A VARIES 10.39′ TO 10.00′
STA. 3172+08.12 TO STA. 3172+33.01
10.00′
STA. 3172+33.01 TO STA. 3181+36.46

B VARIES 9.52′ TO 4.50′
STA. 2179+50.00 TO STA. 2181+35.18

C VARIES 9.57′ TO 10.00′
STA. 2171+85.00 TO STA. 2172+10.00
10.00′
STA. 2172+10.00 TO STA. 2173+91.43

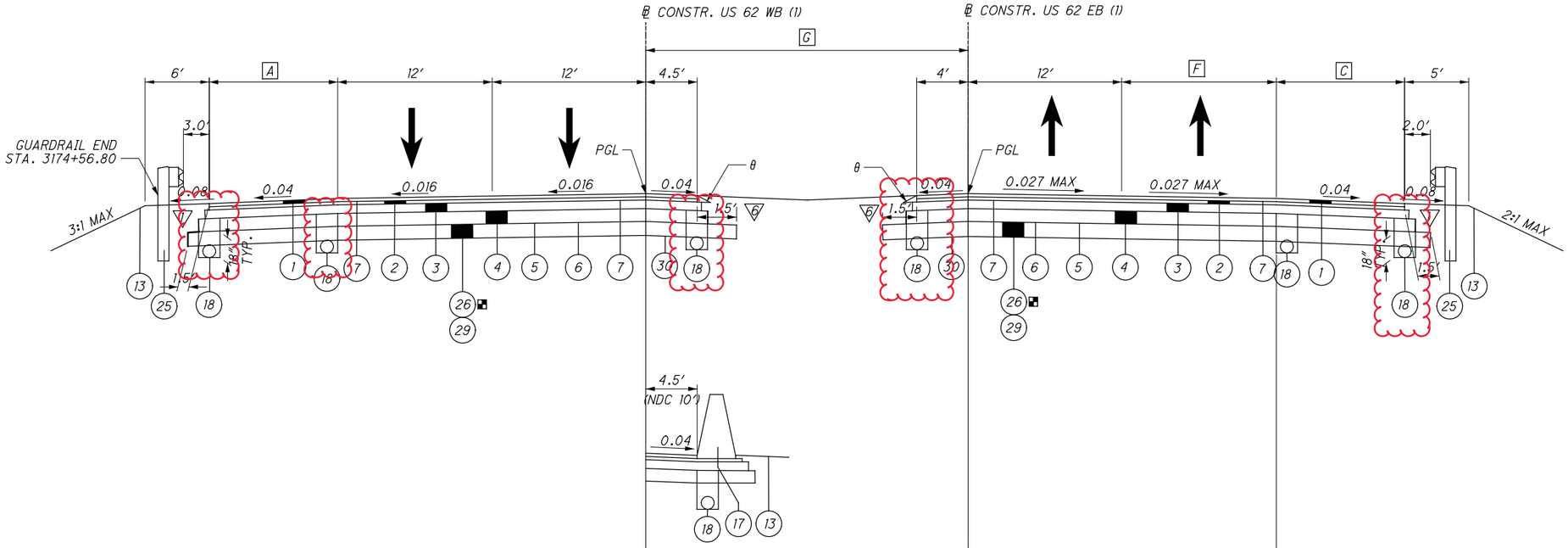
D VARIES 23.00′ TO 0.00′
STA. 2173+91.43 TO STA. 2180+49.84

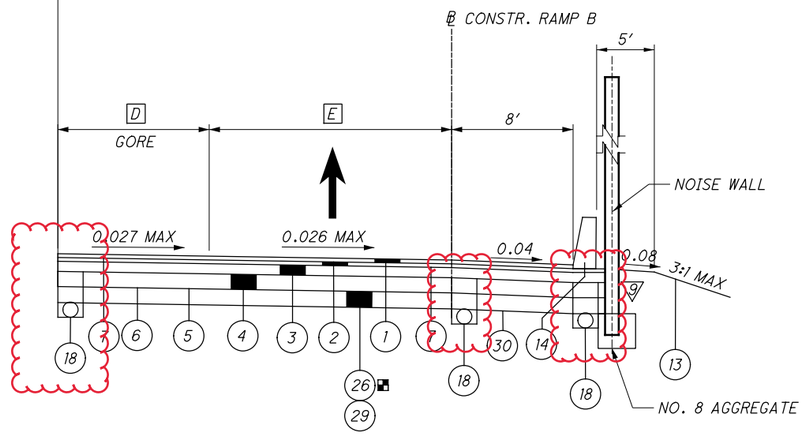
E 16.00′
STA. 2173+91.43 TO STA. 2180+49.84
VARIES 16.00′ TO 14.30′
STA. 2180+49.84 TO STA. 2181+35.18

F VARIES 18.53′ TO 12.00′
STA. 2171+85.00 TO STA. 2173+34.90

G VARIES 35.00′ TO 12.00′
STA. 2171+85.00 TO STA. 2181+35.18

(26) ITEM APPLIES:
US 62 WB(1) STA. 3181+10.00 TO STA. 3181+36.46 (26.46′)
US 62 EB(1) STA. 2181+10.00 TO STA. 2181+35.18 (25.18′)





SUPERELEVATED SECTION - US 62 WB (1) & US 62 EB (1)

SECTION APPLIES US 62 WB (1):
STA. 3172+08.12 TO STA. 3181+36.46 (928.34′)

SECTION APPLIES US 62 EB (1):
STA. 2171+85.00 TO STA. 2181+35.18 (950.18′)

θ - 40° MAX, SEE BP-3.2

▼ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62 WB (1) & EB (1)

STA-062-24.14

A 16.0′
STA. 181+81.20 TO STA. 184+20.18
VARIES 16.0′ TO 12.0
STA. 184+20.18 TO STA. 185+70.00

B VARIES 23.0′ TO 0.0′
STA. 181+81.20 TO STA. 184+20.18

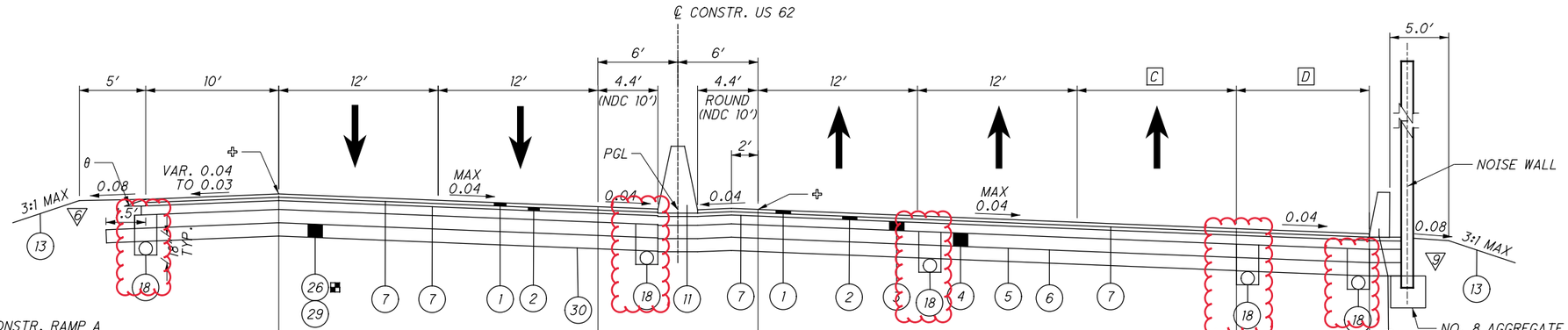
C VARIES 14.30′ TO 12.0′
STA. 181+36.46 TO STA. 182+51.28
12.0′
STA. 182+51.28 TO STA. 189+00.00

D 8.00′
STA. 181+36.46 TO STA. 181+51.28
VARIES 8.00′ TO 10.00′
STA. 181+51.28 TO STA. 182+51.28
10.00′
STA. 182+51.28 TO STA. 189+00.00

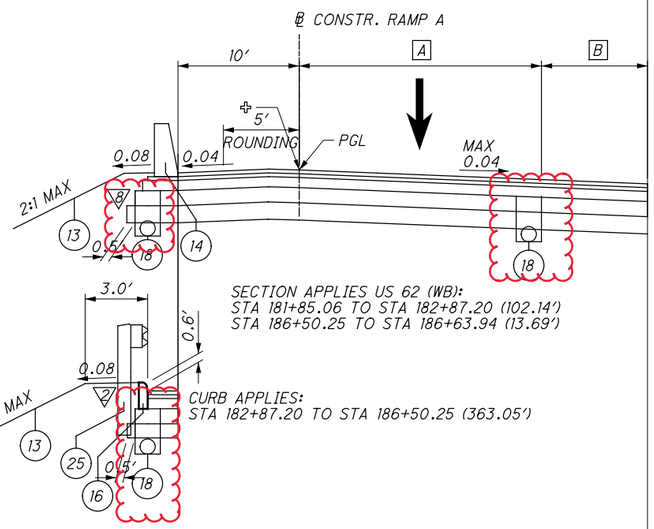
E VARIES 0.00′ TO 12.00′
STA. 186+14.43 TO STA. 186+65.64

G 10.0′
STA. 186+81.32 TO STA. 187+86.68
VARIES 10.0′ TO 4.0′
STA. 187+86.68 TO STA. 189+05.62
4.0′
STA. 189+05.62 TO STA 190+89.38

(26) ITEM APPLIES:
US 62 (WB & EB) STA. 181+36.46 TO STA. 189+47.38 (810.92′)

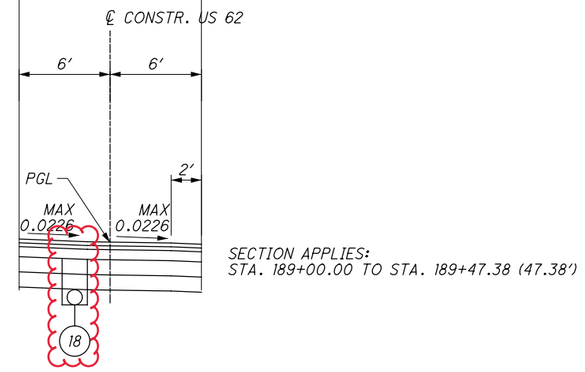


SECTION APPLIES US 62 (EB):
STA 184+66.37 TO STA 186+14.43 (148.06′)



SECTION APPLIES US 62 (WB):
STA 181+85.06 TO STA 182+87.20 (102.14′)
STA 186+50.25 TO STA 186+63.94 (13.69′)

CURB APPLIES:
STA 182+87.20 TO STA 186+50.25 (363.05′)



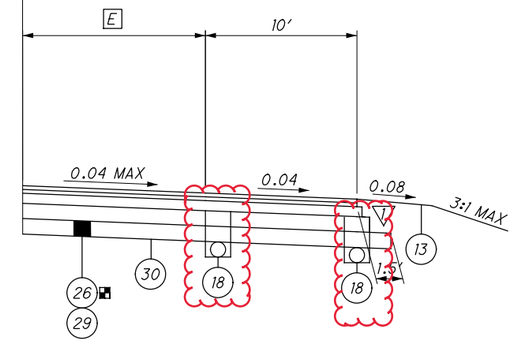
SECTION APPLIES:
STA. 189+00.00 TO STA. 189+47.38 (47.38′)

SUPERELEVATED SECTION - US 62

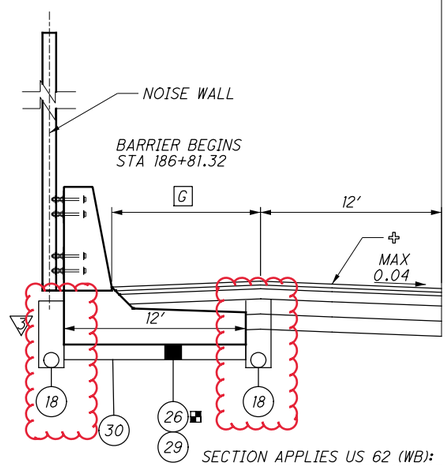
STA. EQN. - STA. 181+36.46 US 62 =
STA. 3181+36.46 US 62 WB (1), 6.0′ RT.

STA. EQN. - STA. 181+36.46 US 62 =
STA. 2181+35.18 US 62 EB (1), 6.0′ LT.

SECTION APPLIES US 62 (WB & EB):
STA. 181+36.46 TO STA. 189+47.38 (810.92′)



SECTION APPLIES US 62 (EB):
STA 186+14.43 TO STA 189+00.00 (285.57′)



SECTION APPLIES US 62 (WB):
STA 186+63.94 TO STA 189+47.38 (283.44′)

℄ 7.00% MAX. BREAK
θ - 40° MAX, SEE BP-3.2

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62

STA-062-24.14

12
500

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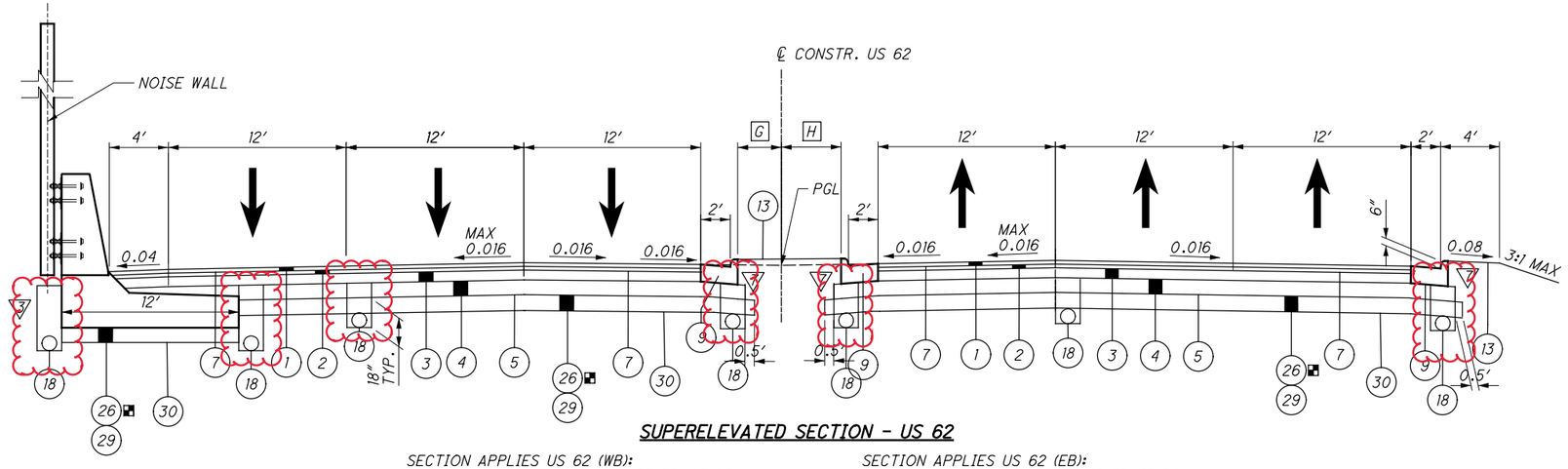
E VARIES 6.00′ TO 2.00′
STA. 189+80.00 TO STA. 190+30.00

F VARIES 6.00′ TO 2′
STA. 189+80.00 TO STA. 190+05.04

G VARIES 0′ TO 3.5′
STA. 189+80.00 TO STA. 190+30.00
3.5′
STA. 190+30.00 TO STA. 190+50.00

H VARIES 0′ TO 4.15′
STA. 189+80.00 TO STA. 190+05.04
VARIES 4.15′ TO 9.37′
STA. 190+05.04 TO STA. 192+47.50

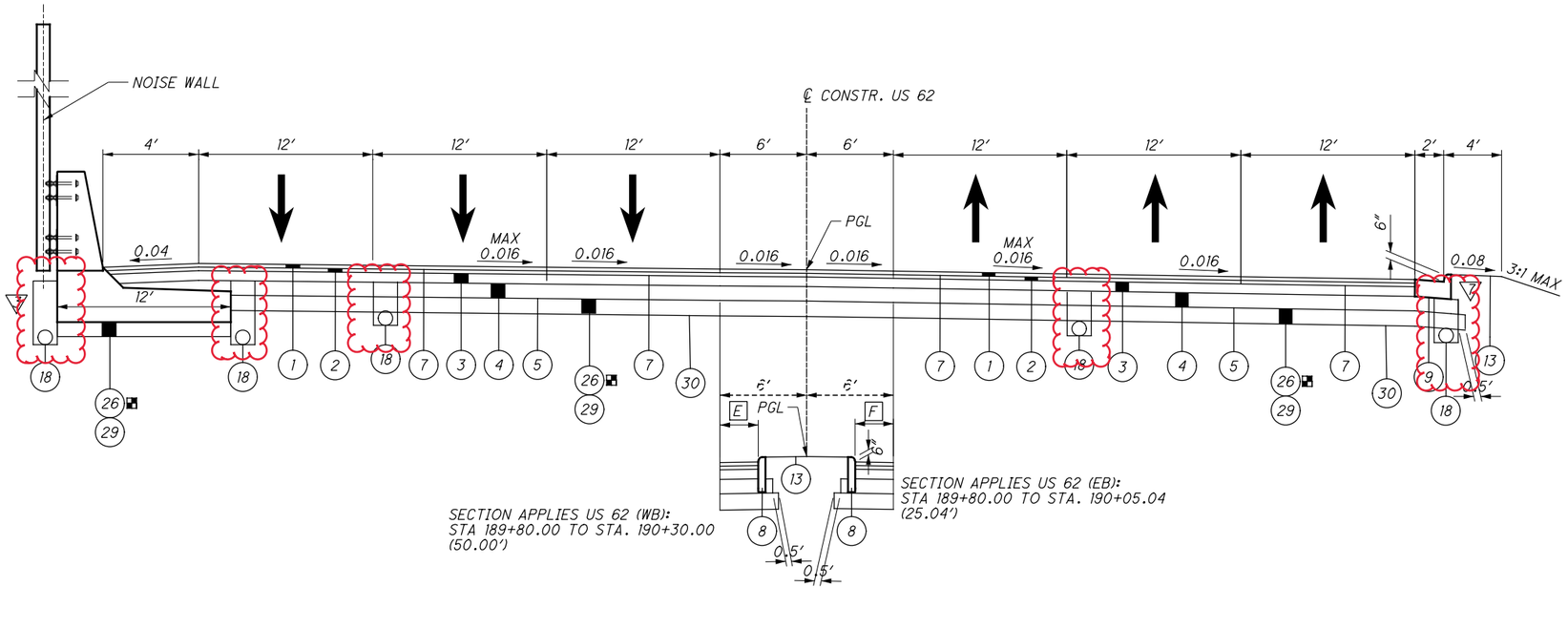
(26) ITEM APPLIES:
US 62 (WB) STA. 189+47.38 TO STA. 190+89.38 (142.00′)
US 62 (EB) STA. 189+47.38 TO STA. 190+18.38 (71.00′)



SUPERELEVATED SECTION - US 62

SECTION APPLIES US 62 (WB):
STA 190+30.00 TO STA. 190+89.38 (59.38′)

SECTION APPLIES US 62 (EB):
STA 190+05.04 TO STA. 190+18.38 (13.34′)



SECTION APPLIES US 62 (WB):
STA 189+80.00 TO STA. 190+30.00
(50.00′)

SECTION APPLIES US 62 (EB):
STA 189+80.00 TO STA. 190+05.04
(25.04′)

SUPERELEVATED SECTION - US 62

SECTION APPLIES US 62 (WB):
STA 189+47.38 TO STA. 190+18.38
(71.00′)

SECTION APPLIES US 62 (EB):
STA 189+47.38 TO STA. 189+82.88
(35.50′)

θ - 40° MAX, SEE BP-3.2

TYPICAL SECTIONS - US 62

STA-062-24.14

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

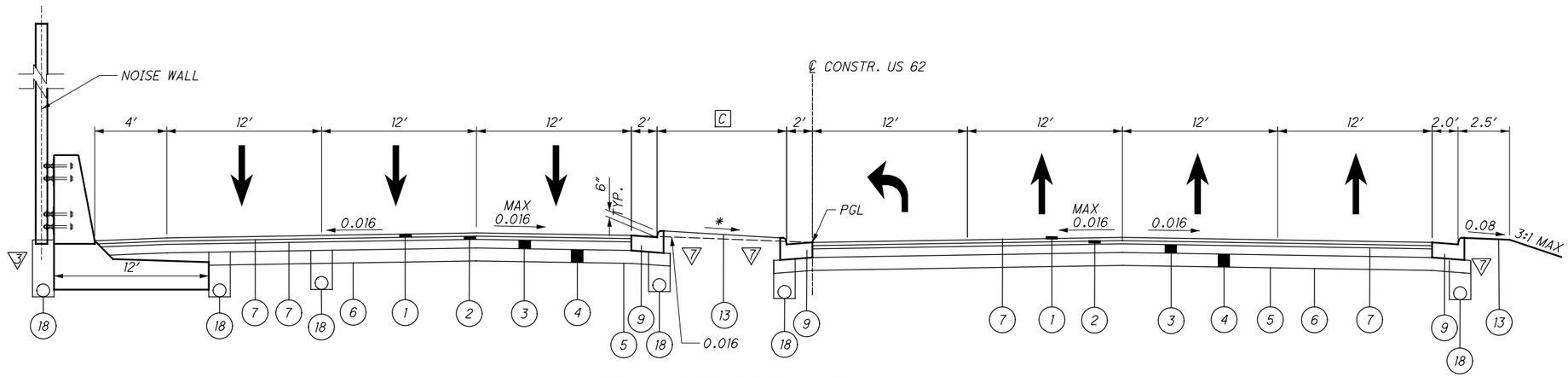
A VARIES 3.37′ TO 9.0′
STA. 190+18.38 TO STA. 193+00.00

B VARIES 6.17′ TO 11.93′
STA. 189+82.88 TO STA. 192+50.00
VARIES 11.93′ TO 0.00′
STA. 192+50.00 TO STA. 193+00.00
0.00′
STA. 193+00.00 TO STA. 193+54.00

C VARIES 7.0′ TO 8.0′
STA. 193+00.00 TO STA. 193+50.00
8.0′
STA. 193+50.00 TO STA. 194+23.92
VARIES 8.0′ TO 0.0′
STA. 194+23.92 TO STA. 194+61.00

D VARIES 0.00′ TO 12.00′
STA. 192+50.00 TO STA. 193+00.00

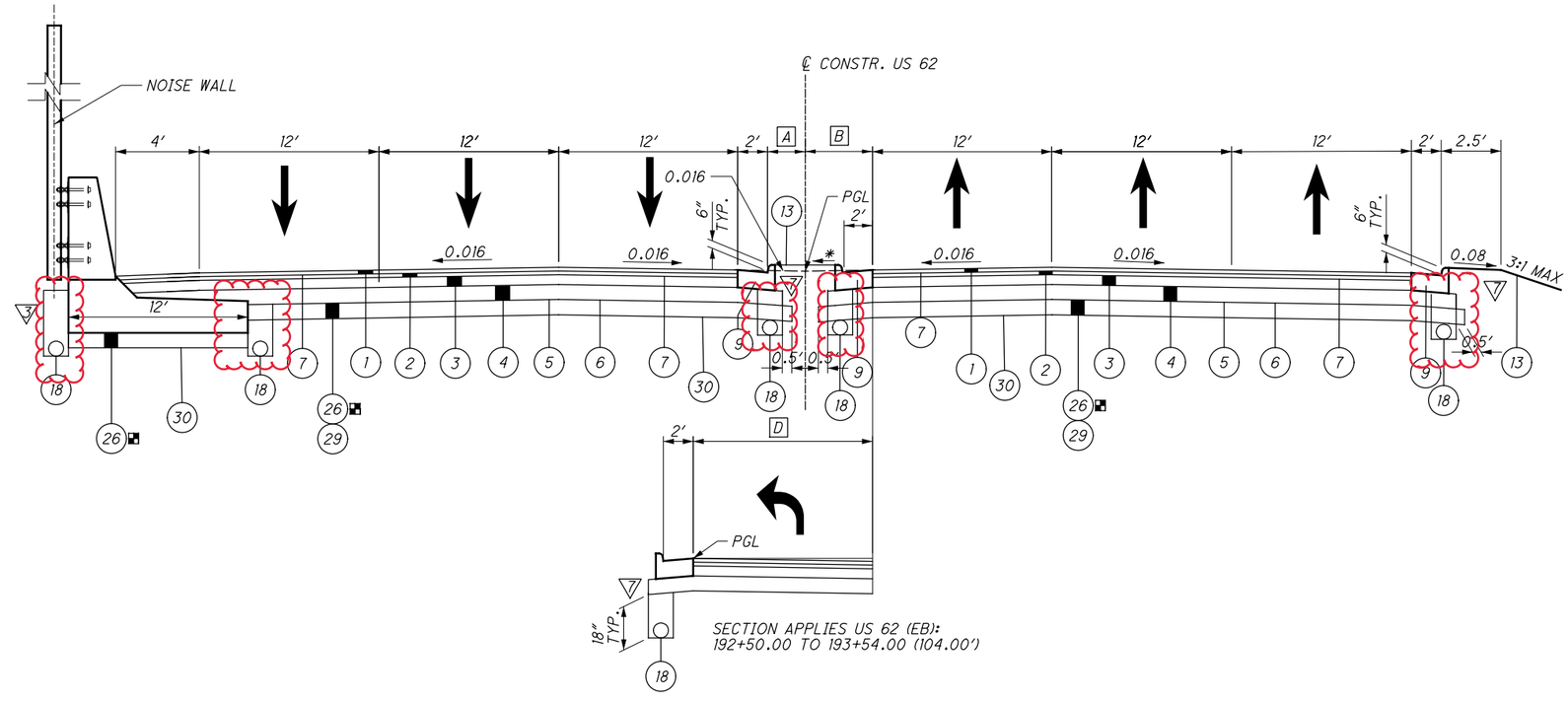
(26) ITEM APPLIES:
US 62 (WB) STA. 190+89.38 TO STA. 191+43.00 (53.62′)
US 62 (EB) STA. 190+18.38 TO STA. 191+43.00 (124.62′)



SUPERELEVATED SECTION - US 62

SECTION APPLIES US 62 (WB):
STA 193+54.00 TO STA 193+89.50 (35.50′)

SECTION APPLIES US 62 (EB):
STA 192+83.00 TO STA 193+54.00 (71.00′)



SECTION APPLIES US 62 (EB):
192+50.00 TO 193+54.00 (104.00′)

NORMAL SECTION - US 62

SECTION APPLIES US 62 (WB):
STA 190+89.38 TO STA 193+54.00 (264.62′)

SECTION APPLIES US 62 (EB):
STA 190+18.38 TO STA 192+83.00 (264.62′)

* MATCH SLOPE OF ADJACENT LANES
⌖ 7.00% MAX. BREAK

FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62

STA-062-24.14

14
500

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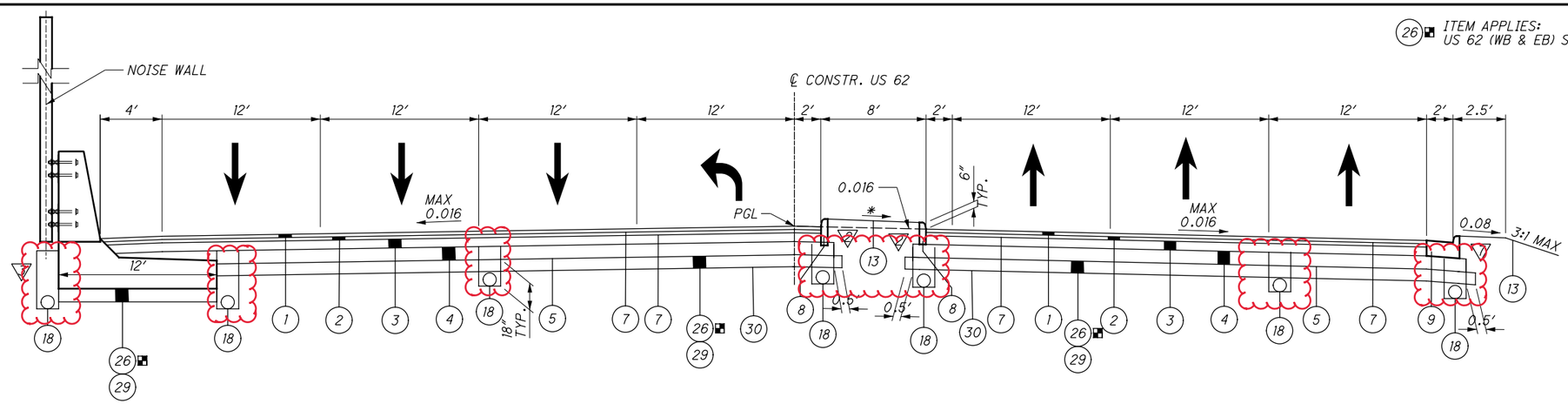
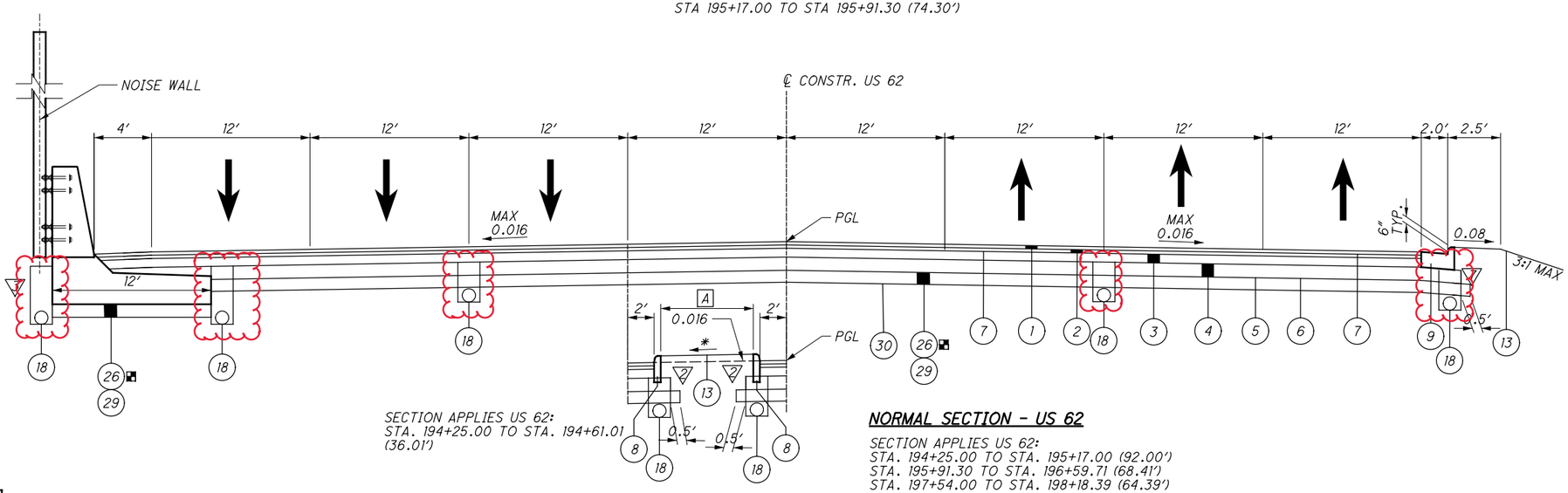


(26) ITEM APPLIES:
US 62 (WB & EB) STA. 195+00.00 TO STA. 196+59.71 (159.71′)

[A] VARIES 7.0′ TO 0.0′
STA. 194+23.78 TO STA. 194+61.01

NORMAL SECTION - US 62

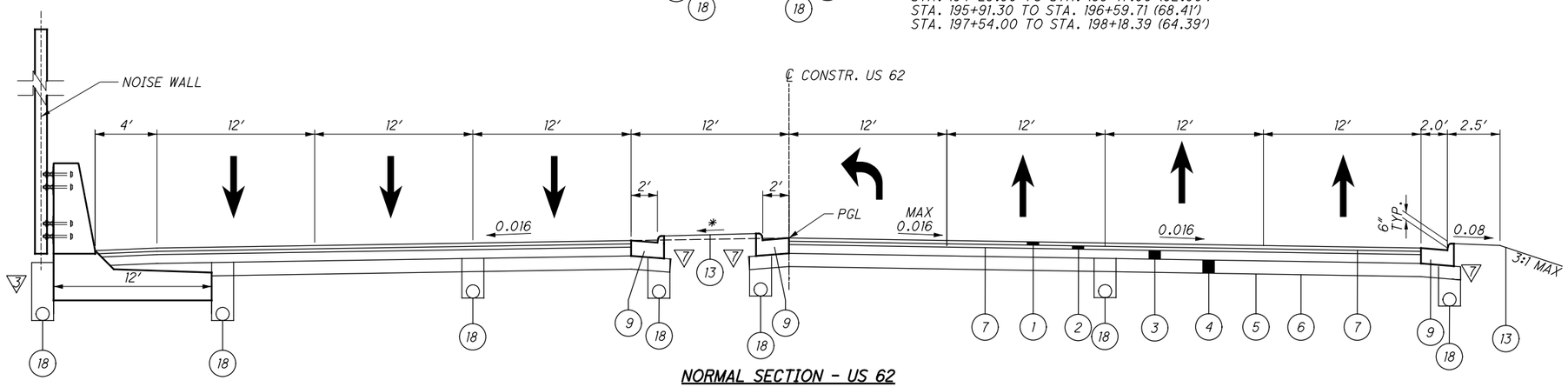
SECTION APPLIES US 62:
STA 195+17.00 TO STA 195+91.30 (74.30′)



SECTION APPLIES US 62:
STA. 194+25.00 TO STA. 194+61.01
(36.01′)

NORMAL SECTION - US 62

SECTION APPLIES US 62:
STA. 194+25.00 TO STA. 195+17.00 (92.00′)
STA. 195+91.30 TO STA. 196+59.71 (68.41′)
STA. 197+54.00 TO STA. 198+18.39 (64.39′)



NORMAL SECTION - US 62

SECTION APPLIES US 62 (WB):
STA 193+89.50 TO STA 194+25.00
(35.50′)

SECTION APPLIES US 62 (EB):
STA 193+54.00 TO STA 194+25.00
(71.00′)

* MATCH SLOPE OF ADJACENT LANES

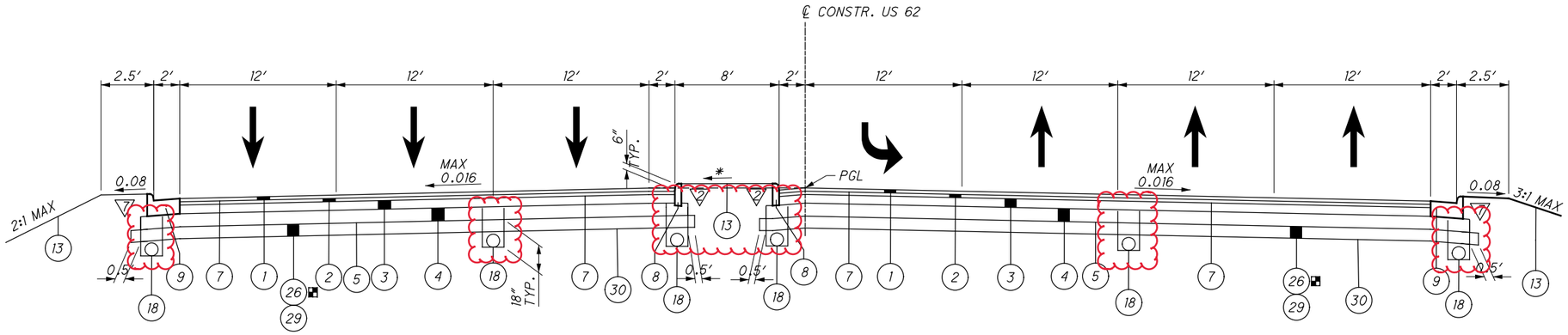
▼ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62

STA-062-24.14

15
500

(26) ITEM APPLIES:
US 62 (WB & EB) STA. 196+59.71 TO STA. 198+18.39 (158.68')



NORMAL SECTION - US 62

SECTION APPLIES US 62:
STA 196+59.71 TO STA. 197+54.00 (94.29')

* MATCH SLOPE OF ADJACENT LANES

FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62

STA-062-24.14

16
500

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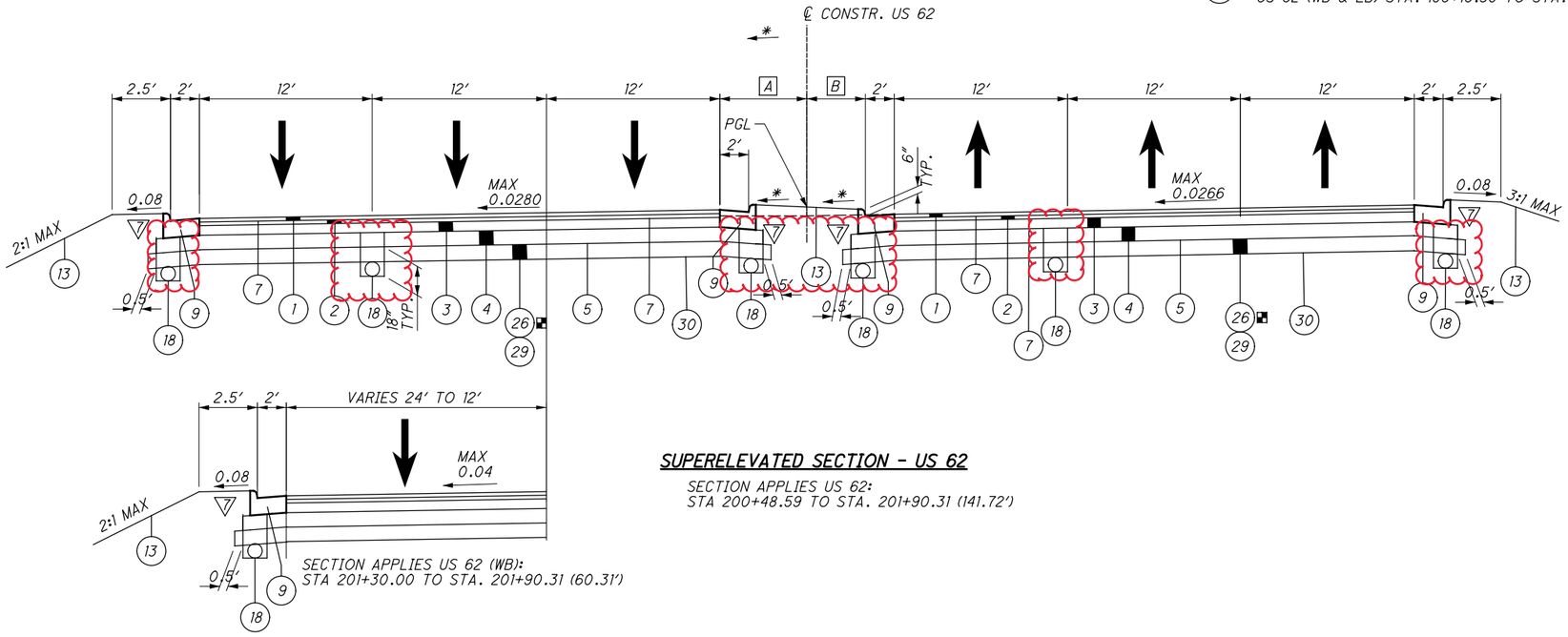
A VARIES 12.0′ TO 7.10′
STA. 200+25.00 TO STA. 201+90.31

B VARIES 8.24′ TO 4.0′
STA. 199+75.00 TO STA. 201+90.31

C 10.0′
STA. 198+18.39 TO STA. 198+85.81
VARIES 10.0′ TO 8.24′
STA. 198+85.81 TO STA. 199+75.00

D VARIES 0.0′ TO 12.0′
STA. 199+75.00 TO STA. 200+25.00

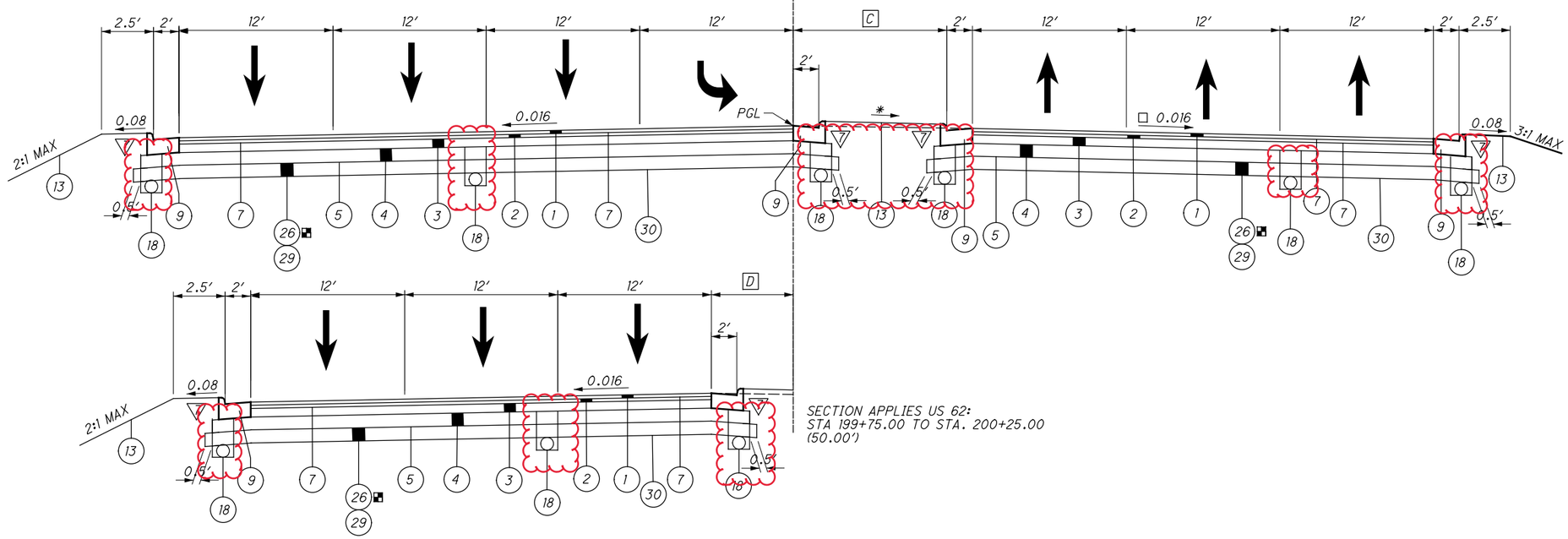
(26) ITEM APPLIES:
US 62 (WB & EB) STA. 198+18.39 TO STA. 201+90.31 (371.92′)



SECTION APPLIES US 62 (WB):
STA 201+30.00 TO STA. 201+90.31 (60.31′)

SUPERELEVATED SECTION – US 62

SECTION APPLIES US 62:
STA 200+48.59 TO STA. 201+90.31 (141.72′)



SECTION APPLIES US 62:
STA 199+75.00 TO STA. 200+25.00
(50.00′)

NORMAL SECTION – US 62

SECTION APPLIES US 62:
STA 198+18.39 TO STA. 200+48.59
(230.20′)

* MATCH SLOPE OF ADJACENT LANES

□ MAX 0.016 FROM 199+63.34 TO 200+48.59

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - US 62

STA-062-24.14

[A] VARIES 13.62′ TO 14.83′
STA. 204+65.85 TO STA. 205+44.78 WB(2)
STA. 204+70.00 TO STA. 205+50.00 EB(2)

[C] 4.00′
STA. 205+50.00 TO STA. 211+25.00 EB(2)
VARIES 4.00′ TO 5.4′
STA. 211+03.32 TO STA. 211+66.03 EB(2)

[D] 4.00′
STA. 210+31.57 TO STA. 210+45.60
VARIES 4.00′ TO 8.00′
STA. 210+45.60 TO STA 211+55.04 WB(2)

[E] VARIES 4.00′ TO 3.00′
STA. 210+99.23 TO STA 211+66.03 EB(2)

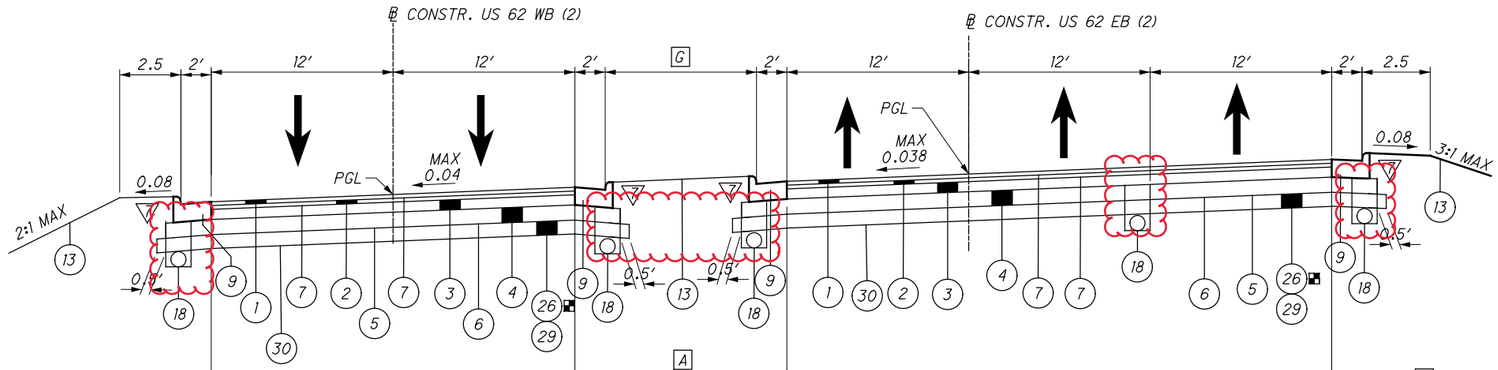
[F] VARIES 0.00′ TO 12.00′
STA. 203+85.00 TO STA 204+35.00 EB(2)
12.00′
STA. 204+35.00 TO STA. 205+73.44 EB(2)

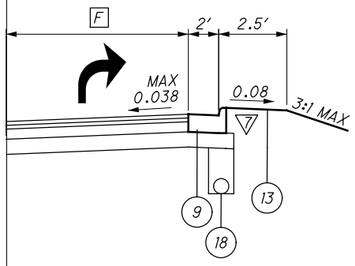
[G] VARIES 9.10′ TO 8.04′
STA. 201+90.31 TO STA. 202+27.50 WB(2)
VARIES 8.04′ TO 7.66′
STA. 202+27.50 TO STA. 204+16.19 WB(2)
VARIES 7.66′ TO 0.00′
STA. 204+16.19 TO STA. 204+65.85 WB(2)

[H] VARIES 4.25′ TO 30.78′
STA. 205+44.78 TO STA 211+55.07 WB(2)

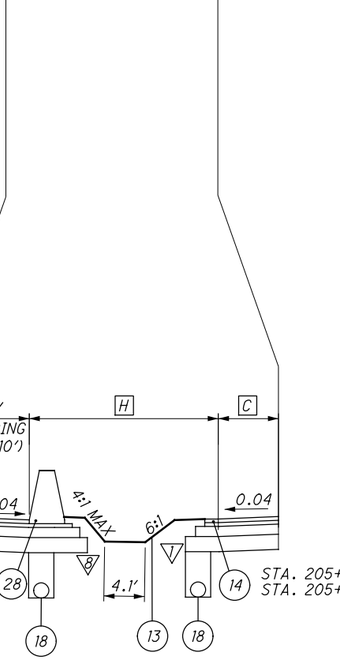
[I] VARIES 12.50′ TO 0.00′
STA. 206+29.20 TO STA. 207+23.59
VARIES 12.50′ TO 8.50′
STA. 207+50.96 TO STA. 209+98.66
VARIES 6.82′ TO 3.52′
STA. 210+50.86 TO STA 210+99.24 WB(2)

(26) ITEM APPLIES:
US 62 (WB) STA. 201+90.31 TO STA. 202+40.00 (49.69′)
US 62 (EB) STA. 201+90.31 TO STA. 202+40.00 (49.69′)

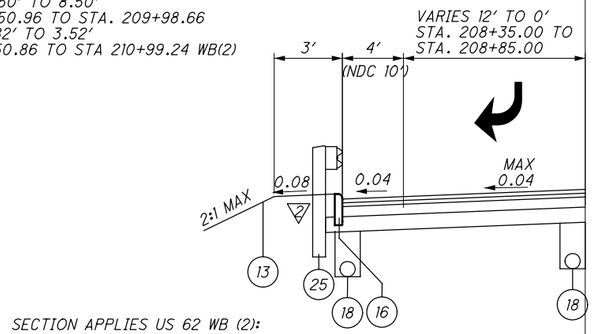




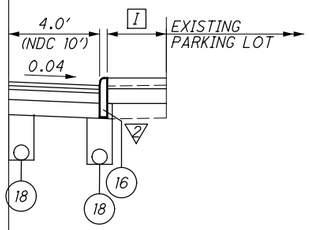
SECTION APPLIES US 62 EB (2):
STA. 203+85.00 TO STA. 206+29.20 (244.20′)



STA. 204+65.85 TO STA. 205+44.78 US 62 WB (2) (78.93′)
STA. 204+70.00 TO STA. 205+50.00 US 62 EB (2) (80.00′)

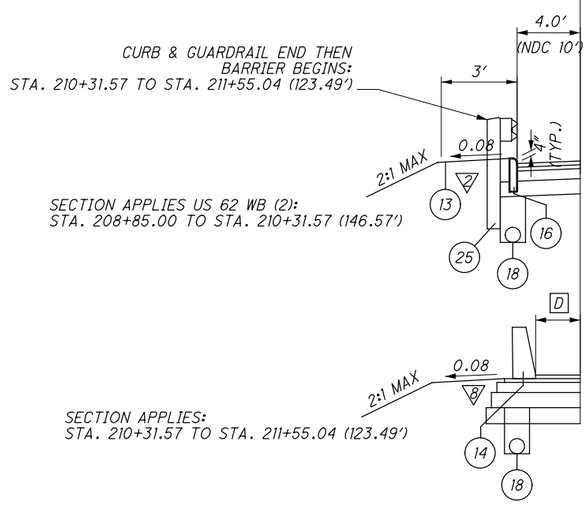


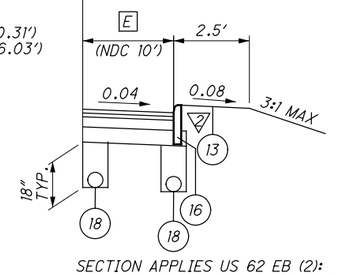
SECTION APPLIES US 62 WB (2):
STA. 206+58.90 TO STA. 208+85.00 (145.90′)



SECTION APPLIES US 62 EB (2):
STA. 206+29.20 TO STA. 210+99.24 (470.04′)

STA. 205+44.78 TO STA. 211+55.09 US 62 WB (2) (610.31′)
STA. 205+50.00 TO STA. 211+66.03 US 62 EB (2) (616.03′)





SECTION APPLIES US 62 EB (2):
STA. 210+99.24 TO STA 211+66.03 (66.79′)

SUPERELEVATED SECTION - US 62 WB (2) & US 62 EB (2)

SECTION APPLIES US 62 WB (2):
STA. 201+90.31 TO STA. 211+55.04 (964.73′)

SECTION APPLIES US 62 EB (2):
STA. 201+90.31 TO STA. 211+66.03 (975.72′)

℄ 7.00% MAX. BREAK

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10.

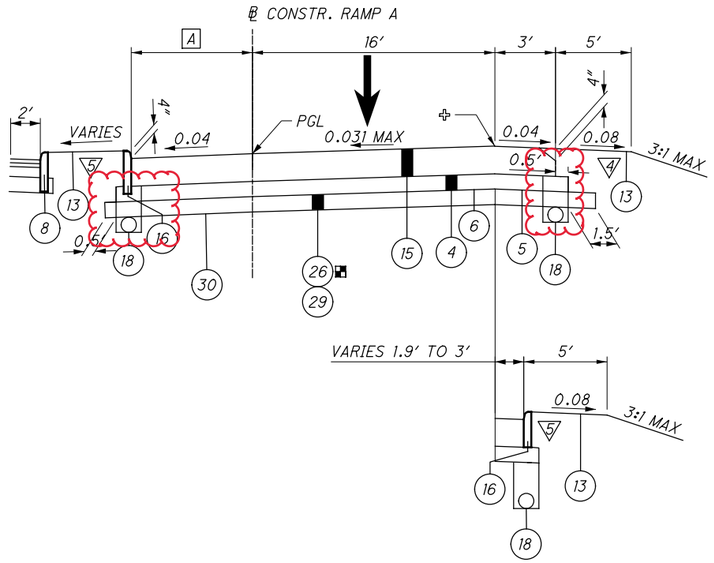
TYPICAL SECTIONS - US 62 WB (2) & EB (2)

STA-062-24.14

(26) ITEM APPLIES:
RAMP A STA 181+00.00 TO STA 181+73.96 (73.96')

[A] VARIES 3.5' TO 6.0'
STA. 179+00.61 TO STA. 179+20.61
6.0'
STA. 179+20.61 TO STA. 180+73.96
VARIES 6.0' TO 10.0'
STA. 180+73.96 TO STA. 181+74.10

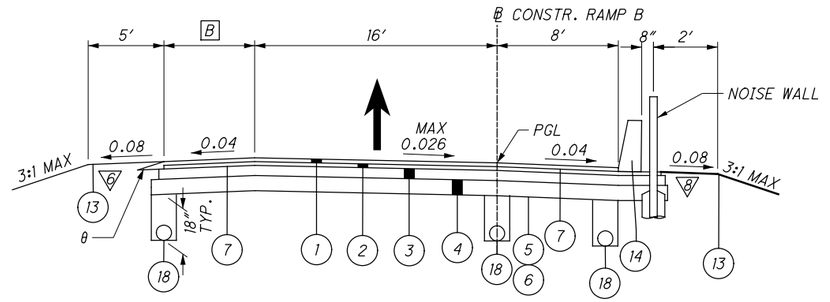
[B] VARIES 3.45' TO 3.00'
STA. 4171+95.00 TO STA. 4172+05.00



SECTION APPLIES RAMP A:
STA. 179+00.61 TO STA. 179+10.61 (10.00')

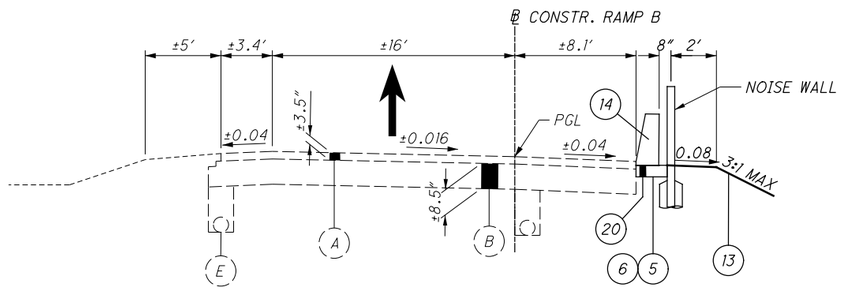
SUPERELEVATED CONCRETE SECTION - RAMP A

SECTION APPLIES RAMP A:
STA. 179+00.61 TO STA. 181+73.96 (273.35')



SUPERELEVATED SECTION - RAMP B

SECTION APPLIES RAMP B:
STA. 4171+95.00 TO STA. 4173+93.11 (198.11')



EX. RAMP B NORMAL SECTION

STA. 4171+95.00 AND BACK 252'.
SEE PLAN SHEET FOR DETAILS.

θ - 40° MAX, SEE BP-3.2

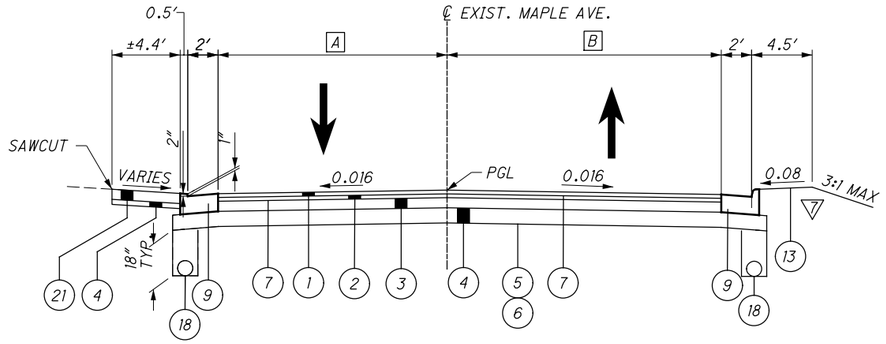
℄ 7.00% MAX. BREAK

FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

TYPICAL SECTIONS - RAMP A & RAMP B

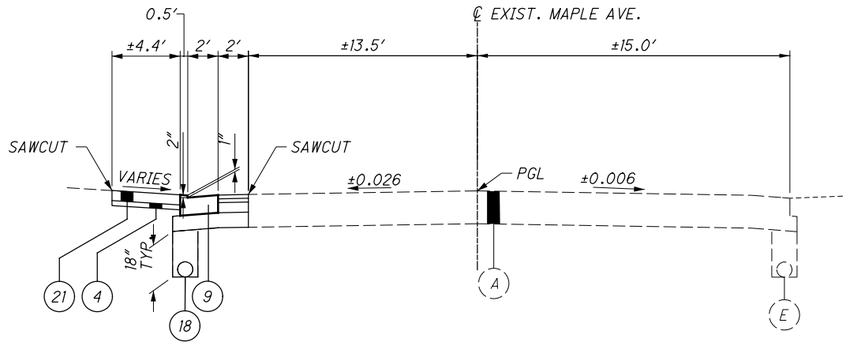
STA-062-24.14

19
500



NORMAL SECTION - MAPLE AVE.

SECTION APPLIES MAPLE AVE.:
STA. 1+39.00 TO STA. 3+08.08 (169.08′)
STA. 3+84.90 TO STA. 4+60.00 (75.10′)



SAWCUT SECTION - MAPLE AVE.

SECTION APPLIES MAPLE AVE.:
STA. 4+60.00 TO STA. 5+19.76 (59.76′)

A VARIES 13.34′ TO 14.00′
STA. 1+39.00 TO STA. 1+60.00
15.00′ TO 15.80′
STA. 3+84.90 TO STA. 4+60.00

B VARIES 15.53′ TO 17.00′
STA. 1+39.00 TO STA. 1+60.00
16.40′ TO 15.50′
STA. 3+84.90 TO STA. 4+60.00

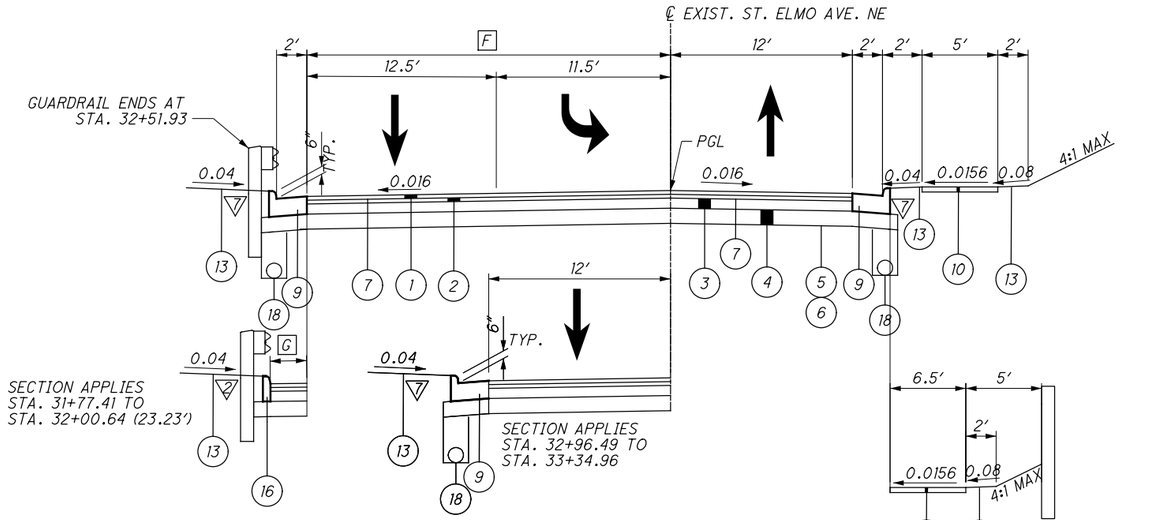
C VARIES 17.62′ TO 24.00′
STA. 27+70.00 TO STA. 28+62.23

D VARIES 12.16′ TO 12.00′
STA. 27+70.00 TO STA. 28+50.00
12.00′
STA. 28+50.00 TO STA. 30+99.50

E VARIES 3.48′ TO 0.0′
STA. 27+70.00 TO STA. 28+50.00

F 23.5′
STA. 30+99.50 TO STA. 32+00.08
VARIES 23.5′ TO 12.0′
STA. 32+00.08 TO STA. 32+96.49

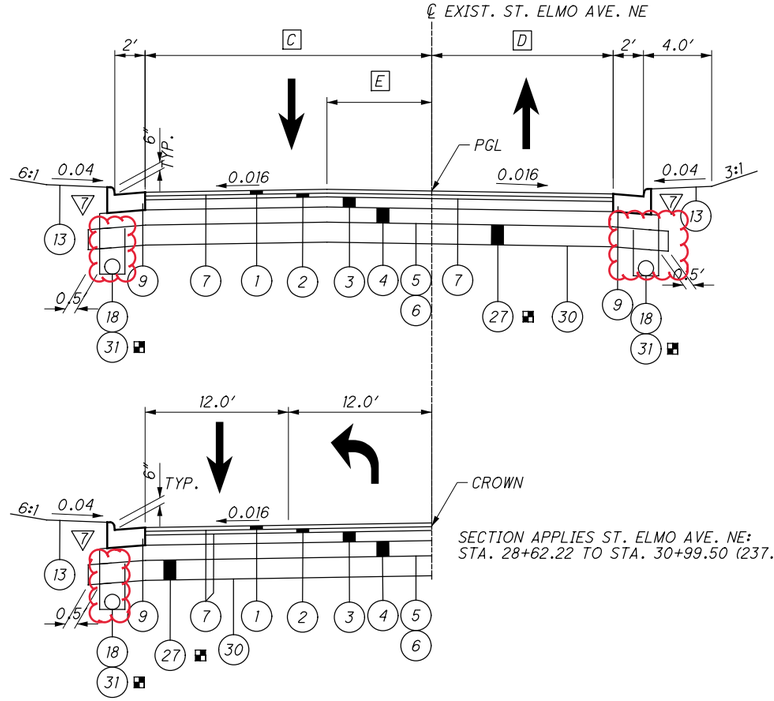
G VARIES 4.00′ TO 2.00′
STA. 31+77.41 TO STA. 32+00.08



NORMAL SECTION - ST. ELMO AVE. NE

SECTION APPLIES ST. ELMO AVE. NE:
STA. 30+99.50 TO STA. 33+34.96 (235.46′)

SECTION APPLIES ST. ELMO AVE. NE:
STA. 31+79.97 TO STA. 32+91.41 (111.44′)



NORMAL SECTION - ST. ELMO AVE. NE

SECTION APPLIES ST. ELMO AVE. NE:
STA. 27+70.00 TO STA. 30+99.50 (329.50′)

▪ ITEM APPLIES TO ST. ELMO AVE. NE:
STA 27+70.00 TO STA 29+65.00 (195.00′)

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

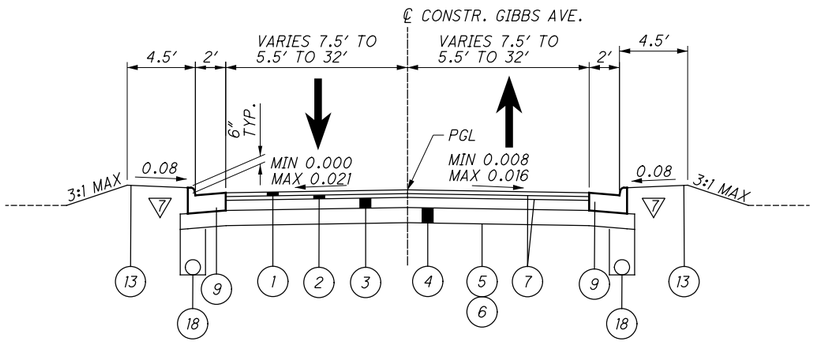
TYPICALS - ST. ELMO AVE. NE & MAPLE AVE.

STA-062-24.14

(26)* ITEM APPLIES:
30TH STREET NE. STA 8+27+00 TO STA 10+26.50
30TH STREET NE. STA 17+74.50 TO STA 23+00.00

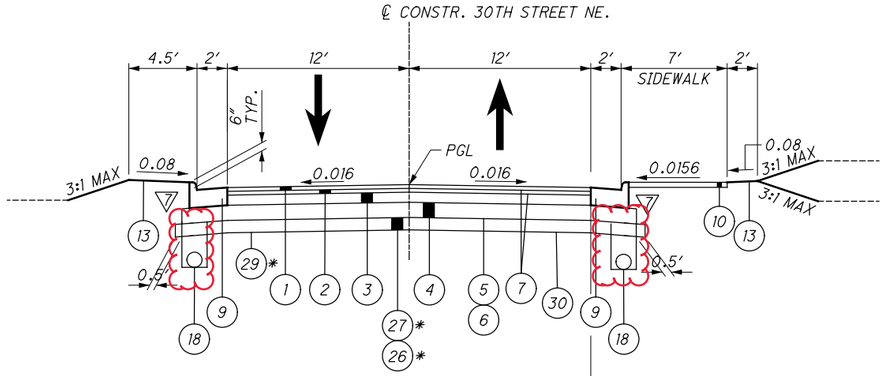
(27)* ITEM APPLIES:
30TH STREET NE. STA 23+00.00 TO STA 23+44.00

(29)* ITEM APPLIES:
30TH STREET NE.
STA 8+29.69 TO STA 10+26.50
STA 17+74.50 TO STA 23+00.00
STA 23+00.00 TO STA 23+44.00



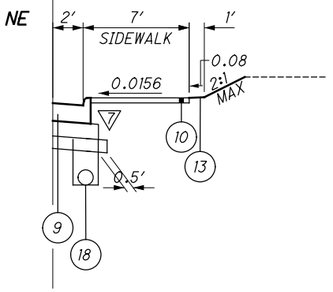
GIBBS AVE.

SECTION APPLIES GIBBS AVE.:
STA. 11+03.49 TO STA. 12+20.00 (116.51′)
FOR MORE DETAILS SEE SHEET 186.

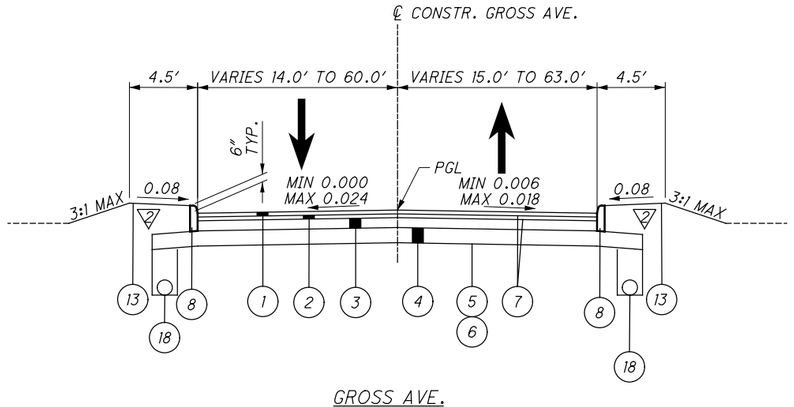


NORMAL SECTION - 30TH STREET NE

SECTION APPLIES 30TH STREET NE.:
STA. 8+27.00 TO STA. 23+44.66 (1517.66′)

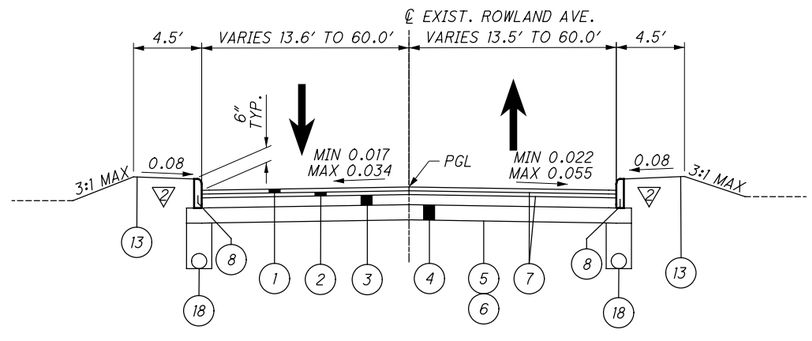


STA. 11+40.00 TO STA. 11+80.00 (40.00′)



GROSS AVE.

SECTION APPLIES GROSS AVE.:
STA. 41+40.50 TO STA. 42+09.00 (68.50′)
FOR MORE DETAILS SEE SHEET 188.



ROWLAND AVE.

SECTION APPLIES ROWLAND AVE.:
STA. 19+30.00 TO STA. 20+50.00 (120.00′)
STA. 21+64.50 TO STA. 22+24.81 (60.31′)
FOR MORE DETAILS SEE SHEET 187.

▽ FOR LEGEND AND ASPHALT EDGE COURSE DETAILS SEE SHEET 10 .

GIBBS AVE., ROWLAND AVE., GROSS AVE., 30TH STREET NE.

TYPICAL SECTIONS - GIBBS

STA-062-24.14

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A PREQUALIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE TRAINED IN ACCORDANCE WITH CMS 614.03, SHALL HAVE SUCCESSFULLY COMPLETED ODOT ADMINISTERED WTS TESTING (AND RE-TESTING WHEN APPLICABLE) AND BE LISTED ON THE ODOT PREQUALIFIED WTS ROSTER. PREQUALIFICATION EXPIRES EVERY 5 YEARS. RE-TESTING SHALL BE SUCCESSFULLY REPEATED EVERY 5 YEARS TO REMAIN PREQUALIFIED.

THE NAME OF THE PREQUALIFIED WTS AND RELATED 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE (SECONDARY) WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY; HOWEVER THE PRIMARY WTS SHALL REMAIN THE POINT OF CONTACT AT ALL TIMES. ANY ALTERNATE (SECONDARY) WTS IS SUBJECT TO THE SAME TRAINING, PREQUALIFICATION AND OTHER REQUIREMENTS OUTLINED WITHIN THIS PLAN NOTE. AT ALL TIMES THE ENGINEER, OR ENGINEER'S REPRESENTATIVES, MUST BE INFORMED OF WHO THE PRIMARY WTS (AND SECONDARY WTS, IF APPLICABLE) IS AT THE CURRENT TIME.

THE WTS POSITION HAS THE PRIMARY RESPONSIBILITY OF IMPLEMENTING THE TRAFFIC MANAGEMENT PLAN (TMP), MONITORING THE SAFETY AND MOBILITY OF THE ENTIRE WORK ZONE, AND CORRECTING TEMPORARY TRAFFIC CONTROL (TTC) DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE WTS, AND ALTERNATE WTS WHEN ON DUTY, SHALL HAVE SUFFICIENT AUTHORITY TO EFFECTIVELY CARRY OUT THE IDENTIFIED WTS RESPONSIBILITIES AND DUTIES. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS.

2. BE ON SITE FOR ALL EMERGENCY TTC NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF, AND EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TTC DEVICES.

3. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TTC MANAGEMENT IS DISCUSSED.

4. BE AVAILABLE ON SITE FOR OTHER MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST.

5. BE AWARE OF ALL EXISTING AND PROPOSED TTC OPERATIONS OF THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS, AND ENSURE COORDINATION OCCURS BETWEEN THEM TO ELIMINATE CONFLICTING TEMPORARY AND/OR PERMANENT TRAFFIC CONTROL.

6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOs). THE WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE LEOS ARE ON THE PROJECT.

7. COORDINATE AND FACILITATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS THE WORK ZONE TTC FOR IMPLEMENTING THE PHASE SWITCH. SUBMIT A WRITTEN DETAIL OF MOT OPERATIONS AND SCHEDULE OF EVENTS TO IMPLEMENT THE SWITCH BETWEEN PHASE PLANS TO THE ENGINEER 5 CALENDAR DAYS PRIOR TO THIS MEETING.

8. BE PRESENT, ON SITE FOR, AND INVOLVED WITH, EACH TTC SET UP/TAKE DOWN AND EACH PHASE CHANGE IN ACCORDANCE WITH CMS 614.03.

WORKSITE TRAFFIC SUPERVISOR (CONTINUED)

9. ON A CONTINUAL BASIS ENSURE THAT THE TTC ZONE AND ALL RELATED DEVICES ARE INSTALLED, MAINTAINED AND REMOVED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

10. ON A CONTINUAL BASIS FACILITATE CORRECTIVE ACTION(S) NECESSARY TO BRING DEFICIENT TTC ZONES AND ALL RELATED DEVICES INTO COMPLIANCE WITH CONTRACT DOCUMENTS IN THE TIMEFRAME DETERMINED BY THE ENGINEER.

11. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TTC DEVICES AND TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, PERFORM ONE WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

A. INITIAL TTC SETUP (DAY AND NIGHT REVIEW).
B. DAILY TTC SETUP AND REMOVAL.
C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TTC SETUP.
D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA AND WITHIN THE INFLUENCE AREA(S) APPROACHING THE WORK ZONE.
E. REMOVAL OF TTC DEVICES AT THE END OF A PHASE OR PROJECT.
F. ALL OTHER EMERGENCY TTC NEEDS.

12. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN #11 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORKDAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TTC MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED OR COMPLETED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THE CURRENT CA-D-8 DOCUMENT CAN BE FOUND ON THE OFFICE OF CONSTRUCTION ADMINISTRATION'S INSPECTION FORMS WEBSITE.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL DEDUCT:

A. THE PRORATED DAILY AMOUNT OF ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY IN WHICH THE WTS FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. THE PRORATED DAILY AMOUNT WILL BE EQUAL TO THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC DIVIDED BY THE DIFFERENCE BETWEEN THE ORIGINAL COMPLETION DATE AND THE FIRST DAY OF WORK, IN CALENDAR DAYS.
B. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A TTC ISSUE IS IDENTIFIED IN THE FIELD AND IS NOT CORRECTED IN THE GIVEN TIMEFRAME PER THE ENGINEER. DEDUCTION B SHALL NOT APPLY TO SITUATIONS COVERED BY DEDUCTION C.
C. 1% OF THE ORIGINAL BID AMOUNT FOR ITEM 614 MAINTAINING TRAFFIC FOR ANY DAY THAT A LANE OR RAMP IS BLOCKED (FULLY OR PARTIALLY) WITHOUT TTC, AS DETERMINED BY THE ENGINEER. THIS DEDUCTION SHALL BE IN ADDITION TO ANY OTHER DISINCENTIVES ESTABLISHED FOR UNAUTHORIZED LANE USE.

WORKSITE TRAFFIC SUPERVISOR (CONTINUED)

FOR DAYS IN WHICH MORE THAN ONE DEDUCTION LISTED ABOVE OCCUR, THE HIGHEST DEDUCTION AMOUNT WILL APPLY.

IF THREE OR MORE TOTAL DAYS RESULT IN TTC ISSUES DESCRIBED IN DEDUCTION B OR C ABOVE, THE PRIMARY WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05. UPON REMOVAL THE ENGINEER SHALL NOTIFY ODOT CENTRAL OFFICE (WTSPrequalification@dot.ohio.gov) TO REGISTER A REMOVAL AGAINST THE STATEWIDE PREQUALIFICATION FOR THE PRIMARY WTS. THREE REMOVALS SHALL CAUSE STATEWIDE DISQUALIFICATION FOR ANY PREVIOUSLY PREQUALIFIED WTS.

PAYMENT FOR THE ABOVE REQUIREMENTS, RESPONSIBILITIES AND DUTIES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 622 - PORTABLE BARRIER PLACEMENT

DURING THE PLACEMENT OF THE PORTABLE BARRIER, TRAFFIC WILL BE PROHIBITED FROM OCCUPYING THE TRAVEL LANE ADJACENT TO THE BARRIER. THE BARRIER WILL BE PLACED AT NIGHT PER THE WORK HOUR RESTRICTION NOTE AND IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE MAP. THE CLOSURE OF THE ADJACENT LANE WILL BE PER THE STANDARD DRAWING MT-95.30.

THE CONTRACTOR WILL SUBMIT A PLAN TO THE ENGINEER FOR APPROVAL SEVEN (7) DAYS IN ADVANCE OF THE PLANNED LANE CLOSURE. WORK WILL NOT BEGIN UNTIL APPROVAL OF THE PLANS HAS BEEN GRANTED.

ALL COSTS INVOLVED IN PLACING THE PORTABLE CONCRETE BARRIER WILL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 622 PORTABLE CONCRETE BARRIER.

PARCEL 76 (1132 30TH ST. NE) CONSTRUCTION WITH ACTIVITY TIME RESTRICTIONS

THE CONTRACTOR SHALL ARRANGE/SCHEDULE THE WORK IN SUCH A MANNER TO MINIMIZE THE INCONVENIENCE TO THE PROPERTY OWNER AND THE BUSINESS OPERATIONS. THE DURATION AT WHICH THE CONTRACTOR CAN CONSTRUCT THE IMPROVEMENTS ON THE PARCEL ARE IDENTIFIED BELOW IS BEING RESTRICTED AS FOLLOWS.

WORK WITHIN THE TEMPORARY R/W SHALL BE CONSTRUCTED IN SUCH A MANNER AS TO MAXIMIZE THE USE OF THE TEMPORARY R/W AREA BY THE PROPERTY OWNER. THE TEMPORARY R/W AREA SHALL BE MAINTAINED UNTIL THE CONTRACTOR IS READY TO PERFORM THE PROPOSED WORK ON THAT PARCEL. THE CONTRACTOR SHALL NOTIFIY THE PROPERTY OWNER, IN WRITING, 30 DAYS PRIOR TO COMMENCING WORK WITHIN THE TEMPORARY RW TO ALLOW THE OWNER TIME TO REMOVE ANY ITEMS THAT MAY OBSTRUCT THE PROPOSED WORK. THE CONTRACTOR SHALL BE ALLOWED A TOTAL OF THIRTY (30) CONSECUTIVE CALENDAR DAYS TO COMPLETE THE WORK IN THE TEMPORARY R/W AREA AND DRIVEWAYS.

IN ADDITION TO SECTION 104.04 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS MANUAL, IF A PARCEL HAS TWO DRIVEWAYS, BOTH DRIVEWAYS SHALL NOT BE CLOSED CONCURRENTLY.

AS PER ITEM 108.07, FAILURE TO COMPLETE ON TIME, IF THE CONTRACTOR FAILS TO COMPLETE THE SPECIFIED WORK WITHIN THE TIME RESTRICTIONS NOTED ABOVE, THE CONTRACTOR SHALL BE REQUIRED TO PAY LIQUIDATED DAMAGES OF $100.00 PER CALENDAR DAY THAT ANY WORK ON THE DRIVEWAYS OR TEMPORARY R/W REMAINS UNCOMPLETED.

THE BUISINESS SIGN IS TO BE REMOVED BY THE PROPERTY OWNER BY THE BEGINNING OF CONSTRUCTION 1/1/22.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND PERMANENT CONCRETE BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE UNDER EITHER OF THE FOLLOWING CONDITIONS: ALONG TAPERS AND TRANSITION AREAS; OR ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLESTACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	266 EACH
ITEM 614, OBJECT MARKER, ONE-WAY	266 EACH
ITEM 614, INCREASED BARRIER DELINEATION (AT CROSSOVERS PHASE 1A)	1,750 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

CALCULATED SS CHECKED GAH

MAINTENANCE OF TRAFFIC NOTES

STA-062-24.14

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED SS | CHECKED GAH

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA	202 GUARDRAIL REMOVED	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1, ONE-WAY	614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	614 OBJECT MARKER, ONY WAY	614 WORK ZONE ARROW, CLASS 1, 642 PAINT	614 SPECIAL-WORK ZONE TRAFFIC SIGNAL	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	622 PORTABLE BARRIER, 50", AS PER PLAN
						SF	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	SY	FT	FT
		PHASE 1																					
55 - 58	ELY-1	EX ROW US 62 & EX US 62	1165+58	1187+19	LT&RT								2023.0										
55 - 57	PMT-1	EX US 62	1171+34	1183+88	LT&RT	21047.4															2,338.6		
55 - 59	ELY-2	EX US 62	1171+34	1189+93	RT								1859.0										
55 - 56	GR-1	EX US 62	1172+70	1173+78	LT		108																
56	CH-1	US 62 EB (1)	2173+88	2175+91	RT									203.0									
56 - 58	ELW-1	US 62 EB (1)	2175+91	1186+19	RT							886.1											
57 - 58	PMT-2	EX US 62	1180+13	1186+19	RT	5522.9														613.7			
57 - 58	PB-1	RAMP A & EX US 62	179+00	1187+29	LT&RT				14								14					710	
58	PB-2	EX US 62	1184+94	1186+69	LT&RT				4								4					175	
58	PB-3	EX US 62	1184+90	1187+67	LT&RT				6								6					280	
58	IA-1	EX US 62	1187+29	1187+62	LT			1															
58	IA-2	EX US 62	1184+62	1184+94	RT			1															
58	IA-3	EX US 62	1187+67	1188+00	RT			1															
60	PMT-3	EX US 62	1197+24	1197+62	LT	382.4														42.5			
60	PB-2	EX US 62	1198+05	1199+58	LT				3								3					150	
61 - 62	ELW-2	US 62 EB (2)	202+48	210+35	RT							791											
61 - 62	PMT-4	US 62 EB (2)	203+52	205+77	RT	941.5														104.6			
62 - 63	PMT-5	US 62 WB (2)	206+38	211+55	RT	9240.0															1,026.7		
62 - 63	ELY-3	US 62 WB (2) & EX US 62 WB	206+48	1213+43	RT								580										
62	CH-2	US 62 WB (2)	206+48	207+12	RT									64.0									
62	ELY-4	US 62 EB (2)	206+54	208+48	LT							194											
62	LL-1	US 62 EB (2)	206+65	210+39	RT					385													
62 - 63	PMT-6	US 62 EB (2)	206+55	211+00	RT	2470.0														274.4			
119		EX US 62 WB	1207+26		LT&RT														1				
		PHASE 1.1																					
65	PMT-1	ROWLAND AVE	20+49	20+60	LT&RT	240.1														26.7			
65	SL-1	ROWLAND AVE	20+50		LT											15							
65	PMT-2	ROWLAND AVE	21+53	22+09	LT&RT	1633.1														181.5			
		PHASE 1A																					
66 - 70	ELW-1	EX US 62	1168+14	1190+02	LT							2188											
66 - 68	ELY-1	EX US 62	1170+65	1181+74	LT&RT								1113.4										
66 - 68	CH-1	EX US 62	1170+38	1178+98	RT									860.0									
66 - 68	PB-1	EX US 62	1171+39	1181+06	LT&RT				19								19						970
66 - 69	PB-2	EX US 62	1172+61	1185+52	LT&RT				26								26					1290	
67 - 68	ELY-2	EX US 62	1173+39	1181+74	RT								835.4										
67 - 69	ELW-2	EX US 62	1173+39	1186+48	RT							1309											
68 - 69	LL-1	EX US 62	1178+98	1186+48	RT					750													
68	IA-1	EX US 62	1181+06	1181+39	RT			1															
68 - 69	DYL-1	EX US 62	1181+74	1185+49	LT						375												
68 - 69	DYL-2	EX US 62	1181+74	1185+49	LT						375												
69	IA-2	EX US 62	1185+52	1185+84	LT			1															
69	DSL-1	EX US 62	1185+49	1186+48	RT						99												
69	DSL-2	EX US 62	1185+49	1186+48	LT&RT						99												
70 - 75	ELW-3	EX US 62 & EX US 620 WB	1190+86	1220+00	LT&RT							3225											
71 - 72	DLW-1	EX US 62 & EX US 62 EB (2)	1199+32	203+16	RT										495.5								
71 - 73	DYL-3	EX US 62 & EX US 62 EB (2)	1199+32	208+62	RT						1042.3												
71 - 72	DYL-4	EX US 62 & EX US 62 EB	1199+32	203+16	RT						495.5												
116		EX CROSSOVER US 62	1169+75	1174+52	LT&RT																		
		SUBTOTALS THIS SHEET								FT 1,135	FT 2,486	FT 8,593	FT 6410.8										
										MILE	MILE	MILE	MILE										
		SUBTOTALS THIS SHEET (REVISED)					108	5	72	0.21	0.47	1.63	1.2	1127	495.5	15	72	0	1	1,243.3	3,365.3	2,605	970
		TOTALS CARRIED TO NEXT SHEET					108	5	72	0.21	0.47	1.63	1.2	1127	495.5	15	72	0	1	1,243.3	3,365.3	2,605	970

STA-062-24.14

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED SS
CHECKED GAH

STA-062-24.14

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA	202 GUARDRAIL REMOVED	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1, ONE-WAY	614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	614 OBJECT MARKER, ONY WAY	614 WORK ZONE ARROW, CLASS I	614 SPECIAL-WORK ZONE TRAFFIC SIGNAL	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	622 PORTABLE BARRIER, 50", AS PER PLAN
						SF	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	SY	FT	FT
72 - 74	PB-3	EX US 62 WB & EX US 62 WB	1203+01	1213+24	RT				21								21					1030	
73	DYL-5	US 62 EB (2)	206+23	208+62	LT&RT						239												
73	ELY-3	US 62 EB (2)	208+62	209+88	RT								126.0										
73 - 74	ELY-4	US 62 EB (2) & US 62 WB (2)	208+62	211+56	LT&RT								306.0										
74	IA-3	EX US 62 WB	1213+24	1213+56	LT			1															
117		EX CROSSOVER US 62	1207+54	1213+40	LT&RT																		
		PHASE IB																					
76 - 84	ELY-1	EX ROW US 62 & EX US 62 EB	1166+49	1215+04	LT&RT								4724.1										
76 - 77	DL-1	EX US 62	1167+73	1173+53	RT										580.3								
76 - 84	ELY-2	EX ROW US 62 & EX US 62 WB	1169+84	1213+53	LT&RT								4403.6										
76 - 84	LL-1	EX US 62 & EX US 62 WB	1169+84	1213+37	LT&RT					4289.6													
76	IA-1	EX US 62	1171+06	1171+39	RT			1															
76 - 78	ELW-1	EX US 62 & US 62	1171+34	181+81	LT							1188.1											
76 - 79	PB-1	EX US 62 & US 62	1171+34	184+68	LT				29								29					1470	
76 - 78	PB-2	EX US 62	1171+39	1183+81	RT				25								25					1240	
76 - 79	ELW-2	EX US 62	1173+53	1185+36	RT							1176.3											
78 - 79	CH-1	US 62	181+81	183+10	LT									131.2									
78	CM-1	US 62	181+81	183+10	LT																		
78	ELY-3	RAMP A	179+01	181+74	RT								276.3										
78 - 81	ELW-3	RAMP A & ST. ELMO AVE	179+01	31+80	CL&LT							2231											
78 - 79	CH-2	RAMP A	181+74	183+06	RT									132.0									
79 - 80	DL-1	US 62	183+10	189+18	LT										618.6								
79	IA-2	US 62	184+68	185+00	LT			1															
79 - 80	PB-3	EX US 62	1188+08	1195+00	RT				14								14					690	
81	CH-3	US 62	196+11	196+40	LT									89.5									
81 - 83	ELW-4	US 62 & MAPLE AVE	196+71	4+23	LT							1639.4											
81	IA-3	EX US 62	1197+98	1198+30	RT			1															
81 - 84	PB-4	EX US 62 & US 62 EB (2)	1198+30	211+65	RT				26								26					1310	
82 - 84	PB-5	US 62 & US 62 WB (2)	199+91	211+23	LT&RT				29								29					1140	
82 - 84	ELW-5	US 62 EB (2) & EX US 62 EB	203+35	1215+04	RT							1059.9											
83	SL-1	MAPLE AVE	3+97	3+97	LT											15							
83	CH-4	US 62 WB (2)	205+94	208+37	LT									241.9									
83	CH-5	US 62 WB (2) & MAPLE AVE	205+94	4+60	LT&CL									78.9									
83	CH-6	US 62 WB (2) & MAPLE AVE	206+40	4+60	LT&CL									84.8									
83	ELW-6	MAPLE AVE & US 62 WB (2)	4+29	208+83	LT							273.3											
83	LA-1	US 62 WB (2)	206+71		LT													1					
83	LA-2	US 62 WB (2)	207+34		LT													1					
83	LA-3	US 62 WB (2)	208+03		LT													1					
84	IA-4	US 62 WB (2)	211+23	211+73	RT			1															
SUBTOTALS THIS SHEET										FT 4,290	FT 239	FT 7,568	FT 9836.0										
										MILE	MILE	MILE	MILE										
SUBTOTALS THIS SHEET (REVISED)							0	5	144	0.81	0.05	1.43	1.9	758.3	1198.9	15	144	3	0	0.0	0.0	6,880	0
SUBTOTALS PREVIOUS SHEET							108	5	72	0.21	0.47	1.63	1.2	1,127	496	15	72	0	1	1,243.3	3,365.3	2,605	970
TOTALS CARRIED TO NEXT SHEET							108	10	216	1.02	0.52	3.06	3.1	1,885	1694.4	30	216	3	1	1,243.3	3,365.3	9,485	970

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA	202 GUARDRAIL REMOVED	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1, ONE-WAY	614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	614 OBJECT MARKER, ONY WAY	614 WORK ZONE ARROW, CLASS I	614 SPECIAL-WORK ZONE TRAFFIC SIGNAL	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	622 PORTABLE BARRIER, 50", AS PER PLAN
						SF	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	SY	FT	FT
		PHASE 2																					
86	DL-1	EX ROW US 62	1166+87	1169+76	RT										289								
86	DL-2	EX ROW US 62	1166+87	1171+35	RT										448								
86	IA-1	EX US 62	1170+54	1170+86	RT			1															
86 - 91	ELW-1	EX US 62 & US 62	1170+86	196+13	RT							2673.1											
86 - 88	PB-1	EX US 62 & US 62 EB (1)	1169+86	2181+35	RT				24								24					1190	
89 -90	ELY-1	EX US 62 & US 62	1170+98	193+71	LT&RT								2410.6										
89	ELW-2	30TH ST NE	10+78	14+14	LT							351.8											
89 - 91	DYL-1	30TH ST NE	11+07	22+66	LT						1180.7												
89 - 91	ELW-3	30TH ST NE	11+07	23+14	LT							1216.6											
90	ELW-4	30TH ST NE	15+81	16+81	LT							100											
90	DL-3	US 62	192+21	192+69	RT										48.4								
90 - 91	ELY-2	US 62	192+69	195+88	RT								317.9										
90 - 91	CH-1	US 62	192+69	195+88	LT&RT									321.9									
90 - 91	DYL-2	US 62	193+73	195+88	LT						215												
91	LA-1	US 62	194+38		LT													1					
91	LA-2	US 62	195+04		LT													1					
91	LA-3	US 62	195+70		LT													1					
91	SL-1	US 62	195+88		LT&RT											46							
91	SL-2	US 62	196+95		LT&RT											57							
91 -94	ELW-5	US 62 & EX US 62 EB	196+50	1215+85	LT&RT							1843.6											
91 -94	ELY-3	US 62 & EX US 62 EB	196+95	1215+85	LT&RT								1772.4										
91	IA-2	US 62	197+64	197+97	RT			1															
91 -93	PB-2	US 62 & US 62 EB (2)	197+97	205+77	RT				16								16					780	
91	ELW-6	30TH ST NE & US 62	21+37	196+13	LT&RT							186.1											
91	SL-3	30TH ST NE	22+66		LT											11							
91	SL-4	ST ELMO AVE	31+65		LT											28							
91	CH-3	ST ELMO AVE	31+65	31+90	LT									25									
91	DYL-3	ST ELMO AVE	31+65	33+06	CL						140.7												
91	LA-4	ST ELMO AVE	31+75		LT													1					
93	IA-3	US 62 EB (2)	206+43	206+76	RT			1															
93 -94	PB-3	US 62 EB (2) & EX US 62 EB	206+76	1213+09	LT&RT				10								10					520	
										FT	FT	FT	FT										
SUBTOTALS THIS SHEET										0	1,536	6,371	4500.9										
										MILE	MILE	MILE	MILE										
SUBTOTALS THIS SHEET (REVISED)							0	3	50	0.00	0.29	1.21	0.9	346.9	785.4	142	50	4	0	0.0	0.0	2,490	0
SUBTOTALS PREVIOUS SHEET							108	10	216	1.02	0.52	3.06	3.1	1,885	1,694	30	216	3	1	1,243.3	3,365.3	9,485	970
TOTALS CARRIED TO NEXT SHEET							108	13	266	1.02	0.81	4.27	3.9	2,232	2479.8	172	266	7	1	1,243.3	3,365.3	11,975	970

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC SUBSUMMARY

STA-062-24.14

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA	202 GUARDRAIL REMOVED	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1, ONE-WAY	614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	614 OBJECT MARKER, ONY WAY	614 WORK ZONE ARROW, CLASS I	614 SPECIAL-WORK ZONE TRAFFIC SIGNAL	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	622 PORTABLE BARRIER, 50", AS PER PLAN
			FROM	TO		SF	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	SY	FT	FT
		PHASE 2A																					
96	LL-1	EX ROW US 62	1166+87	1169+76	RT					289													
96 - 101	LL-2	EX ROW US 62	1166+87	195+88	RT					2891													
96 - 97	ELW-1	US 62 EB (1)	2171+85	2173+91	RT							206											
96 - 101	ELY-1	EX US 62 & US 62	1170+98	195+94	LT&RT								2636.5										
96 - 97	ELY-2	RAMP B	4171+95	4173+93	LT								198.0										
96 - 101	ELW-2	RAMP B & US 62	4171+95	195+88	LT&RT							23725											
97 - 98	CH-1	US 62 EB (1)	2173+91	2180+50	RT									659									
97 - 98	CH-2	RAMP B & US 62 EB (1)	4173+93	2180+50	LT&RT									658.2									
98 - 99	DL-1	US 62 EB (1) & US 62	2180+50	186+58	RT										599.2								
100- 101	CH-3	US 62	193+20	195+88	RT									268									
100	LA-1	US 62	193+22		RT													1					
100- 101	ELY-3	US 62	193+71	195+94	LT								227.4										
100	LA-2	US 62	193+73		RT													1					
100	ELW-3	30TH ST NE	19+64	20+98	LT							147.4											
100	ELW-4	30TH ST NE	19+64	20+98	LT&RT							141.7											
100- 101	DYL-1	30TH ST NE	19+64	23+04	LT&CL						351												
101	CH-4	US 62	194+21	195+88	LT&RT									167.5									
101	LA-3	US 62	194+39		RT													1					
101	LA-4	US 62	195+04		LT													1					
101	LA-5	US 62	195+70		LT													1					
101	SL-1	US 62	195+88		LT&RT											53							
101- 102	ELW-5	ST ELMO AVE & EX US 62 EB	30+24	1204+96	RT							753.9											
101	DYL-3	US 62	196+95	198+54	RT						158.4												
101- 102	CH-5	US 62	196+95	200+21	LT									326.0									
101- 104	LL-2	US 62 & EX US 62 EB	196+95	1217+25	RT					1919													
101- 102	CH-6	US 62	196+96	200+21	LT									328.9									
101	LA-6	US 62	197+05		RT													1					
101	DYL-4	US 62	197+26	198+54	RT						128.6												
101	LA-7	US 62	197+71		RT													1					
101	LA-8	US 62	198+37		LT													1					
101- 104	ELY-4	US 62 & EX US 62 WB	198+54	1213+53	LT&RT								1515.1										
101- 104	ELY-5	US 62 & EX US 62 EB	198+54	1217+25	LT&RT								1756.4										
101	LA-9	US 62	199+03		RT													1					
101	SL-3	30TH ST NE	23+04		RT											12							
101	DYL-5	ST ELMO AVE	29+50	30+24	LT						74												
101	CH-7	ST ELMO AVE	29+50	30+24	CL						74												
101	LA-10	ST ELMO AVE	29+52		LT													1					
SUBTOTALS THIS SHEET										FT 5,099	FT 786	FT 24,974	FT 6333.4										
										MILE	MILE	MILE	MILE										
SUBTOTALS THIS SHEET (REVISED)							0	0	0	0.97	0.15	4.73	1.2	2407.6	599.2	65	0	10	0	0.0	0.0	0	0
SUBTOTALS PREVIOUS SHEET							108	13	266	1.02	0.81	4.27	3.9	2,232	2,480	172	266	7	1	1,243.3	3,365.3	11,975	970
TOTALS CARRIED TO NEXT SHEET							108	13	266	1.99	0.96	9.00	5.1	4,640	3079	237	266	17	1	1,243.3	3,365.3	11,975	970

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC SUBSUMMARY

STA-062-24.14

38
500

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SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	COMPUTER GENERATED AREA	202 GUARDRAIL REMOVED	614 WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	614 BARRIER REFLECTOR, TYPE 1, ONE-WAY	614 WORK ZONE LANE LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 6", 642 PAINT (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT	614 WORK ZONE DOTTED LINE, CLASS 1, 6", 642 PAINT	614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	614 OBJECT MARKER, ONY WAY	614 WORK ZONE ARROW, CLASS I	614 SPECIAL-WORK ZONE TRAFFIC SIGNAL	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	615 PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	622 PORTABLE BARRIER, UNANCHORED	622 PORTABLE BARRIER, 50", AS PER PLAN
						SF	FT	EACH	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	SY	SY	FT	FT
		PHASE 2A																						
101	LA-11	ST ELMO AVE	30+06		LT													1						
101	SL-4	ST ELMO AVE	30+24		LT&RT											25								
102	LA-12	US 62	199+69		LT													1						
102-103	CH-8	EX US 62 EB	1205+46	1207+28	RT									182										
102	LA-13	EX US 62 EB	1205+87		RT													1						
103	LA-14	EX US 62 EB	1206+53		RT													1						
103	CH-9	MAPLE AVE	2+41	3+08	LT									69.7										
103	CH-10	MAPLE AVE	2+57	3+08	RT									40										
103	SL-5	MAPLE AVE	2+95	3+06	RT											17								
103-105	ELW-8	MAPLE AVE & EX US 62 EB	1207+43	1217+25	RT							1009.4												
		PHASE 3																						
108-110	DYL-1	30TH ST NE	8+27	15+98	CL						771.1													
110	DYL-2	30TH ST NE	16+48	20+98	CL						450.1													
SUBTOTALS THIS SHEET										FT 0 MILE	FT 1,221 MILE	FT 1,009 MILE	FT 0.0 MILE											
SUBTOTALS THIS SHEET (REVISED)							0	0	0	0.00	0.23	0.19	0.0	291.7	0	42	0	4	0	0.0	0.0	0	0
SUBTOTALS PREVIOUS SHEET							108	13	266	1.99	0.96	9.00	5.1	4,640	3,079	237	266	17	1	1,243.3	3,365.3	11,975	970
												9.19	5.1											
TOTALS CARRIED TO SHEET 33									266								266							
TOTALS CARRIED TO GENERAL SUMMARY							108	13		1.99	1.19	14.31		4,932	3,079	279		21	1	1,243	3,366	11,975	970

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC SUBSUMMARY

STA-062-24.14

39
500

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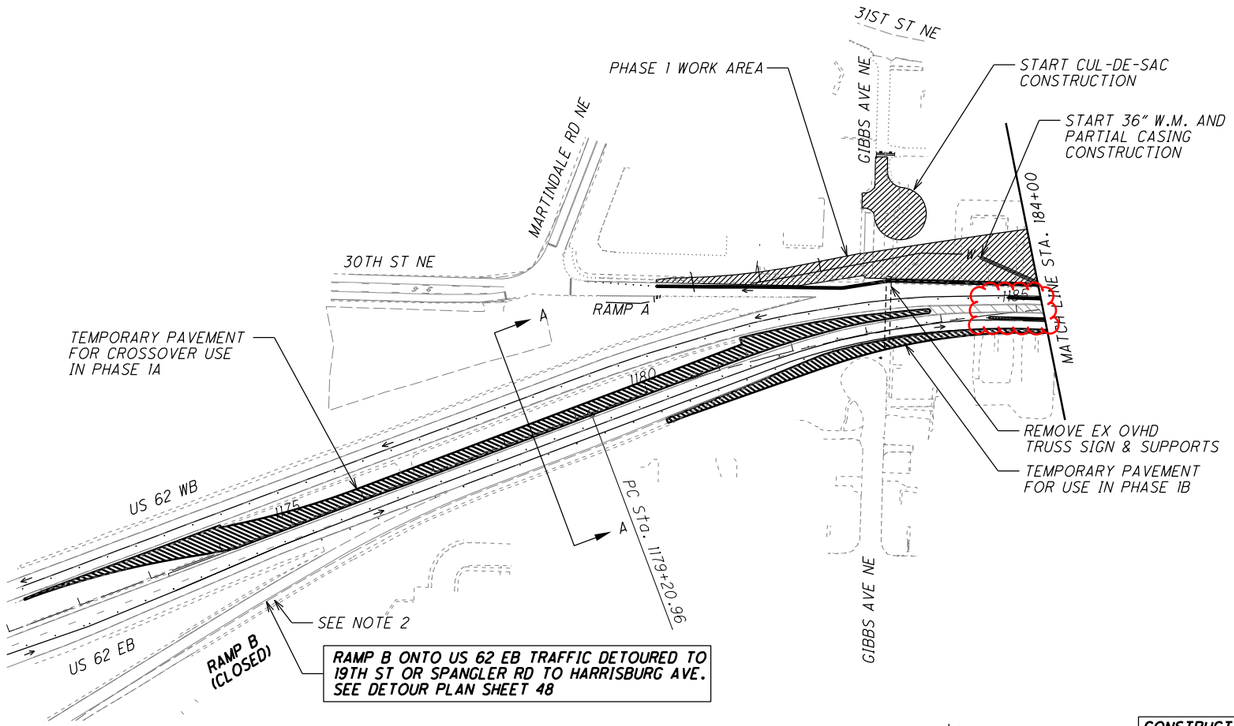

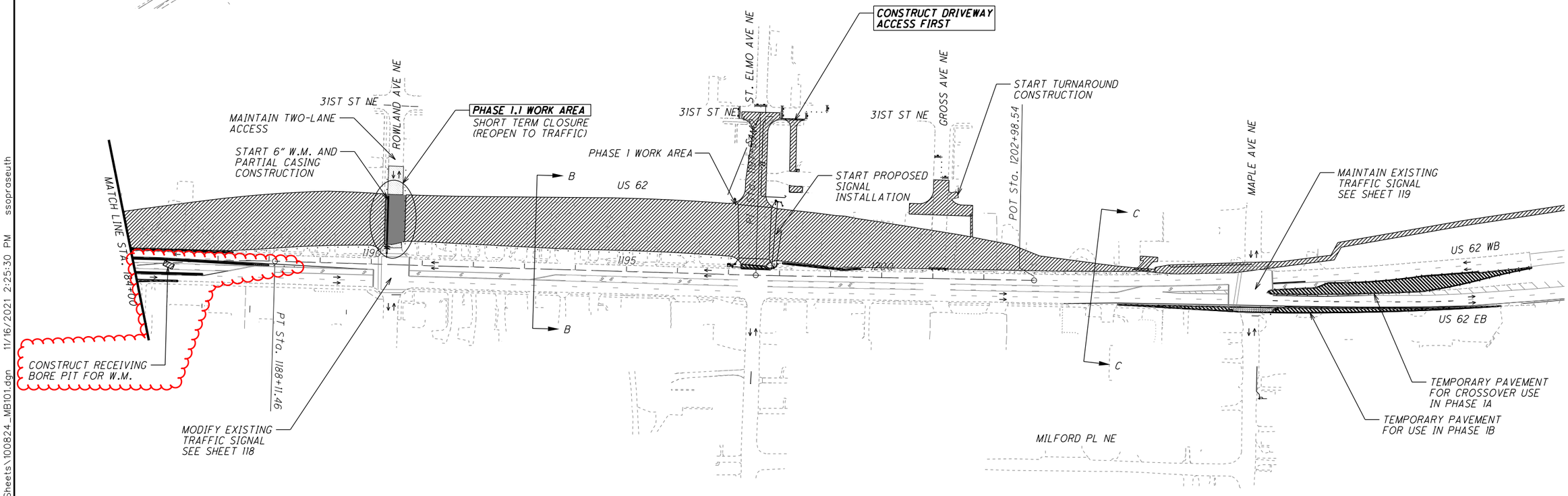

LEGEND

- PHASE 1 WORK AREA
- PHASE 1 WORK AREA REQUIRING SINGLE LANE CLOSURE
- TEMPORARY PAVEMENT BUILT IN THIS PHASE
- TEMPORARY PAVEMENT BUILT IN PRIOR PHASE
- PERMANENT PAVEMENT BUILT IN PRIOR PHASE
- ← DIRECTION OF TRAVEL

NOTES

1. RAMP B SHALL BE CLOSED THIS PHASE.
2. CONTRACTOR SHALL NOT COMPLETELY BLOCK OFF RAMP B AND MUST PROVIDE TEMPORARY ACCESS FOR EMERGENCY VEHICLES.
3. ACCESS TO REMAINING BUSINESS ALONG US 62 NEED TO BE MAINTAINED THROUGHOUT CONSTRUCTION.

HORIZONTAL SCALE IN FEET
0 50 100 200

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC SCHEMATIC - PHASE 1

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DRAINAGE NOTES:
1. CONTRACTOR TO VERIFY POSITIVE DRAINAGE IS PRESENT. ABANDON EXISTING CATCH BASIN AND CONNECT PIPES THROUGH PRIOR TO PLACING TEMP. PAVEMENT.

2. DO NOT INSTALL PROPOSED I-3D BARRIER INLET AT THIS LOCATION IN THIS PHASE. INSTALL PORTION OF LOWER BOX UNIT AS NECESSARY AND STEEL PLATE, OR INSTALL CONTINUOUS PIPE RUN AND CUT AS NECESSARY IN SUBSEQUENT PHASE TO ACCOMODATE BOX SECTION.

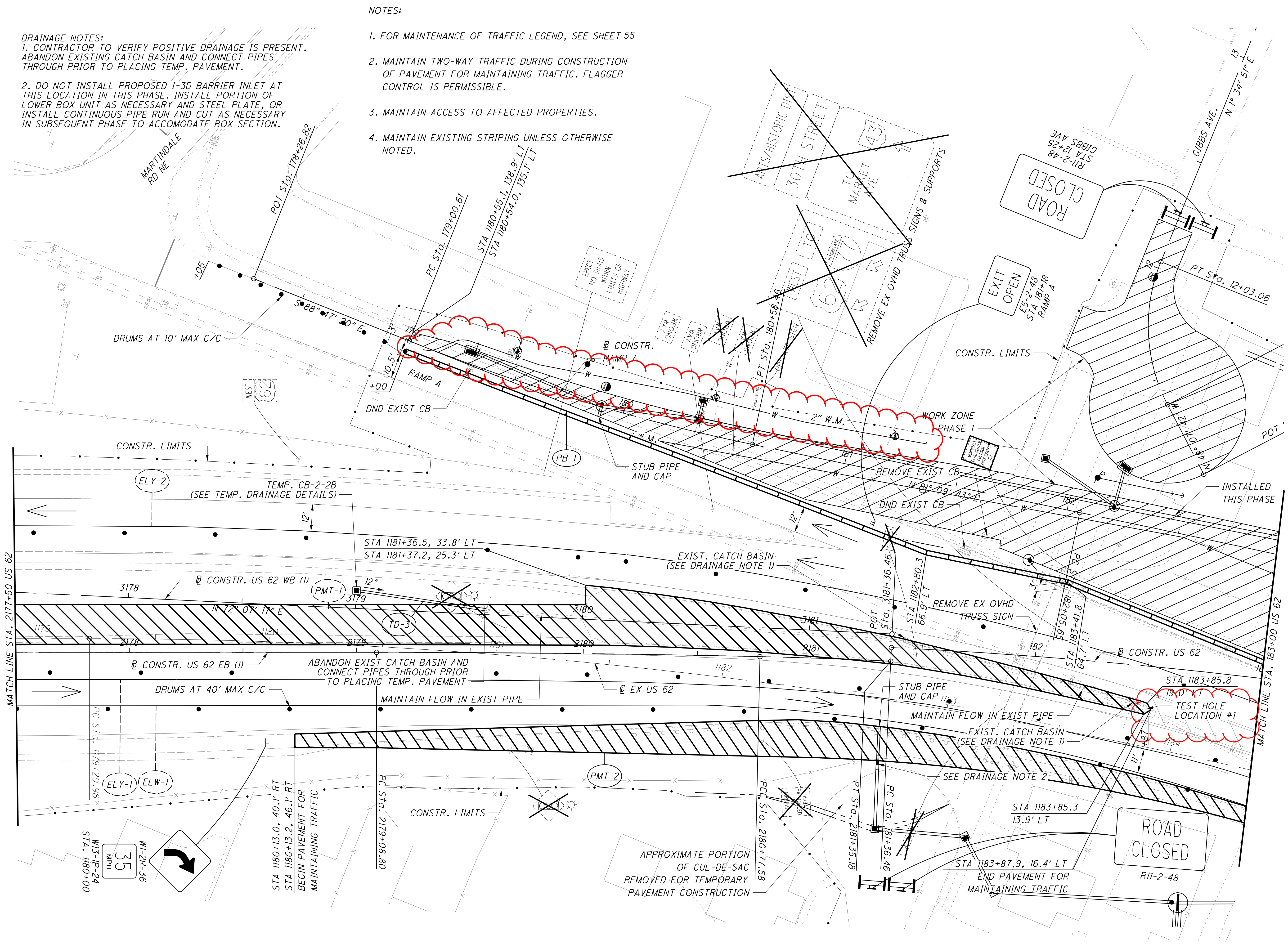
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 55

2. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.

3. MAINTAIN ACCESS TO AFFECTED PROPERTIES.

4. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.



MARTINDALE RD NE
POT Sta. 178+26.82
PC Sta. 179+00.61
STA 1180+55.1, 138.9' LT
STA 1180+54.0, 135.1' LT
DRUMS AT 10' MAX C/C
S 88° 47' 30" E
RAMP A
DND EXIST CB
ERECT NO SIGNS WITHIN LIMITS OF HIGHWAY
℄ CONSTR. RAMP A
PB-1
STUB PIPE AND CAP
PT Sta. 180+58.46
REMOVE EX OVHD TRUSS SIGNS & SUPPORTS
2" W.M.
WORK ZONE PHASE 1
EXIT OPEN
E5-2-48
STA 181+18
RAMP A
ROAD CLOSED
R11-2-48
STA 12+25
GIBBS AVE
GIBBS AVE.
N 1° 34' 51" E
PT Sta. 12+03.06
CONSTR. LIMITS
INSTALLED THIS PHASE
REMOVE EXIST CB
N 81° 09' 43" E
DND EXIST CB
ELY-2
TEMP. CB-2-2B (SEE TEMP. DRAINAGE DETAILS)
STA 1181+36.5, 33.8' LT
STA 1181+37.2, 25.3' LT
EXIST. CATCH BASIN (SEE DRAINAGE NOTE 1)
℄ CONSTR. US 62 WB (1)
PMT-1
N 72° 07' 17" E
TD-3
POT Sta. 3181+36.46
STA 1182+80.3 66.9' LT
REMOVE EX OVHD TRUSS SIGN
STA 1183+41.8 64.7' LT
℄ CONSTR. US 62
STA 1183+85.8 19.0' LT
TEST HOLE LOCATION #1
MATCH LINE STA. 183+00 US 62
MATCH LINE STA. 2177+50 US 62
℄ CONSTR. US 62 EB (1)
ABANDON EXIST CATCH BASIN AND CONNECT PIPES THROUGH PRIOR TO PLACING TEMP. PAVEMENT
DRUMS AT 40' MAX C/C
MAINTAIN FLOW IN EXIST PIPE
℄ EX US 62
STUB PIPE AND CAP
MAINTAIN FLOW IN EXIST PIPE
EXIST. CATCH BASIN (SEE DRAINAGE NOTE 1)
SEE DRAINAGE NOTE 2
PMT-2
ELY-1
ELW-1
PC Sta. 1179+20.96
W1-2R-36
W13-1P-24
STA. 1180+00
STA 1180+13.0, 40.1' RT
STA 1180+13.2, 46.1' RT
BEGIN PAVEMENT FOR MAINTAINING TRAFFIC
PC Sta. 2179+08.80
CONSTR. LIMITS
APPROXIMATE PORTION OF CUL-DE-SAC REMOVED FOR TEMPORARY PAVEMENT CONSTRUCTION
PCC Sta. 2180+77.58
PT Sta. 2181+35.18
PC Sta. 181+36.46
STA 1183+85.3 13.9' LT
STA 1183+87.9, 16.4' LT
END PAVEMENT FOR MAINTAINING TRAFFIC
ROAD CLOSED
R11-2-48

HORIZONTAL SCALE IN FEET

CALCULATED SS

CHECKED GAH

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 2177+50 TO STA. 183+00

STA-062-24.14

57
500

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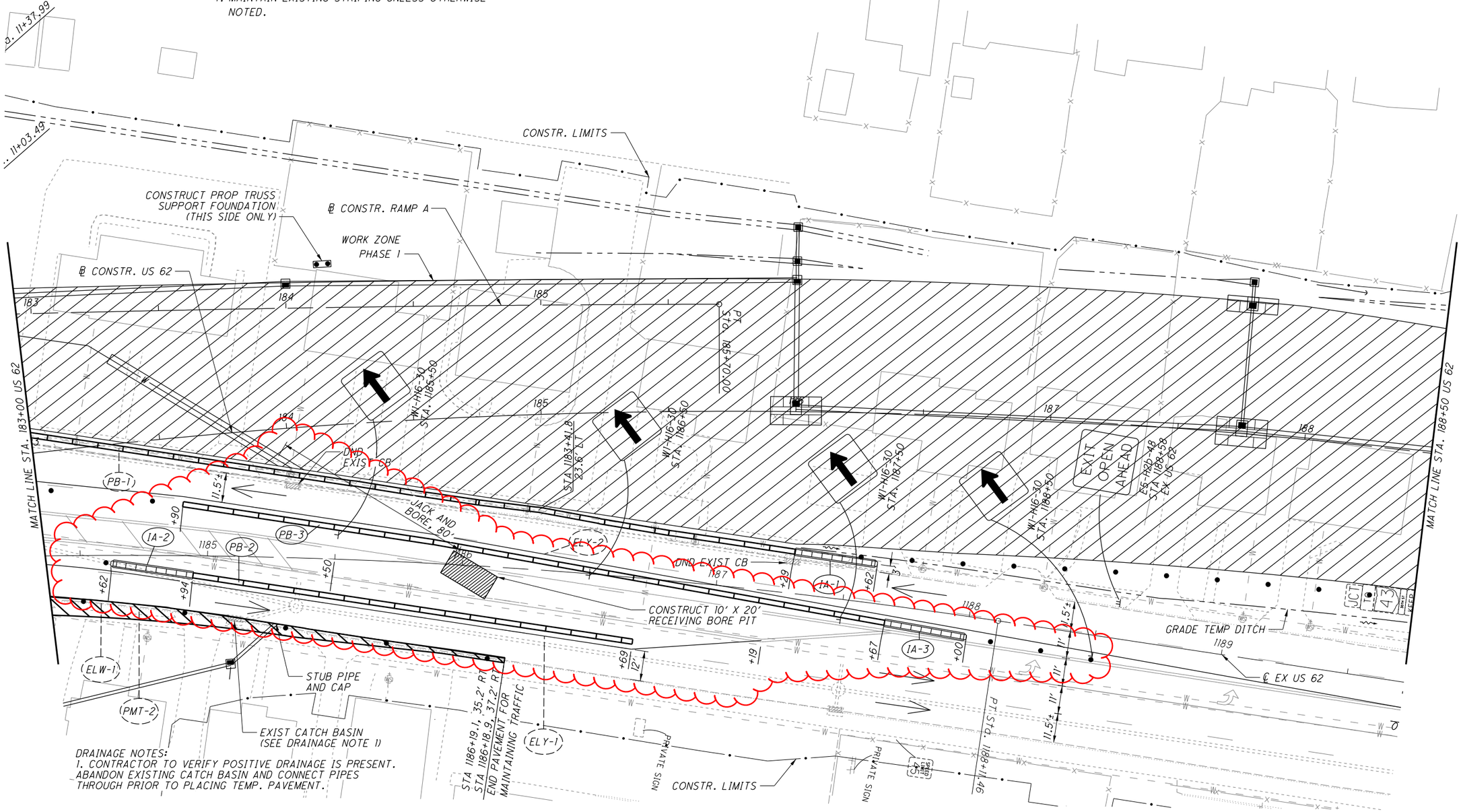
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 55

2. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.

3. MAINTAIN ACCESS TO AFFECTED PROPERTIES.

4. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.



DRAINAGE NOTES:
1. CONTRACTOR TO VERIFY POSITIVE DRAINAGE IS PRESENT. ABANDON EXISTING CATCH BASIN AND CONNECT PIPES THROUGH PRIOR TO PLACING TEMP. PAVEMENT.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC - PHASE 1
STA. 183+00 TO STA. 188+50

STA-062-24.14

58
500

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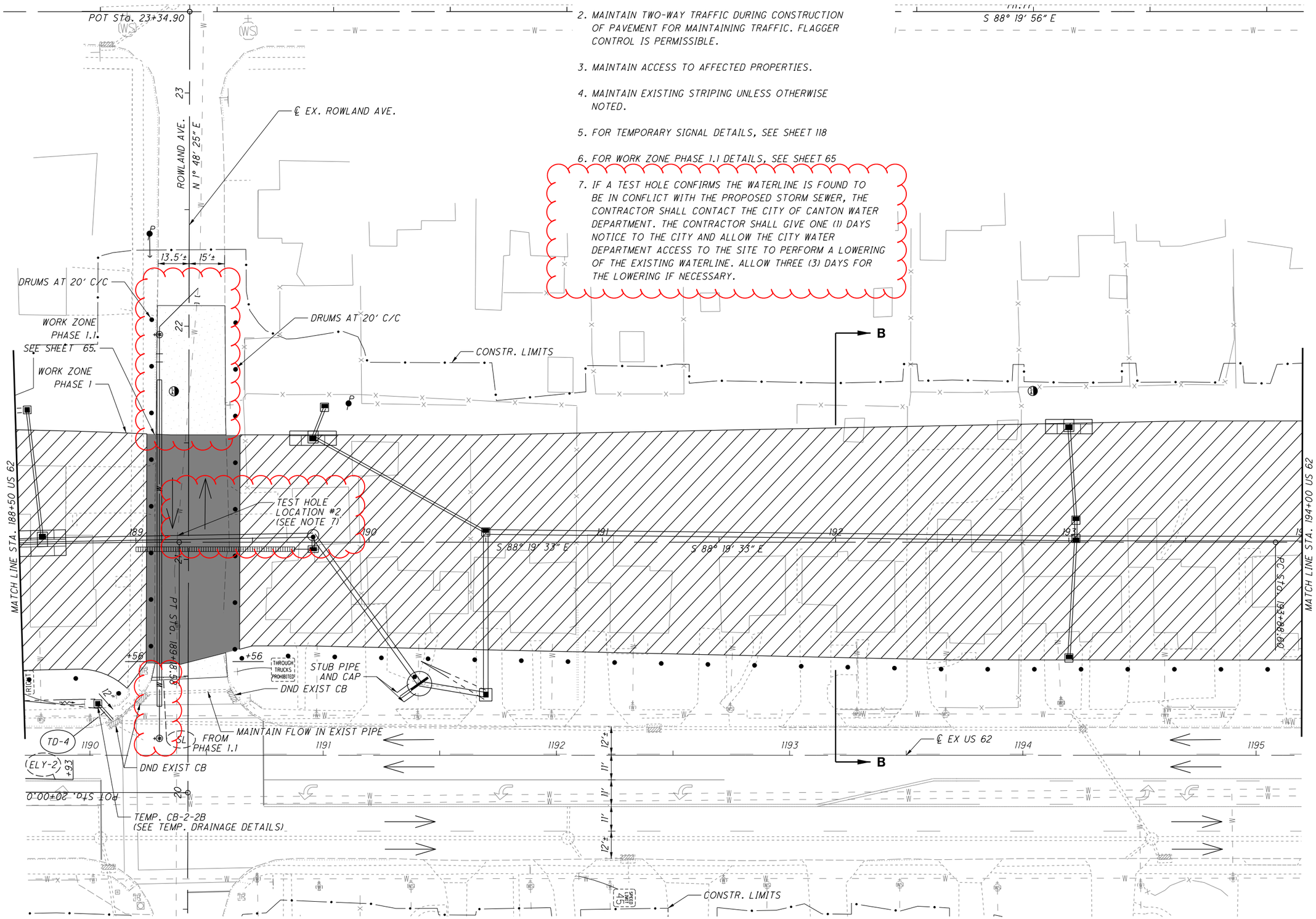
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 55
2. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.
3. MAINTAIN ACCESS TO AFFECTED PROPERTIES.
4. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.
5. FOR TEMPORARY SIGNAL DETAILS, SEE SHEET 118
6. FOR WORK ZONE PHASE 1.1 DETAILS, SEE SHEET 65
7. IF A TEST HOLE CONFIRMS THE WATERLINE IS FOUND TO BE IN CONFLICT WITH THE PROPOSED STORM SEWER, THE CONTRACTOR SHALL CONTACT THE CITY OF CANTON WATER DEPARTMENT. THE CONTRACTOR SHALL GIVE ONE (1) DAYS NOTICE TO THE CITY AND ALLOW THE CITY WATER DEPARTMENT ACCESS TO THE SITE TO PERFORM A LOWERING OF THE EXISTING WATERLINE. ALLOW THREE (3) DAYS FOR THE LOWERING IF NECESSARY.



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SS
CHECKED GAH

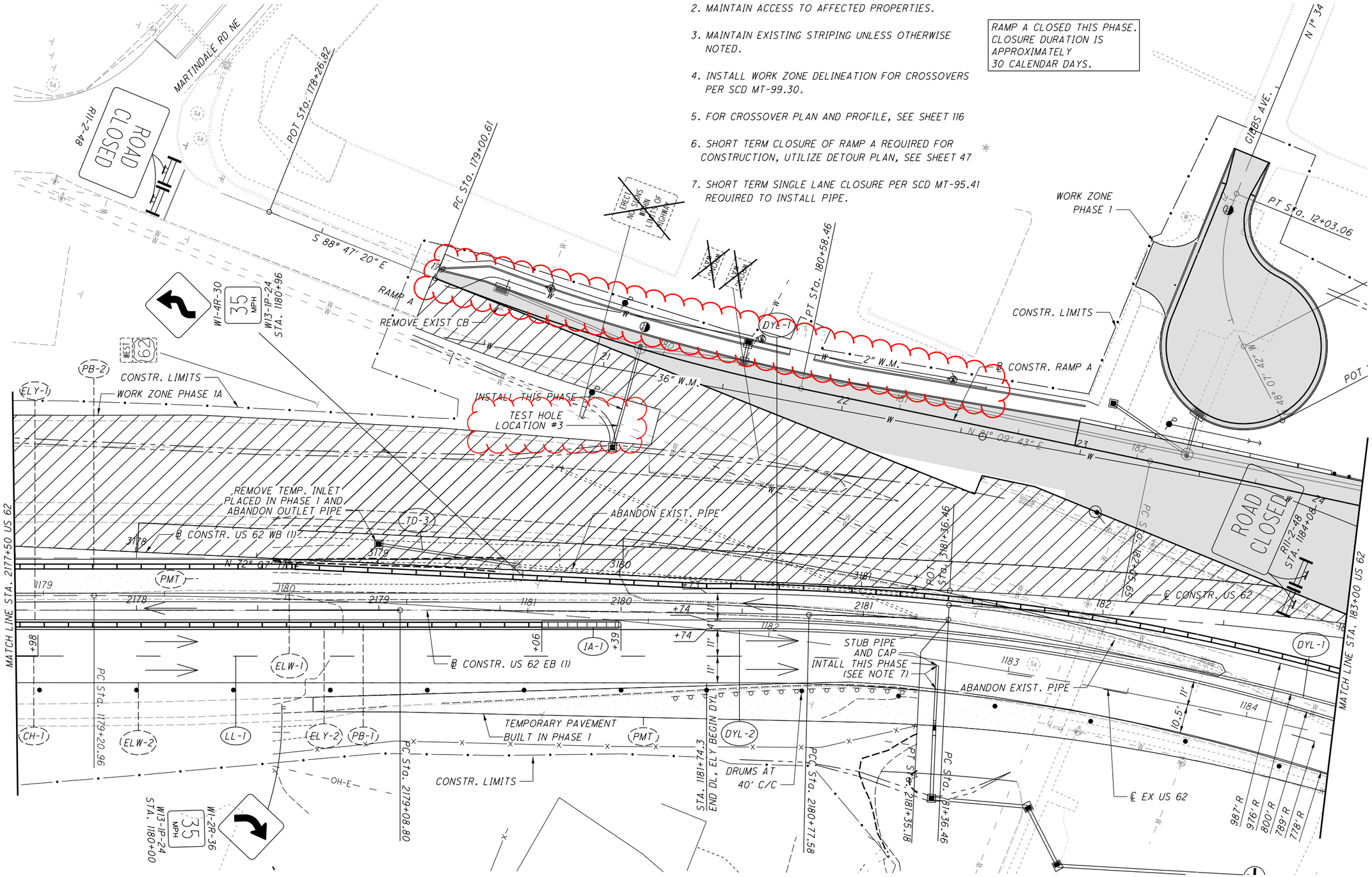
MAINTENANCE OF TRAFFIC - PHASE 1
STA. 188+50 TO STA. 194+00

STA-062-24.14

NOTES:

1. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.
2. MAINTAIN ACCESS TO AFFECTED PROPERTIES.
3. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.
4. INSTALL WORK ZONE DELINEATION FOR CROSSOVERS PER SCD MT-99.30.
5. FOR CROSSOVER PLAN AND PROFILE, SEE SHEET 116
6. SHORT TERM CLOSURE OF RAMP A REQUIRED FOR CONSTRUCTION, UTILIZE DETOUR PLAN, SEE SHEET 47
7. SHORT TERM SINGLE LANE CLOSURE PER SCD MT-95.41 REQUIRED TO INSTALL PIPE.

RAMP A CLOSED THIS PHASE. CLOSURE DURATION IS APPROXIMATELY 30 CALENDAR DAYS.



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC - PHASE 1A
STA. 2177+50 TO STA. 183+00

STA-062-24.14

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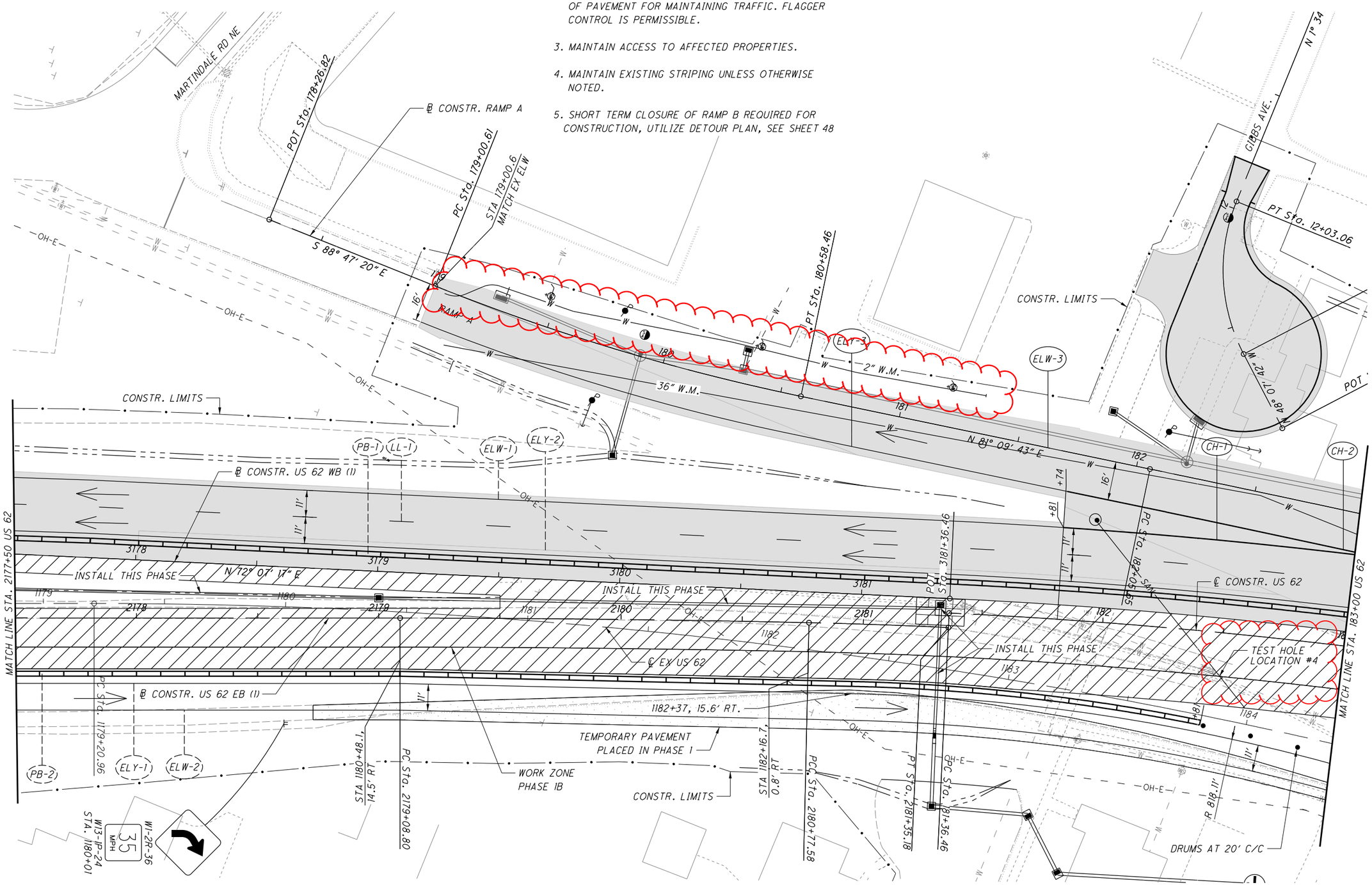
NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 76
2. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.
3. MAINTAIN ACCESS TO AFFECTED PROPERTIES.
4. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.
5. SHORT TERM CLOSURE OF RAMP B REQUIRED FOR CONSTRUCTION, UTILIZE DETOUR PLAN, SEE SHEET 48



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC - PHASE 1B
STA. 2177+50 TO STA. 183+00

STA-062-24.14

78
500

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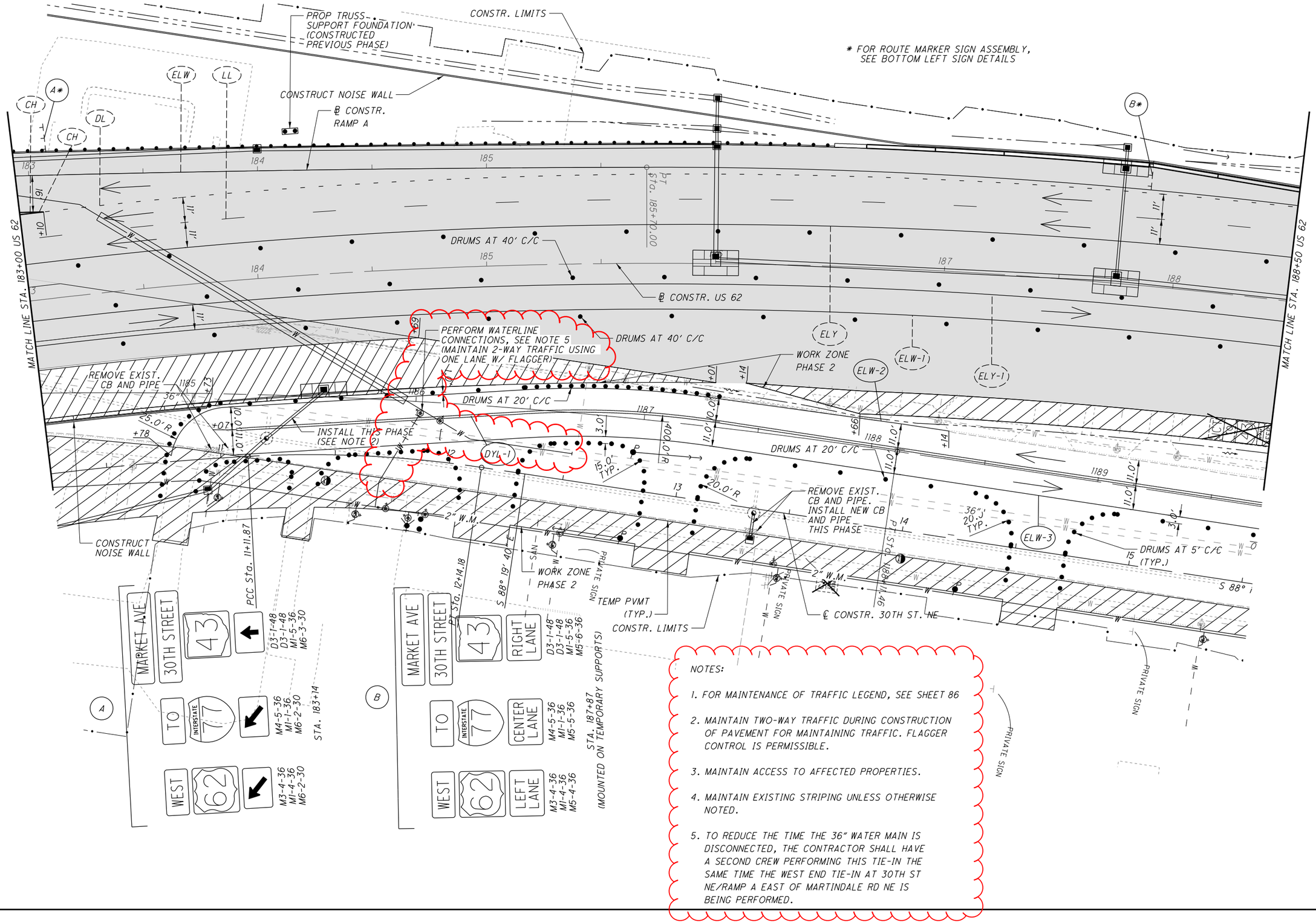

NOTES:

1. FOR MAINTENANCE OF TRAFFIC LEGEND, SEE SHEET 86
2. MAINTAIN TWO-WAY TRAFFIC DURING CONSTRUCTION OF PAVEMENT FOR MAINTAINING TRAFFIC. FLAGGER CONTROL IS PERMISSIBLE.
3. MAINTAIN ACCESS TO AFFECTED PROPERTIES.
4. MAINTAIN EXISTING STRIPING UNLESS OTHERWISE NOTED.
5. TO REDUCE THE TIME THE 36" WATER MAIN IS DISCONNECTED, THE CONTRACTOR SHALL HAVE A SECOND CREW PERFORMING THIS TIE-IN THE SAME TIME THE WEST END TIE-IN AT 30TH ST NE/RAMP A EAST OF MARTINDALE RD NE IS BEING PERFORMED.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SS
CHECKED GAH

MAINTENANCE OF TRAFFIC - PHASE 2
STA. 183+00 TO STA. 188+50

STA-062-24.14

89
500

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
26	28	29	34	40	139	145	154	155	334	335	01/S>2/PV	02/S>2/OT/CANT	03/S>2/CV						
																		DRAINAGE (CONT.)	
	20										20			611	97400	20	FT	CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	28
						12					12			611	98150	12	EACH	CATCH BASIN, NO. 3	
						3					3			611	98151	3	EACH	CATCH BASIN, NO. 3, AS PER PLAN	330
						29					29			611	98180	29	EACH	CATCH BASIN, NO. 3A	
						12					12			611	98181	12	EACH	CATCH BASIN, NO. 3A, AS PER PLAN	330
						5					5			611	98370	5	EACH	CATCH BASIN, NO. 6	
				1							1			611	98390	1	EACH	CATCH BASIN, NO. 7	
						3					3			611	98410	3	EACH	CATCH BASIN, NO. 8	
				4		15					19			611	98470	19	EACH	CATCH BASIN, NO. 2-2B	
						3					3			611	98510	3	EACH	CATCH BASIN, NO. 2-3	
						1					1			611	98540	1	EACH	CATCH BASIN, NO. 2-4	
						3					3			611	99095	3	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B, AS PER PLAN	329
						4					4			611	99110	4	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE C1	
						6					6			611	99114	6	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE D	
						12					12			611	99574	12	EACH	MANHOLE, NO. 3	
						1					1			611	99582	1	EACH	MANHOLE, NO. 3 WITH 90" BASE I.D. AND 8" WEIR	
						1					1			611	99586	1	EACH	MANHOLE, NO. 3 WITH 108" BASE I.D. AND 12" WEIR	
						2					2			611	99654	2	EACH	MANHOLE ADJUSTED TO GRADE	
						3					3			611	99660	3	EACH	MANHOLE RECONSTRUCTED TO GRADE	
		10					1				11			611	99710	11	EACH	PRECAST REINFORCED CONCRETE OUTLET	
	4										4			611	99720	4	EACH	INSPECTION WELL	
						68					68			SPECIAL	61199830	68	FT	TRENCH DRAIN	28
						1					1			895	10020	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 2	
						1					1			895	10040	1	EACH	MANUFACTURED WATER QUALITY STRUCTURE, TYPE 4	
																		PAVEMENT	
								8,320			8,320			302	46000	8,320	CY	ASPHALT CONCRETE BASE, PG64-22	
								9,445			9,445			304	20000	9,445	CY	AGGREGATE BASE	25
								6,403			6,403			407	20000	6,403	GAL	NON-TRACKING TACK COAT	
								37			37			441	50000	37	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
								38			38			441	50300	38	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
								2,990			2,990			442	00100	2,990	CY	ANTI-SEGREGATION EQUIPMENT	
			1					2,033			2,034			442	10001	2,034	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446), AS PER PLAN, PG70-22M	25
								2,416			2,416			442	10100	2,416	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446)	
								654			654			452	10010	654	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
								866			866			452	12050	866	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS	
								781			781			452	14110	781	SY	11" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
					9,283						9,283			609	12000	9,283	FT	COMBINATION CURB AND GUTTER, TYPE 2	
					1,671						1,671			609	24510	1,671	FT	CURB, TYPE 4-C	
					1,708						1,708			609	26000	1,708	FT	CURB, TYPE 6	
15,330											15,330			872	10000	15,330	FT	VOID REDUCING ASPHALT MEMBRANE (VRAM)	26
																		WATER WORK	
									75			75		202	75611	75	EACH	VALVE BOX REMOVED, AS PER PLAN	350
									206			206		613	41200	206	CY	LOW STRENGTH MORTAR BACKFILL	
										5	5			632	64950	5	EACH	TEST HOLE PERFORMED	
									140			140		638	06708	140	FT	24" STEEL PIPE ENCASEMENT, OPEN CUT	350
									76			76		638	06912	76	FT	48" STEEL PIPE ENCASEMENT, OPEN CUT	350
									80			80		638	07320	80	FT	48" STEEL PIPE ENCASEMENT, BORED OR JACKED	
									1			1		638	10800	1	EACH	VALVE BOX ADJUSTED TO GRADE	335
									4			4		SPECIAL	63820538	4	EACH	6" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON)	349
									4			4		SPECIAL	63820586	4	EACH	12" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON)	349
									1			1		SPECIAL	63820738	1	EACH	2" AIR RELEASE VALVE (CANTON)	350
									5			5		SPECIAL	63820750	5	EACH	6" FIRE HYDRANT, COMPLETE (CANTON)	349
									2			2		SPECIAL	63820760	2	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF (CANTON)	335
									2			2		638	98000	2	EACH	WATER WORK, MISC.: 36" BUTTERFLY VALVE WITH VALVE BOX, COMPLETE (CANTON)	335
									2			2		638	98000	2	EACH	WATER WORK, MISC.: 11.25° - 12" DIP BEND FITTING	349
									4			4		638	98000	4	EACH	WATER WORK, MISC.: 11.25° - 36" DIP BEND FITTING, TR-FLEX	349
									2			2		638	98000	2	EACH	WATER WORK, MISC.: 22.5° - 12" DIP BEND FITTING	349
									4			4		638	98000	4	EACH	WATER WORK, MISC.: 22.5° - 36" DIP BEND FITTING, TR-FLEX	349
									4			4		638	98000	4	EACH	WATER WORK, MISC.: 45° - 6" DIP BEND FITTING	349

CALCULATED MSW
CHECKED GAH

GENERAL SUMMARY

STA-062-24.14

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
26	334	351	389								01/S>2/PV	02/S>2/OT/CANT	03/S>2/CV						
																		WATER WORK (CONT.)	349
	10											10		638	98000	10	EACH	WATER WORK, MISC.: 45° - 12" DIP BEND FITTING	349
	3											3		638	98000	3	EACH	WATER WORK, MISC.: 45° - 36" DIP BEND FITTING, TR-FLEX	349
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 90° - 2" HDPE BEND FITTING	349
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 6" x 6" DIP CROSS	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 12" x 12" DIP TEE FITTING	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 36" x 6" DIP TEE FITTING, TR-FLEX	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 36" x 12" DIP TEE FITTING, TR-FLEX	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 36" x 12" DIP CROSS, TR-FLEX	335
	2											2		638	98000	2	EACH	WATER WORK, MISC.: 12" x 6" DIP REDUCER FITTING	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 12" x 6" WYE	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 12" x 12" WYE	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 12" x 12" TEE/CUT-IN SLEEVE	349
	6											6		638	98000	6	EACH	WATER WORK, MISC.: 36" CUTTING SLEEVE	349
	19											19		638	98000	19	EACH	WATER WORK, MISC.: 1" CURB VALVE AND ROADWAY BOX, AS PER PLAN	349
	1											1		638	98000	1	EACH	WATER WORK, MISC.:1 1/2" CURB VALVE AND ROADWAY BOX, AS PER PLAN	349
	10											10		638	98000	10	EACH	WATER WORK, MISC.: 2" CURB VALVE AND ROADWAY BOX, AS PER PLAN	349
	4											4		638	98000	4	EACH	WATER WORK, MISC.: 6" PLUG WITH 2" OUTLET	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 8" PLUG WITH 2" OUTLET	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: CUT AND PLUG EXISTING 8" WATER LINE	335
	8											8		638	98000	8	EACH	WATER WORK, MISC.: CUT AND PLUG EXISTING 12" WATER LINE	335
	1											1		638	98000	1	EACH	WATER WORK, MISC.: 2" BLOW-OFF ASSEMBLY	349
	6											6		638	98000	6	EACH	WATER WORK, MISC.: CUT AND PLUG EXISTING 36" WATER LINE	335
	252											252		638	98600	252	FT	WATER WORK, MISC.: 1" HDPE SERVICE BRANCH, COMPLETE W/TAP	349
	10											10		638	98600	10	FT	WATER WORK, MISC.: 1 1/2" HDPE SERVICE BRANCH, COMPLETE W/TAP	349
	1,887											1,887		638	98600	1,887	FT	WATER WORK, MISC.: 2" HDPE SERVICE BRANCH, COMPLETE W/TAP	349
	200											200		638	98600	200	FT	WATER WORK, MISC.: 36" WATER MAIN (REMOVED)	335
	1											1		638	98600	1	FT	WATER WORK, MISC.: REMOVED CROSS	335
	832											832		638	98600	832	FT	WATER WORK, MISC.: 2" HDPE WATER MAIN	335
	378											378		638	98600	378	FT	WATER WORK, MISC.: 6" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 52	335
	436											436		638	98600	436	FT	WATER WORK, MISC.: 12" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 53	335
	140											140		638	98600	140	FT	WATER WORK, MISC.: 12" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 53, TR-FLEX	335
	1,010											1,010		638	98600	1,010	FT	WATER WORK, MISC.: 36" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 54, TR-FLEX	335
	2											2		SPECIAL	69050600	2	EACH	BOLLARD	350
																		SANITARY SEWER	
		60									60			202	35100	60	FT	PIPE REMOVED, 24" AND UNDER	
		7									7			202	58000	7	EACH	MANHOLE REMOVED	
24											24			202	98600	24	EACH	ABANDON MISC.: DISCONNECT SANITARY SERVICE	26
		171									171			611	01100	171	FT	6" CONDUIT, TYPE C, 707.45	
		174									174			611	01800	174	FT	8" CONDUIT, TYPE B, 707.45	
		138									138			611	01801	138	FT	8" CONDUIT, TYPE B, AS PER PLAN, PVC SDR 35	353
		10									10			611	04401	10	FT	12" CONDUIT, TYPE B, AS PER PLAN, PVC SDR 35	353
		9									9			611	99654	9	EACH	MANHOLE ADJUSTED TO GRADE	
		4									4			611	99655	4	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	26
		1									1			611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE	
		6									6			611	99690	6	EACH	MANHOLE, MISC.: STARK COUNTY PRECAST MANHOLE TYPE "A"	354
																		LIGHTING	
			12								12			625	00480	12	EACH	CONNECTION, UNFUSED PERMANENT	
			691.5								691.5			625	23200	691.5	FT	NO. 4 AWG 2400 VOLT DISTRIBUTION CABLE	
			1,075								1,075			625	24320	1,075	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 2400 VOLT CABLES	
			210.5								210.5			625	25902	210.5	FT	CONDUIT, JACKED OR DRILLED, 725.04, 3"	
			1,035								1,035			625	29000	1,035	FT	TRENCH	
			5								5			625	30700	5	EACH	PULL BOX, 725.08, 18"	
			1								1			625	31510	1	EACH	PULL BOX REMOVED	
			1,035								1,035			625	36011	1,035	FT	UNDERGROUND WARNING/MARKING TAPE, AS PER PLAN	359
			3,483								3,483			625	75550	3,483	FT	DISTRIBUTION CABLE REMOVED	
			3								3			625	75800	3	EACH	DISCONNECT CIRCUIT	

CALCULATED MSW CHECKED GAH

GENERAL SUMMARY

STA-062-24.14

125 500

...\Roadway\Sheets\100824GG001.dgn 11/19/2021 10:05:34 AM ghmassie

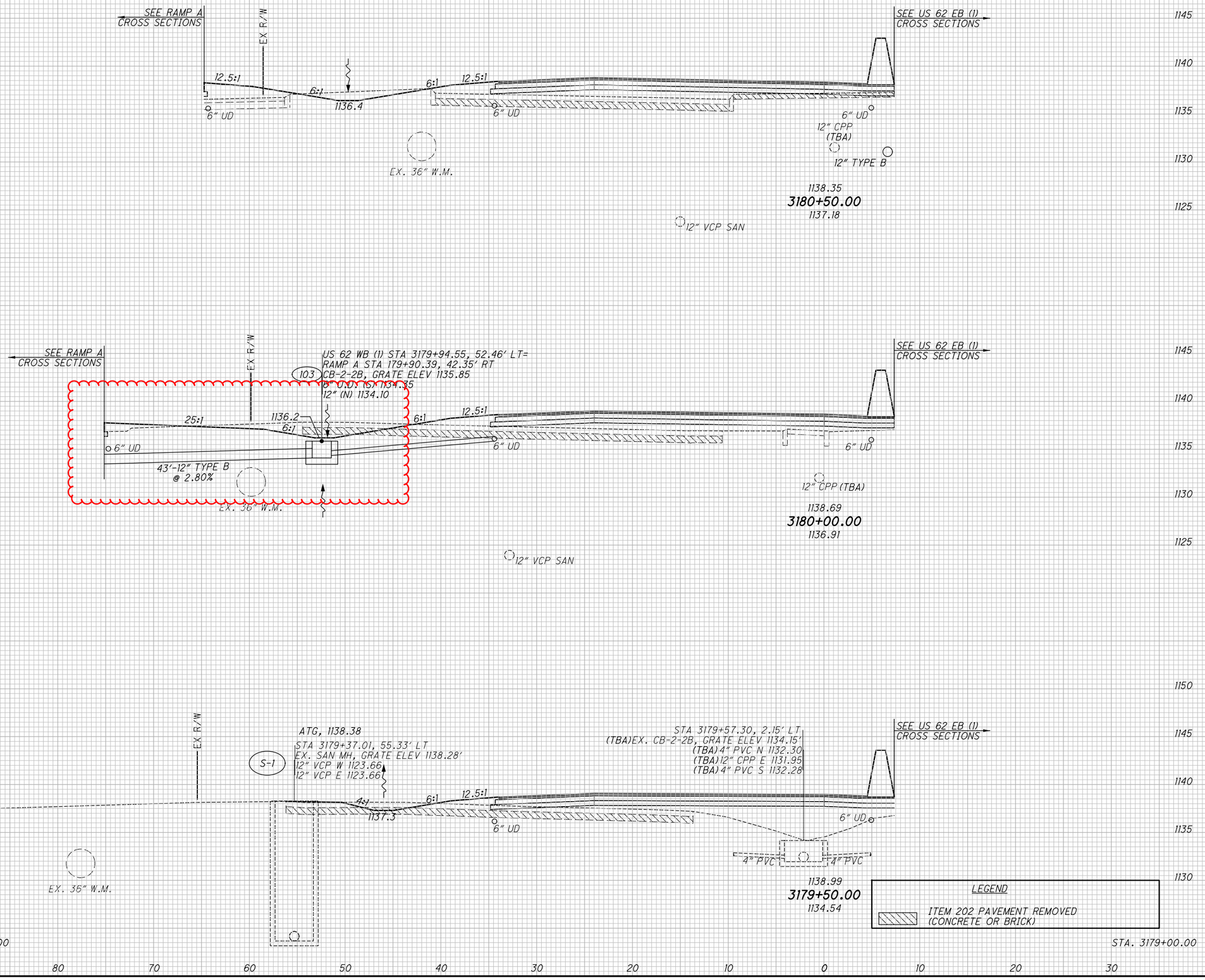
SHEET NUM.									PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
30	31	32	33	34	39	393			01/S>2/ PV	02/S>2/ OT/CANT	03/S>2 /CV						
																NOISE BARRIERS	
						907			907			524	94500	907	FT	DRILLED SHAFTS, 24" DIAMETER	
						24,096			24,096			SPECIAL	60610210	24,096	SF	NOISE BARRIER (REFLECTIVE)	396
						1,440			1,440			SPECIAL	60610920	1,440	SF	NOISE BARRIER, FIBERGLASS PANELS	396
						8,382			8,382			SPECIAL	60610920	8,382	SF	NOISE BARRIER, FIBREGLASS PANELS, MOMENT SLAB MOUNTED	396
																MAINTENANCE OF TRAFFIC	
					108				108			202	38000	108	FT	GUARDRAIL REMOVED	
				7					7			254	01000	7	SY	PAVEMENT PLANING, ASPHALT CONCRETE (WZ RPM)	34
				82					82			411	10000	82	CY	STABILIZED CRUSHED AGGREGATE	34
				500					500			614	11111	500	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE, AS PER PLAN	34
					1				1			SPECIAL	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL	120
			1,750						1,750			614	11630	1,750	FT	INCREASED BARRIER DELINEATION	33
				125					125			SPECIAL	61412200	125	FT	WORK ZONE GUARDRAIL	34
					13				13			614	12380	13	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
LS									LS			614	12420	LS		DETOUR SIGNING	30
				230					230			614	12801	230	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	34
15									15			614	13000	15	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			266						266			614	13310	266	EACH	BARRIER REFLECTOR, TYPE 1 , ONE-WAY	33
			266						266			614	13350	266	EACH	OBJECT MARKER, ONE WAY	33
		144							144			614	18601	144	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	32
					1.99				1.99			614	20110	1.99	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
					1.19				1.19			614	21100	1.19	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
					14.3				14.3			614	22110	14.3	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
					4,932				4,932			614	23210	4,932	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
					3,079				3,079			614	24202	3,079	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 642 PAINT	
					279				279			614	26200	279	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
					21				21			614	30200	21	EACH	WORK ZONE ARROW, CLASS I, 642 PAINT	
	4								4			614	40051	4	EACH	BUSINESS ENTRANCE SIGN, AS PER PLAN	31
				LS					LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
					1,243				1,243			615	20000	1,243	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
					3,366				3,366			615	20001	3,366	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	34
		10							10			616	10000	10	MGAL	WATER	32
				12					12			616	20000	12	TON	CALCIUM CHLORIDE	34
					11,975				11,975			622	41100	11,975	FT	PORTABLE BARRIER, UNANCHORED	
					970				970			622	41011	970	FT	PORTABLE BARRIER, 50", AS PER PLAN	31
																INCIDENTALS	
									LS			108	10000	LS		CPM PROGRESS SCHEDULE	
LS									LS			614	11000	LS		MAINTAINING TRAFFIC	
									33			619	16020	33	MNTH	FIELD OFFICE, TYPE C	
									LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LS			624	10000	LS		MOBILIZATION	

CALCULATED MSW
CHECKED GAH

GENERAL SUMMARY

STA-062-24.14

SEEDING	
END WIDTH	SQ. YDS.
29	190
39	166
20	116
21	472



END AREA	
CUT	FILL
9	88
8	73
0	97
0	86

VOLUME	
CUT	FILL
16	149
8	158
0	170
24	477

CALCULATED MSW
CHECKED GAH

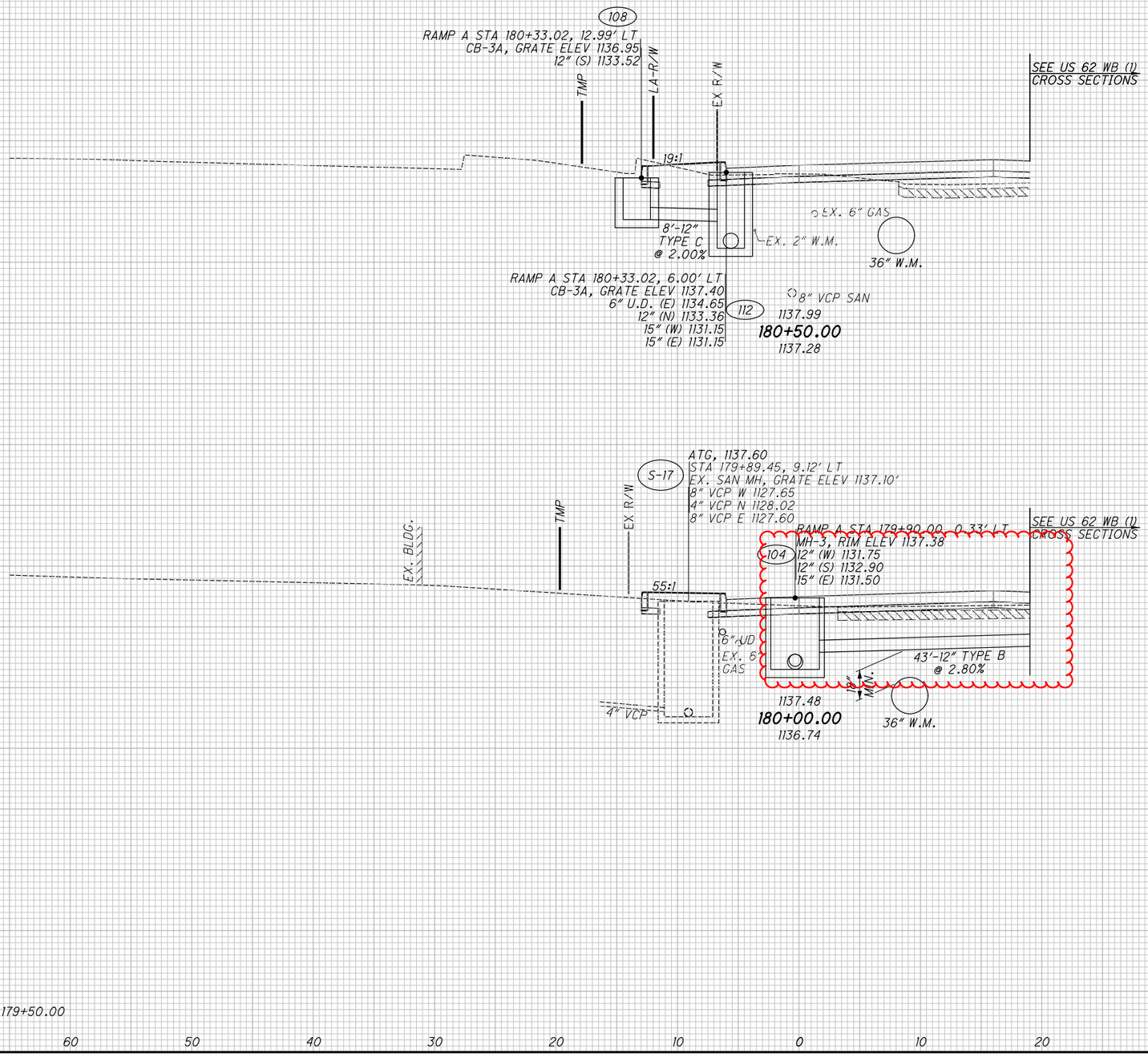
CROSS SECTIONS - US 62 WB (1)
STA. 3179+50.00 TO STA. 3180+50.00

STA-062-24.14

195
500

...\Roadway\Sheets\100824XS101.dgn 11/17/2021 10:24:54 PM ghmassie

SEEDING	
END WIDTH	SQ. YDS.
6	33
6	75
21	108



END AREA	
CUT	FILL
12	20
10	16
25	3

VOLUME	
CUT	FILL
20	33
33	17
53	50

CALCULATED MSW
CHECKED GAH

CROSS SECTIONS - RAMP A
STA. 180+00.00 TO STA. 180+50.00

STA-062-24.14

239
500

\Roadway\Sheets\100824XS400.dgn 11/17/2021 10:21:11 PM ghmassie

WATER WORK ESTIMATED QUANTITIES

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	VALVE BOX REMOVED, AS PER PLAN	SPECIAL - FIRE HYDRANT REMOVED AND DISPOSED OF (CANTON)	SPECIAL - 6" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON)	SPECIAL - 12" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON)	SPECIAL - 36" BUTTERFLY VALVE WITH VALVE BOX, COMPLETE (CANTON)	SPECIAL -6" FIRE HYDRANT, COMPLETE (CANTON)	LOW STRENGTH MORTAR BACKFILL	WATER WORK, MISC.: REMOVED CROSS	WATER WORK, MISC.: 2" HDPE WATER MAIN	WATER WORK, MISC.: 6" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 52	WATER WORK, MISC.: 12" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 53	WATER WORK, MISC.: 12" WATER MAIN DUCTIRE IRON PIPE, ANSI CLASS 54, TR-FLEX	WATER WORK, MISC.: 36" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 54, TR-FLEX	WATER WORK, MISC.: 11.25* - 12" DIP BEND FITTING	WATER WORK, MISC.: 11.25* - 36" DIP BEND FITTING,TR-FLEX	WATER WORK, MISC.: 22.5* - 12" DIP BEND FITTING	WATER WORK, MISC.: 22.5* - 36" DIP BEND FITTING, TR-FLEX	WATER WORK, MISC.: 45* - 6" DIP BEND FITTING	WATER WORK, MISC.: 45* - 12" DIP BEND FITTING	WATER WORK, MISC.: 45* - 36" DIP BEND FITTING, TR-FLEX	WATER WORK, MISC.: 90* - 2" HDPE BEND FITTING	WATER WORK, MISC.: 6" x 6" DIP CROSS	WATER WORK, MISC.: 36" x 12" DIP CROSS, TR-FLEX	WATER WORK, MISC.: 12" x 12" DIP TEE FITTING	WATER WORK, MISC.: 36" x 6" DIP TEE FITTING, TR-FLEX	WATER WORK, MISC.: 36" x 12" DIP TEE FITTING, TR-FLEX	WATER WORK, MISC.: 12" X 6" DIP REDUCER FITTING	WATER WORK, MISC.: 12" X 6" WYE		VALVE BOX ADJUSTED TO GARDE	WATER WORK, MISC.: 12" X 12" TEE W/CUT-IN SLEEVE	WATER WORK, MISC.: 36" CUTTING-IN SLEEVE	WATER WORK, MISC.: 1 1/2" CURB VALVE AND ROADWAY BOX, AS PER PLAN	WATER WORK, MISC.: 2" CURB VALVE AND ROADWAY BOX, AS PER PLAN	WATER WORK, MISC.: 1" CURB VALVE AND ROADWAY BOX, AS PER PLAN	WATER WORK, MISC.: 1" HDPE SERVICE BRANCH, COMPLETE W/TAP	WATER WORK, MISC.: 1 1/2" HDPE SERVICE BRANCH, COMPLETE W/TAP	WATER WORK, MISC.: 2" HDPE SERVICE BRANCH, COMPLETE W/TAP	WATER WORK, MISC.: 36" WATER MAIN (REMOVED)	SPECIAL - 2" AIR RELEASE VALVE	24" STEEL PIPE ENCASEMENT, OPEN CUT	48" STEEL PIPE ENCASEMENT, OPEN CUT	48" STEEL PIPE ENCASEMENT, BORED OR JACKED	WATER WORK, MISC.: 6" PLUG WITH 2" OUTLET	WATER WORK, MISC.: 8" PLUG WITH 2" OUTLET	WATER WORK, MISC.:2" BLOW-OFF ASSEMBLY	WATER WORK, MISC.: CUT AND PLUG EXISTING 12" WATER LINE	WATER WORK, MISC.: CUT AND PLUG EXISTING 36" WATER LINE	SPECIAL-BOLLARD
						202						613	638																																									690
			FROM	TO		EA	EA	EA	EA	EA	EA	CY	FT	FT	FT	FT	EA	FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	EA	FT	FT	FT	EA	EA	EA	EA	EA	EA
344	WW-94	ST. ELMO AVE.	28+45.10	29+10.40	RT	1																																		1	65													
344	WW-95	ST. ELMO AVE.	29+04.21	29+10.40	LT&RT																																						66											
344	WW-144	ST. ELMO AVE.	29+56.86		LT	1																																																
344	WW-145	ST. ELMO AVE.	29+62.39		LT	1																																																
344	WW-96	ST. ELMO AVE.	28+53.45	30+01.51	LT							56																																										
337	WW-97	BASELINE 36" W.M. (W)	20+37.68	26+33.03	RT							149																																										
337	WW-101	BASELINE 36" W.M. (W)	19+55.00	26+90.17	BL													735																			1							45										
337	WW-102	BASELINE 36" W.M. (W)	20+37.68		BL															1																																		
337	WW-163	BASELINE 36" W.M. (W)	20+70.30		BL	1																																	1				30										1	
337	WW-103	BASELINE 36" W.M. (W)	21+57.56		BL	1																																	1				23											
337	WW-104	BASELINE 36" W.M. (W)	22+41.75		BL																																			1	17													
337	WW-105	BASELINE 36" W.M. (W)	22+59.16		BL																																								1									
337	WW-106	BASELINE 36" W.M. (W)	23+13.21		RT	1																																																
337	WW-107	BASELINE 36" W.M. (W)	23+14.40		RT	1																																																
337	WW-106	BASELINE 36" W.M. (W)	23+17.18		RT	1																																																
337	WW-108	BASELINE 36" W.M. (W)	23+36.11		RT	1																																																
337	WW-164	BASELINE 36" W.M. (W)	23+75.80		BL															1																																		
337	WW-165	BASELINE 36" W.M. (W)	24+46.31		BL																	1																																
337	WW-109	BASELINE 36" W.M. (W)	24+56.09	26+12.35	BL																																										76	80						
337	WW-110	BASELINE 36" W.M. (W)	24+61.79		RT	1																																																
337	WW-201	RAMP A	177+40.85	181+33.87	LT/RT																																						394											
337	WW-202	RAMP A	181+33.87		RT																																		1															
337	WW-203	RAMP A	181+33.87		LT																																														1			
338	WW-115	BASELINE 36" W.M. (W)	25+40.27		RT	1																																																
338	WW-116	BASELINE 36" W.M. (W)	26+20.72		BL																									1																								
338	WW-117	BASELINE 36" W.M. (W)	26+29.84							1																																												
338	WW-118	BASELINE 36" W.M. (W)	26+33.03		RT																																																1	
338	WW-166	BASELINE 36" W.M. (W)	26+45.17		BL																	1																																
338	WW-181	BASELINE 36" W.M. (W)	26+45.17	26+90.17																																								45										
338	WW-167	BASELINE 36" W.M. (W)	26+90.17		BL																																1																	
338	WW-119	BASELINE 12" W.M. (2)	30+00.00	30+47.64	BL											48																																						
338	WW-168	BASELINE 12" W.M. (2)	30+11.04		BL																1																																	
338	WW-169	BASELINE 12" W.M. (2)	30+27.50	30+44.54	BL																			4																														
338	WW-120	BASELINE 12" W.M. (2)	30+46.12		BL				1																																													
345	WW-125	ROWLAND AVE.	19+33.06		LT																												1																					
345	WW-126	ROWLAND AVE.	19+33.06	19+93.29	LT										63																																							
345	WW-176	ROWLAND AVE.	19+40.24		LT																		1																															
345	WW-127	ROWLAND AVE.	19+37.97		LT																																															2		
345	WW-128	ROWLAND AVE.	19+42.06		LT			1																																														
345	WW-177	ROWLAND AVE.	19+46.13		LT						1																																											
345	WW-129	ROWLAND AVE.	19+78.11		LT			1																																														
345	WW-178	ROWLAND AVE.	19+81.74	19+88.80	LT																		2																															
345	WW-130	ROWLAND AVE.	19+93.29		LT																											1																						
345	WW-131	ROWLAND AVE.	19+93.29	22+16.39	LT&RT											98	140																																					
345	WW-132	ROWLAND AVE.	19+96.49		LT								1					10										1									2							10								2		
345	WW-179	ROWLAND AVE.	20+08.45	20+13.13	LT																			2																														
345	WW-133	ROWLAND AVE.	20+23.25		LT				1																																													
345	WW-134	ROWLAND AVE.	20+36.97	21+76.97	LT																																									140								
345	WW-135	ROWLAND AVE.	20+21.33		LT	1																																																
TOTALS THIS SHEET						12	0	2	2	1	1	##	1	0	63	146	140	745	0	2	1	2	3	6	0	0	0	1	0	0	1	1	1		0	0	4	0	3	2	82	0	513	100	1	140	76	80	0	0	1	4	2	0

CALCULATED HB
CHECKED GAH

STA-062-24.14

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 VALVE BOX REMOVED, AS PER PLAN (EA)	SPECIAL - FIRE HYDRANT REMOVED AND DISPOSED OF (CANTON) (EA)	SPECIAL - 6" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON) (EA)	SPECIAL - 12" GATE VALVE WITH VALVE BOX, COMPLETE (CANTON) (EA)	SPECIAL - 36" BUTTERFLY VALVE WITH VALVE BOX, COMPLETE (CANTON) (EA)	SPECIAL -6" FIRE HYDRANT, COMPLETE (CANTON) (EA)	613 LOW STRENGTH MORTAR BACKFILL (CY)	638 WATER WORK, MISC.: REMOVED CROSS (FT)	WATER WORK, MISC.: 2" HDPE WATER MAIN (FT)	WATER WORK, MISC.: 6" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 52 (FT)	WATER WORK, MISC.: 12" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 53 (FT)	WATER WORK, MISC.: 12" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 54, TR-FLEX (FT)	WATER WORK, MISC.: 36" WATER MAIN DUCTILE IRON PIPE, ANSI CLASS 54, TR-FLEX (FT)	WATER WORK, MISC.: 11.25° - 12" DIP BEND FITTING (EA)	WATER WORK, MISC.: 11.25° - 36" DIP BEND FITTING, TR-FLEX (EA)	WATER WORK, MISC.: 22.5° - 12" DIP BEND FITTING (EA)	WATER WORK, MISC.: 22.5° - 36" DIP BEND FITTING, TR-FLEX (EA)
345	WW-180	ROWLAND AVE.	21+84.66	21+84.62	LT																	
345	WW-136	ROWLAND AVE.	21+96.38		LT				1													
345	WW-181	ROWLAND AVE.	21+99.72		LT																	
345	WW-137	ROWLAND AVE.	22+11.33		RT																	
345	WW-138	ROWLAND AVE.	22+16.39		RT																	
346	WW-146	BASELINE 2" W.M. E.	498+04.95	507+72.41	RT																	
346	WW-147	BASELINE 2" W.M. E.	499+10.12		RT	1																
346	WW-148	BASELINE 2" W.M. E.	499+82.17		RT	1																
347	WW-149	BASELINE 2" W.M. E.	503+86.85		LT	1																
347	WW-150	BASELINE 2" W.M. E.	505+21.57		LT	1																
347	WW-153	BASELINE 2" W.M. E.	505+65.10		BL	1																
347	WW-154	BASELINE 2" W.M. E.	506+18.32		LT	1																
347	WW-155	BASELINE 2" W.M. E.	507+72.41		BL																	
348	WW-156	MAPLE AVE.	1+39.00	2+90.52	RT																	
348	WW-157	MAPLE AVE.	1+40.00		RT	1																
348	WW-160	MAPLE AVE.	2+37.60		LT	1																
348	WW-161	MAPLE AVE.	2+69.78		RT	1																
348	WW-162	MAPLE AVE.	2+90.69		RT	1																
TOTALS THIS SHEET						10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS CARRIED FROM SHEET 331						20	2	1	1	1	3	0	0	832	315	290	0	265	2	2	1	2
TOTALS CARRIED FROM SHEET 332						33	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTALS CARRIED FROM SHEET 333						12	0	2	2	1	1	206	1	0	63	146	140	745	0	2	1	2
TOTALS CARRIED TO GENERAL SUMMARY						75	2	4	4	2	5	206	1	832	378	436	140	1010	2	4	2	4

REFERENCE NO.	WATER WORK, MISC.: 45° - 6" DIP BEND FITTING (EA)	WATER WORK, MISC.: 45° - 12" DIP BEND FITTING (EA)	WATER WORK, MISC.: 45° - 36" DIP BEND FITTING, TR-FLEX (EA)	WATER WORK, MISC.: 90° - 2" HDPE BEND FITTING (EA)	WATER WORK, MISC.: 6" x 6" DIP CROSS (EA)	WATER WORK, MISC.: 36" x 12" DIP CROSS, TR-FLEX (EA)	WATER WORK, MISC.: 12" x 12" DIP TEE FITTING (EA)	WATER WORK, MISC.: 36" x 6" DIP TEE FITTING, TR-FLEX (EA)	WATER WORK, MISC.: 36" x 12" DIP TEE FITTING, TR-FLEX (EA)	WATER WORK, MISC.: 12" X 6" DIP REDUCER FITTING (EA)	WATER WORK, MISC.: 12" X 6" WYE (EA)	WATER WORK, MISC.: 12" X 12" WYE (EA)	VALVE BOX ADJUSTED TO GARDE (EA)	WATER WORK, MISC.: 12" X 12" TEE /CUT-IN SLEEVE (EA)	WATER WORK, MISC.: 36" CUTTING-IN SLEEVE (EA)	WATER WORK, MISC.: 1 1/2" CURB VALVE AND ROADWAY BOX, AS PER PLAN (EA)	WATER WORK, MISC.: 2" CURB VALVE AND ROADWAY BOX, AS PER PLAN (EA)
WW-180		2															
WW-136																	
WW-181		1															
WW-137																	
WW-138												1					
WW-146																	
WW-147																	
WW-148																	
WW-149																1	
WW-150																	
WW-153																	
WW-154																	
WW-155				1													
WW-156																	1
WW-157																	
WW-160																	
WW-161																	
WW-162																	
TOTALS THIS SHEET	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1
TOTALS CARRIED FROM SHEET 331	0	1	3	0	0	0	1	1	0	1	0	0	1	1	2	0	2
TOTALS CARRIED FROM SHEET 332	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
TOTALS CARRIED FROM SHEET 333	3	6	0	0	0	1	0	0	1	1	1	0	0	0	4	0	3
TOTALS CARRIED TO GENERAL SUMMARY	4	10	3	1	1	1	1	1	1	2	1	1	1	1	6	1	10

REFERENCE NO.	WATER WORK, MISC.: 1" CURB VALVE AND ROADWAY BOX, AS PER PLAN (EA)	WATER WORK, MISC.: 1" HDPE SERVICE BRANCH, COMPLETE W/TAP (FT)	WATER WORK, MISC.: 1 1/2" HDPE SERVICE BRANCH, COMPLETE W/TAP (FT)	WATER WORK, MISC.: 2" HDPE SERVICE BRANCH, COMPLETE W/TAP (FT)	WATER WORK, MISC.: 36" WATER MAIN (REMOVED) (FT)	SPECIAL - 2" AIR RELEASE VALVE (EA)	24" STEEL PIPE ENCASEMENT, OPEN CUT (FT)	48" STEEL PIPE ENCASEMENT, OPEN CUT (FT)	48" STEEL PIPE ENCASEMENT, BORED OR JACKED (FT)	WATER WORK, MISC.: 6" PLUG WITH 2" OUTLET (EA)	WATER WORK, MISC.: 8" PLUG WITH 2" OUTLET (EA)	WATER WORK, MISC.: CUT AND PLUG EXISTING 8" WATER LINE (EA)	WATER WORK, MISC.: CUT AND PLUG EXISTING 12" WATER LINE (EA)	WATER WORK, MISC.: CUT AND PLUG EXISTING 36" WATER LINE (EA)	WATER WORK, MISC.: 2" BLOW-OFF ASSEMBLY (EA)	690 SPECIAL-BOLLARD (EA)
WW-180																
WW-136																
WW-181																
WW-137													2			
WW-138																
WW-146				1016												
WW-147																
WW-148	1	10														
WW-149			10													
WW-150	1	10														
WW-153																
WW-154																
WW-155																
WW-156				154												
WW-157	1	10														
WW-160																
WW-161	1	10														
WW-162																
TOTALS THIS SHEET	4	40	10	1170	0	0	0	0	0	0	0	0	2	0	0	0
TOTALS CARRIED FROM SHEET 331	4	40	0	204	100	0	0	0	0	1	1	1	2	2	0	2
TOTALS CARRIED FROM SHEET 332	9	90	0	0	0	0	0	0	0	3	0	0	0	0	0	0
TOTALS CARRIED FROM SHEET 333	2	82	0	513	100	1	140	76	80	0	0	1	4	4	1	0
TOTALS CARRIED TO GENERAL SUMMARY	19	252	10	1887	200	1	140	76	80	4	1	2	8	6	1	2

CALCULATED HB
CHECKED GAH

WATER WORK ESTIMATED QUANTITIES

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VIII WATER MAIN/SERVICES:

1. ALL WATER MAINS, SERVICES AND APPURTENANCES SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO THE CITY OF CANTON WATER DEPARTMENT REQUIREMENTS AND SPECIFICATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.

2. MAINS - WATER MAINS SHALL BE CLASS 52 (6" AND 8"), CLASS 53 (12") OR CLASS 54 (OVER 12") DUCTILE IRON, MEETING AWWA C151. WATER MAINS 6" THROUGH 12" SHALL BE PUSH JOINTS. WATER MAINS LARGER THAN 12" SHALL BE TR-FLEX PIPE, OR AN APPROVED EQUAL RESTRAINED PUSH-ON JOINT PIPE. THE OUTSIDE SURFACE OF ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES SHALL BE SHOP COATED WITH EITHER ASPHALTIC MATERIAL. IF THE COATING MATERIAL IS FOUND TO BE DAMAGED PRIOR TO THE PIPE TRENCH BEING BACKFILLED, THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL APPROVED MATERIAL AS REQUIRED TO REPAIR AS DIRECTED. THE CONTRACTOR SHALL HAVE SUFFICIENT COATING MATERIALS AVAILABLE AT THE JOB SITE PRIOR TO LAYING THE PIPE. THE INTERIOR OF ALL PIPES AND FITTINGS SHALL BE LINED WITH CEMENT MORTAR AND SEAL COATED IN COMPLETE CONFORMANCE WITH AWWA C104, OR THE LATEST REVISION.

3. ALL DUCTILE IRON PIPE, INCLUDING FITTINGS, BENDS, TEES, VALVES AND APPURTENANCES BURIED UNDERGROUND, SHALL BE ENCASED WITH 8 MIL. POLYETHYLENE FILM CONFORMING TO AWWA C105.

4. WHEN PLASTIC PIPE IS USED, A TRACER WIRE SHALL BE INSTALLED ON TOP OF THE PIPE.
   A. THE TRACER WIRE SHALL BE #14 AWG COPPER CLAD STEEL WIRE WITH 30 MILS OF HIGH-DENSITY POLYETHYLENE (HDPE) INSULATION.
   B. THE TRACER WIRE SHALL BE INSTALLED IN A CONTINUOUS FASHION WITH THE WIRE ON TOP OF THE WATER MAIN AND SECURE TO THE MAIN EVERY FIVE (5) FEET WITH TAPE.
   C. THE TRACER WIRE SHALL BE BROUGHT TO THE SURFACE AT EVERY VALVE BOX AND/OR AS CALLED OUT IN THE DRAWINGS. TRACER WIRE SHALL BE BROUGHT TO THE SURFACE AT LEAST EVERY ONE THOUSAND (1,000) FEET.
   D. IF THE WIRE COATING GETS DAMAGED, REPAIR DAMAGED COATING WITH ELECTRICAL TAPE.
   E. THE TRACER WIRE SHALL PASS A CONTINUITY TEST BEFORE THE WATERLINE INSTALLATION IS ACCEPTED.

5. THE MINIMUM COVER OVER WATER MAINS SHALL BE 4'-6" FROM GROUND SURFACE TO THE BARREL OF THE PIPE.

6. PIPE LENGTHS MAY BE DEFLECTED AT THE JOINT, IF REQUIRED, AT ONE-HALF THE DEGREE RECOMMENDED BY THE MANUFACTURER.

7. FITTINGS SHALL BE DUCTILE IRON AND BE RATED FOR 250 PSI WORKING PRESSURE IN ACCORDANCE WITH AWWA C110 OR AWWA C153. FITTINGS SHALL INCLUDE, BUT NOT LIMITED TO BENDS, TEES, SLEEVES, COUPLINGS, CROSSES, REDUCERS AND CAPS.

   ALL FITTINGS LARGER THAN 12" SHALL BE TR-FLEX FITTINGS, OR AN APPROVED EQUAL RESTRAINED FITTINGS.

8. BUTTERFLY VALVES - BUTTERFLY VALVES SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA C504, CLASS 150B AND CONFORM TO NSF STANDARD 61.
   A. THE VALVE BODY SHALL BE CONSTRUCTED OF ASTM A126, CLASS B CAST WITH MECHANICAL JOINT END CONNECTIONS (WITH ACCESSORIES).
   B. THE VALVE SEAT (UP TO 20") SHALL BE A RUBBER BODY SEATS WITH ONE PIECE CONSTRUCTION, SIMULTANEOUSLY MOLDED AND BONDED INTO A RECESSED CAVITY IN THE VALVE BODY. SEATS MAY NOT BE LOCATED ON THE DISC OR BE RETAINED BY SEGMENTS AND/OR SCREWS. THE VALVE SEAT (GREATER THAN 20") SHALL BE CONSTRUCTED OF BUNA-N RUBBER AND SUITABLE FOR BIDIRECTIONAL SHUTOFF AT RATED PRESSURE. SEATS SHALL BE RETAINED IN THE VALVE BODY BY MECHANICAL MEANS WITHOUT RETAINING RINGS, SEGMENTS, SCREWS OR HARDWARE OF ANY KIND IN THE FLOW STREAM. SEATS SHALL BE A FULL 360 DEGREES CIRCUMFERENCE AND REPLACEABLE WITHOUT DISMANTLING ACTUATOR, DISC OR SHAFT AND WITHOUT REMOVING VALVE FROM THE LINE.
   C. THE VALVE BEARINGS SHALL BE OF A SELF-LUBRICATING, NONMETALLIC MATERIAL.
   D. THE VALVE DISC UP TO 24" SHALL BE A LENS-SHAPED DESIGN AND 30" AND LARGER SHALL BE A FLOW-THROUGH DESIGN.
      THE VALVE DISC MATERIAL SHALL BE:
      - 8"-20" - ASTM A126, CLASS B CAST IRON DISC WITH A STAINLESS STEEL TYPE 316 EDGE
      - 24" AND LARGER - ASTM A536 (65-45-12) DUCTILE IRON DISC WITH A STAINLESS STEEL TYPE 316 EDGE

      DISCS SHALL BE RETAINED BY STAINLESS STEEL PINS WHICH EXTEND THROUGH THE FULL DIAMETER OF THE SHAFT. DISC STOPS LOCATED IN THE FLOW STREAM ARE NOT ALLOWED.
   E. THE VALVE SHAFTS SHALL BE OF STAINLESS STEEL TYPE 304. FOR 24" AND LARGER, SHAFTS SHALL BE TWO-PIECE, STUB-TYPE AND KEYED FOR ACTUATOR CONNECTION. SHAFT SEALS SHALL BE OF A DESIGN ALLOWING REPLACEMENT WITHOUT REMOVING THE VALVE SHAFT.
   F. THE VALVE SHALL BE FURNISHED WITH A TWO (2) INCH SQUARE SERVICE NUT ACTUATOR THAT OPENS RIGHT.
   G. THE VALVE SHALL BE COATED WITH AN NSF61 APPROVED 2-PART LIQUID EPOXY, WITH A MINIMUM DRY FILM THICKNESS OF 8 MILS.

9. ANY FITTINGS OR VALVES ADJACENT TO A TEE OR CROSS SHALL BE ANCHORED TO THE TEE OR CROSS WITH EITHER THE USE OF AN ANCHOR TEE OR ANCHOR CROSS AND/OR ANCHOR COUPLINGS.

10. GATE VALVES - THE ITEMS COVERED BY THIS SPECIFICATION SHALL MEET ALL APPLICABLE AWWA C509 OR C515 STANDARDS AND THE FOLLOWING: ALL VALVES SHALL BE NON-RISING STEM, IRON BODY, RESILIENT WEDGE DISC. THE DESIGN OF THE THRUST COLLAR SHALL BE SUCH THAT THE THRUST COLLAR IS SEALED FROM LINE PRESSURE BY MEANS OF AN "O" RING SEAL. ALL VALVES SHALL BE FURNISHED WITH A TWO (2) INCH SQUARE OPERATING NUT, OPEN RIGHT. ALL VALVES SHALL BE FURNISHED WITH MECHANICAL JOINT END CONNECTIONS. THE STEM SHALL BE PROTECTED FROM EXTERNAL GRIT BY A WEATHER SHIELD AND AN UPPER "O" RING. STEM SHALL BE LUBRICATED. GATE COATING SHALL HAVE A MINIMUM THICKNESS OF 10 MILS. VALVE SHALL BE TESTED AT THE RATED WORKING PRESSURE OF 250 PSI WITH NO LEAKAGE. SHELL TEST OF 500 PSI SHALL BE APPLIED TO BODY WITH VALVE IN THE OPEN POSITION WITH NO LEAKAGE THROUGH THE METAL, STEM SEALS OR JOINTS. VALVE MUST HAVE TRADITIONAL STUFFING BOX. ALL BOLTING MATERIAL IN THE THRUST COLLAR AND BONNET SHALL BE #316 SS BOLTS. ALL VALVES WITH ACCESSORIES PACK (FLANGES, RUBBERS, NUTS, BOLTS)

11. ALL VALVE BOXES SHALL BE HEAVY DUTY, THREE (3) PIECE SCREW TYPE, WITH "WATER" LIDS.

12. FLUSHING AND DISINFECTION OF WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA C651.

13. ALL WATER LINE PRESSURE TESTING SHALL CONFORM TO AWWA C600.

14. WATER MAINS SHALL BE INSTALLED AND BACKFILLED PER O.D.O.T. ITEM 638.

15. WATER LINES LOCATED WITHIN THE LIMITS OF OR WITHIN A 1/2 TO 1 SLOPE OF EXISTING AND/OR PROPOSED ROADWAYS, PARKING AREAS, BUILDINGS, SIDEWALKS, AND/OR DRIVES SHALL BE INSTALLED AS TYPE B CONDUITS. ALL OTHER WATER MAINS SHALL BE INSTALLED AS TYPE C CONDUITS. BEDDING SHALL BE AS SPECIFIED, EXCEPT THAT SLAG WILL NOT BE PERMITTED.

16. ALL BENDS, FITTINGS, TEES, VALVES, DEAD ENDS, ETC. SHALL BE SECURED EQUAL. POURED-IN-PLACE CONCRETE THRUST BLOCKS SHALL ALSO BE PROVIDED AT/FOR EACH BENDS, FITTING, TEE, DEAD END, ETC. THIS BLOCKING SHALL BE CAREFULLY PLACED TO ENSURE IT IS POSITIONED PROPERLY TO WITHSTAND THE RESULTANT FORCES AT EACH BEND, FITTING, ETC. AND SHALL BEAR ON STABLE UNDISTURBED GROUND CAPABLE OF WITHSTANDING THE POTENTIAL LOADING. WHEN DIRECTED BY THE CITY, TIE RODS ARE TO BE 3/4 INCH DIAMETER. TWO TIE RODS ARE REQUIRED FOR AN 8 INCH PIPE, AND FOUR TIE RODS ARE REQUIRED FOR 12 INCH PIPE.

17. IN ADDITION TO THE RESTRAINT OF ALL BENDS, FITTINGS, TEES, VALVES, DEAD ENDS, ETC. THE CONTRACTOR SHALL ALSO SECURE/RESTRAIN ALL JOINTS FOR AT LEAST THREE (3) PIPE JOINTS (50 LF MIN.) BEYOND EACH DEAD END, BEND, FITTING, VALVE, TEE, ETC. UTILIZING MEGALUGS, FIELD LOK GASKETS, OR APPROVED EQUALS.

18. THE CONTRACTOR SHALL PROVIDE 18" VERTICAL CLEARANCE BETWEEN PROPOSED WATERLINES AND ANY SANITARY OR STORM SEWERS. WHEN 18" CLEARANCE CANNOT BE OBTAINED:
   - FOR STORM SEWERS, CONCRETE ENCASE THE STORM SEWER PIPE, 6 FT. ON EACH SIDE OF WATER MAIN.
   - FOR SANITARY SEWERS, REPLACE THE SANITARY SEWER PIPE WITH PVC C900 PIPE, 10 FT. ON EACH SIDE OF THE WATER MAIN. APPROVED COUPLINGS SHALL BE USED TO TIE ONTO THE EXISTING SEWER.

   THE CONTRACTOR SHALL MAINTAIN TEN (10) FOOT HORIZONTAL CLEARANCE BETWEEN WATERLINES/SERVICES AND SANITARY OR STORM SEWERS.

19. HYDRANTS - THE FIRE HYDRANT SETTING SHALL INCLUDE THE HYDRANT, ANCHOR TEE, VALVE, VALVE BOX, 6 INCH DUCTILE IRON (CLASS 52) PIPING AND ALL FITTINGS NEEDED FOR PROPER INSTALLATION TO FINAL GRADE. FIRE HYDRANTS SHALL BE MUELLER A423 MEETING THE CITY OF CANTON WATER DEPARTMENT STANDARDS AND REQUIREMENTS. ALL COSTS FOR THE 6" PIPING ASSOCIATED WITH THE INSTALLATION OF FIRE HYDRANTS SHALL BE INCLUDED WITH THE FIRE HYDRANT PAY ITEM. ALL HYDRANTS SHALL BE INSTALLED WITH THE PUMPER NOZZLE FACING THE STREET. ALL FIRE HYDRANT THREADS SHALL BE LUBRICATED WITH A FOOD GRADE LUBRICANT AND OPERATED UPON INSTALLATION.

20. CUT-IN SLEEVES FOR TIE-IN TO EXISTING WATER MAINS 6" THROUGH 12" SHALL BE SMITH BLAIR 441 SLEEVES WITH #316 SS BOLTS.

    CUT-IN SLEEVES FOR TIE-IN TO EXISTING WATER MAINS LARGER THAN 12" SHALL BE HYMAX LARGE DIAMETER, LONG BODY, COUPLINGS WITH EPDM GASKETS, #316 SS BOLTS.

21. ALL WATER TAPS AND SERVICES MUST BE INSTALLED BEFORE ANY PAVEMENT FOR THE PROPOSED ROADWAY HAS BEEN PLACED. THE CONTRACTOR SHALL MAKE ALL SERVICE TAPS ON THE WATER MAIN.

22. PRIOR TO MAKING THE TAP, THE CONTRACTOR SHALL EXPOSE THE EXISTING CURB BOX AND VERIFY THE SIZE OF THE WATER SERVICE LINE ON THE OWNER'S SIDE. THE PROPOSED TAP AND SERVICE SHALL MATCH THE SIZE OF THE OWNER'S SERVICE LINE, WITH 1" BEING A MINIMUM. AN EXISTING ¾" SERVICE SHALL BE REPLACED WITH A 1" SERVICE AND TAP AND A 1¼" SERVICE SHALL BE REPLACED WITH A 1½" SERVICE AND TAP.

23. THE PROPOSED WATER SERVICES AND TAPS SHALL BE 1" UNLESS NOTED OTHERWISE ON THE PLANS OR DETERMINED OTHERWISE PER PREVIOUS NOTE.

24. ANY SERVICE TO THE FAR SIDE OF THE STREET SHALL BE PUSHED OR BORED UNDER THE PAVEMENT. TRENCHING ACROSS THE ROAD IS NOT PERMITTED.

25. THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY PRECAUTIONS TO PROTECT AND MAINTAIN IN SERVICE, ANY EXISTING WATER MAINS AND/OR SERVICES EXPOSED DURING CONSTRUCTION. IF THE CONTRACTOR BREAKS A WATER MAIN AND/OR SERVICE, HE SHALL BE RESPONSIBLE TO REPAIR THE BREAK, AT HIS OWN EXPENSE, AND WILL NOT BE COMPENSATED FOR ANY DOWNTIME.

26. ANY WATER SERVICE LINE THAT IS BROKEN, CUT OR OTHERWISE DAMAGED, SHALL BE REPLACED FROM THE CORPORATION STOP TO THE CURB STOP WITH A SINGLE PIECE OF HDPE TUBING, CTS, PE4710. NO SPLICING OF THE SERVICE LINE WILL BE PERMITTED.

27. SERVICE BRANCHES WILL BE INSTALLED AS PER O.D.O.T ITEM 638.16, WITH THE FOLLOWING EXCEPTIONS:
   1. WHEN A SERVICE BRANCH IS DISTURBED FOR LOWERING, RAISING, EXTENDING OR SHORTENING ON THE PROPERTY SIDE ON THE SERVICE STOP, IT SHALL BE REPLACED WITH NEW MATERIALS FROM THE CORPORATION STOP TO THE SERVICE STOP.

28. POLYETHYLENE WATER MAIN AND SERVICE TUBING 2" AND UNDER SHALL BE COPPER TUBE SIZE, SDR 9, WITH A MINIMUM PRESSURE CLASS OF 200 PSI AND MEET STANDARDS ASTM-D2737 PE4710 AND AWWA C901. THE ACCEPTABLE TUBING IS CP CHEM PERFORMANCE PIPE DRISCOPLEX 5100-ULTRA-LINE, CHARTER PLASTICS INC. BLUE ICE, ENDOT ENDOPURE AND ADS POLYFLEX.

29. THE PROPOSED FACILITIES SHALL MAINTAIN A MINIMUM 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.

30. A MINIMUM PRESSURE OF 20 PSI AT GROUND LEVEL SHALL BE MAINTAINED AT ALL POINTS IN THE DISTRIBUTION SYSTEM UNDER ALL CONDITIONS OF FLOW.

31. WHEN AN EXISTING WATER MAIN MUST BE SHUT DOWN TO PERFORM REQUIRED WORK, THE CONTRACTOR SHALL NOTIFY THE PROPERTIES TO BE AFFECTED A MINIMUM OF 24 HOURS IN ADVANCE OF SAID SHUT DOWN. THE WORK WILL BE SCHEDULED AND COORDINATED TO MINIMIZE THE TIME THE MAIN IS OUT OF SERVICE.

32. THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS IN ADVANCE OF ANY SHUT DOWN OF AN EXISTING MAIN. THE CONTRACTOR WILL NOT OPERATE ANY VALVES. VALVES WILL BE OPERATED BY CANTON WATER DEPARTMENT PERSONNEL ONLY. VALVES DAMAGED BY THE CONTRACTOR'S OPERATION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

    CITY OF CANTON WATER (CWD)
    2664 HARRISBURB AVENUE NE
    CANTON, OHIO 44704
    BRENT BURRIER
    OFFICE 330-438-6569

33. ALL VALVE BOXES WILL BE ADJUSTED TO FINAL GRADE OF SURROUNDING PAVEMENT OR FINISHED SURFACE TREATMENTS WHEN THE PROJECT IS COMPLETED.

34. ANY DIGGING WITHIN THE RIGHT-OF-WAY OF ANY STREET REQUIRES A ROAD OPENING PERMIT. PLEASE CONTACT THE APPROPRIATE GOVERNMENTAL ENTITY FOR INFORMATION REGARDING THE PERMITTING PROCESS AND/OR FEES DUE.

35. THE CONTRACTOR SHALL REPLACE ANY TRAFFIC SIGNAL LOOP DETECTOR WIRE DAMAGED DURING THE WATERLINE INSTALLATION. THIS COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR ALL ITEMS IN THE PROPOSAL.

36. THE CONTRACTOR SHALL REPLACE ANY ROADWAY PAVEMENT MARKINGS DAMAGED OR REMOVED DURING THIS PROJECT. THE PAVEMENT MARKINGS SHALL BE PER THE GOVERNING AUTHORITY'S SPECIFICATIONS. THIS COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR ALL ITEMS IN THE PROPOSAL.

37. THE CONTRACTOR SHALL REPLACE ANY PRIVATE IRRIGATION SYSTEMS AND/OR UNDERGROUND ELECTRIC FENCES THAT ARE DAMAGED OR REMOVED DURING THE WATERLINE CONSTRUCTION. THIS COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR ALL ITEMS IN THE PROPOSAL.

38. VALVES THAT ARE CALLED OUT TO BE ABANDONED SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO ABANDON EXISTING WATER VALVES. THIS ITEM SHALL ALSO INCLUDE ANY NECESSARY EXCAVATION AND BACKFILL REQUIRED. VALVES SHALL BE CLOSED AND HAVE THE TOP 6" OF THE CASTING REMOVED. VALVES IN PAVEMENT SHALL BE FILLED WITH CONCRETE WITH THE TOP 6" MATCHING THE EXISTING PAVEMENT COMPOSITION. VALVES IN YARD AREA SHALL BE FILLED WITH SAND.

39. FIRE HYDRANTS THAT ARE CALLED OUT TO BE REMOVED SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO REMOVE THE FIRE HYDRANT, HYDRANT VALVE AND PLUG THE HYDRANT TEE.

40. FOR WATERLINES CALLED OUT TO BE ABANDONED, THE CONTRACTOR SHALL PLUG AND ABANDON THE EXISTING WATERLINE WITH A DUCTILE IRON PLUG OR AS DIRECTED BY THE CANTON WATER DEPARTMENT.

41. REMOVAL OF ANY EXISTING THRUST BLOCKS WILL BE CONSIDERED INCIDENTAL TO THE OVERALL PROJECT COST.

42. ITEM 632 TEST HOLE PERFORMED - THIS QUANTITY SHALL BE TO PERFORM TEST HOLES NOTED ON MAINTENANCE OF TRAFFIC SHEETS 57 ,59 , 68 & 78 . THERE ARE 4 TEST HOLES DIRECTLY NOTED ON THE PLANS AND ONE (1) TEST HOLE HAS BEEN INCLUDED AS A CONTINGENCY. ITEM 632 TEST HOLE PERFORMED = 5 EACH

REVISIONS/COMMENTS:

1 ANY REFERENCE TO "THE CITY ENGINEER" WITHIN THE GENERAL NOTES SHALL MEAN THE CANTON WATER DEPARTMENT SUPERINTENDENT.

2 NOT APPLICABLE TO THIS PROJECT

3 REFER TO SECTION VIII. WATER MAIN/SERVICES

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WATER NOTES

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WATERLINE RELOCATION - SEQUENCE OF TYING INTO EXISTING:

DUE TO THE CRITICALITY OF THE 36" WATER LINE AND THE LIMITED FEEDS INTO THE NEIGHBORHOODS TO THE NORTH AND SOUTH OF THIS PROJECT, THE CONTRACTOR SHALL FOLLOW THE TIE-IN SEQUENCE LISTED BELOW. THIS TIE-IN SEQUENCE SHALL BE FOLLOWED UNLESS AN ALTERNATIVE IS APPROVED, IN WRITING, BY THE CANTON WATER DEPARTMENT.

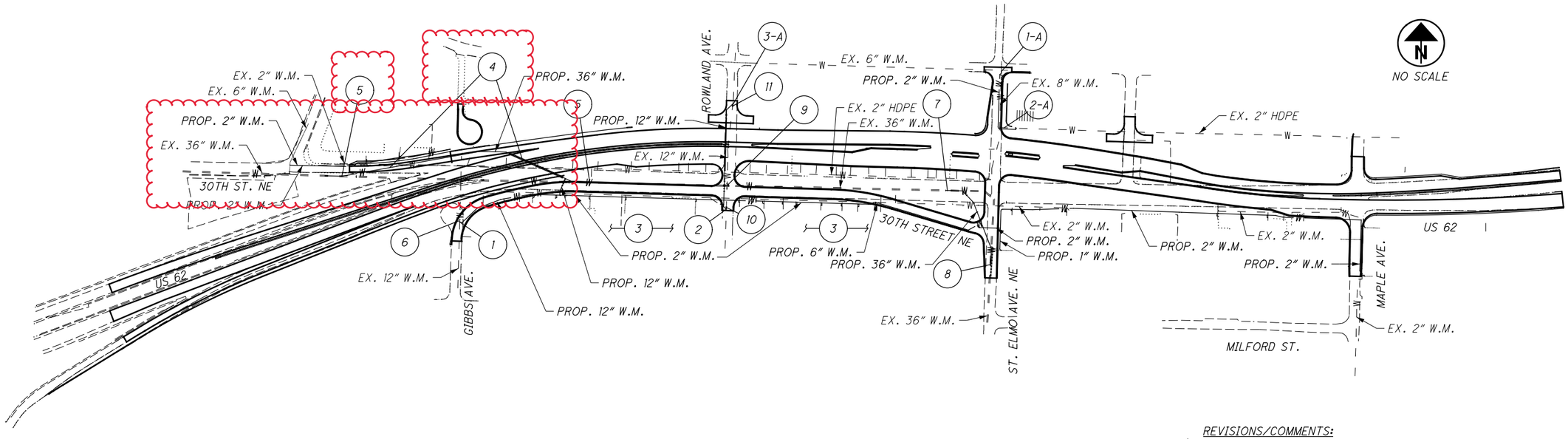
AT THE BEGINNING OF THE PROJECT, THE CONTRACTOR SHALL EXPOSE THE 36" WATER MAIN AT THE LOCATION OF EACH PROPOSED 36" SLEEVE IN ORDER TO ACQUIRE THE DEPTH AND OUTER DIAMETER (O.D.) OF THE PIPE. THE O.D. OF THE PIPE WILL BE REQUIRED WHEN ORDERING THE SLEEVE. THE CONTRACTOR SHALL ASSUME AT LEAST A 12 WEEK LEAD TIME FOR THE SLEEVES.

WHEN TYING INTO THE EXISTING 36" WATER MAIN, THE CONCRETE THRUST BLOCK SHALL BE IN PLACE AND THE PROPOSED 45 FT OF MAIN, THAT IS IN-LINE WITH THE EXISTING, SHALL BE BACKFILLED AND COMPACTED PRIOR TO FILLING AND TURNING THE 36" WATER MAIN BACK INTO SERVICE.

1.) TIE INTO THE 12" WATER MAIN ON GIBBS AVE:
   A. THE CONTRACTOR SHALL TEMPORARILY SHUT DOWN THE EXISTING 12" WATER MAIN, INSTALL THE 12"x12" TEE INTO THE EXISTING 12" MAIN, INSTALL THE 12" GATE VALVE, CLOSE THE VALVE AND RESTORE WATER TO THE EXISTING MAIN. THE CONTRACTOR SHALL THEN PROGRESS WITH THE CONSTRUCTION OF THE PROPOSED 12", 36" AND 2" WATER MAIN.
2.) TIE INTO THE 12" WATER MAIN ON ROWLAND AVE, SOUTH OF RT 62:
   A. THE CONTRACTOR SHALL TEMPORARILY SHUT DOWN THE EXISTING 12" WATER MAIN, INSTALL THE 12"x6" WYE INTO THE EXISTING 12" MAIN, INSTALL THE 6" GATE VALVE, CLOSE THE VALVE AND RESTORE WATER TO THE EXISTING MAIN. THE CONTRACTOR SHALL THEN PROGRESS WITH THE CONSTRUCTION OF THE PROPOSED 6" AND 2" WATER MAIN.
   B. DO NOT TIE THE 6" WATER MAIN INTO THE 36" MAIN AT THIS TIME.
3.) TIE SERVICES INTO THE PROPOSED 12" AND 2" WATER MAIN:
   A. UPON APPROVAL FROM THE WATER DEPARTMENT, THE CONTRACTOR SHALL CONNECT THE EXISTING SERVICES TO THE PROPOSED 12" AND 2" WATER MAIN.
4.) START 36" WATER MAIN AND PARTIAL CASING CONSTRUCTION SUGGESTED IN THE MAINTENANCE OF TRAFFIC PHASE 1 WORKING AREA TO APPROXIMATE STA. 25+39±. CONTINUE THE 36" WATER MAIN. JACK AND BORE THE REMAINING 80' TO A RECEIVING PIT (10' X 20') TO BE CONSTRUCTED IN PHASE 1. THE CONTRACTOR SHALL TEST THE NEW 36" WATERMAIN PRIOR TO TYING IN TO THE EXISTING 36" MAIN.
5.) TIE INTO THE 36" WATER MAIN BETWEEN GIBBS AVE AND ROWLAND AVE / TIE INTO THE 36" WATER MAIN ON 30TH ST, EAST OF MARTINDALE ROAD.:
   A. TO REDUCE THE TIME THE 36" WATER MAIN IS DISCONNECTED, THE CONTRACTOR SHALL HAVE A SECOND CREW PERFORMING THESE TIE-INS AT THE SAME TIME.
6.) DISCONNECT THE 12" MAIN FROM THE TEE ON GIBBS AVE:
   A. THE CONTRACTOR SHALL DISCONNECT THE 12" WATER MAIN FROM THE NORTH SIDE OF THE TEE THAT WAS INSTALLED UNDER ITEM 1.A AND INSTALL A PLUG ON THE TEE AND ONTO THE 12" WATERLINE TO BE ABANDONED.
7.) TIE INTO THE 36" WATER MAIN WEST OF ST ELMO AVE:
   A. PRIOR TO TYING INTO THE EXISTING 36" WATER MAIN, THE CONTRACTOR SHALL ADEQUATELY FLUSH THE PROPOSED 36" MAIN. IN ORDER TO ACQUIRE THE VOLUME OF WATER NEEDED TO FLUSH THIS LINE, THE CONTRACTOR SHALL RUN A TEMPORARY HOSE FROM THE PUMPER NOZZLES OF THE PROPOSED HYDRANT WEST OF ROWLAND AVE TO THE PROPOSED HYDRANT BETWEEN ROWLAND AVE AND ST ELMO AVE. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE HOSE WHERE IT CROSSES ROWLAND AND AT THE DRIVEWAYS.
8.) TIE INTO THE 36" WATER MAIN ON ST ELMO AVE:
   A. TO REDUCE THE TIME THE 36" WATER MAIN IS DISCONNECTED, THE CONTRACTOR SHALL HAVE A SECOND CREW PERFORMING THIS TIE-IN THE SAME TIME THE WEST END (ITEM 7) IS BEING PERFORMED.
9.) REPLACE 36" CROSS AND TIE INTO THE 36" WATER MAIN AT ROWLAND AVE:
   A. DURING THIS STEP, THE CONTRACTOR SHALL REPLACE THE 36" CROSS AND TIE IN THE PROPOSED 6" LINE FROM THE SOUTH AND THE PROPOSED 12" LINE FROM THE NORTH. THE CONTRACTOR SHALL THEN PLUG THE EXISTING 12" LINES TO THE NORTH AND SOUTH TO BE ABANDONED.
10.) DISCONNECT THE 12" MAIN FROM THE WYE ON ROWLAND, SOUTH OF RT 62:
   A. THE CONTRACTOR SHALL DISCONNECT THE 12" WATER MAIN FROM THE NORTH SIDE OF THE WYE THAT WAS INSTALLED UNDER ITEM 2.A AND INSTALL A PLUG ON THE WYE AND ONTO THE EXISTING 12" WATERLINE TO BE ABANDONED.
11.) DISCONNECT THE 12" MAIN FROM THE WYE ON ROWLAND, NORTH OF RT 62:
   A. THE CONTRACTOR SHALL DISCONNECT THE 12" WATER MAIN FROM THE SOUTH SIDE OF THE WYE THAT WAS INSTALLED UNDER ITEM 3-A AND INSTALL A PLUG ON THE WYE AND ONTO THE EXISTING 12" WATERLINE TO BE ABANDONED.

THE FOLLOWING TIE-INS CAN BE DONE INDEPENDENTLY FROM THE PREVIOUSLY MENTIONED TIE-INS.
1-A.) TIE INTO THE WATER MAIN AT THE INTERSECTION OF 31ST ST AND ST ELMO.
2-A.) TIE INTO THE 2" WATER LINE THAT RUNS EAST FROM ST ELMO:
   A. UPON APPROVAL FROM THE WATER DEPARTMENT, THE CONTRACTOR SHALL CONNECT THE PROPOSED 2" TO THE EXISTING 2" LINE.
3-A.) TIE INTO THE 12" WATER MAIN ON ROWLAND AVE, NORTH OF RT 62:
   A. THE CONTRACTOR SHALL TEMPORARILY SHUT DOWN THE EXISTING 12" WATER MAIN, INSTALL THE 12"x12" WYE INTO THE EXISTING 12" MAIN, INSTALL THE 12" GATE VALVE, CLOSE THE VALVE AND RESTORE WATER TO THE EXISTING MAIN. THE CONTRACTOR SHALL THEN PROGRESS WITH THE CONSTRUCTION OF THE PROPOSED 12" WATER MAIN.
   B. DO NOT TIE THE 12" WATER MAIN INTO THE 36" MAIN AT THIS TIME.
   C. THIS CONNECTION SHALL BE MADE PRIOR TO ITEM 9 LISTED ABOVE.

THE ABOVE MENTIONED WORK MAY RESULT IN OVERTIME, NIGHTS AND/OR WEEKEND WORK. IF SO, ALL WORK AND WAGES ASSOCIATED WITH THE OVERTIME, NIGHTS AND/OR WEEKEND OPERATION SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE FOR THE WATERLINE ITEMS. NO ADDITIONAL COMPENSATION WILL BE ACCEPTED.



REVISIONS/COMMENTS:

1 ANY REFERENCE TO "THE CITY ENGINEER" WITHIN THE GENERAL NOTES SHALL MEAN THE CANTON WATER DEPARTMENT SUPERINTENDENT.

2 NOT APPLICABLE TO THIS PROJECT

3 REFER TO SECTION VIII. WATER MAIN/SERVICES

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WATER NOTES

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NOTES:

1. PRIOR TO INSTALLING THE 48" CASING PIPE AND ORDERING THE 36" CUT-IN SLEEVES, THE CONTRACTOR SHALL ACQUIRE THE DEPTH AND O.D. OF THE MAIN AT THE PROPOSED SLEEVE LOCATION. THE CONTRACTOR SHALL ASSUME AT LEAST A 12 WEEK LEAD TIME FOR THE SLEEVES.

2. THE CONTRACTOR SHALL COORDINATE THE SHUTTING DOWN AND TYING INTO THE 36" WATER LINE THROUGH THE CANTON WATER DEPARTMENT. ALL WORK DEEMED NECESSARY SHALL BE COMPLETED AND COORDINATED TO MINIMIZE THE TIME THE MAIN IS OUT OF SERVICE.

NOTES:

◇=ABANDON VALVE AND REMOVE VALVE BOX

CONTRACTOR TO VERIFY EXISTING SERVICE CONNECTION LOCATIONS.

3. THE PAVEMENT TRENCH REPAIR FOR THE 2" WATERLINE, BEYOND THE LIMITS OF THE ROADWAY CONSTRUCTION SHALL CONSIST OF 8" CONCRETE BASE. (ITEM 305, CLASS QC 1P), 1.75" INTERMEDIATE ASPHALT (ITEM 441, TYPE 2) AND 1.25" SURFACE ASPHALT (ITEM 441, TYPE 1). THIS COST SHALL BE INCLUDED IN THE BID PRICE FOR THE WATERLINE ITEMS.

WATER WORK: PLAN & PROFILE-36" W. M. WEST
STA 20+00 TO STA 24+50

STA-062-24.14

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HORIZONTAL SCALE IN FEET

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