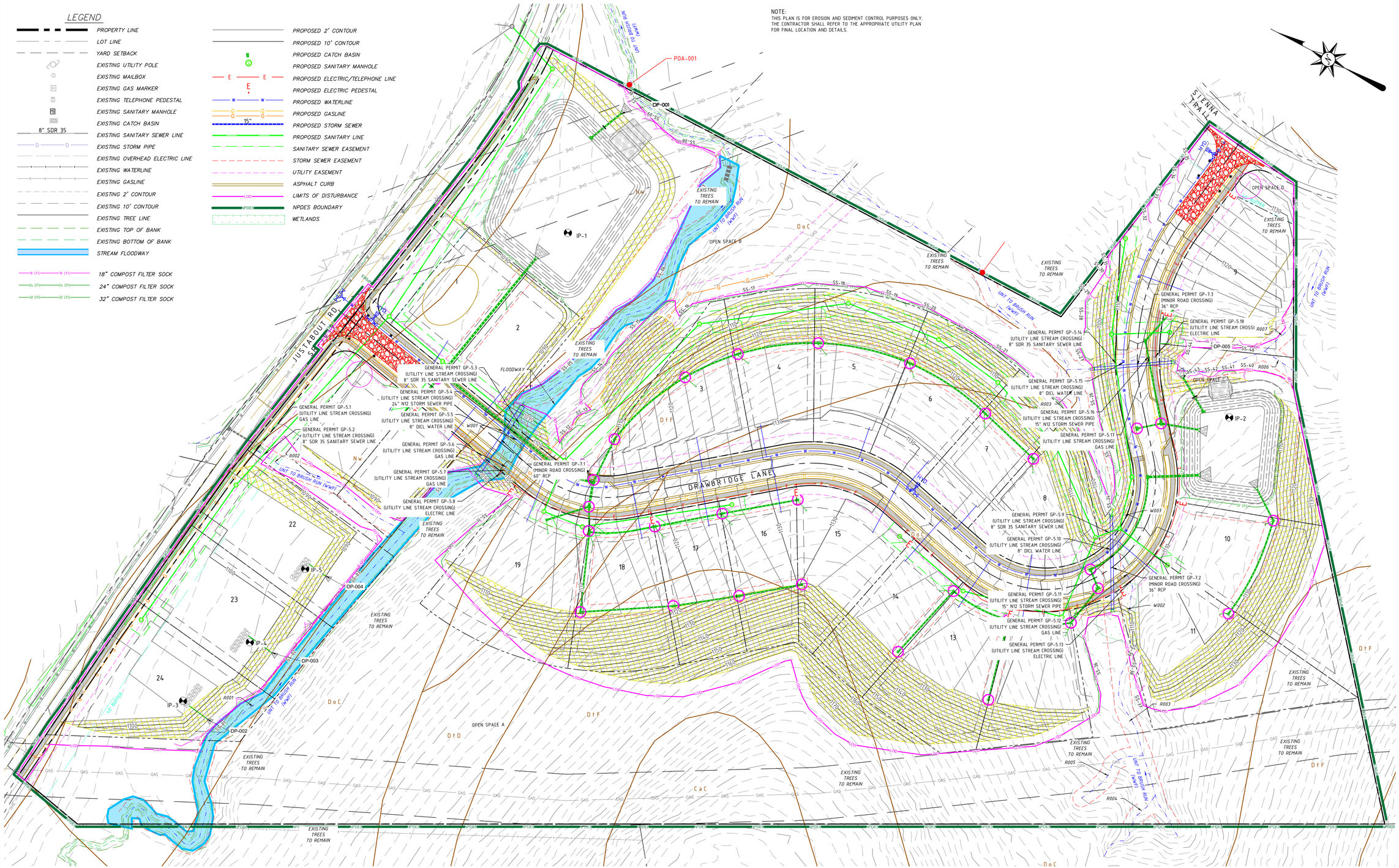
SHEET NO.
D9.6

S:\PROJECTS\291–002–21–HABEN PROPERTY –NEW CASTLE\DRAWINGS\291–002–21–BASE–250407.DWG

LEGEND

- PROPERTY LINE
- LOT LINE
- YARD SETBACK
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING GAS MARKER
- EXISTING TELEPHONE PEDESTAL
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- 8" SDR 35 — EXISTING SANITARY SEWER LINE
- EXISTING STORM PIPE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING WATERLINE
- EXISTING GASLINE
- EXISTING 2' CONTOUR
- EXISTING 10' CONTOUR
- EXISTING TREE LINE
- EXISTING TOP OF BANK
- EXISTING BOTTOM OF BANK
- STREAM FLOODWAY
- 18 CFS — 18 CFS — 18" COMPOST FILTER SOCK
- 24 CFS — 24 CFS — 24" COMPOST FILTER SOCK
- 32 CFS — 32 CFS — 32" COMPOST FILTER SOCK
- PROPOSED 2' CONTOUR
- PROPOSED 10' CONTOUR
- PROPOSED CATCH BASIN
- PROPOSED SANITARY MANHOLE
- PROPOSED ELECTRIC/TELEPHONE LINE
- PROPOSED ELECTRIC PEDESTAL
- PROPOSED WATERLINE
- PROPOSED GASLINE
- 15" — PROPOSED STORM SEWER
- PROPOSED SANITARY LINE
- SANITARY SEWER EASEMENT
- STORM SEWER EASEMENT
- UTILITY EASEMENT
- ASPHALT CURB
- LOD — LIMITS OF DISTURBANCE
- NPDES — NPDES BOUNDARY
- WETLANDS

NOTE:
THIS PLAN IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY. THE CONTRACTOR SHALL REFER TO THE APPROPRIATE UTILITY PLAN FOR FINAL LOCATION AND DETAILS.



KDH CONSULTING ENGINEERS, INC
593 RUGH STREET
GREENSBURG, PA 15601
P: 878.295.8914 F:724.514.7047
www.kdhengineers.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
CHRISTOPHER W. HAMM
ENGINEER
PE-080435

REVISIONS:			
REV	DATE	DESCRIPTION	
1	4/14/2025	ADDRESS WCCD NPDES COMMENTS	

CLIENT:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317

NEWCASTLE

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

SURVEYOR:
KEYSTONE SURVEYING & MAPPING, LLC.
534 VALLEY BROOK ROAD
VENETIA, PA 15367
(724) 514-7047

THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.

PROJECT AREA SUMMARY	
LIMIT OF DISTURBANCE	14.033 ACRES
NPDES PERMIT BOUNDARY	21.419 ACRES

0' 50' 100' 150'
GRAPHIC SCALE 1" = 50'

DEVELOPER:
339 JUSTABOUT LAND COMPANY, LLC.
333 TECHNOLOGY DRIVE, SUITE 108
CANONSBURG, PA 15317
(412) 880-1025
CONTACT: MARK HOSKINS

PROJECT ENGINEER:
KDH CONSULTING ENGINEERS, INC.
593 RUGH STREET, LOWER LEVEL
GREENSBURG, PA 15601
(878) 295-8914
CONTACT: CHRISTOPHER W. HAMM, P.E.

811 Know what's below. Call before you dig.

PROJ NO: 291-002-21
DATE: 1/10/2025
DRAWN BY: RAM
CHECKED BY: CWH

SHEET TITLE:
GENERAL PERMITS

SHEET NO.
D9.7

S:\PROJECTS\291-002-21-HABEN PROPERTY -NEW CASTLE\DRAWINGS\291-002-21-BASE-250407.DWG

MORTGAGE CLAUSE

WE, SHEPHERD'S FINANCE, LLC, MORTGAGOR OF THE PROPERTY EMBRACED IN THIS NEW CASTLE PLAN OF LOTS SUBDIVISION DO HEREBY CONSENT TO THE RECORDING OF SAID PLAT IN THE RECORDER OF DEEDS' OFFICE OF WASHINGTON COUNTY, PENNSYLVANIA, AND TO THE DEDICATION AND COVENANTS APPEARING THEREON.

_____
SHEPHERD'S FINANCE, LLC

_____
WITNESS

DATE _____

WE, HANNA HOLDINGS, INC, MORTGAGOR OF THE PROPERTY EMBRACED IN THIS NEW CASTLE PLAN OF LOTS SUBDIVISION DO HEREBY CONSENT TO THE RECORDING OF SAID PLAT IN THE RECORDER OF DEEDS' OFFICE OF WASHINGTON COUNTY, PENNSYLVANIA, AND TO THE DEDICATION AND COVENANTS APPEARING THEREON.

_____
HANNA HOLDINGS, INC

_____
WITNESS

DATE _____

WE, 339 JUSTABOUT LAND COMPANY, OWNERS OF THE NEW CASTLE PLAN OF LOTS SUBDIVISION DO HEREBY CERTIFY THAT THE TITLE OF THIS PROPERTY IS IN THE NAME OF 339 JUSTABOUT LAND COMPANY AS RECORDED IN INSTRUMENT #202202494, RECORDER OF DEEDS' OFFICE.

_____
339 JUSTABOUT LAND COMPANY

_____
WITNESS

CORPORATION ADOPTION

KNOW ALL MEN BY THESE PRESENTS, THAT 339 JUSTABOUT LAND COMPANY, A CORPORATION OF THE COMMONWEALTH OF PENNSYLVANIA, BY VIRTUE OF A RESOLUTION OF THE BOARD OF DIRECTORS THEREOF, DOES HEREBY ADOPT THIS AS ITS PLAT OF LOTS OF ITS PROPERTY SITUATE IN PETERS TOWNSHIP, COUNTY OF WASHINGTON, AND COMMONWEALTH OF PENNSYLVANIA, AND FOR DIVERS ADVANTAGE ACCRUING TO IT, DOES HEREBY DEDICATE FOREVER, FOR PUBLIC USE, ALL STREETS, RIGHTS-OF-WAY AND EASEMENTS SHOWN UPON THE PLAT, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AS WELL AS ANY OPEN SPACE, COMMON GROUND OR AREAS SHOWN UPON THE PLAT WHICH WILL, SIMULTANEOUS WITH THE RECORDING OF THE PLAT OR AT SOME LATER DATE, BE ACCEPTED BY THE TOWNSHIP, OR CONVEYED TO A HOMEOWNERS' ASSOCIATION OR OTHER NONPROFIT CORPORATION FORMED TO MAINTAIN THE OPEN SPACE COMMON GROUND OR AREAS SET FORTH IN THE PLAT AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAT, 339 JUSTABOUT LAND COMPANY FOREVER DISCHARGE SAID PETERS TOWNSHIP, ITS SUCCESSORS AND ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED, AND ANY SLOPES REQUIRED FOR THE SUPPORT AND MAINTENANCE THEREOF ACCORDING TO SUCH ESTABLISHED GRADES. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON 339 JUSTABOUT LAND COMPANY, ITS SUCCESSORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAT.

IN WITNESS WHEREOF, THE SAID CORPORATION HAS CAUSED ITS CORPORATE SEAL TO BE AFFIXED BY THE HAND OF ITS PRESIDENT AND SAME TO BE ATTESTED BY ITS SECRETARY, THIS _____ DAY OF_____ A.D., 20____.

339 JUSTABOUT LAND COMPANY

_____
PRESIDENT

ATTEST:

_____
(SECRETARY)

CORPORATION ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA :
:SS:
COUNTY OF WASHINGTON :

ON THIS _____ DAY OF _____ A.D., 20___, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND COMMONWEALTH, PERSONALLY APPEARED, _____, (TITLE)_____, OF 339 JUSTABOUT LAND COMPANY, WHO BEING DULY SWORN, DEPOSETH AND SAITH THAT (SHE/HE) WAS PERSONALLY PRESENT AT THE EXECUTION OF THE ADOPTION, RELEASE AND DEDICATION AND SAW THE COMMON AND CORPORATE SEAL OF THE SAID CORPORATION DULY AFFIXED AND THAT THE ABOVE RELEASE AND DEDICATION WAS DULY SIGNED AND SEALED BY AND AS FOR THE ACT AND DEED OF THE SAID 339 JUSTABOUT LAND COMPANY, FOR THE USES AND PURPOSES THEREIN MENTIONED AND THAT THE NAME OF THIS DEPONENT SUBSCRIBED TO THE SAID RELEASE AND DEDICATION AS (TITLE)_____ OF SAID CORPORATION, IN ATTESTATION OF THE DUE EXECUTION AND DELIVERY OF SAID RELEASE AND DEDICATION OF THIS DEPONENT'S OWN AND PROPER AND RESPECTIVE HANDWRITING.

_____
(TITLE)

SWORN TO AND SUBSCRIBED BEFORE ME THE DAY AND DATE ABOVE WRITTEN.

WITNESS BY HAND AND NOTARIAL SEAL THIS _____ DAY OF _____, 20___.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES

THE _____ DAY OF _____, 20___.

THE FOREGOING ADOPTION AND DEDICATION IS MADE BY 339 JUSTABOUT LAND COMPANY WITH THE FULL UNDERSTANDING AND AGREEMENT THAT THE APPROVAL OF THE WASHINGTON COUNTY PLANNING COMMISSION AND THE COUNCIL OF PETERS TOWNSHIP, IF HERETO ATTACHED, WILL BECOME NULL AND VOID UNLESS THIS PLAT IS RECORDED IN THE RECORDER OF DEED'S OFFICE OF WASHINGTON COUNTY, COUNTY OFFICE BUILDING, WASHINGTON, PENNSYLVANIA, WITHIN 90 DAYS OF DATE OF SAID APPROVAL.

SURVEYOR

PETERS TOWNSHIP COUNCIL

WASHINGTON CO. RECORDER OF DEEDS

© 2025 KEYSTONE SURVEYING AND MAPPING INC.

COUNTY PLANNING COMMISSION APPROVAL

REVIEWED BY THE WASHINGTON COUNTY PLANNING COMMISSION THIS_____DAY OF _____ 20_____.

_____
CHAIRPERSON

_____
DIRECTOR

TOWNSHIP PLANNING COMMISSION APPROVAL

APPROVED BY THE PLANNING COMMISSION OF PETERS TOWNSHIP THIS_____DAY OF _____ 20_____.

ATTEST:

_____
PLANNING DIRECTOR

_____
CHAIRPERSON

TOWNSHIP COUNCIL APPROVAL

APPROVED BY THE COUNCIL OF PETERS TOWNSHIP THIS_____DAY OF _____ 20_____.

_____
CHAIRPERSON OF COUNCIL

(SEAL)

ATTEST:

_____
MANAGER

PETERS TOWNSHIP PUBLIC NOTICE

PETERS TOWNSHIP HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAT FOR RECORDING PURPOSES ONLY, THE TOWNSHIP ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED, EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS OR ROADS, TO GRADE, PAVE, AND CURB THE STREETS IN SAID PLAT, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

_____
CHAIRPERSON OF COUNCIL

(SEAL)

ATTEST:

_____
MANAGER

PETERS TOWNSHIP SANITARY AUTHORITY

THE UNDERSIGNED OWNERS, INTENDING TO LEGALLY BIND THEMSELVES, AND THEIR SUCCESSORS AND ASSIGNS, HEREBY GRANT AND DEDICATE TO THE PETERS TOWNSHIP SANITARY AUTHORITY, WASHINGTON COUNTY, PENNSYLVANIA, AND ITS RESPECTIVE SUCCESSORS AND ASSIGNS FOREVER, THE RIGHT TO INSTALL, CONSTRUCT, OPERATE, REPAIR, MAINTAIN, RELOCATE, AND REPLACE ALL NECESSARY FACILITIES FOR SANITARY SEWER COLLECTION AND CONVEYANCE TO, OVER, THROUGH AND ACROSS EASEMENTS FOR UTILITIES AND/OR EASEMENTS FOR SANITARY SEWERS, INCLUDING THE RIGHT TO ASSIGN THE SAME, ALL WITH THE SAME FORCE AND EFFECT AS THOUGH SAID EASEMENTS HAD BEEN DULY ACQUIRED FOR SUCH PURPOSES BY CONDEMNATION, AND THE UNDERSIGNED HEREBY WAIVES FOR ITSELF, THEMSELVES AND IT'S OR THEIR ASSIGNS AND SUCCESSORS ANY AND ALL CLAIMS FOR DAMAGES FOR THE LAWFUL USE OF SUCH EASEMENTS FOR THE AFORESAID PURPOSES.

_____
WITNESS

_____
OWNER

EASEMENTS APPROVED BY THE PETERS TOWNSHIP SANITARY AUTHORITY ON THIS _____DAY OF _____, 20____.

_____
AUTHORITY REPRESENTATIVE

DEED REQUIRED NOTIFICATION CLAUSE

RECORDING A PLAN OF SUBDIVISION ALONE DOES NOT CHANGE THE OWNERSHIP OF THE PROPERTY. AFTER A PLAN OF SUBDIVISION HAS BEEN RECORDED, A DEED MUST ALSO BE RECORDED IN ORDER TO TRANSFER THE TITLE OF THE PROPERTY FROM ONE LANDOWNER TO ANOTHER. IF THE DEED AND PLAN ARE RECORDED IN THE SAME YEAR, THE REVALUATION OF THE PROPERTY WILL BE COMPLETED AND THE TAX BILLS ADJUSTED ACCORDINGLY BY THE FOLLOWING YEAR.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT WE UNDERSTAND THE FOLLOWING:

1. THAT RECORDING A PLAN DOES NOT TRANSFER TITLE OF PROPERTY BETWEEN LANDOWNERS.
2. THAT A DEED MUST BE RECORDED IN ORDER TO TRANSFER THE TITLE OF PROPERTY FROM ONE LANDOWNER TO ANOTHER LANDOWNER.
3. THAT THE PLAN AND DEED MUST BE RECORDED IN THE SAME YEAR IN ORDER FOR THE REVALUATION OF THE PROPERTY TO BE COMPLETED AND TAX BILLS TO BE ADJUSTED ACCORDINGLY BY THE FOLLOWING YEAR.

_____
WITNESS

_____
339 JUSTABOUT LAND COMPANY

SITE ADDRESS:

339 JUSTABOUT RD
VENETIA, PA 15367

PROPERTY OWNER:

339 JUSTABOUT LAND COMPANY
333 TECHNOLOGY DR, SUITE 108
CANONSBURG, PA 15317

EASEMENTS

ALL EASEMENTS ON THIS PLAN ARE INTENDED FOR USE FOR PUBLIC WATER, GAS, ELECTRIC, AND OTHER PUBLIC UTILITIES, CABLE TV AND/OR PUBLIC IMPROVEMENTS INCLUDING STORM AND SANITARY SEWERS. THE TOWNSHIP SHALL HAVE THE ASSIGNABLE RIGHT TO ENTER UPON AND OVER SAID EASEMENTS FOR THE PURPOSES OF CONSTRUCTION, MAINTENANCE, INSPECTION, REPAIR, ETC.

STORMWATER CONTROL EASEMENTS

THE PROPERTY OWNER IS TO MAINTAIN THE EASEMENTS SHOWN ON THE PLAN FOR THE PURPOSES OF STORMWATER CONTROL AS CONSTRUCTED. NO STOPPING UP, FILLING UP, CONFINING, PAVING, CHANGING OF EMBANKMENTS OR ANY OTHER INTERFERENCE OR CHANGE IS TO BE MADE WITHOUT THE PERMISSION OF THE TOWNSHIP. PETERS TOWNSHIP RESERVES THE RIGHT TO WORK WITHIN THE EASEMENT AND RIGHT OF ACCESS TO AND FROM SUCH EASEMENT IF NECESSARY.

CHANNEL EASEMENTS

THE CHANNEL EASEMENT SHOWN ON THIS RECORDED PLAN SERVES TO PROTECT THE STREAM AND AREA WITHIN THE EASEMENT. THE PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING SAID EASEMENT IN ACCORDANCE WITH TOWNSHIP ORDINANCE BUT PETERS TOWNSHIP RESERVES THE RIGHT TO WORK WITHIN THE EASEMENT AND A RIGHT OF ACCESS TO AND FROM SUCH EASEMENT, IF NECESSARY.

DRIVEWAYS

DRIVEWAY ACCESS TO THE STATE HIGHWAY FOR LOTS 22, 23 AND 24 SHALL BE ONLY AS AUTHORIZED BY A HIGHWAY OCCUPANCY PERMIT FROM THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, AS REQUIRED PURSUANT TO § 420 OF ACT OF JUNE 1, 1945 (P.L. 1242, NO. 428), KNOWN AS THE "STATE HIGHWAY LAW."

APPROVED FOR RECORDING PURPOSES ONLY, SUBJECT TO ALL PROVISIONS OF A CONTRACT BETWEEN THE OWNER AND PETERS TOWNSHIP, A COPY OF WHICH IS RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, WASHINGTON COUNTY, PENNSYLVANIA AND A COPY OF WHICH IS ON FILE WITH THE TOWNSHIP.

PROOF OF RECORDING

COMMONWEALTH OF PENNSYLVANIA :
:SS:
COUNTY OF WASHINGTON :

RECORDED, IN THE RECORDER'S OFFICE FOR THE RECORDING OF DEEDS, PLANS, ETC., IN SAID COUNTY IN INSTRUMENT #_____.

GIVEN UNDER MY HAND AND SEAL THIS _____DAY OF _____20_____.

_____
RECORDER

(SEAL)

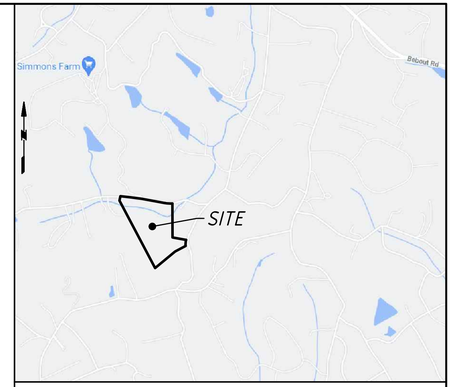
ZONING COMPARISON CHART

	LOW DENSITY RESIDENTIAL	CONSERVATION RESIDENTIAL OVERLAY	TUSCANY LAND DEVELOPMENT
ALLOWED USE	SINGLE	SINGLE	SINGLE
MIN. LOT AREA	21,780 SQ FT	NONE	10,526 SQ FT
MIN. LOT WIDTH	100 FT	75 FT	75 FT
MIN. FRONT YARD	50 FT	25 FT	25 FT
MAX. FRONT YARD	N/A	30 FT	N/A
MIN. REAR YARD	15 FT	20 FT	20 FT
MIN SIDE YARD (TWO STORY)	15 FT	7.5 FT	7.5 FT
MAX. BLDG HEIGHT	35 FT	37 FT	37 FT
LOT COVERAGE	15%	30% SQ FT	30% SQ FT
DENSITY	1.2	2.0 OR 2.5 OR 3.0	1.2
OPEN SPACE	N/A	2DU/AC=25%	44%

REFERENCES

THE SURVEY IS BASED UPON EXISTING CONDITIONS FOUND AT THE SUBJECT AND THE FOLLOWING REFERENCES:

1. PLAN ENTITLED "TUSCANY PLAN OF LOTS" RECORDED IN INST# 201406024, DATED APRIL 2011.
2. PLAN ENTITLED "TUSCANY PLAN OF LOTS AMENDED" RECORDED IN INST# 201816138, DATED OCTOBER 2016.
3. PLAN ENTITLED "TUSCANY PLAN OF LOTS - LOT 13 SUBDIVISION" RECORDED IN INST# 202300382, DATED 11/22/22.
4. PLAN ENTITLED "TUSCANY 2 PLAN OF LOTS SUBDIVISION" RECORDED IN INST# 202410330, DATED 06/10/24.



VICINITY MAP
NOT TO SCALE

GENERAL NOTES

1. THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 1983.
2. VERTICAL DATA SHOWN (IF ANY) IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD 1988.
3. STREET NAMES AND ROW WIDTHS, BLOCK AND LOT NUMBERS AS PER THE CURRENT TAX MAPS.
4. BOUNDARY INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY KEYSTONE SURVEYING AND MAPPING INC ON NOVEMBER 08, 2022.
5. OFFSETS (IF SHOWN) ARE FOR SURVEY REFERENCES ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION OF ANY TYPE.
6. WETLANDS, ENVIRONMENTAL, AND/OR HAZARDOUS MATERIALS LOCATIONS, IF ANY, NOT COVERED UNDER THIS CONTRACT.
7. THIS PLAN IS NOT VALID UNLESS EMBOSSED OR STAMPED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
8. KEYSTONE SURVEYING AND MAPPING, INC. MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO OUR STAKING, FINDINGS, RECOMMENDATIONS, PLANS, SPECIFICATIONS, OR PROFESSIONAL ADVICE EXCEPT THAT THE WORK WAS PERFORMED PURSUANT TO GENERALLY ACCEPTED STANDARDS OF PRACTICE AND DEGREE OF CARE EXERCISED BY MEMBERS OF THE SAME PROFESSION ON PROJECTS OF COMPARABLE SIZE AND COMPLEXITY. AS USED IN THIS SURVEY, THE WORD CERTIFY (CERTIFIED, CERTIFICATION, AND/OR CERTIFICATE) SHALL BE INTERPRETED AS MEANING A PROFESSIONAL OPINION REGARDING THE CONDITIONS OF THOSE FACTS AND/OR FINDINGS WHICH ARE THE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESS OR IMPLIED.
9. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE SEARCH. THEREFORE THIS PROPERTY MAY BE SUBJECT TO ADDITIONAL EASEMENTS, RIGHT-OF-WAYS, COVENANTS, ETC. AS MAY BE DISCLOSED IN A CURRENT, COMPREHENSIVE TITLE SEARCH.
10. AS PER THE NATIONAL FLOOD INSURANCE PROGRAM FIRM MAPS TITLED "TOWNSHIP OF PETERS" MAP NUMBER 42125C0214E, COMMUNITY PANEL NUMBER 422152; EFFECTIVE DATE: SEPTEMBER 30, 2015. THE SUBJECT PROPERTIES LIE WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN).
11. THE OWNERSHIP OF THE STORMWATER DETENTION FACILITIES, UPON INSTALLATION AND CONFIRMATION OF ITS WORKING PROPERTY, WILL BE TRANSFERRED TO PETERS TOWNSHIP.
12. OPEN SPACES WILL BE DEDICATED TO THE HOME OWNERS ASSOCIATION.
13. THE $1,607.43 TRAFFIC IMPACT FEE FOR EACH LOT SHALL NOTED ON ALL FINAL DRAWINGS, INCLUDING THE FINAL PLAN FOR RECORDING, AND BE PAID AT THE TIME OF BUILDING PERMIT ISSUANCE FOR EACH LOT.
14. ALL SANITARY SEWER EASEMENTS SHALL BE A MINIMUM OF TWENTY-FIVE (25) FEET IN WIDTH AND SHALL BE CENTERED ON THE AS-CONSTRUCTED LOCATIONS OF SANITARY SEWERS. WHEN SANITARY SEWERS ARE CONSTRUCTED IN A SHARED (UTILITY OR SANITARY) EASEMENT PARALLEL AND ABUTTED TO A PUBLIC RIGHT-OF-WAY LINE THE EASEMENT SHALL BE LOCATED A MINIMUM OF FIVE (5) FEET OFFSET THE AS-CONSTRUCTED LOCATIONS OF THE SANITARY SEWER FACILITIES OPPOSITE THE SIDE OF THE PUBLIC RIGHT-OF-WAY.

LAND SURVEYOR'S CERTIFICATION

I, KEITH H. HIGGINS, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS THE LOTS, LAND, STREETS, ALLEYS AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

I FURTHER CERTIFY THAT THIS PLAT MEETS WITH THE REQUIREMENTS OF ALL PROVISIONS OF THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT NO. 247, AND OTHER ORDINANCES, INCLUDING ZONING, SUBDIVISION AND LAND DEVELOPMENT, AND STORMWATER MANAGEMENT EXISTENT UNDER THE LAW OF PETERS TOWNSHIP IN WHICH THIS SUBDIVISION IS LOCATED AFFECTING THIS PLAT.

_____ _____
KEITH H. HIGGINS DATE
PROFESSIONAL LAND SURVEYOR
PA LIC No. SU075168

PROJECT NO.: KDH-NEW CASTLE	DRAWING NO.: 1
DATE: 05/12/2025	
SCALE: N/A	
DRAWN BY: TAH	
CHECKED BY: KHH/MES	1 OF 3

DRAWING TITLE:

NOTES AND CLAUSES

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PREPARED FOR:

KDH CONSULTING ENGINEERS

PROJECT:

MAP OF

NEW CASTLE PLAN OF LOTS SUBDIVISION

BEING

A RE-SUBDIVISION OF PARCEL B OF TUSCANY PLAN OF LOTS - LOT 13 SUBDIVISION RECORDED IN INSTRUMENT NUMBER 202300382

KEYSTONE SURVEYING & MAPPING INC.
333 TECHNOLOGY DRIVE, SUITE 110
CANONSBURG, PA 15317
OFFICE (724) 514-7949

K:\2025\KDH - NEW CASTLE\CADD\SUBDIVISION\KDH - NEW CASTLE PLAN OF LOTS SUBDIVISION.DWG

ROAD CENTERLINE - LINE TABLE		
LINE #	DIRECTION	LENGTH
CL1	N81° 08' 59"W	96.17'
CL3	S50° 18' 19"W	61.76'
CL5	N13° 28' 35"E	114.68'
CL7	N38° 33' 36"W	185.85'
CL9	N11° 24' 42"E	276.22'

ROAD CENTERLINE - CURVE TABLE				
CURVE #	LENGTH	RADIUS	CH. BRNG.	CH. DIST.
CC1	224.53'	265.00'	S74° 34' 40"W	217.87'
CC2	312.35'	125.00'	N58° 06' 33"W	237.20'
CC3	136.23'	150.00'	N12° 32' 31"W	131.60'
CC4	109.02'	125.00'	N13° 34' 27"W	105.60'

ROAD RIGHT-OF-WAY - CURVE TABLE				
CURVE #	LENGTH	RADIUS	CH. BRNG.	CH. DIST.
C1	35.72'	25.00'	N40° 12' 56"W	32.76'
C3	203.35'	240.00'	S74° 34' 40"W	197.32'
C5	374.82'	150.00'	N58° 06' 33"W	284.64'
C7	113.53'	125.00'	N12° 32' 31"W	109.66'
C9	130.83'	150.00'	N13° 34' 27"W	126.72'
C11	39.68'	25.00'	N34° 03' 48"W	35.65'
C12	72.43'	290.00'	S57° 27' 37"W	72.24'
C13	249.88'	100.00'	N58° 06' 33"W	189.76'
C14	158.94'	175.00'	N12° 32' 31"W	153.53'
C15	87.22'	100.00'	N13° 34' 27"W	84.48'
C16	38.86'	25.00'	N55° 56' 12"E	35.06'

LOT AREA TABLE

LOT	SQ. FT.	ACRES
LOT 1	12,109	0.278
LOT 2	11,790	0.271
LOT 3	18,122	0.416
LOT 4	15,336	0.352
LOT 5	17,399	0.399
LOT 6	16,777	0.385
LOT 7	13,149	0.302
LOT 8	15,020	0.345
LOT 9	21,308	0.489
LOT 10	24,863	0.571
LOT 11	27,480	0.631
LOT 12	15,090	0.346
LOT 13	18,618	0.427
LOT 14	13,124	0.301
LOT 15	15,449	0.355
LOT 16	13,164	0.302
LOT 17	13,713	0.315
LOT 18	17,546	0.403
LOT 19	24,374	0.560
LOT 20	10,794	0.248
LOT 21	10,526	0.242
LOT 22	21,999	0.505
LOT 23	20,572	0.472
LOT 24	23,294	0.535
OSA	257,175	5.904
OSB	148,737	3.415
OSC	28,455	0.653
OSD	2,648	0.061
RD DED.	802	0.018
ROAD	79,812	1.832
TOTAL	929,244	21.333

PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD83

VICTOR ST. (50' RIGHT-OF-WAY)

JUSTABOUT RD. - SR:1019 (VARIABLE RIGHT-OF-WAY)

DRAWBRIDGE LANE (50' RIGHT-OF-WAY)

SIENNA TRAIL (33' RIGHT-OF-WAY)

ROAD DEDICATION 802 S.F. 0.018 ACRES

OPEN SPACE A 257,175 S.F. 5.904 ACRES *300 DRAWBRIDGE*

OPEN SPACE B 148,737 S.F. 3.415 ACRES *400 DRAWBRIDGE*

OPEN SPACE C 28,455 S.F. 0.653 ACRES *500 DRAWBRIDGE*

OPEN SPACE D 2,648 S.F. 0.061 ACRES

N/F WEILAND, CHARLES RONALD & TERRY LYNN TP# 540-006-00-00-0036-00 DBV-1361 PG-542

N/F LAMB, PHILIP R. & MARIA D. TP# 540-000-00-00-0039-00 INST# 199944576

N/F INGOLD, KELLY M. & DAVID R. TP# 540-000-00-00-0040-00 INST# 202022015

N/F KORINTUS, PATRICIA L. & KEITH A. TP# 540-000-00-00-0041-00 DBV-2458 PG-391

N/F HOWARD, FRANK M. JR. TP# 540-005-00-00-0003-00 INST# 200502146 BEING LOT 2 OF PBV-19 PG-698

N/F LEE, JOHN JOON YUNG & LEE, PEGGY LIN TP# 540-005-00-00-0003-04 INST# 202108693 BEING LOT 2 OF INST# 202108071

N/F HARRISON, BRUCE JR. TP# 540-005-00-00-0003-02 DBV-1090 PG-284

N/F 339 JUSTABOUT LAND CO. TP# 540-006-00-00-0034-00 INST# 202202494 BEING PARCEL B OF INST# 202300382 AREA=929,244 SQ. FT. OR 21.333 ACRES

N/F McGONIGAL, MICHAEL P. & TERRY G. TP# 540-008-20-00-0011-00 DBV-2831 PG-154

N/F ROSS, JOEL C. & KATHY J. TP# 540-008-00-00-0057-00 INST# 201905492

N/F KLIMCHAK, JUSTIN J. & LORI A. TP# 540-005-00-00-0003-01 INST# 200418867

AXLE FOUND (HELD)

1-1/2" IRON PIPE IN CONCRETE FOUND

5/8" IRON PIN & CAP FOUND

5/8" IRON PIN & CAP FOUND (HELD)

MONUMENT TO BE SET (TYPICAL)

CONC. MON. W/ IRON PIN FOUND

BOLT FOUND (HELD)

S00° 06' 56"E 662.17'

S80° 02' 28"E 1192.30'

S62° 15' 53"W 1492.05'

N27° 51' 32"W 1508.08'

S85° 20' 01"E 3.80'

N12° 00' 00"E 81.13'

S83° 46' 53"E 1901.79'

N25° 48' 17"W 1062.54'

N71° 27' 36"W 1004.95'

S82° 24' 54"E 223.84'

S09° 18' 15"W 152.48'

S79° 32' 18"E 108.17'

N11° 24' 42"E 276.22'

N11° 24' 42"E 201.04'

N11° 24' 42"E 139.82'

N11° 24' 42"E 9.44'

S78° 35' 18"E 143.64'

N78° 35' 18"W 143.64'

S11° 24' 42"W 143.64'

S38° 33' 36"E 193.03'

N38° 33' 36"W 185.85'

S61° 44' 50"E 276.45'

N61° 14' 07"E 177.45'

N38° 33' 36"W 161.44'

N27° 28' 35"E 87.92'

N07° 28' 35"E 174.93'

N33° 52' 44"W 148.43'

N36° 43' 44"W 134.20'

N18° 26' 11"W 169.22'

N07° 23' 34"W 81.55'

N21° 57' 51"W 232.47'

S50° 18' 11"W 276.09'

S64° 36' 56"W 120.67'

S69° 46' 27"W 152.00'

S55° 18' 11"W 276.09'

S21° 32' 49"W 114.68'

S13° 28' 35"W 114.68'

S76° 31' 25"W 175.00'

S84° 29' 39"W 175.00'

S62° 47' 38"W 175.00'

S55° 26' 24"W 175.00'

N78° 35' 18"W 143.64'

N70° 05' 22"E 175.00'

N61° 26' 24"E 175.00'

N16° 31' 25"W 175.00'

N07° 35' 06"E 198.58'

N07° 35' 06"E 192.26'

N78° 35' 18"W 139.82'

S78° 35' 18"E 139.82'

S08° 18' 15"W 152.48'

S18° 35' 18"E 139.82'

S78° 35' 18"E 139.82'

S11° 24' 42"W 252.04'

S78° 35' 18"E 143.64'

N38° 33' 36"W 60.12'

N38° 33' 36"W 84.53'

S50° 18' 11"W 61.76'

S38° 33' 36"E 51.02'

R=620.00' AL=147.83' CB=S86°22'08"E CL=147.48'

R=350.00' AL=317.87' CB=S12°32'31"E CL=307.06'

R=358.00' AL=118.61' CB=S05°01'31"W CL=118.07'

R=325.00' AL=283.45' CB=N13°34'27"W CL=274.56'

R=350.00' AL=36.65' CB=N10°28'35"E CL=36.63'

1 12,109 S.F. 0.278 ACRES *105 DRAWBRIDGE*

2 11,790 S.F. 0.271 ACRES *115 DRAWBRIDGE*

3 18,122 S.F. 0.416 ACRES *135 DRAWBRIDGE*

4 15,336 S.F. 0.352 ACRES *145 DRAWBRIDGE*

5 17,399 S.F. 0.399 ACRES *155 DRAWBRIDGE*

6 16,777 S.F. 0.385 ACRES *165 DRAWBRIDGE*

7 13,149 S.F. 0.302 ACRES *175 DRAWBRIDGE*

8 15,020 S.F. 0.345 ACRES *185 DRAWBRIDGE*

9 21,308 S.F. 0.489 ACRES *220 DRAWBRIDGE*

10 24,863 S.F. 0.571 ACRES *210 DRAWBRIDGE*

11 27,480 S.F. 0.631 ACRES *200 DRAWBRIDGE*

12 15,090 S.F. 0.346 ACRES *190 DRAWBRIDGE*

13 18,618 S.F. 0.427 ACRES *180 DRAWBRIDGE*

14 13,124 S.F. 0.301 ACRES *170 DRAWBRIDGE*

15 15,449 S.F. 0.355 ACRES *160 DRAWBRIDGE*

16 13,164 S.F. 0.302 ACRES *150 DRAWBRIDGE*

17 13,713 S.F. 0.315 ACRES *140 DRAWBRIDGE*

18 17,546 S.F. 0.403 ACRES *130 DRAWBRIDGE*

19 24,374 S.F. 0.560 ACRES *120 DRAWBRIDGE*

20 10,394 S.F. 0.248 ACRES *110 DRAWBRIDGE*

21 10,526 S.F. 0.242 ACRES *100 DRAWBRIDGE*

22 21,999 S.F. 0.505 ACRES *320 JUSTABOUT ROAD*

23 20,572 S.F. 0.472 ACRES *310 JUSTABOUT ROAD*

24 23,294 S.F. 0.535 ACRES *300 JUSTABOUT ROAD*

20' REAR

15' SIDE

15' SIDE

25' FRONT

ROAD

TYPICAL LOT DETAIL

LEGEND

- SUBJECT PROPERTY LINE
- ADJOINERS LINES
- PROPOSED PROPERTY LINES
- EXISTING EASEMENTS
- UTILITY EASEMENTS
- STORMWATER EASEMENTS
- SEWER EASEMENTS
- BUFFER LINE
- BUILDING LINES
- CENTERLINE OF ROAD
- WATERCOURSE EASEMENT
- EXISTING EVIDENCE FOUND
- MONUMENT TO BE SET
- OPEN SPACE AREAS
- ROAD DEDICATION AREA

SCALE IN FEET

0 60 120

SITE ADDRESS:

339 JUSTABOUT RD VENETIA, PA 15367

PROPERTY OWNER:

339 JUSTABOUT LAND COMPANY 333 TECHNOLOGY DR, SUITE 108 CANONSBURG, PA 15317

PROJECT NO.:	NEW CASTLE
DATE:	05/12/2025
SCALE:	1" = 60'
DRAWN BY:	MES
CHECKED BY:	KHH/MES

DRAWING NO.: 2

2 OF 3

DRAWING TITLE:

LOT LAYOUT

PETERS TOWNSHIP, WASHINGTON COUNTY, PA

PREPARED FOR:

KDH CONSULTING ENGINEERS

PROJECT:

MAP OF

NEW CASTLE PLAN OF LOTS SUBDIVISION

BEING

A RE-SUBDIVISION OF PARCEL B OF TUSCANY PLAN OF LOTS - LOT 13 SUBDIVISION RECORDED IN INSTRUMENT NUMBER 202300382

KEYSTONE SURVEYING & MAPPING INC.
333 TECHNOLOGY DRIVE, SUITE 110
CANONSBURG, PA 15317
OFFICE (724) 514-7949

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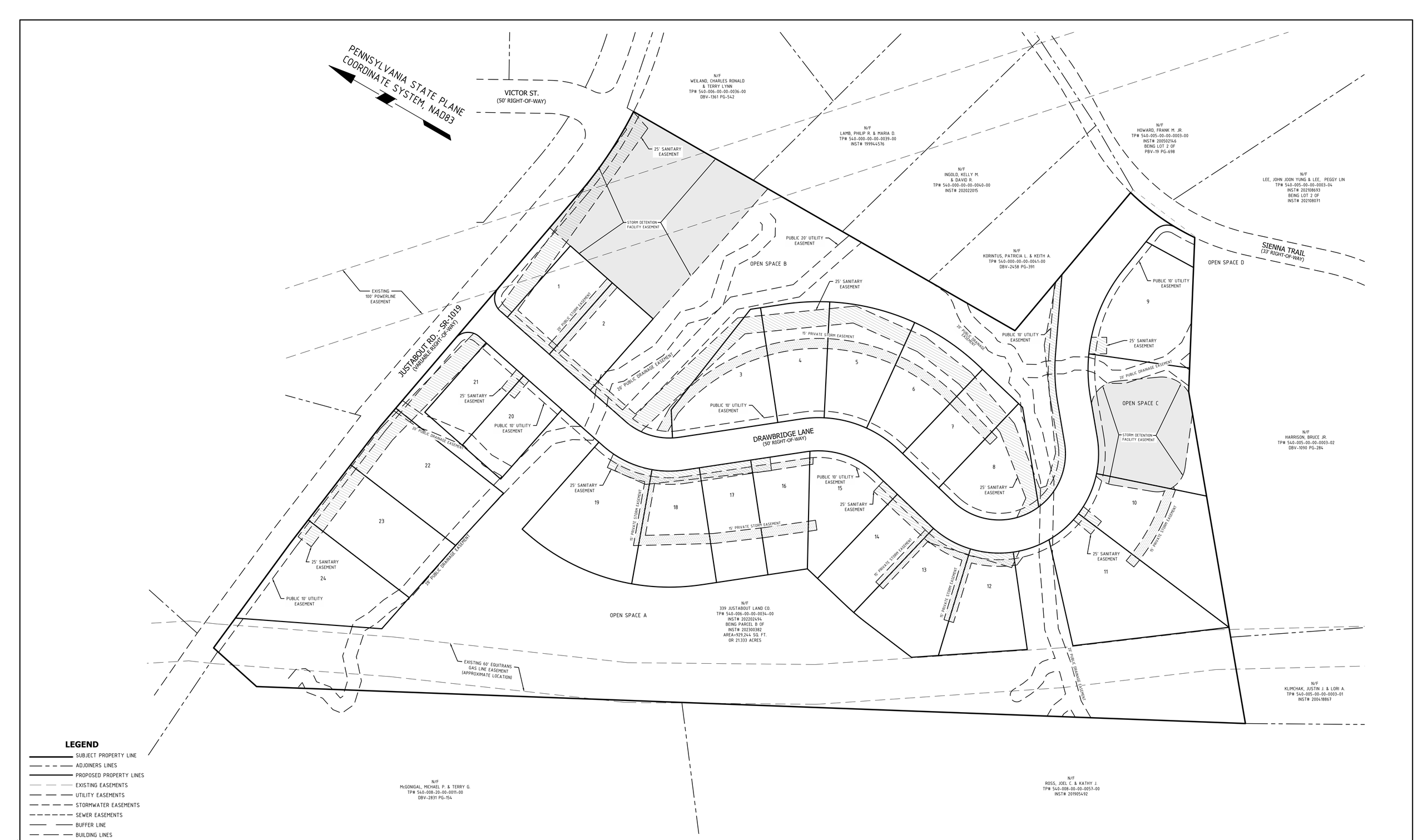
K:\2025\KDH - NEW CASTLE\CADD\SUBDIVISION\KDH - NEW CASTLE PLAN OF LOTS SUBDIVISION.DWG



LEGEND

- SUBJECT PROPERTY LINE
- ADJOINERS LINES
- PROPOSED PROPERTY LINES
- EXISTING EASEMENTS
- UTILITY EASEMENTS
- STORMWATER EASEMENTS
- SEWER EASEMENTS
- BUFFER LINE
- BUILDING LINES
- CENTERLINE OF ROAD
- WATERCOURSE EASEMENT
- EXISTING EVIDENCE FOUND
- MONUMENT TO BE SET
- STORM DETENTION FACILITY EASEMENT
- STORM EASEMENT
- SANITARY EASEMENT

SCALE IN FEET
0 60 120

SITE ADDRESS:

339 JUSTABOUT RD
VENETIA, PA 15367

PROPERTY OWNER:

339 JUSTABOUT LAND COMPANY
333 TECHNOLOGY DR, SUITE 108
CANONSBURG, PA 15317

PROJECT NO.: NEW CASTLE	DRAWING NO.: 3
DATE: 05/12/2025	
SCALE: 1" = 60'	
DRAWN BY: MES	
CHECKED BY: KHH/MES	3 OF 3

DRAWING TITLE:

EASEMENT LAYOUT

PETERS TOWNSHIP,
WASHINGTON COUNTY, PA

PREPARED FOR:

KDH CONSULTING ENGINEERS

PROJECT:

MAP OF

NEW CASTLE PLAN OF LOTS SUBDIVISION

BEING

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