



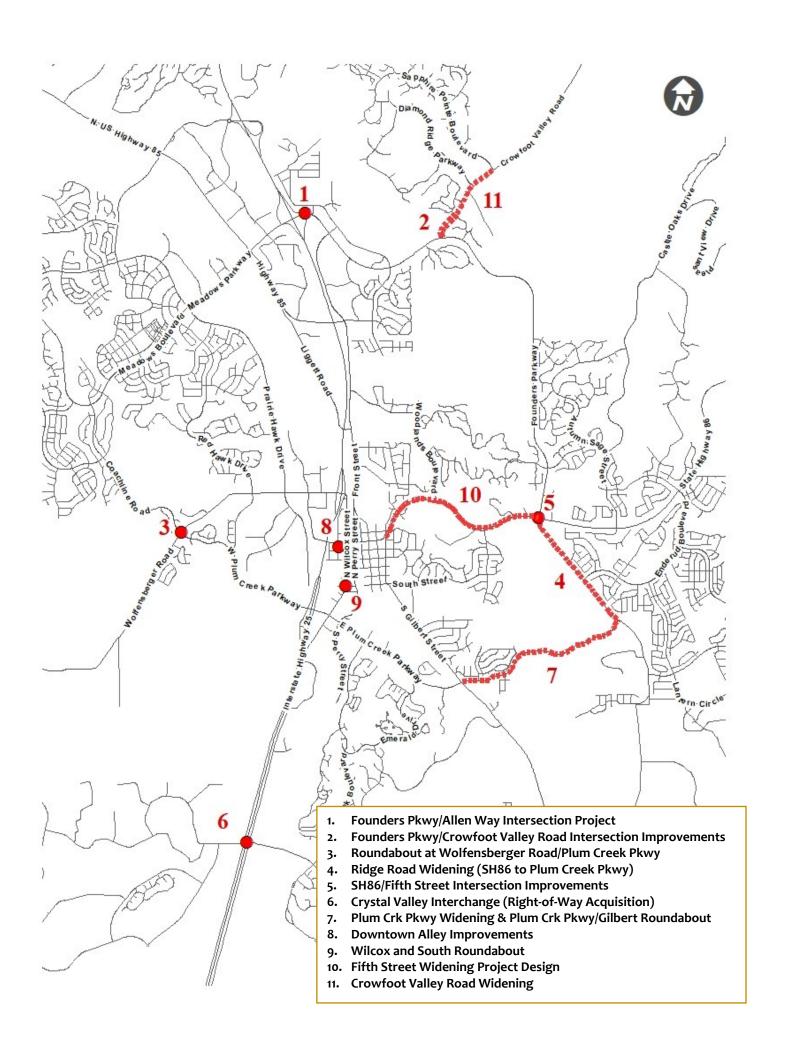
Monthly Report

June 2021

The Public Works Department operates under the **CAN DO** philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.

PW Mission: To provide outstanding service, safety and support for transportation infrastructure and maintenance.





- 1. Founders Pkwy/Allen Way Intersection Improvement Project - This project will address the need for the following improvements:
 - An additional eastbound left turn lane from Founders Parkway to Allen Way
 - A dedicated right turn lane from Founders Parkway to Allen Way
 - An additional southbound right turn lane from Allen Way to westbound Founders Parkway
 - An additional I-25 northbound on-ramp lane
 - A second through lane at Allen Way and Allen Street

Phase: Construction - Close out - Work continues on the close out phase with CDOT. The project team (Town of Castle Rock, NORAA Contractors, FHU, and CDOT) continue to meet weekly to finalize the documentation needed to obtain reimbursement on payments made to the contractor. Reimbursement #3 to Castle Rock is scheduled to be approved by CDOT in early July. Reimbursement requests for payment #4 and #5 are planned on be submitted to CDOT in July. Once reimbursement requests #4 and #5 are finalized with CDOT the Town will start the process of advertising for the Contractors retainage pay request in August.

Budget: \$2.64M Close Out: Fall 2021

- 2. Founders Pkwy (SH86)/Crowfoot Valley Road Intersection Improvement Project and Crowfoot Valley Road Widening **Project** – This project will address the need for the following improvements:
 - Parkway to Crowfoot Valley Road
 - An additional northbound lane on Crowfoot Valley Road between Founders Parkway and Knobcone Drive
 - A southbound free right turn lane from Crowfoot Valley Road to westbound Founders Parkway
 - Widen Founders Parkway both eastbound and westbound between the Crowfoot Valley Road and Woodlands Boulevard
 - Widen Crowfoot Valley Road from Founders Parkway to Knobcone Drive

Phase: Construction: Closeout - Town staff and the project consultant have submitted all required project documents to CDOT. Town is estimating to finalize this project with CDOT in July. The Grading, Erosion, and Sediment Control permit remains open to monitor vegetation coverage and growth. Inspections will be performed until the requirements of the permit are achieved.

Budget: \$3,550,000 Close Out: Fall 2021

3. Wolfensberger Road/Plum Creek Parkway Roundabout **<u>Project</u>** - This project will accomplish the design and construction of a roundabout at this intersection to improve operations and minimize accident potential.

Phase: Closeout - Substantial completion was issued in

Spring 2019. Punch list items are complete. The Town is working with the adjacent property owners to complete the final landscape tie-ins and adjustments. The final landscaping work is anticipated to be complete by Fall 2021. The work completed this month in progression to project closeout is as follows:

Tree removals completed in advance of irrigation repairs

Remaining Budget: \$137,000 Final Completion: Fall 2021

Ridge Road Widening - Ridge Road will be widened from two to four lanes between the Founders Parkway (SH86)/ Fifth Street/Ridge Road intersection and Plum Creek Parkway. The goal is to reduce traffic congestion on the Ridge Road corridor.

Phase: Design: 100% plans have been provided. The consultants continue to work on ROW acquisition. Staff has received initial cost estimate from IREA. Staff is coordinating with the consultant to provide easement descriptions for IREA facilities. Staff plans to review and coordinate with IREA on possible phasing of the relocations. Staff is in the process of review and submitting for approval a task order to update the construction plans to solicit bids for construction by the end of 2021.

Budget: \$900,000

ROW Acquisition: Spring 2021-Phase 1; Fall 2021- Phase 2

Targeted construction: 2024

- An additional eastbound left turn lane from Founders 5. Founders Parkway (SH86)/Fifth Street Intersection "Four Corners" Improvements - With new traffic studies submitted, the consultant will investigate multiple alternatives to address safety concerns and capacity issues at the intersection. Improvements under evaluation include:
 - Southbound traffic add left turn lane, add a free right turn lane, convert right turn lane to through/right
 - Eastbound traffic convert right turn lane to through right, add free right turn lane
 - Northbound traffic add left turn lane, add second through lane, add a free right lane
 - Westbound traffic add through lane, add a free right turn lane

Phase: Design: David Evans & Associates (DEA) is the design consultant for this project. The following is a summary of the activities performed this month:

- Continue with the design.
- Had the FIR meeting with CDOT covering the 30% preliminary plans for review.
- The second public outreach meeting is scheduled for July 27.

Budget: \$1,200,000 for design in 2020 with DRCOG Grant Reimbursement (Town share \$240,000)

Design Completion: 1st quarter 2022

ROW Acquisition: TBD during Preliminary Design stage

Targeted construction: 1st quarter 2022

6. Crystal Valley Interchange - Right-of-Way Acquisition -

The purpose of this project is to achieve acquisition of remaining right-of-way and set aside future project funding allowing potential funding partnerships to assist with advancing construction.

Phase: Right-of Way Acquisition

- Acquisition Services
 - o East Side of I-25 Town Staff is moving forward with the Boone Family property. The remaining properties are in various states of negotiation.
 - West Side of I-25 Town staff and consultants are preparing Notice of Intent for several property owners. The SWQ property closed in early May.

Phase: Preconstruction activities - Interchange Access Request and Environmental Assessment Reevaluation, and Design

- The IGA for the federal BUILD Grant has be executed.
 The BUILD grant agreement has been sent to the Office
 of the Secretary for review/approval, staff is anticipating to get approval for signatures by mid-July. The
 funding of the grant is reimbursement of up to \$5.4M
 with a cost sharing of 45% grant and 55% funded by the
 Town.
- The service agreement with Jacobs Engineering Group for pre-construction services has been executed. The official kickoff meeting will be held in July.
- Staff has completed the delivery method workshop.
 This workshop consisted of a panel of all stakeholders
 determining which method of delivery will be most beneficial to the project schedule and budget. The result of
 the workshop was the CM/GC delivery method would
 be the best to achieve the successful delivery of this
 project with the proposed schedule. Staff will be moving forward with evaluating and making recommendations as the process continues.

Budget: \$6,500,000, and Development Escrow

Completion: Summer 2023 **Targeted Construction:** 2023

7. Plum Creek Parkway Widening and Plum Creek Parkway/ Gilbert Street Roundabout Project – This project will implement the Transportation Master Plan's identified improvements for this corridor. The addition of the remaining two lanes of the master planned four-lane roadway on Plum Creek Parkway between Eaton Street and Ridge Road. Not only will it include the addition of two lanes, but also bicycle 8. and pedestrian multi use lanes. It will also include roundabout modifications at Ridge Road. The improvement has been broken out into three phases in order to meet the department's objectives. Phase 1A included portions of storm sewer improvements between Gilbert and Eaton. Phase 1B includes all roadway/utility/pedestrian access improvements between Gilbert and Eaton, including the implementation of roundabouts at the intersections of Gilbert and Eaton. Phase 2 includes all roadway/utility/pedestrian access improvements between Eaton and Ridge Road.

Phase 1A: Drainage Improvements: Construction (100%) -

The following is a summary of activities performed this month:

Staff compiling final contract documents to begin warranty period

Budget: \$1,158,300

Construction Completion: Complete

Phase 1B: Plum Creek Pkwy Widening and Roundabout: Construction (95% Complete) - The following is a summary of activities performed this month:

- Completed top mat paving (asphalt)
- Installed final striping and thermo-plastic markings
- Completed seeding and final stabilization for roadside improvements
- Poured splash block at roundabouts

June brought completion of roadway construction despite significant weather impacts. Top lift asphalt was placed throughout site followed by thermo-plastic markings and final striping work. The project was successful in completing the remaining work without significant impacts to traffic, thanks to robust phasing and public relations efforts. Remaining work includes: cobble installation inside roundabouts, detention pond finish grading and seeding, and Baldwin park irrigation and landscaping restoration work.

Budget: \$7,507,723

Construction Completion: July 2021

Phase 2: Design and ROW Acquisition (90% Complete) – The following is a summary of design activities performed this month:

- Town departments completed 90% reviews of the design and associated reports
- Review meetings were held with stakeholders/ reviewers as necessary to determine solutions to offsite drainage design
- Property acquisition briefing held with Legal department ahead of acquisition activities

Budget: \$794,375

Design Completion: Summer 2021 ROW Completion: Fall 2021 Targeted construction: 2022

- B. Downtown Alley Improvements: Four alleyways in the downtown area are beyond their service life and are not providing an appropriate level of service. Reconstruction of alley pavement in addition to drainage improvements and sanitary sewer system replacement will renew the service life of both the pavement and sanitary sewer in the area.
 - 2 Alleys (Westerly Alleys) Located West of Jerry St. between 5th and 3rd streets
 - 2 Alleys (Easterly Alleys) Located East of Perry St. between 6th and 4th streets

Phase - Construction

- Notice to Proceed was issued to Elite Surface Infrastructure for construction on 6/2/21.
 Crowfoot Valley Road Widening — Crowfoot Valley Road will be widened between the Knobcone Drive and Macanta
- Installing underground utilities (sewer line) in alley 14 (between 5th St. and 4th St. / Jerry St. and Elbert St).
- Continue with public outreach/coordination efforts to minimize construction impacts to affected businesses.
- Continued the review of submittals from the contractor
- Maintaining site erosion control measures.
- Working with Black Hills on relocating gas lines.

Budget: \$877,900 Completion: Fall 2021

9. Wilcox and South Roundabout – This intersection is currently controlled by stop signs in two directions. As the traffic volumes increase, this existing traffic control will not be the most efficient and could contribute toward increased congestion and accidents. This project is for the design of a roundabout intersection, which will improve operations and minimize accident potential.

Budget: \$2,270,243

Construction Completion: Completed

10. Fifth Street Widening Project Design – Fifth Street is a major arterial connecting local and regional travel between the easterly portions of Town and I-25. Roadway and pedestrian improvements for Fifth Street have been identified within the 2017 Transportation Master Plan (TMP) that will maintain adequate capacity and ensure efficient road network connections for future development.

The Fifth Street Widening project will complete all design elements for implementation of the full build-out transportation network from South Gilbert Street to Ridge Road as identified in the TMP. The transportation network improvements identified in the TMP are as follows:

- Widening to a 4-lane major arterial configuration from Woodlands Blvd. to Ridge Road
- Implementation of on-street bike lane/shoulder from South Gilbert Street to Ridge Road
- Addition of sidewalk from Woodlands Blvd. to Ridge Road along south side of Fifth Street

Fifth Street Widening Project Design (0% Complete)- The following is a summary of activities performed this month:

- Obtained Town Council approval for the design service agreement
- Issued NTP for design (June 16, 2021)
- Began data acquisition activities
- Continued stakeholder coordination with CDOT in relation to grant funding

Budget: \$1,500,000

Design Completion: December 2021 **Right-of-way acquisition:** 2022

Targeted construction: 2023 (looking to advance all construction to 2023 in order to use \$3.5M DRCOG grant funding)

11. Crowfoot Valley Road Widening — Crowfoot Valley Road will be widened between the Knobcone Drive and Macanta Blvd. Currently, this section of Crowfoot Valley Road is a two lane transition section of asphalt roadway with portions in the Town of Castle Rock and in Douglas County. Recent improvements have been completed at both ends of this project along Crowfoot Valley Road, and the intent of this project is to complete improvements to the "gap" between these improvements. The proposed roadway will be a fourlane section, including painted median / turn lanes, with bike lanes in both directions.

Phase: Design—Douglas County has completed the utility locates and field survey. The consultant continues with data research, including drainage report review and typical section review. Town staff has submitted initial comments on the preliminary horizontal alignment design and conceptual intersection design. The consultant is work to evaluate and make recommendations on Town comments.

Budget: \$2,000,000 (Town contribution to construction

funding; IGA to be executed with County)

ROW Acquisition: End of 2021

<u>Traffic Signal System Upgrades</u> – This project is a multi-year signal system upgrade project that began in 2015 and is ongoing as funds are available. The project has included proven technology advances at signalized intersections, for our daily operations, and for communications between the center and each intersection.

- Staff is a part of the CDOT managed, adaptive signal system project that will implement adaptive signal timing on Founders and Meadows Parkway, as well as a six abutting Town signals. In June, the Town provided the project consultant, Kimley-Horn, with traffic signal detection plans. Town IT staff is coordinating with the consultant and CDOT to establish protocol for data sharing.
- In June the Town project to implement automated traffic signal performance metric (ATSPM) system improvements, which includes installing advance detection equipment and improving ATSPM software dashboard functions. Staff completed draft bid documents for Phase I and are awaiting on notice to proceed from CDOT. Once notice is given, Town will purchase detection equipment and advertisement for installation.

2020 Intersection Signalization Construction Project – Signals were constructed at Meadows Boulevard & Cherokee Drive (mast arm signal) and at Hwy 85 & Liggett Rd (temporary span wire signal).

- Signals are operational and performing well, and staff will continue to monitor them.
- The intersection of Hwy 85 & Liggett Rd is awaiting street light luminaire arms which will be delivered and installed by July 21.
- Town staff completed final punch list for Hwy 85 and Liggett Rd
- Citizen's concerns over the new luminaires at Chero-

the luminaire of concern away from nearby residenc-

Budget: \$588,000

Construction Completion: July 2021

Rectangular Rapid Flashing Beacon (RRFB) 2021 Project - This project completes about half of the requested pedestrian beacon crossing locations that staff received in 2019.

- We are awaiting equipment delivery for the 10 Carmanah RRFB locations.
- Staff is working on design plans for the RRFB installa-
- Equipment will be procured and then installed by the begin work in Signs and Markings team in summer 2021.
- 11 additional locations have been identified and the cost is estimated at \$267,000, but has not moved beyond the planning phase.

Budget: \$250,000

Construction Completion: Fall 2021

2021 Pavement Maintenance Program (PMP)

The 2021 PMP will focus its efforts in the Central/North PMP area with additional work taking place on primary streets (Meadows Blvd./Castleton Dr., Crystal Valley Pkwy., Front Street and Scott Blvd).

Meadows Blvd/Castleton Court Concrete Restoration Project began Monday, May 17. Crews continue work on the removal and replacement of curb, gutter & sidewalk, concrete panels, diamond grinding, joint sealing and new pavement markings along Meadows Blvd., between Coachline Rd. and Prairie Hawk

The contractor will then move operations Castleton Ct. to begin removals on Monday, July 12. All planned work is scheduled to be completed by July 28.



The contractor

will then begin work on streets included in the expanded scope which will be funded with project savings.

kee and Meadows is being addressed by Town staff, The Asphalt Overlay Project began construction April 19. Crystal who have ordered dimmable photocells and will aim Valley Parkway and Front Street were completed during the month of June. Some night work was involved so not to disrupt local businesses. Asphalt milling on Scott Blvd., Diamond Ridge Pkwy., Kimberly Dr. and Kryptonite Lane, are currently underway with asphalt paving and pavement markings to follow. All planned work is expected to be complete by July 26 the contractor will then begin work on streets included in the expanded scope.

> The Slurry Seal Project began Tuesday, June 22 with asphalt patching. The contractor repaired a damaged section of Prairie Hawk Drive that posed a safety risk to the traveling public. The

contractor will the Central area and then move to the North area. Asphalt patching is expected to take a few weeks. Slurry Seal placement will begin Tuesday, July 6. All planned work



is expected to be complete by August 27.

The Sidewalk, Curb and Gutter Project was completed in the



month The May. contractor completed all punchlist items. The project came in under contract time and budget.

The Full Depth Reclamation Pro-

ject was completed in the month of May. The contractor completed all punchlist items. The project came in under contract time and budget.

2021 Facilities Parking Lot Improvements Program

This year's maintenance program will see needed improvement made to fourteen (14) parking lots from various Town Departments. These parking lots will see various improvements such as; curb, gutter & sidewalk replacement, asphalt mill and overlay, asphalt patching, slurry seal and seal coat.

Parking lots include the following:

- Service Center front & back (2 lots)
- Red Hawk Golf Course (North Half)
- Red Hawk Maintenance Shop
- Rhyolite Park
- Rec. Center
- Castle Oaks 6 Well Field
- Castle Oaks 7 Well Field
- Prairie Hawk Well Field (A7)
- Canyon South Well Field
- Woodlands 1 Well Field
- Tank 16
- Sellars Gulch Lift Station
- Mitchell Creek Lift Station

Work is scheduled to begin in early September and be complete by October 29.

2021 Bridge Maintenance Program (BMP)

Bids for the 2021 Bridge Rehabilitation for the S. Wilcox Bridge over E. Plum Creek will be submitted for competitive bids upon Colorado Department of Transportation's completion of environmental studies and the consultant submitting an estimation of costs. This project is expected to start in September and be complete by the end of October 2021 pending weather.

Development Division

Review and Permitting

Development Review - All 56 reviews were completed on or before the due date by the PW Development Services Team. **Permitting & Inspection** – 28 right-of-way permits were issued.

Transportation Planning & Traffic Engineering Division

Taxi Voucher Program

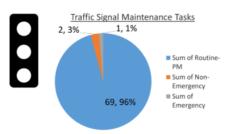
For the month of June, the Taxi Voucher Program funded 179 rides; which is a 62% increase is to last year's June total of 104 rides and a 6% increase from last month's total rides (169). Transportation services are provided for Castle Rock citizens who cannot drive, have a disability that prevents them from driving, or do not have access to a vehicle. In June, 21 individuals used the Taxi service. Of those individuals, 61% of the rides were for work, 20% for shopping trips, and 19% for medical appointments. Sixty-two rides were provided for people without

access to a vehicle, 48 rides to seniors, and 69 rides to disabled riders.

The Castle Rock Senior Center provided a total of 622 rides in June.

Traffic Engineering and Operations

Traffic Signal Operations and Maintenance

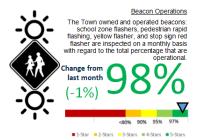


* Most frequently visited signals: Meadows Blvd and Sobercat Way, 5th St and Woodlands Blvd, Plum Creek Pkwy and Interstate 25 Ramp, Ridge Road and King Soggers, Crowfoot Valley Rd and Fire State 151.

Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

For the month of June, the crew accomplished 1402 tasks. Of these tasks, 93 of them were sign work activities related to fabrication, install, repairs, replacements, inspections and investigations. 106 were related to signs and markings projects. We had tasks and investigations. We completed 946 marking tasks related to install, inspections, and replacements. Of the other tasks, 10 were locates, four work zone tasks, 12 special events, and there were three traffic count tasks.

In June, annual paint maintenance work continued for Town crews. Contractor signalized intersection markings work began last month, and a quarter of PMP project areas have had markings replaced.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address quality of life items associated with vehicular traffic on local neighborhood streets and certain collector roadways. Town staff has been collecting homeowner ballots regarding the Rising Moon Way plan. The voting period ends July 2nd. The homeowners in the study area will be notified of the results. If the plan passes, construction will begin late summer/early fall. Staff also received NTCP inquiries for two new streets, 4th Street near Lewis, and Bellavista Street. Both neighborhood point of contacts have been sent the initial support petition and program policy document to review and complete. Results of the speed studies for Black Canyon, Riverwood Way & Tree Top Drive will be shared with the point of contacts in the coming weeks. If the street does not qualify for the program, it will be eligible for evaluation in one year.

Castle Rock Downtown Alley Master Plan:

In June, a draft Existing Conditions report was provided to staff. It is under review and will be modified again before being finalized. Town staff has been working with the consultant's public Outcome: Technician productivity was 75.6%. This productivity outreach team and developing the outreach and communications plan. The first public event has been identified for late July. It will consist of a Community Workshop including stakeholders and the general public.









As you drive around Castle Rock and see many different departments providing first-class service, you will notice how they rely on their Town-issued vehicles. The Fleet Division takes great pride in knowing that those vehicles are reliable and safe to operate.

Fleet Services Division continues to make sure that Town vehicles and equipment are ready for operation. This includes public safety vehicles like Police & Fire but also other department vehicles that need to be in use to provide great service for our resi-

172 RRFB related tasks, including windshield inspections, repair The Fleet Division has started our annual auction of used vehicles and returns have been good. Auction of used vehicles brought in \$121,530 for the month of June.

> As we enter into the summer months we start to slow down just a bit which the fleet team used to make some repairs around the shop and complete a lot of cleaning. Revenue from repair & maintenance of Town vehicles was \$65,129 and technician productivity was very good at 75.6%.

> Fleet staff also completed interviews for the open technician position and has hired a new technician who will start in July. Fleet staff continues to work on ordering new vehicles and equipment for 2021, so far \$2.6M in new vehicles have been ordered.

> Objective/Benchmark: Complete at least 75% of our work orders within 24-hours of coming to shop.

> **Outcome:** Fleet team completed 79.1% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quickly vehicles and equipment get serviced and repaired and back on the job. This benchmark number is just under our monthly objective.

> Objective/Benchmark: Town vehicles and equipment available for use 95% of time.

> Outcome: Town vehicles and equipment were available 97.1% of the time. This high fleet availability rate means that Town vehicles and equipment are ready when they are called upon to perform.

> Objective/Benchmark: Technician productivity percentage of 70% (APWA standard)

> number was a very good increase considering the difficulty in



Using forklift to weld on sewer truck

getting some parts and some larger jobs that were completed. Overall we completed 107 work orders and processed \$65,800 in parts and labor and another \$40,000 in fuel transactions. getting some parts and some larger jobs that were completed. Overall we completed 103 work orders and processed \$87,800 in parts and labor and another \$45,000 in fuel transactions.

Street Operations &Maintenance Division

During the month of June, the Street Operations & Maintenance Division (SO&MD) performed work in the following maintenance operations:

- *Road Verge Maintenance
- *Sweeping
- *Equipment Maintenance
- *Pothole Repair
- *Crack Seal
- *Special Operations

Road Verge Maintenance

In June, Streets Division personnel carried out road verge maintenance operations, which include trash and debris removal, mowing, trimming, and road shoulder repair. Crews spent 227 hours undertaking trash removal operations and covered 96.65 edge line miles of roadway, resulting in 148 bags of trash removed and disposed of properly. Mowing operations were carried out on 101.91 edge line miles of roadway, requiring 207 labor hours. And 14 labor hours were dedicated to rebuilding a road shoulder along 5th street.

Pothole Repair Asphalt Patching

In June, crews spent 253.5 labor hours undertaking various asphalt repair projects throughout Town. Crews completed repairs on 9 utility patches for the Water Department, as well as numerous asphalt failures and potholes around Castle Rock. Additionally, crews responded to an emergency road failure in Plum Creek Pkwy. Crews cut out and removed the damaged portion of the roadway and maintained a temporary patch until permanent repairs could be executed. The coordination between Engineering, Streets, and Signs and Markings resulted in minimal interruption of operability of the roadway. In performing these operations, the team used 45.3 tons of hot mix asphalt and 330 lbs. of cold mix.

Crack Seal Operations

In June, Streets Division crews completed 27.72 lane miles during the yearly maintenance portion of crack seal operations. Crews dedicated 797 labor hours applying 29,050 lbs. of sealant to the roadways in the PMP (Pavement Maintenance Program) West area. Less than 4 miles remain before the operation is completed.

Map: Orange = planned Purple = completed



Street Sweeping Operations

In June, crews spent 111.5 labor hours sweeping the Town to support the morning downtown and business area sweeping program. The crew swept a total 218 lane miles of Town roadways removing 57 cubic yards of material. These operations serve to enhance the environmental and aesthetic character that makes Castle Rock unique.

Special Operations

During the month of June, Streets Division personnel committed 109 labor hours stockpiling 1375 tons of salt needed for the upcoming snow season. Purchasing and stock piling the material in June and July ensures the best possible price and availability of the product and thus, value for the Town.

Equipment Maintenance

Equipment maintenance is a never ending and vital operation that allows the continued operation of the Division. Crews spent 95 labor hours working to maintain the crack seal machines, dump trucks, and street sweepers specifically.

Looking Ahead

In July, crews should complete crack seal maintenance within the first few days of the month. Additionally, mowing operations will be concluded for the initial round. However, the large amount of rain the area has seen this last month will necessitate continued inspection of vegetation height and will likely result in the mowing operations being restarted a little earlier than traditionally done. Bridge painting operations are also planned if weather permits. An additional 525 tons of salt will be stockpiled to try to maximize the amount of material on hand to respond to the upcoming snow season.