



# ENGINEERING

## Monthly Report

Fiscal Year 2016-2017

October 2016

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## FROM THE DIRECTOR

Last month I mentioned the City was in the midst of a financial software implementation three years in the making. This type of project may not be as outwardly visible as a Capital Improvement Project, but the amount of effort needed to pull it off is nonetheless equally as impressive. Every aspect of the financial accounting is new – from General Ledger structure to invoicing and reporting.

In response to the new software, the 2017 -2021 Project List on pages 6-7 has been updated with new project numbers and sub-projects. As noted in the Executive Summary of this report, both the Southeast Interceptor and the North Area Sewer Capacity Improvements projects now have sub-projects. This accounts for the increase in the number of active projects. The project sheets show the comprehensive rollup for a full financial view of the project.

In addition to the new structure for projects we completely re-tooled the project accounting to allow better tracking for project expenses. We went from five reporting categories to twenty-six and we have the ability to add more if needed.

I want to take this time to thank my staff for their hard work and commitment to making this implementation a success.

**Tom Hickmann PE**  
**EIPD Director**  
**541 317-3029**

**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.

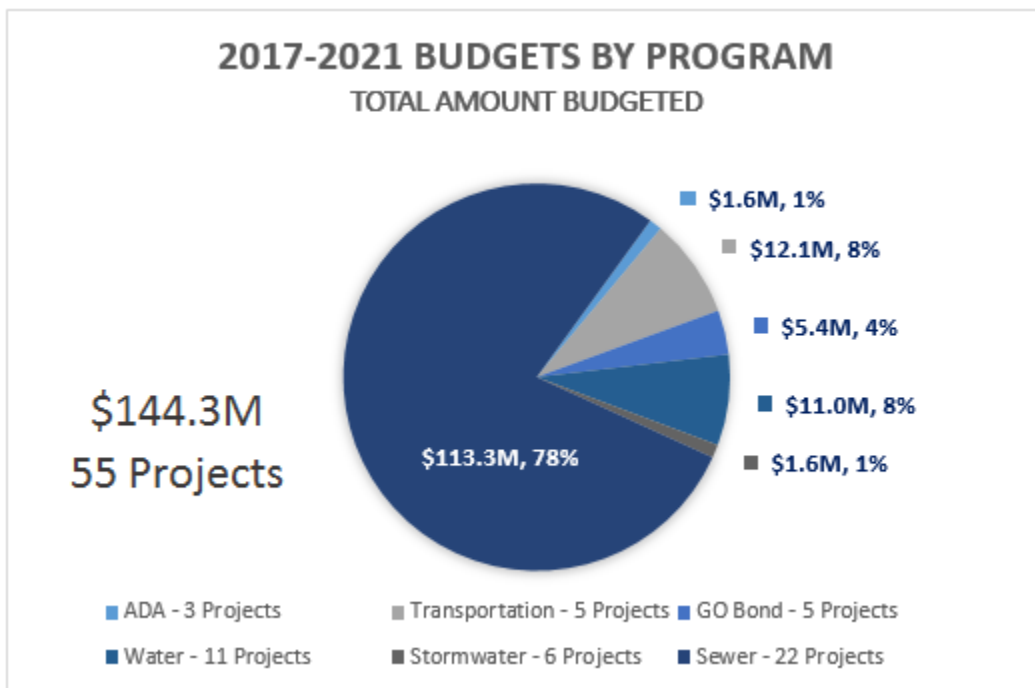
# Executive Summary

## CIP by the Numbers

This section identifies changes to the CIP for the reporting period: September 1, 2016 – September 30, 2016

- 1 Substantial Completion** SEI Segment 4&5R was completed ahead of schedule and under budget on construction.
- 4 Sub-Projects Identified** SEI Segment 4&5R, SEI Segment 2S&3, North Area Gravity Main, and North Area Force Main were added as sub-projects.

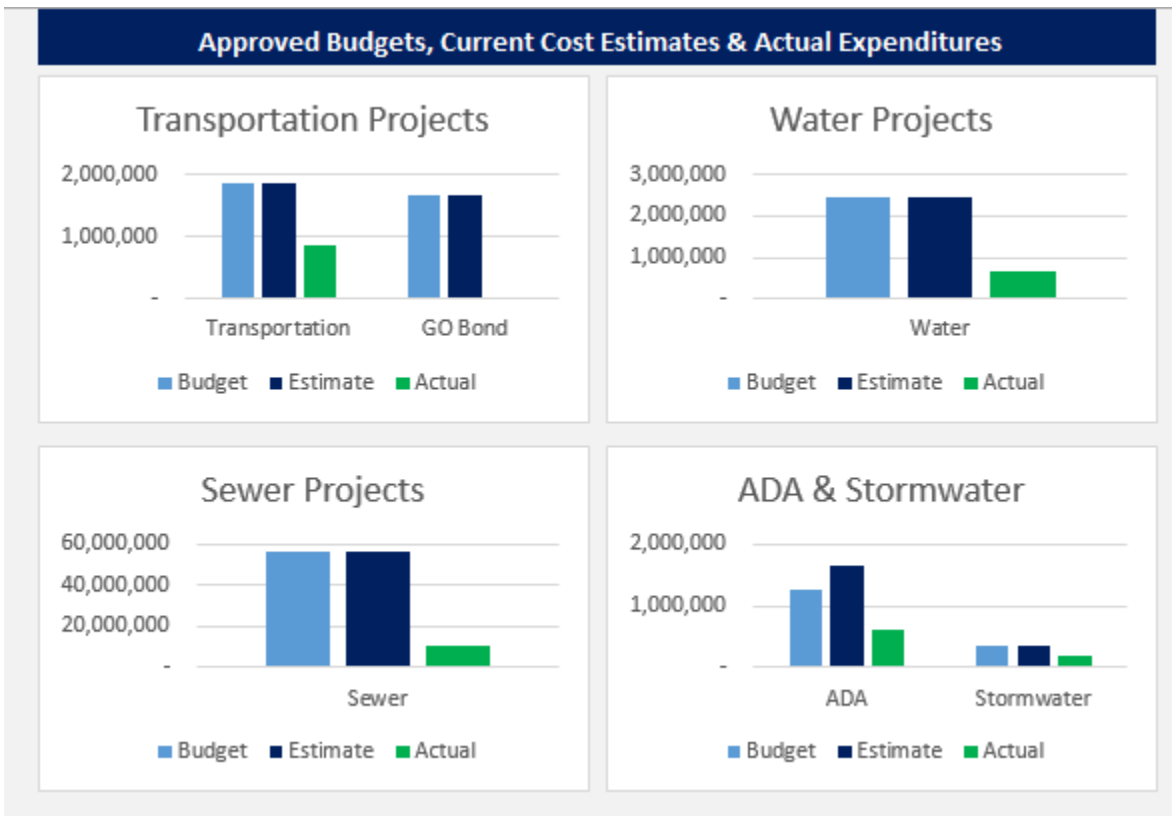
The graph below shows the number of projects, amounts budgeted and the percentage of budgets by program for the 2017-2021 CIP.



The table below shows the status of projects in the current CIP Plan.

Status	CIP	R&R
<b>Open (Active):</b> In planning, design or construction phase	20	1
<b>Substantially Complete (Active):</b> Asset transferred to Operations and City has beneficial use	5	0
<b>Closed (Not Active):</b> Completed 1-2 yr. warranty; Cancelled; Transferred project to Ops	0	0
<b>Pending (Not Active):</b> Scheduled to start within 5-Year CIP Plan	30	15
<b>Total</b>	<b>55</b>	<b>16</b>

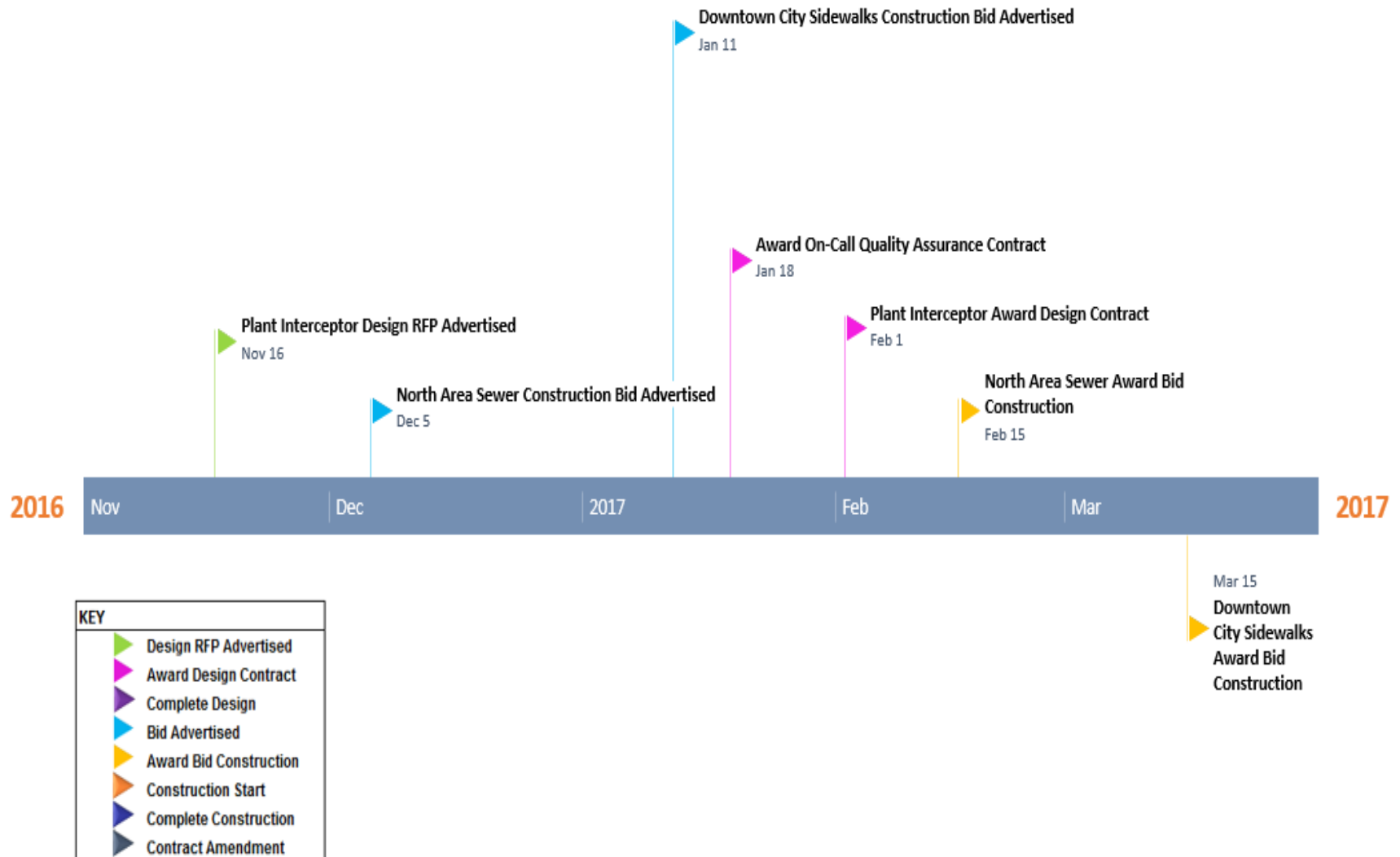
The graph below show the 2017 Fiscal Year approved budgets, current estimates and capital expenditures by program.



The table below shows current fiscal year expenditures and remaining budgets by program. Program budgets are approximately 21% spent for Fiscal Year 2016-17.

Program	Projects	2017 FY Budget	2017 FY Spent	Remaining
Water Reclamation	24	\$ 56,484,700	\$ 10,812,178	\$ 45,672,522
Water	11	\$ 2,443,100	\$ 642,586	\$ 1,800,514
Transportation	5	\$ 1,869,022	\$ 868,600	\$ 1,000,422
GO Bond	5	\$ 1,682,300	\$ 18,637	\$ 1,663,663
ADA Construction	4	\$ 1,267,000	\$ 600,723	\$ 666,277
Stormwater	6	\$ 350,000	\$ 189,556	\$ 160,444
<b>Totals</b>	<b>55</b>	<b>\$ 64,096,122</b>	<b>\$ 13,132,279</b>	<b>\$ 50,963,843</b>

## EIPD Procurement Timeline



## City of Bend 2017 - 2021 Capital Improvement Program Project List

Project Name & Number	Project Start	Estimated Substantial Completion	Project Stage	Cost Estimate Class	Total Project Cost Estimate	Total Project Spent to Date	2016-17	2017-18	2018-19	2019-20	2020-21	2017-2020 Budgeted	Budget Revisions	Percent Project Estimate Spent
<b>ADA Construction</b>														
1A3AA South 3rd Street Pedestrian Improvements	2011	03/31/17	Design	1	666,500	667,675	100,000	-	-	-	-	100,000		100%
1ACAI Citywide Accessibility Improvements	2016	9/28/18	Design	4	750,000	96,116	400,000	300,000	-	-	-	700,000		13%
1ADCS Downtown City Offices Sidewalk	2016	06/30/17	Design	4	250,000	726						-	1	0%
1AADA Future ADA Projects	2017	07/10/05	Pending	5	642,000	-	767,000	-	-	-	-	767,000	1	0%
<b>Total ADA Construction Projects</b>					<b>2,308,500</b>	<b>764,518</b>	<b>1,267,000</b>	<b>300,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,567,000</b>		
<b>BURA - Murphy Crossing Construction</b>														
1TMPR Murphy & Parrell Roundabout	2015	07/29/16	Sub.Complete	1	2,000,000	1,542,395	1,014,000	-	-	-	-	1,014,000		77%
<b>Total BURA Projects</b>					<b>2,000,000</b>	<b>1,542,395</b>	<b>1,014,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,014,000</b>		
<b>Transportation Construction</b>														
1TGCI Galveston Corridor Improvements	2011	10/15/16	Design	5	2,700,000	323,053	225,000	-	-	-	-	225,000		12%
1TSDP Sidewalk Design and Projects	2017	2018	Pending	5	3,550,000	33,271	140,000	380,000	1,830,000	1,150,000	-	3,500,000		1%
1TNPS Neff and Purcell Sidewalks	2016	2020	Pending	5	4,000,000	-	50,000	350,000	300,000	3,300,000	-	4,000,000		0%
1TCSI Citywide Safety Improvements	2016	09/30/18	Design	4	3,219,000	223,687	1,099,000	1,470,000	775,000	-	-	3,344,000	1	7%
<b>Total Transportation</b>					<b>13,469,000</b>	<b>580,011</b>	<b>1,514,000</b>	<b>2,200,000</b>	<b>2,905,000</b>	<b>4,450,000</b>	<b>-</b>	<b>11,069,000</b>		<b>4%</b>
<b>GO Bond</b>														
1TR27 Reed Mkt: Newberry to 27th	2012	10/15/15	Sub.Complete	1	4,841,330	4,851,336	30,000	21,000	-	-	-	51,000		100%
1TR3N Reed Mkt: 3rd to Newberry	2012	11/13/15	Sub.Complete	1	14,145,450	13,163,050	45,000	10,000	16,000	-	-	71,000		93%
1T14R 14th St. Reconstruction	2016	10/15/16	Design	5	4,156,527	113,849	513,000	3,643,527	-	-	-	4,156,527		3%
1T27R 27th Street Reconstruction	2017	2017	Pending	5	1,049,300	5,479	1,049,300	-	-	-	-	1,049,300		1%
1TPWP Powers & Brookwood Roundabout Phase II	2016	10/15/16	Design	3	50,000	-	45,000	-	-	-	-	45,000		0%
<b>Total GO Bond</b>					<b>24,242,607</b>	<b>18,133,714</b>	<b>1,682,300</b>	<b>3,674,527</b>	<b>16,000</b>	<b>-</b>	<b>-</b>	<b>5,372,827</b>		
<b>Water</b>														
1XSWP Bridge Creek Intake and Pipeline	2008	06/30/16	Sub.Complete	1	73,954,698	70,658,205	783,100	-	-	-	-	783,100		96%
1WEWL Egypt Waterline	2012	2019	Planning	2	500,000	25,063	-	-	478,400	-	-	478,400		5%
1WSDC Water SDC Methodology Study	2017	07/09/05	Pending	-	60,000	578	60,000	-	-	-	-	60,000		1%
1WMP1 Water Master Plan Update	2017	07/09/05	Pending	-	500,000	-	500,000	-	-	-	-	500,000		0%
1WS3W Phase 2 South 3rd St. - Water portion	2016	03/31/17	Design	3	1,100,000	-	1,100,000	-	-	-	-	1,100,000		0%
1WAWP Awbrey Well Supply Expansion	2020	2020	Pending	5	2,021,760	-	-	-	-	2,021,760	-	2,021,760		0%
1WLPE Lafayette Pipe Enlargement	2020	2020	Pending	5	250,640	-	-	-	-	250,640	-	250,640		0%
1WCPS College Parallel Pipe Study	2020	2020	Pending	-	1,215,760	-	-	-	-	1,215,760	-	1,215,760		0%
1WVSS Valves Operational System Study	2021	2022	Pending	-	156,000	-	-	-	-	78,000	78,000	156,000		0%
1WSSC Opt Study - New Level 5 Well - Shirley Ct	2021	2021	Pending	-	1,596,400	-	-	-	-	-	2,830,464	2,830,464		0%
1WSPP Opt Study - Parallel Piping Rock Bluff to Brookwood	2021	2021	Pending	-	2,830,464	-	-	-	-	-	1,596,400	1,596,400		0%
<b>Total Water</b>					<b>84,185,722</b>	<b>70,683,846</b>	<b>2,443,100</b>	<b>-</b>	<b>478,400</b>	<b>3,566,160</b>	<b>4,504,864</b>	<b>10,992,524</b>		
<b>Stormwater</b>														
1RABD South Awbrey Butte Drainage Study	2016	03/31/17	Design	-	250,000	60,259	200,000	-	-	-	-	200,000		24%
1R3AA South 3rd Street - Stormwater portion	2016	12/26/16	Design	1	470,000	162,491	150,000	-	-	-	-	150,000		35%
1RNPR Newport Pipe Replacement Design	2018	2019	Pending	5	442,000	-	-	-	442,000	-	-	442,000		0%
1RMP1 Stormwater Master Plan Update	2020	2022	Pending	5	130,000	-	-	-	-	-	130,000	130,000		0%
1RFGU Franklin & Greenwood Underpass	2021	2029	Pending	5	572,000	-	-	-	-	-	572,000	572,000		0%
1RRMC Roosevelt & McKinley	2020	2022	Pending	5	104,000	-	-	-	-	-	104,000	104,000		0%
<b>Total Stormwater</b>					<b>1,968,000</b>	<b>222,750</b>	<b>350,000</b>	<b>-</b>	<b>442,000</b>	<b>-</b>	<b>806,000</b>	<b>1,598,000</b>		

### City of Bend 2017 - 2021 Capital Improvement Program Project List

Project Name & Number	Project Start	Estimated Substantial Completion	Project Stage	Cost Estimate Class	Total Project Cost Estimate	Total Project Spent to Date	2016-17	2017-18	2018-19	2019-20	2020-21	2017-2020 Budgeted	Budget Revisions	Percent Project Estimate Spent
<b>Sewer - Water Reclamation</b>														
1S45R SEI Schedule 4&5R	01/21/15	12/30/16	Sub.Complete	1	16,000,000	11,515,629	4,180,500	-	-	-	-	4,180,500		72%
1S2S3 SEI Schedule 2S&3	07/01/15	12/30/17	Construction	1	32,000,000	4,639,056	18,284,000	9,070,000	-	-	-	27,354,000		14%
1SP1X SEI Phase 1 Extension	03/01/16	12/31/17	Design	4	8,200,000	156,005	4,637,500	3,402,500	-	-	-	8,040,000		2%
1SNAS North Area Gravity Main	2016	12/31/17	Design	5	3,850,000	1,000,468	2,834,850	-	-	-	-	2,834,850		26%
1SNAF North Area Force Main	2016	12/31/17	Design	5	2,850,000	-	2,834,850	-	-	-	-	2,834,850		0%
1SRLS Riverhouse Lift Station Hydraulic Upgrade	2016	06/30/17	Design	5	500,000	9,014	370,000	-	-	-	-	370,000		2%
1XCOL Colorado Pump Station and Force Main	2013	01/10/17	Construction	2	13,620,132	11,326,374	4,525,000	-	-	-	-	4,525,000		83%
1SVOC Valhalla Sewer Relocation	2011	10/16/16	Construction	1	1,860,370	951,694	2,000,000	-	-	-	-	2,000,000		51%
1SPIR Plant Interceptor Rehabilitation	2015	06/30/17	Planning	5	5,738,000	25,331	5,970,000	-	-	-	-	5,970,000		0%
1SWRF Secondary Expansion	2009	06/30/17	Construction	1	45,000,000	40,438,933	2,353,000	-	-	-	-	2,353,000		90%
1SSHI Solids Handling Improvement Project	2016	2019	Pending	5	17,000,000	-	6,000,000	4,000,000	7,000,000	-	-	17,000,000		0%
1SEIP East Interceptor (Formerly SEI Phase II North)	2016	2028	Pending	5	21,000,000	-	1,000,000	1,000,000	-	-	-	2,000,000		0%
1SNIP North Interceptor	2016	2021	Pending	5	23,000,000	-	1,000,000	1,000,000	7,000,000	7,000,000	7,000,000	23,000,000		0%
1SFPU WRF Facilities Plan Update	2018	2018	Pending	5	500,000	-	-	500,000	-	-	-	500,000		0%
1SPSO Parallel Sewer on Olney Avenue	2018	2018	Pending	5	581,000	-	-	605,000	-	-	-	605,000		0%
1SEPP WRF Evaporation Percolation Ponds	2019	2019	Pending	5	1,567,000	-	-	-	1,630,000	-	-	1,630,000		0%
1SAMM Amethyst/Mahogany Street Sewer	2019	2019	Pending	5	679,000	-	-	-	710,000	-	-	710,000		0%
1SM97 Mahogany Street/Hwy 97 Sewer	2019	2019	Pending	5	999,000	-	-	-	1,050,000	-	-	1,050,000		0%
1SSFU WRF Support Facilities Upgrade	2020	2020	Pending	5	2,400,000	-	-	-	-	2,500,000	-	2,500,000		0%
1SOC1 Odor Control Master Plan	2020	2020	Pending	-	1,000,000	-	-	-	-	1,050,000	-	1,050,000		0%
1SSLA Sewer Storage - Land Acquisition	2020	2020	Pending	-	700,000	-	-	-	-	730,000	-	730,000		0%
1SPIC Plant Interceptor Condition Assessment	2020	2020	Pending	5	600,000	-	-	-	-	630,000	-	630,000		0%
1SMP1 Collection System Master Plan (Years 6-10)	2020	2020	Pending	-	1,000,000	-	-	-	-	1,050,000	-	1,050,000		0%
1SGPA Gravity Pipe Condition Assessment	2020	2035	Pending	5	200,000	-	-	-	-	210,000	208,000	418,000		0%
<b>Total Sewer</b>					<b>216,192,024</b>	<b>120,889,742</b>	<b>55,989,700</b>	<b>19,577,500</b>	<b>17,390,000</b>	<b>13,170,000</b>	<b>7,208,000</b>	<b>113,335,200</b>		
<b>Total 2017-2020 Capital Improvement Program</b>					<b>344,365,853</b>	<b>212,816,976</b>	<b>64,260,100</b>	<b>25,752,027</b>	<b>21,231,400</b>	<b>21,186,160</b>	<b>12,518,864</b>	<b>144,948,551</b>		

## S. 3rd St. Pedestrian Improvements

Project is a collaboration with ODOT to provide continuous pedestrian facilities along the 3rd Street corridor between Wilson Avenue and Powers Road by repairing existing facilities that are either non-compliant or deteriorated. In addition, the project will also construct pedestrian facilities where none currently exist. The project is being coordinated with several other projects (water, stormwater, streets) within the corridor.



### Scope

Design, right of way acquisition, and construction of sidewalks, curb ramps that is coordinated with other infrastructure for water, stormwater, and streets. Stormwater scope increased to now include catch basin and drill hole vault replacement.

### Schedule

Start Date: 11/1/2011  
 Substantial Completion: 7/21/2017  
 Final Closeout: 7/21/2018

### Cost

Total Estimated: \$1,205,000  
 Spent to Date: \$860,778  
 % Spent to Estimated: 71%

Sub-Projects:	Est.	Spent
ADA	\$665,000	\$667,675
Water	\$70,000	\$30,612
Stormwater	\$470,000	\$162,491

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:** Construction has started on the East side for all projects. Payments occur prior to work performed due to coordinating with ODOT.

### Cost Estimate Classification: 1





## Phase 2 - S. 3<sup>rd</sup> 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: 6/30/2017  
 Final Closeout: 7/1/2018

- Stormwater portion complete
- Streets portion complete

### Cost

Total Estimated: \$1,135,000  
 Spent to Date: \$22,254  
 % Spent to Estimated: 2%

<u>Sub-Projects:</u>	<u>Est.</u>	<u>Spent</u>
Water	\$1,100,000	\$0
Stormwater	\$5,000	\$6,150
Streets	\$30,000	\$16,104

**Status: On Scope**

**Status: On Schedule**

**Status: On Budget**

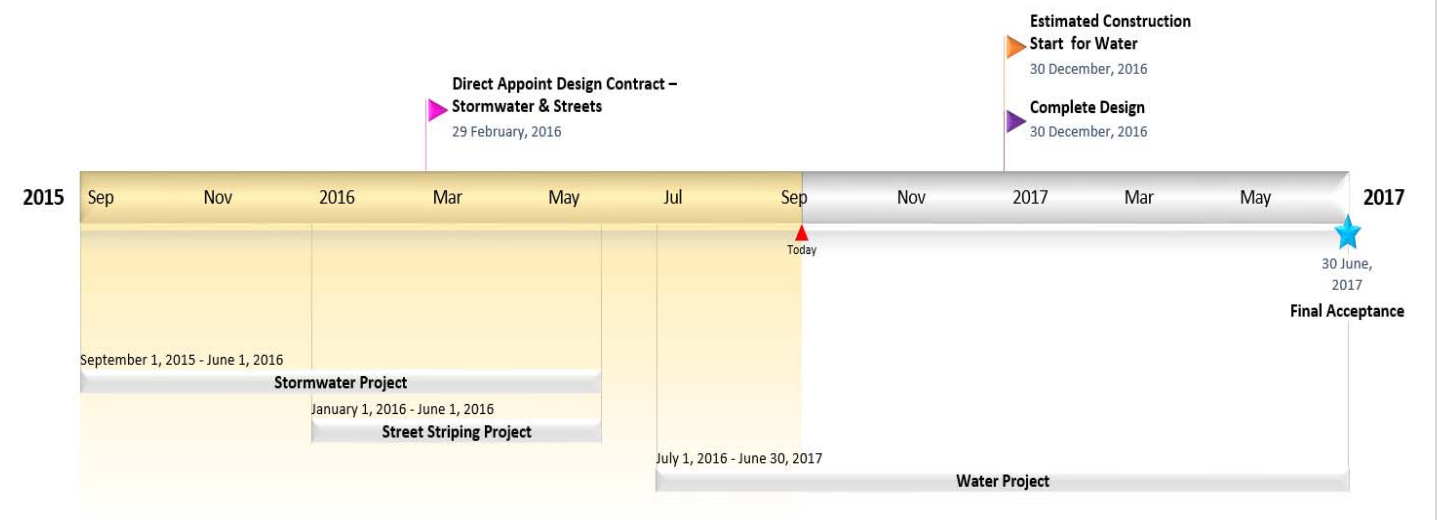
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

**Status Update:** Topographical survey work is complete and the base map has been delivered. 30% design efforts are underway.

### Cost Estimate Classification: 5



## 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](mailto:rrowan@bendoregon.gov)

### Scope

Survey, design, and construction of accessibility improvements, as funding allows, in the Wells Acres, Bear Creek, Division, Downtown & Old Mill and Brookwood/Southwest neighborhoods.

### Schedule

Start Date: 3/1/16  
 Substantial Completion: 9/28/2018  
 Final Closeout: 09/28/2019

### Cost

Total Estimated: \$750,000  
 Spent to Date: \$96,116  
 % Spent to Estimated: 13%

### 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

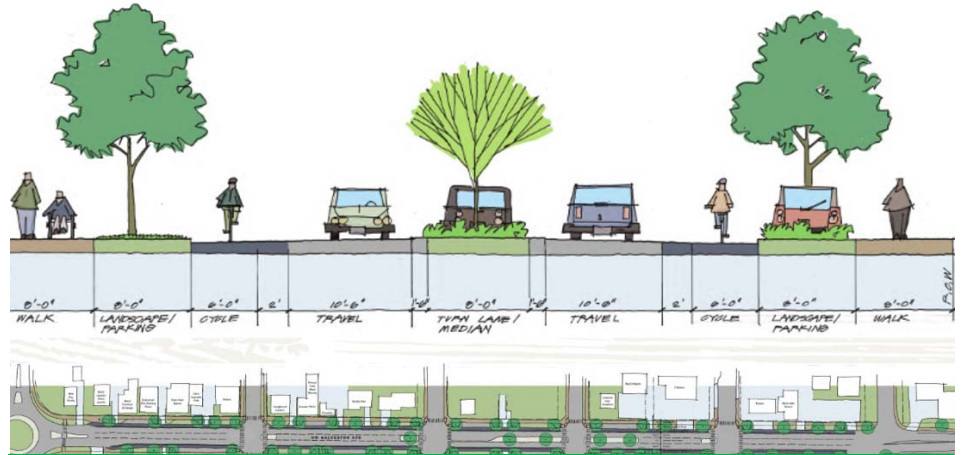
**Status Update:** 60% plans have been reviewed and outreach initiated to the Wells Acres, Dean Swift, and Bend Community Center neighborhoods.

### Cost Estimate Classification: 4



## Galveston Corridor Improvements

The project is the highest ranked Traffic Safety Advisory Committee (TSAC) arterial and collector street safety project to improve vehicle, bicycle, and pedestrian safety, access, and connectivity. It also continues the bike and pedestrian improvements on Galveston from 14th to Lindsey Ct. The project will improve bicycle and pedestrian safety, access, stormwater system, and parking.



Project Engineer: Garrett Sabourin | [gsabourin@bendoregon.gov](mailto:gsabourin@bendoregon.gov)

### 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: \$2,700,000  
 Spent to Date: \$323,053\*  
 % Spent to Estimated: 12%

\* Includes planning. At 30% design cost estimates will be updated to account for water, stormwater and sewer utility projects.

**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:** Project team has received and reviewed the 30% design documents. Consultant will be addressing comments and staff will present to Council in December 2016.

### Cost Estimate Classification: 5



## 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](mailto: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: \$3,344,000  
 Spent to Date: \$223,687  
 % Spent to Estimated: 7%

### 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:** 60% plans have been received from the consultant and are under review by City staff. Outreach continues to businesses neighboring project locations.

### Cost Estimate Classification: 4



# 14<sup>th</sup> 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.



## Scope

Upgrade to City standard to include but not limited to: roadway, surface, curbs, sidewalks, and striping. Final scope to be determined at 30% concept level, but will include safety improvements for bicycles, pedestrians and vehicles.

## Schedule

Start Date: 06/30/2014  
 Substantial Completion: TBD  
 Final Closeout: TBD

## Cost

Total Estimated: \$3,888,950\*  
 Spent to Date: \$113,849  
 % Spent to Estimated: 3%

\*Corridor extension construction cost not included in Total Cost Estimate. At 30% design cost estimates will be updated to account for water, stormwater and sewer utility projects.

### 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:** Project team has received and reviewed the 30% design documents. Consultant will be addressing comments and staff will present to Council in December 2016.

### Cost Estimate Classification: 5



## Downtown City Offices Sidewalk

Old and deteriorating sidewalk will be replaced in the downtown area along Franklin Avenue, Wall Street and Louisiana Avenue. Also included are improvements to provide safer and more visible street crossings at key locations. This project was funded through the Citywide Safety Improvements project (ST14EA).



### Scope

Survey, design and construction of accessibility and safety improvements along Franklin Avenue, Wall Street and Louisiana Avenue in the vicinity of City Hall and the Downtown Library.

### Schedule

Start Date: 7/1/2016  
 Substantial Completion: 6/30/2017  
 Final Closeout: 6/30/2018

### Cost

Total Estimated: \$250,000  
 Spent to Date: \$726  
 % Spent to Estimated: 0.29%

**Status: On Scope**

**Status: On Schedule**

**Status: On Budget**

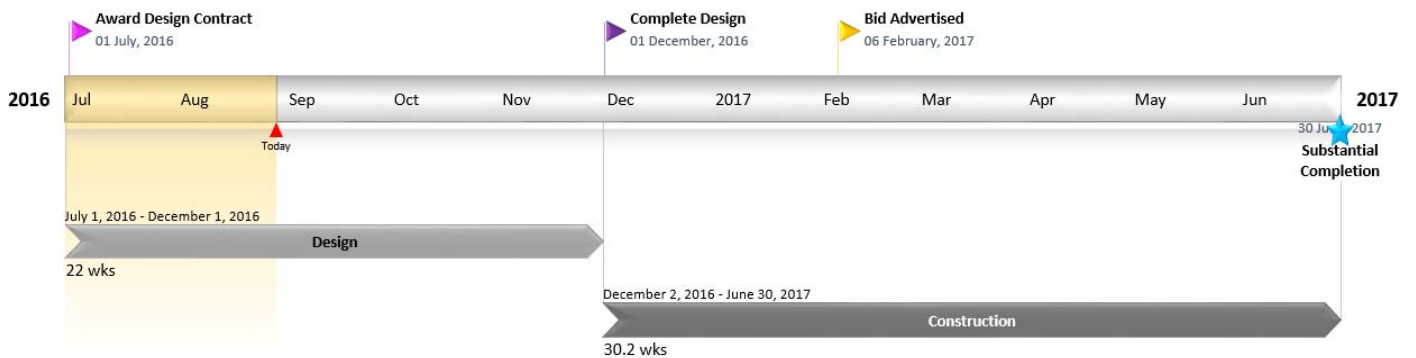
Adjustments: Project Initiated

Adjustments: Project Initiated

Adjustments: Project Initiated

**Status Update:** 60% Design has been submitted by consultants and is under review by City staff. Stakeholders including school district, library and transit system have been engaged.

### Cost Estimate Classification: 4



## Powers & Brookwood Roundabout Phase II

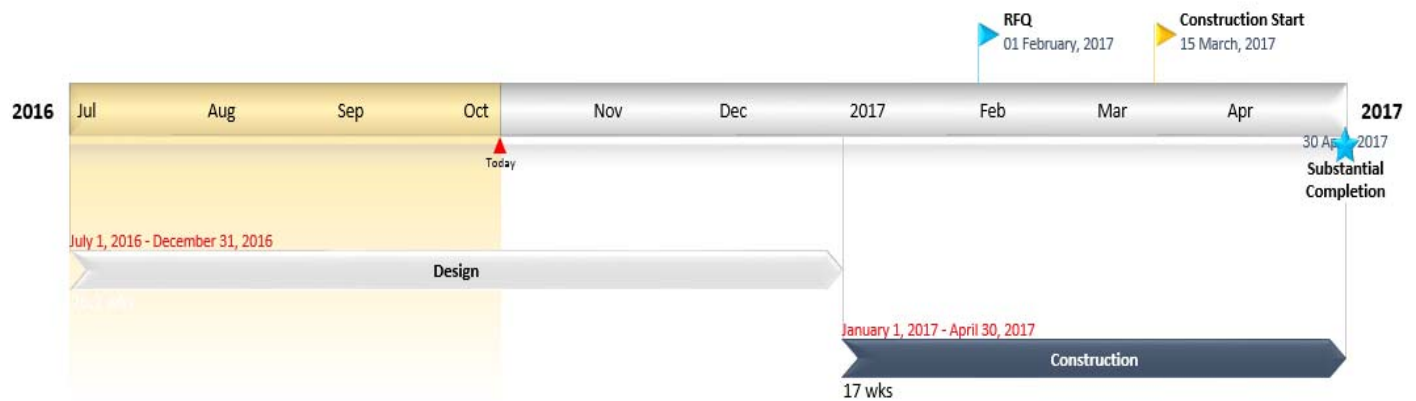
The stormwater from the newly constructed roundabout on Brookwood and Powers is conveyed to and drains into stormwater structures through a swale to the northeast of the roundabout. The Powers & Brookwood Roundabout Phase II Project intent is to rehabilitate this swale. This will be done by cleaning out the storm structures and re-constructing the check dams to convert the swale into a series of retention ponds. This will ensure proper erosion control and sediment collection.



Scope	Schedule	Cost
Re-construct check dams to convey water at appropriate velocity and location. Check dam height will also convert swale into retention ponds for increased retention capacity and sediment collection.	Start Date: 07/01/2016 Substantial Completion: <b>04/30/17</b> Final Closeout: <b>04/30/2018</b>	Total Estimated: \$50,000 Spent to Date: \$0 % Spent to Estimated: 0%
<b>Status: On Scope</b>	<b>Status: Baseline Schedule Revision</b>	<b>Status: On Budget</b>
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: No change from prior month

**Status Update:** Waiting for final approval on design. City is evaluating whether or not to self-perform.

### Cost Estimate Classification: 2



## 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 27<sup>th</sup> 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

### Cost

Total Estimated: \$71,700,000  
Spent to Date: \$33,064,223  
% Spent to Estimated: 46%

Sub-Projects:	Est.	Spent
Previous	\$17,500,000	\$16,753,532
4&5R	\$16,000,000	\$11,582,019
2S&3	\$30,000,000	\$4,572,667
P1EX	\$8,200,000	\$156,005

Status: **Scope Revision**

Status: **On Schedule**

Status: **Potential Budget Adjustment**

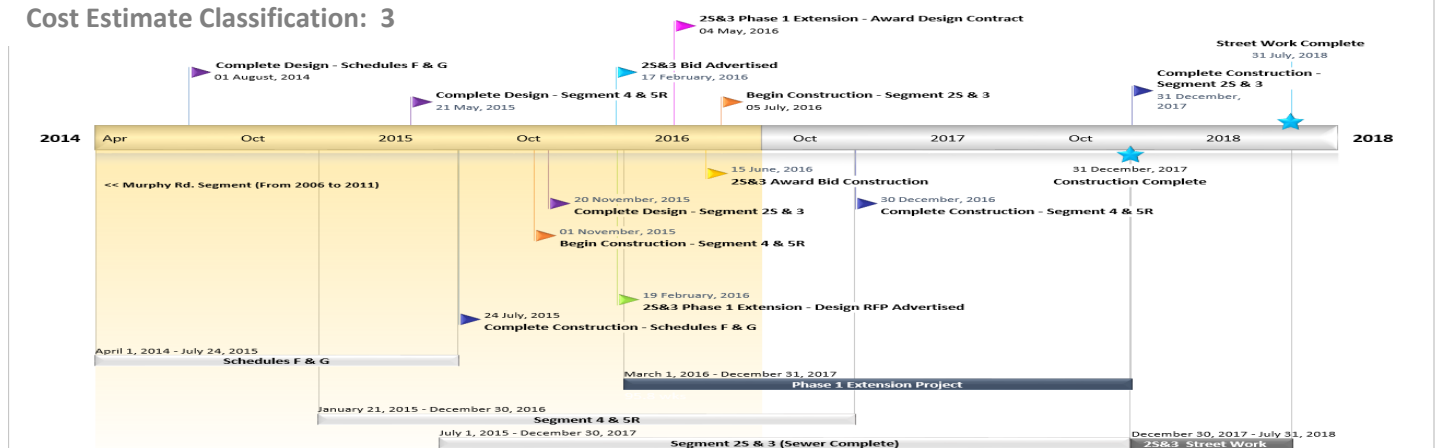
Adjustments: **Alignment adjustments and pipe depth revised. Site constraints and method of sewer conveyance require new pipe.**

Adjustments: **No change from prior month. However, obtaining easements is a risk to maintaining schedule.**

Adjustments: **60% Design for Phase 1 Extension due soon based on potential scope revision**

**Status Update:** Segments 4&5R project is substantially complete, ahead of schedule and under budget on construction contract. Approximately 3 easements are outstanding for Phase 1 Extension. As noted, this is a risk for the schedule on this Segment. 2S&3 rocking and rolling.

### Cost Estimate Classification: 3





## Valhalla Odor Control & Sewer Relocation

The Awbrey Glen lift station currently pumps into the sewage collections system located within the Valhalla neighborhood. A large wet well and long force main causes odorous air discharge. The project will mitigate odor and capacity issues in the neighborhood. This will eliminate neighborhood complaints and allow for the sewage pump station to run more efficiently reducing staff time and operating costs.

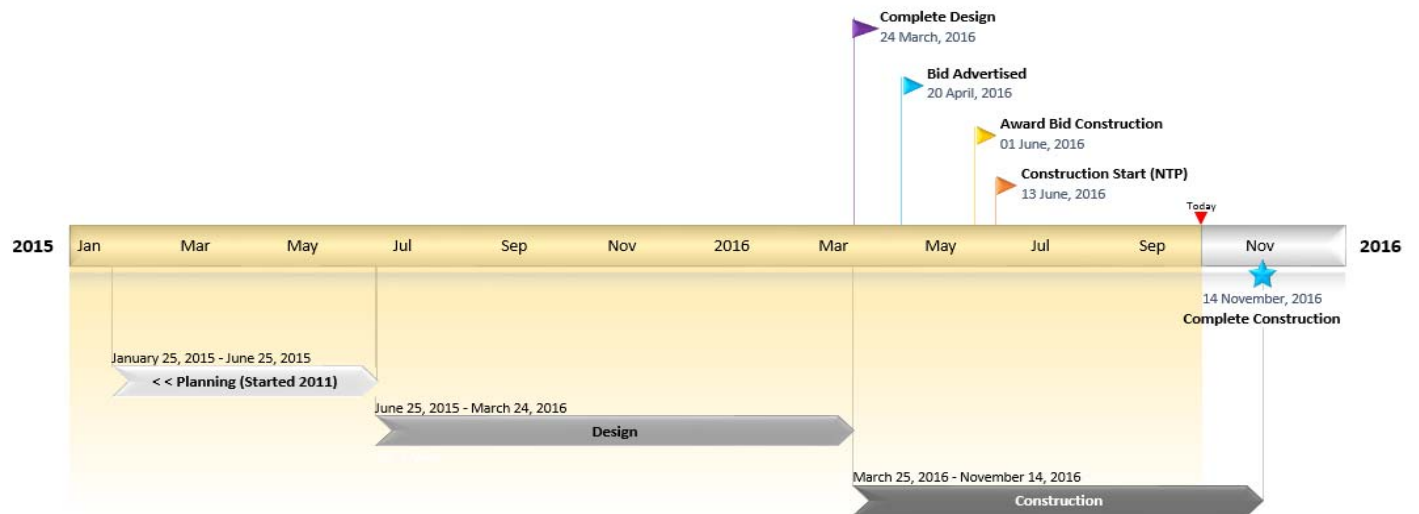


**Project Engineer: Josh Robertson | [jrobertson@bendoregon.gov](mailto:jrobertson@bendoregon.gov)**

Scope	Schedule	Cost
Design and construction of a sewer main to direct sewage around the Valhalla neighborhood and install new odor control systems. Project includes paving restoration.	Start Date: 1/24/11 Substantial Completion: 11/14/2016 Final Closeout: 11/14/2017	Total Estimated: \$1,860,370 Spent to Date: \$951,694 % Spent to Estimated: 51%
<b>Status: On Scope</b>	<b>Status: On Schedule</b>	<b>Status: Potential Cost Increase</b>
Adjustments: No change from prior month	Adjustments: No change from prior month	Adjustments: Project cost increase likely due to changes in scope and schedule. Cost estimate and budgets will be updated after bid closes.

**Status Update:** All pipe installation is complete and paving is complete. Remaining work will focus on the odor control facility with minimal traffic impacts.

### 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: **\$7,047,522**  
 Spent to Date: \$1,013,989  
 % Spent to Estimated: 14%

Sub-Projects:	Est.	Spent
Gravity	\$3,547,522	\$1,009,482
Force Main	\$3,000,000	\$0
Lift Station	\$500,000	\$4507

**Status: On Scope**

**Status: Behind Schedule**

**Status: Potential Budget Adjustment**

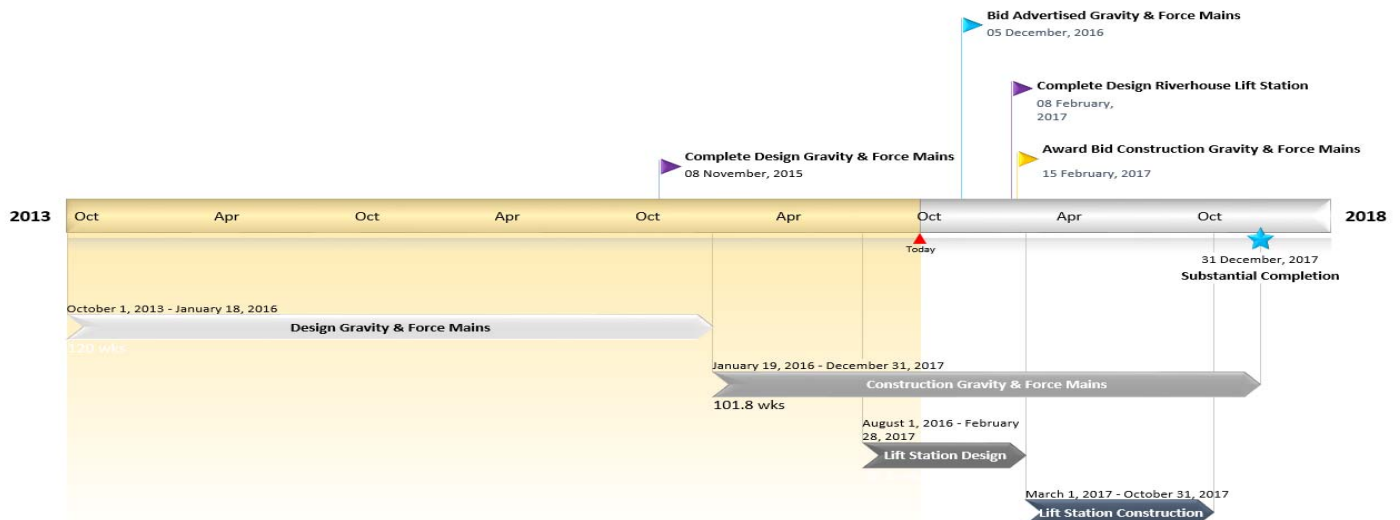
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

**Status Update:** Recorded the outstanding easement on October 3, 2016. The U.S. Bureau of Reclamation is continuing to process the crossing permit for the North Unit Irrigation District, however, bid advertisement will move forward.

### Cost Estimate Classification: 2



## Colorado Pump Station and Sewer Mains

This project includes the design and construction of a new lift station and new gravity and force mains to divert flows from the existing Columbia Street sewer line to an existing trunk line east of the Deschutes River. This new lift station will provide service to future developments on the City's west side, allows decommissioning of an aging sewer lift station with access, capacity, and odor issue, and defer capacity-related improvements at Westside Lift Station.



### Scope

Analysis of service area, flows, capacities, alternatives for pump station sizing, siting, and pipeline route; design and construction of pump station, odor control facility, and gravity and force mains; decommissioning pump station.

### Schedule

Start Date: 2/1/2013  
 Substantial Completion: 01/10/2017  
 Final Closeout: 01/10/2018

### Cost

Total Estimated: \$13,620,132  
 Spent to Date: \$11,326,374  
 % Spent to Estimated: 83%

### Status: On Scope

Adjustments: No change from prior month

### Status: On Schedule

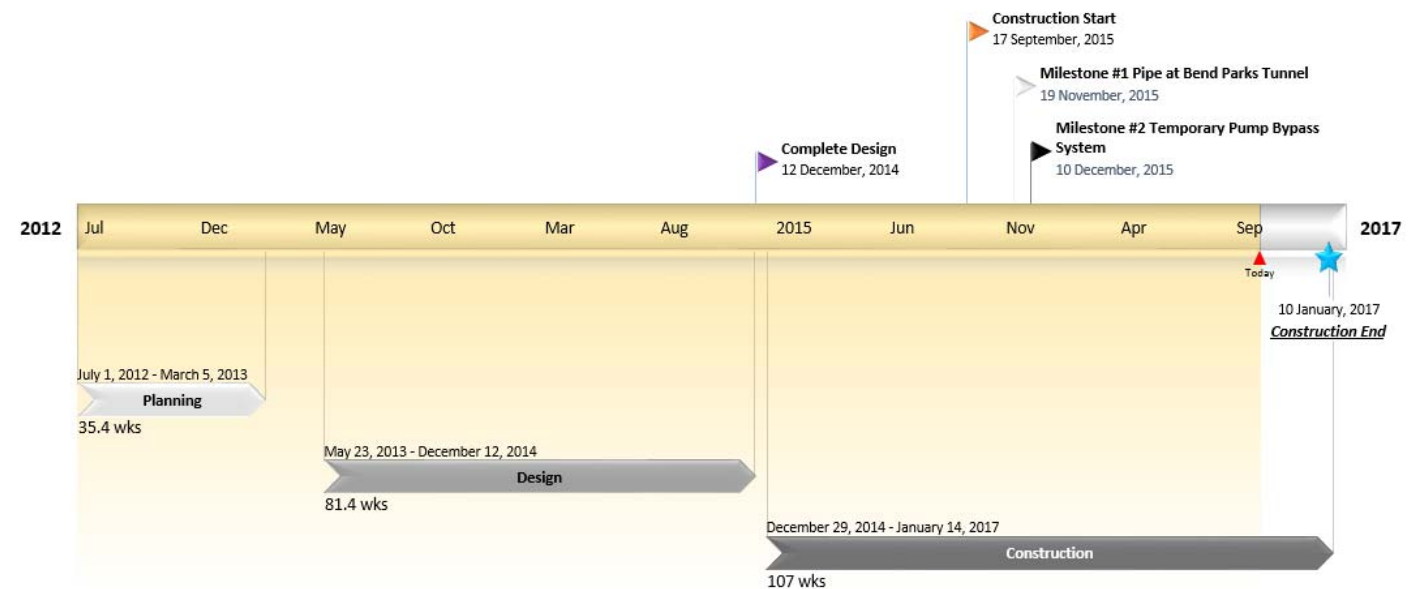
Adjustments: No change from prior month

### Status: On Budget

Adjustments: No change from prior month

**Status Update:** Paving of Shevlin-Hixon drive west of the Deschutes River is scheduled for the week of October 10-14 with additional paving later in the month.

### Cost Estimate Classification: 1



## 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](mailto:jsuhr@bendoregon.gov)**

### Scope

Rehabilitate all Pipeline Assessment Certification Program (PACP) graded 4 and 5 pipe segments with a Cured-In-Place Pipe (CIPP) liner, replace the existing siphon junction box, and clean the double barreled siphons.

### Schedule

Start Date: 3/1/2015  
 Substantial Completion: 09/30/18  
 Final Closeout: 09/30/19

### Cost

Total Estimated: \$5,738,000  
 Spent to Date: \$25,331  
 % Spent to Estimated: 0.44%

**Status: On Scope**

**Status: On Schedule**

**Status: On Budget**

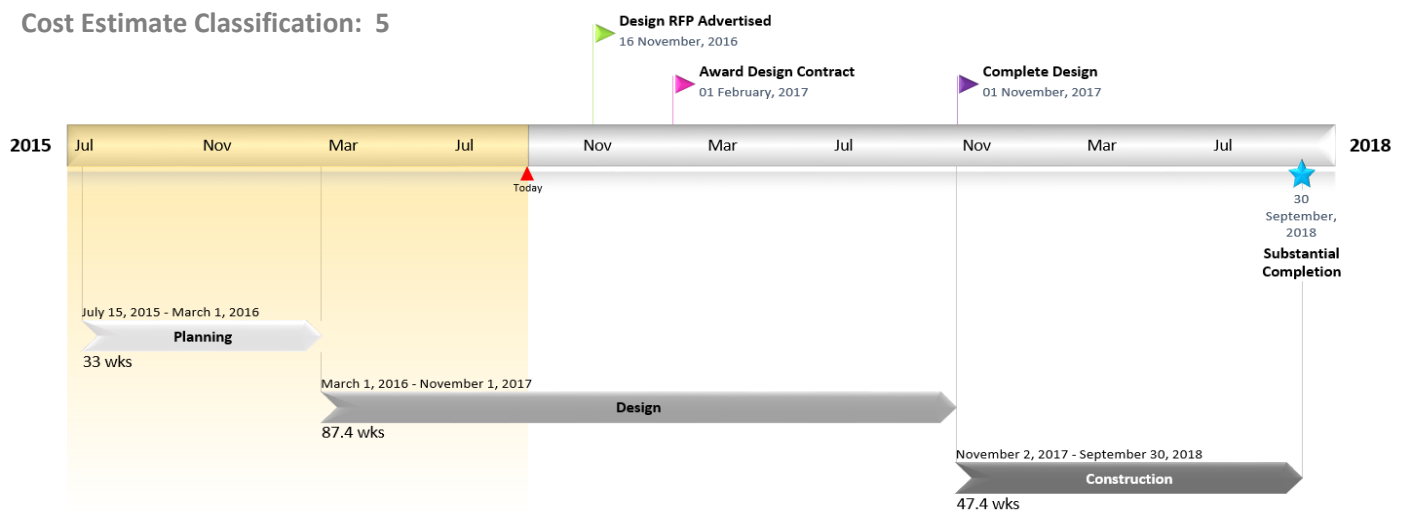
Adjustments: No change from prior month

Adjustments: No impact to budget or scope due to schedule delay.

Adjustments: No change from prior month

**Status Update:** Finalizing scope of work and coordinating with operations division in conjunction with the North Interceptor project. Timeline will be updated in November.

### Cost Estimate Classification: 5





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