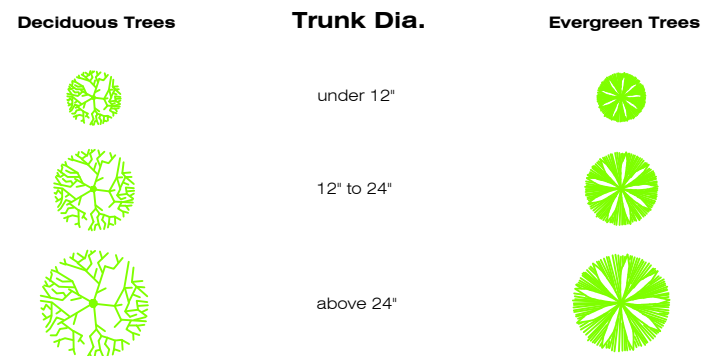
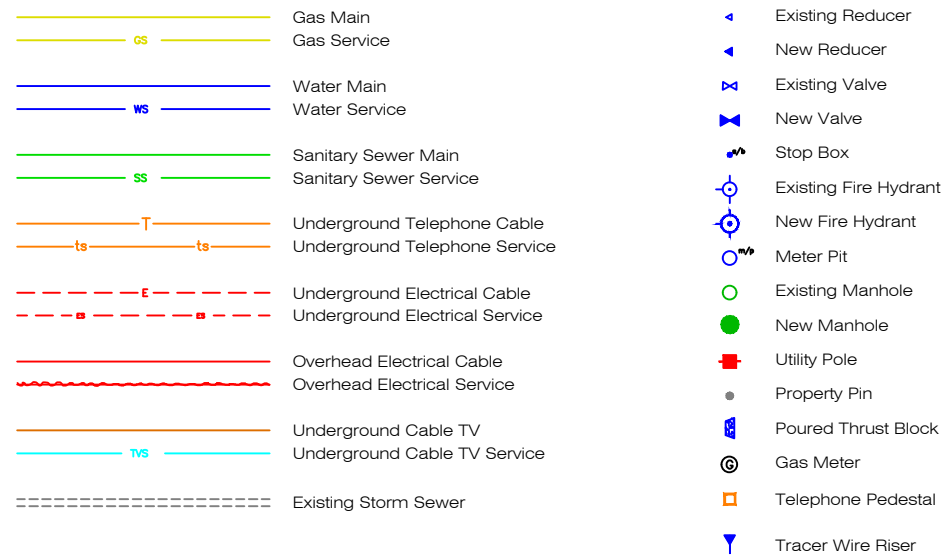
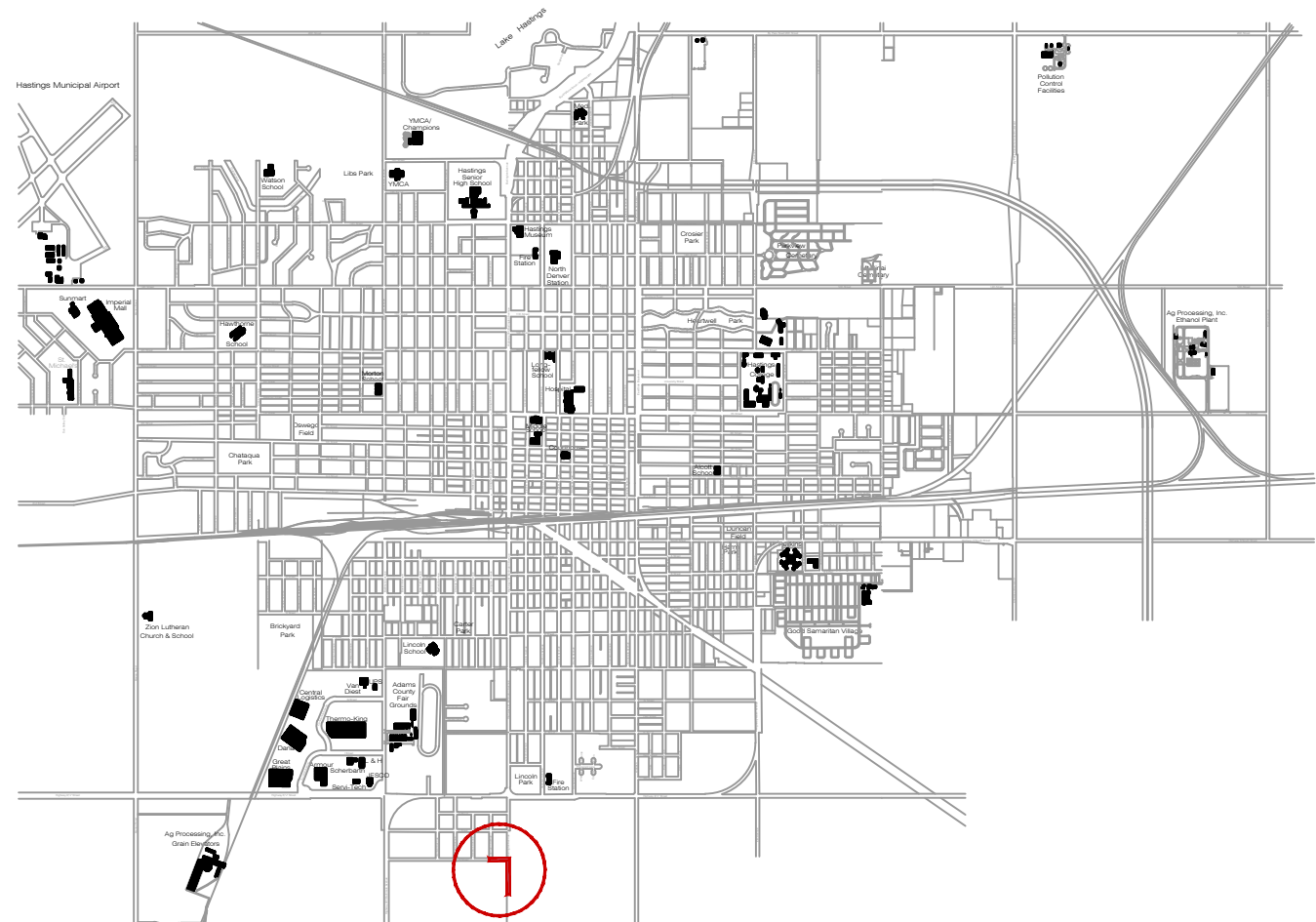


**Relocation of Sanitary Sewer Main on
S. Lexington Avenue to S. Burlington
Avenue; from
"M" Street South to Lift Station.
SW-391 HU 2026-69**



Cover	Plan Cover Sheet
Quantities	Sheet Layout and Quantities
CSS1.1 to CSS1.2	Sanitary Sewer Main Improvements Plan and Profile Sheets
CSS4.1	Sanitary Sewer Service Plans



Relocation of Sanitary
Sewer Main on S. Lexington
Ave. to S. Burlington Ave.;
from "M" Street South to
Lift Station

SEE SHEET NO. 2 FOR THE GENERAL NOTES PERTAINING TO THE COMPLETION OF THIS PROJECT.



Know what's below.
Call before you dig.

No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

Lee Vrooman 6/26/26
City Engineer



Relocation of Sanitary
Sewer Main on S. Lexington
Ave. to S. Burlington Ave.;
from "M" St. South to Lift
Station



**FOR
BID**

Don	K. Miller
Drwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	SW-391
Ckd	
Ckd	
Sheet No.	Cover
No.	SR-102

Dan	K. Miller
Dirwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	SW-391
Ckd	
Ckd	
Sheet No.	Quantitie
No.	SR-102



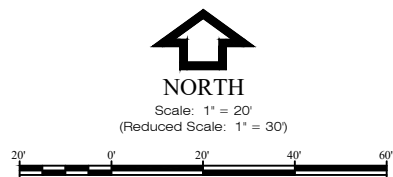
No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

Relocation of Sanitary
Sewer Main on S. Lexington
Ave. to S. Burlington Ave.;
from "M" St. South to Lift
Station



**FOR
BID**

Don	K. Miller
Drwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	SW-391
Ckd	
Ckd	
Sheet No.	CSS1.1
No.	SR-102

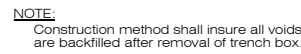


SANITARY SEWER MAIN QUANTITIES					
18" PVC Sanitary Sewer Main	318.00	Lin. Ft.	Crushed Concrete	57.00	Tons
60"Ø Manhole Cone	2.00	Each	Road Gravel	73.00	Tons
Ring and Cover	2.00	Each			
60"Ø Manhole Base	2.00	Each			
60"Ø Manhole Section	18.90	Vert. Ft.			
8" x 11" Concrete Manhole Collar	1.00	Each			
Remove and Dispose of 8" Sanitary Sewer Main	318.00	Lin. Ft.			
Remove Existing Manhole and 8" Drop	1.00	Each			



Disn	K. Miller
Drwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	SW-391
Ckd	
Ckcd	

Sheet No.	CSS1.2
No.	SR-102



Ductile iron pipe shall be installed so that no joint occurs less than ten feet from water main center line

Sewer tile

Concrete collar

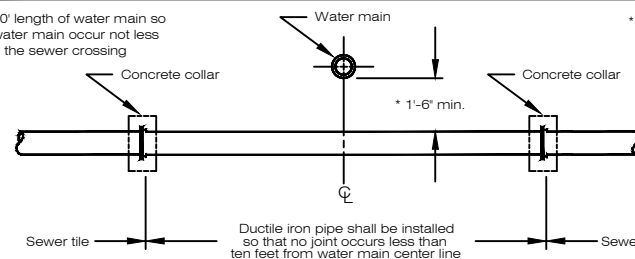
2'-0" min.

Water main

NOTE:
When water and sewer lines cross, the water main shall be installed so that no joint occurs less than ten feet from the water main center line.

Center one 20' length of water main so joints in the water main occur not less than 10' from the sewer crossing

* **NOTE:**
When this distance is greater than 3'-0", the concrete collars and



2-#4 Rebar at Diagonal at Each Corner.

1-#4 Rebar on Each Side

10" Thick Poured 47-B Concrete Collar. Outside Edge of Collar to have 1" of Drop From Manhole Ring

3/4"

NOTE:
X and Y Dim on Plan Sheet

Varies 2'-0" Varies

8" Thick Concrete Collar.

4"

The diagram illustrates a cross-section of a manhole wall joint. A central vertical pipe is shown with a green outline, labeled "Maximum Pipe O.D.". The pipe is surrounded by a hatched area representing the "Wall Thickness". On either side of the pipe, there is a trapezoidal section of "Non-Shrink Grout". A "Water Stop Gasket" is installed within the grout, positioned between the pipe and the wall. A horizontal dashed blue line indicates the "Manhole Dia." across the wall. Arrows point from the labels to their respective components in the diagram.

NOTE

- Manhole sections includes manhole barrel and adjusting rings.
- Block bottom section for placement.
- Adjusting rings used only under paving.

7 1/8"

4"

36"

Varies 16", 32", 48"

Varies 16", 32", 48"

8" max

1'-0"

4"

8"

2'-0"

16" max. adj.

Overall Height (V.F)

Varies 48", 60", 72"

Water Stop Gasket

Joint seal or gasket required at all joints.

1'-0"

4"

8"

#4 Rebar 12" O.C. Each Way

Compacted crushed limestone

NOTE

- Manhole sections includes manhole barrel and adjusting rings.
- Block bottom section for placement.
- Adjusting rings only used under paving.

7 1/8"

4"

12" Flat Top Lid

Varies 16", 32", 48"

Varies 16", 32", 48"

Varies 16", 32", 48"

8" max

2'-0"

16" max. adj.

Overall Height (V/F)

Varies 48", 60", 72"

Water Stop Gasket

1'-0"

4"

8"

1'-0"

#4 Rebar 12" O.C. Each Way

Compacted crushed limestone

SECTION B-B

Water Stop Gasket

Build masonry dam if directed by Engineer

Water Stop Gasket

as req'd

as Req'd by grade

Compacted crushed limestone

1'-0"

Varies 48", 60", 72"

Inlet channel formed in base

No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

Relocation of Sanitary
Sewer Main on S. Lexington
Ave. to S. Burlington Ave.;
from "M" St. South to Lift
Station

Dsn	K. Miller
Drwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	SW-391
Ckd	
Ckd	

Sheet No. CSS3.1

SR-102



HASTINGS
UTILITIES

**FOR
BID**



Hastings Utilities

2026

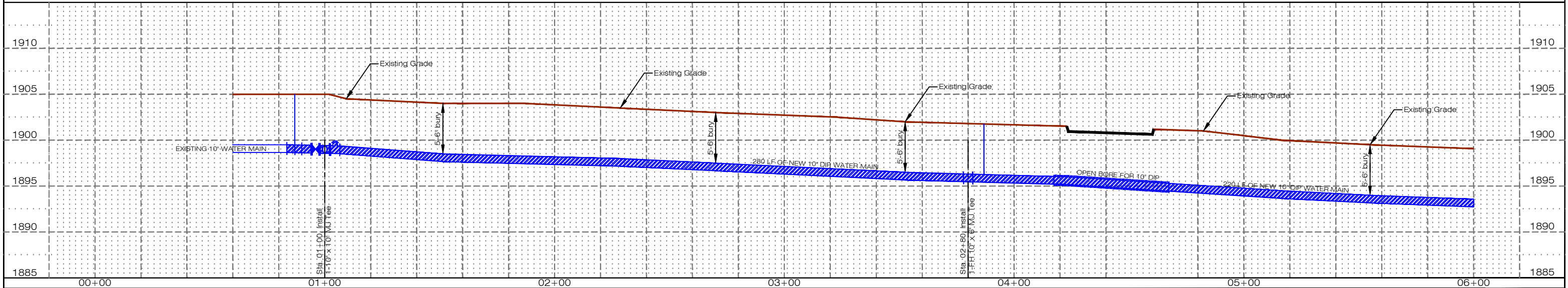
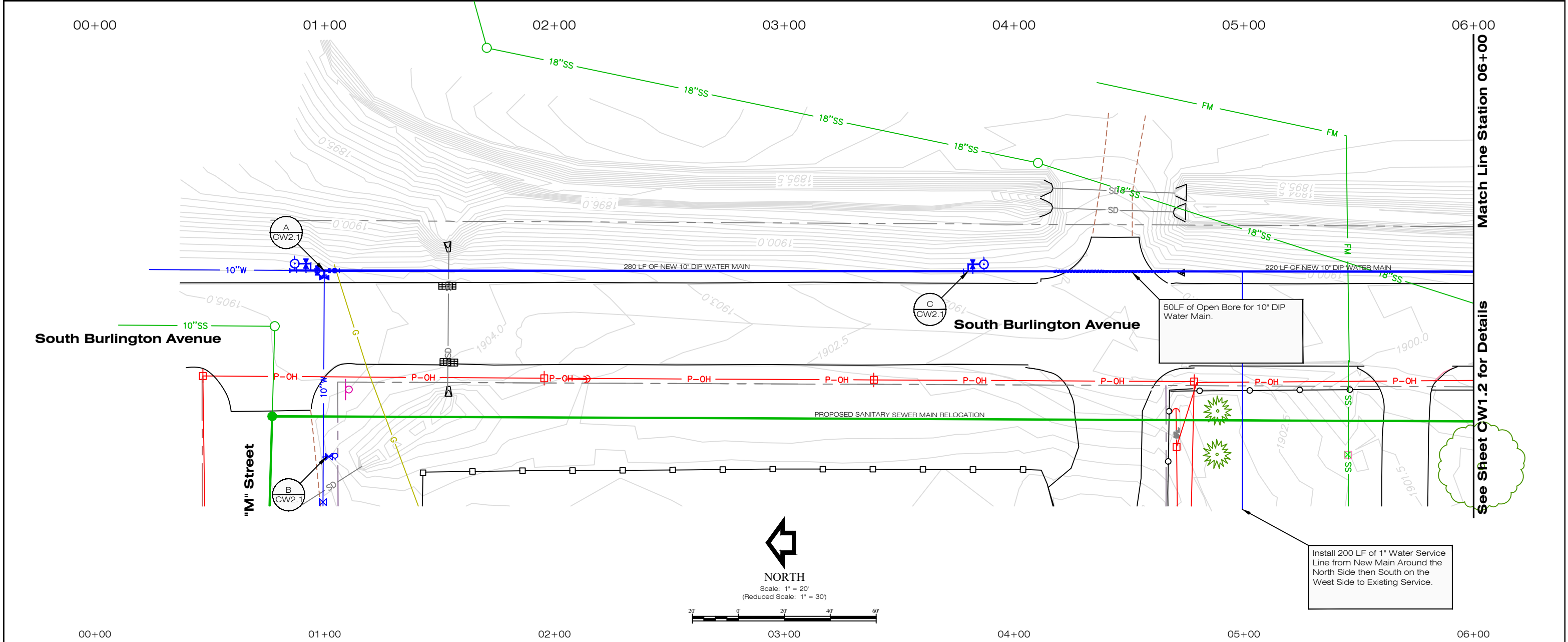
[illegible]

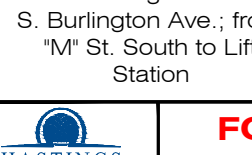
HASTINGS
UTILITIES

Sheet No. **Cover**
No. **WR-143**

No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

Dsn	K. Miller
Drwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	WA-146
Ckd	
Ckd	
Sheet No.	Quantities
No.	WR-143

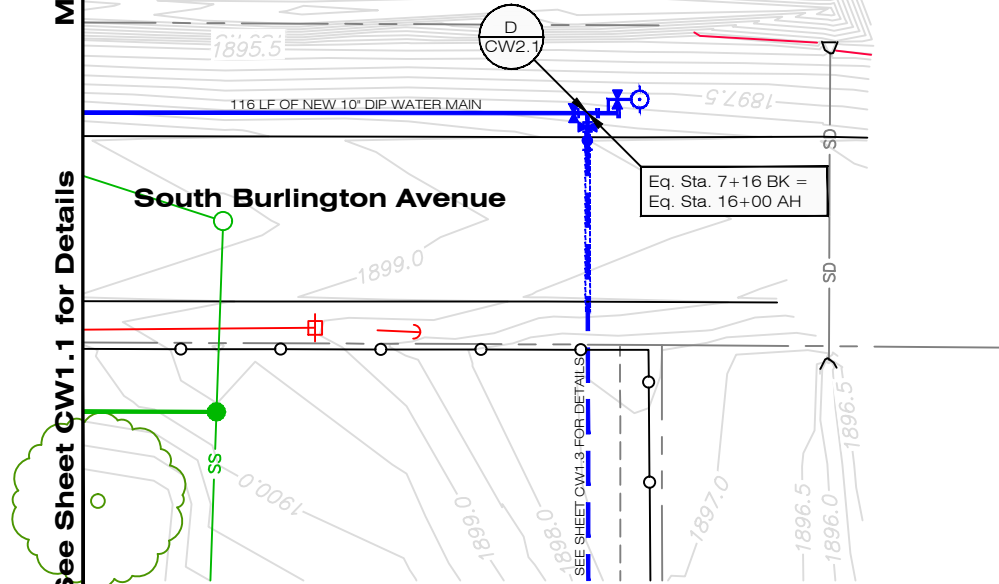


 Know what's below. Call before you dig.	No.	Revision	By	Date	Ckd	App.	WATER MAIN QUANTITIES										 Relocation of Water Main on S. Lexington Ave. to S. Burlington Ave.; from "M" St. South to Lift Station  FOR BID Desn K. Miller Drawn S. Struss Date 5/26/2026 Supt B. Lubken W.O. No. WA-146 Ckd Ckd Sheet No. CW1.1 No. WR-143
							10" DIP Water Main	505.00	Lin. Ft.	10" MJ Plug (1)	36.00	Pounds	3 lb. Anode	1.00	Each		
							Open Bore for 10" DIP Water Main	50.00	Lin. Ft.	6" MJ Plug (1)	16.00	Pounds	Blue Water Marking Tape	555.00	Lin. Ft.		
										10" Solid Sleeve (1)	61.00	Pounds	Tracer Wire	555.00	Lin. Ft.		
							10" Gate Valve and Box	2.00	Each				Tracer Wire Riser	2.00	Each		
										10" Foster Adaptor	3.00	Each	Thrust Block	1.00	Each		
							Fire Hydrant (6'-0" Bury)	2.00	Each	10" MEGA Lug	2.00	Each					
							FH 6" Gate Valve and Box	2.00	Each								
							FH 10"x 6" MJ Tee (2)	238.00	Pounds	1" Water Service Line 200'	1.00	Each					
							FH 6", 36" SW x SW Adapter (2)	174.00	Pounds								
							FH 6" Hydrant Ell (2)	104.00	Pounds	Remove 10" 90° MJ Bend	1.00	Each					
										Remove Fire Hydrant and Adapter	1.00	Each					
										Remove 6" Gate Valve	1.00	Each					
	Rev. 1	Original Drawings		SS	5-26-26	KM		10"x 10" MJ Tee (2)	240.00	Pounds							

06+00 07+00 08+00 30+00 31+00 32+00

Match Line Station 06+00

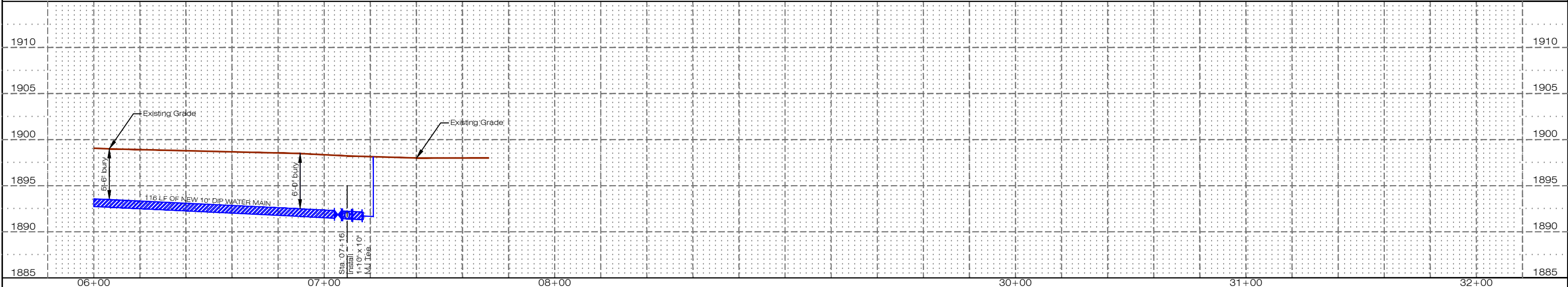
See Sheet CW1.1 for Details



NORTH
Scale: 1" = 20'
(Reduced Scale: 1" = 30')



06+00 07+00 08+00 30+00 31+00 32+00



No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

WATER MAIN QUANTITIES									
10" DIP Water Main	116.00	Lin. Ft.	10" x 10" MJ Tee (2)	240.00	Pounds	2" Service Line Less than 50'	1.00	Each	
4" DIP Water Main	15.00	Lin. Ft.	10" MJ Plug (2)	72.00	Pounds				
			6" MJ Plug w/2" Tap (1)	16.00	Pounds	Remove Valve Boxes	3.00	Each	
10" Gate Valve and Box	2.00	Each	6" MJ Cap (1)	15.00	Pounds				
10"x 4" Tapping Sleeve by HU	1.00	Each	4" MJ Cap (1)	9.00	Pounds				
4" Tapping Valve by HU	1.00	Each	4" Solid Sleeve (1)	20.00	Pounds				
Fire Hydrant (6'-6" Bury)	1.00	Each	10" Foster Adaptor	3.00	Each	3 lb. Anode	1.00	Each	
FH 6" Gate Valve and Box	1.00	Each	10" MEGA Lug	3.00	Each	Blue Water Marking Tape	128.00	Lin. Ft.	
FH 10"x 6" MJ Tee (1)	119.00	Pounds				Tracer Wire	128.00	Lin. Ft.	
FH 6", 36" SW x SW Adapter (1)	87.00	Pounds				Tracer Wire Riser	1.00	Each	
FH 6" Hydrant Ell (1)	52.00	Pounds				Thrust Block	3.00	Each	

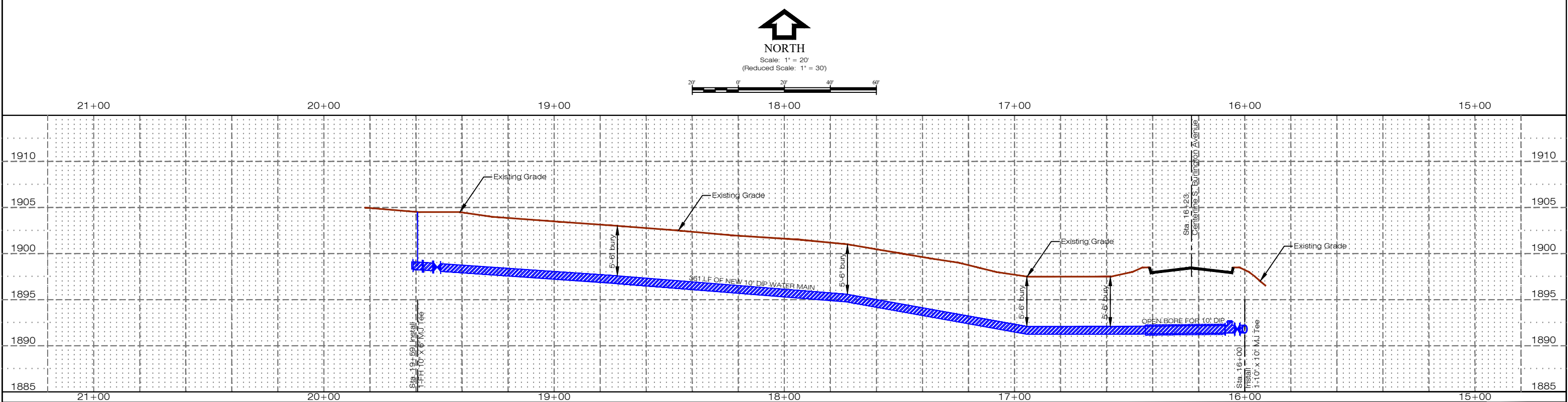
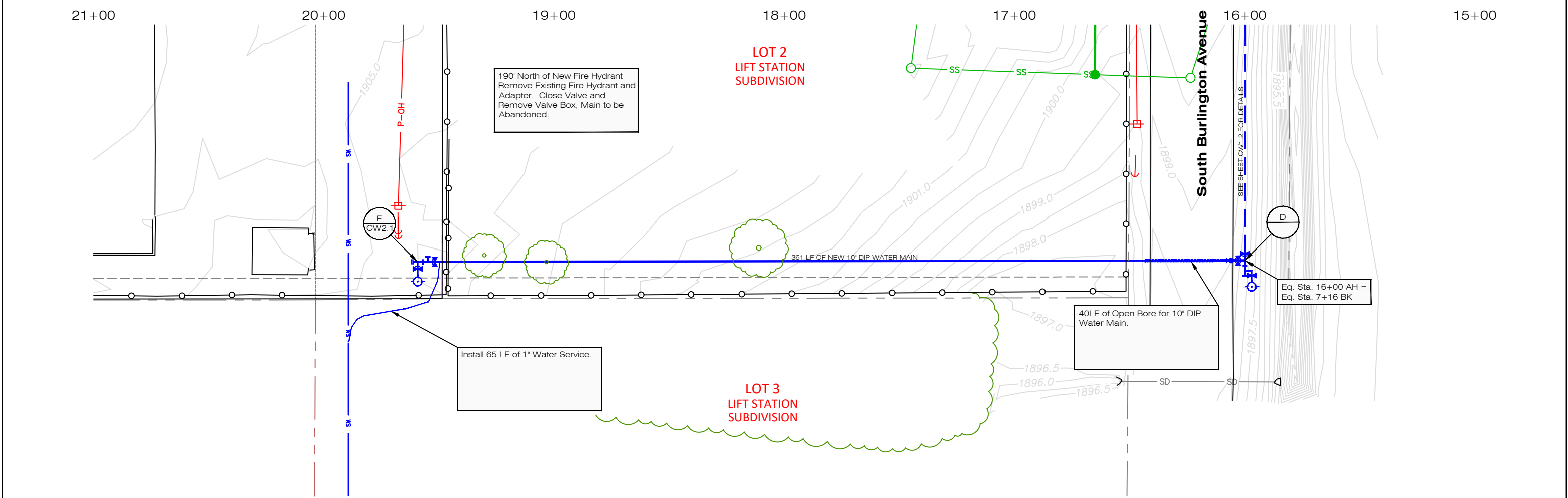


Relocation of Water Main
on S. Lexington Ave. to
S. Burlington Ave.; from
"M" St. South to Lift
Station



FOR
BID

Des	K. Miller
Drawn	S. Struss
Date	5/26/2026
Supt	B. Lubken
W.O. No.	WA-146
Ckd	
Sheet No.	CW1.2
No.	WR-143



 Know what's below. Call before you dig.	No.	Revision	By	Date	Ckd	App	WATER MAIN QUANTITIES											Relocation of Water Main on S. Lexington Ave. to S. Burlington Ave.; from "M" St. South to Lift Station		 FOR BID		Sheet No. CW1.3 No. WR-143	
							10" DIP Water Main	361.00	Lin. Ft.	10" x 10" MJ Tee (1)	120.00	Pounds	3 lb. Anode	1.00	Each								
							Open Bore for 10" DIP Water Main	40.00	Lin. Ft.	10" MJ Plug (2)	72.00	Pounds	Blue Water Marking Tape	397.00	Lin. Ft.								
							10" Gate Valve and Box	1.00	Each	10" Foster Adaptor	2.00	Each	Tracer Wire	397.00	Lin. Ft.								
										10" MEGA Lug	1.00	Each	Tracer Wire Riser	1.00	Each								
												Thrust Block	3.00	Each									
							Fire Hydrant (6'-0" Bury)	1.00	Each														
							FH 6" Gate Valve and Box	1.00	Each	1" Water Service Line Between 50' & 100'	1.00	Each											
							FH 10"x 6" MJ Tee (1)	90.00	Pounds														
							FH 6", 36" SW x SW Adaptor (1)	87.00	Pounds	Remove Fire Hydrant and Adaptor	1.00	Each											
						FH 6" Foster Adaptor	1.00	Each	Remove Valve Box	1.00	Each												
Rev. 1	Original Drawings		SS	5-26-26	KM																		

"M" Street

"M" Street

Burlington Avenue

N

LEGEND

- Tracer Wire Riser
- Anode/Ground

TRACER WIRE RISER AND ANODE PLAN



Relocation of Water Main
on S. Lexington Ave. to
S. Burlington Ave.; from
"M" St. South to Lift
Station



FOR
BID

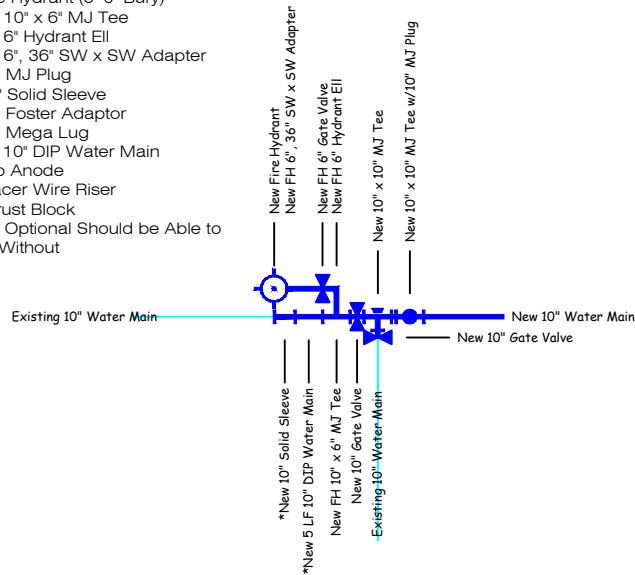
Desn	K. Miller
Drawn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	WA-146
Ckd	
Ckd	
Sheet No.	CWTW
No.	WR-143



Know what's below.
Call before you dig.

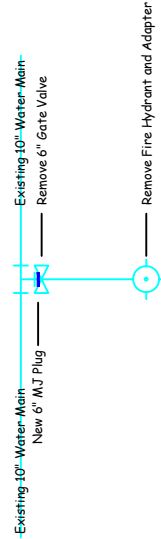
No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

Sta. 01+00, Remove
1 - 10" 90° MJ Bend
Sta. 01+00, Install
2 - 10"x10" MJ Tee
2 - 10" Gate Valve and Box
1 - FH 6" Gate Valve and Box
1 - Fire Hydrant (6-0" Bury)
1 - FH 10" x 6" MJ Tee
1 - FH 6" Hydrant Ell
1 - FH 6", 36" SW x SW Adapter
1 - 10" MJ Plug
* 1 - 10" Solid Sleeve
3 - 10" Foster Adapter
2 - 10" Mega Lug
* 5 LF - 10" DIP Water Main
1 - 3 lb Anode
1 - Tracer Wire Riser
1 - Thrust Block
* This is Optional Should be Able
Install Without



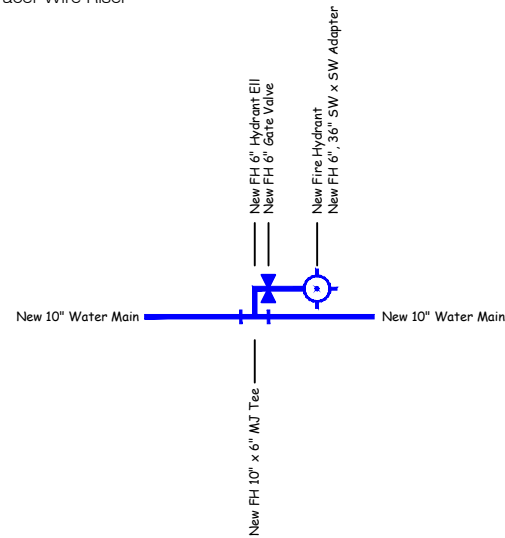
A circular logo with a horizontal line. Above the line is the letter 'A' and below the line is the text 'CW2.1'.

Sta. 01+00, 81' Rt., Remove
1 - Fire Hydrant and Adapter
1 - 6" Gate Valve and Box
Sta. 01+00, 81' Rt., Install
1 - 6" MJ Plug



Sta. 02+80, Install

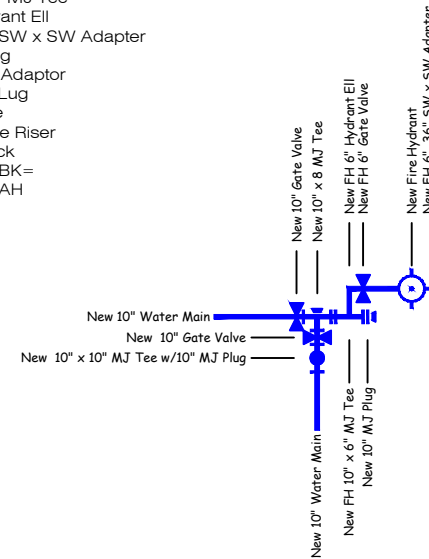
- 1 - FH 6" Gate Valve and Box
- 1 - Fire Hydrant (6'-0" Bury)
- 1 - FH 10" x 6" MJ Tee
- 1 - FH 6" Hydrant Ell
- 1 - FH 6", 36" SW x SW Adapter
- 1 - Tracer Wire Riser



Sta. 07+16, Install

- 1 - 10" x 10" MJ Tee
- 1 - 10" x 10" MJ Tee
- 2 - 10" Gate Valve and Box
- 1 - FH 6" Gate Valve and Box
- 1 - Fire Hydrant (6'-6" Bury)
- 1 - FH 10" x 6" MJ Tee
- 1 - FH 6" Hydrant Ell
- 1 - FH 6", 36" SW x SW Adaptor
- 2 - 10" MJ Plug
- 3 - 10" Foster Adaptor
- 2 - 10" Mega Lug
- 1 - 3 lb Anode
- 1 - Tracer Wire Riser
- 2 - Thrust Block

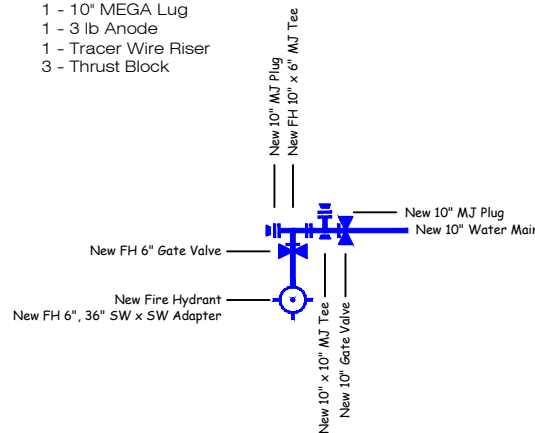
Eq. Sta. 07+16 BK=
Eq. Sta. 16+00 AH



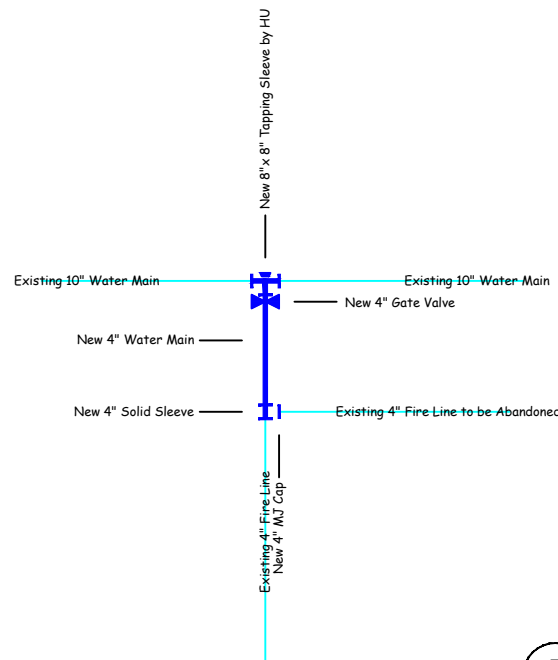
Sta. 19+59, Install

- 1 - 10" x 10" MJ Tee
- 1 - 10" Gate Valve and Box
- 1 - FH 6" Gate Valve and Box
- 1 - Fire Hydrant (6-0" Bury)
- 1 - FH 10" x 6" MJ Tee
- 1 - FH 6", 36" SW x SW Adaptor
- 1 - FH 6" Foster Adaptor
- 2 - 10" MJ Plug
- 2 - 10" Foster Adaptor
- 1 - 10" MEGA Lug
- 1 - 3 lb Anode
- 1 - Tracer Wire Riser
- 3 - Thrust Block

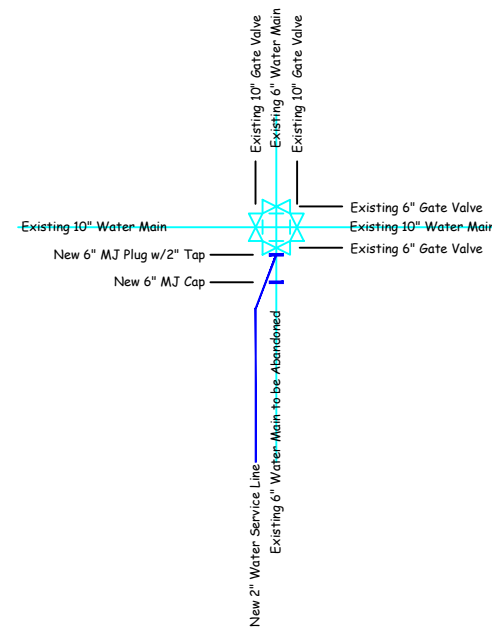
(lug 6" MJ Tee)



Sta. 30+40, Install
 1 - 10" x 4" Tapping Sleeve by HU
 1 - 4" Tapping Valve by HU
 1 - 4" MJ Cap
 1 - 4" Solid Sleeve
 15 LF - 4" DIP Water Main
 1 - Thrust Block



Sta. 31+14, Install
1 - 6" MJ Plug w/2" Tap
1 - 6" MJ Cap



The logo consists of a circle divided horizontally. The top half contains the letter 'G' and the bottom half contains the text 'CW2.'.



Know what's below.
Call before you dig.

No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	

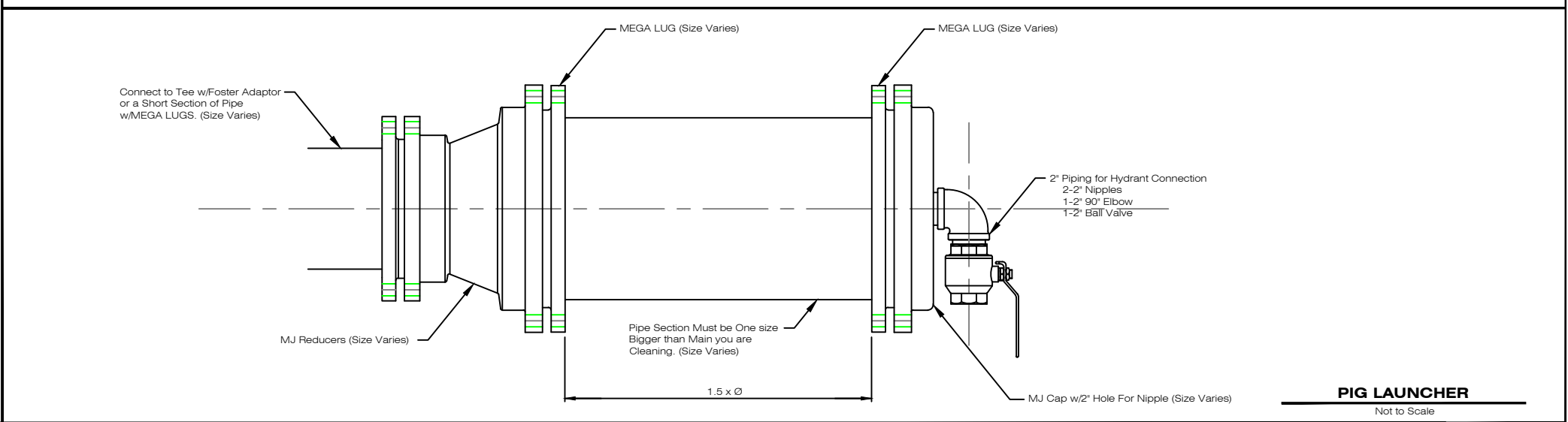
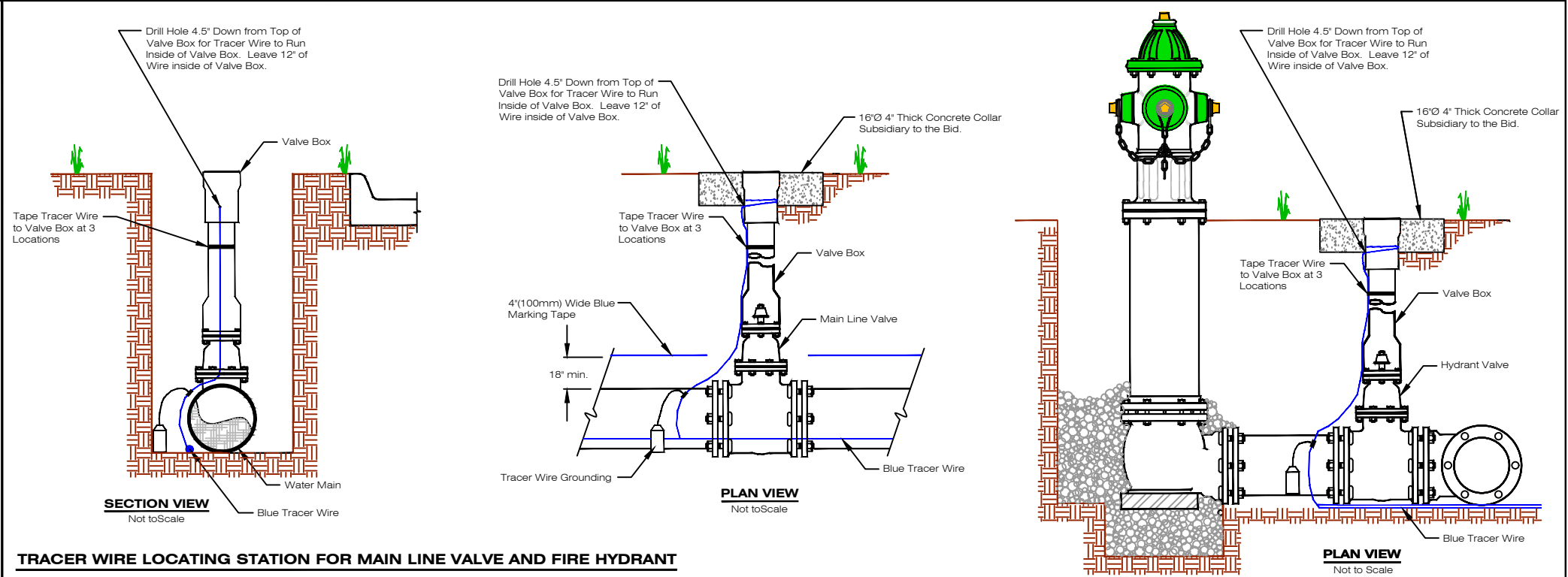
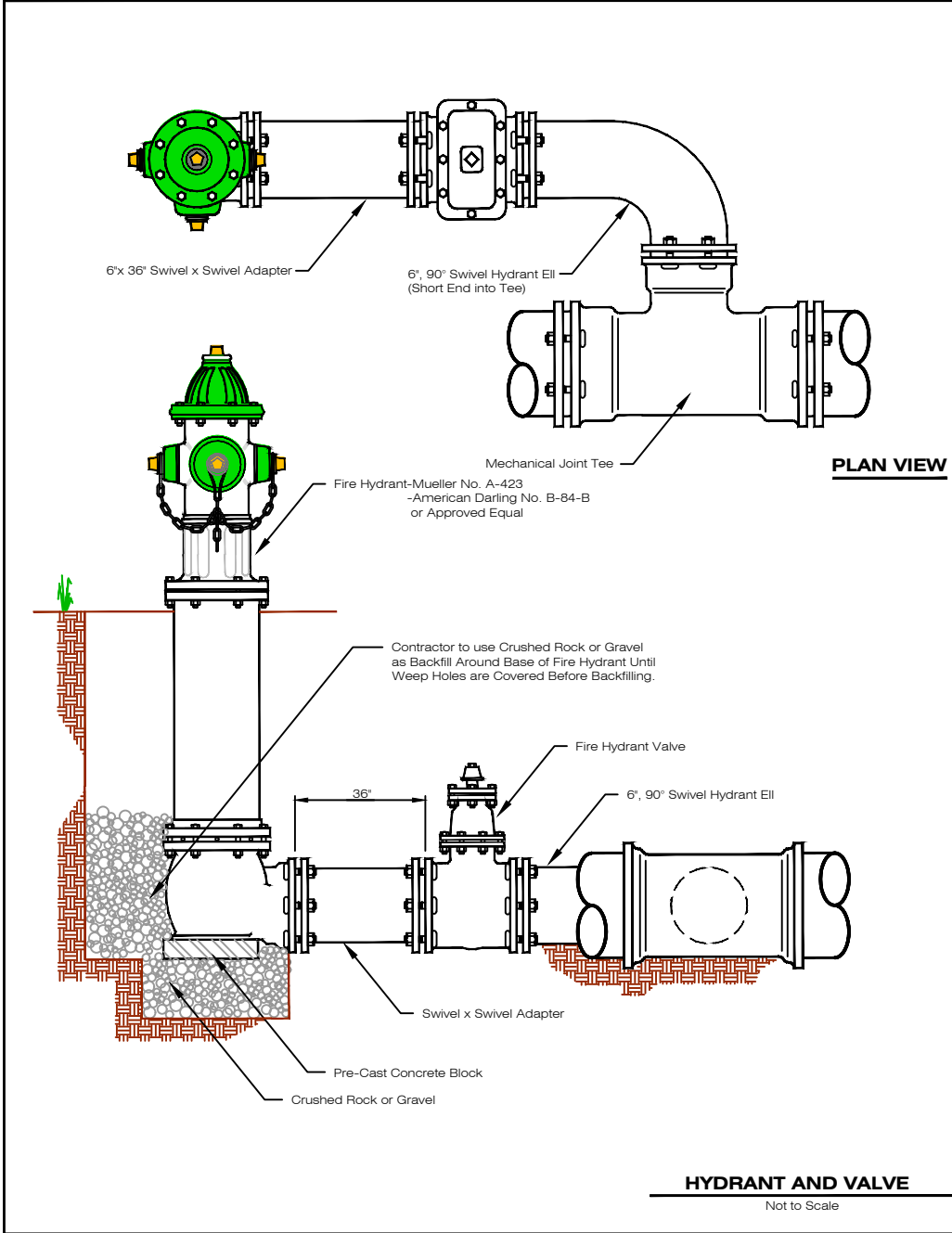
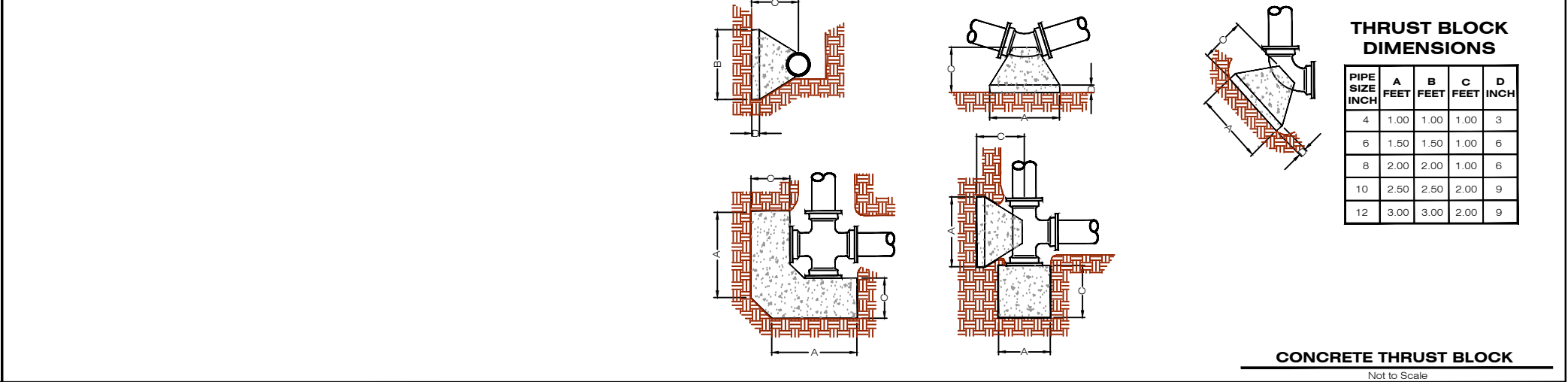
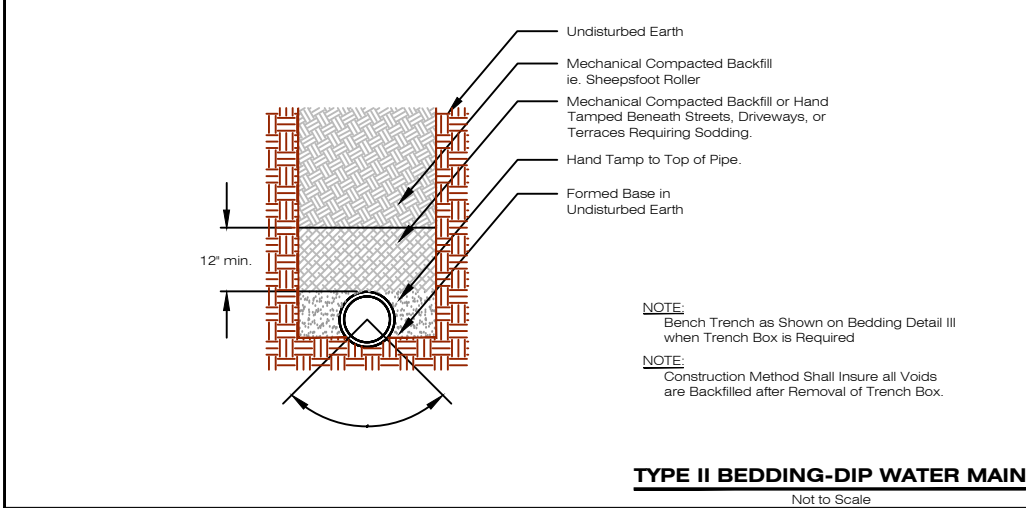


Relocation of Water Main
on S. Lexington Ave. to
S. Burlington Ave.; from
"M" St. South to Lift
Station



**FOR
BID**

Don	K. Miller
Drawn	S. Struss
Date	5/26/2026
Suppl.	B. Lubken
W.O. No.	WA-146
Ckd	
Ckd	
Sheet No.	CW2.1
No.	WR-143





Know what's below.
Call before you dig.

No.	Revision	By	Date	Ckd	App
Rev. 1	Original Drawings	SS	5-26-26	KM	



Relocation of Water Main
on S. Lexington Ave. to
S. Burlington Ave.; from
"M" St. South to Lift
Station

**HASTINGS
UTILITIES**

**FOR
BID**

Desn	K. Miller
Dwn	S. Struss
Date	5/26/2026
Supt.	B. Lubken
W.O. No.	WA-146
Ckd	
Ckd	
Sheet No.	CW3.1
No.	WR-143