LBNF Final Design Schedule and Plan

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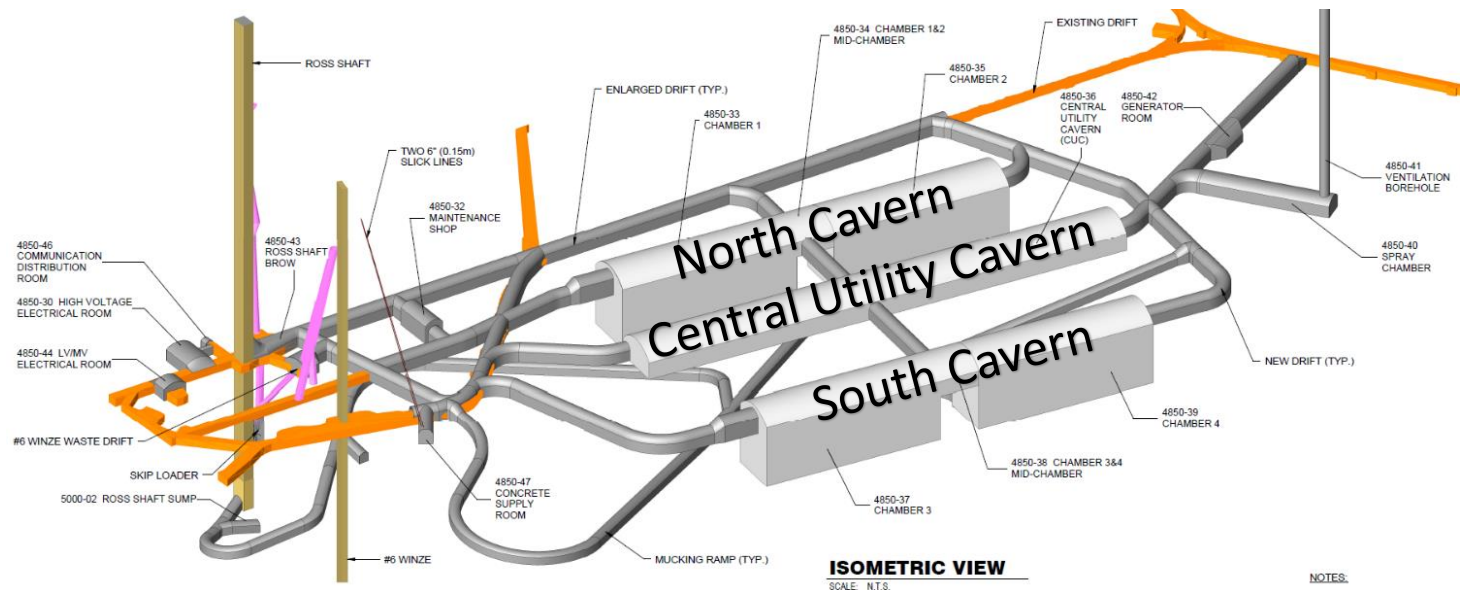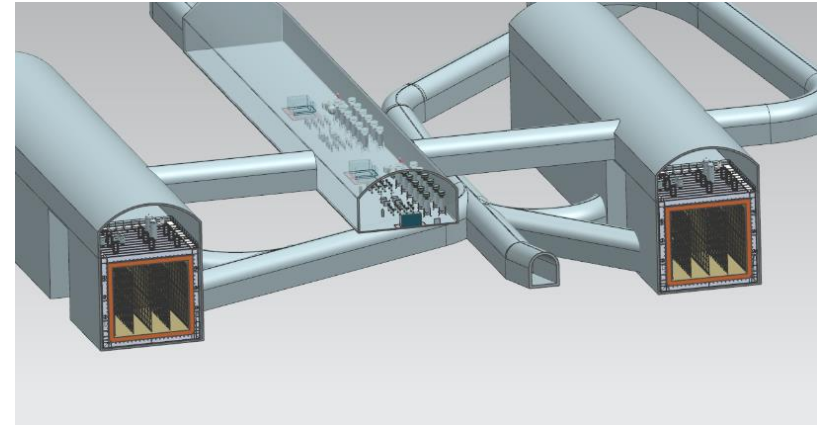
LBNF FSCF Project Manager

November 2017

Outline

- Schedule

- Deliverable Description

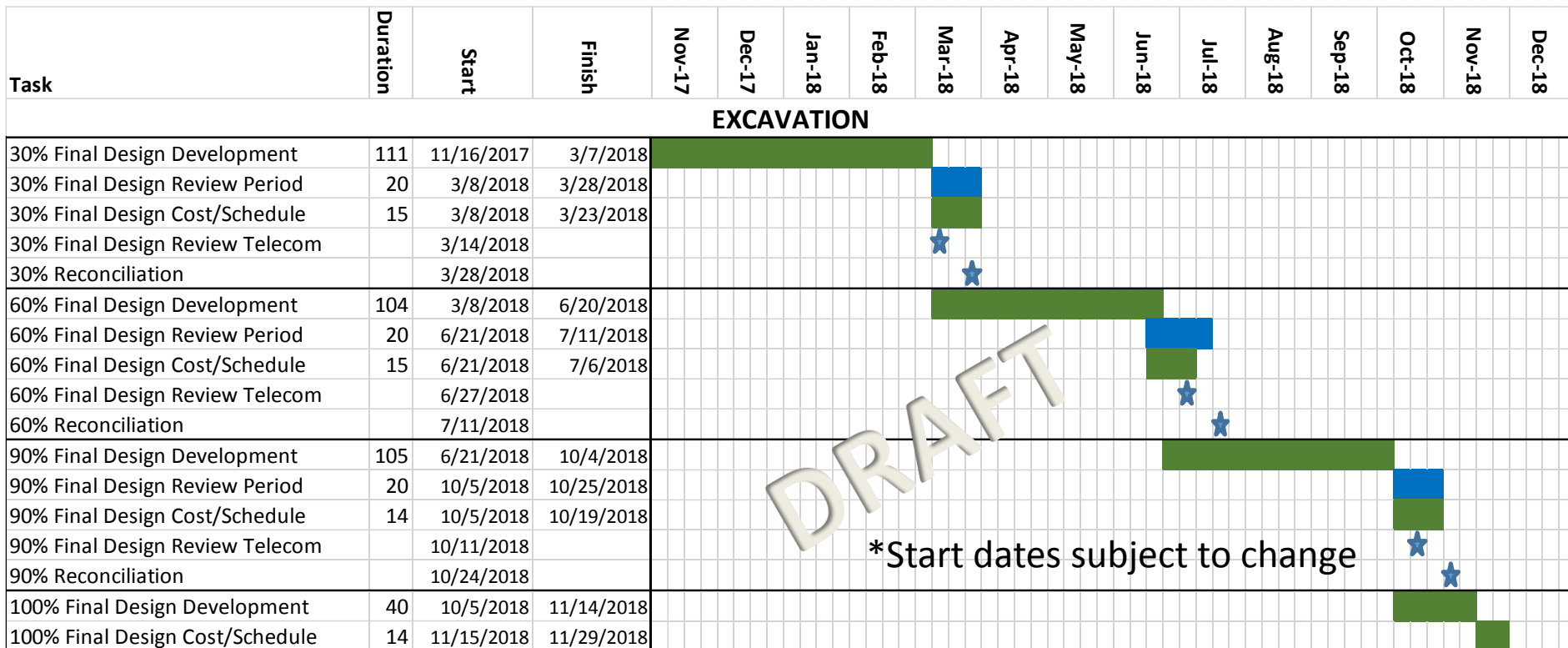- Meetings and Workshops

- Review Process

Schedule – the big picture

- Delays in assigning the contract have pushed the start of design much later than anticipated

- We are working toward being able to start physical work on the main scope in August 2019

- Our procurement process is such that we need to allow <u>at least</u> 9 months between the completion of final design and the start of construction.

  - Includes KAJV bidding, development and evaluation of independent cost estimates (and any associated adjustments), submission to DOE for concurrence, award/NTP, and mobilization.

- To facilitate this, we are targeting a final design 100% submittal date of November 14, 2018 for EXC and December 7 for BSI.

Final Design Schedule (EXC)

To meet the constraints listed on the previous slide, FRA is proposing the schedule below for EXC. Arup is welcome to propose changes. BSI is proposed to follow the same basic schedule, but delayed by 3 weeks. A discussion point is how to facilitate good combined workshops with this delay (EXC will be charging ahead with the next deliverable when BSI submits)

Task	Duration	Start	Finish	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
EXCAVATION																	
30% Final Design Development	111	11/16/2017	3/7/2018														
30% Final Design Review Period	20	3/8/2018	3/28/2018														
30% Final Design Cost/Schedule	15	3/8/2018	3/23/2018														
30% Final Design Review Telecom		3/14/2018															
30% Reconciliation		3/28/2018															
60% Final Design Development	104	3/8/2018	6/20/2018														
60% Final Design Review Period	20	6/21/2018	7/11/2018														
60% Final Design Cost/Schedule	15	6/21/2018	7/6/2018														
60% Final Design Review Telecom		6/27/2018															
60% Reconciliation		7/11/2018															
90% Final Design Development	105	6/21/2018	10/4/2018														
90% Final Design Review Period	20	10/5/2018	10/25/2018														
90% Final Design Cost/Schedule	14	10/5/2018	10/19/2018														
90% Final Design Review Telecom		10/11/2018															
90% Reconciliation		10/24/2018															
100% Final Design Development	40	10/5/2018	11/14/2018														
100% Final Design Cost/Schedule	14	11/15/2018	11/29/2018														

*Start dates subject to change

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Design Deliverables

- Deliverables to include:

  - Brief Basis of Design (BoD) Report with key assumptions, key changes from previous deliverable, and key design choices made.

  - BoD Appendix with requirements list and how requirement is met

  - BoD Appendix with responses to previous submittal comments

  - BoD Appendix with response memorandum to KAJV constructability comments

  - Drawings – Divided into bid packages (called subprojects in RFP)

  - Specifications – Divided into bid packages

  - Cost and Schedule estimates – Divided into bid packages

- Note that bid packages are expected to be defined by the 30% deliverable.

Meetings and Workshops

- Weekly teleconference hosted by Arup to discuss progress and questions on both BSI and EXC

- Two workshops following each 30, 60 and 90% deliverable:

  - Design review workshop hosted by Arup and held via teleconference including presentations covering key elements of the design progression. Discussions on value engineering will be included as well. Plan for a full day to cover both EXC and BSI.

  - Estimate reconciliation workshop hosted by FRA at SURF to reconcile estimates from Arup and KAJV

- A teleconference will be hosted by FRA following the 60 and 90% deliverables to reconcile the cost estimate with an independent third party

- Two 4 hour teleconference workshops with LBNF and DUNE technical systems to refine and finalize requirements.

Review Process

- FRA will coordinate review of each deliverable by FRA, SDSTA, DUNE, and KAJV.

- Review comments will be consolidated and filtered for duplication by FRA, and submitted to Arup ~3 weeks after receiving the design packages.

- A discussion point is whether there are better ways to provide comments than the spreadsheet format we've used previously.

- The 90% deliverable is anticipated to require very little update to reach 100%, and therefore no review process is included with the 100% submittal.