



ENGINEERING

Monthly Report

Fiscal Year 2017-2018

October 2017



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Financial Impact Review: Review by Finance Director, Sharon Wojda, determined no significant change to previously published financial information at this time. Future budget adjustments may be needed for projects with significant changes in scope and schedule, but estimates are unknown at this time.

Operational Impact Review: Review by Utility Director, Paul Rheault, determined operational impacts are in line with achieving greater efficiency in our systems.

CAPITAL IMPROVEMENT PROGRAM in BRIEF

For a quick summary of the 2018 fiscal year take a look below.

The focus this month was on getting projects to completion, both in construction and design. The SEI took a huge step forward completing nearly \$3 million in work and the South Awbrey Butte Drainage Study is actually wrapping up next month. Both projects are trending under budget and the SEI is significantly ahead of schedule.

How have the numbers **changed** since the CIP was adopted in June?

	Baseline	Now
TOTAL PROJECTS	75	77
ACTIVE PROJECTS	45	48
BUDGET	\$57.4 M	\$57.5 M

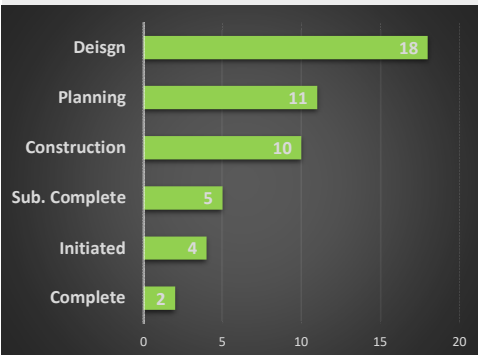
Two Synergy Projects were added. The funds containing the budgets on these projects are maintained by other departments so no changes were made to the CIP Budget.

How much of the 2018 fiscal year budgets have been **spent** so far?

We've spent **\$7.1 Million**
That's **12%**
of the total amount budgeted this FY.

Spending was strong in September
We saw as much spending this month as we did the prior two months combined

Of the projects that are active this fiscal year, what phase are they in now in the overall project life cycle?

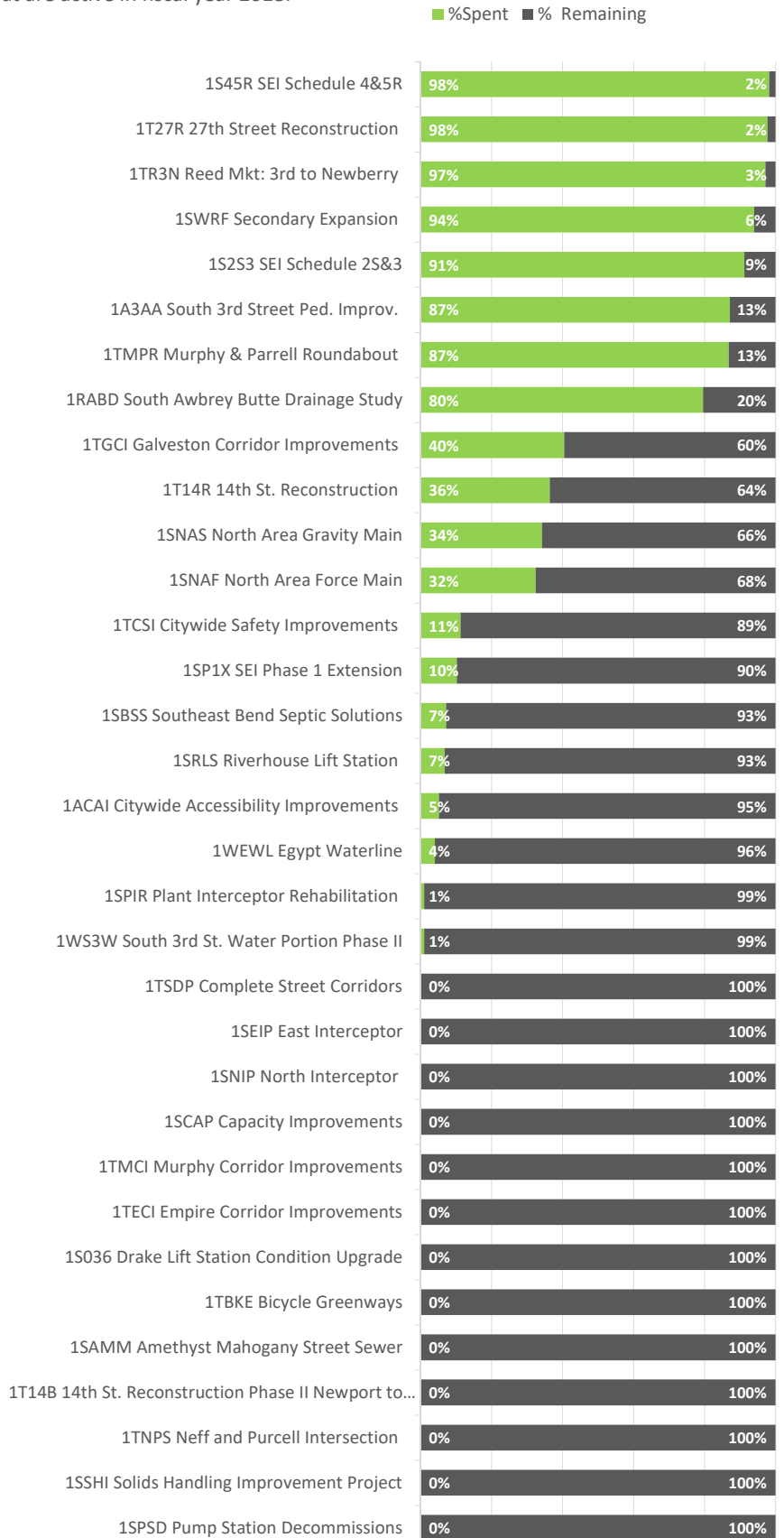


Eleven projects had phases change: Three projects were initiated, three moved to design, three to construction and two were completed. Be sure to check out the new project sheets at the end of this report.

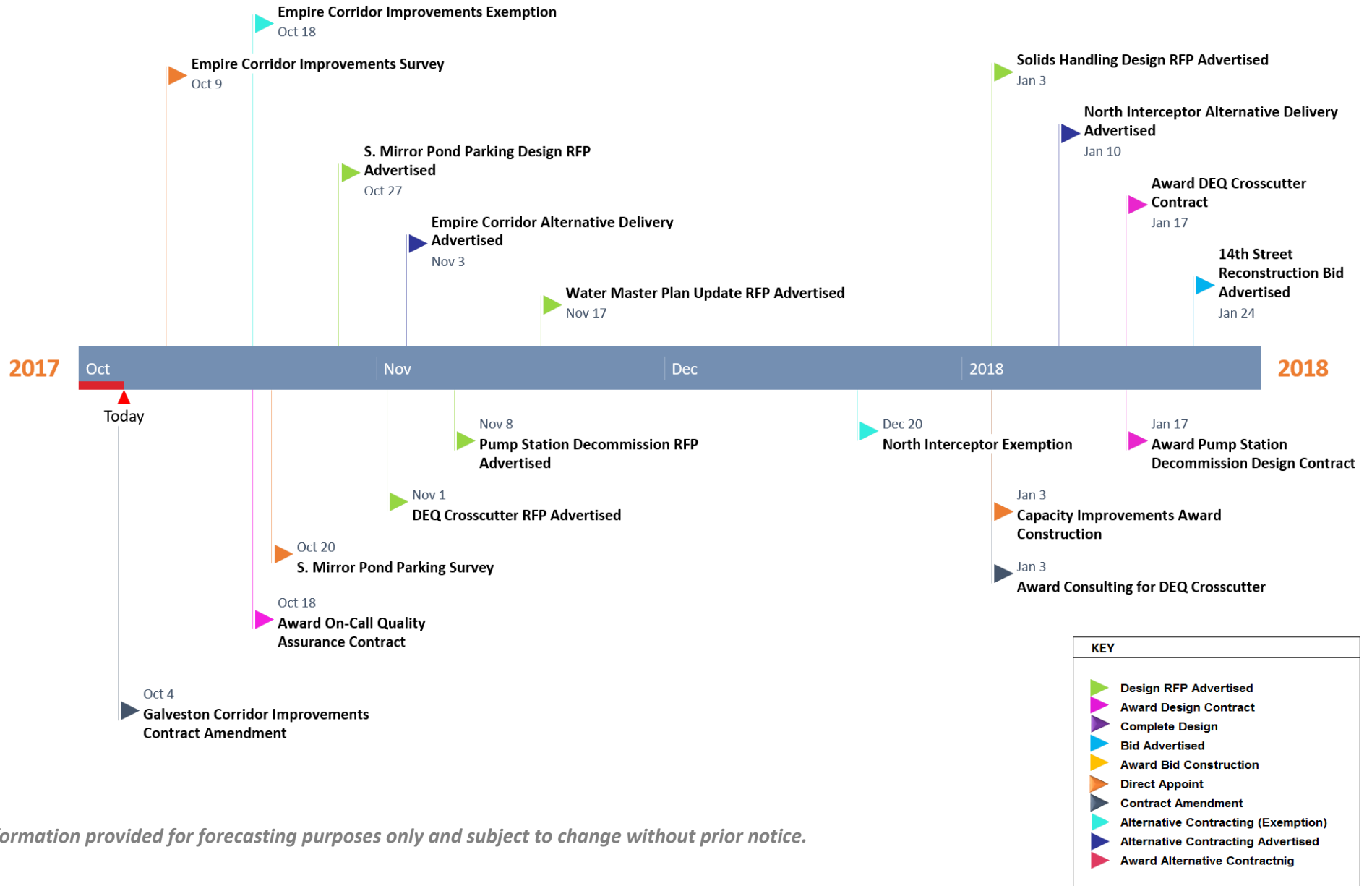
Reporting Period: **Sept. 1-30**

SPENDING ON ACTIVE PROJECTS

Total percentage of budgets spent over the lifespan of the project for projects that are active in fiscal year 2018.



EIPD Procurement Timeline



Information provided for forecasting purposes only and subject to change without prior notice.

City of Bend 2018 - 2022 Capital Improvement Program Project List															
Project Name & Number	Major Project	Project Manager & Team Member(s)	Projected Start	Estimated Completion	Current Phase	Total Project Cost Estimate	Spent to Date	2017-18 Budgeted	2018-19 Budgeted	2019-20 Projected	2020-21 Projected	2021-22 Projected	Total 2018-22 CIP Budgeted	Budget Notes & Revisions	Percent Total Cost Est. Spent
Transportation															
1A3AA South 3rd Street Pedestrian Improvements	1X3RD	Suhr, Burr	2011	Jul 2017	Sub. Complete	815,000	749,461	15,000	-	-	-	-	15,000		92%
1XCAI Citywide Accessibility Improvement Program															
1ACAI Citywide Accessibility Improvements	1XCAI	Rowan	2016	Sep 2018	Construction	1,156,000	200,921	850,000					850,000		
Dean Swift Road Corridor	1XCAI	Rowan	2018	Sep 2018	Design	150,000	-		150,000				150,000		
NE Division Street Corridor	1XCAI	Rowan	2018	Sep 2018	Design	500,000	-		500,000				500,000		
Lodge Pole Drive Corridor	1XCAI	Rowan	2019	Dec 2019	Design	315,000	-			315,000			315,000		
Poplar Street Corridor	1XCAI	Rowan	2019	Jun 2020	Design	250,000	-			250,000			250,000		
SW Truman Hill Taft Silver Lake Corridor	1XCAI	Rowan	2020	Jun 2020	Design	440,000	-				440,000		440,000		
SW Cleveland Avenue Corridor	1XCAI	Rowan	2020	Jun 2021	Design	190,000	-				190,000		190,000		
NW Delaware Avenue Corridor	1XCAI	Rowan	2021	Dec 2021	Design	500,000	-					500,000	500,000		
NW Hill Street Corridor	1XCAI	Rowan	2021	Jun 2022	Design	250,000	-					250,000	250,000		
NW Seismore Street Corridor	1XCAI	Rowan	2021	Jun 2022	Design	125,000	-					125,000	125,000		
1ACAI Citywide Accessibility Improvements						3,876,000	200,921	850,000	650,000	565,000	630,000	875,000	3,570,000		5%
1T14R 14th St. Reconstruction †	1XGOB	Sabourin, Burr	2016	Oct 2017	Design	6,195,000	869,186	4,206,369	150,000	-	-	-	4,356,369		14%
1T14B 14th St. Reconstruction Schedule B Newport to Galveston †		Sabourin, Burr	2017	Oct 2018	Design	2,600,000	-	-	1,300,000	1,300,000	-	-	2,600,000		0%
1TCSI Citywide Safety Improvements		Rowan	2016	Sep 2018	Construction	3,535,000	396,663	2,219,000	775,000	-	-	-	2,994,000		11%
1TGCI Galveston Corridor Improvements †		Sabourin	2011	Oct 2017	Design	950,000	384,649	520,000	-	-	-	-	520,000		40%
1TBKE Bicycle Greenways		Rowan	2018	May 2018	Pending	900,000	-	225,000	225,000	225,000	225,000	-	900,000		0%
1TMPR Murphy & Parrell Roundabout		Sabourin	2015	May 2020	Sub. Complete	2,952,600	2,562,595	50,000	5,000	5,000	-	-	60,000	1	87%
1TNPS Neff and Purcell Intersection		Rowan	2016	May 2021	Pending	4,000,000	-	50,000	350,000	300,000	3,300,000	-	4,000,000		0%
1TPWP Powers & Brookwood Roundabout Phase II	1XGOB	Sabourin	2017	Oct 2017	Complete	50,000	-	50,000	-	-	-	-	50,000		0%
1TECI Empire Corridor Improvements		Forster	2018	Mar 2018	Initiated	15,630,000	-	500,000	3,465,000	5,665,000	3,000,000	3,000,000	15,630,000		0%
1TMCI Murphy Corridor Improvements		Forster	2018	Mar 2018	Pending	10,000,000	-	500,000	1,500,000	2,000,000	3,000,000	3,000,000	10,000,000		0%
1TSDP Complete Street Corridors		Rowan	2017	Oct 2020	Pending	801,000	965	200,000	600,000	-	-	-	800,000		0%
1TR3N Reed Mkt: 3rd to Newberry	1XGOB	Sabourin	2012	Oct 2018	Sub. Complete	13,804,664	13,406,963	160,000	16,000	-	-	-	176,000		97%
Total Transportation Projects						69,985,264	18,772,323	9,545,369	9,036,000	10,060,000	10,155,000	6,875,000	45,671,369		
Stormwater															
1RMP1 Stormwater Master Plan Update		Martin	2020	Jun 2018	Pending	500,000	-	-	500,000	-	-	-	500,000		0%
1RABD South Awbrey Butte Drainage Study		Sabourin	2016	Oct 2017	Planning	285,000	226,818	10,000	-	-	-	-	10,000		80%
1RNPR Newport Pipe Replacement Design		Sabourin	2018	Jun 2019	Pending	442,000	-	-	442,000	-	-	-	442,000		0%
1RFGU Franklin & Greenwood Underpass		Sabourin	2021	Jun 2022	Pending	5,620,000	-	-	-	-	120,000	600,000	720,000		0%
1RRMC Roosevelt & McKinley		Martin	2020	Jun 2022	Pending	579,000	-	-	-	-	104,000	475,000	579,000		0%
Total Stormwater Projects						6,926,000	226,818	10,000	942,000	-	224,000	1,075,000	2,251,000		
Water															
1WAWP Awbrey Well Supply Expansion		Martin	2020	Jun 2019	Pending	2,021,760	-	-	-	2,021,760	-	-	2,021,760		0%
1WCPS College Parallel Pipe Study		Martin	2020	Jun 2019	Pending	1,215,760	-	-	-	1,215,760	-	-	1,215,760		0%
1WEWL Egypt Waterline		Forster, Webster	2012	Dec 2017	Construction	771,000	30,828	590,000	-	-	-	-	590,000		4%
1WLPE Lafayette Pipe Enlargement		Martin	2020	Jun 2019	Pending	250,640	-	-	-	250,640	-	-	250,640		0%
1WMP1 Water Master Plan Update		Martin	2017	Dec 2017	Initiated	550,000	-	550,000	-	-	-	-	550,000		0%
1WRBO Parallel Piping Rock Bluff to Brookwood		Martin	2022	Jun 2022	Pending	2,940,000	-	-	-	-	-	2,940,000	2,940,000		0%
1WS3W South 3rd St. Water Portion Phase 2	1X3RD	Suhr	2016	Jun 2018	Design	632,000	6,437	550,000	-	-	-	-	550,000		1%
1WSDC Water SDC Methodology Study		Ockner	2017	Dec 2017	Complete	60,578	578	60,000	-	-	-	-	60,000		1%
1WSPP Parallel Piping Brookwood to Brosterhaus		Martin	2021	Jun 2021	Pending	1,596,400	-	-	-	-	1,596,400	-	1,596,400		0%
1WSSC New Water Well Near NE Shirley Court		Martin	2021	Jun 2021	Pending	2,830,464	-	-	-	-	2,830,464	-	2,830,464		0%
1WSWO New Water Well Shiloh Site		Martin	2022	Jun 2022	Pending	2,721,600	-	-	-	-	-	2,721,600	2,721,600		0%
1WVSS Valves Operational System Study		Martin	2020	Jun 2022	Pending	234,000	-	-	-	78,000	78,000	78,000	234,000		0%
Total Water Projects						15,824,202	37,843	1,750,000	-	3,566,160	4,504,864	5,739,600	15,560,624		

Phase 2 - S. 3rd Street Improvements

Phase 2 projects are capital improvement projects and address maintenance issues. The timing is being driven to occur in advance of the street preservation work within 3rd Street that is planned for the summer of 2017. Due to the impacts to the 3rd Street roadway, it is imperative that they occur prior to the grind and inlay preservation work.



Scope

Includes design and construction for streets, water, and stormwater. This work will include an analysis of the drainage basin to assess the condition of the existing stormwater facilities; creation of a striping and paving plan; replace existing 2-inch sub-standard waterlines with 8-inch pipelines.

Schedule

Start Date: 10/1/2015
 Substantial Completion: **1/31/2018**
 Final Closeout: **1/31/2018**

- Stormwater portion complete
- Streets portion complete

Cost

Total Estimated:	\$667,000	
Spent to Date:	\$28,961	
% Spent to Estimated:	4%	
<u>Sub-Projects:</u>	<u>Est.</u>	<u>Spent</u>
Water	\$632,000	\$6,437
Stormwater	\$5,000	\$6,150
Streets	\$30,000	\$16,104

Status: Potential Scope Reduction

Status: Baseline Schedule Revision

Status: Potential Budget Reduction

Adjustments: **Construction portion of this project is under review**

Adjustments: **Schedule updated with Utility Operations staff**

Adjustments: **Cost will be lower if the water portion is not constructed**

Status Update: 100% design of the waterline portion will be complete in December. Utility Operations staff will assist in determining priority at that time. There is a potential to deprioritize project until a future date. Current timeline reflects only the design phase. If the project moves to construction, the timeline will be updated in December or January.

Cost Estimate Classification: 4



Citywide Accessibility Improvements

Through the help of dedicated volunteers on the City of Bend Accessibility Advisory Committee (COBAAC) and the Central Oregon Coalition for Access (COCA), key corridors and neighborhoods across the city have been prioritized for accessibility improvements. This project will design, construct, or repair these curb ramps and sidewalks including those identified through the City's Barrier Removal Request process.



Project Engineer: Rory Rowan | rrowan@bendoregon.gov

Scope

Survey, design, and construction of accessibility improvements **in the Mountain View Neighborhood, NE Kearney Avenue, NE Wells Acres Road, and Broadway and Delaware locations. Construction of all locations except the Mountain View Neighborhood in 2017. Construction of Mountain View in 2018.**

Schedule

Start Date: 3/1/16
 Substantial Completion: **06/30/2018**
 Final Closeout: **06/30/19**

Cost

Total Estimated: \$1,156,000
 Spent to Date: \$200,921
 % Spent to Estimated: 17%
Design = \$250,000
Construction = \$906,000

- Mountain View \$466,000
- NE Kearney Ave \$235,000
- NE Wells Acres Rd \$140,000
- Broadway & Delaware \$65,000

Status: **On Scope**

Status: **Ahead of Schedule**

Status: **On Budget**

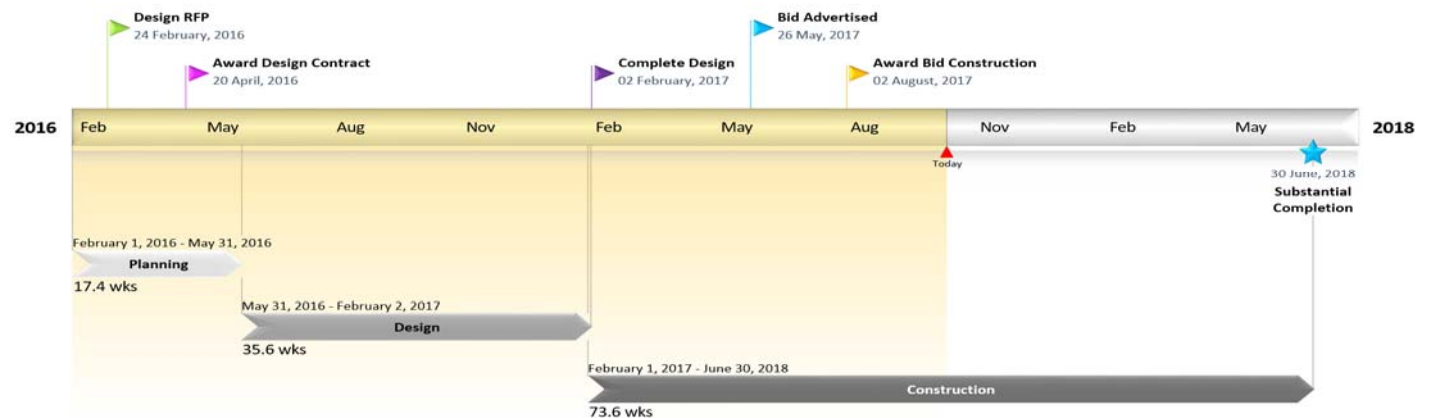
Adjustments: **Scope adjusted to better reflect that future corridors were established as separate sub-projects in the CIP**

Adjustments: **Trending approximately 17 days ahead on all locations currently in construction**

Adjustments: **No impact to budget due to Scope and Schedule updates**

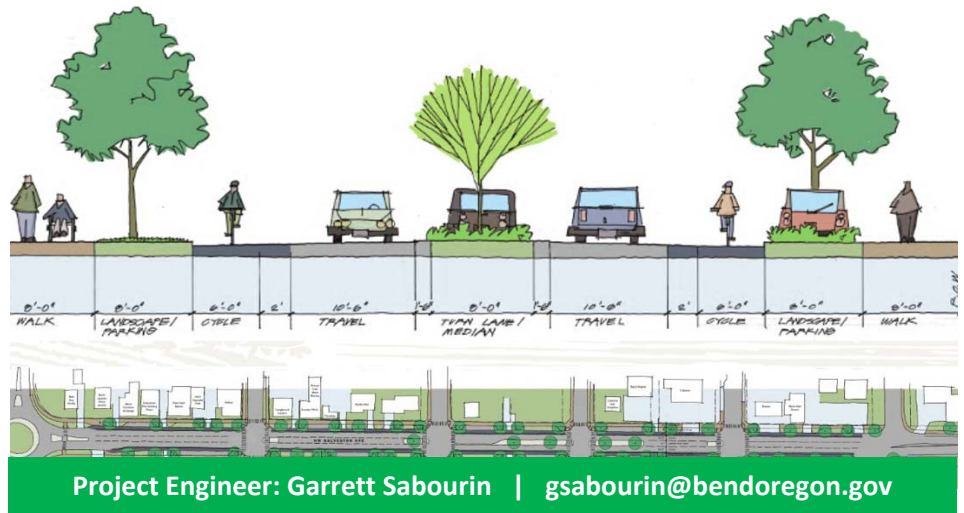
Status Update: Sidewalk, curb ramps and driveways being constructed. Construction should be complete by end of October. Cost estimate classification moved from Class 2 to 1.

Cost Estimate Classification: 1



Galveston Corridor Improvements

The Galveston Corridor planning dates back to 2007 when the Traffic Safety Advisory Committee identified the project as the City of Bends 4th highest safety priority project, for existing arterials and collectors. Following initial identification of the project there was significant public interest and involvement from the adjacent community, resulting in the development of a local task force and subsequent council acceptance of a 'hybrid' streetscape concept. Design initiated in 2016.



Scope

Study to improve safety, access, and connectivity for vehicles, bicycles, and pedestrians. Also to improve the streetscape along a newly emerging mixed use corridor. A collaborative process has formed between City staff and property/business owners with a taskforce to devise project concepts and designs. At 30% design project will be brought to council to decide the Stormwater and other elements to be carried forward.

Schedule

Start Date: 06/01/2011
 Substantial Completion: TBD
 Final Closeout: TBD

Cost

Total Estimated: \$950,000[†]
 Spent to Date: \$384,649*
 % Spent to Estimated: 8%
[†] Total cost estimate for 30% design
 * Includes planning prior to CIP

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Contract amendment #6 will be presented to Council on October 4. Amendment will include scope and fee to carry design from 30% to final. Timeline will be updated next month.

Cost Estimate Classification: 4



Citywide Safety Improvements

With the help of the community and a prior safety study, the city has identified multiple locations across the city where there have been a high number of crashes. Several treatments are proposed to make these locations safer for people walking, riding bicycles, and driving. This project will further develop the design of these treatments and construct them with additional community input.



Project Engineer: Rory Rowan | rrowan@bendoregon.gov

Scope

Survey, design, traffic analysis, public involvement, and construction of safety improvements at the following locations: 3rd St at Hawthorne, Franklin, Roosevelt, and Reed Market, Colorado Ave & Bend Pkwy (US Hwy 97) interchange, Neff Rd at Williamson Blvd, 27th St at Conners Ave, Brosterhous Road railroad underpass.

Schedule

Start Date: 10/1/2014
 Substantial Completion: 9/30/2018
 Final Closeout: 9/30/2019

Cost

Total Estimated: \$3,535,000
 Spent to Date: \$396,663
 % Spent to Estimated: 11%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

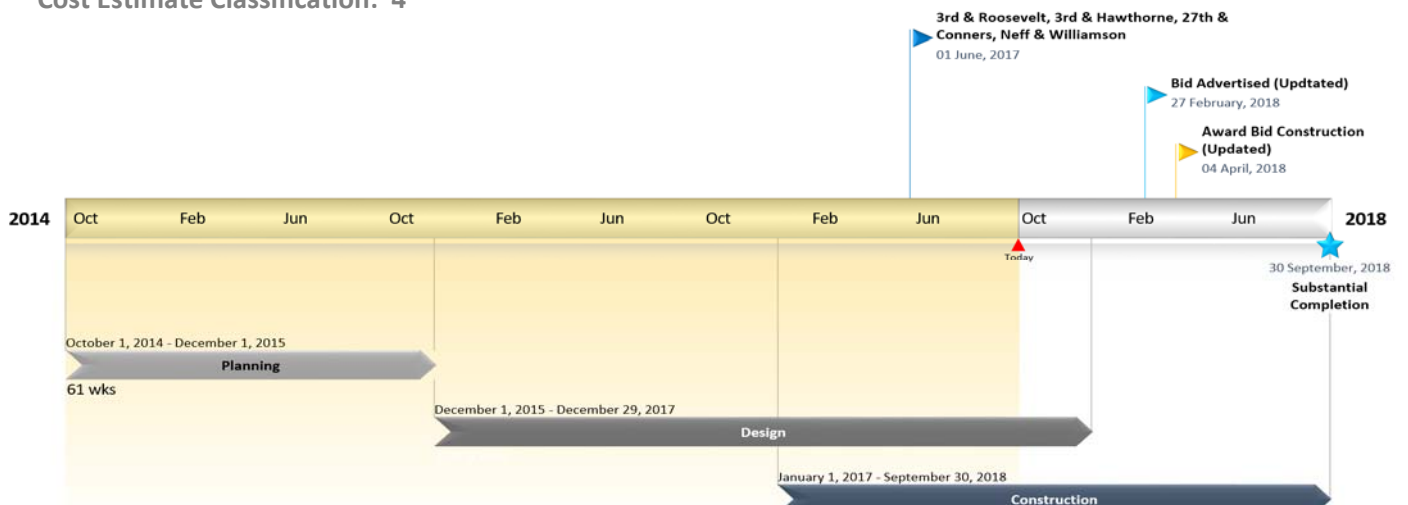
Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Ribbon cutting & celebration for 3rd Street Pedestrian Improvements project acknowledged the enhanced crossing of Third Street at Roosevelt Avenue. Enhancements include flashing beacons and a safety island. This is one of the City's Safer by Design projects.

Cost Estimate Classification: 4



14th Street Reconstruction

Improve safety of corridor from SW Colorado Avenue to NW Newport Avenue for all modes of transportation. Project is part of voter approved General Obligation Bond and will focus on an up updated roadway configuration to include surfacing, striping, bike lanes, sidewalks and streetscape. Design will attempt to tie-in with suggested changes being made to the Galveston Corridor Improvements.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope	Schedule	Cost									
Upgrade to City standard to include but not limited to: roadway, surface, curbs, sidewalks, and striping. Includes safety improvements for bicycles, pedestrians and vehicles.	Start Date: 06/30/2014 Substantial Completion: TBD Final Closeout: TBD	Total Estimated: \$6,195,000 Spent to Date: \$869,186 % Spent to Estimated: 14%									
		<table border="1"> <thead> <tr> <th>Sub-Projects:</th> <th>Est.</th> <th>Spent</th> </tr> </thead> <tbody> <tr> <td>GO Bond</td> <td>\$4,893,612</td> <td>\$539,253</td> </tr> <tr> <td>Trans Con.</td> <td>\$1,299,630</td> <td>\$329,933</td> </tr> </tbody> </table>	Sub-Projects:	Est.	Spent	GO Bond	\$4,893,612	\$539,253	Trans Con.	\$1,299,630	\$329,933
	Sub-Projects:	Est.	Spent								
GO Bond	\$4,893,612	\$539,253									
Trans Con.	\$1,299,630	\$329,933									
Status: On Scope	Status: On Schedule	Status: On Budget									
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: No change from prior month									

Status Update: Design is on schedule and anticipating advertising for Phase I construction in spring 2018.

Cost Estimate Classification: 3



Water Master Plan Update

The existing Water Master Plan was completed in 2011 and is due to be updated in order to more accurately reflect current system conditions. The update will address current operational parameter efficiencies, needed capital improvements, and the full integration of the Water Management and Conservation Plan. All of this information will be used to update the SDC methodology and rate forecasting.

Water System Master Plan Update Optimization Study

City of Bend, Oregon, Project No. WA09FA

Final Report

Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope

Alignment of master planning, rate analysis and SDC development allows for unity between future water system operational needs and the required water system funding.

Start Date: 3/1/2017
 Substantial Completion: 06/30/2019
 Final Closeout: 06/30/2020

Total Estimated: \$1,110,578
 Spent to Date: \$578
 % Spent to Estimated: 0.05%

Status: On Scope

Adjustments: Project initiated

Status: On Schedule

Adjustments: Project initiated

Status: On Budget

Adjustments: Project initiated

Status Update: Project initiated. This project scope changed to include the Water SDC Methodology Study. Project budget increased by savings from the South 3rd St. Water Portion Phase II project (see page 5 of this report).

Cost Estimate Classification: 5



Egypt Waterline Project

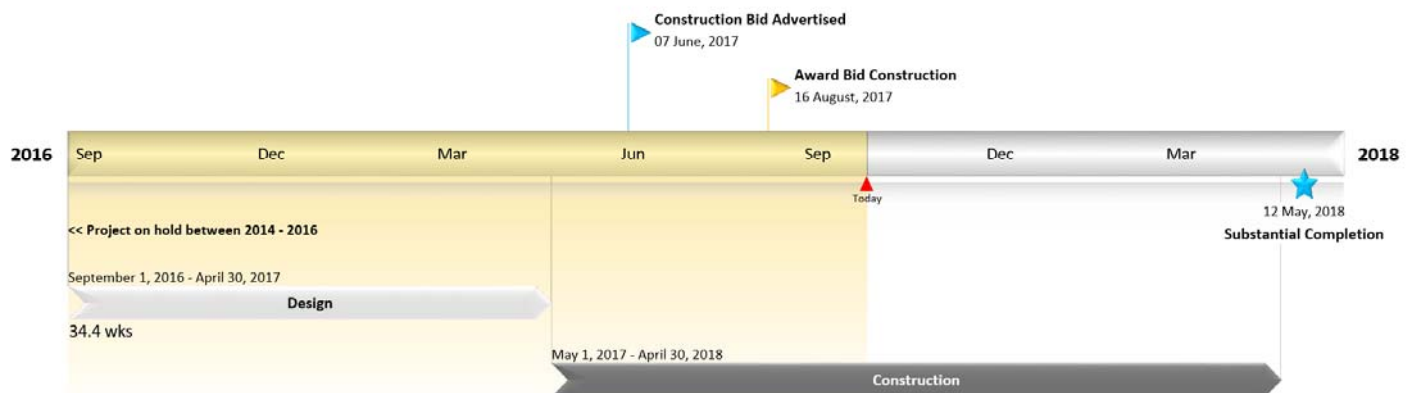
The Egypt Waterline seeks to create a redundant water source for Juniper Ridge. This project became a Capital Improvement Project after it was identified in the 2011 Water master Plan Optimization study by Murray and Smith Associates. A redundant connection for Juniper Ridge is necessary to provide an adequate water supply during system disruptions due to maintenance activities, public emergencies, or catastrophic events.



Scope	Schedule	Cost
Design a waterline connection between Ranch Village Dr. and 18th Street. This work will include a pressure zone change to Juniper Ridge to match that of the neighborhood to the southwest.	Start Date: 7/1/2012 Substantial Completion: 04/30/18 Final Closeout: 04/30/18	Total Estimated: \$771,000 Spent to Date: \$30,828 % Spent to Estimated: 4% Additional Funding Sources: Parks & Rec: \$51,995 COB Street Ops: \$83,033 School District: \$6,000
Status: On Scope	Status: On Schedule	Status: On Budget
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: No change from prior month

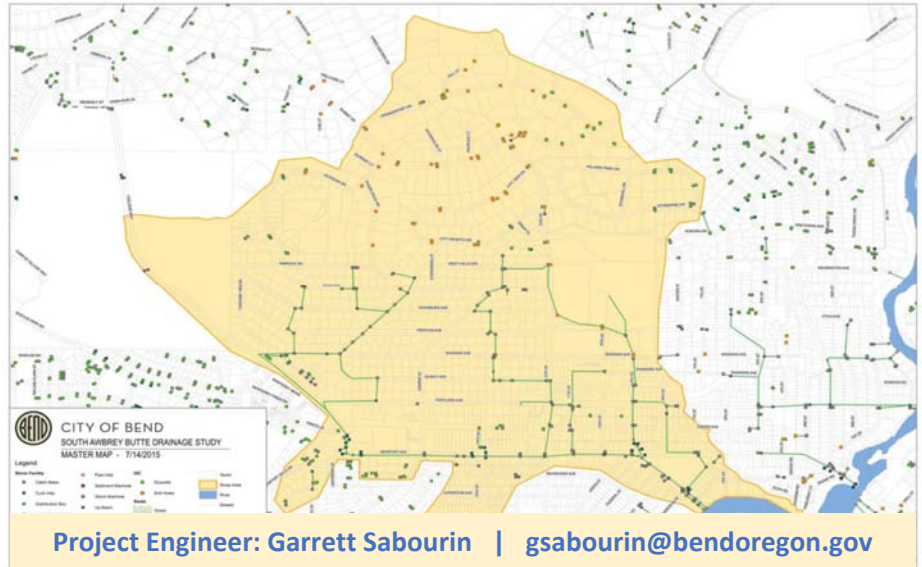
Status Update: Trending on schedule to begin construction in December 2017 during the Bend La Pine School District winter break, weather permitting.

Cost Estimate Classification: 1



South Awbrey Butte Drainage Study

An evaluation will be completed in order to identify areas with run-off problems and complete a modeling effort in order to estimate run-off volumes. This will be the basis for future stormwater system improvements on Awbrey Butte and downstream areas.



Scope

Complete a drainage system analysis for the southern hillside of Awbrey Butte. The intent is to identify and provide recommendations for drainage problem areas, as well as provide design peak flow rates at critical design locations along the Newport Avenue drainage.

Schedule

Start Date: 7/1/15
Substantial Completion: 05/26/2017
Final Closeout: 10/1/2017

Cost

Total Estimated: \$285,000
Spent to Date: \$226,818
% Spent to Estimated: 80%

Status: On Scope

Adjustments: No change from prior month

Status: Behind Schedule

Adjustments: Timeline extended by consultant resulted in savings on project

Status: Under Budget

Adjustments: Project will closeout approximately 16% under budget

Status Update: Consultant addressing City comments on final improvement plan and will submit final draft of the Final Improvement Plan and project will begin closeout. This is the last month this project will be included in the monthly report.

Cost Estimate Classification: N/A



Southeast Interceptor Phase I

Large diameter gravity sewer pipeline extending from the southwest quadrant to the northeast quadrant of the City, approximately 4 ½ miles in length. This project reroutes or intercepts a significant volume of sewage away from the downtown and central sewer systems to the east side of the City in accordance with the Collection System Master Plan completed in 2014. Segment 2S&3 indicates the 2.5 mile stretch of 27th street between Neff and Reed Market Rd.



Project Engineer: Eric Forster | eforster@bendoregon.gov

Scope

Design and construction of gravity sewer, from South 3rd street to the Neff Road interim connection. Phase 1 Extension Project, approved in January 2016, adds approximately 3,000 feet of sewer main work.

Schedule

Start Date: 7/1/2006
 Sewer Completion: 12/31/2017
 Street Completion: 7/31/2018
 Final Closeout: 7/30/2019

- Previous segments, as well as 4&5R, are complete.

Cost

Total Estimated: \$72,000,000
 Spent to Date: \$58,852,879
 % Spent to Estimated: 96%

Sub-Projects:	Est.	Spent
Previous	\$17,500,000	\$16,765,255
4&5R	\$12,500,000	\$12,277,365
2S&3	\$31,500,000	\$28,742,332
P1EX	\$10,500,000	\$1,067,927

Status: On Scope

Status: Potential Schedule Revision

Status: Increased Budget

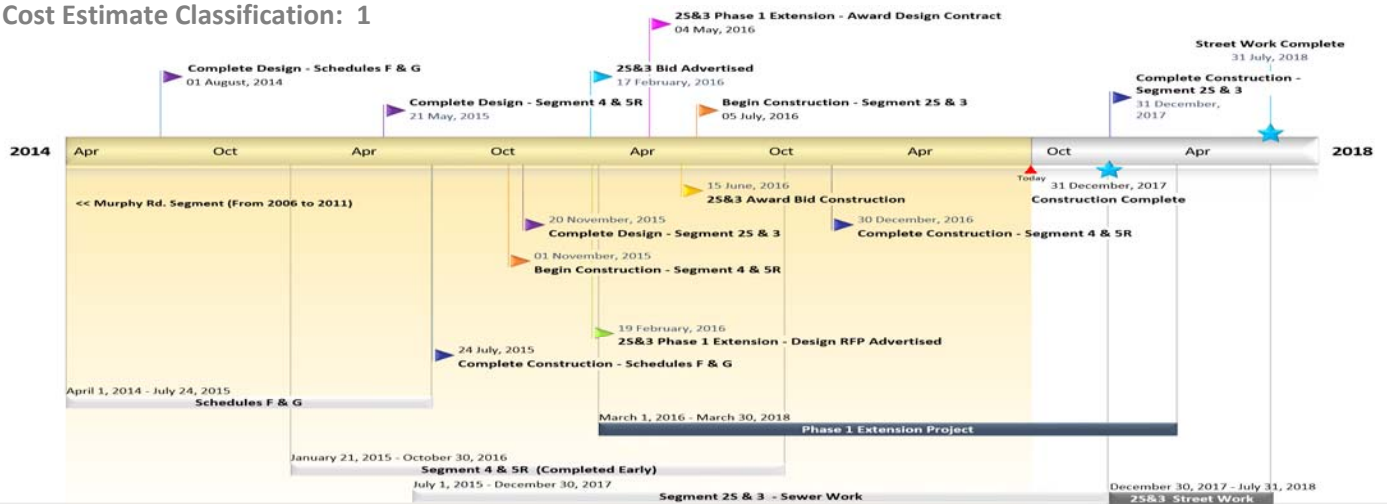
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: Contractor estimates substantial completion on the 27th Street project (2S&3) in October. Contract completion date is July 2018; consequently, the project is finishing significantly ahead of schedule. Find Phase I Extension information at <https://www.bendoregon.gov/city-projects/city-infrastructure-projects/se-interceptor-project/neff-road-sewer-line-segment>

Cost Estimate Classification: 1



North Area Sewer Capacity Improvements

This project will increase the capacity of the gravity main downstream of the multiple force main discharge point at manhole 3157 and reroute the force main discharge from several lift stations and the NE 3rd Street pressure sewer. It will also reconfigure the structure at Mervin Sampels Bypass and include modifications to both the Sawyer and Riverhouse lift stations.



Project Engineer: George Franklet | gfranklet@bendoregon.gov

Scope

Analysis of alternatives for pipeline route and construction methods for crossing of irrigation canals and railroad tracks; design and construction of gravity and force mains, pump station modifications, and flow bypass optimization.

Schedule

Start Date: 10/1/2013
 Substantial Completion: 12/31/17
 Final Closeout: 12/31/18

Cost

Total Estimated: \$8,860,000*
 Spent to Date: \$2,758,596
 % Spent to Estimated: 31%
 * Includes street preservation work

Sub-Projects:	Est.	Spent
Force Main	\$4,450,000	\$1,426,164
Gravity	\$3,855,000	\$1,319,556
Lift Station	\$555,000	\$12,875

Status: **Scope Increase**

Status: **Schedule Delay**

Status: **Potential Cost Increase**

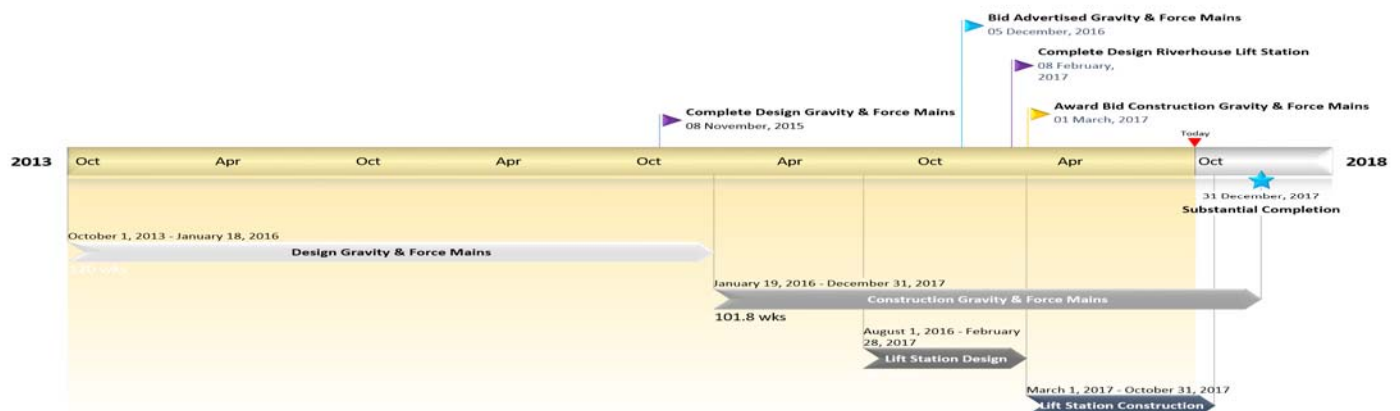
Adjustments: **Scope added due to unknown ODOT drainage facilities**

Adjustments: **Hwy 97 bore delayed due to unknown ODOT drainage facilities**

Adjustments: **Additional costs anticipated due to unforeseen subsurface conditions**

Status Update: Paving and striping of Butler Market Road were completed in September. Construction of the Gravity Main continues with the construction of the main on Nels Anderson Road. Advancement of the bore under Highway 97 stopped due to encountering unknown ODOT drainage facilities and unforeseen subsurface conditions and is scheduled to continue in mid-October. Paving of Nels Anderson Road is scheduled to be completed by mid-November. The overall project remains on schedule for substantial completion by the end of 2017.

Cost Estimate Classification: 1



Southeast Bend Septic to Sewer Solutions

When constructed, existing residences, currently on septic systems, will eventually and systematically connect to the recently constructed South East Interceptor (SEI). This project will require phases to meet constructability limitations and to better meet community involvement requirements.

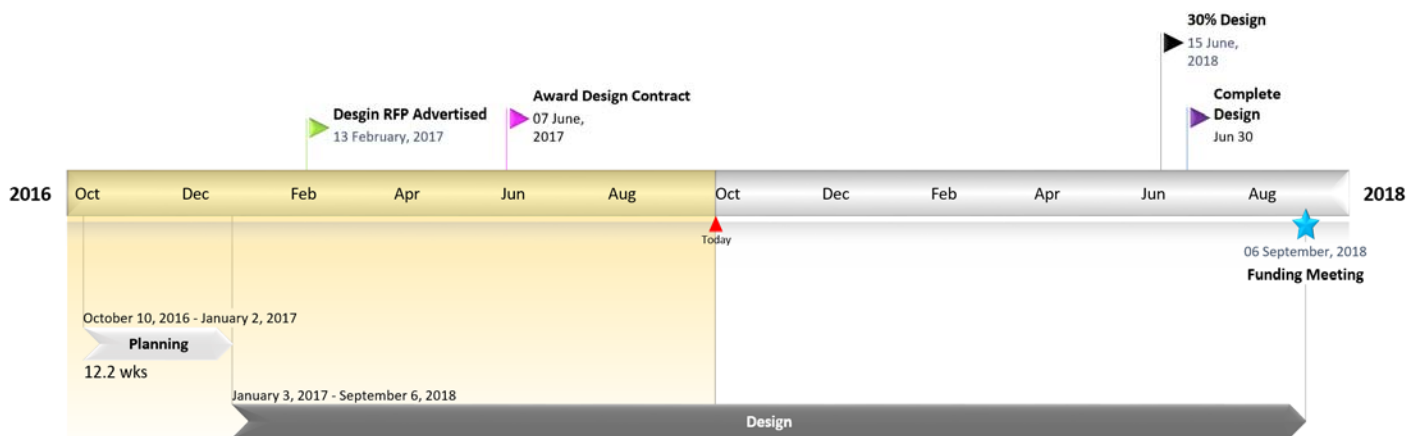


Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope	Schedule	Cost
Design 70,000 feet of gravity sewer through a portion of Southeast Bend area near King's Forest neighborhood.	Start Date: 10/10/2016 Substantial Completion: 12/31/2019 Final Closeout: 12/31/2019*	Total Estimated: \$2,800,000* Spent to Date: \$201,332 % Spent to Estimated: 7%
Status: On Scope	Status: On Schedule	Status: On Budget
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: No change from prior month

Status Update: Topographic survey is 80% complete, and scheduled to be completed by December 2018. Citizen's Advisory meetings are on schedule. Approximately 90% of the 550 homeowners have been contacted.

Cost Estimate Classification: 5



Plant Interceptor Rehabilitation

The existing plant interceptor conveys all of the City’s sewage to the WRF. The concrete pipeline is deteriorating due to age as well as the sulfides breaking down the concrete wall. This project will rehabilitate the plant interceptor by designing and constructing a Cured-In-Place Pipe (CIPP) liner on the pipe segments in the worst structural condition to lengthen the operational life of the pipeline. All project aspects were previously identified in the Plant Interceptor Condition Assessment and incorporated into the CSMP projects list.



Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope

Rehabilitate all pipe segments and manholes with a Cured-In-Place Pipe (CIPP) liner, and replace the existing siphon junction box.

Schedule

Start Date: 3/1/2015
 Substantial Completion: 11/30/18
 Final Closeout: 11/30/19

Cost

Total Estimated: \$10,700,000
 Spent to Date: \$112,240
 % Spent to Estimated: 1%

Status: On Scope

Status: On Schedule

Status: On Budget

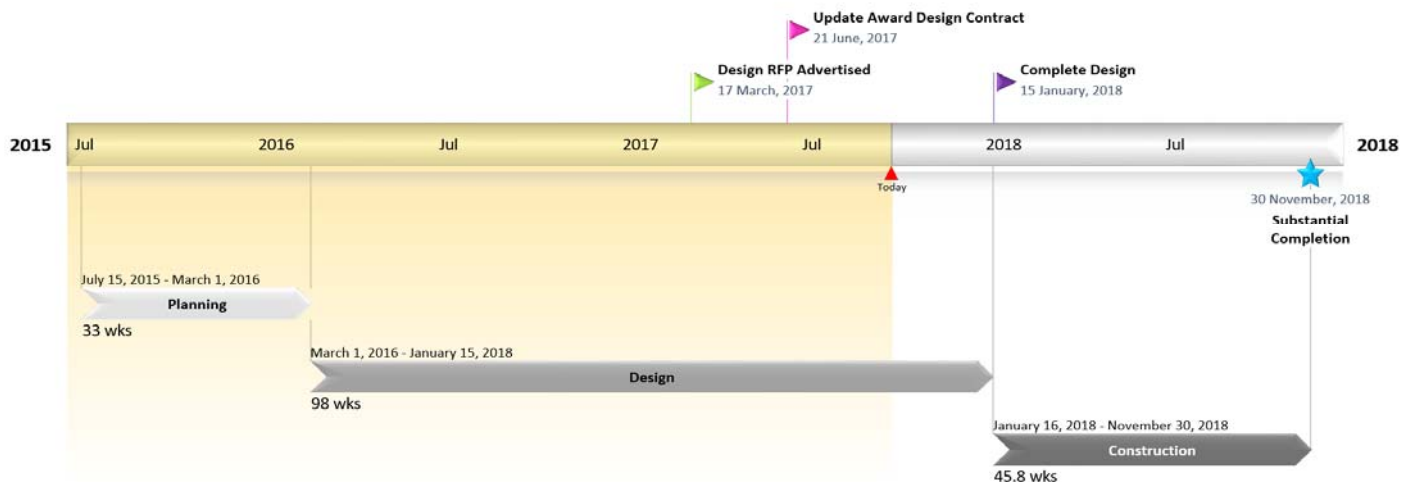
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

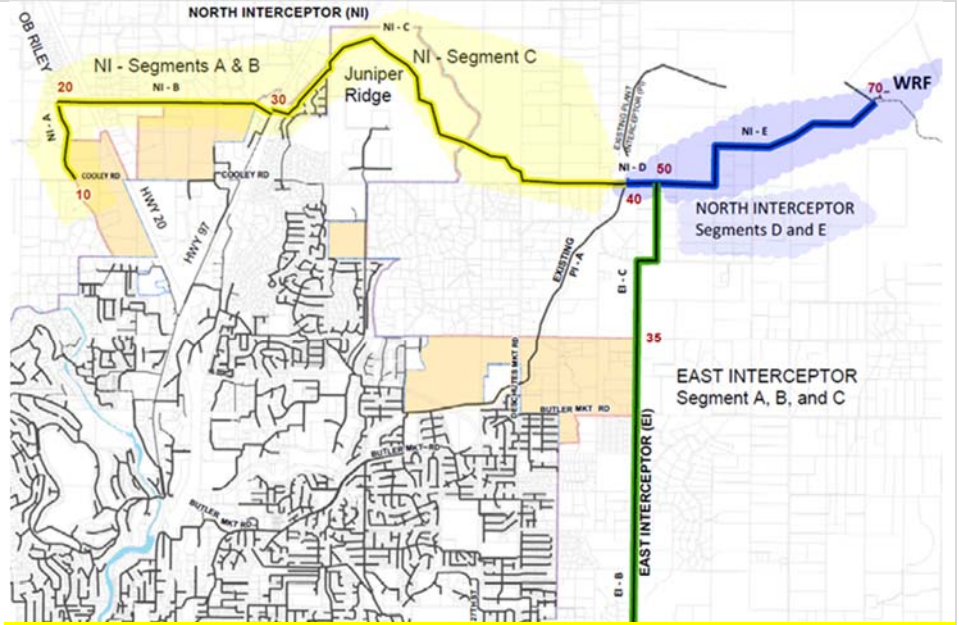
Status Update: Working with Bureau of Reclamation, Bureau of Land Management, and United States Forest Service on the special use application. Historical and cultural resource survey was performed along the alignment. Public involvement meeting scheduled in early October.

Cost Estimate Classification: 5



North Interceptor Project

Sewer Interceptor running east to west on the Northern Edge of Bend's UGB, beginning at Cooley Road and OB Riley Road and running east past the Juniper Ridge development, connecting with existing Plant Interceptor, connecting with the East Interceptor, and continuing further east to deliver untreated waste water to the WRF. Segments NI-D and NI-E are designated as Priority 1 (10,300 feet). Segments NI-A, NI-B, and NI-C are designated a Priority 2 (26,300 feet).



Project Engineer: Eric Forster | eforster@bendoregon.gov

Scope

Design, bid, contract, and build approximately 36,000 feet of gravity sewer, various diameters running along the Northern edge of Bend's UGB. Connects to the WRF.

Schedule

Start Date: 3/1/17
 Substantial Completion: 12/31/2022
 Final Closeout: 12/31/2023

Cost

Total Estimated: \$23,000,000
 Spent to Date: \$13,770
 % Spent to Estimated: 0.06%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

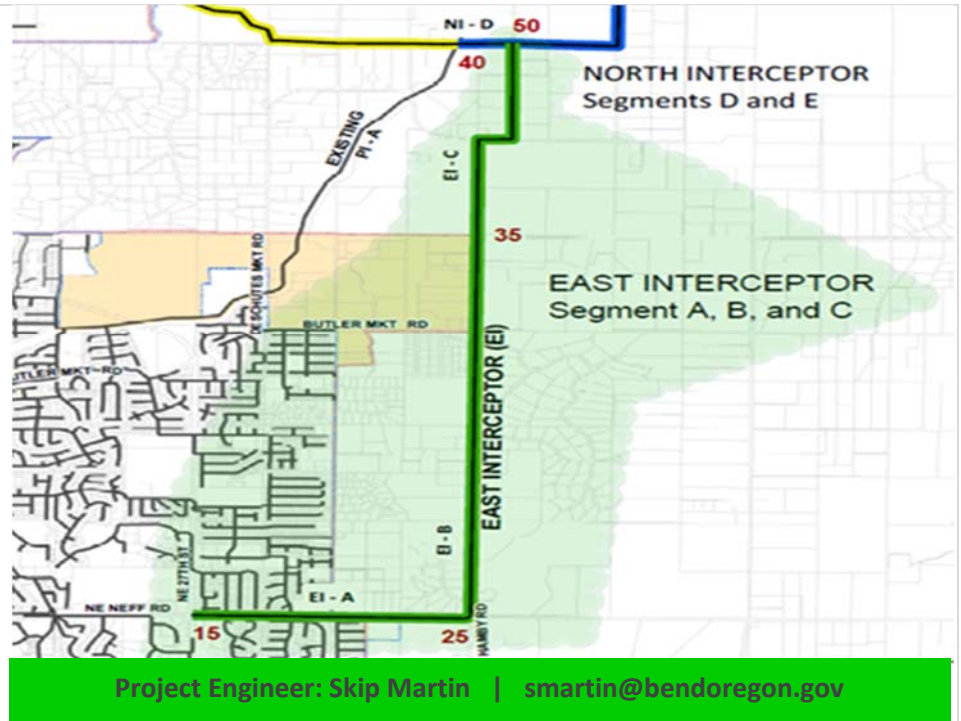
Status Update: Received ground survey and digital terrain model (DTM) for both North and East Interceptor alignments. Added it to Geographical Information System (GIS) data. Preparing State of Oregon Department of Environmental Quality (DEQ) Clean Water State Revolving Fund (CWSRF) loan application.

Cost Estimate Classification: 5



East Interceptor Project

Future Sewer Interceptor connecting with the SEI at Neff Rd and 27th St, proceeding east on Neff Rd to Hamby Rd (5,300 feet), then turning north on Hamby and connecting to the North Interceptor (16,500 feet). Total length of East Interceptor is approximately 21,800 feet.



Scope

Design, bid, contract, and build approximately 22,000 feet of gravity sewer, various diameters running along the Eastern edge of Bend's UGB. Connects to the North Interceptor

Schedule

Start Date: 3/1/17
 Substantial Completion: 12/31/2025
 Final Closeout: 12/31/2026

Cost

Total Estimated: \$21,000,000
 Spent to Date: \$13,770
 % Spent to Estimated: 0.07%

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Current work on this project is limited to determining diameter and depth for future alignment to the North Interceptor Project and UGB Expansion modeling.

Cost Estimate Classification: 5



Capacity Improvements Project

Provides additional treatment capacity at the Water Reclamation Facility (WRF) in order to ensure the City continues to meet the needs of the community and Department of Environmental Quality (DEQ) permit requirements. Treatment capacity increases from 6.5 MGD to 8.5 MGD when complete with greater flexibility in the future to increase capacity at a much lower cost.



Project Engineer: Josh Robertson | jrobertson@bendoregon.gov

Scope

This project would add plant capacity by retrofitting existing aeration basins to Integrated Fixed-Film Activated Sludge (IFAS) operation, making hydraulic improvements to plant piping and starting up Ultra Violet disinfection systems to replace the current chlorine contact system.

Schedule

Start Date: 4/1/2017
 Substantial Completion: 7/31/19
 Final Closeout: 7/31/2020

Cost

Total Estimated: \$8,000,000
 Spent to Date: \$214
 % Spent to Estimated: 0.00%

Status: On Scope

Status: On Schedule

Status: On Budget

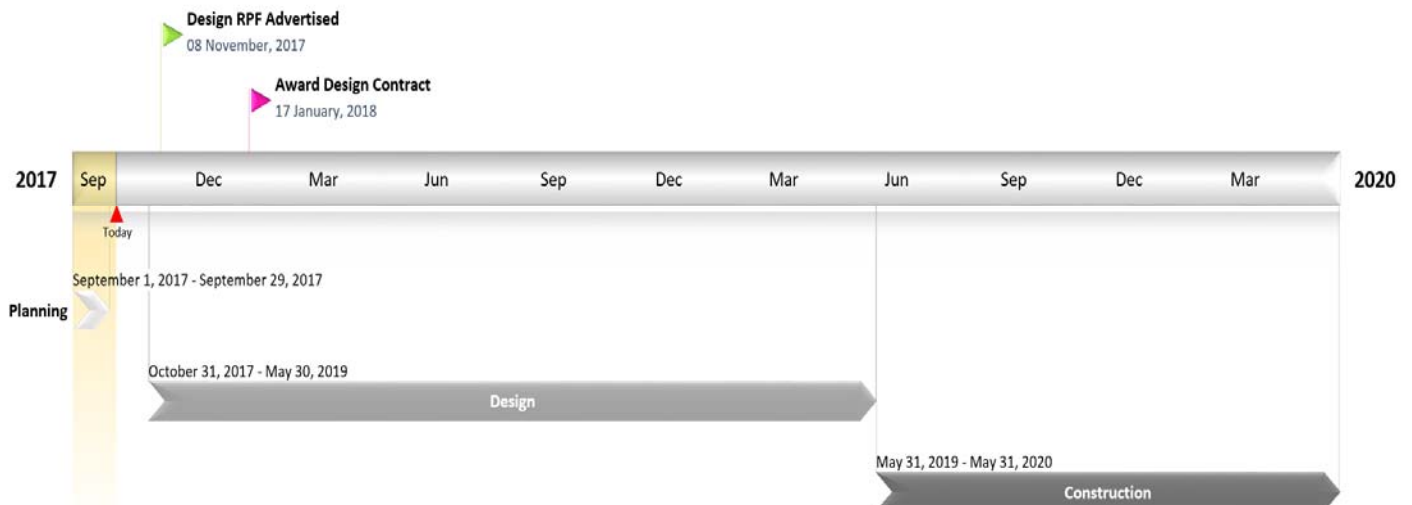
Adjustments: Project Initiated

Adjustments: Project Initiated

Adjustments: Project Initiated

Status Update: Project initiated.

Cost Estimate Classification: 5



Pump Station Decommissions Projects

The cost analysis in the Collection System Master Plan determined the following lift station decommissions: Nottingham Pump Station Connections to SEI, Ridgewater #1, Bridges at Shadow Glen, Tri-Peaks, Crown Villa #1 & #2, Muphy, Quail Ridge #1 & #2, South Village, and Sun Meadow.



Project Engineer: Oliver Murray | omurray@bendoregon.gov

Scope

The project consists of decommissioning multiple sewer pump stations throughout the City where gravity sewer diversions have been determined to be viable.

Schedule

Start Date: 3/1/2017
 Substantial Completion: 06/30/2019
 Final Closeout: 06/30/2020

Cost

Total Estimated: \$1,515,000
 Spent to Date: \$0
 % Spent to Estimated: 0.00%

Status: On Scope

Status: On Schedule

Status: On Budget

Adjustments: Project initiated

Adjustments: Project initiated

Adjustments: Project initiated

Status Update: Project initiated. Utility Operations vision performed the gravity diversion on #17A+B Ridgewater #1 and #18A+B Bridges at Shadow Glen. Flows have been diverted to SEI and these stations are now offline and in the process of being removed.

Cost Estimate Classification: 5



South Mirror Pond Parking Lot

Current issues with the South Mirror Pond parking lot include a lack of parking for oversized vehicles and bicycle rentals and loitering. This project will update the parking lot to improve intended function and create greater parking diversity.



Project Engineer: Brad Tower | btower@bendoregon.gov

Scope

This is a synergy project with the Economic Development Department and Bend Police Department.

Schedule

Start Date: 9/1/2017
 Substantial Completion: 08/31/2018
 Final Closeout: 08/31/2019

Cost

Total Estimated: \$470,000
 Spent to Date: \$0
 % Spent to Estimated: 0.00%

Status: On Scope

Status: On Schedule

Status: On Budget

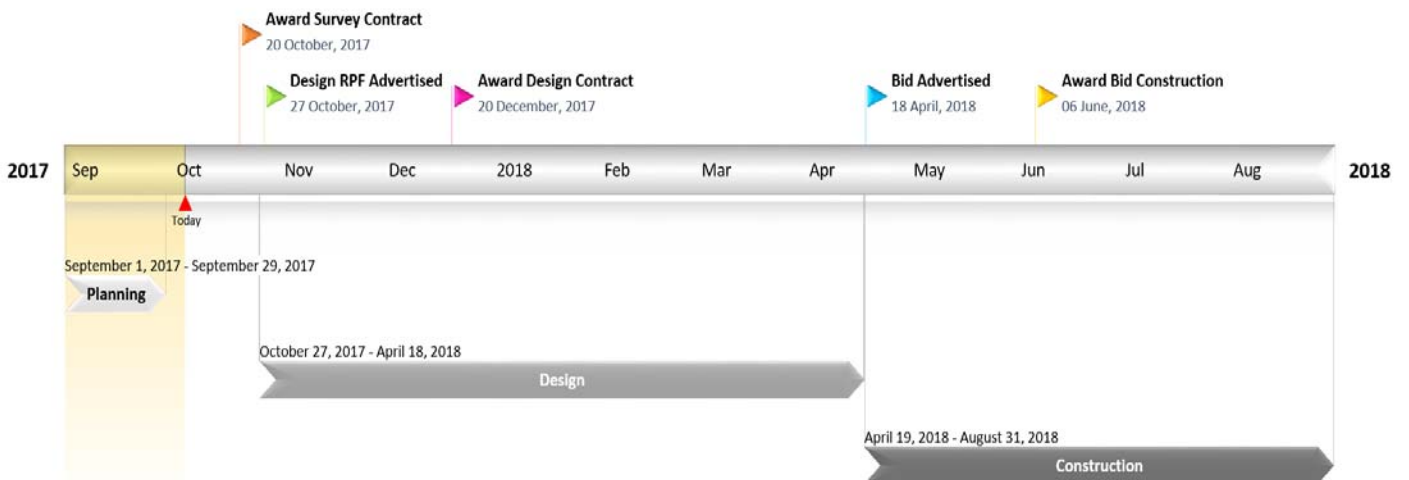
Adjustments: Project initiated

Adjustments: Project initiated

Adjustments: Project initiated

Status Update: Project initiated

Cost Estimate Classification: 5



Collection System Master Plan Post Acknowledgement Plan Amendment

This project is updated the 2014 CSMP to recognize the project elements that were identified as part of the UGB process. This work will identify the elements of the collection system that will be needed to serve the expansion areas and the costs associated with those improvements. This work is being done working closely with the Growth Management Department.



Bend Economic Opportunities Analysis

Bend's Growth to 2028

Project Engineer: Skip Martin | smartin@bendoregon.gov

Scope

This is a synergy project with the Growth Management Department and is not included in the Capital Improvement Program.

Schedule

Start Date: 3/1/2017
 Substantial Completion: 12/30/2017
 Final Closeout: 4/1/2018

Cost

Total Estimated: \$ _____
 Spent to Date: \$0
 % Spent to Estimated: 0.00%

Status: On Scope

Adjustments: Project initiated

Status: On Schedule

Adjustments: Project initiated

Status: On Budget

Adjustments: Project initiated

Status Update: Project initiated

Cost Estimate Classification: 5

