



Finance & Audit Committee

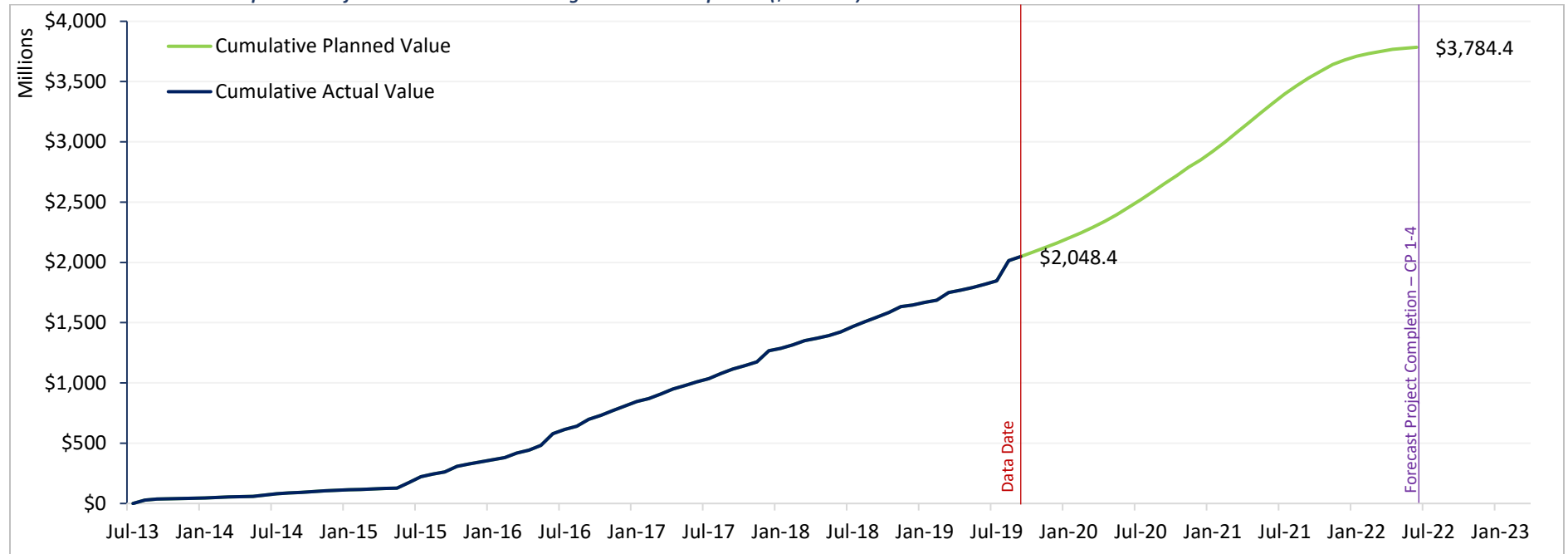
CENTRAL VALLEY STATUS REPORT

November 2019 Report (data through September 2019)

Infrastructure Delivery Overview – 119-mile Central Valley Segment Construction Packages 1-4 (CP 1-4)

CP 1-4 Earned Value

CP 1-4 - Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



- Notes:**
- Figure 1 shows historical expenditures from the award of the first construction package through September 30, 2019. The planned values from October 2019 to December 2022 are based on the Proposed Schedules developed for all the construction packages as of November 2019. It is anticipated that the total current contractual value \$3.784B will be expended by end of December 2022.

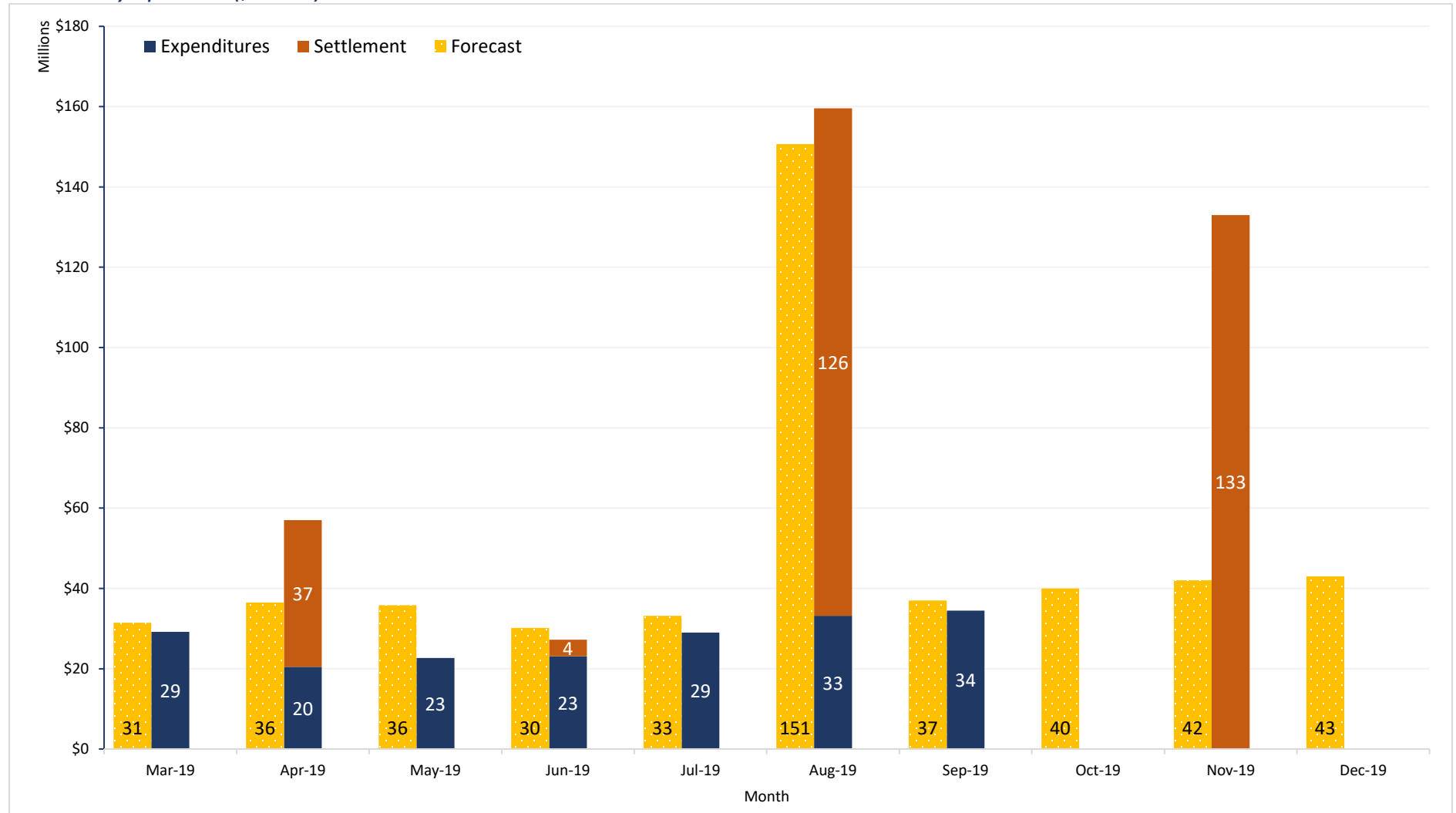
CP 1-4 Projected Milestones

Milestone	Date	Milestone	Date	Milestone	Date
01. CP 1 Main Design Complete	Nov-19	05. CP 2-3 Main Design Complete	May-21	09. CP 4 Main Design Complete	Feb-20
02. CP 1 ROW Acquisition Complete	Nov-20	06. CP 2-3 ROW Acquisition Complete	Jan-21	10. CP 4 ROW Acquisition Complete	Dec-20
03. CP 1 Environmental Clearance Complete	Mar-20	07. CP 2-3 Environmental Clearance Complete	Feb-20	11. CP 4 Environmental Clearance Complete	Apr-20
04. CP 1 Utility Relocation Complete	Mar-21	08. CP 2-3 Utility Relocation Complete	Feb-21	12. CP 4 Utility Relocation Complete	Mar-21

- Notes:**
- The above at completion value (\$3,784.4M) is based on the current contract values of the construction packages and does not include SR99. This value does not include change orders that are yet to be executed.

CP 1-4 - Design-Build Planned vs. Actual Expenditures – Near Term

CP 1-4 Monthly Expenditures (\$ Millions)

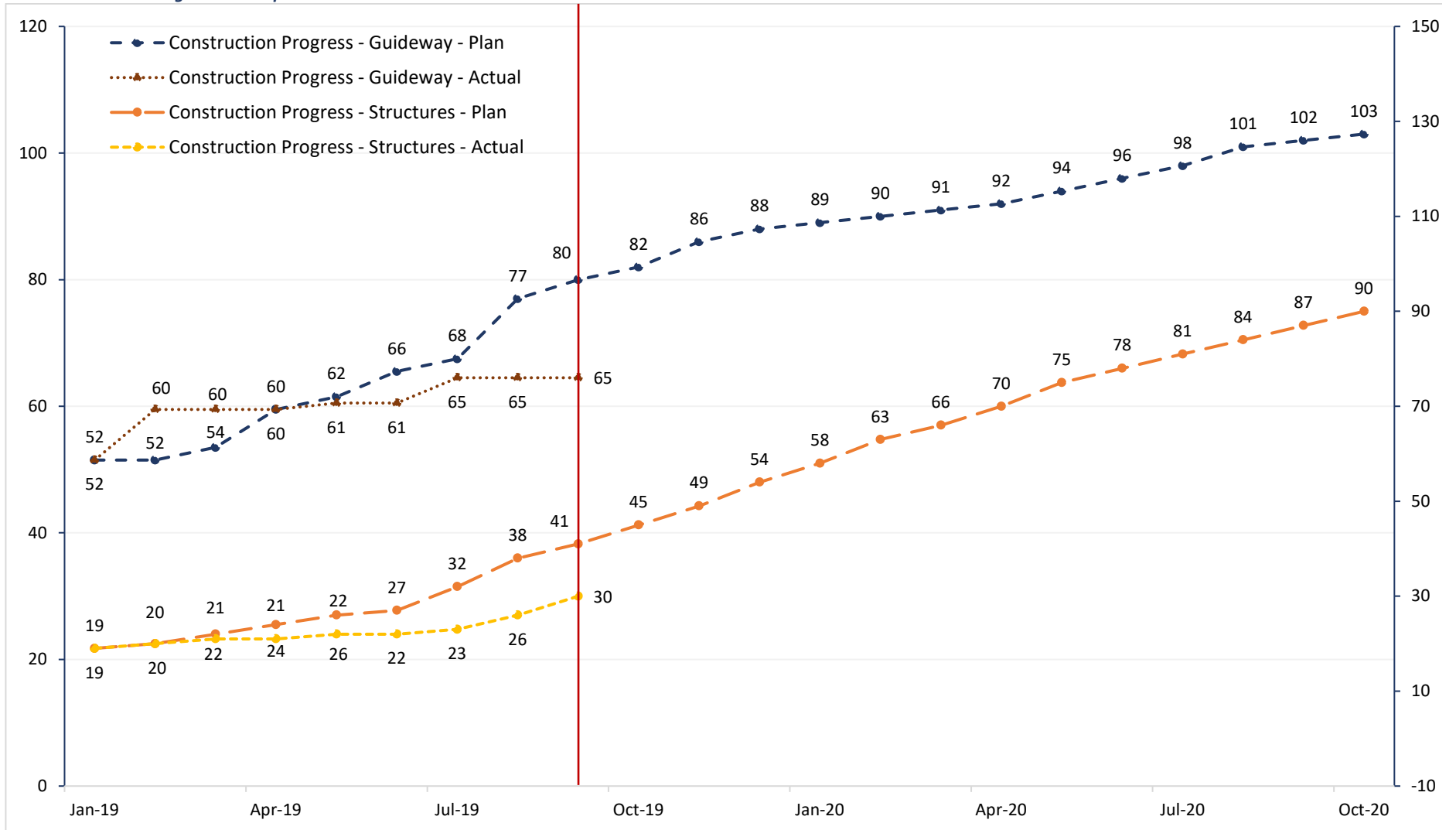


Notes:

1. Expenditures contained in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. Forecasted expenditures are based on the Proposed Schedules developed for CP 1-4 as of November 2019.
3. Sudden increases in the cumulative values are due to Time Impact Analysis Settlements.
4. Preliminary actuals for October 2019 total approximately \$45.4 million. Final actuals will be reported next month.

CP 1-4 – Structures and Guideway Progress – Planned vs. Actuals

CP 1-4 Construction Progress to Completion – Forecast vs. Actual



Notes:

1. Total Structures: 94 each.
2. Total Guideway: 117 miles does not include mileage for SR-99.
3. This forecast is based on the get to work plans developed in January 2019.

CP 1-4 - Construction Progress

CP 1-4 Construction Progress Summary

Construction Package	Category	Planned vs. Actuals	Status Update
CP 1	Structures	Planned Progress: 20 structures Actual Progress: 16 structures Progress 4 structures behind	<ul style="list-style-type: none"> As of September 2019, 6 structures completed, and 10 structures are underway; this include Road 27, Ave 15, Ave 12, Ave 10, San Joaquin River Viaduct, McKinley, SR180, Fresno Trench, and Downtown Fresno Viaduct. Avenue 15.5 structure has ROW requirements attached to PG&E relocations. Project team is looking to redesign to stay within the Right of Way. Avenue 9 has ROW requirements attached to PG&E relocations. Project team is looking to redesign to stay within ROW. GSB HSR Structure AT&T line found when excavating for footing. AT&T redesign/workaround being explored. Belmont is awaiting design comments resolution.
CP 1	Guideway	Planned Progress: 14 miles Actual Progress: 8 miles Progress 6 miles behind	<ul style="list-style-type: none"> Approximately 3 miles cannot be constructed due to IPB design which is required to complete the guideway. IPB design height was under discussion with railroads. Guideway Package 3 (GW 3) package design was not approved preventing a few miles of southern guideway being constructed. Two miles dependent on approval of retaining wall design packages. Design lifespan specification is in question and the project team is coordinating to drive this to resolution.
CP 2-3	Structures	Planned Progress: 12 structures Actual Progress: 10 structures Progress 2 structures behind	<ul style="list-style-type: none"> As of end of September 2019, there are 10 structures under construction and it is expected that the total structures under construction will increase next month. Delaying factors are unavailability of Right of Way and delayed starts of utilities works resulting from land conveyance issues. HSR is mobilizing additional resources and optimizing the processes to expedite the land conveyance process. In addition, the PCM team and the Authority are actively working to mitigate any additional issues affecting the land conveyance process.
CP 2-3	Guideway	Planned Progress: 45 miles Actual Progress: 45 miles Progress on target	<ul style="list-style-type: none"> As of the end of September 2019, 19 miles of embankment substantially completed, and 26 miles of embankment work is ongoing.
CP 4	Structures	Planned Progress: 9 structures Actual Progress: 4 structures Progress 5 structures behind	<ul style="list-style-type: none"> Re-design of one structure (Merced Avenue Overpass) was not completed as per plan due to ongoing negotiations with third parties and utilities regarding the relocation of their services. This is expected to be resolved in December 2019. Environmental clearance (preparation of the Pre-Construction Survey) is ongoing to clear areas for construction Ongoing negotiations with landowners are taking longer than anticipated, impacting the acquisition of ROW and the start of construction on anticipated structures. HSR is mobilizing additional resources, carrying out negotiations with the property owners, and optimizing the processes to expedite the ROW acquisition.
CP 4	Guideway	Planned Progress: 21.1 miles Actual Progress: 12 miles Progress 9.1 miles behind	<ul style="list-style-type: none"> Ongoing negotiations with landowners are taking longer than anticipated, this include Semitropic and Neufeld. Semitropic is impacting approximately 5 miles of the alignment. Environmental clearance (preparation of the Pre-Construction Survey) has delayed the start of construction on the remaining alignment.

CP 1-4 – ROW Parcels to be Acquired and Remaining

CP 1-4 ROW Parcels to be Acquired and Remaining

Construction Package	Total Needed Parcels as of August 31	Total Acquired to Date as of August 31	Remaining Parcels to be Acquired as of August 31	Optimized Parcels	Parcels Acquired in September	Total Parcels Remaining as of September 30
CP 1	932	827	105	4	0	101
CP 2-3	854	547	307	4	12	291
CP 4	223	166	57	0	0	57
Total	2009	1540	469	8	12	449

Notes:

1. Optimized parcels are reductions in parcels achieved through utility redesign.
2. Reporting of railroad parcels is now included in the land conveyance reporting in this report for each Construction Package, rather than in the totals above. The property rights needed on railroad Right-of-Way is obtained through agreement rather than going through the Right-of-Way acquisition process.
3. The data above is an update to the Central Valley Status Report presented to the F & A Committee on October 15, 2019.

The Real Property Branch is implementing the following risk mitigation strategies:

- Improvements to the land conveyance process to reduce process time from 140 days to approximately 40 days in length.
- Improvements to the pre-Acquisition process to reduce time from 105 to approximately 65 days.
- Pursuing administrative settlements to decrease the time to acquisition and immediately deliver needed parcels.
- Consolidating new acquisitions with existing acquisitions on the same parcels to decrease the time for the new acquisitions.
- Adding staff in Land Conveyance to triple our production rate and meet need dates for critical (utility) conveyances.
- Pursuing a Resolution of Necessity to start the condemnation process 31 days after first offer to have a known end point for parcel acquisition and to plan construction activities to meet schedule.

119-Mile Central Valley Segment - Third Party Agreements

CP 1-4 Look Ahead - Estimated completion timeline for key Third Party Agreements

Entity	Project Section	Result of Resolution	Estimated Completion
Calif. Dept. of Toxic Substances Control	CP 1	Provides for environmental review and mitigation between the design-builder and Calif. Dept. of Toxic Substances Control.	Jan 20
County of Fresno	CP 1	Updates road locations to be closed to reflect design changes since original Cooperative Agreement and provide further clarity regarding remediation of County property post-construction.	Jan 20
County of Fresno	CP 1	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan 20
Fresno Metropolitan Flood Control District	CP 1	CCUA template allows for prompt execution of the CCUA land conveyances.	Nov 19
Fresno Metropolitan Flood Control District	CP 1	JUA template allows for prompt execution of the JUA land conveyances.	Nov 19
Madera Valley Water Company	CP 1	Obtains cooperation on our project and captures the essential terms on how we work together to relocate Madera Valley Water Company's facilities.	Oct/Nov 19
Corcoran Irrigation District	CP 2-3	Provides for CID's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Feb 20
County of Fresno	CP 2-3	Updates the road locations to be closed to reflect design changes since original Cooperative Agreement and provides further clarity regarding remediation of County property post-construction.	Jan 20
County of Fresno	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan 20
County of Kings	CP 2-3	Covers the transfer of Right-of-Way between the Authority and the County. Allows the Authority's immediate right of possession and use of existing Right-of-Way to construct the HSR project.	Mar 20
County of Tulare	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Dec 19
Kings County Water District	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances.	Mar 20
Kings County Water District	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances.	Mar 20
Lakeside Ditch Company	CP 2-3	Provides for the necessary coordination for the development of JUA/CCUA.	Nov/Dec 19
Lower Tule River Irrigation District	CP 2-3	Provides for Lower Tule's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Jan 20
Lower Tule River Irrigation District	CP 2-3	Defines the ownership and maintenance of facilities between the Authority and Lower Tule in perpetuity.	Oct/Nov 19
People's Ditch Company	CP 2-3	Provides for People's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Nov 19
Settler's Ditch Company	CP 2-3	Provides for Settler's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Nov 19

CP 1-4 Look Ahead - Estimated completion timeline for key Third Party Agreements (cont'd)

Entity	Project Section	Result of Resolution	Estimated Completion
Southern California Edison	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances.	Oct/Nov 19
Southern California Gas Company (Sempra)	CP 2-3	Southern California Gas Company's replacement rights needed in the BNSF Right-of-Way.	Oct/Nov 19
Southern California Edison	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances.	Oct/Nov 19
Southern California Edison	CP 2-3	Utility agreement addendum for Duct and Substructure Work for Construction.	Oct/Nov 19
Southern California Edison	CP 2-3	EP templates for providing either a temporary right where SCE's prior rights were in franchise and facilities be in franchise again post-construction, or a permanent replacement right for franchise prior rights where roadway will be vacated.	Feb 20
City of Wasco	CP 4	Covers the transfer of Right-of-Way between the Authority and the City. It allows the Authority's immediate right of possession and use of existing Right-of-Way to construct the HSR project.	Feb 20
City of Wasco	CP 4	Defines the ownership and maintenance of grade separations between the Authority and City in perpetuity.	Feb 20
City of Wasco	CP 4	Design and construction of a pedestrian underpass at the Wasco Amtrak station.	Feb 20
City of Wasco	CP 4	Design and construction of a grade separation at Poso Ave. in Wasco.	Feb 20
County of Kern	CP 4	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity. Status Update: The Authority is awaiting final confirmation from the County of Kern of the agreement execution.	Oct 19
County of Kern	CP 4	Covers the transfer of Right-of-Way between the Authority and the County. It allows the Authority's immediate right of possession and use of existing Right-of-Way to construct the HSR project. Status Update: The Authority is awaiting final confirmation from the County of Kern of the agreement execution.	Oct 19
County of Tulare	CP 4	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Nov 19
Semitropic Water Storage District	CP 4	This agreement is for design and construction of facilities.	Nov/Dec 19
Semitropic Water Storage District	CP 4	JUA template allows for prompt execution of the JUA land conveyances.	Nov/Dec 19
Semitropic Water Storage District	CP 4	CCUA template allows for prompt execution of the CCUA land conveyances.	Nov/Dec 19
Southern California Edison	CP 4	EP templates for providing either a temporary right where SCE's prior rights were in franchise and facilities be in franchise again post-construction, or a permanent replacement right for franchise prior rights where roadway will be vacated.	Jan 20
Southern California Edison	CP 4	Utility agreement addendum for Duct and Substructure Work for Construction.	Oct/Nov 19
Southern California Gas Company (Sempra)	CP 4	Southern California Gas Company's replacement rights needed in the BNSF Right-of-Way.	Oct/Nov 19
Pacific Gas & Electric Company	CP 4	Allows for the continuation of CP 4 PG&E design and construction work for 4.5 additional years until June 30, 2024.	Dec 19

119-Mile Central Valley Segment – Environmental Clearance

Incidental Take Permits (ITP) Summary

ITP Name	Amendment Status	Construction Project	ITP Amendment Construction Implications	Date of Approval / Issue
Merced-Fresno 2081 ITP, Permit Number 2081-2013-025-04, Issued on 03/12/2014				
Utility Design Refinements	In draft with contractor	CP 1	Documents changes in utility design at various locations in CP 1.	Feb-20
Hairy Orcutt Grass	In draft with contractor	CP 1	Administrative to identify the mitigation site for HOG. no impact on construction.	Feb-20
North Extension Separation of Rail	In draft with contractor	CP 1	Accommodates increase in construction footprint to realign the HST away from existing freight rail lines in the North Extension of CP 1.	Mar-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 6/15/2015				
Kings River Complex	Issued	CP 2-3	Issued on 10/31/19	Dec-19
Deer Creek/Cross Creek	In Review with CDFW	CP 2-3	Accommodates design changes in the Deer and Cross Creek areas.	Feb-20
CP 2-3 IPB	In Review with CDFW	CP 2-3	Construction of IPB at various locations in CP 2-3.	Feb-20
Table 5	In Review with HSR	CP 2-3	Administrative map book amendment to finalize the locations of dedicated wildlife crossings.	Feb-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 6/15/2015				
Wasco At-Grade	In Review with CDFW	CP 4	Accommodates changes construction profile in the city of Wasco from a viaduct to retained filled structure. Also increases construction footprint to complete construction of cast-in-place concrete walls.	Feb-20
Semitropic Utilities	Executed	CP 4	Executed 10/22/19	Jan-20
Gromer Utility Relocation	Executed	CP 4	Executed 10/22/19	Mar-20
McCombs and Merced/Scaroni Caltrans	In Review with CDFW	CP 4	Increases construction footprint for design variations at McCombs and Merced/Scaroni interchanges with SR 43, utility relocations, Caltrans roadway improvements, access roads, and other covered activities.	Apr-20
BNSF/PG&E	In draft with contractor	CP 4	Covers additional ROW adjacent to the mainline required for relocation of 3rd party utilities and access to utilities and BNSF operations areas. Also, to include various other small footprint adjustments along alignment.	Apr-20

Notes:

- The above table represents a snapshot in time of the ITP amendments needed to complete CP 1-4. Some additional design changes may occur to complete utility relocations. As design progresses and achieves final approval, the risk of additional amendments shrinks.

CONSTRUCTION PACKAGE 1 (CP 1) OVERVIEW

CP 1 – Design-Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	11/15/2011
SOQ Date:	12/19/2011
RFP Date:	3/22/2012
Proposal:	1/18/2013
Bid Open Date:	4/13/2013
Award Date:	8/16/2013
NTP 1 Date:	10/15/2013
NTP 2 Date:	11/22/2013
NTP 3 Date:	7/11/2014
Original Completion Date:	3/31/2018
Current Completion Date:	11/2/2021

Contract Value

Description	Amount
Fixed Bid Price:	\$969,988,000.00
Provisional Sums:	\$53,000,000.00
Original Contract Price:	<u>\$1,022,988,000.00</u>
Executed Change Orders:	\$719,808,136.24
Current Contract Amount:	<u>\$1,742,796,136.24</u>
Approved Invoices to Date ¹ :	\$1,111,247,193.72
Remaining Contract Balance:	\$631,548,942.52

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ² :	\$192,983,151.00
Executed Change Orders ³ :	\$192,983,151.00
Remaining Authorized Contingency	<u>\$0.00</u>

Contract Time Status

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded:	1,312
Work Days Spent (thru 9/30/2019):	2,176

Expended to Date

Description	Percentage
Time:	74.0%
Dollars:	63.8%

Growth %

Description	Percentage
Time:	80.6%
Dollars:	70.4%

Notes:

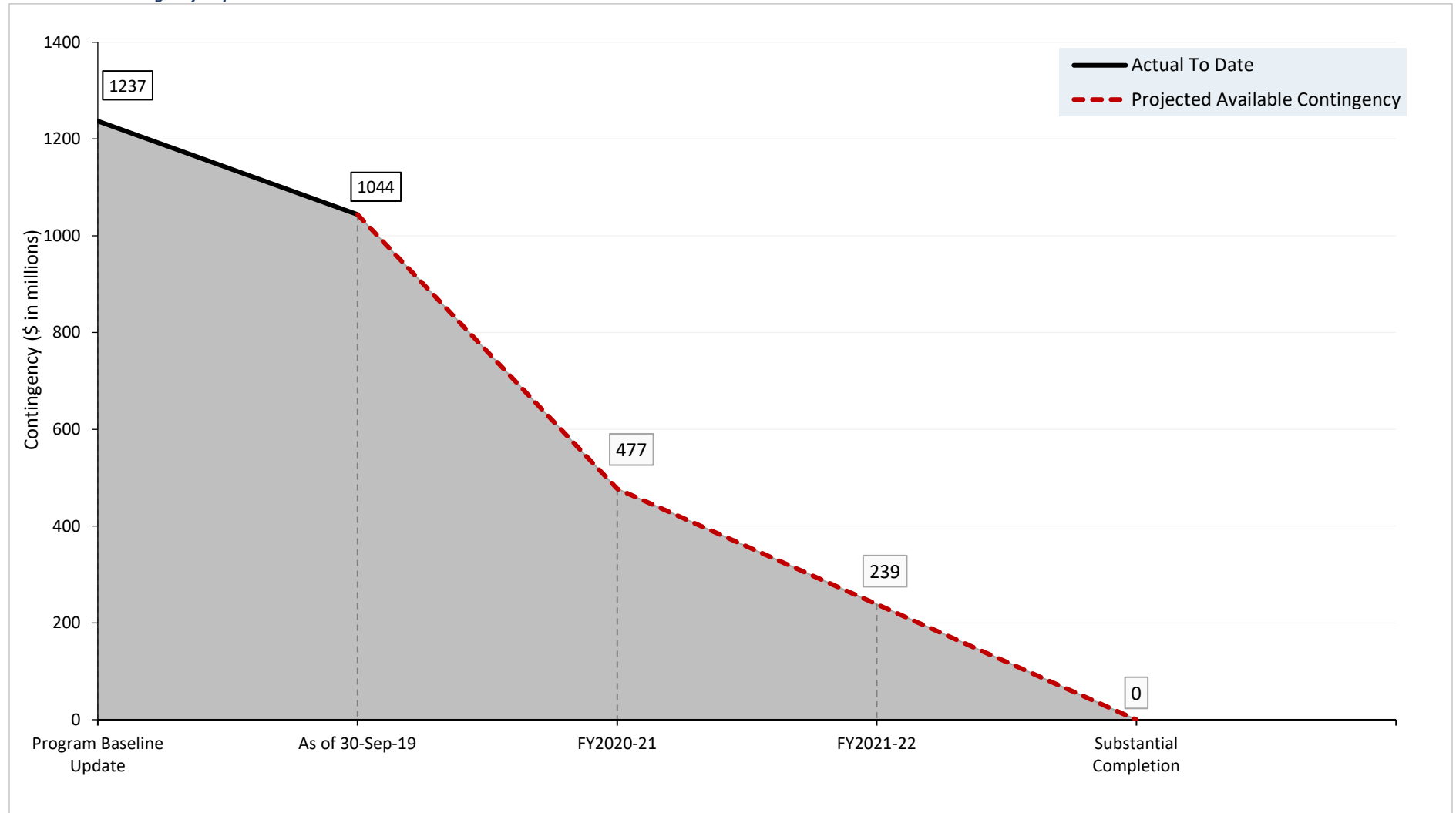
1. Includes estimated earned value for the reporting period.
2. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
3. Contingency funded change orders only.
4. The budget status table has been removed this period as it contains same information as the contract value.

CP 1 – Executed Change Order Status*CP 1 – Executed Change Order Status*

CO Number	Title	Change Status	Amount	Executed Date
Total:			\$0	

CP 1 – Risk - Contingency Report

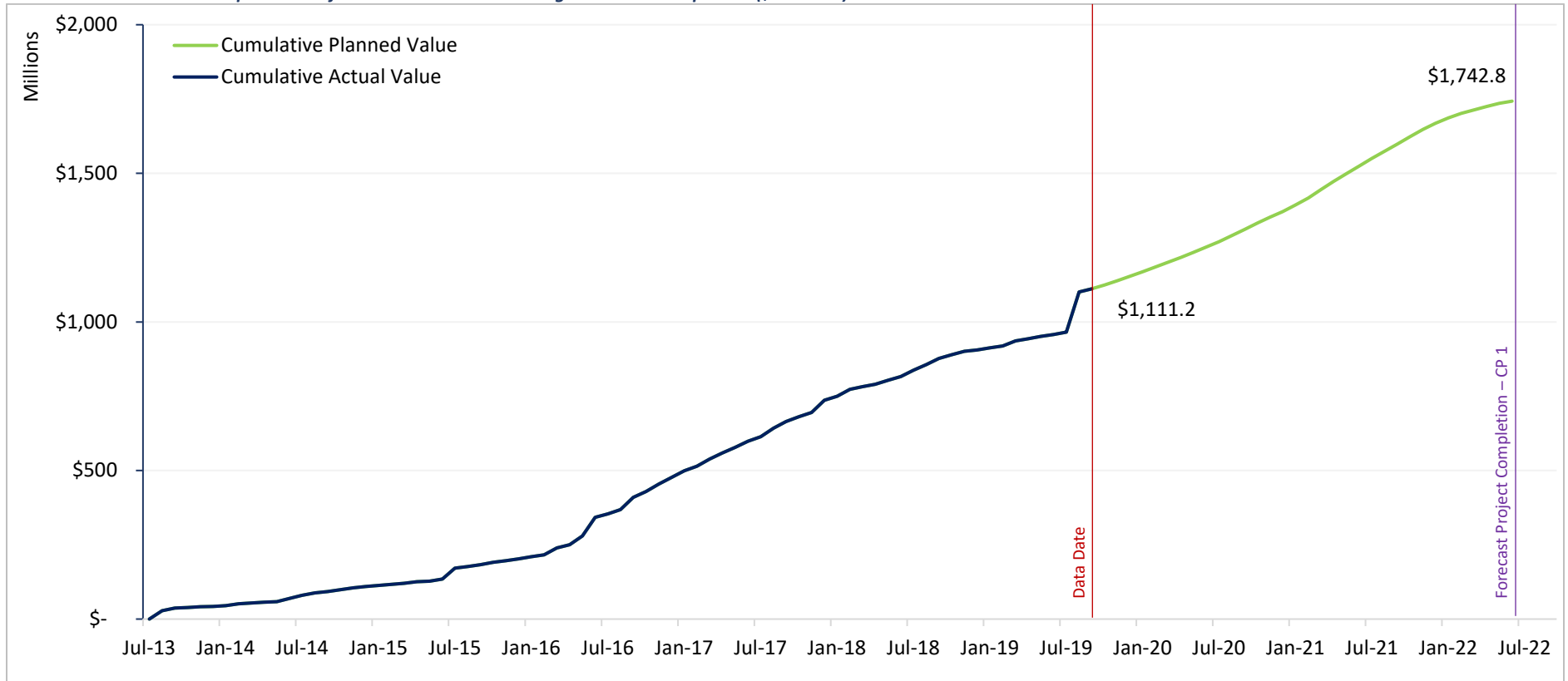
CP 1 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project.
 2. The amount of \$77M is still included for Herndon - pending execution. It will be removed from the total amount once the change order is executed.
 3. Contract through September 30, 2019.

CP 1 – Earned Value

CP 1 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



CP 1 – Projected Milestones

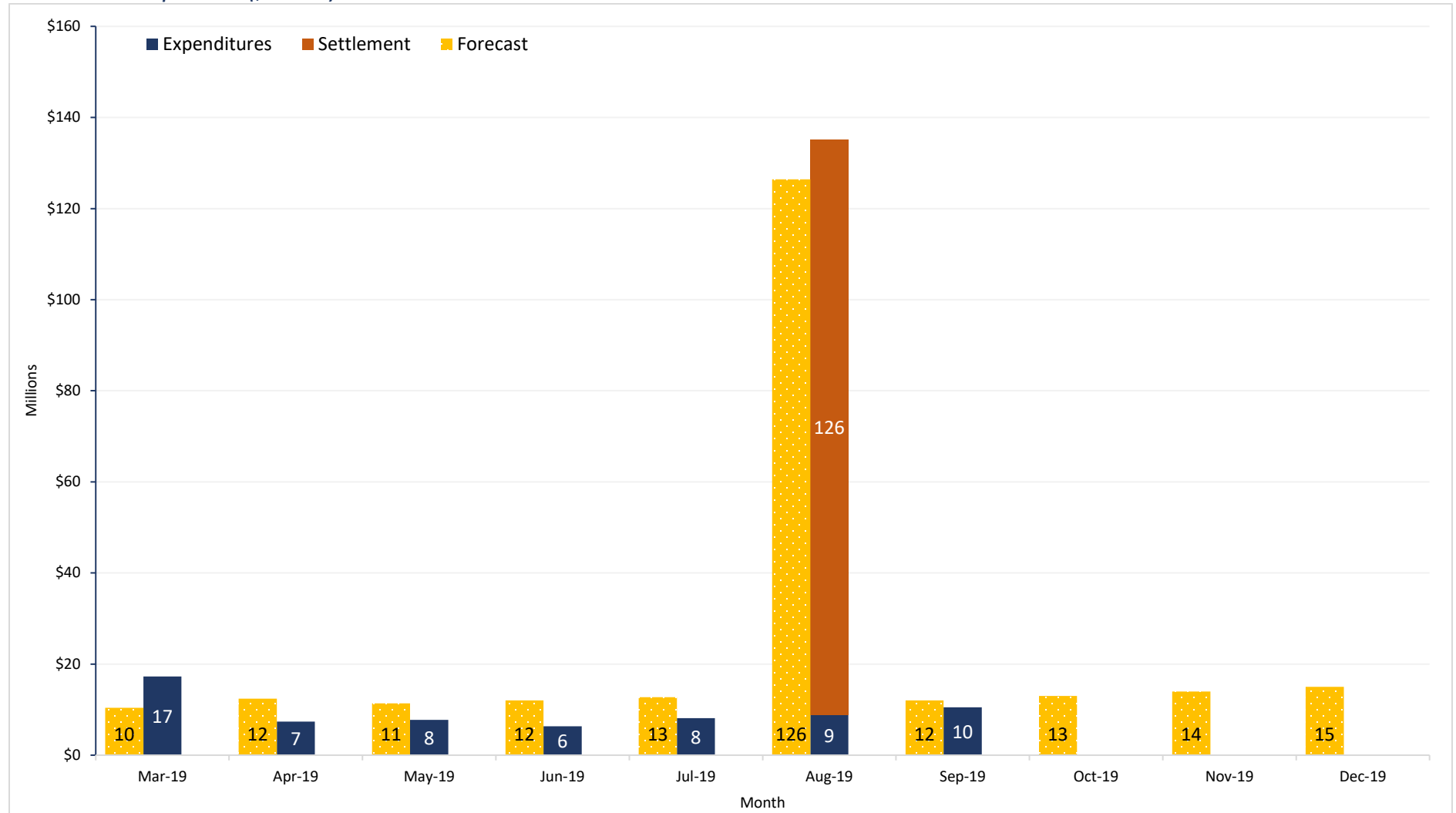
Milestone	Date	Milestone	Date
Main Design Complete	Feb-20	Environmental Clearance Complete	Apr-20
ROW Acquisition Complete	Nov-20	Utility Relocation Complete	Mar-21

Notes:

1. The Planned Value and Contract Substantial Completion Date is based on the CP 1 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. The Current Contract Value at completion does not include unexecuted change orders including IPB, Herndon, SR99 section remaining works, and North Extension Revision.

CP 1 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 1 – Fiscal Year Expenditures (\$ Millions)



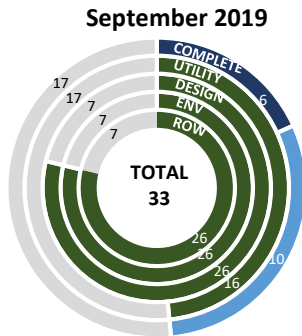
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. Preliminary actuals for October 2019 total approximately \$13.5 million. Final actuals will be reported next month.

CP 1 – Construction Progress

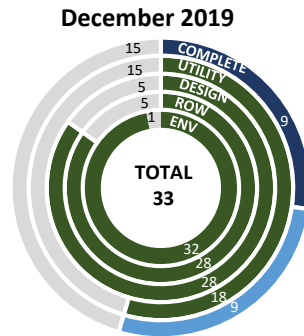
CP 1 – Construction Progress

Actual Structures



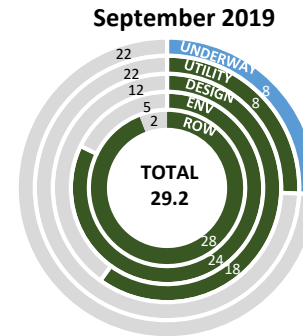
Cleared 48% | 16 Structures

Forecasted Structures



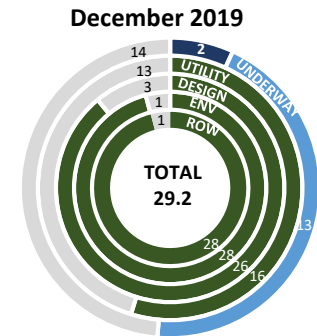
Cleared 55% | 18 Structures

Actual Guideways



Cleared 26% | 8 Miles

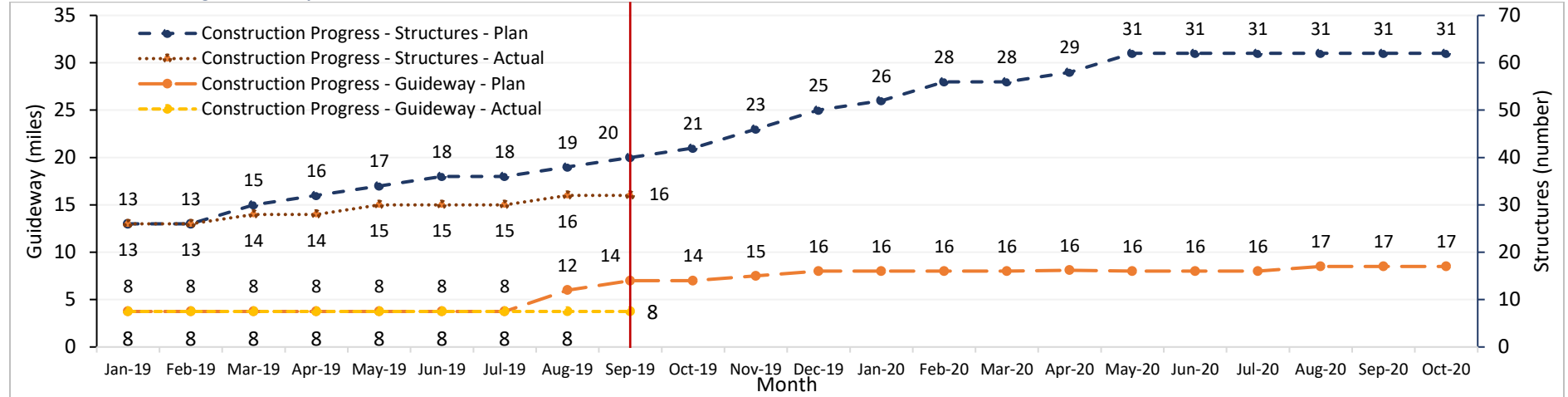
Forecasted Guideways



Cleared 55% | 16 Miles



CP 1 – Construction Progress to Completion – Forecast vs. Actual

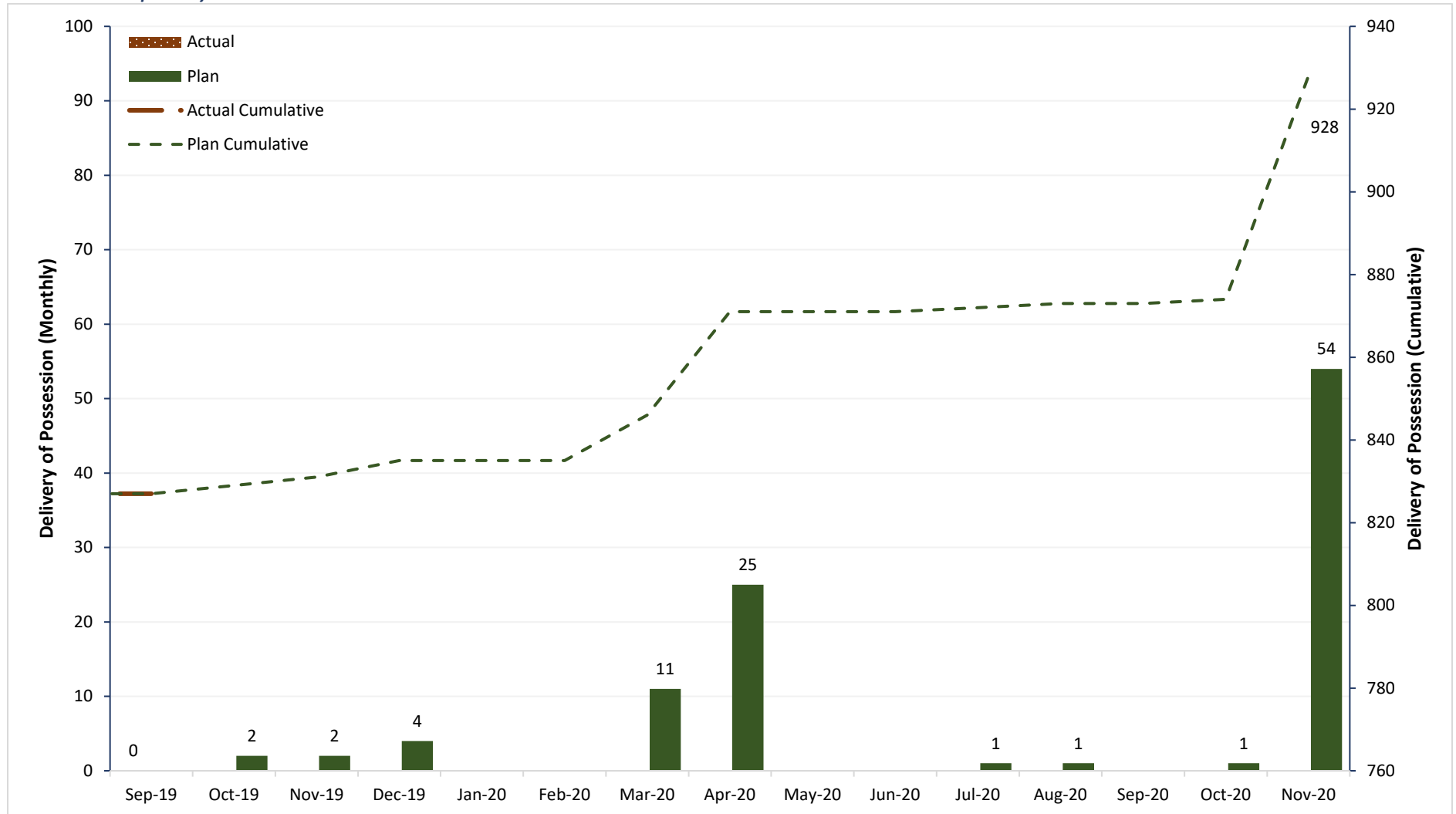


Notes:

1. Total Structures: 33 structures.
2. Total Guideway: 29 miles. (this does not include SR99 section)
3. This forecast is based on the get to work plans developed in Jan 2019.

CP 1 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 1 – Parcels Acquired by Month

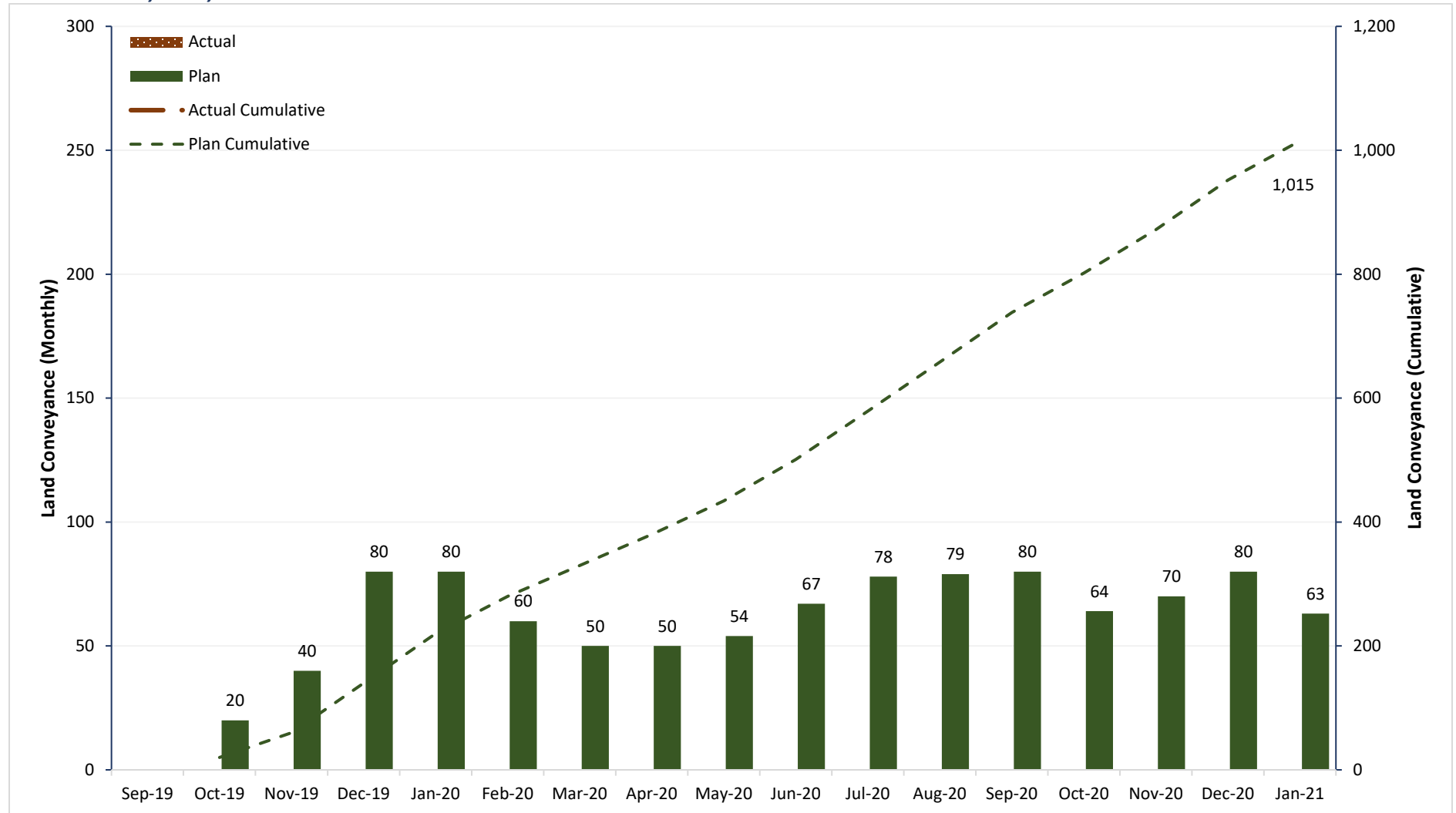


Note:

1. ROW process review undertaken in September. Actuals will be reported in October.

CP 1 – ROW Land Conveyance by Month – Plan vs. Actual

CP 1 – Land Conveyance by Month



Note:

1. ROW process review undertaken in September. Actuals will be reported in October.

CONSTRUCTION PACKAGE 2-3 (CP 2-3) OVERVIEW

CP 2-3 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	10/9/2013
SOQ Date:	12/13/2013
RFP Date:	4/3/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	6/10/2015
NTP 1 Date:	6/12/2015
NTP 2 Date:	7/25/2015
Original Completion Date:	8/19/2019
Current Completion Date:	5/22/2020

Contract Value

Description	Amount
Fixed Bid Price:	\$1,205,335,890.00
Provisional Sums:	\$160,000,000.00
Original Contract Price:	<u>\$1,365,335,890.00</u>
Executed Change Orders:	\$172,548,996.42
Current Contract Amount:	<u>\$1,537,884,886.42</u>
Approved Invoices to Date ¹ :	\$720,646,272.11
Remaining Contract Balance:	<u>\$817,238,614.31</u>

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ² :	\$92,658,215.14
Executed Change Orders ³ :	\$92,658,215.14
Remaining Authorized Contingency	<u>\$0.00</u>

Contract Time Status

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded:	277
Current Contract Days:	1,763
Work Days Spent (thru 9/30/2019)	1,529

Expended to Date

Description	Percentage
Time:	86.7%
Dollars:	46.9%

Growth %

Description	Percentage
Time:	18.6%
Dollars:	12.6%

Notes:

1. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
2. Contingency funded change orders only.
3. The budget status table has been removed this period as it contains same information as the contract value.

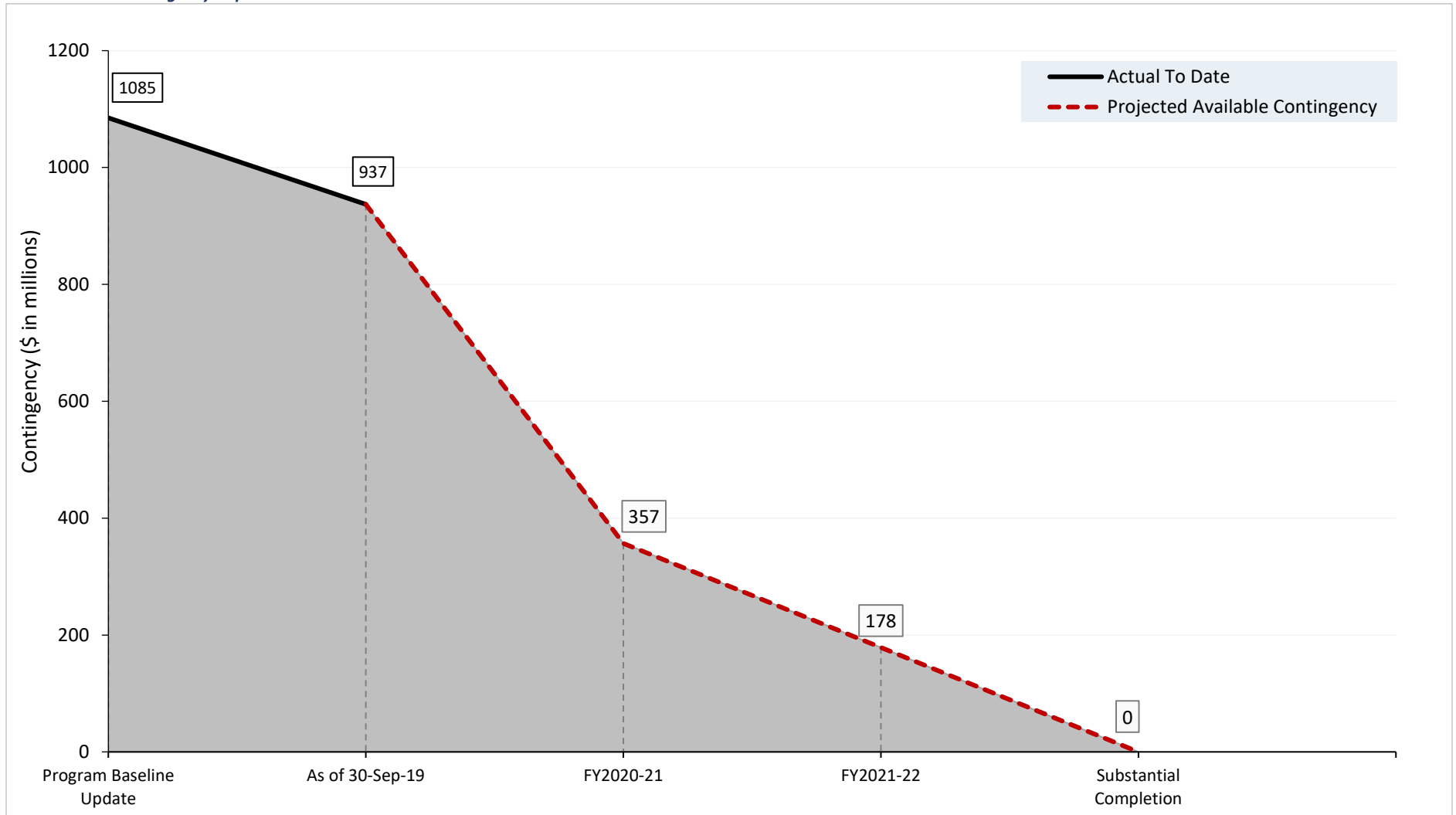
CP 2-3 – Executed Change Order Status

CP 2-3 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00105	SR43 Crossing Kings River (1H-03)	Fully Executed	\$791,800	9/27/2019
00115	Dept Toxic Substance Ctrl Reimburse.	Fully Executed	\$13,876	9/23/2019
00109	Project Floodplain Limit Increases	Fully Executed	\$18,809,463	9/06/2019
00010.8	TCO Avenue 136 - Box Structure	Fully Executed	\$5,846,353	9/6/2019
00103	Fargo Redesign Due Rev ROW Acq. Limits	Fully Executed	\$33,170	9/2/2019
00108	CID 200% Flow - Iowa	Fully Executed	\$1,431,274	9/2/2019
00110	CTC FB160291 10" Carrier Pipe	Fully Executed	\$28,355	9/2/2019
00107	CID 200% Flow - Davis Ditch	Fully Executed	\$844,191	9/2/2019
0024.1.2	Haz Mat Abatement FB-10-0708	Fully Executed	\$-2,412	9/2/2019
Total			\$27,796,069	

CP 2-3 – Risk - Contingency Report

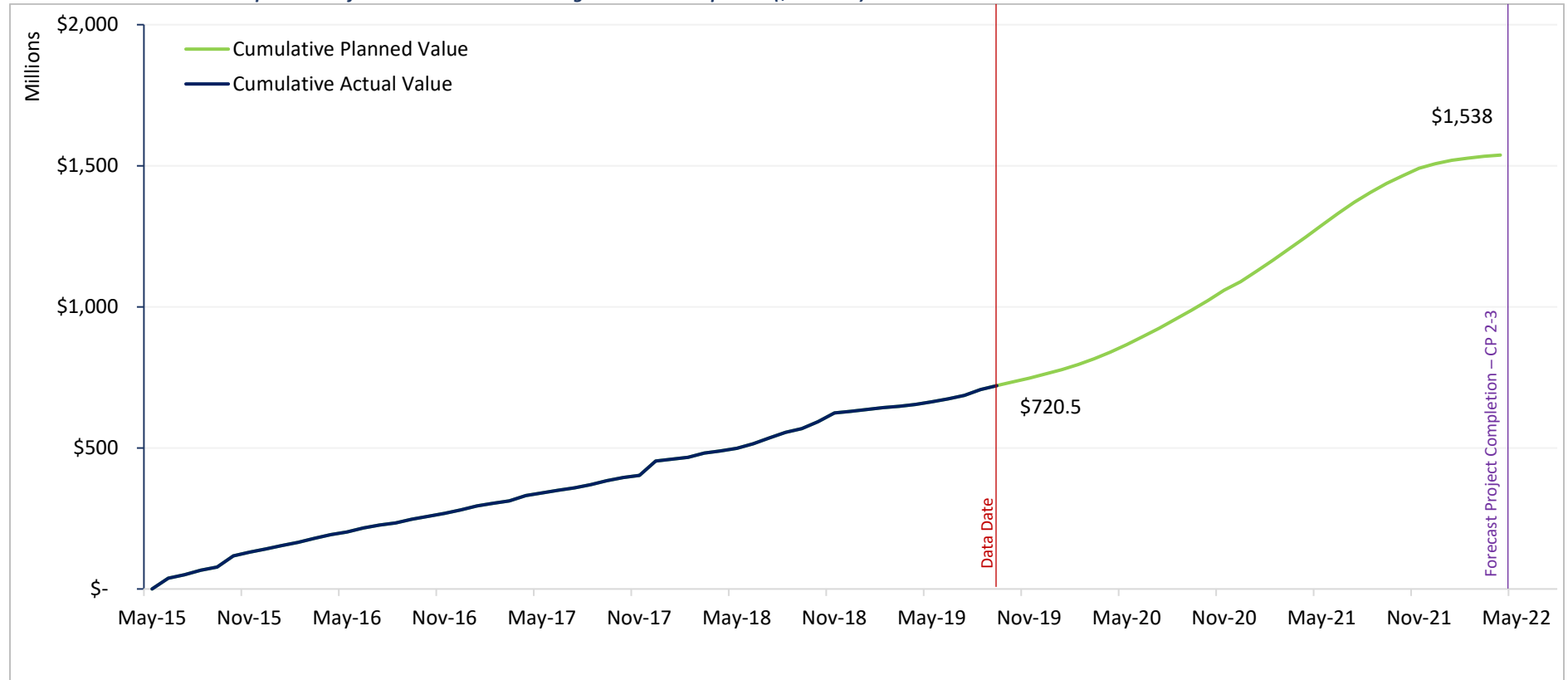
CP 2-3 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 2-3 Project.
 2. Contract through September 30, 2019.

CP 2-3 – Earned Value

CP 2-3 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



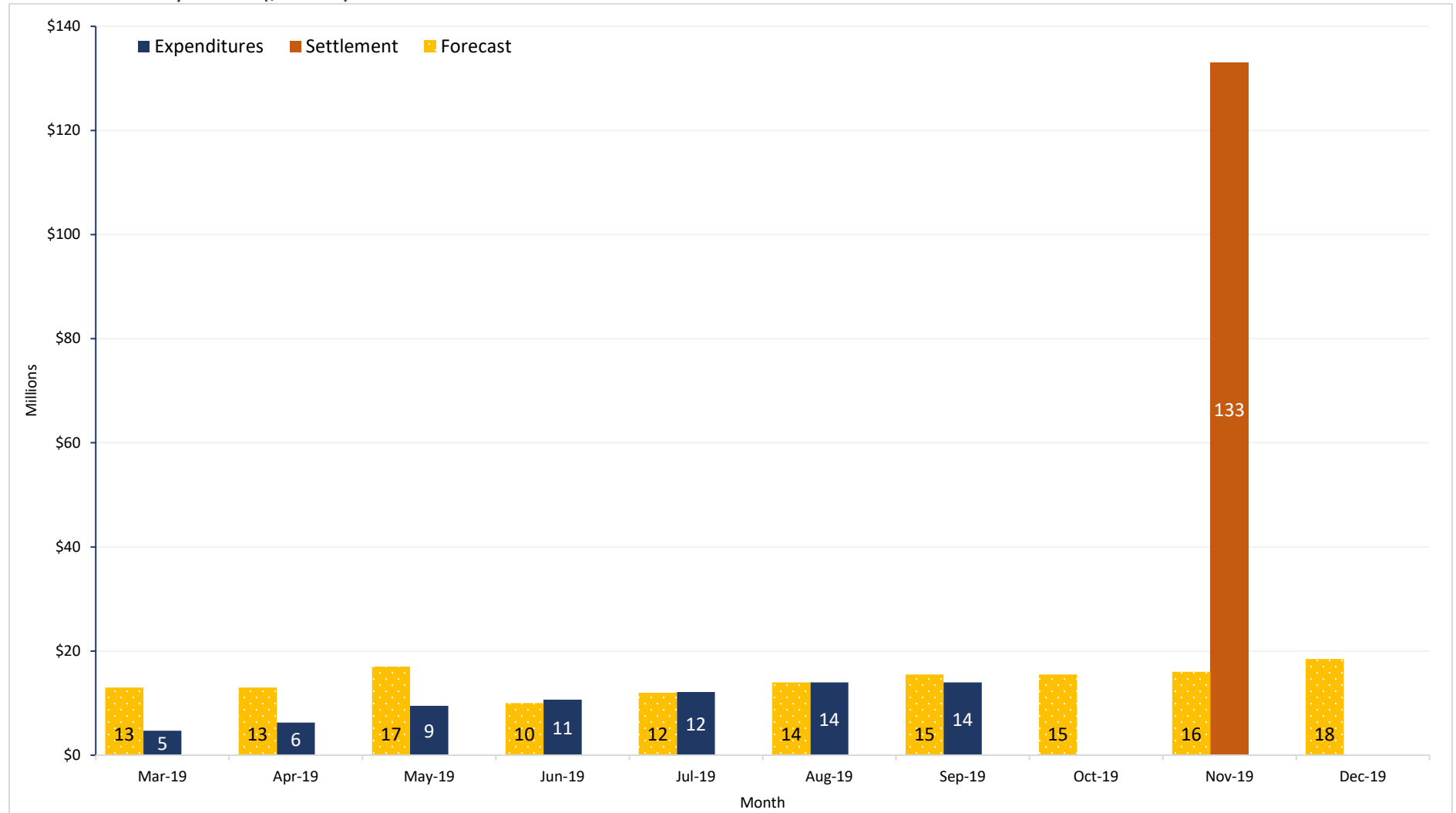
CP 2-3 – Projected Milestones

Milestone	Date	Milestone	Date
Main Design Complete	Feb-20	Environmental Clearance Complete	Apr-20
ROW Acquisition Complete	Jan-21	Utility Relocation Complete	Mar-21

- Notes:**
1. The Planned Value and Contract Substantial Completion Date is based on the CP 2-3 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized
 2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
 3. The Current Contract Value does not include unexecuted change orders including Project 517, the latest TIA settlement, IPB change orders.

CP 2-3 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 2-3 – Fiscal Year Expenditures (\$ Millions)



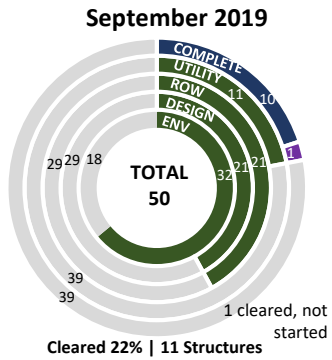
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. Preliminary actuals for October 2019 total approximately \$21 million. Final actuals will be reported next month.

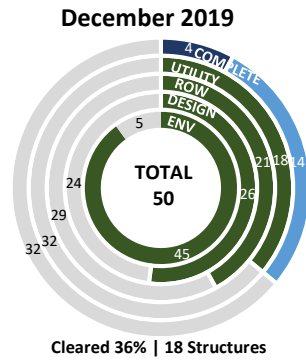
CP 2-3 – Construction Progress

CP 2-3 – Construction Progress

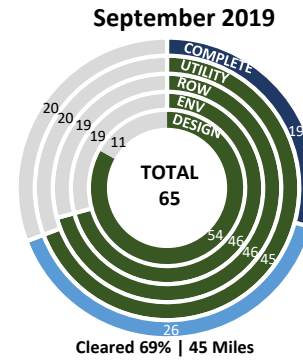
Actual Structures



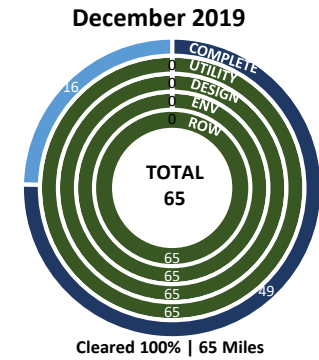
Forecasted Structures



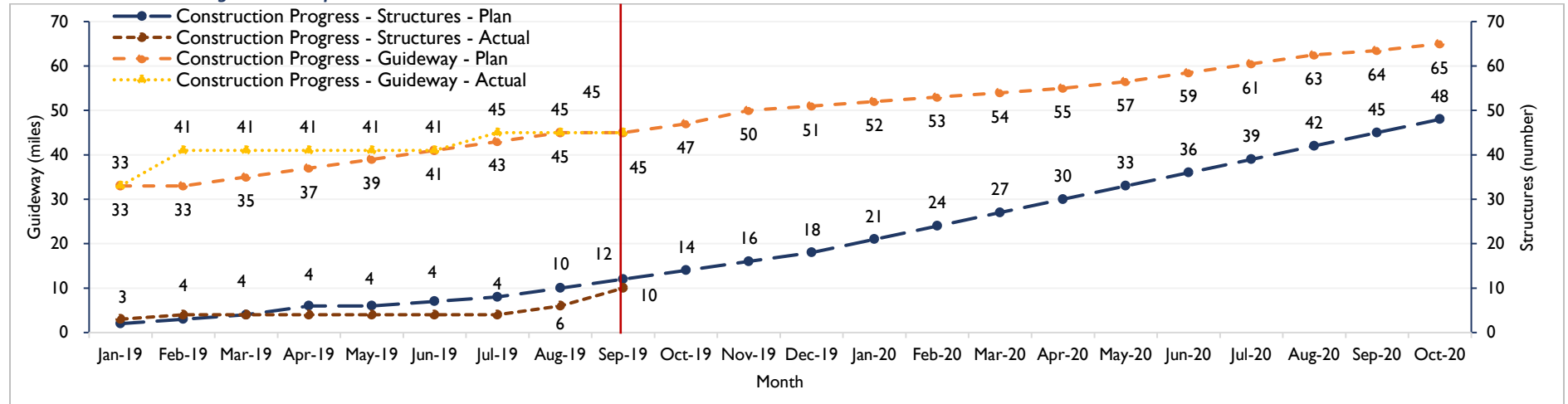
Actual Guideways



Forecasted Guideways



CP 2-3 – Construction Progress to Completion – Forecast vs. Actual

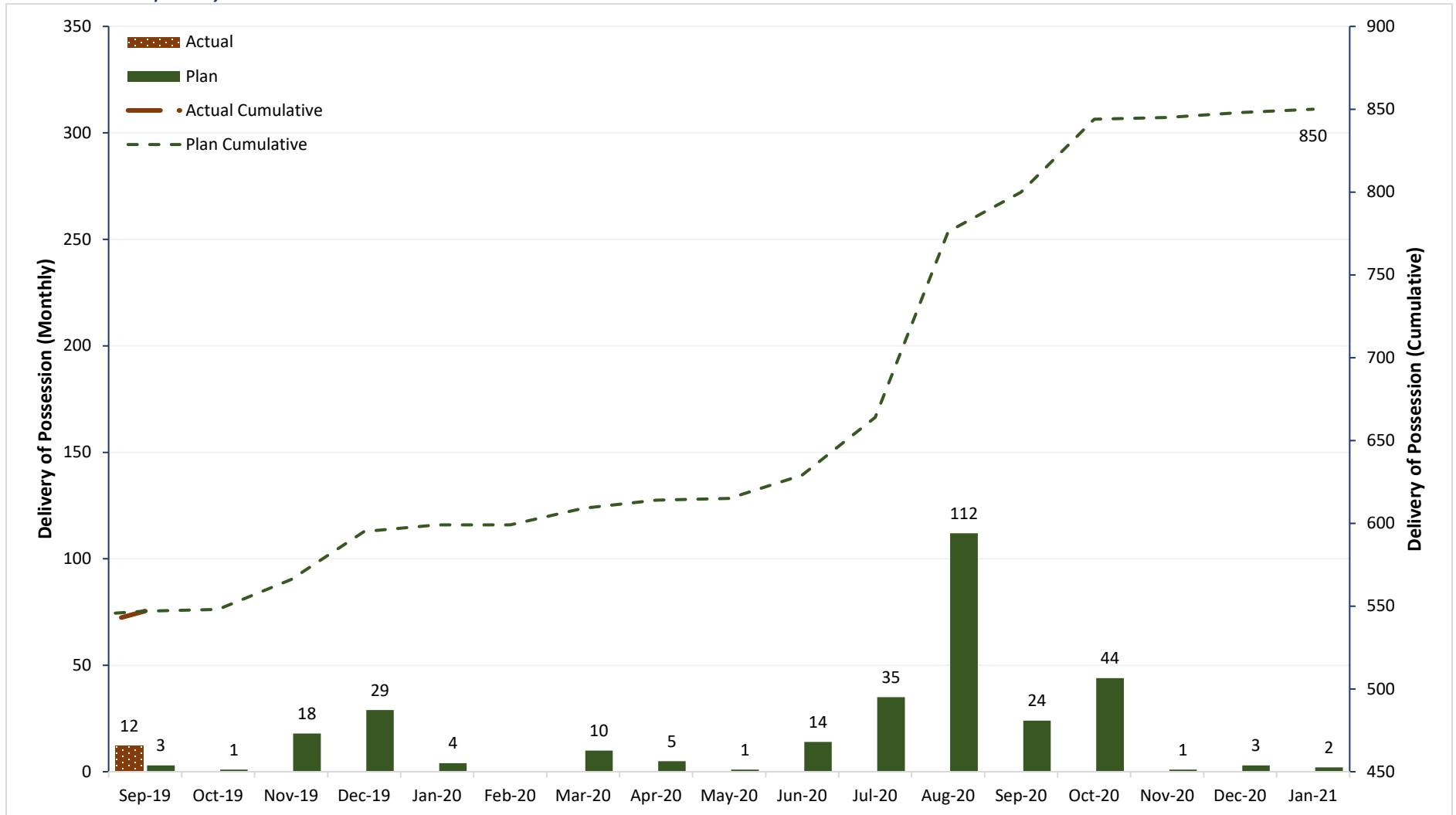


Notes:

- Total Structures: 50 each.
- Total Guideway: 65 miles.
- This forecast is based on the get to work plans developed in Jan 2019.

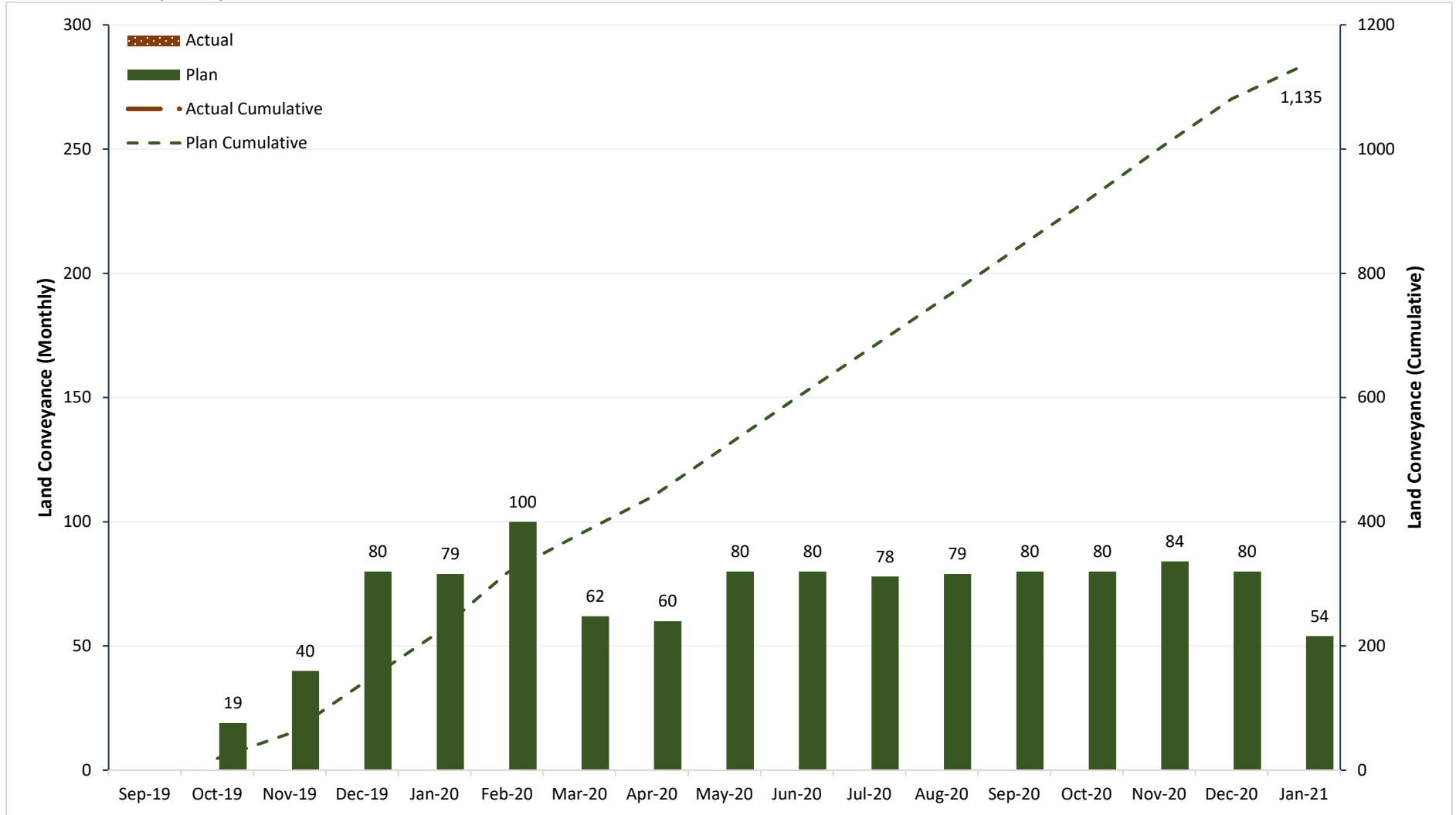
CP 2-3 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 2-3 – Parcels Acquired by Month



CP 2-3 – ROW Land Conveyance by Month – Plan vs. Actual

CP 2-3 – Land Conveyance by Month



Note:

1. ROW process review undertaken in September. Actuals will be reported in October.

CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW

CP 4 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	11/20/2014
SOQ Date:	1/30/2015
RFP Date:	5/27/2015
Proposal:	11/25/2015
Bid Open Date:	1/5/2016
Award Date:	2/29/2016
LNTP Date:	3/1/2016
NTP Date:	4/15/2016
Original Completion Date:	6/3/2019
Current Completion Date:	6/30/2021

Contract Value

Description	Amount
Fixed Bid Price:	\$337,247,000.00
Provisional Sums:	\$107,000,000.00
Original Contract Price:	<u>\$444,247,000.00</u>
Executed Change Orders:	\$59,478,356.53
Current Contract Amount:	<u>\$503,725,356.53</u>
Approved Invoices to Date ² :	\$216,597,393.10
Remaining Contract Balance:	<u>\$287,127,963.43</u>

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ³ :	\$56,188,068.00
Executed Change Orders ⁴ :	\$56,188,068.00
Remaining Authorized Contingency	<u>\$0.00</u>

Contract Time Status

Description	Duration ¹
Original Contract Days:	1,144
Extension of Time Awarded:	757
Current Contract Days:	1,901
Work Days Spent (thru 9/30/2019)	1,265

Expended to Date

Description	Percentage
Time:	66.5%
Dollars:	43.0%

Growth %

Description	Percentage
% Time Growth:	66.2%
% Dollars Growth:	13.4%

Notes:

1. Includes actuals through September 2019.
2. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
3. Contingency funded change orders only.

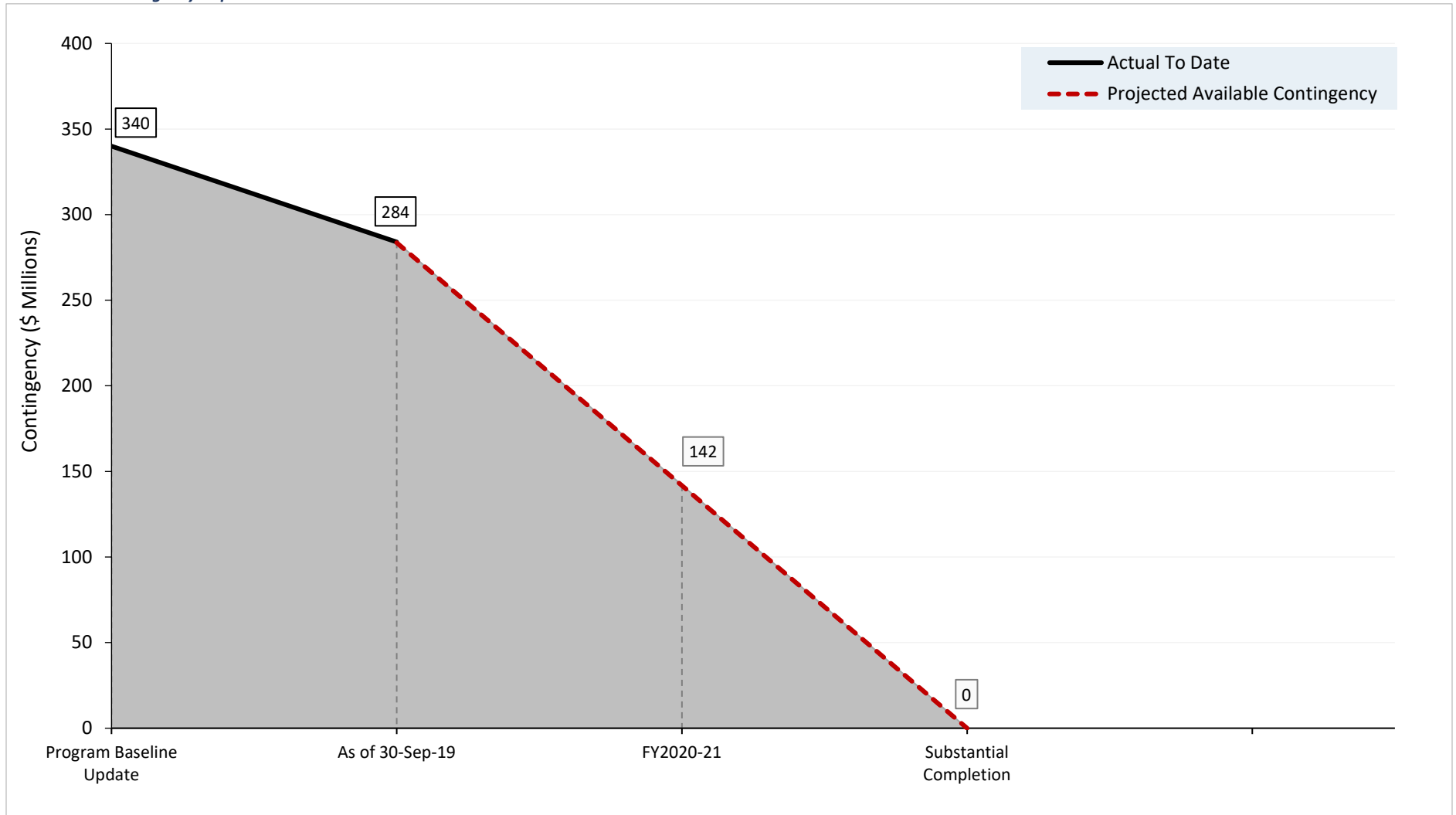
CP 4 – Executed Change Order Status

CP 4 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00041	CO 41 Revise Realign of Canal 9-22	CO Executed	\$180,657.04	09/24/19
Total:			\$180,657.04	

CP 4 – Risk - Contingency Report

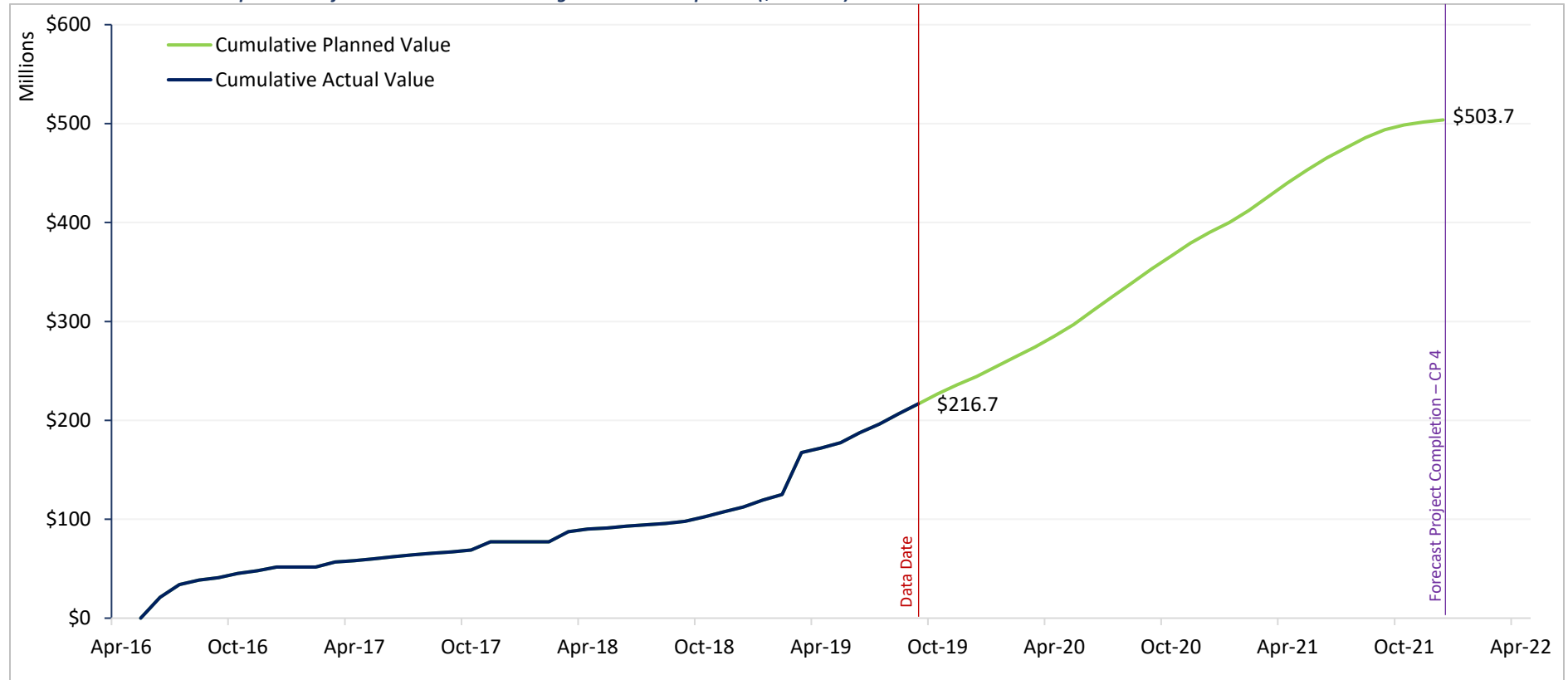
CP 4 – Risk - Contingency Report



- Notes:**
1. The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 4 Project.
 2. Contract through September 30, 2019.

CP 4 – Earned Value

CP 4 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



CP 4 – Projected Milestones

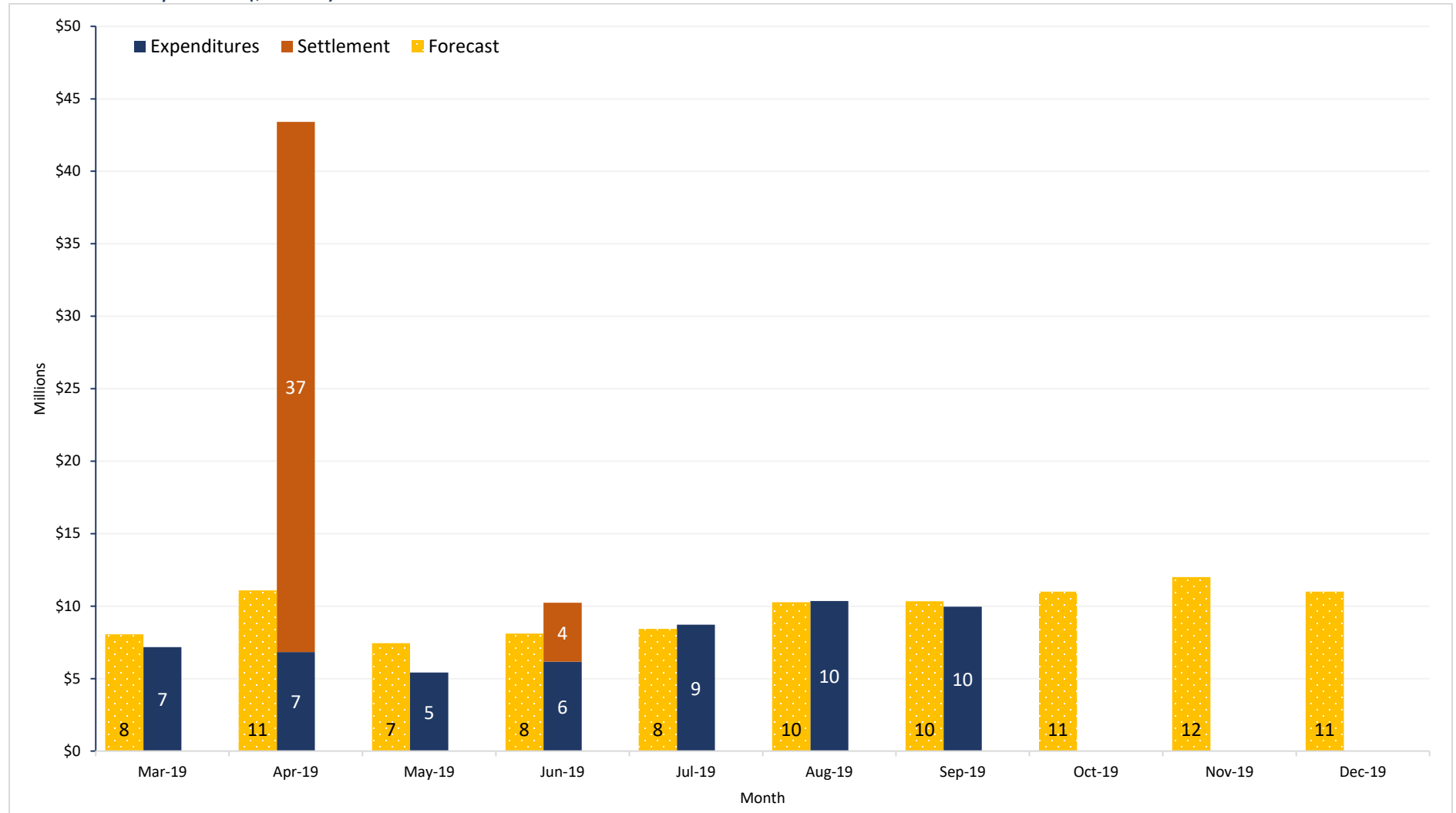
Milestone	Date	Milestone	Date
Main Design Complete	Feb-20	Environmental Clearance Complete	Apr-20
ROW Acquisition Complete	Dec-20	Utility Relocation Complete	Mar-21

Notes:

1. The Planned Value and Contract Substantial Completion Date is based on the CP 4 Proposed Schedule as of November 2019. This is expected to be refined as future change orders are issued and a revised RBS is finalized.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. The above contract value does not include unexecuted change orders including SR46 BNSF structure and IPB

CP 4 – Design-Build Planned vs. Actual Expenditures – Near Term

CP 4 – Fiscal Year Expenditures (\$ Millions)



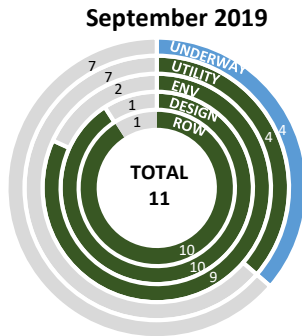
Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement.
3. Preliminary actuals for October 2019 total approximately \$10.8 million. Final actuals will be reported next month.

CP 4 – Construction Progress

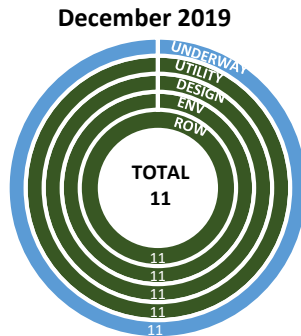
CP 4 – Construction Progress

Actual Structures



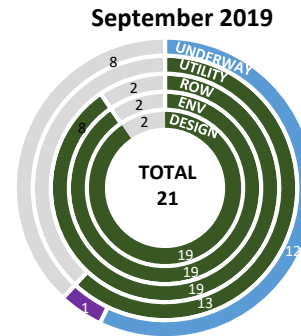
Cleared 36% | 4 Structures

Forecasted Structures



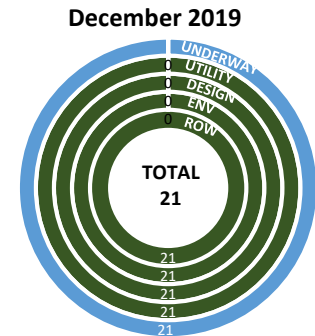
Cleared 100% | 11 Structures

Actual Guideways



Cleared 62% | 13 Miles

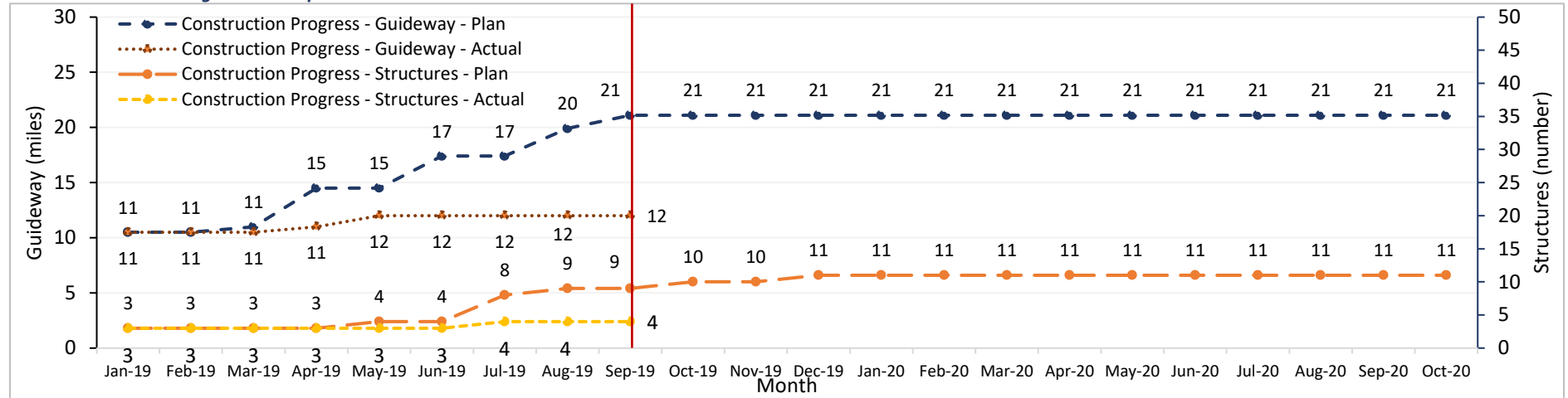
Forecasted Guideways



Cleared 100% | 21 Miles



CP 4 – Construction Progress to Completion – Forecast vs. Actual

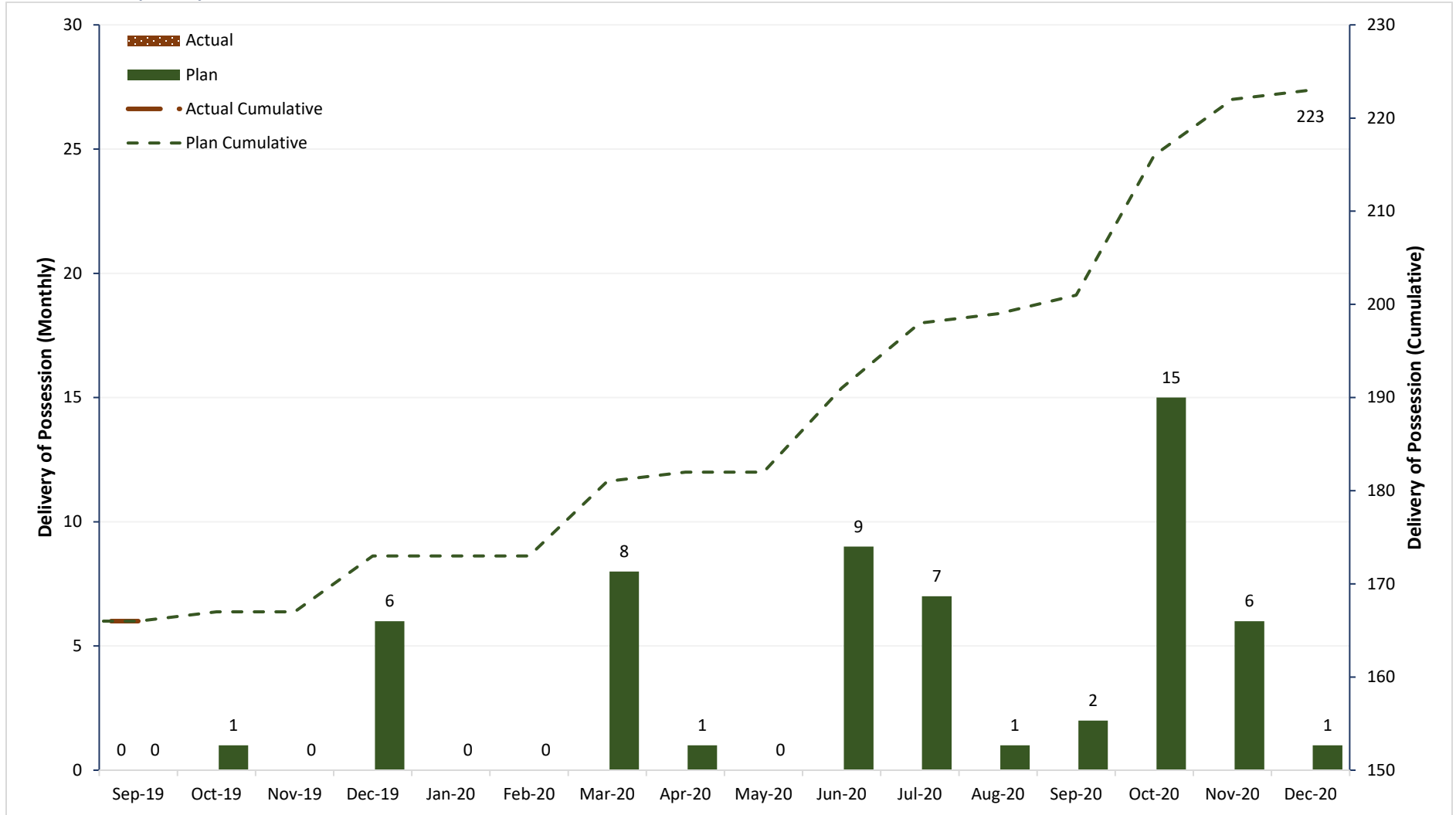


Notes:

1. Total Structures: 11 each.
2. Total Guideway: 21 miles.
3. Four miles of guideway have been cleared but not started.
4. This forecast is based on the get to work plans developed in Jan 2019.

CP 4 – ROW Parcels Acquired by Month – Plan vs. Actuals

CP 4 – Parcels Acquired by Month

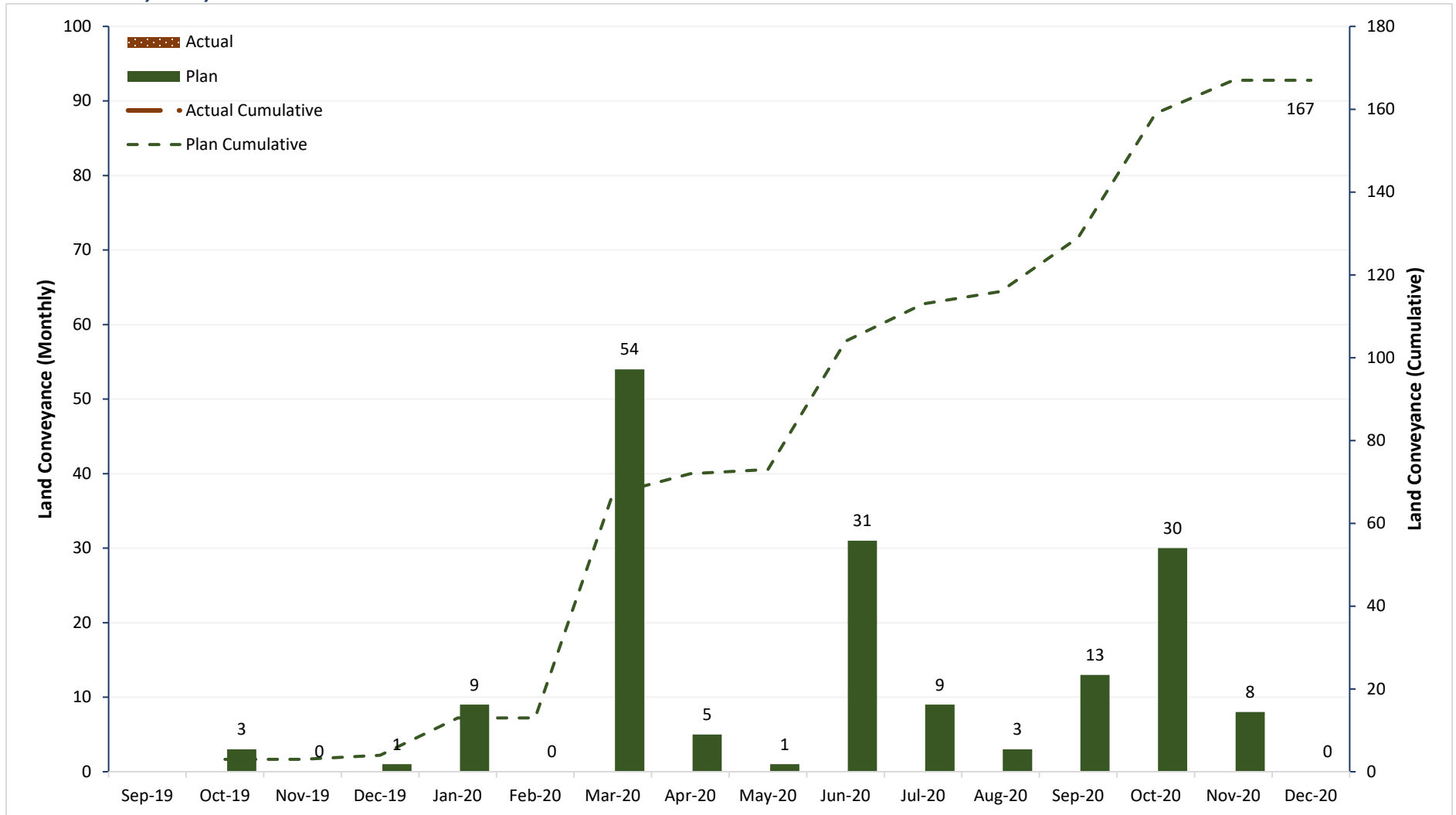


Note:

1. ROW process review undertaken in September. Actuals will be reported in October.

CP 4 – ROW Land Conveyance by Month – Plan vs. Actual

CP 4 – Land Conveyance by Month

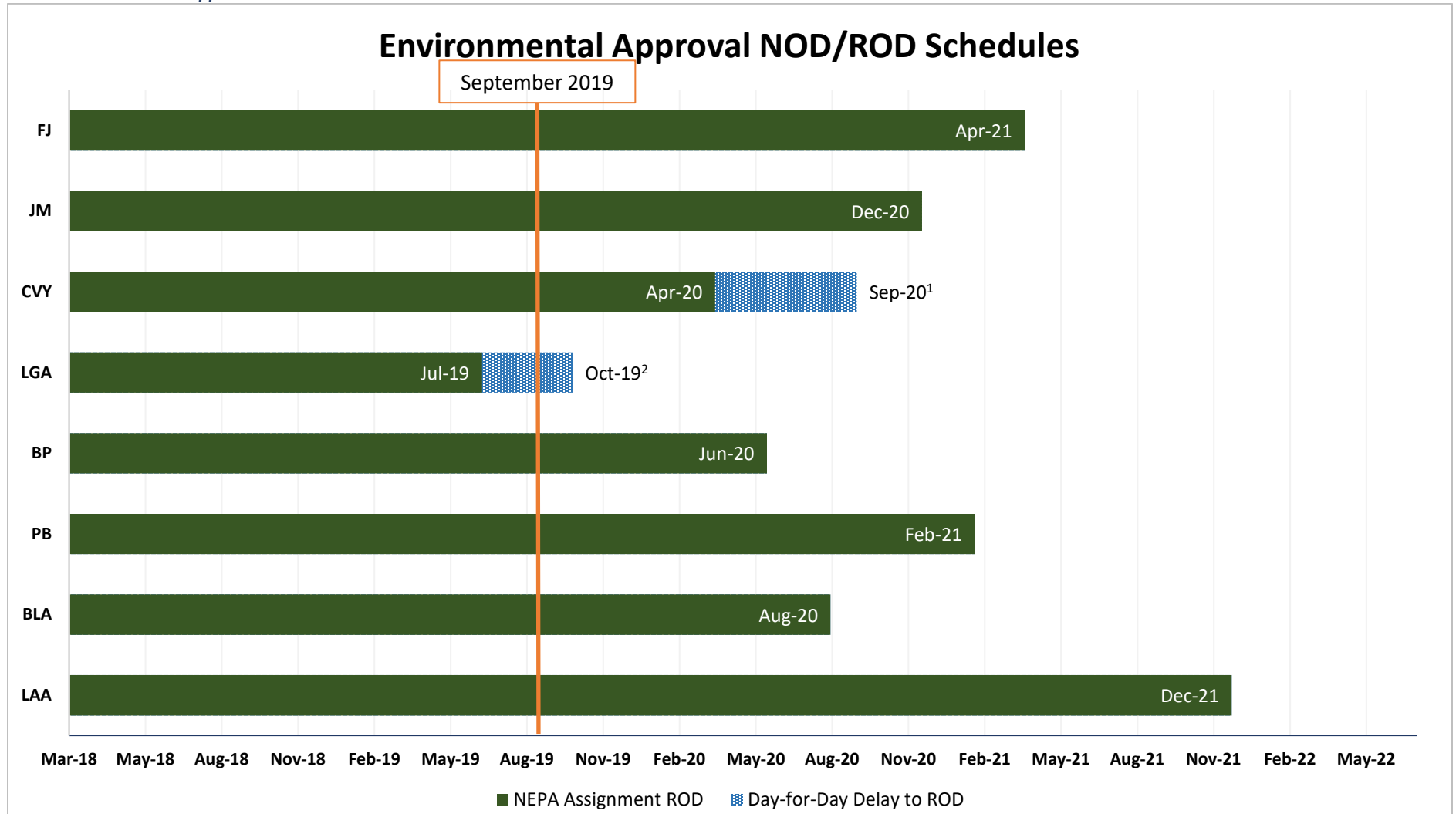


Note:

1. ROW process review undertaken in September. Actuals will be reported in October.

PROJECT DEVELOPMENT SCHEDULE – RECORDS OF DECISION (ROD)

Phase 1 Environmental Approval Schedule



Notes:

1. Actual 4-month delay (day for day slip due to lack of NEPA Assignment).
2. Actual 3-month delay (day for day slip due to lack of NEPA Assignment).

Project Development Schedule (to ROD)

Program Priority	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alt. Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIS & Obtain ROD		Date EIR/EIS To Be Completed	
			Number	Section	Due Dates	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month
Document Complete	Merced to Fresno	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Fresno to Bakersfield	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	CV Electrical Interconnections	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
1	San Francisco to San Jose	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Sep-19 98%	Complete Complete 100%	Mar-20 Apr-20 48%	Mar-20 Apr-20 49%	Apr-21 Apr-21 0%	Apr-21 Apr-21 0%	Apr-21	Apr-21
2	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Sep-19 98%	Complete Complete 100%	Dec-19 Mar-20 44%	Dec-19 Mar-20 45%	Dec-20 Dec-20 0%	Dec-20 Dec-20 0%	Dec-20	Dec-20
3	Central Valley Wye (M-F)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	May-18 Sep-19 99%	Complete Complete 100%	Apr-20 Sep-20 0%	Apr-20 Sep-20 ¹ 5%	Sep-20	Sep-20
4	Locally Generated Alternative (F-B)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-19 Oct-19 92%	Jul-19 Oct-19 ² 96%	Aug-19 Oct-19	Aug-19 Oct-19
5	Los Angeles to Anaheim	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Nov-20 Nov-20 68%	Nov-20 Nov-20 68%	Dec-21 Dec-21 0%	Dec-21 Dec-21 0%	Dec-21	Dec-21
6	Burbank to Los Angeles	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-19 Oct-19 70%	Sep-19 Oct-19 70%	Aug-20 Aug-20 0%	Aug-20 Aug-20 ³ 0%	Aug-20	Aug-20
7	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Dec-19 Jan-20 64%	Dec-19 Jan-20 64%	Feb-21 Feb-21 0%	Feb-21 Feb-21 ⁴ 0%	Feb-21	Feb-21
8	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-19 Mar-20 84%	Jul-19 Mar-20 85%	Jun-20 Jun-20 0%	Jun-20 Jun-20 ⁵ 0%	Jun-20	Jun-20
9	HMF	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-16 TBD 0%	Apr-16 TBD 0%	Sep-16 TBD 0%	Sep-16 TBD 0%	Feb-21 TBD 0%	Feb-21 TBD 0%	TBD	TBD

¹ Actual 4-month delay (day-for-day slip occurred because of lack of NEPA Assignment).

² Actual 3-month delay (day-for-day slip occurred because of lack of NEPA Assignment).

³ Potential 5-month delay (Construction assumptions update and External Agency coordination: Burbank Airport). Developing mitigation plans to minimize or eliminate associated schedule impacts.

⁴ Potential 6-month delay (External Agency Coordination: Una Lake). Developing mitigation plans to minimize or eliminate associated schedule impacts.

⁵ Potential 6-month delay (External Agency Coordination: CCNM). Developing mitigation plans to minimize or eliminate associated schedule impacts.

Project Development – Key Actions

The Authority assumed federal lead agency status with NEPA Assignment. On July 23, the NEPA Assignment Team began working with all project sections, especially the Central Valley project sections, to conduct NEPA environmental clearance actions.

Project Development – Key Actions Summary

Project Section	Key Actions
San Francisco to San Jose	<ul style="list-style-type: none"> • Project schedule revisions to include changes in environmental processes to reflect FRA award of NEPA Assignment • Continuation of internal Authority review of the administrative draft EIR/EIS (Environmental Impact Report/Environmental Impact Statement) • Preparation of the staff-recommended Preferred Alternative staff report in response to internal Authority comments.
San Jose to Merced	<ul style="list-style-type: none"> • Preparation of the staff-recommended State’s Preferred Alternative staff report and Authority Board memorandum in response to internal Authority comments to draft products • Participation in public and local government outreach activities to gather input on the staff-recommended Preferred Alternative • Other activities included advancing the Geotechnical Investigation Plan for the western and eastern approaches to Pacheco Pass and associated seismic faults.
Central Valley Wye	<ul style="list-style-type: none"> • Preparing the draft supplemental EIS for public circulation on September 13, 2019 with the comment period ending October 28, 2019. • Continued process of recording comment submissions to the draft supplemental EIR.
Locally Generated Alternative	<ul style="list-style-type: none"> • The federal cooperating agency review period closed August 30, 2019. The Authority will then respond to the comment and ready for publication the final supplemental EIS.
Bakersfield to Palmdale	<ul style="list-style-type: none"> • Engineering analysis continues to be conducted to avoid adversely affecting the Cesar Chavez National Monument (CCNM). • On August 28, 2019, Authority staff presented additional design options to the consulting parties for review and comment. • From this feedback, the Authority intends to prepare a Finding of Effect report that would be shared with the consulting parties in October.
Palmdale to Burbank	<ul style="list-style-type: none"> • Coordination continued with USACE and USEPA on Checkpoint B (for approvals and permits) with regard to impacts to Una Lake. • Cooperating agency review of the EIR/EIS is planned for late October or early November 2019.
Burbank to Los Angeles	<ul style="list-style-type: none"> • Continued to conduct consultation with municipalities and agencies within the project section by providing preliminary engineering plans for their review. • From this review, refinements were made to the construction phasing plans. • In addition, the regional team continued to revise its technical analyses for the administrative draft EIR/EIS.
Los Angeles to Anaheim	<ul style="list-style-type: none"> • Coordination continued with BNSF on project elements and analysis methods for inclusion in the draft EIR/EIS.