

CITY OF BERLIN, WISCONSIN

2021 STREET AND UTILITY IMPROVEMENTS

UTILITIES

STREET AND STORM SEWER
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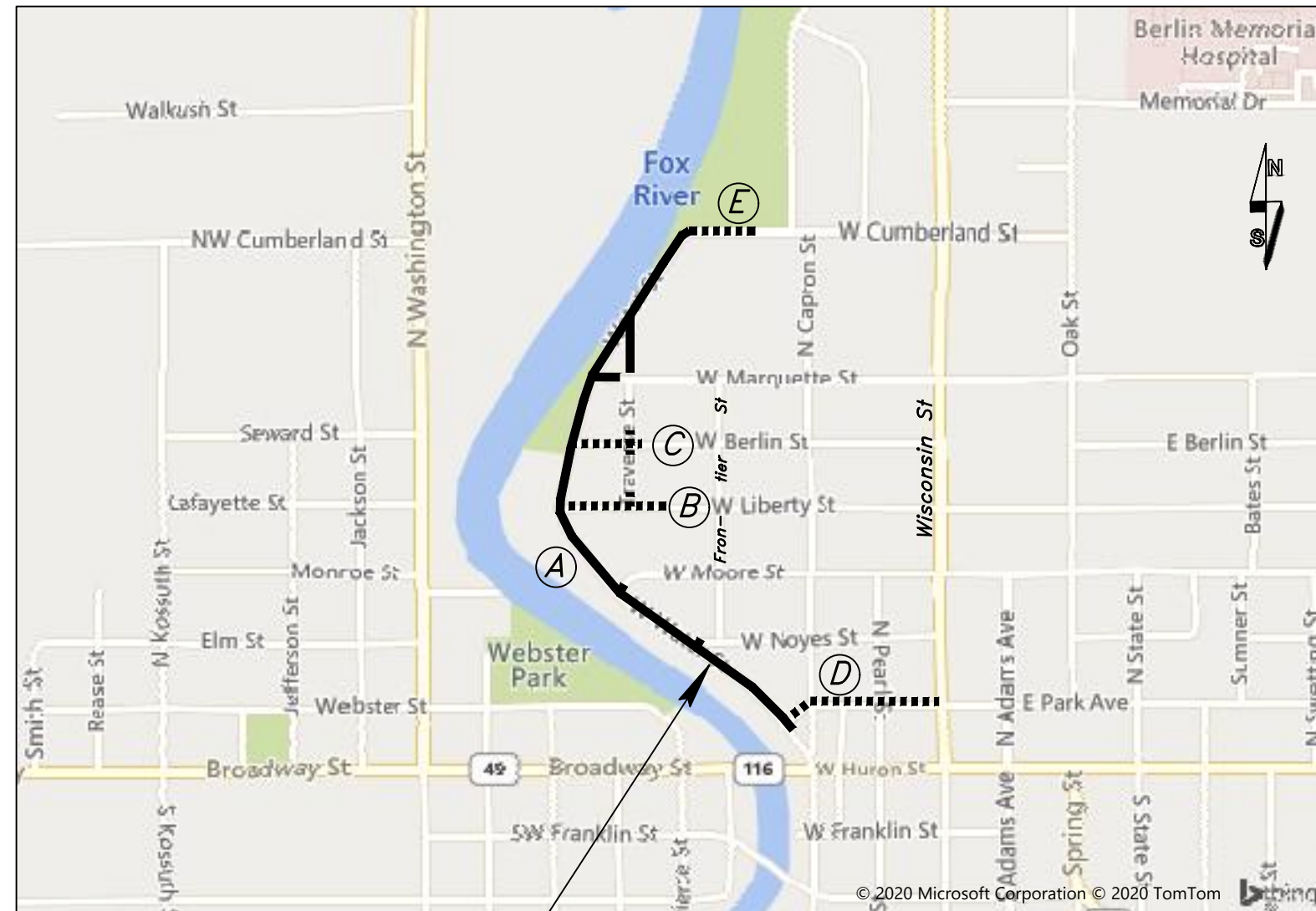
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920-263-0062 OFFICE
920-304-6797 CELL
CONTACT: NICK FRASE
EMAIL: NICK.FRASE@CHARTER.COM



PROJECT VICINITY MAP



PROJECT LOCATION

STREETS:

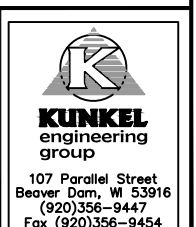
- A WATER STREET
(PARK AVE. TO CUMBERLAND)
- B LIBERTY STREET
(WATER ST. TO MID-BLOCK OF TRAVERSE ST. & FRONTIER ST.)
- C BERLIN ST.
(WATER ST. TO TRAVERSE ST.)
- D PARK AVENUE
(WATER ST. TO WISCONSIN ST.)
- E CUMBERLAND STREET
(WATER ST. TO RIVER DR.)

INDEX TO SHEETS

- 1 COVER & LOCATION MAP
- 2 STANDARD SYMBOLS AND ABBREVIATIONS
- 3-10 TYPICAL CROSS SECTIONS
- 11-16 WATER STREET UTILITIES PLAN AND PROFILE
- 17 WATER STREET WATERMAIN PLAN AND PROFILE
- 18-19 PARK AVENUE UTILITIES PLAN AND PROFILE
- 20 LIBERTY STREET UTILITIES PLAN AND PROFILE
- 21 BERLIN STREET UTILITIES PLAN AND PROFILE
- 22 UTILITY DETAILS
- 23-28 WATER STREET PAVING PLAN AND PROFILE
- 29-30 PARK AVENUE PAVING PLAN AND PROFILE
- 31-37 WATER STREET CROSS SECTIONS
- 38-39 PARK AVENUE CROSS SECTIONS
- 40 LIBERTY STREET PAVING PLAN AND PROFILE
- 41 BERLIN STREET PAVING PLAN AND PROFILE
- 42 BERLIN STREET CROSS SECTIONS
- 43 CUMBERLAND PAVING PLAN
- 44 PAVING DETAILS
- 45 OUTFALLS EROSION CONTROL PLAN
- 46 EROSION CONTROL PLAN DETAILS



PROJECT #
KU20.1061.00



SHEET 1 OF 46

PROJECT PLANS REDUCED 1/2 SIZE

STANDARD SYMBOLS

BCM	BLOCK CORNER MONUMENT	MH	MANHOLE
IP	IRON PIPE	WV	WATER VALVE
RB	REBAR	AV	AUXILIARY VALVE
CP	CONTROL POINT	WM	WATERMAIN
R/W	RIGHT OF WAY	PP	POWER POLE/UTILITY POLE
PL	PROPERTY LINE	LP	LIGHT POLE
PR	PROPOSED	STM	STORM SEWER
EX	EXISTING	INL	STORM INLET
TBR	TO BE REMOVED	SAN	SANITARY SEWER
TBA	TO BE ABANDONED	FM	FORCEMAIN
CONN	CONNECT OR CONNECTION	STA	STATION
		CL	CENTERLINE
CSW	CONCRETE SIDEWALK	T/C	TOP OF CURB
DRWY	DRIVEWAY	B/W	BACK OF WALK
CONC	CONCRETE	ER	END OF RADIUS
ASPH	ASPHALT	PC	POINT OF CURVATURE
GRAV	GRAVEL	PI	POINT OF INTERSECTION
PAYT	PAVEMENT	F/L	FLOW LINE
DWF	DETECTABLE WARNING FIELD	GB	GRADE BREAK
		TOP	TOP OF PIPE
NTS	NOT TO SCALE	OSD	OUTSIDE DROP CONNECTION

GENERAL NOTES

THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS. SEE PROFILES FOR INTERSECTION GRADES IN CURBED SECTIONS. GRADES FOR OTHER INTERSECTIONS ARE CALLED OUT ON THE PLANS

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED. ALL OTHER RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

CURB AND GUTTER PLAN GRADES ARE TO THE TOP OF CURB LINE UNLESS OTHERWISE NOTED.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN. CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2 INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

SAWCUTS, AS SHOWN ON PLANS, ARE AT SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

THE CLEAR ZONE IS 2 FEET BEHIND THE FACE OF THE CURB.
SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE EXACT LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.

EXISTING DRAINAGE FACILITIES WILL REMAIN FUNCTIONAL DURING EXCAVATION OPERATIONS.

THE EXACT LOCATION AND LIMITS OF PRIVATE AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EXISTING DRIVEWAYS ARE TO BE REPLACED IN KIND, UNLESS OTHERWISE NOTED.

ASPHALTIC COMMERCIAL AND PRIVATE ENTRANCES SHALL BE SAWCUT AS REQUIRED TO PROVIDE A CLEAN BUTT JOINT TO NEW WORK.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE. ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 120 LB/SY/IN.

WHEREVER ASPHALTIC CONCRETE PAVEMENT ABUTS OR OVERLAPS ONTO PORTLAND CEMENT CONCRETE, THE EXISTING PAVEMENT SHALL RECEIVE A TACK COAT OF RS-1 OR RS-2 EMULSIFIED ASPHALT.APPLICATION RATE FOR TACK COAT SHALL BE 0.05 GALLONS PER SQUARE YARD.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE EROSION CONTROL DEVICES AS SHOWN ON THE PAVING PLAN SHEETS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR WILL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT THE PEDESTRIAN ACCESS AS LAID OUT IN THE "TRAFFIC CONTROL – PEDESTRIAN ACCESS" SECTION OF THE PLAN.

REMOVAL OF EROSION CONTROL DEVICES SHALL BE INCIDENTAL TO RESPECTIVE BID ITEMS.

STANDARD SYMBOLS

	BLOCK CORNER MONUMENT		LIGHT POLE		UTILITY CROSS		INLET PROTECTION
	PROPERTY CORNER MONUMENT		UTILITY POLE		UTILITY TEE		TRACKING PAD
	CONTROL POINT		PEDESTAL		FLOW DIRECTION		DITCH CHECK
	BUSH		GUY WIRE		WATER UTILITY		SILT FENCE
	DECIDUOUS TREE (TRUNK DIAMETER INDICATED)		DETECTABLE WARNING FIELD		SANITARY SEWER		TURBIDITY BARRIER
	CONIFEROUS TREE (TRUNK DIAMETER INDICATED)		STORM INLET		STORM SEWER		RIPRAP
	BLOCK CORNER MONUMENT		YARD INLET		WATER SERVICE		
	TREE/BUSH TO BE REMOVED		MANHOLE (STORM, SANITARY OR WATER)		GAS UTILITY		
			FIRE HYDRANT		GAS SERVICE		
			WATER VALVE		UNDERGROUND TELEPHONE/CABLE UTILITY		
					UNDERGROUND ELECTRIC UTILITY		
					UNDERGROUND FIBER OPTIC UTILITY		

NOT TO SCALE

REDUCED 1/2

NOT TO SCALE

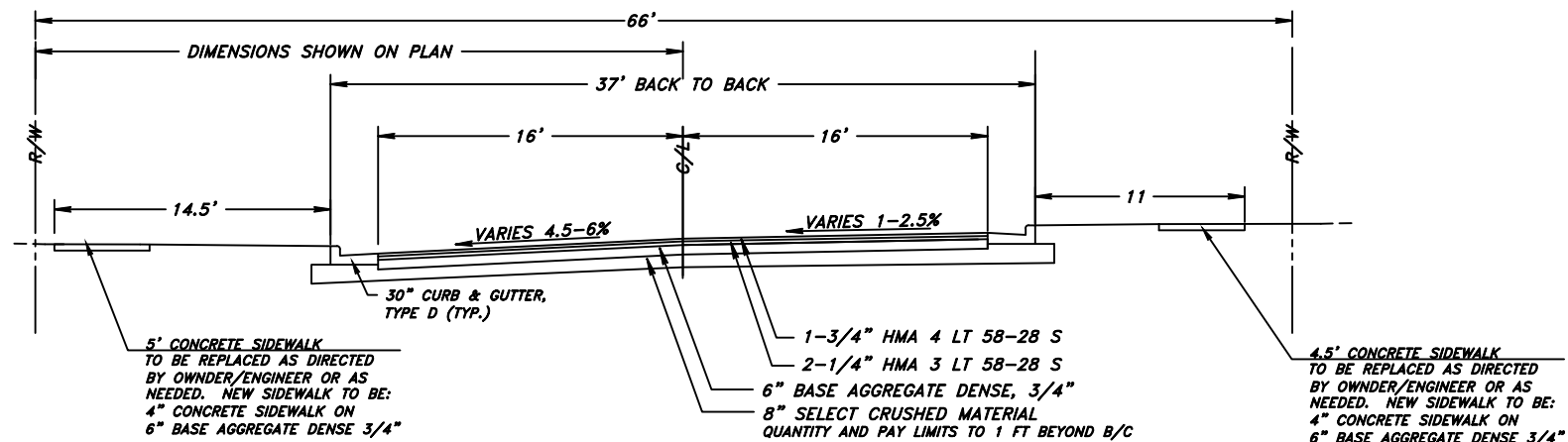
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CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
SYMBOLS AND ABBREVIATIONS

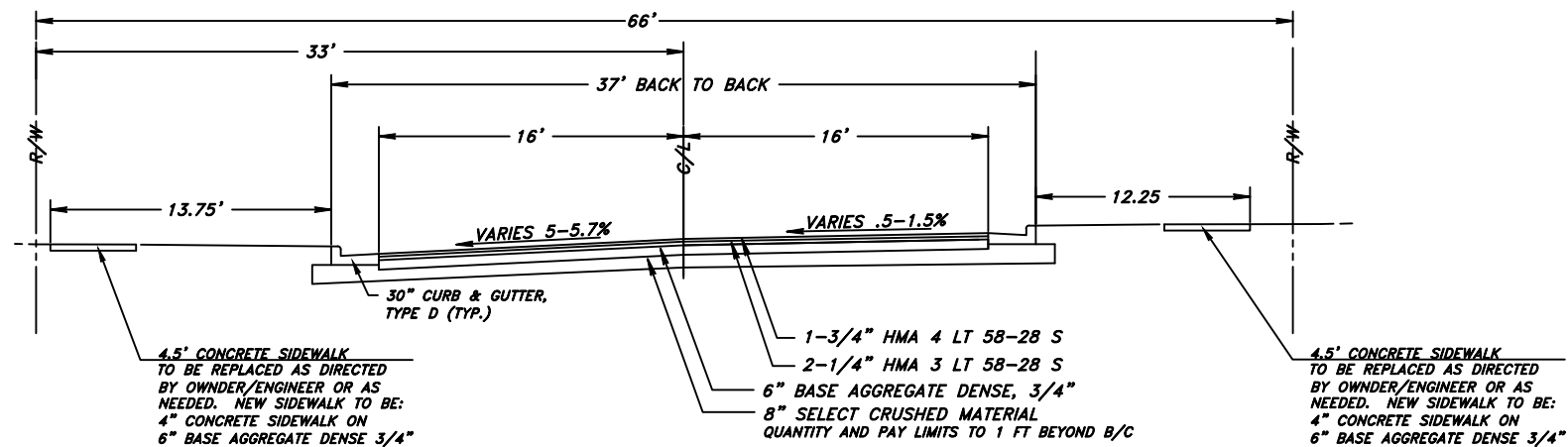


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SHEET 2 OF 46



WATER STREET
TYPICAL CROSS SECTION
STATION 11+50 to 12+50



WATER STREET
TYPICAL CROSS SECTION
STATION 12+50 to 13+50

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

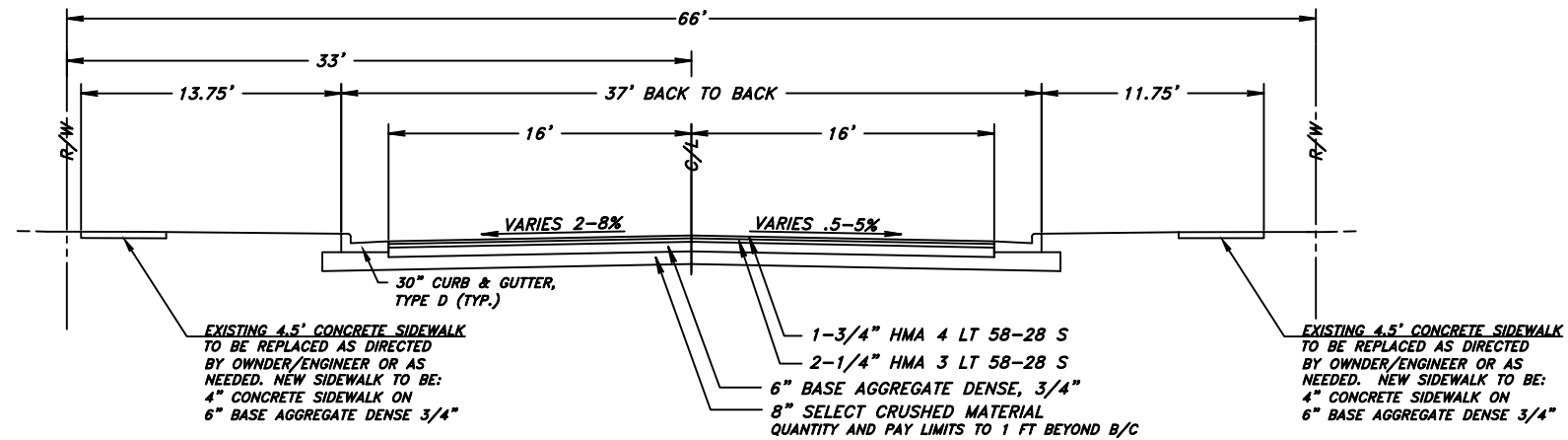
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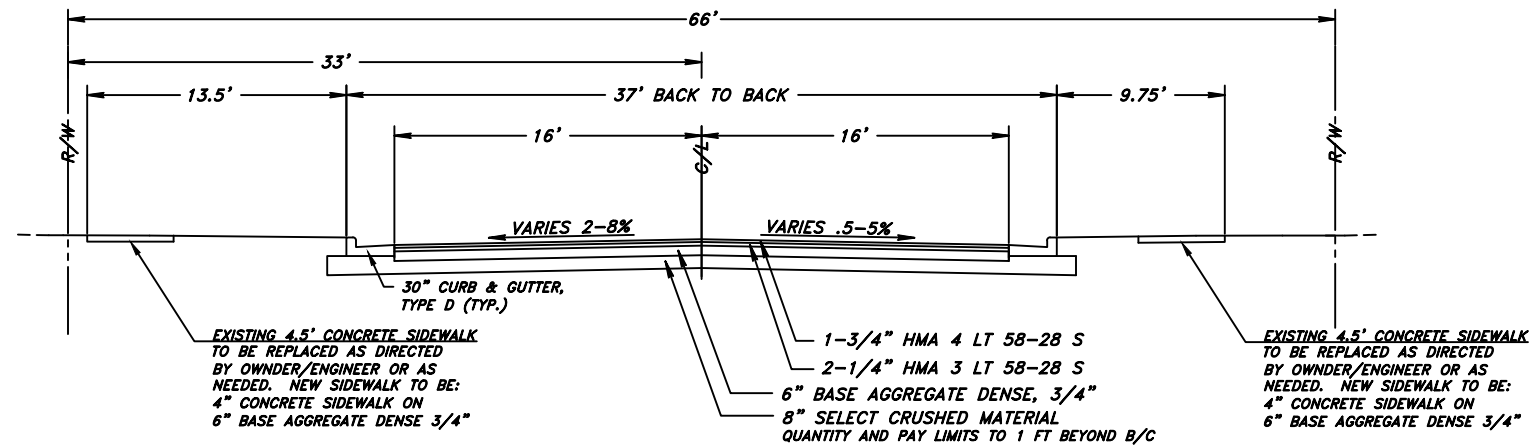
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IMPROVEMENTS
TYPICAL CROSS SECTIONS



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WATER STREET
TYPICAL CROSS SECTION
STATION 15+50 to 21+00



WATER STREET
TYPICAL CROSS SECTION
STATION 23+50 to 25+50

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

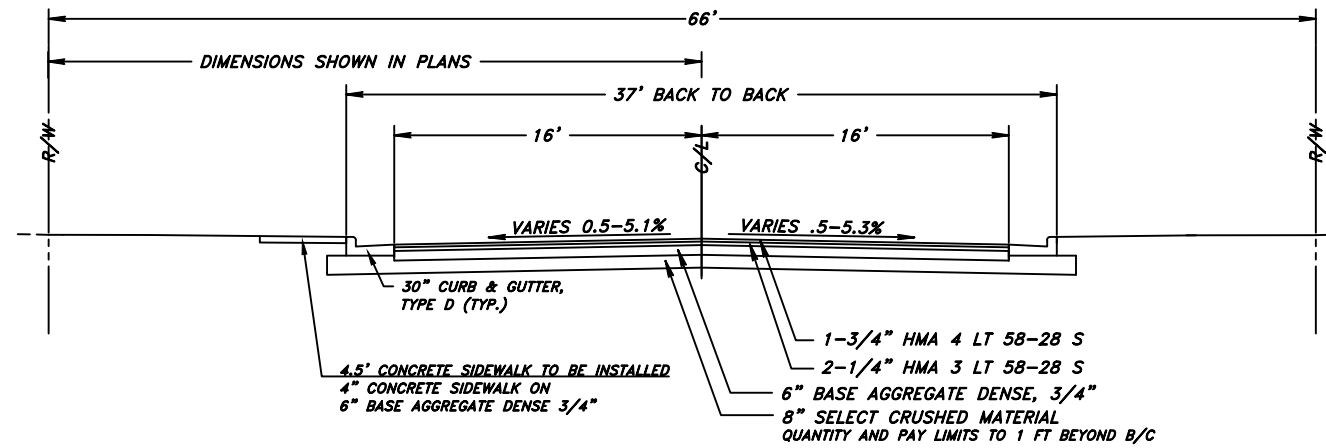
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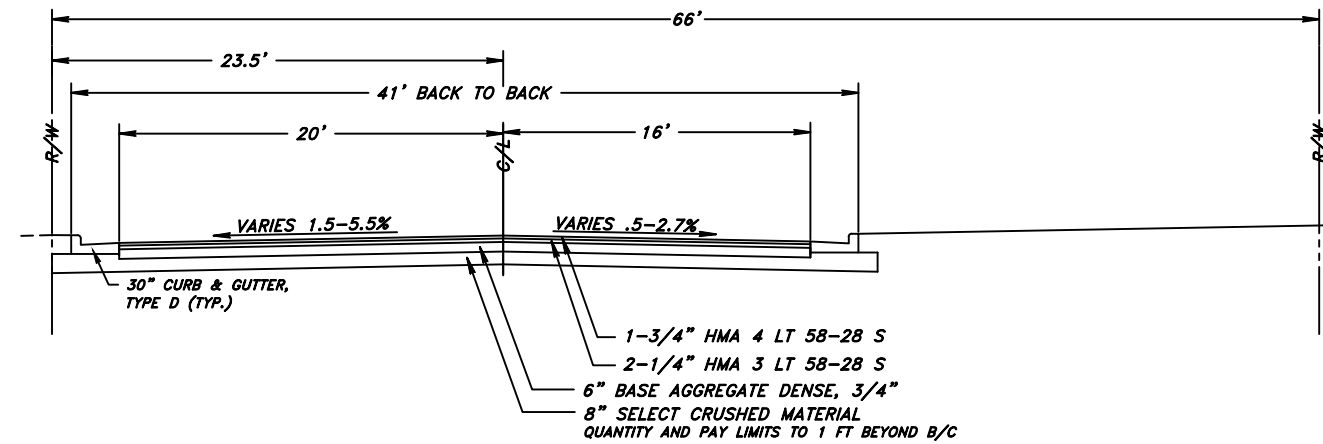
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TYPICAL CROSS SECTIONS



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WATER STREET
TYPICAL CROSS SECTION
STATION 27+50 to 33+00



WATER STREET
TYPICAL CROSS SECTION
STATION 34+50 to 36+00

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

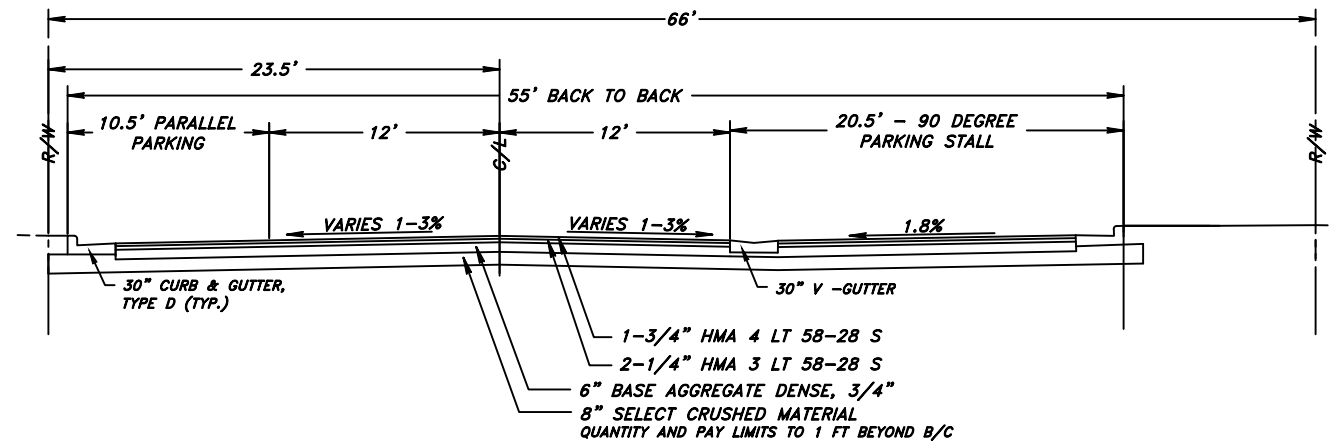
DATE : 2/10/21

DRAWN BY : RUH
APPROVED BY : BAO

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2021 STREET AND UTILITY IMPROVEMENTS
TYPICAL CROSS SECTIONS



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WATER STREET
TYPICAL CROSS SECTION
STATION 38+00 to 42+00

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

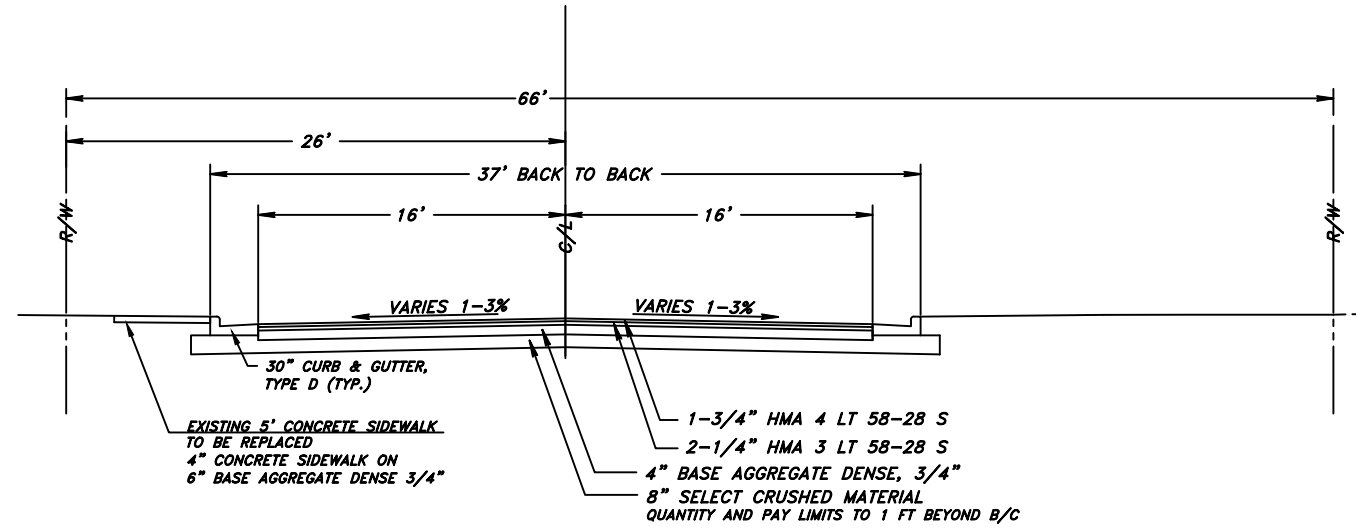
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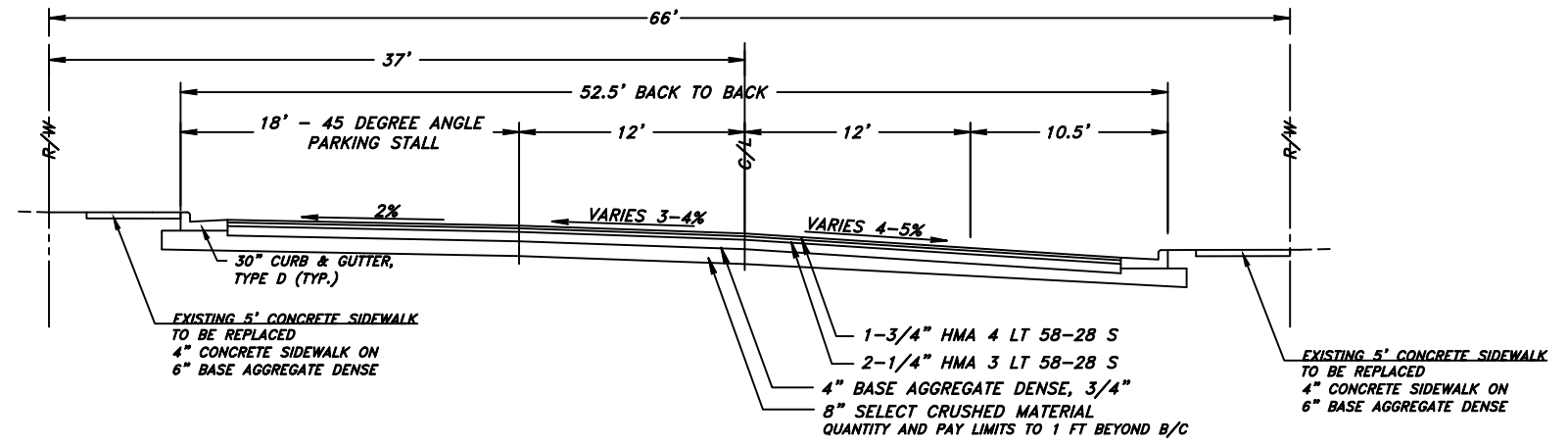
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PARK AVENUE
TYPICAL CROSS SECTION
STATION 100+00 to 101+20



PARK AVENUE
TYPICAL CROSS SECTION
STATION 101+90 to 104+15

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061	DATE : 2/10/21	DRAWN BY : RUH
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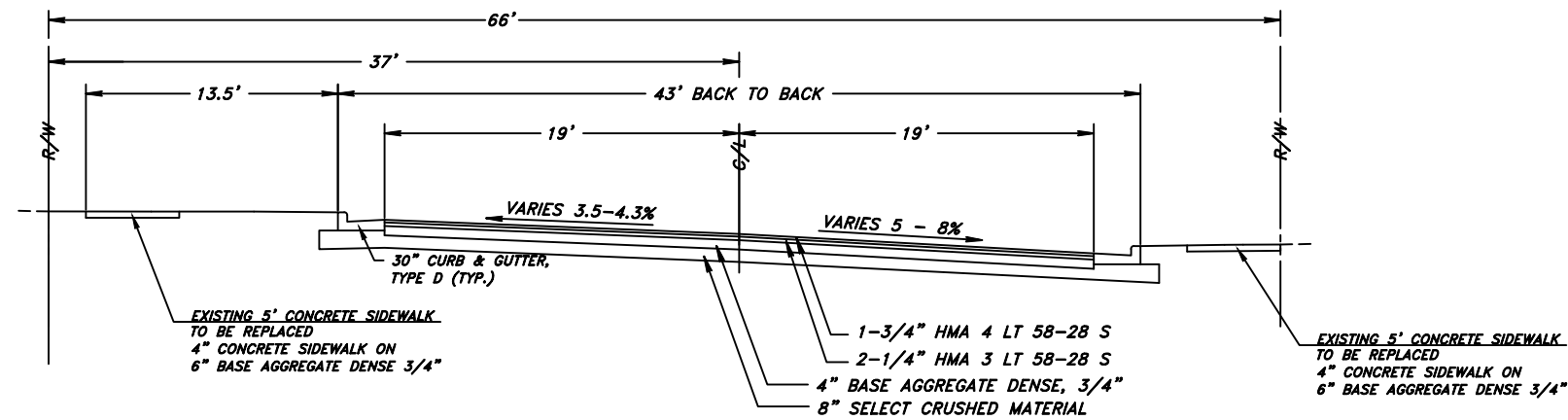
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TYPICAL CROSS SECTIONS



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SHEET 7 OF 46



PARK AVENUE
TYPICAL CROSS SECTION
STATION 105+05 to 107+75

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

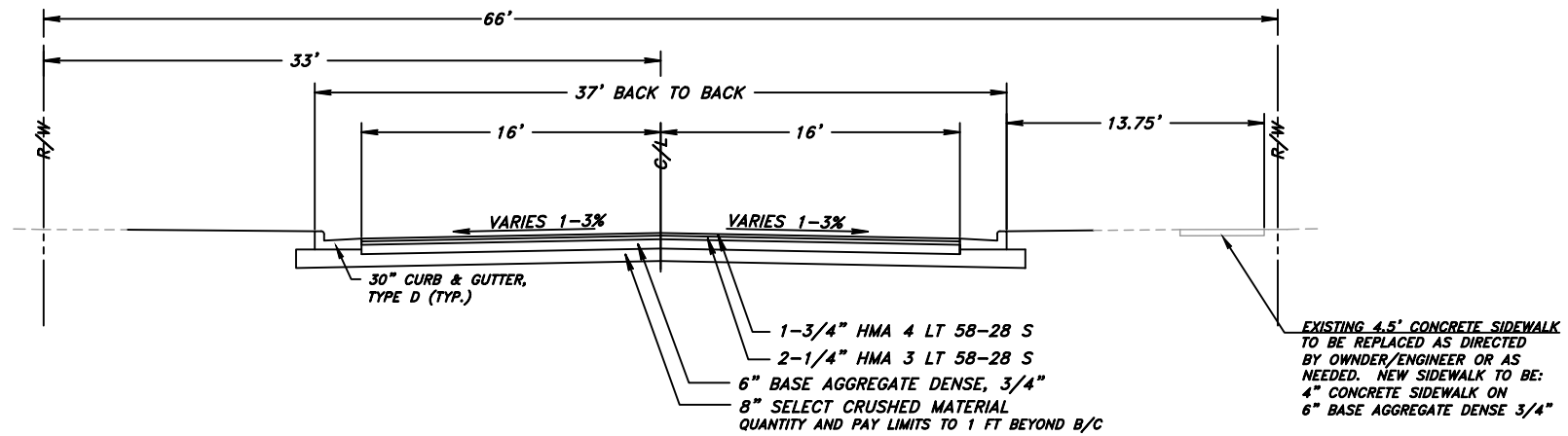
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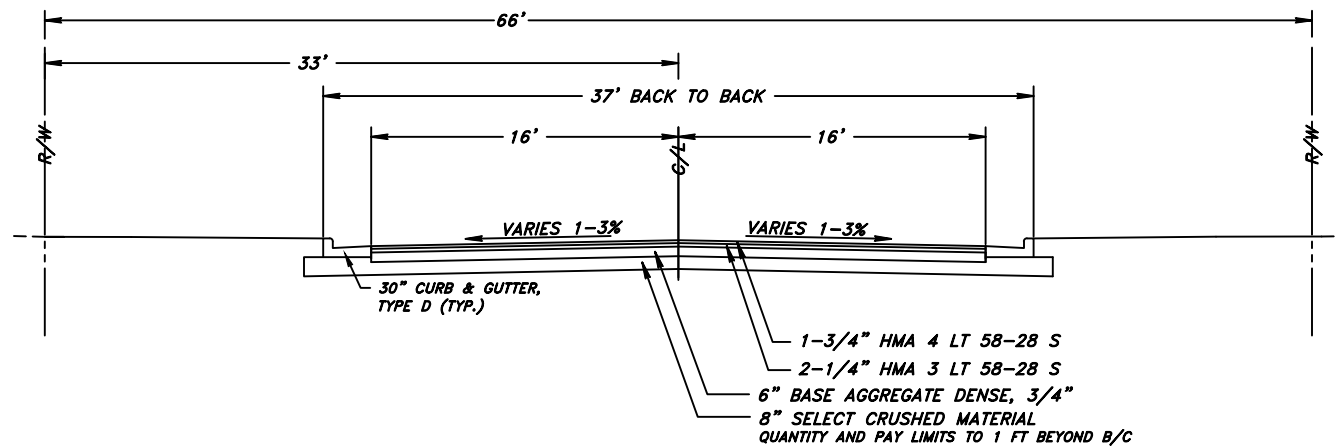
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IMPROVEMENTS
TYPICAL CROSS SECTIONS



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LIBERTY STREET
TYPICAL CROSS SECTION
STATION 50+00 to 58+00



BERLIN STREET
TYPICAL CROSS SECTION
STATION 60+00 to 63+00

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KUZ0.1061

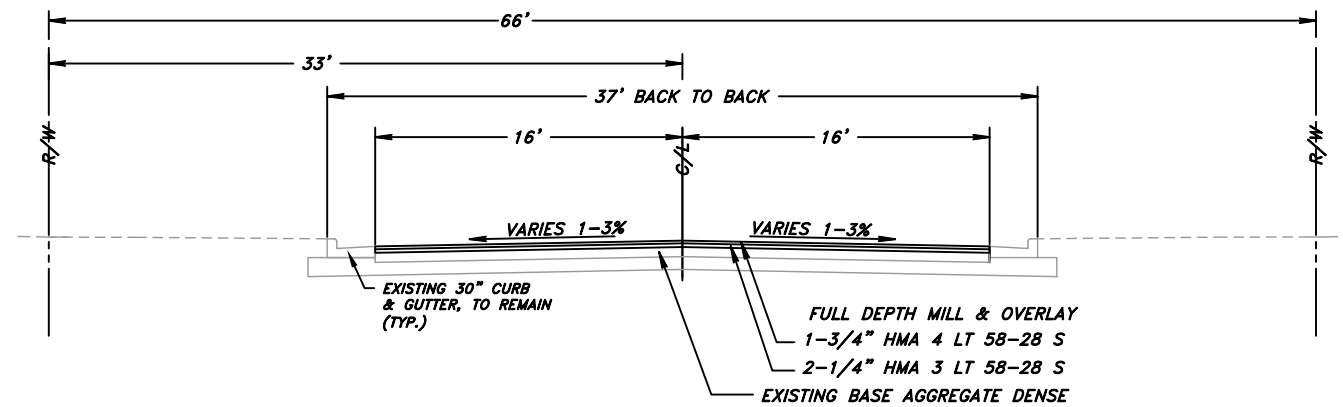
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DRAWN BY : RJH
APPROVED BY : BAO

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2021 STREET AND UTILITY IMPROVEMENTS
TYPICAL CROSS SECTIONS



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CUMBERLAND STREET
TYPICAL CROSS SECTION
STATION 70+00 to 75+00

NOT REVISED

SCALE : 1"=2.5'

PROJECT : # KU20.1061

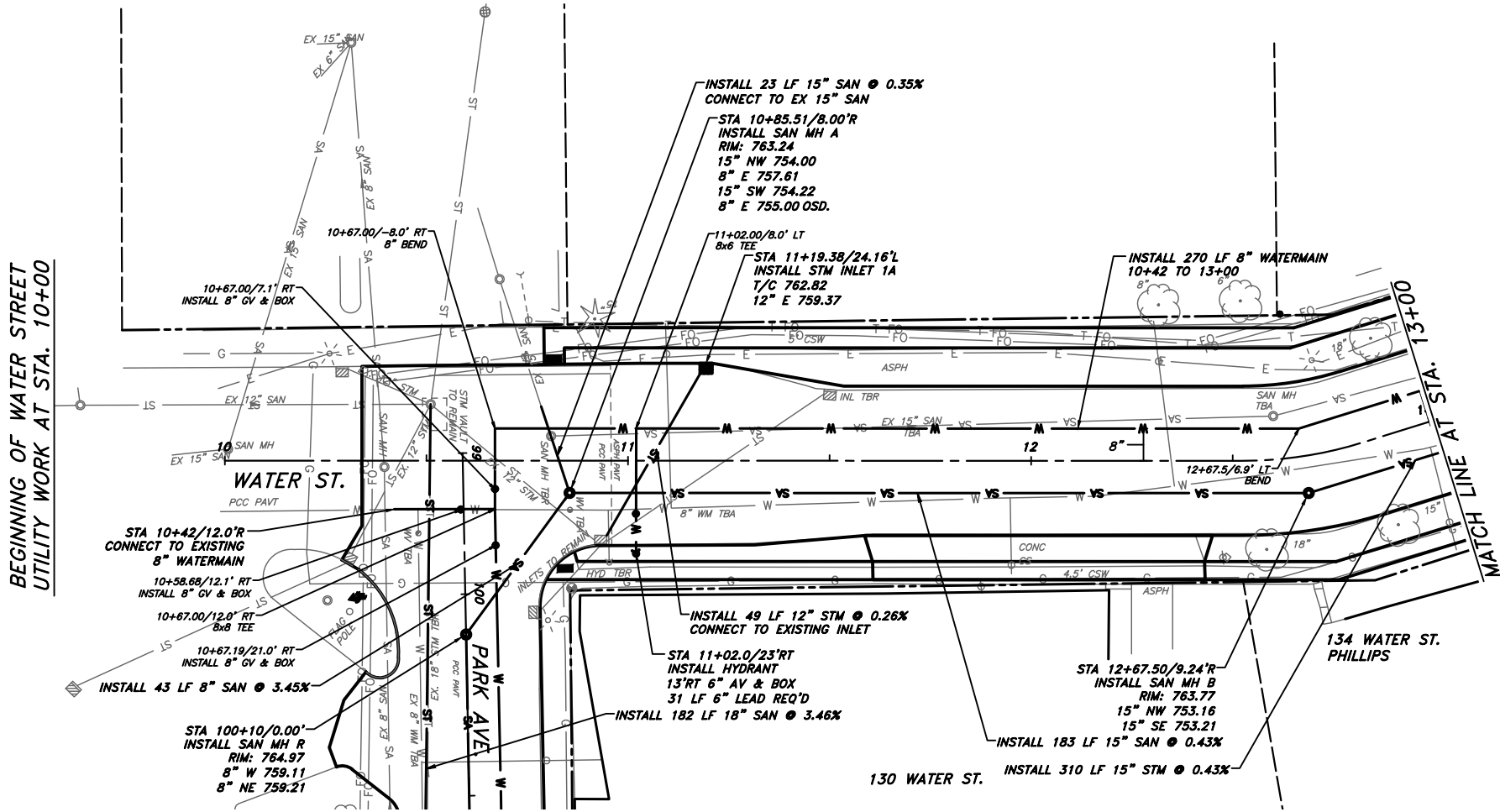
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APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
TYPICAL CROSS SECTIONS

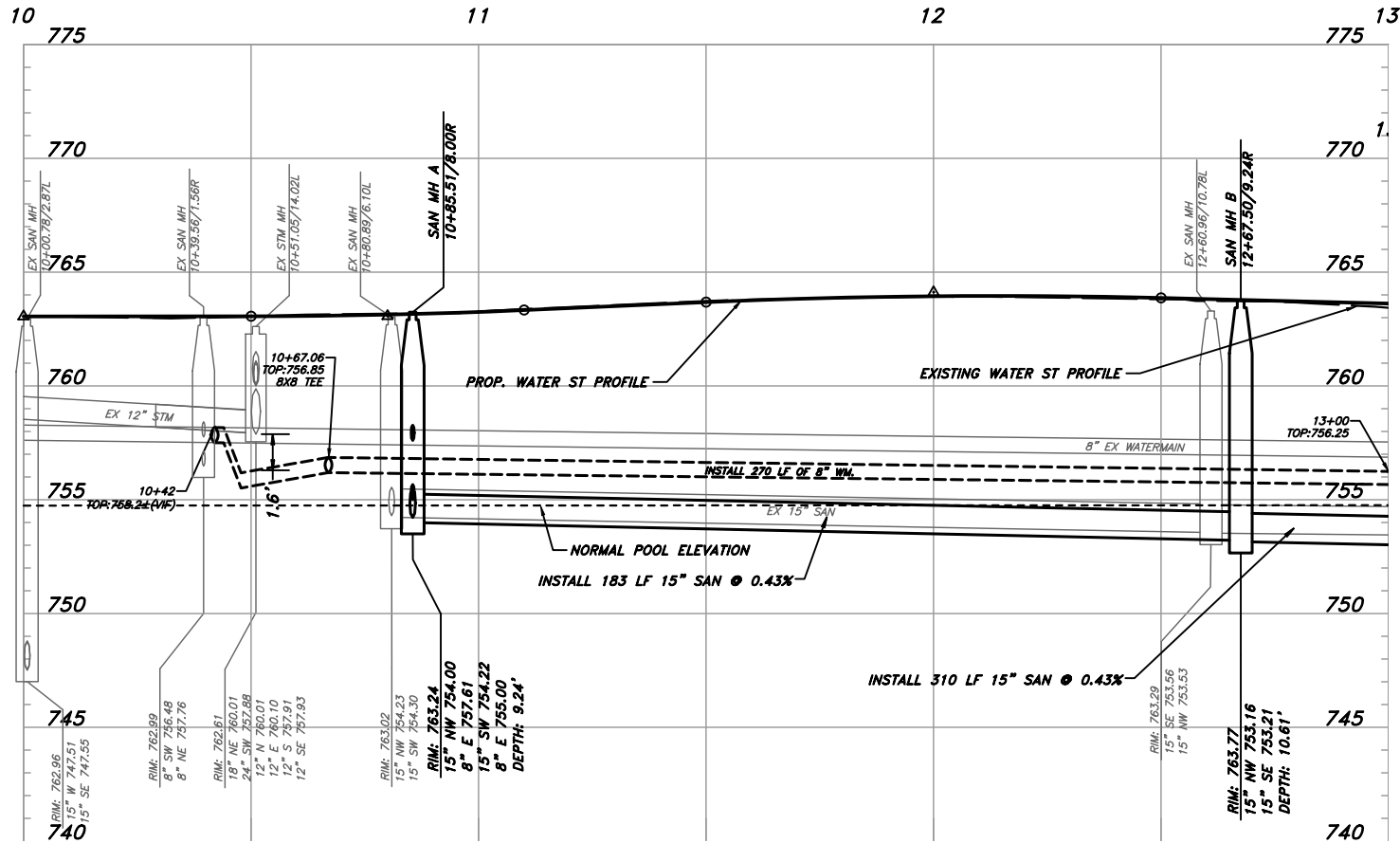


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UTILITY PLAN NOTES:

1. VERIFY LOCATION & DEPTH OF EXISTING UTILITIES AT CONNECTIONS.
2. LOCATE AND RESTORE ALL SERVICE LATERALS IN-KIND.
3. MAINTAIN MIN. 8.0' HORIZONTAL CLEARANCE B/W A SEWER & WATERMAIN.
4. MAINTAIN MIN. 0.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES OVER A SEWER AND MIN. 1.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES UNDER A SEWER.
5. MAINTAIN MIN. 6.5' COVER OVER WATERMAIN, OTHERWISE PROVIDE INSULATION PER SPECIAL PROVISIONS.



NOT REVISED

SCALE : 1" = 20'H 4"V

PROJECT : #K20.1061

DATE : 12/14/2020

DRAWN BY : RUH, ZA
APPROVED BY : BAO

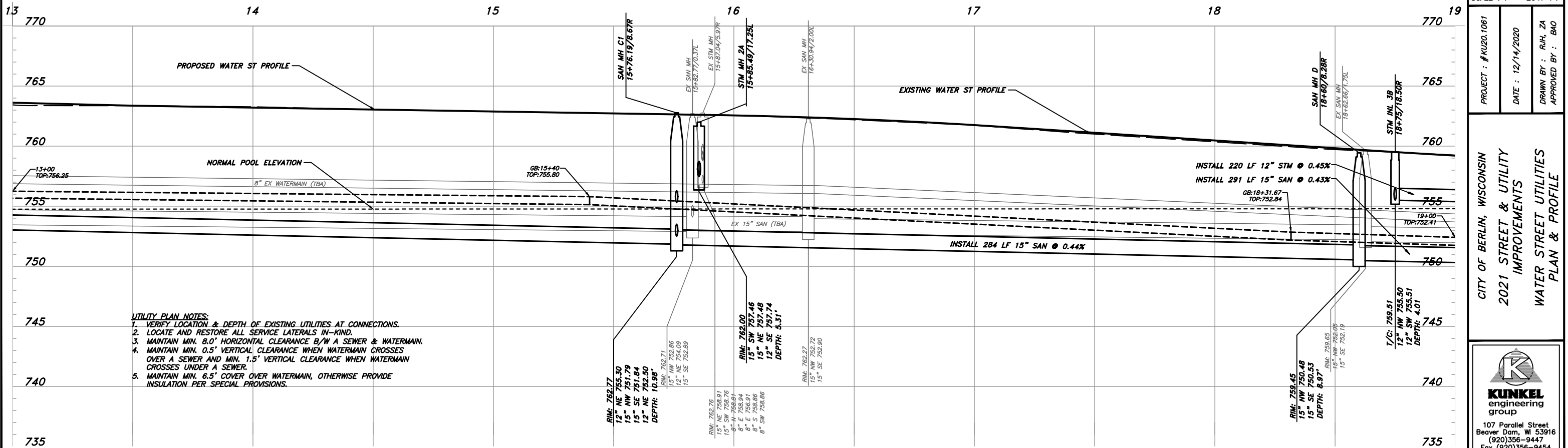
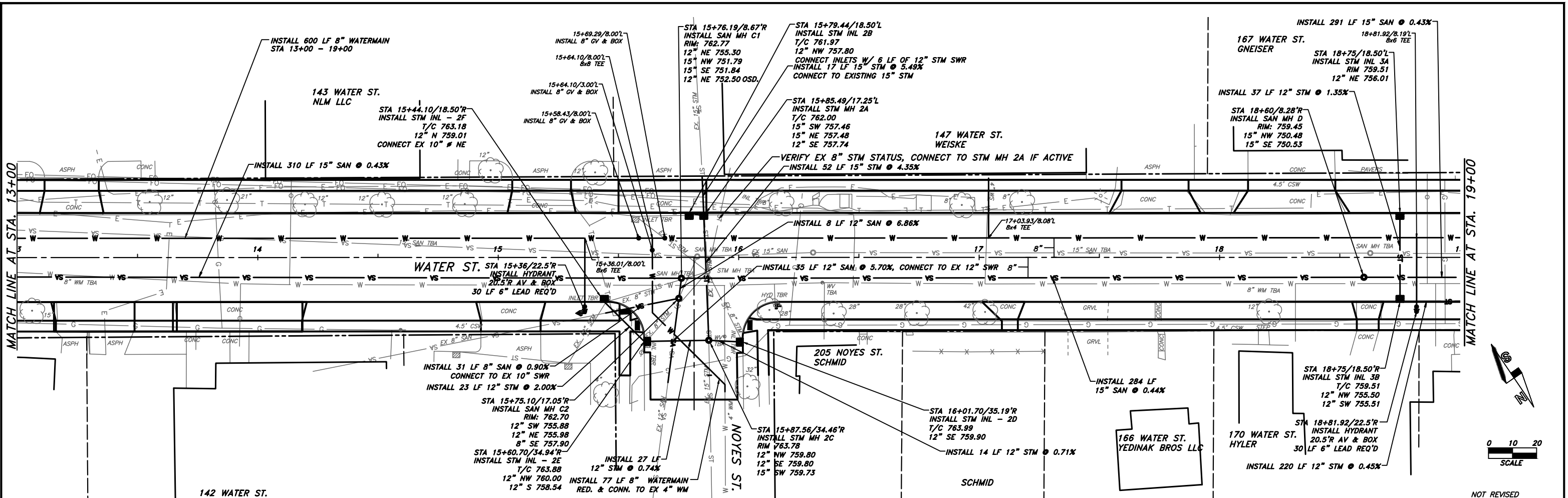
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2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET UTILITIES
PLAN & PROFILE



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UTILITY IMPROVEMENTS

SHEET 11 OF 46

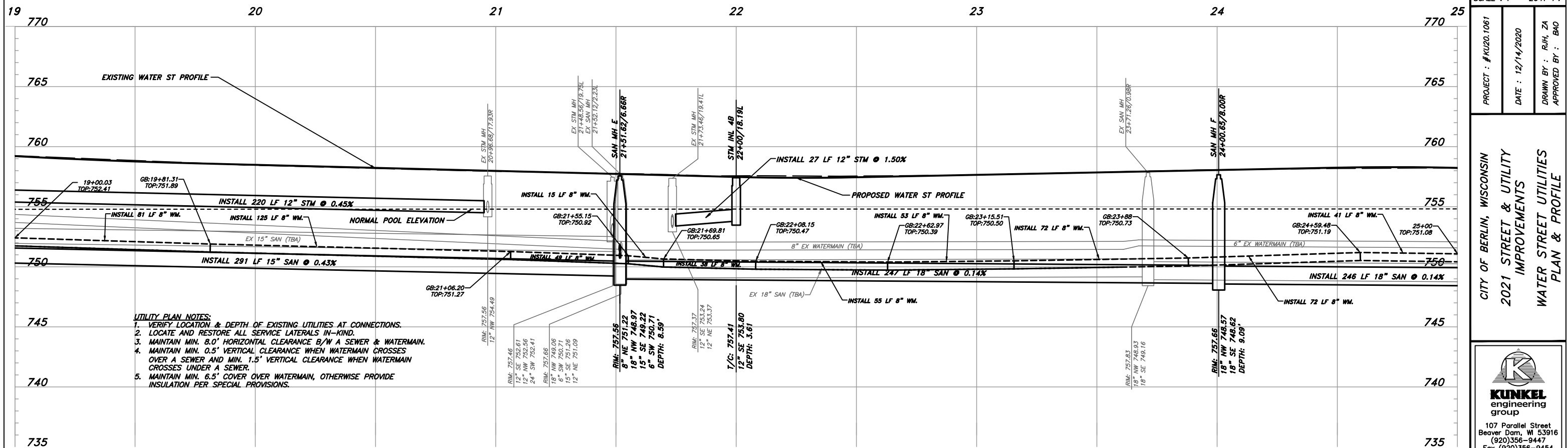
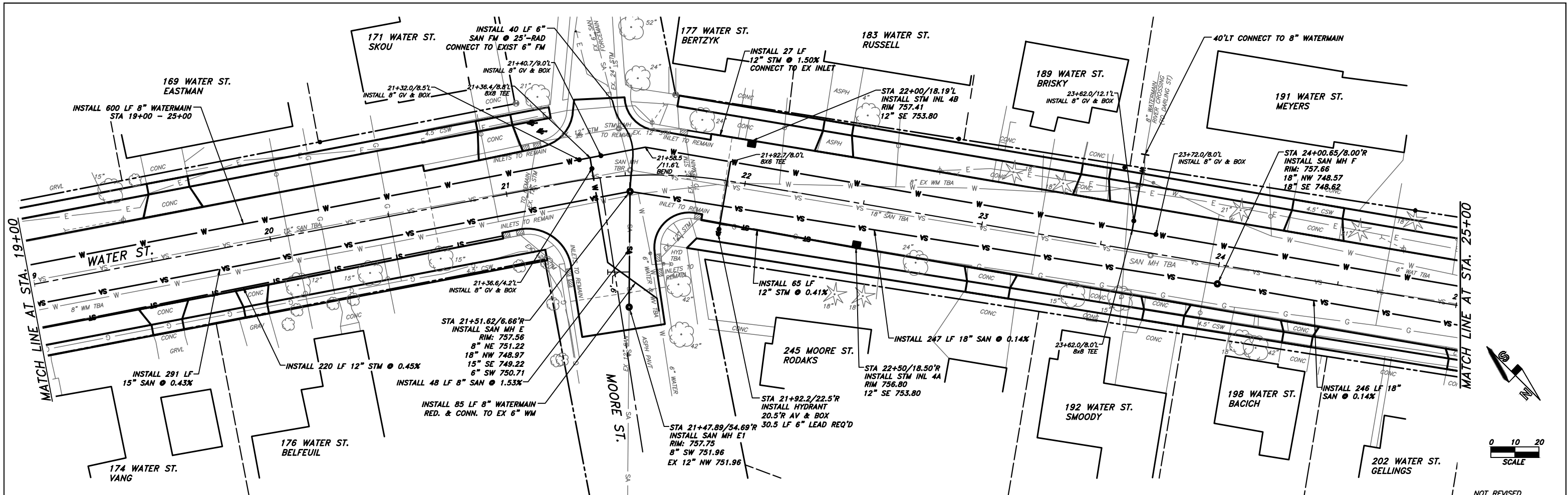


NOT REVISED
SCALE : 1" = 20'H 4"V

PROJECT : #KUD20.1061
DATE : 12/14/2020
DRAWN BY : R.H. ZA
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET UTILITIES
PLAN & PROFILE

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UTILITY IMPROVEMENTS

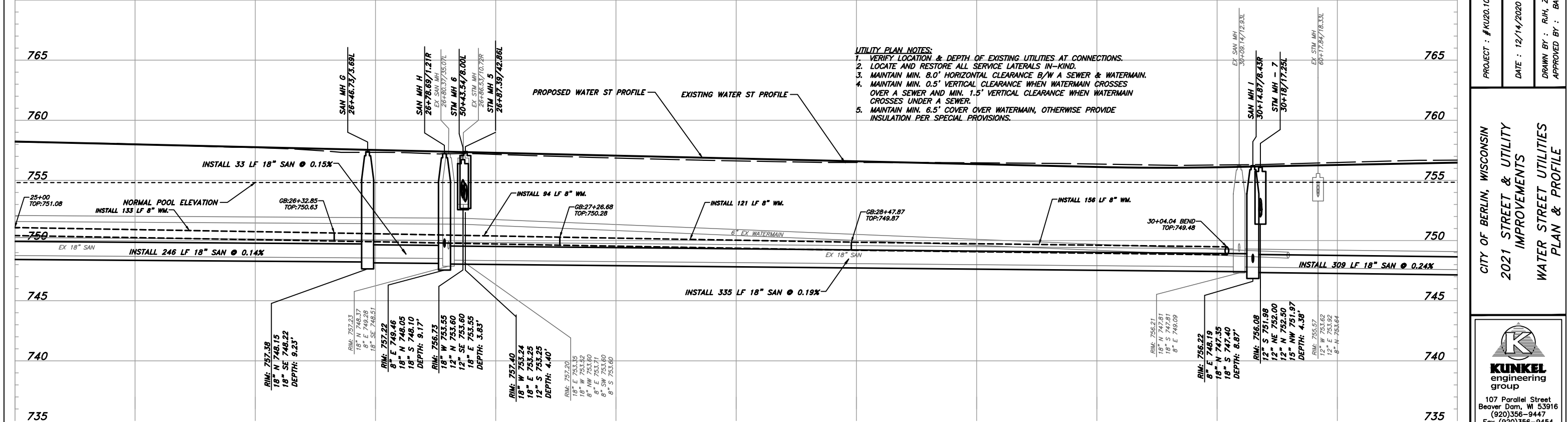
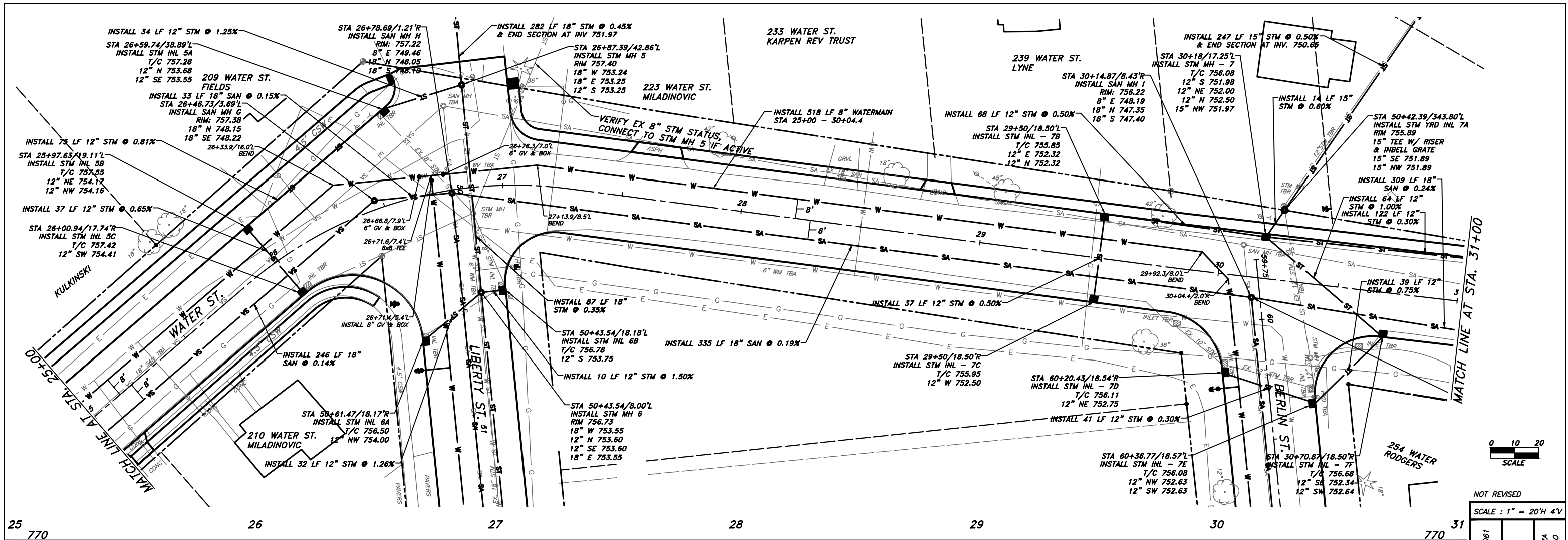
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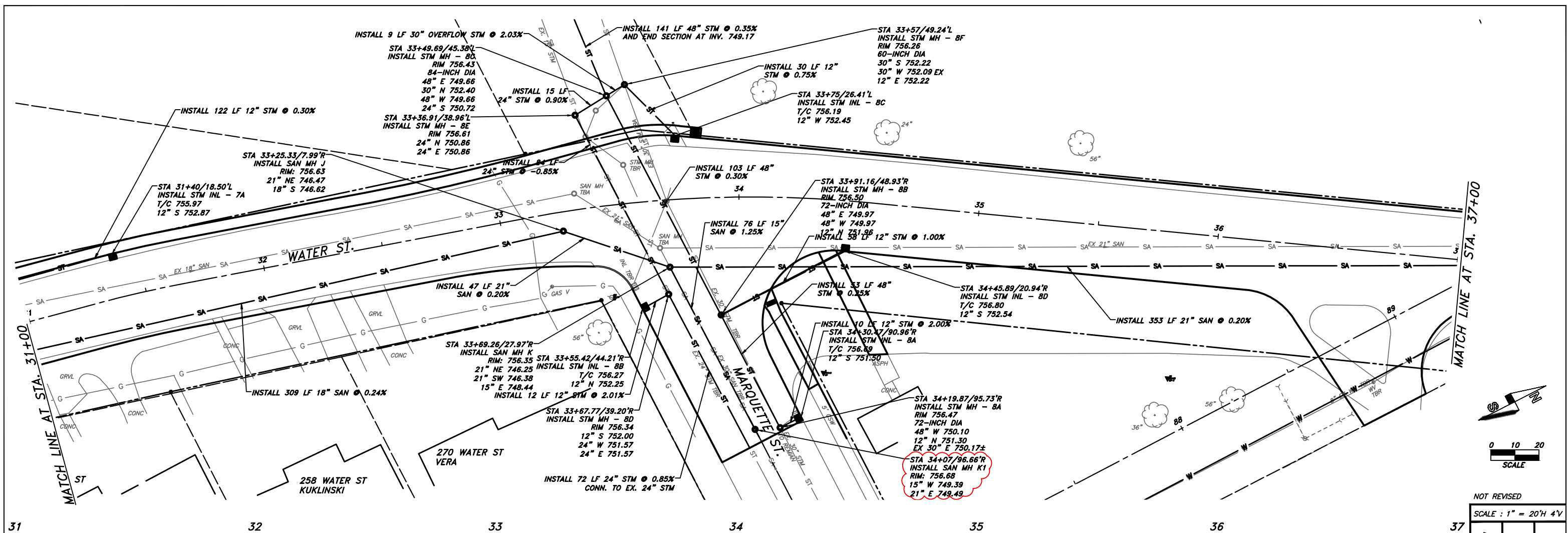
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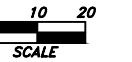
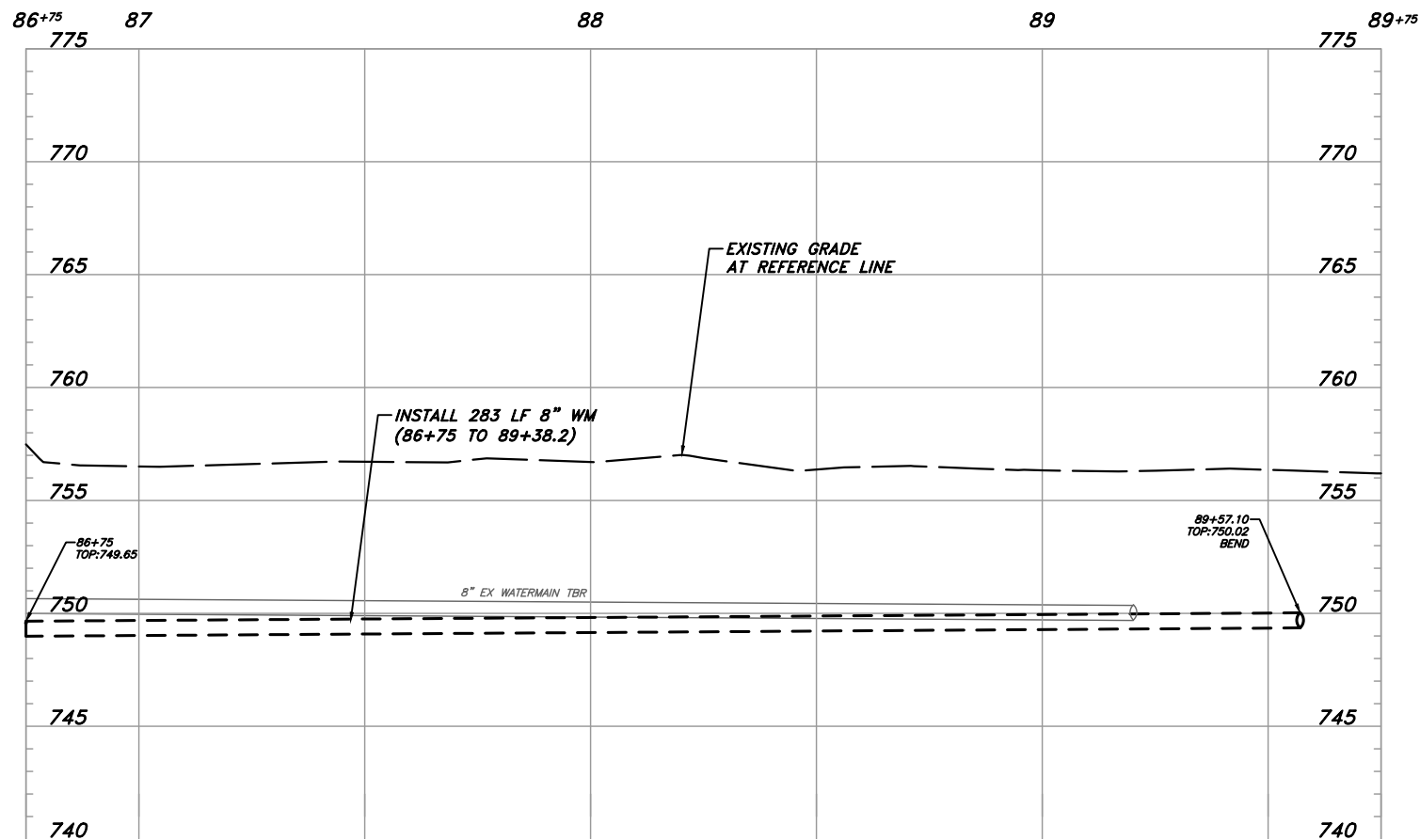
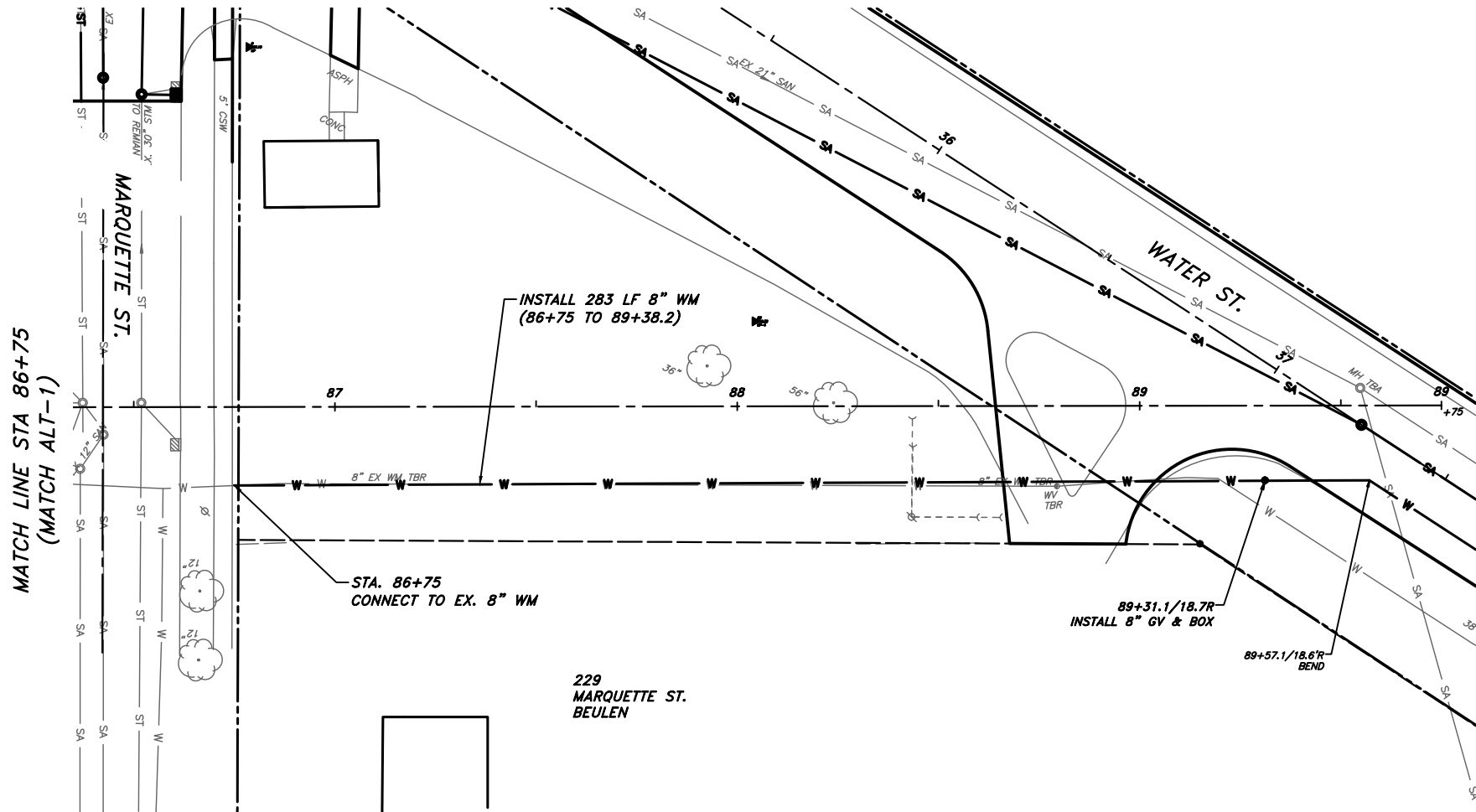
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DRAWN BY : RUH, ZA
APPROVED BY : BAO

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2021 STREET & UTILITY
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WATER STREET UTILITIES
PLAN & PROFILE

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NOT REVISED

SCALE : 1" = 20'H 4'V

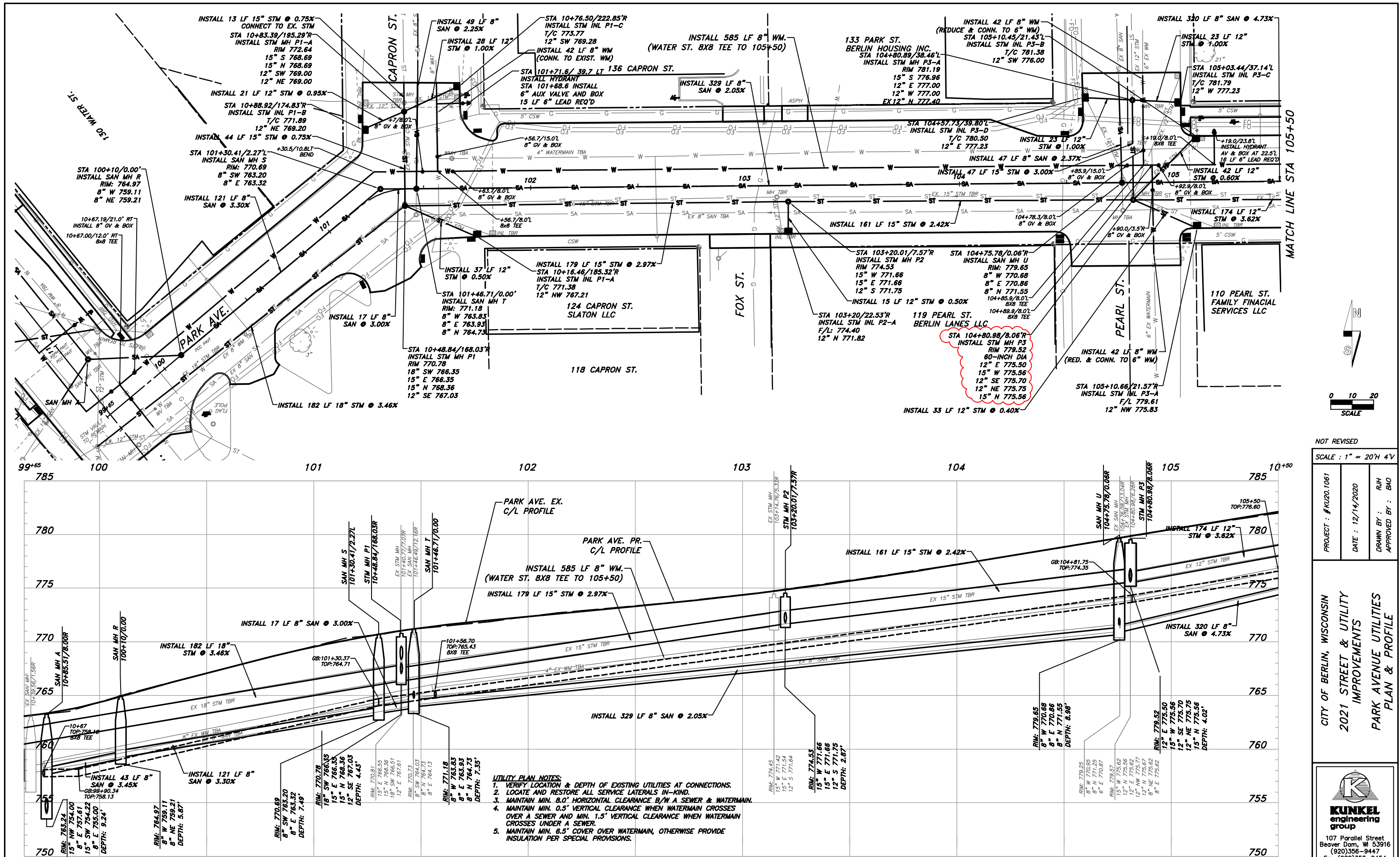
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CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET WATERMAIN
PLAN & PROFILE



UTILITY IMPROVEMENTS

SHEET 17 OF 46



PLOT DATE: 3/24/2021 3:48:12 PM
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UTILITY IMPROVEMENTS

NOT REVISED

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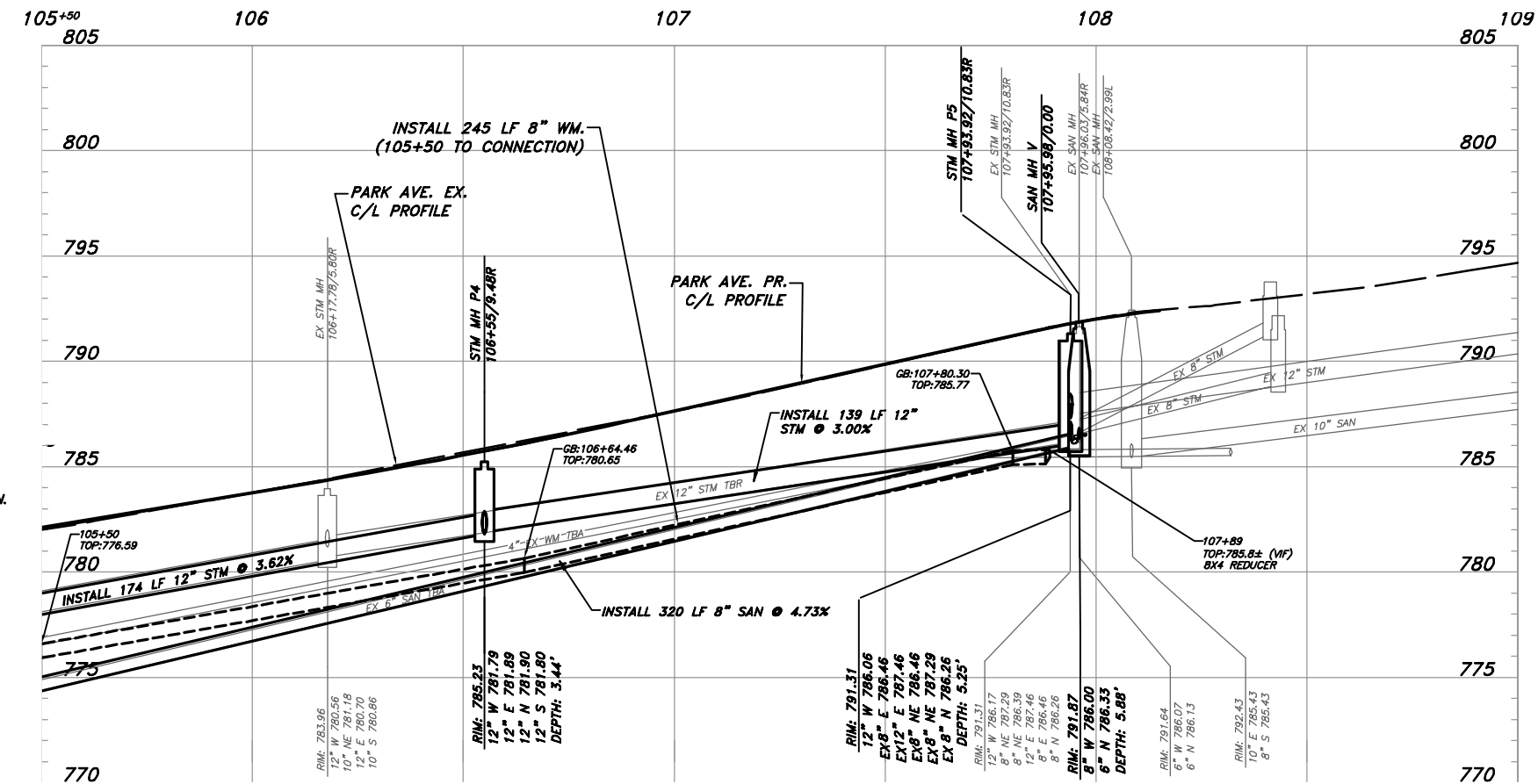
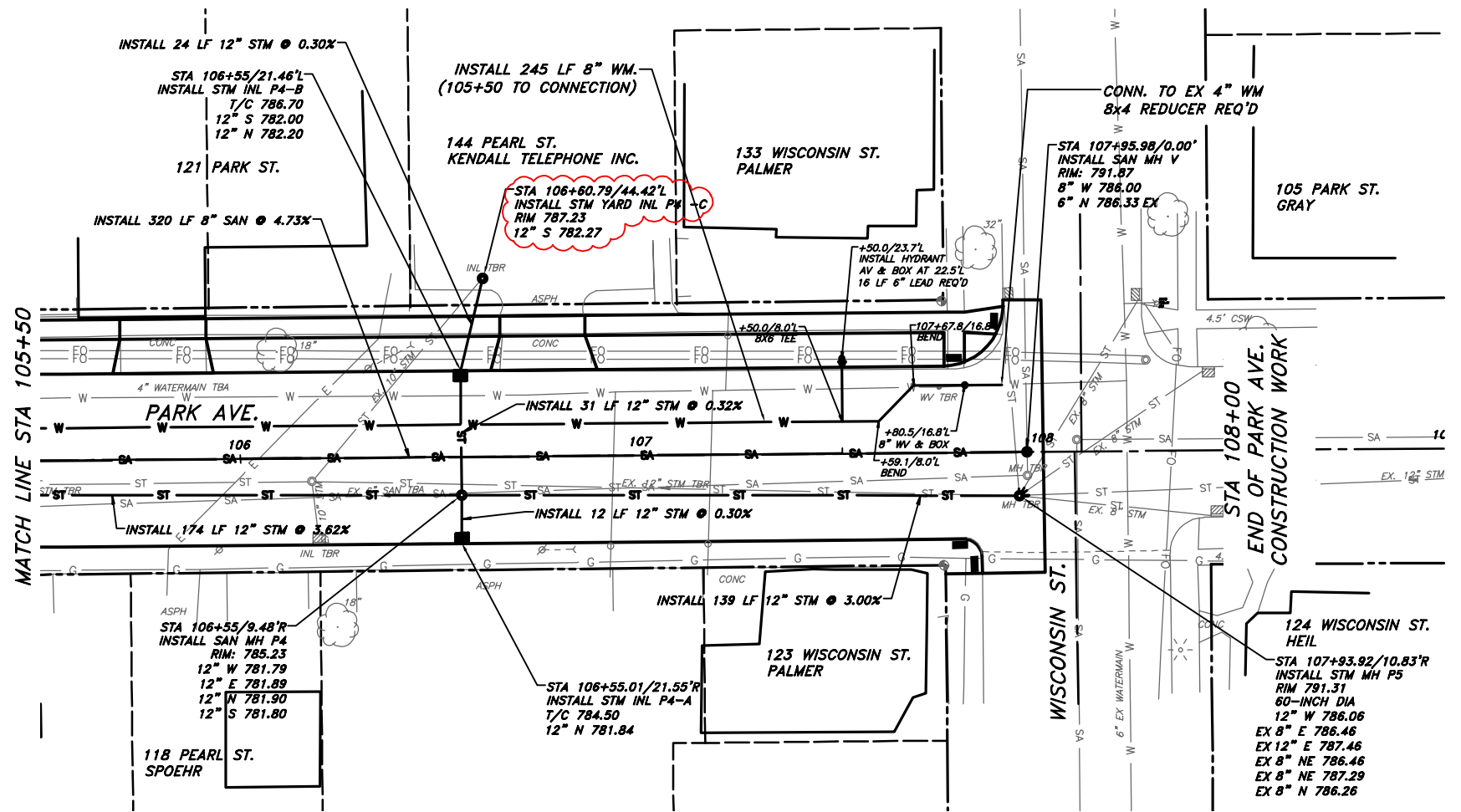
PROJECT: #K020.1061	DATE: 12/14/2020	DRAWN BY: RJH
		APPROVED BY: BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY IMPROVEMENTS
PARK AVENUE UTILITIES PLAN & PROFILE

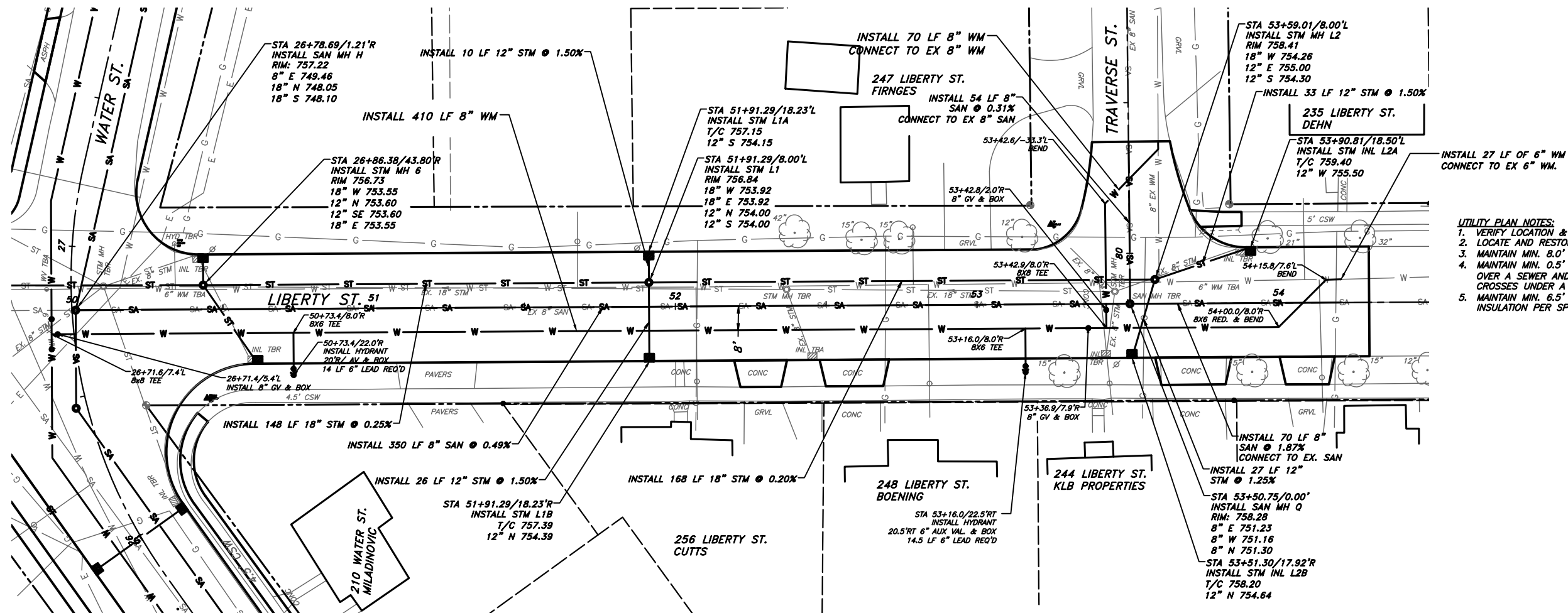
KUNKEL
engineering group

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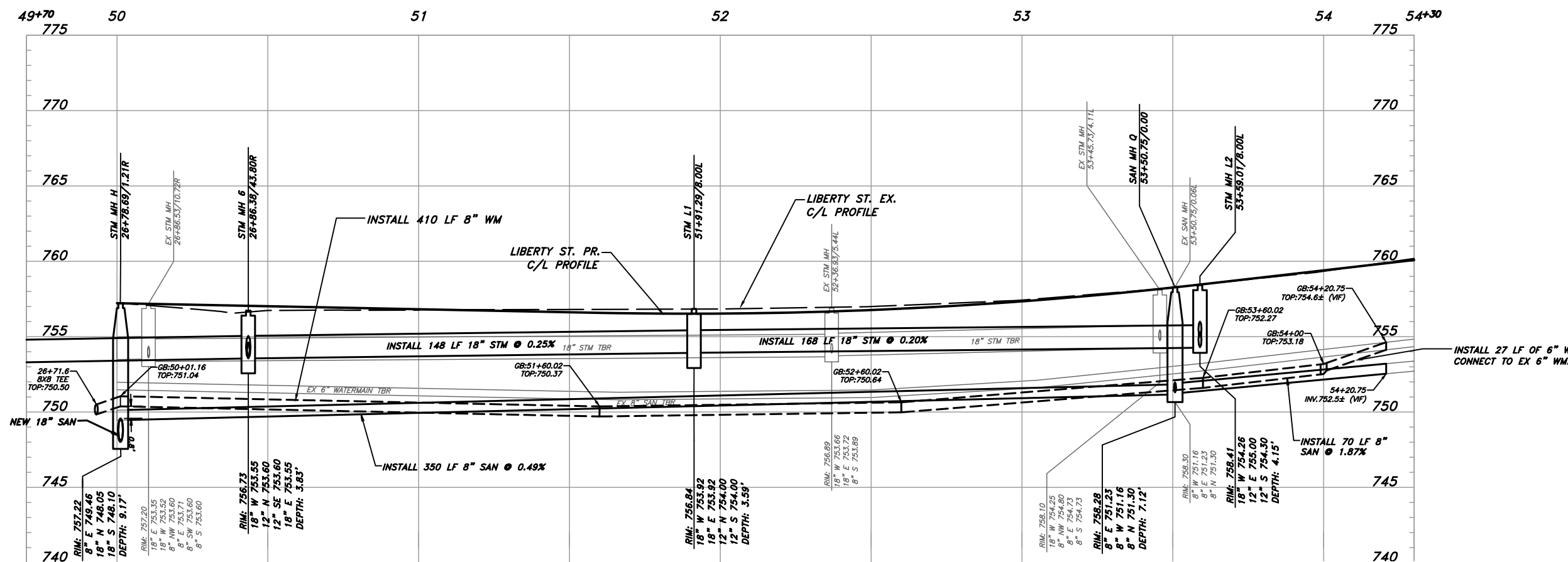
SHEET 18 OF 46



- UTILITY PLAN NOTES:**
1. VERIFY LOCATION & DEPTH OF EXISTING UTILITIES AT CONNECTIONS.
 2. LOCATE AND RESTORE ALL SERVICE LATERALS IN-KIND.
 3. MAINTAIN MIN. 8.0' HORIZONTAL CLEARANCE B/W A SEWER & WATERMAIN.
 4. MAINTAIN MIN. 0.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES OVER A SEWER AND MIN. 1.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES UNDER A SEWER.
 5. MAINTAIN MIN. 6.5' COVER OVER WATERMAIN, OTHERWISE PROVIDE INSULATION PER SPECIAL PROVISIONS.



- UTILITY PLAN NOTES:**
1. VERIFY LOCATION & DEPTH OF EXISTING UTILITIES AT CONNECTIONS.
 2. LOCATE AND RESTORE ALL SERVICE LATERALS IN-KIND.
 3. MAINTAIN MIN. 8.0' HORIZONTAL CLEARANCE B/W A SEWER & WATERMAIN.
 4. MAINTAIN MIN. 0.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES OVER A SEWER AND MIN. 1.5' VERTICAL CLEARANCE WHEN WATERMAIN CROSSES UNDER A SEWER.
 5. MAINTAIN MIN. 6.5' COVER OVER WATERMAIN, OTHERWISE PROVIDE INSULATION PER SPECIAL PROVISIONS.



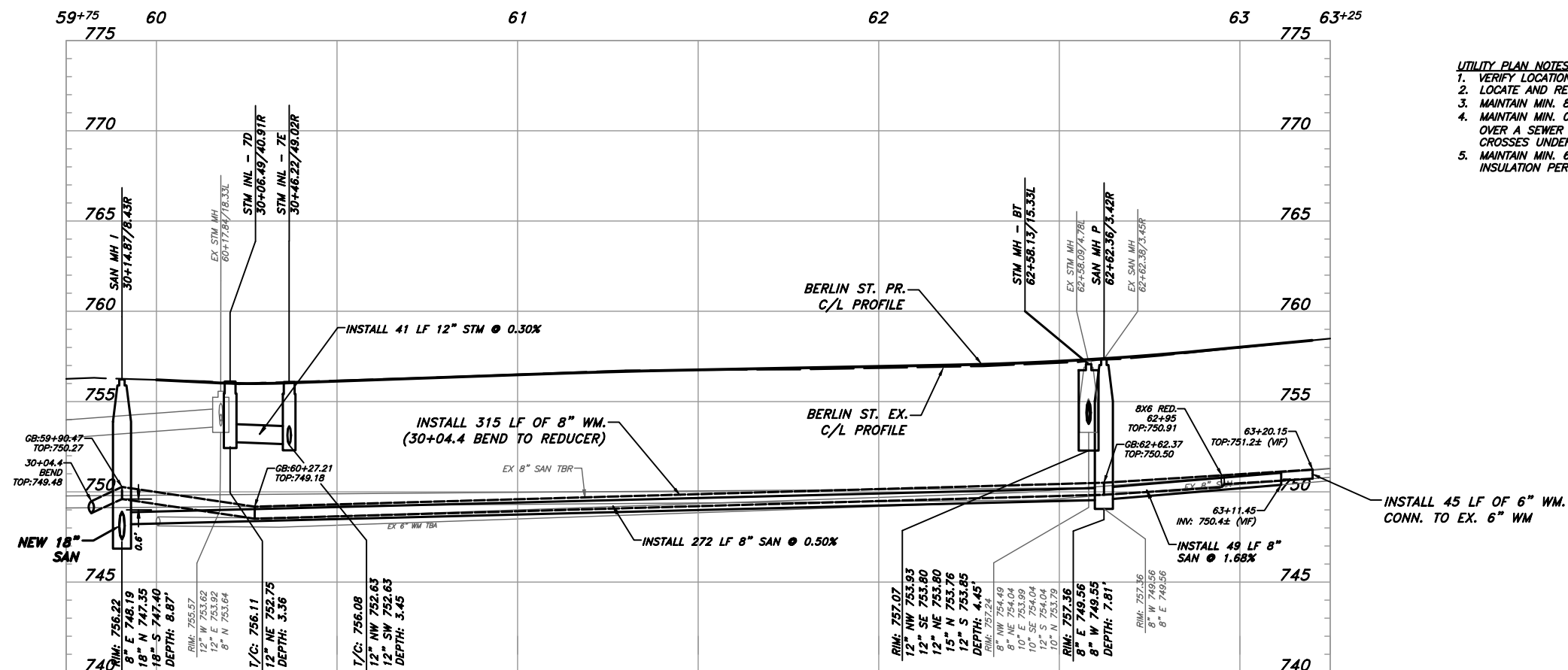
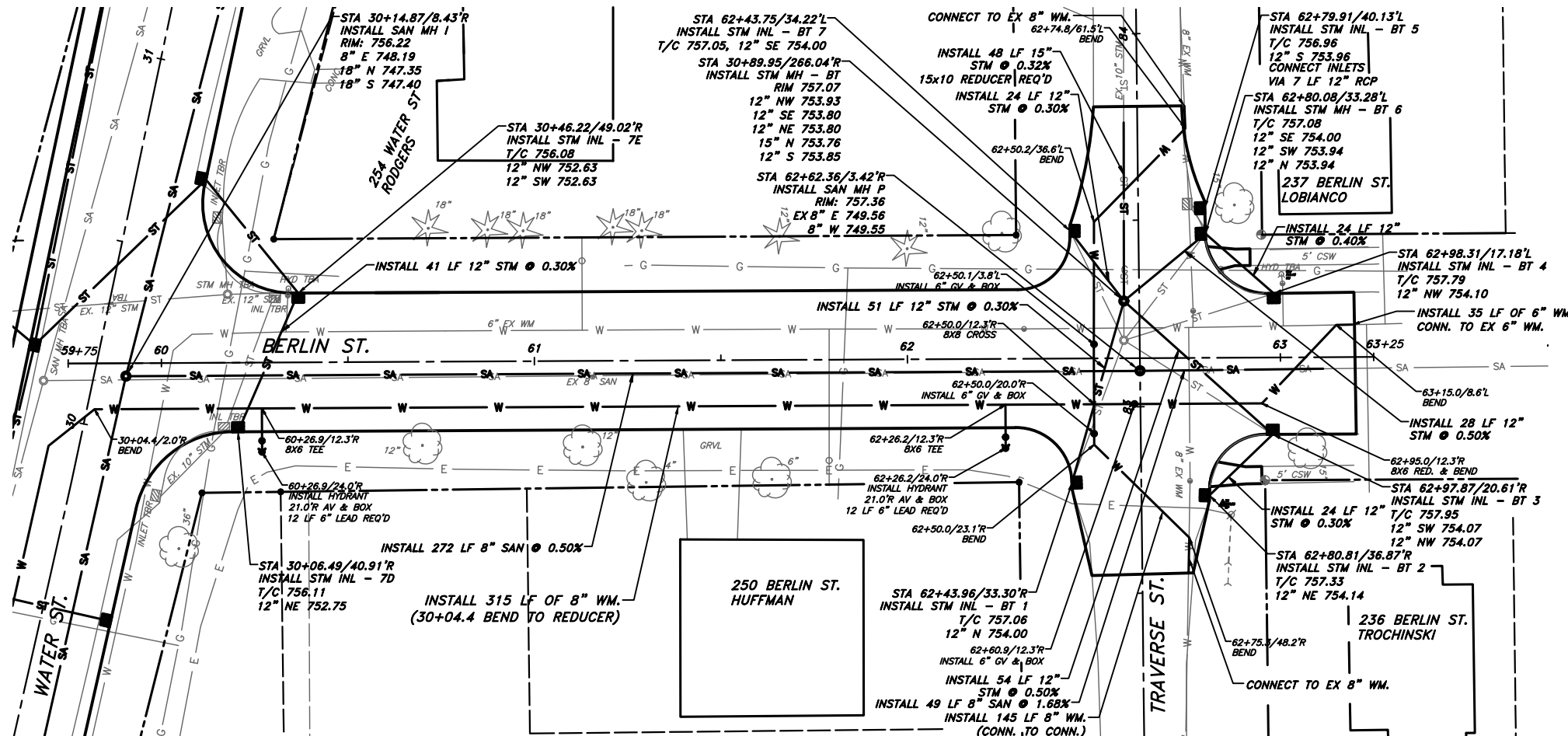
NOT REVISED

SCALE : 1" = 20'H 4"V

PROJECT : #KU20.1061
DATE : 12/14/2020
DRAWN BY : RUH
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
LIBERTY STREET UTILITIES
PLAN & PROFILE

KUNKEL
engineering
group
107 Parallel Street
Beaver Dam, WI 53916
(920)356-9447
Fax (920)356-9454



- UTILITY PLAN NOTES:**
1. VERIFY LOCATION & DEPTH OF EXISTING UTILITIES AT CONNECTIONS.
 2. LOCATE AND RESTORE ALL SERVICE LATERALS IN-KIND.
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 5. MAINTAIN MIN. 6.5' COVER OVER WATERMAIN, OTHERWISE PROVIDE INSULATION PER SPECIAL PROVISIONS.

NOT REVISED

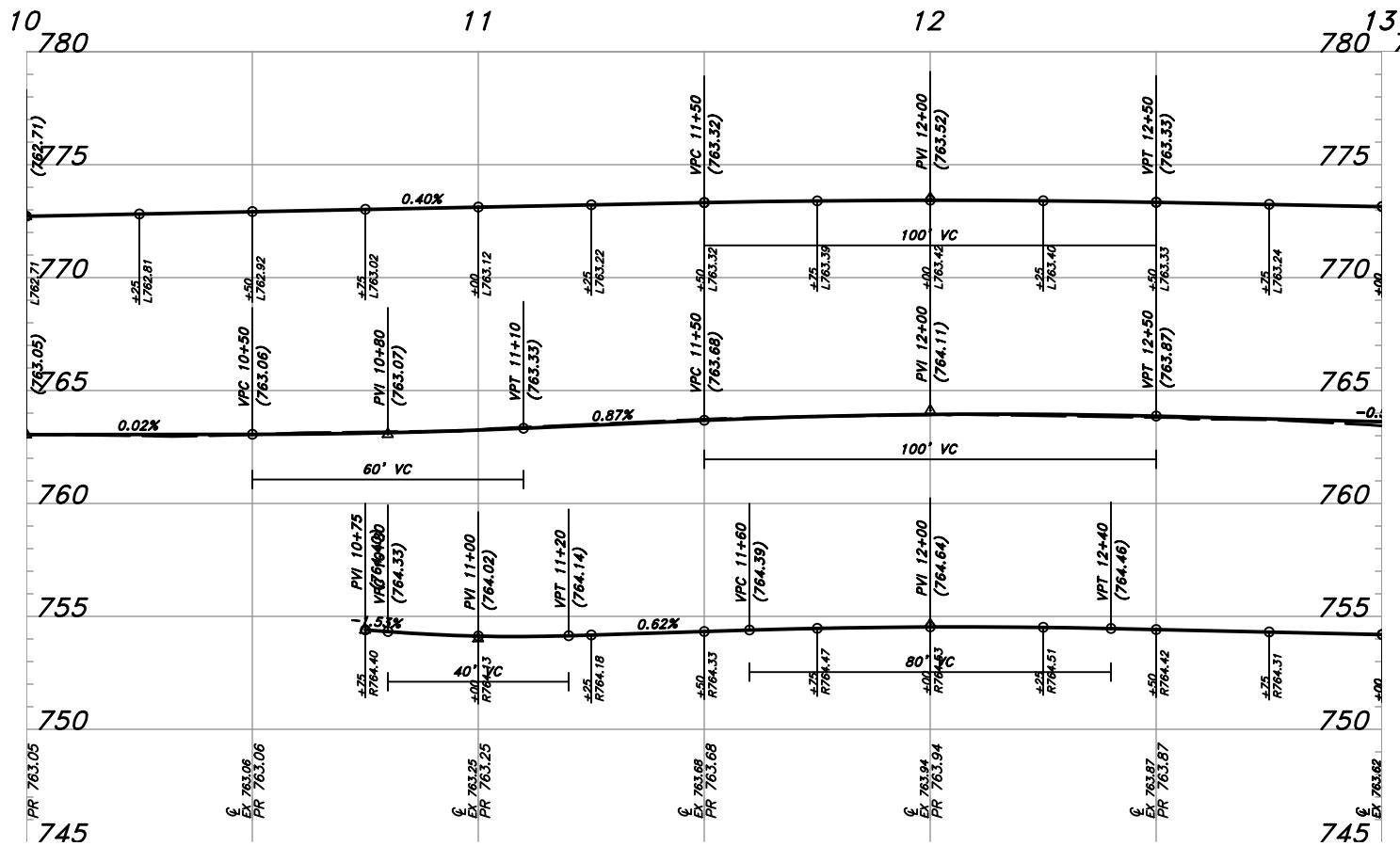
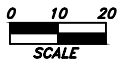
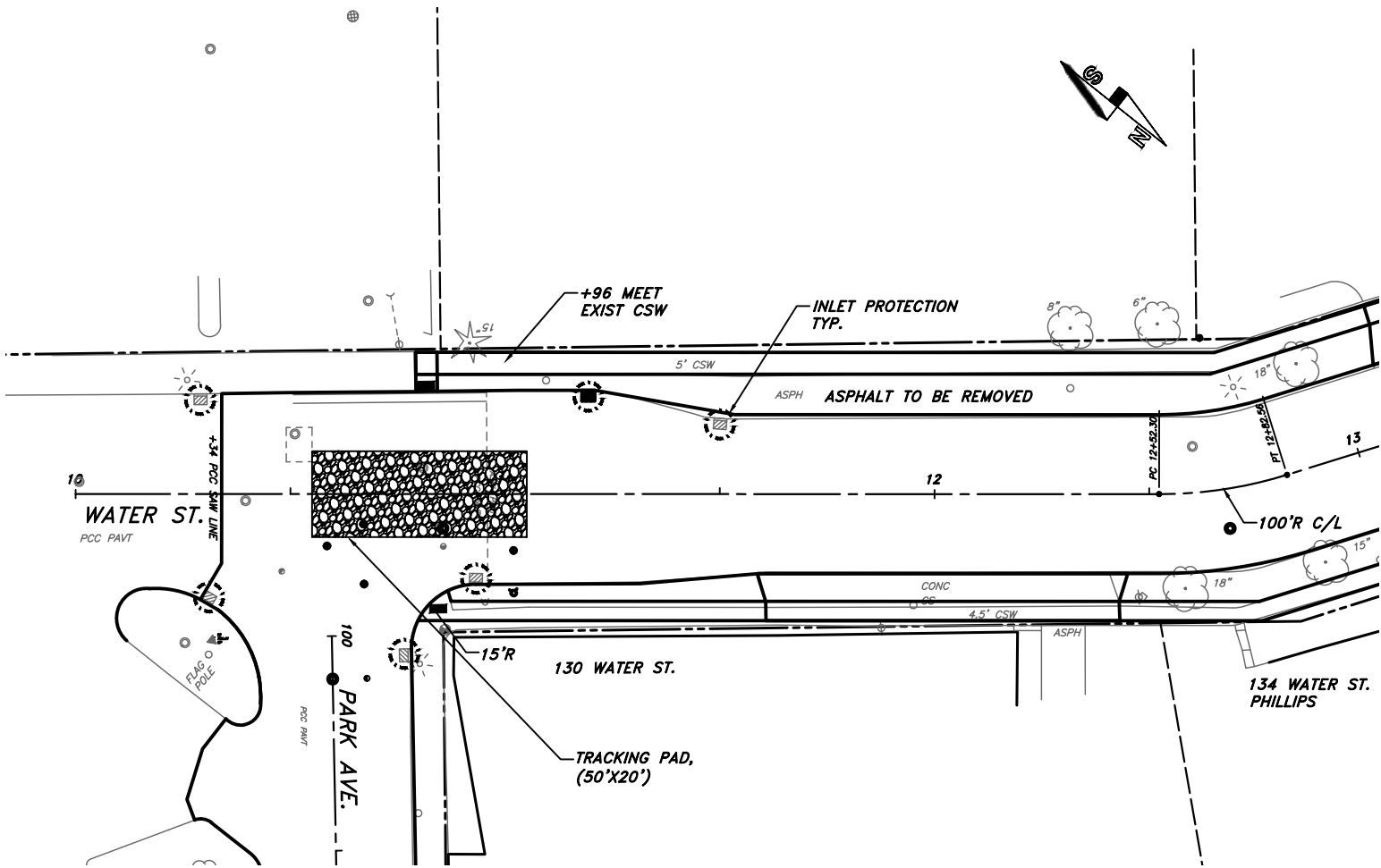
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PROJECT : #KU20.1061	DATE : 12/14/2020	DRAWN BY : RUH	APPROVED BY : BAO
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CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
BERLIN STREET UTILITIES
PLAN & PROFILE

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NOT REVISED

SCALE : 1" = 20'H 4"V

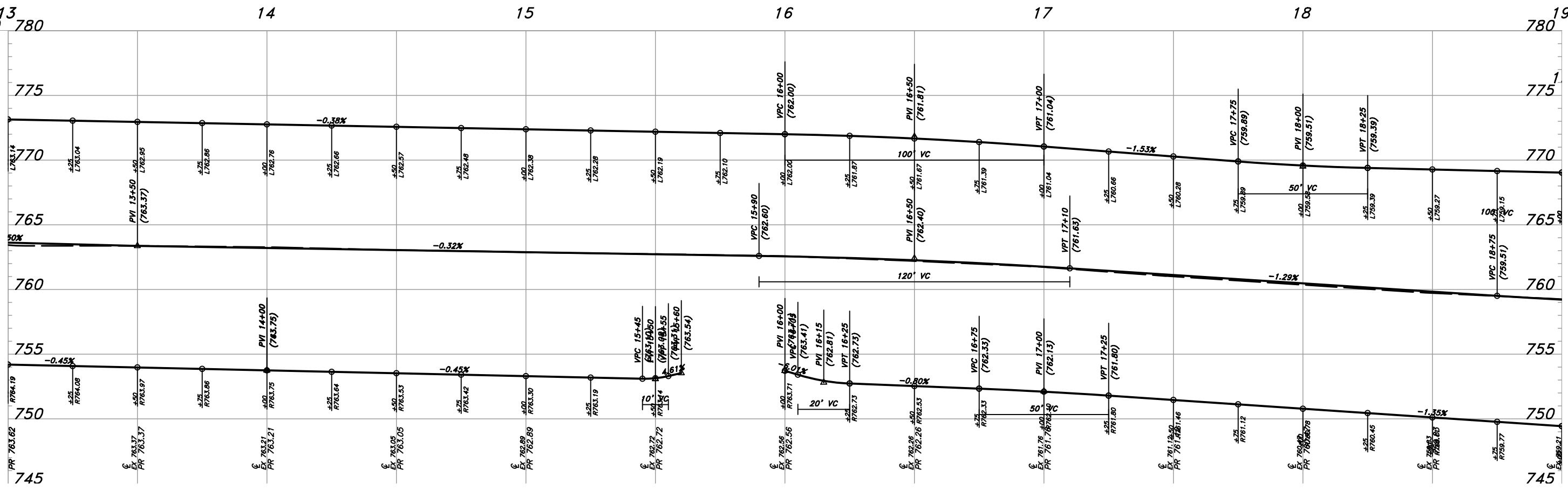
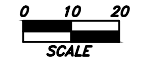
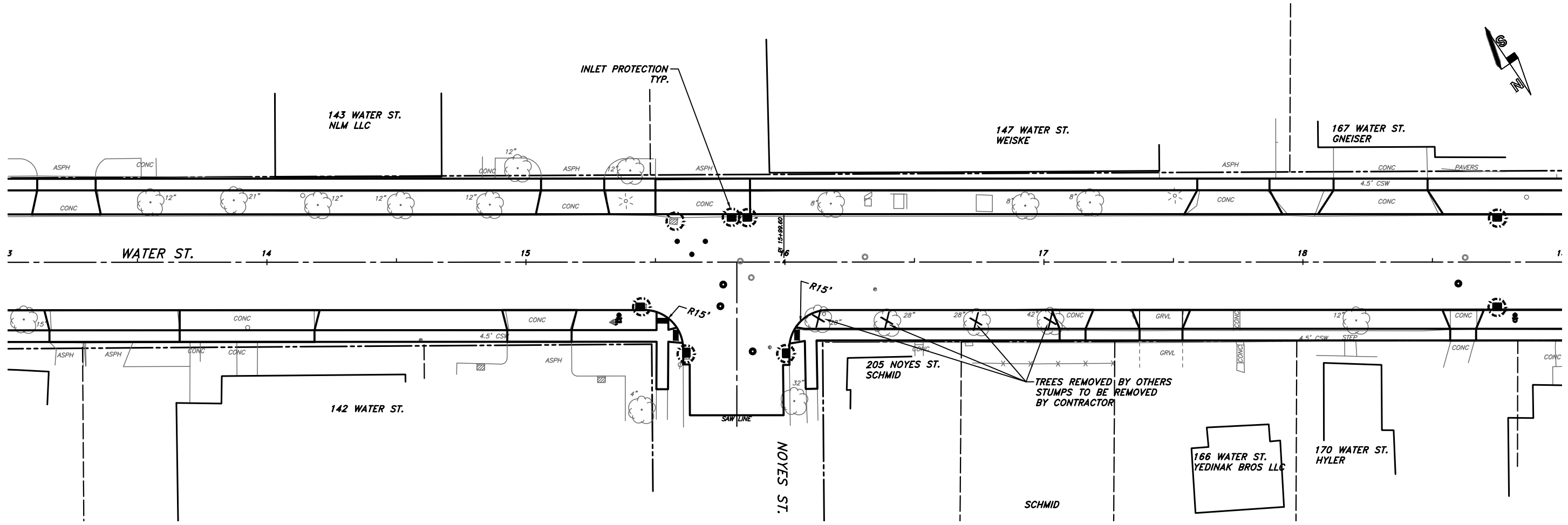
PROJECT : #K020.1061	DATE : 12/14/2020	DRAWN BY : RJH
		APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET PLAN & PROFILE



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PLOT DATE: 3/11/2021 4:32:22 PM
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NOT REVISD
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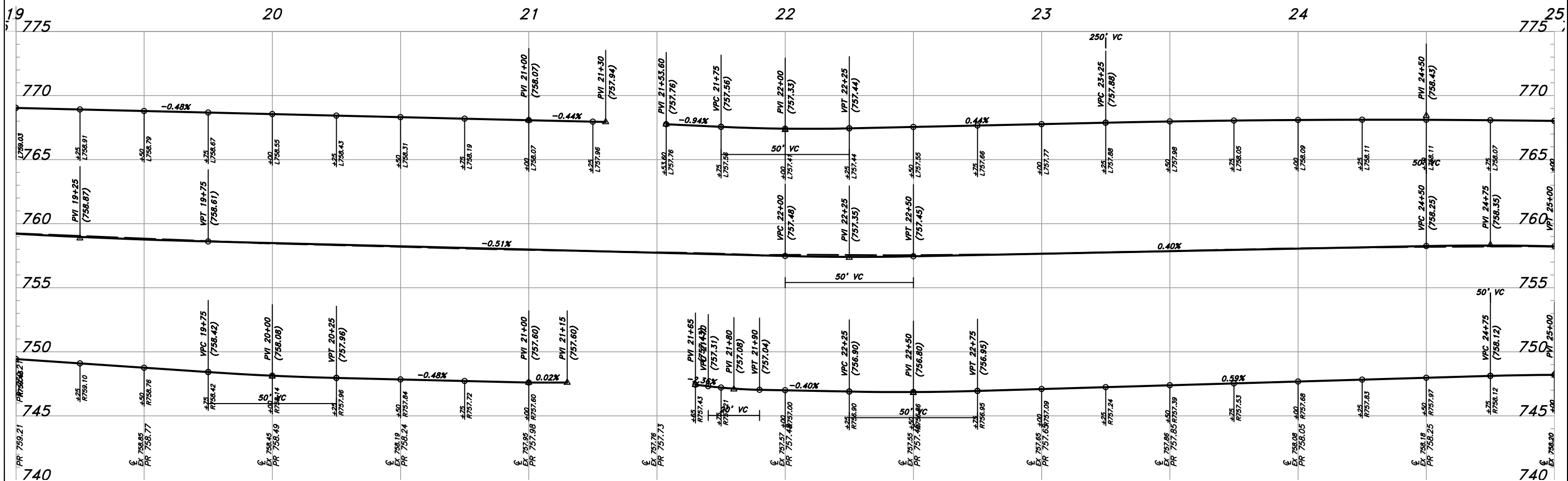
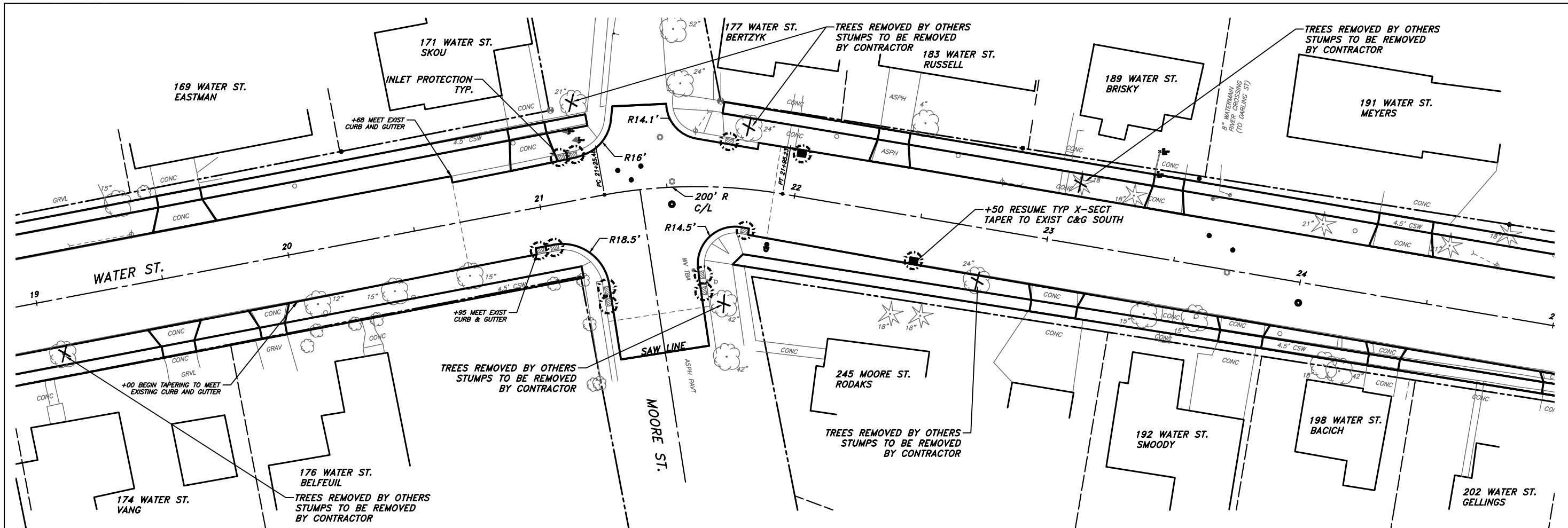
PROJECT : #K020.1061	DATE : 12/14/2020	DRAWN BY : RJH	APPROVED BY : BAO
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CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY IMPROVEMENTS
WATER STREET PLAN & PROFILE

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SHEET 24 OF 46

STREET GRADES



PLOT DATE: 3/11/2021 4:32:39 PM
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STREET GRADES

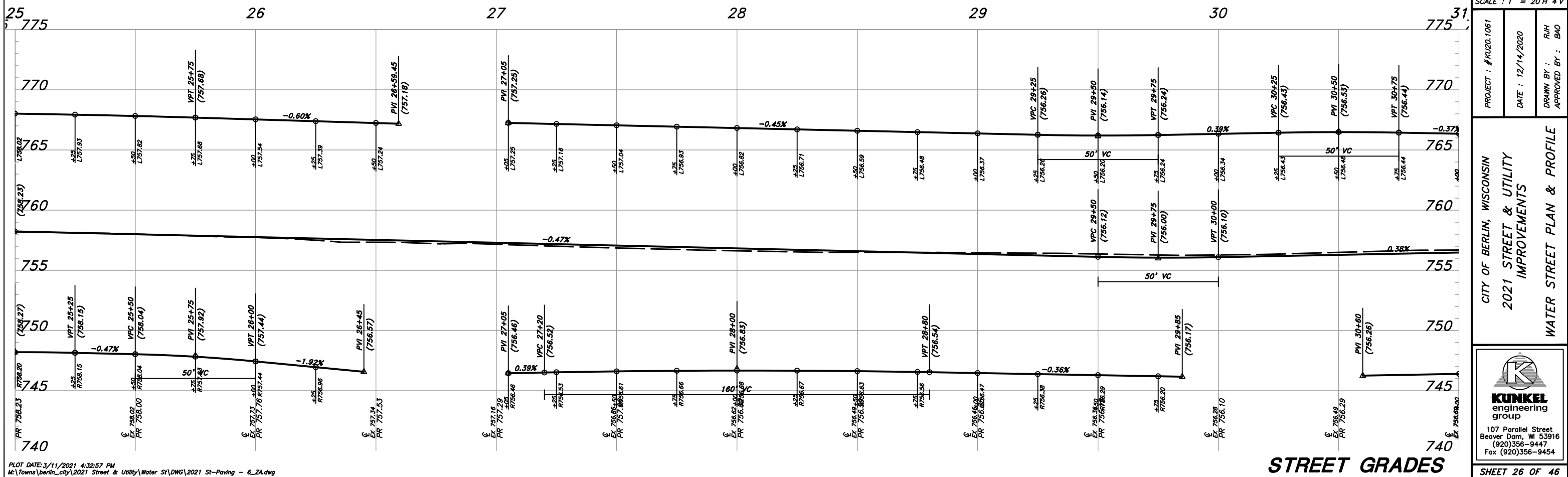
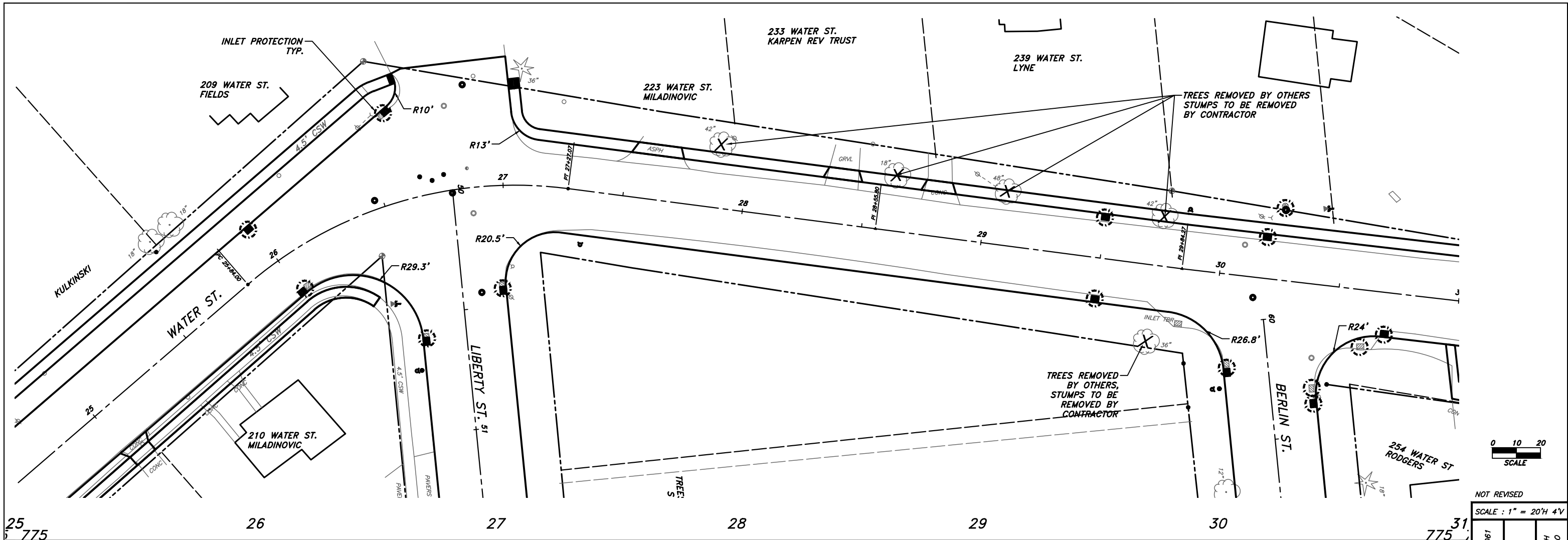
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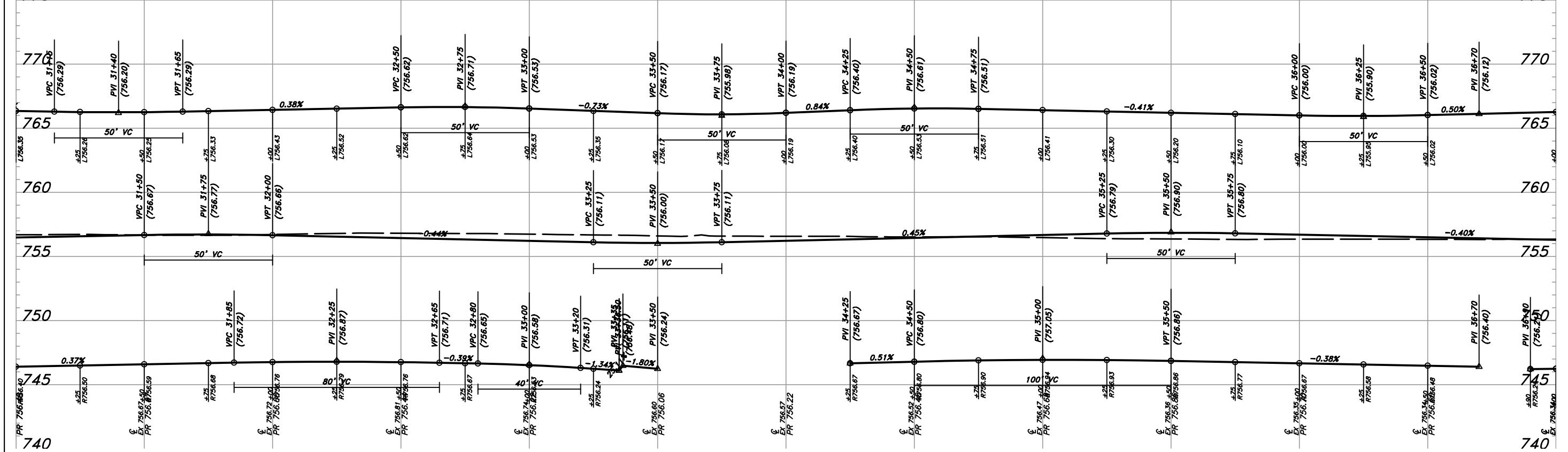
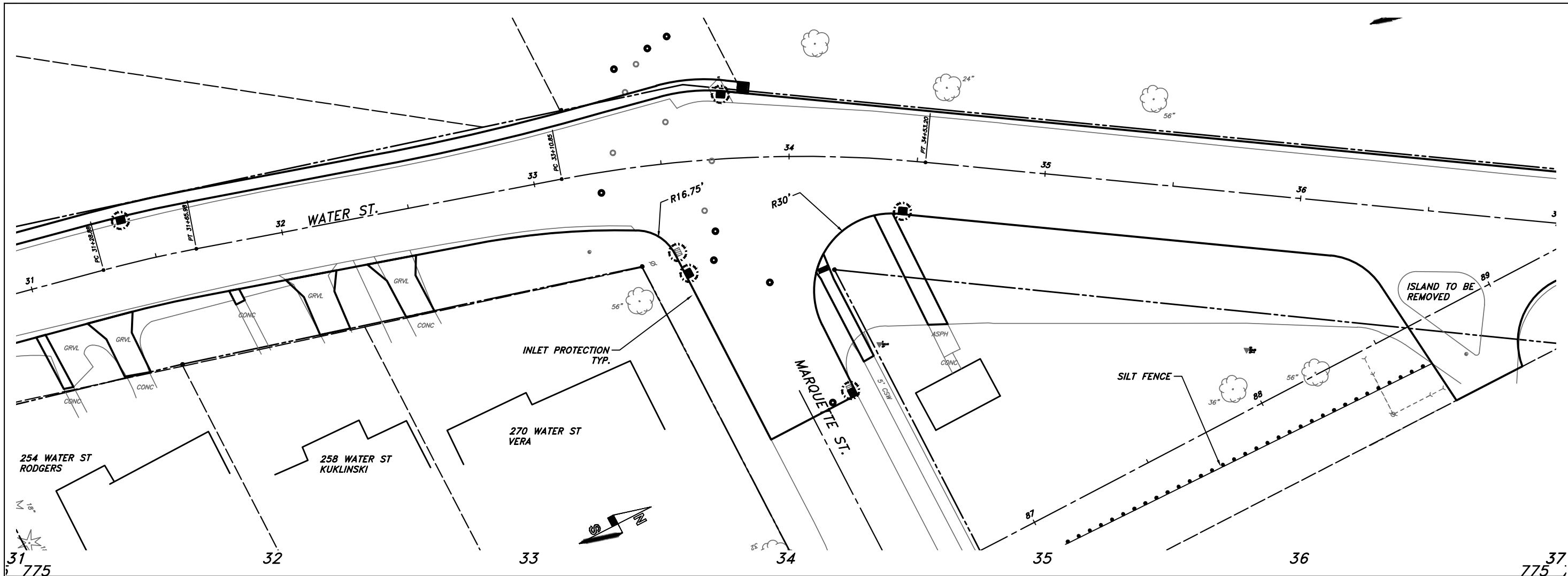
PROJECT : #KUZ0.1061
DATE : 12/14/2020
DRAWN BY : RJH
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET PLAN & PROFILE

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SHEET 25 OF 46





PLOT DATE: 3/12/2021 11:08:45 AM
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STREET GRADES

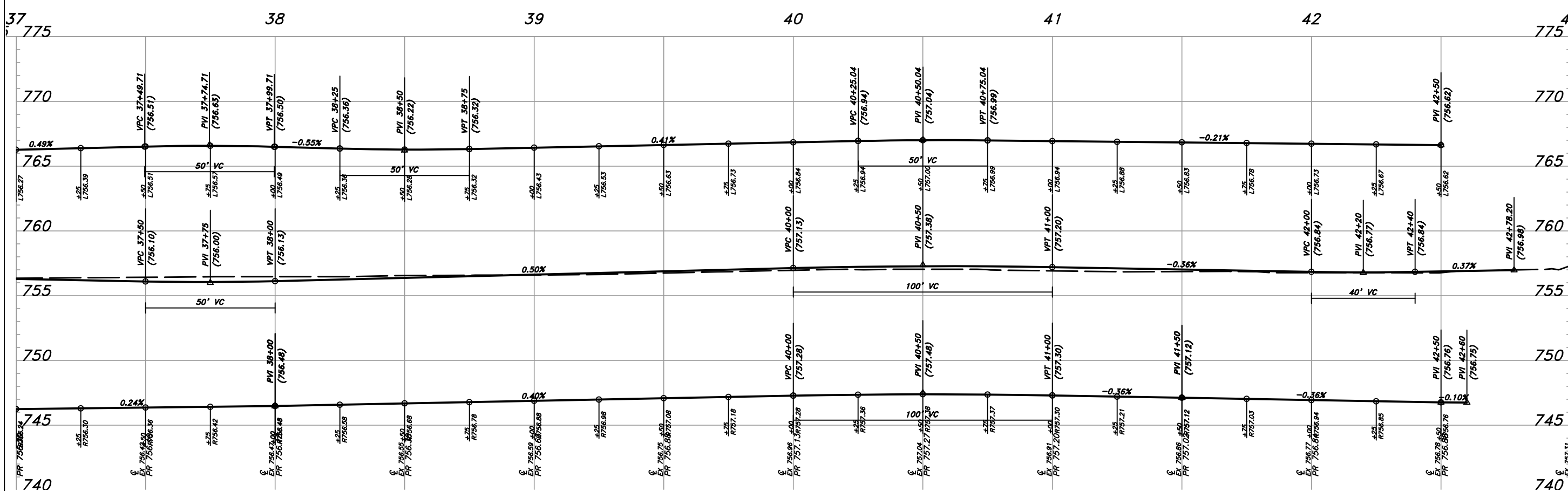
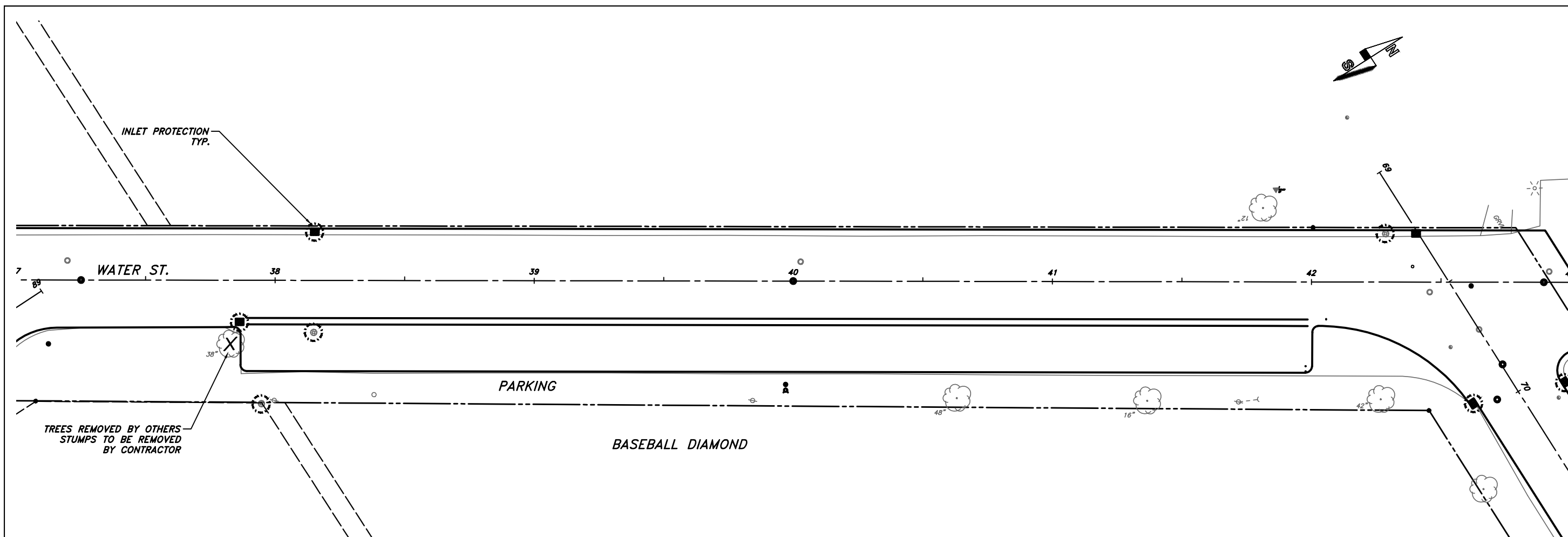
NOT REVISED

SCALE : 1" = 20'H 4"V

PROJECT : #K020.1061	DATE : 12/14/2020	DRAWN BY : RJH
		APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
 2021 STREET & UTILITY
 IMPROVEMENTS
 WATER STREET PLAN & PROFILE

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PLOT DATE: 3/24/2021 3:42:05 PM
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REVISED 3/24/2021
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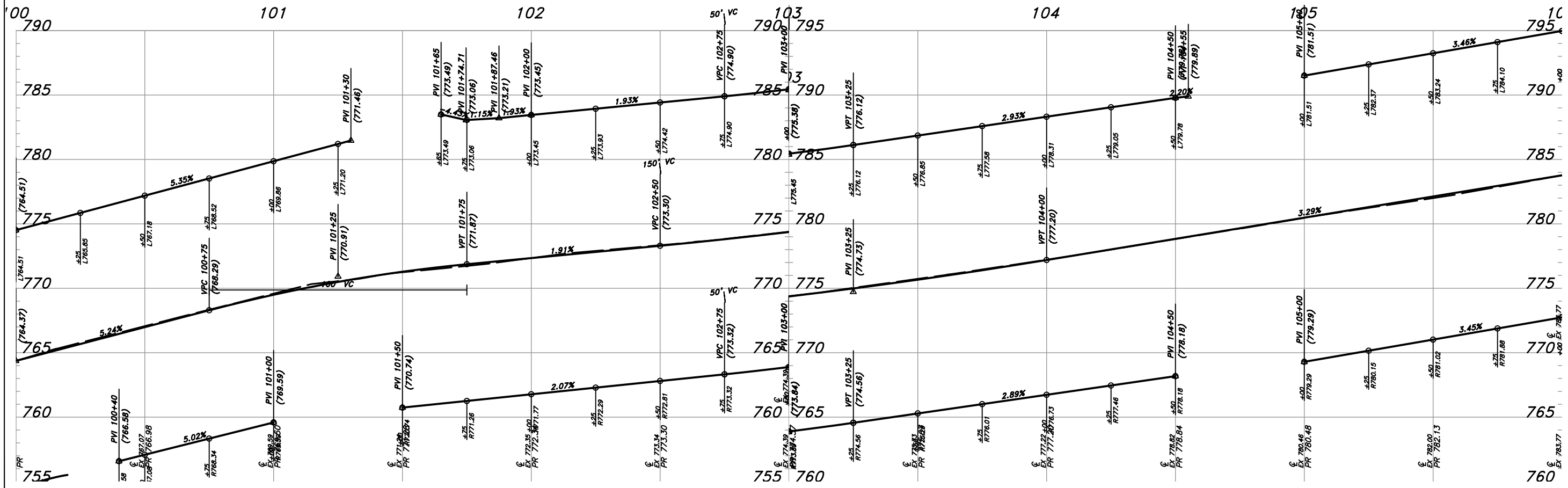
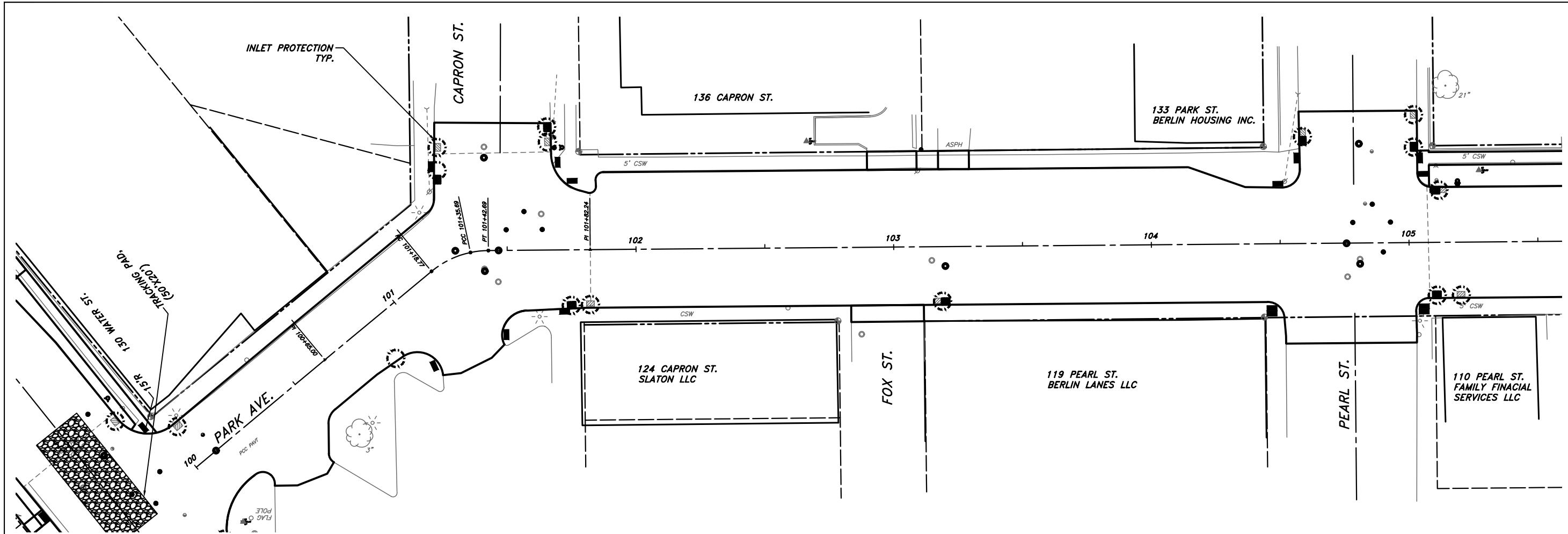
PROJECT : #K020.1061	DATE : 12/14/2020	DRAWN BY : RJH
		APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS

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SHEET 28 OF 46

STREET GRADES



PLOT DATE: 3/11/2021 4:33:59 PM
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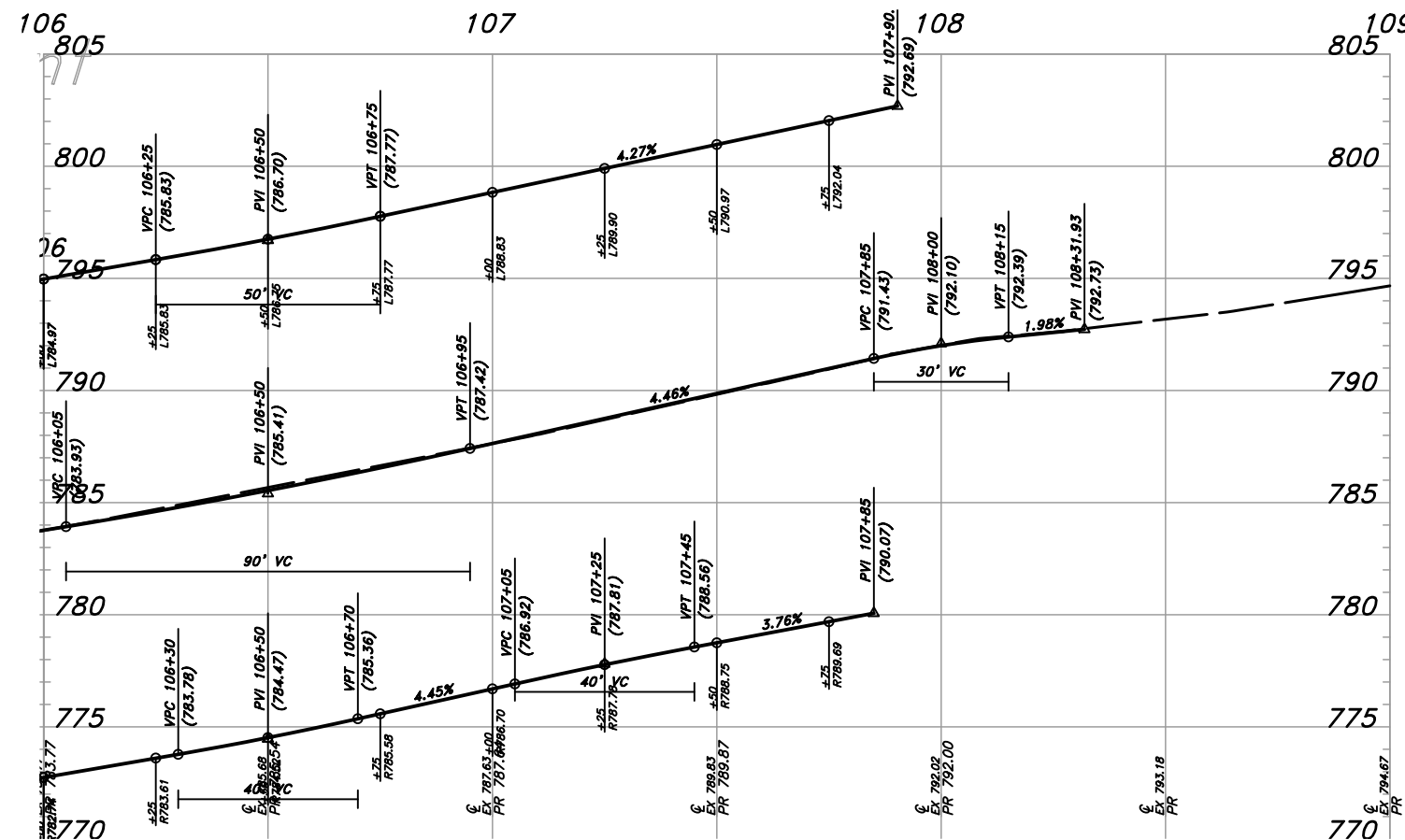
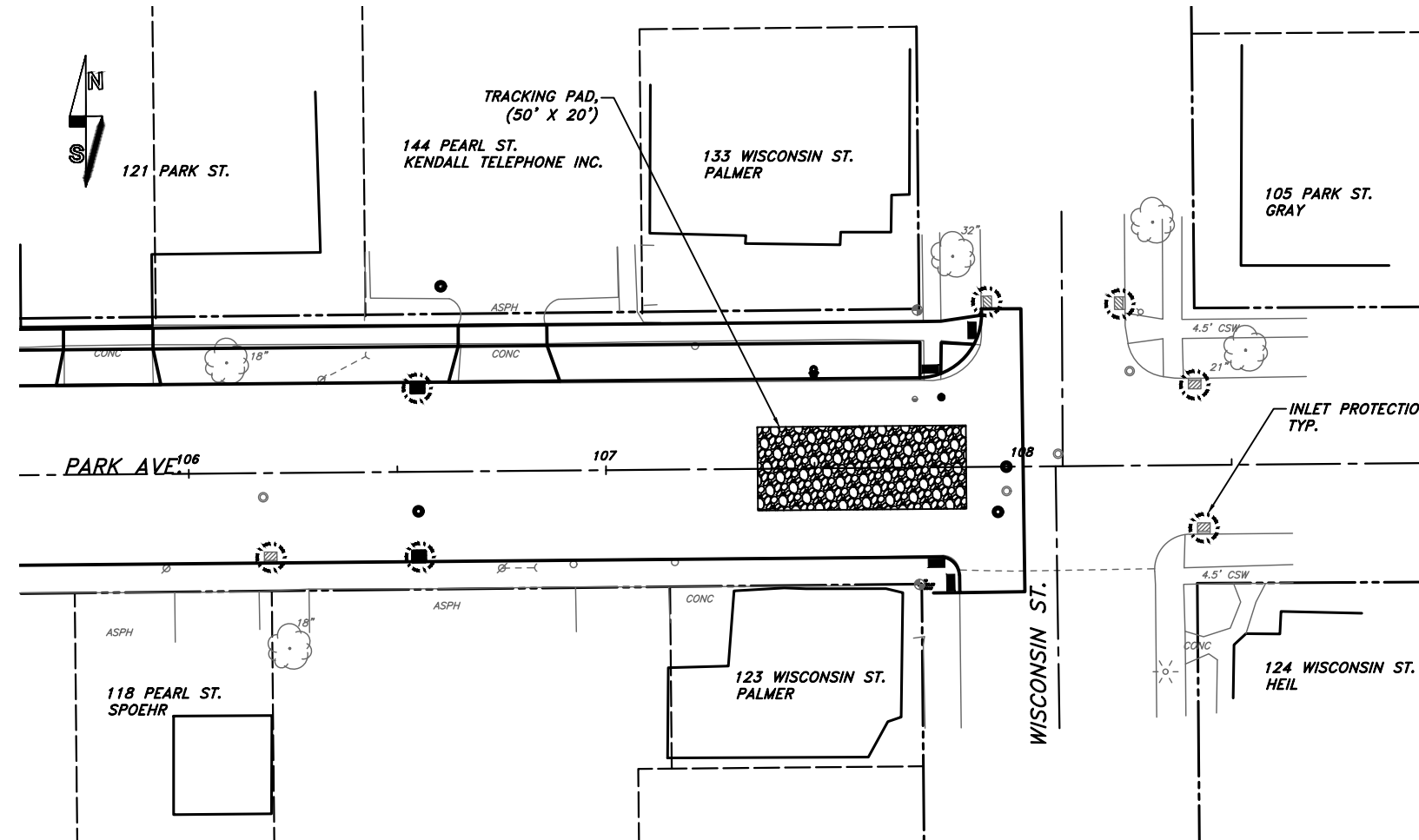
SCALE : 1" = 20'H 4"V

PROJECT : #KUZ0.1061	DATE : 12/14/2020	DRAWN BY : RJH	APPROVED BY : BAO
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CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY IMPROVEMENTS
WATER STREET PLAN & PROFILE

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SHEET 29 OF 46



NOT REVISED

SCALE : 1" = 20'H 4'V

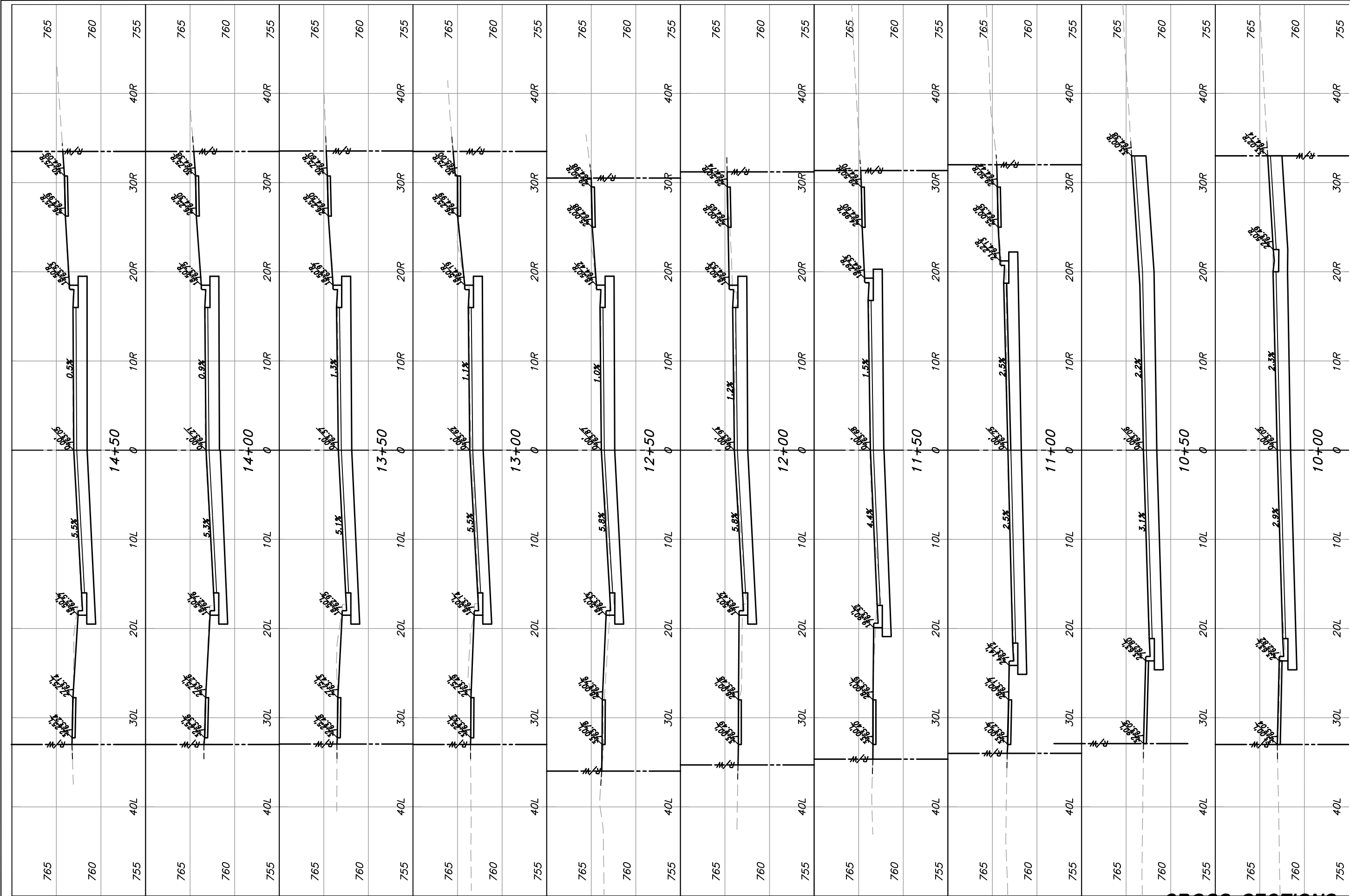
PROJECT : #KU20.1061	DATE : 12/14/2020	DRAWN BY : RJH
		APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
WATER STREET PLAN & PROFILE

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STREET GRADES

SHEET 30 OF 46



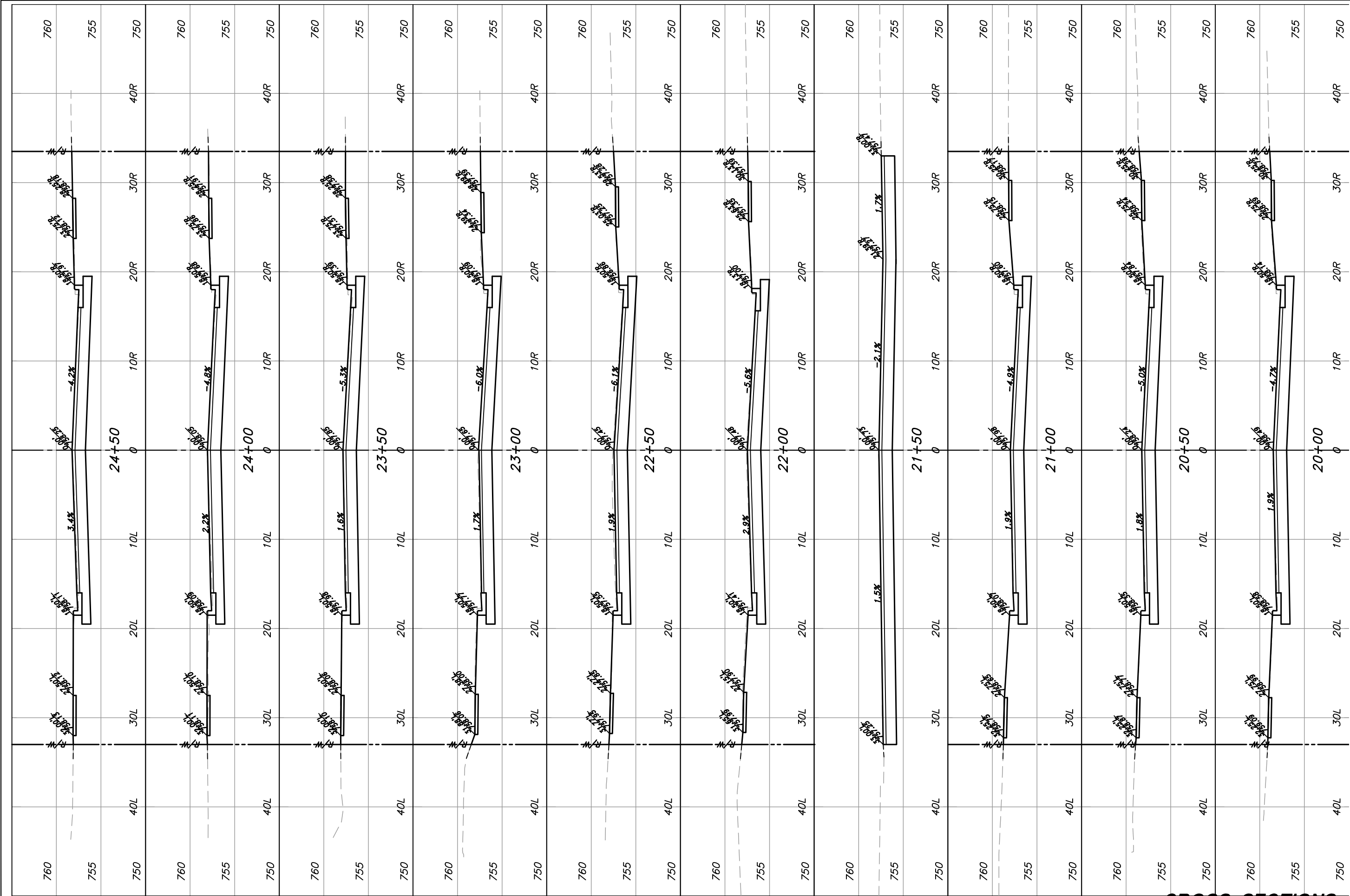
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PROJECT : #KUZ0.1061
DATE : 5/9/19
DRAWN BY : RJH APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
WATER STREET CROSS SECTIONS

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CROSS SECTIONS

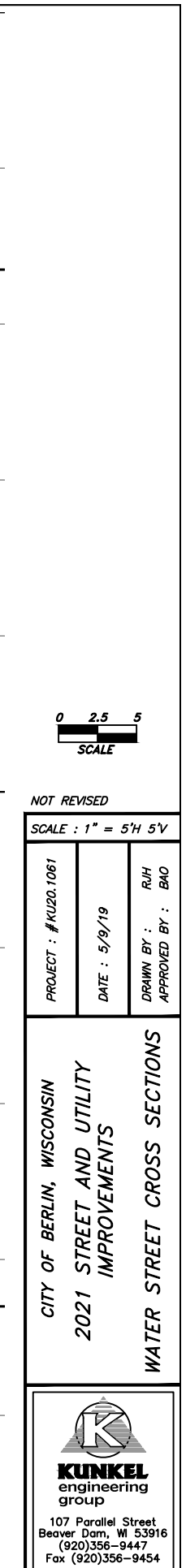


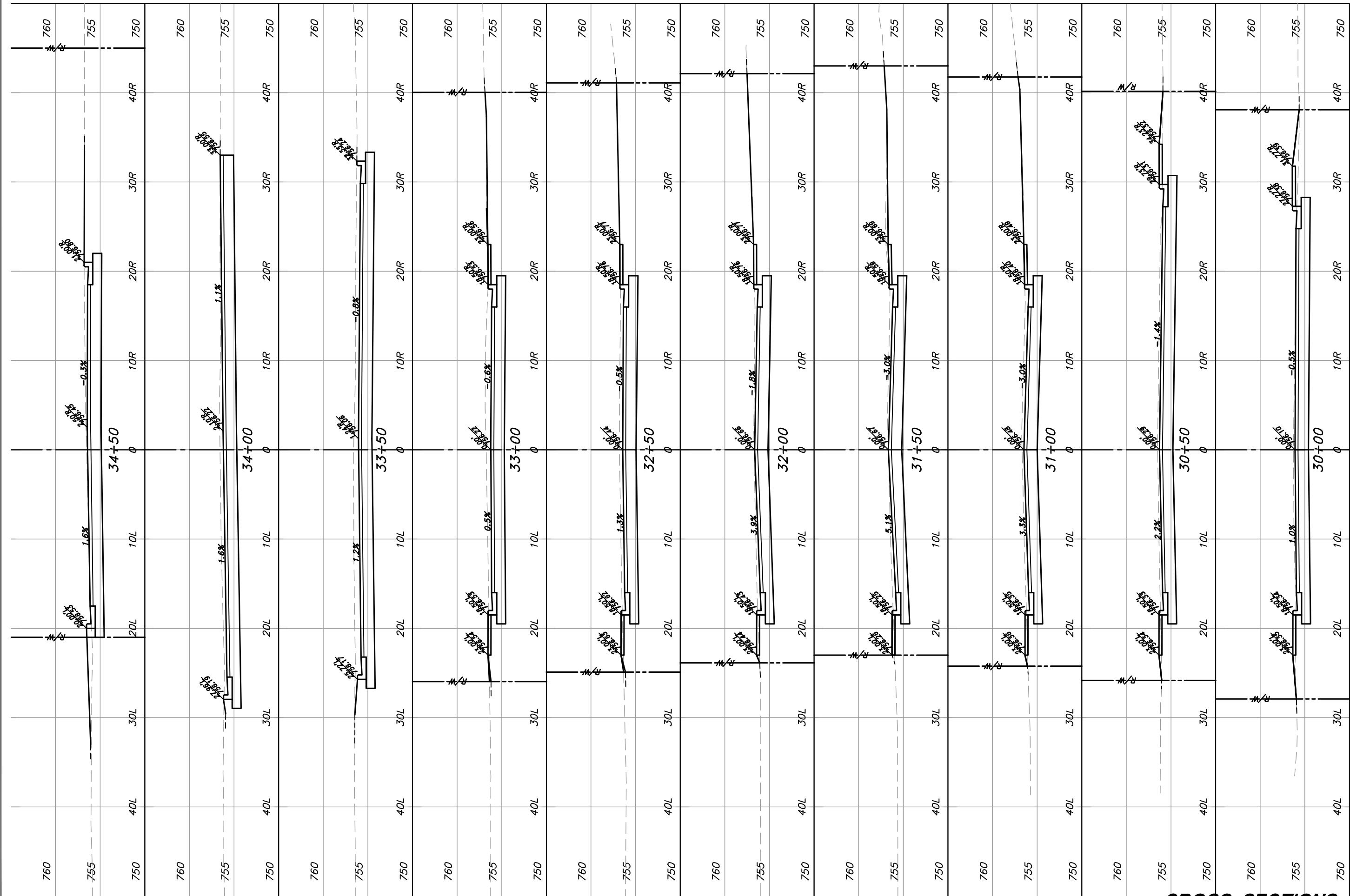
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PROJECT : #KUZ0.1061
DATE : 5/9/19
DRAWN BY : RJH APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
WATER STREET CROSS SECTIONS

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PLOT DATE: 3/11/2021 4:35:05 PM
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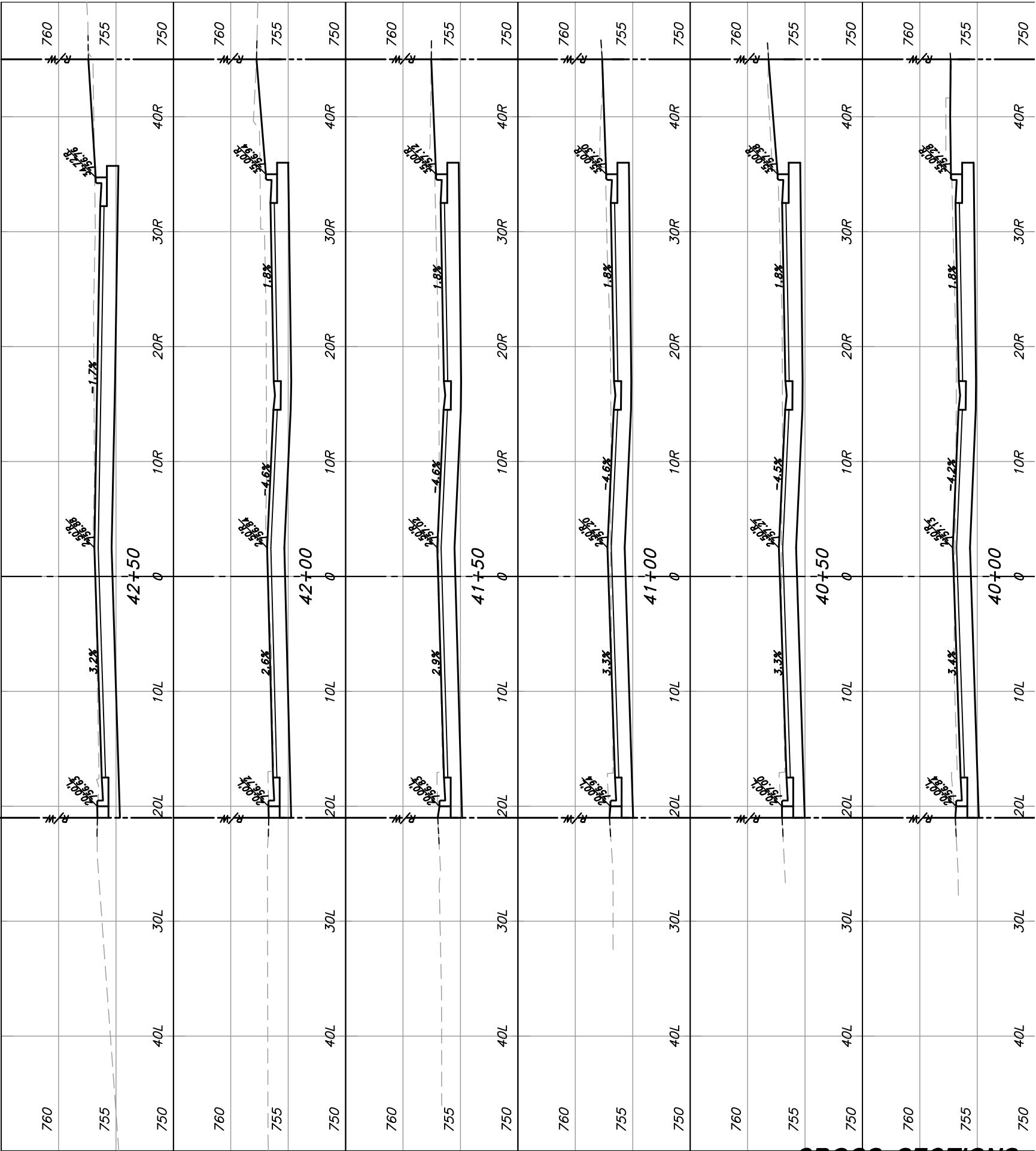
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PROJECT : #KUZ0.1061
DATE : 5/19/19
DRAWN BY : RJH
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
WATER STREET CROSS SECTIONS

KUNKEL
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107 Parallel Street
Beaver Dam, WI 53916
(920)356-9447
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CROSS SECTIONS



NOT REVISED

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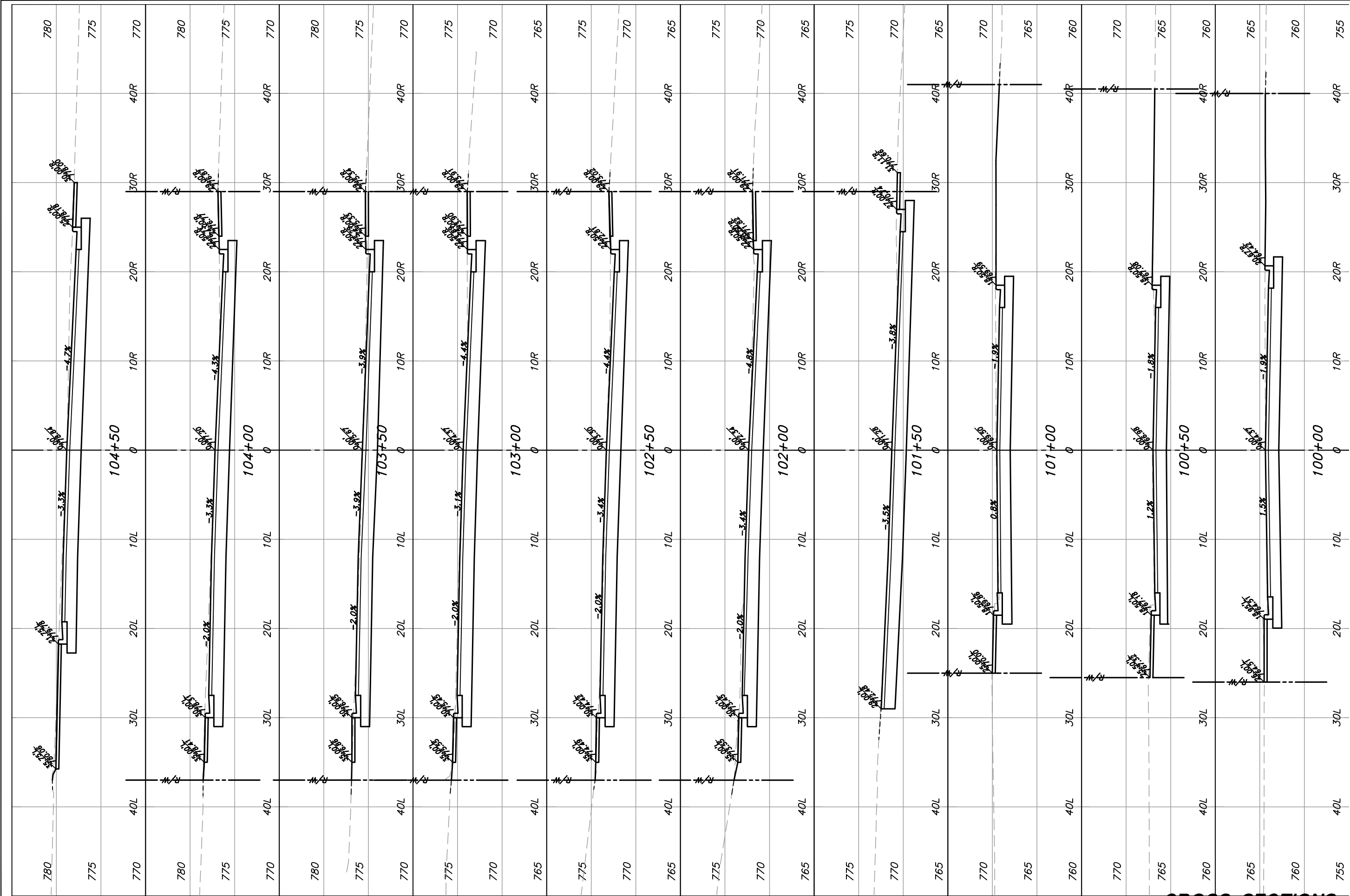
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DATE : 5/9/19

DRAWN BY : RJH
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
WATER STREET CROSS SECTIONS



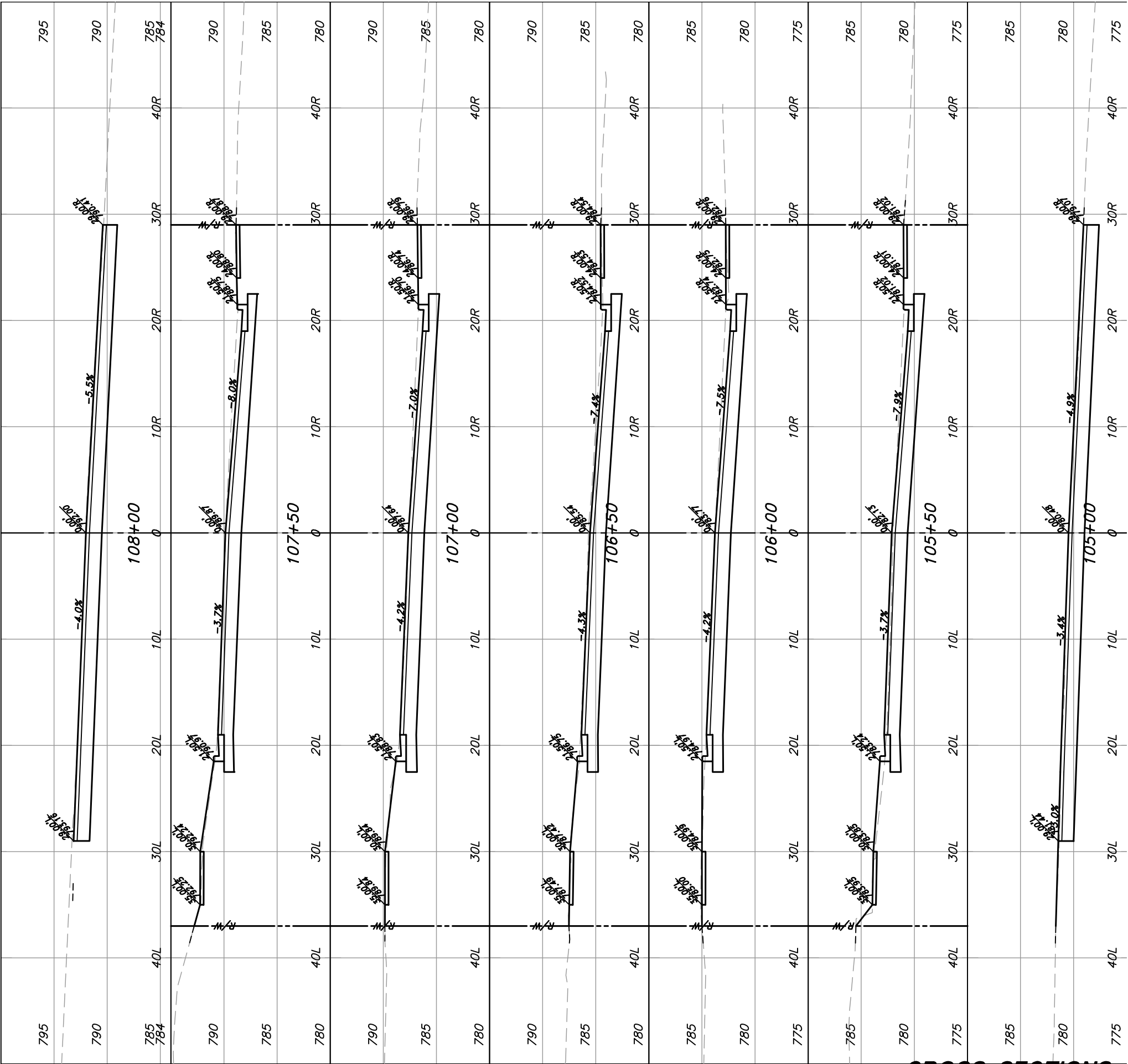


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PROJECT : #KU20.1061
DATE : 5/9/19
DRAWN BY : RJH APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
PARK AVENUE CROSS SECTIONS

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engineering
group
107 Parallel Street
Beaver Dam, WI 53916
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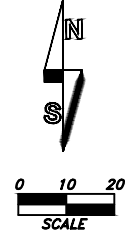
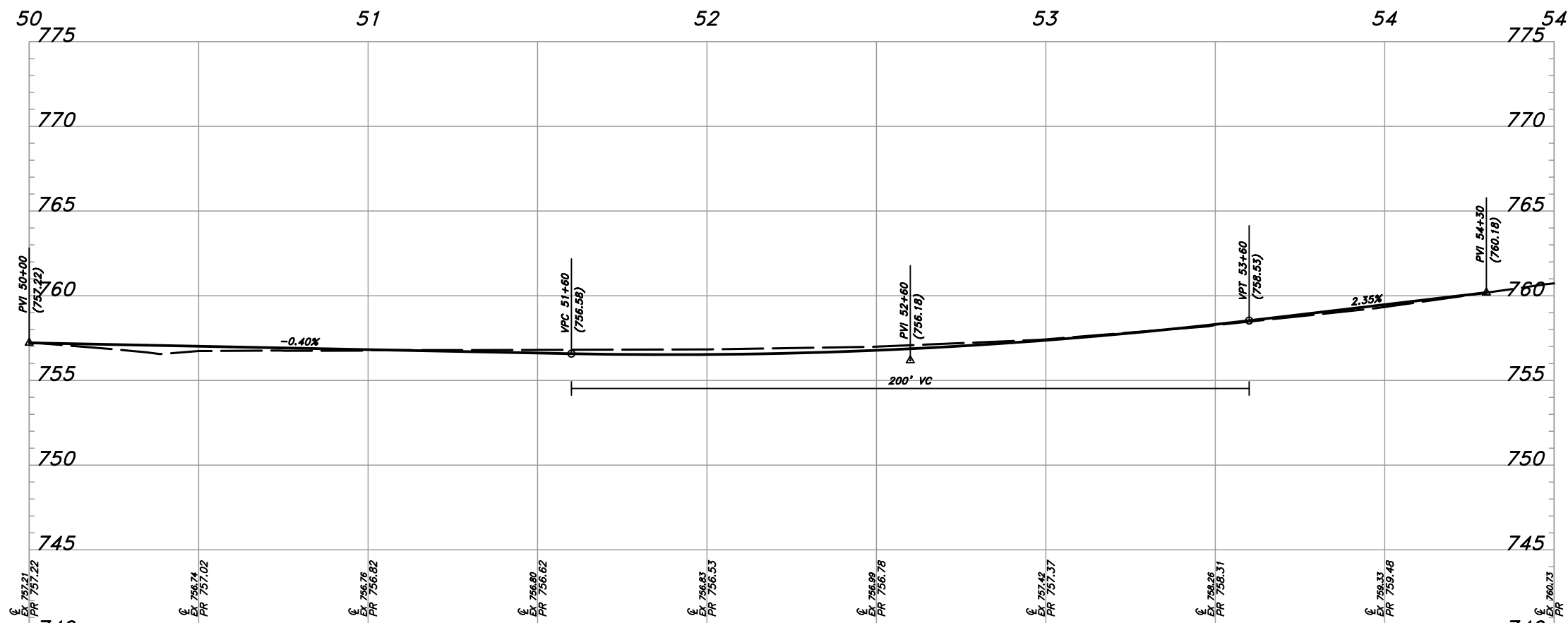
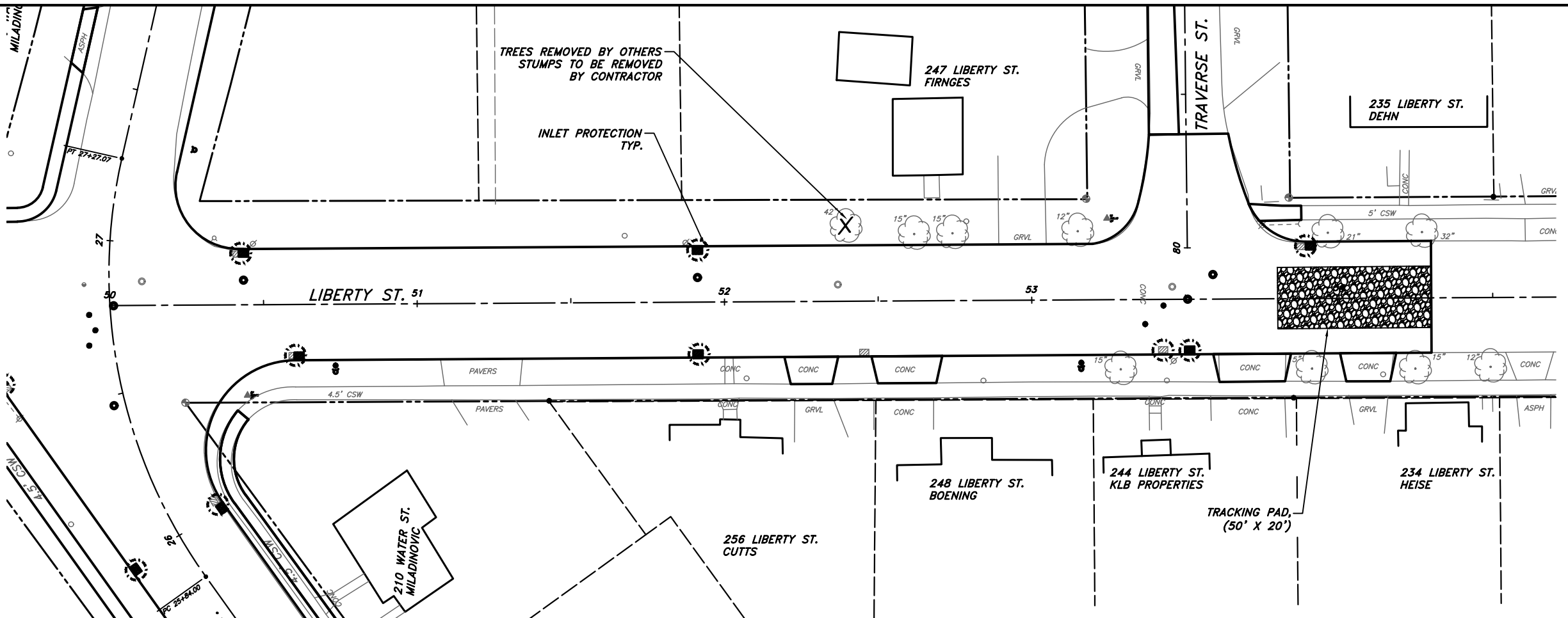
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PROJECT : #KUZ0.1061	DRAWN BY : RJH
DATE : 5/9/19	APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
PARK AVENUE CROSS SECTIONS


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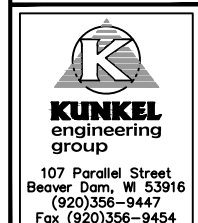


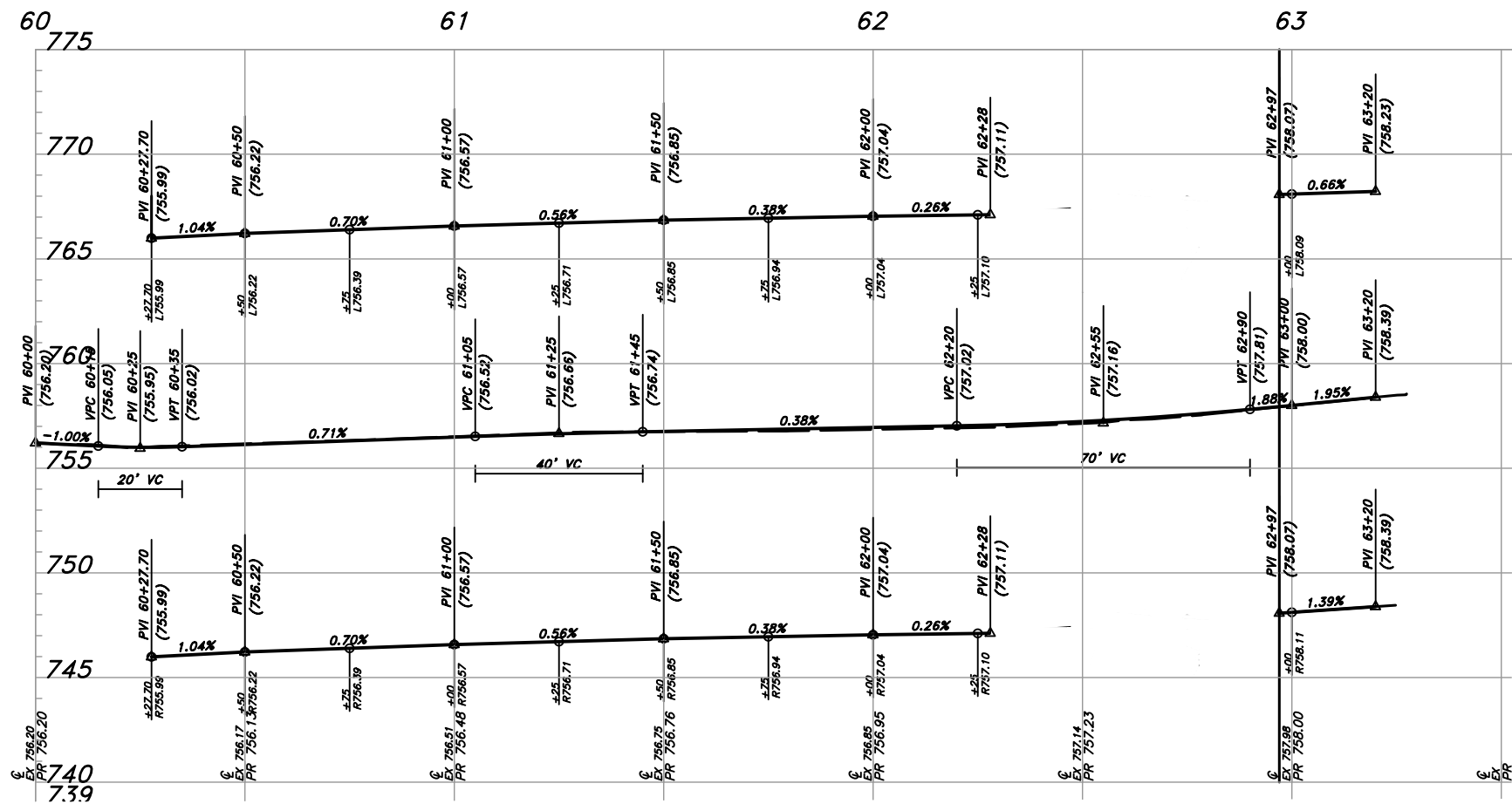
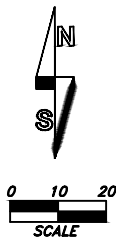
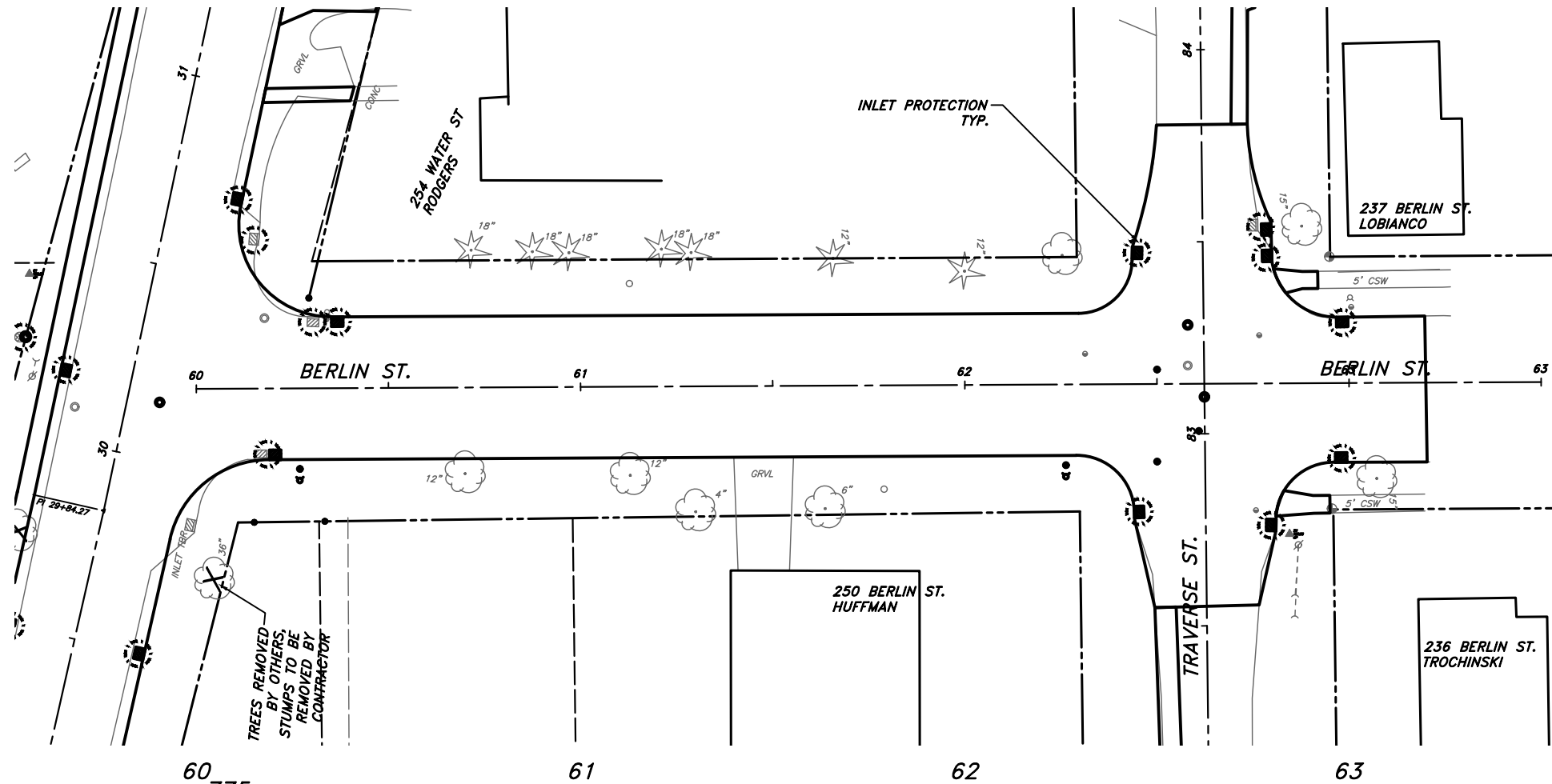
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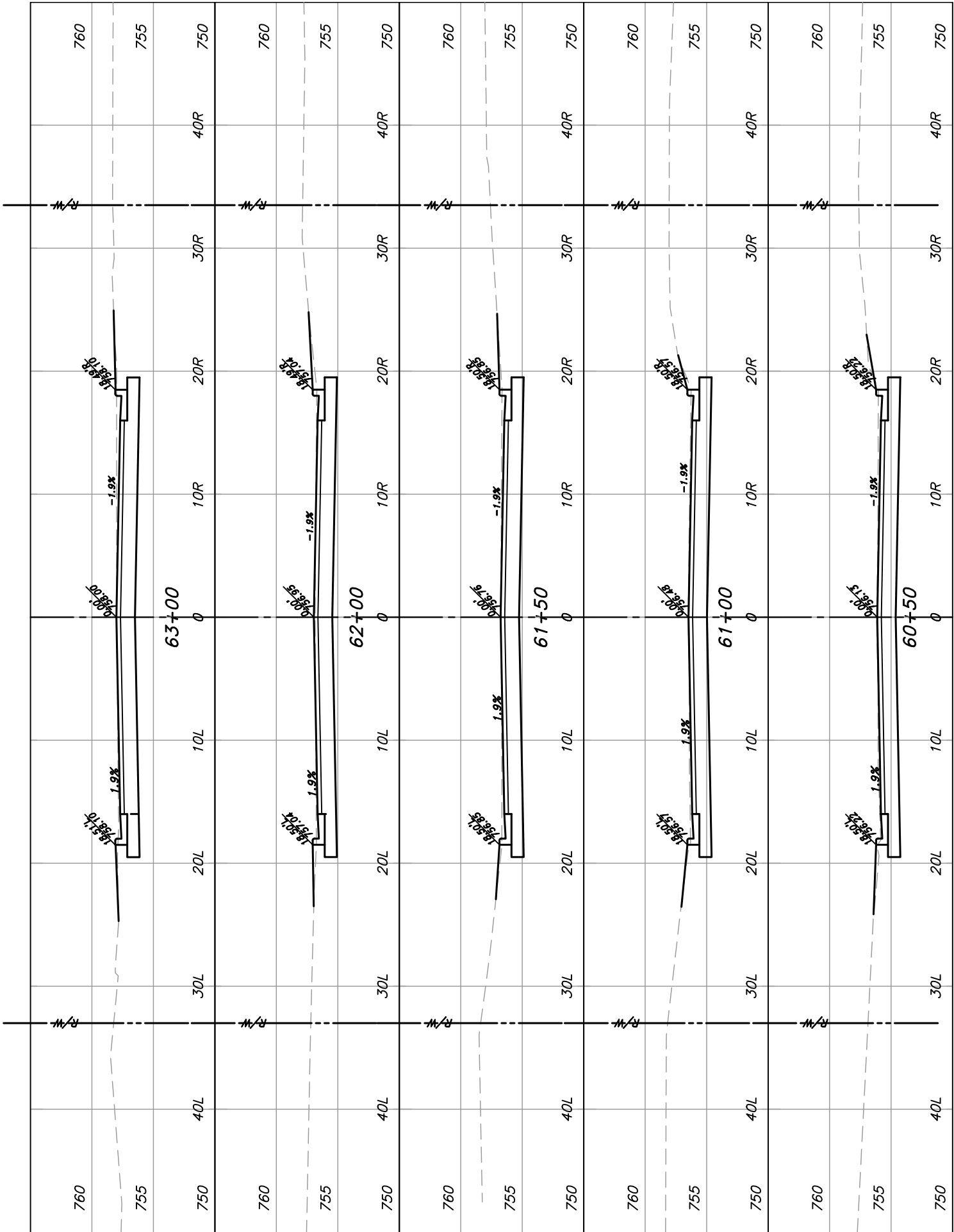
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PROJECT : #KU20.1061	DATE : 12/14/2020	DRAWN BY : RIH
		APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
LIBERTY STREET
PLAN & PROFILE







NOT REVISED

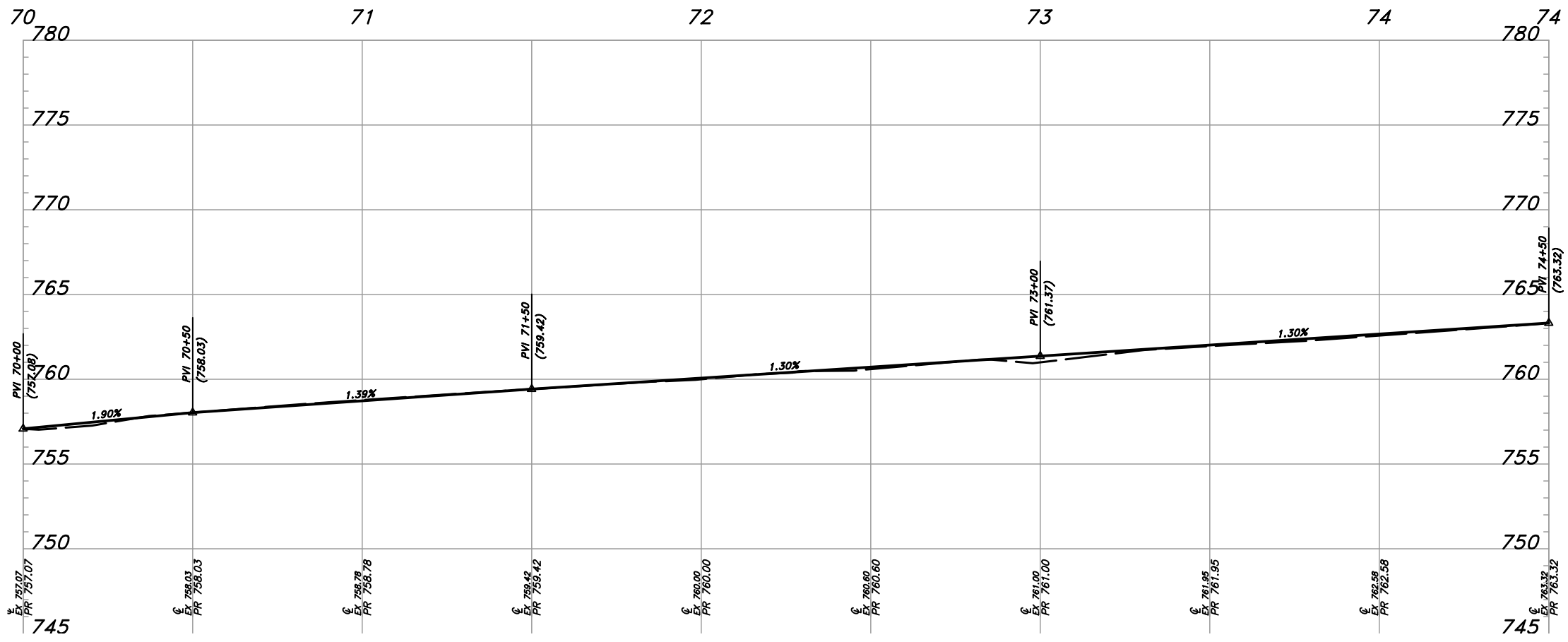
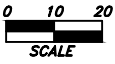
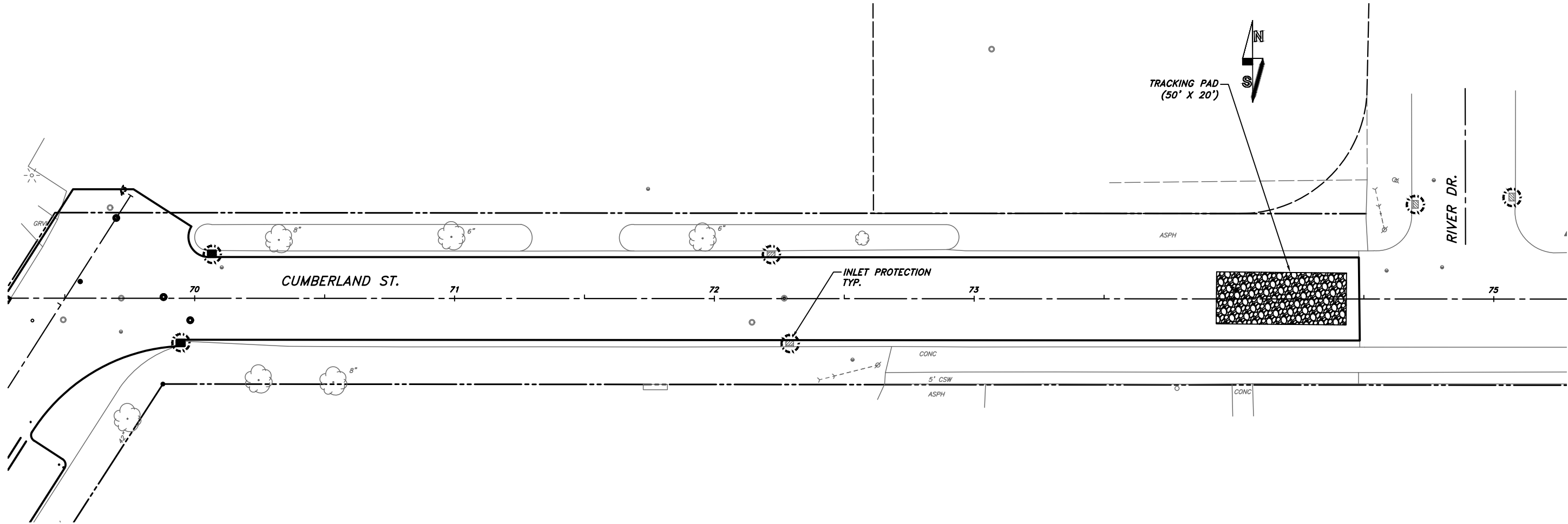
SCALE : 1" = 5'H 5"V

PROJECT : #KUZ0.1061	DRAWN BY : RJH
DATE : 5/9/19	APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
BERLIN STREET
CROSS SECTIONS


KUNKEL
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CROSS SECTIONS



NOT REVISED

SCALE : 1" = 20'H 4"V

PROJECT : #K20.1061	DATE : 12/14/2020	DRAWN BY : RJH
		APPROVED BY : BAO

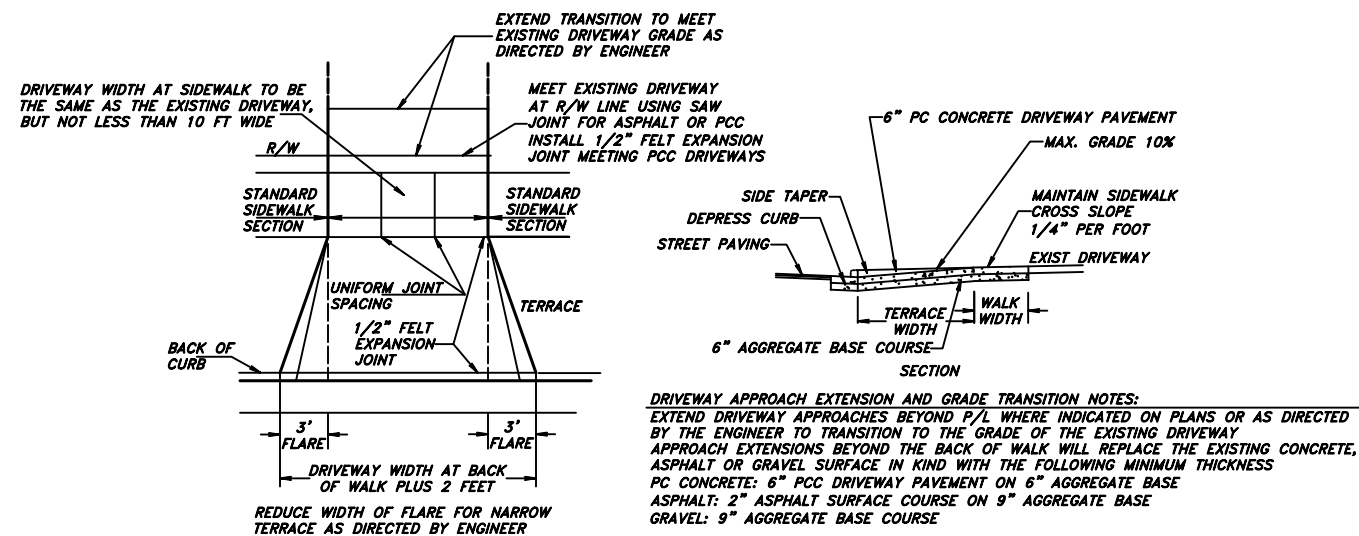
CITY OF BERLIN, WISCONSIN
2021 STREET & UTILITY
IMPROVEMENTS
CUMBERLAND STREET
PLAN & PROFILE

KUNKEL
engineering
group

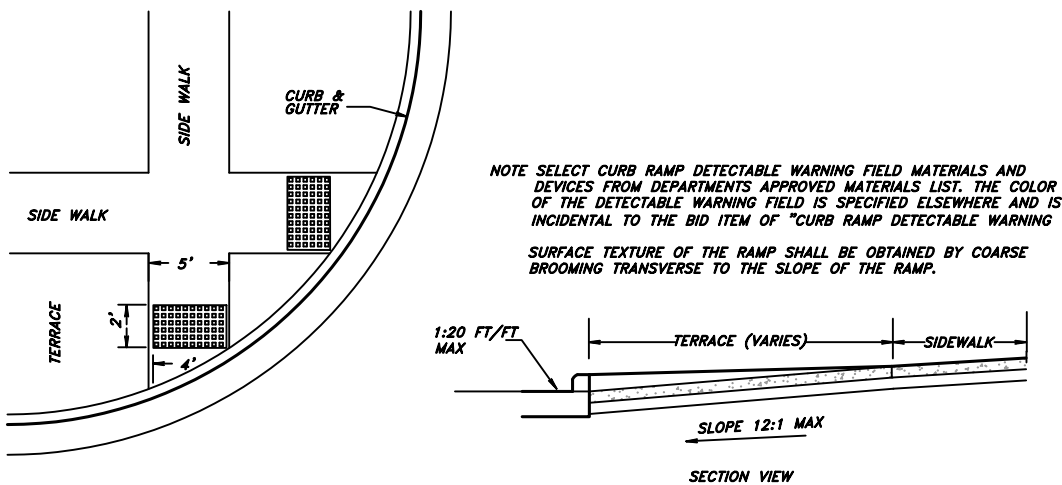
107 Parallel Street
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PAVING PLAN

PAVING DETAILS

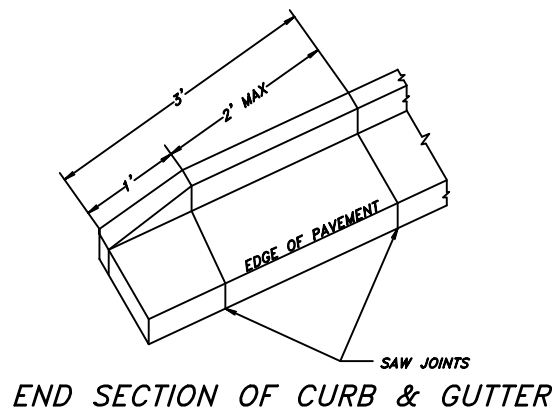


DRIVEWAY PAVEMENT DETAILS

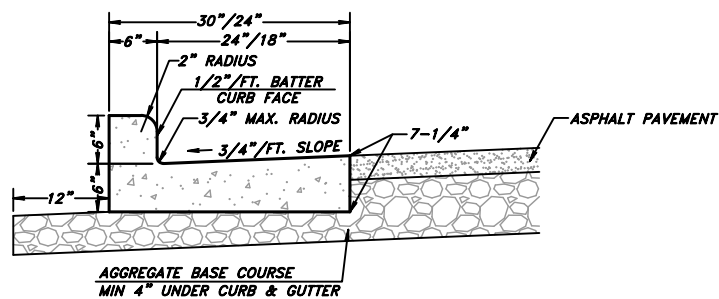


PLAN VIEW
(TYPE 2 RAMP)

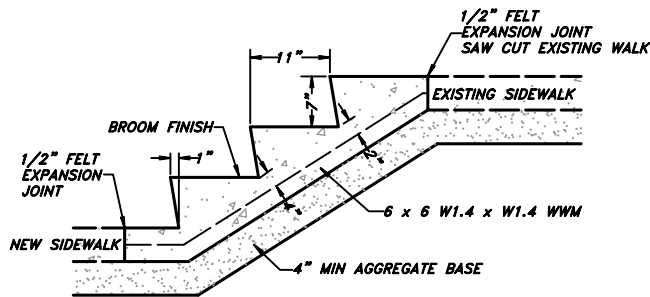
SIDEWALK RAMP DETAILS
REQUIRED AT ALL INTERSECTIONS AND WHERE CALLED OUT ON PLANS



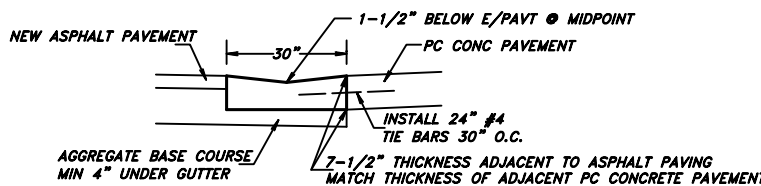
END SECTION OF CURB & GUTTER



STANDARD TYPE D CURB AND GUTTER
ADJACENT TO ASPHALT PAVEMENT



PC CONCRETE STEP DETAIL
(CAST-IN-PLACE)



STANDARD V GUTTER
FOR INSTALLATION ADJACENT TO EITHER
ASPHALT PAVEMENT OR PCC PAVEMENT

NOT TO SCALE

REDUCED 1/2

REVISED 12/15/2020

NOT TO SCALE

PROJECT : #KU20.1061

DATE : 2/4/2021

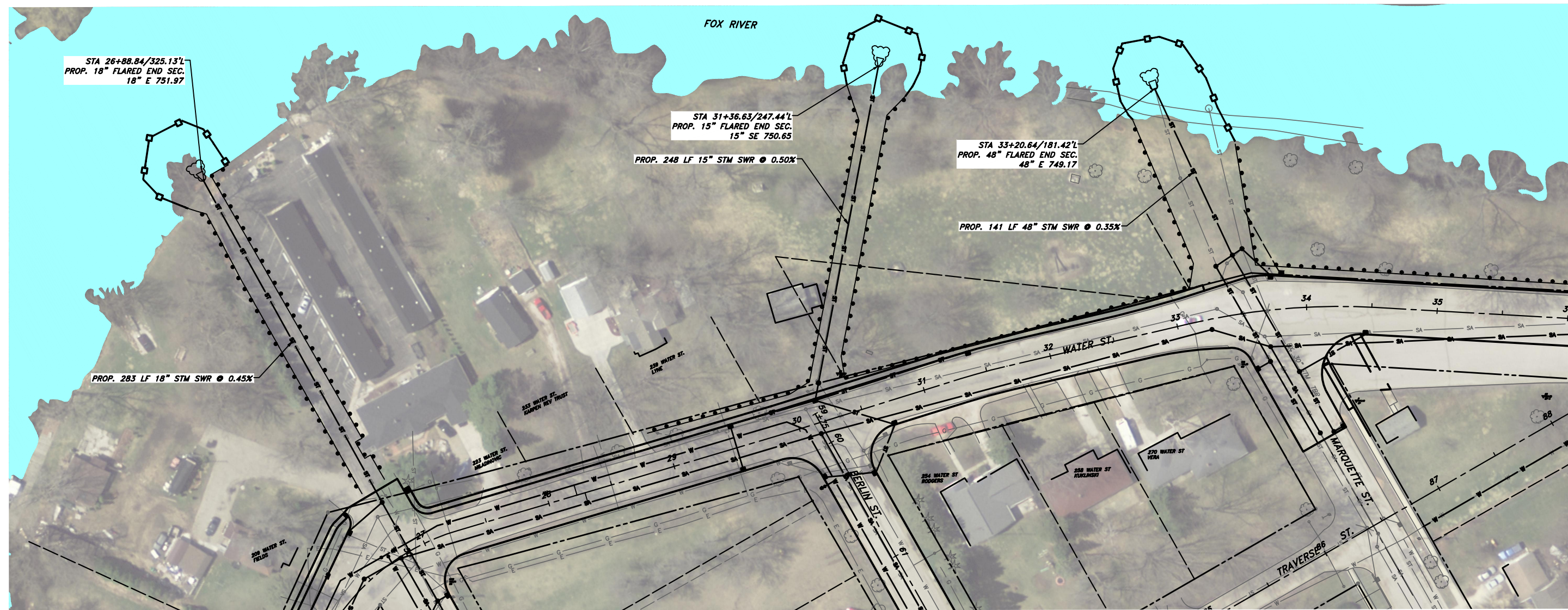
DRAWN BY : ARW
APPROVED BY : BAO

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
PAVING DETAILS

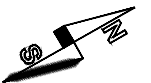
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PAVING DETAILS

SHEET 44 OF 46



MATCH LINE AT STA. 36+00



0 20 40
SCALE

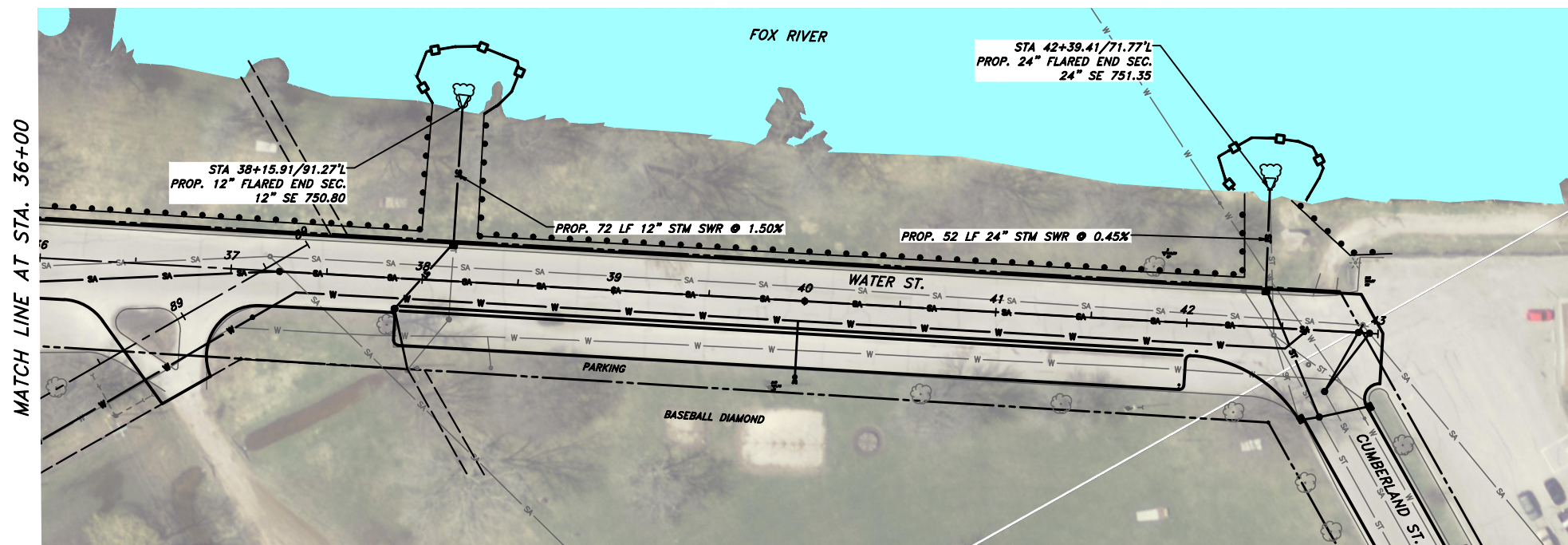
NOT REVISED

SCALE : 1" = 40'H

PROJECT : #K20.1061

DATE : 12/14/2020

DRAWN BY : R.H. ZA
APPROVED BY : BAO



MATCH LINE AT STA. 36+00

LEGEND

- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP

STANDARD EROSION CONTROL PROVISIONS

General Notes for Construction Erosion Control:

1. Refer to WDNR's Stormwater web page of technical standards @ <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm#Construction>
2. Construct and maintain all erosion and sediment control measures in accordance with the WDNR's Stormwater web page of technical standards @ <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm#Construction>
3. Install sediment control measures prior to any grading or disturbance of existing surface material. Adjust all sediment control measures to meet field conditions at the time of construction.
4. Provide weekly inspection and maintenance of all sediment control structures to ensure intended purpose is accomplished. Maintain documentation of inspections per the project special provisions. Sediment control measures are to be in working condition at the end of each working day.
5. In addition to weekly inspections, inspect sediment control structures for integrity after any rainfall of 1/2" or greater and correct any damaged structures.
6. Do not remove sediment control measures until the areas served have established vegetative cover.
7. Collect tracked soil from paved roads located near the construction site. All streets shall be swept and cleared of all dirt and debris on a daily basis.
8. When Discharging trench water refer to WDNR Technical Standard 1061 for de-watering in order to properly filter water in a settling basin or filtering device prior to release into a storm sewer or stream.
9. Protect storm sewer section basins from run-off with fabric per WDNR Tech Std 1060.
10. Prevent overland flow from leaving the work site by installing straw bale or fabric filter fencing parallel to the contours located downhill from the work area.
11. Sediment control for pipeline construction.
 - a. Place excavated trench material on the high side of the trench.
 - b. Backfill, compact, and stabilize the trench immediately after pipe installation.
12. Temporary seeding areas which land-disturbing activities will not be performed for a period greater than 30 days and requires vegetative cover for less than one year. Permanent seeding and stabilization should be applied within a week of final grade being established.
13. All land disturbance and stabilization for this project will occur between April 15th and September 15th. Warm season seeding can be used during this time period. Should seeding need to be completed after November 15th, a dormant seed must be used. All seeding construction shall conform to WDNR Conservation Practice Standard 1059.

EROSION CONTROL PLAN & DETAILS

Applicable WDNR Technical Standards

- 1052 Non Channel Erosion Mat
1056 Silt Fence
1057 Stone Tracking Pad
1058 Mulching
1059 Seeding
1060 Inlet Protection
1067 Grading Practices for Erosion Control
1068 Dust Control
1069 TURBIDITY BARRIER

- SECTION A - WATER STREET (0.63 MILE)
SECTION B - LIBERTY STREET (0.17 MILE)
SECTION C - BERLIN STREET (0.06 MILE)
SECTION D - CUMBERLAND STREET (0.08 MILE)
SECTION E - TRAVERSE STREET (0.18 MILE)
SECTION F - PARK AVENUE (0.15 MILE)

TOTAL DISTURBED AREA: 1.27 MILES

PROJECT-SPECIFIC EROSION CONTROL PLAN

City of Berlin - 2021 Street and Utility Improvements

Tracking Pads must be installed per erosion control plan details at all locations shown on the plans and as directed by the engineer and maintained through final stabilization.

Inlet Protection must be installed per erosion control plan details at all locations shown on the plans and as directed by the engineer and maintained through final stabilization.

Silt fence must be installed per erosion control plan details at all locations shown on the plans and as directed by the engineer and maintained through final stabilization.

REQUIRED STORM SEWER
INLET PROTECTION TYPE C

INLET PROTECTION TYPE C SHALL BE INSTALLED ON ALL EXISTING INLETS IN THE PROJECT LIMITS AS SHOWN ON THE PAVING PLANS. INSTALL INLET PROTECTION ON NEW OR REPLACEMENT INLETS AS THEY ARE INSTALLED

GEOTEXTILE FILTER FABRIC SHALL BE TYPE FF PER WDOT STD SPEC, OR ALTERNATE MATERIALS PER CURRENT PAL

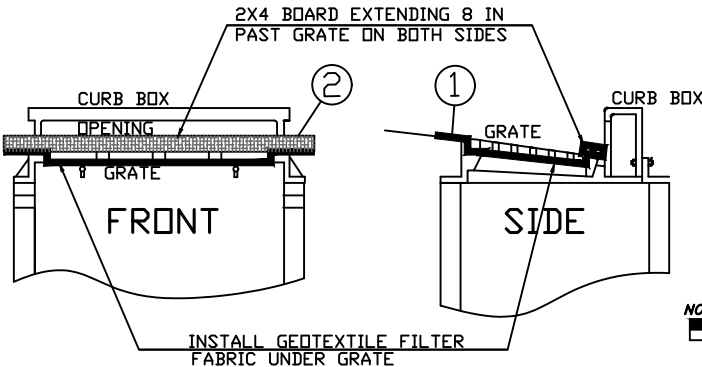
CONTRACTOR SHALL PREVENT SEDIMENT TRAPPED IN FABRIC FROM FALLING INTO STORM SEWER DURING MAINTENANCE OR REMOVAL. SHOULD MATERIAL SPILL INTO STORM SEWER THE CONTRACTOR SHALL CLEAN THE INLET IMMEDIATELY

1) CUT FABRIC TO ALLOW MIN 10" AROUND PERIMETER OF GRATE WHEN INSTALLED TO FACILITATE MAINTENANCE AND REMOVAL

2) WRAP MIN 18" FABRIC AROUND BOARD AT INLET THROAT AND STAPLE. BOARD SHALL NOT COMPLETELY BLOCK INLET THROAT. TRIM FABRIC TO WITHIN 3' OF THE GRATE IN THE GUTTER FLOWLINE.

CONSTRUCTION EROSION CONTROL LEGEND

- EXISTING INLET - INSTALL TYPE C INLET PROTECTION
INDICATES TRACKING PAD TO BE INSTALLED
INDICATES SILT FENCE TO BE INSTALLED
INDICATES BALE CHECK TO BE INSTALLED



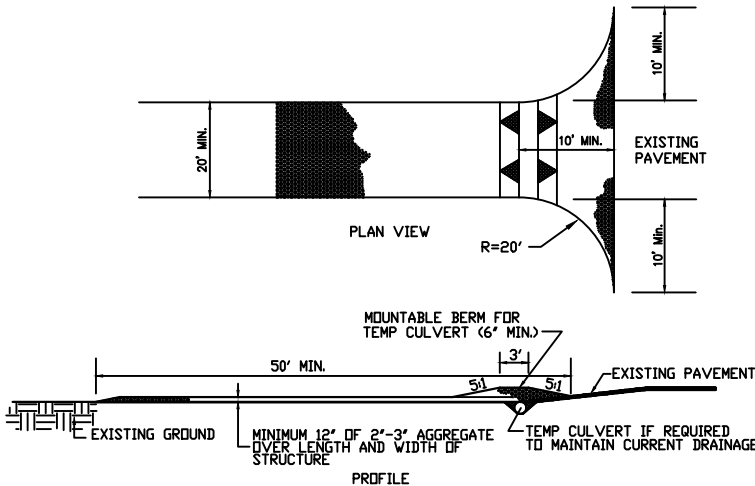
REDUCED 1/2

REVISED 12/15/2020

NOT TO SCALE

PROJECT : #KUL20.1061
DATE : 2/4/2021
DRAWN BY : ARW
APPROVED BY : BAO

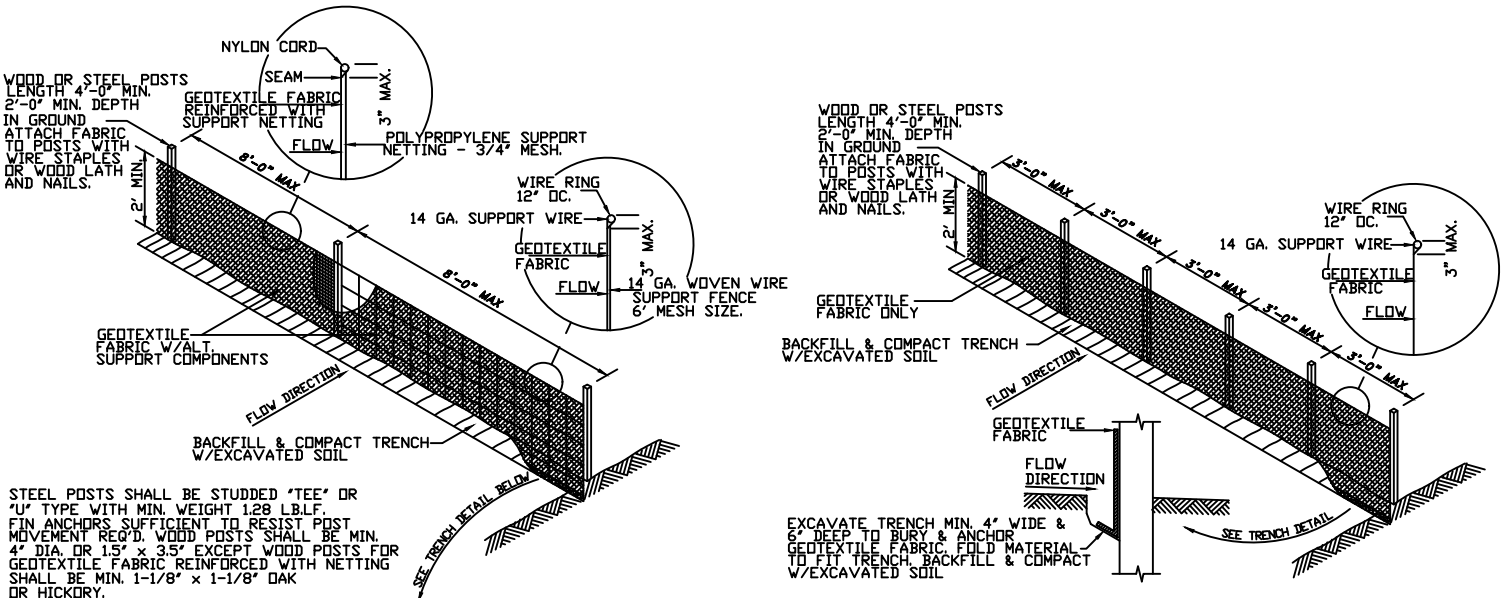
EROSION CONTROL SHOWN ON ALL
PAVING SHEETS AND SHEET 45



- 1) LOCATION - A TRACKING PAD SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.
- 2) SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MINIMUM OF 6" OF STONE OVER THE PIPE. TO BE SIZED ACCORDING TO THE DRAINAGE. 6" MINIMUM WILL BE REQUIRED.
- 3) MAINTENANCE - TRACKING PAD SHALL BE INSPECTED DAILY AND REPAIRED OR REPLACED IMMEDIATELY.
- 4) REMOVAL - SITE STABILIZED/SEEDED/PAVED AS PER SPECIAL PROVISIONS.

TRACKING PAD / STABILIZED CONSTRUCTION ENTRANCE

PLOT DATE: 3/11/2021 4:39:16 PM
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SILT FENCE - METHOD "A"

SILT FENCE - METHOD "B"

EROSION CONTROL DETAILS

CITY OF BERLIN, WISCONSIN
2021 STREET AND UTILITY
IMPROVEMENTS
EROSION CONTROL DETAILS

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SHEET 46 OF 46