

DISPOSAL/RECYCLING OF CONSTRUCTION MATERIAL

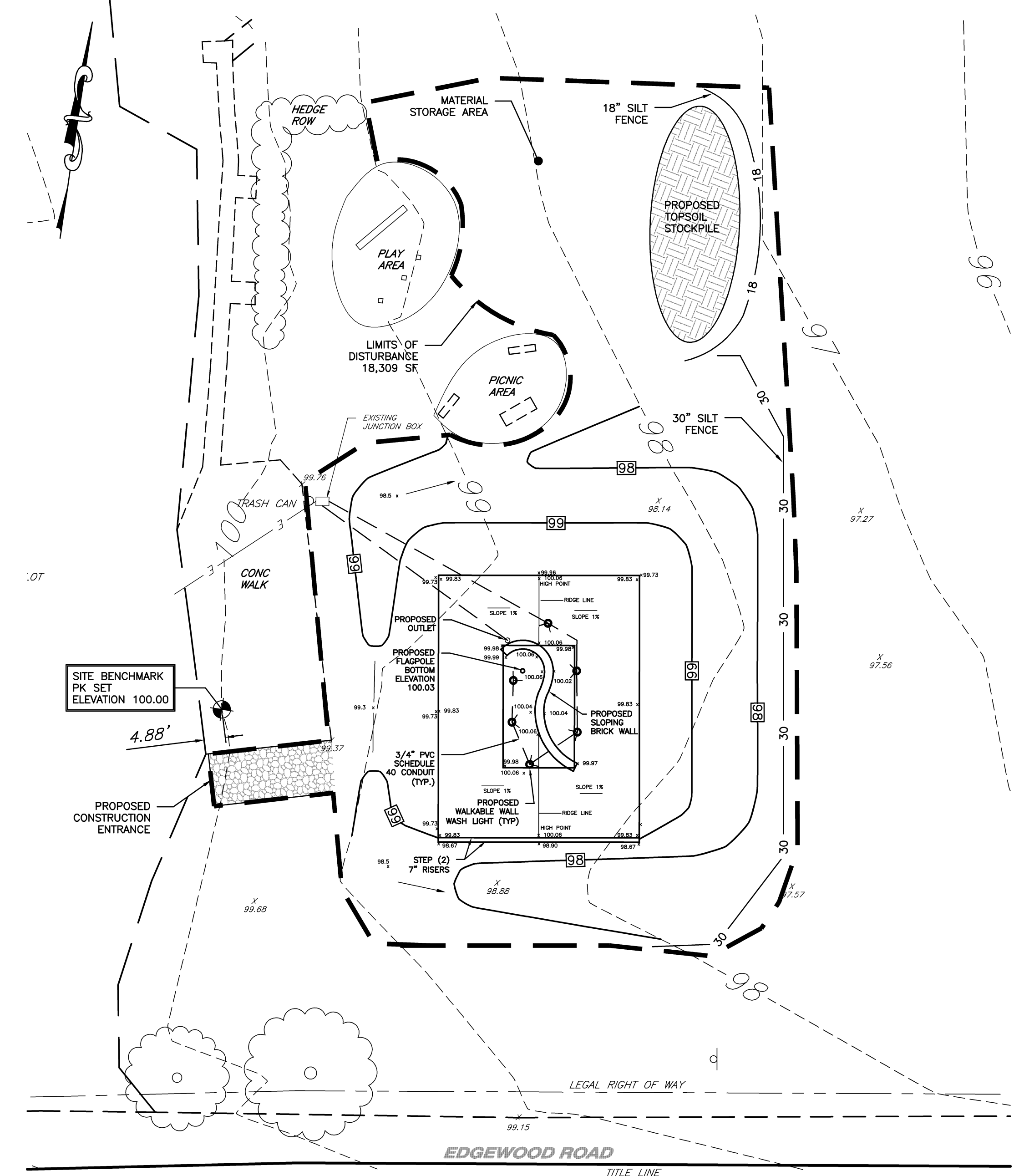
ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

SEDIMENT REMOVED FROM BMPs SHOULD BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS, OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

MAJOR SOIL PROPERTIES AND ESTIMATED DEGREE OF LIMITATION

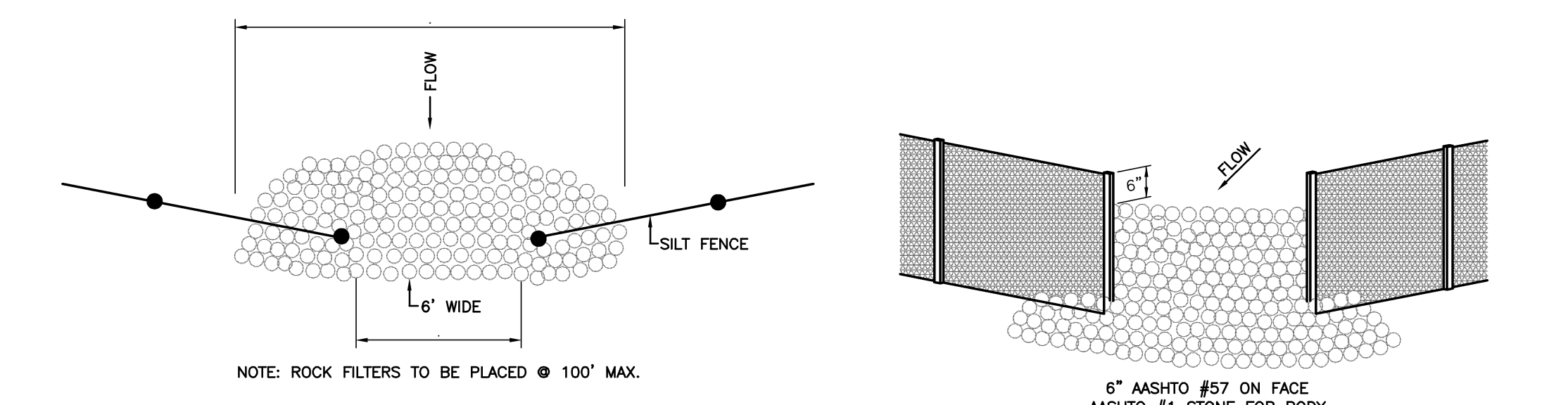
MAP SYMBOL	SOIL	HYDROLOGIC SOIL GROUP	DEPTH TO		SOILS FEATURES THAT AFFECT:
			HWT (FT)	BEDROCK (IN)	
U/B	URBAN LAND - LANSDALE COMPLEX 0-8%	B	55"-60"	>6'	NOT LIMITED

NOTE: ENTIRE LIMITS OF DISTURBANCE ARE WITHIN THE URBAN LAND - LANSDALE COMPLEX SOIL BOUNDARY
SOURCE: SOIL BOUNDARY LINES SHOWN WERE OBTAINED FROM WEB SOIL SURVEY MAPS OF BUCKS COUNTY, PENNSYLVANIA DATED OCTOBER 14, 2013 BY THE NATURAL RESOURCES CONSERVATION SERVICE.



OVERALL VIEW

SCALE 1" = 20'



ROCK FILTER OUTLET

NOT TO SCALE

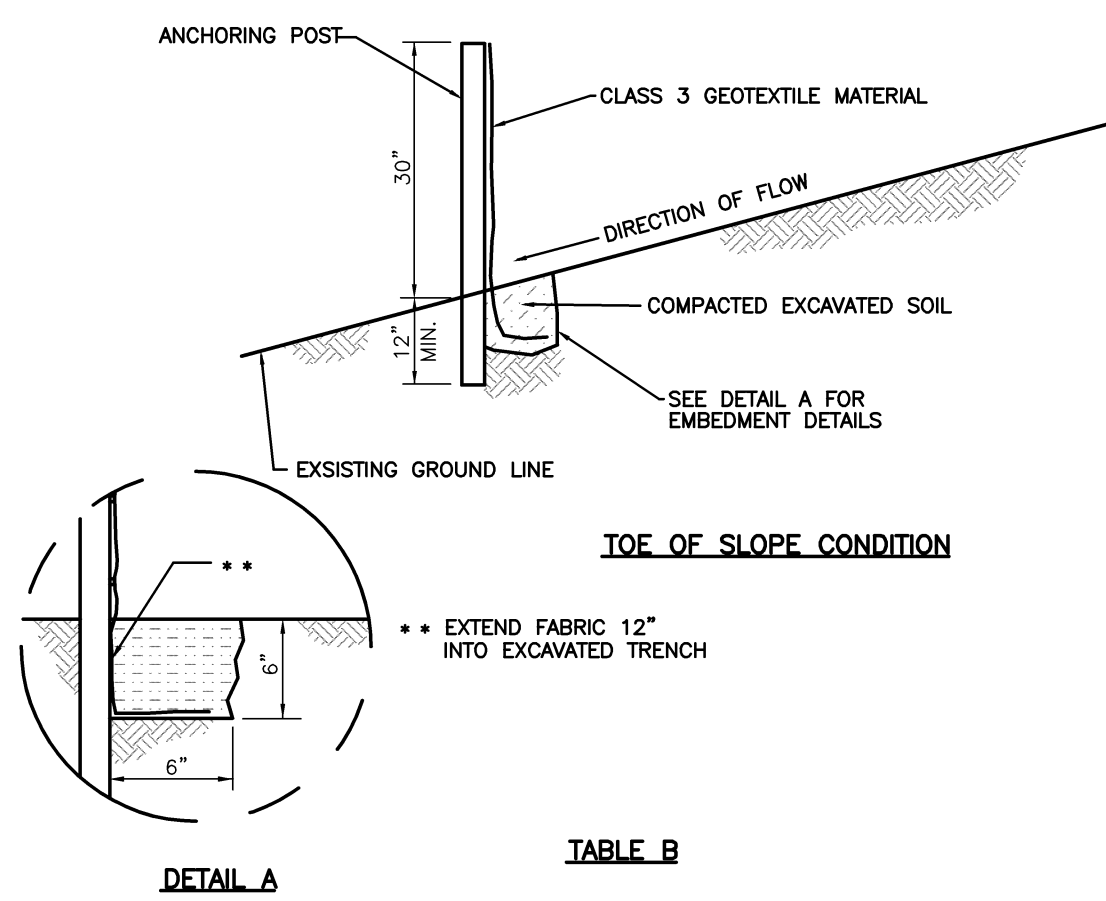


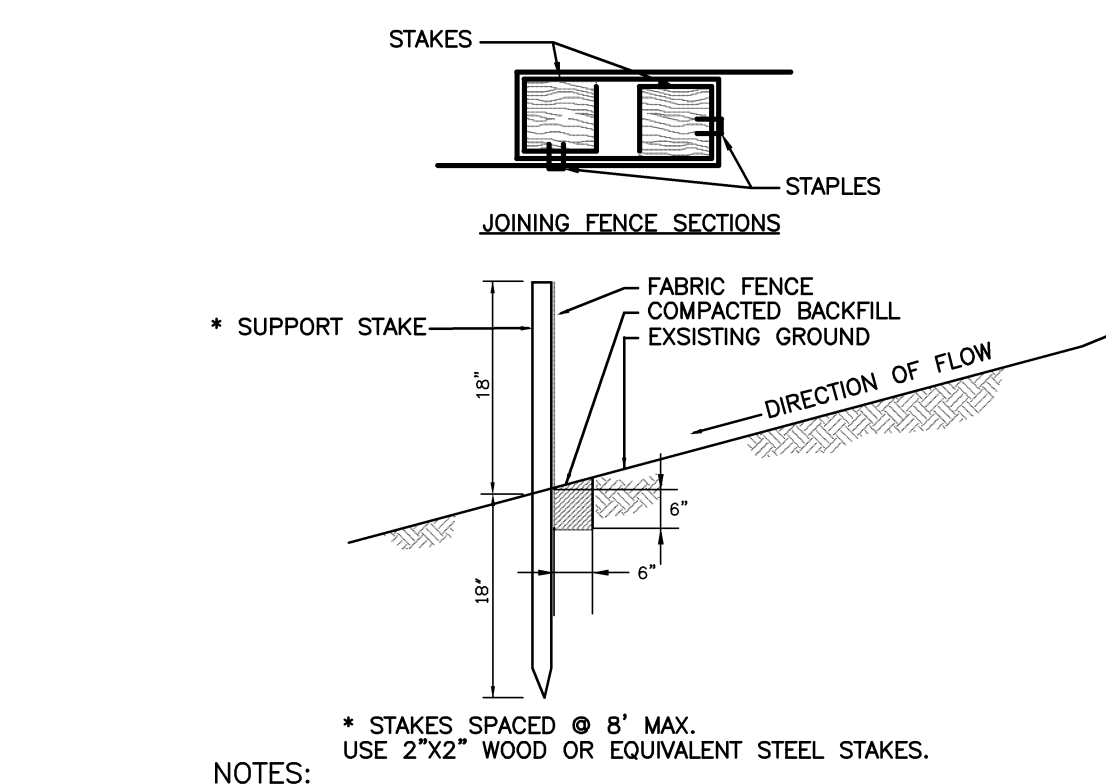
TABLE B

TYPE OF CLASS 3 GEOTEXTILE MATERIAL	NOMINAL FABRIC HEIGHT	MAX. POST SPACING W/OUT MESH SUPPORT	MAX. POST SPACING WITH MESH SUPPORT
3A	30"	8'-0"	NA.
3B	30"	8'-0"	NA.

NA = NOT AVAILABLE

30" SILT BARRIER FENCE DETAIL

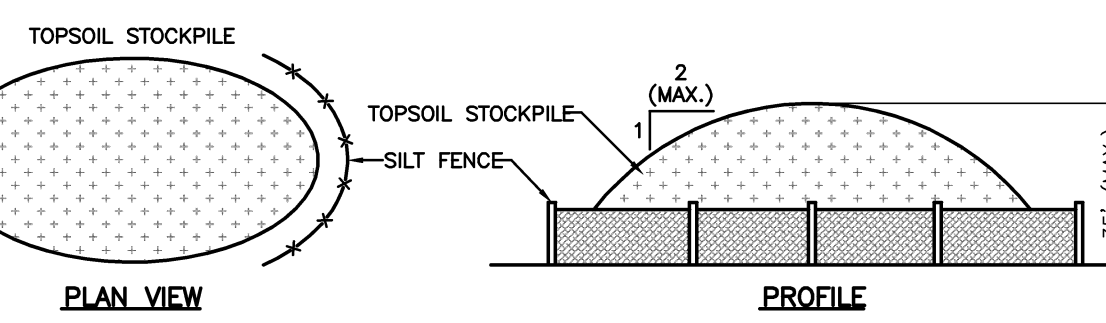
NOT TO SCALE



- NOTES:**
- FILTER FABRIC FENCE MUST BE PLACED AT LEVEL GRADE. BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 8 FEET UP SLOPE @ 45 DEGREES TO THE MAIN BARRIER ALIGNMENT.
 - SEDIMENT MUST BE REMOVED WHEN ACCUMULATION REACHES HALF THE ABOVE GROUND HEIGHT OF THE FENCE (9").
 - ANY SECTION OF FENCE WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (SEE ROCK FILTER OUTLET DETAIL).

STANDARD FILTER FABRIC FENCE (18" HIGH)

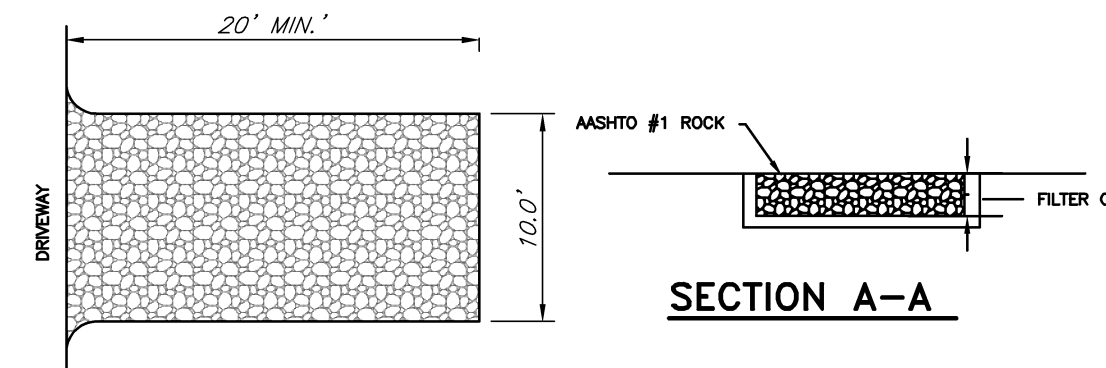
NOT TO SCALE



SILT FENCE MUST BE PLACED ON THE DOWNSLOPE SIDE OF SOIL STOCKPILES IMMEDIATELY APPLY TEMPORARY SEEDING TO ALL STOCKPILES WHICH WILL BE IN PLACE FOR 20 DAYS OR MORE.

TOPSOIL STOCKPILE AREA DETAIL

NOT TO SCALE



MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC HIGHWAY WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

ROCK CONSTRUCTION ENTRANCE

N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET; STOCKPILE SLOPES MUST NOT EXCEED 2:1.
- THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE O/RP SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES (BMPs) TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- THE O/RP SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE BUCKS COUNTY CONSERVATION DISTRICT AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.
- ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER UNDISTURBED AREAS.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
- EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.
- AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE O/RP SHALL INVITE ALL CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN DESIGNER AND THE BUCKS COUNTY CONSERVATION DISTRICT TO A PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INC. AT 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATIONS.
- DISTURBED AREAS THAT ARE AT FINISHED GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY CEASES, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% (PERCENT) VEGETATIVE OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- UNTIL A SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, RE-NETTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.
- ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.), AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

MAINTENANCE OF FACILITIES:

- SILT FENCE MAINTENANCE - CONTRACTOR SHALL REMOVE SEDIMENT WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE. CONTRACTOR SHALL IMMEDIATELY REPLACE ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR OVERTOPPED WITH A ROCK FILTER OUTLET.
- ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. THE STONE SHALL BE REMOVED AND CLEANED AS IT FILLS WITH SILT. A STOCKPILE OF NO. 1 AGGREGATE SHALL BE MAINTAINED ON SITE FOR THESE PURPOSES. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IN A MANNER SATISFACTORY TO THE MUNICIPALITY AND THE COUNTY CONSERVATION DISTRICT.

NOTES

- THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT, ADDITIONAL EASEMENTS AND OR RIGHTS OF WAY MAY EXIST.
- THE VERTICAL DATUM FOR THIS SURVEY WAS ASSUMED, THE SITE BENCHMARK IS A PK NAIL SET IN THE CONCRETE WALK. (SEE PLAN FOR BENCHMARK LOCATION) ELEVATION 100.00.
- TOPOGRAPHIC FEATURES ARE BASED ON A SURVEY PERFORMED BY BOUCHER AND JAMES, INC. COMPLETED IN OCTOBER OF 2012 AND REPRESENTS EXISTING CONDITIONS AT THAT TIME.

LOT AREA SUMMARY T.M.P. 20-21-5

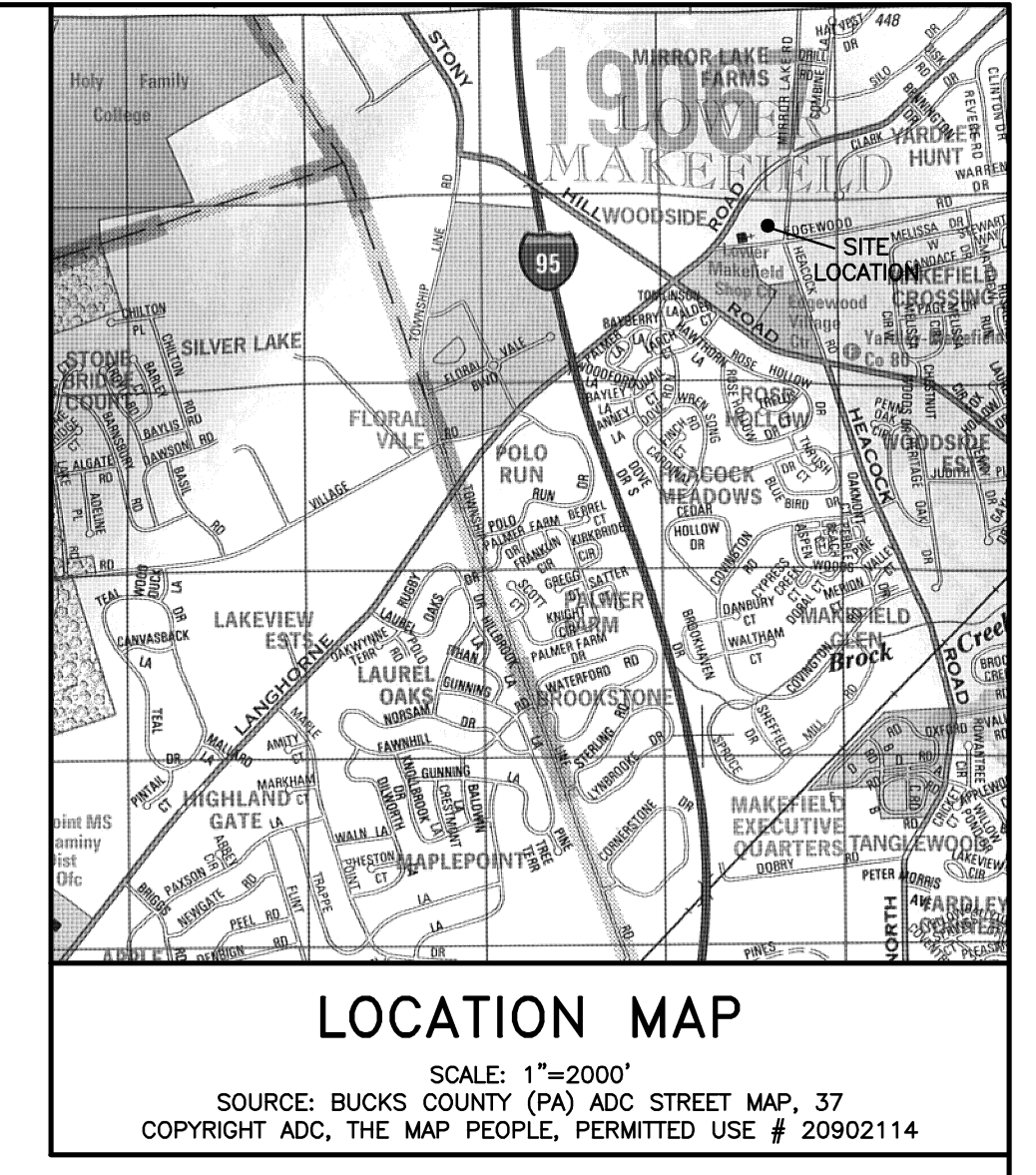
LOT AREA2.87 AC. (TAX MAP)
OWNER..... LOWER MAKEFIELD TOWNSHIP
1100 EDGEWOOD DRIVE
YARDLEY PA, 19067

TEMPORARY SEEDING SPECIFICATIONS

LIME: 190 LBS/1000 S.F.
GROUND LIMESTONE INCORPORATED 4 INCHES INTO SOIL.
FERTILIZER: 25 LBS/1000 S.F.
10-20-20 INCORPORATED 4 INCHES INTO SOIL.
SEED: 1.0 LBS/1000 S.F.
ANNUAL RYEGRASS
MULCH 140 LBS/1000 S.F.
MINIMUM STANDARD FOR LIMESTONE AND FERTILIZER
LIMESTONE SHALL BE APPLIED AT A RATE OF 1 TON PER ACRE
FERTILIZER SHALL BE APPLIED AT THE RATE OF:
NITRATE NITROGEN: 30 LBS/ACRE AVERAGE.
PHOSPHORUS: 100 LBS/ACRE AVERAGE.
POTASSIUM: 120 LBS/ACRE AVERAGE.

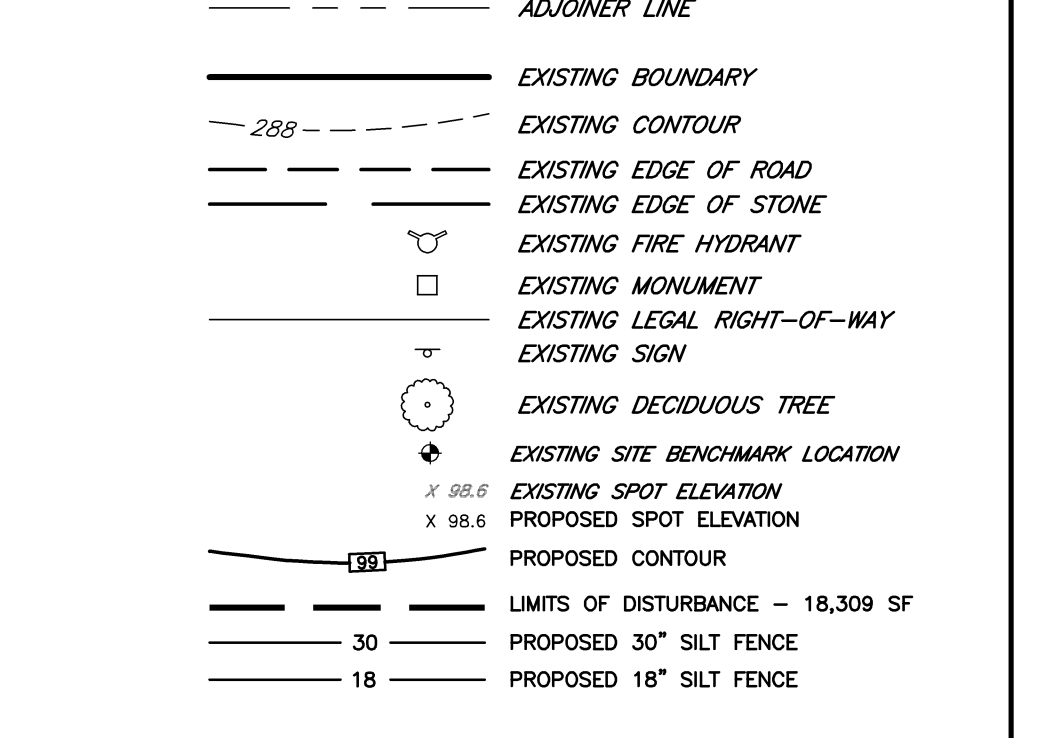
PERMANENT SEEDING SPECIFICATIONS

LIME: 190 LBS/1000 S.F.
GROUND LIMESTONE INCORPORATED 4 INCHES INTO SOIL.
FERTILIZER: 25 LBS/1000 S.F.
10-20-20 INCORPORATED 4 INCHES INTO SOIL.
SEEDING: LAWN AND MOWED AREAS KENTUCKY BLUEGRASS 30 LBS/AC
REDTOP 3 LBS/AC
PERENNIAL RYEGRASS 20 LBS/AC
TOTAL SEEDING= 63 LBS/AC
OR
PENNLAWN-FINE FESCUE 40 LBS/AC
REDTOP 3 LBS/AC
PERENNIAL RYEGRASS 20LBS/AC
TOTAL SEEDING= 63LBS/AC
SLOPES OR UNMOWED AREAS CROWN VETCH 25 LBS/AC
PERENNIAL RYEGRASS 20 LBS/AC
TOTAL SEEDING= 50 LBS/AC
PLANTING DATE: MARCH 1ST TO MAY 15TH AND AUGUST 15TH TO OCTOBER 15TH
MULCH: STRAW AT A RATE OF 140 LBS/1000SF. MULCH SHALL BE SECURED BY APPROVED METHODS



LOCATION MAP

SCALE: 1"=2000'
SOURCE: BUCKS COUNTY (PA) ADD STREET MAP, 37
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LEGEND

- ADJOINER LINE
- EXISTING BOUNDARY
- EXISTING CONTOUR
- EXISTING EDGE OF ROAD
- EXISTING EDGE OF STONE
- EXISTING FIRE HYDRANT
- EXISTING MONUMENT
- EXISTING LEGAL RIGHT-OF-WAY
- EXISTING SIGN
- EXISTING DECIDUOUS TREE
- EXISTING SITE BENCHMARK LOCATION
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- LIMITS OF DISTURBANCE - 18,309 SF
- PROPOSED 30" SILT FENCE
- PROPOSED 18" SILT FENCE

CONSTRUCTION SEQUENCE

- BEFORE EARTH DISTURBANCE BEGINS, THE LANDOWNER SHALL BE THOROUGHLY FAMILIAR WITH EROSION AND SEDIMENT CONTROL RULES AND REGULATIONS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- AT LEAST THREE WORKING DAYS BEFORE STARTING ANY EARTH DISTURBANCE, THE LANDOWNER SHALL NOTIFY THE BUCKS COUNTY CONSERVATION DISTRICT. AT LEAST THREE DAYS BEFORE EARTH DISTURBANCE BEGINS, THE CONTRACTOR SHALL CONTACT THE PENNSYLVANIA ONE-CALL SYSTEM, AT 1-800-242-1776, TO OBTAIN INFORMATION ON BURIED UTILITY LOCATIONS.
- EARTH DISTURBANCE AND CONSTRUCTION MUST PROCEED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE. EACH STAGE IN THE SEQUENCE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE BEGINS. CLEARING AND GRUBBING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE.
- ALL EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. ONLY LIMITED DISTURBANCE IS PERMITTED TO PROVIDE ACCESS TO THE EROSION AND SEDIMENT CONTROL AREAS FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
- INSTALL ROCK CONSTRUCTION ENTRANCE, STONES, MUD, DIRT AND /OR CONSTRUCTION DEBRIS MUST BE REMOVED FROM ALL ROADWAYS AND DRIVEWAYS IMMEDIATELY UPON OBSERVATION BY THE CONTRACTOR. UNDER NO CIRCUMSTANCES WILL STONES, MUD, DEBRIS, ETC. BE ALLOWED TO REMAIN ON ROAD SURFACES FOR ANY PERIOD OF TIME.
- INSTALL SILT FENCE AS SHOWN ON PLAN. IMMEDIATELY STABILIZE DISTURBED AREAS.
- CLEAR AND GRUB SITE. STRIP TOPSOIL AND STOCKPILE WHERE INDICATED ON PLAN FOR USE WITH FINAL GRADING. INSTALL PERIMETER FILTER FABRIC FENCE AROUND STOCKPILES AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO ALL DISTURBED AREAS.
- ROUGH GRADE MEMORIAL AREA TO THE PROPOSED SUB-GRADE ELEVATION. INSTALL ELECTRIC CONDUIT AND IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCHING TO ALL DISTURBED AREAS.
- COMPLETE MEMORIAL CONSTRUCTION.
- FINISH GRADE ALL LAWN AREAS AND PERMANENTLY SEED ALL EXPOSED AREAS.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROLS MUST BE REMOVED. THE STANDARD FOR A STABILIZED, EROSION RESISTANT, PERENNIAL VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.

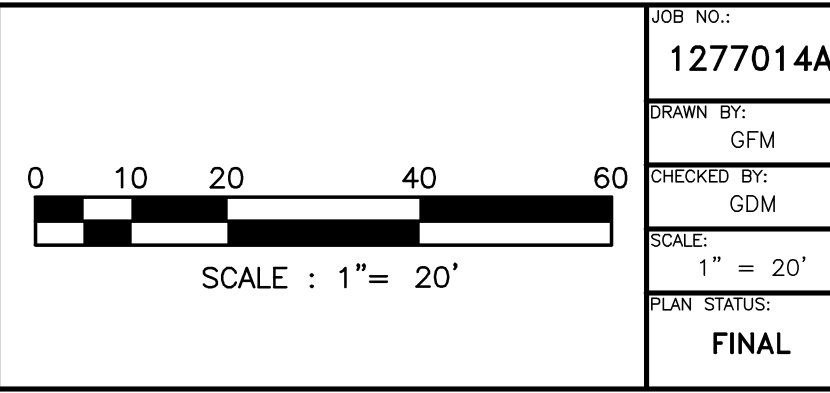
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REVISIONS:

DATE	DESCRIPTION	DATE	DESCRIPTION
03/26/2014	REVISED GRADING, TOPSOIL STOCKPILE LOCATION AND LIMITS OF DISTURBANCE. ADDED MATERIAL STORAGE AREA.		

PROJECT: VETERANS SQUARE MEMORIAL
LOWER MAKEFIELD TOWNSHIP
BUCKS COUNTY, PA

APPLICANT: LOWER MAKEFIELD TOWNSHIP
1100 EDGEWOOD DRIVE
YARDLEY PA, 19067



GRADING AND EROSION & SEDIMENTATION CONTROL PLAN

Boucher & James, Inc.
CONSULTING ENGINEERS
DOYLESTOWN • STROUDSBURG • MORGANTOWN

CORPORATE HEADQUARTERS: 1456 FERRY RD, BUILDING 500, DOYLESTOWN, PA. 18901
VOICE: (215) 345-9400 FAX: (215) 345-9401

SHEET 1 OF 1

VETERANS SQUARE MEMORIAL

DATE: OCTOBER 16, 2012

P:\2013\1272014\4.dwg Final Design & SEDIMENTATION Mar. 26, 2014 - 4:28pm T:\bname EROSION & SEDIMENTATION