

FINAL WORK PLAN

Contract No. F41624-03-D-8613

Task Order No. 0207



Prepared for:

Camp Stanley Storage Activity Boerne, Texas

Prepared by:

PARSONS

Austin, TX

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ATTACHMENT

Attachment 1 On-post and Off-post Groundwater Wells, CSSA

1.0 INTRODUCTION

Parsons is under contract with Air Force Center for Environmental Excellence (AFCEE) to provide groundwater monitoring and environmental program support services under AFCEE Contract F41624-03-D-8613 as Task Order 0207 (TO 0207). Services will be provided for Camp Stanley Storage Activity (CSSA) at the facility located in Boerne, Texas. The work shall be performed in accordance with requirements of the Resource Conservation and Recovery Act (RCRA) 3008(h) Order in effect for CSSA.

This work plan provides the activities to be conducted in to complete the requirements of the scope of work in effect for TO 0207. Existing work plans for current and previous CSSA task orders fulfilled by Parsons are in effect and are available in the CSSA Environmental Encyclopedia, [Volume 1, Work Plans](#). Activities to be conducted for TO 0207 will follow the provisions of those prior work plans. This work plan sets out project-specific activities directly related to TO 0207.

2.0 TO 0207 SCOPE OF WORK

The activities covered by this work plan include monitoring existing on- and off-post groundwater wells, sample Westbay-equipped wells, provide data validation, and provide on- and off-post granular activated carbon (GAC) maintenance. Parsons will complete Environmental Encyclopedia (EE) updates, publish the EE to the website, develop and submit progress reports to the United States Environmental Protection Agency (USEPA), provide public meeting support, local area network (LAN) support, and develop a document management system (DMS).

2.1 GROUNDWATER SAMPLING

Groundwater monitoring will be conducted in the months of September 2006, December 2006, March 2007 and June 2007. Twelve months of on- and off-post GAC maintenance will be conducted from July 2006 through July 2007. [Table 2-1](#) indicates the number of wells and sampling parameters to be completed under this TO. Wells may be removed from or included in the sampling schedule based on the recommendations of the Final Long-Term Monitoring Optimization (LTMO) Study (Parsons, 2005) and/or the provisions of the Data Quality Objectives (DQOs) for the Groundwater Monitoring Program (Parsons, 2006). Wells to be sampled are shown on Attachment 1.

Sampling of the wells will be based on AFCEE Handbook procedures with exceptions as appropriate for the hydrogeology at the site. The wells will be purged in accordance with low-flow sampling techniques. The staff will follow the methods approved in CSSA Quality Assurance Program Plan (QAPP) and the Sampling and Analysis Plan (SAP) for TO 0207. Quality Assurance/Quality Control (QA/QC) sampling and analysis will be performed to meet the requirements in the CSSA QAPP. The purge water will be containerized and transported for treatment in the GAC treatment system prior to discharge at CSSA's Outfall 002.

GAC maintenance includes monthly inspection and replacement of the pre-filters installed at each GAC system. The GAC system is also inspected for condition and operation. The carbon canisters at the off-post GAC systems located at (LS-6, LS-7, OFR-3, RFR-10 and RFR-11) are scheduled for replacement every six months, or as needed based on analytical results. Carbon exchange is scheduled for September 2006 and March 2007. The carbon canisters located at the GAC system at wells LS-2 and LS-3 are scheduled for replacement every 18 months, or as needed based on analytical results.

2.2 ANALYTICAL VALIDATION AND VERIFICATION

The analytical validation and verification task includes issues related to analytical data, including an audit of the AFCEE certified laboratories, oversight of sample collection and submittal efforts, interaction with the selected laboratory, data verification, data validation, and management of electronic analytical data.

The laboratory audit will review the specific analytical methods associated with this project, as well as the overall quality systems utilized by the laboratory. The ability of the laboratory to comply with requirements specified in the AFCEE QAPP and project DQOs will be emphasized. All major and minor audit findings will be documented in an audit report. The laboratory will be required to submit its response and proposed corrective actions for review and approval by AFCEE, CSSA, and Parsons.

Table 2-1 Sample Quantities and Analytical Parameters

Well Count	Well ID	Frequency (LTMO)	Sep-06	Dec-06	Mar-07	Jun-07
1	CS-MW1-LGR	Semi-annual	S	NS	S	NS
2	CS-MW1-BS	Biennial - Sep 08	NS	NS	NS	NS
3	CS-MW1-CC	Biennial - Sep 08	NS	NS	NS	NS
4	CS-MW2-LGR	Semi-annual	S	NS	S	NS
5	CS-MW2-CC	Biennial - Sep 08	NS	NS	NS	NS
6	CS-MW3-LGR	Semi-annual	S	NS	S	NS
7	CS-MW4-LGR	Semi-annual	S	NS	S	NS
8	CS-MW5-LGR	Semi-annual	S	NS	S	NS
9	CS-MW6-LGR	Semi-annual	S	NS	S	NS
10	CS-MW6-BS	Biennial - Sep 08	NS	NS	NS	NS
11	CS-MW6-CC	Biennial - Sep 08	NS	NS	NS	NS
12	CS-MW7-LGR	Semi-annual	S	NS	S	NS
13	CS-MW7-CC	Biennial - Sep 08	NS	NS	NS	NS
14	CS-MW8-LGR	Every 9 months*	NS	NS	S	NS
15	CS-MW8-CC	Biennial - Sep 08	NS	NS	NS	NS
16	CS-MW9-LGR	Semi-annual	S	NS	S	NS
17	CS-MW9-BS	Biennial - Sep 08	NS	NS	NS	NS
18	CS-MW9-CC	Biennial - Sep 08	NS	NS	NS	NS

Table 2-1 Sample Quantities and Analytical Parameters, cont'd

Well Count	Well ID	Frequency (LTMO)	Sep-06	Dec-06	Mar-07	Jun-07
19	CS-MW10-LGR	Every 9 months*	NS	NS	S	NS
20	CS-MW10-CC	Biennial - Sep 08	NS	NS	NS	NS
21	CS-MW11A-LGR	Semi-annual	S	NS	S	NS
22	CS-MW11B-LGR	Semi-annual	S	NS	S	NS
23	CS-MW12-LGR	Every 9 months*	NS	NS	S	NS
24	CS-MW12-BS	Biennial - Sep 08	NS	NS	NS	NS
25	CS-MW12-CC	Biennial - Sep 08	NS	NS	NS	NS
26	CS-MWH-LGR	Biennial - Sep 08	NS	NS	NS	NS
26	CS-MW16-LGR	Semi-annual	S	NS	S	NS
27	CS-MW16-CC	Semi-annual	S	NS	S	NS
28	CW-MW17-LGR	Every 9 months*	NS	NS	S	NS
29	CS-MW18-LGR	Semi-annual	S	NS	S	NS
30	CS-1	Every 9 months*	NS	NS	S	NS
31	CS-MW19-LGR	Semi-annual	S	NS	S	NS
32	CS-2	Every 9 months*	NS	NS	S	NS
33	CS-4	Semi-annual	S	NS	S	NS
34	CS-9	Every 9 months*	NS	NS	S	NS
35	CS-D	Semi-annual	S	NS	S	NS
36	CS-10	Every 9 months*	NS	NS	S	NS
37	CS-11	Every 9 months*	NS	NS	S	NS
38	CS-MWG-LGR	Every 9 months*	NS	NS	S	NS
39	CS-I	Every 9 months*	NS	NS	S	NS
40	MWXX-LGR	Quarterly (4 events)	S	S	S	S
41	MWXX-LGR	Quarterly (4 events)	S	S	S	S
42	MWXX-LGR	Quarterly (4 events)	S	S	S	S
43	MWXX-LGR	Quarterly (4 events)	S	S	S	S
44	MWXX-LGR	Quarterly (4 events)	S	S	S	S
45	MWXX-LGR	Quarterly (4 events)	S	S	S	S
		Total	21	6	32	6

On-post wells to be sampled for short list of VOCs 1,2-dichloroethene, DCE, trans-1,2-dichloroethene, PCE, TCE, and vinyl chloride and the metals lead, cadmium, and nickel.

Active drinking water wells (shown in bold) to be sampled for the full list VOCs and nine metals.

Well Count	Well ID	Frequency	Sep-06	Dec-06	Mar-07	Jun-07
Est. 40	Off-post wells	Quarterly (4 events)	40	40	40	40

Total 160

Off-post wells to be sampled for short list of VOCs 1,2-dichloroethene, DCE, trans-1,2-dichloroethene, PCE, TCE, and vinyl chloride.

Table 2-1 Sample Quantities and Analytical Parameters, cont'd

Well Count	Well ID	Frequency (LTMO)	Sep-06	Dec-06	Mar-07	Jun-07
Other types of samples						
46	CS-WB01 (10 intervals)	Semi-annual	10	NS	10	NS
47	CS-WB02 (10 intervals)	Semi-annual	10	NS	10	NS
48	CS-WB03 (10 intervals)	Semi-annual	10	NS	10	NS
49	CS-WB04 (11 intervals)	Semi-annual	11	NS	11	NS

Total 41 41

Westbay intervals to be sampled for short list of VOCs 1,2-dichloroethene, DCE, trans-1,2-dichloroethene, PCE, TCE, and vinyl chloride and the metals lead, cadmium, and nickel.

GAC Outfall 002	Weekly	2 samples per week, 52 weeks = 104
Outfall 004	Weekly	2 samples per week, 52 weeks = 104

Total 208

Outfall samples will be analyzed for PCE and TCE only.

Parsons will oversee each sampling event, including reviewing each chain-of-custody for accuracy and completeness, verifying that the laboratory sample log-in sheets match the chain-of-custody forms, addressing any sample receipt issues (such as broken sample containers), and maintaining continuous contact with the laboratory regarding scheduling.

Laboratory data packages will be reviewed by Parsons chemists for completeness and adherence to the CSSA QAPP and the approved laboratory variances. All associated analytical QA/QC data will be examined, and all exceptions will be noted in both the case narrative and data verification report (DVR). The sample results associated with noncompliant QC performance will be qualified in accordance with the CSSA QAPP.

Following verification of the laboratory data, the data usability as related to the project DQOs will be assessed. Validation will include examination of historical data (if available), laboratory data trends, and the reasons for data collection. Based on the overall assessment of the data, flags may be removed or changed to reflect usability of the data. The basis for such changes will be detailed in the project summary report.

Electronic data submitted by the laboratories will be loaded into the CSSA GIS database, verified for accuracy, and updated to reflect all data qualifier changes incurred through the data verification and validation process. The data are to be supplied in Environmental Resource Program Information Management System (ERPIMS) compliant format.

2.3 PUBLIC MEETING SUPPORT

Parsons will provide technical expertise and logistical support for two public meetings. The public meetings will be held in the open house format consistent with previous public meetings. The purpose of the public meetings is to present information on the CSSA Environmental

Program to the general public with government personnel representation and USEPA and Texas Commission on Environmental Quality (TCEQ) participation. Parsons will provide technical information to be presented to the public and provide technical experts to assist during question and answer portions of the public meetings.

The public meetings will be held as two separate meetings held on a weekday evening, in the CSSA area with Parsons technical experts in attendance. The types of presentation materials to be provided include both handouts and static poster displays. Parsons will work in conjunction with CSSA environmental personnel to prepare poster displays for each meeting.

2.4 LAN SUPPORT AND DMS DEVELOPMENT

The LAN support to be provided includes technical support for CSSA's LAN network. An Information Technology specialist from Parsons will provide technical support for CSSA on an as-needed basis. Parsons will perform routine LAN and computer system maintenance for the CSSA environmental office computer system for a 13-month period through December 2007. Parsons shall install new hardware, software, software upgrades and anti-virus pattern updates to the system. Parsons will provide directly to the CSSA environmental office limited technical support for hardware and software installed on the system and will assist in getting further technical support from product vendors, as well as assisting the CSSA environmental office with informal recommendations for acquiring new hardware and software.

Parsons will also assist CSSA in evaluating, installing and further customizing a DMS. It is assumed that DMS development will begin with a professional evaluation of DMS capabilities beneficial and cost effective for implementation at CSSA. Initial evaluations will be conducted with CSSA environmental office personnel involvement to identify specific installation variables that will affect the design and features of the final system to be developed. Parsons will assist CSSA with the evaluation of currently available DMS software packages and identification of the package that will provide CSSA with options for customization, ease of use and the ongoing maintenance features desired. Included in the evaluations will be consideration of the level of effort required to develop quality metadata required by each prospective DMS for both existing and new documents.

Parsons will provide network systems integration expertise to install and configure the DMS within the existing CSSA Environmental and Safety Office LAN with minimal impact to the performance, security and structure of the LAN. Parsons will provide technical information and management expertise to assist CSSA in producing and implementing the environmental information DMS tailored to CSSA.

After the initial software evaluation and subsequent purchase of the DMS base software, Parsons will provide programming expertise to further customize and tailor the DMS to the specific uses and needs of CSSA. Parsons will develop tools, where possible, to add the existing documents and metadata to the DMS.

2.5 REPORTING PROCEDURES

Various reports are required under the TO 0207 scope of work, including: Quarterly Groundwater Monitoring Reports (CDRL A001d), Annual Groundwater Monitoring Reports (CDRL A001e), EPA Reports (CDRL A001f), Environmental Encyclopedia Updates (CDRL A001g), Health and Safety Plan (CDRL A004), Sampling and Analysis Plan (CDRL A005), Project Activities Work Plan (CDRL A007), Project Schedule (CDRL B002), Bi-monthly Status Reports (CDRL B004), Meeting Presentation Materials (CDRL B008), and Meeting Minutes (CDRL B010). Specific reporting procedures will follow the provisions of the statement of work (SOW) and the procedures set out below.

2.5.1 Environmental Encyclopedia Updates

Parsons will provide fourteen (14) months of updates to the CSSA Administrative Record, or EE from October 2006 through December 2007. Monthly updates are anticipated to include USEPA progress reports, correspondence, updates to chronologies, investigation reports, treatability studies, and table of contents and will be made on an ongoing basis to the electronic version of the EE. The hard-copy updates will be compiled and organized, and update instructions will be prepared and submitted quarterly. Plans and reports from different delivery orders will be collated into the updates, and the updates will be distributed to CSSA, AFCEE, USEPA, and regional and state offices of the TCEQ. Additional encyclopedia volumes (binders) will be included as necessary. A total of seven copies of the EE will be updated. Documents included in the updates will also be added to the hyperlinked version of the EE. DVD copies of the hyperlinked encyclopedia will also be distributed four times in one year of updates.

2.5.1 USEPA Progress Reports

Parsons will provide USEPA progress reports in accordance with the requirements of the 3008(h) order. The reports will be at the semi-annual frequency currently approved by USEPA. Each report will include a description and estimate of the percentage of the RCRA Facility Investigation (RFI) completed, summaries of all findings, summaries of all changes made in the RFI during the reporting period, summaries of all contacts with representatives of the local community, public interest groups or TCEQ during the reporting period, summaries of all problems or potential problems encountered during the reporting period, actions being taken to rectify problems, changes in contact personnel during the reporting period, projected work for the next period, and copies of daily reports, inspection reports, and laboratory/monitoring data. Parsons will provide twelve months of progress reports, assumed to include the December 2006, June 2007, and December 2007 submittals.

2.5.2 Groundwater Reports

All results from the four rounds of groundwater sampling will be included in the quarterly groundwater reports and one annual groundwater report. The preliminary analytical data will be provided to CSSA within five days of receipt at Parsons. All reports will be prepared as both draft and final versions, with one round of government comments before issuance of the final

reports. Three summary quarterly groundwater reports will be prepared and submitted to document the findings of contaminant concentration and delineation. One annual groundwater report (December 2006) will be prepared to summarize the quarterly reports.

The samples collected from Outfalls 002 and 004 are reported in monthly discharge monitoring reports, to be submitted to TCEQ. The discharge monitoring reports will be provided each month to CSSA for submittal to TCEQ.

2.5.3 Report Distribution

From the field efforts for groundwater monitoring covered in this work plan, eight reports will be submitted in draft and final versions. In addition, all technical reports produced as part of TO 0207 will be submitted in accordance with the SOW provisions. The project deliverables will be prepared and submitted to the following entities as given in [Table 2-2](#).

3.0 SCHEDULE

The activities covered by this work plan will be performed in accordance with the schedule given in [Table 3-1](#).

**Table 2-2
 Project Deliverables and Distribution List for Quarterly Groundwater Technical Reports**

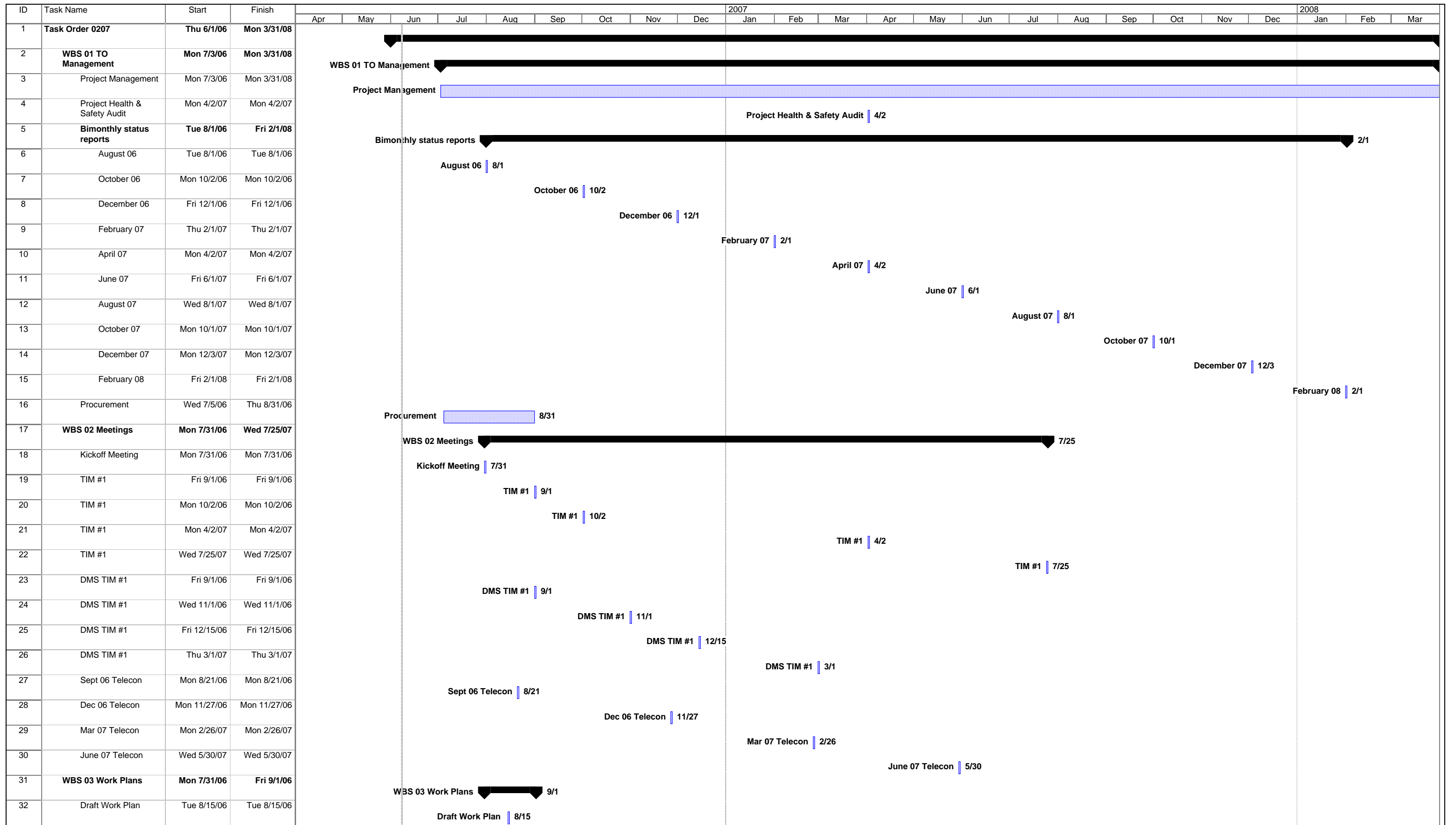
Item	Required Date per RFP	Proposed Date	Distribution			
			HQ AFCEE/ IWE	AFCEE ACW	Base POC	AFCEE Library
Draft OSHA Report (A001a)	<i>As needed</i>	<i>As needed</i>	1		1	
Final OSHA Report (A001a)	<i>As needed</i>	<i>As needed</i>	1	L	1	
Draft Analytical Data Report (A0001b)	Nov 06, Feb 07, May 07, Aug 07	Nov 06, Feb 07, May 07, Aug 07	2		2	
Final Analytical Data Report (A001b)	Dec 06, Mar 07, Jun 07, Sep 07	Dec 06, Mar 07, Jun 07, Sep 07	1	LT	2	
Draft Document Management System (A001c)	<i>As needed</i>	<i>As needed</i>	2		2	
Final Document Management System (A001c)	<i>As needed</i>	<i>As needed</i>	1	LT	2	
Draft Quarterly Monitoring Report (A001d)	Nov 06, May 07, Aug 07	Nov 06, May 07, Aug 07	2		2	
Final Quarterly Monitoring Report (A001d)	Dec 06, Jun 07, Sep 07	Dec 06, Jun 07, Sep 07	1	LT	2	
Draft Annual Monitoring Report (A001e)	Feb 07,	Feb 07,	2		2	
Final Annual Monitoring Report (A001e)	Mar 07,	Mar 07,	2			
Draft EPA Report (A001f)	Dec 06, Jun 07, Dec 07	Dec 06, Jun 07, Dec 07	2		2	
Final EPA Report (A001f)	Jan 07, Jul 07, Jan 08	Jan 07, Jul 07, Jan 08	1	LT	2	1
Draft EE Updates (A001g)	Monthly Oct 06 to Oct 07	Monthly Oct 06 to Oct 07	2		2	
Final EE Updates (A001g)	Monthly Oct 06 to Oct 07	Monthly Oct 06 to Oct 07	1	LT	2	CD
Critical Issues Notification (A003)	<i>As needed</i>	<i>As needed</i>	LT	LT	LT	
Draft Quality Program Plan – Part 1 (HSP) (A004)	Jul 06	Jul 06	2		2	
Final Quality Program Plan – Part 1 (HSP) (A004)	Aug 06	Aug 06	2	LT	1	CD
Draft Quality Program Plan – Part	Aug 06	Aug 06	2		2	

Item	Required Date per RFP	Proposed Date	Distribution			
			HQ AFCEE/ IWE	AFCEE ACW	Base POC	AFCEE Library
2 (SAP) (A005)						
Final Quality Program Plan – Part 2 (SAP) (A005)	Sep 06	Sep 06	1	LT	2	CD
Draft Project Activities Work Plan (A007)	Aug 06	Aug 06	2		2	
Final Project Activities Work Plan (A007)	Sep 06	Sep 06	1	LT	2	CD
Project Schedule (B002)	Jul 06	Jul 06	1	1	1	
CPSMR (B004)	Bimonthly	Bimonthly	1	1	1	AFCEE/ MSR 1
Draft Digital Photography (B005)	<i>As needed</i>	<i>As needed</i>	2		2	
Final Digital Photography (B005)	<i>As needed</i>	<i>As needed</i>	1	LT	2	CD
ERPIMS Package (B007)	<i>As needed</i>	<i>As needed</i>	1	1	1	
Draft Meeting Presentation Materials (B008)	<i>As needed</i>	<i>As needed</i>	2		2	
Final Meeting Presentation Materials (B008)	<i>As needed</i>	<i>As needed</i>	1	LT	2	
Draft Meeting Agenda (B009)	<i>As needed</i>	<i>As needed</i>	2		2	
Final Meeting Agenda (B009)	<i>As needed</i>	<i>As needed</i>	1	LT	2	
Draft Meeting Minutes (B010)	<i>As needed</i>	<i>As needed</i>	2		2	
Final Meeting Minutes (B010)	<i>As needed</i>	<i>As needed</i>	1	1	2	

All hard copy deliverables will be submitted on recycled content paper and printed double sided unless otherwise specified by the Air Force. All deliverables will be provided to CSSA and AFCEE according to format, content, and schedule as described below.

[Table 3-1](#) provides a tentative timeline for the progression of work. With the current scope of work, quarterly groundwater reporting will be completed by June 2007. Other activities to be conducted under TO 0207 will conclude in December 2007. The schedule will be maintained and updated, and submitted with the bi-monthly status reports.

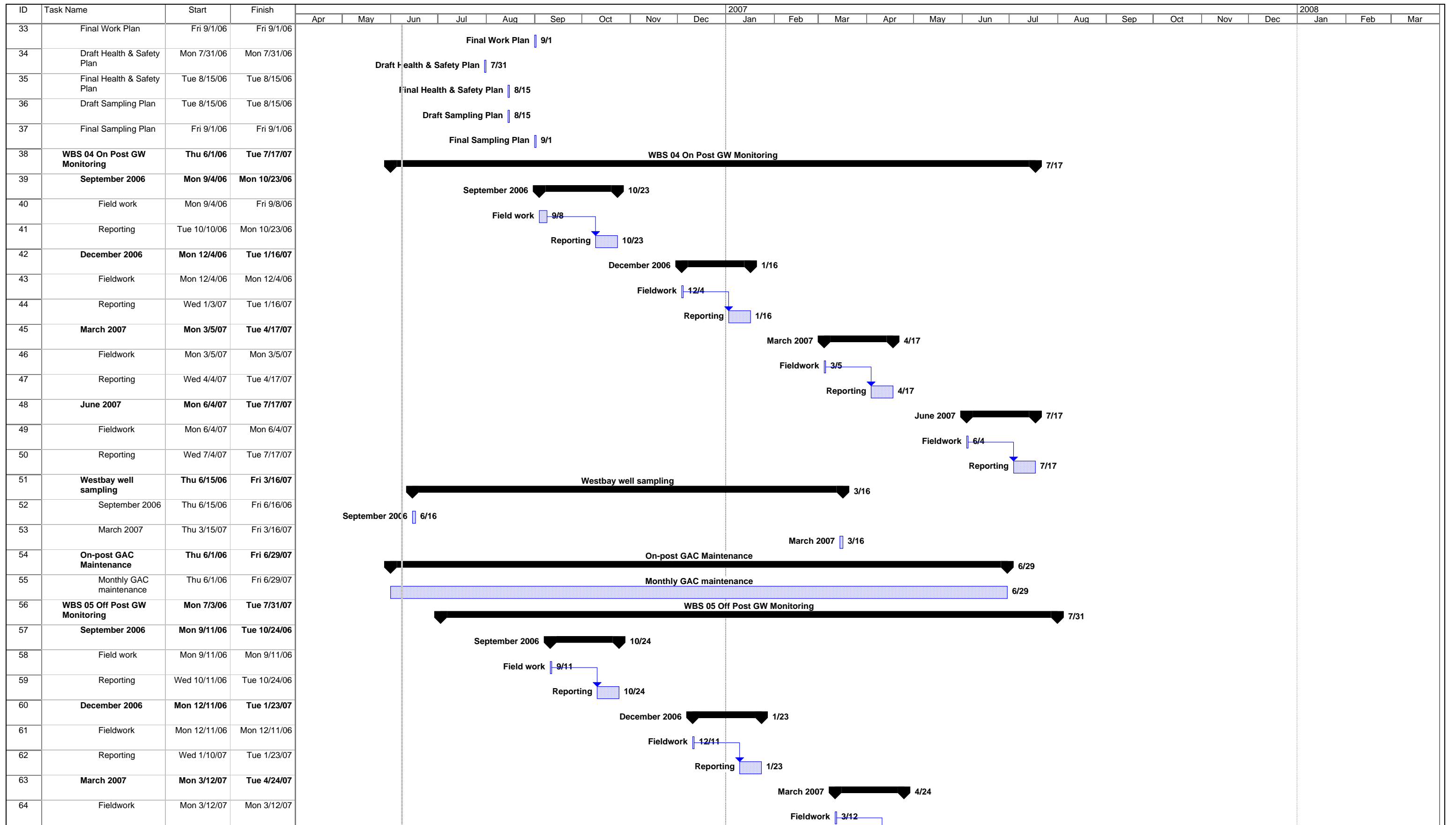
Table 3-1
Schedule






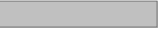





Project: Project schedule
Date: Thu 6/8/06

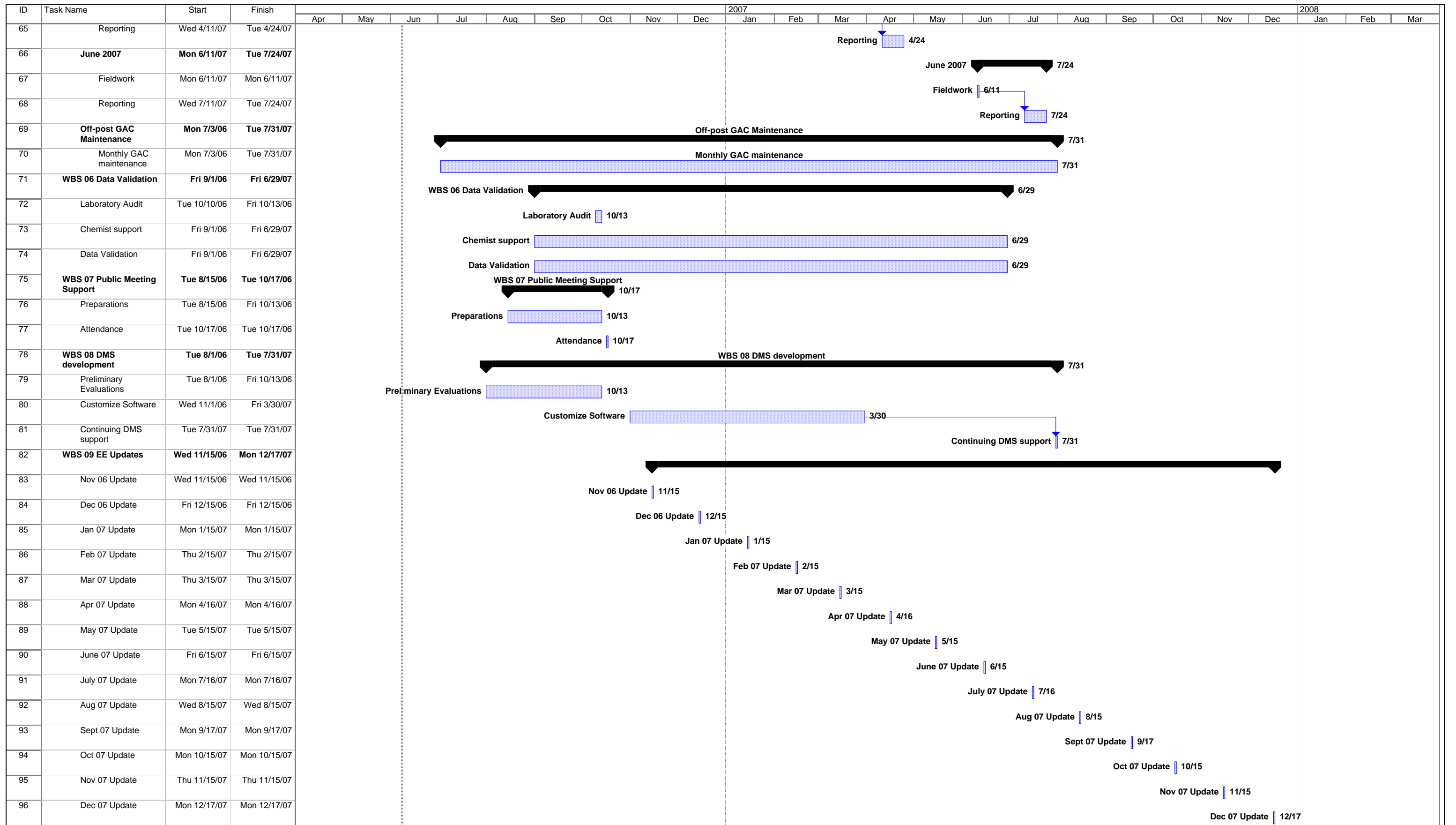
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Split: [Dotted bar] Milestone [Black diamond] Project Summary [Grey bar] External Milestone [Black diamond]



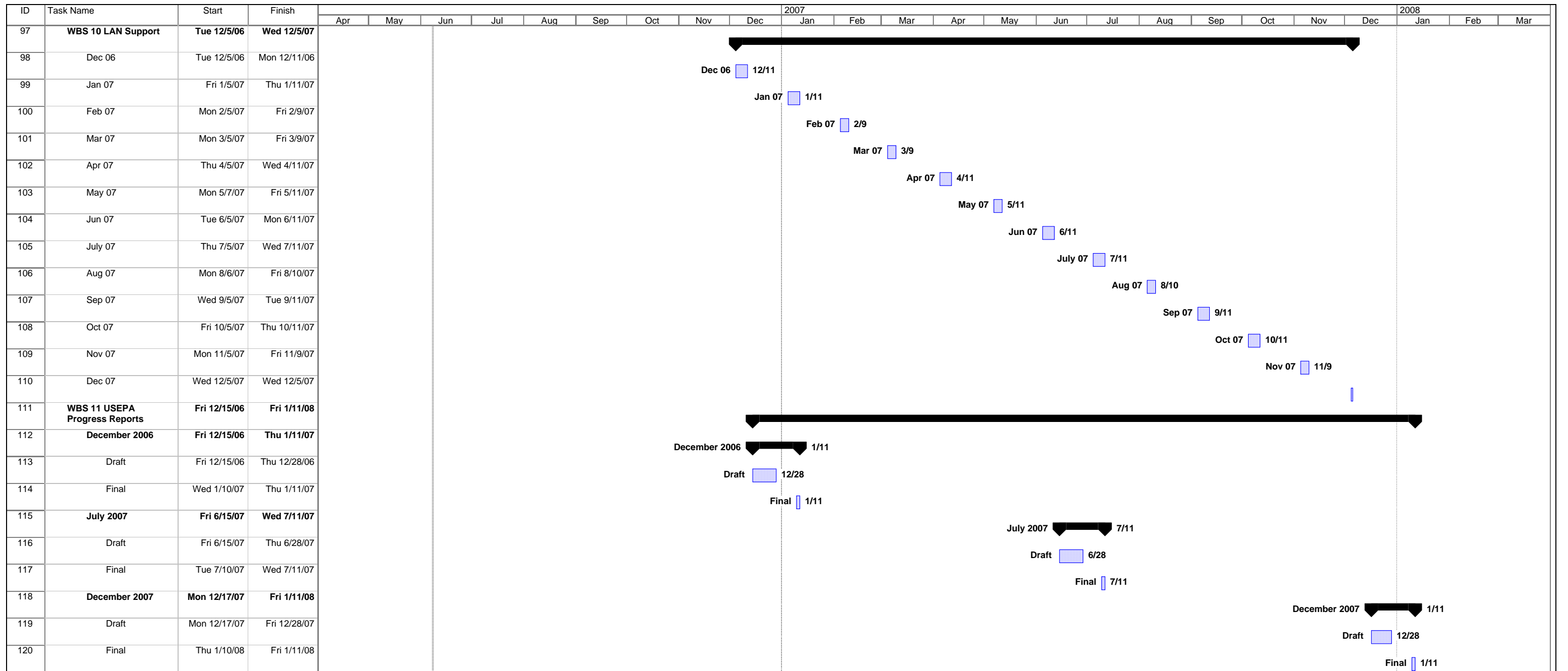
Project: Project schedule
Date: Thu 6/8/06

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



Project: Project schedule
Date: Thu 6/8/06

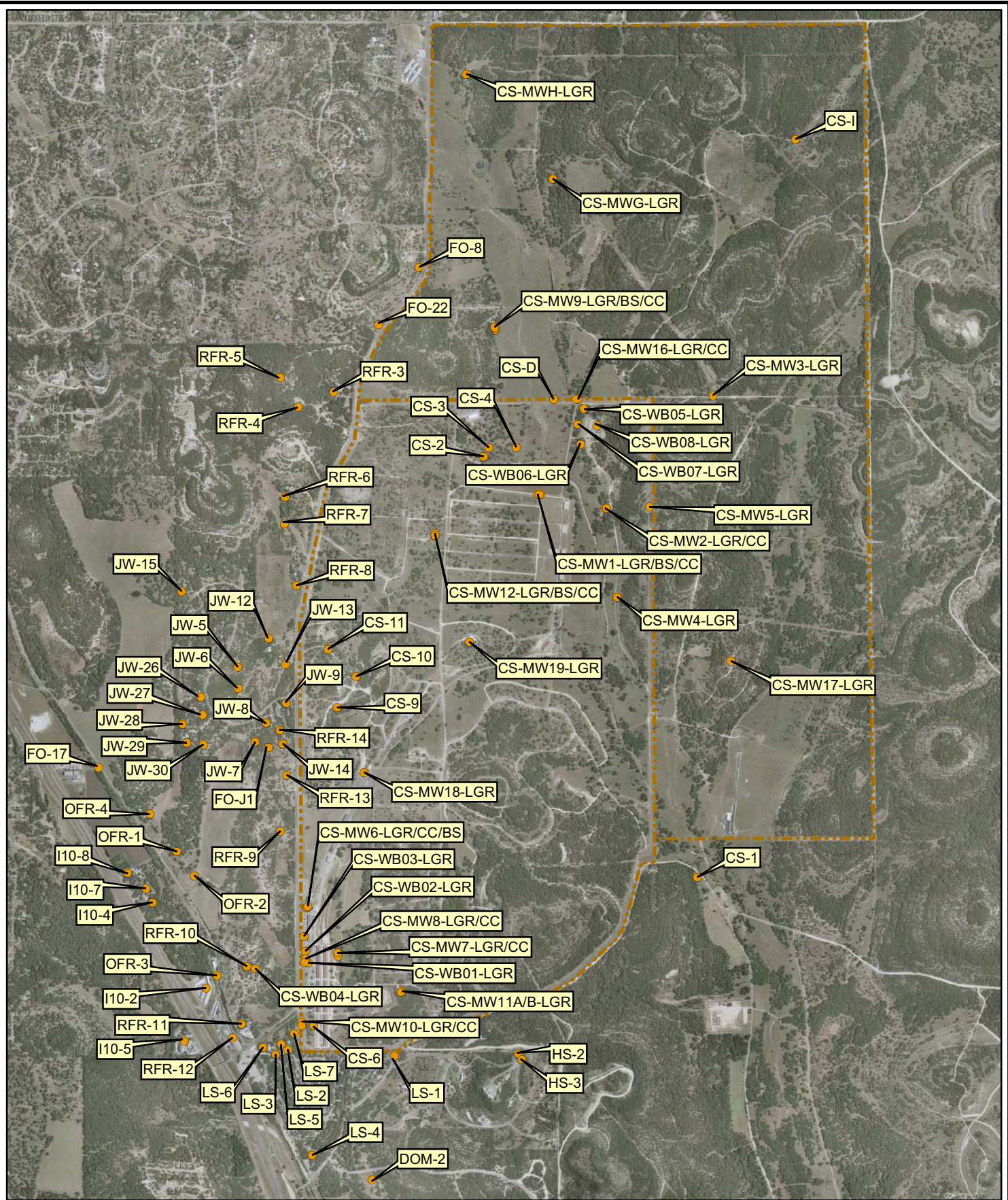
Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



Project: Project schedule
Date: Thu 6/8/06

Task		Progress		Summary		External Tasks	
Split		Milestone		Project Summary		External Milestone	

Attachment 1
On-post and Off-post Groundwater Wells, CSSA



● On-Post Wells and Off-Post Wells

----- CSSA Boundary

0 2,000 4,000 Feet

Attachment 1

On-Post and Off-Post Ground Water Wells
Camp Stanley Storage Activity

PARSONS