

# GENERAL NOTES

THIS PLAN REPRESENTS AN ACTUAL FIELD SURVEY BOUNDARY PREFORMED BY OTM, LLC ON OCTOBER 9, 2017 AND SUPPLEMENTAL POND ELEVATIONS PREFORMED BY MCNEILL LAND SURVEYING, LLC ON FEBRUARY 16, 2018. THE STATE PLANE COORDINATE SYSTEM SOUTH ZONE, NAVD88 ELEVATION DATUM WAS USED.

APPLICANT: ASB HOME IMPROVEMENTS, LLC 3310 STUMP HALL ROAD COLLEGEVILLE, PA 19426

PROPERTY KNOWN AS A.P.N. 43-00-16522-00-4, AS IDENTIFIED ON THE OFFICIAL TAX MAPS OF MONTGOMERY COUNTY, LOWER PROVIDENCE TOWNSHIP, COMMONWEALTH OF

SOIL MAP UNIT LEGEND		
MONTGOMERY COUNTY, PENNSYLVANIA		
MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP
LbF	LANSDALE LOAM, VERY STONY, 25 TO 60 PERCENT SLOPES	В
PIB	PENNS-LANSDALE COMPLEX, 3 TO 8 PERCENT SLOPES	В
ReB	READINGTON SILT LOAM, 3 TO 8 PERCENT SLOPES	С
RwA	ROWLAND SILT LOAM, 0 TO 3 PERCENT SLOPES	С
UusD	URBAN LAND-UDORTHENTS, SHALE AND SANDSTONE COMPLEX, 8 TO 25 PERCENT SLOPES	Α

NOTE: THERE ARE NO KNOWN NATURALLY OCCURRING GEOLOGIC/SOIL CONDITIONS THAT HAVE THE POTENTIAL TO CAUSE POLLUTION LOCATED ON-SITE.

# SEQUENCE OF CONSTRUCTION

IN ORDER TO KEEP EROSION AND SEDIMENT POLLUTION DURING CONSTRUCTION TO AN ABSOLUTE MINIMUM, ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE A SUBSEQUENT STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, PERMITEES, CO-PERMITEES, OPERATORS, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE DAYS REFORE STARTING ANY EARTH DISTURBANCE ACTIVITY. ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INC. 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS. THE LICENSED PROFESSIONAL MUST BE ALLOWED TO OVERSEE INSTALLATION OF STRUCTURAL PCSM

- BMP'S AS DENOTED BY \*\*CRITICAL STAGE\*\* IN THE FOLLOWING SEQUENCE. THE LIMITS OF DISTURBANCE SHALL BE DELINEATED WITH SURVEY STAKES OR SIMILAR, PRIOR TO ANY DISTURBANCE AND SHALL NOT BE DISTURBED DURING SITE CONSTRUCTION EXCEPT
- 2. INSTALL THE ROCK CONSTRUCTION ENTRANCE AT THE SITE ENTRANCE ONTO YERKES ROAD (PER STANDARD DETAIL #3-1) TO SERVE AS ACCESS TO THE SITE.

FOR TEMPORARY IMPACTS FOR MITIGATION OR RESTORATION PER PLANS.

- 3. ORANGE CONSTRUCTION FENCING SHALL BE INSTALLED AT THE ENTIRE LIMIT OF DISTURBANCE. PLACE COMPOST FILTER SOCK AS DELINEATED ON THE PLANS AND DOWNSTREAM OF ALL EXCAVATED OR TOPSOIL STOCKPILING AREAS TO BE DISTURBED. INSTALL THE TREE PROTECTION FENCE AND THE CONCRETE WASHOUT FACILITY PER PLANS.
- 4. \*\*CRITICAL STAGE\*\* INSTALLED THE PROPOSED CULVERTS.
- 5. BEGIN BULK EXCAVATION ACTIVITIES FOR THE PROPOSED ACCESS DRIVEWAY. STRIP TOPSOIL WITHIN AREAS OF PROPOSED EARTHWORK AND STOCKPILE ACCORDING TO PLANS. STABILIZE BY SPREADING 2-3" OF TOPSOIL AND PROVIDING TEMPORARY SEEDING AS NECESSARY. CESSATION OF ACTIVITIES FOR FOUR (4) DAYS OR LONGER REQUIRES TEMPORARY SEEDING.
- 6. INSTALL THE PROPOSED ACCESS DRIVEWAY INCLUDING AGGREGATE BASE AND BINDER COURSE.

#### \*\*CRITICAL STAGE\*\* FINISH GRADE AND SPREAD TOPSOIL. SEED AND MULCH EACH AREA OF DISTURBANCE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE COMPLETION DATE AND SCHEDULE SEEDING). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SF, PROPOSED TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. PRIOR TO PLACING TOPSOIL,

\*\*CRITICAL STAGE\*\* INSTALL THE PROPOSED INFILTRATION TRENCHES AND SEEPAGE PIT. EXTREME CARE SHALL BE TAKEN DURING CONSTRUCTION OF PERMANENT STORMWATER FACILITIES TO MINIMIZE COMPACTION AND PREVENT SILTATION OF THE AREA.

SUBSOIL SHALL BE SCARIFIED.

- 9. REMOVE TEMPORARY CONTROL MEASURES AFTER UNIFORM EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED. MINIMUM OF UNIFORM COVERAGE OR A DENSITY OF 70% ACROSS THE DISTURBED AREA, TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS AND STABILIZATION OF THE SITE IS COMPLETE TO THE SATISFACTION OF THE MONTGOMERY COUNTY CONSERVATION DISTRICT. AREAS DISTURBED DURING THE REMOVAL OF THE CONTROLS MUST BE STABILIZED. THE MONTGOMERY COUNTY CONSERVATION DISTRICT AND WORCESTER TOWNSHIP SHALL BE NOTIFIED PRIOR TO REMOVAL OF ANY EROSION CONTROLS.
- 10. UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITY UNDER 25 PA. CODE \$ 102.22(a)(2) (RELATING TO PERMANENT STABILIZATION) AND INSTALLATION OF BMP'S IN ACCORDANCE WITH THE APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH 25 PA. CODE § 102.4 AND 102.8, THE PERMITTEE AND/OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE DEPARTMENT OR AUTHORIZED CONSERVATION

# THERMAL IMPACTS

THERMAL IMPACTS FOR THE PROPERTY ARE BEING MINIMIZED BY THE INSTALLATION OF MAINTAINED LAWNS AND BASINS WITH EXTENSIVE PLANTINGS. THE PROPOSED DISTURBED AREA CURRENTLY IS COVERED WITH DENSE GRASS, MEADOW, AND TREES WHICH PROVIDE SOME SHADE FOR THE GROUND RUNOFF TRAVELING ALONG IT. STORMWATER ON SITE WILL BE COLLECTED MAINLY VIA INLETS TO ALLOW THE COOLING OF RUNOFF PRIOR TO REACHING THE BASIN DUE TO SHADING AND BEING UNDERGROUND. THE PROPOSED VEGETATION WILL PROVIDE SHADING OF THE RUNOFF PRIOR TO REACHING THE STORM SYSTEM AND WILL PROVIDE AN OPPORTUNITY FOR INFILTRATION AND PLANT UPTAKE OF THE RUNOFF. THREE BIO-RETENTION AREAS AND A BASIN ARE PROPOSED FOR VOLUME MANAGEMENT TO REDUCE HOLDING OF RUNOFF THAT MAY HEAT UP BY AN EXTENDED EXPOSURE OF THE SUN.

# RECYCLING STATEMENT

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, CONCRETE WASH WATER, SANITARY WASTES, ETC. THAT COULD ADVERSELY IMPACT WATER QUALITY. 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.

# DRAWING LEGEND

12"FS — 12"FS — 12"FS —

EXISTING CONTOUR/ELEVATION

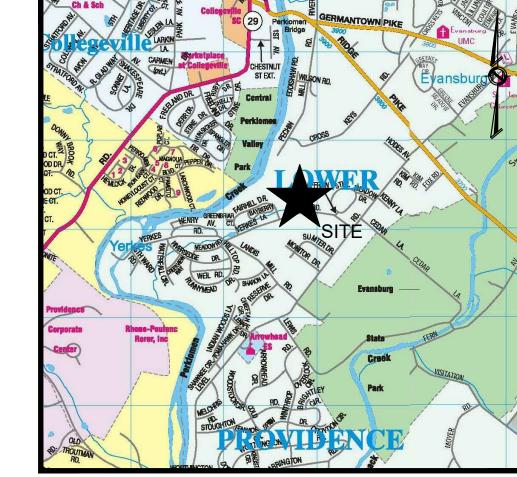
SOIL BOUNDARY EDGE OF PAVEMENT LIMITS OF DISTURBANCE

FILTER SOCK EXISTING BUILDING

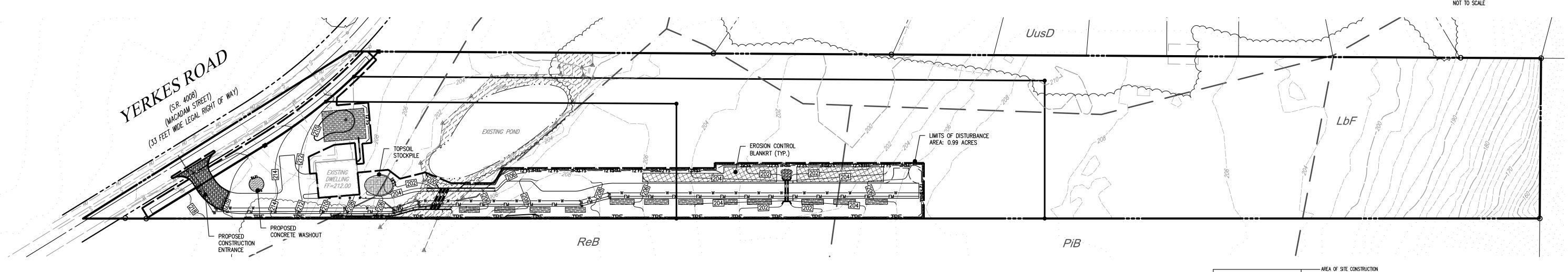
CONSTRUCTION ENTRANCE

EROSION CONTROL BLANKET

TOPSOIL STOCKPILE

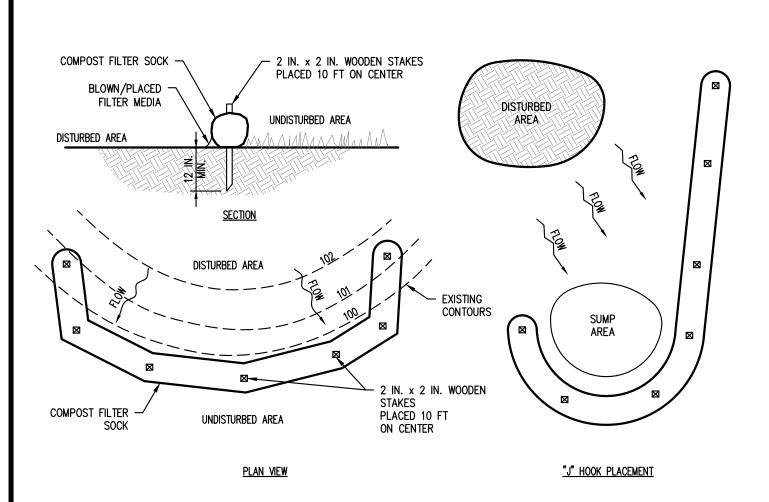


**VICINITY MAP** 



MAINTAIN STOCK PILE SURFACE IN ACCORDANCE WITH TEMPORARY

STABILIZATION NOTES



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

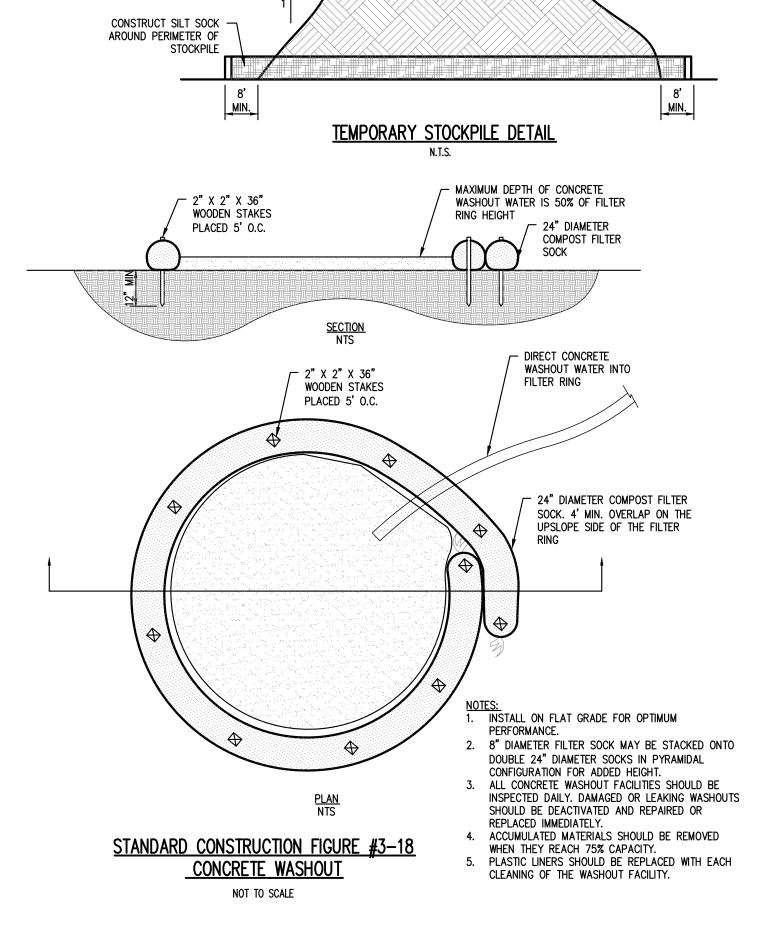
ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF

THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

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

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

STANDARD CONSTRUCTION DETAIL #4-1

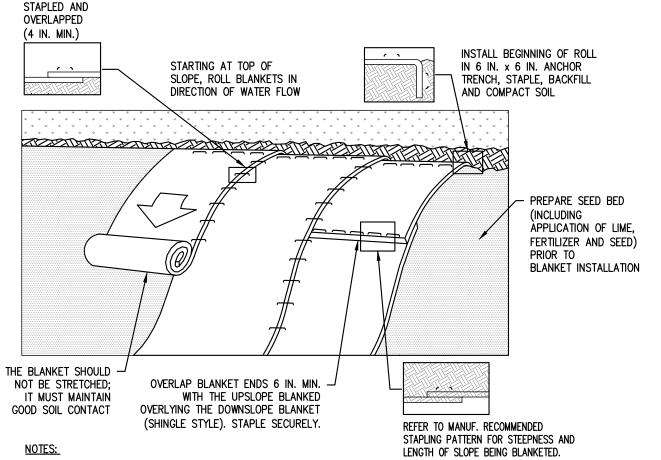


(MAX SIDE

SLOPE, TYP.)

<u>WASHWATER RECYCLING SYSTEMS:</u> WASHWATER RECYCLING SYSTEMS HAVE ALSO BEEN DEVELOPED WHICH SEPARATE THE SOLIDS FROM THE WASHWATER, CAPTURING BOTH IN IMPERMEABLE BAGS AND ALLOWING THEM TO BE RECYCLED. THESE SYSTEMS MAY BE USED IN LIEU OF WASHOUTS IF MANUFACTURERS' SPECIFICATIONS ARE FOLLOWED. CARE MUST BE TAKEN TO PREVENT THE FILTERED WATER FROM ENTERING ANY SURFACE WATERS. SEDIMENT BASINS AND SEDIMENT TRAPS SEDIMENT BASINS AND SEDIMENT TRAPS MAY NOT BE USED AS CONCRETE WASHOUT DEVICES, SINCE THEY DISCHARGE DIRECTLY TO SURFACE WATERS. THIS DISCHARGE WOULD HAVE AN ADVERSE EFFECT UPON THE RECEIVING WATER. IN ADDITION, CONTINUED USE OF A BASIN OR TRAP AS A WASHOUT FACILITY WOULD SIGNIFICANTLY REDUCE THE STORAGE CAPACITY OF THE BASIN OR TRAP.

ALL 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. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.



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.

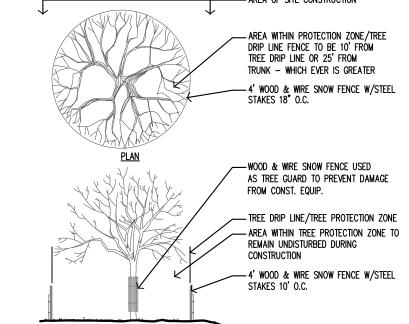
THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

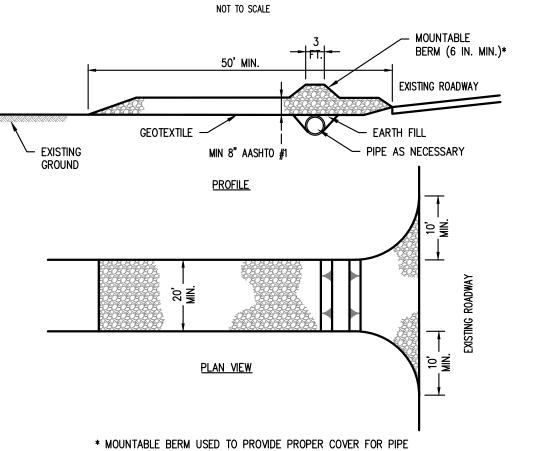
> STANDARD CONSTRUCTION DETAIL #11-1 EROSION CONTROL BLANKET INSTALLATION

> > NOT TO SCALE



TREE PROTECTION DURING SITE CONSTRUCTION

**ELEVATION** 



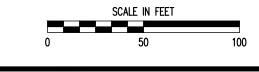
 REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

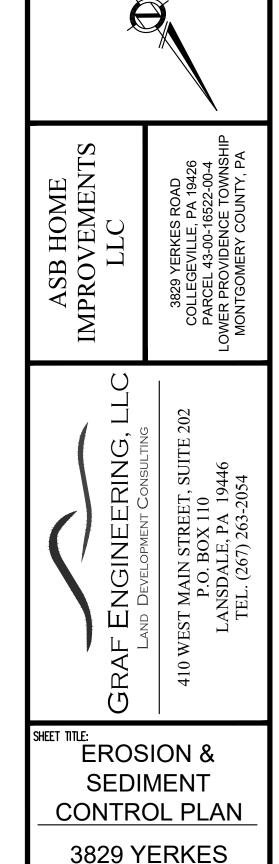
 RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

 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.

STANDARD CONSTRUCTION DETAIL #3-1





ROAD

DRAWN BY:

CHECKED BY:

# SEQUENCE OF CONSTRUCTION

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- I. THE LIMITS OF DISTURBANCE SHALL BE DELINEATED WITH SURVEY STAKES OR SIMILAR, PRIOR TO ANY DISTURBANCE AND SHALL NOT BE DISTURBED DURING SITE CONSTRUCTION EXCEPT
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# SEDIMENT DISPOSAL

SILT REMOVED FROM PERMANENT BMP'S SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS LOCATED OUTSIDE THE 100 YEAR FLOOD PLAINS, WETLANDS, STEEP SLOPES AND DRAINAGE SWALES. AREAS OF SEDIMENT DISPOSAL SHALL BE CONSIDERED A CRITICAL VEGETATION AREA REQUIRING IMMEDIATE STABILIZATION

# RECYCLING AND DISPOSAL METHODS

THE OPERATOR SHALL REMOVE FROM THIS SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THIS SITE.

## DRAWING LEGEND

PROPERTY LINE

EXISTING CONTOUR/ELEVATION SOIL BOUNDARY EDGE OF PAVEMENT \_\_\_\_\_\_

EXISTING BUILDING

**VICINITY MAP** 

# HOME VEMENT

ASB PROV

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TWO WEEKS.

a. If Slow release nitrogen (300 pounds 38-0-0 per acre or equivalent) is used in addition SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOP DRESSING IS NOT MANDATORY. b. Spring installation of sod will require an application of Fertilizer such as 10-20-10 EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET BETWEEN SEPTEMBER

1 AND OCTOBER 15 c. FALL INSTALLATION OF SOD WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.

# IN ADDITION. STABILIZATION WITH MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.

GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING. a. UNROTTED SMALL-GRAIN STRAW OR HAY AT 3.0 TONS PER ACRE SPREAD UNIFORMLY AT 135 POUNDS PER 1000 SQUARE FEET AND ANCHORED WITH LIQUID MULCH BINDER OR: b. WOOD-FIBER OR PAPER-FIBER MULCH AT A RATE OF 1500 POUNDS PER ACRE MAY BE APPLIED BY

A HYDROSEEDER OR HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. IF EMULSIFIED

### UusD GR=209.20 PROPOSED MODULAR RETAINING WALL **PROPOSED** INV.: 198.80 - DW ENDWALL 2 TREELINE TOP OF WALL: 205.00 PROPOSED ROOF LEADER (TOP OF WALL TO BE 6" MIN. TOP OF WALL: 205.00 ABOVE DRIVEWAY ELEV.) **FXISTING** DWELLING CULVERT # PROPOSED SUBSURFACE CULVERT #2 THREE (3) 24" RCP PIPES TWO (2) 18" RCP PIPES INFILTRATION BED (TYP. PIPE LENGTH: 23' \*SEE DETAIL ON SHEET 4 PIPE LENGTH: 20' PIPE SLOPE: 2.17% PIPE SLOPE: 2.00% MODULAR RETAINING WALL 1 DW ENDWALL 1 TOP OF WALL: 205.00 INV.: 201.00 (TOP OF WALL TO BE 6" MIN. TOP OF WALL: 205.00 ABOVE DRIVEWAY ELEV.) SUPPLEMENTAL **EXISTING CONTOURS** (SHOWN AS DOTS) TAKEN FROM PASDA

# GENERAL NOTES

I. THIS PLAN REPRESENTS AN ACTUAL FIELD SURVEY BOUNDARY PREFORMED BY OTM, LLC ON OCTOBER 9, 2017 AND SUPPLEMENTAL POND ELEVATIONS PREFORMED BY McNEILL LAND SURVEYING, LLC ON FEBRUARY 16, 2018. THE STATE PLANE COORDINATE SYSTEM SOUTH ZONE, NAVD88 ELEVATION DATUM WAS USED.

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- 5. PROPERTY KNOWN AS A.P.N. 43-00-16522-00-4. AS IDENTIFIED ON THE OFFICIAL TAX MAPS OF MONTGOMERY COUNTY, LOWER PROVIDENCE TOWNSHIP, COMMONWEALTH OF
- 4. ANY FURTHER DEVELOPMENT FOR ANY OF THE LOTS SHOWN ON THESE PLANS WILL REQUIRE FULL COMPLIANCE WITH THE LOWER PROVIDENCE TOWNSHIP'S CHAPTER 129 STORMWATER MANAGEMENT ORDINANCE, SPECIFICALLY SECTION 129-14. POST DEVELOPMENT RATES OF RUNOFF SHALL NOT EXCEED 75 PERCENT OF THE PEAK RATES PRIOR TO DEVELOPMENT FOR THE 2 AND 10 YEAR STORMS.
- 5. STORM SEWER STRUCTURES MAY NOT BE LOCATED ON TOP OF, OR WITHIN 10 FEET OF ELECTRIC, COMMUNICATION, WATER, SANITARY SEWER, OR GAS SERVICES AND/OR MAINS, UNLESS APPROVAL IS RECEIVED FROM THE TOWNSHIP AND OPERATING UTILITY AUTHORITY.
- DURING CONSTRUCTION, DULY AUTHORIZED REPRESENTATIVES OF LOWER PROVIDENCE TOWNSHIP MAY ENTER AT ANY REASONABLE TIME UPON ANY PROPERTY WITHIN THE TOWNSHIP TO INVESTIGATE WHETHER CONSTRUCTION ACTIVITIES ARE IN COMPLIANCE WITH THIS CHAPTER.
- 7. PER SECTION 129-29, THE APPLICANT FOR ANY REGULATED ACTIVITY REQUIREING A STORMWATER MANGEMENT SITE PLAN AND STORMWATER MANAGEMENT PERMIT SHALL BE RESPONSIBLE FOR COMPLETING AN AS-BUILT SURVEY, SEALED BY A PROFESSIONAL FNGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA OR A REGISTERED. SURVEYOR LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA, OF ALL STORMWATER
- MANAGEMENT FACILITES/IMPROVEMENTS INCLUDED IN THE APPROVED PLAN. 8. A SET OF PLANS APPROVED BY THE TOWNSHIP SHALL BE ON FILE AT THE SITE THROUGHOUT THE DURATION OF DEVELOPMENT ACTIVITIES. PERIODIC INSPECTIONS MAY BE MADE BY THE TOWNSHIP OR DISIGNEE DURING DEVELOPMENT ACTIVITIES.
- 9. IT SHALL BE UNLAWFUL FOR ANY PERSON TO UNDERTAKE ANY REGULATED ACTIVITY ON ANY PROPERTY EXCEPT AS PROVIDED FOR IN THE APPROVED PLAN AND PURSUANT TO THE REQUIREMENTS OF CHAPTER 129. IT SHALL BE UNLAWFUL TO ALTER OR REMOVE ANY STORMWATER MANAGEMENT FACILITY OR BEST MANAGEMENT PRACTICE (BMP) REQUIRED BY THIS PLAN PERSUANT TO CHAPTER 129 OR TO ALLOW THE PROPERTY TO REMAIN IN A CONDITION WHICH DOES NOT CONFORM TO THE APPROVED PLAN.
- 10. A BLANKET EASEMENT IS HEREBY GRANTED TO LOWER PROVIDENCE TOWNSHIP FOR THE PURPOSES OF INSPECTION AND/OR EMERGENCY REPAIRS TO THE BEST MANAGEMENT PRACTICES (BMPs) SHOWN AS PART OF THE APPROVED PLANS.

# BMP 6.4.3: SUBSURFACE INFILTRATION BED

# TYPICAL CONSTRUCTION SEQUENCE

- DUE TO THE NATURE OF CONSTRUCTION SITES, SUBSURFACE INFILTRATION SHOULD BE INSTALLED TOWARD THE END OF THE CONSTRUCTION PERIOD. IF POSSIBLE.
- INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER THE PENNSYLVANIA EROSION AND SEDIMENTATION CONTROL PROGRAM MANUAL) DURING
- THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT
- 4. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
- EARTHEN BERMS (IF USED) BETWEEN INFILTRATION BEDS SHOULD BE LEFT IN PLACE DURING EXCAVATION. THESE BERMS DO NOT REQUIRE COMPACTION IF PROVEN STABLE DURING
- CONSTRUCTION. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, CLEANOUTS, PERFORATED
- PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACE IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS
- THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED A MAXIMUM OF 8 INCH LEFTS, EACH LAYER SHOULD BE LIGHTLY COMPACTED. WITH

CONSTRUCTION FOUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.

- APPROVED SOIL MEDIA SHOULD BE PLACED OVER INFILTRATION BED A MAXIMUM OF 6 INCH
- 10. SEED AND STABILIZE TOPSOIL. 11. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

# MAINTENANCE AND INSPECTION ISSUES

- CATCH BASINS AND INLETS SHOULD BE INSPECTED AND CLEANED AT LEAST 2 TIMES PER
- THE OVERLYING VEGETATION OF SUBSURFACE INFILTRATION FEATURES SHOULD BE MAINTAINED IN GOOD CONDITION, AND ANY BARE SPOTS REVEGETATED AS SOON AS POSSIBLE. VEHICULAR ACCESS ON SUBSURFACE INFILTRATION AREAS SHOULD BE PROHIBITED, AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. IF ACCESS IS NEEDED, USE OF PERMEABLE. TURF REINFORCEMENT SHOULD BE CONSIDERED.

# BMP 6.4.6: DRY WELL/SEEPAGE PIT

- TYPICAL CONSTRUCTION SEQUENCE PROTECT INFILTRATION AREA FROM COMPACTION PRIOR TO INSTALLATION.
- . IF POSSIBLE, INSTALL DRYWELLS DURING LATER PHASES OF SITE CONSTRUCTION TO PREVENT SEDIMENTATION AND/OR DAMAGE FROM CONSTRUCTION ACTIVITY. INSTALL AND MAINTAIN PROPÉR EROSION AND SEDIMENT CONTROL MEASURES DURING
- CONSTRUCTION AS PER THE PENNSYLVANIA EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (MARCH 2000, OR LATEST EDITION). EXCAVATE DRY WELL BOTTOM TO 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 FOUIPMENT. EXCAVATION EQUIPMENT SHOULD BE PLACED OUTSIDE THE LIMITS OF THE DRY WELL. 5. COMPLETELY WRAP DRY WELL WITH NONWOVEN TEXTILE. (IF SEDIMENT AND/OR DEBRIS HAVE
- ACCUMULATED IN DRY WELL BOTTOM, REMOVE PRIOR TO GEOTEXTILE PLACEMENT). GEOTEXTILE ROLLS SHOULD OVERLAP BY A MINIMUM OF 4 INCHES WITHIN THE TRENCH. FOLD BACK AND SECURE EXCESS GEOTEXTILE DURING STONE PLACEMENT. INSTALL CONTINUOUSLY PERFORATED PIPE, OBERSAVTION WELLS, AND ALL OTHER DRY WELL
- STRUCTURES. CONNECT ROOF LEADERS TO STRUCTURES AS INDICATED ON PLANS. PLACE UNIFORMLY GRADED, CLEAN-WASHED AGGREGATE IN 6 INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS. 8. FOLD AND SECURE NONWOVEN GEOTEXTILE OVER TRENCH, WITH MINIMUM OVERLAP OF 12
- 9. PLACE 12 INCH LIFT OF APPROVED TOPSOIL OVER TRENCH, AS INDICATED ON PLANS. 10. SEED AND STABILIZE TOPSOIL. 11. CONNECT SURCHARGE PIPE TO ROOF LEADER AND POSITION OVER SPLASHBOARD. 12. DO NOT REMOVE EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY

# MAINTENANCE AND INSPECTION ISSUES

STABILIZED.

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

# BMP 6.7.3: SOIL AMENDMENT AND RESTORATION

- TYPICAL CONSTRUCTION SEQUENCE: ALL CONSTRUCTION SHOULD BE COMPLETED AND STABILIZED BEFORE BEGINNING SOIL RESTORATION.
- \*\* CRITICAL STAGE \*\* SPREAD 2-3 INCHES OF APPROVED COMPOST ON EXISTING SOIL. TILL ADDED SOIL INTO EXISTING SOIL WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF 6 INCHES. THIS PROCESS SHOULD BE COMPLETED IN STEPS UNTIL APPROXIMATELY 2-3 INCHES BELOW FINAL GRADE. ADD AN ADDITIONAL 4 INCHES OF APPROVED COMPOST TO BRING THE AREA UP TO GRADE.
- AFTER PERMANENT PLANTING/SEEDING, 2-3 INCHES OF COMPOST BLANKET WILL BE APPLIED TO AREAS NOT PROTECTED BY GRASS OR OTHER PLANTS.

# • ALL CONSTRUCTION SHOULD BE COMPLETED AND STABILIZED PRIOR TO BEGINNING SOIL

- RESTORATION. COMPOST PRODUCTS MUST MEET ALL APPLICABLE STATE AND FEDERAL REGULATIONS PERTAINING TO ITS PRODUCTION AND DISTRIBUTION, AND CHEMICAL CONTAMINANT AND
- PATHOGEN LIMIT STANDARDS. VERY COARSE COMPOST SHOULD BE AVOIDED TO ALLOW FOR PLANTING AND LAWN ESTABLISHMENT. COMPOST PRODUCTS PROPOSED FOR USE IN THIS APPLICATION MUST HAVE A MAXIMUM BULK
- LOAMS, 1.3 G/CCM FOR SILT LOAMS, AND 1.1 G/CCM FOR SILTY CLAY LOAMS, CLAY LOAMS (35% TO 45% CLAY) AND CLAYS.□ BEFORE THE COMPOST IS PLACED AND EXCAVATION COMPLETE, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN

DENSITY OF 1.6 G/CCM FOR LOAMY SANDS, 1.4 G/CCM FOR SANDY LOAMS OR SANDY CLAY

- TO ACHIEVE THIS CONDITION, SUBSOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL WILL BE REQUIRED AS DIRECTED BY THE OWNERS'S REPRESENTATIVE, WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED, AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED.
- SUB-SOILING SHALL BE PERFORMED BY THE PRIME OR EXCAVATING CONTRACTOR AND SHALL OCCUR BEFORE COMPOST PLACEMENT. SUBSOIL AREAS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE. WHEN DIRECTED BY THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL VERIFY THAT THE SUB-SOILING WORK CONFORMS TO THE SPECIFIED
- SUB-SOILING SHALL FORM A TWO-DIRECTIONAL GRID. CHANNELS SHALL BE CREATED BY A COMMERCIALLY AVAILABLE, MULTI-SHANKED, PARALLELOGRAM IMPLEMENT (SOLID-SHANK RIPPER). THE EQUIPMENT SHALL BE CAPABLE OF EXERTING A PENETRATION FORCE NECESSARY FOR THE SITE. S CHISEL PLOWS, OR SPRING-LOADED EQUIPMENT WILL BE ALLOWED. THE GRID CHANNELS SHALL BE SPACED A MINIMUM OF 12 INCHES TO A MAXIMUM OF 36 INCHES APART, DEPENDING ON EQUIPMENT, SITE CONDITIONS, AND THE SOIL MANAGEMENT PLAN. THE CHANNEL DEPTH SHALL BE A MINIMUM OF 20 INCHES OR AS SPECIFIED IN THE SOIL MANAGEMENT PLAN. IF SOILS ARE SATURATED, THE CONTRACTOR SHALL DELAY OPERATIONS UNTIL THE SOIL WILL NOT HOLD A BALL WHEN SQUEEZED. ONLY ONE PASS SHALL BE PERFORMED ON ERODIBLE SLOPES GREATER THAN 1 VERTICAL TO 3 HORIZONTAL. WHEN ONLY ONE PASS IS USED, WORK SHOULD BE AT RIGHT ANGLES TO THE
- DIRECTION OF SURFACE DRAINAGE, WHENEVER PRACTICAL. EXCEPTIONS TO SUB-SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE TRENCHING / DRAINAGE LINES ARE INSTALLED. WHERE COMPACTION IS BY DESIGN (ABUTMENTS. FOOTINGS, OR IN SLOPES), AND ON INACCESSIBLE SLOPES, AS APPROVED BY THE OWNER'S REPRESENTATIVE. IN CASES WHERE EXCEPTIONS OCCUR, THE CONTRACTOR SHALL OBSERVE A MINIMUM SETBACK OF 20 FEET OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ARCHEOLOGICAL CLEARANCES MAY BE REQUIRED IN SOME INSTANCES.

# MAINTENANCE AND INSPECTION ISSUES:

THE SOIL RESTORATION PROCESS MAY NEED TO BE REPEATED OVER TIME, DUE TO COMPACTION BY USE AND/OR SETTLING (FOR EXAMPLE, PLAY FIELDS OR PARK AREA WILL BE COMPACTED BY FOOT

# STANDARD FOR PERMANENT STABILIZATION

- A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
- SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER. SITE PREPARATION a. Grade as needed and feasible to permit the use of conventional equipment for seedbed 4. SEEDBED PREPARATION SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER. PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. . SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED 5. SOD PLACEMENT
- OF 4 INCHES. 2. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED TO PROVIDE A COOD ROND WITH THE TOPSOIL d. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE
- FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE COMPLETION DATE AND SCHEDULE SEEDING). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SF, PROPOSED TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.
- 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.
- 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. SEEDBED PREPARATION a. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE. b. APPLY 10-20-10 OR EQUIVALENT RATED FERTILIZER AT A RATE OF 500 POUNDS PER ACRE OR 11
- POUNDS PER 1000 SQUARE FEET c. APPLY 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN. d. APPLY PULVERIZED DOLOMITIC LIMESTONE AT A RATE OF 1/3 TONS PER ACRES OR 15 POUNDS PER
- 1000 SQUARE FEET. e. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION, REMOVE ALL
- OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL g. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
- a. Seed mixture permanent: 30 LBS/ACRE EACH KENTUCKY 31 TALL FESCUE AND KENTUCKY BLUEGRASS (LOW MAINTENANCE VARIETY) SPREADING FESCUE SEEDING DATES: 3/1 TO 5/15 8/15 TO 4. PROTECTIVE MATERIALS TO BE USED:
- b. APPLY SEED UNIFORMLY. NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2". HYDROSEEDINGS (INCLUDING FERTILIZER AND SEED IN A SLURRY FORM), WHICH ARE MULCHED, MAY BE LEFT ON THE SOIL SURFACE. SOIL CONSERVATION DISTRICT CAN REQUIRE SPECIFIC TECHNIQUES FOR HYDROSEEDING AND/OR HYDROMULCHING IN AREAS WITH DROUGHTY CONDITIONS. FOR MULCHING REQUIREMENTS SEE STANDARD FOR STABILIZATION WITH MULCH: PROTECTIVE MATERIALS TO BE USED.
- IRRIGATION (WHERE FEASIBLE) IF SOIL MOISTURE IS DEFICIÉNT AND MULCH IS NOT USED, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER, A MINIMUM OF 1/4" TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED, ESPECIALLY WHEN SEEDING IS PERFORMED IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

# B. STANDARD FOR PERMANENT STABILIZATION WITH SOD

HIGH QUALITY CULTIVATED SOD.

- METHODS AND MATERIALS a. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER
- b. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES. c. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH)
- d. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE. e. FOR DROUGHTY SITES A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A

f. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND

INSTALLED WITHIN A PERIOD OF 36 HOURS. . SITE PREPARATION SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER.

- TO BRING SOIL PH TO 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH a. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD
  - b. Place sod strips with snug even joints that are staggered. Open spaces invite erosion. c. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT
  - AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS. WHICH WOULD CAUSE DRYING OF THE ROOTS. d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE).
- e. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING PROPERLY SECURED. ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST

- STANDARD FOR PERMANENT STABILIZATION WITH MULCH 1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE
- ASPHALT (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1 AND CRS-2), APPLY 0.04 GAL./SQ. YD. OR 194 GAL./ACRE ON FLAT SLOPES LESS THAN 8' HIGH. ON SLOPES 8' OR MORE HIGH USE 0.075 GAL./SQ. YD. OR 363 GAL./ACRE.



SCALE(V): DRAWN BY: CHECKED BY: 10/15/201

STORMWATER

**MANAGEMENT** 

PLAN

**3829 YERKES** 

ROAD

PROJECT No.:

