Appendix F
Field Variance Forms

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA001
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Final OE-15SEA1–4 Site Specific Work Plan, Programmatic Work Plan
DESCRIPTION OF CHANGE:	6-pass QC test to be performed only when entering new type of terrain.
REASON FOR CHANGE:	This QC test was being performed daily and the project geophysicists (COE and Parsons) determined that it should only be done when a new type of terrain is encountered.
RECOMMENDED RESOLUTION:	Do 6-pass QC test only when new terrain is encountered.
PRESENT AND COMPLETED WORK IMPACT:	Should slightly increase overall productivity.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/6/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)	Date	Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	05/30/02		5/31/02		6/11/02

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

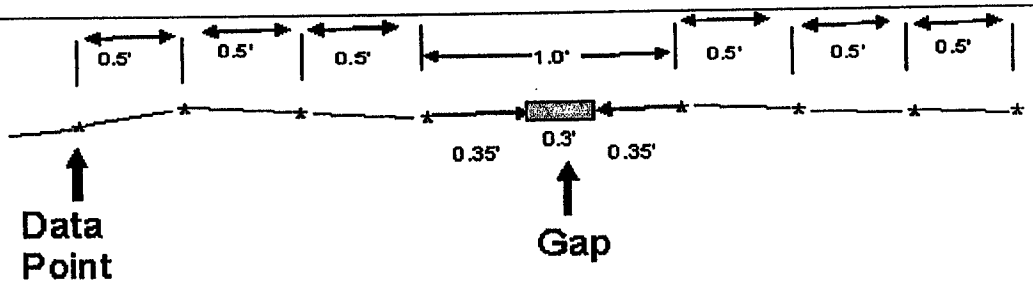
FIELD CHANGE NO.:	SEA002
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Final OE-15SEA1–4 Site Specific Work Plan, Programmatic Work Plan
DESCRIPTION OF CHANGE:	Check of instrument on metallic QC spike not required after each battery change or instrument turn-off.
REASON FOR CHANGE:	This QC test was being performed several times each day, whenever a battery was changed out or the instrument was turned off for a short period of time. The test was evaluated by the project geophysicists (COE and Parsons) and it was determined that this was a test that takes time away from geophysical surveying and serves little purpose in maintaining quality control.
RECOMMENDED RESOLUTION:	Perform QC spike test when starting a gridblock survey and after the survey is completed (this includes the end of a workday if the gridblock was not completed).
PRESENT AND COMPLETED WORK IMPACT:	Should slightly increase overall productivity.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/6/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)	Date	Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
Mike Cormier	05/30/02	Juan Koponen	5/31/02	Stan Yarbrough	6/11/02

PARSONS INFRASTRUCTURE AND TECHNOLOGY

FIELD VARIANCE FORM

FIELD CHANGE NO.:	FVF003
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Final OE-15SEA1–4 Site Specific Work Plan, Programmatic Work Plan
DESCRIPTION OF CHANGE:	 Revise FVF003 to change the along line data point spacing criteria. The previous criteria established by FVF003 is that 98% of along line data point spacings be less than 0.7 ft. The revised criteria is based on the total length of all segments along data transects that are more than 0.35 (0.7/2) ft from a data point (see segment labeled Gap in diagram above). The total length of these segments may not exceed 2% of the total transect length.
REASON FOR CHANGE:	The new criteria incorporates the size of along line data gaps in addition to the number of gaps greater than 0.7 ft. It is the total size of along line data gaps, not the total number of gaps that could prevent detection of an OE item.
RECOMMENDED RESOLUTION:	Incorporate the change as soon as possible.
PRESENT AND COMPLETED WORK IMPACT:	QC criteria for past and future work will directly measure the problem that could prevent detection of OE items. This will ensure that datasets with large along line data gaps will not be accepted, and will prevent unnecessary recollection of acceptable datasets.

Prepared By:

Craig Murray, Parsons GEO QCS — 10/8/02 — Date

Approvals:

Wayne Wright, Parsons QCM — 10-8-02 — Date

Tamir Klaff, Parsons PG — 10-8-02 — Date

Gary Griffith, Parsons PM — 10-8-02 — Date

Mike Cormier, USACE, GEOTECHNICIST — 10-10-02 — Date

Juan R. Pearson, USACE PM — 10-15-02 — Date

Stan Yarbrough, USACE, CM — 25 Oct. 02 — Date

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA004
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Final OE-15SEA1–4 Site Specific Work Plan, Programmatic Work Plan
DESCRIPTION OF CHANGE:	Change line spacing criteria so that as long as 98% of the grid is within 1.75-ft of a data point, "redo" lines do not need to be performed to fill in data gaps.
REASON FOR CHANGE:	There are occasional outliers in the data spacing that have minimal to no affect on data quality. The project geophysicists (COE and Parsons) determined that as long as these outliers represent less than 2% of the total data, it is not considered necessary to re-survey the outlier areas.
RECOMMENDED RESOLUTION:	If less than 2% of the data points in a gridblock file exceed the 1.75-ft spacing, "redo" lines do not need to be performed.
PRESENT AND COMPLETED WORK IMPACT:	Should reduce number of "redo" lines necessary and increase overall productivity.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/7/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
Mike Cormier	05/30/02	Juan Koponen	5/31/02	Stan Yarbrough	6/11/02

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA006
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	DID OT-FTO-05
DESCRIPTION OF CHANGE:	Geophysical data to not be delivered in DBASE format.
REASON FOR CHANGE:	This format is not a useful format for the COE geophysicists. A more appropriate format has been established and agreed on by the project geophysicists (COE and Parsons).
RECOMMENDED RESOLUTION:	Do not deliver data in DBASE format.
PRESENT AND COMPLETED WORK IMPACT:	No impact to work.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/6/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
Michael Cormier	05/30/02		5/31/02		6/11/02

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA007
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	DID OT-FTO-05
DESCRIPTION OF CHANGE:	Geophysical data to be delivered in blocks of grids as opposed to single grids.
REASON FOR CHANGE:	The data are collected as gridblocks (several grids grouped together) and are thus more easily transferred and processed by both Parsons and COE as gridblocks. Information regarding the grids included within the gridblocks is included with each delivery.
RECOMMENDED RESOLUTION:	Data should be delivered grouped into gridblocks.
PRESENT AND COMPLETED WORK IMPACT:	Increases data processing productivity.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/6/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	05/30/02		5/31/02		6/11/02

Parsons Infrastructure and Technology

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA008
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	DID OT-FTO-05
DESCRIPTION OF CHANGE:	Coordinate data to be delivered only in California State Plane coordinates when GPS is used.
REASON FOR CHANGE:	GPS and geophysical data are combined immediately in the field data recorders. There is no practical reason that the data should then be broken down into local coordinates by the processors. This information can easily be extracted from the State Plane coordinates as the grid corners coincide with State Plane coordinates ending in "00".
RECOMMENDED RESOLUTION:	Positioning data should be delivered in California State Plane coordinates only, unless a local grid system was used to perform the survey (e.g. no GPS used).
PRESENT AND COMPLETED WORK IMPACT:	No impact.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/7/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)	05/30/02	Juan Koponen (COE PM)	5/31/02	Stan Yarbrough (COE Cost Manager)	6/11/02

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA010
PROJECT:	Former Fort Ord, Seaside 1-4 Site
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT(S):	Programmatic Work Plan, Seaside 1-4 Site-Specific Work Plan
DESCRIPTION OF CHANGE:	Upon intrusive investigation, if an anomaly yields a non-OE item or fragments or pieces of an OE item that are not intact, the approximate weight of the total associated with the anomaly will be recorded, but the type of OE the item is associated with, the distance and direction away from the flag and the inclination and declination (e.g. dipping 45 deg, pointing NW) will not be recorded. If the anomaly is a UXO item or OE-SCRAP that can be identified (e.g. practice grenade, 2.36" rocket motor), the type of OE, approximate weight, distance and direction away from the flag and inclination and declination *will* be recorded.
REASON FOR CHANGE:	Clarification of procedures for recording information during intrusive investigations.
RECOMMENDED RESOLUTION:	Implement the procedure listed above.
PRESENT AND COMPLETED WORK IMPACT:	None.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02	Craig Murray	5/7/02	Gary Griffith	5/7/02
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
Mike Cormier	05/30/02		5/31/02		6/11/02

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA011
PROJECT:	Former Fort Ord, Seaside 1-4 Site
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT(S):	Programmatic Work Plan, Seaside 1-4 Site-Specific Work Plan
DESCRIPTION OF CHANGE:	To date, the Parsons data processors have been selecting all data spikes from the data that were above 2.5 mV. A low-pass filter will now be applied to reduce the amount of noise in the data that is picked as anomalies.
REASON FOR CHANGE:	Parsons geophysicists have reviewed field reacquisition data and intrusive results and determined that a simple noise reduction filter applied to the data will reduce the number of non-reacquireable anomalies while still selecting the reacquireable anomalies. Attached to this document is a white paper summarizing the process.
RECOMMENDED RESOLUTION:	Implement the noise reduction filter discussed above.
PRESENT AND COMPLETED WORK IMPACT:	Will reduce the number of points that need to be reacquired and investigated.

APPROVALS:

Prepared By	Date	Craig Murray (Parsons QC Geophysicist)	Date	Gary Griffith (Parsons PM)	Date
Tamir Klaff	5-6-02		5/7/02		5/7/02
Mike Cormier (COE QA Geophysicist)	05/30/02	Juan Koponen (COE PM)	5/31/02	Stan Yarbrough (COE Cost Manager)	6/11/02

Field Variance Form

FIELD CHANGE NO.:	SEA013
PROJECT:	Former Fort Ord, Seaside 1-4 Site
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT(S):	Programmatic Work Plan, Seaside 1-4 Site-Specific Work Plan.
DESCRIPTION OF CHANGE:	Current operations at OE-15SEA.1-4 involves reacquiring digital geophysical anomalies and digging all selected anomalies, regardless of reacquisition results. The reacquisition team visits all selected anomaly locations and determines if the anomaly can be detected a second time with either the EM61 or the Schonstedt. If either instrument detects an anomaly at the selected location, a yellow flag marks that point as successfully reacquired. If neither instrument detects an anomaly at the selected location, a pink flag marks that point as unsuccessfully reacquired, indicating a false target. Currently all anomalies are being excavated by the UXO dig teams. The proposed change to this procedure would be to excavate all yellow (successfully reacquired) anomalies, but only 10% of the pink (unsuccessfully reacquired) anomalies. This 10% could be assigned in the anomaly database and would appear on the dig sheets in the same format as the successfully reacquired anomalies. The results from the 10% sampling of pink flags will be reviewed and if these digs result in any significant finds (UXO or UXO-like), this process will be reviewed. This protocol has previously been discussed in weekly geophysical and OE update meetings.
REASON FOR CHANGE:	Pink flags are being excavated despite the fact that the anomalies cannot be reacquired with magnetic or electromagnetic sensors, verifying they are false targets. Digging only 10% of these anomalies would reduce the number of digs, reducing costs, while maintaining confirmation sampling of the reacquisition process.
RECOMMENDED RESOLUTION:	Implement the procedure listed above.
PRESENT AND COMPLETED WORK IMPACT:	Increased production, reduced cost.

APPROVALS:

Prepared By (Parsons QC Geophysicist)	Date	Wayne Wright (Quality Control Manager)	Date	Gary Griffith (Parsons PM)	Date
Craig Murray	6-05-02		6/5/02		6/5/02
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	06/10/02		6-10-02		6/11/02

Field Variance Form

FIELD CHANGE NUMBER:	SEA014
PROJECT:	Former Fort Ord, Seaside 1-4 Site
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT(S):	Seaside 1-4 Site-Specific Work Plan.
DESCRIPTION OF CHANGE:	Section 1.3 of the Seaside 1-4 SSWP states: *...the following actions will be performed:* *...(2) Excavation of all anomalies...* *The entire OE-15SEA.1-4 site will be surveyed and any anomaly that is found will be investigated.* Proposed change to this text is: *...the following actions will be performed:* *...(2) Investigation and resolution of all anomalies...* *The entire OE-15SEA.1-4 site will be surveyed and any anomaly will be investigated and resolved. An anomaly may be investigated and resolved in one of the following ways (See sections 5.10 and 5.13 of the PWP for descriptions of specific procedures):* *(1) The anomaly is interpreted as noise by data processors* *(2) The anomaly is not detected during reacquisition* (3) *The source of the anomaly is removed.*
REASON FOR CHANGE:	This change is intended to clarify the scope of this project.
RECOMMENDED RESOLUTION:	Implement the change proposed above.
PRESENT/COMPLETED WORK IMPACT:	No impact.

APPROVALS:

Prepared By (Parsons QC Geophysicist)	Date	Wayne Wright (Quality Control Manager)	Date	Gary Griffith (Parsons PM)	Date
Craig Murray	7-10-02		8-22-02		
Mike Cormier (COE QA Geophysicist)		Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	08/30/02		9/9/02		9 Sep. 02

Field Variance Form

FIELD CHANGE NO.:	FVF017
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT (S):	Standard Operating Procedure for seeding quality control items for quality control monitoring of analog and digital geophysical operations, Appendix G, volume 2, of the Programmatic Work Plan
DESCRIPTION OF CHANGE:	Section 4.0 Procedures, second bullet under pre-survey of the SOP states: *...Obtain at least one inert ordnance item (as discussed above) for every four acres to be surveyed, not to exceed a total of 20 items per site:* ...Proposed change to this text is: *Obtain at least one inert ordnance item (as discussed above) for every four acres to be surveyed and ensure the items are planted at or shallower than the detection depths listed on table 7.3 of EM1110-1-4009.*
REASON FOR CHANGE:	This change is intended to clarify the scope of this project.
RECOMMENDED RESOLUTION:	Implement the change proposed above.
PRESENT AND COMPLETED WORK IMPACT:	No impact. This Fieldwork Variance does not apply to the OE-15SEA.1-4 project. A large percentage of the site has already been surveyed, preventing additional QC seeding.

APPROVALS:

Prepared By (Parsons QC Geophysicist)	Date	Wayne Wright (Quality Control Manager)	Date	Gary Griffith (Parsons PM)	Date
Craig Murray	7-02-02		7/9/02		7/9/02
Mike Cormier (COE QA Geophysicist)	Date	Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	07/24/02		7/11/02		7/11/02

Field Variance Form

FIELD CHANGE NO.:	FVF022
PROJECT:	Former Fórt Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT (S):	OE-15SEA.1-4 SSWP, Programmatic Work Plan (Section 5.5.1)
DESCRIPTION OF CHANGE:	1. Change the blanking distance used for gridding geophysical data from 1.75 feet to 2 feet. Any grid with an area that is more than the blanking distance from a data location will require that additional data be collected to fill in the gap between survey lines. 2. In addition, the EM61-Mk2 anomaly selection process will incorporate channel 1 data. EM61-Mk2 line spacing will remain two feet, only the QC criteria will change.
REASON FOR CHANGE:	The change outlined above will be made because: 1. Analysis of the Channel 1 data greatly reduces the risk that any anomalies are present in the data gap areas that are included in the data as a result of increasing the blanking distance to 2 feet. For example, the data collected over a hand grenade buried at 14-inches bgs in grid B1B8J9 shows that even small items buried relatively deeply will be detected by the instrument from over 2 feet away. 2. Based on results of the "White Paper on the Navigation Error Observed for EM61-MK2 Surveys at the Seaside Parcels on the Former Fort Ord", small data gaps could likely to be associated with navigation errors associated with instrument "sway" and terrain affects on the GPS. 3. The project impacts of sending geophysical survey teams back into the field to fill gaps in data that have extremely low risk of affecting survey results are considerable. No redos (to date) established using either a 1.75-ft blanking distance or a 2-ft blanking distance to collect data gaps due to lane spacing (not blocks of data) have changed anomaly selections.
RECOMMENDED	Implement the changes proposed above.

RESOLUTION:	
PRESENT AND COMPLETED WORK IMPACT:	Fewer grids requiring redo actions. May slightly increase number of anomaly selections.

APPROVALS:

Prepared by Tamir Klaff (Project Geophysicist)		Wayne Wright (Quality Control Manager)	Date	Gary Griffith (Parsons PM)	Date
	8-26-02		8-27-02		8-27-02
Mike Cormier (COE QA Geophysicist)	Date	Juan Koponen (COE PM)	Date	Stan Yarbrough (COE Cost Manager)	Date
	09-10-02		9/10/02		9/11/02

PARSONS INFRASTRUCTURE AND TECHNOLOGY

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA025
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Programmatic Work Plan
DESCRIPTION OF CHANGE:	Add paragraph **6.6.5.1 Ordnance Fillers** In the event of locating a Livens Projector, 4-inch Stokes or a 4.2-inch mortar and positive identification of the filler remains unknown, the item will be left in place awaiting disposition by U.S. Army Technical Escort Unit (TEU) who will identify the filler prior to final disposition.
REASON FOR CHANGE:	Enhance safety of the community, workers and the environment.
RECOMMENDED RESOLUTION:	Incorporate the change as soon as possible.
PRESENT AND COMPLETED WORK IMPACT:	Minimal impact on past work, with minimal to significant impact to future work.

Prepared By:

Wayne Wright, Parsons QCM — 9-12-02 Date

Approvals:

Brad Olson, Parsons UXOSO — 9-12-02 Date

Gary Griffith, Parsons PM — 9-12-02 Date

Clinton Huckins, USACE PM — 9/12/02 Date

Juan Koponen, USACE PM — 9/13/02 Date

Stan Yarbrough, USACE, CM — 13 SEPT. 02 Date

PARSONS INFRASTRUCTURE AND TECHNOLOGY

FIELD VARIANCE FORM

FIELD CHANGE NO.:	SEA027
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Programmatic Work Plan and OE-15 SEA.1-4 Site Specific Work Plan
DESCRIPTION OF CHANGE:	Add Standard Operating Procedure (SOP) G-12 for OE with Unknown Filler, see attached.
REASON FOR CHANGE:	To establish standard procedures for OE with unknown filler.
RECOMMENDED RESOLUTION:	Incorporate the change as soon as possible.
PRESENT AND COMPLETED WORK IMPACT:	Minimal impact on past work, with minimal to significant impact to future work.

Wayne Wright, Parsons QCM — 10/2/02 Date

Brad Olson, Parsons UXOSO — 10/2/02 Date

Gary Griffith, Parsons PM — 10-2-02 Date

Clinton Huckins, USACE — 10/2/02 Date

Juan [illegible], USACE PM — 10/2/02 Date

Stan Yarbrough, USACE, CM — 10/4/02 Date

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STANDARD OPERATING PROCEDURE

FOR

OE WITH UNKNOWN FILLER

1.0 PURPOSE

The purpose of this SOP is to provide the step by step procedures and safety and health requirements applicable in the event ordnance items are discovered and the filler cannot be positively determined on the former Fort Ord.

A Chemical Warfare Materiel (CWM) Risk Assessment has been completed for the former Fort Ord. The results indicated that the probability of encountering CWM munitions is "unlikely" while the probability of encountering CWM Chemical Identification Sets (CAIS) is "seldom."

2.0 SCOPE

This SOP applies to all personnel involved in the conduct of UXO clearance of the former Fort Ord.

3.0 REGULATORY REFERENCES

- AR 385-61, AR 385-64, DA Pam 385-61 and DA Pam 385-64 for Safety concerning RCWM containing explosives
- AR 50-6, Chemical Surety
- AR 190-11 Security for RCWM

4.0 RESPONSIBILITIES

4.1 Program Manager

Responsible for ensuring availability of resources required to safely implement this SOP.

4.2 OE Field Operations Manager

The OEFOM is responsible for incorporating this SOP in plans, procedures, and training and ensuring that all personnel conducting UXO clearance operations are familiar with and comply with this SOP.

4.3 UXO Safety Officer

The UXO Safety Officer (UXOSO) ensures that all operations pertaining to UXO clearance is being conducted in a safe manner and in accordance with the Programmatic Work Plan, Site Specific Work Plan, and this SOP. The UXOSO conducts safety audits of the operations and ensures that all personnel are properly trained and utilizing the appropriate PPE.

4.4 Senior UXO Supervisor

The Senior UXO Supervisor (SUXOS) is responsible for planning, coordinating, and supervising all subcontractor on-site UXO activities; preparation of standard operating procedures (SOPs) for UXO operations ensuring compliance with DoD directives as well as local, state and federal statues and codes.

4.5 UXO Team Leader

The UXO team leader is responsible for supervision of the team conducting the clearance operation. He is required to conduct training of personnel involved in UXO clearance operations to ensure that every member of the UXO team thoroughly understands this SOP.

4.6 OE Safety Specialist (USACE)

The OE Safety Specialist (OESS) provides on-site safety support for OE activities, verifies UXO qualifications of contractor employees, coordinates exclusion zones activities with advise of the PM, OE Design Center POC and OE Safety Manager, facilitates military Explosive Ordnance Disposal (EOD) response when needed, provides technical OE safety support to USACE districts and contractors, and conducts government quality assurance inspections of completed work.

5.0 OPERATIONS

5.1 General

There are three ordnance items of concern that require positive identification of the filler prior to any disposition, which include; the Livens Projector, 4-inch Stokes mortar, and the 4.2-inch mortar.

- Visual recognition of the Livens Projector, 4.2-inch mortar, and the 4-inch Stokes is necessary and requires training on recognition features to ensure everyone uses the same techniques. The 4-inch Stokes mortar with chemical filler is 16 inches, 15 inches when filled with smoke producing filler, and 14 inches when filled with incendiary filler. The length is measured from the outside edge of the raised shoulders at both ends of the Stokes body. The 4.2-inch mortar is measured from the base of the tail boom to the top of the fuze. The 4.2 inch mortar of lengths other than 21.01-inches will be treated as ordnance/UXO with a known filler in accordance with the former Fort Ord PWP/SSWP.

- Livens Projectors, the 16-inch long 4-inch Stokes, and the 21.01-inch long 4.2-inch mortar shall be treated as OE with unknown fillers.

- Upon recognition/identification of a Livens Projector, a 4.2-inch mortar, or a 4-inch Stokes by any UXO team member conducting a UXO clearance operation, the team member will immediately notify the Team Leader who will measure the item. If the measurements are 16 inches for a Stokes mortar, or if the item recognized/identified is a 4.2-inch mortar 21.01 inches long, or a Livens Projector, the Team Leader will notify the Senior UXO Supervisor (SUXOS) and the USACE OE Safety Specialist.

- The UXO team and any other teams in the vicinity will evacuate the area, proceeding at least 200 feet upwind, and await the USACE OE Safety Specialist and the SUXOS.

- Upon arrival of the USACE OE Safety Specialist, the UXO Team leader will accompany him to the location of the suspect item.

- In the event the USACE OE Safety Specialist determines the item contains a known filler other than CWM, it shall be disposed of in accordance with the former Fort Ord PWP/SSWP.

- Upon verification by the USACE OE Safety Specialist of an OE item with an unknown filler, the exact location will be recorded using a GPS unit and backfilled with excavated material in the event the item is white phosphorous (WP). The

UXO Team Leader and USACE OE Safety Specialist will evacuate to the safe area upwind, and the OE Safety Specialist will notify DENR, the Garrison Commander, Sacramento District Safety Manager, and HNC. The UXO Team will investigate the surrounding area for additional like items as directed by the USACE OE Safety Specialist.

- The Garrison Commander and DENR will request the services of the U.S. Army Technical Escort Unit (TEU).

- In the event TEU positively identifies the filler as CWM, or the filler remains unknown, TEU will make the determination for and conduct a safe disposal of the item.

- In the event TEU positively identifies the filler as non-CWM, they will release the item to the USACE for disposal in accordance with the Former Fort Ord Programmatic Work Plan.

6.0 SAFETY

6.1 General

At no time will a Livens Projector, a 21.01-inch long 4.2-inch mortar, or a 4-inch Stokes mortar measuring 16 inches in length (fuzed or un-fuzed) be moved prior to disposition determination by TEU.

6.2 PPE

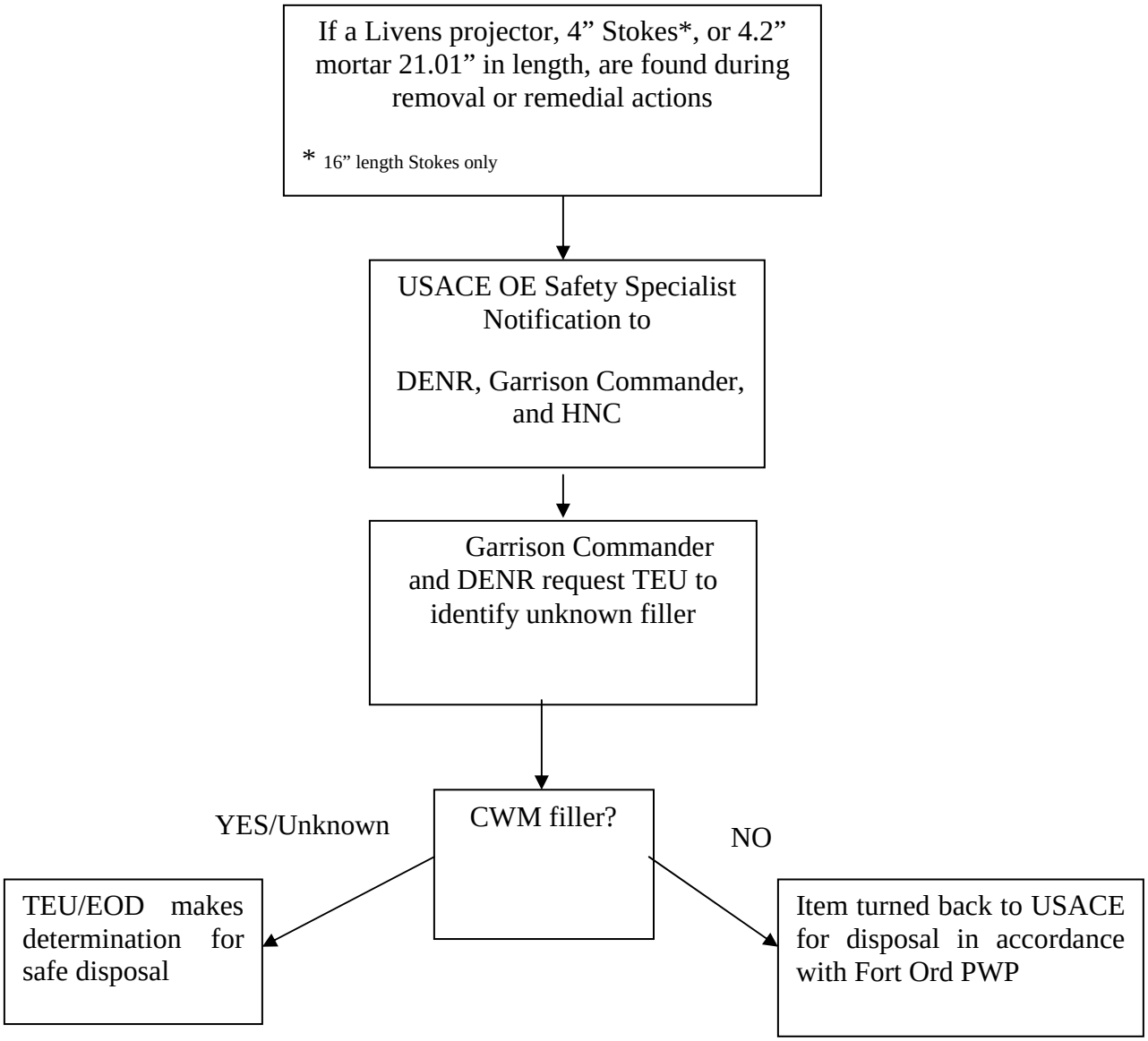
- Standard PPE for field UXO Clearance operations will be utilized.

Fort Ord OE Cleanup

Flowchart

For OE with Unknown Filler

Attachment 1



PARSONS

Field Variance Form

FIELD CHANGE NO.:	SEA028
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Programmatic Work Plan Volume 2 of 2, Appendix G
DESCRIPTION OF CHANGE:	Add Appendix G-13, Standard Operating Procedure for maintaining the Nonconformance and Corrective Action Program to Volume 2 of the Programmatic Work Plan. (See Attached)."
REASON FOR CHANGE:	To standardize and document any nonconforming activity affecting the safe execution of the required specifications of the Fort Ord Clean Up Project, and the actions taken to correct the nonconformance.
RECOMMENDED RESOLUTION:	Incorporate the change as soon as possible.
PRESENT AND COMPLETED WORK IMPACT:	Minimal impact of past work, and minimal impact to future work.

Prepared By:

Wayne Wright, Parsons QCM — 11-5-02 Date

Approvals:

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STANDARD OPERATING PROCEDURE FOR MAINTAINING THE NONCONFORMANCE AND CORRECTIVE ACTION PROGRAM

1.0 PURPOSE

The purpose of this Standard Operating Procedure (SOP) is to provide a means for identifying nonconforming activities, recommending corrective actions, verifying that corrective actions have been completed, and documenting the process.

2.0 RESPONSIBILITIES

2.1 Program Manager (PM)

The Program Manager shall be responsible for ensuring the availability of the resources needed to implement this SOP, and shall also ensure that this SOP is incorporated in plans, procedures and training for sites where this SOP is to be implemented.

2.2 Quality Control Manager (QCM)

The Quality Control Manager will be responsible for ensuring this SOP is effectively implemented. He will coordinate with the PM and pertinent staff members in determining effective corrective actions.

2.3 UXO Quality Control Specialist (UXOQCS)

The UXOQCS for the site is responsible for ensuring that quality control is maintained during all analog geophysical operations. The UXOQCS will perform the actions specified in this SOP to identify nonconforming activities, recommend corrective actions to be completed to achieve contract and work plan requirements, and to verify that the approved corrective actions are in fact completed. He will utilize the Parsons Nonconformance and Corrective Action Report form and the Parsons Fort Ord OE/UXO Nonconformance Report Log forms, see attached.

2.4 Quality Control Geophysicist (GEOQCS)

The GEOQCS for the site is responsible for ensuring that quality control is maintained during all digital geophysical operations. The GEOQCS will perform the actions specified in this SOP to identify nonconforming activities, recommend corrective actions to be completed to achieve contract and work plan requirements, and to verify that the approved

corrective actions are in fact completed. He will utilize the Parsons Nonconformance and Corrective Action Report and the Parsons Fort Ord OE/UXO Nonconformance Report Log forms see attached.

NOTE

Corrective actions other than the recommended will be explained separately and attached to the Nonconformance and Corrective Action Report.

2.5 OE Field Operations Manager (OEFOM)

The OEFOM is responsible for overall site field operations. He will receive a copy of all Nonconformance Reports affecting field operations, and will be responsible for scheduling any corrective actions required when approved by the PM.

3.0 PROCEDURES

The procedures below will be followed whenever an activity is in nonconformance with either the contract or any portion of the Programmatic Work Plan or Site Specific Work Plan.

3.1 Identify Nonconforming Activities

When an activity is identified to be in nonconformance, i.e., not being performed to required specifications, not within specified tolerance, not conforming to a specific scope of work or is in violation of the Safety and Health Plan, it will be recorded on the Nonconformance and Corrective Action Report, see attached.

3.2 Recommend Corrective Action

As a priority, recommended corrective actions must be designed to bring the nonconforming activity back into conformity, making sure that the discovered nonconformity is not part of a bigger issue. If so, the recommended corrective action must address the entire issue. Secondly, if at all possible, recommendations should be an expeditious method that is cost effective.

3.3 Verify Corrective Action Has Been Completed

Once the corrective action has been completed, the QC inspecting officer will verify completion through re-inspection.

4.0 Administrative Procedures

The administrative procedures below must be followed in order to properly document a nonconformance from identification through verified corrective action.

- The QC Inspection Officer identifying the nonconformance will initiate the numerically sequenced Nonconformance and Corrective Action Report (NCR-CAR) and the NCR-CAR Log Forms.

- The QC Inspecting Officer will complete the section identifying the OE Site, the Nonconforming Process, Report number, Date, and Part I. He will sign and date part I.

- The QC Manager will complete part II and add his recommended corrective action, sign and date part II.

- The Program Manager will add his comments to part II and either agree with the recommended corrective action or convene a meeting with members of his staff to discuss alternative corrective actions, then sign the NCR-CAR. A copy will become part of the daily QC report.

- Once the Program Manager has signed the NCR-CAR the QCM will place a date in one or more of the "delivered to" blocks, and deliver a copy to those indicated as being responsible for coordinating the corrective action.

- Once the corrective action has been completed, the Inspecting Officer will verify the work through re-inspection, sign and date the original form in Part III, and submit it to the QCM for signature.

- The QCM will discuss the completed actions with the PM and have the PM sign the form completing all actions.

- The original will be kept in the QC Manager's files and when completed, become a part of the grid record in the Ordnance and Explosives (OE) database.

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Field Variance Form

Field Change No.:	SEA030
Project:	Former Fort Ord
Project Number:	739266
Applicable Document:	Programmatic Work Plan and OE-15 Seaside 1-4 SSWP
Description Of Change:	Change paragraphs 2.6.2, 5.16.7 and 11.11.4, all of which state, "A failure of any of the above steps will be constituted by the discovery of a UXO or UXO-like item, or five non-selected anomalies as a result of the QC survey." To read, "A failure of any of the above steps will be constituted by the discovery of a UXO or UXO-like item as a result of the QC survey, sufficient in size to represent a 37mm projectile or larger, or the discovery during the QC process of five non-selected anomalies that should have been selected during the initial survey."
Reason For Change:	To standardize QC/QA failure criteria by quantifying the size of an UXO or UXO-like item that is sufficient to cause the grid to fail a QC/QA inspection.
Recommended Resolution:	Incorporate the change as soon as possible
Present And Completed Work Impact:	Minimal impact on past work, and minimal impact to future work.

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Juan Kopondo, USACE PM — 11/26/02 Date

Stan Yarbrough, USACE, CMS — 27 Nov. 02 Date

Ted Asch, USACE, Geophysicist FOR — 11/25/02 Date

PARSONS

Field Variance Form

FIELD CHANGE NO.:	PWP002
PROJECT:	Former Fort Ord
PROJECT NUMBER:	739266
APPLICABLE DOCUMENT:	Programmatic Work Plan (PWP)
DESCRIPTION OF CHANGE:	Paragraphs 2.3.8.3, conflicts with 2.6.1. and 5.13 in that, 2.3.8.3 reads, "In the event the anomaly is not at the point painted on the ground, the search team shall search a five-foot radius around the paint." Change paragraph 2.3.8.3 to "In the event the anomaly is not at the flagged location, the search team shall search a three-foot radius around the flag."
REASON FOR CHANGE:	Consistency
RECOMMENDED RESOLUTION:	Incorporate the change
PRESENT AND COMPLETED WORK IMPACT:	No impact on past or present work ?

Prepared by:

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Approvals:

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Theodore Asch, USACE Geophysicists — 12/17/02 Date

Juan Koppert, USACE PM — 12/20/02 Date

Stan Yarbrough, USACE, OMS — 01/06/03 Date