

Delegation of Authority

Summary for: 2023 Activities

in accordance with the
Memorandum of Agreement
between the
Washington State Department of Ecology
and
Spokane County
effective
September 1, 2014

prepared by
Spokane County
Public Works Department

Hannah Thomascall, E.I.T – Water Reclamation Project
Manager

Chris Knudson – Sewer Design Project Manager

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Ben Brattebo, P.E. – Water Programs Manager

April 2024

Delegation of Authority

Summary for: 2023 Activities

Preface: *The Memorandum of Agreement (MOA) between the Washington State Department of Ecology (Ecology) and Spokane County Division of Utilities* (Spokane County) provides delegation of review and approval of some of the engineering activities ordinarily completed by Ecology to Spokane County as authorized by RCW 90.48.110(2). The MOA was signed by the parties on September 8, 2014 and is effective for the period September 1, 2014 through August 31, 202. “Attachment A” of the MOA identifies the party responsible for the review and approval of specific engineering documents required for construction of sewerage collection and treatment systems, improvements or extensions to existing sewerage systems or sewage treatment or disposal plants, and the proposed method of future operations and maintenance of those facilities and industrial pretreatment systems. The MOA also confirms the delegation of review and approval of engineering reports, plans and specifications and operation and maintenance manuals for the federal industrial pretreatment program delegated to Spokane County under 40 CFR Part 403.*

*Division of Utilities – our name has been changed to: **“Public Works Department”**

1.0 Overview of MOA

The Memorandum of Agreement (MOA) is comprised of several sections, summarized below.

1.1 Delegated Activities

As allowed under RCW 90.48.110(2), Spokane County will carry out the responsibility for the duties and functions for the following activities on behalf of Ecology:

- Pretreatment Program
- Wastewater Treatment Facility Improvements
- Collection Systems
- Construction Management
- Review and Approval of Other Plans and Construction Documents

1.2 Other MOA Sections

The MOA also addresses: required submittals; qualifications; standards; maintenance of records; compliance with all laws, regulations and agreements; dispute resolution; process support; amendment, termination and revocation; non-delegated activities; and term.

2.0 Pretreatment Program

Ecology delegated the authority and responsibility to Spokane County to administer: the federal pretreatment program (40 CFR Part 403) as authorized under the Clean Water Act; Chapters 173-208 & 173-240 (sections 110-180) WAC; the State Waste Discharge Permit Program, Chapter 173-216 WAC; and applicable portions of Water Pollution Control, Chapter 90.48 RCW.

2.1 Summary of Annual Pretreatment Activities

Spokane County continues to implement, maintain, enforce and keep its Industrial Pretreatment Program up-to-date. Each year, the County conducted the industrial waste survey for the service area, administered industrial wastewater discharge permits, inspected and monitored the permitted industrial facilities, and took enforcement actions when the permittees were in non-compliance with their individual discharge permits.

Spokane County also prepares an annual report of Industrial Pretreatment Program activities under its National Pollutant Discharge Elimination System (NPDES) Permit WA-0093317. That comprehensive annual report is submitted to Ecology by May 1st of each year under Special Condition S6. A summary of the annual activities is provided in Table 2-1.

Table 2-1. Annual Pretreatment Program Activities Summary

Year ^(a)	Values for Industrial Pretreatment Permits from Spokane County					
	SIU ^(b) Permits	CIU ^(c) Permits	Permits Issued ^(d)	SNC ^(e)	NOV ^(f)	AO ^(g)
2021	7	6	1	0	4	0

(a) Calendar Year: January 1st through December 31st.

(b) Number of Significant Industrial Users (SIU) that hold individual Permits.

(c) Number of SIUs that are also Categorical Industrial Users (CIU).

(d) Number of new or reissued individual Permits each year.

(e) Number of Significant Non-Compliance (SNC) violations each year.

(f) Number of Notice of Violations (NOV) each year.

(g) Number of Administrative Orders (AO) each year.

3.0 Wastewater Treatment Facility Improvements

Ecology delegated the authority and responsibility to Spokane County for engineering review and approval of plans and specifications, construction quality assurance plans, and operation and maintenance manuals, as well as addenda for all collection, transmission and treatment facility projects as set forth in Chapter 173-240 WAC.

As noted in the MOA, Spokane County must maintain updated as-built drawings and will issue a “Declaration of Construction” (Chapter 173-240-090 WAC) for all completed projects. Spokane County must send an electronic version of the Operations & Maintenance Manual, Declaration of Construction, and record drawings for all projects to the Ecology Eastern Regional Office Water Quality Program.

3.1 Operating Wastewater Treatment Facilities

Spokane County utilizes two major regional wastewater treatment facilities and one smaller interim facility to properly handle the sewage discharges of its customers. The operating facilities’ capacities range from large to small as listed in Table 3-1.

Table 3-1. Wastewater Treatment Facilities Utilized by Spokane County

Treatment Facility Name [Permit No.]	Total Capacity MGD ^(e)	County’s Capacity MGD ^(e)	Type / Status / Comments
RPWRF ^{(a)(b)} [WA0024473]	50.0	10.0	Tertiary Treatment, with Membrane Filtration
SCRWRF ^(c) [WA0093317]	8.0	8.0	Tertiary Treatment, with Membrane Bioreactors (MBR) <i>(periodically adding operational enhancements)</i>
Latah Creek ^(d) [ST8045]	0.09	0.09	Extended Aeration, Activated Sludge Treatment <i>(WA Dept. of Ecology: State Waste Discharge permit)</i>

^(a) Riverside Park Water Reclamation Facility (RPWRF; owned by the City of Spokane).

^(b) RPWRF’s improvements are delegated to the City of Spokane, and are not included in this Report.

^(c) Spokane County Regional Water Reclamation Facility (SCRWRF).

^(d) Hangman Valley / Latah Creek Wastewater Treatment Plant (owned by Spokane County).

^(e) MGD = million gallons per day (nominal average daily design treatment capacity).

3.2 Summary of Annual Improvement Activities by Treatment Facility

Spokane County owns and operates two of the three treatment facilities listed in Table 3-1. A summary of the annual improvement activities for each of the County-owned facilities is provided in Table 3-2.

Table 3-2. Annual Improvement Activities by County Treatment Facility

Facility & Year	Description of Operational Improvements	Submittal Dates: O&M Manual Updates
<i>SCRWRF</i>		
2023	None.	07/31/2023
<i>Latah Creek WWTP</i>		
2023	None.	None.

^(a) All improvements are for Operational enhancement and flexibility. No improvements are for capacity increase.

4.0 Collection System & Pumping Facilities

Ecology delegated the authority and responsibility to Spokane County for engineering review and approval of plans and specifications, construction quality assurance plans, and operation and maintenance manuals, as well as addenda for all collection, transmission and pumping facility projects as set forth in Chapter 173-240 WAC.

As noted in the MOA, Spokane County shall maintain updated as-built drawings and will issue a “Declaration of Construction” (Chapter 173-240-090 WAC) for all completed projects. Spokane County is required to send an electronic version of the O&M Manual, Declaration of Construction, and Record Drawings for all projects to the Ecology Eastern Regional Office Water Quality Program.

Spokane County assumes responsibility for engineering review and approval of conveyance and pumping facilities as indicated in “Attachment A” to the MOA.

4.1 Summary of Annual Collection System & Pump Station Projects

A summary of the annual improvement activities to date for each of the collection system and pump station projects is provided in Table 4-1.

Table 4-1. Annual Collection System Project Summary

Year(s) of Construction	Collection System & Pump Station Improvements	Ecology Submittals		
		O&M Manual	Record Drawings ^(b)	Declaration of Completion
2023	<p><u>Barker Road Sewer Extension Project, Phase 3</u></p> <p>371 lineal feet of force main sewer pipe, 899 lineal feet of gravity sewer pipe, 11 side sewers totaling 433 lineal feet of side sewer pipes, 15 pothole utilities, 3 manholes, 1,703 lineal feet of imported pipe bedding, and one dry line connection.</p> <ul style="list-style-type: none"> Design Engineer: Matt D. Morkert, P.E., Century West Engineering Design Approve: April 17, 2023 Construction contract awarded: Corridor Contractors Physical Completion Date: October 28, 2023 Construction management performed by: Parametrix Spokane County Representative: Chris Knudson 	See Note ^(a)	01/03/2024 (submitted with this report)	Has not been issued at the time of this report due to punch list items remaining
<p>Notes:</p> <p>^(a) Spokane County operates and maintains its system of sewerage through the County's Wastewater Operations Center. This work force includes 22 staff, 2 Vactor trucks, 2 video inspection crews, 2 repair crews. Pipes are cleaned every 3 years, some more frequent. Pipes are video inspected every 10 years.</p>				

5.0 Construction Management

Under the MOA, Spokane County assumes construction management oversight for Ecology-funded projects supported by the Centennial Clean Water Fund and/or other state funding sources. Insofar as there have been no Ecology-funded projects in the period for this Delegation Report, there are no project eligibility or other applicable activities to report.

6.0 Review & Approval of Other Plans & Construction Documents

Under the MOA, Spokane County is delegated authority to approve the engineering quality assurance plans under WAC 173-240-075, to approve O&M manuals under WAC 173-240-070 – 080 and 173-240-140 – 150, and to approve deviations from the approved plans.

6.1 Summary of "Other" Annual Construction Activities

Spokane County directly manages the design and construction of sewer collection system projects as listed in Table 4-1. Additionally, developers and other project proponents design and construct sewer line extensions to the County's system. For these projects, the County reviews and approves the design documents to ensure that each design:

1. Has been designed and stamped by a licensed professional engineer.
2. Conforms to the County's general sewer plan.
3. Complies with Ecology's Criteria for Sewage Works Design.
4. Complies with Spokane County's Standards for Road & Sewer Construction.

Once the project is physically complete, the responsible licensed engineer signs and stamps the required county certification stating that the project has been constructed in accordance with the approved plans. The County is provided a Bill of Sale from the developer, transferring the new infrastructure into the County's regional system of sewerage. A one-year warranty is provided for all new sewerage-related components. Once under county ownership, the County assumes operation and maintenance of the new facilities.

Submittal of Record Drawings

Record drawings referenced in this report are submitted with this report and maintained in Spokane County's files. All record drawings are available upon request from Spokane County.



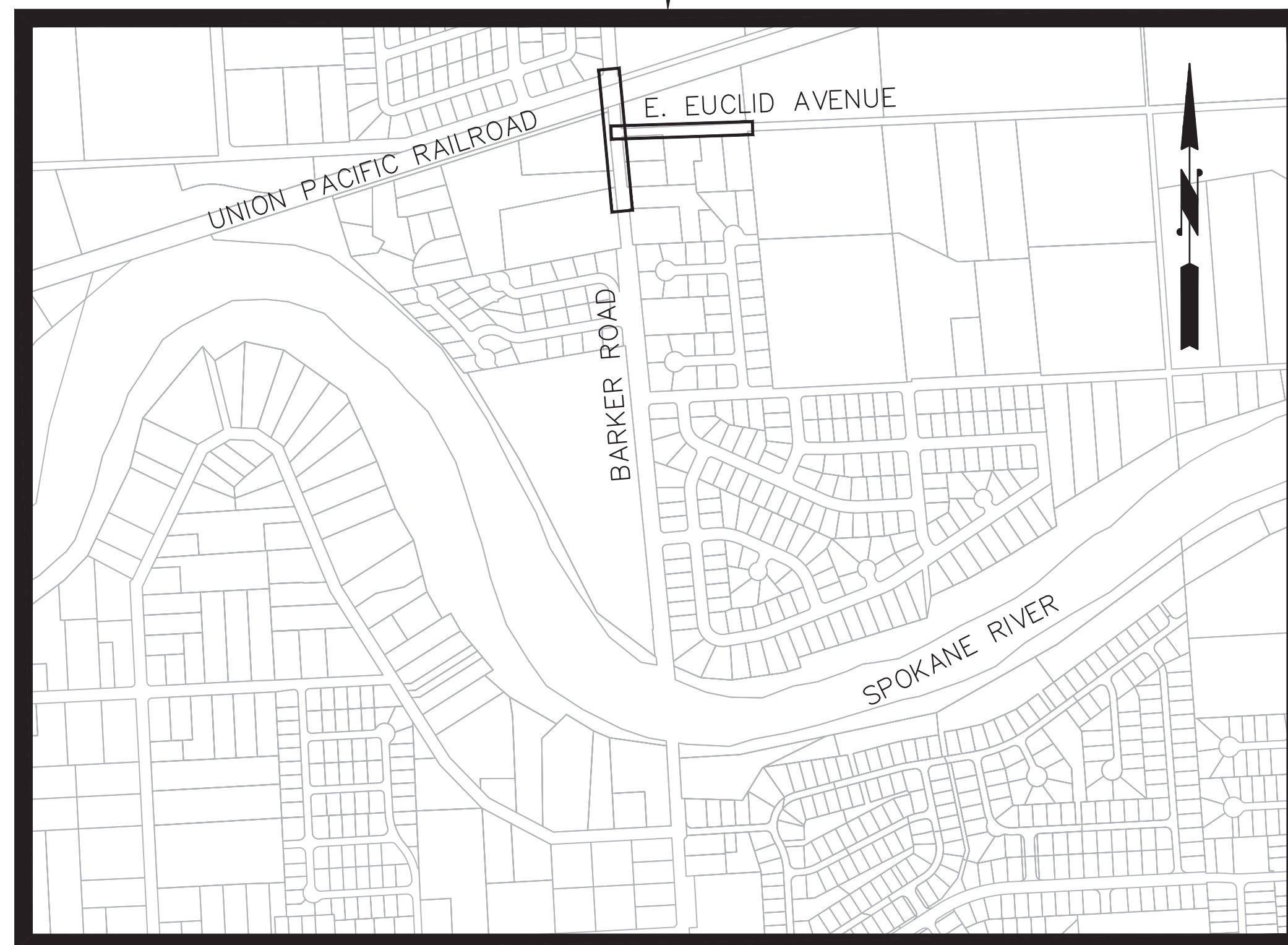
SPOKANE COUNTY
PUBLIC WORKS DEPARTMENT
1026 W BROADWAY AVE.
SPOKANE, WA. 99260-0170
(509) 477-3604

BARKER ROAD SEWER EXTENSION, PHASE 3

SANITARY SEWER PROJECT NO. 236C

BID SCHEDULE C

VICINITY MAP



FOR
SPOKANE COUNTY
PUBLIC WORKS
SPOKANE COUNTY, WASHINGTON

RECORD DRAWING

THIS DOCUMENT PROVIDES A SCHEMATIC ILLUSTRATION OF THE IMPROVEMENTS
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SPOKANE COUNTY COMMISSIONERS

FIRST DISTRICT	CHRIS JORDAN
SECOND DISTRICT	AMBER WALDREF
THIRD DISTRICT	JOSH KERNS
FOURTH DISTRICT	MARY KUNEY
FIFTH DISTRICT	AL FRENCH

SPOKANE COUNTY PUBLIC WORKS DEPARTMENT

SR. DIRECTOR OF PUBLIC WORKS

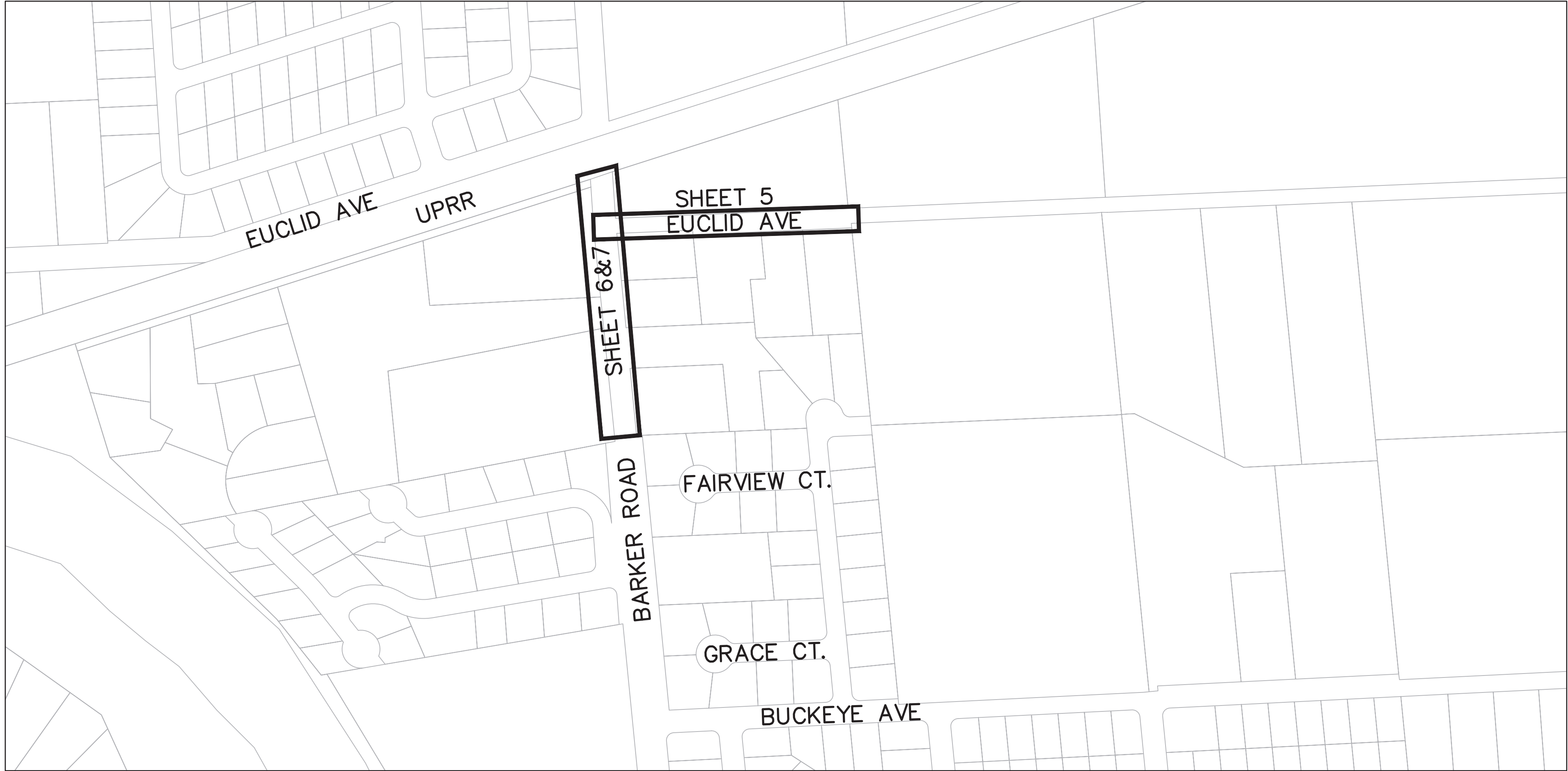
KYLE TWOHIG

WASTEWATER SYSTEM ADMINISTRATOR

LOUIS GRAF, P.E.



SPOKANE OFFICE
11707 E. MONTGOMERY DRIVE
SPOKANE VALLEY, WA 99206
509.838.3810
509.624.0355 FAX



SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER, PROJECT LOCATION
2	SHEET INDEX
3	MANHOLE INDEX
4	NOTES & LEGEND
5	EUCLID AVE
6	BARKER ROAD GRAVITY SEWER
7	BARKER ROAD FORCE MAIN
8	DETAILS
9	COUNTY DETAILS

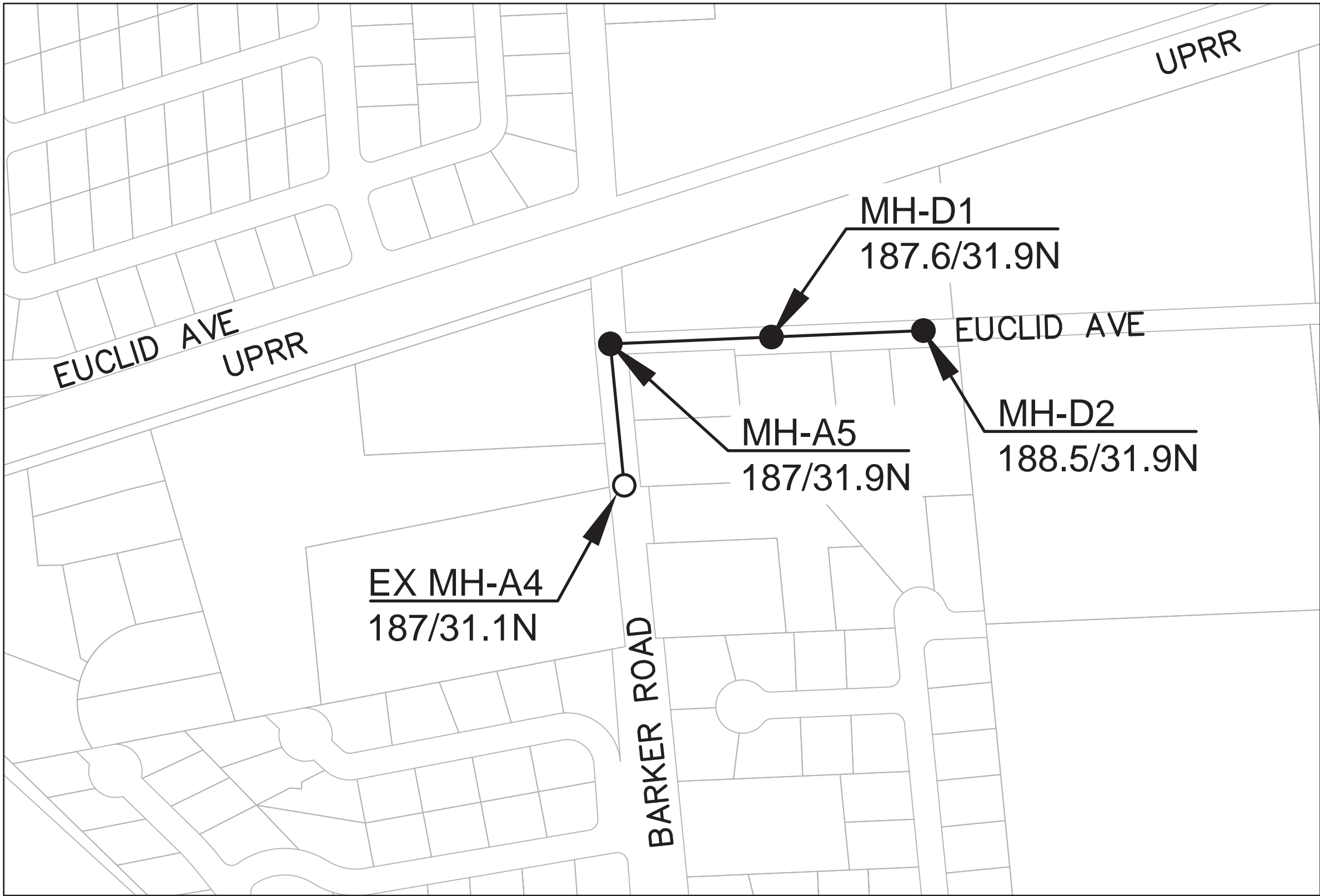
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						Drawn By: JJB,TKV Date: 4/11/23	SCALE <div>0 1/2 1</div> <div>IF THIS BAR DOES NOT MEASURE 1" AT 24"X36", THEN DRAWING IS NOT TO SCALE - SCALE ACCORDINGLY</div>	Spokane County Public Works Dept. 1026 W. Broadway Ave. SPOKANE, WA. 99260-0430 (509) 477-3604	APPROVED: _____ SPOKANE COUNTY Date: _____	BARKER ROAD SEWER EXTENSION, PHASE 3 #236C SHEET INDEX BID # P13127	SHEET 2 of 9
						Designed By: PS,BDH Date: 4/11/23					
						Checked By: MDM Date: 4/11/23					
No.	Date	By	Ckd.	Appr.	Revision						



ESTIMATED QUANTITIES

MANHOLE		A4-A5	A5-D1	D1-STUB	D1-D2	D2-STUB	FM	TOTAL	
Pothole Utility	EA	3	2	3	1	3	3	15	EA
6-inch Force Main Sewer Pipe, D.I.	LF						371	371	LF
8-Inch Gravity Sewer Pipe	LF	217	280	42	318	42		899	LF
Side Sewer 8-inch x 4-inch Tee	EA	2			3			5	EA
Side Sewer 8-inch x 6-inch Tee	EA	2	1		3			6	EA
Side Sewer Riser 4-inch	EA	2			3			5	EA
Side Sewer Riser 6-inch	EA	2	1		3			6	EA
4-Inch Side Sewer Pipe	LF	97			126			223	LF
6-Inch Side Sewer Pipe	LF	93	25		92			210	LF
Manhole Type I-48	EA	1	1		1			3	EA
Manhole Test	EA	1	1		1			3	EA
Trench Excavation Safety System-Sewer	LF	407	305	42	536	42	371	1,703	LF
Mainline Crossing AC Water Lines	EA	1					1	2	EA
Crossing AC Water Lines	EA							-	EA
Side Sewer Sleeve	LF				80			80	LF
Imported Pipe Bedding	LF	407	305	42	536	42	371	1,703	LF
Connect Dry Line	EA				1			1	EA
Dry Hole	EA				1			1	EA

WATER, SEWER, STORM CONSTRUCTION SEQUENCING:

- CID#19 TO DECOMMISSION EXISTING 10" AC WATER MAIN WEST OF SERVICE TO 18712 E EUCLID AVENUE, INCLUDES INSTALLATION OF THRUST BLOCK. CONTRACTOR TO COORDINATE WITH CID#19.
- CONTRACTOR TO PERFORM UTILITY POTHOLING AT CROSSINGS WITH EXISTING AC WATER MAINS.
- BARKER ROAD – INSTALL SANITARY SEWER AND FORCE MAIN.
- BARKER ROAD – INSTALL STORMWATER SYSTEM, NORTH AND SOUTH OF THE RR CROSSING INCLUDING STORMWATER IN EUCLID AVE (W).
- BARKER RD – INSTALL WATER MAIN UP TO AND INCLUDING THE FIRE HYDRANT ASSEMBLY AT THE SOUTHEAST CORNER OF EUCLID AND BARKER. INCLUDING ALL TESTING AND ACCEPTANCE OF WATER SYSTEM, BY CID #19, TO THIS POINT.

STEPS 1 THRU 5 ARE TO ALLOW BARKER ROAD AND EUCLID AVE (W) TO BE COMPLETED AND OPENED TO TRAFFIC. OTHER STEPS ARE REQUIRED (I.E. UPRR COORDINATION, ITS, PAVING, SIGNAGE AND CHANNELIZATION).

- EUCLID AVE (E) – ALL WATER MAIN AND SERVICE LINES. INCLUDING ALL TESTING AND ACCEPTANCE OF WATER SYSTEM BY CID #19.
 - ABANDON EXISTING 10" AC WATER MAIN IN EUCLID AVE (E).
 - CID#19 TO RELOCATE EXISTING FIRE HYDRANT FROM SOUTH SIDE OF EUCLID TO NEW 6" STUB ON NORTH SIDE OF EUCLID.
- EUCLID AVE (E) – INSTALL SANITARY SEWER.
- EUCLID AVE (E) – INSTALL STORMWATER SYSTEM.

NOTE:

THE ESTIMATED QUANTITIES FROM MANHOLE TO MANHOLE FOR EACH ITEM ARE FOR INFORMATION ONLY AND FOR A GENERAL OVERVIEW OF THE PROJECT. FIELD CONDITIONS MAY VARY FROM THOSE ASSUMED AND ACTUAL QUANTITIES MAY BE MORE OR LESS THAN INDICATED OR IN DIFFERENT LOCATIONS. THESE VARIATIONS ARE NOT "CHANGES" AS DEFINED BY THE CONTRACT.

RECORD DRAWING

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1	3/30/23				SEQUENCING NOTES	Drawn By: JJB,TKV	Date: 4/11/23	SCALE IF THIS BAR DOES NOT MEASURE 1" AT 24"x36", THEN DRAWING IS NOT TO SCALE - SCALE ACCORDINGLY	Spokane County Public Works Dept. 1026 W. Broadway Ave. SPOKANE, WA. 99260–0430 (509) 477–3604	APPROVED: _____ SPOKANE COUNTY Date: _____	BARKER ROAD SEWER EXTENSION, PHASE 3 #236C MANHOLE INDEX BID # P13127	SHEET 3 of 9
2	4/11/23				SEQUENCING NOTES	Designed By: PS,BDH	4/11/23					
						Checked By: MDM	4/11/23					
No.	Date	By	Ckd.	Appr.	Revision							

ABBREVIATIONS

DATUM

NOTES

PIPE	AC	ASBESTOS CONCRETE	MISC	A.C.	ASPHALT CONCRETE	MISC	MH	MANHOLE
	CI	CAST IRON		CB	CATCH BASIN		MIN.	MINIMUM
	CMP	CORRUGATED METAL PIPE		CFS	CUBIC FEET PER SECOND		N	NORTH
	CSP	CONCRETE		CL	CENTERLINE		N.I.C.	NOT IN CONTRACT
	DI	DUCTILE IRON		C.O.	CLEAN OUT		NO.	NUMBER
	FM	FORCE MAIN		CONC.	CONCRETE		NTS	NOT TO SCALE
	GALV	GALVANIZED STEEL		CONN.	CONNECTION		O.C.	ON CENTER
	PVC	POLYVINYL CHLORIDE PIPE		CRP	COUNTY ROAD PROJECT		P	POWER
	RCP	REINFORCED CONCRETE PIPE		C.Y.	CUBIC YARD		PP	POWER POLE
	STL	STEEL PIPE		D	DEGREE OF CURVE		P.S.I.	POUNDS PER SQUARE INCH
	CTE	COAL-TAR ENAMEL		DEC.	DECIDUOUS		Qc	FULL PIPE CAPACITY FLOW
BUILDING TYPE	NB	NO BASEMENT		DET.	DETAIL		Qd	DESIGN FLOW
	FB	FULL BASEMENT, DAYLIGHT BASEMENT		DIA.	DIAMETER		REV.	REVISED
	SE	SPLIT ENTRY, SPLIT LEVEL		DIM.	DIMENSION		REQ'D	REQUIRED
				DW	DRYWELL		RD.	ROAD
				DWG	DRAWING		R.R.	RAILROAD
				E	EAST		R/W	RIGHT-OF-WAY
				ELEV.	ELEVATION		S	SOUTH OR PIPE SLOPE
				EP	EDGE OF PAVEMENT		SD	STORM DRAIN
				E.W.	EACH WAY		SHT.	SHEET
				EXIST.	EXISTING		SL	SURVEY LINE
				FH	FIRE HYDRANT		SPR	SUMP PUMP RELIEF DRAIN
				FT.	FOOT OR FEET		SS	SANITARY SEWER
				G	GAS		ST.	STREET
				GR	GRADE		STA	STATION
				HP	HIGH PRESSURE		STD.	STANDARD



VERTICAL:
ELEVATION DATUM IS NAVD 1988. BASIS OF ELEVATIONS IS WSDOT MONUMENT GPS 32290-152 ELEVATION 2004.88.

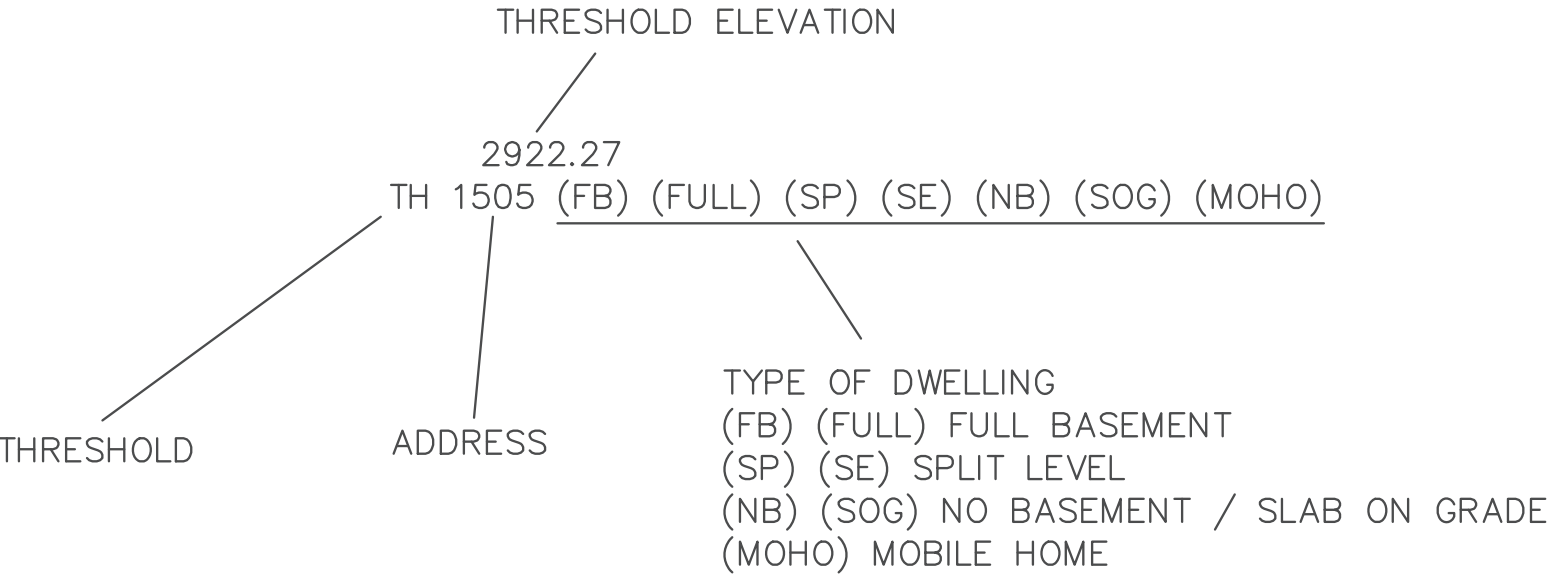
HORIZONTAL:

LOCAL COORDINATES:

PROJECT COORDINATES ARE SURFACE COORDINATES AND BASED ON: CONTROL MONUMENT BASE BEING A #4 REBAR WITH A BLUE PLASTIC CAP MARKED "CONTROL PT, PLS 29270" LOCATED IN THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EUCLID AVE WEST AND FLORA ROAD.
N: 270763.547
E: 2541122.466
EL: 2014.38
WHICH HAS 200,000 SUBTRACTED FROM THE NORTHING AND 2,500,000 SUBTRACTED FROM THE EASTING.

LEGEND

DESCRIPTION	EXISTING	PROPOSED	DESCRIPTION	EXISTING	PROPOSED
UTILITIES			MISC		
GAS					
GAS LINE (BURIED)	-- -- 6"G -- --				
GAS VALVE	sv				
POWER					
LIGHT POLE	*		R/W LINE - PROPERTY LINE	— — — — —	
			T.B.M. LOCATION AND NUMBER	△	
POWER POLE	⌒				
GUY WIRE	⌒				
POWER VAULT	P				
POWER LINE (OVERHEAD)	— — — P — — —				
SEWER			SURFACE FEATURES		
SANITARY SEWER PIPE	-- -- 8"SS PVC -- --	— 8" SS > —	FENCE	— X — — — X — —	
SANITARY FORCE MAIN		— FM — — —	CURB	=====	=====
SANITARY SEWER PIPE (shown on another sheet)			PAVED ROAD	=====	
SANITARY SEWER MANHOLE	⊙	●	GRAVEL ROAD	=====	
SEPTIC TANK	[SEPT]		PATH	=====	
PROJECT BOUNDARY		— — — — —			
STORM DRAIN					
STORM DRAIN MANHOLE	⊙		TREES, SHRUBS	⊙	
STORM DRAIN DRYWELL	⊙		MAILBOX	MB	
STORM DRAIN CATCH BASIN	□	■	BUILDING WITH ADDRESS AND BUILDING TYPE (SEE ABBREVIATIONS)	11505 NB	
STORM DRAIN PIPE	-- -- D -- --	— D — — —	BUILDING WITH EXISTING DRYLINE SIDE SEWER TO BE CONNECTED IN THIS PROJECT	11505 NB	
TELEPHONE					
FIBER OPTIC CABLE (BURIED)	-- -- T -- --		BOLLARD	⊙	
FIBER OPTIC VAULT	①		TRAFFIC		
TELEPHONE RISER	⊠				
WATER			SIGN	—	
WATER SERVICE	— — — W — — —	— W — — —	PROFILE		
WATER PIPE	— — — W — — —	— W — — —	GROUND LINE	-----	
WATER VALVE	⌒	⌒	BUILDING ADDRESS WITH LOWEST FLOOR ELEVATION	10221 1964.7	
WATER METER	⊠				
FIRE HYDRANT	⊠ FH				
WATER SHUT OFF	⊠				



HOUSE DESIGNATION EXAMPLE

RECORD DRAWING

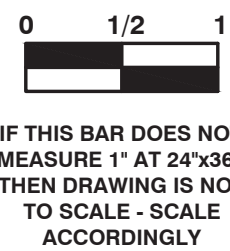
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SPokane OFFICE
11707 E. MONTGOMERY DRIVE
SPokane VALLEY, WA 99206
509.838.3810
509.624.0355 FAX

SCALE

HORIZONTAL: N/A
VERTICAL: N/A



Spokane County
Public Works Dept.
1026 W. Broadway Ave.
Spokane, WA. 99260-0430
(509) 477-3604

APPROVED: SPOKANE COUNTY

Date:

BARKER ROAD SEWER EXTENSION, PHASE 3 #236C
NOTES AND LEGEND
BID # P13127

SHEET

4 of 9

No.	Date	By	Ckd.	Appr.	Revision

Drawn By:	Date:
JJB,TKV	4/11/23
Designed By:	
PS,BDH	4/11/23
Checked By:	
MDM	4/11/23

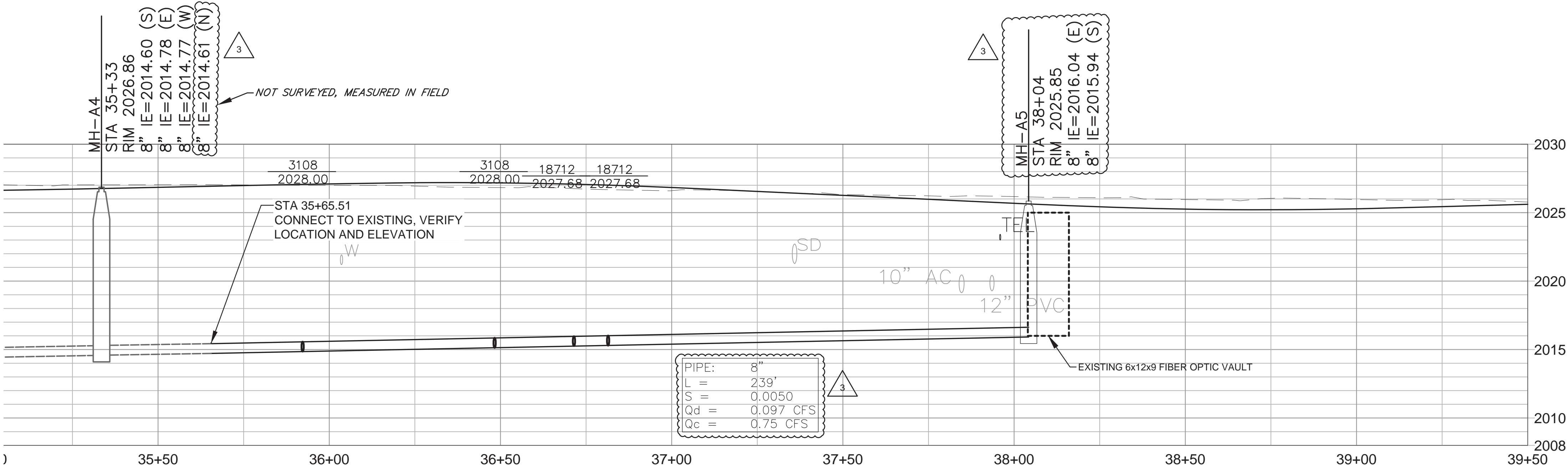
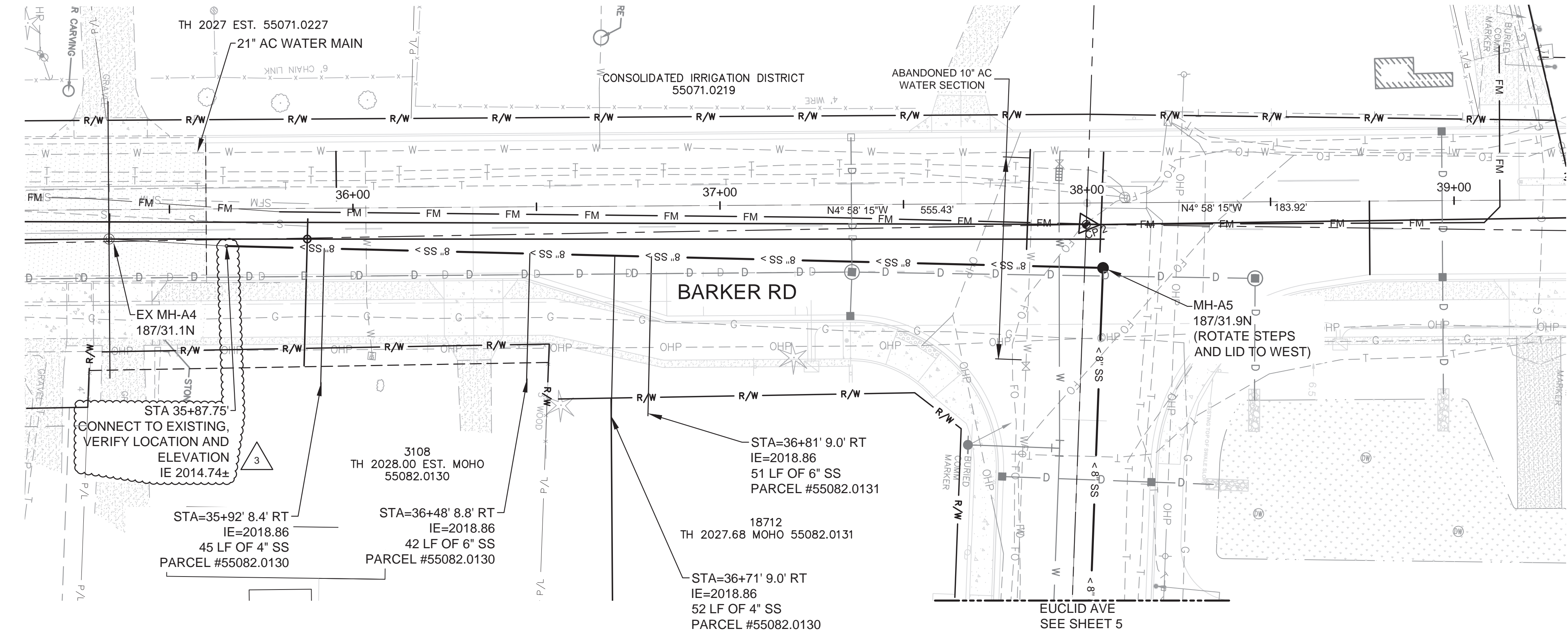
CONSTRUCTION NOTES:

- FOR ROAD REPLACEMENT DETAILS SEE CITY OF SPOKANE VALLEY PLAN SHEETS.
- SEPTIC TANK AND DRYLINE LOCATIONS ARE FROM UTILITY OWNER RECORDS. SPOKANE COUNTY AND CENTURY WEST ARE NOT RESPONSIBLE FOR THE ACCURACY OF LOCATION.
- ALL SIDE SEWER SERVICES SHALL BE TYPE "A" PER SPOKANE COUNTY STANDARD PLAN U-17, UNLESS OTHERWISE NOTED AS TYPE B OR C.
- CAP STUB AND SERVICE PIPES AND MARK END WITH 2"x4" WOODEN POST INSTALLED FROM TOP OF PIPE TO 6" BELOW GROUND SURFACE. ATTACH #4 REBAR TO TOP OF WOODEN POST.
- CONTRACTOR SHALL VERIFY DEPTH OF EXISTING AC WATER MAINS AT ALL CROSSINGS WITH SANITARY SEWER(S) AND STORM WATER PRIOR TO COMMENCING WORK.
- BOTH THE TIME AND EXTENT OF EXCAVATION UNDER AC WATER MAINS SHALL BE MINIMIZED. CID#19 SHALL BE PRESENT DURING ALL UNDER CROSSINGS OF AC WATER MAINS.
- THE 21" AND 10" AC WATER MAINS, APPURTENANCES, AND COMMUNICATION CONDUITS SHALL BE SUPPORTED DURING THE INSTALLATION OF ALL NEW UTILITIES. TRENCH UNDERNEATH AC MAIN SHALL BE BACKFILLED WITH CDF.
- THE CONTRACTOR SHALL COORDINATE ALL UTILITY WORK, INCLUDING SERVICE LATERALS, TO PROTECT THE AC WATER MAINS DURING CONSTRUCTION AND PRIOR TO THE DECOMMISSION AND ABANDONMENT OF AC WATER MAINS.
- WHEN LESS THAN 18" OF VERTICAL SEPARATION BETWEEN A PERPENDICULAR WATER AND SEWER CROSSING, THE SEWER PIPE SHALL BE CASED WITH WATER CLASS PIPE. UNLESS NOTED OTHERWISE.



WATER, SEWER, STORM CONSTRUCTION SEQUENCING:

- CID#19 TO DECOMMISSION EXISTING 10" AC WATER MAIN WEST OF SERVICE TO 18712 E EUCLID AVENUE, INCLUDES INSTALLATION OF THRUST BLOCK. CONTRACTOR TO COORDINATE WITH CID#19.
 - CONTRACTOR TO PERFORM UTILITY POTHOLING AT CROSSINGS WITH EXISTING AC WATER MAINS.
 - BARKER ROAD - INSTALL SANITARY SEWER AND FORCE MAIN.
 - BARKER ROAD - INSTALL STORMWATER SYSTEM, NORTH AND SOUTH OF THE RR CROSSING INCLUDING STORMWATER IN EUCLID AVE (W).
 - BARKER RD - INSTALL WATER MAIN UP TO AND INCLUDING THE FIRE HYDRANT ASSEMBLY AT THE SOUTHEAST CORNER OF EUCLID AND BARKER. INCLUDING ALL TESTING AND ACCEPTANCE OF WATER SYSTEM, BY CID #19, TO THIS POINT.
- STEPS 1 THRU 5 ARE TO ALLOW BARKER ROAD AND EUCLID AVE (W) TO BE COMPLETED AND OPENED TO TRAFFIC. OTHER STEPS ARE REQUIRED (I.E. UPRR COORDINATION, ITS, PAVING, SIGNAGE AND CHANNELIZATION).
- EUCLID AVE (E) - ALL WATER MAIN AND SERVICE LINES. INCLUDING ALL TESTING AND ACCEPTANCE OF WATER SYSTEM BY CID #19.
 - ABANDON EXISTING 10" AC WATER MAIN IN EUCLID AVE (E).
 - CID#19 TO RELOCATE EXISTING FIRE HYDRANT FROM SOUTH SIDE OF EUCLID TO NEW 6" STUB ON NORTH SIDE OF EUCLID.
 - EUCLID AVE (E) - INSTALL SANITARY SEWER.
 - EUCLID AVE (E) - INSTALL STORMWATER SYSTEM.



CONTROL POINTS				
CP #	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	270560.69	2546348.92	2022.60	FOUND BOLT
CP2	271869.99	2546220.41	2025.70	FOUND PIN IN CONCRETE

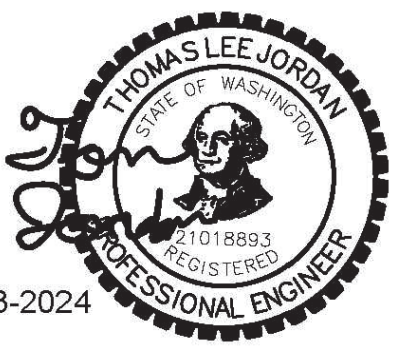
MANHOLE SCHEDULE					LINE TESTING			COORDINATES	
MH NO.	MH TYPE	ADDRESS	RIM ELEV.	MH DEPTH	MH TO MH	AIR	MANDREL	NORTHING	EASTING
MH - A5	I-48	187/32.5N						271875.15	2546224.02
MH - A6	I-48	187/31.9N						271984.16	2546214.73



SPOKANE OFFICE
11707 E. MONTGOMERY DRIVE
SPOKANE VALLEY, WA 99206
509.838.3810
509.624.0355 FAX

RECORD DRAWING

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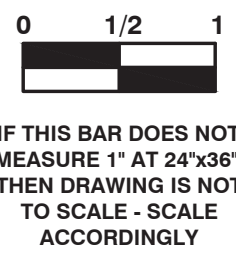


1	3/30/23				SEQUENCING NOTES
2	4/11/23				SEQUENCING NOTES
3	1/3/24				RECORD DRAWINGS
No.	Date	By	Ckd.	Appr.	Revision

Drawn By: JJB,TKV Date: 4/11/23
Designed By: PS,BDH 4/11/23
Checked By: MDM 4/11/23

SCALE

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

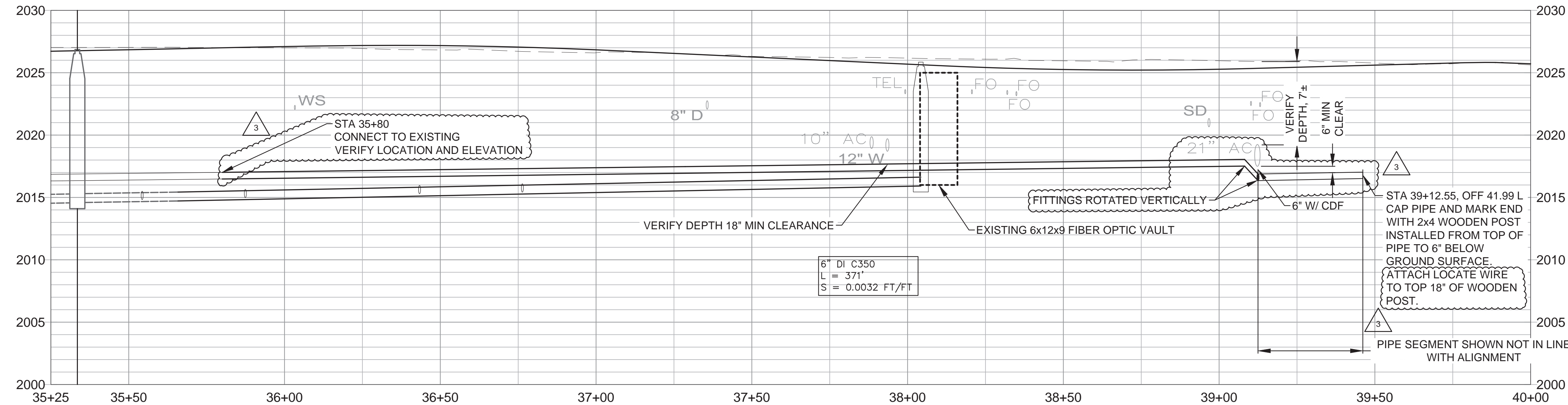
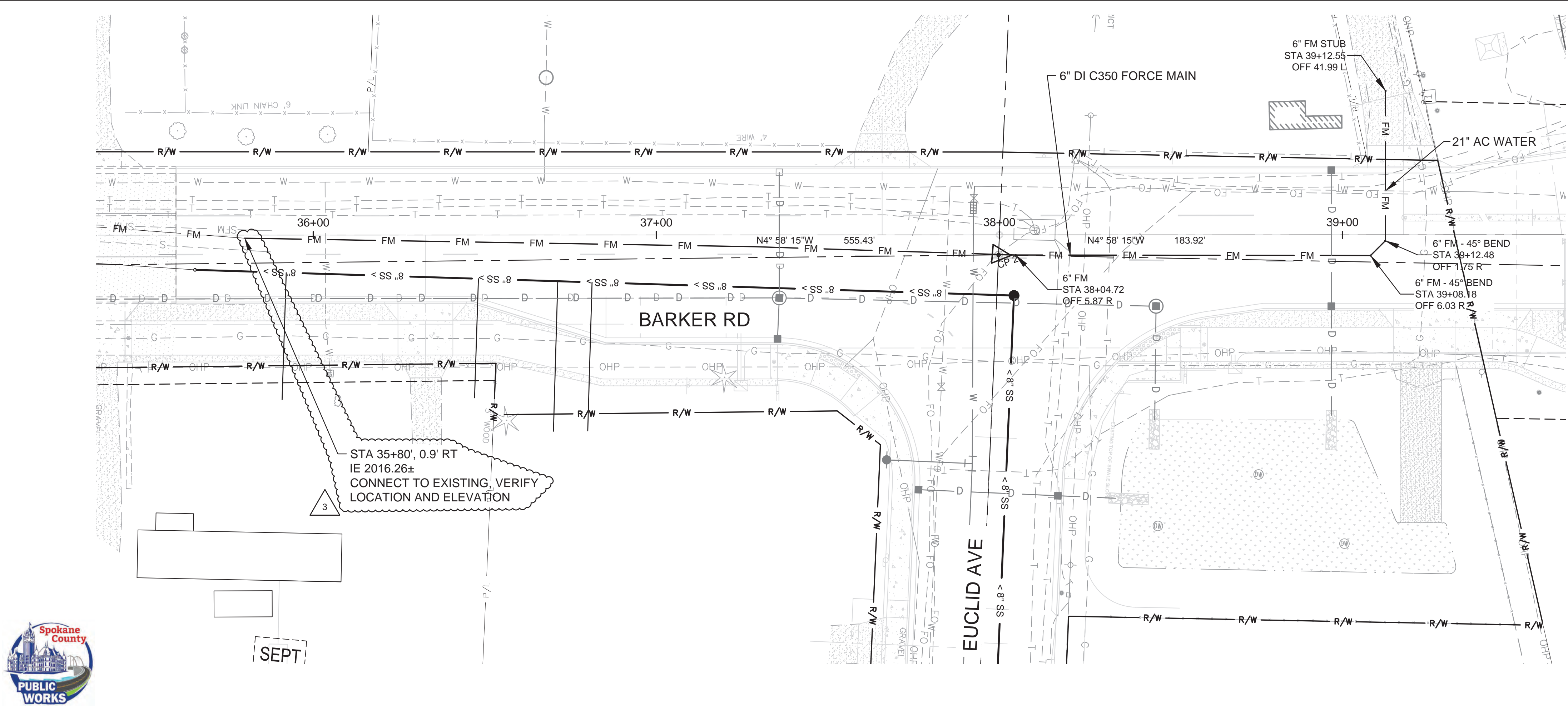


Spokane County
Public Works Dept.
1026 W. Broadway Ave.
SPOKANE, WA. 99260-0430
(509) 477-3604

APPROVED: _____
SPOKANE COUNTY
Date: _____

BARKER ROAD SEWER EXTENSION, PHASE 3 #236C
BARKER ROAD GRAVITY SEWER
STA 0+00 TO END STA

SHEET
6 of 9



WATER, SEWER, STORM CONSTRUCTION SEQUENCING:

- CID#19 TO DECOMMISSION EXISTING 10" AC WATER MAIN WEST OF SERVICE TO 18712 E EUCLID AVENUE, INCLUDES INSTALLATION OF THRUST BLOCK. CONTRACTOR TO COORDINATE WITH CID#19.
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 - EUCLID AVE (E) - INSTALL STORMWATER SYSTEM.

CONTROL POINTS

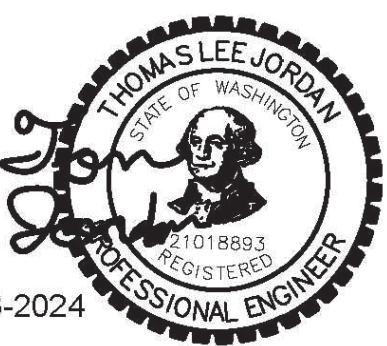
CP #	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	270560.69	2546348.92	2022.60	FOUND BOLT
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Parametrix

ENGINEERING · PLANNING · ENVIRONMENTAL SERVICES
825 N POST STREET STE 201 | SPOKANE, WA 99201
P 509.326.3373
WWW.PARAMETRIX.COM

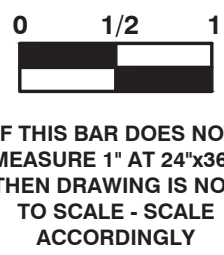


1	3/30/23				SEQUENCING NOTES
2	4/11/23				SEQUENCING NOTES
3	1/3/24				RECORD DRAWINGS
No.	Date	By	Ckd.	Appr.	Revision

Drawn By: JJB,TKV Date: 4/11/23
Designed By: PS,BDH 4/11/23
Checked By: MDM 4/11/23

SCALE

HORIZONTAL: 1"=20'
VERTICAL: 1"=5'



IF THIS BAR DOES NOT MEASURE 1" AT 24"X36", THEN DRAWING IS NOT TO SCALE - SCALE ACCORDINGLY



SPOKANE OFFICE
11707 E. MONTGOMERY DRIVE
SPOKANE VALLEY, WA 99208
509.638.3810
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Public Works Dept.
1026 W. Broadway Ave.
SPOKANE, WA. 99260-0430
(509) 477-3604

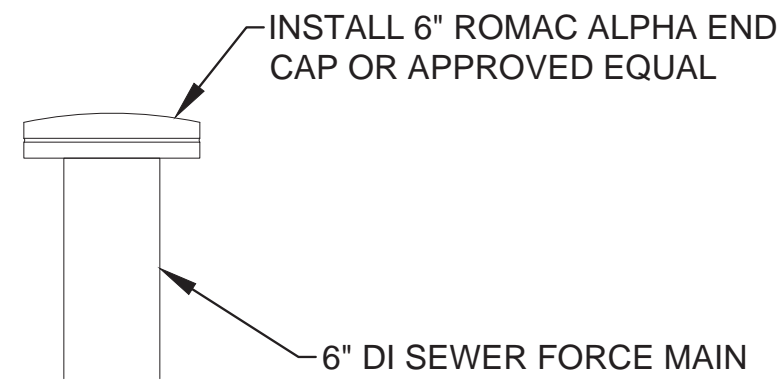
APPROVED:
SPOKANE COUNTY

Date: _____

BARKER ROAD SEWER EXTENSION, PHASE 3 #236C
BARKER ROAD FORCE MAIN
STA 18+50 TO STA 24+01

SHEET

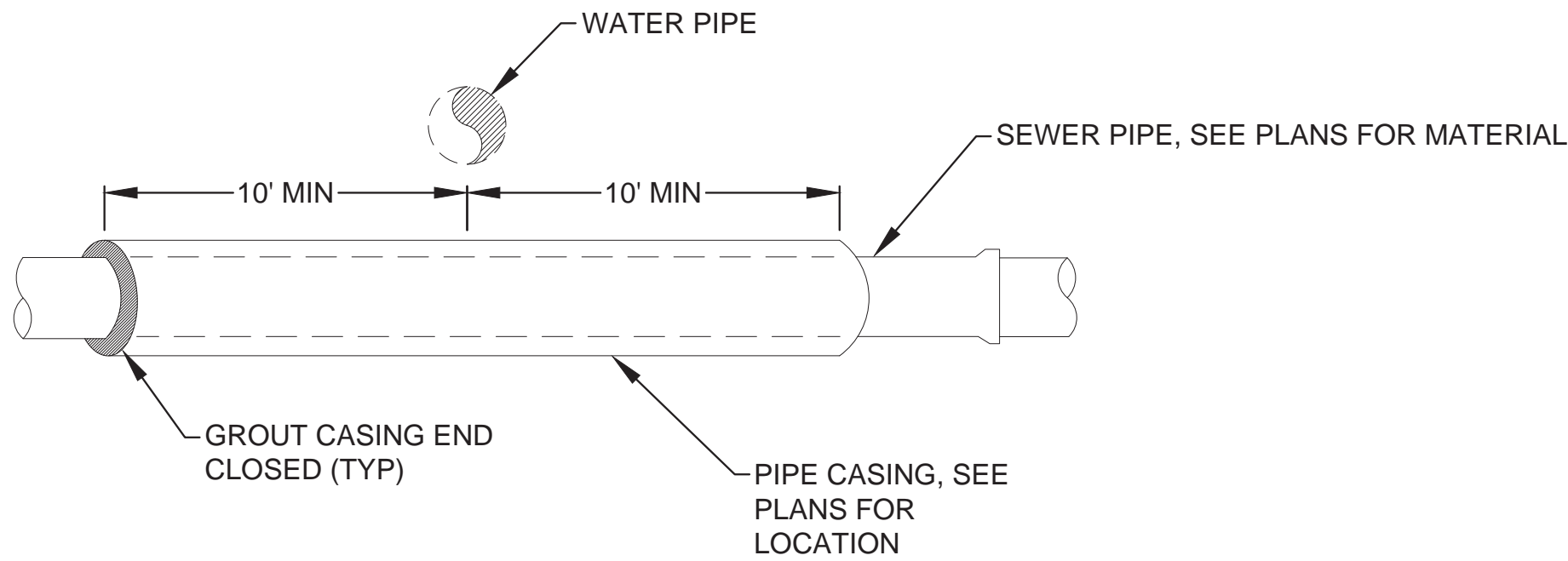
7 of 9



FORCE MAIN CAP

N.T.S.

1
8



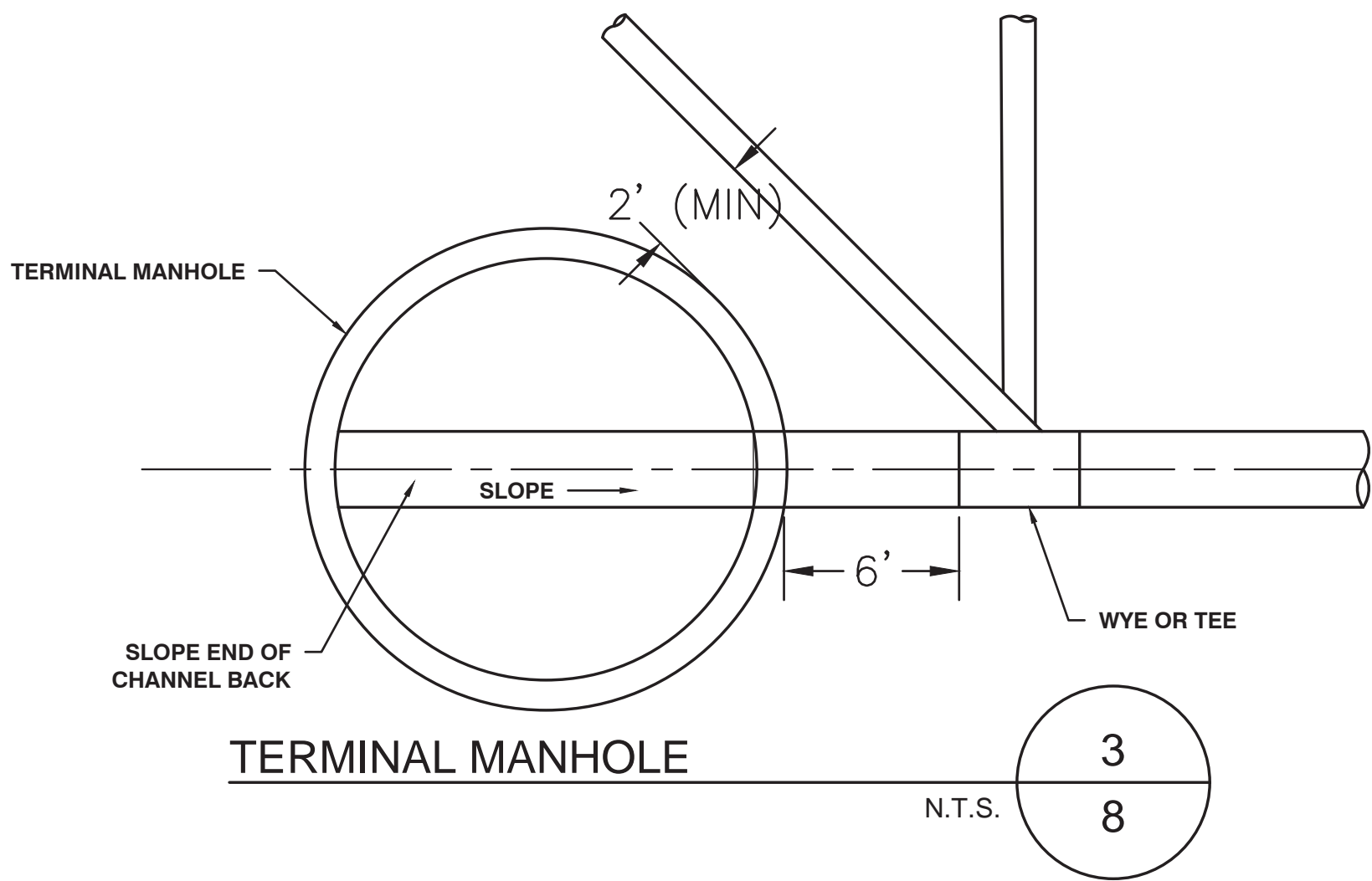
CONSTRUCTION NOTES:

1. REFER TO SPECIFICATIONS FOR PIPE CASING MATERIAL AND GROUT TYPE.
2. DO NOT PLACE SEWER PIPE JOINT WITHIN 5 FEET OF THE WATER LINE CROSSING.
3. ENCASEMENT DIAMETER SHALL BE ONE SIZE LARGER THAN THE ENCASED PIPE AND ENCASEMENT SHALL HAVE 12" COVER MINIMUM.
4. ENCASEMENT SHALL BE CENTERED OVER CROSSING AND EXTEND 10' PAST CROSSING ON EACH
5. PIPE CASING SHALL BE PAID PER LINEAL FOOT.
6. INSULATION, IF APPLICABLE, SHALL BE PAID PER EACH INSTALLATION OF 2'X4' BOARD.
7. ENCASEMENT SHALL BE PER APPLICABLE WATER / IRRIGATION DISTRICT STANDARDS.

PIPE CASING AT CROSSING

N.T.S.

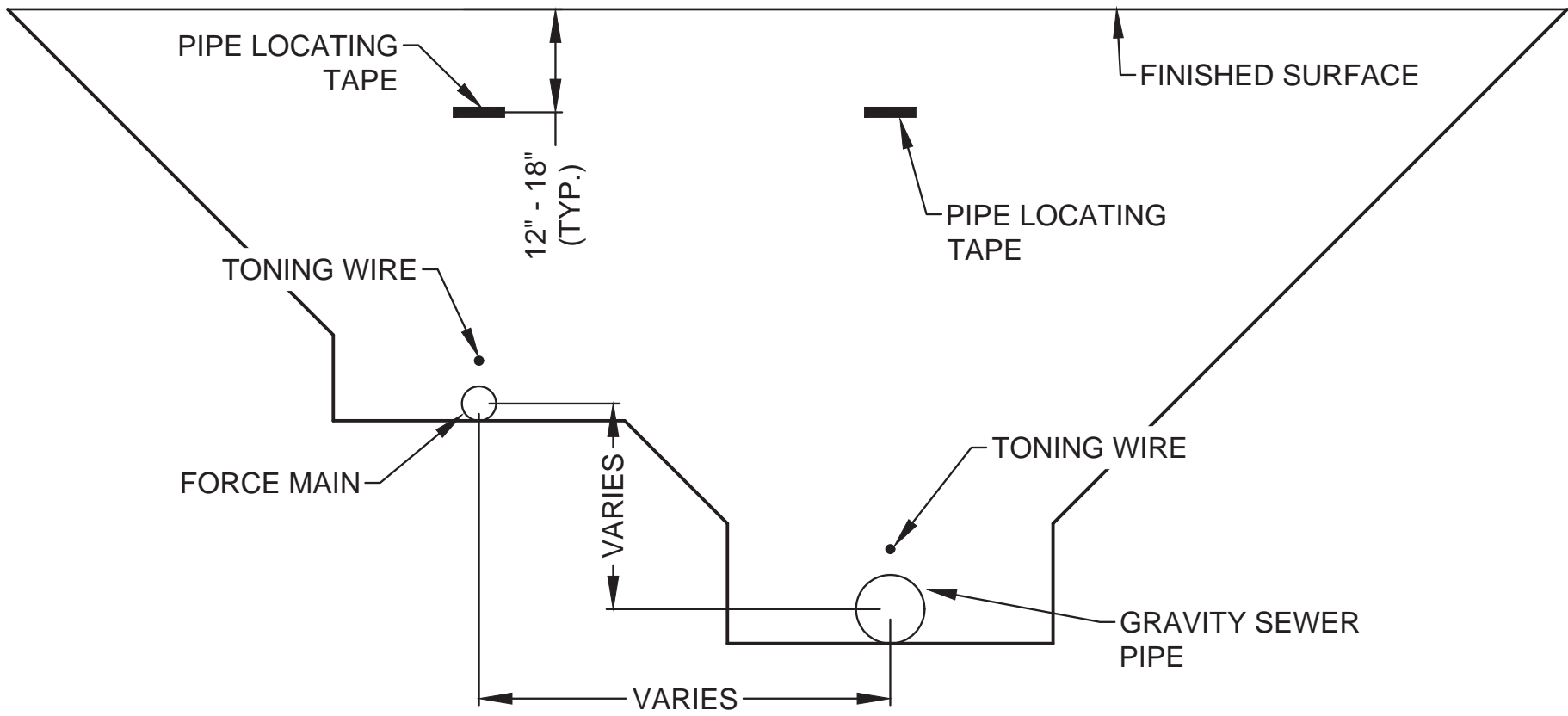
2
8



TERMINAL MANHOLE

N.T.S.

3
8



FM AND GRAVITY PIPE
COMMON TRENCH

N.T.S.

4
8

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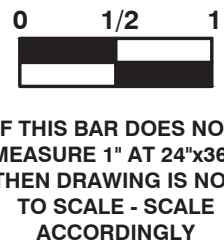
SPOKANE OFFICE
11707 E. MONTGOMERY DRIVE
SPOKANE VALLEY, WA 99206
509.638.3610
509.624.0365 FAX

No.	Date	By	Ckd.	Appr.	Revision

Drawn By: JJB,TKV Date: 4/11/23
Designed By: PS,BDH 4/11/23
Checked By: MDM 4/11/23

SCALE

HORIZONTAL: N/A
VERTICAL: N/A



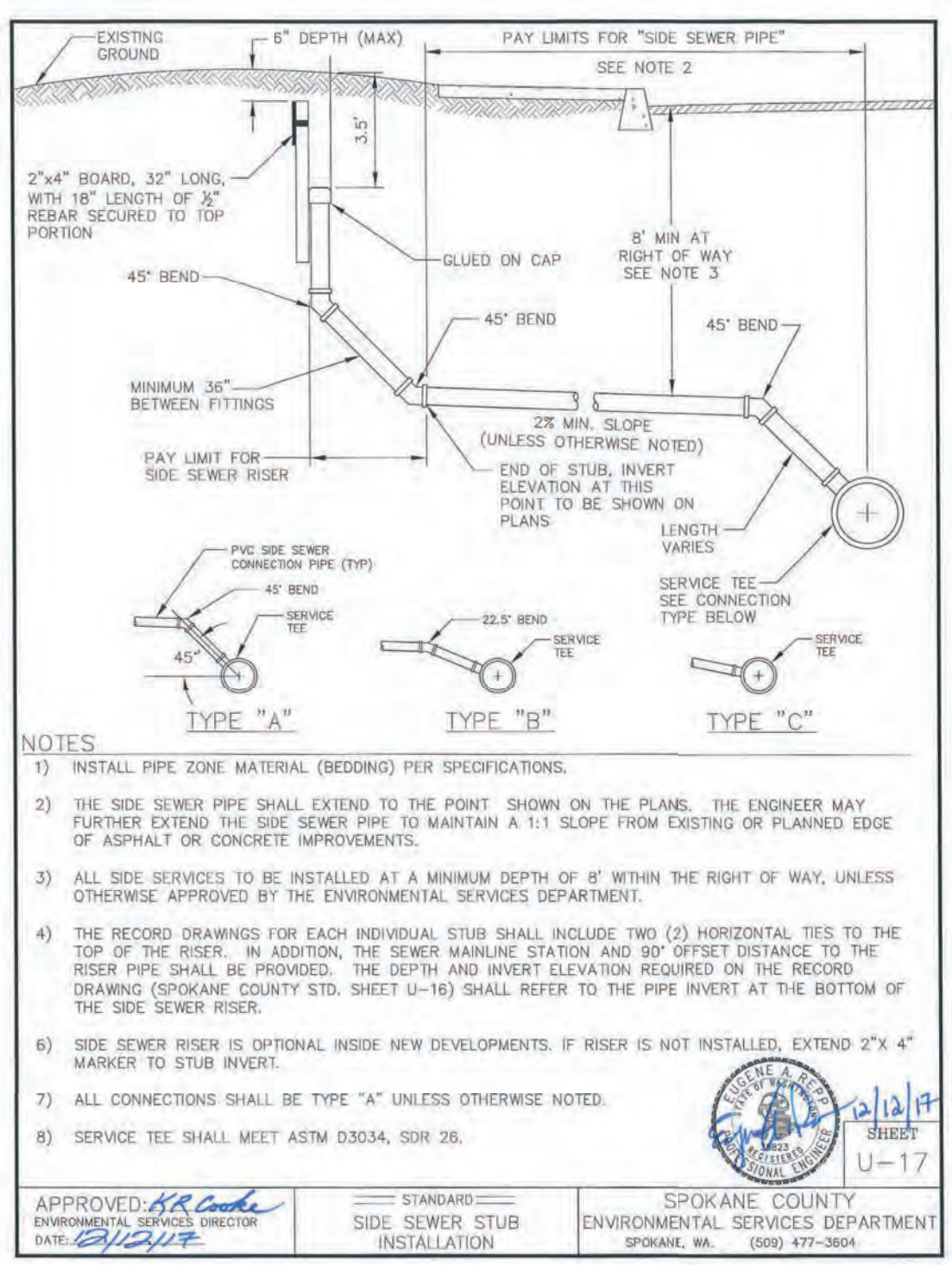
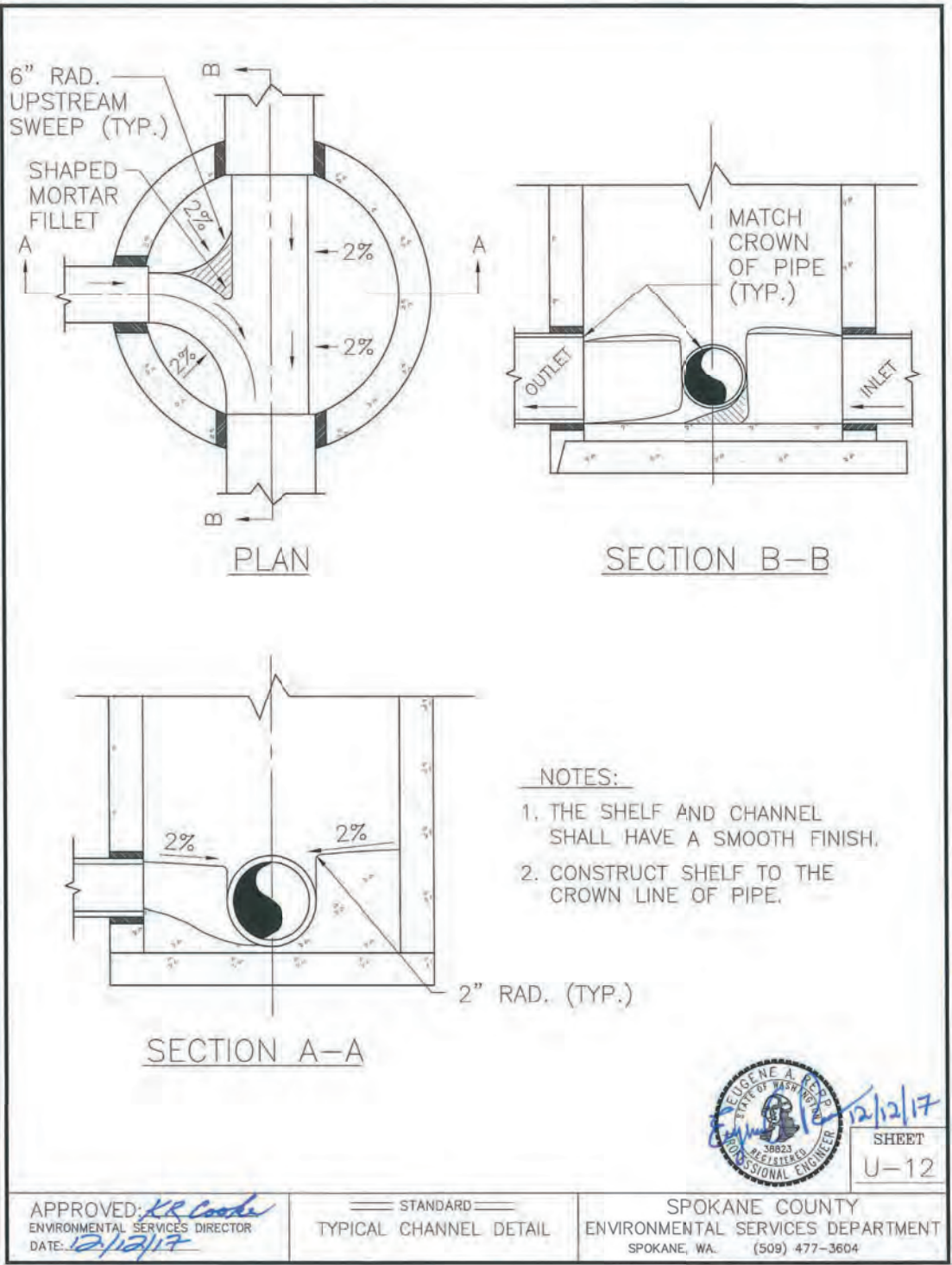
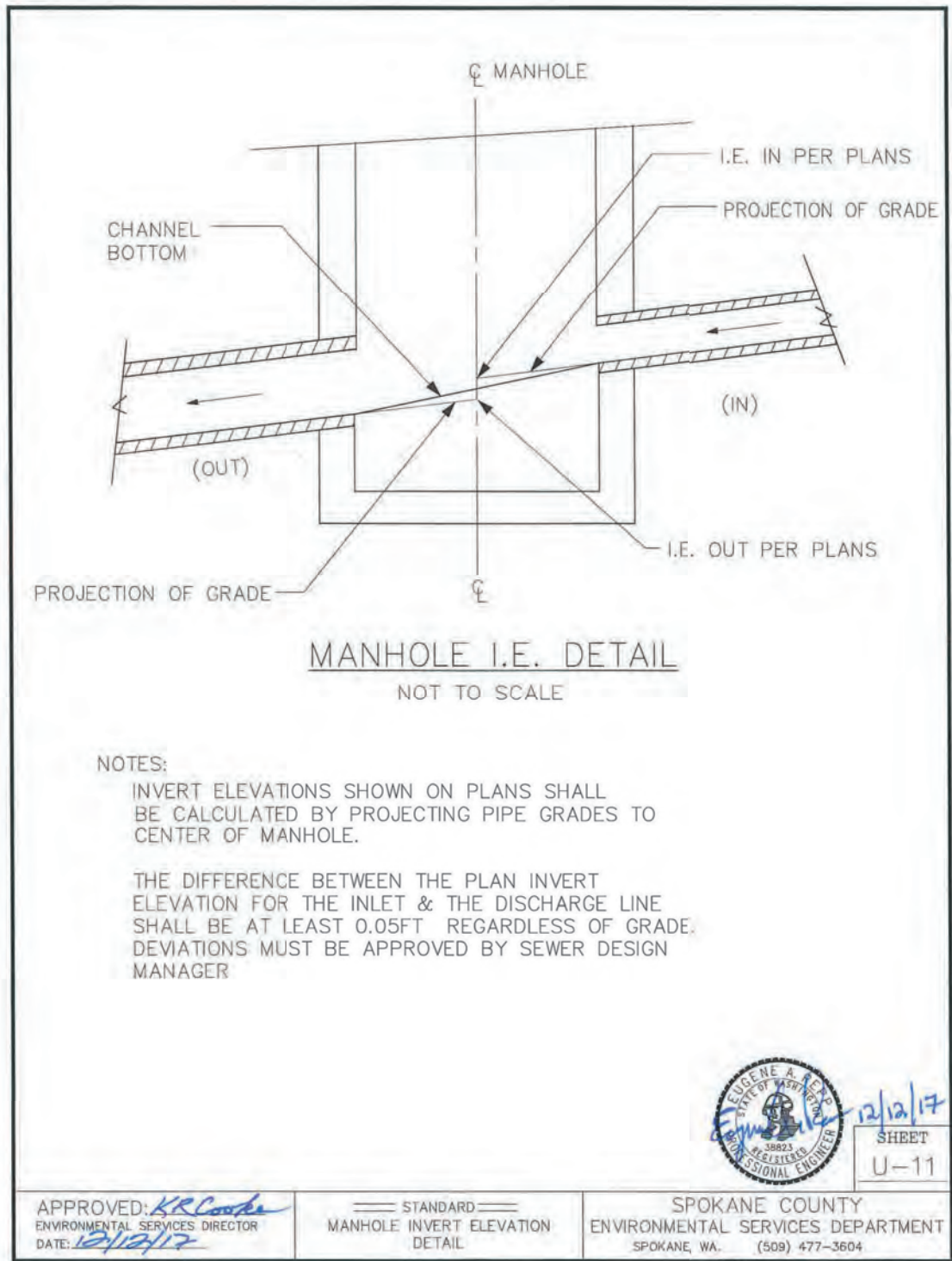
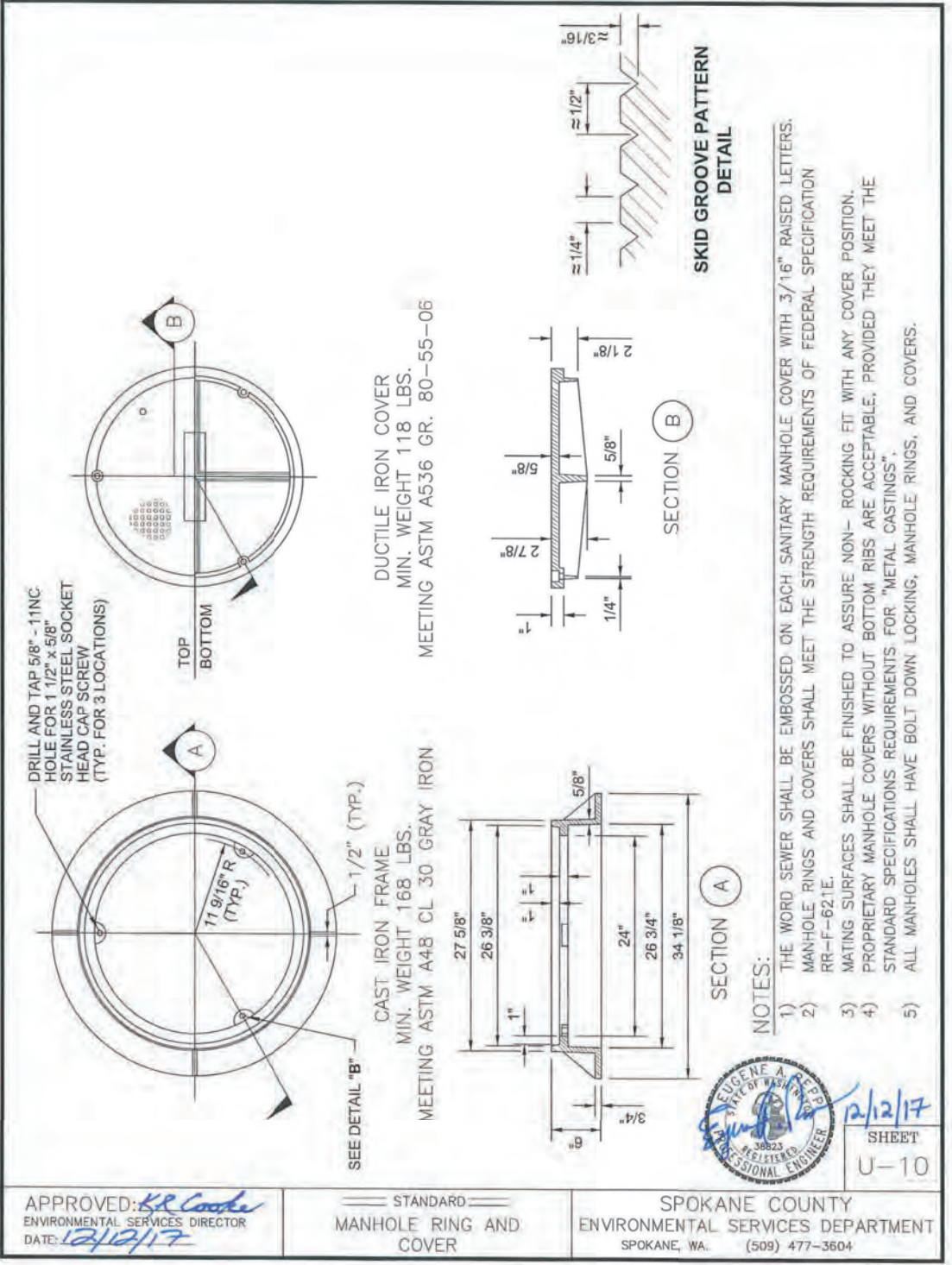
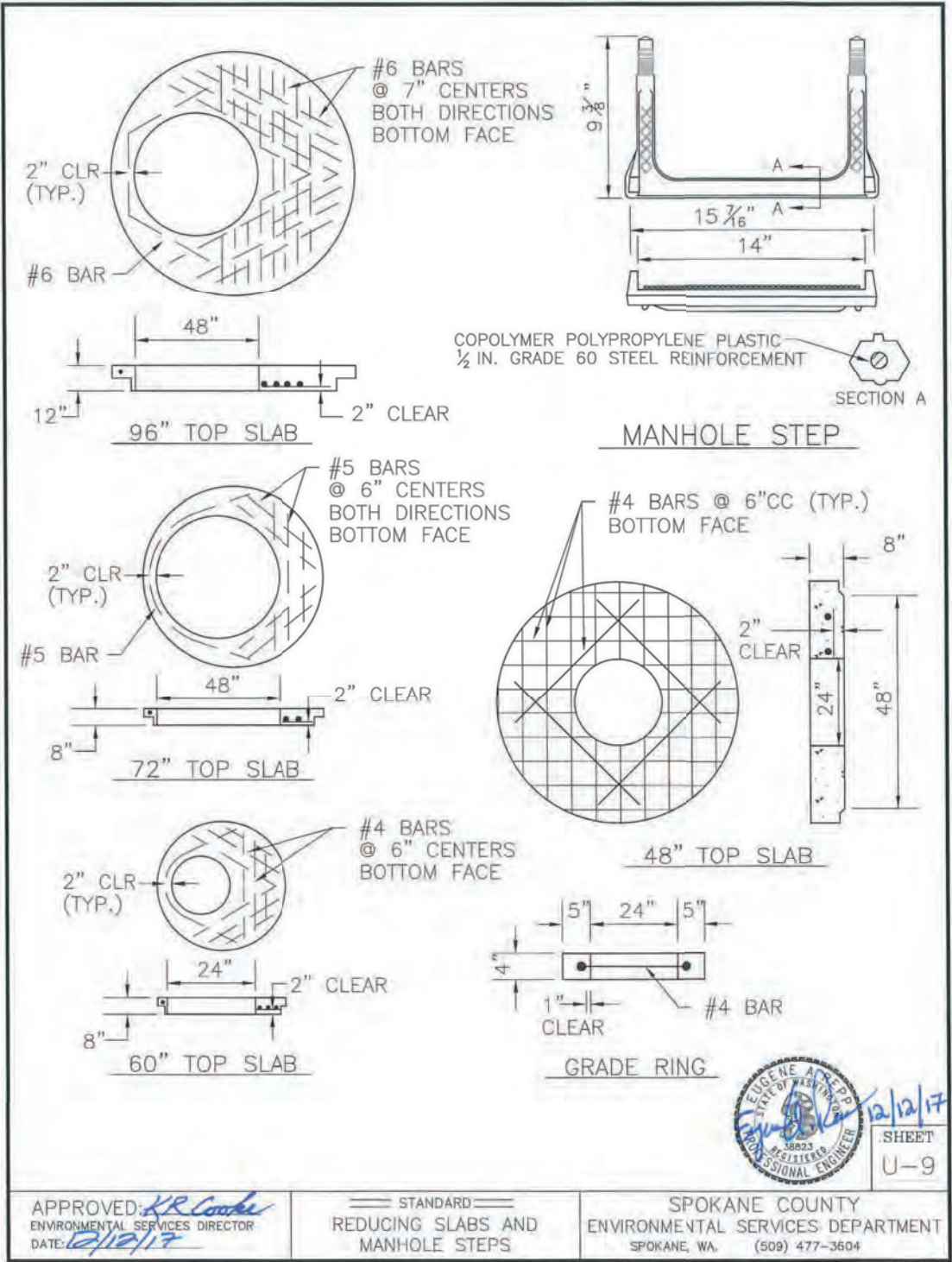
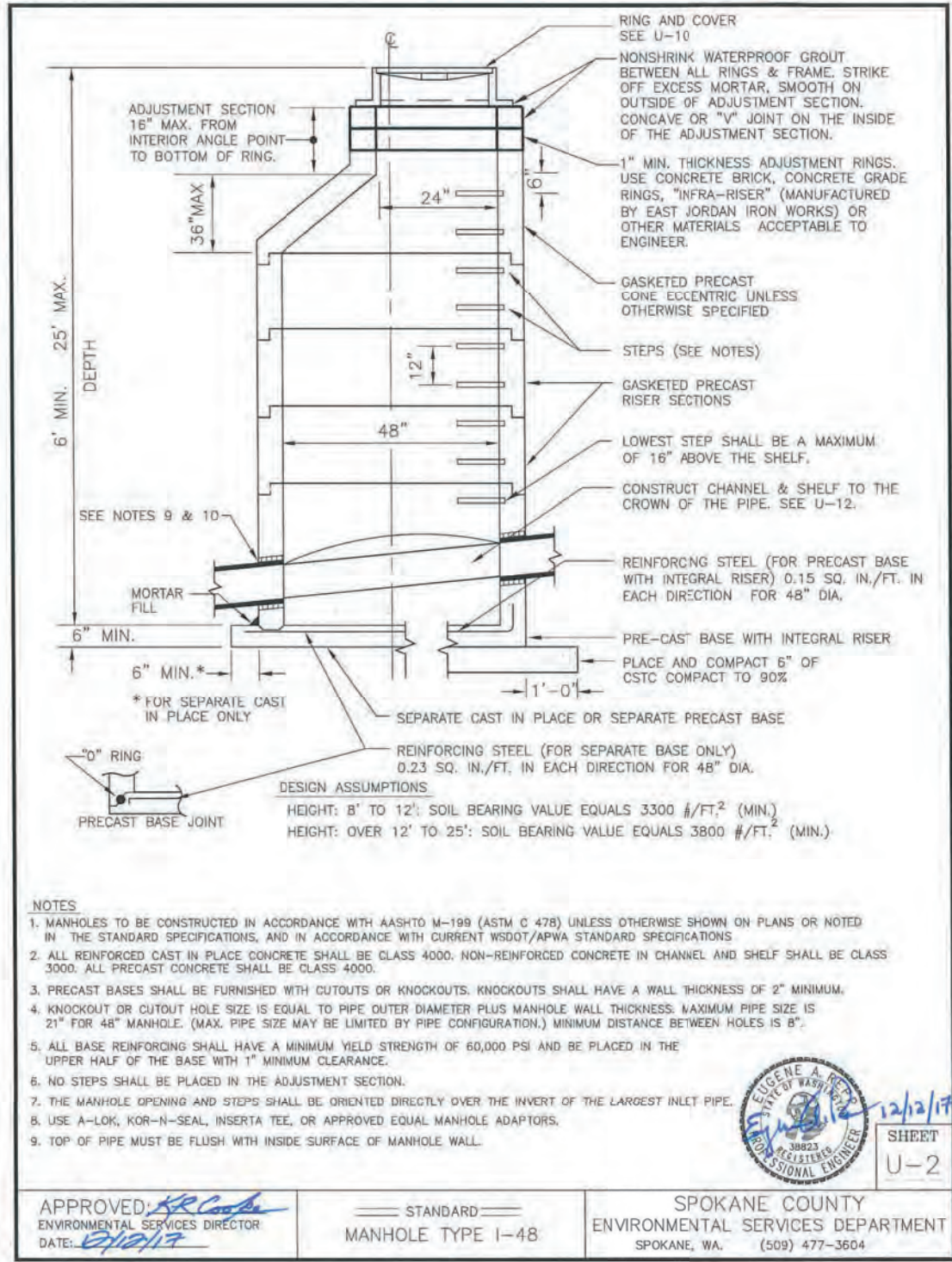
Spokane County
Public Works Dept.
1026 W. Broadway Ave.
SPOKANE, WA. 99260-0430
(509) 477-3604

APPROVED: _____
SPOKANE COUNTY
Date: _____

BARKER ROAD SEWER EXTENSION, PHASE 3 #236C
DETAILS
BID # P13127

SHEET

8 of 9



RECORD DRAWING

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JUB.TKV	4/11/23
Designed By:	
PS.BDH	4/11/23
Checked By:	
MDM	4/11/23

SCALE	
HORIZONTAL: _____ N/A _____	
VERTICAL: _____ N/A _____	

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" AT 24"X36", THEN DRAWING IS NOT TO SCALE - SCALE ACCORDINGLY

APPROVED: _____
SPokane County
Date: _____

BARKER ROAD SEWER EXTENSION, PHASE 3 #236C
COUNTY DETAILS
SHEET 9 of 9