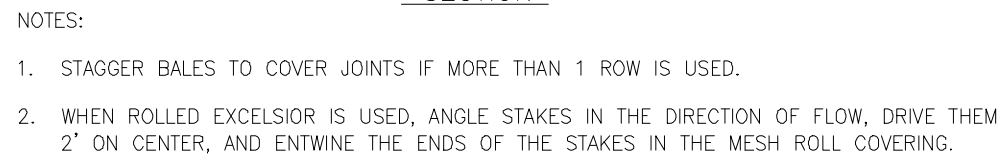


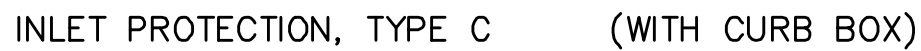
1. CONTRACTOR SHALL REMOVE SIGNS, MAILBOXES, ETC. DURING CONSTRUCTION. IMMEDIATELY AFTER INSTALLATION AND BACKFILL OCCURS, ALL SIGNS, MAILBOXES, ETC. SHALL BE RETURNED TO THEIR PREVIOUS LOCATION. ALL STOP SIGNS MUST BE DISPLAYED AT ALL TIMES.
2. 4-INCHES OF INSULATION IS REQUIRED WHEREVER COVER OVER THE TOP OF WATER MAIN AND/OR WATER LATERAL IS LESS THAN 6 FT. OR WHERE SHOWN ON PLANS. (INCIDENTAL TO PROPOSED WATER MAIN)
3. RESTRAINT OF PROPOSED WATER MAIN IS INCIDENTAL TO WATER MAIN CONSTRUCTION.
4. SUPPORTING OF POWER/LIGHT POLES ALONG THE ENTIRE PROJECT LIMITS FOR PROPOSED WATER MAIN IS INCIDENTAL TO PROPOSED WATER MAIN CONSTRUCTION.
5. LOCATION OF PROPOSED WATER LATERALS ON PLANS ARE APPROXIMATE. FINAL LOCATION SHALL BE DETERMINED IN FIELD DURING CONSTRUCTION.
6. CONTRACTOR SHALL REINSTATE ALL SUMP PUMP DISCHARGES DAMAGED DURING CONSTRUCTION OR EXTEND EXISTING DISCHARGES AS REQUIRED WITHIN THE PROJECT LIMITS. CONTRACTOR SHALL FURNISH NEW PIPE MATERIAL TO MATCH EXISTING PIPE, AND JOIN WITH A WATERTIGHT SEAL. (INCIDENTAL TO PROPOSED WATER MAIN)
7. THE BASE SURVEY WAS PROVIDED BY MILWAUKEE COUNTY DOT AND THE PROPOSED WATER MAIN LINEWORK WAS PREPARED BY BAXTER & WOODMAN, INC. IN OCTOBER 2017. ALL UNDERGROUND UTILITIES AND STRUCTURES HAVE BEEN SHOWN TO A REASONABLE DEGREE OF ACCURACY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND TO AVOID DAMAGE THERETO.
8. CONTRACTOR SHALL PROVIDE CLASS D CONCRETE BUTTRESS RESTRAINT AT ALL HORIZONTAL BENDS W/STANDARD DIMENSIONS PER FILE NO. 44 OF THE STANDARD SPECIFICATIONS. RESTRAIN VERTICAL BENDS, VALVES AND LENGTH OF HYDRANT LEADS WITH S.S. RODDING OR MEGA LUGS AS APPROVED BY ENGINEER. RESTRAINT OF PROPOSED WATER MAIN IS INCIDENTAL TO WATER MAIN CONSTRUCTION.
9. ALL STATIONS AND DIMENSIONS ARE TO CENTER OF STRUCTURE/FITTING OR OPERATING NUT OF HYDRANT.
10. COORDINATES IN THIS PLAN ARE REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 27). GROUND ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF OAK CREEK VERTICAL DATUM (NGVD29-580.60').
11. CONTRACTOR SHALL INSTALL GALVANIC ANODE CORROSION PROTECTION AT EACH CONNECTION TO EXISTING DUCTILE IRON WATER MAIN.
12. CONTRACTOR SHALL INSTALL BRASS GROUNDING RODS AT ALL CONNECTIONS TO EXISTING WATER MAIN AND CONNECT TO TRACER WIRE WITH 5/8" GROUND ROD CLAMP MANUFACTURED BY STORM COPPER COMPONENTS OR EQUAL TO BE USED FOR FUTURE UTILITY LOCATING.
13. PVC FITTINGS SHALL BE USED ON ALL PVC PIPE. PVC FITTINGS 4" TO 12" IN DIAMETER SHALL BE INJECTION MOLDED AND COMPLY WITH THE REQUIREMENTS OF AWWA C907 AND BE CERTIFIED CSA B137.2. MOLDED FITTINGS WILL BE MADE OF PVC COMPOUND WITH A MINIMUM HYDROSTATIC DESIGN BASIS OF 4000 PSI. MOLDED FITTINGS MUST BE FACTORY MUTUAL APPROVED AND LISTED BY THE UNDERWRITER'S LABORATORIES INTERNATIONAL (ULI) IF A PARTICULAR TYPE OR PVC FITTING IS NOT MANUFACTURED OR UNAVAILABLE. THE CONTRACTOR MAY USE DUCTILE IRON FITTINGS ON A CASE BY CASE BASIS WITH THE APPROVAL OF THE UTILITY ENGINEER.
14. CONTRACTOR SHALL NOTIFY OAK CREEK WATER & SEWER UTILITY 48 HOURS BEFORE TAKING ANY WATER MAIN OUT OF SERVICE.
15. STAINLESS STEEL HARDWARE SHALL BE USED FOR ALL HYDRANTS, FITTINGS AND VALVES.
16. ALL HYDRANTS WILL BE SET SO THAT THE MAIN NOZZLE FACES THE ADJACENT STREET (INCIDENTAL).
17. THE CONTRACTOR SHALL PROVIDE APPROPRIATE EQUIPMENT TO FILL AND FLUSH NEW WATER MAINS.

1. DITCHLINES TO BE RESTORED WITH 3" TOPSOIL, HYDROSEED AND EROSION MATTING. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE.
2. ALL SAWCUTTING, PAVEMENT REMOVAL, EXCAVATION, MATERIALS, AND LABOR NECESSARY FOR THE INSTALLATION OF THE PROPOSED WORK IS INCIDENTAL.



NO SCALE

3. ALL PERMIT CONDITIONS SHALL BE MET DURING CONSTRUCTION OF THE PROJECT.
2. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF OAK CREEK, AND SHALL MEET OR EXCEED EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS".
3. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. REPAIRS AND MAINTENANCE SHALL BE COMPLETED WITHIN 24 HOURS OF INSPECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY.
5. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
6. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT AS PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN THE PUBLIC STREET FREE OF DUST AND DIRT.
8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ALL TOPSOIL AND FILL STOCKPILES. NOTIFY THE CITY OF OAK CREEK OF ANY NEW STOCKPILE LOCATIONS.
9. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
10. ANY SOIL DISTURBANCE AND/OR SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILE, IF REMAINING FOR MORE THAN THIRTY DAYS. PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS.
11. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, AND MULCHING SODDING, COVERING WITH TARPS, OR EQUIVALENT BEST MANAGEMENT PRACTICES. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
12. TRACKING. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE CITY, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY AN APPROPRIATE BEST MANAGEMENT PRACTICE PRACTICE SPECIFIED IN THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS".
13. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORK DAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORK DAY.
14. NOTIFY THE CITY WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
15. NOTIFY THE CITY OF COMPLETION OF ANY BEST MANAGEMENT PRACTICES WITHIN THE NEXT WORKING DAY AFTER THEIR INSTALLATION.



THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.



(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

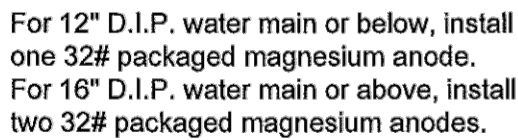
This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting. *2/11/84*

Utility Engineer

Date _____



-

NO SCALE

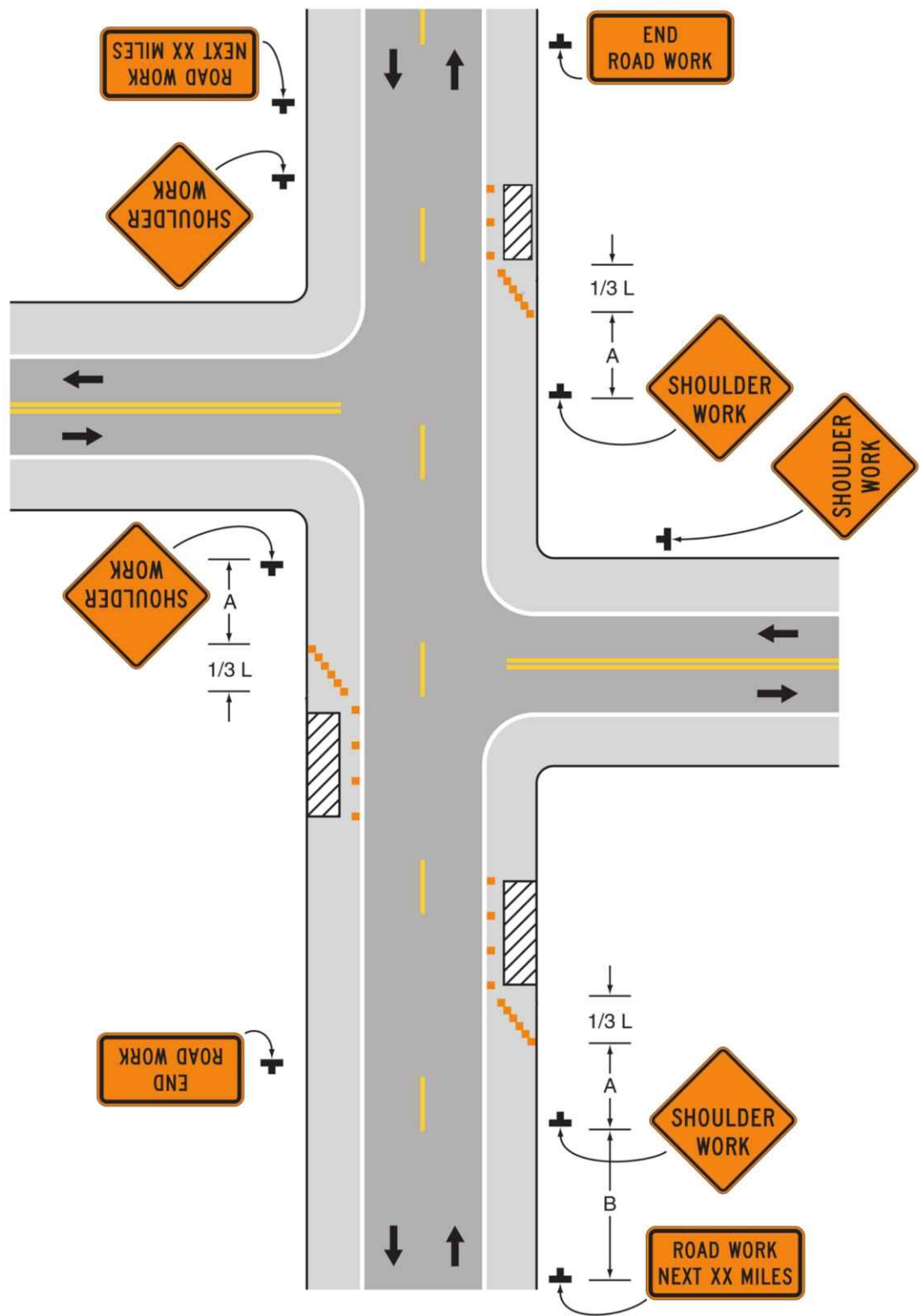


The 32# packaged magnesium anode shall be laid adjacent to the water main pipe at a point that allows for the greatest separation between anode and water main.

N.T.S.

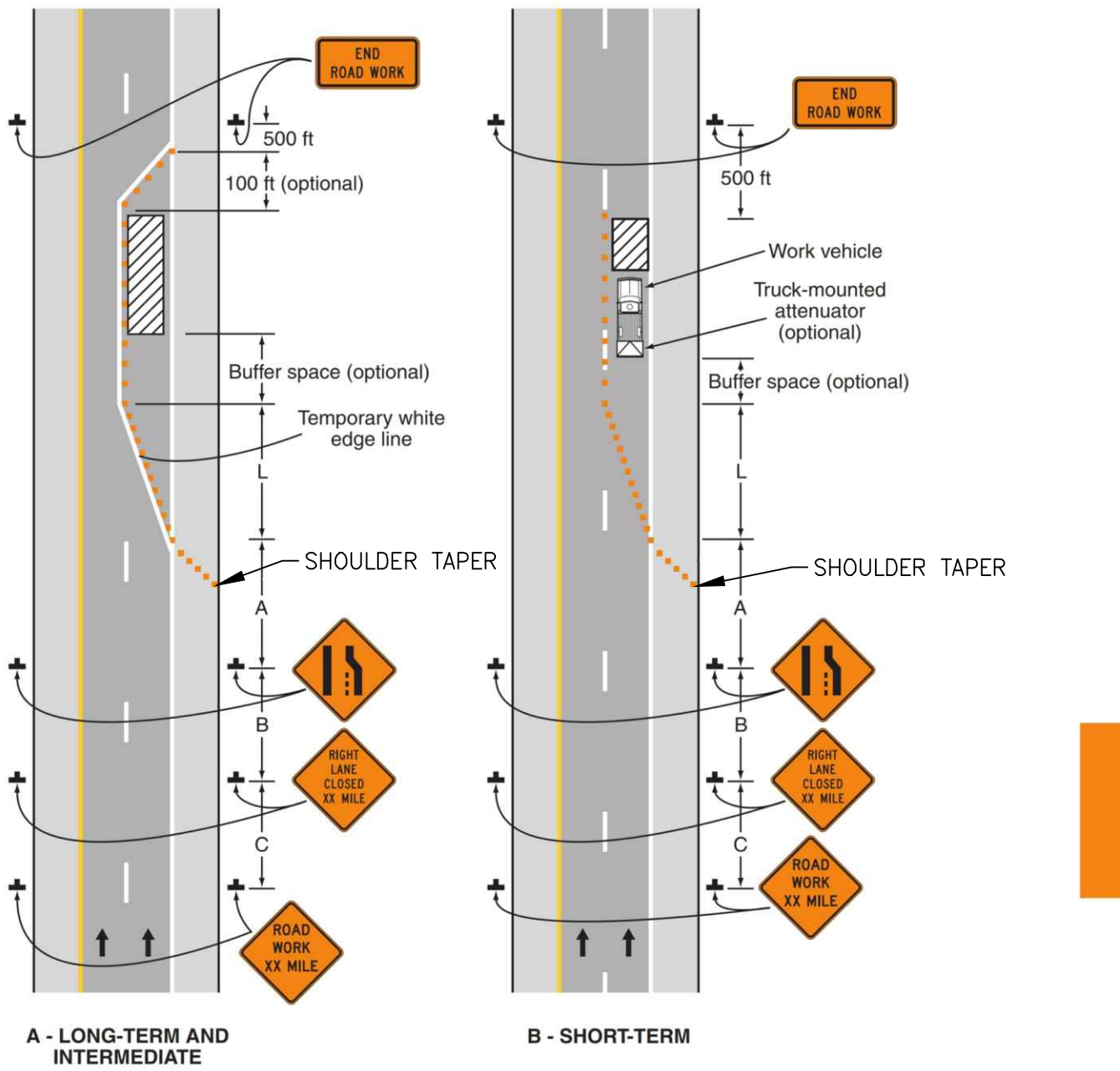
SA. TB		CITY OF OAK CREEK, WISCONSIN				APPROVED BY _____		
ST. TB						UTILITY ENGINEER _____		DATE _____
W. TB		DESIGNED BY _____ DATE _____ DRAWN BY _____ DATE _____ CHECKED BY _____ DATE _____				APPROVED BY _____		
G. TB		J.S. 12/13/2017 T.B. 12/13/2017 J.S. 12/13/2017				 1/18/18		
E. TB		GENERAL NOTES AND DETAILS				CITY ENGINEER _____ DATE _____		
T. TB						SCALE _____		SHEET _____
I. TB						PLAN _____		2
TS. TB						HOR. _____		OF
PP. TB						VER. _____		12
		REVISION BY _____ DATE _____				FILE NO:18101-2C-2370		

TYPICAL SHOULDER CLOSURE



SOURCE: 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

TYPICAL LANE CLOSURE



SOURCE: 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

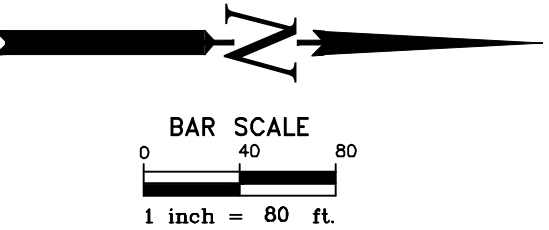
TYPICAL SHOULDER CLOSURE

1. TRAFFIC CONTROL SHALL BE INSTALLED IN STAGES CORRESPONDING TO WORK ZONES, AND SHALL BE LIMITED TO AREAS WHERE WORK IS ACTIVELY TAKING PLACE TO MINIMIZE DISRUPTION TO MOTORISTS.
2. ALL TRAFFIC CONTROL SIGNAGE SHALL HAVE DIAMOND GRADE SHEETING PER WISDOT STANDARDS.
3. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AND COUNTY PERMIT TO ENGINEER FOR REVIEW AND APPROVAL. A MINIMUM OF TWO WEEKS PRIOR TO CONSTRUCTION.
4. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
5. USE FLAGGERS AS NECESSARY TO DIRECT TRAFFIC AT WORK ZONES.
6. COMPLY WITH ALL CITY OF OAK CREEK, MILWAUKEE COUNTY AND WISCONSIN DEPARTMENT OF TRANSPORTATION PERMIT CONDITIONS FOR TRAFFIC CONTROL.

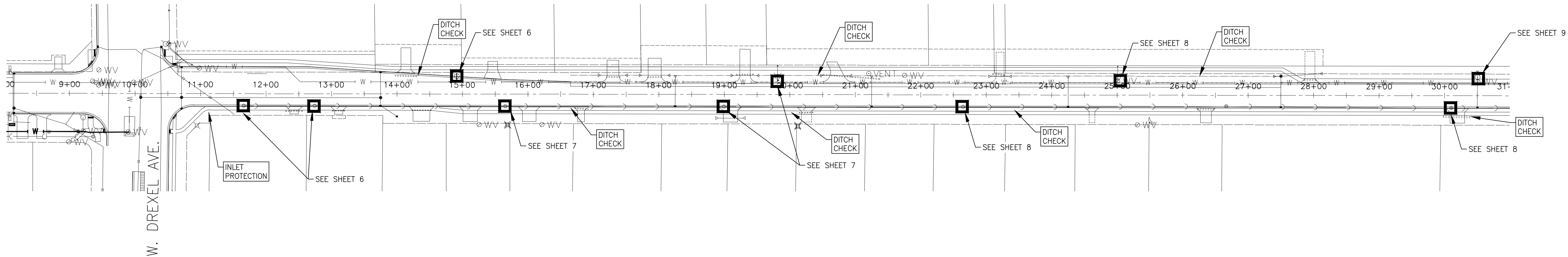
This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting.

Utility Engineer Date

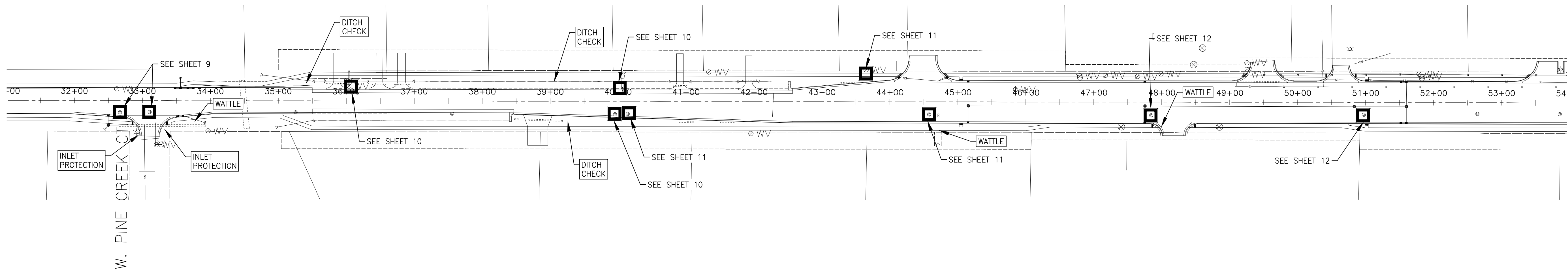
SA. TB		CITY OF OAK CREEK, WISCONSIN			APPROVED BY	
ST. TB					UTILITY ENGINEER DATE	
W. TB		TRAFFIC CONTROL PLAN			APPROVED BY	
G. TB					DESIGNED BY DATE DRAWN BY DATE CHECKED BY DATE	
E. TB					J.S. 12/13/2017 T.B. 12/13/2017 J.S. 12/13/2017	
T. TB					Michael C. Smith 1/18/18	
I. TB					CITY ENGINEER DATE	
TS. TB	SCALE SHEET					
PP. TB	PLAN HOR. N/A 4					
	PROFILE N/A OF					
	HOR. N/A 12					
	VER. N/A					
	REVISION BY DATE					
	FILE NO:18101-4C-2372					



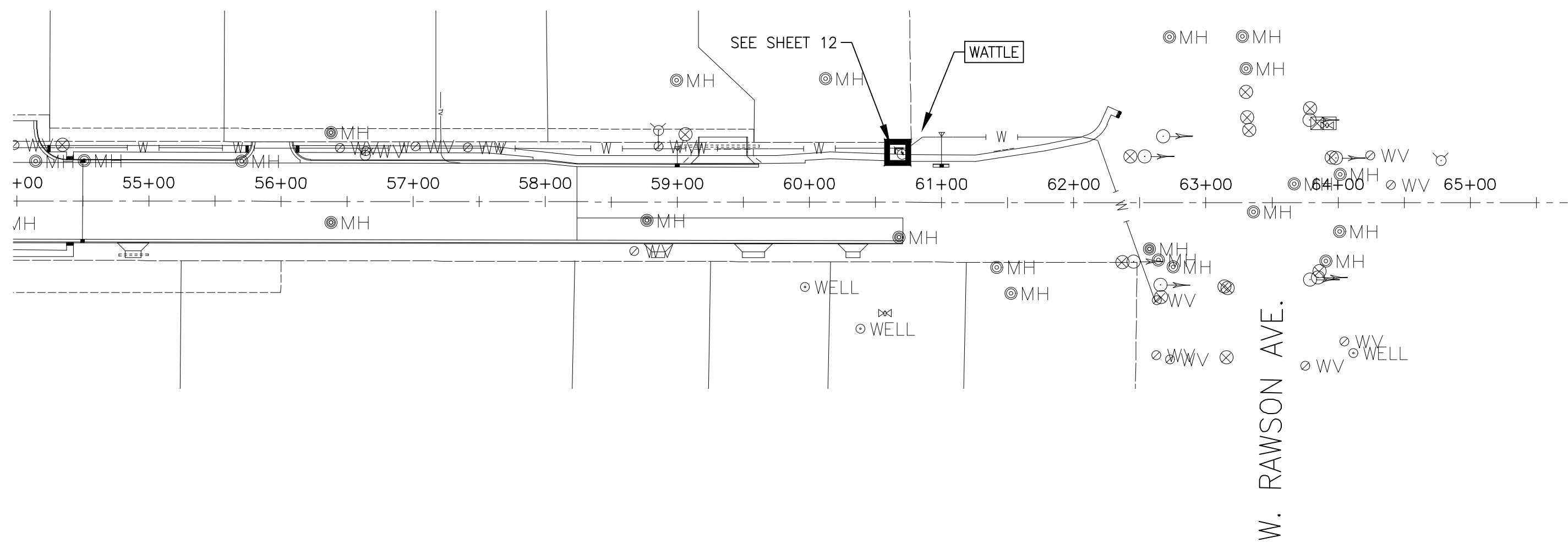
SOUTH 13TH STREET



SOUTH 13TH STREET



SOUTH 13TH STREET



This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting

1-18-2018

Utility Engineer Date

SA.TB
ST.TB
W.TB
G.TB
E.TB
T.TB
I.TB
TS.TB
PP.TB



Gary A. Vogel

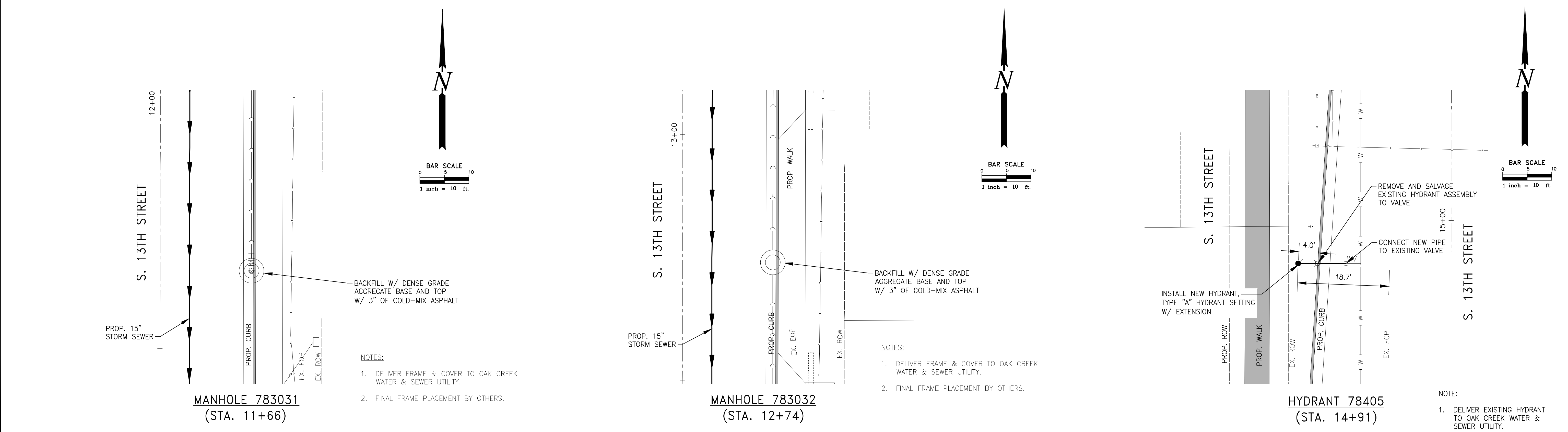
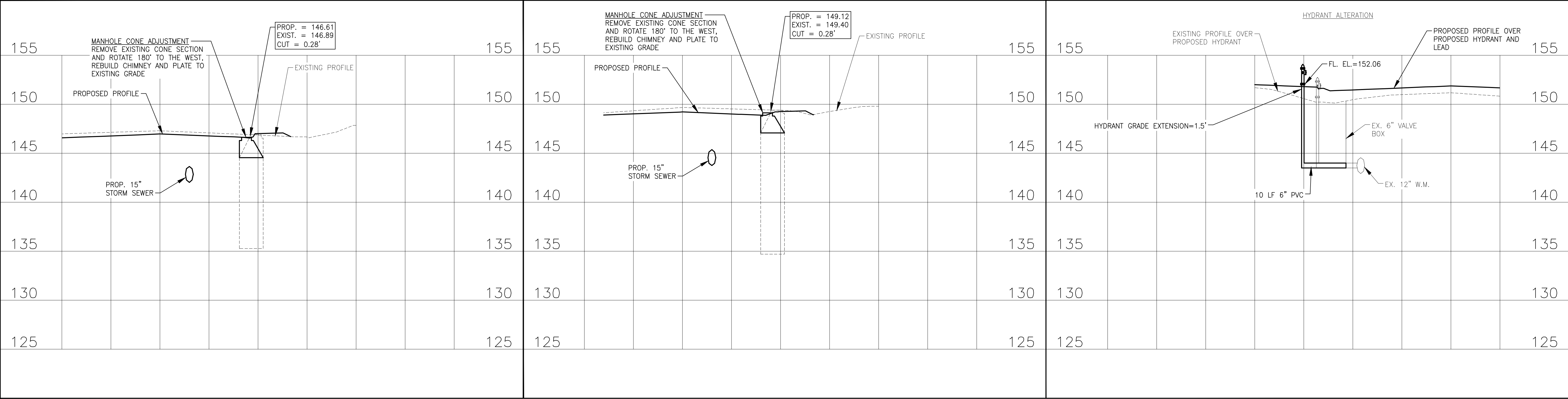
REVISION BY DATE

CITY OF OAK CREEK, WISCONSIN

DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE
J.S.	12/13/2017	T.B.	12/13/2017	J.S.	12/13/2017

GENERAL LAYOUT AND EROSION CONTROL
IN: SOUTH 13TH STREET
FR: 80' S. OF W. DREXEL AVE.
TO: 236' S. OF W. RAWSON AVE.

APPROVED BY	
UTILITY ENGINEER	DATE
APPROVED BY	
<i>Michael C. Smith</i>	1/18/18
CITY ENGINEER	DATE
SCALE	SHEET
PLAN	
HOR. 1"=80'	5
PROFILE	OF
HOR.	
VER.	12
FILE NO:18101-5C-2373	



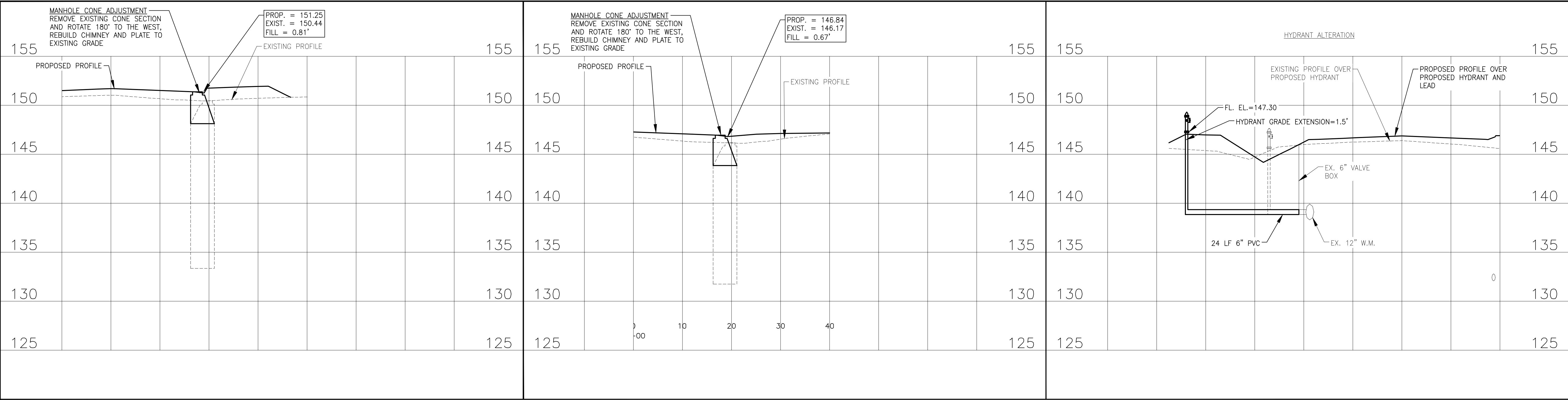
BID ITEM NOS.	ESTIMATE OF QUANTITIES	
1	MANHOLE CONE ADJUSTMENT	2 EA.
3	HYDRANT ALTERATION	1 EA.
5	HYDRANT EXTENSION	1.5 V.F.

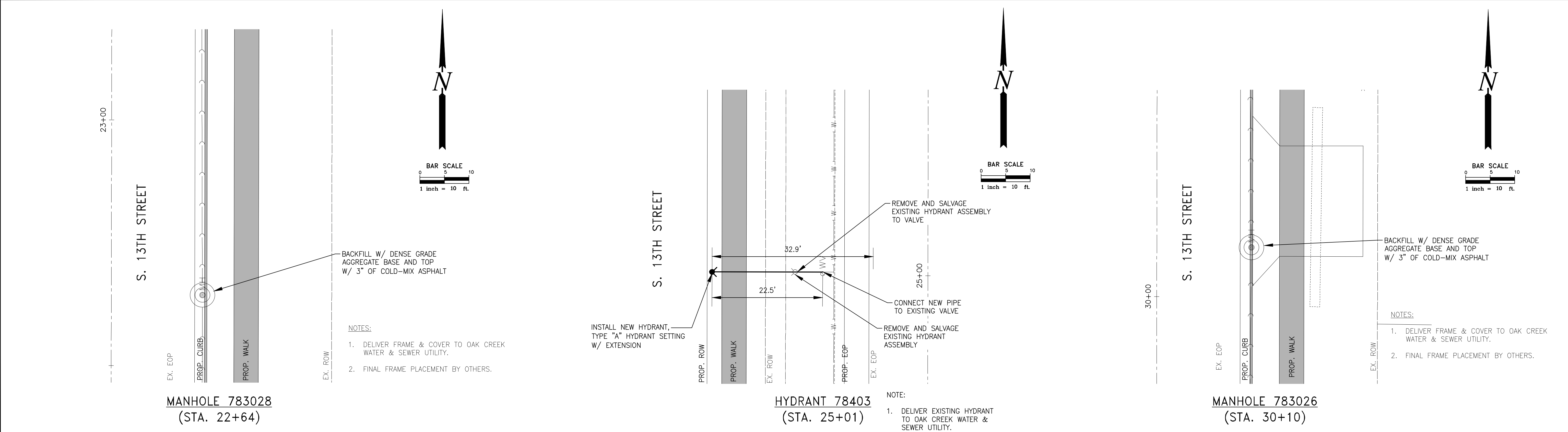
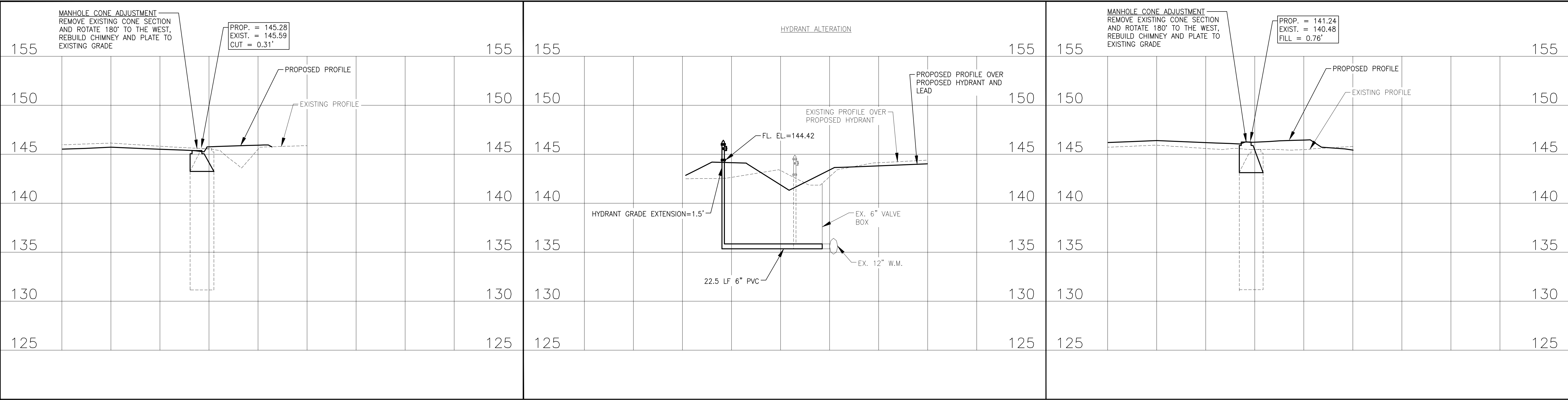
This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting.

Utility Engineer Date

SA.TB	
ST.TB	
W.TB	
G.TB	
E.TB	
T.TB	
I.TB	
TS.TB	
PP.TB	
REVISION BY	DATE

CITY OF OAK CREEK, WISCONSIN						APPROVED BY			
DESIGNED BY		DATE		DRAWN BY		DATE			
J.S.		12/13/2017		T.B.		12/13/2017			
UTILITY MODIFICATIONS IN: SOUTH 13TH STREET FR: 80' S. OF DREXEL AVE. TO: 274' N. OF DREXEL AVE.						APPROVED BY			
						Michael CS		1/18/18	
						CITY ENGINEER		DATE	
						SCALE		SHEET	
						PLAN		6	
						HOR. 1"=10'			
						PROFILE			
						HOR. 1"=10'			
						VER. 1"=5'			
						FILE NO:18101-6C-2374			





ESTIMATE OF QUANTITIES		
BID ITEM NOS.		
1	MANHOLE CONE ADJUSTMENT	2 EA.
3	HYDRANT ALTERATION	1 EA.
5	HYDRANT EXTENSION	1.5 V.F.

This is to certify that this plan was
approved by the Water Works and Sewer
Utility Commission of Oak Creek at a
regular meeting.

Utility Engineer

Date

SA. TB
ST. TB
W. TB
G. TB
E. TB
T. TB
I. TB
TS. TB
PP. TB



REVISION BY DATE

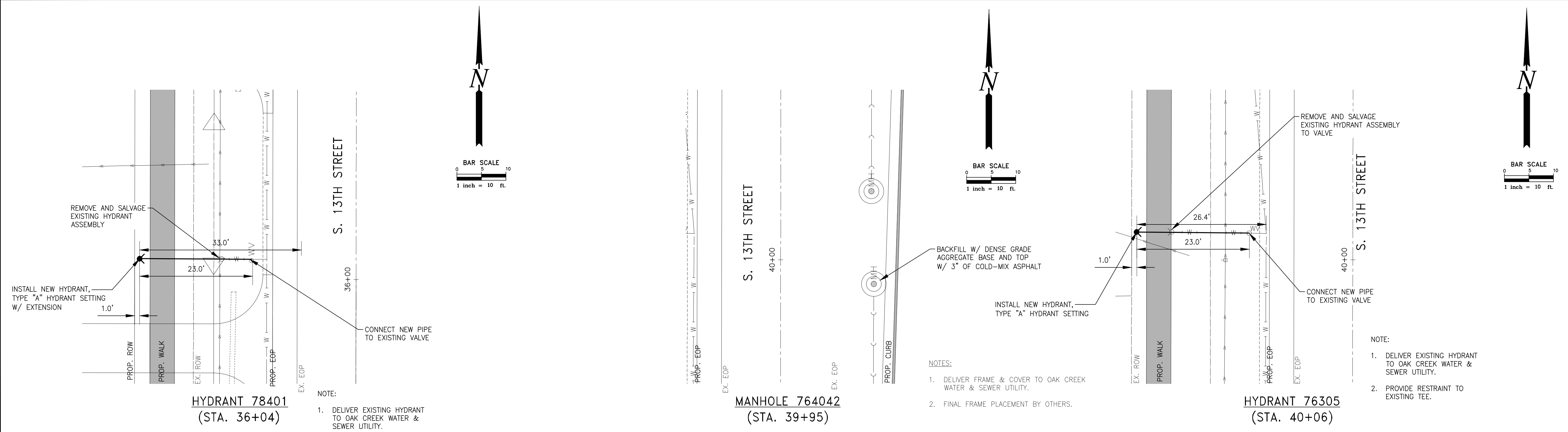
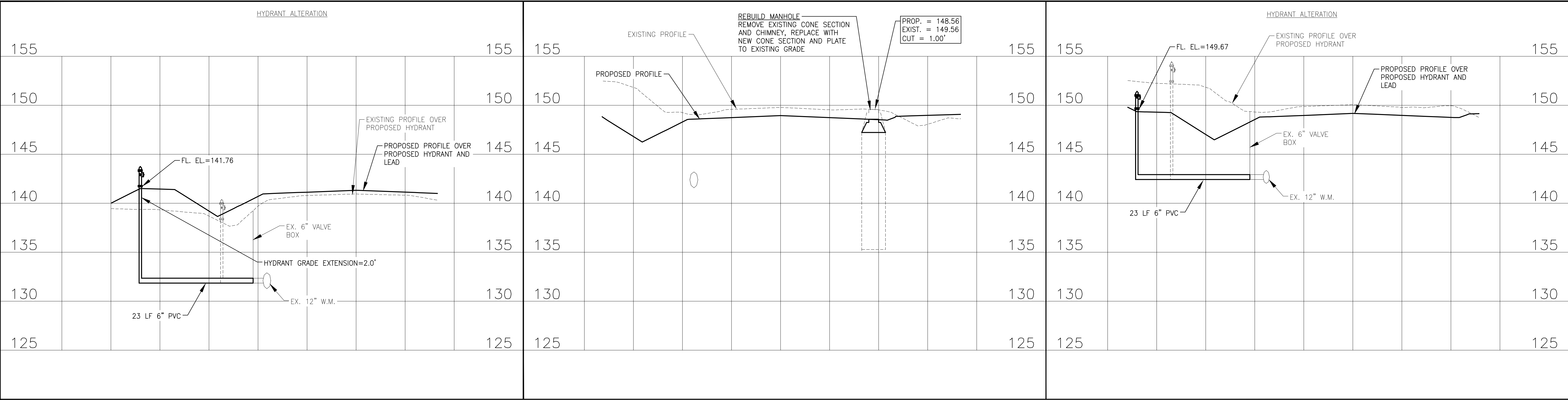
CITY OF OAK CREEK, WISCONSIN

DESIGNED BY DATE DRAWN BY DATE CHECKED BY DATE
J.S. 12/13/2017 T.B. 12/13/2017 J.S. 12/13/2017

UTILITY MODIFICATIONS
IN: SOUTH 13TH STREET

FR: 983' N. OF DREXEL AVE.
TO: 1500' N. OF DREXEL AVE.

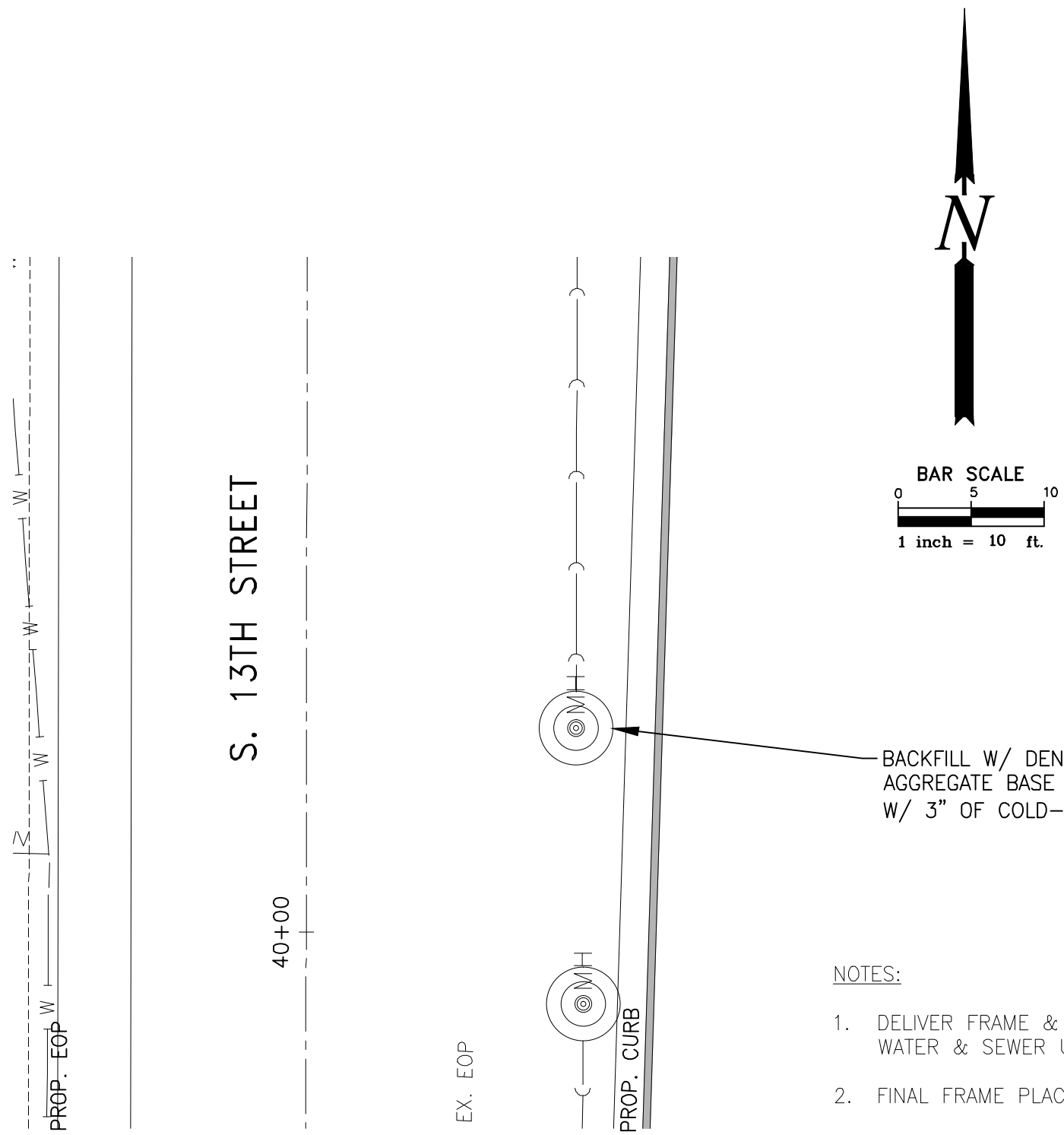
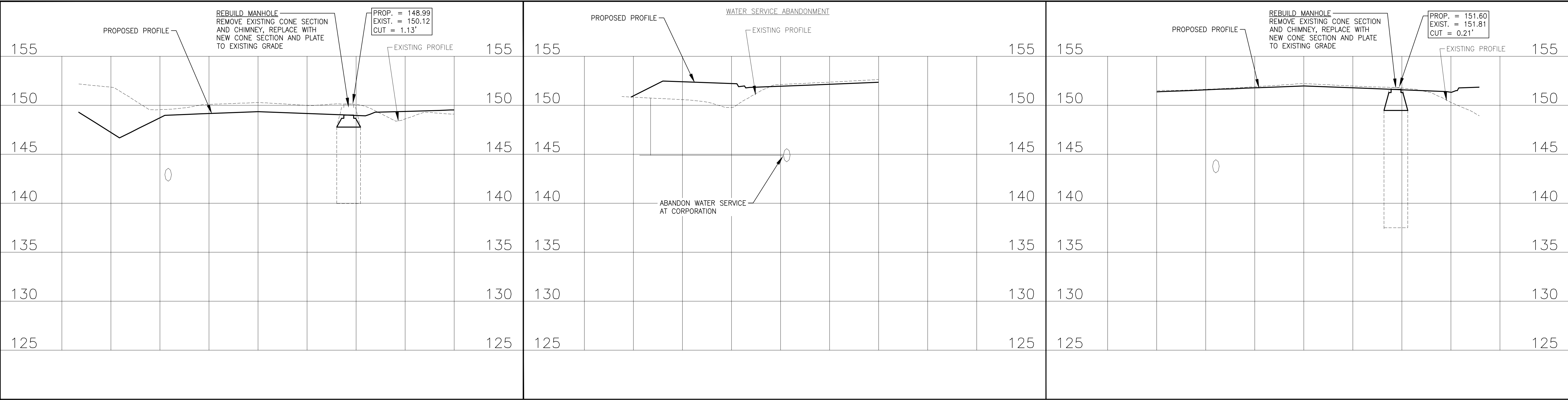
APPROVED BY	
UTILITY ENGINEER	DATE
APPROVED BY	
Michael C. Smith	1/18/18
CITY ENGINEER	DATE
SCALE	SHEET
PLAN HOR. 1"=10'	8
PROFILE HOR. 1"=10' VER. 1"=5'	OF 12
FILE NO:18101-8C-2376	



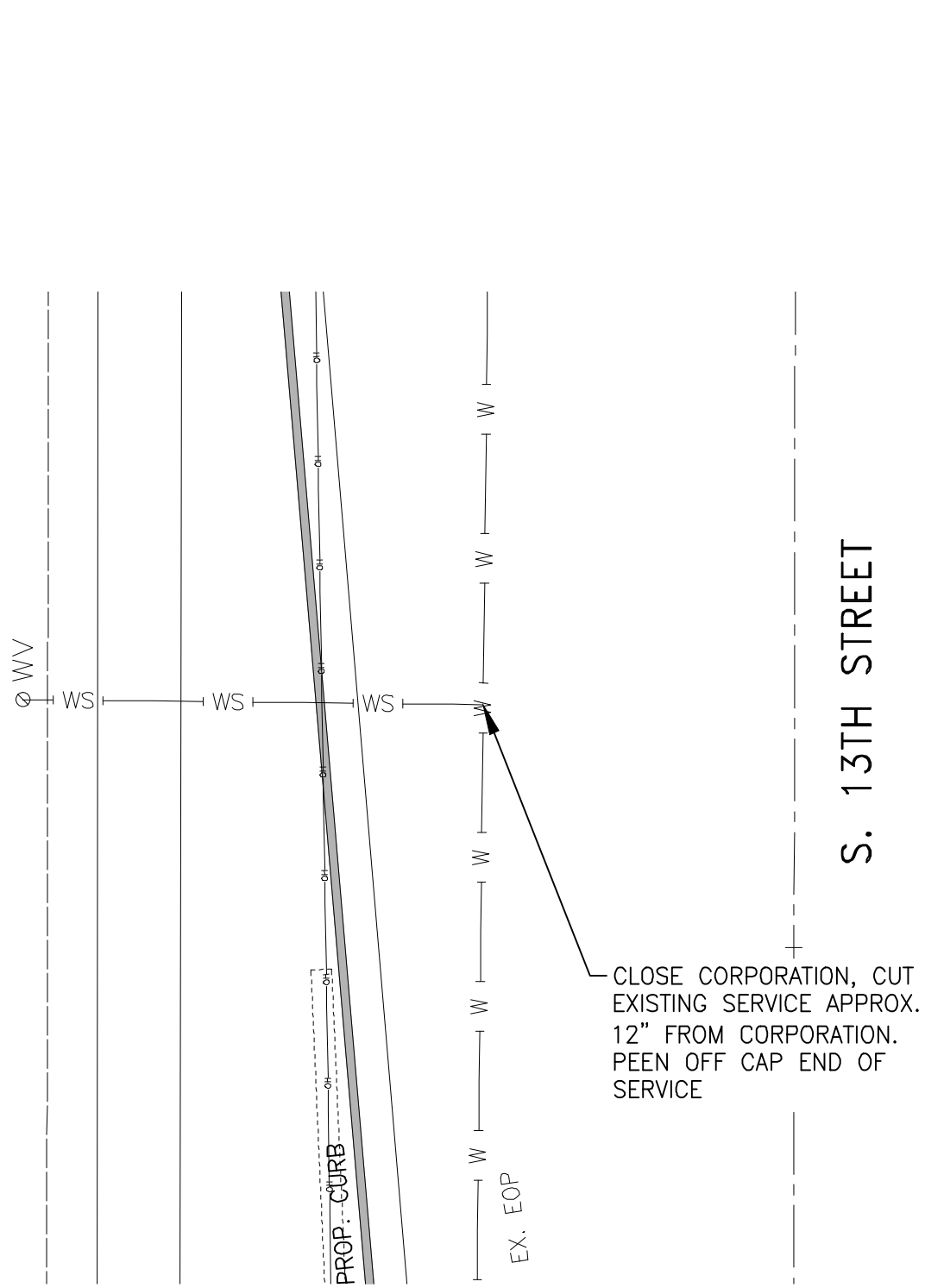
ESTIMATE OF QUANTITIES		
BID ITEM NOS.		
2	REBUILD MANHOLE	1 EA.
3	HYDRANT ALTERATION	2 EA.
5	HYDRANT EXTENSION	2.0 V.F.

This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting. *[Signature]* 1-16-2018
Utility Engineer Date

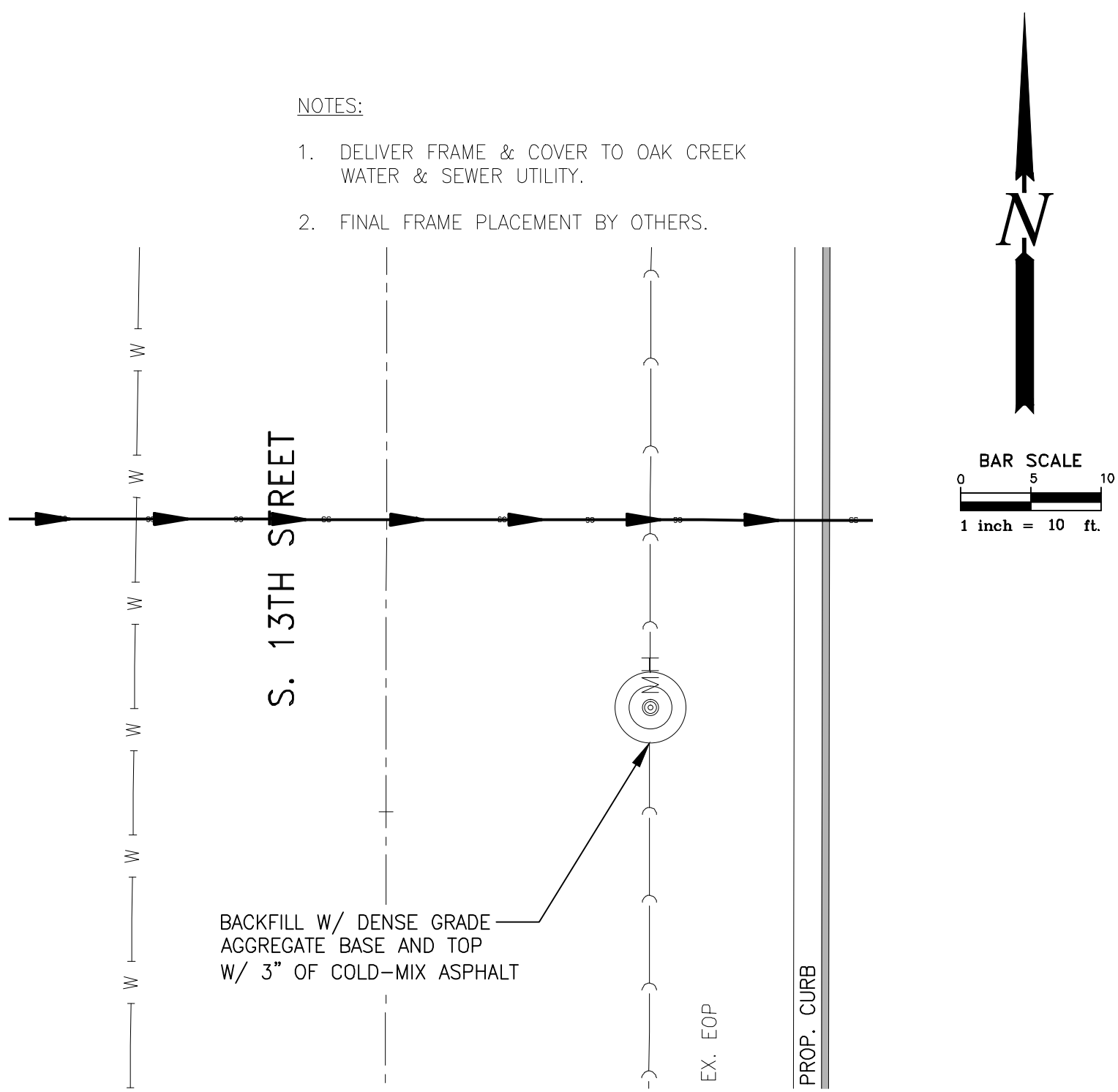
SA.TB ST.TB W.TB G.TB E.TB T.TB I.TB TS.TB PP.TB	 <i>[Signature]</i>	CITY OF OAK CREEK, WISCONSIN DESIGNED BY J.S. DATE 12/13/2017 DRAWN BY T.B. DATE 12/13/2017 CHECKED BY J.S. DATE 12/13/2017 UTILITY MODIFICATIONS IN: SOUTH 13TH STREET FR: 2719' S. OF RAWSON AVE. TO: 2196' S. OF RAWSON AVE.	APPROVED BY UTILITY ENGINEER DATE APPROVED BY <i>Michael C. Smith</i> 1/18/18 CITY ENGINEER DATE SCALE SHEET PLAN HOR. 1"=10' 10 PROFILE HOR. 1"=10' OF VER. 1"=5' 12 FILE NO:18101-10C-2378
REVISION BY DATE			



MANHOLE 764039
(STA. 40+14)



1" LATERAL – NOT IN SERVICE
(STA. 43+65)



MANHOLE 764038
(STA. 44+57)

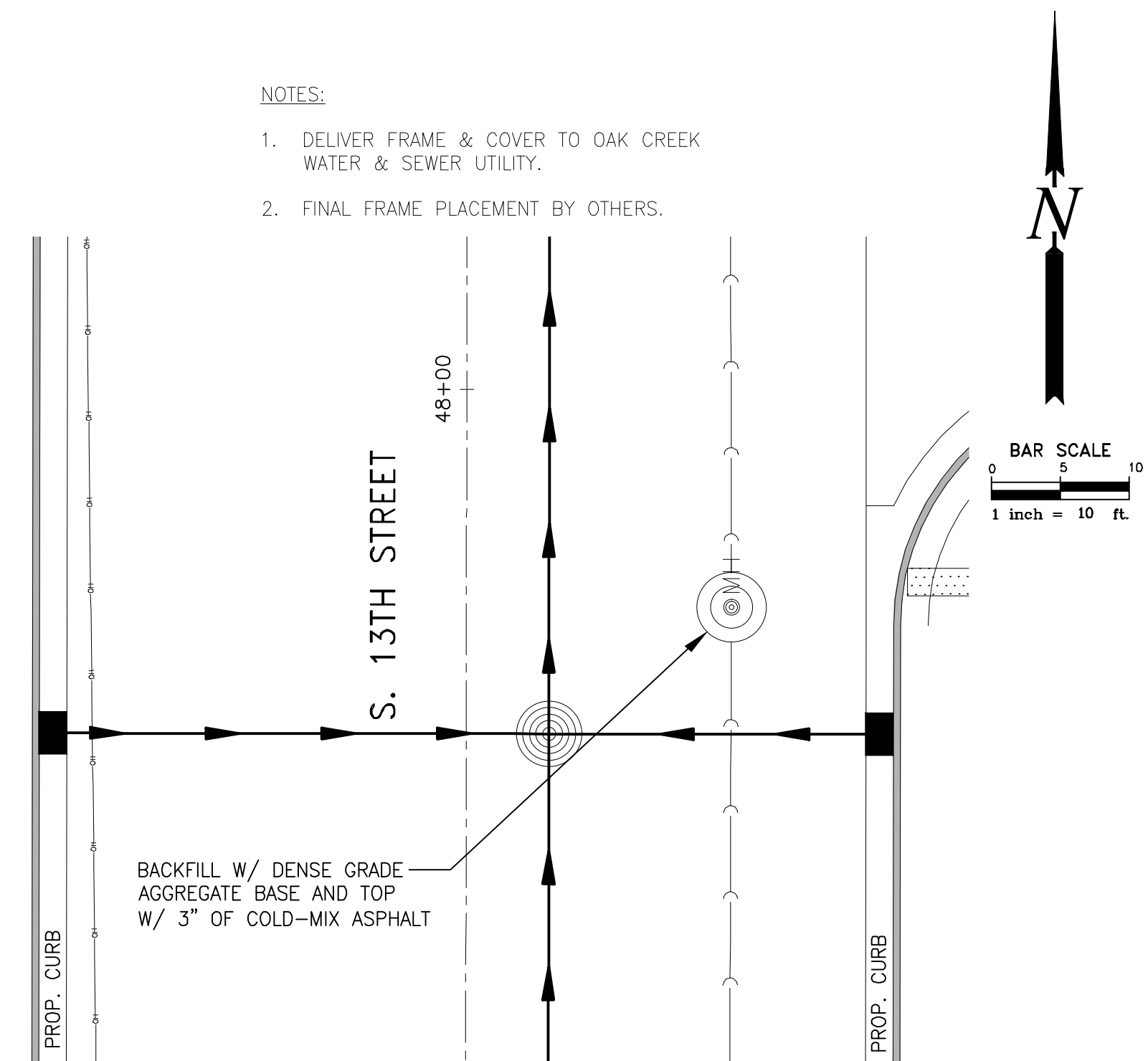
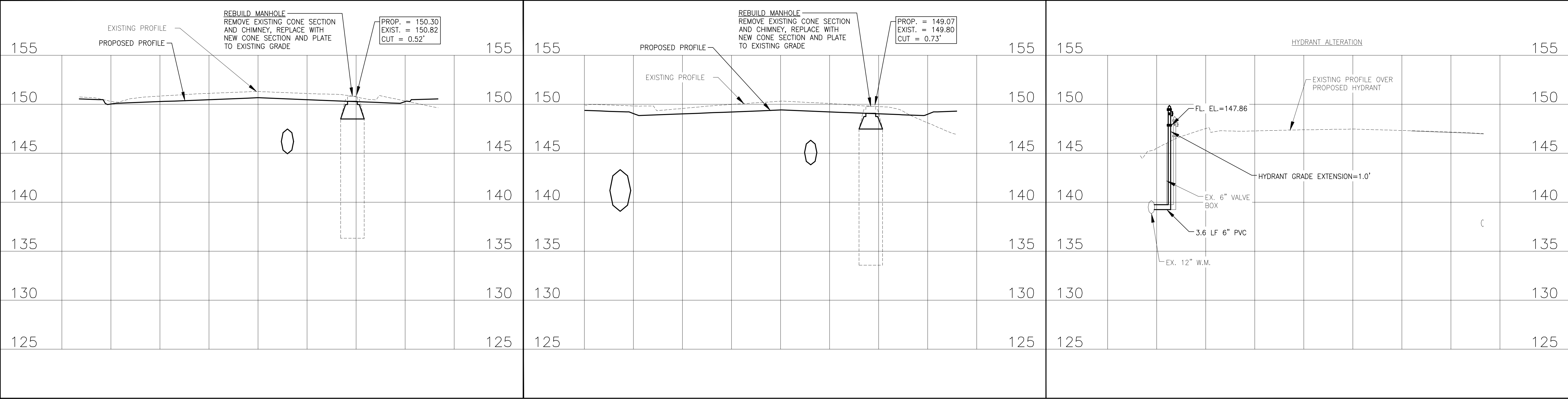
ESTIMATE OF QUANTITIES		
BID ITEM NOS.		
2	REBUILD MANHOLE	2 EA.
6	WATER SERVICE ABANDONMENT	1 EA.

This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting. *[Signature]* 1-16-2018
Utility Engineer Date

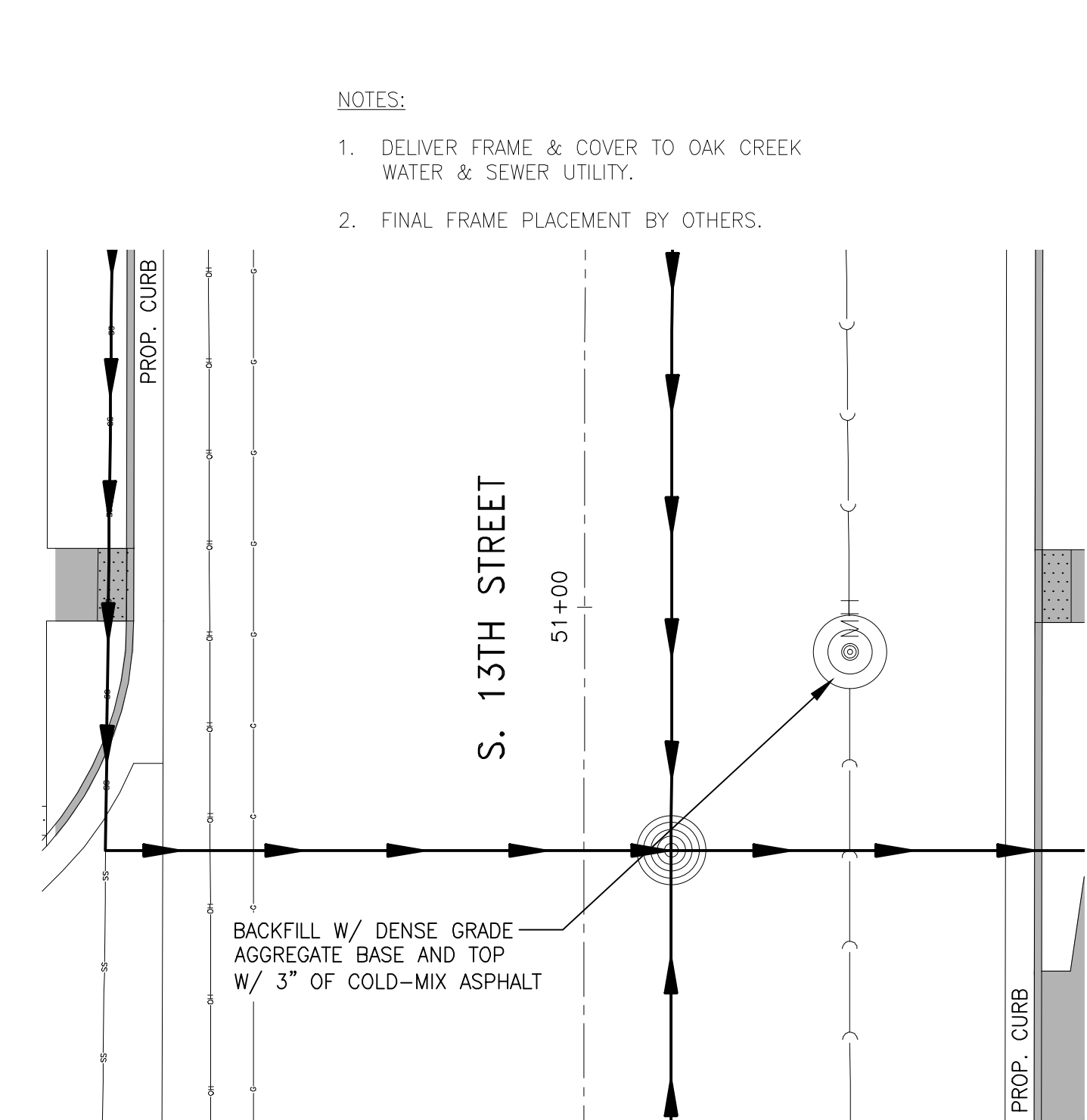
SA. TB	
ST. TB	
W. TB	
G. TB	
E. TB	
T. TB	
I. TB	
TS. TB	
PP. TB	
REVISION BY	DATE

CITY OF OAK CREEK, WISCONSIN				
DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY DATE
J.S.	12/13/2017	T.B.	12/13/2017	J.S. 12/13/2017
UTILITY MODIFICATIONS IN: SOUTH 13TH STREET FR: 1959' S. OF RAWSON AVE. TO: 1139' S. OF RAWSON AVE.				

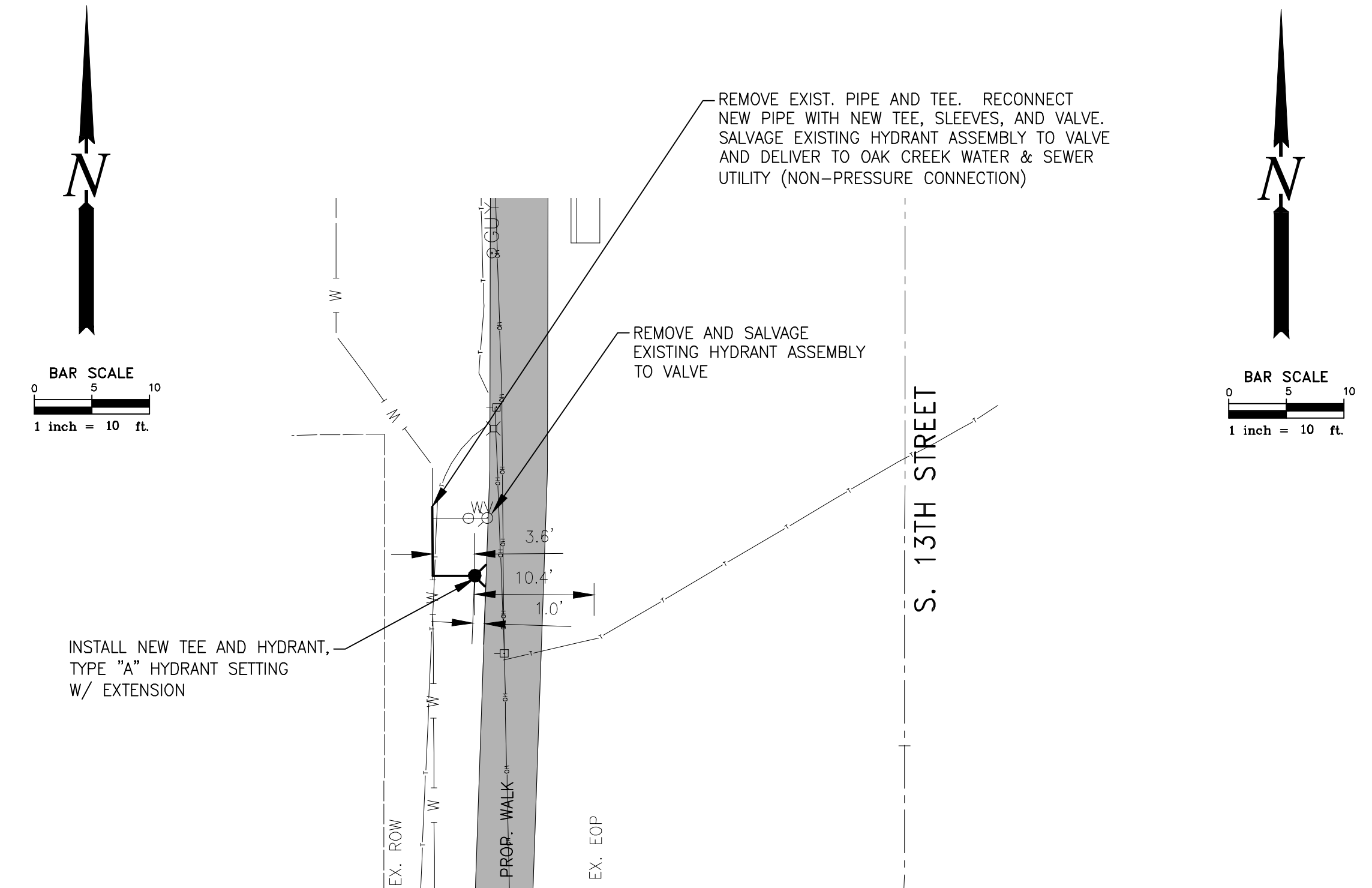
APPROVED BY	
UTILITY ENGINEER	DATE
APPROVED BY	
<i>Michael C. Smith</i>	1/16/18
CITY ENGINEER	DATE
SCALE	SHEET
PLAN HOR. 1"=10'	11
PROFILE HOR. 1"=10'	OF
VER. 1"=5'	12
FILE NO:18101-11C-2379	



MANHOLE 764037
(STA. 47+84)



MANHOLE 764036
(STA. 50+97)



HYDRANT 76301
(STA. 60+65)

ESTIMATE OF QUANTITIES		
BID ITEM NOS.		
2	REBUILD MANHOLE	2 EA.
4	RECONNECT HYDRANT	1 EA.
5	HYDRANT EXTENSION	1.0 V.F.

This is to certify that this plan was approved by the Water Works and Sewer Utility Commission of Oak Creek at a regular meeting. *[Signature]* 1-16-2018
Utility Engineer Date

SA. TB
ST. TB
W. TB
G. TB
E. TB
T. TB
I. TB
TS. TB
PP. TB

[Signature]

CITY OF OAK CREEK, WISCONSIN

DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE
J.S.	12/13/2017	T.B.	12/13/2017	J.S.	12/13/2017

UTILITY MODIFICATIONS
IN: SOUTH 13TH STREET
FR: 659' S. OF RAWSON AVE.
TO: 236' S. OF RAWSON AVE.

APPROVED BY	
UTILITY ENGINEER	DATE
APPROVED BY	
<i>[Signature]</i>	1/18/18
CITY ENGINEER	DATE
SCALE	SHEET
PLAN HOR. 1"=10'	12
PROFILE HOR. 1"=10'	OF
VER. 1"=5'	12
FILE NO:18101-12C-2380	