#### PUBLIC WORKS MEMORANDUM #12-2021

| DATE:    | March 22, 2021  |
|----------|---|
| TO:      | Honorable Mayor Meredith Leighty and City Council Members |
| THROUGH: | Heather Geyer, City Manager                               |
| FROM:    | Kent Kisselman PE, Director of Public Works               |
| SUBJECT: | Lift Station A and Force Main A Replacement Update        |
|          |   |

## PURPOSE

To provide City Council with an update on the status of the Lift Station A and Force Main A replacement projects.

#### BACKGROUND

Northglenn's Lift Station A and Force Main A convey sewage from the entire City to the Wastewater Treatment Plant (WWTP). Lift Station A is the most critical lift station in the City and has been planned for replacement for many years due to deteriorated conditions, pumps that have failed and are difficult to maintain, safety concerns for the staff entering the "submarine" dry well that can leak and fill with sewage, and other concerns. Force Main A has been identified for replacement due to previous breaks and maintenance issues.

On Dec. 21, 2020, the City entered into contracts with J.R. Filanc Construction Company, Inc. through Resolution No. 20-186 for the replacement of Lift Station A, and with BT Construction, Inc. through Resolution No. 20-187 for the replacement of Force Main A.

#### Impacts to the Community

Construction on Force Main A will be done in sections, and at times two crews will work in different locations along the line. Traffic will be affected. Tunneling pits will be installed at 112<sup>th</sup> Avenue and 120<sup>th</sup> Avenue to avoid major disruptions, but turn lanes or access roads may be closed. Also, residents near the replacement area may have water/sewer interruptions or limited access to driveways for short periods of time.

Besides construction noise, the replacement of Lift Station A should not affect the public.

# **Outreach for Force Main A**

BT Construction is taking the lead on outreach, with the City providing support. Efforts by BT Construction include:

- Website: www.northglenn.org/forcemainaproject
- Phone line: 303.219.9784
- Email: nfma@btconstruction.com
- Delivery of door hangers at least 48 hours in advance of anticipated traffic or water/sewer impacts
- Public meetings as warranted

The City will provide updates through its social media channels, the City website and in the Connection as necessary.

Lift Station A and Force Main A Replacement Update March 22, 2021 Page 2 of 2

## UPDATE

## Lift Station A Replacement

J.R. Filanc Construction Company has completed the pre-construction phase and begun to mobilize to the site as of March 8, 2021. They will soon make temporary electrical connections, and in the coming weeks will begin excavation. Procurement of long-lead items, such as pumps and electrical equipment, is well underway. Attachment 1 provides a 10-week look-ahead schedule and an overall project schedule is provided in Attachment 2.

## Force Main A Replacement

BT Construction has completed the pre-construction phase and is planning to begin mobilizing on or about March 15, 2021. They have placed the order for the entirety of the PVC pipe, and are planning to store it in multiple locations, including the WWTP. BT Construction is in discussions with several property owners along the project corridor for the staging of materials. Work will begin with one crew in the Maintenance & Operations Facility yard, and another crew is anticipated to be added by the summer, which may make it possible to complete the project ahead of schedule. A project schedule is expected in the coming days.

## Force Main A Outreach

An online "Lunch + Learn" forum for Force Main A was held on March 15. The event was widely publicized through the City's communications channels, as well as a direct mailer from BT Construction.

# **BUDGET/TIME IMPLICATIONS**

The overall project budget has not changed at this time.

| Description   | Contract Number | Amount       |
|---|-----------------|--------------|
| Lift Station A Guaranteed Maximum Price<br>(GMP) including contractor's contingency<br>and fee (J.R. Filanc Construction Company) | 2020-061A       | \$9,944,664  |
| Lift Station A owner's contingency  | 2020-061A       | \$215,178    |
| Force Main A GMP including contractor's contingency and fee (BT Construction)   | 2020-062A       | \$14,011,886 |
| Force Main A owner's contingency  | 2020-062A       | \$264,875    |
| WWTP odor mitigation engineer's estimate  | TBD             | \$2,200,000  |
| Final Bonding Amount  |                 | \$26,636,603 |

The project is currently on schedule with a completion date of February 2022.

#### STAFF RECOMMENDATION

This item is for informational purposes only.

# STAFF REFERENCE

If Council members have any questions, please contact Kent Kisselman, Director of Public Works, at 303.450.4005 or kkisselman@northglenn.org.

# ATTACHMENTS

- 1. Lift Station A 10-week look-ahead schedule
- 2. Lift Station A overall schedule
- 3. Force Main A construction map

|                                    |        |   |       |      |   |   |     | NO   | RTI | HGL  | EN | N L  | S A  | RE   | PL/ | ACE | ME   | NT   | PRC | JEC | T   |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
|------------------------------------|--------|---|-------|------|---|---|-----|------|-----|------|----|------|------|------|-----|-----|------|------|-----|-----|-----|------|----|-----|-----|------|------|---|---|------|------|----|----|-----|-------------------|------|---|---|----|------|-----|---|---|-----------|------|-----|-------|
|                                    |        |   |       |      |   |   |     |      | :   | 10-' | We | ek   | Loc  | ok-A | ۱he | ad  | Sch  | edu  | le  |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| TASK                               | FILANC | : | 3/8/2 | 2021 |   |   | 3/1 | 5/20 | 21  |      | 3  | 3/22 | 2/20 | 21   |     | 3   | /29/ | 2021 | 1   |     | 4/5 | /202 | 21 |     | 4/  | 12/2 | 2021 |   |   | 4/19 | /202 | 21 |    | 4,  | /26/              | /202 | 1 |   | 5/ | /3/2 | 021 |   |   | 5/1       | 0/20 | )21 |       |
|                                    |        | М | тΜ    | VR   | F | Μ | Т   | W    | R   | F    | M  | ۲V   | W    | R    | FΙ  | M . | гν   | V R  | F   | Μ   | Т   | W    | R  | FN  | ИΤ  | W    | R    | F | М | T    | W    | R  | FN | N I | гΙν               | V R  | F | Μ | Τ  | W    | R   | F | М | Т         | W    | R   | F     |
| Clear & Grub/Level                 |        | Х | х х   | ( X  | Х |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | 1     |
| Install Temp Fence/Remove Existing |        |   |       | X    | Х | Х | Х   |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | L     |
| Mobe Connex's                      |        |   |       |      |   |   | Х   |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Electrical Relocate                |        |   |       |      |   |   | Х   | Х    | Х   |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Install 60' SS (30")               |        |   |       |      |   |   |     |      | Х   | Х    | X  | X    |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Demo Asbestos/Abatement            |        |   |       |      |   |   |     |      |     |      | X  | Х    | Х    | X    | Х   |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | 1     |
| Install Water/Hydrant Line         |        |   |       |      |   |   |     |      |     |      |    |      | Х    | X    | Х   | X   | x x  | < X  | X   |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Temp Power                         |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     | X   | XX   | ( X  | Х   |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Mobe Office                        |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      | Х    | Х   |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | 1     |
| Set up Crane                       |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     | Х   | Х   | Х    |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | 1     |
| Dewatering Wells                   |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     | Х    | X  | X Z | х х | X    | Х    | Х |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     | 1     |
| Survey for Excavation              |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      | Х |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
| Excavate & Install Shoring         |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   | Х | Х    | X    | X  | X  | ХХ  | $\langle \rangle$ | < X  | X | X | X  | X    | Х   | Х | Х | Х         | Х    | Х   | Х     |
|                                    |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
|                                    |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   |   |    |      |     |   |   |           |      |     |       |
|                                    |        |   |       |      |   |   |     |      |     | Τ    |    |      | Τ    |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   | Τ    |      |    |    |     |                   |      |   |   |    |      |     |   |   | $\square$ |      |     |       |
|                                    |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     |     |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   | Τ | T  |      |     |   |   |           | i T  |     | <br>1 |
|                                    |        |   |       |      |   |   |     |      |     |      |    |      |      |      |     |     |      |      |     | 1   |     |      |    |     |     |      |      |   |   |      |      |    |    |     |                   |      |   | Т |    |      |     |   |   |           | i T  |     |       |

# **ATTACHMENT 1**

| J.R. Filanc Construction         |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     | С    | ity of I | Northglen | in   |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|----------------------------------|----------|------|------|--------|-------|----------|-------|--------|------|--------|------|---------|--------|---------|-----|--------|--------|----------|-----|------|----------|-----------|------|------|---------|--------|---------|---------|----------|--------|--------|---------|---------|--------|-------|-------|-----------|-----|---------|---------|----------|
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          | A Replace |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      | Wee      | k Ending  |      |      | ŀ       |        |         |         | ·        |        |        |         |         |        |       |       |           |     |         |         |          |
| Activity                         | 3/14     | 3/21 | 3/28 | 4/4 4/ | /11 4 | 4/18 4/2 | 25 5/ | /2 5/9 | 5/16 | 5 5/23 | 5/30 | 6/6 6/1 | L3 6/2 | 20 6/27 | 7/4 | 7/11 7 | 7/18 7 | //25 8/1 | 8/8 | 8/15 | 8/22     | 8/29 9/5  | 9/12 | 9/19 | 9/26 10 | /3 10/ | /10 10/ | '17 10/ | /24 10/3 | 81 11/ | 7 11/1 | 4 11/21 | 1 11/28 | 8 12/5 | 12/12 | 12/19 | 12/26 1/2 | 1/9 | 1/16 1/ | 23 1/30 | 2/6 2/13 |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Mobilization                     |          |      | - 1  |        | 1     | 1        |       | 1      | 1    | 1      |      |         |        |         | 1   | 1 1    |        | 1        |     | 1 1  |          | 1         | 1 1  | 1    | 1       |        |         | -       |          |        | -      | 1       | 1       | 1      | 1 1   |       |           |     | 1       | 1       | 1 1      |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Pump Station                     |          |      |      |        |       | I        |       |        | 1    |        | L I  |         |        |         |     | II     |        |          |     |      |          |           | 1 1  |      | I       |        |         |         |          |        |        |         | 1       |        |       |       |           | 1 1 |         |         |          |
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| Relocate Electrical / Water      |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Install Dewatering Wells         |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Excavate / Shoring               |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Flow Fill under Base Slab        |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        | _    |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Form / Rebar / Place (F/R/P) SOC | <u>,</u> |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| F/R/P Walls to Elev 5225         |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Watertight Test                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        | _    |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Backfill / Flow To Elev 5225     |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           | -    |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| F/R/P Valve/Meter Vault Slab     |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        | +    |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         | -       |        |       |       |           |     |         |         |          |
| F/R/P Balance of Pump Station    |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Pump Sta Mech/ Misc Metals       |          |      |      |        |       |          |       |        |      | -      |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           | +   |         |         |          |
| Commision & Startup              |          |      |      |        |       |          | -     |        | -    |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         | -       |          |        | _      |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          | _     |        | +    | -      |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Final Pipe Tie - Ins             |          |      |      |        |       |          |       |        | 1    |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
|                                  |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |
| Demo Existing Pump Station       |          |      |      |        |       |          |       |        |      | _      |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        | _      |         |         |        |       |       |           | 1 1 |         |         |          |
| Dunchlint ( Dom - biliti         |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     | +    |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           | +   |         |         |          |
| Punchlist/ Demobilization        |          |      |      |        |       |          |       |        |      |        |      |         |        |         |     |        |        |          |     |      |          |           |      |      |         |        |         |         |          |        |        |         |         |        |       |       |           |     |         |         |          |

# **ATTACHMENT 2**

