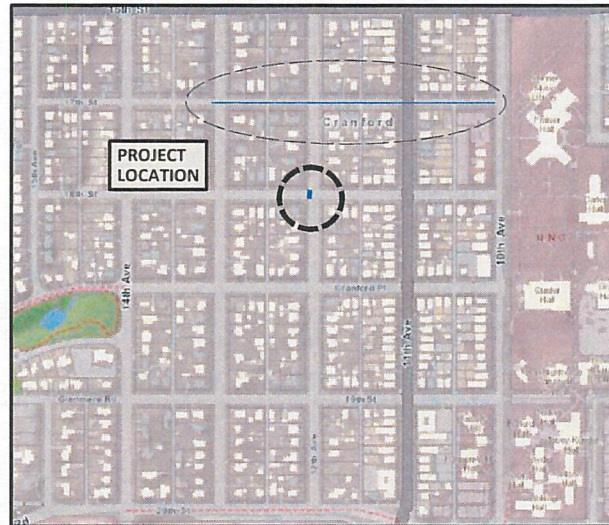


2020 KGM - CRANFORD STORMWATER IMPROVEMENTS

17TH STREET - 10TH TO 14TH AVENUES AND 18TH STREET @ 12TH AVENUE

SUMMER 2020



VICINITY MAP
N.T.S.

City of Greeley
Department of Public Works
Stormwater Management Division



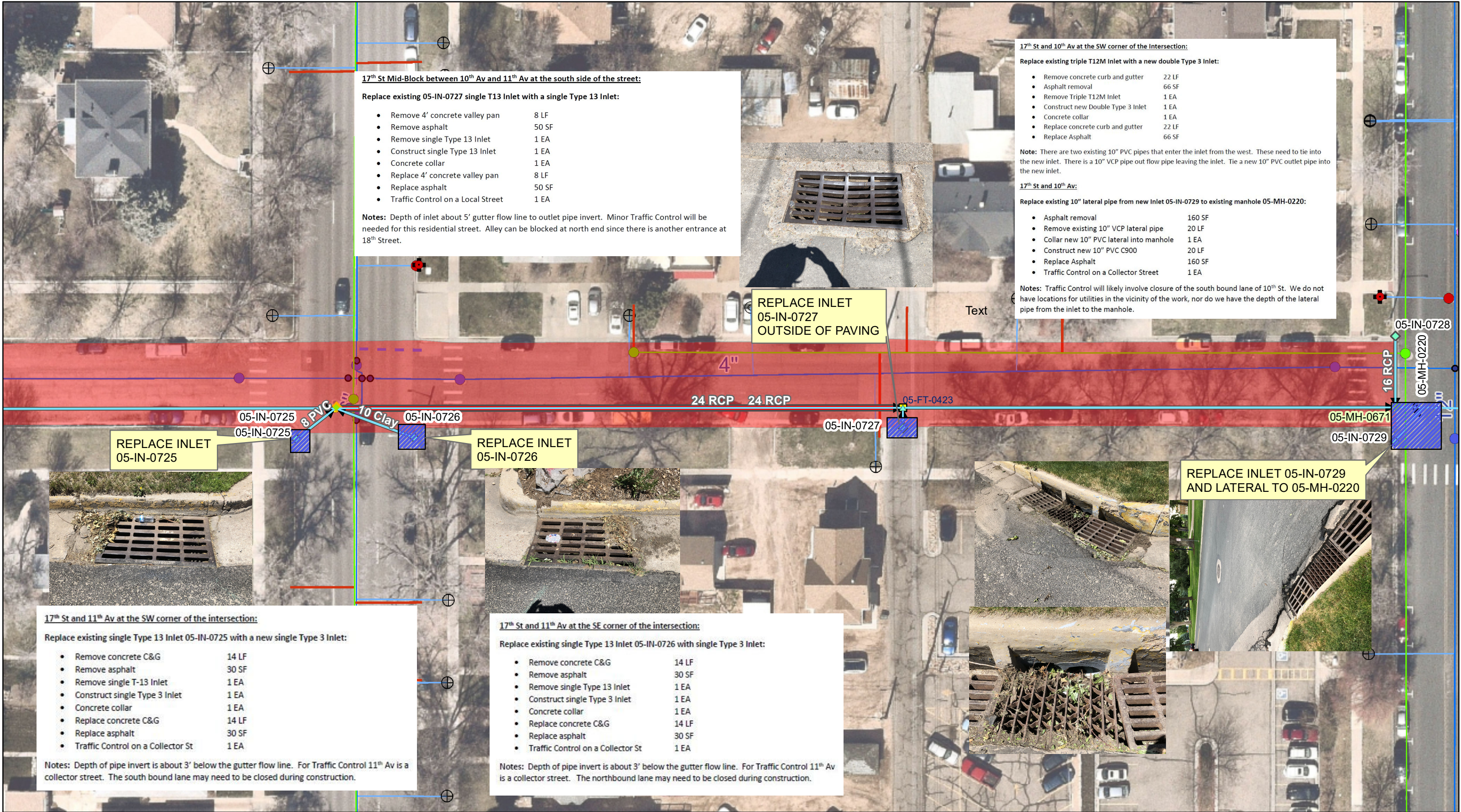
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU
DIG, GRADE, OR EXCAVATE FOR MAINTENANCE OF
UNDERGROUND MEMBER UTILITIES.

SHEET INDEX

	NAME
1	TITLE, SHEET INDEX, & VICINITY MAP
2	17TH STREET - 10TH TO 11TH AVENUES
3	17TH STREET - 1100 BLOCK TO 13TH AVENUE
4	18TH STREET - 12TH AVE CROSSSPAN
5	18TH STREET - 12TH AVENUE CROSSSPAN -- STANDARD DETAIL AND EXISTING ELEVATIONS

Adam Prior
City Engineer
Karen Reynolds
Water/Sewer Chief Engineer
Stormwater Manager

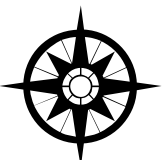
REVISIONS:	BY: DATE:	DESIGNED BY: BL		STORMWATER MANAGEMENT DIVISION Department of Public Works 1001 NINTH AVENUE GREELEY, COLORADO 80631 PH: 970-336-4074 FAX: 970-336-4019 greeleygov.com/stormwater	2020 KGM - CRANFORD STORMWATER IMPROVEMENTS 17TH STREET - 10TH TO 14TH AVE & 18TH STREET @ 12TH AVE TITLE, SHEET INDEX, & VICINITY MAP	BUN: 413 00 591 5807 0000	PROJECT CODE:	DATE: 7/2020
		DRAWN BY: LSH						SHEETS 5
		CHECKED BY: BL						1
								SHEET



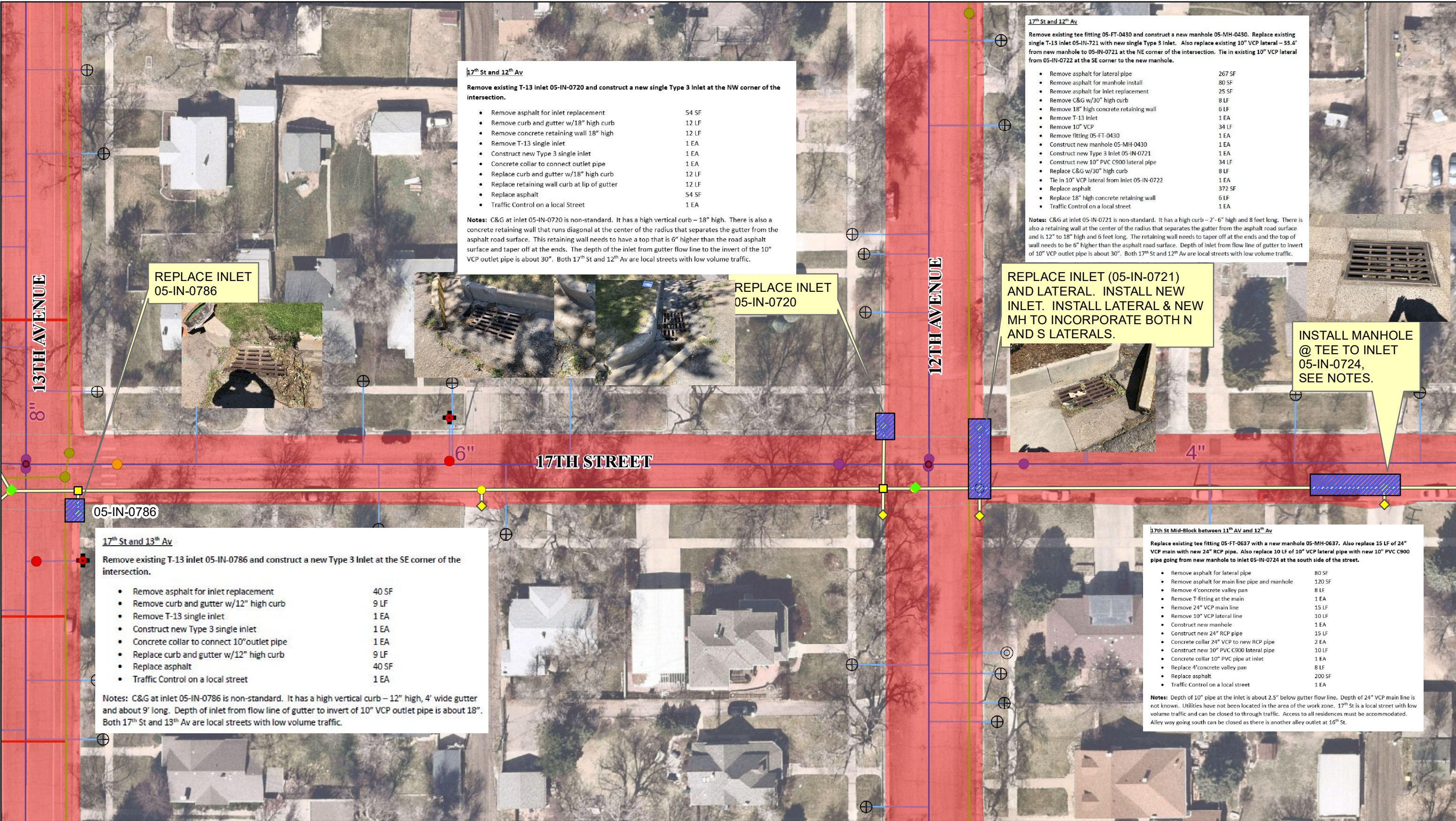
2020 KGM PROJECTS 17TH ST - 10TH TO 11TH AVE

File: 17th_Street_10-11_2020_KGM_Stormwater_Work_locations
Date: 7/22/2020
By: City of Greeley, LSH

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1 inch = 40 feet
SHEET 2 OF 5 SHEETS



17th St and 12th Av

Remove existing T-13 inlet 05-IN-0720 and construct a new single Type 3 Inlet at the NW corner of the intersection.

• Remove asphalt for inlet replacement	54 SF
• Remove curb and gutter w/18" high curb	12 LF
• Remove concrete retaining wall 18" high	12 LF
• Remove T-13 single inlet	1 EA
• Construct new Type 3 single inlet	1 EA
• Concrete collar to connect outlet pipe	1 EA
• Replace curb and gutter w/18" high curb	12 LF
• Replace retaining wall curb at lip of gutter	12 LF
• Replace asphalt	54 SF
• Traffic Control on a local Street	1 EA

Notes: C&G at inlet 05-IN-0720 is non-standard. It has a high vertical curb – 18" high. There is also a concrete retaining wall that runs diagonal at the center of the radius that separates the gutter from the asphalt road surface. This retaining wall needs to have a top that is 6" higher than the road asphalt surface and taper off at the ends. The depth of the inlet from gutter flow line to the invert of the 10" VCP outlet pipe is about 30". Both 17th St and 12th Av are local streets with low volume traffic.

17th St and 12th Av

Remove existing tee fitting 05-FT-0430 and construct a new manhole 05-MH-0430. Replace existing single T-13 inlet 05-IN-0721 with new single Type 3 Inlet. Also replace existing 10" VCP lateral – 33.4' from new manhole to 05-IN-0721 at the NE corner of the intersection. Tie in existing 10" VCP lateral from 05-IN-0722 at the SE corner to the new manhole.

• Remove asphalt for lateral pipe	267 SF
• Remove asphalt for manhole install	80 SF
• Remove asphalt for inlet replacement	25 SF
• Remove C&G w/30" high curb	8 LF
• Remove 18" high concrete retaining wall	6 LF
• Remove T-13 Inlet	1 EA
• Remove 10" VCP	34 LF
• Remove fitting 05-FT-0430	1 EA
• Construct new manhole 05-MH-0430	1 EA
• Construct new Type 3 Inlet 05-IN-0721	1 EA
• Construct new 10" PVC C900 lateral pipe	34 LF
• Replace C&G w/30" high curb	8 LF
• Tie in 10" VCP lateral from inlet 05-IN-0722	1 EA
• Replace asphalt	372 SF
• Replace 18" high concrete retaining wall	6 LF
• Traffic Control on a local street	1 EA

Notes: C&G at inlet 05-IN-0721 is non-standard. It has a high curb – 2'-6" high and 8 feet long. There is also a retaining wall at the center of the radius that separates the gutter from the asphalt road surface and is 12" to 18" high and 6 feet long. The retaining wall needs to taper off at the ends and the top of wall needs to be 6" higher than the asphalt road surface. Depth of inlet from flow line of gutter to invert of 10" VCP outlet pipe is about 30". Both 17th St and 12th Av are local streets with low volume traffic.

REPLACE INLET
05-IN-0786



REPLACE INLET
05-IN-0720



REPLACE INLET (05-IN-0721)
AND LATERAL. INSTALL NEW
INLET. INSTALL LATERAL & NEW
MH TO INCORPORATE BOTH N
AND S LATERALS.



INSTALL MANHOLE
@ TEE TO INLET
05-IN-0724,
SEE NOTES.

17th St and 13th Av

Remove existing T-13 inlet 05-IN-0786 and construct a new Type 3 Inlet at the SE corner of the intersection.

• Remove asphalt for inlet replacement	40 SF
• Remove curb and gutter w/12" high curb	9 LF
• Remove T-13 single inlet	1 EA
• Construct new Type 3 single inlet	1 EA
• Concrete collar to connect 10" outlet pipe	1 EA
• Replace curb and gutter w/12" high curb	9 LF
• Replace asphalt	40 SF
• Traffic Control on a local street	1 EA

Notes: C&G at inlet 05-IN-0786 is non-standard. It has a high vertical curb – 12" high, 4' wide gutter and about 9' long. Depth of inlet from flow line of gutter to invert of 10" VCP outlet pipe is about 18". Both 17th St and 13th Av are local streets with low volume traffic.

17th St Mid-Block between 11th Av and 12th Av

Replace existing tee fitting 05-FT-0637 with a new manhole 05-MH-0637. Also replace 15 LF of 24" VCP main with new 24" RCP pipe. Also replace 10 LF of 10" VCP lateral pipe with new 10" PVC C900 pipe going from new manhole to inlet 05-IN-0724 at the south side of the street.

• Remove asphalt for lateral pipe	80 SF
• Remove asphalt for main line pipe and manhole	120 SF
• Remove 4" concrete valley pan	8 LF
• Remove T-fitting at the main	1 EA
• Remove 24" VCP main line	15 LF
• Remove 10" VCP lateral line	10 LF
• Construct new manhole	1 EA
• Construct new 24" RCP pipe	15 LF
• Concrete collar 24" VCP to new RCP pipe	2 EA
• Construct new 10" PVC C900 lateral pipe	10 LF
• Concrete collar 10" PVC pipe at inlet	1 EA
• Replace 4" concrete valley pan	8 LF
• Replace asphalt	200 SF
• Traffic Control on a local street	1 EA

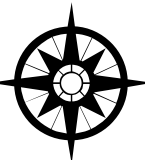
Notes: Depth of 10" pipe at the inlet is about 2.5" below gutter flow line. Depth of 24" VCP main line is not known. Utilities have not been located in the area of the work zone. 17th St is a local street with low volume traffic and can be closed to through traffic. Access to all residences must be accommodated. Alley way going south can be closed as there is another alley outlet at 16th St.



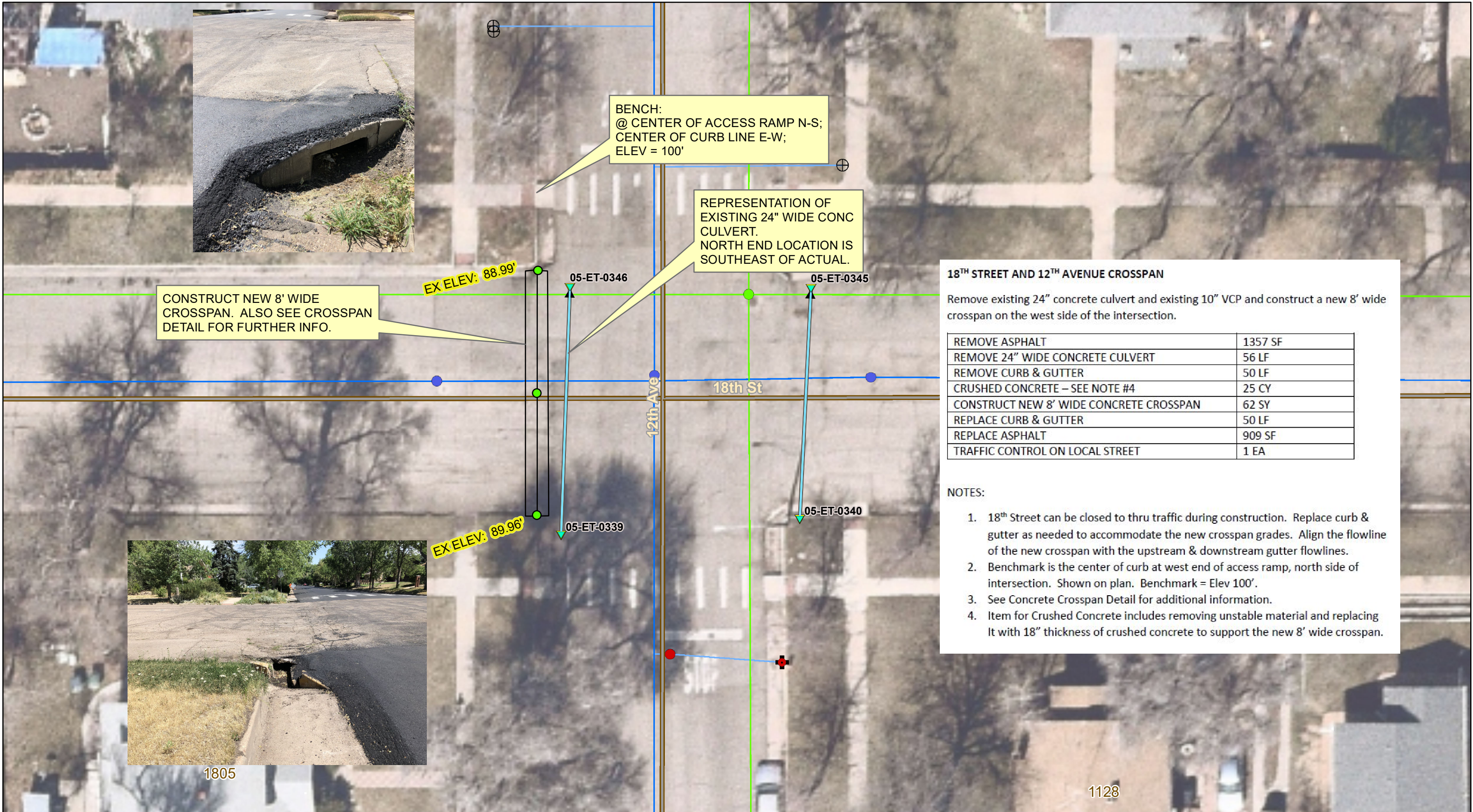
2020 KGM 17TH ST PROJECTS 1100 BLOCK TO 13TH AVE

File: 17th_Street_12-13_2020_KGM_Stormwater_Work_locations
Date: 7/22/2020
By: City of Greeley, LSH

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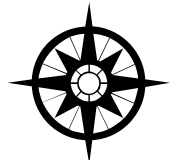
1 inch = 50 feet



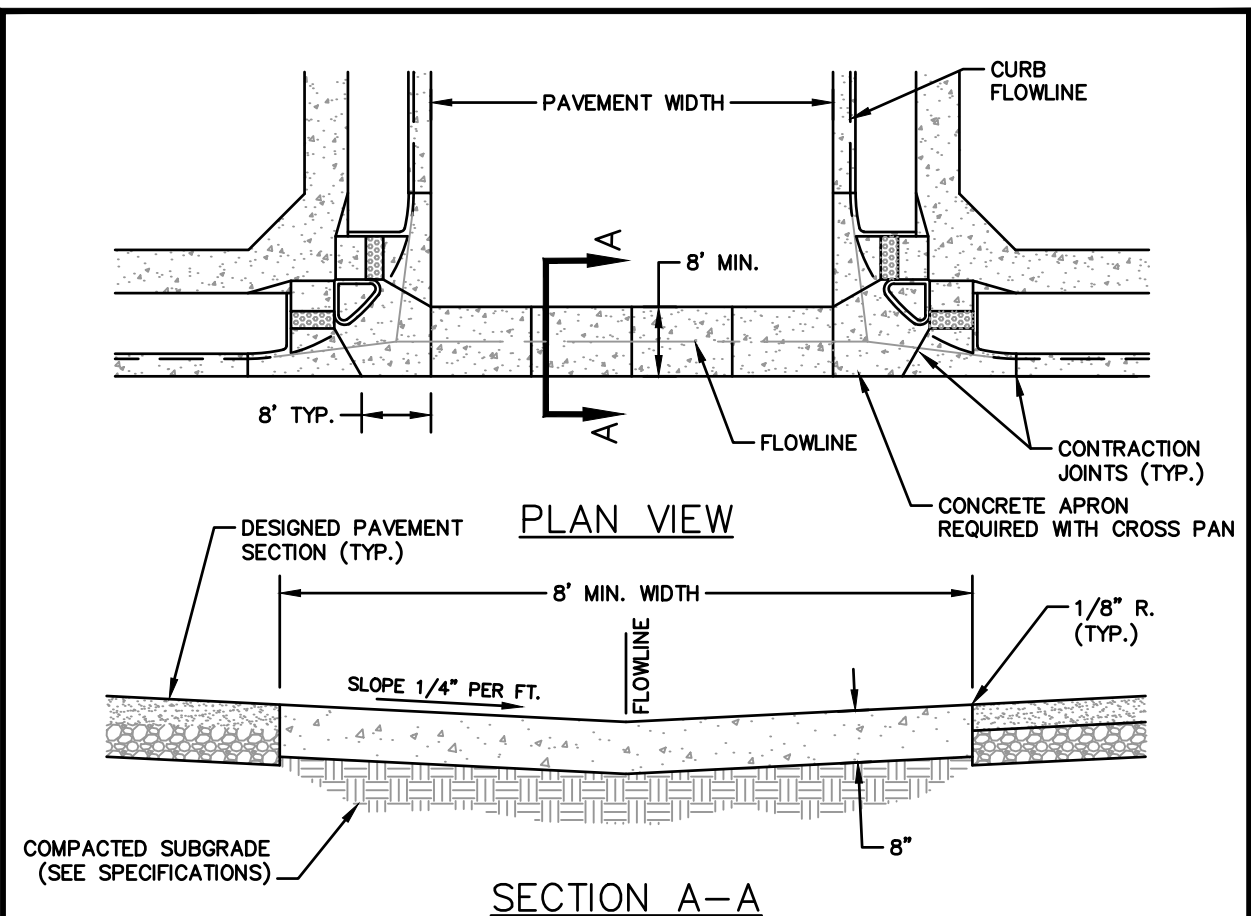
2020 KGM PROJECTS 18TH ST - 12TH AVE CROSSPAN

File: 18th_Street_12thAve_2020_KGM_Stormwater_Work_locations
Date: 7/22/2020
By: City of Greeley, LSH

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1 inch = 20 feet
SHEET 4 OF 5 SHEETS



NOTES:

1. MINIMUM OF 0.6% LONGITUDINAL SLOPE FOR CROSS PANS.
2. MAXIMUM SPACING OF CONTRACTION JOINTS – TEN (10) FEET.
3. CONCRETE APRON SHALL BE POURED MONOLITHICALLY WITH CURB AND SHALL BE 8" THICK (SEE CURB RAMP DETAILS).
4. CROSS PAN AND APRON MAY BE POURED MONOLITHICALLY OR IF POURED SEPARATELY SHALL BE DOWELLED TOGETHER.
5. SEE STREET DESIGN STANDARDS FOR PERMISSIBLE LOCATIONS OF CROSS PANS.
6. MID-BLOCK CROSS PANS SHALL BE A MINIMUM OF TEN (10) FEET WIDE.
7. LARGER WIDTHS MAY BE REQUIRED BY THE CITY.
8. DOWELING MAY BE REQUIRED AT CERTAIN COLD JOINTS AT THE CITY'S DIRECTION, BASED ON SPECIAL SUBGRADE CIRCUMSTANCES.
9. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

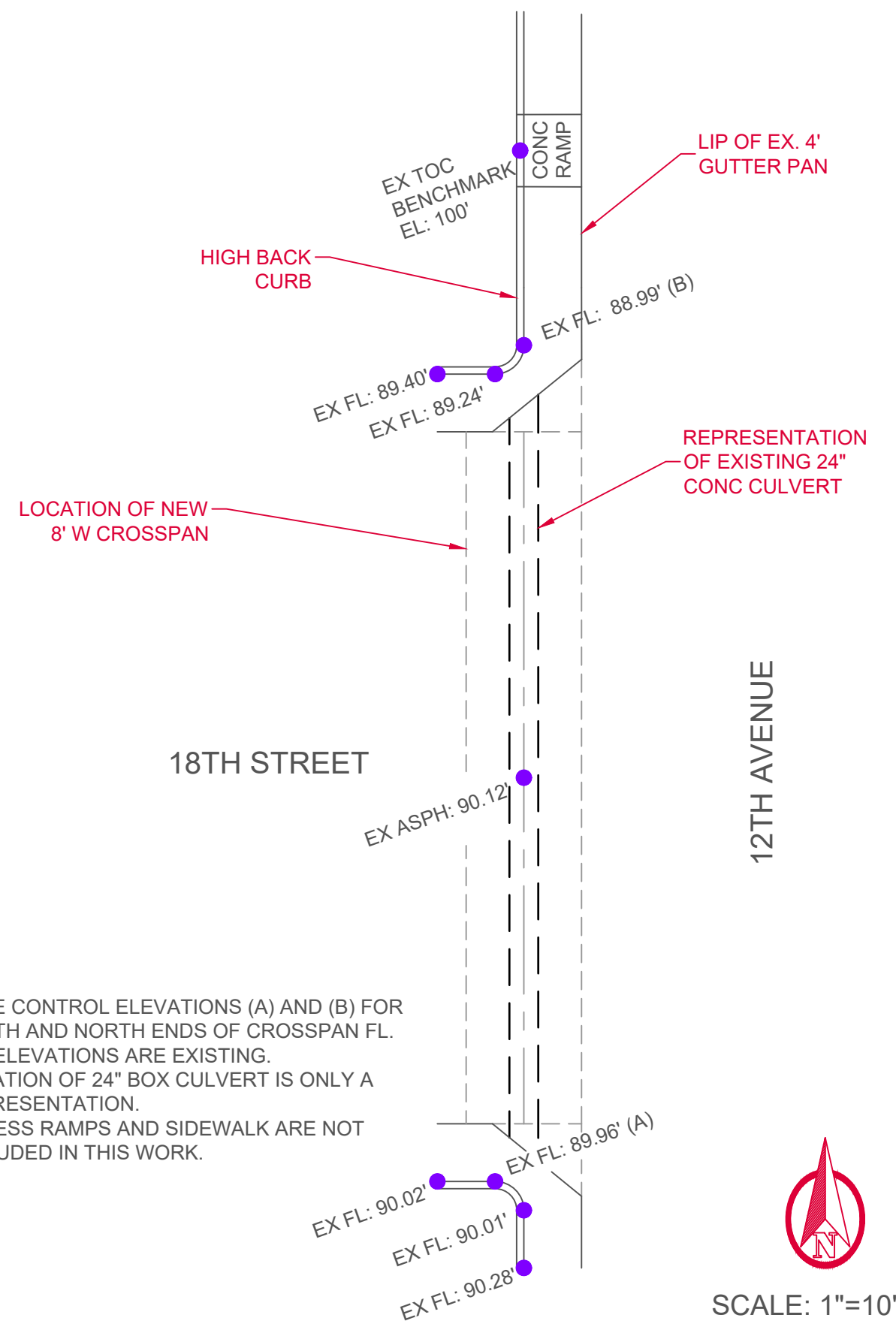


CONCRETE CROSS PAN DETAIL

DETAIL NO. S-28

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. NOTE CONTROL ELEVATIONS (A) AND (B) FOR SOUTH AND NORTH ENDS OF CROSSPAN FL.
2. ALL ELEVATIONS ARE EXISTING.
3. LOCATION OF 24" BOX CULVERT IS ONLY A REPRESENTATION.
4. ACCESS RAMPS AND SIDEWALK ARE NOT INCLUDED IN THIS WORK.



SCALE: 1"=10'

REVISIONS:	BY:	DATE:



STORMWATER MANAGEMENT DIVISION
Department of Public Works
1001 NINTH AVENUE GREELEY, COLORADO 80631
PH: 970-336-4074 FAX: 970-336-4019
greeleygov.com/stormwater

18TH STREET 12TH AVENUE CROSSPAN
18TH ST & 12TH AVE WEST SIDE OF INTERSECTION
STD DETAIL AND EXISTING ELEVATIONS

BUN: 413 00 591 5807 0000

PROJECT CODE:

DATE: 07222020

SHEETS

5

5

SHEET