# ATLANTIC COAST PIPELINE PROJECT CONTRACTOR YARDS

HIGHLAND, AUGUSTA, ROCKBRIDGE, BUCKINGHAM, AND BRUNSWICK COUNTIES, VIRGINIA

# EROSION & SEDIMENT CONTROL PLAN

#### PROJECT CONTACTS



#### OWNER/APPLICAN

DOMINION TRANSMISSION, INC. 5000 DOMINION BOULEVARD GLEN ALLEN, VA 23060 PHONE: 804-335-4923



#### CONSULTANT

ENVIRONMENTAL RESOURCES
1000 IDS CENTER
80 SOUTH EIGHTH STREET
MINNEAPOLIS, MN 55402
WAYNE SICORA, PE, CPESC
612-347-7128
wayne sicora@erm.com

#### EXISTING INFORMATION SOURCES

CONTOURS AND BASE MAP PROVIDED BY I3
CONSULTING, LLC WITH ADDITIONAL CONTOURS
OBTAINED FROM THE USGS NATIONAL ELEVATION

#### PLAN REPRODUCTION WARNING

THE PLANS HAVE BEEN CREATED ON 24"X36" SHEETS FOR REDUCTIONS, REFER TO GRAPHIC SCALE.

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING, AND SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.

\*\*\*WARNING\*\*\* INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING.

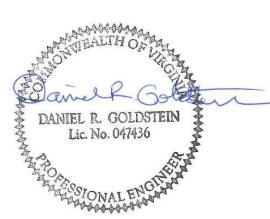
#### **GENERAL NOTE**

ERM HAS DEPICTED EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) ON THESE PLAN SHEETS PREPARED BY OTHERS FOR USE BY CONTRACTOR TO CONTROL EROSION AND SEDIMENTATION DURING CONSTRUCTION OF THIS PROJECT. ERM IS RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED. ERM RETAINS NO RESPONSIBILITY OR LIABILITY FOR INFORMATION DEVELOPED, PREPARED OR OTHERWISE PROVIDED BY OTHERS, OR FOR INACCURACIES OF SOURCE DATA PROVIDED BY OTHERS. ERM ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DESIGNS OR WORK PRODUCTS OF ANY TYPE TO THE EXTENT THAT THEY ARE BASED UPON OR DERIVED FROM SUCH INCORRECT INFORMATION OR DATA.



THREE DAYS BEFORE YOU DIG CALL VA ONE CALL SYSTEM TOLL FREE 811 OR 1-800-552-7001





# SHEET INDEX

FILLED CIRCLE INDICATES DRAWING INCLUDED WITHIN THIS ISSUE

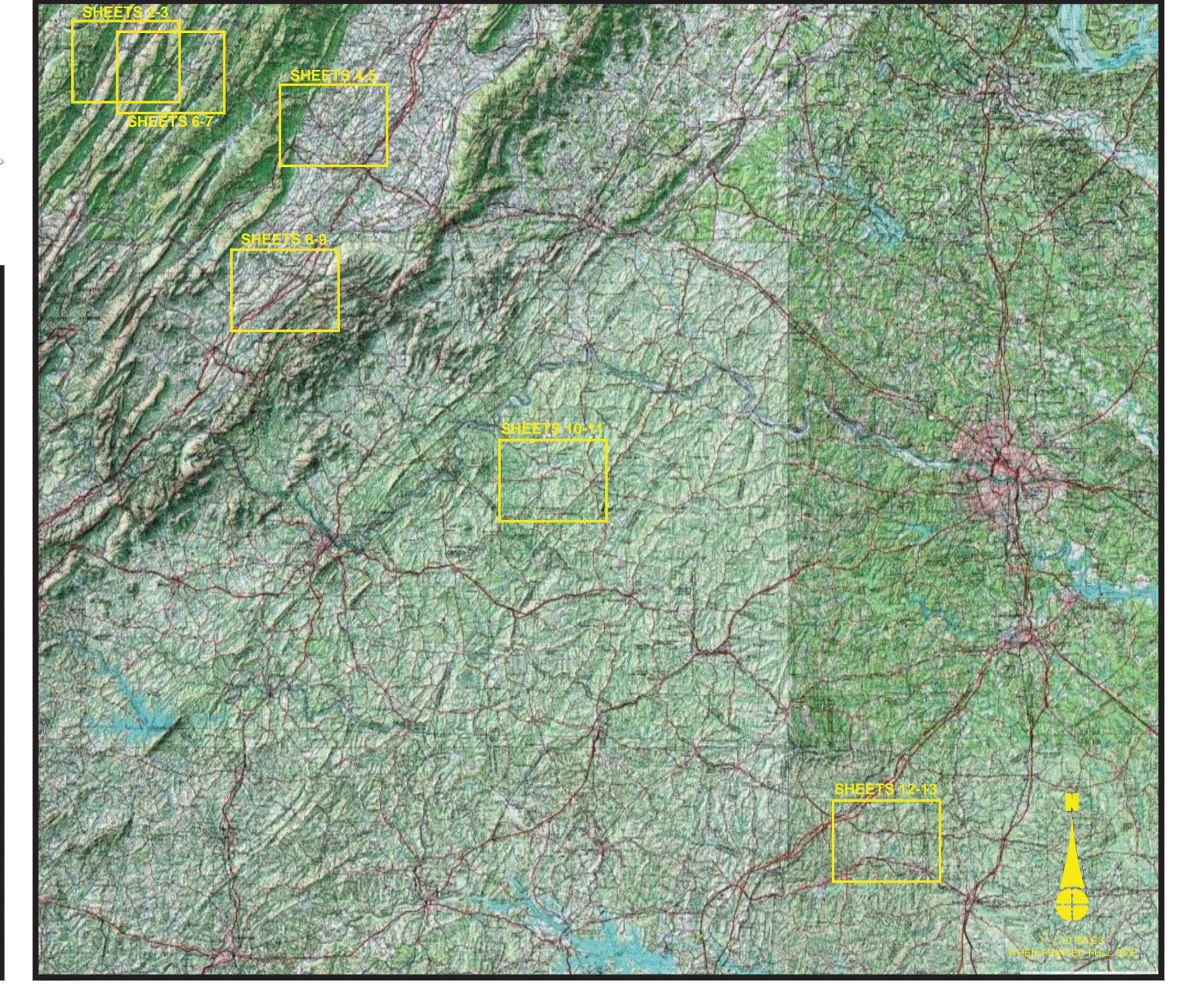
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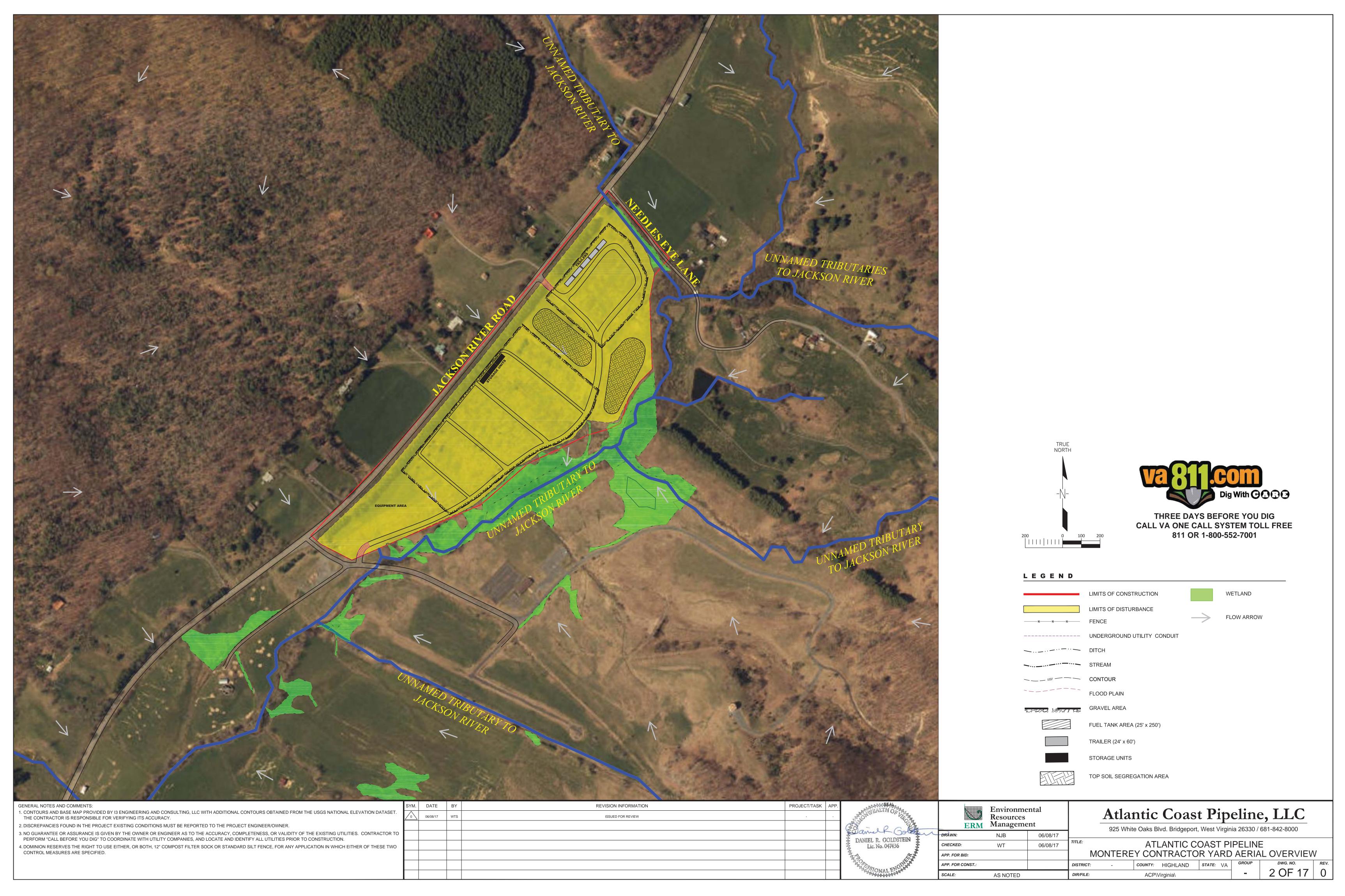
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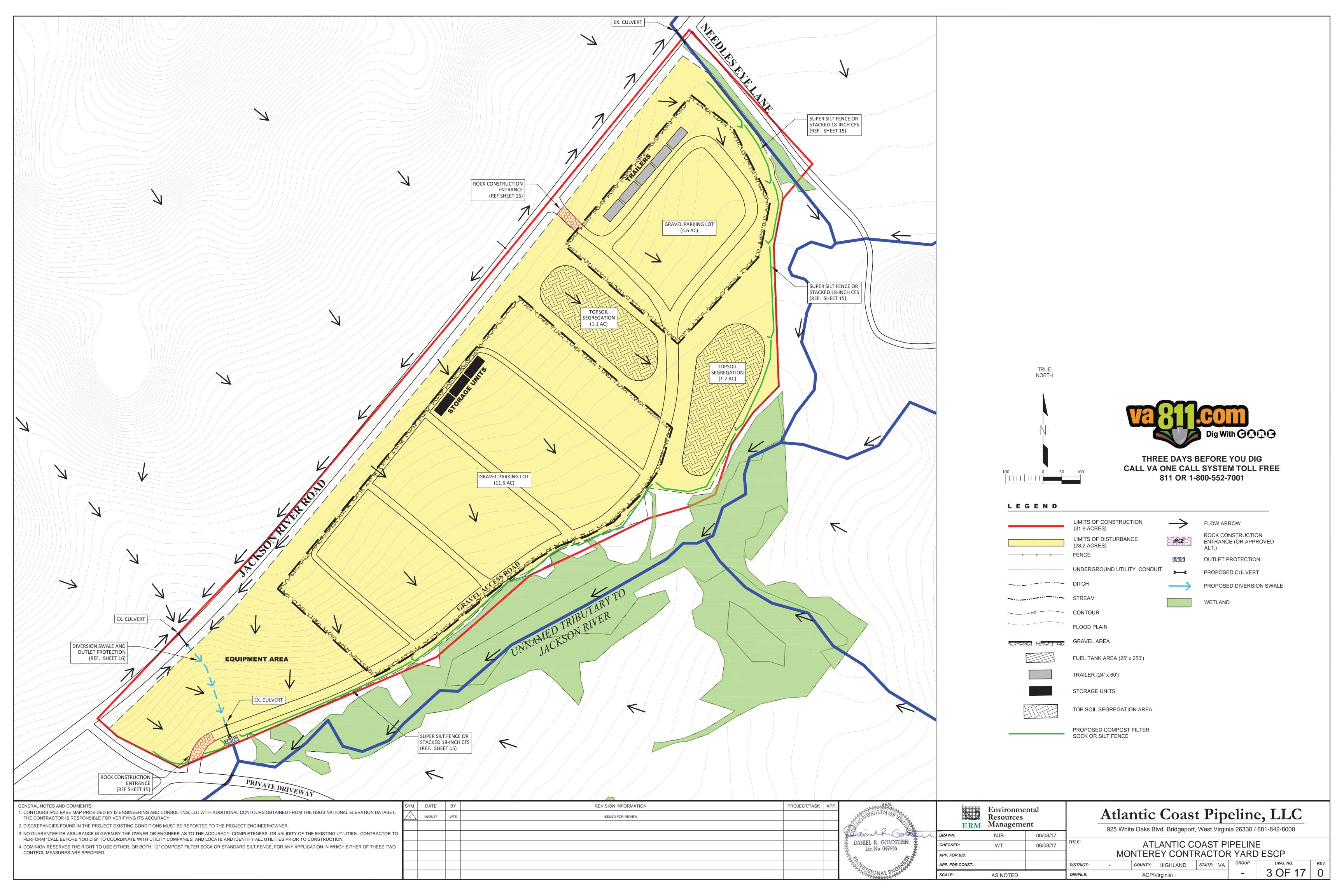
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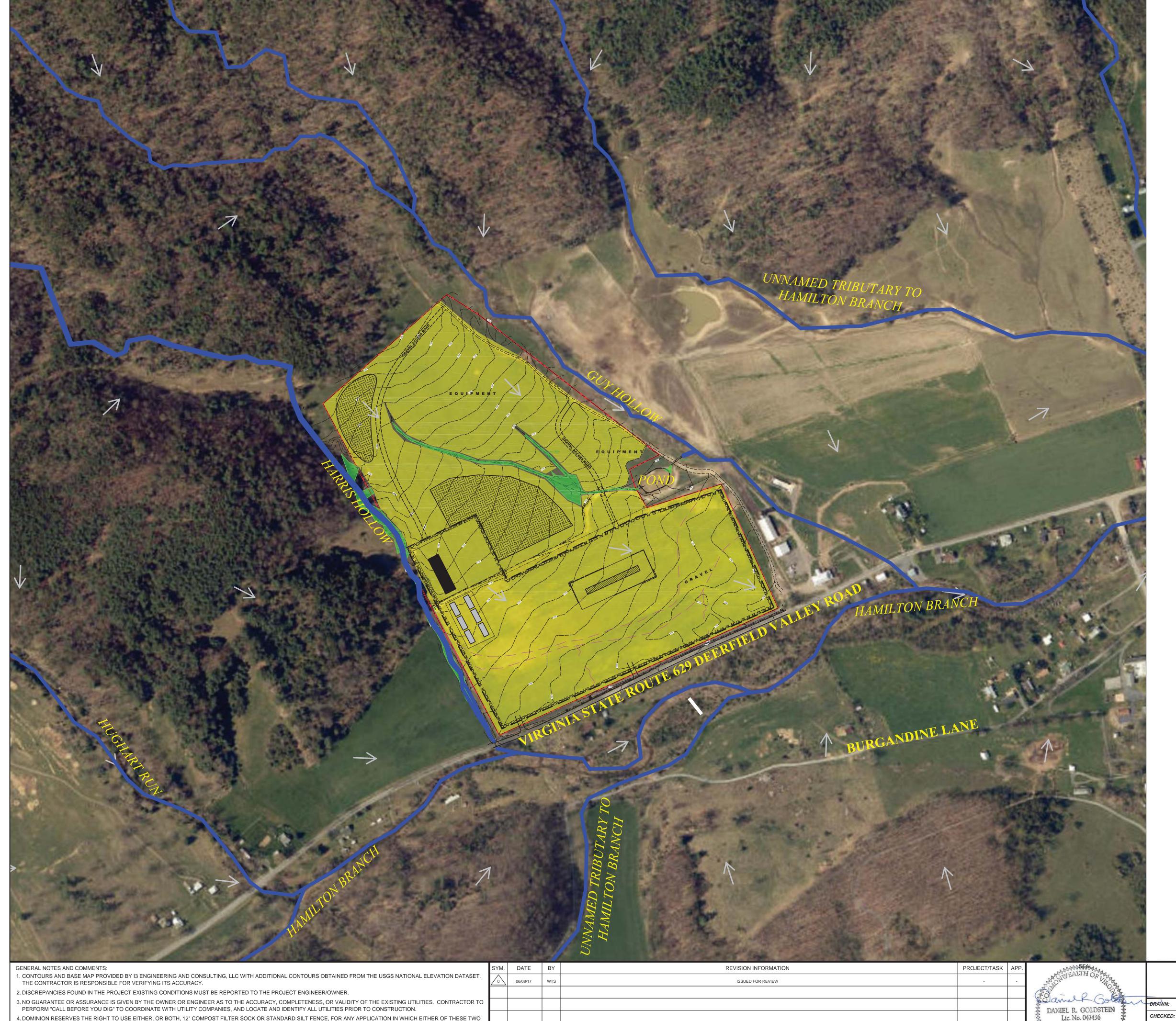
	06/19/2017	SHEET 1 - COVER SHEET					
	06/19/2017	SHEET 2 - MONTEREY (CY SPR 03-A) AERIAL OVERVIEW					
	06/19/2017	SHEET 3 - MONTEREY (CY SPR 03-A) ESCP					
	06/19/2017	SHEET 4 - DEERFIELD (SP4A_CY GWNF-6 SPR04-A) AERIAL OVERVIEW					
	06/19/2017	SHEET 5 - DEERFIELD (SP4A_CY GWNF-6 SPR04-A) ESCP					
	06/19/2017	SHEET 6 - MCDOWELL (CY SPR 04-A) AERIAL OVERVIEW					
	06/19/2017	SHEET 7 - MCDOWELL (CY SPR 04-A) ESCP					
	06/19/2017	SHEET 8 - STEELES TAVERN (SP5_CY SPR05-C) AERIAL OVERVIEW					
	06/19/2017	SHEET 9 - STEELES TAVERN (SP5_CY SPR05-C) ESCP					
	06/19/2017	SHEET 10 - BUCKINGHAM (CY SPR 06-C) AERIAL OVERVIEW					
	06/19/2017	SHEET 11 - BUCKINGHAM (CY SPR 06-C) ESCP					
	06/19/2017	SHEET 12 - EMPORIA (SP7_CY SPR07-B) AERIAL OVERVIEW					
	06/19/2017	SHEET 13 - EMPORIA (SP7_CY SPR07-B) ESCP					
	06/19/2017	SHEET 14 - ESCP NOTES					
	06/19/2017	SHEET 15 - ESCP DETAILS					
	06/19/2017	SHEET 16 - ESCP DETAILS					
	06/19/2017	SHEET 17 - ESCP DETAILS					
DRAV	DRAWING INDEX LEGEND						

# LOCATION MAP

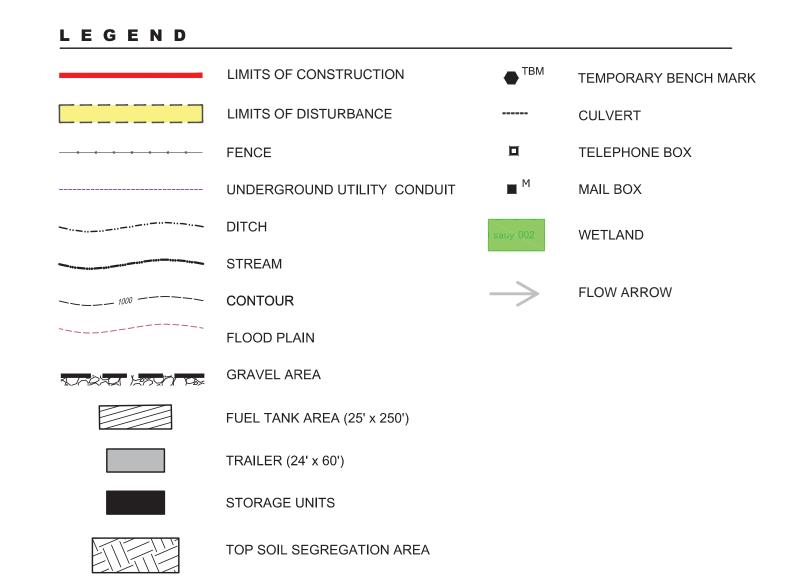












4. DOMINION RESERVES THE RIGHT TO USE EITHER, OR BOTH, 12" COMPOST FILTER SOCK OR STANDARD SILT FENCE, FOR ANY APPLICATION IN WHICH EITHER OF THESE TWO CONTROL MEASURES ARE SPECIFIED.

APP. FOR BID:

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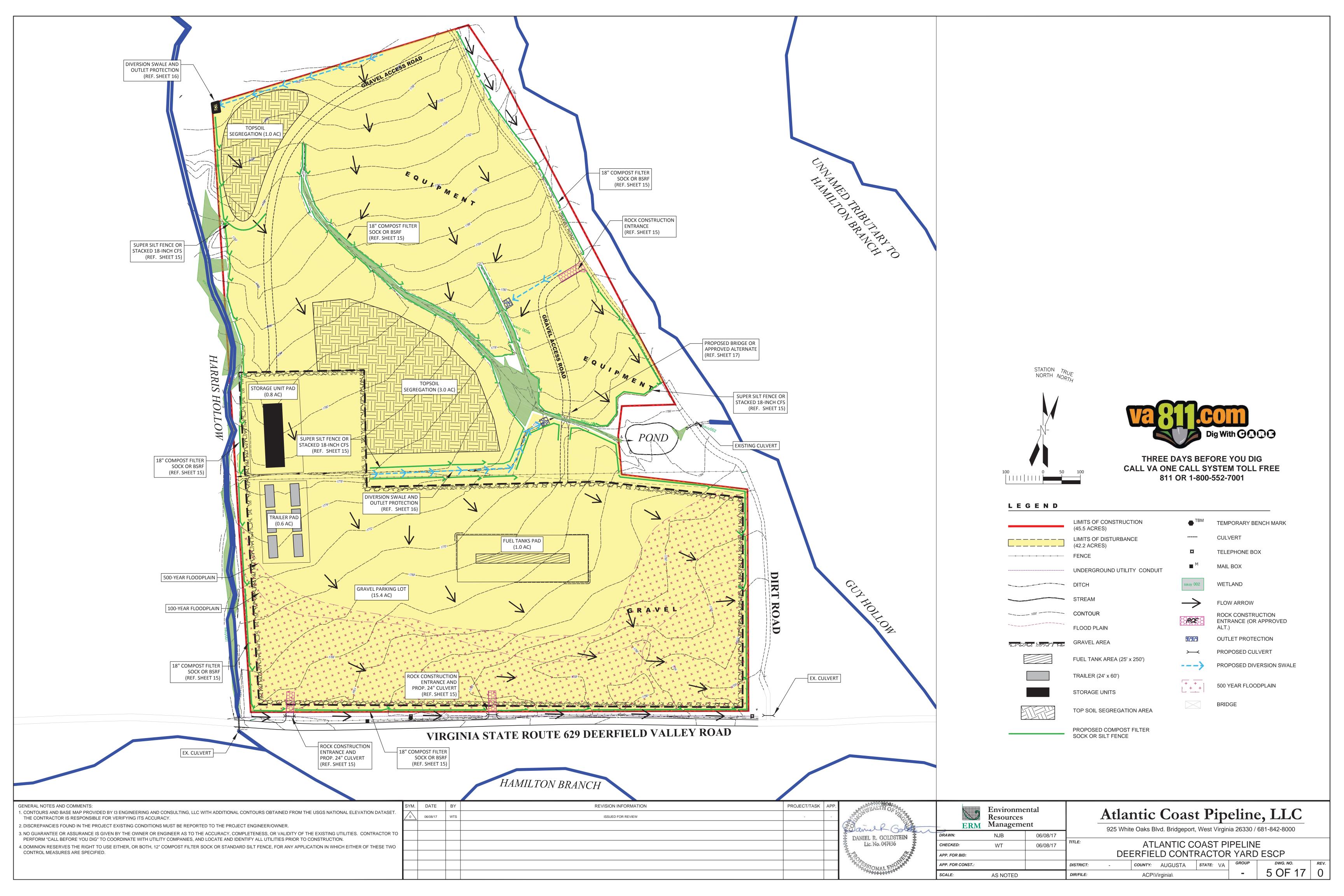
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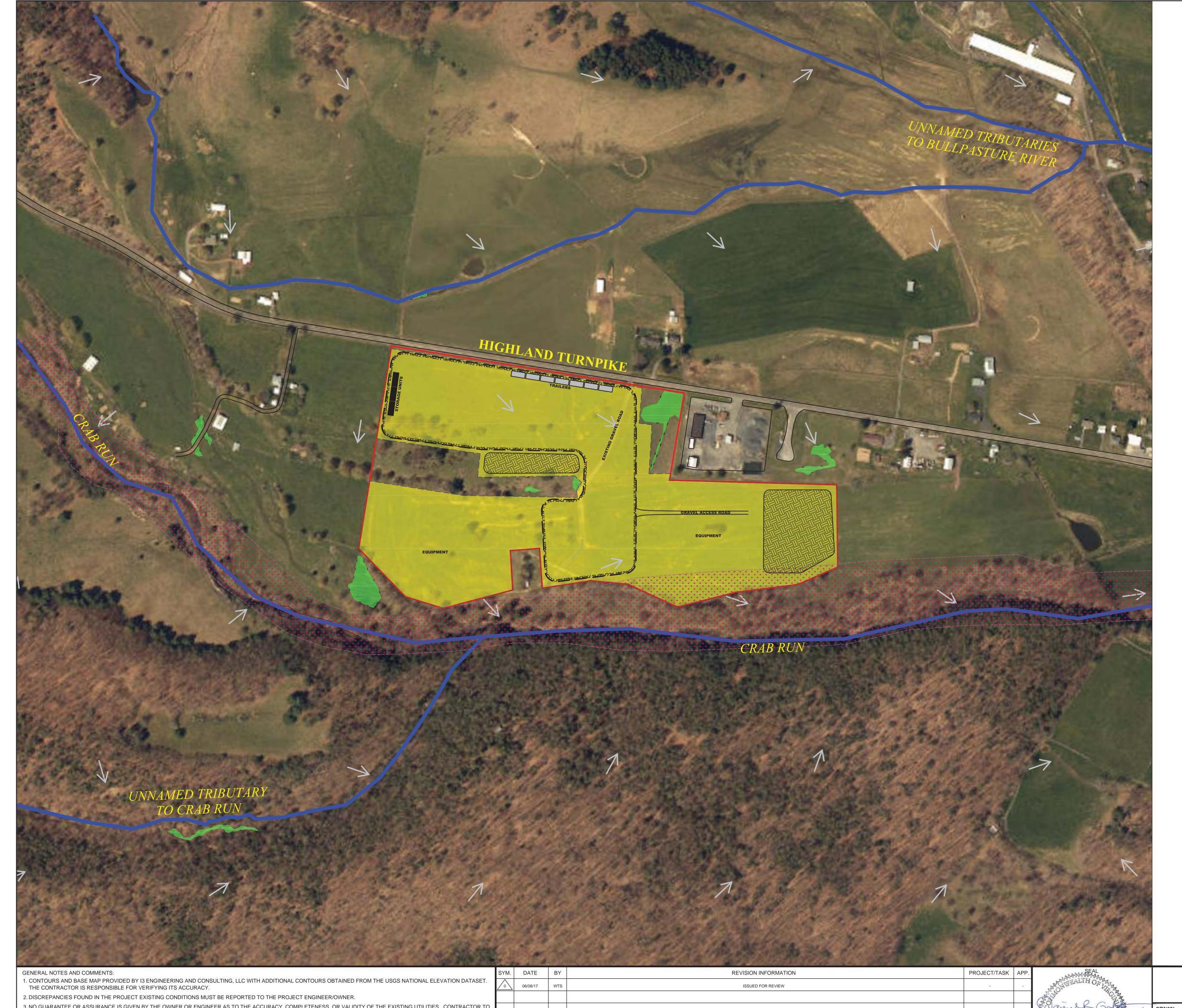
Atlantic Coast Pipeline, LLC

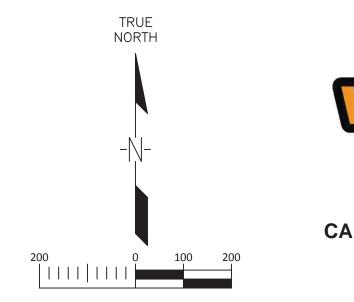
925 White Oaks Blvd. Bridgeport, West Virginia 26330 / 681-842-8000 06/08/17

ATLANTIC COAST PIPELINE DEERFIELD CONTRACTOR YARD AERIAL OVERVIEW 06/08/17 4 OF 17 0

APP. FOR CONST.: DISTRICT: AS NOTED DIR/FILE: ACP\Virginia\









#### LEGEND

LIMITS OF CONSTRUCTION LIMITS OF DISTURBANCE 

WETLAND FLOW ARROW

----- UNDERGROUND UTILITY CONDUIT

100 YEAR FLOODPLAIN

FLOOD PLAIN

GRAVEL AREA

FUEL TANK AREA (25' x 250')

STORAGE UNITS

TRAILER (24' x 60')

TOP SOIL SEGREGATION AREA

3. NO GUARANTEE OR ASSURANCE IS GIVEN BY THE OWNER OR ENGINEER AS TO THE ACCURACY, COMPLETENESS, OR VALIDITY OF THE EXISTING UTILITIES. CONTRACTOR TO PERFORM "CALL BEFORE YOU DIG" TO COORDINATE WITH UTILITY COMPANIES, AND LOCATE AND IDENTIFY ALL UTILITIES PRIOR TO CONSTRUCTION. 4. DOMINION RESERVES THE RIGHT TO USE EITHER, OR BOTH, 12" COMPOST FILTER SOCK OR STANDARD SILT FENCE, FOR ANY APPLICATION IN WHICH EITHER OF THESE TWO CONTROL MEASURES ARE SPECIFIED.

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# DANIEL R. GOLDSTEIN Lic. No. 047436 APP. FOR BID:

# Environmental Resources Management

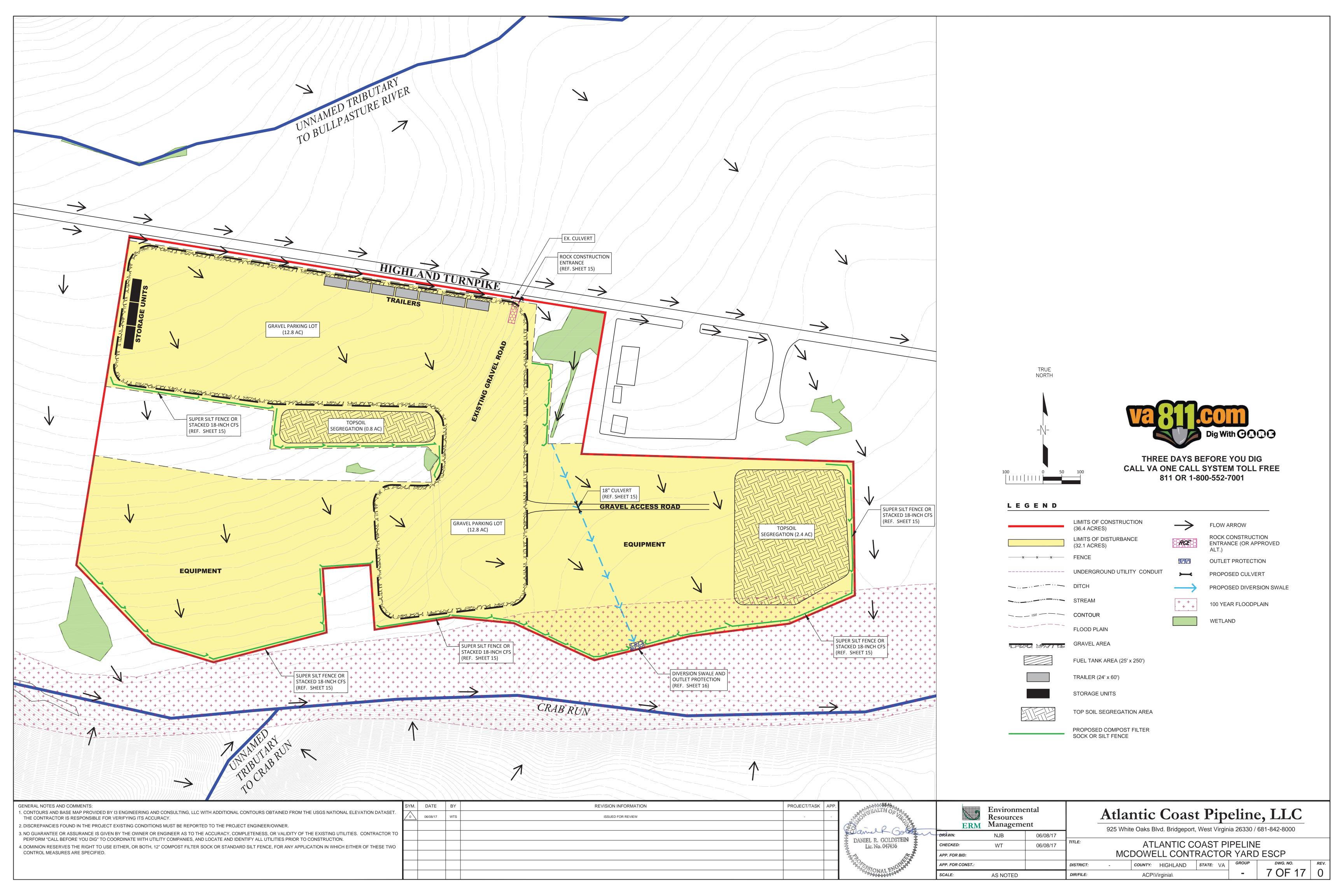
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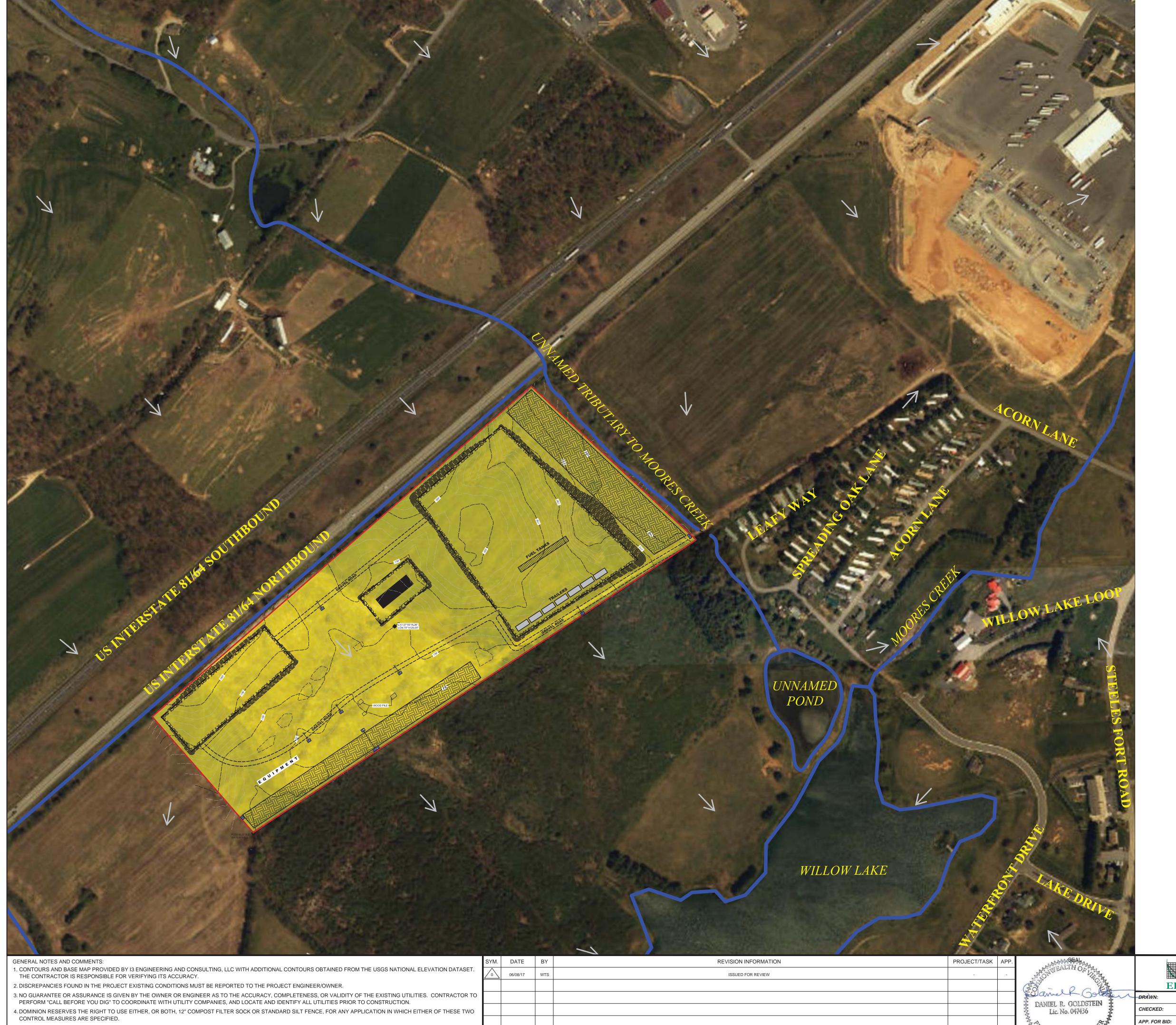
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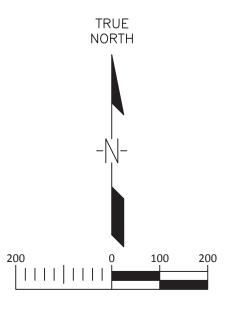
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LEGEND LIMITS OF CONSTRUCTION LIMITS OF DISTURBANCE SPOIL AREAS DITCH -\_\_\_1800 ---- CONTOUR VIRGINIA DEPARTMENT OF TRANSPORTATION MARKER FIRE HYDRANT FUEL TANK AREA (25' x 250') TRAILER (24' x 60') STORAGE UNITS TOP SOIL SEGREGATION AREA GRAVEL AREA FLOW ARROW

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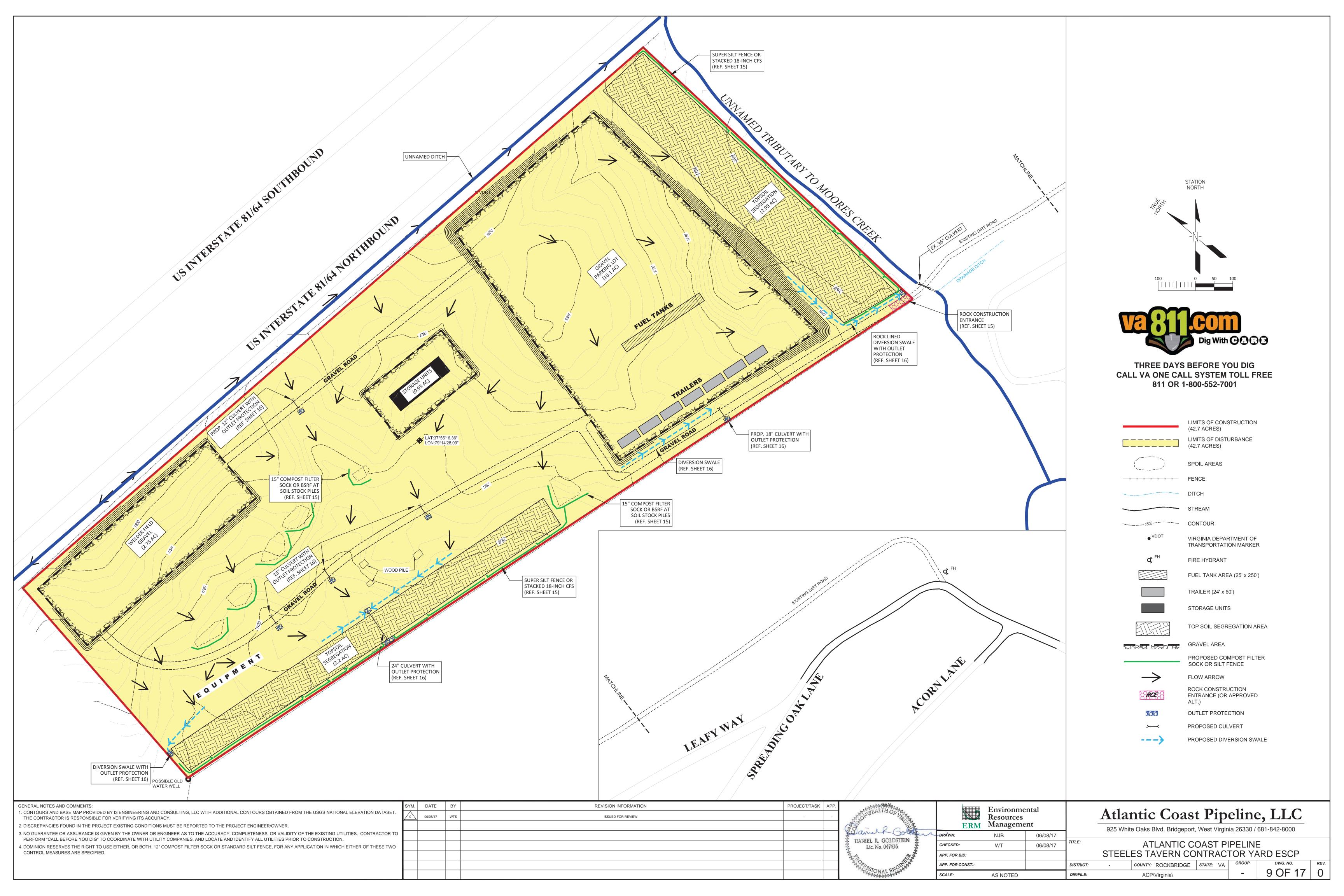
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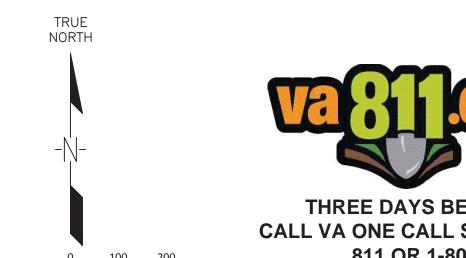
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ATLANTIC COAST PIPELINE
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L E G E N D LIMITS OF DISTURBANCE

LIMITS OF CONSTRUCTION

WETLAND

FLOW ARROW 100 YEAR FLOODPLAIN

FLOOD PLAIN

DIR/FILE:

FUEL TANK AREA (25' x 250')

TRAILER (24' x 60')

STORAGE UNITS

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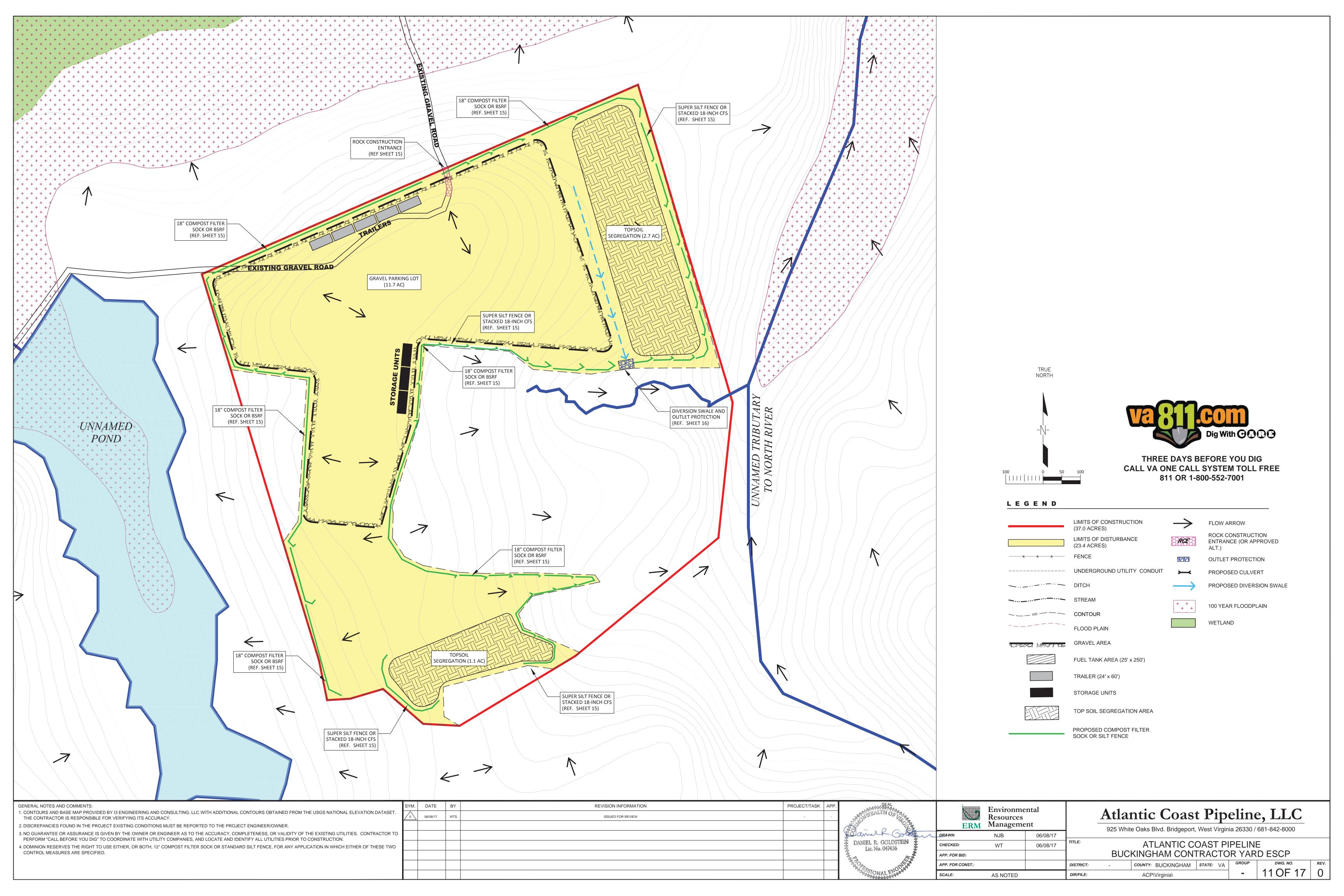
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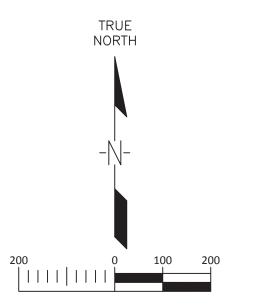
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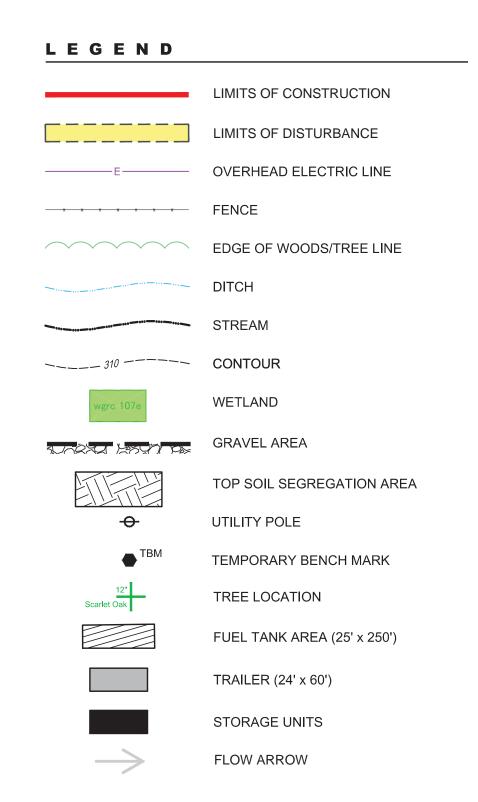
ATLANTIC COAST PIPELINE
BUCKINGHAM CONTRACTOR YARD AERIAL OVERVIEW 06/08/17 - 10 OF 17 0











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1. CONTOURS AND BASE MAP PROVIDED BY 13 ENGINEERING AND CONSULTING, LLC WITH ADDITIONAL CONTOURS OBTAINED FROM THE USGS NATIONAL ELEVATION DATASET. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ITS ACCURACY.

2. DISCREPANCIES FOUND IN THE PROJECT EXISTING CONDITIONS MUST BE REPORTED TO THE PROJECT ENGINEER/OWNER. 3. NO GUARANTEE OR ASSURANCE IS GIVEN BY THE OWNER OR ENGINEER AS TO THE ACCURACY, COMPLETENESS, OR VALIDITY OF THE EXISTING UTILITIES. CONTRACTOR TO

PERFORM "CALL BEFORE YOU DIG" TO COORDINATE WITH UTILITY COMPANIES, AND LOCATE AND IDENTIFY ALL UTILITIES PRIOR TO CONSTRUCTION. 4. DOMINION RESERVES THE RIGHT TO USE EITHER, OR BOTH, 12" COMPOST FILTER SOCK OR STANDARD SILT FENCE, FOR ANY APPLICATION IN WHICH EITHER OF THESE TWO CONTROL MEASURES ARE SPECIFIED.

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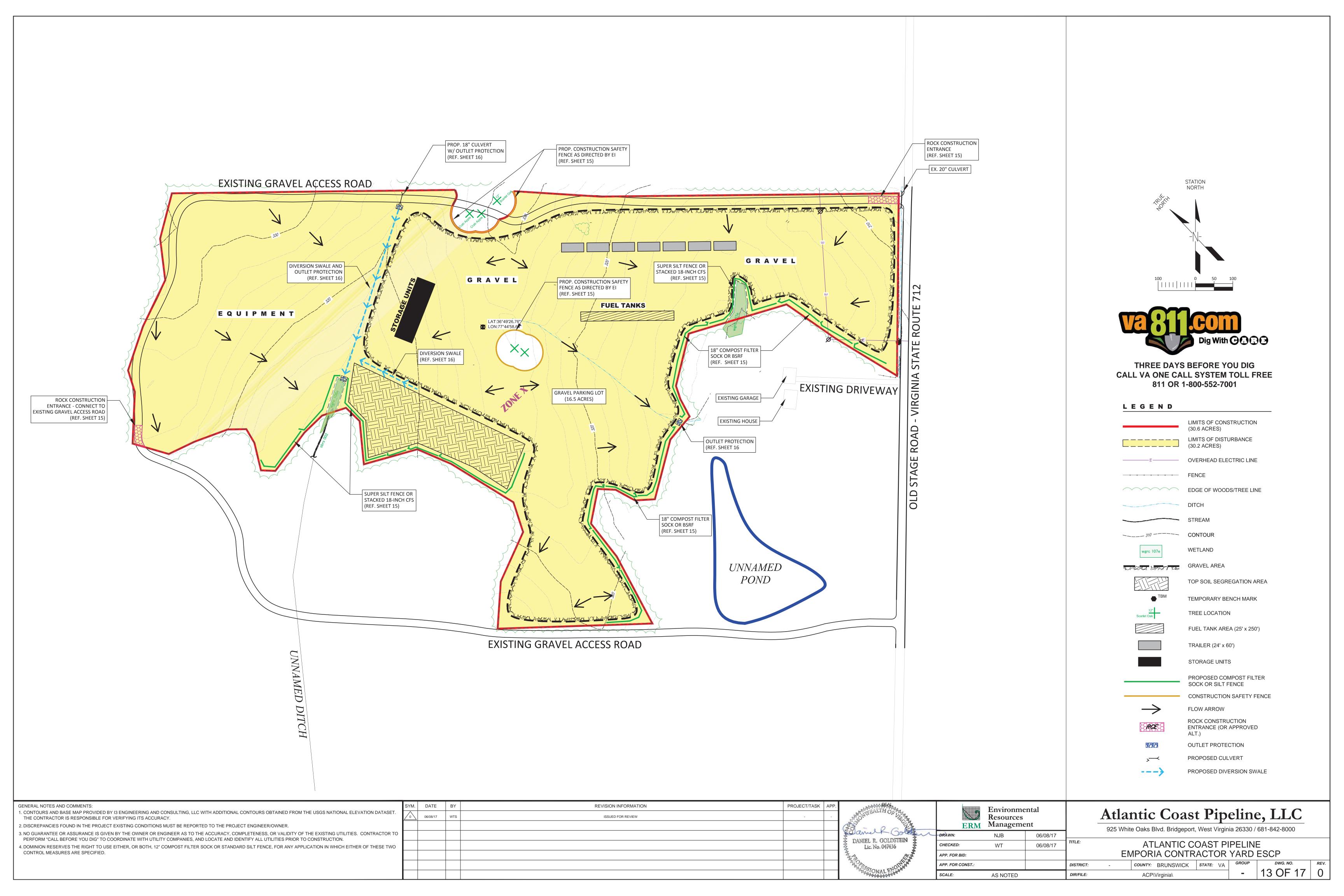
DANIEL R. GOLDSTEIN Lic. No. 047436

## Atlantic Coast Pipeline, LLC

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	EMPORIA CONTRACTOR YARD AERIAL OVERVIEW

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#### GENERAL EROSION AND SEDIMENT CONTROL PLAN NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 9VAC25-840: EROSION AND SEDIMENT CONTROL REGULATIONS.
- 2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- 3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- 7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- 8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- 9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

#### **EROSION AND SEDIMENT CONTROL PLAN NARRATIVE**

THE EROSION AND SEDIMENT (E&S) CONTROL MEASURES FOR THE CONTRACTOR YARD ACTIVITIES CONSIST OF, BUT ARE NOT LIMITED TO, SAFETY FENCE, COMPOST FILTER SOCK, BELTED SILT RETENTION FENCE, WATERBARS, TRENCH PLUGS, ROCK CONSTRUCTION ENTRANCES, DIVERSION SWALES, CULVERTS, OUTLET PROTECTION, AND TEMPORARY AND PERMANENT SEEDING AND MULCHING. BEST MANAGEMENT PRACTICES (BMP) SPECIFICATIONS FOR THE E&S CONTROL PLAN (E&SCP) ARE TO BE UTILIZED BY THE CONSTRUCTION CONTRACTOR ACCORDING TO THE PROVIDED PLAN.

#### GENERAL CONSTRUCTION NOTES:

- 1. DISCHARGING SEDIMENT LADEN WATER WHICH WILL CAUSE OR CONTRIBUTE TO THE DEGRADATION OF A BENEFICIAL USE OF A WATER OF THE STATE FROM THE CONSTRUCTION SITE, A DEWATERING SITE, INTO ANY WATERBODY OR STORM DRAIN WITHOUT FILTRATION OR EQUIVALENT TREATMENT IS PROHIBITED.
- 2. THE DISCHARGER SHALL AMEND THE EROSION & SEDIMENT CONTROL PLAN WHENEVER THERE IS A CHANGE IN THE CONSTRUCTION OR OPERATIONS, WHICH MAY EFFECT THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS, GROUNDWATER, OR A MUNICIPAL STORM DRAIN SYSTEM.
- 3. DISCHARGES ORIGINATING FROM OFF-SITE SOURCES, WHICH FLOW THROUGH OR ACROSS THE AREAS DISTURBED BY CONSTRUCTION, SHALL BE DIVERTED AROUND THE ACTIVE CONSTRUCTION AREA WHENEVER POSSIBLE.
- 4. SOIL STABILIZATION (TEMPORARY SEED AND MULCHING) PROCEDURES WILL TAKE PLACE WITHIN 7 DAYS IF AREA IS TO BE LEFT IDLE FOR 21 DAYS AND/OR PRIOR TO PERIODS OF CESSATION IN CONSTRUCTION ACTIVITIES. PERMANENT STABILIZATION MUST ULTIMATELY BE COMPLETED IN ALL DISTURBED AREAS.
- 5. DUE TO VARYING SITE CONDITIONS, ADDITIONAL SEDIMENT CONTROL BMPS MAY BE NECESSARY BEYOND THE MEASURES SHOWN ON THE E&S CONTROL PLAN.
- 6. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES, LOCATED WITHIN THE IMMEDIATE AREA AND ABLE TO GET TO THE SITE WITHIN A REASONABLE TIMEFRAME. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON-SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY BMP DEVICES WHEN RAIN OR SNOW MELT EVENTS ARE IMMINENT.
- 7. DUE TO VARYING SITE CONDITIONS, SOIL STOCKPILE LOCATIONS/EXTENT AND LOCATION OF EROSION CONTROL MEASURES ASSOCIATED WITH THESE STOCKPILES SHALL BE PREVIEWED/APPROVED BY PROJECT EI.
- 8. STAGING AREAS, ASSEMBLY AREAS, TEMPORARY EQUIPMENT AND NON-HAZARDOUS MATERIAL STORAGE AREAS SHALL BE LOCATED OUTSIDE 100-YR FLOOD ZONES. HAZARDOUS MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM SURFACE WATER BODIES.
- 9. BMPs are to be inspected in accordance with the frequnecies stipulated in the stormwater pollution prevention plan (swppp). A written report must also be completed, documenting each inspection and, if necessary, any repair, replacement or maintenance activity.
- 10. THE LOCATION AND EXISTENCE OF EXISTING UNDERGROUND FACILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM A SEARCH OF AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN ON THE DRAWINGS, AND ANY OTHER WHICH IS NOT ON RECORD OR NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AT THE POINTS OF CONNECTION AND ALL UTILITY CROSSINGS TO DETERMINE EXACT LOCATIONS PRIOR TO THE START OF WORK. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND EXISTING CONDITIONS SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY.
- 11. ALL REQUIRED PERMITS MUST BE OBTAINED PRIOR TO STARTING WORK.

**GENERAL NOTES AND COMMENTS** 

- 12. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EXISTING AND PROPOSED SITE EROSION & SEDIMENTATION CONTROL DEVICES AND FACILITIES.
- 13. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING EROSION & SEDIMENTATION DEVICES AND SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE ENGINEER OF RECORD HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER OF RECORD.

- 14. AS SITE SPECIFIC CONDITIONS MAY WARRANT, THE E&SC PLAN MAY REQUIRE MINOR MODIFICATIONS TO ENSURE PROPER PROTECTION OF RECEIVING WATERS. THE RESPECTIVE PROJECT ENVIRONMENTAL INSPECTOR (EI) WILL IDENTIFY SITE SPECIFIC AREAS WHERE A CERTAIN BMP MODIFICATION(S) IS NECESSARY TO EITHER OMIT OR ENHANCE BMPS IN SUCH AREAS. THIS PROCESS ENTAILS THE EI TO IDENTIFY LOCATIONS WHERE BMPS WILL NEED TO BE ALTERED, SUBSTITUTED OR OMITTED AND CONTACT THE DOMINION COMPLIANCE SPECIALIST TO REVIEW PROPOSED CHANGES. UPON REVIEW AND APPROVAL BY THE DOMINION COMPLIANCE SPECIALIST, THE EI WILL REDLINE, DATE, AND SIGN THE E&SCP DRAWING(S) DEPICTING THE REDLINE CHANGE(S). ONCE THIS PROCESS IS COMPLETED BY THE EI WILL NOTIFY THE VADEQ OF SUCH MINOR MODIFICATION REDLINE AMENDMENTS AS REQUIRED BY THE GENERAL PERMIT.
- 15. FOR THE PURPOSES OF THIS DOCUMENT, THE FOLLOWING DEFINITIONS APPLY:
- a. LIMITS OF DISTURBANCE (LOD) THE BOUNDARY WITHIN WHICH GROUND DISTURBANCE OCCURS (OR MAY OCCUR) AS A RESULT OF CONSTRUCTION RELATED ACTIVITIES.
- b. LIMITS OF CONSTRUCTION (LOC) THE BOUNDARY WITHIN WHICH GROUND DISTURBANCE OCCURS AS A RESULT OF THE CONSTRUCTION RELATED ACTIVITIES, IDENTIFIED AS LIMITS OF DISTURBANCE (LOD) ON THE E&SC PLANS, AS WELL AS WORK AREAS INCLUDING VEHICLE PARKING AND EQUIPMENT AND MATERIAL STAGING.

#### BMP INSTALLATION AND REMOVAL SEQUENCE

CONSTRUCTION MUST BE IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. THIS SEQUENCE IS DESIGNED TO MINIMIZE SOIL EROSION AND SEDIMENTATION. THE CONTRACTOR MAY DEVIATE SLIGHTLY FROM THE STAGING OF PERMANENT SITE IMPROVEMENTS, BUT NO DEVIATION FROM THE RELATIVE ORDER OF EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE ALLOWED.

THE STAGING OF EARTHMOVING ACTIVITIES FOR THIS PROJECT IS A GENERAL DESCRIPTION OF THE WORK REQUIRED. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH COMPANY STANDARDS, THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY REGULATIONS AND ALL OTHER APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS.

THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN INCLUDING THE SOIL EROSION CONTROL DRAWINGS AND NARRATIVE SHALL BE AVAILABLE ON SITE AT ALL TIMES DURING EARTH DISTURBANCE.

- 1. STAKE/FLAG ALL LIMITS OF DISTURBANCE FOR CONSTRUCTION ACTIVITIES, CLEARLY IDENTIFYING WETLAND AND STREAM EDGES. INSTALL SIGNS TO DESIGNATE THE AREA TO IDENTIFY IMPORTANT PROJECT ATTRIBUTES SUCH AS WETLAND/STREAM BOUNDS, EXCLUSION AREAS ETC.
- 2. INSTALL ROCK CONSTRUCTION ENTRANCE IMMEDIATELY BEFORE INITIAL DISTURBANCES. THE ROCK CONSTRUCTION ENTRANCE TO BE UNDERLAIN BY FILTER FABRIC. ALL CONSTRUCTION TRAFFIC SHOULD USE ONLY ROCK CONSTRUCTION ENTRANCE FOR INGRESS AND EGRESS. ALL MUD OR SEDIMENT TRACKED ONTO THE EXISTING ROADWAY SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY.
- 3. INSTALL EROSION CONTROL MEASURES (I.E., COMPOST FILTER SOCK AND/OR SILT FENCE) AS NECESSARY WITH THE ACCESS ROADS TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING DOWNSTREAM WATER BODIES. MAINTAIN THE ACCESS ROAD AS REQUIRED, ASSOCIATED DITCHES, AND NECESSARY OUTLET PROTECTION.
- 4. PRIOR TO GRADING AND EXCAVATION, INSTALL REMAINING EROSION CONTROL DEVICES (ECDs) SHOWN ON THE PLANS.
- 5. COMMENCE GRADING AND ASSOCIATED CUT AND FILL SLOPES. THE EARTH MOVING ACTIVITY SHALL BEGIN IN AREA OF CUT SO THAT THE CUTS CAN BE PLACED IN AREAS OF FILL.
- 6. FINALIZE CONTRACTOR YARD INSTALLATION AND ROADWAY GRADES AND PLACE TOPSOIL ON THE CUT AND FILL AREAS. IMMEDIATELY INSTALL EROSION CONTROL BLANKETS OR EQUIVALENT ON CUT AND FILL SLOPES, AFTER PLACEMENT OF STOCKPILES TOPSOIL ON EXCAVATED SLOPES, AND AS DIRECTED.
- 7. RE-DISTRIBUTION OF WET SEDIMENT FROM DEVICES AND FACILITIES SHALL ONLY BE PERMITTED UPHILL OF AN EFFECTIVE SEDIMENT CONTROL DEVICE OR FACILITY. SEDIMENT LADEN RUNOFF SHALL NOT BE ALLOWED TO FLOW DIRECTLY INTO, ONTO OR THROUGH UNPROTECTED INLETS, STORM DRAINS, AND WATER BODIES.
- 8. ANY EXPOSED TOPSOIL PILES SHOULD BE STABILIZED & SEEDED PER THE PERMIT REGULATIONS, AND BY TABLES SHOWN ON THE APPROVED EROSION CONTROL PLANS AND MULCHED WITH STRAW AS SPECIFIED BY THE PROJECT OWNER.
- 9. UPON MINIMUM 70% UNIFORM PERENNIAL VEGETATIVE GROWTH, REMOVE TEMPORARY SEDIMENT CONTROLS. REMOVE ACCUMULATED SEDIMENTS WITHIN DEVICES, RE-GRADE TO FINAL CONTOURS. STABILIZE SITE PER THE PLANS.

#### **SEQUENCE OF CONSTRUCTION**

- 1. LIMITS OF CONSTRUCTION MUST BE FIELD MARKED PRIOR TO CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
- 2. DETAILED SEQUENCE OF CONSTRUCTION:
- a. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- b. CLEAR AND GRADE AS NECESSARY FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES.
- c. INSTALL SEDIMENT CONTROL DEVICES.
- d. PREPARE "TEMPORARY" PARKING AND STORAGE AREA(S).
- e. CLEAR AND GRUB THE SITE, AS REQUIRED.
- f. START CONSTRUCTION OF THE SITE IMPROVEMENTS.
- g. BEGIN GRADING THE SITE.

DATE BY

- h. INSTALL CONTRACTOR YARD IMPROVEMENTS.
- i. COMPLETE GRADING, INSTALL GRAVEL AND PERMANENT SEEDING AND PLANTING.
- . AT THE CONCLUSION OF THE CONSTRUCTION ACTIVITIES, TEMPORARY SOIL STOCKPILES, ROCK STAGING AREAS AND EQUIPMENT AREAS SHALL BE REMOVED, REGRADED, AND STABILIZED TO PRE-EXISTING CONDITIONS.

**REVISION INFORMATION** 

k. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED).

#### **MAINTENANCE SCHEDULE**

AFTER CONSTRUCTION IS COMPLETED AND REVEGETATION HAS BEEN ACHIEVED, ALL BMPS WILL BE REMOVED AND ANY LAND DISTURBED BY REMOVAL WILL BE PERMANENTLY STABILIZED. UNLESS OTHERWISE SPECIFIED, ALL MAINTENANCE MUST BE COMPLETED IMMEDIATELY AFTER AN INSPECTION IDENTIFIES THAT A BMP IS NOT FUNCTIONING AS REQUIRED.

- E&S CONTROLS WILL BE INSPECTED DAILY AT THE ACTIVE CONSTRUCTION SITE, AT LEAST ONCE EVERY SEVEN
  CALENDAR DAYS FOR ACTIVELY DISTURBED AREAS, EVERY 14 CALENDAR DAYS FOR RESTORED AREAS, AND
  WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5-INCH PER 24-HOUR PERIOD DURING THE
  ENTIRE PROJECT.
- SEDIMENT MUST BE REMOVED WHERE ACCUMULATION REACHES ONE-HALF THE ABOVE GROUND HEIGHT OF THE CONTROL MEASURE.
- EROSION CONTROL MEASURES, WHICH HAVE BEEN UNDERMINED OR TOPPED, MUST IMMEDIATELY BE REPAIRED.
- OTHER REQUIRED REPAIRS OR MAINTENANCE SHALL BE MADE IMMEDIATELY.
- TEMPORARY AND PERMANENT E&S CONTROL BMPS SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

#### MATERIAL WASTE HANDLING AND RECYCLING

- 1. SOLID WASTE DISPOSAL SHALL BE HANDLED THROUGH ONE OF THE LOCAL LICENSED WASTE MANAGEMENT PROVIDERS AND PERMITTED DISPOSAL FACILITIES. THE CONTRACTOR WILL PROVIDE MOBILE AND COVERED WASTE RECEPTACLES AS NEEDED ALONG THE PROJECT LIMITS. CONTRACTOR SHALL ALSO PROVIDE A COVERED DUMPSTER FOR CONSOLIDATION OF WASTE FOR PICK UP AND DISPOSAL FOR THE DURATION OF THE PROJECT. ALL SOLID WASTE SHALL BE DISPOSED OF AT A LICENSED PERMITTED MUNICIPAL LANDFILL
- 2. THE CONTRACTOR WILL DISPOSE OF ALL SCRAP MATERIAL. THE SCRAP MATERIAL MUST BE REMOVED FROM THE SITE AND DISPOSED OF OR RECYCLED AT A PROPERLY LICENSED/PERMITTED FACILITY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY PERMITS AND/OR DISPOSAL FEES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO ASSURE THAT ALL MATERIALS AREA HANDLED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS, RULES, AND REGULATIONS, INCLUDING BUT NO LIMITED TO THOSE ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY, VADEQ, AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- 3. CONTRACTOR SHALL PRACTICE GOOD HOUSEKEEPING FOR THE DURATION OF THE PROJECT INCLUDING THE ROUTINE REMOVAL AND DISPOSAL OF SOLID WASTE.
- 4. CONTRACTOR SHALL KEEP RECORDS OF PROPER SOLID WASTE DISPOSAL AND PROVIDE COPIES TO THE EI.

#### **SEEDING AND MULCHING**

SEE SEED MIXES, SOIL AMENDMENTS, AND MULCH SPECIFICATIONS SPECIFIED IN THE ACP RESTORATION AND REHABILITATION PLAN.

- 1. SEEDBED PREPARATION: AREAS TO BE SEEDED SHALL BE FREE OF ROCKS AND STONES, DISKED TO A DEPTH OF 4-IN TO 6-IN, AND SMOOTHLY GRADED.
- 2. TOPSOIL SHALL BE REDISTRIBUTED ON ALL DISTURBED AREAS TO BE STABILIZED PRIOR TO SEEDING.
- 3. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 21 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED.
- 4. WHERE THE INITIATION OF STABILIZATION MEASURES WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW.
- 5. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED (E.G., THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 21 DAYS), THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED.
- 6. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RE-SEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.

#### **POLLUTANT CONTROLS**

PROJECT/TASK

- SPILLS OCCURRING DURING CONSTRUCTION, OPERATION AND MAINTENANCE ARE TO BE REPORTED IMMEDIATELY TO THE MONITORING CENTER AT 1-800-835-7191. DOMINION'S ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT WILL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE AGENCIES, EXCEPT AS PROVIDED FOR BELOW.
- IF THE CALL TO THE MONITORING CENTER IS NOT RETURNED WITHIN 30 MINUTES AND THE SPILL HAS IMPACTED WATER, THE PERSON DISCOVERING THE SPILL OR RELEASE WILL CONTACT THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 AND REPORT THE RELEASE. THAT PERSON WILL CONTINUE CALLING THE MONITORING CENTER UNTIL A REPRESENTATIVE IS REACHED.

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

THE CONTRACTOR SHALL BE READILY FAMILIAR WITH AND MAINTAIN ON SITE FOR IMMEDIATE REFERENCE THE PROJECT SWPPP. THE REQUIREMENTS OF THE SWPPP PROVIDE ADDITIONAL DETAIL AND INFORMATION BEYOND THE PROJECT NOTES AND DETAILS. THE PERFORMANCE REQUIREMENTS OF THE SWPPP ARE INCORPORATED AND MADE PART OF THESE PLANS.

Environmental Atlantic Coast Pipeline, LLC 06/08/17 ISSUED FOR REVIEW Resources **ERM** Management 925 White Oaks Blvd. Bridgeport, West Virginia 26330 / 681-842-8000 06/08/17 NJB DANIEL R. GOLDSTEIN ATLANTIC COAST PIPELINE CHECKED: 06/08/17 WT Lic. No. 047436 **EROSION AND SEDIMENT CONTROL PLAN NOTES** APP. FOR BID: APP. FOR CONST. STATE: VA DISTRICT: COUNTY: - 14 OF 17 0 AS NOTED DIR/FILE: ACP\Virginia\

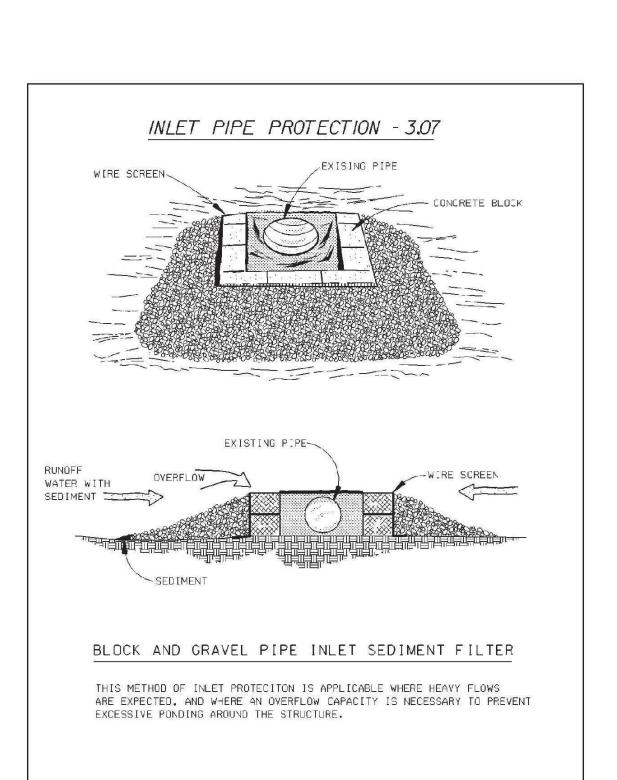
#### COMPOST FILTER SOCK WOODEN STAKES PLACED 10' — O.C. AND THROUGH MIDDLE OF WOODEN STAKES PLACED 10' O.C. AND THROUGH MIDDLE FILTER SOCK OF FILTER SOCK BLOWN/PLACED FILTER MEDIA, AS — BLOWN/PLACED FILTER MÉDIA, AS-NEEDED NEEDED AREA TO BE PROTECTED WORK AREA WORK AREA <u>SECTION</u> <u>SECTION</u> - WOODEN STAKES PLACED 10' O.C. AND THROUGH MIDDLE OF FILTER - WOODEN STAKES PLACED 10' O.C. AND THROUGH MIDDLE OF FILTER SOCK (TYP.) SOCK (TYP.) AREA TO BE PROTECTED AREA TO BE PROTECTED COMPOST - COMPOST WATER FLOW WATER FLOW FILTER SOCK FILTER SOCK WORK AREA NOTES: 1. FILTER SOCK TO BE FILTREXX SEDIMENT CONTROL SILTSOXX OR APPROVED EQUAL. FILTER MEDIA INSIDE AND, AS NECESSARY UP—SLOPE OF FILTER SOCK, TO BE FILTREXX FILTERMEDIA OR APPROVED EQUAL. 2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FILTER SOCK.

# STRAW BALE BARRIER - 3.04 STAKEC AND ENTRENCHED BINDING WIRE STRAW BALE COMPACTED SOIL TO PREVENT PIPING FILTERED RUNOFF PROPERLY INSTALLED STRAW BALE CROSS SECTION 2. PLACE AND STAKE STRAW BALES 1. EXCAVATE THE TRENCH 3. WEDGE LOOSE STRAW BETWEEN BALES 4. BACKEILL AND COMPACT THE EXCAVATED SOIL CONSTRUCTION OF STRAW BALE BARRIER

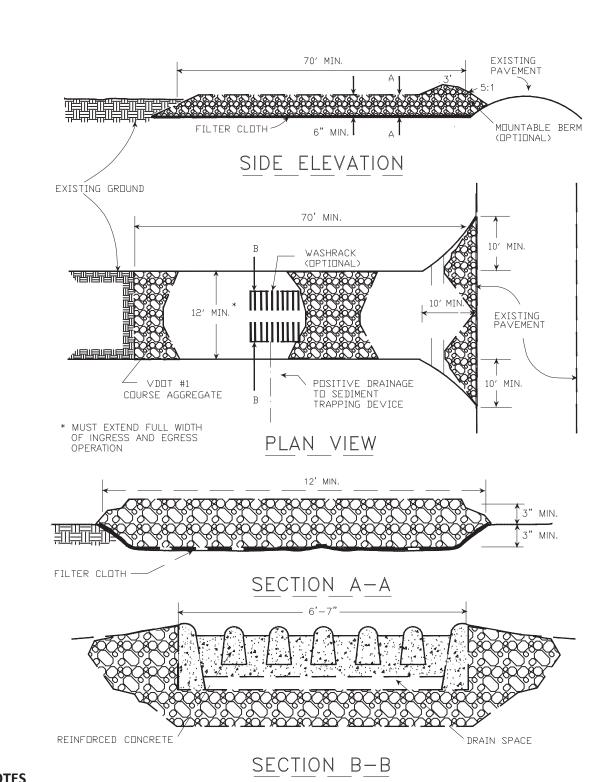
# SAFETY FENCE PERSPECTIVE VIEW PERSPECTIVE VIEW PERSPECTIVE VIEW PLASTIC FENCE METAL FENCE PLATE. 3.1-1

### VDOT ROAD AND BRIDGE STANDARDS VA. DSWC

STAKES WILL BE INSTALLED TO THE MINIMUM EMBEDMENT DEPTH OF 18 INCHES TO THE EXTENT POSSIBLE TO ENSURE THE FUNCTIONALITY OF THE SAFETY FENCE. WHERE ADEQUATE EMBEDMENT DEPTH CANNOT BE ACHIEVED ADDITIONAL MEASURES, INCLUDING BUT NOT LIMITED TO SANDBAGS, MOUNDED EARTH, ETC. WILL BE UTILIZED TO SECURE THE FENCE.

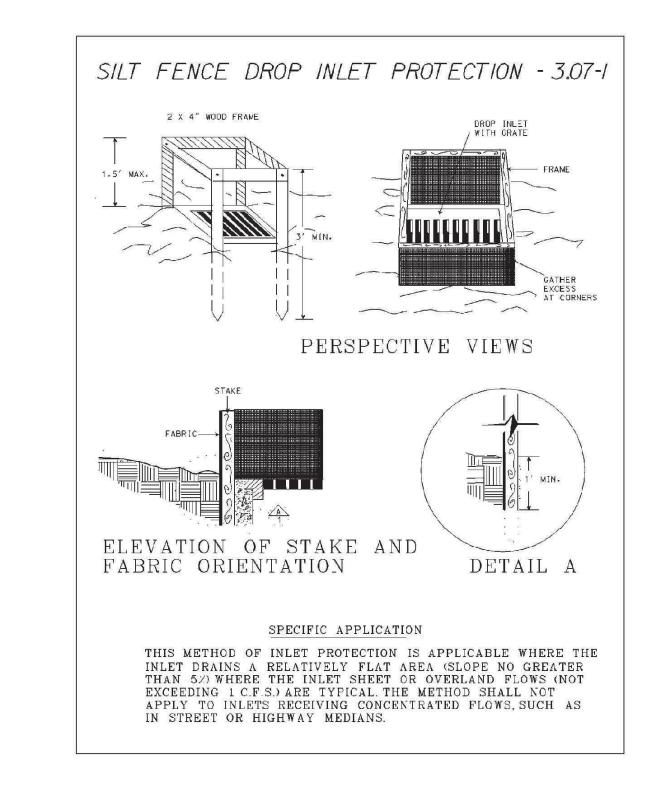


#### STONE CONSTRUCTION ENTRANCE



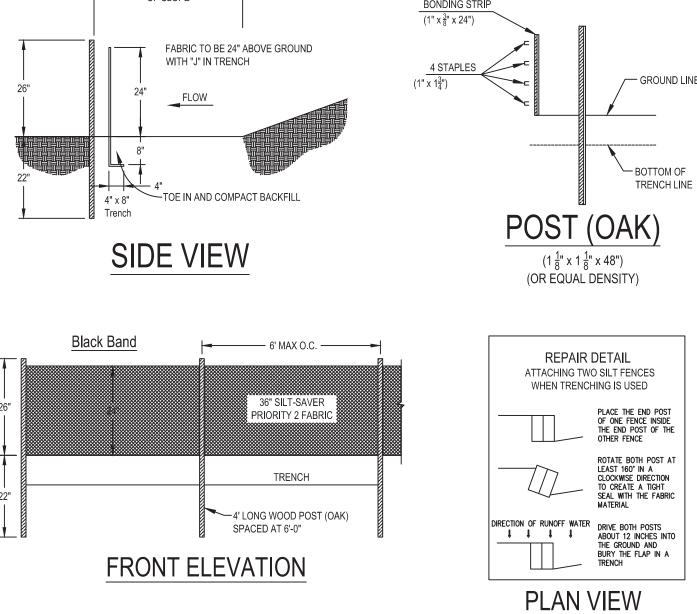
#### WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROAD SURFACE BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER

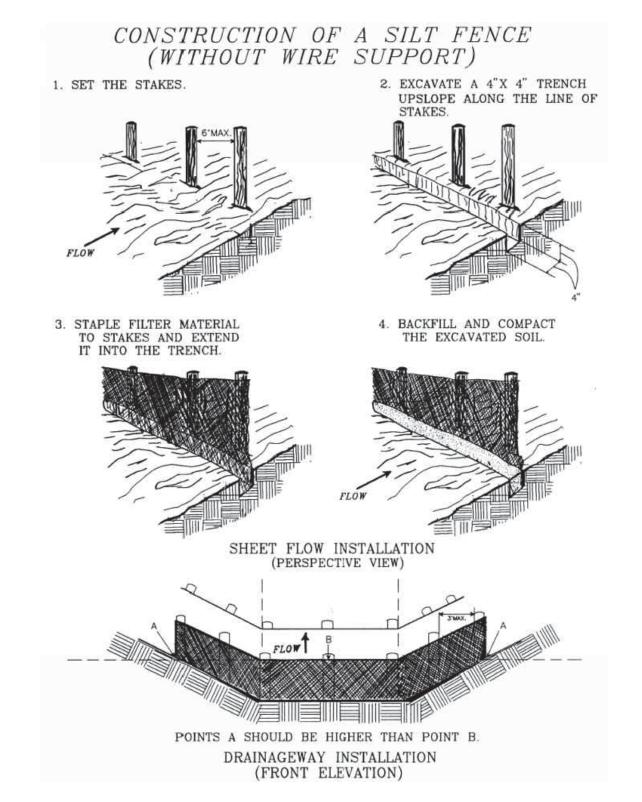
SEDIMENT IS REMOVED IN THIS MANNER.



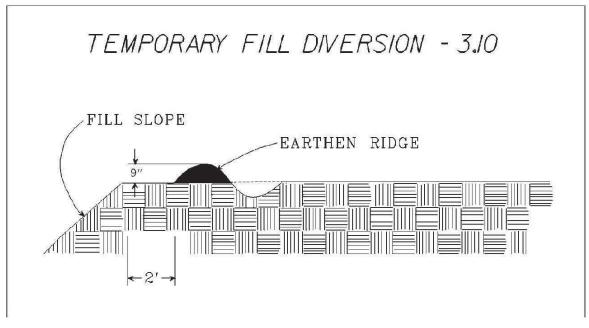
### BELTED SILT RETENTION FENCE - (BSRF)

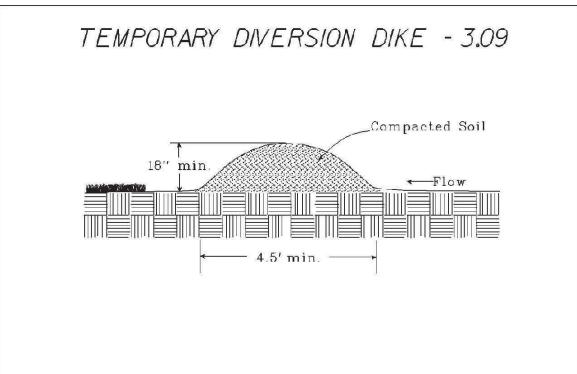


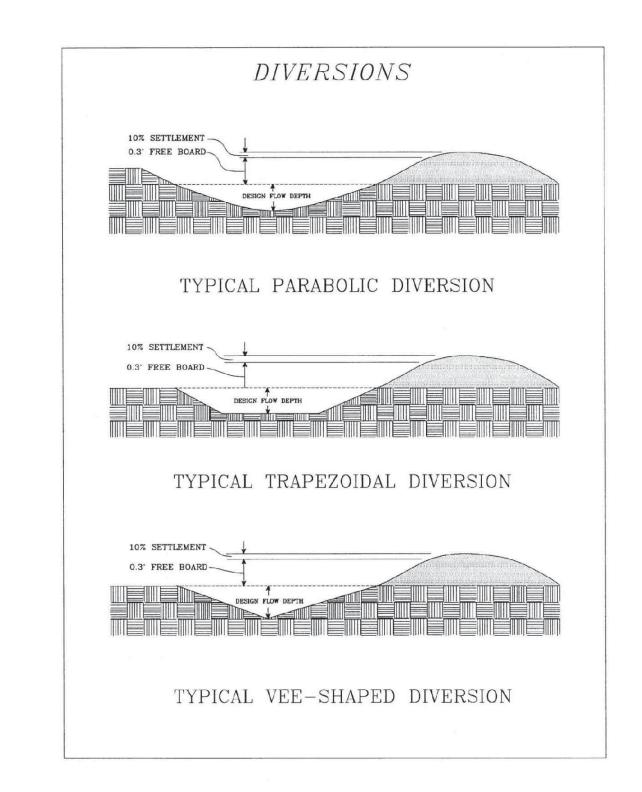




GENERAL NOTES AND COMMENTS: YM. DATE BY REVISION INFORMATION PROJECT/TASK / Environmental Atlantic Coast Pipeline, LLC Resources 06/08/17 ISSUED FOR REVIEW ERM Management 925 White Oaks Blvd. Bridgeport, West Virginia 26330 / 681-842-8000 06/08/17 NJB DANIEL R. GOLDSTEIN ATLANTIC COAST PIPELINE 06/08/17 WT Lic. No. 047436 EROSION AND SEDIMENT CONTROL PLAN DETAILS APP. FOR BID: APP. FOR CONST.: DISTRICT: - 15 OF 17 0 SCALE: AS NOTED DIR/FILE: ACP\Virginia\

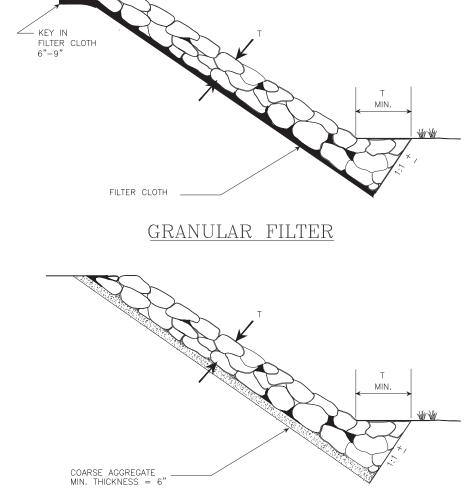






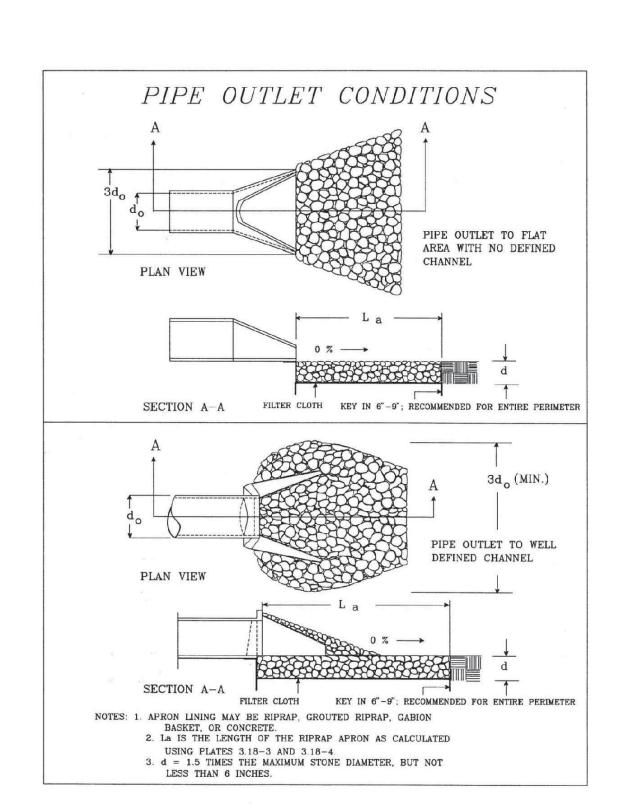
#### TOE REQUIREMENTS FOR BANK STABILIZATION

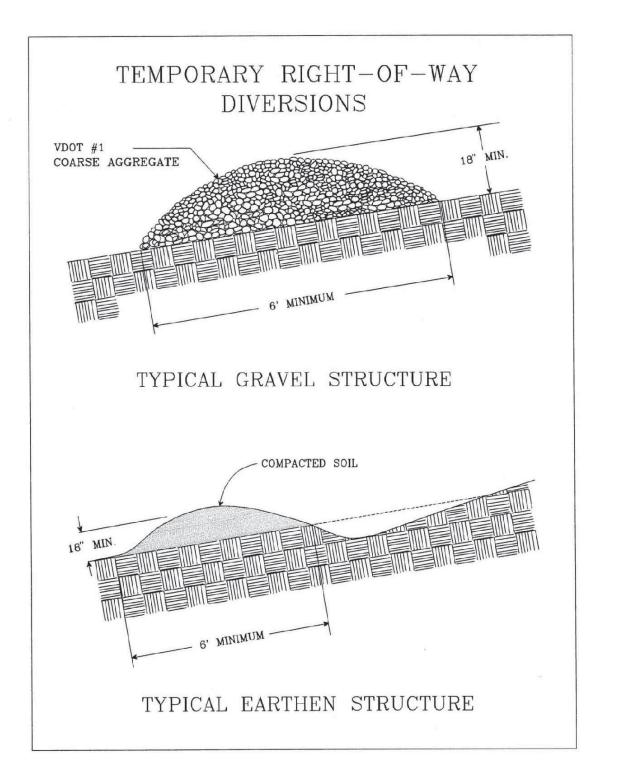
#### FILTER CLOTH UNDERLINER (PREFERRED)



Notes: Filter Fabric Underlining: A lining of engineering filter fabric (geotextile) shall be placed between the riprap and the underlying soil surface to prevent soil movement into or through the riprap . The filter fabric must have opening size equal to or greater than U.S. No. 50 sieve; tensile strenght of at least 30 lb/linear in. and puncture strength of at least 80 lbs. Filter fabric shall not be used on slopes greater than 1 1/2:1 as slippage may occur and should be used in conjunction with a layer of course aggregate (granular filter blanket) when the riprap to be placed is Class II or larger.

NOT TO SCALE



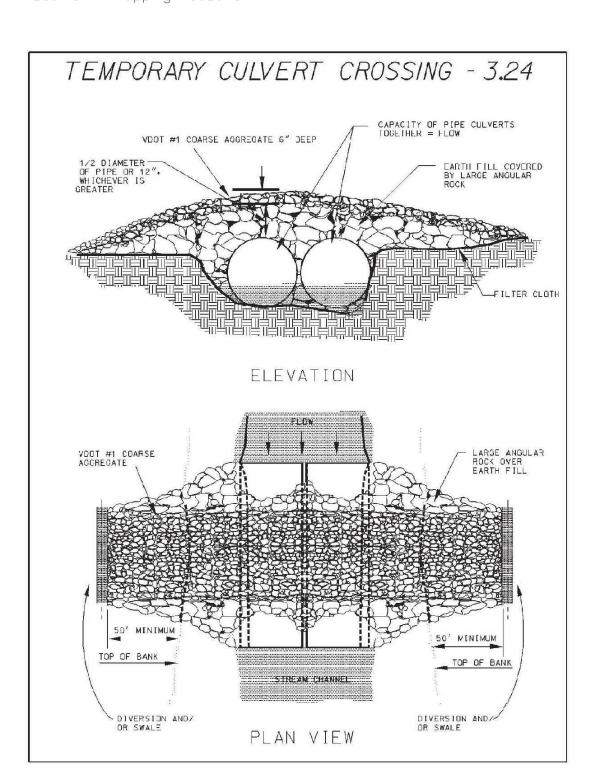


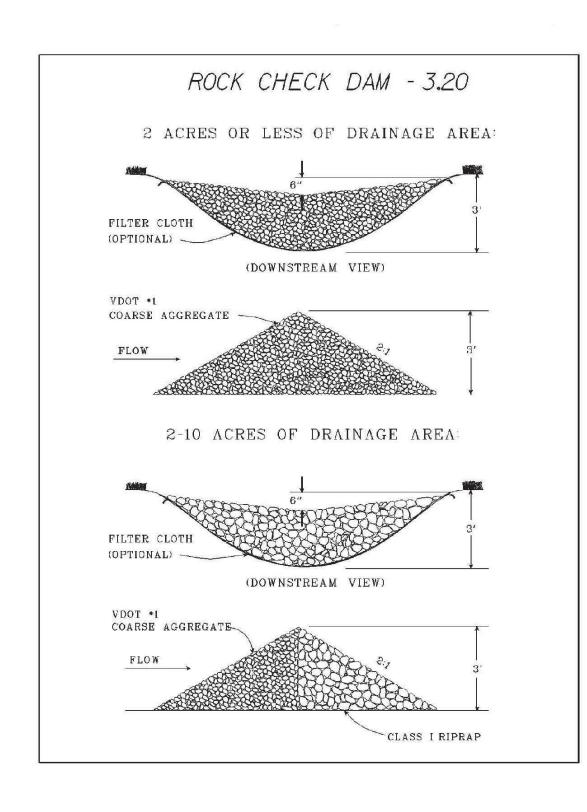
Design Criteria: No formal design is required. The following criteria shall be Height- The minimum allowable height of the diversion is 18 inches; Side Slopes- Side slopes should be 2:1 or flatter to allow the passage of construction traffic, along with a minimum base width of 6 feet; Width-The measure should be constructed completely across the disturbed portion of the right-of-way; Spacing-Use the following to determine the spacing of right-of-way diversions within the VA Erosion Control Handbook;

- less than 7% slope: 100 ft.
  between 7% and 25% slope: 75ft.
  between 25% and 40% slope: 50ft.

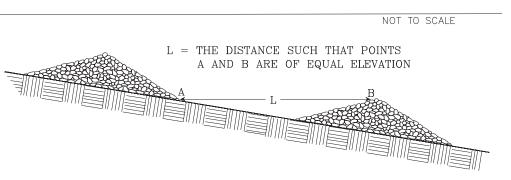
- Greater than 40%: 25 ft. Grade- Positive drainage (with less than 2% slope) should be provided to a stabilized outlet, sediment-trapping facility, or a vegetative buffer strip of adequate size.

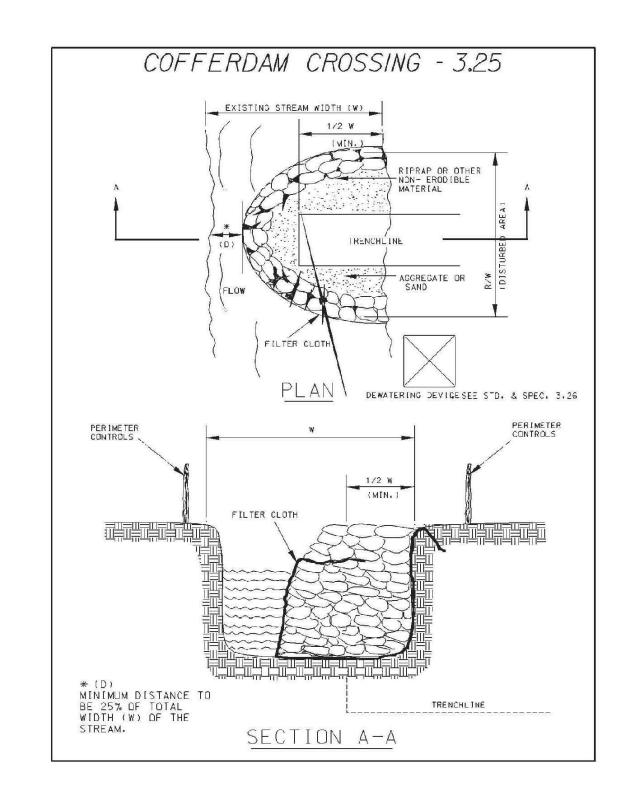
Dutlet- Interceptor dikes must have an outlet which is not subject to erosion. The on-site location may need to be adjusted to meet field conditions in order to utilize the most suitable outlet. Concentrated flows should spread over the widest possible area after release. Flows with high sediment concentrations should pass through an appropriate sediment-trapping measure.





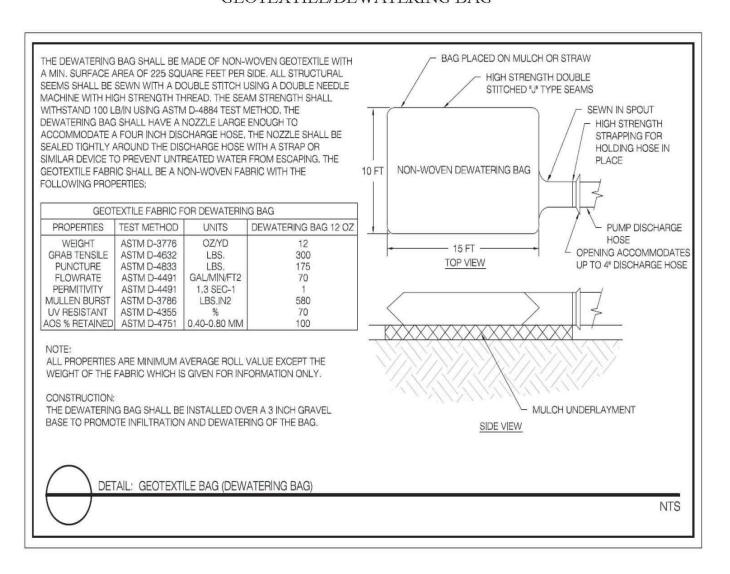
#### SPACING BETWEEN CHECK DAMS

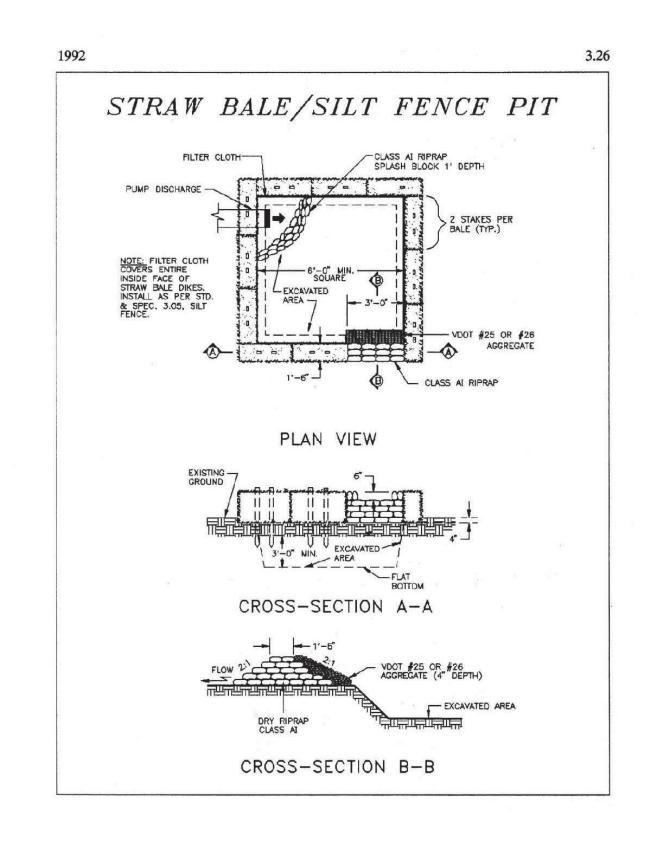


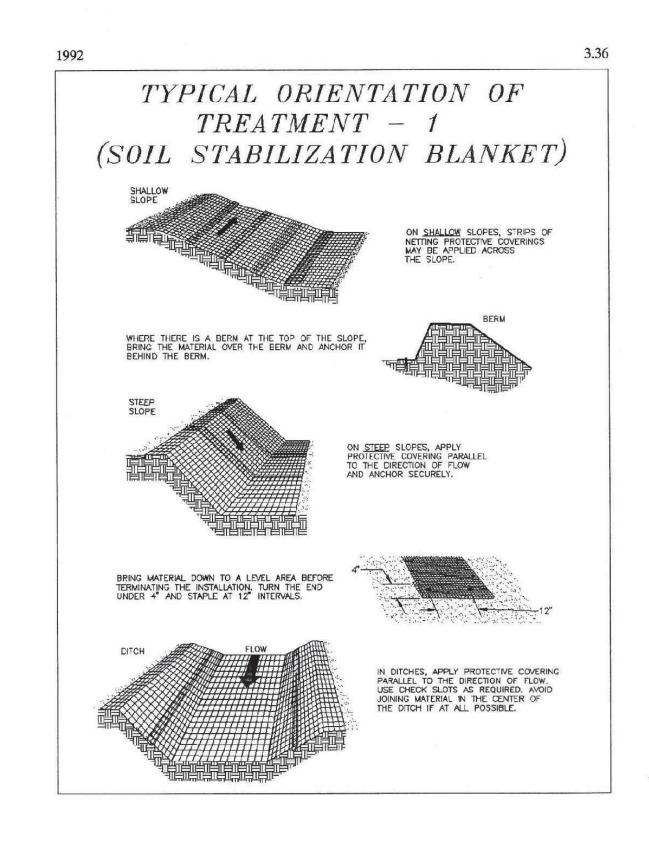


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				DANIEL D. COLDSTEIN	DRAWN:	NJB	06/08/17	
				Lic. No. 047436	CHECKED:	WT	06/08/17	ATLANTIC COAST PIPELINE
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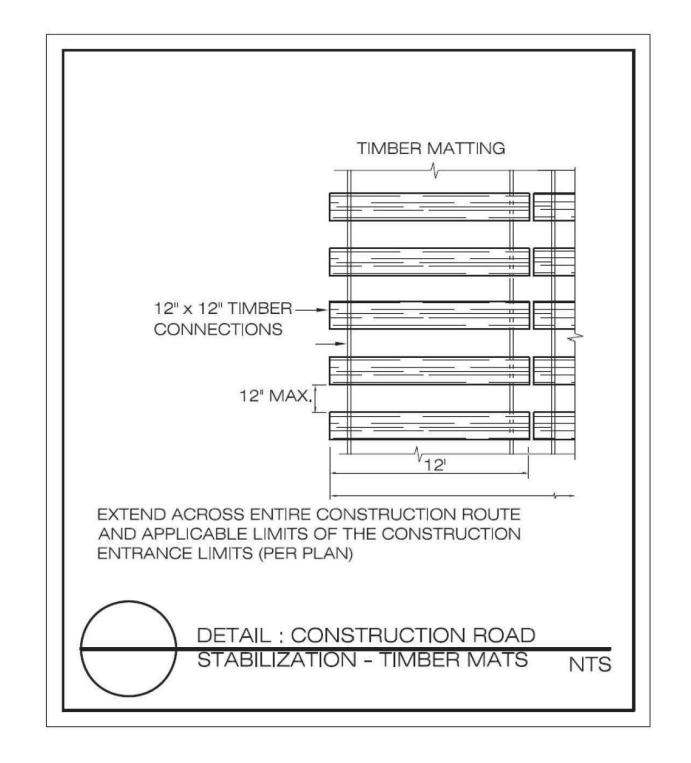
#### GEOTEXTILE/DEWATERING BAG



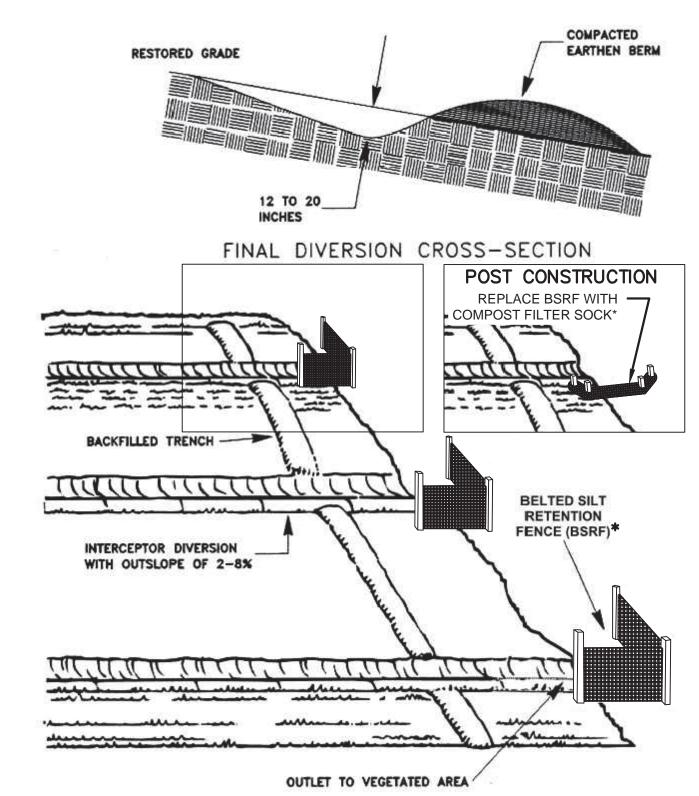




#### TIMBER MAT STABILIZATION

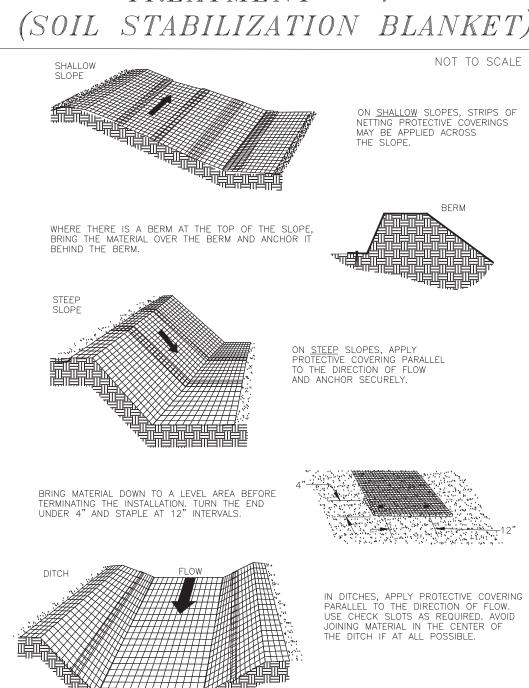


### RIGHT-OF-WAY DIVERSION



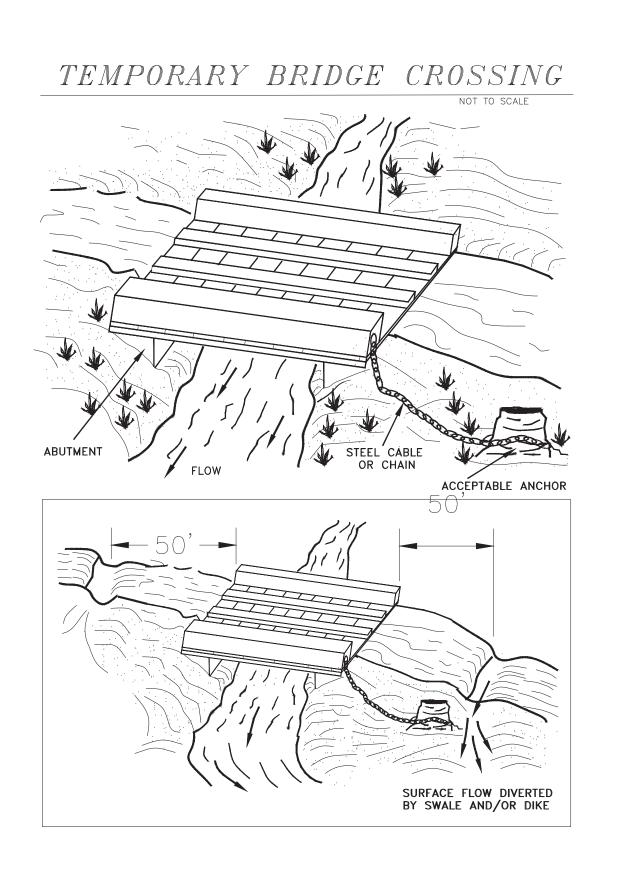
\*CONTRACTOR MAY SUBSTITUTE STRAW WATTLES, COIR LOGS, MULCH SOCK OR SIMILAR BMP. FURTHER, SALVAGED OR IMPORTED ROCK MAY ALSO BE USED TO REDUCE VELOCITY AND DISTRIBUTE FLOW.

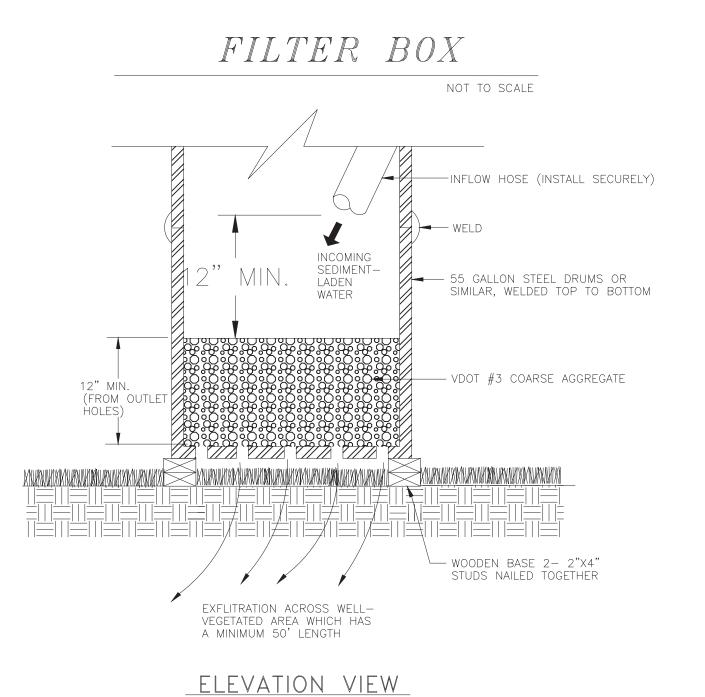
#### TYPICAL ORIENTATION OF TREATMENT - 1 (SOIL STABILIZATION BLANKET)



#### **NOTES**

1. EROSION CONTROL MATS/BLANKETS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.





GENERAL NOTES AND COMMENTS:

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# DANIEL R. GOLDSTEIN Lic. No. 047436

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