

APPENDIX G
FIELD WORK VARIANCES

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The following field work variances are included as electronic files on the enclosed CDROM:

Field Work Variance 001 – Golf course transect data collection method

Field Work Variance 002 – Request to add additional investigation in federally delineated wetlands

Field Work Variance 003 – Request to revise approach for MRS-R02 and MRS-R03 for placement of grids and analog intrusive transects

Field Work Variance 004 – Request to supplement grids in background areas with data from intrusive transects in background areas

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FIELD WORK VARIANCE

PROJECT NO.: H1018

DATE: 10/1/15

VARIANCE NO.: 001

PROJECT NAME: Former Conway Bombing and Gunnery Range RI/FS

PAGE 1 OF 2

CONTRACT NO.: W912DY-10-D-0023

DELIVERY ORDER NO.: 0018

PRESENT REQUIREMENTS:

REQUESTED BY: HydroGeoLogic, Inc.

Request variance to the proposed method for geophysical investigation previously planned in golf course and residential areas. HGL requests to perform data collection by person-portable single sensor methods rather than multi-sensor towed-array methods.

PROPOSED CHANGE:

See summary on final page.

TECHNICAL JUSTIFICATION:

The person-portable single sensor overland transects will provide sufficient data for site characterization which will meet data quality objectives and performance metrics, in accordance with the approved work plan, for golf course and residential transects.

COST/SCHEDULE IMPACT:

No impact on cost, schedule, or data quality.

REASON FOR CHANGE:

ADDITION

DELETION

CHANGE ORDER

REQUIRED: NO

YES

CHANGE ORDER NO. _____

APPLICABLE DOCUMENT:

See explanation included on final page of this document.

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HydroGeoLogic Project Manager

DATE

10/1/15

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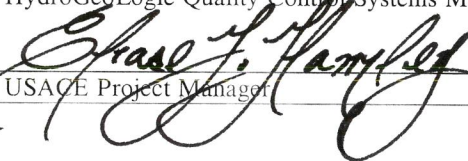


HydroGeoLogic Quality Control Systems Manager

DATE

10/1/15

APPROVED BY



USACE Project Manager

DATE

5 Oct 2015

FIELD WORK VARIANCE (FWV) TRACKING LOG

FWV NO.	AFFECTED DOCUMENT	SUBJECT	DATE WRITTEN	DATE SUBMITTED	DATE APPROVED BY USACE	REMARKS
001	Work Plan	DGM along golf course transects	9-16-15	9/22/15 10/1/15, after comments rec'd		

FWV 001, DGM Method on proposed Golf Course Transects

As provided in the approved Work Plan, the proposed collection method for golf course transects, residential transects, and wetlands transects in open areas was configuration of the EM61-MK2 as a multi-sensor towed array.

Upon evaluation of the terrain, vegetation, wetlands, and rights-of-entry (ROE) granted for the former Conway Bombing and Gunnery Range at the initiation of the field activities, the multi-sensor towed array configuration is not the best method to collect data through the wetlands areas (where vegetation cannot be destroyed) and is not beneficial based the lack of ROE granted for wide open residential areas lacking wooded tree cover. Visual Sample Plan (VSP) calculations confirm that the increased sampling coverage of the multi-sensor towed array compared to the single sensor person portable system does not provide significant advantages for detecting elevated anomaly density areas.

As part of discussions with the project team during review of this field work variance, the VSP calculations for transect spacings were re-run and are shown in Table 1. The current proposed transect spacing of 500-ft is appropriate for characterization of the four MRSs based on the anticipated munitions and the historical information available.

This field work variance will adapt the proposed method of collection for golf course transects, residential transects, and wetlands transects to use the person-portable single sensor method already described in the Work Plan. The person-portable single sensor collection method is already described in Appendix K, Section K.4.3.1, and no changes are requested. All relevant data quality objectives, geophysical performance metrics, quality assurance and quality control requirements established in the Work Plan for person-portable single sensor collection methods remain in place. No changes to Appendix K, Geophysical Investigation Plan, are requested. The relevant section of the work plan which is revised is paragraph 3.8.1.2 (changes highlighted below):

3.8.1.2 The geophysical investigation of the four MRSs will use a combination of DGM transects and grids. DGM transects will be used to define areas of evaluated concentrations of anomalies. DGM transect investigations will include the following types of transects:

- ~~Towed-array~~ Person-portable single sensor transects (golf course and residential areas);
- Wetland ~~towed-array~~ Person-portable single sensor transects (These will be used for wetland areas and surface water features that are 1.5 ft deep or shallower, such as retention ponds or golf course water hazards; DGM data will not be collected where the water is deeper than 1.5 ft);
- Person-portable single sensor overland transects (land-based transects for areas near permanent structures or in wooded areas)
- Mag-and-dig transects within known target areas; and

- Mag-and-count transects within wetlands areas that are unable to be collected by person-portable single sensor methods.

No other changes to the work plan are required.

Table 1, Summary of VSP Inputs*

MRS	Target Feature	Target Shape	Target Radius_Ft	Target Anomalies per acre	Background Anomalies per acre	Ratio Target: Background	Sensor Footprint_ft	Required Transect Spacing_Ft (90% Confidence)
MRS-R09	37mm impact area	Circular	333	60	30	2	3.33	335.3
MRS-R09	37mm impact area	Circular	333	90	30	3	3.33	426.3
MRS-R09	37mm impact area	Circular	333	120	30	4	3.33	477.3
MRS-R09	37mm impact area	Circular	333	150	30	5	3.33	505.3
MRS-R09	37mm impact area	Circular	333	180	30	6	3.33	526.3
MRS-R09	37mm impact area	Circular	333	210	30	7	3.33	540.3
MRS-R09	37mm impact area	Circular	333	240	30	8	3.33	555.3
MRS-R09	37mm impact area	Circular	333	270	30	9	3.33	571.3
MRS-R09	37mm impact area	Circular	333	300	30	10	3.33	577.3
MRS-R01, R02, R03	Bombing target (< 100 #)	Circular	714	60	30	2	3.33	866.3
MRS-R01, R02, R03	Bombing target (< 100 #)	Circular	714	90	30	3	3.33	1013.3
MRS-R01, R02, R03	Bombing target (< 100 #)	Circular	714	120	30	4	3.33	1098.3
MRS-R01, R02, R03	Bombing target (< 100 #)	Circular	714	150	30	5	3.33	1159.3

*VSP inputs not presented are program defaults

FIELD WORK VARIANCE

PROJECT NO.: H1018

DATE: 11/2/15

VARIANCE NO.: 002

PROJECT NAME: Former Conway Bombing and Gunnery Range RI/FS

PAGE 1 OF 5

CONTRACT NO.: W912DY-10-D-0023

DELIVERY ORDER NO.: 0018

PRESENT REQUIREMENTS:

REQUESTED BY: HydroGeoLogic, Inc.

Request variance to add investigation in wetland areas. The investigation will include minimal vegetation clearance and intrusive investigation within these areas, as described further below.

PROPOSED CHANGE:

See summary on final page.

TECHNICAL JUSTIFICATION:

There are no anticipated impacts to coastal or non-coastal wetlands as a result of this project and a Negative Determination is applicable for these activities (approved by SCDHEC on November 2, 2015). Due to the presence of thick vegetation, minimal vegetation clearance is needed to collect characterization data in wetlands areas.

COST/SCHEDULE IMPACT:

No impact on cost, schedule, or data quality.

REASON FOR CHANGE:

X ADDITION

DELETION

CHANGE ORDER

REQUIRED: X NO

YES

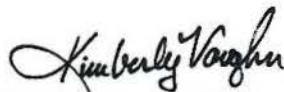
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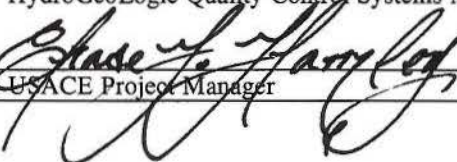


HydroGeoLogic Quality Control Systems Manager

DATE

11/2/15

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USACE Project Manager

DATE

2 Nov 15

FIELD WORK VARIANCE (FWV) TRACKING LOG

FWV NO.	AFFECTED DOCUMENT	SUBJECT	DATE WRITTEN	DATE SUBMITTED	DATE APPROVED BY USACE	REMARKS
001	Work Plan	DGM along golf course transects	9-16-15	9/22/15 10/1/15, after comments rec'd	10/2/2015	
002	Work Plan	Expand investigation in wetlands areas	10/20/2015	11/2/15		

FWV 002, Data Collection in Wetland Areas

1.0 Description of the Field Work Variance

As provided in the approved Final Work Plan, no vegetation clearance and no intrusive investigation will occur in wetland areas. However, it has been determined that minimal vegetation clearance and intrusive investigation will be beneficial in wetland areas. The additional investigation will gather valuable information, essential to completing the RI to determine the nature and extent of munitions and explosives of concern. The additional data gathered will allow more informed decisions to be made for these areas, based on investigation results. A portion of the project activities will occur in wetlands areas based on the National Wetlands Inventory data for South Carolina; however, there are no anticipated impacts to coastal or non-coastal wetlands as a result of this project and a Negative Determination is applicable for these activities.

This Negative Determination was submitted under CFR 930.33 paragraph (a), for review and concurrence by SCDHEC. The Negative Determination was concurred to by SCDHEC on November 2, 2015. Therefore, it has been determined that minimal vegetative clearance and intrusive investigation will be beneficial in wetland areas. These activities will be minimal and temporary, and will not affect any coastal use or resource or result in the fill of any wetland. The activities include:

- Vegetation removal in wetland areas will be conducted along parallel transects spaced 500-ft apart or in grid locations. Data collection areas will be selected to minimize required vegetation removal. The debris will be left where it falls. Vegetation removal will only be completed where necessary to allow the UXO team to follow the transect line or to safely investigate a subsurface anomaly.
- Intrusive investigations of subsurface anomalies in wetland areas will be conducted by the use of hand digging tools. No intrusive investigation will occur where water is deeper than 6-inches.
- Support facilities will be located in upland areas.

Vegetation removal and intrusive investigations are already described in the work plan, and no changes to those methods are requested. All relevant data quality objectives, geophysical performance metrics, quality assurance and quality control requirements established in the Work Plan for vegetation removal and hand-dug intrusive methods remain in place. Only the location where these activities will be conducted has changed. Relevant sections of the work plan, with the changes requested, are in Section 2.0.

2.0 Revisions to the Work Plan

2.1 Appendix K

No changes to Appendix K, Geophysical Investigation Plan, are requested.

2.2 Updated Figures Displaying Wetlands Areas

New figures were created to show updated wetlands information from the National Wetlands Inventory, in replacement of these figures:

- Figure B.22 MRS-R01 Range II Wetlands (see Figure 1, attached)
- Figure B.23 MRS-R02 Range III Wetlands (see Figure 2, attached)
- Figure B.24 MRS-R03 Range IV Wetlands (see Figure 3, attached)
- Figure B.25 MRS-R09 Machine Gun / Rifle Range Wetlands (see Figure 4, attached)

2.3 Paragraph 3.6

The following edits apply to Paragraph 3.6:

3.6 VEGETATION CLEARANCE

3.6.1 Brush clearance, which will be performed using anomaly avoidance procedures, may be required for the analog and DGM surveys. Anomaly avoidance will consist of visual and instrument-aided procedures to ensure that no MEC/MPPEH or other debris is on or protruding from the surface such that it may damage the equipment or cause a safety hazard.

Areas to be avoided will be clearly marked by personnel conducting anomaly avoidance procedures. In areas determined by the UXO Technician II to be free of surface MEC/MPPEH, vegetation will be cleared to a minimum height of 6 inches above the ground surface (in non-wetlands areas) and be limited to cutting of brush, vines, small trees, and tree limbs that would directly impede access for the geophysical survey personnel. In wetlands areas, vegetation will be cleared to an appropriate height above the ground surface to allow the DGM data collection team access through the area. Cut vegetation will be moved from the anticipated instrument path so as not to impede data collection or create a safety hazard.

3.6.2 Brush clearing (in non-wetlands areas) will be accomplished by a two-person brush clearing team consisting of a UXO Technician II and a heavy equipment operator using a tracked

loader with a mulching head or brush-hog attachment. In wetlands areas, alternate cutting equipment may be used, as provided for in SOP 15.10 (see Appendix I). Brush clearing personnel will don appropriate personal protective equipment (PPE) during brush clearing activities. Any surface recovered MEC/MPPEH will be managed and disposed of IAW the ESP.

2.4 *Paragraph 3.8.1.5*

Paragraph 3.8.1.5 is revised as shown:

3.8.1.5 DGM data will be collected within wetland/pond areas that are 1.5 ft deep or shallower. ~~This data will only be used to determine anomaly density. There will be no~~ Intrusive investigation of DGM anomalies found in the wetland/pond areas will be investigated using hand tools. No intrusive investigation will occur where water is deeper than 6-inches.

2.5 *Paragraph 6.3.2.2*

Paragraph 6.3.2.2 is revised as shown:

6.3.2.2 The topography associated with the Former Conway BGR slopes generally to the southeast, and elevations range from nearly sea level to about 40 ft above sea level. Generally, the area is wooded with pine trees and thick underbrush. The USFWS National Wetlands Inventory (updated May 2015) shows that there are many wetlands within the boundaries of the investigation areas and MRSs, as shown in Figure 1 through Figure 4 of this field-work variance. Figures B.22 through B.25 of Appendix B. The wetland types identified by the National Wetlands Inventory as within the site include freshwater forested/shrub wetlands, freshwater ponds, and freshwater emergent wetlands (USFWS, 2014b). HGL team will make every attempt to avoid disturbing wetlands within the project area, as concurred to by SCDHEC on November 2, 2015 in the wetlands investigation Negative Determination letter.

No other changes to the work plan are required.

FIELD WORK VARIANCE

PROJECT NO.: H1018

DATE: 12/3/15

VARIANCE NO.: 003

PROJECT NAME: Former Conway Bombing and Gunnery Range RI/FS

PAGE 1 OF 8

CONTRACT NO.: W912DY-10-D-0023

DELIVERY ORDER NO.: 0018

PRESENT REQUIREMENTS:

REQUESTED BY: HydroGeoLogic, Inc.

Request for variance on "completion of DGM density transects" due to lack of right-of-entry (ROE) and inaccessibility of transect distances sufficient to support an overall density analysis. Additionally, the overall density analysis is not necessary to complete characterization for MRS-R02 and MRS-R03 due to previous definition of the target areas during historical investigations. An alternate approach to placement of DGM grids is requested, based on all documented historical removal action data and historical RI data. Additional grids and/or transects may also be placed after completion of intrusive effort for the proposed DGM grid locations, to confirm the boundary of MEC contamination and/or to collect information in background areas.

PROPOSED CHANGE:

See summary on final page.

TECHNICAL JUSTIFICATION:

Due to lack of ROE and the presence of thick vegetation with inundated wetlands, this revised approach is sufficient to accomplish the MEC characterization.

COST/SCHEDULE IMPACT:

No impact on cost, schedule, or data quality.

REASON FOR CHANGE:

ADDITION

DELETION

CHANGE ORDER

REQUIRED: NO

YES

CHANGE ORDER NO.

APPLICABLE DOCUMENT:

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12/3/15

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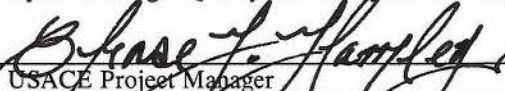


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DATE

12/3/15

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USACE Project Manager

DATE

1/12/16

FIELD WORK VARIANCE (FWV) TRACKING LOG

FWV NO.	AFFECTED DOCUMENT	SUBJECT	DATE WRITTEN	DATE SUBMITTED	DATE APPROVED BY USACE	REMARKS
001	Work Plan	DGM along golf course transects	9-16-15	9/22/15 10/1/15, after comments rec'd	10/2/2015	
002	Work Plan	Expand investigation in wetlands areas	10/20/2015	11/2/15		
003	Work Plan	Alternative approach to placement of DGM grids.	12/3/2015	12/3/2015		

FWV 003, Alternative Approach for placement of DGM grids

1.0 Description of the Field Work Variance

As provided in the Work Plan, during the RI field activities, all areas with elevated anomaly density or with potential to contain UXO should be traversed with a 90% chance of detecting these areas. The approved work plan evaluated all historical data, types of munitions recovered from each MRS, and identified potential MEC use areas (target areas and other areas of high anomaly density). Limited evaluation of MRS-R01 and MRS-R09 was performed in past investigations and the target area characteristics were not accurately defined prior to this RI. Extensive evaluation of MRS-R02 and MRS-R03 has been performed, including past intrusive investigations and removal actions. For MRS-R02 and MRS-R03, the target areas were defined in these MRSs, consistent with the historical record; however, the target area boundaries still require definition.

The work plan proposed parallel DGM transects to define areas of evaluated concentrations of anomalies (See paragraph 3.8.1.2). Following the transect investigations, anomaly density maps are generated and locations for DGM grids are identified (see paragraph 3.8.1.3). Due to the lack of ROE and presence of impassable areas within the wetlands (water is deeper than 1.5 feet and/or terrain features are impassable), the transect investigations will not be completed with sufficient coverage or in sufficient mileage to provide the most useful characterization information for large portions of MRS-R02 and MRS-R03. In some portions of these MRSs, some parallel DGM transect data can still be collected, but not in all areas. The areas that can be completed are limited to short segments that are not contiguous lengths and are not located adjacent to other parallel lines of DGM transects. Evaluation of the transects that have been brush cut and/or evaluated ahead of DGM data collection indicates that accessible coverage to be completed will be of limited assistance to accurately determine the target area boundaries in MRS-R02 and MRS-R03.

Previous intrusive investigations in MRS-R02 and R03 have identified central target areas in each MRS. Strategically located DGM grids can be used in lieu of transects to define the boundary of the target areas in MRS-R02 and MRS-R03. HGL proposes to place the DGM grid locations by using all available DGM transect data from the current investigation, previous RI/FS investigation data (geophysical survey and intrusive data), and previous removal action intrusive data in order to propose grid locations appropriate to delineate the extent of MEC contamination. Previous investigation efforts at MRS-R02 and MRS-R03 were much more extensive than those performed at MRS-R01. At MRS-R02 and MRS-R03 intrusive activities were performed within the presumed bombing targets and MEC and MD were identified (Figure 1).

1.1 Additional Information – MRS-R02

ROE refusal on the eastern side of MRS-R02 has reduced the amount of parallel DGM transect mileage that can be completed (Figure 2, screenshot). ROE refusal and impassable areas of the available parcels on the western side of MRS-R02 has reduced the amount of coverage by parallel transects that can be completed (Figure 3, screenshot). HGL has completed 10.8 miles of

vegetation clearance in MRS-R02 of the proposed 10.5 miles available to be completed based on ROE granted.

1.2 Additional Information – MRS-R03

ROE refusal on the southern side of MRS-R03 has reduced the amount of parallel DGM transect mileage that can be completed (Figure 4, screenshot). Inundated areas of the available parcels on the northeastern side of MRS-R03 has also reduced the amount of coverage by parallel transects that can be completed (Figure 5, screenshot). HGL has completed 3.2 miles of vegetation clearance in MRS-R03 of the proposed 11 miles available to be completed based on ROE granted.

1.3 Conclusions

The current environmental conditions, extensive intrusive investigations performed prior to this project in MRS-R02 and MRS-R03, lack of contiguous ROE in MRS-R02 and MRS-R03 as well as flooded conditions in some of the wetlands, warrant the use of a combined approach using both DGM grid locations and transects (either “mag and count” or “mag and dig”) to define the MEC boundaries at MRS-R02 and MRS-R03.

The DGM grids and additional intrusive transects will be strategically placed for approval by the client to provide additional characterization information. In general, DGM grids may not require extensive vegetation clearance compared to transects, as relatively less vegetated areas and areas without water deeper than 1.5-ft can be selected, in close proximity to the planned location. The locations of grids appropriate to complete the boundary characterization at MRS-R02 are provided in Figure 1.

2.0 Revisions to the Work Plan

The following specific paragraphs of the work plan are requested to be revised as follows:

Paragraph 3.8.1.2 and 3.8.1.3

3.8.1.2 The geophysical investigation of the four MRSs will use a combination of DGM transects and grids. DGM transects ~~will~~ may be used to define areas of evaluated concentrations of anomalies. DGM transect investigations ~~will~~ may include the following types of transects:

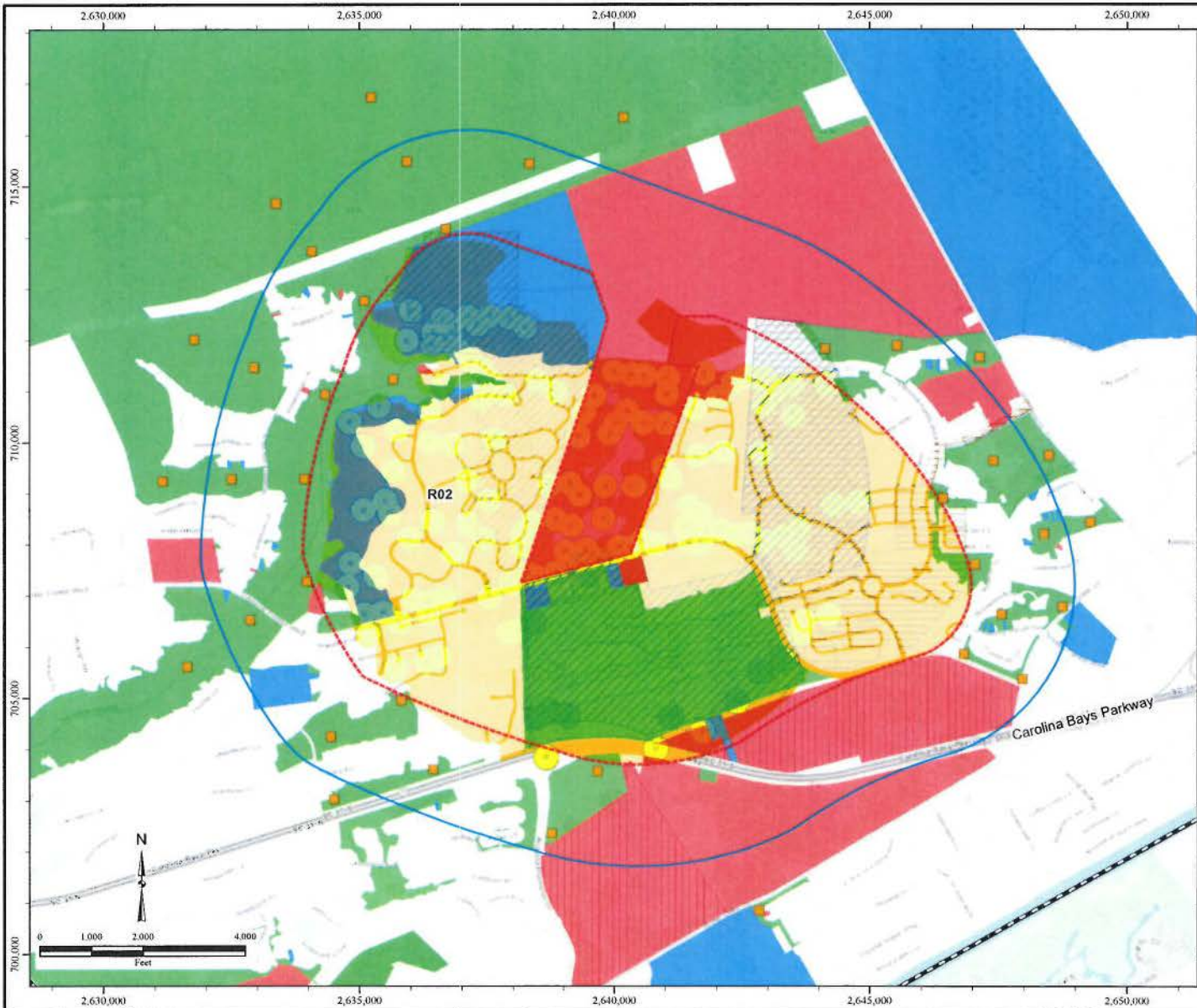
- Towed-array transects (golf course and residential areas);
- Wetland towed-array transects (These will used for wetland areas and surface water features that are 1.5 ft deep or shallower, such as retention ponds or golf course water hazards; DGM data will not be collected where the water is deeper than 1.5 ft);
- Person-portable single sensor overland transects (land-based transects for areas near permanent structures or in wooded areas); and
- Mag-and-dig transects within known target areas.

3.8.1.3 Following the transect investigations, anomaly density maps will be generated and locations for DGM grids will identified. If sufficient transect investigations cannot be completed, historical data and all current investigation data will be used to suggest locations for placement of DGM grids. DGM grids will be installed in high-density anomaly areas to characterize the nature, density, and extent of MEC and MD. DGM grids will also be used in areas of relatively low anomaly concentrations to confirm the absence of MEC/MD. A buffer area outside of the expected MEC areas will be characterized using a grid sampling approach to confirm that MEC is not present outside the boundary of the investigation area. Additional DGM grids and/or transects (with intrusive investigation) may be placed to support the findings of the intrusive effort completed in the DGM grids.

Paragraph 3.8.3.1

Following the DGM survey of available ~~the~~ transects, anomaly density maps will be developed to locate survey grids within high-, medium- and low-anomaly density areas. If sufficient transect investigations cannot be completed, historical data and all current investigation data will be used to suggest locations for placement of DGM grids. These grids will undergo an additional DGM survey and an intrusive investigation of anomalies to better define the nature of MEC and MD within each MRS. If MEC is discovered at the outer boundary of an MRS, HGL will coordinate with the PDT to determine an acceptable approach for expanding the characterization to evaluate the MRS boundary.

Figure 1
MRS-R02
Proposed Grid Locations



- Legend**
- Proposed Grid
 - Former Conway Bombing and Gunnery Range Boundary
 - Parcel ROE Accepted
 - Parcel ROE Refused
 - Parcel ROE Mailed
 - Parcel ROE Not Mailed
 - ▭ Munitions Response Site (1,961.2 acres)
 - Expanded Investigation Area (2,192.0 acres)
- Funded by USACE**
- Parsons, 2003 (Investigation)
 - Parsons, 2003 (Removal)
 - EODT, 2012 (Investigation)
- Funded Privately**
- ▨ ERM for International Paper 2005 (Removal)
 - ▨ Kestrel for LandBank 2006, (Removal)
 - ▨ Kestrel for LandBank 2007, (Removal)
 - ▨ Kestrel & Advent for Waterbridge 2009, (Removal)
 - ▨ Tetra Tech for DR Horton 2006, (Removal)
 - ▨ LandBank, 2001 (Removal)

Notes
Coordinates in South Carolina Stateplane, NAD83, feet
MRS=munitions response site
ROE=right of entry

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12/3/2015 JAR
Source: HGL, USACE, ERM, Kestrel, Parsons, Tetra Tech
ArcGIS Online Topographic Imagery



Screenshots

Figure 2, MRS-R02, ROE Refusal on the East

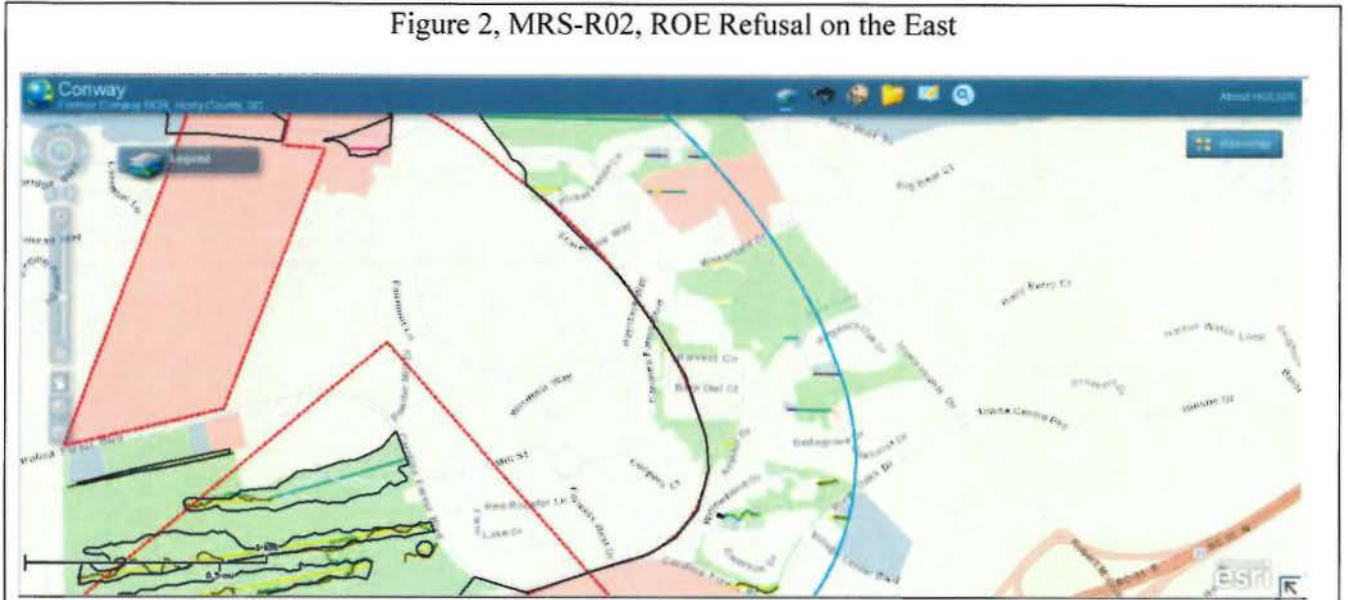
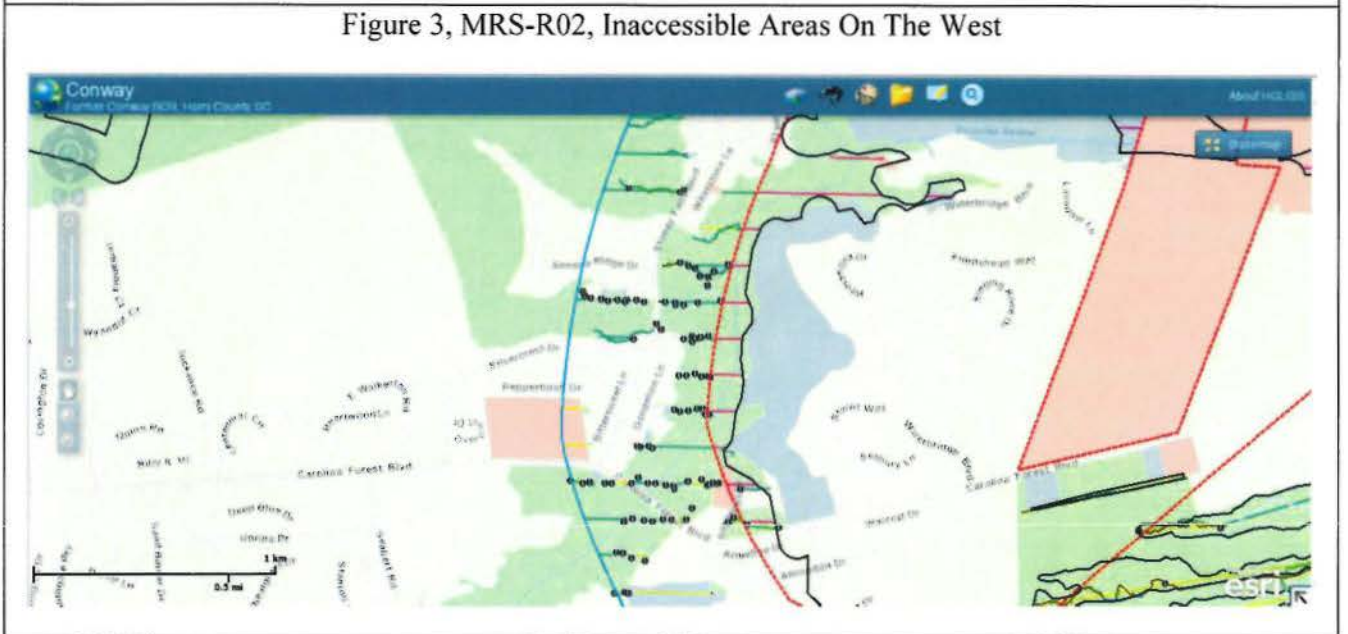


Figure 3, MRS-R02, Inaccessible Areas On The West



Screenshots

Figure 4, MRS-R03, ROE Refusal to the South

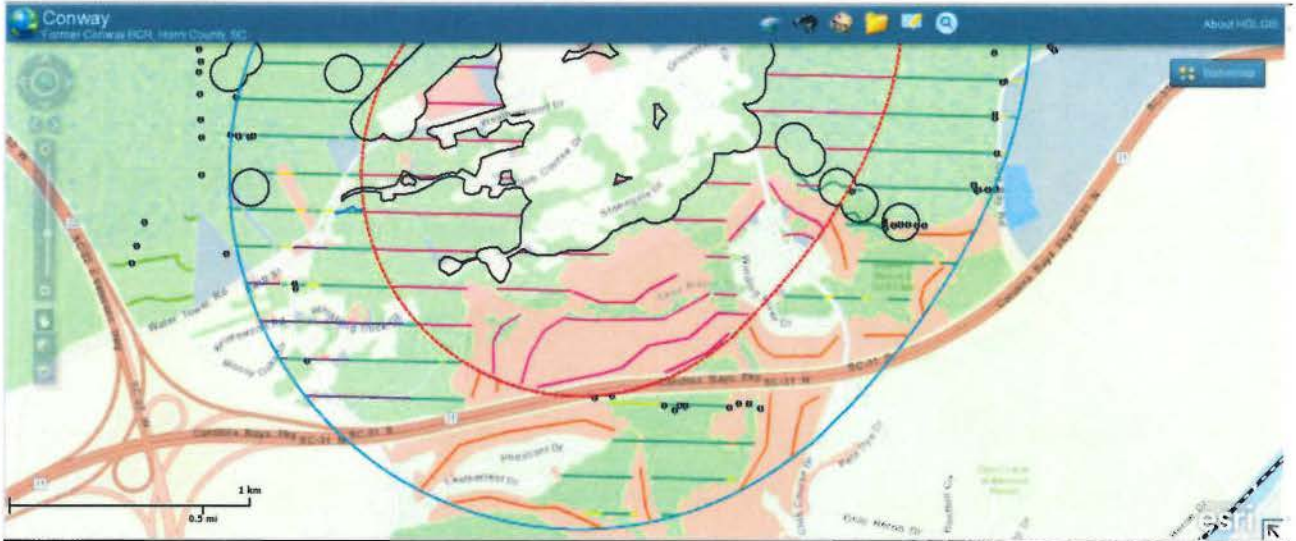
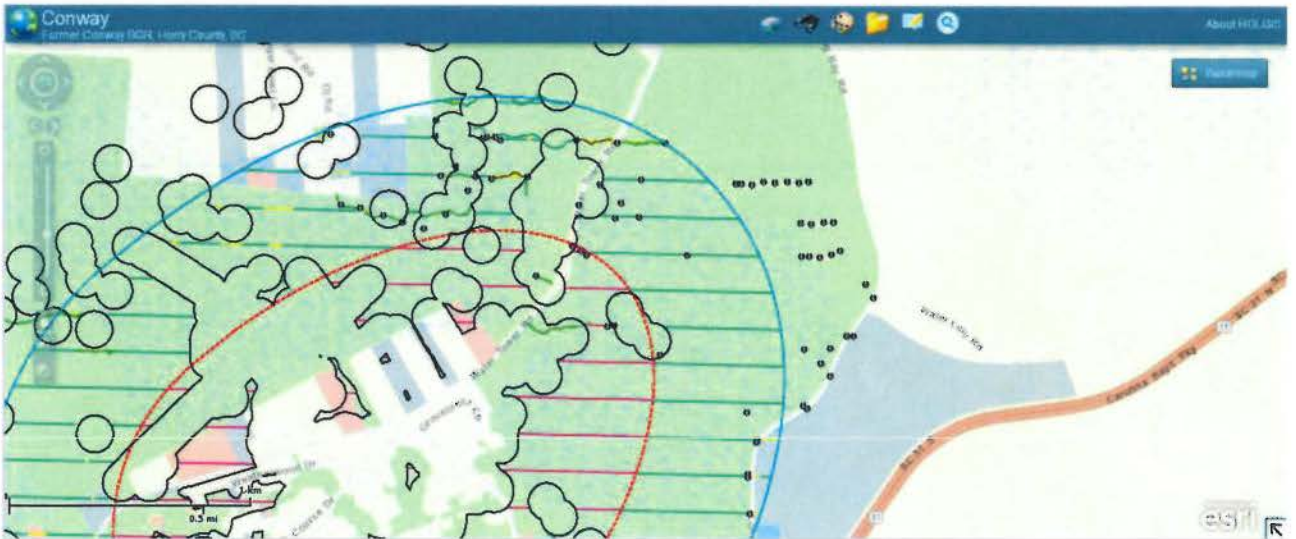


Figure 5, MRS-R03 impassable areas to the northeast



Black observation dots shown along transect lines mark areas which were noted by HGL teams as impassable due to vegetation, flooded areas, streams or ravines, and/or unable to collect DGM data.

FIELD WORK VARIANCE

PROJECT NO.: H1018

DATE: 4/14/16

VARIANCE NO.: 004

PROJECT NAME: Former Conway Bombing and Gunnery Range RI/FS

PAGE 1 OF 1

CONTRACT NO.: W912DY-10-D-0023

DELIVERY ORDER NO.: 0018

PRESENT REQUIREMENTS:

REQUESTED BY: HydroGeoLogic, Inc.

DGM is currently being performed in full coverage grids in presumed background areas of each MRS. Recently, analog intrusive "mag and dig" transects were approved by the Project Team to add investigation near golf course properties in presumed background areas, where DGM grid locations were not available, due to golf course operations. Other DGM locations proposed are affected by nearby electrical utilities.

PROPOSED CHANGE:

Section K.6 and subsection K.6.3 of the approved GIP specifies mag and dig may be used within full coverage grids for characterization if site conditions are not amenable to DGM. QC for the mag and dig grids will include a minimum of 1 coverage seed and 1 blind seed per equipment operator per grid.

TECHNICAL JUSTIFICATION:

Some of the DGM grids placed in presumed background areas of each MRS are characterized by excessive numbers of obstacles (trees). Extensive trees within 100-ft by 100-ft full coverage grids prevent accurate EM61 measurement positions as it is difficult to walk at a constant velocity between closely-spaced trees. Previous contractors have used mag and dig with a Schonstedt detector over contiguous areas to detect 100 pound bombs and relatively larger munitions fragments to depths of 3-4 ft. Analog intrusive (mag and dig) transects were approved by the Project Team for use on golf course properties.

COST/SCHEDULE IMPACT:

No impact on cost, schedule, or data quality.

REASON FOR CHANGE:

ADDITION

DELETION

CHANGE ORDER

REQUIRED: NO

YES

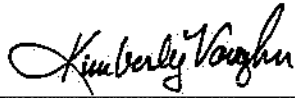
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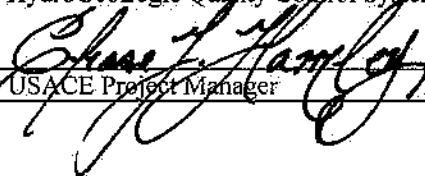


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4/14/16

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