OAK VALLEY MITIGATION

CONTRACT NO. C51503

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE OF CALIFORNIA

October updated schedule Narrative report

Contractor:

Four M Contracting, Inc.

CPM Scheduling Consultant:

HSE Contractors Inc.

Project Notice to proceed – May 26, 2015

Data date – November 3, 2015

Project Finish Date – January 12, 2017

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1. Contract Description:

1. Excavation, grading, and revegetation of a new channel and floodplain system:

    a. Temporary fencing.

    b. Protection of native trees and vegetation.

    c. Removal of trees, brush, debris, and other clearing as approved and as necessary for construction and access.

    d. Monitoring well destruction.

    e. Earthwork, including excavation, transport, stockpile, and placement of fill.

    f. Rock structures for grade control.

    g. Biotechnical structures.

    h. Erosion control devices.

    i. Planting, seeding, and irrigation.

    j. Plant establishment.

    k. Hog exclusion fence and gate.

2. Milestone Status:

Activity Name	*Baseline Finish*	*Oct Update Finish*
Construction Work	24-Dec-15	13-Jan-2016
Project Completion	01-Jan-17	**12**-Jan-2017

Table 1: Milestone Status

3. Project Summary:

OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3 — **TASK filter: All Activities**

Activity ID	Activity Name	Original Duration	Remaining Duration	BL1 Start	BL1 Finish	Start	Finish	Activity % Complete	Total Float
	OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3	426d	312d	26-May-15	01-Jan-17	26-May-15 A	12-Jan-17		-9d
	KEY Dates	426d	0d	26-May-15	01-Jan-17	26-May-15 A	12-Jan-17		-9d
	Engineering	146d	32d	26-May-15	11-Dec-15	10-Jun-15 A	18-Dec-15		271d
	Engineering Submittal	126d	3d	26-May-15	11-Nov-15	10-Jun-15 A	18-Nov-15		271d
	Engineering Approval	131d	32d	16-Jun-15	11-Dec-15	10-Jun-15 A	18-Dec-15		271d
	Mobilization and Clean Up	14d	0d	01-Sep-15	21-Sep-15	24-Aug-15 A	17-Sep-15 A		
	Earth Work	24d	0d	14-Sep-15	15-Oct-15	26-Aug-15 A	16-Oct-15 A		
	Rock Structure	55d	29d	28-Sep-15	07-Dec-15	01-Sep-15 A	15-Dec-15		1d
	Irrigation System	59d	15d	09-Sep-15	23-Nov-15	24-Aug-15 A	02-Dec-15		-5d
	HOG Exclusion Fence	10d	10d	03-Dec-15	16-Dec-15	16-Dec-15	30-Dec-15		-9d
	Planting	288d	288d	24-Nov-15	01-Jan-17	09-Dec-15	12-Jan-17		-9d
	Concrete	16d	0d	18-Dec-15	24-Dec-15	15-Oct-15 A	13-Jan-16		-9d
	Demobilization	5d	5d	18-Dec-15	24-Dec-15	24-Dec-15	01-Jan-16		0d

Table 2: Project Summary Status

4. Progress Analysis:

4.1 Delay Summary Brief:

The project is behind the contractual finish date with 9 days as Jan 12, 2017 instead of Jan 01, 2017 as result of delaying Pole Cuttings Approval which planned to be finish on Dec 4, 2015.

Furthermore, overall the project is achieving progress over than the planned until the data date which is 48.19% against Schedule % Complete 47.27%

Therefore, the Project is over the track

OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3					TASK filter: All Activities			
Activity ID	Activity Name	Original Duration	BL1 Start	BL1 Finish	Start	Finish	Performance % Complete	Schedule % Complete
OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3		426d	26-May-15	01-Jan-17	26-May-15 A	12-Jan-17	48.19%	47.27%
KEY Dates		426d	26-May-15	01-Jan-17	26-May-15 A	12-Jan-17	0%	0%
Engineering		146d	26-May-15	11-Dec-15	10-Jun-15 A	18-Dec-15	0%	0%
Engineering Submittal		126d	26-May-15	11-Nov-15	10-Jun-15 A	18-Nov-15	0%	0%
Engineering Approval		131d	16-Jun-15	11-Dec-15	10-Jun-15 A	18-Dec-15	0%	0%
Mobilization and Clean Up		14d	01-Sep-15	21-Sep-15	24-Aug-15 A	17-Sep-15 A	100%	100%
Earth Work		24d	14-Sep-15	15-Oct-15	26-Aug-15 A	16-Oct-15 A	100%	100%
Rock Structure		55d	28-Sep-15	07-Dec-15	01-Sep-15 A	15-Dec-15	40.73%	34.5%
Irrigation System		59d	09-Sep-15	23-Nov-15	24-Aug-15 A	02-Dec-15	1.5%	0%
HOG Exclusion Fence		10d	03-Dec-15	16-Dec-15	16-Dec-15	30-Dec-15	0%	0%
Planting		288d	24-Nov-15	01-Jan-17	09-Dec-15	12-Jan-17	0%	0%
Concrete		16d	18-Dec-15	24-Dec-15	15-Oct-15 A	13-Jan-16	100%	0%
Demobilization		5d	18-Dec-15	24-Dec-15	24-Dec-15	01-Jan-16	0%	0%

Table 3: Project Performance % Complete VS Schedule % Complete

4.2 Behind Schedule Activities:

The following are the activities which are behind the schedule and don't start according to the Project Baseline.

Table 4: Behind Schedule Activities

OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3							TASK filter: -ve floats.		
Activity ID	Activity Name	Original Duration	BL1 Start	BL1 Finish	Start	Finish	Total Float	Performance % Complete	Schedule % Complete
OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3		23d	23-Sep-15	02-Nov-15	02-Nov-15 A	04-Dec-15	-7d	0%	100%
Engineering		23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	-7d	0%	0%
Engineering Approval		23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	-7d	0%	0%
A1790	Pole Cuttings Approval	23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	-9d	5%	100%
A1860	Fascine Bundles Approval	23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	-7d	5%	100%
Rock Structure		5d	15-Oct-15	02-Nov-15	03-Nov-15	09-Nov-15	-5d	0%	100%
A1120	Excavate Willow Baffle	3d	15-Oct-15	19-Oct-15	03-Nov-15	05-Nov-15	-3d	0%	100%
A1100	Backfill Toe Trench	5d	27-Oct-15	02-Nov-15	03-Nov-15	09-Nov-15	-5d	0%	100%

4.3 Ahead of Schedule Activities:

The following are the activities which are ahead of the schedule and the contractor achieve more than the planned according to the Baseline.

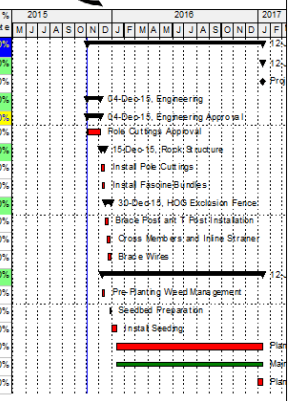
Activity ID	Activity Name	Original Duration	BL1 Start	BL1 Finish	Start	Finish	Performance % Complete	Schedule % Complete
OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3		61d	01-Sep-15	24-Dec-15	13-Oct-15 A	02-Nov-15 A	100%	23.71%
Engineering		15d	01-Sep-15	22-Sep-15	02-Nov-15 A	02-Nov-15 A	0%	0%
Engineering Submittal		15d	01-Sep-15	22-Sep-15	02-Nov-15 A	02-Nov-15 A	0%	0%
A1730	Pole Cuttings Submittal	15d	01-Sep-15	22-Sep-15	02-Nov-15 A	02-Nov-15 A	100%	100%
A1820	Fascine Bundles Submittal	15d	01-Sep-15	22-Sep-15	02-Nov-15 A	02-Nov-15 A	100%	100%
Earth Work		9d	14-Sep-15	13-Oct-15	14-Oct-15 A	16-Oct-15 A	100%	100%
A1830	Dewatering	5d	21-Sep-15	25-Sep-15	14-Oct-15 A	14-Oct-15 A	100%	100%
A1910	Validate Dewatering Permission	0d	14-Sep-15		14-Oct-15 A		100%	100%
A1070	Apply Gypsum Soil Amendment to Floodplain Area and leach	1d	12-Oct-15	12-Oct-15	15-Oct-15 A	16-Oct-15 A	100%	100%
A2080	Apply Gypsum Soil Amendment to Fill Placement Areas	1d	13-Oct-15	13-Oct-15	15-Oct-15 A	15-Oct-15 A	100%	100%
Rock Structure		39d	19-Oct-15	07-Dec-15	13-Oct-15 A	22-Oct-15 A	100%	1.23%
A1670	Complete Clearing & Grubbing, Finish Grading	4d	12-Nov-15	18-Nov-15	13-Oct-15 A	13-Oct-15 A	100%	0%
A1920	Subgrade Preparation	3d	19-Oct-15	21-Oct-15	14-Oct-15 A	15-Oct-15 A	100%	100%
A1990	Boulder Step Pool	15d	03-Nov-15	23-Nov-15	14-Oct-15 A	15-Oct-15 A	100%	0%
A2040	Subgrade Inspection	1d	21-Oct-15	21-Oct-15	14-Oct-15 A	14-Oct-15 A	100%	100%
A1080	Rock Placement	5d	22-Oct-15	28-Oct-15	14-Oct-15 A	15-Oct-15 A	100%	100%
A1110	Fill Voids	5d	23-Oct-15	29-Oct-15	14-Oct-15 A	15-Oct-15 A	100%	100%
A2030	Install Crest Wing	7d	25-Nov-15	07-Dec-15	16-Oct-15 A	22-Oct-15 A	100%	0%
Concrete		5d	18-Dec-15	24-Dec-15	15-Oct-15 A	23-Oct-15 A	100%	0%
A1900	Post Construction Survey	2d	23-Dec-15	24-Dec-15	15-Oct-15 A	20-Oct-15 A	100%	0%
A1420	Surface Preparation	3d	18-Dec-15	22-Dec-15	22-Oct-15 A	22-Oct-15 A	100%	0%
A1430	Concrete entrance Placement	2d	23-Dec-15	24-Dec-15	23-Oct-15 A	23-Oct-15 A	100%	0%

Table 5: Ahead of Schedule Activities

4.4 Project Longest Path:

OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3 — **TASK filter: Longest Path.** — HSE CEM Schedulers Consultants

Activity ID	Activity Name	Original Duration	BL1 Start	BL1 Finish	Start	Finish	Performance % Complete	Schedule % Complete
OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3		320d	23-Sep-15	01-Jan-17	02-Nov-15 A	12-Jan-17	0%	0%
KEY Dates		0d	01-Jan-17	01-Jan-17	12-Jan-17	12-Jan-17	0%	0%
A1620	Project Finish	0d		01-Jan-17		12-Jan-17*	0%	0%
Engineering		23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	0%	0%
Engineering Approval		23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	0%	0%
A1790	Pole Cuttings Approval	23d	23-Sep-15	23-Oct-15	02-Nov-15 A	04-Dec-15	5%	100%
Rock Structure		7d	18-Nov-15	30-Nov-15	07-Dec-15	15-Dec-15	0%	0%
A1680	Install Pole Cuttings	7d	18-Nov-15	30-Nov-15	07-Dec-15	15-Dec-15	0%	0%
A2010	Install Fascine Bundles	5d	20-Nov-15	30-Nov-15	09-Dec-15	15-Dec-15	0%	0%
HOG Exclusion Fence		10d	03-Dec-15	16-Dec-15	16-Dec-15	30-Dec-15	0%	0%
A1220	Brace Post ant T Post Installation	6d	03-Dec-15	10-Dec-15	16-Dec-15	23-Dec-15	0%	0%
A1240	Cross Members and Inline Strainer	5d	08-Dec-15	14-Dec-15	21-Dec-15	28-Dec-15	0%	0%
A1230	Brace Wires	5d	10-Dec-15	16-Dec-15	23-Dec-15	30-Dec-15	0%	0%
Planting		288d	24-Nov-15	01-Jan-17	09-Dec-15	12-Jan-17	0%	0%
A1190	Pre-Planting Weed Management	4d	24-Nov-15	01-Dec-15	09-Dec-15	14-Dec-15	0%	0%
A1700	Seedbed Preparation	3d	15-Dec-15	17-Dec-15	29-Dec-15	31-Dec-15	0%	0%
A1690	Install Seeding	9d	18-Dec-15	31-Dec-15	01-Jan-16	13-Jan-16	0%	0%
A1710	Plant & Seed Establishment	263d	01-Jan-16	01-Jan-17	14-Jan-16	12-Jan-17	0%	0%
A1950	Maintenance after Seeding	263d	01-Jan-16	01-Jan-17	14-Jan-16	12-Jan-17	0%	0%
A1960	Planting Establishment Inspection	10d	20-Dec-16	01-Jan-17	31-Dec-16	12-Jan-17	0%	0%



Remaining Level of Effort — Remaining Work — Summary
Actual Level of Effort — Critical Remaining Work
Actual Work — Milestone

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03-Nov-15

Table 6: Project Longest Path

5. Cost loaded Progress Histogram:

According to the Estimate of Earning by Month which is attached in the Baseline narrative which is the Planned Volume of work based on the project cost, the below is comparison between which is planned and the earned value according to the actual progress in the project

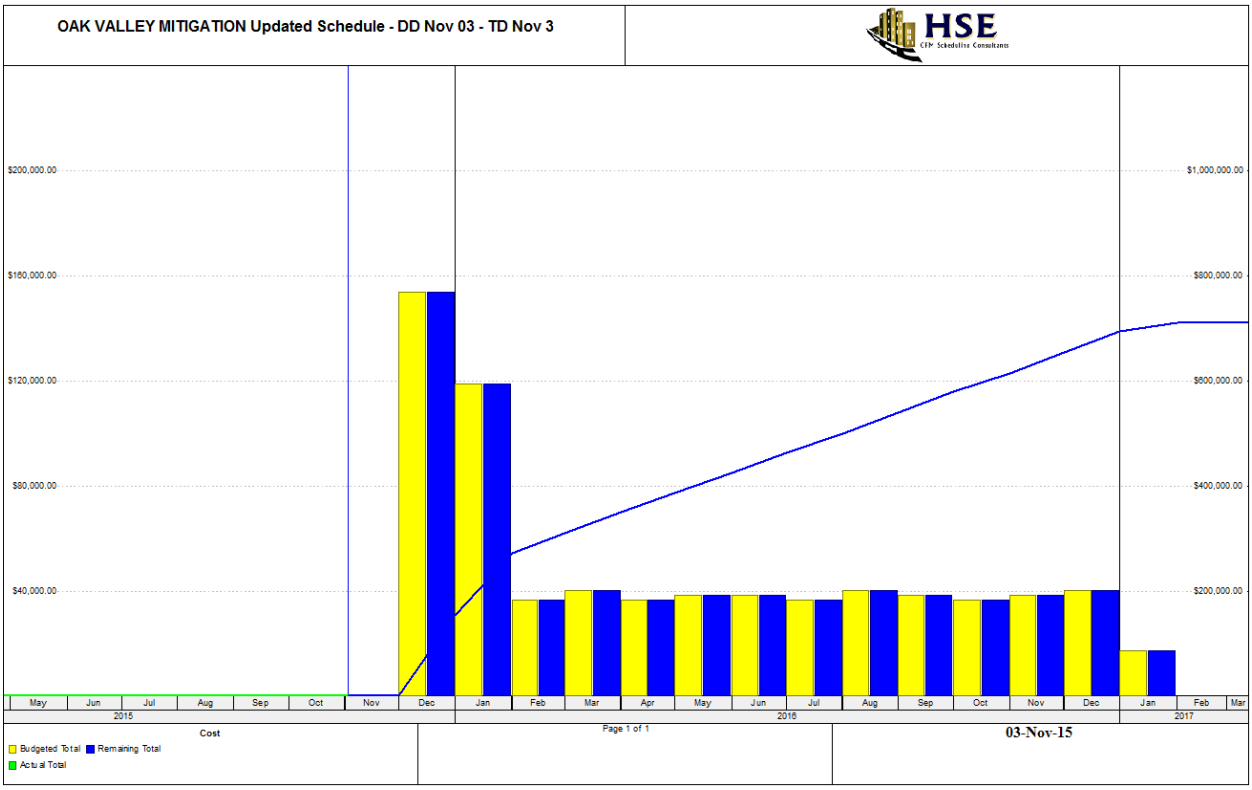


Figure 1: Estimate of Earning by Month VS Earned Value

6. Project Look Ahead:

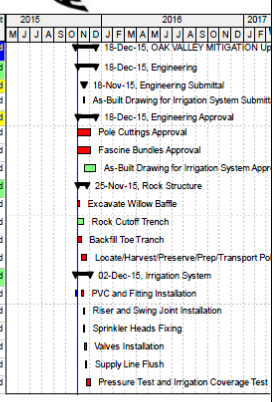
The following is the project look ahead of November 2015

OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3

TASK filter: 1 Month Look Ahead.

HSE CPM Scheduling Consultants

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Actual Start	Actual Finish	Activity % Complete	Total Float
OAK VALLEY MITIGATION Updated Schedule - DD Nov 03 - TD Nov 3		40d	32d	28-Oct-15 A	18-Dec-15	28-Oct-15			271d
Engineering		40d	32d	02-Nov-15 A	18-Dec-15	02-Nov-15			271d
Engineering Submittal		3d	3d	16-Nov-15	18-Nov-15				271d
A1870	As-Built Drawing for Irrigation System Submittal	3d	3d	16-Nov-15	18-Nov-15			0%	271d
Engineering Approval		40d	32d	02-Nov-15 A	18-Dec-15	02-Nov-15			271d
A1790	Pole Cuttings Approval	23d	22d	02-Nov-15 A	04-Dec-15	02-Nov-15		5%	-9d
A1860	Fascine Bundles Approval	23d	22d	02-Nov-15 A	04-Dec-15	02-Nov-15		5%	-7d
A1880	As-Built Drawing for Irrigation System Approval	20d	20d	19-Nov-15	18-Dec-15			0%	271d
Rock Structure		17d	17d	03-Nov-15	25-Nov-15				18d
A1120	Excavate Willow Baffle	3d	3d	03-Nov-15	05-Nov-15			0%	-3d
A1980	Rock Cutoff Trench	10d	10d	03-Nov-15	16-Nov-15			0%	25d
A1100	Backfill Toe Tranch	5d	5d	03-Nov-15	09-Nov-15			0%	-5d
A1660	Locate/Harvest/Preserve/Prep/Transport Pole Cuttings	12d	12d	10-Nov-15	25-Nov-15			0%	-2d
Irrigation System		20d	15d	28-Oct-15 A	02-Dec-15	28-Oct-15			-5d
A1130	PVC and Fitting Installation	6d	6d	28-Oct-15 A	17-Nov-15	28-Oct-15		5%	-5d
A1140	Riser and Swing Joint Installation	3d	3d	16-Nov-15	18-Nov-15			0%	-5d
A1150	Sprinkler Heads Fixing	3d	3d	17-Nov-15	19-Nov-15			0%	-5d
A1170	Valves Installation	3d	3d	19-Nov-15	23-Nov-15			0%	-4d
A1160	Supply Line Flush	3d	3d	20-Nov-15	24-Nov-15			0%	-5d
A1180	Pressure Test and Irrigation Coverage Test	4d	4d	25-Nov-15	02-Dec-15			0%	-5d



Remaining Level of Effort | Remaining Work | Summary
Actual Level of Effort | Critical Remaining Work
Actual Work | Milestone

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03-Nov-15

Table 7: Monthly Look Ahead

7. Project Statistics:

Scheduling/Leveling Settings:

General

Scheduling .....Yes
Leveling .....No
Ignore relationships to and from other projects .....No
Make open-ended activities critical .....No
Use Expected Finish Dates .....Yes
Schedule automatically when a change affects dates .....No
Level resources during scheduling .....No
Recalculate assignment costs after scheduling .....No
When scheduling progressed activities use .....Retained Logic
Calculate start-to-start lag from .....Early Start
Define critical activities as Total Float less than or equal to .0
Compute Total Float As .....Finish Float
Calculate float based on finish date of .....Each project
Calendar for scheduling Relationship Lag .....Predecessor Activity Calendar

Advanced

Calculate multiple float paths.....No

Statistics:

 # Projects.....1
 # Activities.....111
 # Not Started.....28
 # In Progress.....3
 # Completed.....80
 # Relationships.....189
 # Activities with Constraint.....2
Activity: A1620 Project Finish
Activity: A1720 Construction Phase Finish Date

 # Projects Scheduled/Leveled.....1
 # Activities Scheduled/Leveled.....111
 # Relationships with other projects.....0
Data Date.....03-Nov-15
Earliest Early Start Date.....03-Nov-15
Latest Early Finish Date.....12-Jan-17

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