

PROJECT OVERVIEW

IN MAY OF 2017, THE QUAKER VALLEY SCHOOL DISTRICT (QVSD) PURCHASED 107.96 ACRES OF HIGH GROUND IN LEET TOWNSHIP AND 39.21 ACRES IN EDGEWORTH BOROUGH FROM THE THREE RIVERS TRUST AND BOUGHT AN ADDITIONAL 11.424 ACRES OF ADJACENT LAND IN LEETSDALE BOROUGH AS A POSSIBLE SITE FOR A NEW HIGH SCHOOL CAMPUS. AFTER QVSD CONDUCTED AN ALTERNATIVE SITE ANALYSIS, QVSD DECIDED THAT THE THREE RIVERS TRUST PROPERTY WAS THE BEST OPTION FOR THE NEW HIGH SCHOOL CAMPUS.

THE SITE IS A RESIDENTIAL PROPERTY ON A RIDGE CONTAINING THREE HOMES. ONE OF THE HOMES WAS THE MUOTTA MANSION ON THE WILLIAM WALKER ESTATE LOCATED IN EDGEWORTH BOROUGH. THE PREVIOUS LAND OWNER, THREE RIVERS TRUST, HAS PLANS TO DEVELOP THE SITE INTO A PAD AND BREAKFAST MANOR AND HAD MOVED THE MUOTTA MANSION FROM ITS ORIGINAL FOUNDATION IN EDGEWORTH BOROUGH ALONG THE RIDGE 1000 FEET TO LEET TOWNSHIP TO MAKE WAY FOR A NEW MANSION. THREE RIVERS TRUST ABANDONED THE PROJECT LEAVING THE HOMES ON THE PROPERTY VACANT AND LEAVING A DEEP FOUNDATION FOR THE NEW MANSION UNFINISHED. THE NPDES PERMIT (NPDES NO. PA030216003), WHICH WAS ISSUED FOR THE WORK WAS TERMINATED IN FEBRUARY 2022 (ACC# FILE NO. E59-01234).

QVSD PLANS TO DEVELOP 69.6 ACRES OF THE 158 ACRES OF PROPERTY. THE PROPERTY IS MAINLY WOODED WITH THE EXCEPTION OF THE RIDGE TOP WHERE THE WOODS WERE CLEARED FOR THE THREE RIVERS TRUST DEVELOPMENT. QVSD PLANS TO BURY THE NEW FOUNDATION BUILT FOR THE NEW MANSION AND GRADE THIS AREA AS A MEADOW AREA. NO OTHER DEVELOPMENT IS PLANNED FOR THE LEETSDALE BOROUGH. THE MAIN DEVELOPMENT WILL BE IN LEET TOWNSHIP WHERE QVSD PLANS TO BUILD A 2-STORY SCHOOL, TENNIS COURTS, STADIUM AND PARKING AREAS.

THE PROPERTY IS IN THE LITTLE SEWICKLEY WATERSHED WHICH IS A HIGH QUALITY-TROUT STOCKING (HQ-TSF). THE LITTLE SEWICKLEY CREEK IS IMPAIRED WITH HIGHWAY RUNOFF. A RIPARIAN BUFFER WILL BE REQUIRED FOR A HQ IMPAIRED STREAM. THE EXISTING WOODED AREA BETWEEN THE PLANNED PROJECT AND THE UNIT TO LITTLE SEWICKLEY CREEK TO THE EAST SPANS 400 TO 1300 FEET. THIS WOODED AREA WILL BE PROTECTED DURING CONSTRUCTION AND REMAIN AS A RIPARIAN AREA. RIPARIAN BUFFERS WILL BE ESTABLISHED ON THE INTERMITTENT AND PERENNIAL UNITS ON THE PROPERTY.

THE PROPERTY IS CURRENTLY ACCESSED BY MULTIPLE DRIVES. THE MAIN ACCESS IS DIRECTLY OFF OF CAMP MEETING ROAD AT THE RIDGE LINE.

THE ANTICIPATED INCREASE IN IMPERVIOUS AREA IS 14.69 ACRES. WITHOUT CONTROLS, THE PROPOSED CONSTRUCTION WILL INCREASE THE STORMWATER RUNOFF FROM THE SITE. TWO DETENTION FACILITIES ARE PLANNED TO REDUCE THE POST DEVELOPMENT RUNOFF RATE. SEVERAL BIORETENTION AREAS AND MANAGED RELEASE CONCEPT (MRC) STRUCTURES ARE DESIGNED FOR WATER QUALITY AND VOLUME CONTROL. BECAUSE THE DISTURBANCE AREA EXCEEDS 1 ACRE AND THE PROJECT AREA IS WITHIN A HQ WATERSHED, AN INDIVIDUAL NPDES PERMIT APPLICATION IS SUBMITTED FOR THE DEVELOPMENT.

THE PROJECT AREA IS LOCATED OUTSIDE THE 500-YEAR FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR ALLEGHENY COUNTY, PA PANEL 154 OF 658, MAP NUMBER 42003C0154H, DATED SEPTEMBER 26, 2014.

THREE WETLANDS AND SIX STREAMS HAVE BEEN DELINEATED WITHIN THE PROJECT LIMIT OF DISTURBANCE (LOD) BOUNDARY. A JOINT PERMIT APPLICATION HAS BEEN SUBMITTED FOR THE PREDICTED WETLAND AND STREAM IMPACTS.

A PNDI WAS GENERATED FOR THE PROPERTY. THE PNDI RESULTED IN NO IMPACTS ANTICIPATED.

THIS EROSION AND SEDIMENTATION CONTROL PLAN MEETS THE REQUIREMENTS OF LEET TOWNSHIP AND CONFORMS TO THE REQUIREMENTS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (PA DEP) EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (ESPCPM) DATED MARCH 2012.

102.4(B)(3) PLAN PREPARER'S QUALIFICATIONS

MARTHA L. FRECH, P.E. IS A REGISTERED PROFESSIONAL CIVIL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA. SHE HAS OVER 40 YEARS OF EXPERIENCE PREPARING AND PERMITTING LAND DEVELOPMENT PROJECTS, STORMWATER MANAGEMENT PLANS AND EROSION AND SEDIMENT CONTROL PLANS. AS A PART OF HER CONTINUOUS PROFESSIONAL DEVELOPMENT, SHE HAS ATTENDED COURSES AND SEMINARS HOSTED BY PA DEP, WESTMOREL AND COUNTY CONSERVATION DISTRICTS, ALLEGHENY COUNTY CONSERVATION DISTRICT AND OTHER CONSERVATION AGENCIES. SHE HAS RECEIVED NUMEROUS UPDATES FOR NPDES PERMIT APPLICATIONS, EROSION AND SEDIMENT CONTROL APPLICATIONS, BMP APPLICATIONS, NEW EAS CONTROL PRODUCTS, ETC.

102.4(B)(4)(I) MINIMIZE EXTENT AND DURATION OF EARTH DISTURBANCE

APPROXIMATELY 69.6 ACRES OF THE TOTAL PROPERTY OF 158.6 ACRES WILL BE DISTURBED FOR THE CONSTRUCTION OF THE PROPOSED HIGH SCHOOL CAMPUS. THE LIMIT OF DISTURBANCE (LOD) RUNS ALONG THE RIDGE FROM CAMP MEETING ROAD EASTWARD TO THE LEET TOWNSHIP-EDGEWORTH BOROUGH CORPORATE BOUNDARY, AND ALONG THE EAST SIDE OF CAMP MEETING ROAD TO BEAVER STREET. AN ADDITIONAL 0.17 ACRE OF CAMP MEETING ROAD WILL BE RE-SURFACED AS PART OF THE PROPOSED IMPROVEMENTS TO THE MAIN ENTRANCE FOR THE SCHOOL.

LAND CLEARING AND GRADING WILL BE MINIMIZED BY CLEARING AND GRADING ONLY ENOUGH AREA TO FACILITATE THE CONSTRUCTION OF THE SCHOOL AND THE DEVELOPMENT OF THE ENGINEERED FILL THAT WILL PROVIDE THE FOUNDATION FOR THE SCHOOL FACILITIES. THE SCHOOL BUILDINGS WILL BE AT THE EASTERN SIDE OF THE PROJECT SITE. THE ATHLETIC FACILITIES AT THE WESTERN SIDE OF THE SITE AND PARKING AND RELATED FACILITIES WILL BE IN THE CENTRAL AREA. ACCESS TO THE SCHOOL WILL BE FROM CAMP MEETING ROAD USING AN IMPROVED EXISTING SITE ENTRANCE AND ONE NEW ENTRANCE WITHIN THE LOD.

THE CONTRACTOR WILL NOT CUT OR DAMAGE ANY TREES ADJACENT TO OR OUTSIDE OF THE LIMITS OF DISTURBANCE (LOD) SHOWN ON THE E&S PLANS. THE CONTRACTOR SHALL NOT DEVIATE FROM THE LOD SHOWN ON THE E&S PLAN. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. ALL OTHER DISTURBED AREAS WILL BE RETURNED TO APPROXIMATE ORIGINAL CONTOURS AND STABILIZED.

102.4(B)(4)(II) MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION

THE PROPOSED PROJECT LOD WILL BE LIMITED TO APPROXIMATELY 69.6 ACRES OF THE TOTAL 158-ACRE PROPERTY. THE DRAINAGE PATTERNS OF THE EXISTING ON-SITE STREAMS WILL NOT BE CHANGED. THE PROJECT HAS SIX UNNAMED TRIBUTARIES TO THE OHIO RIVER: UNIT-1, UNIT-1A, UNIT-2, UNIT-3, UNIT-4IS, AND UNIT-6. UNIT-1 AND UNIT-3 ARE INTERMITTENT, UNIT-1 IS PERENNIAL, AND UNIT-4IS AND UNIT-6 ARE EPHEMERAL. UNIT-1, UNIT-1A, UNIT-2, AND UNIT-3 WILL BE LARGELY PRESERVED. MOST OF UNIT-4IS AND PART OF UNIT-6 WILL BE REMOVED.

UNIT-1 HAS TWO EXISTING CULVERTS, ONE OF WHICH WILL BE REMOVED. TWO NEW CULVERTS ON UNIT-1 ARE PROPOSED TO CARRY THE NEW DRIVEWAY OVER THE STREAM. UNIT-2 HAS ONE EXISTING CULVERT WHICH WILL REMAIN AND AN ADDITIONAL CULVERT WILL BE INSTALLED TO CARRY THE NEW DRIVEWAY OVER THE STREAM. UNIT-3 WILL NOT BE IMPACTED BY THE PROJECT. UNIT-4IS COLLECTS DRAINAGE FROM CAMP MEETING ROAD AND HAS A DRIVEWAY CULVERT WHICH WILL BE REMOVED. THE UPPER REACH OF UNIT-4IS WILL BE FILLED, AND THE LOWER REACH WILL BE MODIFIED TO SERVE AS A STORMWATER CHANNEL. UNIT-6 IS A RAVINE. THE UPPER REACH OF UNIT-6 WILL BE THE SITE OF THE NEW DRIVEWAY.

EXISTING STREAMS AND CHANNELS WITHIN THE LOD WILL BE DIVERTED BY USING PUMP AROUNDS TO FACILITATE THE CONSTRUCTION OF THE ENTRANCE ROADS AND SEDIMENT BASIN.

FROM THE POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (MAY 2020) THE PROJECT AREA IS 50.08 ACRES OF WOODS, AND THE PROJECT WILL PRESERVE 16.13 ACRES OF WOODS. EXISTING MEADOW AREAS (ONE UNIT-1) WILL ALSO BE PRESERVED. THE AREAS WITHIN AND ADJACENT TO THE LOD WILL BE PROTECTED BY PROTECTIVE FENCING AND/OR EROSION AND SEDIMENTATION CONTROL MEASURES.

102.4(B)(4)(III) MINIMIZE SOIL COMPACTION

THE PROJECT WILL HAVE SPECIFIED SOIL COMPACTION REQUIREMENTS FOR THE PROPOSED DEVELOPMENT OF THE ENGINEERED FILLS. DISTURBED AREAS WILL HAVE THE TOPSOIL REPLACED AND BE VEGETATED. BEFORE SEEDING, THE UPPER FEW INCHES OF TOPSOIL WILL BE FILLED.

102.4(B)(4)(IV) MEASURES TO MINIMIZE INCREASED RUNOFF

THE ANTICIPATED INCREASE IN IMPERVIOUS AREA IN THE PCSM PLAN IS 14.69 ACRES. WITHOUT CONTROLS, THE PROPOSED CONSTRUCTION WILL INCREASE THE STORMWATER RUNOFF FROM THE SITE. TWO STORMWATER MANAGEMENT FACILITIES (SWMF) ARE PLANNED TO REDUCE THE POST DEVELOPMENT RUNOFF RATE. SEVERAL BIORETENTION AREAS (RAIN GARDENS) AND MRC STRUCTURES ARE DESIGNED TO ALSO HANDLE THE INCREASED RUNOFF VOLUME.

102.4(B)(5)(I) EXISTING TOPOGRAPHIC FEATURES

THE SITE IS ALONG A RIDGELINE LOCATED OFF OF CAMP MEETING ROAD IN LEET TOWNSHIP, ALLEGHENY COUNTY, PENNSYLVANIA. THE SITE IS MAINLY WOODED WITH THE TOP OF THE RIDGE CLEARED FROM PREVIOUS SITE DEVELOPMENT. EXISTING SITE CONDITIONS ARE SHOWN ON DRAWING C100. THE ELEVATIONS ACROSS THE SITE RANGE FROM 1123 TO 760.

102.4(B)(5)(II) TYPES, DEPTH, SLOPE, LOCATION AND LIMITATIONS OF THE SOILS

THE SOILS LOCATED WITHIN THE LOD ARE ERNEST-VANDERGRIFT SILT LOAMS (EVD), GILPIN SILT LOAM (GID), GILPIN-UPSHUR COMPLEXES (GPD AND GOF), GILPIN WEIKERT, CULLEOKA CHANNERY SILT LOAMS (GSF), RAYNE SILT LOAMS (RYCB AND RYCC), AND URBAN LAND-RAINSBORO COMPLEX (URB). THE LIMITATIONS FOR THE SOIL TYPES WITH RESPECT TO DEVELOPMENT ARE LISTED IN TABLE 1.

TABLE 1: LIMITATION OF PENNSYLVANIA SOILS PERTAINING TO EARTHMOVING PROJECTS

(TAKEN FROM PA DEP EROSION AND SEDIMENT CONTROL MANUAL, MARCH 2012)

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH-WATER TABLE	HYDRIC/HYDRIC INCLUSIONS	LOW STRENGTH/LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK - SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
ERNEST-VANDERGRIFT SILT LOAM	X	C/S		X	X	X	X	X	X	X	X	X	X			X
GILPIN SILT LOAM	X	C	X	X					X	X	X	X				
GILPIN-UPSHUR COMPLEXES	X	C/S	X	X					X	X	X	X	X			
GILPIN WEIKERT, CULLEOKA CHANNERY SILT LOAM	X	C/S	X	X					X	X	X	X	X			
RAYNE SILT LOAM	X	C		X					X	X	X	X				
URBAN LAND-RAINSBORO COMPLEX	X	X	X	X	X	X	X	X	X	X	X	X				

EVD - ERNEST-VANDERGRIFT SILT LOAM. 15 - 25% SLOPES. THIS SOIL IS FOUND ON HILLSIDES, AND CONSISTS OF MODERATELY WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (4.1 INCHES). THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS ABOUT 18-36 INCHES TO FRAGIPAN. DEPTH TO WATER TABLE IS 17-22 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS MODERATELY LOW TO MODERATELY HIGH (0.06 - 0.60 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) C/D. THIS SOIL IS HYDRIC OR HAS HYDRIC INCLUSIONS.

GID - GILPIN SILT LOAM. 15 - 25% SLOPES. THIS SOIL IS FOUND ON HILLSIDES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (4.8 INCHES). THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS ABOUT 25-37 INCHES TO PARALITHIC BEDROCK. DEPTH TO WATER TABLE IS MORE THAN 60 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS MODERATELY HIGH TO HIGH (0.2 - 2.0 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) C. THIS SOIL IS NOT HYDRIC.

GPD - GILPIN-UPSHUR COMPLEX. 15 - 25% SLOPES. THIS SOIL IS FOUND ON HILLSIDES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (4.3 INCHES). THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS ABOUT 30-36 INCHES TO PARALITHIC BEDROCK. DEPTH TO WATER TABLE IS MORE THAN 60 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS MODERATELY HIGH TO HIGH (0.2 - 2.0 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) C. THIS SOIL IS NOT HYDRIC.

GOF - GILPIN-UPSHUR COMPLEX. VERY STEEP SLOPES. THIS SOIL IS FOUND ON HILLSIDES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (3.8 INCHES). THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS ABOUT 20-40 INCHES TO LITHIC BEDROCK. DEPTH TO WATER TABLE IS MORE THAN 80 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS MODERATELY HIGH TO HIGH (0.2 - 2.0 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) C. THIS SOIL IS NOT HYDRIC.

GSF - GILPIN WEIKERT, CULLEOKA CHANNERY SILT LOAM. 25 - 80% SLOPES. THIS SOIL IS FOUND ON HILLSIDES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (4.5 INCHES). THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS ABOUT 30-36 INCHES TO LITHIC BEDROCK. DEPTH TO WATER TABLE IS MORE THAN 80 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS MODERATELY HIGH TO HIGH (0.2 - 2.0 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) C. THIS SOIL IS NOT HYDRIC.

RYCB - RAYNE SILT LOAM. 3-8% SLOPES. THIS SOIL IS FOUND ON RIDGES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (5.6 INCHES). THE SOIL IS LISTED AS 'PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS 30-55 INCHES TO PARALITHIC BEDROCK. DEPTH TO WATER TABLE IS GREATER THAN 80 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS VERY LOW (0.00 - 0.00 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) B. THIS SOIL IS NOT HYDRIC.

RYCC - RAYNE SILT LOAM. 8-15% SLOPES. THIS SOIL IS FOUND ON RIDGES, AND CONSISTS OF WELL-DRAINED SOILS. AVAILABLE WATER SUPPLY IS LOW (5.6 INCHES). THE SOIL IS LISTED AS 'FARMLAND OF STATEWIDE IMPORTANCE'. THE DEPTH TO RESTRICTIVE FEATURE IS 35-55 INCHES TO PARALITHIC BEDROCK. DEPTH TO WATER TABLE IS GREATER THAN 80 INCHES. THE CAPACITY OF THE MOST LIMITING LAYER TO TRANSMIT WATER IS VERY LOW (0.00 - 0.00 INCHES/HOUR). THE SOIL IS LISTED AS HYDROLOGIC SOIL GROUP (HSG) B. THIS SOIL IS NOT HYDRIC.

URB - URBAN LAND-RAINSBORO COMPLEX. GENTLY SLOPING. THIS SOIL IS HUMAN-TRANSPORTED MATERIAL. THE SOIL IS LISTED AS 'NOT PRIME FARMLAND'. THE DEPTH TO RESTRICTIVE FEATURE IS 10 INCHES OR MORE. THIS SOIL IS HYDRIC OR HAS HYDRIC INCLUSIONS.

GARVIN, BOWARD, BEITKO ENGINEERING, INC. (GBBE), THE LICENSED GEOTECHNICAL ENGINEER FOR THE PROJECT, COMPLETED A THOROUGH PRE-DEVELOPMENT SITE CHARACTERIZATION AND ASSESSMENT OF SOILS AND GEOLOGY. DETAILED SOIL AND GEOTECHNICAL INFORMATION IS IN THE GEOTECHNICAL EXPLORATION AND ENGINEERING REPORT BY GBBE. SOILS SHOULD BE ANALYZED BY THE CONTRACTOR BEFORE BEING USED IN THE CONSTRUCTION PROCESS. A QUALIFIED PROFESSIONAL ENGINEER SHOULD BE ENLISTED DURING CONSTRUCTION TO PROVIDE ADVICE, PARTICULARLY DURING THE FOUNDATION PREPARATION AND EARTHWORK.

RESOLUTIONS FOR THE SOIL USE LIMITATIONS INCLUDE:

- THE CONTRACTOR SHALL NOT CUT VERTICAL BANKS. CUT AND FILL SLOPES WILL BE NO STEEPER THAN 2:1. THE FILL SOILS WILL BE AN ENGINEERED SOIL TO IMPROVE THE STABILITY OF FILL SLOPES.
- SOIL CORROSION CAN BE CONTROLLED BY USING ORGANIC AND INORGANIC COATINGS, APPLYING METALLIC COATINGS, CATHODIC PROTECTION, AND CONCRETE ADMIXTURES. THE REINFORCEMENT IN THE CONCRETE STRUCTURES WILL BE EPOXY-COATED AND THE UTILITY PIPES SHALL BE PLASTIC.
- DROUGHTY CONDITIONS, ESPECIALLY IN THE BIORETENTION AREAS, WILL BE MITIGATED WITH WATERING AS REQUIRED.
- THE SITE WILL BE VEGETATED TO ELIMINATE BARE AREAS AND DECREASE EROSION. COMPOST FILTER SOCKS AND EROSION CONTROL BLANKETS WILL BE USED PRIOR TO FINAL STABILIZATION. TIMELY SEEDING AND MULCHING OF DISTURBED AREAS WILL REDUCE EROSION POTENTIAL.
- CONTRACTOR SHALL PUMP EXCAVATIONS TO WATER FILTER BAGS TO REMOVE ANY GROUNDWATER OR OTHER UNWANTED WATER FROM WORK AREAS, INCLUDING AREAS EXHIBITING A HIGHWATER TABLE. A HIGH-WATER TABLE IS NOT A CONCERN AT THE PONDS. REFER TO THE GEOTECHNICAL EXPLORATION AND DESIGN REPORT BY GARVIN, BOWARD, BEITKO ENGINEERING, INC. FOR GUIDANCE WORKING WITH THE SITE SOILS AND THE ENGINEERED SOIL. IF POSSIBLE, EARTH MOVING ACTIVITIES SHALL BE CONDUCTED DURING DRY CONDITIONS.
- AN AQUATIC RESOURCES REPORT (ARR) WAS COMPLETED BY SKELLY & LOY, INC. IN MARCH 2018. THE ARR IDENTIFIED SIX WETLANDS IN THE VICINITY OF THE UNIT OF LITTLE SEWICKLEY CREEK, OUTSIDE OF THE PROJECT LOD. STREAMLINE ENGINEERING, INC. PREPARED AN INDEPENDENT WETLAND DETERMINATION AND WATER RESOURCES EVALUATION REPORT SPECIFIC TO THE PROJECT LOD IN 2025, REVISED MAY 2026. THREE SMALL WETLANDS WERE DELINEATED WITHIN THE LOD.
- SITE SOILS AND ROCK WILL BE OVER-EXCAVATED AND BLENDED WITH SAND TO DEVELOP THE ENGINEERED SOIL FOR THE SITE. THE PROPOSED GRADING CALLS FOR CUT AND FILL SLOPES THAT ARE NO STEEPER THAN 3H:1V OR WILL BE GEO-REINFORCED.
- THE PROPOSED INFILTRATION FEATURES ARE BIORETENTION AREAS WHICH ARE PART OF THE POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN. THE BIORETENTION AREAS WILL BE CONSTRUCTED WITHIN AREAS THAT HAVE BEEN OVER-EXCAVATED AND BACKFILLED WITH AN ENGINEERED SANDY SOIL TO PROMOTE INFILTRATION.
- AN ENGINEERED SOIL WILL BE USED IN THE CONSTRUCTION OF THE POND EMBANKMENTS. A SAND FILTER DIAPHRAGM WILL BE USED FOR THE PIPE PENETRATION TO MITIGATE FOR PIPING.
- THE CONTRACTOR SHALL PERFORM SOIL TESTING ON ALL DISTURBED AREAS TO DETERMINE IF THE SPECIFIED SOIL AMENDMENTS ARE ADEQUATE TO ESTABLISH VEGETATIVE COVER. THE CONTRACTOR SHALL CONDITION THE SOIL AS RECOMMENDED BY THE TESTING LABORATORY PRIOR TO FINAL SEEDING.
- FROST ACTION AND SHRINK-SWELL CONCERNS WILL BE ADDRESSED BY OVER-EXCAVATING THE FOUNDATION BELOW THE PROPOSED SLABS TO COMPETENT BEDROCK AND SOIL.
- THE ENGINEERED SOIL WILL MITIGATE FOR POTENTIAL SHRINK AND SWELL OF THE ON-SITE SOILS.
- THE SITE WILL BE GRADED TO PROVIDE POSITIVE DRAINAGE TO THE STORM SEWER SYSTEM, CULVERTS AND CHANNELS.
- THE ENGINEERED SOIL WILL MITIGATE FOR POTENTIAL WETNESS OF ON-SITE SOILS. MAJOR CONSTRUCTION WILL OCCUR IN DRY CONDITIONS.

102.4(B)(5)(III) PAST, PRESENT, AND PROPOSED LAND USES

PAST 50 YEARS (1969) - THE SITE WAS THE ORIGINAL WILLIAM WALKER ESTATE. MOST OF THE SITE IS WOODED OR IN MEADOW, WITH AN ACCESS LAKE RUNNING ALONG THE RIDGELINE TO THE LEET TOWNSHIP-EDGEWORTH BOROUGH CORPORATE BOUNDARY. THE ORIGINAL MUOTTA MANSION WAS LOCATED BY A PREVIOUS PROPERTY OWNER TO NEAR THE CENTER OF THE RIDGE, AND TWO ABANDONED RESIDENCES ARE SITUATED ON THE PROPERTY ALONG CAMP MEETING ROAD.

PRESENT (LAST 5 YEARS) - THE PROJECT AREA HAS BEEN UNUSED AND UNCHANGED SINCE PURCHASED BY THE QUAKER VALLEY SCHOOL DISTRICT IN 2017, PENDING THE COMPLETION OF STUDIES FOR DEVELOPMENT OF THE SITE AS A HIGH SCHOOL.

PROPOSED - THE PROPOSED PROJECT IS TO DEMOLISH THE EXISTING ABANDONED RESIDENCES AND CONSTRUCT A HIGH SCHOOL CAMPUS ON THE RIDGE. THE CAMPUS WILL BE WITHIN LEET TOWNSHIP. THE ABANDONED FOUNDATION IN EDGEWORTH BOROUGH WILL BE FILLED IN, COVERED WITH FILL AND VEGETATED WITH A MEADOW MIX AND TREE PLANTINGS.

102.4(B)(5)(IV) VOLUME AND RATE OF RUNOFF FROM THE PROJECT SITE

THE VOLUME AND RATE OF RUNOFF FROM THE PROJECT SITE ARE EXPECTED TO INCREASE WITHOUT STORMWATER MANAGEMENT CONTROLS. A PCSM PLAN UNDER SEPARATE COVER HAS BEEN DEVELOPED TO MANAGE THE INCREASE OF RUNOFF VOLUMES AND RATES.

102.4(B)(5)(V) SURFACE WATERS AND THEIR CHAPTER 93 CLASSIFICATION

RUNOFF FROM THE SITE CURRENTLY DISCHARGES TO UNITS TO LITTLE SEWICKLEY CREEK. THE CHAPTER 93 DESIGNATION FOR LITTLE SEWICKLEY CREEK AND ITS TRIBUTARIES IS HQ-TSF - HIGH QUALITY - TROUT STOCKING. THE STREAMS ARE IDENTIFIED ON THE EXISTING CONDITIONS AND SENSITIVE RESOURCE MAP.

AN AQUATIC RESOURCES REPORT (ARR) WAS PREPARED FOR THE ENTIRE 158-ACRE QVSD PROPERTY BY SKELLY & LOY, INC. IN MARCH 2018. THE ARR IDENTIFIED SIX WETLANDS WITHIN THE PROPERTY IN THE VICINITY OF THE UNIT OF LITTLE SEWICKLEY CREEK, BUT OUTSIDE OF THE PROJECT LOD. A WETLAND DETERMINATION AND WATER RESOURCES EVALUATION REPORT WAS INDEPENDENTLY PREPARED BY STREAMLINE ENGINEERING, INC. SPECIFICALLY FOR THE PROJECT LOD AREA. THREE WETLANDS AND SIX STREAMS WERE IDENTIFIED WITHIN THE PROJECT LOD. THE THREE WETLANDS ARE DESIGNATED AS W1 (0.03 ACRE), W2 (0.01 ACRE), AND W3 (0.006 ACRE). SIX STREAMS WERE IDENTIFIED IN THE REPORT. UNIT-1 AND UNIT-3 ARE INTERMITTENT STREAMS THAT FLOW SOUTHWARD THROUGH THE SITE. PARALLELING CAMP MEETING ROAD, UNIT-3 ORIGINATES IN WETLAND W1, AND JOINS UNIT-1. UNIT-1 FLOWS INTO UNIT-2. UNIT-2 IS PERENNIAL, AND FLOWS ALONG CAMP MEETING ROAD NEAR THE BASE OF THE HILLSIDE WITHIN THE PROJECT. UNIT-4IS IS A DIVIDED EPHEMERAL CHANNEL THAT CONVEYS ROADWAY DRAINAGE FROM CAMP MEETING ROAD, AND TERMINATES IN WASHOUT AREAS IN THE WOODS. UNIT-6 IS EPHEMERAL RAVINE LOCATED IN THE SOUTHWEST CORNER OF THE PROJECT SITE. THE WETLANDS AND STREAMS ARE SHOWN ON THE EXISTING CONDITIONS AND SENSITIVE RESOURCE MAP. THE WETLANDS AND WATER RESOURCES THAT WILL BE IMPACTED WILL REQUIRE A JOINT PERMIT APPLICATION FOR THE PROPOSED ACTIVITY.

102.4(B)(5)(VI) TYPE OF PERIMETER AND ONSITE E&S BMPS

TEMPORARY CONTROLS

ALTERNATIVE E&S ROCK CONSTRUCTION ENTRANCE - ROCK CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED CONSISTING OF AN 8-INCH MINIMUM LAYER OF AASHTO #1 ROCK UNDERLAIN BY A PAD OT CLASS 4 GEOTEXTILE. EACH ROCK CONSTRUCTION ENTRANCE WILL BE A MINIMUM OF 50 FEET LONG BY 20 FEET WIDE. PUBLIC STREET SWEEPING WITH A VACUUM SWEEPER AND ROLLING OF DIRT AND GRAVEL ROADS WILL BE CONDUCTED AT THE END OF EACH WORKDAY. MANUAL CLEANING OF TIRES WILL BE PERFORMED ON ALL TRUCKS EXITING THE SITE. A STOCKPILE OF ROCK MATERIAL WILL BE KEPT ON SITE FOR MAINTENANCE OF THE ENTRANCE.

COMPOST FILTER SOCKS - COMPOST FILTER SOCKS SHALL BE PLACED AT EXISTING GRADE DOWNGRADIENT OF AREAS TO BE DISTURBED. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ROCK FILTER OUTLET - WHEREVER A SEDIMENT BARRIER HAS BEEN UNDERMINED OR TOPPED, IT SHALL IMMEDIATELY BE REPLACED WITH A ROCK FILTER OUTLET. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH ONE-THIRD THE HEIGHT OF THE OUTLET.

ROCK FILTER (ROCK CHECK DAMS) - ROCK CHECK DAMS WILL BE USED AT THE DOWNSTREAM END OF THE PUMP-AROUNDS WHERE FILTERING SEDIMENT FROM THE WORK AREAS IS NEEDED. ROCK FILTERS WILL ALSO BE USED AT THE DOWNSTREAM ENDS OF CHANNELS UNTIL THE CHANNELS ARE LINED.

TEMPORARY COFFERDAM AND PUMP BYPASS AROUND IN-CHANNEL WORK - A PUMP BYPASS SHALL BE EMPLOYED TO MAINTAIN DIVERSION OF CLEAN WATER FROM THE PROJECT SITE. A TEMPORARY SANDBAG COFFERDAM WITH AN IMPERVIOUS MEMBRANE SHALL BE USED TO IMPOUND THE UPSTREAM FLOW FOR THE PUMP INTAKE. A PUMP AND DISCHARGE PIPE WILL DIVERT WATER FROM THE STREAM AROUND THE WORK SITE AND DISCHARGE THE FLOW ONTO A RIPRAP APRON DOWNSTREAM OF THE DISTURBED AREA AND ROCK FILTER.

PUMPED WATER FILTER BAGS WITH COMPOST FILTER SOCK RING - PUMPED WATER FILTER BAGS SHALL BE USED TO FILTER ACCUMULATED WATER PUMPED FROM DISTURBED AREAS OR TRENCHES. THE FILTER BAG SHALL BE SURROUNDED BY A COMPOST FILTER SOCK RING.

COMPOST SOCK SEDIMENT TRAP - A COMPOST SOCK SEDIMENT TRAP WILL BE USED AT THE SCHOOL SITE WHERE SITE SLOPES AND LENGTHS PRECLUDE USE OF COMPOST FILTER SOCK. THE TRAP SHALL NOT EXCEED THREE SOCKS IN HEIGHT. MINIMUM TRAP HEIGHT IS 24 INCHES.

COMPOST SOCK CONCRETE WASHOUT WITH SOCK RING - CONCRETE WASHOUTS WILL BE USED TO PROVIDE A SUITABLE WASHOUT FACILITY FOR CLEANING CHUTES, MIXERS, AND HOPPERS OF THE CONCRETE DELIVERY VEHICLES. THE WASHOUT WILL BE PLACED ON A SUITABLE IMPERVIOUS GEOMEMBRANE. THE COMPOST SOCKS WILL BE STAKED IN A MANNER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AROUND THE PERIMETER OF THE MEMBRANE SO AS TO FORM A CLOSED RING. THE OVERLAPPING ENDS OF THE SOCK WILL BE LOCATED AT THE UPSLOPE CORNER. WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A HIGHER PERIMETER WALL. A PROPRIETARY CONCRETE WASHOUT DEVICE MAY BE USED AS AN ALTERNATIVE.

SEDIMENT BASIN - A SEDIMENT BASIN WILL BE USED TO HANDLE RUNOFF FROM THE SITE DURING CONSTRUCTION. STAGING OF THE PROJECT IS NECESSARY TO MINIMIZE THE RISK OF OVERLOADING THE SEDIMENT BASIN DURING CONSTRUCTION. THE BASIN WILL BE CONVERTED TO A STORMWATER MANAGEMENT FACILITY (SWMF2) UPON STABILIZATION OF ITS TRIBUTARY AREAS.

TOP OF SLOPE BERM - TOP OF SLOPE BERMS WILL BE USED TO PREVENT RUNOFF FROM DISCHARGING OVER THE CUT SLOPES. THE BERMS WILL BE CREATED AS THE MASS EXCAVATION PROCEEDS. PUMP FILTER BAGS WITH COMPOST FILTER SOCK RINGS WILL BE USED TO HANDLE THE RUNOFF.

DIVERSION CHANNELS - DIVERSION CHANNELS WILL BE USED TO CONVEY RUNOFF FROM UPLAND, UNDISTURBED AREAS AROUND CONSTRUCTION AREAS. TWO TEMPORARY (OT AND D2) AND ONE PERMANENT (C2) DIVERSION CHANNELS ARE PROPOSED.

COLLECTION CHANNELS - COLLECTION CHANNELS WILL BE USED TO CONVEY RUNOFF FROM ACTIVE WORK AREAS TO A SEDIMENT TREATMENT FACILITY. THREE CHANNELS (C1, C3, AND C4) WILL BE CONVERTED TO PERMANENT STORMWATER CHANNELS AND DISCHARGE TO SWMF-2. ONE CHANNEL, C2, WILL BE A TEMPORARY COLLECTION CHANNEL TO THE SEDIMENT BASIN DURING CONSTRUCTION, THEN BE CONVERTED TO A PERMANENT DIVERSION CHANNEL.

COIR MAT INLET PROTECTION - INLET PROTECTION USING COIR MATS WILL BE PROVIDED AS SHOWN ON THE DRAWINGS AND AT ALL INLETS THAT MAY RECEIVE RUNOFF FROM DISTURBED SURFACES OF LESS THAN 0.5 ACRE. INLET PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DETAIL AND MANUFACTURER'S RECOMMENDATIONS.

STONE AND CONCRETE BLOCK INLET PROTECTION WITH COMPOST LAYER - INLET PROTECTION USING STONE AND CONCRETE BLOCK WITH A COMPOST LAYER WILL BE PROVIDED FOR INLETS WITH DRAINAGE AREAS BETWEEN 0.5 ACRE AND 1.0 ACRE AS SHOWN ON THE DRAWINGS. INLET PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DETAIL AND MANUFACTURER'S RECOMMENDATIONS.

EROSION CONTROL BLANKETS - EROSION CONTROL BLANKETS SHALL BE USED ON SLOPES 3 HORIZONTAL TO 1 VERTICAL (3H:1V) AND STEEPER, AND ON DISTURBED AREAS WITHIN FIFTY FEET OF A WATER BODY. INSTALLATION OF EROSION CONTROL BLANKET INCREASES PERMISSIBLE SHEAR STRESS OF A SLOPE, THEREBY INCREASING STABILITY AND REDUCING THE POTENTIAL FOR EROSION.

UTILITY TRENCH PLUGS - UTILITY TRENCH PLUGS SHALL BE INSTALLED, AS NECESSARY, DURING ALL UTILITY TRENCHING ACTIVITY IN ACCORDANCE WITH THE STANDARD DETAIL.

BAFFLES - BAFFLES (TURBIDITY BARRIERS) WILL BE USED IN THE SEDIMENT BASIN TO PROVIDE A MINIMUM 4:1 LENGTH-TO-WIDTH RATIO.

TEMPORARY SEEDING - ANY AREA NOT BEING USED OR NOT SCHEDULED FOR USE WITHIN 4 DAYS WILL BE MULCHED AND SEEDED WITH TEMPORARY GRASS SUCH AS OATS OR CEREAL RYE. ALL COMPLETED WORK AREAS WILL HAVE PERMANENT VEGETATION ESTABLISHED AS SOON AS POSSIBLE. WHERE SEDIMENT HAS ACCUMULATED, IT WILL BE REMOVED PRIOR TO PLACEMENT OF VEGETATION. REFER TO APPENDIX D FOR SEED AND MULCH MIXTURES AND APPLICATION RATES.

TEMPORARY/PERMANENT ROADS - THE THREE EXISTING SITE ACCESS ROADS WILL BE USED DURING CONSTRUCTION. THE PROPOSED NEW DRIVEWAY MAY ALSO BE USED AS AN ACCESS ROAD.

SURFACE ROUGHENING - SURFACE ROUGHENING WILL BE CONDUCTED ON SLOPES PRIOR TO FILL PLACEMENT OR RE-VEGETATION ACTIVITIES.

RUMBLE PAD - THE EXISTING RUMBLE PAD ON THE EXISTING ACCESS ROAD WILL BE RETAINED FOR USE WITH THE ROCK CONSTRUCTION ENTRANCE AT THIS LOCATION.

PERMANENT CONTROLS

SWALES/CHANNELS - ROCK LINED SWALES/CHANNELS WILL BE LOCATED AT THE TOE OF THE EXCAVATED SLOPES TO COLLECT ON-SITE RUNOFF.

CULVERTS AND PIPES WITH ENDWALLS - CULVERTS WILL BE INSTALLED TO CONVEY FLOW IN THE STREAMS UNDER THE ENTRANCE ROADS. THE CULVERTS WILL INCLUDE PENNDOT TYPE DW ENDWALLS WITH APRONS. THREE PERMANENT STREAM CROSSINGS (CULVERTS 1, 2, AND 3) ARE PROPOSED. PIPES WILL BE USED TO CONVEY STORMWATER FLOWS ON-SITE.

RIPRAP APRON OUTLET PROTECTION - RIPRAP APRONS ARE PROPOSED AT THE OUTLETS OF THE STORM PIPES INTO THE CHANNELS AND AT THE OUTLETS OF CULVERTS WHICH DISCHARGE TO THE SEDIMENT BASIN AND TO STREAMS. ADDITIONAL APRONS ARE PROPOSED WHERE APPROPRIATE AT THE OUTLETS OF STORM PIPES DISCHARGING TO THE BIORETENTION AREAS.

STORMWATER SEWER SYSTEM - A SERIES OF CATCH BASINS WILL BE INSTALLED TO COLLECT RUNOFF FROM ROOF DRAINS, DRIVEWAYS, AND PARKING AREAS. THE RUNOFF COLLECTED WILL BE PIPED TO THE CHANNELS.

BIORETENTION AREA - BIORETENTION AREAS (RAIN GARDENS) ARE PLANNED NEAR PARKING AREAS FOR WATER QUALITY AND VOLUME CONTROL.

SWMF1 AND SWMF2 - SWMF1 IS AN UNDERGROUND STORMWATER DETENTION FACILITY. THE SEDIMENT BASIN SB-1 WILL BE CONVERTED INTO STORMWATER MANAGEMENT FACILITY SWMF-2.

PERMANENT VEGETATION - ALL DISTURBED AREAS THAT HAVE POTENTIAL FOR EROSION SHOULD BE STABILIZED WITH VEGETATION AS SOON AS POSSIBLE. WORK AREAS THAT ANTICIPATE BEING DISTURBED WITHIN 12 MONTHS MAY BE STABILIZED WITH TEMPORARY SEED MIXTURES. ALL OTHER AREAS SHOULD BE STABILIZED WITH PERMANENT SEED MIXTURES UPON REACHING FINAL GRADE. NO MORE THAN 15,000 SQUARE FEET OF AREA SHOULD REACH FINAL GRADE WITHOUT BEING SEEDED OR MULCHED. CUT SLOPES IN COMPETENT ROCK AND ROCK FILLS NEED NOT BE VEGETATED. AREAS THAT DO NOT RECEIVE SUFFICIENT SUNLIGHT TO SUPPORT REVEGETATION SHOULD BE STABILIZED BY SOME MEANS OTHER THAN VEGETATION.

A MEADOW MIX WITH TREE PLANTINGS WILL BE USED AT THE ABANDONED FOUNDATION AREA AND FOR RE-VEGETATION OF DISTURBED AREAS TO BE RESTORED AS MEADOW. ADDITIONAL INFORMATION IS PROVIDED ON THE LANDSCAPE PLAN.

AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3-5 INCHES GENERALLY AND PRIOR TO THE PLACEMENT OF TOPSOIL, AND 6-12 INCHES ON COMPACTED SOILS. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4-8 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUT SLOPES SHALL HAVE A MINIMUM OF 2 IN

CONSTRUCTION SEQUENCE

STAGE 1

- PARTICIPATE IN THE PRE-CONSTRUCTION MEETING WITH THE PERMITTING AGENCIES (PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) AND ALLEGHENY COUNTY CONSERVATION DISTRICT (ACCD)), QVSD, GEOTECHNICAL ENGINEER, AND THE DESIGN ENGINEER TO REVIEW THE PERMIT REQUIREMENTS AND THE APPROVED WORK PLAN AND SCHEDULE. **CRITICAL STAGE OF CONSTRUCTION.**
- STAKE OUT THE LIMITS OF THE SITE AND AREAS OF EARTH DISTURBANCE (LOD), AND ESTABLISH BENCHMARKS AND REFERENCE POINTS.
- INSTALL PROTECTIVE FENCE ALONG WETLANDS W1, W2, AND W3, AND THE WOODS TO BE PROTECTED.
- MARK THE LOCATIONS OF EXISTING UTILITIES AND STRUCTURES TO REMAIN AND TO REMOVE.
- INSTALL ROCK CONSTRUCTION ENTRANCE RCE-1 ON THE EXISTING MAIN ENTRANCE ROAD, RCE-2 AT THE EXISTING LOWER CAMP MEETING ROAD ACCESS, AND RCE-3 ON THE DRIVEWAY TO THE ABANDONED HOUSE OFF CAMP MEETING ROAD. PROVIDE VACUUM EQUIPMENT TO SWEEP PUBLIC ROADWAYS WEEKLY. GRAVEL ROADS TO BE ROLLED DAILY. MANUALLY CLEAN TIRES OF EACH TRUCK EXITING THE SITE. STOCKPILE ADDITIONAL STONE FOR FUTURE USE IN REPAIRING AND MAINTAINING THE ROCK CONSTRUCTION ENTRANCES AT EACH LOCATION.
- INSTALL COMPOST FILTER SOCKS CFS1-1, CFS1-2, CFS1-3, AND CFS1-4 FOR DEMOLITION OF THE HOUSES AND AT PROPOSED PROJECT OFFICE HOUSE. INSTALL COMPOST FILTER SOCKS CFS1-5 AND CFS1-6 ALONG THE DRIVEWAY (HAUL ROAD 3) TO HOUSE #1 TO BE RAZED.
- CONSTRUCT THE GRAVEL PARKING AREA AT THE BRICK HOUSE ON THE EXISTING MAIN ENTRANCE TO THE PROJECT. THIS HOUSE WILL BE USED AS A PROJECT OFFICE.
- INSTALL DUMPSTERS AT THE HOUSES TO BE RAZED, DEMOLISH HOUSE #1, THE MUOTTA HOUSE, AND THE ABANDONED FOUNDATION. DISPOSE OF DEMOLITION DEBRIS AT A PERMITTED FACILITY. REMOVE DUMPSTERS WHEN DEMOLITION IS COMPLETED.
- INSTALL COIR MAT INLET PROTECTION ON EXISTING CATCH BASINS CB-1 AND CB-2 ALONG HAUL ROAD 2.
- INSTALL COMPOST FILTER SOCKS CFS1-7 AND CFS1-8 ALONG HAUL ROAD 2.
- CUT OFF AND REMOVE THE EXPOSED PORTION OF THE ABANDONED GAS LINE ON UNIT1 (JOINT PERMIT [JP] E0205225-004 ACTIVITY, UTILITY DEMO 1).

STAGE 2

- INSTALL COMPOST FILTER SOCKS CFS2-1 THROUGH CFS2-12 DOWNSLOPE OF THE TOPSOIL AND SOIL STOCKPILE AREAS.
 - REMOVE CFS1-3 AND CFS1-4.
 - INSTALL ROCK FILTER WITH COMPOST LAYER RF-1 IN UNT6 (JP E0205225-004 ACTIVITY, ROCK FILTER 1).
 - CLEAR AND GRUB AREAS WHERE STAGE 2 BMPs ARE TO BE INSTALLED.
 - STRIP TOPSOIL FROM AREAS CLEARED AND GRUBBED AND PLACE IN THE TOPSOIL STOCKPILE. SEED AND MULCH STOCKPILE AND FILL SLOPES IN VERTICAL INCREMENTS OF 15-FEET MAXIMUM TO PROMOTE EARLY STABILIZATION OF THE SLOPE. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
 - INSTALL ROCK FILTER WITH COMPOST LAYER RF-2 AT THE DOWNSTREAM END OF PROPOSED DIVERSION CHANNEL D1.
 - CONSTRUCT AND STABILIZE TEMPORARY DIVERSION CHANNEL D1 WITH ROCK LINING TO DISCHARGE TO UNT1 (JP E0205225-004 ACTIVITY, OUTFALL 3). PLACE EROSION CONTROL BLANKET ON CUT SLOPES 3H:1V AND STEEPER.
- 19.IMPLEMENT EXCAVATION, SLOPE STABILIZATION AND TEMPORARY SHORING REQUIREMENTS AS PROVIDED IN THE GEOTECHNICAL REPORT FOR CONSTRUCTION OF SEDIMENT BASIN SB-1. **CRITICAL STAGE OF CONSTRUCTION.**
- CONSTRUCT SEDIMENT BASIN SB-1. PLACE EXCAVATED SOILS IN SOIL STOCKPILES 1, 2, AND 3. **CRITICAL STAGE OF CONSTRUCTION.**
 - INSTALL COMPOST FILTER SOCK CONCRETE WASHOUT 1 FOR THE SEDIMENT BASIN CONSTRUCTION.
 - INSTALL THE TEMPORARY (E&S) PERFORATED RISER, PERMANENT (STORMWATER) RISER, PRINCIPAL SPILLWAY PIPE WITH CONCRETE CRADLE AND FILTER DIAPHRAGM, AND RIPRAP APRON 6 AT THE OUTLET OF THE PRINCIPAL SPILLWAY PIPE TO DISCHARGE INTO UNT6 (JP E0205225-004 ACTIVITY, ROCK APRON 6). CONNECT THE TEMPORARY RISER TO THE PERMANENT RISER, AND CLOSE OFF THE INLETS OF THE PERMANENT RISER. CONSTRUCT THE EMERGENCY SPILLWAY AND INSTALL SPILLWAY TURF REINFORCEMENT MAT. INSTALL THE SEDIMENT BAFFLE AND THE CLEANOUT STAKE. **CRITICAL STAGE OF CONSTRUCTION.**
 - STABILIZE THE DISTURBED AREA AT SB-1 WITH SEED, MULCH, AND EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER.
 - TEMPORARY SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL TRIBUTARY DISTURBED AREAS HAVE BEEN STABILIZED WITH PERMANENT VEGETATION. STABILIZATION IS DEFINED AS ACHIEVING A MINIMUM UNIFORM 70% UNIFORM PERENNIAL VEGETATIVE COVER OVER THE ENTIRE DISTURBED AREA.
 - ONCE AN AREA HAS BEEN BROUGHT TO FINAL GRADE AND IS READY FOR STABILIZATION, NO MORE THAN 15,000 SQUARE FEET SHALL BE LEFT EXPOSED WITHOUT BEING STABILIZED.
 - CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 3

- CLEAR AND GRUB THE AREAS WHERE STAGE 3 BMPs ARE TO BE INSTALLED.
- INSTALL STORM PIPE 2 WITH SLOPE ANCHORS AND RIPRAP APRON RA-5 INTO SEDIMENT BASIN SB-1 FOR PROPOSED COLLECTION CHANNEL C1.
- CONSTRUCT COLLECTION CHANNEL C1 WITH ROCK LINING. STABILIZE CUT SLOPES WITH SEED AND MULCH, AND INSTALL EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER.
- INSTALL ROCK FILTER WITH COMPOST LAYER RF-3 AT THE DOWNSTREAM END OF PROPOSED DIVERSION CHANNEL D2.
- CONSTRUCT DIVERSION CHANNEL D2 WITH ROCK LINING TO DISCHARGE TO UNT1 (JP E0205225-004 ACTIVITY). STABILIZE CUT SLOPES WITH SEED AND MULCH, AND INSTALL EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL PIPE FROM ENDWALL AT CAMP MEETING ROAD TO DIVERSION CHANNEL D2 TO REMOVE ROAD RUNOFF FROM ENTERING UNT4/5 (JP E0205225-004 ACTIVITY, STREAM FILL 1).
- CONSTRUCT COLLECTION CHANNEL C2 WITH ROCK LINING. STABILIZE CUT SLOPES WITH SEED AND MULCH, AND WITH EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER.
- REMOVE TEMPORARY DIVERSION CHANNEL D1. STOCKPILE THE ROCK LINING FOR FILL OR LINING. STABILIZE CUT SLOPES WITH SEED AND MULCH, AND INSTALL EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER.
- CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 4

- INSTALL COMPOST FILTER SOCKS CFS4-1 THROUGH CFS4-15 AS SHOWN ON THE STAGE 4 PLANS.
 - REMOVE THE DRIVEWAY CULVERT ON UNT4/5 UNDER HAUL ROAD 3 (JP E0205225-004 ACTIVITY, CULVERT DEMO 2).
 - CLEAR AND GRUB THE VEGETATION FROM THE ATHLETIC FIELD SITE, THE SCHOOL SITE, AND THE OUTSLOPES OF THESE AREAS TO THE COMPOST FILTER SOCK PROTECTION IN PREPARATION OF THE START OF MASS GRADING.
- 39.STRIP TOPSOIL FROM THE ATHLETIC FIELD SITE AND STOCKPILE. SEED AND MULCH STOCKPILE AND FILL SLOPES IN VERTICAL INCREMENTS OF 15-FEET MAXIMUM TO PROMOTE EARLY STABILIZATION OF THE SLOPE. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- REMOVE CFS1-5.
 - INSTALL TEMPORARY SHORING FOR THE REINFORCED SOIL SLOPE (RSS) WALL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. **CRITICAL STAGE OF CONSTRUCTION.**
 - SET UP THE ROCK PROCESSING AREA.
 - BEGIN THE UNDERCUT EXCAVATION TO FORM THE KEY TRENCH FOR THE RSS WALL AT THE ATHLETIC FIELD SITE PER THE GEOTECHNICAL REPORT. PUMP WATER FROM DEEP EXCAVATIONS TO THE SEDIMENT TREATMENT FACILITY (SB-1). **CRITICAL STAGE OF CONSTRUCTION.**
 - PERFORM MASS EXCAVATION IN ROCK AT THE ATHLETIC FIELD SITE. PROVIDE A TOP-OF-SLOPE BERM TO DRAIN AWAY FROM THE SLOPE FACE. PUMP FILTER BAGS SHALL BE USED TO TREAT ALL STANDING WATER OR WATER PUMPED FROM DISTURBED AREAS THAT ARE NOT OTHERWISE TREATED. **SEE DEWATERING WORK AREAS REQUIREMENTS.**
 - INSTALL THE TOE UNDERDRAIN FOR THE RSS WALL TO DISCHARGE TO UNT6 (JP E0205225-004 ACTIVITY, OUTFALL 5). **CRITICAL STAGE OF CONSTRUCTION.**
 - CONSTRUCT THE BENCHES FOR THE UNDERCUT EXCAVATION. TIE THE BENCH UNDERDRAINS INTO THE TOE UNDERDRAIN. **CRITICAL STAGE OF CONSTRUCTION.**
 - CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 5

- MAINTAIN THE STAGE 4 COMPOST FILTER SOCKS AS THE STAGE 5 COMPOST FILTER SOCKS.
- 49.STRIP TOPSOIL FROM THE SCHOOL SITE AND PLACE IN THE TOPSOIL STOCKPILE. SEED AND MULCH STOCKPILE AND FILL SLOPES IN VERTICAL INCREMENTS OF 15-FEET MAXIMUM TO PROMOTE EARLY STABILIZATION OF THE SLOPE. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- START MASS EXCAVATION AT THE SCHOOL SITE. EXCAVATE TO LOWER THE ELEVATION OF THE SCHOOL SITE FOUNDATION PAD TO THE STAGE 5 LIMITS SHOWN ON THE DRAWINGS. PERFORM EXCAVATION TO MAINTAIN DRAINAGE TOWARD THE COMPOST FILTER SOCK PROTECTION.
 - HAUL EXCAVATED ROCK TO THE ROCK CRUSHING AREA FOR PROCESSING. PLACE PROCESSED ROCK IN THE UNDERCUT TRENCH AND FILLS AT THE ATHLETIC FIELD SITE.
 - CONTINUE TO PROVIDE ACCESS TO THE TOPSOIL STOCKPILE BY REGRADING HAUL ROAD 1.
 - CONTINUE ROCK PROCESSING AND CONSTRUCT THE UPPER FILL SLOPE AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**
 - CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 6

- INSTALL COMPOST FILTER SOCKS CFS6-1 THROUGH CFS6-15.
 - REMOVE THE STAGE 4/STAGE 5 COMPOST FILTER SOCKS UPSLOPE OF THE STAGE 6 COMPOST FILTER SOCKS.
 - INSTALL COMPOST FILTER SOCK SEDIMENT TRAP 1 TO COLLECT RUNOFF FROM THE TOPSOIL CUT SLOPE AT THE SCHOOL SITE.
 - CLEAR AND GRUB THE AREA UPSLOPE OF THE STAGE 6 COMPOST FILTER SOCKS.
 - STRIP TOPSOIL FROM THE GRUBBED AREA.
 - INSTALL COMPOST FILTER SOCK CONCRETE WASHOUT 2 ALONG THE MAIN ENTRANCE ROAD.
 - SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON TEMPORARY SOIL SLOPE DRAINING TO THE COMPOST FILTER SOCK SEDIMENT TRAP.
- 62.CONTINUE EXCAVATION AT THE SCHOOL SITE, WITH PLACEMENT OF PROCESSED ROCK, AND BLENDED COLLUVIUM AND SAND MATERIAL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**
- CONTINUE CONSTRUCTION OF THE REINFORCED SOIL SLOPE WALL RSS WALL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**
 - ONCE THE TOE OF THE RSS WALL IS COMPLETED, BEGIN BUILDING THE NEW LOWER ENTRANCE ROAD AT THE TOE OF THE WALL. CONSTRUCT COLLECTION CHANNEL C3 ALONG THE UPPER SIDE OF THE ROAD, TO DISCHARGE TO COLLECTION CHANNEL C2.
 - CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 7

- MAINTAIN COMPOST FILTER SOCKS CFS6-1, CFS6-3, CFS6-4, AND CFS6-5 UNTIL THE MSE WALLS ARE CONSTRUCTED.
- INSTALL PUMP FILTER BAGS AT THE SCHOOL SITE EXCAVATION AREA. FILTER BAGS SHALL BE USED TO TREAT ALL STANDING WATER OR WATER PUMPED FROM DISTURBED AREAS. **SEE DEWATERING WORK AREAS REQUIREMENTS.**
- CONSTRUCT THE FOUNDATION TRENCH AND START CONSTRUCTION OF THE MECHANICALLY-STABILIZED EARTH (MSE) WALLS MSE1, MSE2, MSE3, MSE5 AND MSE6. USE PUMP FILTER BAGS WITH COMPOST FILTER SOCK RINGS TO DEWATER AND TREAT WATER IN THE FOUNDATION TRENCH. **CRITICAL STAGE OF CONSTRUCTION.**
- REMOVE THE COMPOST FILTER SOCK SEDIMENT TRAP 1.
- CONTINUE EXCAVATIONS AT THE SCHOOL SITE, AND CONSTRUCTION OF THE MSE WALLS. **CRITICAL STAGE OF CONSTRUCTION.**
- CONTINUE FILL PLACEMENT OF PROCESSED ROCK AND BLENDED SOILS AT THE SCHOOL SITE. **CRITICAL STAGE OF CONSTRUCTION.**

- INSTALL COMPOST FILTER SOCKS CFS7-1 THROUGH CFS7-7.
- CLEAR AND GRUB THE AREA UPSLOPE OF THE STAGE 7 COMPOST FILTER SOCKS.
- CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 8

- INSTALL COMPOST FILTER SOCK CONCRETE WASHOUTS 2 AND 3.
- INSTALL COMPOST FILTER SOCKS CFS8-1 THROUGH CFS8-8.
- CONTINUE EXCAVATION AT THE SCHOOL SITE.
- CONTINUE CONSTRUCTION OF THE MECHANICALLY STABILIZED EARTH WALLS MSE1, MSE2, MSE3, MSE5 AND MSE6.
- CONTINUE CONSTRUCTION OF THE RSS WALL.
- INSTALL INLET PROTECTION ON THE EXISTING CATCH BASINS E1, E2, E3, AND E6 ALONG CAMP MEETING ROAD.
- BEGIN INSTALLATION OF FILL SLOPES FOR THE REALIGNMENT OF CAMP MEETING ROAD AND THE NEW ACCESS FROM CAMP MEETING ROAD.
- INSTALL ROCK CONSTRUCTION ENTRANCES RCE-4 AND RCE-5.
- CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 9

- MAINTAIN INSTALLED COMPOST FILTER SOCKS.
- MAINTAIN SEDIMENT BASIN SB-1.
- COMPLETE THE CONSTRUCTION OF THE SUBGRADE AT THE SCHOOL SITE.
- STABILIZE THE COMPLETED AREAS AT THE ATHLETIC FIELD SITE. ONCE AN AREA HAS BEEN BROUGHT TO FINAL GRADE AND IS READY FOR STABILIZATION, NO MORE THAN 15,000 SQUARE FEET SHALL BE LEFT EXPOSED WITHOUT BEING STABILIZED.
- START CONSTRUCTION OF THE UNDERGROUND STORMWATER DETENTION FACILITY SWMF-1.
- GRADE IN THE BIORETENTION PONDS AND INSTALL THE MRC STRUCTURES. INSTALLATION SHALL FOLLOW THE PROCEDURE PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN. **CRITICAL STAGE OF CONSTRUCTION.**

- UPON COMPLETION OF SWMF-1, REMOVE DIVERSION CHANNEL D2 AND PIPING, AND REMOVE EXISTING CATCH BASINS E1, E2, AND E3 AND ASSOCIATED PIPING ALONG CAMP MEETING ROAD.
- INSTALL THE NEW STORMWATER SYSTEM ON CAMP MEETING ROAD THAT DISCHARGES TO SWMF-1. INSTALL INLET PROTECTION ON INLETS UNTIL TRIBUTARY AREAS ARE STABILIZED.
- INSTALL STORMWATER PIPING AT THE ATHLETIC FIELD SITE THAT DRAINS TO SWMF-1. INSTALL INLET PROTECTION ON INLETS UNTIL TRIBUTARY AREAS ARE STABILIZED. PIPES WHOSE SLOPES EXCEED 19% SHALL HAVE SLOPE ANCHORS.
- INSTALL THE SANITARY SEWER AND OTHER UTILITIES AT THE ATHLETIC FIELD SITE. USE TRENCH PLUGS AND PUMP FILTER BAGS IN EXCAVATIONS.
- REMOVE A PORTION OF CFS1-7 TO ALLOW IN-STREAM WORK IN UNT1.
- INSTALL PUMP-BYPASS 1 ON UNT1 (JP E0205225-004 ACTIVITY, PUMP AROUND 1). THE PUMP BYPASS INCLUDES A COFFERDAM AT THE PUMP, ROCK FILTER DOWNSTREAM OF THE WORK AREA, AND RIPRAP APRON AT THE PUMP OUTFALL.
- INSTALL CULVERT 1 ON UNT1 WITH CHANNEL WORK AT ITS INLET AND RIPRAP APRON 10 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CHANNEL WORK 1, CULVERT CROSSING 1, RIPRAP APRON 10). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- REMOVE THE EXISTING 30-INCH DIAMETER CULVERT ON UNT1 AND GRADE IN THE PROPOSED NATURAL CHANNEL (JP E0205225-004, CULVERT DEMO 1).
- INSTALL CULVERT 2 ON UNT1 WITH CHANNEL RESTORATION AND RIPRAP APRON 11 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CHANNEL WORK 2, CULVERT CROSSING 2, RIPRAP APRON 11). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- REMOVE RCE4 AND RCE5.
- SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON DISTURBED AREAS. INSTALL ECB ON ALL DISTURBED AREAS WITHIN 50 FEET OF UNT1.
- REMOVE PUMP-BYPASS 1 WHEN CONSTRUCTION IS COMPLETED AND CONSTRUCTION AREAS ARE STABILIZED. STABILIZATION REQUIRES A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER FOR THE TRIBUTARY AREA.
- INSTALL PUMP-BYPASS 2 ON UNT2 (JP E0205225-004 ACTIVITY, PUMP AROUND 2). THE PUMP BYPASS INCLUDES A COFFERDAM AT THE PUMP, ROCK FILTER DOWNSTREAM OF THE WORK AREA, AND RIPRAP APRON AT THE PUMP OUTFALL.
- INSTALL CULVERT 3 ON UNT2 AND RIPRAP APRON 10 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CULVERT CROSSING 3, RIPRAP APRON 9). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- REMOVE ABANDONED GAS LINE ALONG UNT2. CUT OUT EXPOSED SECTIONS OF THE PIPE, AND EXCAVATE AS NEEDED TO REMOVE BURIED SECTIONS. PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS.
- REMOVE THE EXISTING CULVERT ON UNT6 (JP E0205225-004 ACTIVITY, CULVERT DEMO 3).
- INSTALL SANITARY SEWER CROSSING OF UNT6 (JP E0205225-004 ACTIVITY, UTILITY CROSSING 5).
- INSTALL OVERHEAD ELECTRIC/TELEPHONE/CABLE (OHE/TTC) UTILITY CROSSINGS OF UNT2 AND UNT6 (JP E0205225-004 ACTIVITY, UTILITY CROSSINGS 4 AND 5).
- SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON DISTURBED AREAS. INSTALL ECB ON ALL DISTURBED AREAS WITHIN 50 FEET OF UNT2.
- REMOVE PUMP-BYPASS 2 WHEN CONSTRUCTION IS COMPLETED AND CONSTRUCTION AREAS ARE STABILIZED. STABILIZATION REQUIRES A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER FOR THE TRIBUTARY AREA.
- INSTALL PUMP-BYPASS 3 ON UNT2 (JP E0205225-004 ACTIVITY, PUMP AROUND 3). THE PUMP BYPASS INCLUDES A COFFERDAM AT THE PUMP, ROCK FILTER DOWNSTREAM OF THE WORK AREA, AND RIPRAP APRON AT THE PUMP OUTFALL.
- INSTALL CULVERT 3 ON UNT2 AND RIPRAP APRON 10 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CULVERT CROSSING 3, RIPRAP APRON 9). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- REMOVE ABANDONED GAS LINE ALONG UNT2. CUT OUT EXPOSED SECTIONS OF THE PIPE, AND EXCAVATE AS NEEDED TO REMOVE BURIED SECTIONS. PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS.
- REMOVE THE EXISTING CULVERT ON UNT6 (JP E0205225-004 ACTIVITY, CULVERT DEMO 3).
- INSTALL SANITARY SEWER CROSSING OF UNT6 (JP E0205225-004 ACTIVITY, UTILITY CROSSING 5).
- INSTALL OVERHEAD ELECTRIC/TELEPHONE/CABLE (OHE/TTC) UTILITY CROSSINGS OF UNT2 AND UNT6 (JP E0205225-004 ACTIVITY, UTILITY CROSSINGS 4 AND 5).
- SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON DISTURBED AREAS. INSTALL ECB ON ALL DISTURBED AREAS WITHIN 50 FEET OF UNT2.
- REMOVE PUMP-BYPASS 2 WHEN CONSTRUCTION IS COMPLETED AND CONSTRUCTION AREAS ARE STABILIZED. STABILIZATION REQUIRES A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER FOR THE TRIBUTARY AREA.
- CONTINUE CONSTRUCTION OF THE NEW ENTRANCE ROAD FROM THE SCHOOL SITE TOWARD SEDIMENT BASIN SB-1 AND FROM CAMP MEETING ROAD TO SB-1. INSTALL STORMWATER INLETS WITH INLET PROTECTION (COIR MATS FOR INLETS WITH DRAINAGE AREA LESS THAN 0.5 ACRE, AND STONE PROTECTION INLET WITH COMPOST LAYER FOR INLETS WITH DRAINAGE AREAS BETWEEN 0.5 AND 1.0 ACRE). STORMWATER PIPING TO DISCHARGE TO SB-1.
- CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 10

- ONCE PERMANENT STABILIZATION IS ACHIEVED, SEDIMENT CONTROL MEASURES MAY BE REMOVED. ANY AREA DISTURBED AS PART OF THE REMOVAL PROCESS MUST BE PERMANENTLY STABILIZED.
- UPON STABILIZATION OF THE AREAS DRAINING TO THE SWMF-1, AND COMPLETION OF THE SWMF-1 CONSTRUCTION, START THE CONVERSION OF SB-1 TO SWMF-2. REGRADE SB-1 TO THE REQUIRED CONFIGURATION OF SWMF-2. STABILIZE THE DISTURBED AREA DRAINING TO SB-1. **CRITICAL STAGE OF CONSTRUCTION.**
- UPON STABILIZATION OF THE DISTURBED AREA AT SB-1, COMPLETE THE CONVERSION OF SB-1 TO SWMF-2. REMOVE THE TEMPORARY RISER, BAFFLES, AND CLEANOUT STAKE. OPEN THE INLETS ON THE PERMANENT RISER. **CRITICAL STAGE OF CONSTRUCTION.**
- COMPLETE CONSTRUCTION OF THE NEW ENTRANCE ROAD AT SWMF-2. INSTALL THE STORMWATER COLLECTION SYSTEM. INSTALL INLET PROTECTION ON ALL INLETS UNTIL THE ROADWAY IS STABILIZED WITH SUBBASE.
- START CONSTRUCTION OF THE SCHOOL BUILDINGS.
- INSTALL UTILITIES AT THE SCHOOL SITE, CONNECTING TO UTILITY INSTALLATIONS AT THE ATHLETIC FIELD SITE.
- PLACE SUBBASE ON THE ROADS, PARKING AREAS, SIDEWALKS, AND PATIO AREAS.
- INSTALL SIDEWALKS AND PATIO AREAS.
- INSTALL SOIL MEDIA IN THE BIORETENTION PONDS. INSTALLATION SHALL FOLLOW THE PROCEDURE PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN. **CRITICAL STAGE OF CONSTRUCTION.**
- PERFORM FINAL SEEDING, MULCHING, AND EROSION CONTROL BLANKET INSTALLATION. WHEN 70% UNIFORM PERENNIAL VEGETATION IS ACHIEVED, CONNECT THE STORMWATER SYSTEM AND ROOF DRAINS TO DISCHARGE TO SWMF-1 AND SWMF-2
- REMOVE STAGE 6, STAGE 7 AND STAGE 8 COMPOST FILTER SOCKS. SEED AND MULCH DISTURBED AREAS FROM THE REMOVAL OF THE BMPs AND OTHER TEMPORARY E&S CONTROL MEASURES.
- TEMPORARY SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL TRIBUTARY DISTURBED AREAS HAVE BEEN STABILIZED WITH PERMANENT VEGETATION. STABILIZATION IS DEFINED AS ACHIEVING A MINIMUM UNIFORM 70% UNIFORM PERENNIAL VEGETATIVE COVER OVER THE ENTIRE DISTURBED AREA.

STAGE 11

- PAVE THE ROADS AND PARKING AREAS.
- PLANT TREES AND LANDSCAPING. INSTALLATION SHALL FOLLOW THE PROCEDURES PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN WHICH INCLUDES THE PROJECT LANDSCAPE PLANS.
- INSTALL PLANTINGS IN THE BIORETENTION PONDS. INSTALLATION SHALL FOLLOW THE PROCEDURES PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN WHICH INCLUDES THE PROJECT LANDSCAPE PLANS. **CRITICAL STAGE OF CONSTRUCTION.**
- PERFORM FINAL CONNECTION OF THE STORMWATER SYSTEM TO THE BIORETENTION PONDS.
- BRING DUMPSTER TO BRICK HOUSE/PROJECT OFFICE.
- RAZE THE BRICK HOUSE. REMOVE GRAVEL PARKING PAD. HAUL DEMOLITION DEBRIS TO A PERMITTED FACILITY. REMOVE CFS1-1 AND CFS1-2.
- REMOVE RCE1, RCE2, AND RCE3.
- ONCE PERMANENT STABILIZATION IS ACHIEVED, SEDIMENT CONTROL MEASURES MAY BE REMOVED. ANY AREA DISTURBED AS PART OF THE REMOVAL PROCESS MUST BE PERMANENTLY STABILIZED SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON DISTURBED AREAS.

CRITICAL STAGES OF CONSTRUCTION

A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON SITE AND BE RESPONSIBLE DURING CRITICAL STAGES OF CONSTRUCTION WHICH INCLUDE:

STAGE 1

- PARTICIPATE IN THE PRE-CONSTRUCTION MEETING WITH THE PERMITTING AGENCIES (PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) AND ALLEGHENY COUNTY CONSERVATION DISTRICT (ACCD)), QVSD, GEOTECHNICAL ENGINEER, AND THE DESIGN ENGINEER TO REVIEW THE PERMIT REQUIREMENTS AND THE APPROVED WORK PLAN AND SCHEDULE. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 2

- IMPLEMENT EXCAVATION, SLOPE STABILIZATION AND TEMPORARY SHORING REQUIREMENTS AS PROVIDED IN THE GEOTECHNICAL REPORT FOR CONSTRUCTION OF SEDIMENT BASIN SB-1. **CRITICAL STAGE OF CONSTRUCTION.**
- CONSTRUCT SEDIMENT BASIN SB-1. PLACE EXCAVATED SOILS IN SOIL STOCKPILES 1, 2, AND 3. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL THE TEMPORARY (E&S) PERFORATED RISER, PERMANENT (STORMWATER) RISER, PRINCIPAL SPILLWAY PIPE WITH CONCRETE CRADLE AND FILTER DIAPHRAGM, AND RIPRAP APRON 6 AT THE OUTLET OF THE PRINCIPAL SPILLWAY PIPE TO DISCHARGE INTO UNT6 (JP E0205225-004 ACTIVITY, ROCK APRON 6). CONNECT THE TEMPORARY RISER TO THE PERMANENT RISER, AND CLOSE OFF THE INLETS OF THE PERMANENT RISER. CONSTRUCT THE EMERGENCY SPILLWAY AND INSTALL SPILLWAY TURF REINFORCEMENT MAT. INSTALL THE SEDIMENT BAFFLE AND THE CLEANOUT STAKE. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 3

- CONSTRUCT DIVERSION CHANNEL D2 WITH ROCK LINING TO DISCHARGE TO UNT1 (JP E0205225-004 ACTIVITY). STABILIZE CUT SLOPES WITH SEED AND MULCH, AND INSTALL EROSION CONTROL BLANKET ON SLOPES 3H:1V AND STEEPER. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 4

- INSTALL TEMPORARY SHORING FOR THE REINFORCED SOIL SLOPE (RSS) WALL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. **CRITICAL STAGE OF CONSTRUCTION.**
- BEGIN THE UNDERCUT EXCAVATION TO FORM THE KEY TRENCH FOR THE RSS WALL AT THE ATHLETIC FIELD SITE PER THE GEOTECHNICAL REPORT. PUMP WATER FROM DEEP EXCAVATIONS TO THE SEDIMENT TREATMENT FACILITY (SB-1). **CRITICAL STAGE OF CONSTRUCTION.**

- INSTALL THE TOE UNDERDRAIN FOR THE RSS WALL TO DISCHARGE TO UNT6 (JP E0205225-004 ACTIVITY, OUTFALL 5). **CRITICAL STAGE OF CONSTRUCTION.**
- CONSTRUCT THE BENCHES FOR THE UNDERCUT EXCAVATION. TIE THE BENCH UNDERDRAINS INTO THE TOE UNDERDRAIN. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 5

- CONTINUE ROCK PROCESSING AND CONSTRUCT THE UPPER FILL SLOPE AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 6

- CONTINUE EXCAVATION AT THE SCHOOL SITE, WITH PLACEMENT OF PROCESSED ROCK, AND BLENDED COLLUVIUM AND SAND MATERIAL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**
- CONTINUE CONSTRUCTION OF THE REINFORCED SOIL SLOPE WALL RSS WALL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 7

- CONSTRUCT THE FOUNDATION TRENCH AND START CONSTRUCTION OF THE MECHANICALLY-STABILIZED EARTH (MSE) WALLS MSE1, MSE2, MSE3, MSE5 AND MSE6. USE PUMP FILTER BAGS WITH COMPOST FILTER SOCK RINGS TO DEWATER AND TREAT WATER IN THE FOUNDATION TRENCH. **CRITICAL STAGE OF CONSTRUCTION.**
- CONTINUE EXCAVATIONS AT THE SCHOOL SITE, AND CONSTRUCTION OF THE MSE WALLS. **CRITICAL STAGE OF CONSTRUCTION.**
- CONTINUE FILL PLACEMENT OF PROCESSED ROCK AND BLENDED SOILS AT THE SCHOOL SITE. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 8

(NO CRITICAL STAGE OF CONSTRUCTION.)

STAGE 9

- GRADE IN THE BIORETENTION PONDS AND INSTALL THE MRC STRUCTURES. INSTALLATION SHALL FOLLOW THE PROCEDURE PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL CULVERT 1 ON UNT1 WITH CHANNEL WORK AT ITS INLET AND RIPRAP APRON 10 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CHANNEL WORK 1, CULVERT CROSSING 1, RIPRAP APRON 10). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL CULVERT 2 ON UNT1 WITH CHANNEL RESTORATION AND RIPRAP APRON 11 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CHANNEL WORK 2, CULVERT CROSSING 2, RIPRAP APRON 11). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL CULVERT 3 ON UNT2 AND RIPRAP APRON 10 AT ITS OUTLET (JP E0205225-004 ACTIVITY, CULVERT CROSSING 3, RIPRAP APRON 9). PERFORM WORK DURING DRY WEATHER AND LOW-FLOW CONDITIONS. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 10

- UPON STABILIZATION OF THE AREAS DRAINING TO THE SWMF-1, AND COMPLETION OF THE SWMF-1 CONSTRUCTION, START THE CONVERSION OF SB-1 TO SWMF-2. REGRADE SB-1 TO THE REQUIRED CONFIGURATION OF SWMF-2. STABILIZE THE DISTURBED AREA DRAINING TO SB-1. **CRITICAL STAGE OF CONSTRUCTION.**
- UPON STABILIZATION OF THE DISTURBED AREA AT SB-1, COMPLETE THE CONVERSION OF SB-1 TO SWMF-2. REMOVE THE TEMPORARY RISER, BAFFLES, AND CLEANOUT STAKE. OPEN THE INLETS ON THE PERMANENT RISER. **CRITICAL STAGE OF CONSTRUCTION.**
- INSTALL SOIL MEDIA IN THE BIORETENTION PONDS. INSTALLATION SHALL FOLLOW THE PROCEDURE PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN. **CRITICAL STAGE OF CONSTRUCTION.**

STAGE 11

- INSTALL PLANTINGS IN THE BIORETENTION PONDS. INSTALLATION SHALL FOLLOW THE PROCEDURES PROVIDED IN THE POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN WHICH INCLUDES THE PROJECT LANDSCAPE PLANS. **CRITICAL STAGE OF CONSTRUCTION.**
- CONSERVATION DISTRICT.

UNDERGROUND UTILITY LINE INSTALLATION SEQUENCE

THE PROJECT INVOLVES RELOCATING AND INSTALLING NEW UNDERGROUND UTILITIES LINES. THE FOLLOWING STEPS SHOULD BE TAKEN TO MINIMIZE EROSION AND SEDIMENT.

- LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
- LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILL THAT CAN BE COMPLETED THE SAME DAY.
- NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.
- TRENCH PLUGS WILL BE SPACED AND CONSTRUCTED OF THE MATERIALS AND TO THE DETAILS SHOWN IN THE E&S PLAN DETAILS.
- WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. THE WATER WILL BE PUMPED TO A SEDIMENT TRAP/BASIN OR FILTERED USING FILTER BAGS. THE SEDIMENTS WILL BE DEPOSITED ON A SITE DETERMINED BY THE CONTRACTOR.
- ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE AT THE END OF EACH WEEK.
- IN CERTAIN CASES, TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED. IN THESE CASES, DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.

NOTICE OF TERMINATION

UPON PERMANENT STABILIZATION OF THE PROJECT DISTURBED AREAS AND COMPLETION OF PROPER INSTALLATION OF THE PCSM BMPs, QVSD SHALL SUBMIT A PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF TERMINATION AND RECORD DRAWINGS WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL IN ACCORDANCE WITH SECTION 102.8 OF THE PA CODE TO THE ALLEGHENY COUNTY CONSERVATION DISTRICT.

DEWATERING WORK AREAS REQUIREMENTS

WHEREVER WATER IS PUMPED FROM A DISTURBED AREA, IT MUST BE TREATED FOR SEDIMENT REMOVAL PRIOR TO DISCHARGING TO SURFACE WATER UNLESS IT CAN BE SHOWN THAT THE QUALITY OF THE WATER BEING PUMPED ALREADY MEETS DISCHARGE STANDARDS. THE PUMP DISCHARGE MAY BE ROUTED THROUGH A PUMPED WATER FILTER BAG OR A PROPERLY FUNCTIONING SEDIMENT BASIN OR TRAP, IF AVAILABLE. WHILE PUMPING, THE MAXIMUM WATER LEVEL IN THE TRAP OR BASIN, IF USED, SHOULD NOT EXCEED THE CLEANOUT ELEVATION. WATER PUMPED FROM DISTURBED AREAS MAY NOT BE DISCHARGED DIRECTLY TO DETENTION PONDS, SINCE THEY ARE NOT DESIGNED TO BE EFFICIENT SEDIMENT REMOVAL STRUCTURES. IF FILTER BAGS AND SUMP PITS ARE USED TO FILTER WATER, THE TOPOGRAPHY AND CONDITIONS OF THE GROUND COVER BETWEEN THE DISCHARGE POINT AND THE RECEIVING SURFACE WATER SHALL BE EVALUATED FOR POTENTIAL EROSION. UNDISTURBED VEGETATED AREAS ARE PREFERRED.

GENERAL NOTES:

PE SEAL:

- REVISIONS:
- 3-20-2024 GENERAL REVISIONS.
 - 5-16-2024 GENERAL REVISIONS.
 - 6-25-2025 GENERAL REVISIONS.
 - 6-10-2026 GENERAL REVISIONS.

PROJECT NAME AND LOCATION:

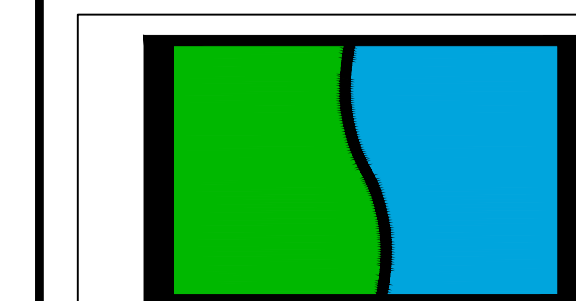
QUAKER VALLEY HIGH SCHOOL FACILITY
LEET TOWNSHIP, EDGEWORTH AND LEETSDALE BOROUGHS
ALLEGHENY COUNTY, PA

DRAWING TITLE:

EROSION AND SEDIMENT CONTROL NARRATIVE SHEET 2 OF 3

CLIENT:

QUAKER VALLEY SCHOOL DISTRICT
100 LEETSDALE INDUSTRIAL DRIVE,
SUITE B
LEETSDALE, PA 15056



STREAMLINE ENGINEERING INC.

110 ALLAN STREET
LOWER BURRELL, PA 15068
TELE: (724) 594-0326
FAX: (724) 594-0328

ISSUE DATE: 11-13-2023

PROJECT NUMBER: 21-109

DRAWING NUMBER: ESC501

SCALE: AS SHOWN

DRAWN BY: MLF CHECKED BY: KLF

OFF-SITE WASTE AND BORROW AREAS

ALL OFF-SITE WASTE AND BORROW AREAS SHALL HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE APPROPRIATE COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED.

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.

PROCEDURES WHICH ENSURE THAT THE PROPER MEASURES FOR THE RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THE PROJECT SITE SHALL BE UNDERTAKEN IN ACCORDANCE WITH DEPARTMENT REGULATIONS.

INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHALL BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL. SEDIMENT REMOVED FROM BMPs DURING MAINTENANCE SHALL BE PLACED BEHIND THE SEDIMENT BARRIER OF THE TOPSOIL STOCKPILE AREA AND SPREAD ON THE GROUND TO DRY. AFTER THE MATERIAL HAS DRIED IT SHALL BE ADDED TO THE TOPSOIL STOCKPILE.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

THE CONTRACTOR SHALL EXERCISE ENVIRONMENTAL DUE DILIGENCE USING INVESTIGATIVE TECHNIQUES, INCLUDING ONE OR MORE OF THE FOLLOWING ON ANY FILL THAT IS USED ON-SITE:

- VISUAL INSPECTION
- DATA BASE SEARCHES
- REVIEW OF OWNERSHIP
- TRANSACTION SCREENS
- ANALYTICAL TESTING
- SANBORN MAPS

ANY FILL USED MUST BE CLEAN FILL AS DEFINED BY PA DEP (REF: DOCUMENT NO. 258-2182-773) WHICH STATES, "CLEAN FILL IS UNCONTAMINATED, NONWATER-SOLUBLE, NONDECOMPOSABLE INERT SOLID MATERIAL."

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.

102.4(B)(5)(VIII) SUPPORTING CALCULATIONS AND MEASUREMENTS

THE STANDARD WORKSHEETS AND CALCULATIONS FOR THE SEDIMENT BASINS, COMPOST FILTER SOCK SEDIMENT TRAP, CHANNELS, CULVERTS, RIPRAP APRONS, ROCK FILTERS, AND COMPOST FILTER SOCKS, ARE INCLUDED IN MODULE 1.

102.4(B)(5)(X) MAINTENANCE PROGRAM

GENERAL - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND REPAIRS DURING CONSTRUCTION. 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 CONSTRUCTION SUPERINTENDENT SHALL MAKE VISUAL INSPECTION OF ALL EROSION AND SEDIMENT BMP CONTROLS AND NEWLY STABILIZED AREAS WEEKLY AND AFTER EACH RUNOFF EVENT. INSPECTIONS, DEFICIENCIES, AND REPAIRS SHOULD BE LOGGED ONTO PADEP FORM 3800-FM-BCW0271D DATED 12/2024 AND KEPT ON SITE AT ALL TIMES. THE INSPECTION LOG SHALL BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF THEIR SITE VISIT.

DAMAGED CONTROLS SHALL BE REPAIRED OR REPLACED BY CLOSE OF DAY, WHICH INCLUDE THE FOLLOWING:

- UNDERTAKE REQUIRED GRADING TO REPAIR EROSION GULLIES OR ANY OTHER FORM OF CONCENTRATED FLOW ON UPSLOPE DRAINAGE AREAS.
- PROMPTLY REAPPLY MULCH MATERIAL WHICH MAY BECOME DISLODGED OR LOST. IF ANY SLOPE FAILURES OCCUR, REDRESS, EXCAVATE AND/OR REESTABLISH SLOPE AND REPLACE THE MULCH AS DIRECTED. MAINTAIN MULCHED AREAS UNTIL PROJECT IS COMPLETED OR UNTIL PERMANENTLY STABILIZED. RESEED AND MULCH AREAS THAT ARE DAMAGED OR WHICH FAIL TO SHOW UNIFORM GROWTH OF COVER.
- AREAS DISTURBED DURING MAINTENANCE, REPAIRS OR REMOVAL OF BMPs SHALL BE STABILIZED IMMEDIATELY.

ANY ACTIVE WORK AREA THAT HAS BEEN DISTURBED, WHICH IS IDLE FOR MORE THAN 4 DAYS, SHALL BE TEMPORARILY SEEDED AND MULCHED. ANY INACTIVE WORK AREA SHALL BE STABILIZED IMMEDIATELY (WITHIN 48 HOURS).

TEMPORARY CONTROLS

ROCK CONSTRUCTION ENTRANCE - THE ROCK CONSTRUCTION ENTRANCE WILL BE INSTALLED AS SHOWN ON THE DRAWINGS. THE ROCK CONSTRUCTION ENTRANCE WILL BE CONSTANTLY MAINTAINED AT THE DESIGNATED AREA AND TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON SITE OF THE ENTRANCE(S). IF RUMBLE PADS ARE USED, ACCUMULATED MATERIALS SHOULD BE CLEANED FROM THE PADS DAILY (MORE IF NECESSARY) AND DISPOSED IN THE MANNER SPECIFIED IN THE PLAN. THE DRAIN SPACE UNDER THE WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON A PAVED ROADWAY WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE - THE ROCK CONSTRUCTION ENTRANCE WILL BE INSTALLED AS SHOWN ON THE DRAWINGS. THE ROCK CONSTRUCTION ENTRANCE WILL BE CONSTANTLY MAINTAINED AT THE DESIGNATED AREA AND TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON SITE OF THE ENTRANCE(S). IF RUMBLE PADS ARE USED, ACCUMULATED MATERIALS SHOULD BE CLEANED FROM THE PADS DAILY (MORE IF NECESSARY) AND DISPOSED IN THE MANNER SPECIFIED IN THE PLAN. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON A PAVED ROADWAY WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

COMPOST FILTER SOCKS - COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. ANY NECESSARY MAINTENANCE AND REPAIRS SHALL BE MADE IMMEDIATELY. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATION REACHES 1/3 THE HEIGHT OF SOCK. DAMAGED COMPOST FILTER SOCK SHALL BE REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF COMPOST FILTER SOCK SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ROCK FILTER OUTLET - ROCK FILTER OUTLETS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

ROCK FILTER - THE ROCK FILTER SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE FILTER. ADDITIONAL STONE AND MULCH SHALL BE ADDED AS NEEDED.

TEMPORARY COFFERDAM AND PUMP-AROUND - THE TEMPORARY COFFERDAM AND PUMP-AROUND SHALL BE INSPECTED DAILY AND AFTER EVERY RUNOFF EVENT.

PUMPED WATER FILTER BAGS WITH COMPOST FILTER SOCK - FILTER BAGS AND THE COMPOST FILTER SOCK SHALL BE INSPECTED DAILY. A SUITABLE MEANS OF ACCESSING THE FILTER BAGS WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE AVAILABLE ON SITE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FULL OF SEDIMENTS. IT IS RECOMMENDED THAT BAGS BE PLACED ON STRAPS TO FACILITATE REMOVAL. IF A PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. MAKE REPAIRS AS NEEDED TO THE COMPOST FILTER SOCK RING.

COMPOST SOCK SEDIMENT TRAP - THE COMPOST SOCK SEDIMENT TRAP SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE SOCKS.

COMPOST SOCK CONCRETE WASHOUT - CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.

SEDIMENT BASIN - INSPECT WEEKLY AND AFTER EVERY RUNOFF EVENT. CLEAN SEDIMENT FROM THE BASINS ONCE THE SEDIMENT LEVEL REACHES THE MAXIMUM LEVEL ON THE CLEAN OUT STAKE. CLEAR DEBRIS FROM ALL ORIFICES ON THE RISER.

TEMPORARY CHANNELS - TEMPORARY CHANNELS SHOULD BE INSPECTED AFTER EACH MAJOR STORM EVENT. DEBRIS SHOULD BE REMOVED, AND MISSING OR DISLODGED ROCK SHOULD BE REPLACED.

INLET PROTECTION - FILTER BAG AND COIR MAT INLET PROTECTION INSTALLED SHALL BE INSPECTED WEEKLY AND AFTER EVERY RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 FULL OR WHEN CAPACITY FLOW HAS BEEN REDUCED SO AS TO CAUSE FLOW BYPASS OF THE INLET. MATS SHALL BE RINSED OR REPLACED, DAMAGED OR CLOGGED BAGS SHALL BE REPLACED IMMEDIATELY. A SUPPLY OF BAGS AND MATS SHALL BE MAINTAINED ON SITE FOR REPLACEMENT. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER INSPECTION.

EROSION CONTROL BLANKET - BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERMANENT 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.

BAFFLES - BAFFLES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

TEMPORARY ACCESS ROADS - INSPECT WEEKLY AND AFTER EVERY RUNOFF EVENT. REPAIR DAMAGED ROADWAYS, DITCHES, AND CROSS DRAINS IMMEDIATELY.

MAINTENANCE OF VEGETATION - ALL AREAS REQUIRING INTERIM OR FINAL STABILIZATION MUST BE ADDRESSED WITHIN 72 HOURS OF COMPLETION OF DISTURBANCE. AREAS UTILIZING VEGETATIVE STABILIZATION MUST BE SEEDED/PLANTED IN SUFFICIENT TIME TO GERMINATE BY OCTOBER 15TH OF EACH YEAR. SEEDING SHALL BE ACCOMPLISHED THROUGH THE USE OF HYDRO SEEDING TECHNIQUES OR CONVENTIONAL SEEDING AND MULCHING AT THE RATE OF NO LESS THAN 3 TONS PER ACRE (FOR HAY OR STRAW) AS RECOMMENDED IN THE PENN STATE AGRONOMY GUIDE.

AREAS WHICH INDICATE WASHOUTS, RILLS AND/OR LESS THAN 70% VEGETATIVE COVER SHALL BE GRADED AS NEEDED, RE-SEEDED AND RE-MULCHED IMMEDIATELY.

MAINTENANCE SHALL CONSIST OF REVIEWING THE VEGETATIVE GROWTH PROGRESS AND INSPECTIONS ON A WEEKLY BASIS UNTIL RE-VEGETATION IS ACHIEVED. POINT FREQUENCY MEASUREMENTS SHALL BE DONE 150 DAYS AFTER SEEDING AND THEN FINAL DETERMINATION WITHIN TWO YEARS. POOR GROWTH, DIEBACK, PESTS, DISEASE, FUNGUS, AND CONSTRUCTION DAMAGE SHALL BE ASSESSED AND CORRECTED BY PEST ERADICATION, RESEEDING AND RE-MULCHING.

PERMANENT CONTROLS

SWALES/CHANNELS - THE SWALES AND CHANNELS SHALL BE INSPECTED AFTER EACH MAJOR STORM EVENT. ANY ERODED AREAS SHALL BE REPLACED WITHIN 48 HOURS OF DISCOVERY WITH SIMILAR LINING MATERIAL. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.

CULVERTS - CULVERTS SHALL BE INSPECTED AFTER EACH MAJOR STORM EVENT. DEBRIS AFFECTING THE FLOW INTO OR OUT OF THE CULVERT SHALL BE REMOVED.

RIPRAP APRON OUTLET PROTECTION - INSPECT RIPRAP APRONS ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. REPLACE DISPLACED RIPRAP WITHIN THE APRON IMMEDIATELY.

STILLING WELL SUMP - INSPECT THE SUMPS ON A WEEKLY BASIS AND AFTER EVERY RUNOFF EVENT. REMOVE DEBRIS AND SEDIMENTS FROM THE SUMP IMMEDIATELY.

STORMWATER SEWER SYSTEMS - INSPECT CATCH BASINS MONTHLY AND AFTER EVERY RUNOFF EVENT. REMOVE DEBRIS AND SEDIMENTS.

BIORETENTION AREAS - INSPECT THE BIORETENTION AREAS ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. REMOVE DEBRIS, AND REVEGETATE WITH BIORETENTION PLANTINGS AS NEEDED.

STORMWATER MANAGEMENT FACILITIES (SWMFS) - SWMFS SHALL BE INSPECTED MONTHLY AND AFTER EVERY RUNOFF EVENT. REMOVE DEBRIS AND SEDIMENTS AS NECESSARY THAT WOULD IMPAIR THE PERFORMANCE OF THE FACILITY. REPAIR AREAS NEEDING REVEGETATION.

PERMANENT VEGETATION - MAINTENANCE SHALL CONSIST OF REVIEWING THE VEGETATIVE GROWTH PROGRESS AND INSPECTIONS ON A MONTHLY BASIS. POOR GROWTH, DIEBACK, PESTS, DISEASE, FUNGUS, AND OTHER DAMAGE SHALL BE ASSESSED AND CORRECTED BY PEST ERADICATION, RESEEDING AND RE-MULCHING.

102.4(B)(5)(XI) RECYCLING OR DISPOSAL OF MATERIALS

1. SEDIMENT REMOVED FROM BMPs DURING MAINTENANCE SHALL BE DISPOSED WITHIN THE DISTURBED LIMITS OF THE PROJECT IN AREAS OUTSIDE OF STEEP SLOPES, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR IT SHALL BE PLACED IN TOPSOIL STOCKPILES. IF PLACED IN STOCKPILE, THE SEDIMENT SHALL BE PLACED BEHIND THE FILTER FABRIC FENCE OF THE TOPSOIL STOCKPILE AREA AND SPREAD ON THE GROUND TO DRY. AFTER THE MATERIAL HAS DRIED IT SHALL BE ADDED TO THE TOPSOIL STOCKPILE.
2. ALL OFF-SITE WASTE AND BORROW AREAS SHALL HAVE AN E&S PLAN REVIEWED AND APPROVED BY THE APPROPRIATE COUNTY CONSERVATION DISTRICT PRIOR TO BEING ACTIVATED.
3. IF MATERIAL IS IMPORTED TO THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR. SEE CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE REQUIREMENTS.
4. TRANSPORT UNSUITABLE MATERIAL TO SUITABLY PROTECTED OFF-SITE AREAS. TRANSPORT MATERIAL IN A MANNER THAT PREVENTS SPILLAGE ONTO PUBLIC ROADS OR INTO WATERCOURSES. THE CONTRACTOR MUST HAVE AN APPROVED E&S PLAN FOR ANY OFF-SITE SPOIL LOCATION PRIOR TO STOCKPILING ANY MATERIALS AT THOSE LOCATIONS. OFF-SITE SPOIL LOCATION MUST BE APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT.
5. 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.
6. UNDER NO CIRCUMSTANCES MAY EROSION CONTROL BMPs BE USED FOR TEMPORARY STORAGE OF DEMOLITION MATERIALS OR CONSTRUCTION WASTES.
7. INDIVIDUALS RESPONSIBLE FOR EARTH DISTURBANCE ACTIVITIES MUST ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS. CONSTRUCTION WASTES INCLUDE, BUT ARE NOT LIMITED TO, EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. MEASURES SHALL BE PLANNED AND IMPLEMENTED FOR HOUSEKEEPING, MATERIALS MANAGEMENT, AND LITTER CONTROL. WHEREVER POSSIBLE, RECYCLING OF EXCESS MATERIALS IS PREFERRED, RATHER THAN DISPOSAL.

102.4(B)(5)(XII) GEOLOGIC FORMATION/SOIL CONDITIONS

AVAILABLE PUBLISHED REFERENCES INDICATE THE PROPOSED SCHOOL CAMPUS SITE LIES WITH THE ALLEGHENY PLATEAU PHYSIOGRAPHIC PROVINCE. THE BEDROCK AT THE SITE IS WITHIN THE LOWER CASSELMAN TO UPPER GLENSHAW FORMATIONS IN THE CONEMAUGH GROUP OF THE PENNSYLVANIAN SYSTEM. THE ROCKS IN THESE FORMATIONS INCLUDE THICK SANDSTONE AND CLAYSTONE UNITS AND THIN SHALE AND LIMESTONE UNITS, MOST OF WHICH WERE ENCOUNTERED DURING DRILLING. THE SITE LIES ON THE EASTERN FLANK OF THE NORTH-SOUTH TRENDING CROVIS RUN ANTICLINE. THE BEDROCK DIPS GENTLY AT 10 FEET/MILE TOWARD THE SOUTHEAST. THE AMES LIMESTONE DAYLIGHTS BELOW THE RIDGETOP. THE AMES LIMESTONE IS A WELL-KNOWN MARKER BED THAT TYPICALLY DEFINES THE TOP OF THE PITTSBURGH REDBEDS. A CLAYSTONE UNIT THAT IS ASSOCIATED WITH MANY LANDSLIDES IN THIS AREA. IN MANY BORINGS THAT WERE DRILLED IN THE VICINITY OF THE PROPOSED LOWER ACCESS ROAD, COLLUVIAL DEPOSITS WERE ENCOUNTERED. COLLUVIAL DEPOSITS ARE SOIL DEPOSITS CREATED FROM THE DOWNSLOPE MOVEMENT OF SOIL AND ROCK. THE COLLUVIUM ENCOUNTERED DURING DRILLING RANGED IN THICKNESS OF 6 FEET TO 54 FEET.

ACCORDING TO "COAL RESOURCES OF ALLEGHENY COUNTY," CLIFFORD DODGE, 1985, THE PITTSBURGH COAL IS ERODED AT THIS SITE. THE NEXT MINEABLE COAL SEAM, THE UPPER FREEPORT, LIES AT AN ELEVATION OF APPROXIMATELY 690 FEET ABOVE MSL. ACCORDING TO THE PUBLISHED INFORMATION, THE UPPER FREEPORT COAL IS NOT MINED BENEATH THE SITE, SO THEREFORE IT IS PROBABLY NOT OF MINEABLE THICKNESS IN THE VICINITY.

102.4(B)(5)(XIII) POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

WITHOUT CONTROLS, THE PROJECT WILL INCREASE THE THERMAL IMPACTS TO THE SURROUNDING ENVIRONMENT. LANDSCAPING AND BIORETENTION PONDS WILL BE USED AROUND THE DEVELOPMENT TO REDUCE THE THERMAL IMPACTS.

- 8.
9. INSTALL COMPOST FILTER SOCK CONCRETE WASHOUT 2 ALONG THE MAIN ENTRANCE ROAD.
10. SEED, MULCH, AND INSTALL EROSION CONTROL BLANKET ON TEMPORARY SOIL SLOPE DRAINING TO THE COMPOST FILTER SOCK SEDIMENT TRAP.

11. CONTINUE EXCAVATION AT THE SCHOOL SITE, WITH PLACEMENT OF PROCESSED ROCK, AND BLENDED COLLUVIUM AND SAND MATERIAL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**

12. CONTINUE CONSTRUCTION OF THE REINFORCED SOIL SLOPE WALL RSS WALL AT THE ATHLETIC FIELD SITE. **CRITICAL STAGE OF CONSTRUCTION.**

13. ONCE THE TOE OF THE RSS WALL IS COMPLETED, BEGIN BUILDING THE NEW LOWER ENTRANCE ROAD AT THE TOE OF THE WALL. CONSTRUCT COLLECTION CHANNEL C3 ALONG THE UPPER SIDE OF THE ROAD, TO DISCHARGE TO COLLECTION CHANNEL C2.

14. **CESSATION OF ACTIVITY FOR AT LEAST 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.**

STAGE 7

15. MAINTAIN COMPOST FILTER SOCKS CFS6-1, CFS6-3, CFS6-4, AND CFS6-5 UNTIL THE MSE WALLS ARE CONSTRUCTED.

16. INSTALL PUMP FILTER BAGS AT THE SCHOOL SITE EXCAVATION AREA. FILTER BAGS SHALL BE USED TO TREAT ALL STANDING WATER OR WATER PUMPED FROM DISTURBED AREAS. **SEE DEWATERING WORK AREAS REQUIREMENTS.**

17. CONSTRUCT THE FOUNDATION TRENCH AND START CONSTRUCTION OF THE MECHANICALLY STABILIZED EARTH (MSE) WALLS MSE1, MSE2, MSE3, MSE5 AND MSE6. USE PUMP FILTER BAGS WITH COMPOST FILTER SOCK RINGS TO DEWATER AND TREAT WATER IN THE FOUNDATION TRENCH. **CRITICAL STAGE OF CONSTRUCTION.**

18. REMOVE THE COMPOST FILTER SOCK SEDIMENT TRAP 1.

19. CONTINUE EXCAVATIONS AT THE SCHOOL SITE, AND CONSTRUCTION OF THE MSE WALLS. **CRITICAL STAGE OF CONSTRUCTION.**

20. CONTINUE FILL PLACEMENT OF PROCESSED ROCK AND BLENDED SOILS AT THE SCHOOL SITE. **CRITICAL STAGE OF CONSTRUCTION.**

GENERAL NOTES:

PE SEAL:

REVISIONS:

PROJECT NAME AND LOCATION:

QUAKER VALLEY HIGH SCHOOL FACILITY

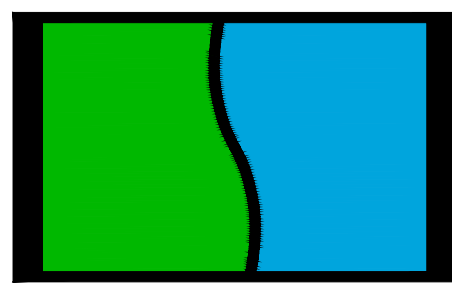
LEET TOWNSHIP, EDGEWORTH AND LEETSDALE BOROUGHS ALLEGHENY COUNTY, PA

DRAWING TITLE:

EROSION AND SEDIMENT CONTROL NARRATIVE SHEET 3 OF 3

CLIENT:

QUAKER VALLEY SCHOOL DISTRICT
100 LEETSDALE INDUSTRIAL DRIVE,
SUITE B
LEETSDALE, PA 15056



STREAMLINE
ENGINEERING
INC.

110 ALLAN STREET
LOWER BURRELL, PA 15068
TELE: (724) 594-0326
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ISSUE DATE: 6-10-2026

PROJECT NUMBER: 21-109

DRAWING NUMBER: ESC502

SCALE: AS SHOWN

DRAWN BY: MLF CHECKED BY: KLF

STANDARD EROSION AND SEDIMENTATION CONTROL NOTES

- 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.
- 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, AND THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN TO AN ON-SITE PRECONSTRUCTION MEETING.
- 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.
- 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.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE 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.
- 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.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(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.
- 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.
- 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.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL COUNTY CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE 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.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
- 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.
- 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. USE PADEP FORM 3800-FM-BCW0271D DATED 4/2025.
- 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 SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- 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.
- 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.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL CHANNELS SHALL BE FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIALS/WASTES.

**STANDARD WORKSHEET #21
Temporary And Permanent Stabilization Specifications**

PROJECT NAME: Quaker Valley School District
 LOCATION: Leet Township, Allegheny County, PA
 PREPARED BY: Kerry L. Frech DATE: 10/16/2023, REVISED 6/10/2026
 CHECKED BY: Martha L. Frech DATE: 10/16/2023, REVISED 6/10/2026

SPECIFICATIONS: THE DEPARTMENT RECOMMENDS THE USE OF THE PENN STATE PUBLICATION "EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND" AS THE STANDARD TO USE FOR THE SELECTION OF SPECIES, SEED SPECIFICATIONS, MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM PENN DOT'S PUBLICATION # 408, SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT. UPON SELECTION OF A REFERENCE, THAT REFERENCE MUST BE USED TO PROVIDE ALL SPECIFICATIONS FOR SEEDING, MULCHING, AND SOIL AMENDMENTS. THE FOLLOWING SPECIFICATION WILL BE USED FOR THIS PROJECT:

(TEMPORARY) SPECIES: PENNDOT FORMULA T TEMPORARY
 % PURE LIVE SEED: 98 %
 APPLICATION RATE: 140 LB./ACRE
 FERTILIZER TYPE: COMMERCIAL FERTILIZER 10-20-20 (X-X-X)
 FERTILIZER APPL. RATE: 100 LB./1000SY
 LIMING RATE: 410 LB/1000SY
 MULCH TYPE: WHEAT OR OAT STRAW
 MULCHING RATE: 3 T./ACRE

(PERMANENT) TOPSOIL PLACEMENT DEPTH: _____ IN.
 SPECIES: REFER TO BSHM ARCHITECTS, INC. LANDSCAPE PLAN
 % PURE LIVE SEED: _____ %
 APPLICATION RATE: _____ LB./ACRE
 FERTILIZER TYPE: _____ (X-X-X)
 FERTILIZER APPL. RATE: _____ LB./1000SY
 LIMING RATE: _____ LB/1000SY
 MULCH TYPE: _____
 MULCHING RATE: _____ T./ACRE
 ANCHOR MATERIAL: _____
 ANCHORING METHOD: _____
 RATE OF ANCHOR MATERIAL APPL.: _____ LB./ACRE
 SEEDING SEASON DATES: _____

(PERMANENT - STEEP SLOPE) TOPSOIL PLACEMENT DEPTH: _____ IN.
 SPECIES: REFER TO BSHM ARCHITECTS, INC. LANDSCAPE PLAN
 % PURE LIVE SEED: _____ %
 APPLICATION RATE: _____ LB./ACRE
 FERTILIZER TYPE: _____ (X-X-X)
 FERTILIZER APPL. RATE: _____ LB./1000SY
 LIMING RATE: _____ LB/1000SY
 MULCH TYPE: _____
 MULCHING RATE: _____ T./ACRE
 ANCHOR MATERIAL: _____
 ANCHORING METHOD: _____
 RATE OF ANCHOR MATERIAL APPL.: _____ LB./ACRE
 SEEDING SEASON DATES: _____

(MEADOW MIX - TEMPORARY) TOPSOIL PLACEMENT DEPTH: _____ IN.
 SPECIES: REFER TO BSHM ARCHITECTS, INC. LANDSCAPE PLAN
 % PURE LIVE SEED: _____ %
 APPLICATION RATE: _____ LB./ACRE
 FERTILIZER TYPE: _____ (X-X-X)
 FERTILIZER APPL. RATE: _____ LB./1000SY
 LIMING RATE: _____ LB/1000SY
 MULCH TYPE: _____
 MULCHING RATE: _____ T./ACRE

(MEADOW MIX - PERMANENT) TOPSOIL PLACEMENT DEPTH: _____ IN.
 SPECIES: REFER TO BSHM ARCHITECTS, INC. LANDSCAPE PLAN
 % PURE LIVE SEED: _____ %
 APPLICATION RATE: _____ LB./ACRE
 FERTILIZER TYPE: _____ (X-X-X)
 FERTILIZER APPL. RATE: _____ LB./1000SY
 LIMING RATE: _____ LB/1000SY
 MULCH TYPE: _____
 MULCHING RATE: _____ T./ACRE
 ANCHOR MATERIAL: _____
 ANCHORING METHOD: _____
 RATE OF ANCHOR MATERIAL APPL.: _____ LB./ACRE
 SEEDING SEASON DATES: _____

Seeding Mix – Formula T Temporary Grass Mix					
Formula and Species	% by Weight	Minimum %		Max % Weed Seed	Seeding Rate LB/1000 sq yd (lb/acre)
		Purity	Germination		
Formula T Temporary Grass Mix					Total
Oats (<i>Avena sativa</i>) (Spring)	100	97	85	0.10	6 (30)
Cereal Rye (<i>Secale cereale</i>) (Fall)	100	97	85	0.10	6 (30)

Mulch Application Rates				
Mulch Type	Application Rate (Min.)			Notes
	Per Acre	Per 1000 sq. ft.	Per 1000 sq. yd.	
Straw	3 tons	140 lb.	1240 lb	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb.	1240 lb.	Timothy, mixed clover & timothy, or other native forage grasses
Wood Chips	4-6 tons	185-275 lb.	1650-2500 lb.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb.	415	See limitation below

GENERAL NOTES:

PE SEAL:

- REVISIONS:
 1. 6-25-2025 GENERAL REVISIONS.
 2. 6-10-2026 GENERAL REVISIONS.

PROJECT NAME AND LOCATION:

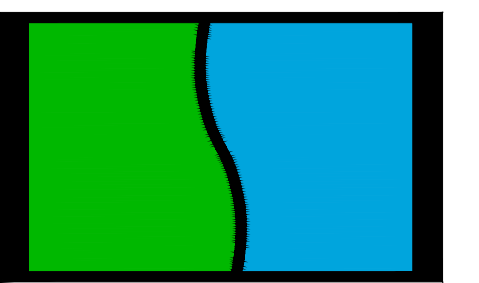
QUAKER VALLEY HIGH SCHOOL FACILITY
 LEET TOWNSHIP, EDGEWORTH AND LEETSDALE BOROUGH ALLEGHENY COUNTY, PA

DRAWING TITLE:

STANDARD NOTES AND SEEDING CHARTS

CLIENT:

QUAKER VALLEY SCHOOL DISTRICT
 100 LEETSDALE INDUSTRIAL DRIVE, SUITE B
 LEETSDALE, PA 15056



STREAMLINE ENGINEERING INC.

110 ALLAN STREET
 LOWER BURRELL, PA 15068
 TELE: (724) 594-0326
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ISSUE DATE: 11-13-2023

PROJECT NUMBER: 21-109

DRAWING NUMBER: ESC502

SCALE: AS SHOWN

DRAWN BY: MLF CHECKED BY: KLF