



Monthly Report

August 2019

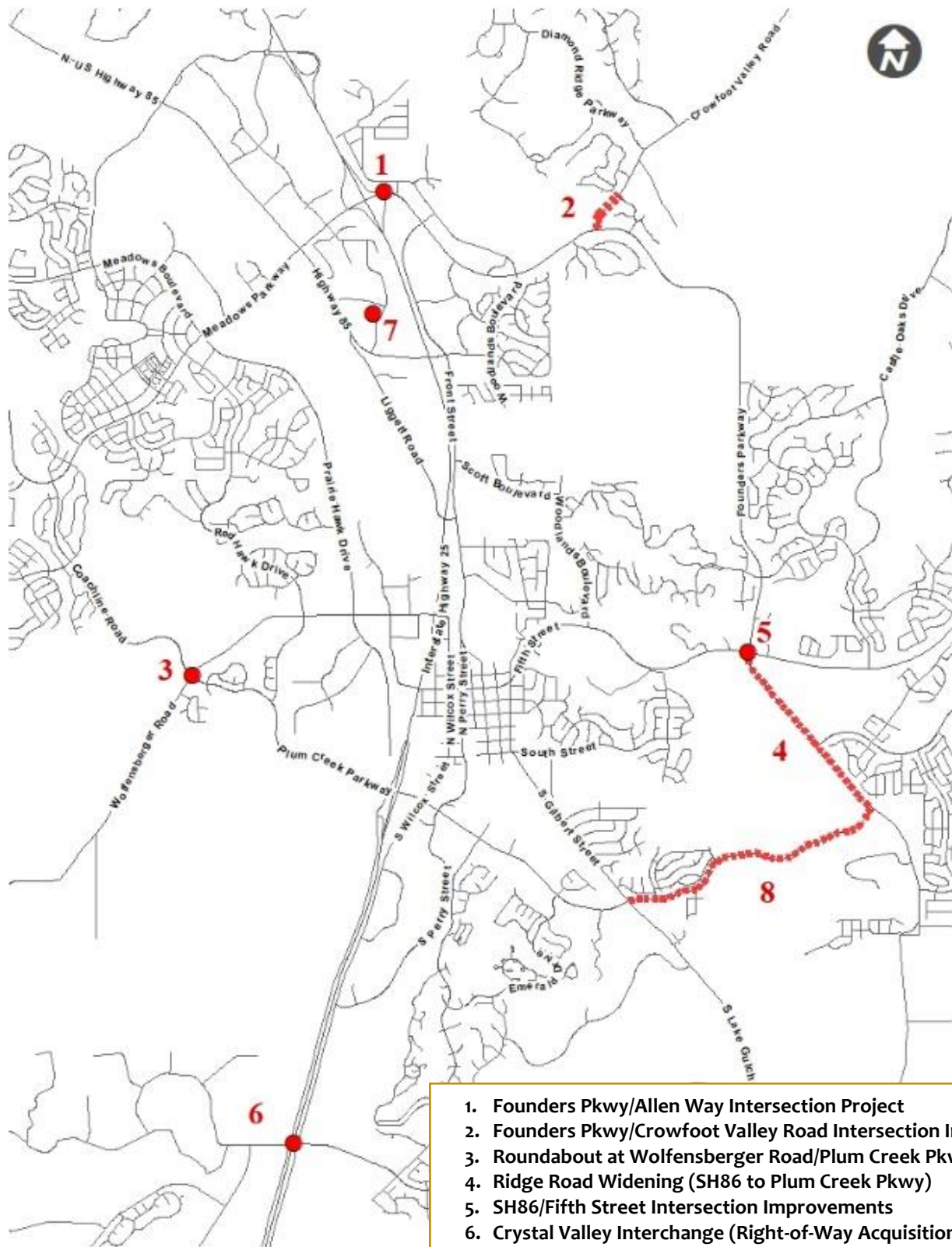


The Public Works Department operates under the CAN DO philosophy – We are committed to doing the job right with a positive attitude while staying dedicated to meeting the needs of our Town values and continually searching for opportunities to improve.

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



Capital Projects



1. Founders Pkwy/Allen Way Intersection Project
2. Founders Pkwy/Crowfoot Valley Road Intersection Improvements
3. Roundabout at Wolfensberger Road/Plum Creek Pkwy
4. Ridge Road Widening (SH86 to Plum Creek Pkwy)
5. SH86/Fifth Street Intersection Improvements
6. Crystal Valley Interchange (Right-of-Way Acquisition)
7. Public Works Facility Expansion
8. Plum Crk Pkwy Widening & Plum Crk Pkwy/Gilbert Roundabout

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 – Noraa Concrete Construction Corporation was awarded the construction contract and a pre-construction meeting was held on June 19. The following is a summary of the construction activities that took place during this month:

- Continued removals of existing concrete pavement, sidewalk and curb & gutter
- Continued work on traffic signals; including conduit and erecting poles
- Paved new concrete pavement on half of the NB I-25 On-Ramp
- Paved temporary asphalt pavement and switched traffic on the NB I-25 On-Ramp
- Removed remaining existing pavement on NB I-25 On-Ramp
- Began construction of a retaining wall with natural stone
- Constructed new drainage inlets

Budget: \$2.64M

Construction Completion: 4th Quarter 2019

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:

- An additional eastbound left turn lane from Founders 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, Intersection Improvements:

- The contractor has placed the lower lifts of asphalt pavement along the south side of Founders Pkwy, the remaining items include the top lift of asphalt pavement, guard rail installation, and general clean up in this area.
- Temporary asphalt pavement was placed so Crowfoot traffic could be shifted to the east to allow the contractor to work on the free right turn lane.
- The contractor has been constructing the retaining wall on the west side of Crowfoot.
- The project is currently a week behind schedule. The contractor is indicating additional crews are scheduled to be assigned to the project, and will be back on schedule by the end of September.

Budget: \$3,550,000

Construction Completion: Winter 2019

3. **Wolfensberger Road/Plum Creek Parkway**

Roundabout Project - This project will accomplish the design and construction of a roundabout at this intersection to improve operations and minimize potential accidents.

Phase: Construction – The following construction activities were performed by Rocky Mountain Excavating:

- Completed punch-list items
- Closing out project

Budget: \$1.14M

Construction Completion: Spring 2019

4. **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 - Stanley Consultants, Inc., has been awarded the design contract for this project. 100% plans have been provided. A service agreement has been approved to initiate the ROW acquisition. Staff is working with IREA to initiate agreements to have their facilities relocated.

Budget: \$400,000

Design Completion: Spring 2019

5. **Founders Parkway (SH86)/Fifth Street Intersection Improvements** – The Town’s design consultant, Short Elliott Hendrickson, Inc. (SEH) investigated multiple alternatives to address safety concerns and capacity issues at this intersection. A roundabout was the preferred alternative by CDOT, who owns the right-of-way for this intersection.

Phase: Design

- The DRCOG grant was awarded to the Town.
- Project will be designed per Federal requirements/standards.
- Town is set to meet with CDOT to establish rolls and responsibilities for the design and construction of the intersection improvements

Budget: \$340,000

Design Completion: Pending award

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

- Appraisal Services – Working on Appraisals
- Acquisition Services
 - East Side of I-25 – Continued initial appraisal discussion
 - East Side of I-25 – Continue to work on offer letters.
 - West Side of I-25 – Town received approval from CDOT and FHWA on the Access Line Locations..

Budget: Development Escrow

Completion: Fall 2020

7. **Public Works Facility Expansion** – This project consists of the addition and renovation of the Service Center building.

Phase: Construction

Mark Young, the general contractor for the Public Works Addition/Renovation had made great progress during the month of April. Work has continued on both the new phases of the addition which include; 1. The addition of two new fleet service bays on the north side of the existing building and 2. New office space on the south side of the existing building.

Fleet Service Bays:

All systems have been installed and are currently being tested. The General Contractor is currently working with the Building & Fire Department on completing their final inspections in preparation for the Temporary Certificate of Occupancy (TCO). The only work remaining in the space is sealing the floor which will be the last item as it will need approximately one week cure time. Once the floor is fully cured and the TCO has been received, Owner training will commence to ensure that the employees are familiar with all the new systems.

Office Addition: The exterior envelope of the building is nearly completed minus a few pieces of glazing and some detail work on the roof and parapet. The metal panels on both the new addition and the existing building have been installed. The existing concrete at the main entrance has been removed in preparation for the new layout and the low water use landscaping.

The interior of the building is progressing along smoothing with all the interior wall rough-ins completed, drywall hung and finishing the drywall well underway.

Misc.: In the north yard, the new exit onto Castleton Ct. has been completed with a security gate and pressure plate to automatically open the gate when a vehicle pulls up. The entire parking lot striping has also been re-striped. The engine block heaters have been installed and have the electrical wires pulled to keep the diesel plow trucks warm in the winter. The existing gates and motors off of Justice Way are currently being replaced.

Upcoming Activities: The fleet service bays are in the process of obtaining TCO from the Building and Fire Department. Once this is received, the bays will be turned over to Fleet Services and placed into full service. The office addition will move towards installation of finishes such as prime and paint, ceiling grid, placing mechanical and electrical rough in the gridded ceiling and getting geared up for landscape installation. The existing restrooms will also undergo remodeling during the month of September.

Budget: \$4,960,349

Construction Finish: Spring 2020

8. **Plum Creek Parkway Widening and Plum Creek Parkway/Gilbert Street Roundabout Project** – This project will address the need for the following improvements:

- Convert Plum Creek Parkway/Gilbert Street intersection into a roundabout
- Reconstruct the existing 2-lane section of Plum Creek Pkwy from Gilbert to Eaton streets
- Widen Plum Creek Parkway from Gilbert Street to Eaton Street
- Widen Plum Creek Parkway from Eaton Street to Ridge Road

Phase: Design and ROW Acquisition –

- Continued working on the Widening of Plum Creek Pkwy from Eaton St. to Ridge Road design package.
 - Continued development of construction plans
- Cont. the development of the project specifications and bid package.
- Cont. to update the plans to reflect the drainage design package.
- Cont. utility coordination for utility relocations

Drainage design package

- Finalized construction bid package
- Advertised for construction bids

Right of Way Acquisition / Appraisal

- Acquisition Services
 - Continued coordination with property owners who are obtaining appraisal
 - Mailed out offer letters to property owners.

Budget: \$794,375

Design & ROW Completion: Spring 2019

Traffic Signal System Upgrades (Phase 3) –This project is the third phase of a multi-year signal system upgrade project that was first approved as part of the 2015 budget process. The two main components of the Phase 3 project are the installation of closed circuit television (CCTV) and travel time monitoring devices at key intersections.

- The installation of CCTV cameras is now complete all cameras are reporting video back to the Service Center.
- All travel time monitoring devices on Town owned signals are operational.
- Staff continued conversations with CDOT about travel time device installations on

CDOT signals. The current plan is for the Town to procure the devices and CDOT will install and maintain the devices. A data feed will be shared through CDOT for the Town to perform analytics.

- COTrip is now receiving and publishing Castle Rock's travel time data.
- Staff is still working with CDOT on how to share CCTV still images on COTrip.
- A continuation of the phase 3 project is being undertaken with the incorporation of Automated Traffic Signal Performance Measures (ATSPM). A proof of concept project is wrapping up along the Plum Creek Parkway corridor between Emerald and I-25.
- The use of ATSPMs provides a better understanding of system operation and maintenance needs and is helping us better serve our stakeholders in a cost effective manner.
- In August, staff continued reviewing metrics on Plum Creek Parkway using the SPM data. There is enough information to conclude this trial and understand that continuing with SPM data implementation is beneficial.
- We plan to continue implementing SPM and advanced detection devices on the consistently lowest performing corridors and eventually the entire system.

Budget: \$520,000

Construction Completion: Summer 2019

2019 Intersection Signalization Construction Projects

This project will construct one new signal at Meadows Boulevard / Future Street and one replacement traffic signal at Factory Shops Boulevard / New Memphis Court.

- In August, Meadows Blvd. and Future St. became operational and is currently being monitored for operational issues. All work is now complete.
- Punch-list items will follow at both locations and are expected to be completed by Fall.

Budget: \$667,000

Construction Completion: Fall 2019

2019 Illuminated Street Name Sign Project –This project will be installing illuminated street name signs at several signalized intersections in Town along the major “ring” road that loops around the Town of Castle Rock.

- In August, sign installations were complete at Factory Shops Blvd / New Memphis Court, and Meadows Blvd. / Future Street.
- Other sign installation intersections in 2019 currently under construction include, I-25 northbound and southbound off-ramps and Meadows/Founders Parkway, signs will also be placed at I-25 / Plum Creek Parkway, Founders / Crowfoot Valley Road, and Founders / Allen.

Budget: \$55,000

Design Completion: End of 2019

Engineering Division

2019 Pavement Maintenance

Program (PMP) — The 2019 PMP will focus its efforts in the West PMP area with additional work taking place on primary streets (Meadows Boulevard, Wolfensberger Rd., Butterfield Crossing, Foothills Dr., Cherokee Dr., & Morning View Dr.).

The Slurry Seal project is complete with staff walking the streets to document punchlist item to address prior to project closeout.



The contractor is currently addressing punchlist items.

Butterfield Crossing was completed this month with new striping pattern ADA ramps and other improvements. Staff is working with the contractor to complete all punchlist items to place project into the warranty period.



Full Depth Reclamation (FDR) work is complete in all phases. FDR is the process of blending the existing asphalt pavement into the subgrade to improve the quality of the material, then paving new asphalt mats. Once the contractor has completed all punchlist items, the project will be placed in the warranty period.



Concrete restoration work on Meadows Blvd. and

Wolfensberger Rd continued during the month of July. Curb, gutter and sidewalk repair, ADA ramp install, removal of concrete pavement, diamond grinding and joint sealing were all part of the scope of work. The contractor is currently finishing night work on Wolfensberger Rd. and the project is on schedule to be complete by August 30.



2019 Facilities Parking Lot

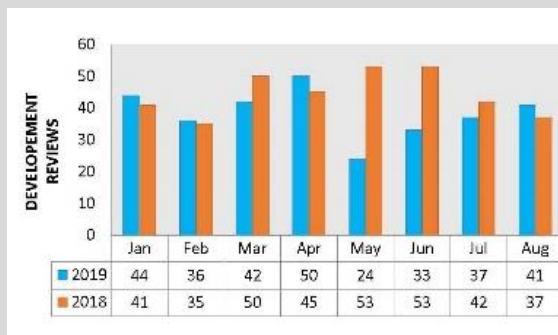
Improvements Program - This contract will see needed improvements to three parking lots at Town Parks, and one Parking lot in the Downtown area as follows:

- Crystal Valley Tank
- Coachline Tank
- Red Hawk Golf Course (South half)
- Founders Park (Asphalt and Concrete sections)

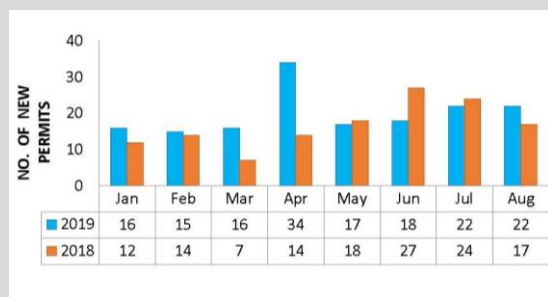
A pre-construction meeting was held on July 31. Work begins in early September and continues into October. Staff will be marking up the limits of construction as well as working with CR Water and the Red Hawk Golf Club to coordinate the work.

Development Review and Permitting

Development Review - All 41 reviews were completed on or before the due date by the PW Development Services Team.



Permitting – 21 right-of-way permits were issued.



Transportation Planning & Traffic Engineering Division

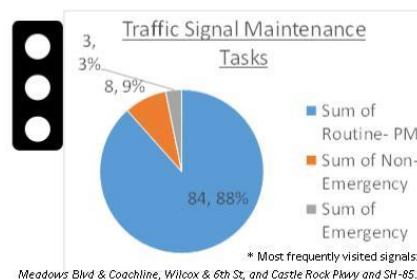
Taxi Voucher Program

For the month of August, the Taxi Voucher Program funded 139 rides; this was basically the same as last August's total of 140 rides. Ridership this month is down 13 rides from last month. 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 August, 20 individuals used the Town's Taxi service. Of those that used the service, 83% of the rides were for work, 9% were for grocery shopping trips, and 8% for medical appointments. Four new people have

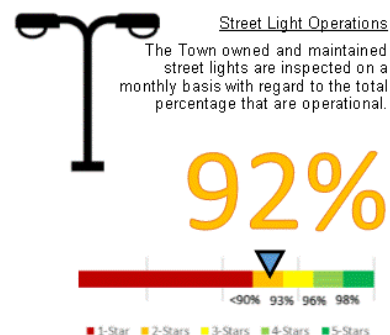
registered for the service. The Castle Rock Senior Center provided a total of 618 rides in August

Traffic Engineering and Operations

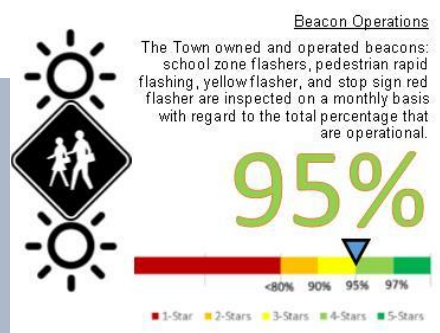
Traffic Signal Operations and Maintenance



Street Light Operations



Beacon



Operations



Street Signs and Pavement Marking Maintenance

During August, the Signs & Markings crew completed 678 tasks. Tasks included windshield inspections of both contractor and Town staff work. This included inspections to prepare for the fall contractor striping effort coming in September. In addition, special event coordination was completed for the on-going Farmer's Market and the upcoming Artfest. Finally, the crew painted arrows in downtown along with crosswalks and stop bars too and striped the Rec Center parking lot while it was closed for maintenance.

Transportation Planning

Neighborhood Traffic Calming Program (NTCP):

The NTCP exists to verify and address resident speeding concerns on local neighborhood streets and certain collector roadways. There was one new inquiry for Ridge Oaks Drive. The following streets have active traffic calming programs occurring;

- Diamond Ridge Pkwy
- N. Meadows Drive

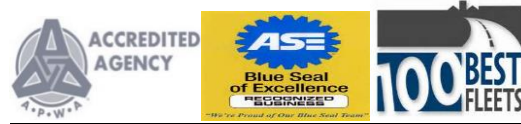
DRCOG 2021 – 2023 Transportation Improvement Program (TIP):

The DRCOG Board approved the 2021-2023 DRCOC TIP, which includes \$4.225 million in federal funding for the SH-86/Founders Pkwy/5th Street/Ridge Road intersection project. Douglas County has also agreed to contribute \$1 million for the project. Currently, the total cost of the project is estimated at \$6.5 million.

Castle Rock Transit Feasibility Study:

The kick off meeting was held in August with the technical review committee for the Transit Feasibility Study. The consulting firm Felsburg, Holt, and Ullevig along with their team has been retained to conduct the study. It is expected to last approximately 12 months.

Fleet Services



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 was busy in August 2019 Keeping Castle Rock on the move. The Fleet Division billed out \$58,000 of parts and labor and met the following objectives and benchmarks:

Objective/Benchmark: Complete at least 75% of our Work orders within 24-hours of coming to shop.
Outcome: Fleet team completed 77% of the work orders within 24-hours of opening repair requests or service requests. This benchmark number shows how quick the Fleet Division is working on vehicles to get them back on the road.

Objective/Benchmark: Town vehicles and equipment available for use 95% of time.
Outcome: Town vehicles and equipment were available 95.4% 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)
Outcome: Technician productivity was 74.1%. This was above our benchmark of 70% compared to the standard set by the American Public Works Association (APWA).

Additionally, Fleet was able to put one new truck into service: This was a F250 equipped with snowplow for the Parks Department. Fleet technicians enrolled in advanced Ford training last month. The overall work orders completed were 140, which is higher than our average of 125 a month.



New plow truck for the Parks Department.

Street Operations & Maintenance Division

During the month of **August**, the Street Operations & Maintenance Division (SO&MD) performed work in five (5) maintenance operations:

- Crack Seal Operations
- Asphalt and pothole patching
- Road Shoulder Maintenance
- Special Operations
- Vegetation Control
- Sweeping

Crack Seal Operations.

Crack Seal crews have been crack sealing the east portion of town between Gilbert and Ridge Rd. to advance the maintenance portion of the crack seal program. Crews completed 19.92 lane miles of roadway using 20,000 pounds (10 tons) of crack seal material.

Asphalt Patching

In August, Streets O&M crews have used 26.26 tons of hot mix asphalt to repair potholes and patches in the roadway. Crews completed full depth patching on Meadows Parkway and repaired potholing on Plum Creek Parkway, Ridge Road and Perry Street.



Vegetation Control

Streets Division crews worked to knock down vegetation on Public Works maintained road verge. During this process the crews will clean up trash, mow and trim the vegetation in the verge area. 104 Edge Line Miles were completed in the month of August. In addition



to mowing and trimming the crews also worked to clear 20 cubic yards of tree and shrub trimmings to enhance visibility for signage and intersections. 28 bags of roadside trash were also removed from the road verge areas.

Special Operations

Numerous special operations were underway during the month of August. Preparations for the winter season included mixing salt/sand blend, installing new sanders on some of the plow trucks, and development of an updated snow plow training course. Recycled asphalt is also being stockpiled for an upcoming paving project in September for the Encore project next to Town Hall.



Sweeping

Streets crews also undertook the planned sweeping of the downtown and business areas cleaning a total of 32.41 lane miles of roadway and removing 20 cubic yards of detritus from downtown.

Looking Ahead

Looking into the month of September the Streets Division is planning to begin the paving for the parking lot for Town Hall, Beginning work on the Pavement Maintenance Program portion of Crack Seal Operations. Bridge Maintenance Operations should begin on the Plum Creek bridge west of Wilcox St. after being delayed for asphalt patching needs. Finalization of the Snow Plow training curriculum and scheduling of the class for the Town's Snow control Operations. Asphalt repair operations are also expected to continue.