

**Public Works Department** 117 N Molalla Avenue PO Box 248 Molalla, Oregon 97038 Phone: (503) 829-6855 Fax: (503) 829-3676

#### 06/31/19

TO:	Steve Mrazik, Water Quality Manager Oregon DEQ 2020 SW 4 <sup>th</sup> Avenue, Suite 400
FROM:	Andy Peters, Operations Supervisor, City of Molalla
CC:	Gerald Fisher, Public Works Director, City of Molalla Dan Huff, City Manager, City of Molalla Steve Major, Dyer Partnership

#### **RE: 2019 TMDL Report for City of Molalla**

Mr. Mrazik,

Attached is the 2019 TMDL Temperature and Bacteria Report Matrix for the City of Molalla, and supporting documentation. This year we made some updates to the measurments in order to make recording and reporting information easier and more accurate. This report will be placed in the City Council Packet for review, in accordance with the plan, at either the August or September regular meeting.

Respectfully,

Andy Peters City of Molalla Public Works Operations Supervisor (503) 829-6855 x220 Cell: 503-793-0507 apeters@cityofmolalla.com 117 N Molalla Ave Molalla, OR 97038

	POLLUTANT: Tempe					of Molalla: TMDL In	mplementation Tra	acking Matrix
SOURCE What sources of this pollutant are under your jurisdiction?	<b>STRATEGY</b> What is being done, or what will you do, to reduce and/or control pollution from this source?	<b>HOW</b> <i>Specifically, how will this</i> <i>be done?</i>	FISCAL ANALYSIS What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?	MEASURE How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?	TIMELINE When do you expect it to be completed?	MILESTONE What intermediate goals do you expect to achieve, and by when, to know progress is being made?	ADAPTIVE MANAGEMENT APPLIED Indicate how strategies have changed with annual review reports.	STATUS Include summary and date.
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Enforce existing Municipal Code17- 2.4.030 for new development: 50 ft. riparian and wetland setback and protection of native vegetation.	Code enforcement staffing; 0.20 FTE is currently funded.	Track enforcement actions and violations as well as development plan review. Record square footage of riparian area protected with all development.	On-going; code adopted	Retain all existing riparian vegetation on developments planned through 2020, as required by Municipal Code 17-2.4.030. Report areas protected in annual TMDL review report.	6/30/19: No Changes	6/30/19: protection of riparian zones added to the Plan Review Checklist. New development approvals are reviewed to this standard. Code Enforcement funding and staffing source continues, and has also been budgeted for FY 19/20 and approved by City Council.

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Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Implement Phase 1 of Bear Creek Greenway Project. Approximately 7,500 LF of 8-10' wide pathway through private industrial and residential lands.	\$480,000	Completion of trail from Molalla Forest Rd. to Molalla city limits.	5-15 years	Annual review of budget for possible implementation or private development. Report funding status in annual TMDL review report.	6/30/19: no changes	6/30/19: this project remains in review based on potential private development
Lack of shading in riparian areas	Protect and enhance existing vegetation in riparian areas.	Conduct public education on protection of riparian areas.	Staffing to conduct educational effort; 0.20 FTE currently funded.	Number of bill inserts and website postings. Number of meetings.	On-going	Educational outreach once per year through 2020. Provide outreach details in annual TMDL review report.	6/30/19: no changes	6/30/19: Public Outreach conducted in August 2019 at the "National Night Out" Event in Molalla.

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Lack of shading in riparian areas	Protect and enhance existing vegetation	Tree protection as required by City Code 17- 3.4.030.	Staffing as required for plan review and enforcement.	Track enforcement actions and violations as well as number of existing trees retained with each development.	On-going	Maintain all existing trees, where possible, on new development as required by Municipal Code 17-3.4.030. Provide project list and tree protection details in annual TMDL review report.	6/30/19: no changes	6/30/19: protection of existing trees added to the Plan Review Checklist. New development approvals are reviewed to this standard.
Lack of shading in riparian areas	Partner with	Establish a working relationship with Clackamas SWCD and watershed groups where possible.	Staffing to conduct educational effort.	Number of meetings attended and projects	5 years	Attend at least one meeting annually through 2020. Provide list of meetings attended in annual TMDL review report.	6/30/19: Looking at ongoing opportunities in cooperation with Clackamas SWCD	6/30/19: N/A
Lack of shading in riparian areas	watershed groups and Clackamas SWCD where possible.	Partner on riparian restoration/enhancement projects.	Volunteer and staffing as required.	completed in partnership with watershed groups, number of site visits performed, times bill-inserts are included.	5 years	Contribute to at least one project by end of 2020. Report on funding status/availability in annual TMDL review report.	6/30/19 no changes	6/30/19: Agreement entered into with Molalla River Alliance for Molalla River Enhancement project.

	_	TN	IDL Implementa	tion Matrix - Tem	perature			
Lack of shading in riparian areas		Partner on public education/outreach opportunities.	Volunteer and staffing as required.		5 years	Participate in at least one public outreach with partner by end of 2020. Provide outreach details in annual TMDL review report	6/30/19: no changes	6/30/19: Anticipate preparing information for National Night Out (August)
Lack of shading in riparian areas	Tree planting	Enforce tree planting and landscaping by way of Municipal Code 17.3.4.	In City budget for Code enforcement staffing.	Number of trees planted and area landscaped.	On-going	Establish list of projects that provided new trees and landscape areas through 2020 and include in annual TMDL review report.	6/30/19: no changes	6/30/19: The City planted 50 Ponderosa Pine Trees along the Riparian Zone of Bear Creek in cooperation with the Pudding River Watershed Council.

Stormwater       City Council overview and acknowledgement.       Review TMDL Plan, annual reports and five year review with City Council.	None	Track number of times TMDL reports are covered in City Council meeting minutes.	On-going	City Council approval of TMDL Plan and review reports.	annual report is reviewed by City Council in	performed by City Council on March 14 <sup>th</sup>
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Reduced stream flow in Molalla River and tributaries	Reduce municipal water diversion.	Water conservation efforts driven primarily by public education.	Staffing to conduct educational effort; 0.15 FTE currently funded.	Number of bill inserts mailed. Number public service announcements. Monitor total water use.	On-going	Educational outreach once a year through 2020. Water use reported annually and provided in annual TMDL review report.	6/30/19: no changes	6/30/19: 2018 Water Quality Report completed and posted to the website Spring 2019. (See attached). Over 2200 bill inserts mailed.
Wastewater treatment plant discharge	Maintain low effluent temperatures.	Maintain compliance with NPDES permit requirements.	Wastewater treatment staff; funded positions.	Molalla River temperature monitoring.	Continuous temperature measurement; monthly permit reporting.	Report instream temperature monitoring with annual TMDL report review.	6/30/19: no changes	6/30/19: no discharges to the Molalla River in summer months, therefore no contributed to temperature.

POLLUTANT:	ementation Trackir	ng Matrix						
SOURCE What sources of this pollutant are under your jurisdiction?	STRATEGY What is being done, or what will you do, to reduce and/or control pollution from this source?	<b>HOW</b> <i>Specifically, how will</i> <i>this be done?</i>	FISCAL ANALYSIS What is the expected resource need? Are there existing resources budgeted? If not, where will the resources come from?	MEASURE How will you quantitatively or qualitatively demonstrate successful implementation or completion of this strategy?	TIMELINE When do you expect it to be completed?	MILESTONE What intermediate goals do you expect to achieve, and by when, to know progress is being made?	ADAPTIVE MANAGEMENT APPLIED Indicate how strategies have changed with annual reports.	STATUS Include summary and date.
Stormwater	Promote Low Impact Development and on-site stormwater treatment.	Encourage green street standards – at least half street improvements with new development. Meet pre- development hydrology requirements per Municipal Code 17- 3.6 and Public Works Design Standards Section 3.2.	Currently in Public Works budget.	Percent of green street standards for each project. For each project, stormwater quantity calculations to meet pre-development hydrology and water quality requirements per PW Standards.	On-going	All new development plans incorporate green street standards where practical and include pre- development hydrology. Report applicable improvements <i>to the</i> <i>standards</i> in annual TMDL review report.		6/30/19: these requirements are incorporated into the Public Works Standards and Engineering Details in 2019.
Stormwater	Promote Low Impact Development and on-site stormwater treatment.	Incorporate stormwater treatment with transportation projects <del>:</del> e.g. Fenton Ave.	Included in city budget according to capital improvement plan.	Number of stormwater treatment features installed.	2020	Fenton Ave. Project Completion in 2018. Capital Projects Completed in the year.	6/30/19: removed specific reference to Fenton Ave Project.	6/30/19: Fenton Avenue added new swales in 2019.

		Encourage use of drainage swales				installed to CIC	-,,	6/30/19: two
Stormwater	Promote Low Impact Development and	that settle, infiltrate, and treat turbid runoff.	Currently in City planning budget for plan	Track number of projects that incorporate	On-going	Stormwater map by end of 2020. Report	work since it is	new storm swales added in 2019. GIS
	on-site stormwater treatment.	Current Public Works Design Standards Section 3.5 provides design specifications for drainage swales.	review.	drainage swales.		quality facilities constructed in annual TMDL review report		inventory complete.
		uramage swates.						

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Stormwater	Reduce pet waste in stormwater runoff.	Install waste bags in parks and common dog-walking locations. Citizen education about improper pet waste management.	Currently in Parks budget.	Number of citizen- complaints. Track refill need at bag holders.	On-going	Report complaint number and Dollars spent on bag use in annual TMDL review report.	strikethrough removed and italics added for clarity.	6/30/19: \$980.53 of dog waste bags supplied to parks in 2018/19.
Stormwater	Educate developers and the public about stormwater and hydrology in the City of Molalla.	Make Stormwater Master Plan and Public Works Design Standards available to public via City website.	None	Number of private developments that meet stormwater standards.	On-going	All Private development projects meet stormwater detention and water quality requirements. Report number of water quality facilities constructed in annual TMDL review report.	changes.	6/30/19: ongoing education continued as part of the pre- development meetings.
Stormwater	Prevent erosion from construction sites.	Conduct grading inspections per Municipal Code 21.70 to ensure protection against erosion.	Currently in Public Works budget.	Percent of sites that comply voluntarily.	On-going	Report <del>number of permitted</del> excavation projects and compliance with Municipal Code21.70 in annual TMDL review report.		6/30/19: The City performed inspections on all projects in 2018/19 and inspectors reported no violations of this Municipal Code.

		Cooperate with DEQ				6/30/19: no	<mark>6/30/19: Open</mark>
Stormwater	Prevent erosion from construction sites.	to enforce erosion control through 1200C permits as required by Municipal Code - Chapter 17 and Public Works Design Standards 1.18.4.	Currently in Public Works budget.	Keep track of 1200C permits within City boundaries.	On-going	changes	1200C permits are available to view on DEQ's website.

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Stormwater	Reduce runoff and sediment load from impervious areas: roads, vacant lots.	Maintain weekly street sweeping schedule.	Currently in Public Works budget.	Using street sweeping log, track frequency of areas cleaned.	On-going	Report volume estimate of street sweepings in annual TMDL review report.	6/30/19: no changes	6/30/19: Detailed street sweeping logs are attached, including lane miles swept, quantities recovered and routes driven.
Stormwater	Maintenance Program for stormwater collection system.	Maintain storm system components including; catch basins, manholes and pipes.	Currently in Public Works budget. System Development Charges in place for storm drainage system.	Track maintenance projects that improve stormwater system. Construct Decant Facility as funding allows.	On-going	Indicate number and type of maintenance projects in annual TMDL review report. Provide funding status for Decant facility in annual TMDL review report.	6/30/19: no changes	6/30/19: The City installed a bioswale to handle the City Shops site to full buildout, and, and now plans construction of the decant facility in 2021
Stormwater	City Council overview and acknowledgement.	Review TMDL Plan, annual reports and five year review with City Council.	None	Track number of times TMDL reports are covered in City Council meeting minutes.	On-going	Staff review of approved TMDL Plans with City Council.		6/30/19: Five year review with City Council done in May 2018. Annual report for 2019/20

								will be in
								August 2019
Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks.	Implement Phase 1 of Bear Creek Greenway Project. Approximately 7,500 LF of 8-10' wide pathway through private industrial and residential lands.	\$480,000	Completion of trail from Molalla Forest Rd. to Molalla city limits.	5-15 years	Annual review of budget for possible implementation or private development. Report funding status in annual TMDL review report.	6/30/19: no changes	6/30/19: project in planning stages looking at private development opportunities
Lack of riparian vegetation; eroding streambanks	Restore riparian vegetation and streambanks.	Partner with watershed groups on riparian restoration/enhanc ement projects.	Staffing to conduct effort; 0.10 FTE currently funded; volunteer contributions.	Number of projects/efforts completed in partnership with watershed groups.	5 years	Contribute to at least one project by end of 2020. Report on funding status/availability in annual TMDL review report.	6/30/19: no changes	6/30/19: project in planning stages looking at private development opportunities

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Lack of riparian vegetation; eroding streambanks	Protect and enhance existing vegetation in riparian areas.	Enforce existing Municipal Code17- 2.4.030 for new development: 50 ft. riparian and wetland setback and protection of native vegetation	Code enforcement staffing; 0.25 FTE is currently funded.	Track enforcement actions and violations as well as development plan review. Record square- footage of riparian- area protected with all development.	On-going; code adopted	Retain all existing riparian vegetation on developments planned through 2020, as required by Municipal Code 17- 2.4.030. <del>Report areas protected in annual TMDL review report.</del> <i>Record compliance</i> <i>on Plan Review</i> <i>Checklist</i>		6/30/19: Plan review checklist now specifies what needs to be protected, and documents the Cities' in requiring that protection.
Cross connections of storm and sanitary sewers	Increase effectiveness and efficiency of wastewater treatment.	Eliminate illicit discharge and infiltration issues in downtown core.	To be determined.	Average daily flow to treatment plant before and after cross connect issues addressed.	5 years	Complete Wastewater Facilities Plan in 2018. Report completion of plan and cross connection projects in annual TMDL review report. Include annual review of budget for- cross connection projects.		6/30/19: smoke tested the largest subdivision in Molalla and disconnected several homes that were discharging to storm. Report attached. Also completed WWFCSMP in fall 2018, adopted by City Council.
Cross connections of storm and sanitary	Decommission Septic Systems per Municipal Code 13.08.300 – Upon Availability of Public Sewer –	Administer 30-day notice to connect to city sewer where public sewer is made available.	Planning staff, full time.	Number of new connections made annually as a result of annexations, violations	On-going	Connect all residential, commercial, industrial properties within city limits to city sewer and	changes	6/30/19: the city established new connections



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DATE	March 20, 2018
ТО	Andy Peters, City of Molalla Public Works Operations Supervisor
FROM	Ryan Quigley, PE
PROJECT NAME	Big Meadow Subdivision – Smoke Testing
PROJECT NO.	198.00C

#### Background

The City of Molalla discovered that the sewer service lateral for 1225 Meadowlawn Pl. was connected directly to the storm water collection system. After correcting the issue, by rerouting the lateral to the sewer collection system, the City made observations of the storm water system that indicated the possibility of other misconnected sewer service laterals. The City requested that The Dyer Partnership Engineers & Planners, Inc. (Dyer) coordinate smoke testing of the storm water collection system within the Bid Meadow Subdivision to help identify these misconnections.

#### **Smoke Testing**

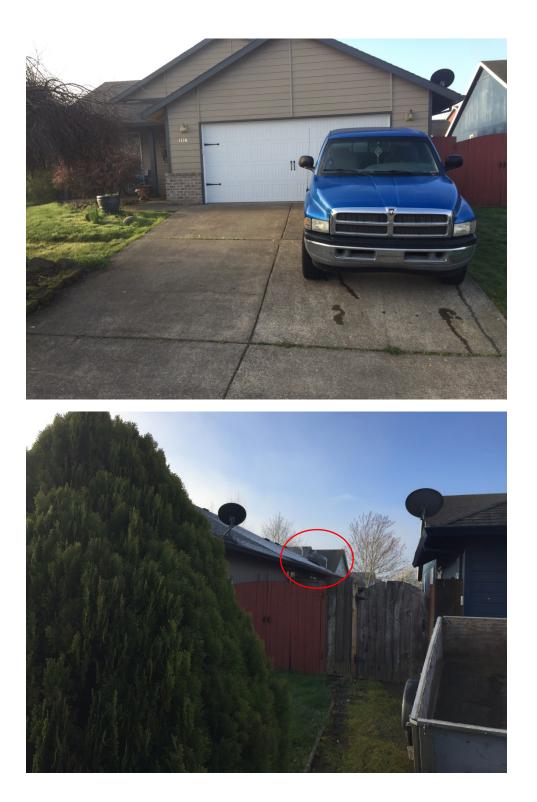
With the assistance of City crews, Dyer conducted smoke testing on March 19, 2018. During the test period, 8:30 am to 1:30pm, the smoke testing equipment was set up on various storm water system manholes throughout the Big Meadow subdivision. A total of fourteen manholes were used as test points, providing full coverage of the storm system serving the subdivision.

While the smoke equipment was in operation, Dyer and City personal observed the sewer roof vents of each home in the vicinity of the test equipment. With the storm system charged with smoke, roof vents emitting smoke are an indication that the sewer lateral for the home may be connected to the storm system.

#### Results

During the smoke testing, three homes were observed with roof sewer vents producing smoke. The locations of these homes are shown on the attached storm water system map, along with the manholes used as test locations and the storm lines that were covered during the testing. The homes with noted deficiencies are as follows:

## **<u>1116 Meadowlawn Pl.</u>**



### **<u>1130 Meadowlawn Pl.</u>**



# 1406 Meadowlawn Pl.





#### Recommendation

At this time, Dyer recommends that the City further investigate the sewer lateral connections of the homes noted above. TV inspection of the sewer main, existing sewer laterals, and storm line should be conducted to better understand the nature of the sewer lateral connection. If a direct connection to the storm line is found, the City should to take the appropriate steps to disconnect the lateral from the storm system and connect the laterals to the sanitary sewer main.



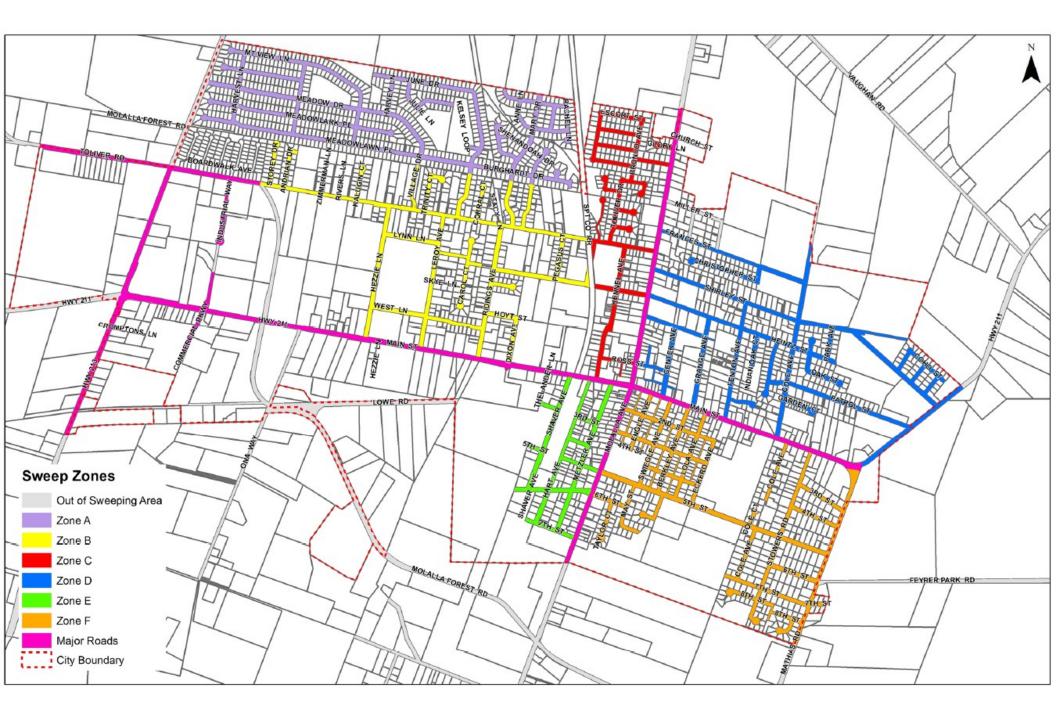
Mike,

Gerald asked me to pass along that as of Tuesday this week my contractors have completed fixing all sanitary laterals that were connected to the Storm System which we identified by smoke testing in February. They are now properly connected to Sanitary Sewer. This closes the file for me on the issue of mis-connected laterals in town per my SSO report dated 2/6/18.

Thanks!

#### **Andy Peters**

City of Molalla Public Works Operations Supervisor (503) 829-6855 x220 Cell: 503-793-0507 apeters@cityofmolalla.com 117 N Molalla Ave Molalla, OR 97038



# StreetSweepingReport

WO#	Addr/Dates	Request	
3681 (/prd/Command/Edit/3681) <sup>Storm</sup>	various Entered: 9/28/2018 Requested: 9/27/2018 Friday 10/5/2018	************************************	Robot
3695 (/prd/Command/Edit/3695) <sup>Storm</sup>	various Entered: 10/1/2018 Requested: 10/4/2018 Friday 10/12/2018	************************************	Robot

3755 (/prd/Command/Edit/3755) Storm	various Entered: 10/7/2018 Requested: 10/15/2018 Thursday 10/18/2018	************************************	Robot
3862 (/prd/Command/Edit/3862) Storm	Entered: 10/15/2018 Requested: 10/22/2018 Friday 10/26/2018	************************************	Robot

3929 (/prd/Command/Edit/3929) Storm	various Entered: 10/22/2018 Requested: 10/31/2018 Wednesday 10/31/2018	Street Sweeping   Oct Wk 4: Zones C, D, E, Main Roads         1. Sweep streets; 2. Track progress the form below; 3. Generate new Work Orders for any issues seen related to drainage, street pavement conditions, curb and sidewalk conditions, obstructions within the roadway, and other issues related to the safe operation of City streets; 4. Close out this Work Order when done.         Route Map at '\\dc1\public\Operations\LinkedRecords\Tmdl\StreetSweepingRoutes.png'	Robot
4057 (/prd/Command/Edit/4057) Storm	various Entered: 11/1/2018 Requested: 11/7/2018 Wednesday 11/7/2018	************************************	Robot

		-	
4133 (/prd/Command/Edit/4133) Storm	various Entered: 11/7/2018 Requested: 11/15/2018 Thursday 11/15/2018	************************************	Robot
4244 (/prd/Command/Edit/4244) Storm	various	************************************	Robot

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		************************************	
4347 (/prd/Command/Edit/4347) Storm	various Entered: 11/23/2018 Requested: 11/30/2018 Friday 11/30/2018	Forty Miles (40) Tally Total Loads: Seven Loads (7) Roads on the Route NOT given service this round Most of Section "D" not done this week. Heavy rain limited ability to sweep, too much water on roadways. dp Additional sweeping done during the week Spot sweeping around downtown area in preparation of tree lighting	Robot

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4425 (/prd/Command/Edit/4425) <sup>Storm</sup>	various Entered: 12/1/2018 Requested: 12/7/2018 Friday 12/7/2018	************************************	Robot
4481 (/prd/Command/Edit/4481) Storm	various Entered: 12/7/2018 Requested: 12/13/2018 Thursday 12/13/2018	************************************	Robot

4565 (/prd/Command/Edit/4565) Storm	various Entered: 12/15/2018 Requested: 12/20/2018 Thursday 12/20/2018	************************************	Robot
4649 (/prd/Command/Edit/4649) <sup>Storm</sup>	various Entered: 12/22/2018 Requested: 12/31/2018 Friday 1/4/2019	************************************	Robot

4706 (/prd/Command/Edit/4706) <sup>Storm</sup>	various Entered: 1/1/2019 Requested: 1/7/2019 Thursday 1/10/2019	************************************	Robot
4755 (/prd/Command/Edit/4755) Storm	Shops Entered: 1/7/2019 Requested: 1/15/2019 Friday 1/18/2019	************************************	Robot

4872 (/prd/Command/Edit/4872) Storm	various Entered: 1/15/2019 Requested: 1/22/2019 Thursday 1/24/2019	************************************	Robot
4958 (/prd/Command/Edit/4958) <sup>Storm</sup>	various Entered: 1/22/2019 Requested: 1/31/2019 Thursday 1/31/2019	************************************	Robot

5100 (/prd/Command/Edit/5100) <sup>Storm</sup>	various Entered: 2/1/2019 Requested: 2/7/2019 Thursday 2/7/2019		Robot
5161 (/prd/Command/Edit/5161) Storm	various Entered: 2/7/2019 Requested: 2/15/2019 Friday 2/22/2019	************************************	Robot

5258 (/prd/Command/Edit/5258 <sup>Storm</sup>	various ) Entered: 2/15/2019 Requested: 2/22/2019 Friday 2/22/2019	************************************	Robot
		 - - 	
5319 (/prd/Command/Edit/5319) <sup>Storm</sup>	various	************************************	Robot
	19) Entered: 2/22/2019 Requested: 2/28/2019 Thursday 2/28/2019	Tally Total Loads: 	

5423 (/prd/Command/Edit/5423) <sup>Storm</sup>	various Entered: 3/5/2019 Requested: 3/7/2019 Thursday 3/7/2019	************************************	Robot
5455 (/prd/Command/Edit/5455) <sup>Storm</sup>	various Entered: 3/7/2019 Requested: 3/15/2019 Friday 3/15/2019	************************************	Robot

 2013			
5551 (/prd/Command/Edit/5551) <sup>Storm</sup>	various Entered: 3/15/2019 Requested: 3/22/2019 Friday 3/22/2019	************************************	Robot
5623 (/prd/Command/Edit/5623) <sup>Storm</sup>	various Entered: 3/22/2019 Requested: 3/28/2019 Friday 4/5/2019	Street Sweeping   Mar Wk 4: Zones C, D, E, Main Roads           1. Sweep streets; 2. Track progress the form below; 3. Generate new Work Orders for any issues           seen related to drainage, street pavement conditions, curb and sidewalk conditions, obstructions           within the roadway, and other issues related to the safe operation of City streets; 4. Close out           this Work Order when done.           Route Map at '\\dcl\public\Operations\LinkedRecords\Tmdl\StreetSweepingRoutes.png'	Robot

5737 (/prd/Command/Edit/5737) <sup>Storm</sup>	various Entered: 4/1/2019 Requested: 4/15/2019 Friday 4/19/2019	************************************	Robot
6158 (/prd/Command/Edit/6158) <sup>Storm</sup>	various Entered: 5/1/2019 Requested: 5/31/2019 Friday 5/31/2019	************************************	Robot