

# Columbia Winter Weather Response Late 2025 - Early 2026

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Pre-Council Worksession

11-17-2025

Columbia Winter Weather Response

Richard Stone  
Engineering & Operations Manager  
City of Columbia Public Works Department

# Winter Weather Information 2025-2026

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This information is not static and changes over time.

# Winter Weather Information 2025-2026

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From a high level perspective, everything we do is centered on providing the best possibility for people to achieve safe travel.

That is home base.

# Winter Weather Information 2025-2026

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We do not control:

- Mother nature
- How other agencies respond (MoDOT and Boone County responses impact travel within and around the City)

# Winter Weather Information 2025-2026

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We do control:

- Our resources
- Our planning
- How we react to what is happening

# Winter Weather Information 2025-2026

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Hierarchy of priority routes points first toward efficient travel from an emergency response perspective, then everything else follows from there.

# Winter Weather Information 2025-2026

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- Equipment and other resources have been built towards first, second and third priority routes over last decade plus for the most efficient response possible with available resources.

# Winter Weather Information 2025-2026

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- Equipment and other resources have been built towards first, second and third priority routes over last decade plus for the most efficient response possible with available resources.
- Any winter weather response for any agency is based on: available resources, establishing a plan before winter, and proper execution during winter.

# Winter Weather Information 2025-2026

www.comosnow.com

city of  
Columbia

RESIDENT ▾ BUSINESS ▾ VISITORS ▾ GOVERNMENT ▾

Home » Government » Departments » Public Works » Street Division » Snow and Ice Management

## Snow and Ice Management

Columbia Public Works is responsible for snow and ice management on designated city streets. There are 1,418 lane miles of city-maintained streets including 691 lane miles of first, second and third priority routes and 1,100 cul-de-sacs.

- [Street and Snow Route Priority Viewer](#)

The American Public Works Association (APWA) presented the Excellence in Snow and Ice Control Award to Columbia Public Works at the APWA North American Snow Conference in Des Moines, Iowa, on April 24, 2017.

City, County and State agencies are responsible for treating and plowing different roads and streets in the Columbia area:

- Columbia plows and treats roadways within the City limits not covered by other agencies.
- [Boone County](#) plows county roads which may be on or inside the border of the city limits.
- The [Missouri Department of Transportation \(MoDOT\)](#) plows major state roadways which run through the city limits, such as Providence Road, College Avenue, Stadium Boulevard and others.

All agencies cooperate with a "plow down" policy regardless of which road jurisdiction a plow truck is on. (So if you see a truck with its plow up, there is a reason...for example a road treatment may have just been put down so the plow driver doesn't want to remove it too quickly.)

| PLOW TRUCK COLOR KEY |        |                                                            |
|----------------------|--------|------------------------------------------------------------|
| AGENCY               | COLOR  | DESCRIPTION                                                |
| Boone County         | RED    | Boone County Resource Management trucks are typically red. |
| City of Columbia     | WHITE  | City of Columbia trucks are typically white.               |
| State of Missouri    | YELLOW | MoDOT trucks are typically yellow.                         |

▸ Winter Weather Policies and Procedures

▸ District Routes, Neighborhoods & Maps

Public Works

Updates

Public Works Administration

Fleet Operations

Street Division

Traffic Management ▾

Bus Service

Snow and Ice Management

Parking Utility ▾

Engineering ▾

Facilities Management and Custodial Services

Media and Contact Information ▾

# Winter Weather Information 2025-2026

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- Internally, we treat winter weather events as if the event is a disaster situation -- because that's what they are.

# Winter Weather Information 2025-2026

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Incident Command System (ICS) typically initiated if  
2+ full shifts expected

otherwise email with information

ICS/email sent to  
[BCJCSupervisors@boonecountymo.org](mailto:BCJCSupervisors@boonecountymo.org)  
with a bunch of people copied for communication

# Winter Weather Information 2025-2026

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ICS updated every 12 hours (shift change) or  
major changes



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------|
| 1. Incident Name:<br>Winter storm beginning 3/10/2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2. Incident Number:<br>Update #3 | 3. Date/Time Initiated:<br>Date: 03/10/22    Time: 07:00 |
| <p>4. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment):</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                  |                                                          |
| <p>5. Situation Summary and Health and Safety Briefing (for briefings or transfer of command): Recognize potential Incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.</p> <p>Snow overnight, fluffy with some drifting. Light to heavy rates. Approximately 5 inches accumulation, all precipitation forecast to end by 0800. A 28 person crew will be focused on priority routes through the morning. Additional resources may be added through the day due to volume of snow fall. Projected temperatures to rise above freezing mid-afternoon with some possible sun later today. We anticipate transitioning to subward streets at some point with some resources around mid-day depending on progress along priority streets. Temperatures forecast to fall to around 10 overnight Friday to Saturday.</p> |                                  |                                                          |
| <p>6. Prepared by: Name: <u>Richard Stone</u>    Position/Title: <u>Engineering &amp; Operations Manager</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                          |
| ICS 201, Page 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  | Date/Time: 3/11/2022 07:00                               |

[illegible]

# Example ICS information



**INCIDENT BRIEFING (ICS 201)**  
**Snow and Ice Management**

|                                                              |                                         |                                                              |
|--------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|
| <b>1. Incident Name:</b><br>Winter storm beginning 3/10/2022 | <b>2. Incident Number:</b><br>Update #3 | <b>3. Date/Time Initiated:</b><br>Date: 03/10/22 Time: 07:00 |
|--------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|

**9. Current Organization** (fill in additional organization as appropriate):

**Incident Commander(s)**  
 Sam Thomas  
 573- [redacted]

**Liaison Officer**

**Safety Officer**

**Public Information Officer**  
 John Ogan 573- [redacted]

**Operations Section Chief**  
 Primary  
 Melissa Kelpe  
 573- [redacted]  
  
 Alternate  
 Mike Wheeler  
 573- [redacted]  
  
 Second alternate  
 Tommy Haskamp  
 573- [redacted]

**Planning Section Chief**  
 Richard Stone  
 573- [redacted]

|                                            |                                                         |
|--------------------------------------------|---------------------------------------------------------|
| <b>6. Prepared by: Name:</b> Richard Stone | <b>Position/Title:</b> Engineering & Operations Manager |
|--------------------------------------------|---------------------------------------------------------|

ICS 201, Page 3 Date/Time: 3/11/2022 07:00



**INCIDENT BRIEFING (ICS 201)**  
**Snow and Ice Management**

|                                                              |                                         |                                                              |
|--------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|
| <b>1. Incident Name:</b><br>Winter storm beginning 3/10/2022 | <b>2. Incident Number:</b><br>Update #3 | <b>3. Date/Time Initiated:</b><br>Date: 03/10/22 Time: 07:00 |
|--------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|

**10. Resource Summary:**

| Resource                   | Resource Identifier | Date/Time Ordered | ETA | Arrived                             | Notes (location/assignment/status)                                                  |
|----------------------------|---------------------|-------------------|-----|-------------------------------------|-------------------------------------------------------------------------------------|
| 9 - Tandem-axle trucks     |                     |                   |     | <input checked="" type="checkbox"/> | 1 additional available                                                              |
| 6 - single-axle trucks     |                     |                   |     | <input checked="" type="checkbox"/> | 1 additional available                                                              |
| 2 - Class 5 trucks         |                     |                   |     | <input checked="" type="checkbox"/> | 1 additional available                                                              |
| 5 - One-ton trucks         |                     |                   |     | <input checked="" type="checkbox"/> | 6 additional available                                                              |
| 1 - Loader                 |                     |                   |     | <input checked="" type="checkbox"/> | At salt dome; 1 additional available                                                |
| Motorgrader with wing plow |                     |                   |     | <input checked="" type="checkbox"/> | available                                                                           |
| 2 - Skid steer             |                     |                   |     | <input checked="" type="checkbox"/> | available                                                                           |
| 3 - backhoe                |                     |                   |     | <input checked="" type="checkbox"/> | available                                                                           |
| 4-Fleet                    |                     |                   |     | <input checked="" type="checkbox"/> |                                                                                     |
| Sewer                      |                     |                   | day | <input type="checkbox"/>            | additional resources to be contacted for availability - subwards                    |
| Water                      |                     |                   | day | <input type="checkbox"/>            | additional resources to be contacted for availability - subwards                    |
| Parks                      |                     |                   | day | <input type="checkbox"/>            | additional resources to be contacted for availability - subwards                    |
|                            |                     |                   |     | <input type="checkbox"/>            |                                                                                     |
|                            |                     |                   |     | <input type="checkbox"/>            |                                                                                     |
|                            |                     |                   |     | <input type="checkbox"/>            |                                                                                     |
| Trucks down                |                     |                   |     | <input type="checkbox"/>            | 1981S-springs-out;1547-1T-front end, out;1534-1Tuseable if needed, front alignment; |
|                            |                     |                   |     | <input type="checkbox"/>            |                                                                                     |

|                                            |                                                         |
|--------------------------------------------|---------------------------------------------------------|
| <b>6. Prepared by: Name:</b> Richard Stone | <b>Position/Title:</b> Engineering & Operations Manager |
|--------------------------------------------|---------------------------------------------------------|

ICS 201, Page 4 Date/Time: 3/11/2022 07:00

# Winter Weather Information 2025-2026

| Name                            | Date modified       | Type        |
|---------------------------------|---------------------|-------------|
| SnowFight_Historical_Info       | 11/21/2024 4:07 PM  | File folder |
| SnowFight_Inspector Information | 9/29/2021 12:58 PM  | File folder |
| SnowFightEarly2014              | 11/26/2018 5:08 AM  | File folder |
| SnowFightEarly2015              | 12/3/2019 8:26 AM   | File folder |
| SnowFightEarly2016              | 11/26/2018 5:08 AM  | File folder |
| SnowFightEarly2017              | 11/26/2018 5:08 AM  | File folder |
| SnowFightEarly2018              | 11/26/2018 5:08 AM  | File folder |
| SnowFightEarly2019              | 3/2/2019 9:56 PM    | File folder |
| SnowFightEarly2020              | 2/23/2020 9:28 AM   | File folder |
| SnowFightEarly2021              | 4/19/2021 3:39 PM   | File folder |
| SnowFightEarly2022              | 1/8/2024 5:04 PM    | File folder |
| SnowFightEarly2023              | 3/16/2023 8:45 AM   | File folder |
| SnowFightEarly2024              | 2/16/2024 5:18 AM   | File folder |
| SnowFightEarly2025              | 3/19/2025 9:56 AM   | File folder |
| SnowFightLate2014               | 11/26/2018 5:08 AM  | File folder |
| SnowFightLate2015               | 9/25/2015 9:57 AM   | File folder |
| SnowFightLate2016               | 11/26/2018 5:08 AM  | File folder |
| SnowFightLate2017               | 12/3/2019 10:55 AM  | File folder |
| SnowFightLate2018               | 1/19/2019 7:05 AM   | File folder |
| SnowFightLate2019               | 1/17/2020 5:05 AM   | File folder |
| SnowFightLate2020               | 12/31/2020 10:32 PM | File folder |
| SnowFightLate2021               | 1/1/2022 4:36 AM    | File folder |
| SnowFightLate2022               | 1/8/2024 5:02 PM    | File folder |
| SnowFightLate2023               | 1/12/2024 7:32 AM   | File folder |
| SnowFightLate2024               | 12/10/2024 8:00 PM  | File folder |
| SnowFightLate2025               | 11/7/2025 2:21 PM   | File folder |
| SnowInformation                 | 8/21/2024 4:18 PM   | File folder |
| Snowback operational signing    | 2/21/2022 9:24 AM   | File folder |

| Name                                                 | Date modified      | Type                    | Size   |
|------------------------------------------------------|--------------------|-------------------------|--------|
| 01-01-2022                                           | 2/16/2022 11:04 PM | File folder             |        |
| 01-05-2022                                           | 1/15/2022 6:58 AM  | File folder             |        |
| 01-08-2022                                           | 1/10/2022 8:11 AM  | File folder             |        |
| 01-15-2022                                           | 7/22/2022 10:12 AM | File folder             |        |
| 02-01-2022                                           | 2/16/2022 10:58 PM | File folder             |        |
| 02-17-2022                                           | 2/23/2022 5:14 PM  | File folder             |        |
| 02-23-2022                                           | 3/8/2022 10:36 AM  | File folder             |        |
| 03-10-2022                                           | 3/14/2022 8:48 AM  | File folder             |        |
| City of Columbia ICS report based on FEMA ICS report | 3/7/2022 3:18 PM   | PDF Document            | 193 KB |
| ICS New Template March 2022                          | 3/7/2022 2:32 PM   | Microsoft Word Docum... | 70 KB  |

| Name                                                                                     | Date modified      | Type                | Size   |
|------------------------------------------------------------------------------------------|--------------------|---------------------|--------|
| 02-23-22_Snow_Update_1_ICS 201                                                           | 2/23/2022 3:29 PM  | Microsoft Word 9... | 317 KB |
| 02-23-22_Snow_Update_1_ICS 201                                                           | 2/23/2022 3:30 PM  | PDF Document        | 179 KB |
| 02-23-22_Snow_Update_2_ICS 201                                                           | 2/23/2022 5:54 PM  | Microsoft Word 9... | 187 KB |
| 02-23-22_Snow_Update_2_ICS 201                                                           | 2/23/2022 5:54 PM  | PDF Document        | 104 KB |
| 02-23-22_Snow_Update_3_ICS 201                                                           | 2/25/2022 8:27 AM  | Microsoft Word 9... | 374 KB |
| 02-23-22_Snow_Update_3_ICS 201                                                           | 2/25/2022 8:27 AM  | PDF Document        | 185 KB |
| 02-23-22_Snow_Update_4_ICS 201                                                           | 2/25/2022 8:27 AM  | Microsoft Word 9... | 453 KB |
| 02-23-22_Snow_Update_4_ICS 201                                                           | 2/25/2022 8:27 AM  | PDF Document        | 294 KB |
| 02-23-22_Snow_Update_5_ICS 201                                                           | 2/25/2022 8:27 AM  | Microsoft Word 9... | 157 KB |
| 02-23-22_Snow_Update_5_ICS 201                                                           | 2/25/2022 8:27 AM  | PDF Document        | 89 KB  |
| City of Columbia ICS Report based on FEMA ICS report                                     | 3/7/2022 3:18 PM   | PDF Document        | 193 KB |
| City of Columbia, MO Mail - Columbia Public Works ICS Update #1 - 02_23_22 event         | 2/23/2022 5:55 PM  | PDF Document        | 99 KB  |
| City of Columbia, MO Mail - Columbia Public Works weather response and potential weat... | 2/23/2022 5:55 PM  | PDF Document        | 76 KB  |
| City of Columbia, MO Mail - Columbia Public Works weather response ICS Update #5         | 2/25/2022 8:27 AM  | PDF Document        | 104 KB |
| City of Columbia, MO Mail - Likely winter weather Wednesday afternoon_evening into Th... | 2/22/2022 10:31 AM | PDF Document        | 75 KB  |
| ICS New Template March 2022                                                              | 3/7/2022 2:32 PM   | Microsoft Word D... | 70 KB  |

# Winter Weather Information 2025-2026

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## Stats:

- The City currently maintains ~1465 total lane miles
- ~691 lane miles of First (337), Second (205) & Third Priority routes (149)
- 1 salt dome, 5,000 tons

# Winter Weather Information 2025-2026

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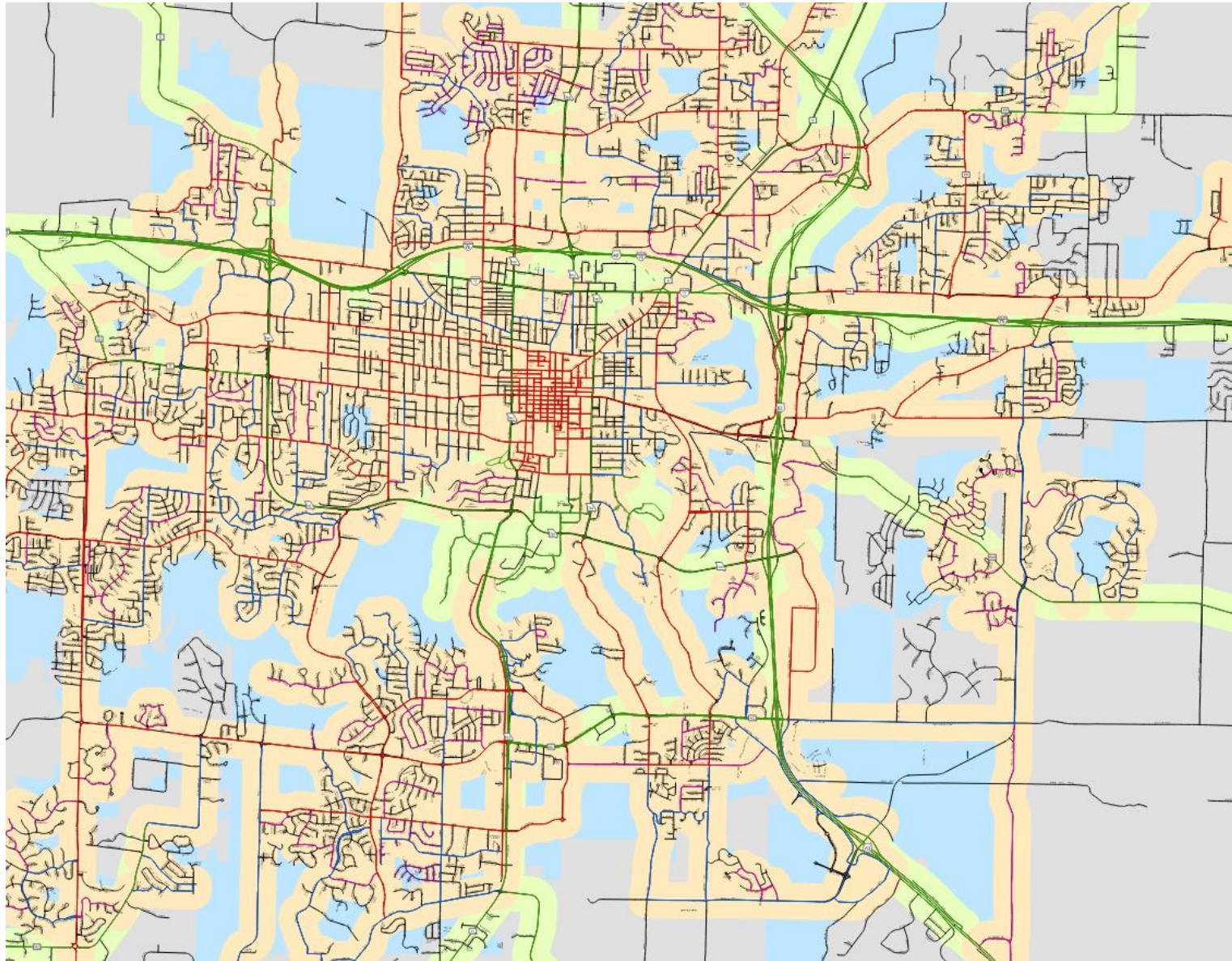
## Stats:

- Priority routes, generally continuous operation until near normal conditions. Intention is at least one bare wheel path at all times for First and Second, passable for Thirds nearly all time (operational decision)

Buffer map from  
Third Priority  
Routes

Most within  
approximately  
1,000 feet

Target all within  
800 feet



# Winter Weather Information 2025-2026

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## Stats:

- 14 Tandem\*(3 functional only due to great Fleet assistance), 4 single axle\*, 12 one-tons, 5 Class 5
  - 4 Tandems+1 single axle delivery imminent
- 8-30 drivers per shift + other support

# Winter Weather Information 2025-2026

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## Stats:

- Street Division: 45 FTE
- 4 vacancies

# Winter Weather Information 2025-2026

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## Stats:

- Street Division: 45 FTE (43 FTE in 2005)
- 4 vacancies
- Means less than 20 operators with Street Division only, meaning other agency assistance needed

# Winter Weather Information 2025-2026

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## Stats:

- 8-12 inches and more, additional resources ramped up from other departments (backhoes, loaders, other equipment, utilizing people from other parts of the organization, contract haulers)
- Move to “more of entire workforce” critical response – add resources based on event

# Winter Weather Information 2025-2026

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## Stats:

- Most communities target around 20-35 lane miles per operator for continuous operation, but every situation is specific to that community.
- We are at about 35 lane miles for Street Division only and about 25 lane miles with shared resources for most events.

# Winter Weather Information 2025-2026

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## **Less than 4" of snow**

First, Seconds, Thirds (24/7 operation)

- Curb to curb
- Continuous operation
- Tow vehicles parked on First or Second Priority routes at 2"

# Winter Weather Information 2025-2026

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What we're trying to get to for these types of events  
within 24-36 hours after end of active event



# Winter Weather Information 2025-2026

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## **Less than 4" of snow**

Neighborhoods during normal business hours after first, seconds and thirds operationally complete

# Winter Weather Information 2025-2026

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## **Less than 4" of snow**

Neighborhoods during normal business hours after first, seconds and thirds operationally complete

Typically end operations in about 48 hours or less.

# Winter Weather Information 2025-2026

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## **4” and greater of snow**

First, seconds and thirds

- Curb to curb
- Continuous operation
- Tow vehicles parked on First or Second Priority routes at 2”

# Winter Weather Information 2025-2026

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## **4” and greater of snow**

Enter neighborhoods after first and seconds are passable and curb to curb. Will have been reaching into neighborhoods with Thirds. May split response (some trucks on first and seconds some in neighborhoods).

All streets plowed and treated to ‘passable’ condition in a methodical manner.

# Winter Weather Information 2025-2026

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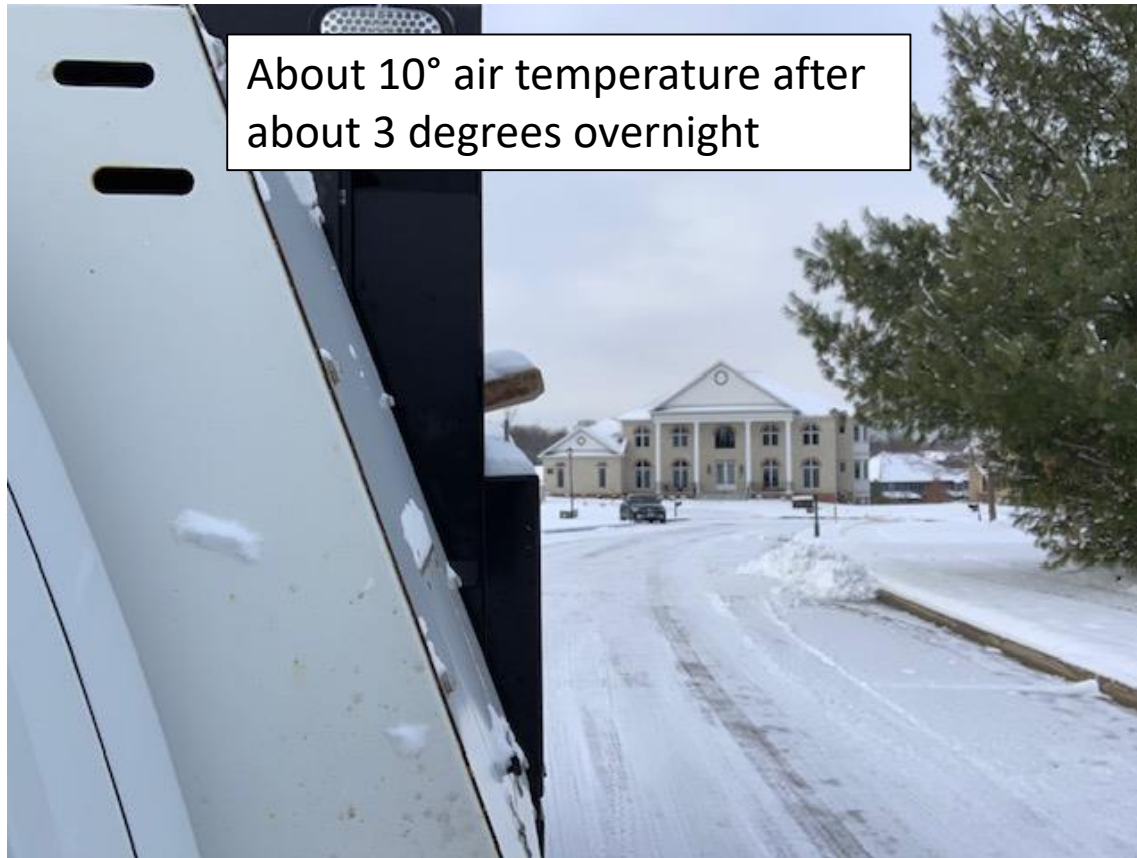
## **4” and greater of snow**

‘Passable’ = passable by a front wheel drive vehicle at slow speed utilizing reasonable winter weather driving

Depending on temperatures – may look like this



# Depending upon temperatures, roads may look like this:



These photos were taken about four hours apart.

# Winter Weather Information 2025-2026

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Council direction, based on a lot of factors. Limiting impact to the environment is a relevant factor.



## Hinkson Creek

Collaborative Adaptive Management

Chloride Task Force

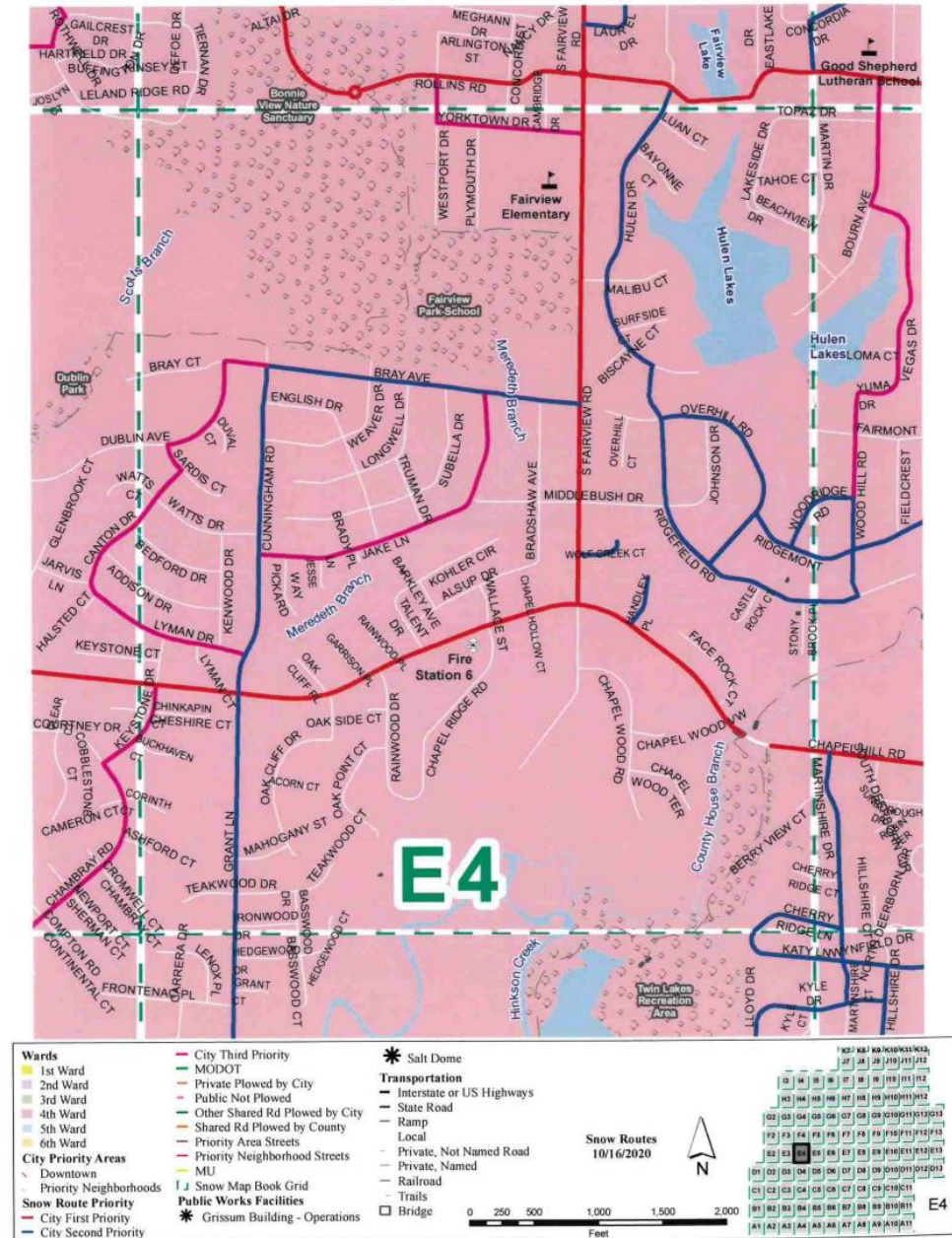
Depending on temperatures – may look like this



Taken about 4 hours apart

# Methodical manner

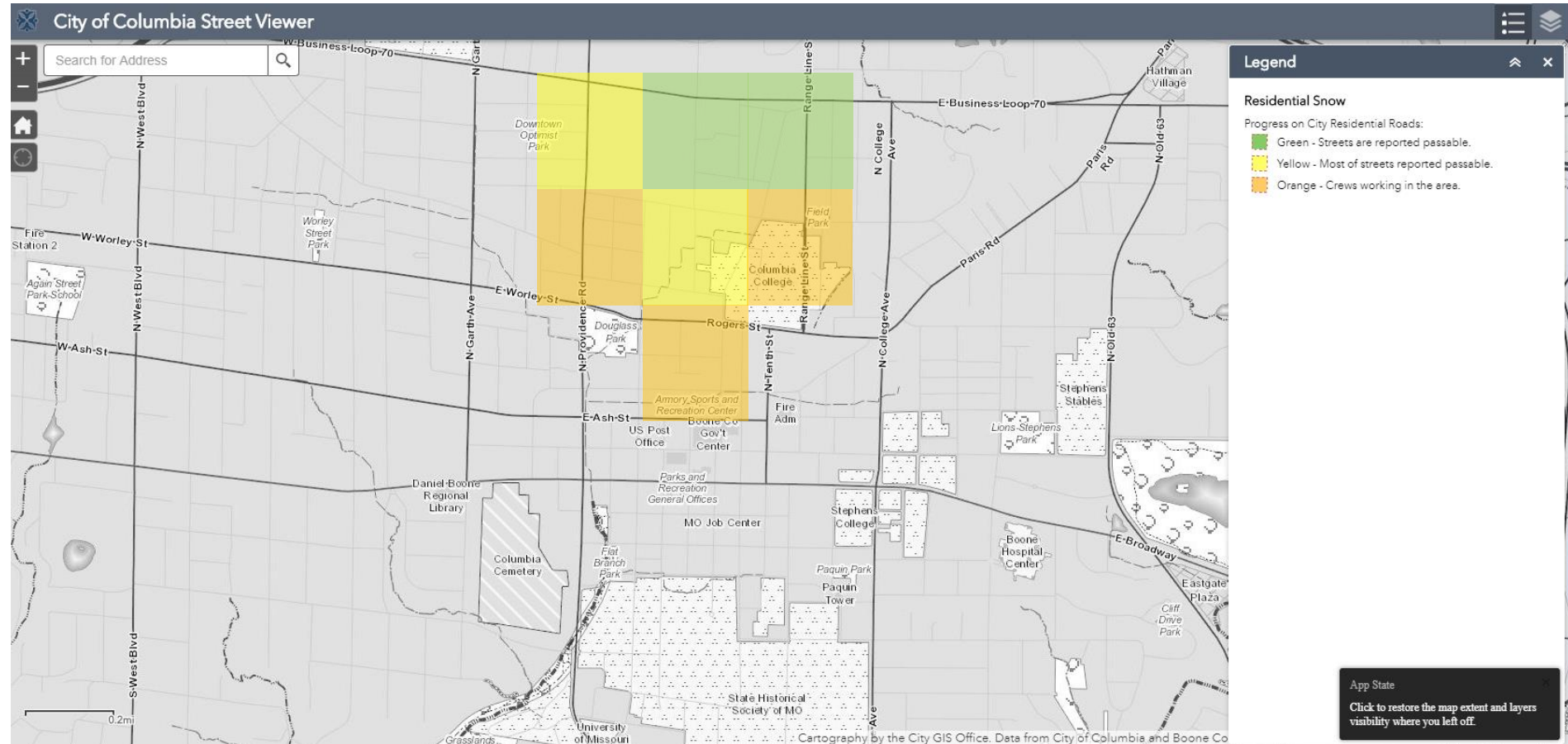
1. Each driver and each inspector has a book with every street.
2. Subwards are reported as complete by driver then inspector inspects for passable condition. In process of upgrading tracking equipment for efficiency.



“Subward” grids

Check <https://www.como.gov/comosnow/>

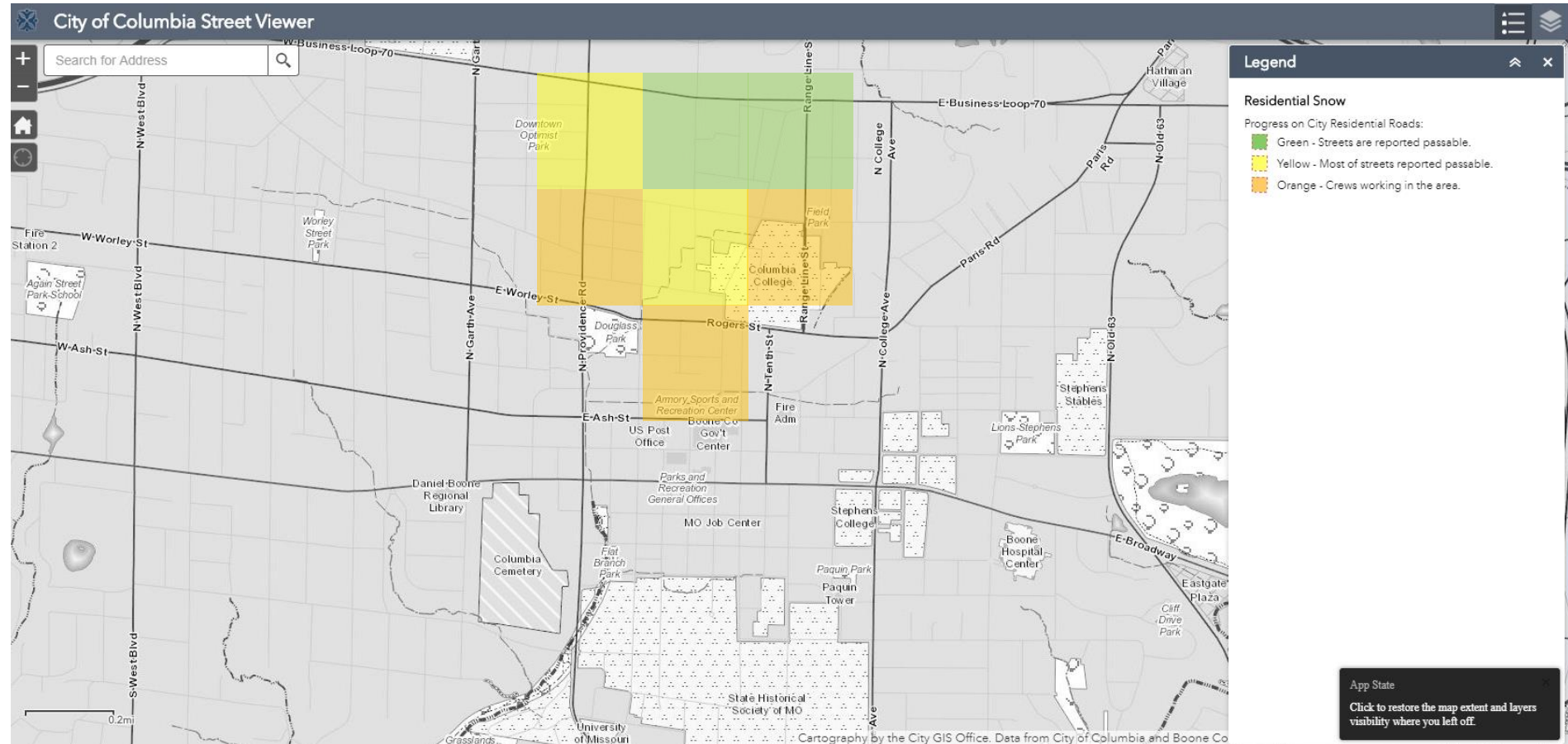
- Public facing map to indicate progress
- Over the years, positive feedback from the public regarding knowledge of progress.



City Street Road Condition Link (will be on main page)

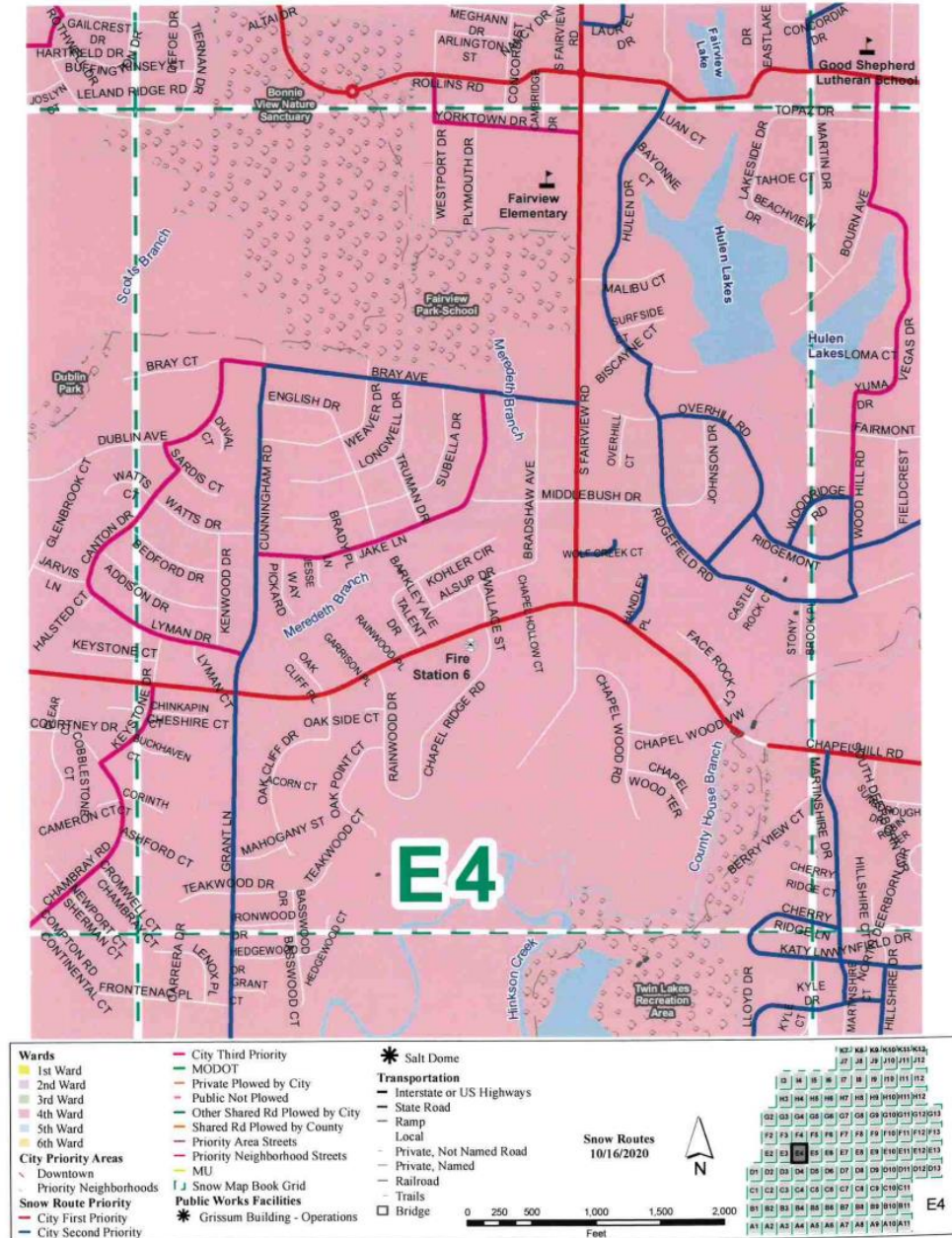
Check <https://www.como.gov/comosnow/>

- Historically, outside to in one event, then inside to out



City Street Road Condition Link (will be on main page)

If completed and considered passable (all green on the map), we still address calls for service and evaluate conditions for additional response based on the specifics of the event.



“Subward” grids

# Winter Weather Information 2025-2026

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Methodical approach.

Have a plan – work the plan.

# Winter Weather Information 2025-2026

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There is no 'typical' storm. Every one is different.

However, there are some guidelines we follow based on FHWA research.

# Winter Weather Information 2025-2026

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## MoDOT EPG

- [https://epg.modot.org/index.php/133.5 Operator%E2%80%99s Guide for Anti-Icing](https://epg.modot.org/index.php/133.5_Operator%E2%80%99s_Guide_for_Anti-Icing)

# Example guidelines for a ‘Type 3 Event’

Table 133.5.3.6.3 Type 3 Winter Event: 1 – 6 in. of snow/frozen precipitation in 24 hours OR a trace to 1/2 in. of ice

## Continuous Operations Routes

| Pavement Temperature Range and Trend                                                                                                                                                                                                                                                                                                                                                                                    | Initial Operation                             |                                |                                      |                       | Subsequent Operations                                              |                                      |              |                       |              | Comments                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------|--------------------------------------|-----------------------|--------------------------------------------------------------------|--------------------------------------|--------------|-----------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                         | Pavement surface at time of initial operation | Maintenance action             | Salt spread rates                    |                       | Maintenance action                                                 | Salt spread rates                    |              |                       |              |                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |                                               |                                | Pre-wetted solid salt (lb/lane-mile) | Brine (gal/lane-mile) |                                                                    | Pre-wetted solid salt (lb/lane-mile) |              | Brine (gal/lane-mile) |              |                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                         |                                               |                                |                                      |                       |                                                                    | Light snow                           | Heavier snow | Light snow            | Heavier snow |                                                                                                                                                                                                                                                                                                                                           |
| Above 32° F, steady or rising                                                                                                                                                                                                                                                                                                                                                                                           | Dry, wet, slush or light snow cover           | None, see comments             | -                                    | -                     | None, see comments                                                 | -                                    | -            | -                     | -            | 1) Monitor pavement temperature closely for drops toward 32° F and below.<br>2) Treat slick patches if needed with pre-wetted salt at 100 lb/lane-mile or brine 44 gal/lane-mile; plow if needed.                                                                                                                                         |
| Above 32° F, 32° F or below is imminent; ALSO 20° to 32° F, remaining in range                                                                                                                                                                                                                                                                                                                                          | Dry                                           | Apply brine or pre-wetted salt | 100                                  | 44                    | Plow as needed, reapply brine or pre-wetted solid salt when needed | 100                                  | 200          | 44                    | 88           | 1) Applications will need to be more frequent at lower temperatures and higher snowfall rates.<br>2) Do not apply brine onto heavy snow accumulation or packed snow. 3) After heavier snow periods and during light snowfall, reduce salt rate to 100 lb./lane-mile or 44 gal./lane-mile brine; continue to plow and apply salt as needed |
|                                                                                                                                                                                                                                                                                                                                                                                                                         | Wet, slush, or light snow cover               | Apply brine or pre-wetted salt | 100                                  | 44                    |                                                                    |                                      |              |                       |              |                                                                                                                                                                                                                                                                                                                                           |
| 10° to 20° F, remaining in range                                                                                                                                                                                                                                                                                                                                                                                        | Dry, wet, slush or light snow cover           | Apply pre-wetted salt          | 200                                  | -                     | Plow as needed, reapply pre-wetted solid salt when needed          | 200                                  | 250          | -                     | -            | 1) Reduce salt rate to 200 lb./lane-mile after heavier snow periods and during light snowfall; continue to plow and apply salt as needed.<br>2) Liquid calcium chloride may be used for pre-wetted salt at colder temperatures                                                                                                            |
| Below 10° F, steady or falling                                                                                                                                                                                                                                                                                                                                                                                          | Dry or light snow cover                       | Plow as needed                 | -                                    | -                     | Plow and apply salt/abrasive mix as needed                         | -                                    | -            | -                     | -            | As pavement becomes slick, apply salt/abrasive mix to enhance traction. Salt will have limited melting power at these temperatures.                                                                                                                                                                                                       |
| Notes: SALT APPLICATIONS. 1) Time initial and subsequent chemical applications to prevent deteriorating conditions or development of packed and bonded snow. 2) Anticipate increases in snowfall intensity. Apply higher rate treatments prior to or at the beginning of heavier snowfall periods to prevent development of packed and bonded snow. 3) Apply salt ahead of traffic rush periods occurring during storm. |                                               |                                |                                      |                       |                                                                    |                                      |              |                       |              |                                                                                                                                                                                                                                                                                                                                           |
| PLOWING. If needed, plow before salt applications so that excess snow, slush or ice is removed and pavement is wet, slushy or lightly snow-covered when treated.                                                                                                                                                                                                                                                        |                                               |                                |                                      |                       |                                                                    |                                      |              |                       |              |                                                                                                                                                                                                                                                                                                                                           |

# Winter Weather Information 2025-2026

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Always limitation on equipment and resources and every storm is different, but generally targeting those guidelines for effective treatments.

# Winter Weather Information 2025-2026

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**Around 6” and greater of snow**

Downtown removal may be triggered

(depends on what’s happened before and what’s coming – probably will be around 8”)



# Winter Weather Information 2025-2026

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## **12"+ and greater of snow**

Neighborhood streets will probably be delayed to about the third day to start

First and seconds are going to take at least two days.

Communication regarding emergency response to and from locations critical – internal work with ICS planner or designated liaison person

# Winter Weather Information 2025-2026

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Long(er) term horizon:

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- What we have been doing is not wrong. In fact it is just about exactly correct given the resources we have available to address the situation.

...however...

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- If we are doing it the exact same way five years from now, we will be doing it wrong.

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- Evaluate each year what is the best way to examine first, second and third priority
- Discuss whether additional parking modifications would improve our approach (internal structure, external communication, public sentiment/voluntary compliance, etc.)

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- Priority neighborhoods – benefits and impacts. They require a local contact to coordinate the removal of parked cars from streets, improving our overall response time.
- It requires effort and collaboration from both our staff and local contacts.

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- Based on Council direction have explored a pilot for subdivisions or neighborhoods expressing a desire to manage their own winter weather response.
- This has been explored, but no subdivision has yet taken steps to initiate a pilot program for this purpose.

# Winter Weather Information 2025-2026

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Long(er) term horizon:

- Potential for blower(s). Horizon ~2027-2028 winter. Several reasons.
- Demo of blower unit downtown scheduled this winter, but several logistic challenges.
- Evaluating potential for belly plows.

# Winter Weather Information 2025-2026

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Smaller scale blower unit



Loader mounted blower unit

# Winter Weather Information 2025-2026

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Long(er) term horizon:

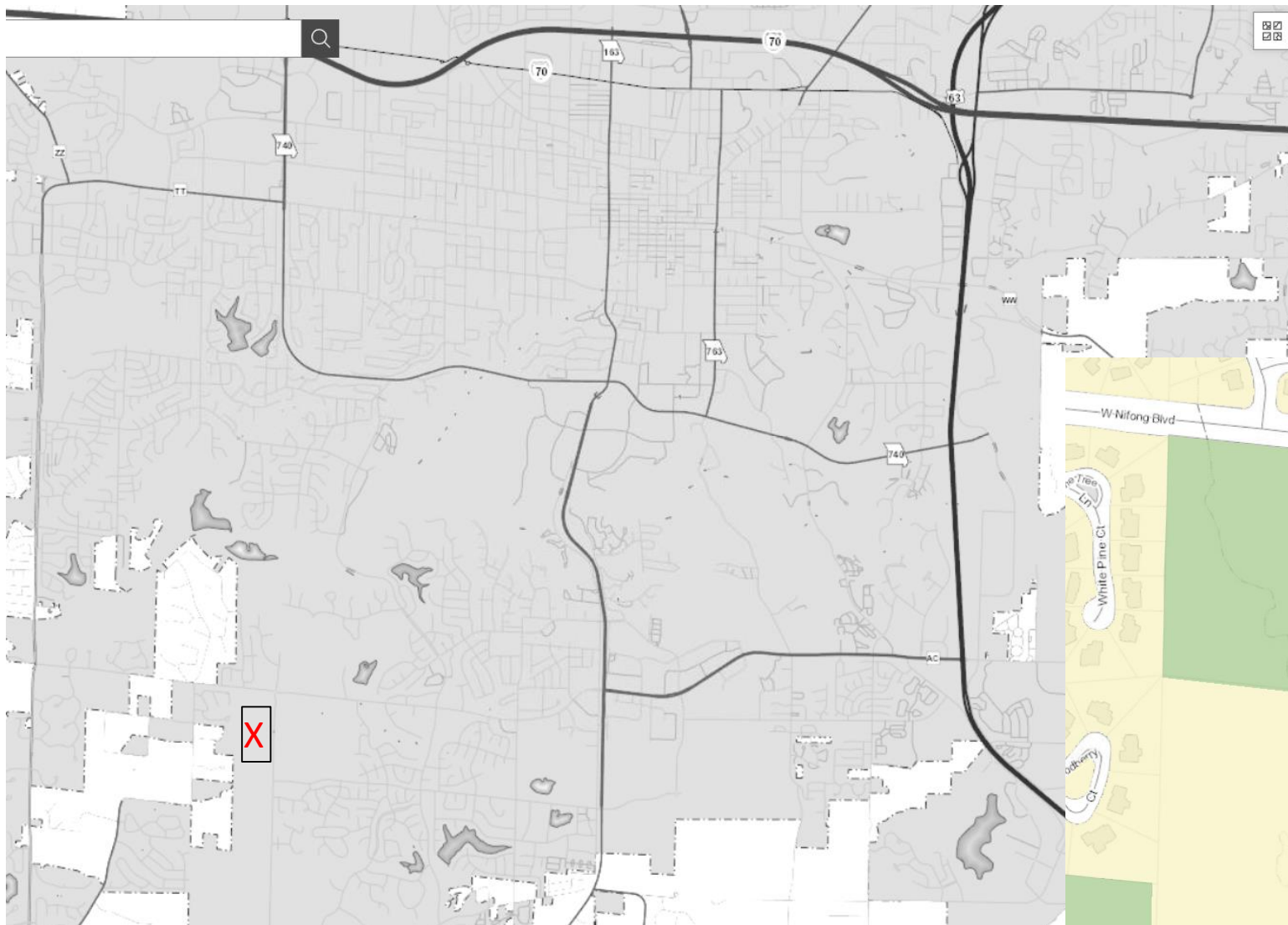
- We are currently assessing the effectiveness of potassium acetate (currently being used at the airport) and calcium-magnesium acetate or magnesium chloride for use by us – requires changes for storage, delivery and equipment modifications

# Winter Weather Information 2025-2026

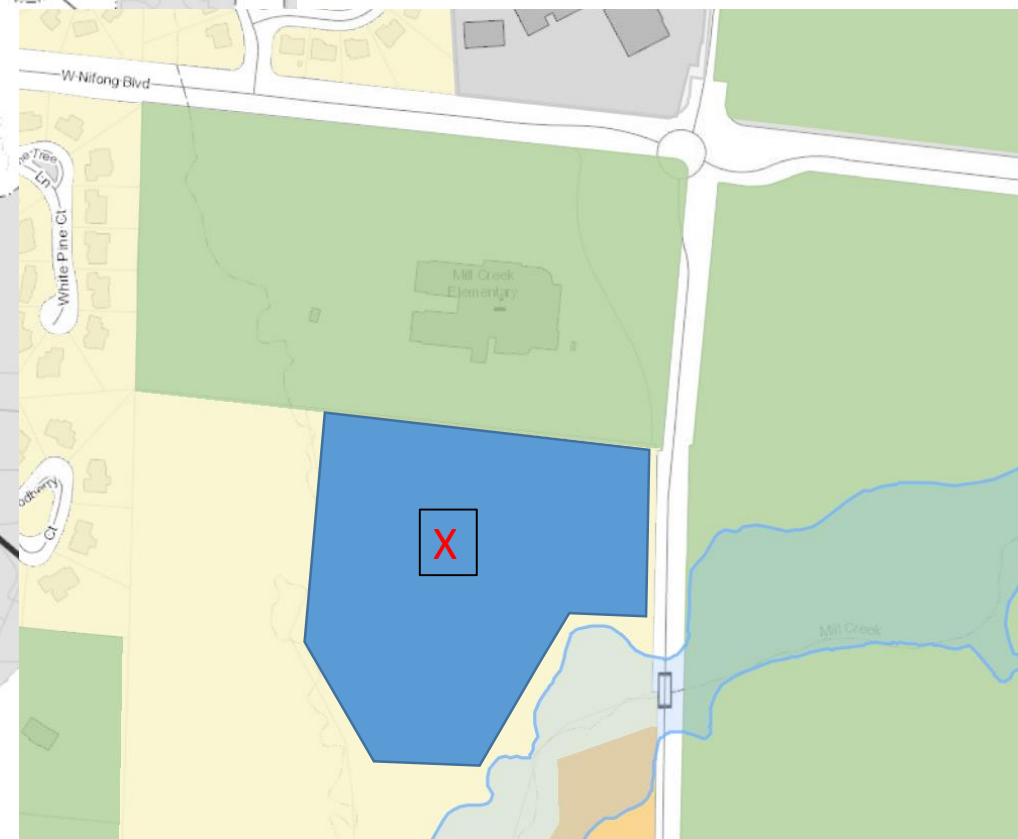
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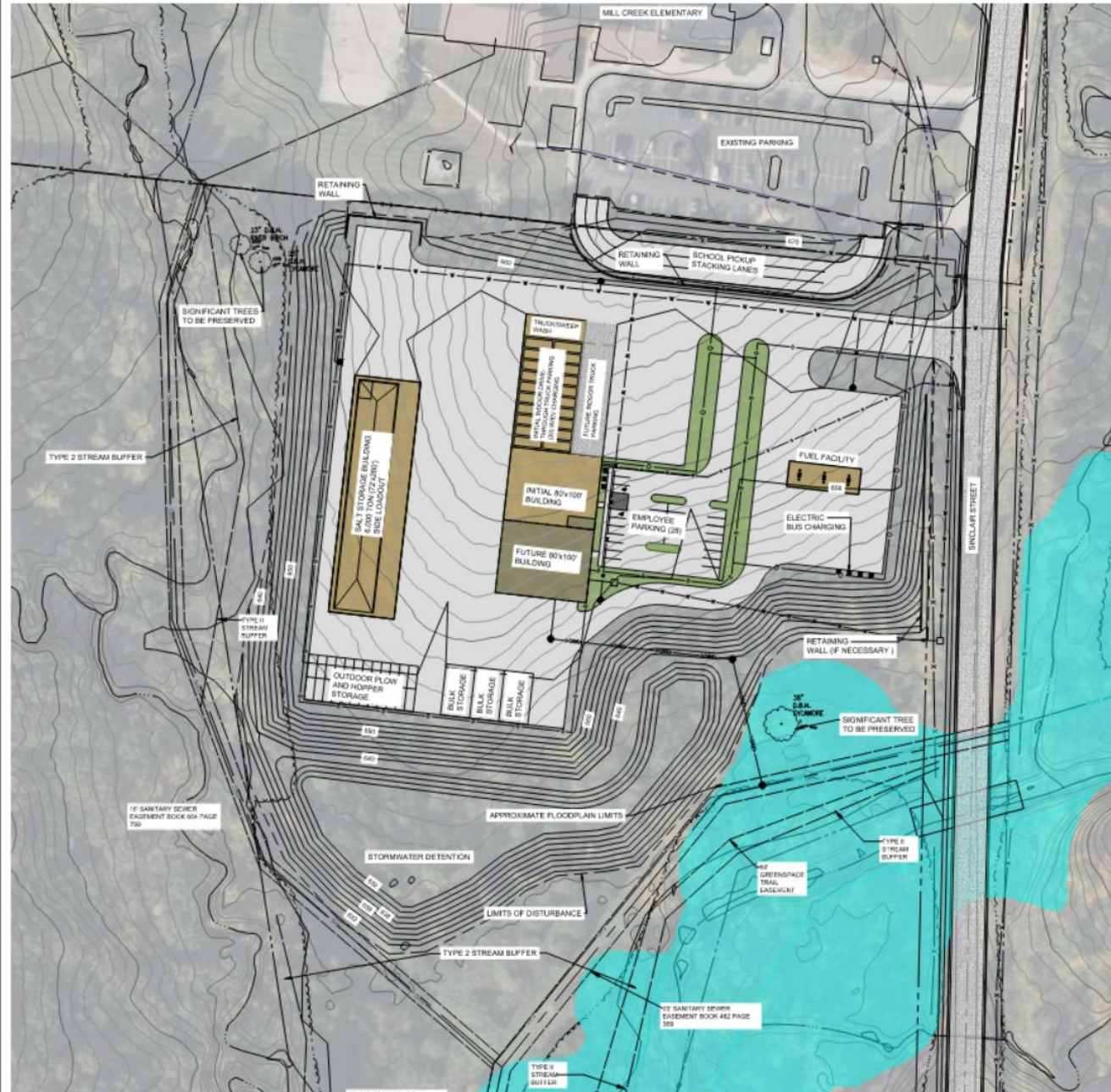
Long(er) term horizon:

- New salt dome facility in the south (will help improve response times everywhere).  
Opportunity for stockpile of pretreated magnesium chloride or other options.



Location of future new salt storage and operations facilities – southwest Columbia.





# CITY OF COLUMBIA MUNICIPAL SERVICES CENTER SOUTH

## CONCEPT MASTER PLAN

FEBRUARY 2024

### NARRATIVE

THE FULL MASTER PLAN INCLUDES THE INITIAL PHASE SALT STORAGE BUILDING ALONG WITH NEW MAINTENANCE BUILDINGS AND A FUEL CANOPY.

BELOW ARE SOME KEY ITEMS:

- 1) SALT STORAGE BUILDING SIZE: 18,720 SF (72' x 260')
- 2) SALT STORAGE VOLUME: 6,000 TON
- 3) INDOOR TRUCK PARKING W/ EV CHARGING: 20 TRUCKS (FUTURE EXPANSION 10 ADDITIONAL)
- 4) MAINTENANCE BUILDING: 8,000 SF (80' x 100')
- 5) FUTURE MAINTENANCE BUILDING EXPANSION: 8,000 SF (80' x 100')
- 6) OUTDOOR PLOW AND HOPPER STORAGE: SPACE TO ACCOMMODATE AS NEEDED
- 7) BULK STORAGE: TONNAGE AS NEEDED BASED ON PRODUCT
- 8) APPROXIMATE AREA DISTURBED: 10.7 ACRES
- 9) APPROXIMATE CUBIC YARDS OF EARTHWORK: 70,000
- 10) FACILITY WILL UTILIZE CITY UTILITIES.
- 11) A TREE AUDIT WAS COMPLETED BY THE CITY AND SIGNIFICANT TREES WILL BE PRESERVED.
- 12) THE ADJACENT FLOOD PLAIN AND STREAM BUFFER CORRIDORS WILL BE PRESERVED.
- 13) ROOF OF BUILDINGS, WHERE POSSIBLE, WILL BE DESIGNED TO SUPPORT PHOTOVOLTAIC PANELS FOR ELECTRIC GENERATION ON SITE.
- 14) POSSIBLE FUTURE SCHOOL PICK UP STACKING LANES PROVIDED TO RELIEVE CONGESTION ON SINCLAIR STREET DURING SCHOOL DISMISSAL.



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# Winter Weather Information 2025-2026

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Targeting open 2026-2027 winter – in progress.

# Winter Weather Information 2025-2026

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Public Works employs a systematic, equitable and methodical approach to winter weather.

The plan has been carefully crafted with a focus on resource management, environmental stewardship, and resident safety. Our commitment lies in faithfully following the plan to achieve those goals.

# Winter Weather Information 2025-2026

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Many years there are no or one 4 inch snow event

Typically about 1-2% of days (over the last 25 years) retain more than 4 inches of accumulation

That's about 4-8 days a year on average where it stays around

# Winter Weather Information 2025-2026

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We are happy when the average or better occurs,  
but prepare for other possibilities.

# Winter Weather Information 2025-2026

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Questions ?