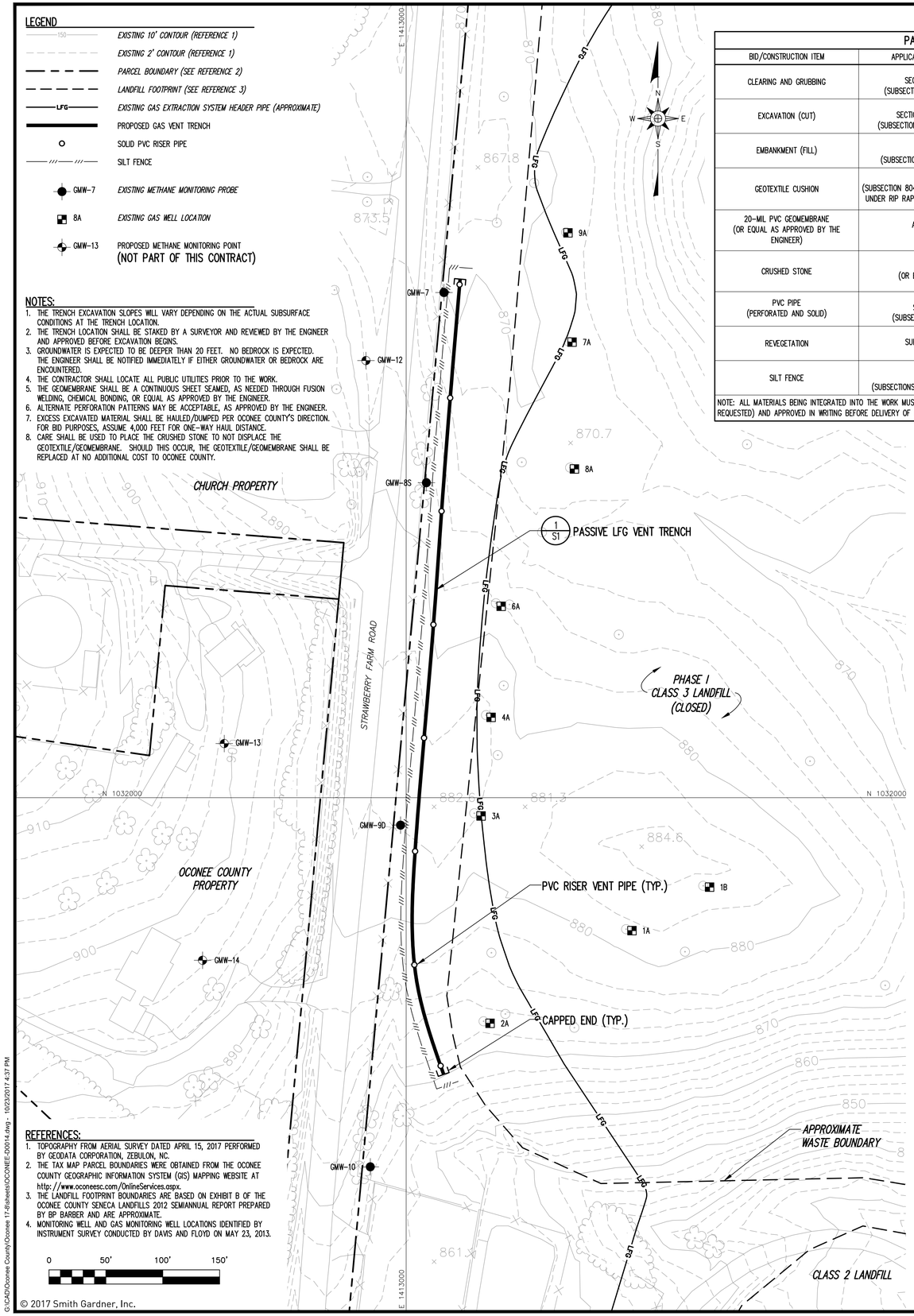
LEGEND

- 150 — *EXISTING 10' CONTOUR (REFERENCE 1)*
- *EXISTING 2' CONTOUR (REFERENCE 1)*
- *PARCEL BOUNDARY (SEE REFERENCE 2)*
- *LANDFILL FOOTPRINT (SEE REFERENCE 3)*
- LFG — *EXISTING GAS EXTRACTION SYSTEM HEADER PIPE (APPROXIMATE)*
- PROPOSED GAS VENT TRENCH
- SOLID PVC RISER PIPE
- SILT FENCE
- GMW-7 — *EXISTING METHANE MONITORING PROBE*
- 8A — *EXISTING GAS WELL LOCATION*
- GMW-13 — PROPOSED METHANE MONITORING POINT (NOT PART OF THIS CONTRACT)

NOTES:

1. THE TRENCH EXCAVATION SLOPES WILL VARY DEPENDING ON THE ACTUAL SUBSURFACE CONDITIONS AT THE TRENCH LOCATION.
2. THE TRENCH LOCATION SHALL BE STAKED BY A SURVEYOR AND REVIEWED BY THE ENGINEER AND APPROVED BEFORE EXCAVATION BEGINS.
3. GROUNDWATER IS EXPECTED TO BE DEEPER THAN 20 FEET. NO BEDROCK IS EXPECTED. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF EITHER GROUNDWATER OR BEDROCK ARE ENCOUNTERED.
4. THE CONTRACTOR SHALL LOCATE ALL PUBLIC UTILITIES PRIOR TO THE WORK.
5. THE GEOMEMBRANE SHALL BE A CONTINUOUS SHEET SEAMED, AS NEEDED THROUGH FUSION WELDING, CHEMICAL BONDING, OR EQUAL AS APPROVED BY THE ENGINEER.
6. ALTERNATE PERFORATION PATTERNS MAY BE ACCEPTABLE, AS APPROVED BY THE ENGINEER.
7. EXCESS EXCAVATED MATERIAL SHALL BE HAULED/DUMPED PER OCONEE COUNTY'S DIRECTION. FOR BID PURPOSES, ASSUME 4,000 FEET FOR ONE-WAY HAUL DISTANCE.
8. CARE SHALL BE USED TO PLACE THE CRUSHED STONE TO NOT DISPLACE THE GEOTEXTILE/GEOMEMBRANE. SHOULD THIS OCCUR, THE GEOTEXTILE/GEOMEMBRANE SHALL BE REPLACED AT NO ADDITIONAL COST TO OCONEE COUNTY.



REFERENCES:

1. TOPOGRAPHY FROM AERIAL SURVEY DATED APRIL 15, 2017 PERFORMED BY GEODATA CORPORATION, ZEBULON, NC.
2. THE TAX MAP PARCEL BOUNDARIES WERE OBTAINED FROM THE OCONEE COUNTY GEOGRAPHIC INFORMATION SYSTEM (GIS) MAPPING WEBSITE AT http://www.oconeesc.com/OnlineServices.aspx.
3. THE LANDFILL FOOTPRINT BOUNDARIES ARE BASED ON EXHIBIT B OF THE OCONEE COUNTY SENECA LANDFILLS 2012 SEMIANNUAL REPORT PREPARED BY BP BARBER AND ARE APPROXIMATE.
4. MONITORING WELL AND GAS MONITORING WELL LOCATIONS IDENTIFIED BY INSTRUMENT SURVEY CONDUCTED BY DAVIS AND FLOYD ON MAY 23, 2013.

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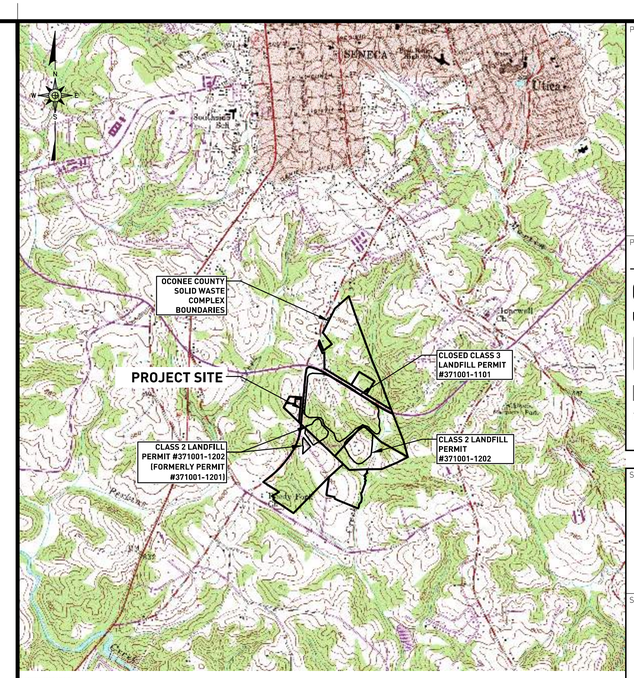
PASSIVE LANDFILL GAS TRENCH

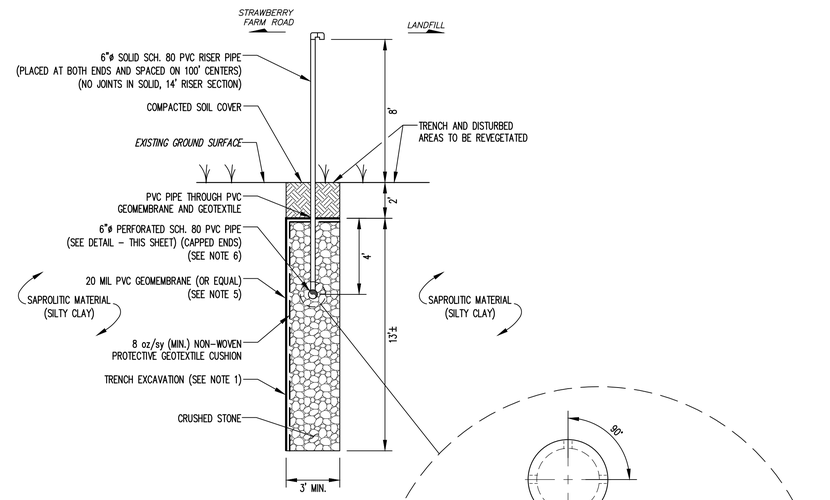
BID/CONSTRUCTION ITEM	APPLICABLE TECHNICAL SPECIFICATION REFERENCE	OTHER REQUIREMENTS
CLEARING AND GRUBBING	SCDOT SPECIFICATIONS SECTION 201 – CLEARING AND GRUBBING (SUBSECTIONS 201.1 THROUGH 201.4; AS APPLICABLE)	SEE NOTE BELOW. THE CONTRACTOR SHALL ESTABLISH ALL LINES, GRADES, AND WORK LIMITS.
EXCAVATION (CUT)	SCDOT SPECIFICATIONS SECTION 204 – EXCAVATION FOR STRUCTURES (SUBSECTIONS 204.1 THROUGH 204.4.5.3; AS APPLICABLE)	NONE
EMBANKMENT (FILL)	SCDOT SPECIFICATIONS SECTION 205 – EMBANKMENT (SUBSECTIONS 205.1 THROUGH 205.4.7; AS APPLICABLE)	NONE
GEOTEXTILE CUSHION	SCDOT SPECIFICATIONS (SUBSECTION 804.2.11 – GEOTEXTILE FABRIC FOR EROSION CONTROL UNDER RIP RAP, CLASS 2 FABRIC UNPROTECTED; AS APPLICABLE)	SEE NOTE BELOW. SEAM STRENGTH IS NOT REQUIRED. SEAMS TO BE OVERLAPPED A MINIMUM OF 12 INCHES BETWEEN PANELS.
20-MIL PVC GEOMEMBRANE (OR EQUAL AS APPROVED BY THE ENGINEER)	ASTM D7176 (MATERIAL PROPERTIES) ASTM D7408 (SEAMS)	SEE NOTE BELOW. THE GEOMEMBRANE SHALL BE ADEQUATELY ANCHORED DURING STONE PLACEMENT.
CRUSHED STONE	AASHTO #1 OR #4 GRADATIONS (OR EQUAL AS APPROVED BY THE ENGINEER)	SEE NOTE BELOW. STONE SHALL BE PLACED IN A MANNER SO AS NOT TO PULL OR OTHERWISE DAMAGE THE ADJACENT GEOSYNTHETICS.
PVC PIPE (PERFORATED AND SOLID)	SCDOT SPECIFICATIONS SECTION 803 – PIPE SLOPE DRAINS (SUBSECTIONS 803.2.1.2; 803.3; AS APPLICABLE)	SEE NOTE BELOW.
REVEGETATION	SCDOT SPECIFICATIONS SUPPLEMENTAL TECHNICAL SPECIFICATION SC-M-810-4 (07/17) SEEDING	SEE NOTE BELOW.
SILT FENCE	SCDOT SPECIFICATIONS SECTION 815 – EROSION CONTROL (SUBSECTIONS 815.2.5.1; 815.2.5.2; 815.2.12; AS APPLICABLE)	SEE NOTE BELOW.

NOTE: ALL MATERIALS BEING INTEGRATED INTO THE WORK MUST BE SUBMITTED TO THE ENGINEER THROUGH A SHOP DRAWING SUBMITTAL (WITH SAMPLE, AS REQUESTED) AND APPROVED IN WRITING BEFORE DELIVERY OF THOSE MATERIALS TO THE SITE AND BEFORE THE WORK STARTS.



REFERENCES:

1. PORTIONS OF USGS 7.5" SENECA, S.C. QUADRANGLE.
2. TOPOGRAPHIC CONTOUR INTERVAL EQUALS 20 FEET.



GAS VENT TRENCH DETAIL (1/S1) — NOT TO SCALE

PERFORATIONS
2 ROWS OF ⅝" HOLES
180 DEG. APART
4" C-C, STAGGERED 2"
(4 TOTAL ROWS)

FOR BIDDING
NOT FOR CONSTRUCTION

SAFETY NOTE:
Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

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

PREPARED FOR:

OCONEE COUNTY SOLID WASTE AND RECYCLING OCONEE COUNTY SOUTH CAROLINA

PREPARED BY:

SMITH+ GARDNER
ENGINEERS
14 N. Boylan Avenue, Raleigh NC 27603 | 919.828.0577

SEAL — SOUTH CAROLINA PROFESSIONAL ENGINEER — JOHN M. GARDNER — NO. 31104 — 10/24/2017

SEAL — SOUTH CAROLINA — SMITH GARDNER, INC. NO. C01488 — CERTIFICATE OF AUTHORIZATION

REV.	DATE	DESCRIPTION

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PROJECT TITLE:

LANDFILL GAS REMEDIATION PLAN SENECA CLASS 3 (CLOSED) LANDFILL

DRAWING TITLE:

PASSIVE LFG VENT TRENCH PLAN, DETAILS AND TECHNICAL SPECIFICATIONS

DESIGNED: J.M.G.	PROJECT NO: OCONEE 17-8
DRAWN: DS	SCALE: AS SHOWN
APPROVED: JMG	DATE: Oct. 2017
FILENAME: OCONEE-D0014	
SHEET NUMBER: 1	DRAWING NUMBER: S1

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