



ENGINEERING

Monthly Report

November 2015



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FROM THE DIRECTOR

Executing the Capital Improvement Program portfolio is complex in nature due to the size, volume, various funding sources, project types and delivery methods on projects. With so many variables and ever-changing conditions, it is essential that we collaborate.

In fact, EIPD teamed up with the Growth Management Department in October to initiate three transportation projects focusing on bicycle, pedestrian and vehicle safety issues. Additionally, EIPD has regularly scheduled meetings with Community Development and Private Development Engineering, Street Operations, Utility Operations, and the Accessibility Office. We use this time to prioritize projects and coordinate work efforts. These meeting have had many positive result such as minimizing disruptions to the community due to construction and traffic detours.

This month we are expanding these efforts by adding a financial impact review from the City Finance Director, and an operational impact review from the Public Works Director. These provide added oversight to ensure we stay in alignment with budgetary and operational objectives. You can find these statements at the bottom of this page. In order to allow enough time for these reviews the timeframe for publishing the Engineering monthly report was pushed back a few weeks. This report will now be published on the last day of the month rather than mid-month.

Wishing you happy holiday season from all of us at EIPD.

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.

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

Executive Summary

CIP Numbers Snapshot

- **4 Projects Initiated.** Galveston Corridor Improvements Project, Citywide Safety Improvements Project, 14th Street Reconstruction Project, and NE 2nd and Penn Sewer Line Realignment
- **1 Substantially Complete Project.** Summit Drive Curb Ramps
- **3 Projects Final Closeout.** Simpson & Mt. Washington RAB, Empire & 18th Street RAB, and Powers & Brookwood RAB

Status	CIP	R&R
Open – Planning, Design, Construction	24	1
Substantially Complete – Minor budgets required	4	-
Final Closeout – No financial obligation, complete or cancelled	5	3
Pending – Projected scheduled to start within the next 5 years	27	41
Total	60	45

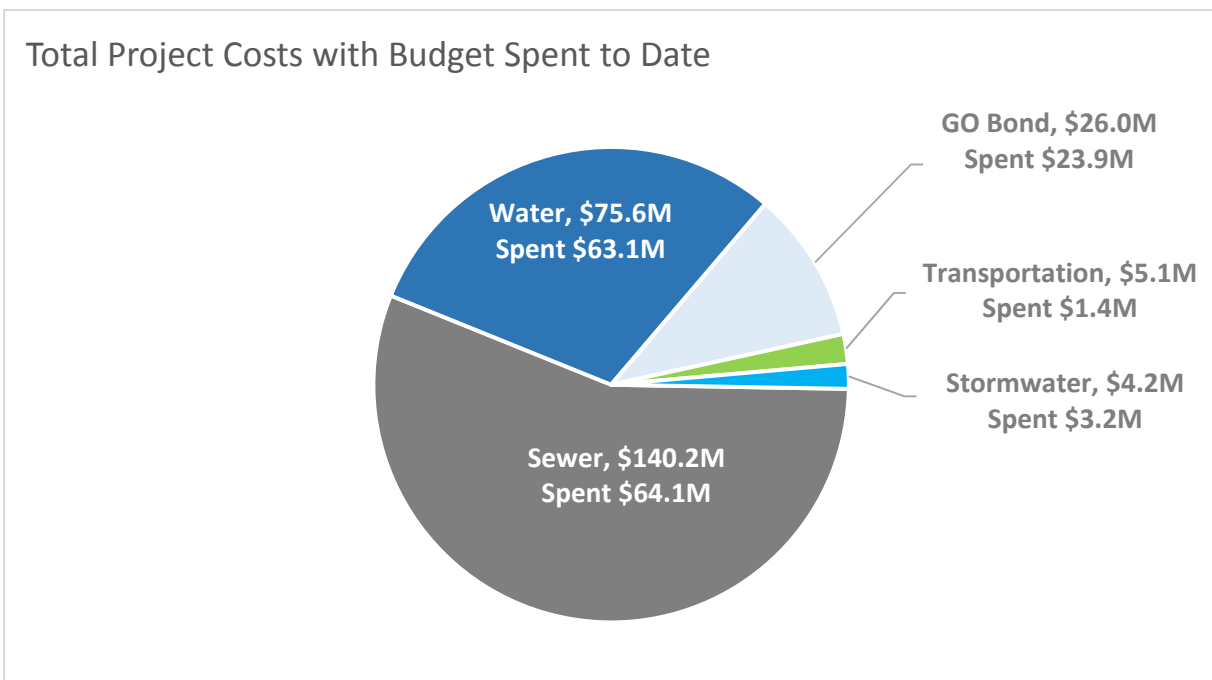
*Completed projects are projects that have been closed out, which is at the end of the warranty period. This is typically one to two years after construction was completed.

Upcoming

In November we will present council with Contract Amendment 9 on the WRF for supplemental construction management services. The Murphy Parrell roundabout bid package was moved back to December and will go to council along with amendments on the 14th Street Reconstruction Project and the Galveston Corridor Improvement Project.

Active Project Cost

The graph below shows the total value of the 30 active projects in the CIP and budget spent to date.



City of Bend 2016 - 2020 Capital Improvement Program Project List

Project Name & Number	Project Start	Estimated Completion	Project Stage	Cost Estimate Classification	Total Project Budget	Total Project Spent to Date	2015-16 Adopted Budget	2016-17 Adopted Budget	2017-18 Proposed Budget	2018-19 Proposed Budget	2019-20 Proposed Budget	Current 5-Year CIP Planned Budgets	Percent Budget Spent
ADA Construction													
AA11FA South 3rd Street Pedestrian Improvements	2011	3/31/17	Design	4	435,309	157,953	355,000	-	-	-	-	355,000	36%
AA14DA Summit Drive Curb Ramps	2015	10/9/15	Sub.Complete	1	835,000	898,088	318,000	-	-	-	-	318,000	108%
AA17XX Future ADA Projects **	2017	TBD	Pending	5	350,000	-	-	350,000	-	-	-	350,000	0%
Total ADA Construction Projects					1,620,309	1,056,041	673,000	350,000	-	-	-	1,023,000	
BURA - Murphy Crossing Construction													
ST15MA Murphy & Parrell Roundabout	2015	7/15/16	Design	2	1,777,000	39,986	1,300,000	-	-	-	-	1,300,000	2%
Total BURA Murphy Crossing Construction Projects					1,777,000	39,986	1,300,000	-	-	-	-	1,300,000	
Transportation Construction													
ST11GA Galveston Corridor Improvements	2011	5/30/17	Planning	5	626,099	231,188	250,000	50,000	-	-	-	300,000	37%
ST14CA Sidewalk Design and Projects	2014	6/30/18	Planning	5	1,396,097	32,306	350,000	970,000	20,000	-	-	1,340,000	2%
ST14DA Neff and Purcell Sidewalks	2016	6/30/17	Pending	5	800,000	-	300,000	500,000	-	-	-	800,000	0%
ST14EA Citywide Safety Improvements	2016	9/1/18	Design	5	3,344,000	-	360,000	-	-	-	-	360,000	0%
ST15NA Phase 2 South 3rd Street Striping	2016	6/1/16	Design	5	30,000	-	30,000	-	-	-	-	30,000	0%
Total Transportation Projects					6,196,196	263,494	1,290,000	1,520,000	20,000	-	-	2,830,000	
GO Bond													
ST12CB Empire/18th Roundabout	2012	10/15/15	Complete	1	2,647,809	2,642,290	10,200	-	-	-	-	10,200	100%
ST12CC Simpson/Mt. Washington Roundabout	2012	10/15/15	Complete	1	2,181,647	2,167,650	20,000	-	-	-	-	20,000	99%
ST12CD Powers/Brookwood Roundabout	2012	10/15/15	Complete	1	2,147,600	2,146,000	1,000	-	-	-	-	1,000	100%
ST12CE Reed Mkt: Newberry to 27th	2012	10/15/16	Sub.Complete	1	4,841,330	4,820,666	20,000	-	-	-	-	20,000	100%
ST12CJ Reed Mkt: 3rd to Newberry	2012	11/13/15	Construction	1	14,145,450	12,081,156	4,234,610	-	-	-	-	4,234,610	85%
ST12CH 27th Street Reconstruction	2017	2017	Pending	5	1,049,300	-	-	1,049,300	-	-	-	1,049,300	0%
ST12CK 14th St. Reconstruction	2016	7/9/05	Planning	5	3,888,950	-	2,732,050	1,149,300	-	-	-	3,881,350	0%
Total GO Bond Projects					30,902,086	23,857,762	7,017,860	2,198,600	-	-	-	9,216,460	
Water													
WA0902 Bridge Creek Intake and Pipeline	2008	12/31/15	Construction	1	73,954,698	63,125,081	14,331,500	-	-	-	-	14,331,500	85%
WA12AA 18th Street Waterline Extension (JR)	2012	4/30/16	Pending	2	485,063	25,063	460,000	-	-	-	-	460,000	5%
WA15BA Water SDC Methodology Study	2016	6/30/16	Pending	N/A	60,000	578	60,000	-	-	-	-	60,000	1%
WA15FA Firerock Bridge & Waterline	2016	6/30/17	Pending	5	450,000	-	50,000	400,000	-	-	-	450,000	0%
WA15GA South 3rd Street Pedestrian - Water portion	2017	3/31/17	Design	4	70,000	-	70,000	-	-	-	-	70,000	0%
WA15HA Water Master Plan Update	2016	6/30/16	Pending	N/A	500,000	-	500,000	-	-	-	-	500,000	0%
WA15JA Phase 2 South 3rd St. - Water portion	2016	3/1/16	Design	5	1,100,000	-	1,100,000	-	-	-	-	1,100,000	0%
WA16AA Westwood Reservoir Maintenance	2016	4/30/16	Cancelled	5	345,000	-	345,000	-	-	-	-	345,000	0%
WA20AX Awbrey Well Supply Expansion	2020	2020	Pending	5	1,944,000	-	-	-	-	-	1,944,000	1,944,000	0%
WA20BX Lafayette Pipe Enlargement	2020	2020	Pending	5	241,000	-	-	-	-	-	241,000	241,000	0%
WA20CX College Parallel Pipe Study	2020	2020	Pending	N/A	1,169,000	-	-	-	-	-	1,169,000	1,169,000	0%
WA20DX Valves Operational System Study	2020	2020	Pending	N/A	75,000	-	-	-	-	-	75,000	75,000	0%
Total Water Projects					80,393,761	63,150,721	16,916,500	400,000	-	-	3,429,000	20,745,500	

City of Bend 2016 - 2020 Capital Improvement Program Project List

Project Name & Number	Project Start	Estimated Completion	Project Stage	Cost Estimate Classification	Total Project Budget	Total Project Spent to Date	2015-16 Adopted Budget	2016-17 Adopted Budget	2017-18 Proposed Budget	2018-19 Proposed Budget	2019-20 Proposed Budget	Current 5-Year CIP Planned Budgets	Percent Budget Spent
Sewer - Water Reclamation													
SW0802 Secondary Expansion	2009	12/30/18	Construction	1	49,835,881	37,817,131	6,148,000	1,102,000	-	-	-	7,250,000	76%
SW14CA Headworks Upgrade	2016	10/1/17	Pending	1	1,720,492	176,018	1,000,000	-	-	-	-	1,000,000	10%
SW16AA Solids Handling (Secondary Expansion)	2017	2020	Pending	1	4,000,000	-	-	250,000	1,750,000	1,000,000	1,000,000	4,000,000	0%
SW0707 Southeast Interceptor Phase 1	2007	2018	Construction	3	57,000,000	19,135,952	16,163,000	7,925,000	7,185,000	-	-	31,273,000	34%
SW0707 SEI Phase II North Medical Center to Deschutes Market Rd.	2020	2025	Pending	5	16,500,000	-	-	-	-	-	5,737,000	5,737,000	0%
SW11BA Valhalla Sewer Relocation	2011	10/31/17	Design	3	1,860,370	131,556	1,746,000	-	-	-	-	1,746,000	7%
SW12AA Collection System Master Plan Update	2012	12/30/15	Sub.Complete	5	3,791,557	3,820,955	506,000	-	-	-	-	506,000	101%
SW13DA North Area Sewer Capacity Improvements	2013	11/1/17	Design	3	6,547,522	676,732	5,909,300	-	-	-	-	5,909,300	10%
SW13EA Colorado Pump Station and Sewer Mains	2013	12/30/17	Construction	1	13,620,132	2,289,239	11,321,400	-	-	-	-	11,321,400	17%
SW14BA Deschutes Brewery Sewer	2016	7/1/15	Complete	1	300,000	-	170,000	-	-	-	-	170,000	0%
SW15AA Plant Interceptor Rehabilitation	2015	12/31/16	Planning	5	5,738,000	20,955	5,718,000	-	-	-	-	5,718,000	0.4%
SW15DA N.E. 2nd & Penn Sewer Line Realignment	2016	12/31/16	Planning	4	300,000	-	100,000	200,000	-	-	-	300,000	0.0%
SW15GA Wood River Village Lift Station/Vacuum Evaluation	2016	2/28/16	Planning	N/A	50,000	-	50,000	-	-	-	-	50,000	0%
SW15IA Bend South Sewer Evaluation	2016	2/28/16	Planning	N/A	50,000	-	50,000	-	-	-	-	50,000	0%
SW15JA WRF Treatment Plant Upgrades	2016	On-Going	Pending	5	700,000	-	100,000	100,000	100,000	200,000	200,000	700,000	0%
SW17AA WRF Facilities Plan Update	2018	2018	Pending	5	500,000	-	-	-	500,000	-	-	500,000	0%
SW18BX Parallel Sewer on Olney Avenue	2018	2018	Pending	5	581,000	-	-	-	581,000	-	-	581,000	0%
SW15KA WRF Evaporation Percolation Ponds	2019	2019	Pending	5	1,567,000	-	-	-	-	1,567,000	-	1,567,000	0%
SW19AX Amethyst/Mahogany Street Sewer	2019	2019	Pending	5	679,000	-	-	-	-	679,000	-	679,000	0%
SW19BX Mahogany Street/Hwy 97 Sewer	2019	2019	Pending	5	999,000	-	-	-	-	999,000	-	999,000	0%
SW18AA WRF Support Facilities Upgrade	2020	2020	Pending	5	2,400,000	-	-	-	-	-	2,400,000	2,400,000	0%
SW20AX Odor Control Master Plan	2020	2020	Pending	5	1,000,000	-	-	-	-	-	1,000,000	1,000,000	0%
SW20BX Sewer Storage - Land Acquisition	2020	2020	Pending	5	700,000	-	-	-	-	-	700,000	700,000	0%
SW20EX Plant Interceptor Condition Assessment	2020	2020	Pending	5	600,000	-	-	-	-	-	600,000	600,000	0%
SW20FX Collection System Master Plan (Years 6-10)	2020	2020	Pending	5	1,000,000	-	-	-	-	-	1,000,000	1,000,000	0%
SW20GX Gravity Pipe Condition Assessment	2020	2020	Pending	5	200,000	-	-	-	-	-	200,000	200,000	0%
Total Water Reclamation (Sewer) Projects					172,239,954	64,068,537	48,981,700	9,577,000	10,116,000	4,445,000	12,837,000	85,956,700	
Stormwater													
SR0802 Drake and Dohema Pump Station	2008	4/15/17	Construction	1	404,686	217,686	172,000	-	-	-	-	172,000	54%
SR09AA Third Street Underpass	2009	10/30/16	Sub.Complete	1	2,999,008	2,964,759	55,000	-	-	-	-	55,000	99%
SR14AA Phase 2 3rd Street - Stormwater portion	2016	3/30/16	Planning	5	400,000	-	400,000	-	-	-	-	400,000	0%
SR15AA South Awbrey Butte Drainage Study	2016	10/1/16	Planning	N/A	250,000	-	150,000	100,000	-	-	-	250,000	0%
SR15BA South 3rd Street - Stormwater portion	2016	3/31/16	Design	4	150,000	-	150,000	-	-	-	-	150,000	0%
SR15CA Newport Pipe Replacement Design	2018	2019	Pending	5	425,000	-	-	-	-	425,000	-	425,000	0%
Total Stormwater Projects					4,628,694	3,182,445	927,000	100,000	-	425,000	-	1,452,000	
Total Capital Improvement Program Projects					297,758,000	155,618,984	77,106,060	14,145,600	10,136,000	4,870,000	16,266,000	122,523,660	

Blue highlights indicate projects with detail project sheets.

Phase I - S. 3rd St. Pedestrian Improvements

Project will 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.



Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope

Design, right of way acquisition, and construction of sidewalks, curb ramps that is coordinated with other infrastructure for water, stormwater, and streets. April 2015 reduction in scope decreased construction duration by approximately 25%.

Schedule

Start Date: 11/1/2011
 Substantial Completion: 3/31/2017
 Final Closeout: 3/31/2018*
 * Includes warranty period

Cost

Total Estimated: \$655,309
 Spent to Date: **\$157,953**
 Percent Spent: **24%**
 Three Projects: ADA \$435,309, Water \$70,000, Stormwater \$150,000
Amount reduced - Prior report included unrelated expenditures in error.

Status: On Scope

Status: On Schedule

Status: On Budget

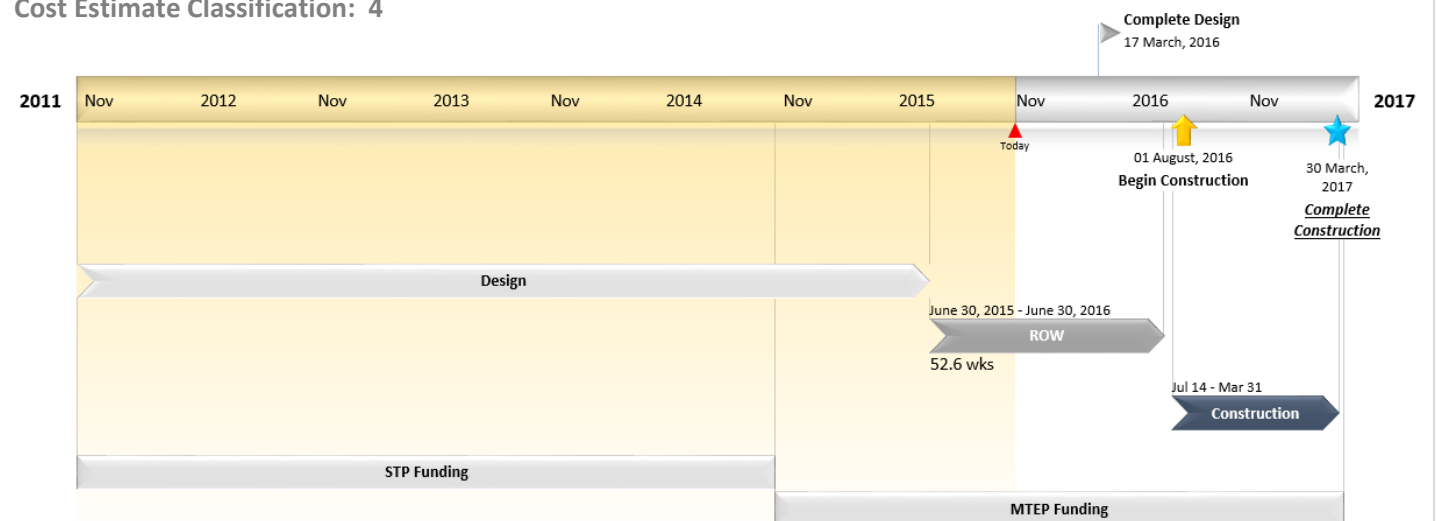
Adjustments: No change from prior month

Adjustments: No change from prior month

Adjustments: No change from prior month

Status Update: No change from last month

Cost Estimate Classification: 4



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.

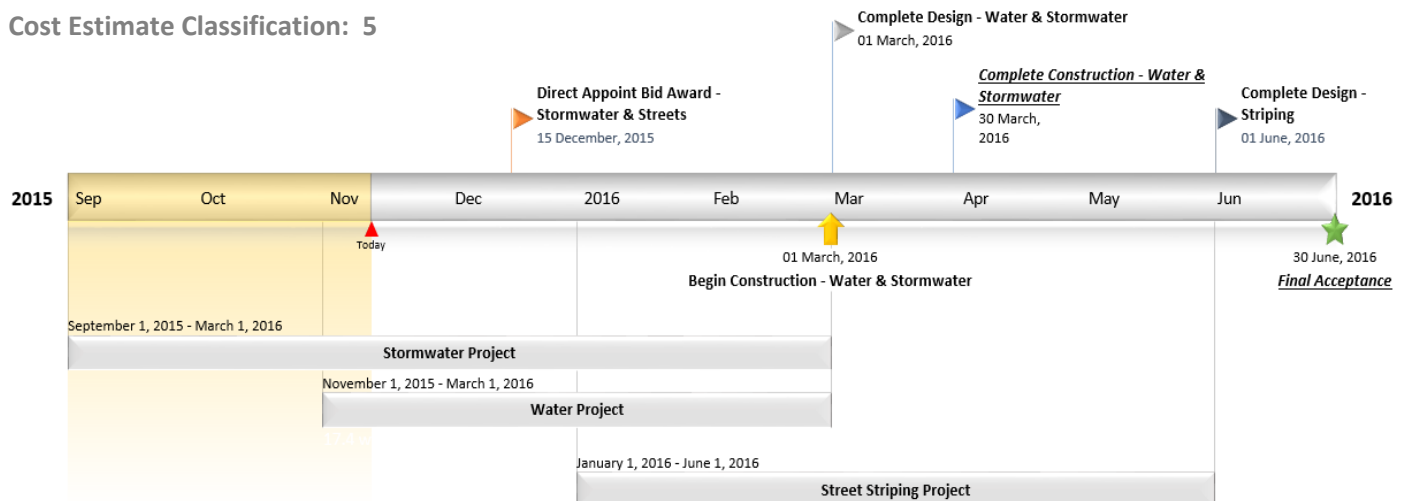


Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope	Schedule	Cost
Includes design and construction for streets, water, and stormwater. This work will include an analysis of the drainage basin to assess the performance and condition of the existing stormwater facilities; creation of a striping and paving plan; replace existing 2-inch sub-standard waterlines with 8-inch pipelines.	Start Date: 10/1/2015 Substantial Completion: 6/30/2016 Final Closeout: 7/1/2017* * Includes warranty period	Total Estimated: \$1,530,000 Spent to Date: \$0 Percent Spent: 0% Three Projects: Water \$1,100,000, Stormwater \$400,000, Streets \$30,000
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

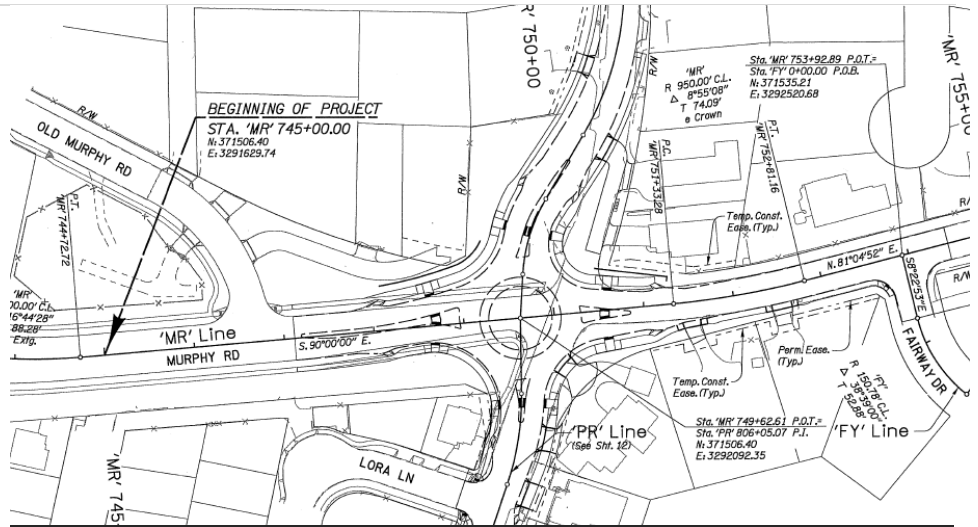
Status Update: Potential schedule change for water portion due to street preservation timing.

Cost Estimate Classification: 5



Murphy & Parrell Roundabout

This project will finalize the original conceptualized extension of Murphy Road on the east side as a part of the Murphy Overcrossing Project and make the intersection safer for vehicles, pedestrians and bicycles.



Project Engineer: Ryan Oster | roster@bendoregon.gov

Scope

Construct a portion of Segment 6 of the SE Interceptor. Construct a roundabout, landscaping, stormwater facilities, illumination, signs and striping to current City standards. Design was completed as part of the Murphy overpass and extension project.

Schedule

Start Date: 5/1/2015
 Substantial Completion: **7/29/2016**
 Final Closeout: **7/29/2019***
 * 1 Year warranty and 2 years additional for plant establishment

Cost

Total Estimated: \$2,000,000
 Spent to Date: \$39,986
 Percent Spent: 2%

Status: On Scope

Adjustments: No change from prior month

Status: Slight Schedule Delay

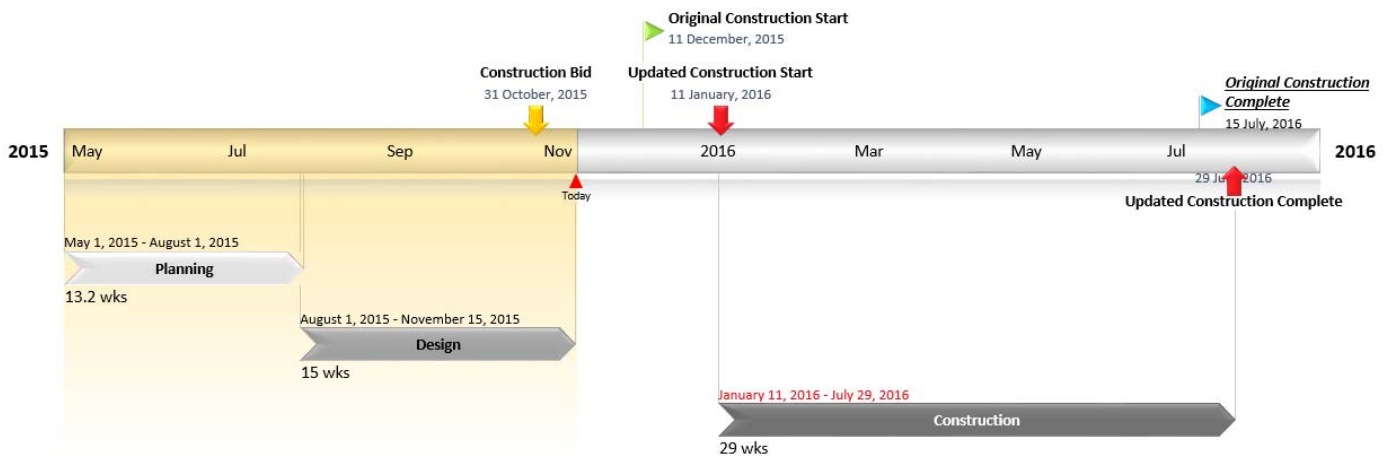
Adjustments: **Work slide on completion date due to DEQ bid related items on Schedule B SEI work performed on this job site.**

Status: On Budget

Adjustments: No change from prior month

Status Update: No change from last month.

Cost Estimate Classification: 2



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: Ryan Oster | roster@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.

Schedule

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

Cost

Total Estimated: \$626,099*
Spent to Date: \$231,188
Percent Spent: 37%
* Includes planning expenditures not captured in CIP budgets.

Status: On Scope

Adjustments: No change from prior month

Status: On Schedule

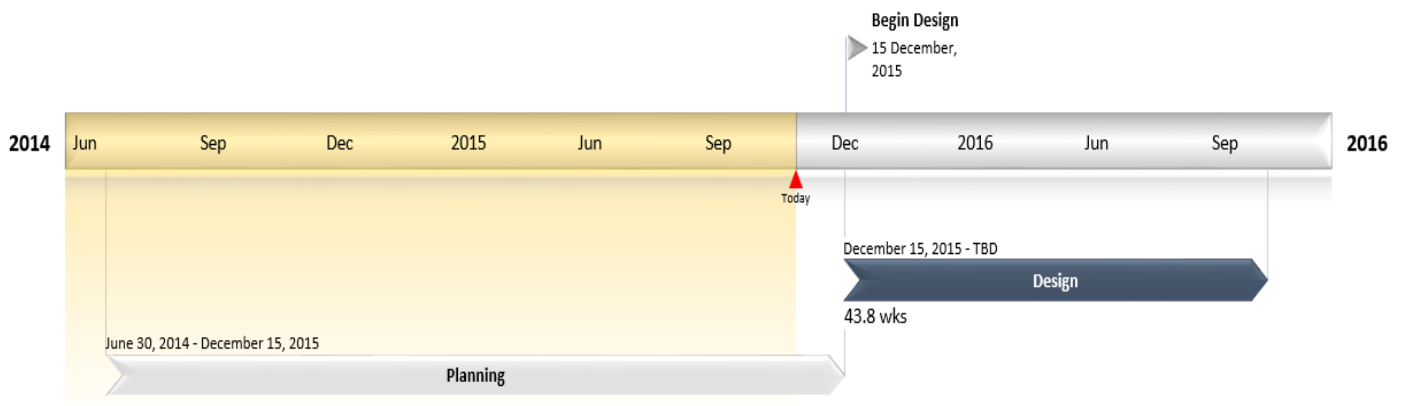
Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Project initiated. Initial timeline will be modified when more information is available on the project.

Cost Estimate Classification: N/A



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	Schedule	Cost
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.	Start Date: 10/1/2014 Substantial Completion: 9/30/2018 Final Closeout: 9/30/2019* * Includes warranty period	Total Estimated: \$3,344,000 Spent to Date: \$0 Percent Spent: 0%
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 initiated. Initial timeline will be modified and milestones identified when more information is available on the project.

Cost Estimate Classification: N/A



GO Bond Reed Market: 3rd to Newberry

Improved safety of the corridor for vehicular, pedestrian, and bicycle traffic. Reduced congestion in the corridor. Provides new stormwater facilities, signing, lighting, retaining walls and striping; upgrades the existing railroad crossing; and realigns American Lane to the west of the current location and reconstructs a bridge at the new location.



Project Engineer: Ryan Oster | roster@bendoregon.gov

Scope

Design and construction of travel lanes, turn lane, 6-foot shoulders and bike lanes, separated sidewalks and a landscape strip. At the intersection of Reed Market and 15th Street the existing signalized intersection will be upgraded to a roundabout. Construction management and inspection services.

Schedule

Start Date: 8/8/2011
Substantial Completion: 11/13/2015
Final Closeout: 11/13/2018*
* 1 Year warranty and 2 years additional for plant establishment

Cost

Total Estimated: \$14,145,450
Spent to Date: \$12,081,156*
Percent Spent: 85%
* Final billing has not been processed.

Status: On Scope

Status: On Schedule

Status: On Budget

Adjustments: No change

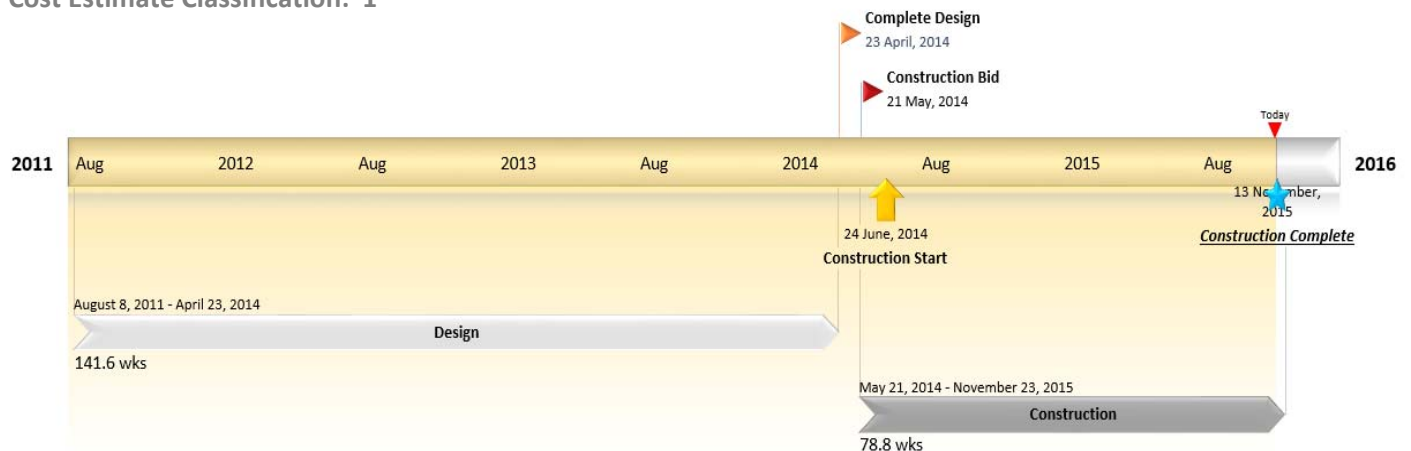
Adjustments: No change

Adjustments: No change

There has been a great deal of public comment and scrutiny over the length of time and disruption caused to the corridor as a result of this project. The City could have completed the work on the project within a one year period with full shutdown of the corridor. However, Council chose to perform the work in stages in order to minimize the impact to businesses, resulting in a significant increase to project timelines.

Status Update: Signal at American Lane was activated, the illumination was installed and the final striping was completed between the RR and 15th Street. Landscaping work is being done and punch list item work will begin soon.

Cost Estimate Classification: 1



14th Street Reconstruction

Improve safety of corridor from SW Simpson Avenue to NW Galveston 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: Ryan Oster | roster@bendoregon.gov

Scope	Schedule	Cost
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.	Start Date: 06/30/2014 Substantial Completion: TBD Final Closeout: TBD	Total Estimated: \$3,888,950 Spent to Date: \$0 Percent Spent: 0%
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 initiated. Initial timeline will be modified when more information is available on the project.

Cost Estimate Classification: N/A



Bridge Creek Intake, Pipeline & Treatment

Replace pipeline to reduced risk of transmission main failure to secure a dual water supply source. Membrane treatment for surface water to meet federal treatment requirements to treat for Cryptosporidium will also protect Bend's surface water in the event of a fire in the watershed. Intake does not meet current building code, and lacks fish screens. New intake allows remote monitoring and operation of the facilities.

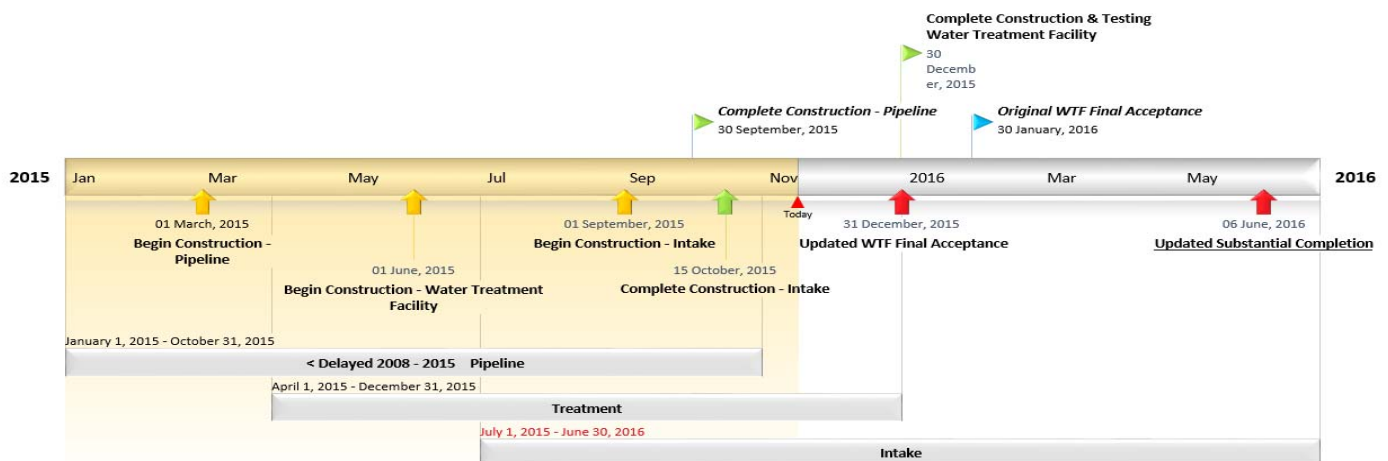


Project Engineer: Heidi Lansdowne | hlansdowne@bendoregon.gov

Scope	Schedule	Cost
Feasibility study of alternative water supplies; design and construction to replace transmission lines, intake, flow control, fish screens, membrane filtration, construction management, and inspection services. These costs also include all costs related to legal.	Start Date: 4/1/2008 Substantial Completion: 12/30/2015 Final Closeout: 12/30/2016* * Includes warranty periods	Total Estimated: \$73,954,698 Spent to Date: \$63,125,081 Percent Spent: 85%
Status: Modified Scope	Status: Schedule Adjusted	Status: On Budget
Adjustments: Modifications to Intake scope based on existing conditions. No impact to cost.	Adjustments: Schedule adjusted due to modifications in scope to Intake. No impact to cost.	Adjustments: No change from prior month

Status Update: WTF final commission on-going. Intake 10% complete.

Cost Estimate Classification: 1



Water Rec. Facility Secondary Expansion

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 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.

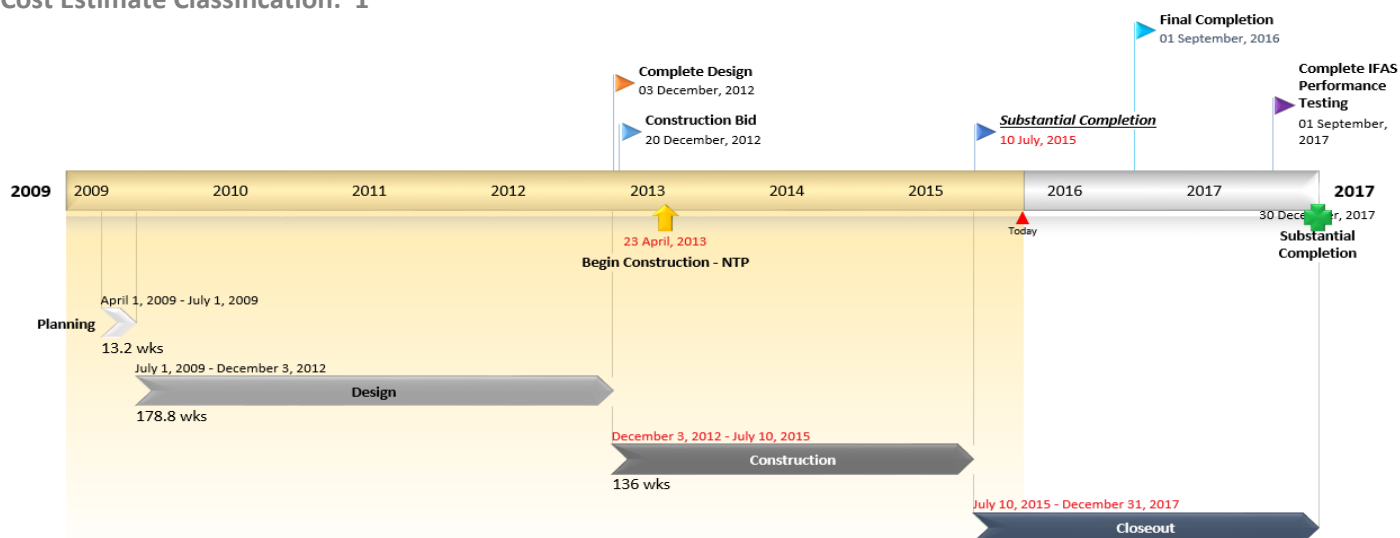


Project Engineer: Jeff England | jengland@bendoregon.gov

Scope	Schedule	Cost
The project adds a primary clarifier, aeration basin, blower facilities, UV and sodium hypochlorite disinfection improvements, and various piping modifications. Removed large portion of original scope to reduce overall expenditures.	Start Date: 4/1/2008 Substantial Completion: 12/30/2017 Final Closeout: 12/30/2018* * Includes warranty period	Total Estimated: \$60,000,000 Spent to Date: \$37,536,109 Percent Spent: 73% Includes Facilities Plan, pre-design, final design, services during construction, and construction.
Status: On Scope	Status: Construction Delayed	Status: Potential Cost Increase
Adjustments: Removed portions of scope from contract.	Adjustments: Does not include work change directives 66, 67, 68 – Revised schedule TBD.	Adjustments: Potential cost increase. Amount unknown at this time.

Status Update: Construction continues at multiple facilities including aeration basin 4, Blower Bldg. B, Primary Clarifier 3, yard piping, and Plant Effluent Bldg. Portions of the Work have been removed by Work Change Directives 66, 67, and 68. Cost and schedule implications are unclear at this time and will be resolved over the coming weeks.

Cost Estimate Classification: 1



Southeast Interceptor Phase I

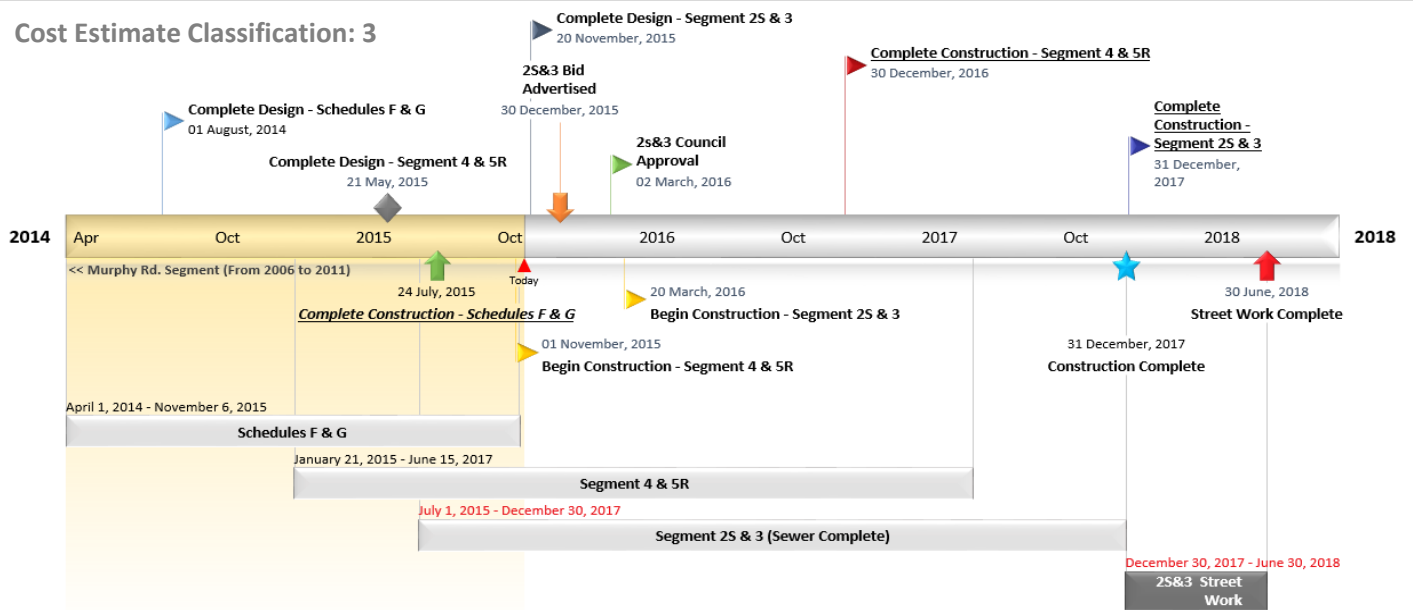
Large diameter gravity sewer pipeline extending from the southwest quadrant to the northeast quadrant of the City, approximately 4 ½ miles in length. This project reroutes or intercepts a significant volume of sewage away from the downtown and central sewer systems to the east side of the City in accordance with the Collection System Master Plan completed in 2014.



Scope	Schedule	Cost
Design and construction of gravity sewer, from South 3rd street to the Neff Road interim connection.	Start Date: 7/1/2006 Substantial Completion: 12/31/2017 Final Closeout: 4/30/2018* * Includes warranty period	Total Estimated: \$60,000,000 Spent to Date: \$18,900,399 Percent Spent: 33%
Status: On Scope	Status: Potential Revision	Status: On Budget
Adjustments: No change from prior month	Adjustments: Sewer completion remains at December 2017. Potential revision due to street rebuilding improvements on 27th Street in 2018.	Adjustments: No change from prior month

Status Update: Segments 4&5R: Initial existing utility confirmations being performed by contractor. Heavy trenching scheduled to begin the first week of January. Segments 2S&3: Significant door to door public outreach/visits to commercial areas, medical areas, and apartment management staff. Six public meetings scheduled in November and December targeted to groups with common interests, the last one being a catch-all meeting for the public at large.

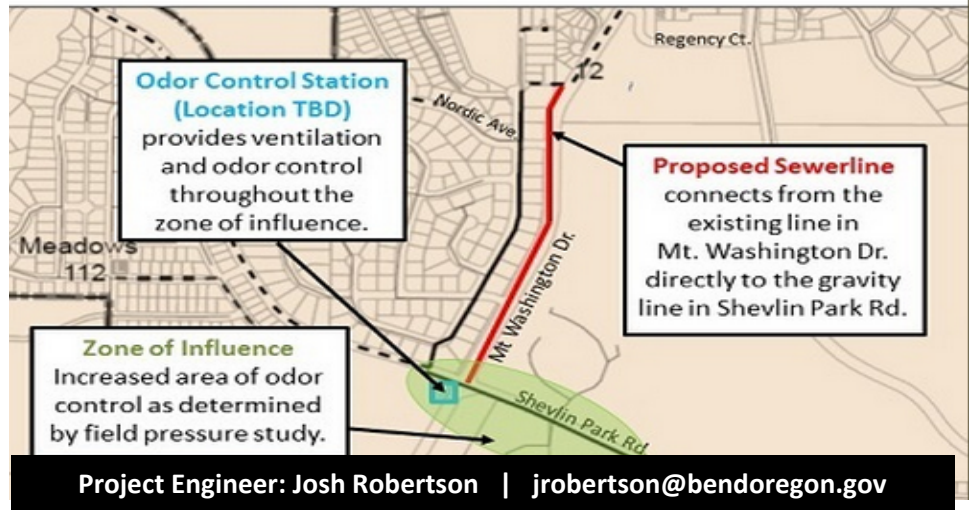
Cost Estimate Classification: 3



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.

PROPOSED SEWER IMPROVEMENT PROJECT MAP



Scope

Design and construction of a sewer main to direct sewage around the Valhalla neighborhood and install new odor control systems.

Schedule

Start Date: 1/24/11
Substantial Completion: 10/16/2016
Final Closeout: 10/31/2017*

* Includes warranty period

Cost

Total Estimated: \$1,860,370
Spent to Date: \$131,556
Percent Spent: 7%

Status: On Scope

Adjustments: No change from prior month

Status: Revised Construction Schedule

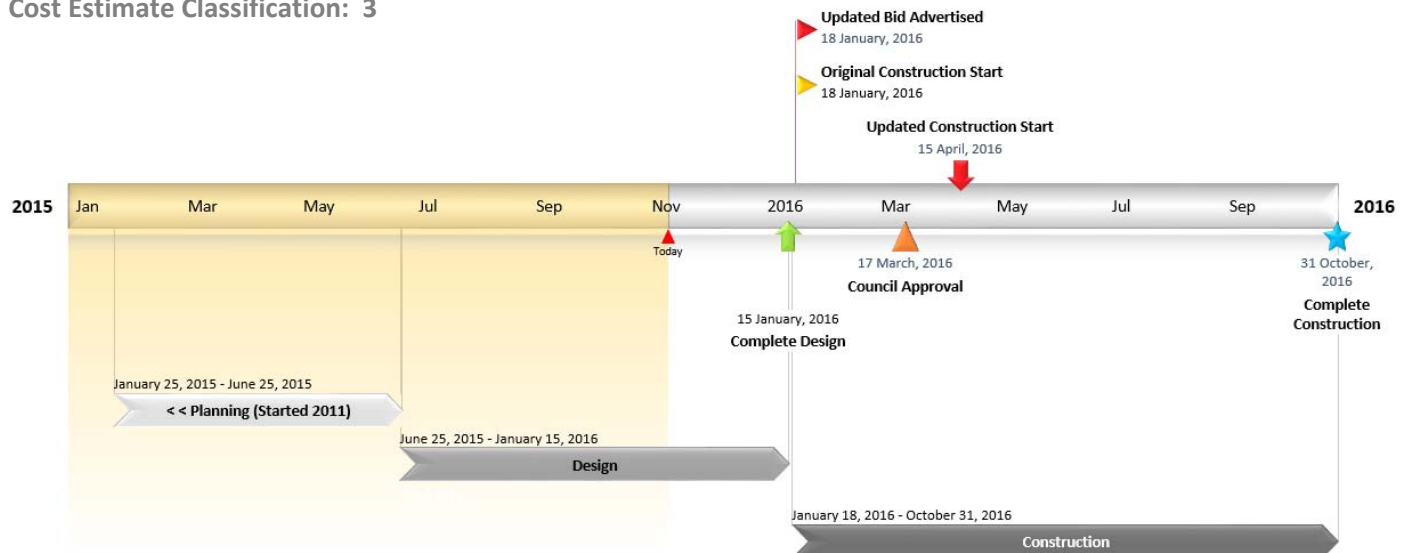
Adjustments: Deprioritized project based on current workload.

Status: On Budget

Adjustments: No change from prior month

Status Update: No change from last month.

Cost Estimate Classification: 3



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: 11/1/2016
 Final Closeout: 11/1/2017*

* Includes warranty period

Cost

Total Estimated: \$6,547,522
 Spent to Date: \$676,732
 Percent Spent: 10%

Status: On Scope

Status: Revised Construction Schedule

Status: On Budget

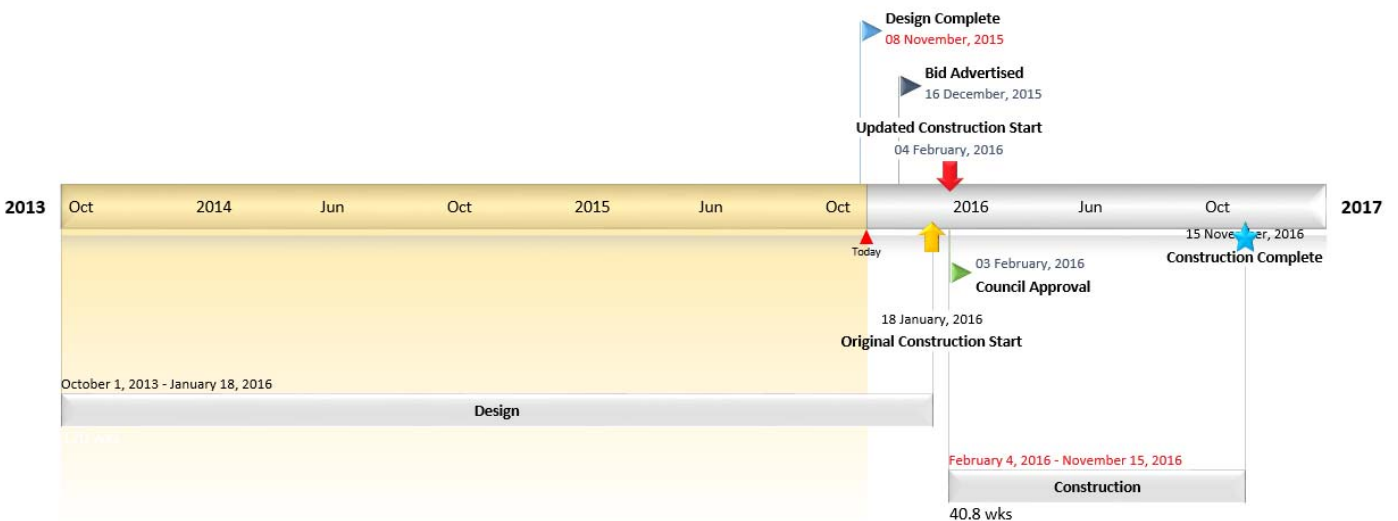
Adjustments: No change from prior month

Adjustments: Bid and construction schedule adjusted.

Adjustments: No change from prior month

Status Update: Finalizing plans and specifications for both the gravity and force main portions of the project. Negotiating construction easements with private land owners and completing permits with North Unit Irrigation District and BNSF RR.

Cost Estimate Classification: 3



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.



Project Engineer: George Franklet | gfranklet@bendoregon.gov

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*

* Includes warranty period

Cost

Total Estimated: \$13,620,132
 Spent to Date: \$2,231,663
 Percent Spent: 16%

Status: In Negotiation

Adjustments: Negotiating with consultant on scope change for work on DEQ Loan requirements and design modification for Parks & Rec tunnel.

Status: On Schedule

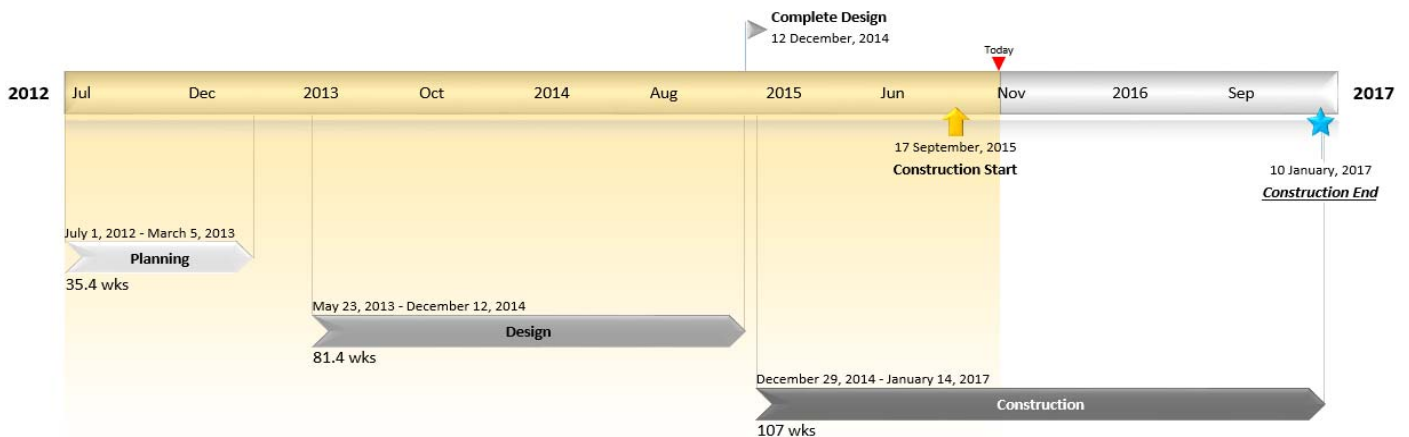
Adjustments: No change from prior month

Status: On Budget

Adjustments: No change from prior month

Status Update: Installation of the sewer mains within the BPRD closure of Colorado Avenue continued on and east of the bridge in coordination with the construction of the new tunnel undercrossing. Due to delays caused by unforeseen site conditions, the closure will be extended to November 20th.

Cost Estimate Classification: 1



Plant Interceptor Rehabilitation

The existing plant interceptor conveys all of the City’s sewage to the WRF and the 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 liner and corrosion control (air extraction) system. This solution provides protection for the worst portions of the pipe and lessens the deterioration rate of the other pipeline segments.

HDProfiler System

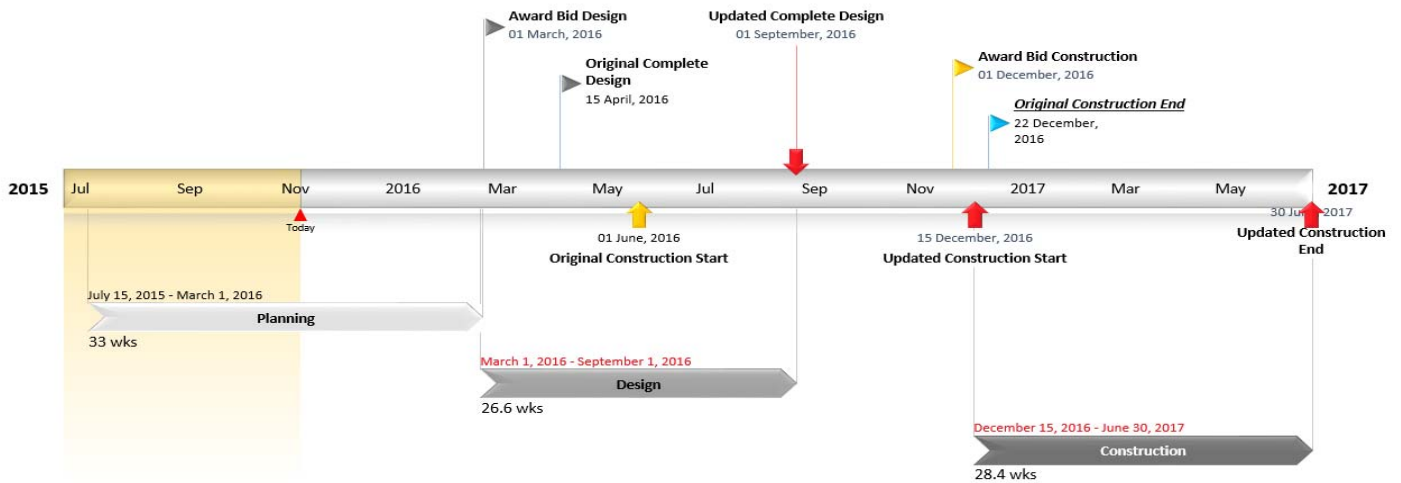


Project Engineer: Jason Suhr | jsuhr@bendoregon.gov

Scope	Schedule	Cost
Rehabilitate all grade 4 and 5 pipe segments with a liner as identified in the PICA. Dig and replace four segments that were identified in the CSMP as undersized for future flow projections. Install corrosion control air extraction facility to slow the degradation of the concrete pipeline.	Start Date: 3/1/2015 Substantial Completion: 6/30/2017 Final Closeout: 6/30/2018* * Includes warranty period	Total Estimated: \$5,738,000 Spent to Date: \$20,955 Percent Spent: 0.40%
Status: On Scope	Status: Revised Schedule	Status: On Budget
Adjustments: No change from prior month.	Adjustments: Adjusted schedule to align with scope and project deliverables.	Adjustments: No change from prior month

Status Update: Discussions are on-going regarding the execution of the PI rehab work in conjunction with the NI, SEI, and new PI. Potential to modify scope based on these discussions.

Cost Estimate Classification: 5



NE 2nd & Penn Sewer Line Realignment

The sewer main of interest currently intersects two (2) private property parcels and exceeds the hydraulic requirements for the serviced catchment area. The purpose of this project is to design an alternate route, within the City of Bend Right of Way which meets current standards.

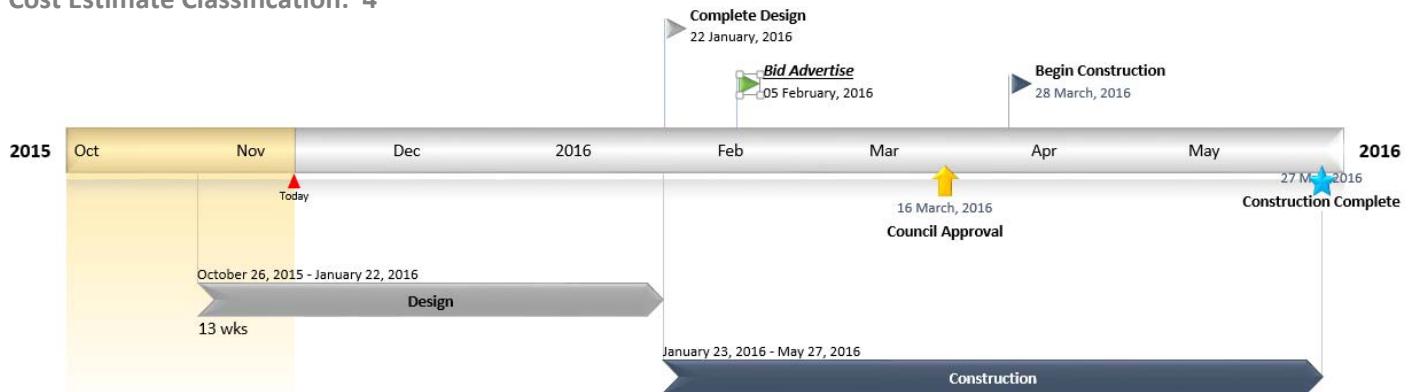


Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope	Schedule	Cost
Design and construct a section of gravity sewer main to provide an alternative conveyance route within the City of Bend Right of Way.	Start Date: 11/18/2015 Substantial Completion: 5/27/2016 Final Closeout: 5/27/2017* * Includes warranty period	Total Estimated: \$300,000 Spent to Date: \$0 Percent Spent: 0%
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

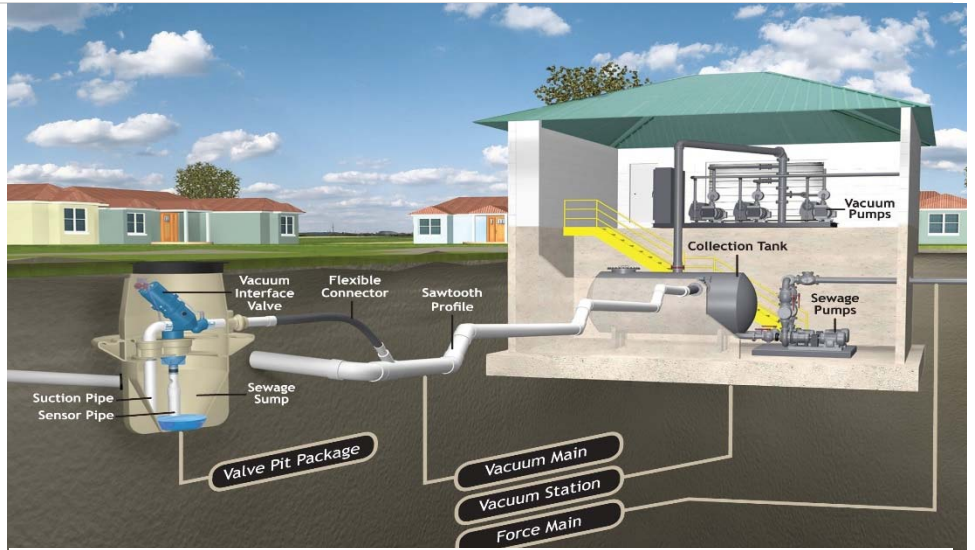
Status Update: Project initiated, contract executed and design phase initiated. Construction timeframe will be modified when more information is available on the project.

Cost Estimate Classification: 4



Wood River Village Lift Station & Vacuum Eval.

Evaluate existing system conditions in order to determine existing and future capacity as well as future development potential within the area.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope	Schedule	Cost
Complete a sewer system analysis and develop three (3) preliminary design solutions for a longstanding replacement and/or upgrade to the developments collection system.	Start Date: 9/1/2015 Substantial Completion: 3/11/2016 Final Closeout: 3/11/2016	Total Estimated: \$50,000 Spent to Date: \$0 Percent Spent: 0%
Status: On Scope	Status: Revised Schedule	Status: On Budget
Adjustments: No change from prior month	Adjustments: Updated to reflect approved contract schedule	Adjustments: No change from prior month

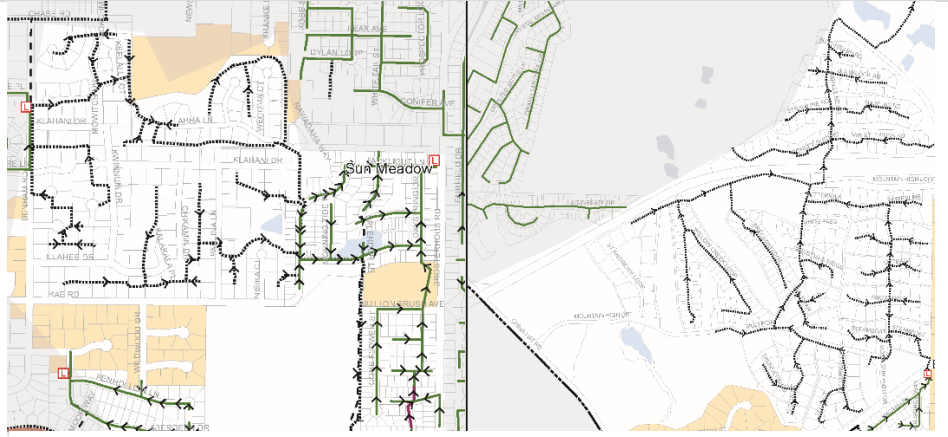
Status Update: Direct appoint contract routed for approval, with notice to proceed scheduled for issuance on November 16, 2015.

Cost Estimate Classification: N/A



Bend South Sewer Evaluation

Evaluate existing system locations and conditions in order to determine existing and future capacity as well as future development potential within the area. This is part of the former Juniper Utility.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope

Complete a sewer system analysis and develop three (3) preliminary design solutions for a longstanding replacement and/or upgrade to the developments collection system.

Schedule

Start Date: 10/05/2105
 Substantial Completion: **3/11/2016**
 Final Closeout: **3/11/2016**

Cost

Total Estimated: \$50,000
 Spent to Date: \$0
 Percent Spent: 0%

Status: **On Scope**

Status: **Revised Schedule**

Status: **On Budget**

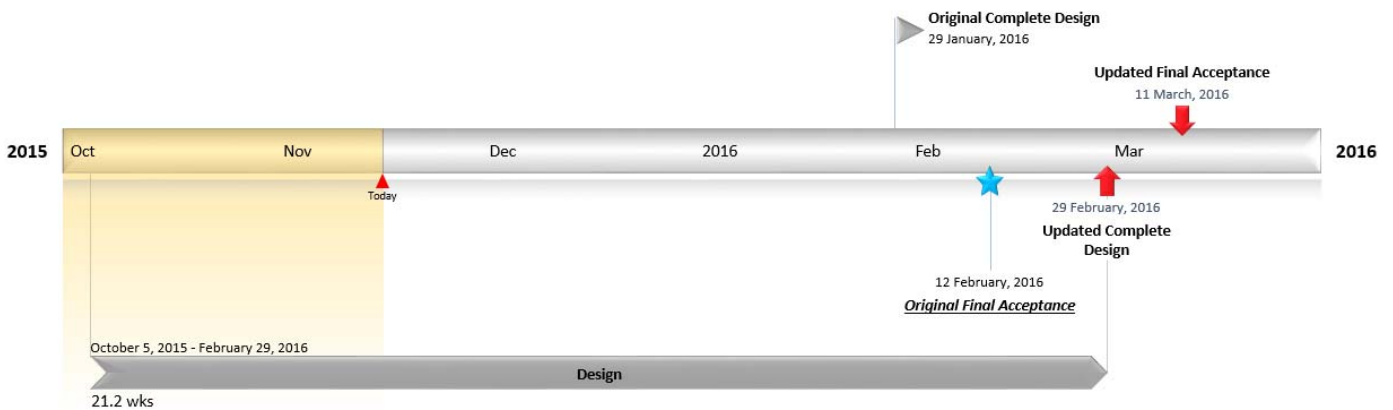
Adjustments: No change from prior month

Adjustments: **Updated to reflect approved contract schedule**

Adjustments: No change from prior month

Status Update: Direct appoint contract routed for approval, with notice to proceed scheduled for issuance on November 16, 2015.

Cost Estimate Classification: N/A



Drake and Dohema Pump Station

A nine acre basin drains to the intersection of Drake and Dohema. The existing stormwater system consists of catch basins and drill holes. The existing drill holes fail to take in water, causing flooding. During larger storm events the water floods neighboring basements and has caused significant property damage in the past. The project will help prevent flooding and protect groundwater.



Project Engineer: Ryan Oster | roster@bendoregon.gov

Scope	Schedule	Cost
The collection system, force mains and treatment swale have been constructed. The remaining work includes installation of a control panel, minor conduit work, and a pump system.	Start Date: 4/1/2011 Substantial Completion: 4/15/2016 Final Closeout: 4/15/2017* * Includes warranty period	Total Estimated: \$404,686 Spent to Date: \$217,686 Percent Spent: 54% Cost savings by self- performing the instillation of pumps and control panels.
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

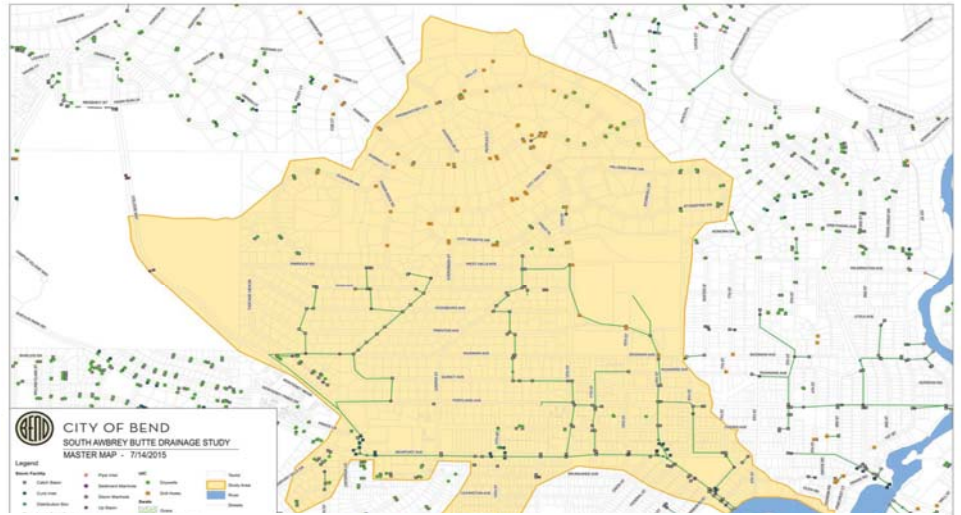
Status Update: No change from prior month

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.



Project Engineer: Garrett Sabourin | gsabourin@bendoregon.gov

Scope	Schedule	Cost
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 Storm Sewer Line.	Start Date: 7/1/15 Substantial Completion: 12/26/2016 Final Closeout: 01/02/2017	Total Estimated: \$250,000 Spent to Date: \$0 Percent Spent: 0%
Status: On Scope	Status: Revised Schedule	Status: On Budget
Adjustments: No change from prior month	Adjustments: Deprioritized project based on current workload.	Adjustments: No change from prior month

Status Update: Potential schedule update after advertisement dates determined.

Cost Estimate Classification: N/A

