

# MCNETT FLATS SUBDIVISION

*Major Subdivision Application*

## Section 13: Public Water Design Report

<u>Revision</u>	<u>Date</u>
1 <sup>st</sup> Element Review Copy	August 25, 2020
1 <sup>st</sup> Sufficiency Review Copy	September 1, 2020
2 <sup>nd</sup> Sufficiency Review Copy	October 16, 2020
Governing Body Review	December 4, 2020

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## ATTACHMENTS

EXISTING AS BUILT DRAWINGS

## ENGINEER'S REPORT

### 1.1.1 GENERAL INFORMATION

- a. The proposed subdivision is to consist of seven mixed-use commercial lots located on a 20.21-acre parcel at the northern terminus of George Elmer Drive. The subject parcel does not currently have an assigned address; it is legally described as Parcel 8A of Certificate of Survey 6109 located in Section 12, Township 13 North, Range 20 West, P.M.M., Missoula County, Montana. Adjacent Developments include the 44 Ranch and Flynn Ranch residential subdivisions.

Existing sanitary sewer infrastructure in the vicinity includes an 8" PVC gravity main in the George Elmer Drive right-of-way (Record Drawing P-07-019), and 8" PVC mains located in the Old Ranch Road and Pius Way rights-of-way. The existing system is owned and operated by the City of Missoula and was constructed in 2010 in the subject area. Record drawings of the existing sanitary sewer infrastructure are included within this submittal. Please refer to the included record drawings for more detailed information regarding the existing sanitary system in the project area.

Existing water infrastructure can also be found adjacent to the subject parcel to the south in the City of Missoula Service Area. The 8" ductile iron main is located in the Pius Way, George Elmer Drive, and Old Ranch Road rights-of-way (Record Drawing 504-C) and was installed in 2009. The existing system is owned and operated by the City of Missoula. Record drawings of the existing water infrastructure are including within this submittal. Please refer to these drawings for more detailed information regarding the existing water distribution system in the project area.

- b. The proposed water main extension will serve the City of Missoula as an extension of the City's existing water transmission system.

c. Owner contact information: **City of Missoula**  
**435 Ryman Street**  
**Missoula, MT 59802**

Developer contact information: **Tollefson Properties, LLC.**  
**15311 Tyson Way**  
**Frenchtown, MT 59834**  
**(406) 360-4153**

### 1.1.2 EXTENT OF WATER SYSTEM

- a. The proposed mixed-use commercial development will occur on seven separate lots to be subdivided through the division of the parent parcel by the public roads to be constructed on the site. The proposed development will include the extension of the 80' George Elmer Drive right-of-way through the middle of the subject parcel. There will be two 64' rights-of-way coming onto the subject parcel from the adjacent development to the west, Remington Flats, which is currently undergoing subdivision review. The two roads continuing onto the subject parcel from Remington Flats will be in a tuning fork configuration with the northern road named Winchester Drive and the southern road named Remington Drive. The two roads will merge into one 64' right of way that continues to the east through the subject parcel named Abby Lane. Lastly, the 64' right-of-way of Old Ranch Road that parallels George Elmer to the east will be continued through the proposed development to the north. George Elmer is classified as a Minor Arterial with parking, and the rest of the roadways will be classified as Urban Local Streets.

At full build-out the development could contain approximately 650 living units, if the maximum density permitted by the proposed zoning is realized. The proposed complete water main extensions will include approximately 1,188 lineal feet of 16" ductile iron pipe, 2,110 lineal feet of 12" ductile iron pipe, 104 lineal feet of 6" ductile iron hydrant lead pipe, and five fire hydrant assemblies. The proposed main extensions will connect to the existing 8" main in both the George Elmer Drive and Old Ranch Road rights-of-way and follow the same bearing of the roadways to the north where they will be connected by a cross at the intersection of the main east-west roadway. The extension will tie into the 8" x 8" x 8" tee fitted with a blow off valve at the terminus of George Elmer Drive. The Old Ranch Road extension will tie into the existing 8" stub onto the property. The proposed 16" water main is anticipated to tie into the proposed 16" main in Remington Drive of the Remington Flats Subdivision near the southwest corner of the property and continue to the north end of the George Elmer Drive extension. All mains will be fitted with blow-off valves at dead end locations to facilitate future extension. All proposed water main extensions will be located within the proposed rights-of-way.

- b. The proposed water main extensions will be fit with a blow-off valve at the terminus of the two mains that run north and south in George Elmer Drive and Old Ranch Road along the northern property boundary to facilitate future extension. The main that runs east-west will also be fitted with a blow-off valve at the terminus located along the eastern boundary in order to facilitate future extension.
- c. The future service requirements for the proposed water main will be limited to the maximum possible living units on the subject parcel; a total of approximately 650 living units at the maximum density permitted by the proposed zoning. The adjacent developments, 44 ranch and Flynn Ranch, are currently served by the City of Missoula's distribution system. The proposed subdivision located to the

west of the subject parcel, Remington Flats, is also expected to connect to the City of Missoula's distribution system and is currently under subdivision review. Future development of the adjacent properties to the north and west is expected and efforts to allow for future extensions have been made.

### 1.1.3 ALTERNATE PLANS

The proposed water main extensions connect to existing City of Missoula transmission mains directly adjacent to the proposed development. No other alternate plans were considered due to the proximity of the available City of Missoula water transmission system.

### 1.1.4 SITE CONDITIONS

- a. The project site is currently a vacant lot with non-qualified agricultural use. According to the Missoula Urban Area Future Land Use Map, amended on February 13, 2017, the future land use of the subject property is Neighborhood Mixed-Use. In addition, the subject property falls within a future node development. The 2019 Missoula Area Land Use Element comprehensive plan recommends a land use of Community Mixed-Use. An irrigation ditch runs along the eastern property boundary and is a branch of the historic Flynn-Dougherty Ditch. Slopes on the site generally range from 1-10%.

Geologically, this area is mapped on the Missoula West 30' x 60' Quadrangle Geologic Map (MBMG Open File Report 373) as Quaternary period Alluvium of Alluvial Terrace Deposits (Qat). These deposits are characterized as well-rounded cobbles, gravel, and sand in deposits with flat topped surfaces that are 10 to 30 feet above the present flood plain.

- b. Foundation conditions at building sites will be suitable for construction in accordance with recommendations outlined in the geotechnical report.
- c. Three nearby water wells located southwest of the site and data-based at the Montana Bureau of Mines and Geology, indicate a groundwater table depth ranging from 27 to 50 feet. One of the well-logs includes a lithology of 10 feet of clay overlying gravel, cobbles, and sand with a few varying layers of clay that extended to 112 feet in depth. This was the deepest of the three wells. No bedrock was noted. Please refer to the projects Geotechnical Report for more information on the test pit locations. The groundwater table was not encountered in any of the test pits during the subsurface investigation.

### 1.1.5 WATER USE DATA

- a. The estimated maximum population which will be served by the proposed water main extensions on the proposed development will include an average of 2.3 residents per living unit, for a total of 1,495 people.
- b. Water usage for the proposed development includes domestic water demands and irrigation demands. The average daily demand during the summer months, when landscaping requires irrigation, is calculated in this section.

### **Average Daily Demand**

The average daily demand, including domestic demands and irrigation demands, was calculated based on the following assumptions:

*Domestic: 100 gallons per day, per resident*

*Irrigation: Two inches applied per week during the summer months (June-August)*

The average daily domestic demand is calculated as follows:

$$D_{\text{DOM}} = 1,495 \text{ residents} * 100 \text{ gpd} = 149,500 \text{ gpd}$$

The average daily irrigation demand during the summer months is calculated as follows:

$$D_{\text{IRR}} = \left(\frac{2''}{\text{week}}\right) \left(\frac{1'}{12''}\right) \left(\frac{7.48 \text{ gal}}{\text{ft}^3}\right) \left(\frac{\text{week}}{7 \text{ days}}\right) (33,802 \text{ ft}^2 \text{ landscaping}) = 6,020 \text{ gpd}$$

Thus, the total average daily demand during the summer months, when water usage will be at its most severe, is 155,520 gallons per day.

- c. Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for detailed information.
- d. Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for detailed information.
- e. Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for detailed information.

## **1.1.6 FLOW REQUIREMENTS**

- a. The peak instantaneous demand, the theoretical maximum amount of water that is likely to be used at any given time, was estimated for the project using the AWWA Modified Fixture Value Method for Domestic and the Required Maximum Flow Rate Calculator for Irrigation in the Pacific Northwest created by Washington State University. The estimated population of the proposed development was

determined by using the maximum density allowed by B2-2 Zoning Regulations per City of Missoula Title 20.

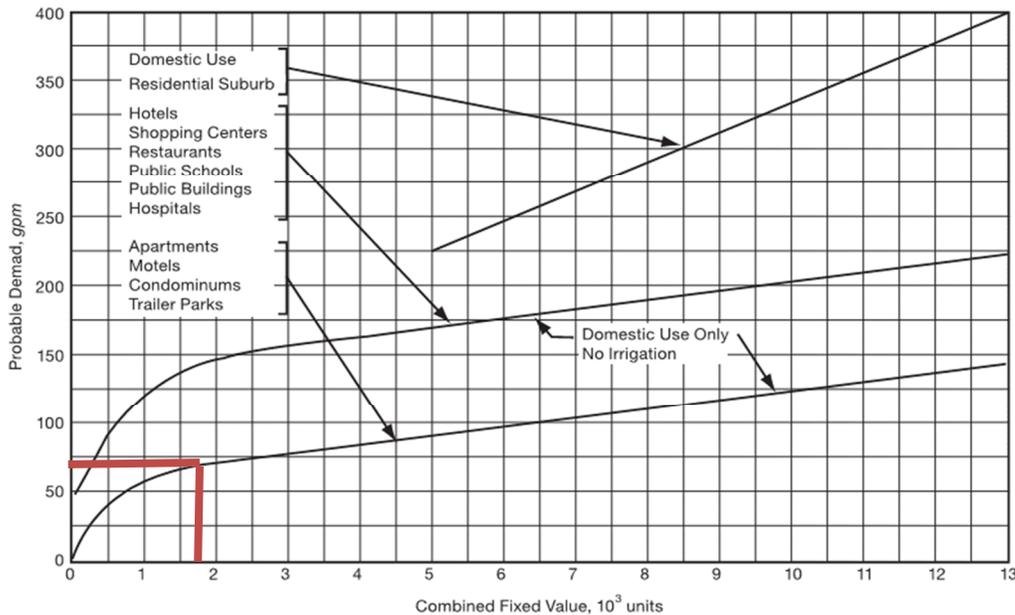
For the purposes of the analysis, it is assumed that each living unit will include a kitchen sink faucet, dishwasher, one toilet with flush tank, one lavatory sink faucet, one bathtub, one shower heads, and a clothes washer. There will be approximately 22 buildings in the development at full build-out. The combined fixture value for the average building in the full development is calculated in .

**TABLE 1. COMBINED FIXTURE VALUE CALCULATION.**

FIXTURE OR APPLIANCE	NUMBER	FIXTURE VALUE (GPM)	PRESSURE-ADJUSTED FIXTURE VALUE (GPM)	TOTAL FIXTURE VALUE (GPM)
FAUCET (KITCHEN SINK)	650	1.8	1.8	1170
TOILET (FLUSH TANK)	650	6	6	3900
FAUCET (LAVATORY)	650	1.5	1.5	975
BATHTUB	650	8	8	5200
CLOTHES WASHER (VERTICAL AXIS)	650	6	6	3900
SHOWER (SINGLE HEAD)	650	2.5	2.5	1625
DISHWASHER	650	1.3	1.3	845

**COMBINED FIXTURE VALUE:**

The combined fixture value of 17,615 was applied to the demand curve shown in Figure 1.



**FIGURE 1. DEMAND CURVE FOR AWWA MODIFIED FIXTURE VALUE METHOD.**

The combined probable peak demand for domestic use is approximately 74 gallons per minute, per building. Additional irrigation flows must be considered. To estimate the peak irrigation flow rate, the “Required Maximum Flow Rate” calculator for irrigation in the Pacific Northwest, developed by Washington State University, was used. Assuming a maximum use rate of two inches per week, applied to 33,802 square feet of landscaping with an efficiency of 75%, the maximum irrigation flow rate for the development is 6 gallons per minute.

**1.1.7 SOURCES OF WATER SUPPLY**

The City of Missoula will be responsible for the source of water supply. Please reference the City of Missoula’s PWS (PWSID: MT0000294) on file for detailed information.

**1.1.8 PROPOSED TREATMENT PROCESSES**

There are no proposed treatment processes for this project. The proposed water main will connect to the City of Missoula’s existing public water system.

**1.1.9 SEWAGE SYSTEM AVAILABLE**

The existing sewage collection system adjacent to the development are owned and operated by the City of Missoula. The proposed sewer mains to be installed as part of the

development will maintain a minimum 10-foot horizontal and 18-inch vertical edge-to-edge separation from all existing and proposed water transmission mains.

#### **1.1.10 WASTE DISPOSAL**

Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for detailed information.

#### **1.1.11 AUTOMATION**

Automated controls are not proposed for this project.

#### **1.1.12 PROJECT SITES**

- a. Not applicable – alternate sites were not considered for this project.
- b. Adjacent developments include residential and residential-mixed use land uses.
- c. Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for potential source water pollution sources.

#### **1.1.13 FINANCING**

Please reference the City of Missoula's PWS (PWSID: MT0000294) on file for detailed information.

#### **1.1.14 FUTURE EXTENSIONS**

Areas to the south and west of the proposed subdivision are developed or in the process of being developed. Future extensions are anticipated for the parcels directly north and east of the proposed subdivision. However, there is no information on when this future extension would occur.

#### **REFERENCES**

Montana Department of Environmental Quality, "Standards for Water Works", Circular DEQ-1.

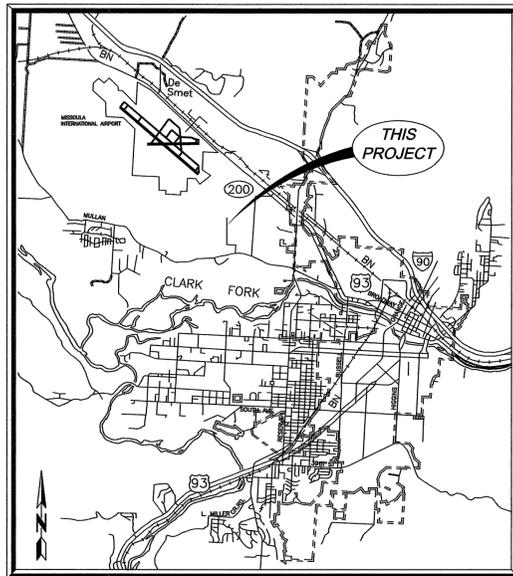
Washington State University, "Required Maximum Flow Rate" Irrigation in the Pacific Northwest.

# FLYNN RANCH WATER SYSTEM IMPROVEMENTS

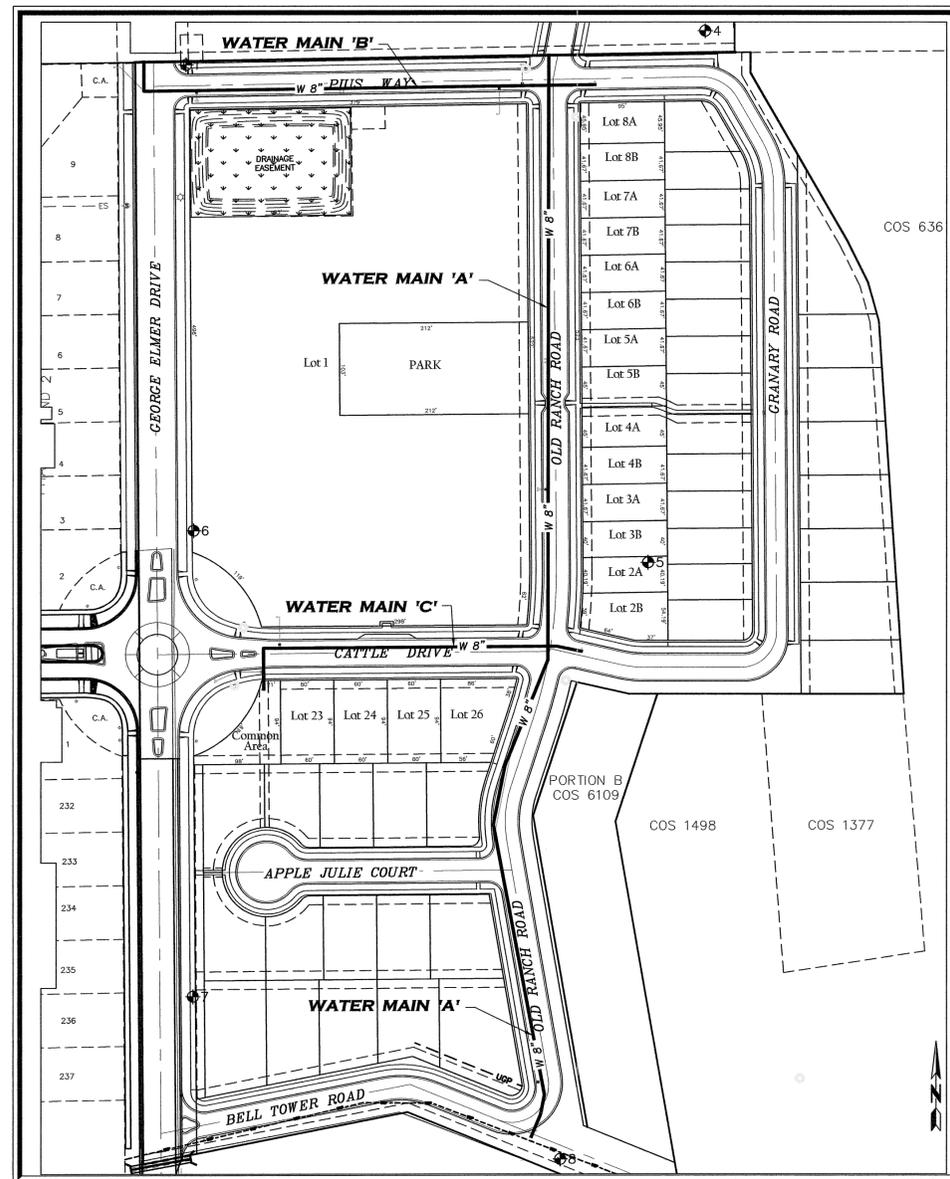
MISSOULA COUNTY, MONTANA

SEC. 12, T. 13 N., R. 20 W., P.M.M.

PLANS PREPARED FOR:  
**STOCKYARD ROAD INVESTMENTS, LLC**  
P.O. Box 2060  
SUN VALLEY, IDAHO 83353



VICINITY MAP  
NO SCALE



SITE MAP  
NO SCALE

INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	WATER MAIN 'A' PLAN AND PROFILE - STA 14+00 TO 20+00
3	WATER MAIN 'A' PLAN AND PROFILE - STA 20+00 TO 25+75
4	WATER MAIN 'A' PLAN AND PROFILE - STA 25+75 TO 26+27
5	WATER MAIN 'B' PLAN AND PROFILE - STA 9+00 TO 14+85.44
6	WATER MAIN 'C' PLAN AND PROFILE - STA 11+19 TO 14+39.27
7	WATER MAIN 'C' & 'D' PLAN AND PROFILE
8	CONSTRUCTION DETAILS, LEGEND AND PROJECT NOTES
9	CONSTRUCTION DETAILS

PROJECT STATUS	
STATUS	DATE
PRELIMINARY - NOT FOR CONSTRUCTION	9/2009
FINAL - APPROVED FOR CONSTRUCTION	0/0/08

**ENGINEERING CONTACT:**

TERRY FOREST, P.E. - VICE PRESIDENT MUNICIPAL  
(406) 721-4320

PAUL DRUYVESTEIN, P.E. - PROJECT ENGINEER  
(406) 721-4320

**UTILITY LOCATION:**

CALL 1-800-424-5555  
UNDERGROUND UTILITIES LOCATION CENTER

WITH THE FOLLOWING:  
COUNTY MISSOULA CITY MISSOULA  
STREET ADDRESS GEORGE ELMER DRIVE  
SEC. & 1/4 SEC. NO.# 12, SE 1/4  
TOWNSHIP & RANGE T. 13 N., R. 20 W.

CALL TWO WORKING DAYS BEFORE YOU DIG  
(ID, MT, ND, OR, WA, WY)

PROJECT CONTROL POINTS				
PT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	97876.41	27633.28	3156.11	RED PLASTIC CAP
CP-4	97914.38	28217.11	3158.08	RED PLASTIC CAP
CP-5	97318.82	28153.09	3158.21	RED PLASTIC CAP
CP-6	97354.39	27642.08	3156.51	RED PLASTIC CAP
CP-7	96832.38	27641.24	3158.74	RED PLASTIC CAP
CP-8	96650.29	28054.29	3161.72	RED PLASTIC CAP

**PROJECT BENCHMARK**

CONTROL POINT 13, LOCATED NORTH OF INTERSTATE 90 AND THE BURLINGTON NORTHERN RAILROAD NEAR TIMBER EDGE DRIVE. ELEVATION = 3319.74

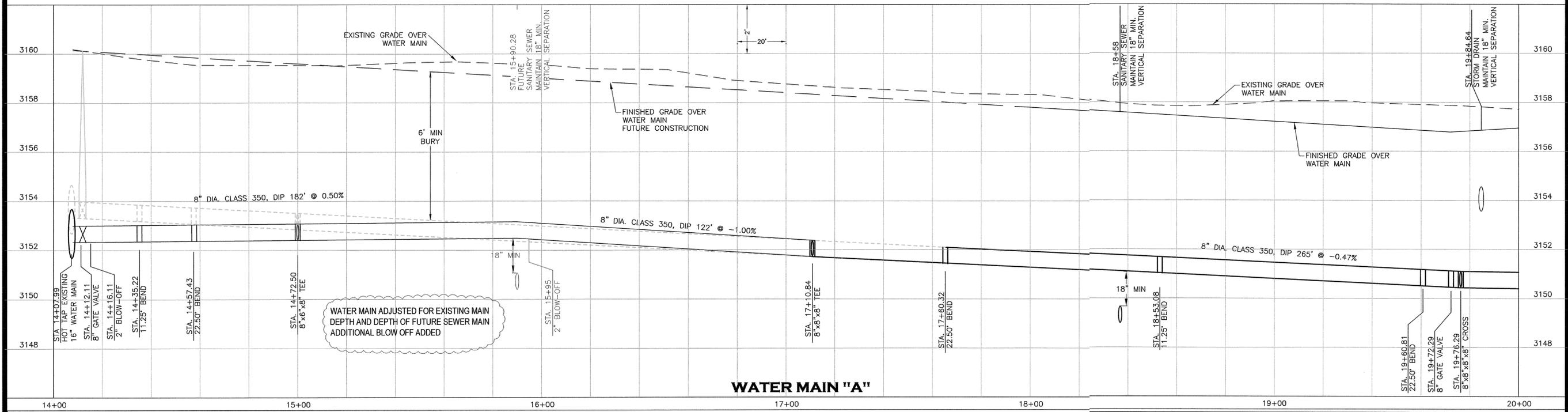
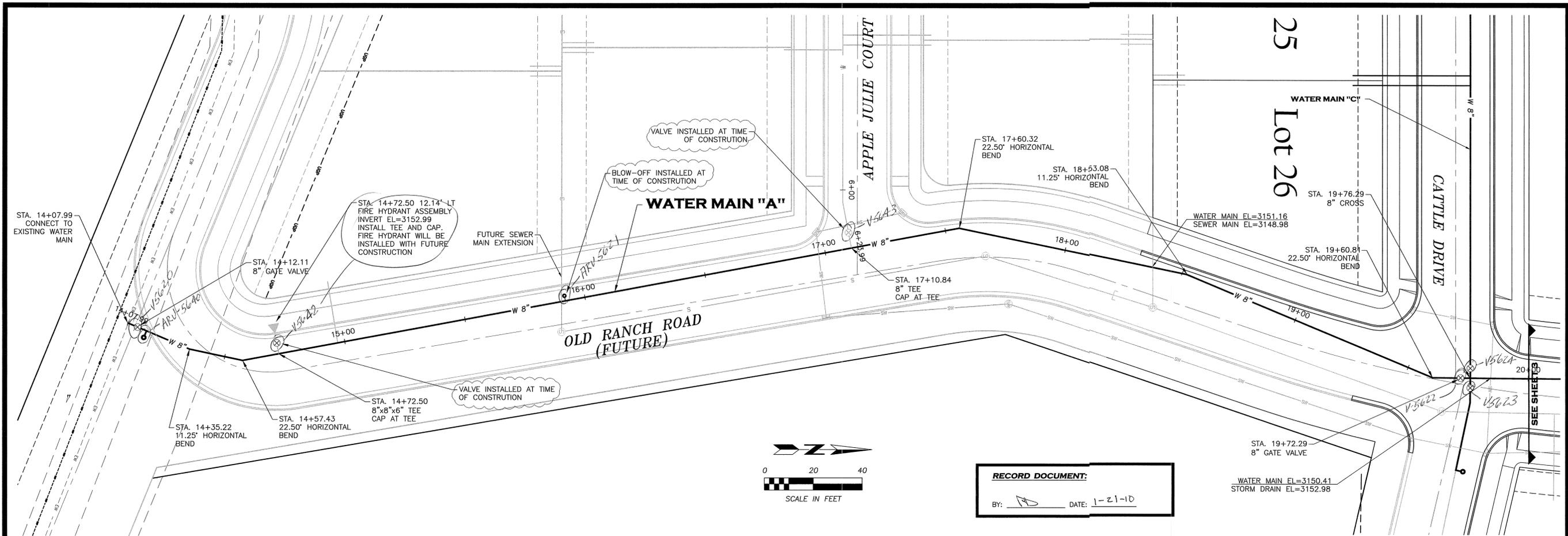
NOTE: ALL WORK WILL BE DONE IN ACCORDANCE WITH MPWSS CURRENT ADDITION.

*Paul Druyvestein*  
PAUL DRUYVESTEIN, P.E.  
DATE: 1-21-09  
EXPIRES: 7-20-10



JOB 3109A006  
DRAWING 504-C

FLYNN RANCH MISSOULA, MONTANA WATER SYSTEM IMPROVEMENTS			
COVER SHEET			
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1. 8/2009 MINOR REVISIONS	DJL	6/2008	5109
2. 12/2009 R. DRAWINGS	DESIGN BY:	CHECK BY:	SHEET NO.
3.	PD	TLF	1 OF 9
4.			
5.			



BY	DATE	REVISION DESCRIPTION
DJL	2/2009	ADDED BLOWOFF STA 14+16.11
JLC	12/2009	RECORD DRAWINGS

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DRAWN	DJL	DATE	5/08
CHECKED		SURVEYED	DJA

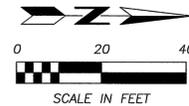
**DJA, P.C.**  
 CONSULTING ENGINEERS & LAND SURVEYORS  
3203 Russell Street, Missoula, Montana 59801-8291  
 Phone 406/721-4320 Fax 406/546-0371

**FLYNN RANCH  
 PHASE 1**

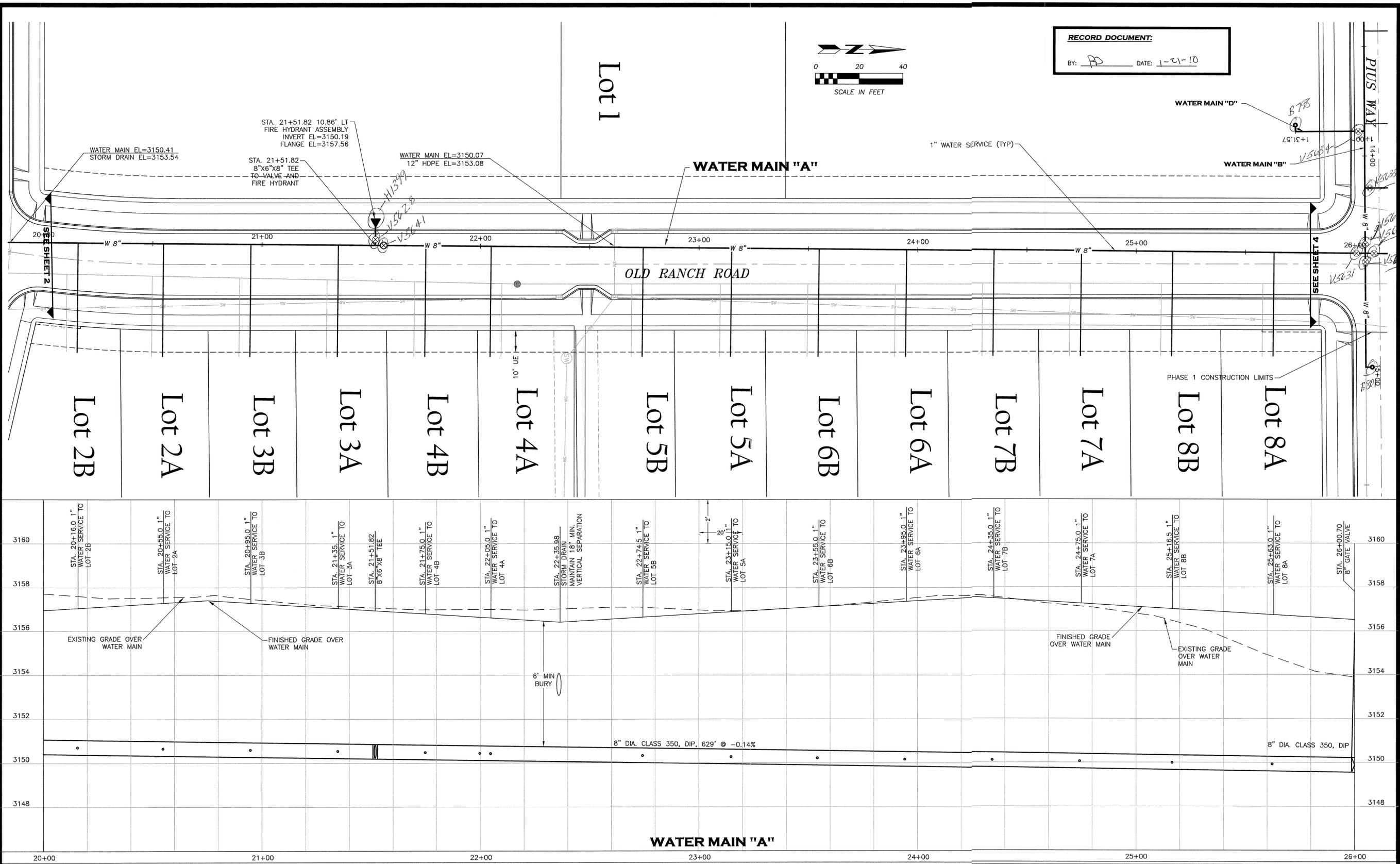
**WATER IMPROVEMENTS  
 WATER MAIN 'A' - STA. 14+00 TO STA. 20+00  
 PLAN AND PROFILE**

SHEET	2	OF	9
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JOB 3109A006  
 DRAWING 504-C



**RECORD DOCUMENT:**  
 BY: PD DATE: 1-21-10



BY	DATE	REVISION DESCRIPTION
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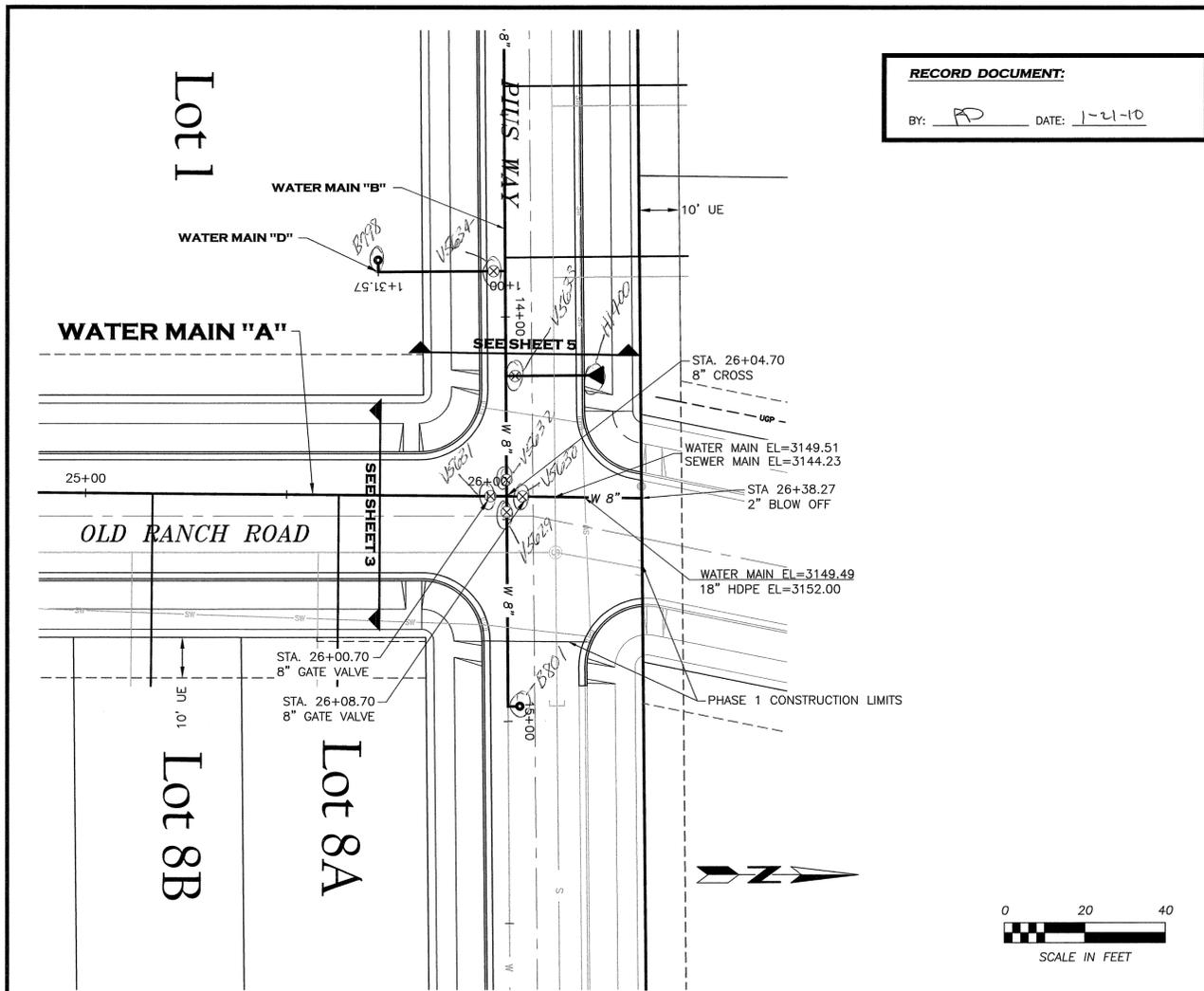
**D&A, P.C.**  
 CONSULTING ENGINEERS & LAND SURVEYORS  
2003 Russell Street, Missoula, Montana 59801-8891  
 Phone 406/721-4320 Fax 406/548-6371

**FLYNN RANCH  
 PHASE 1**

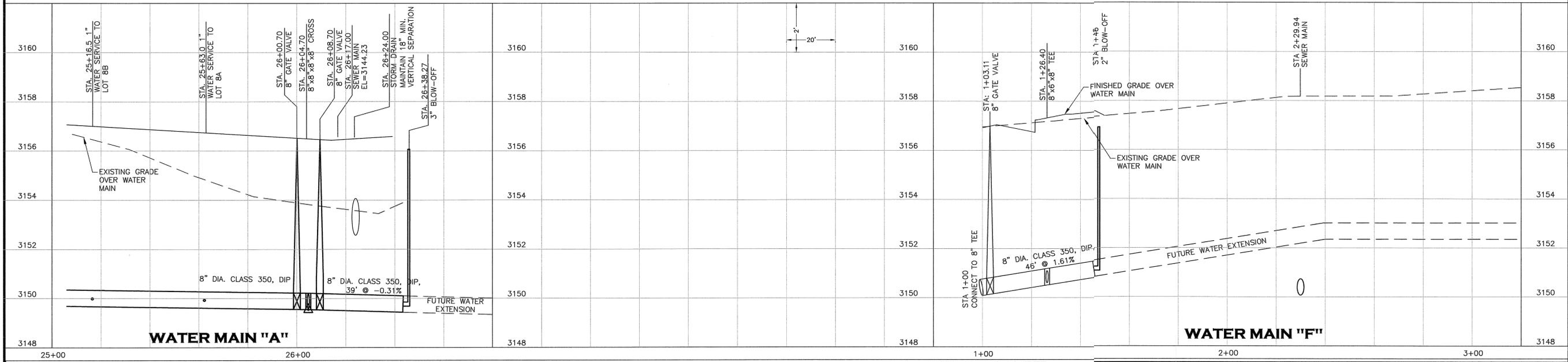
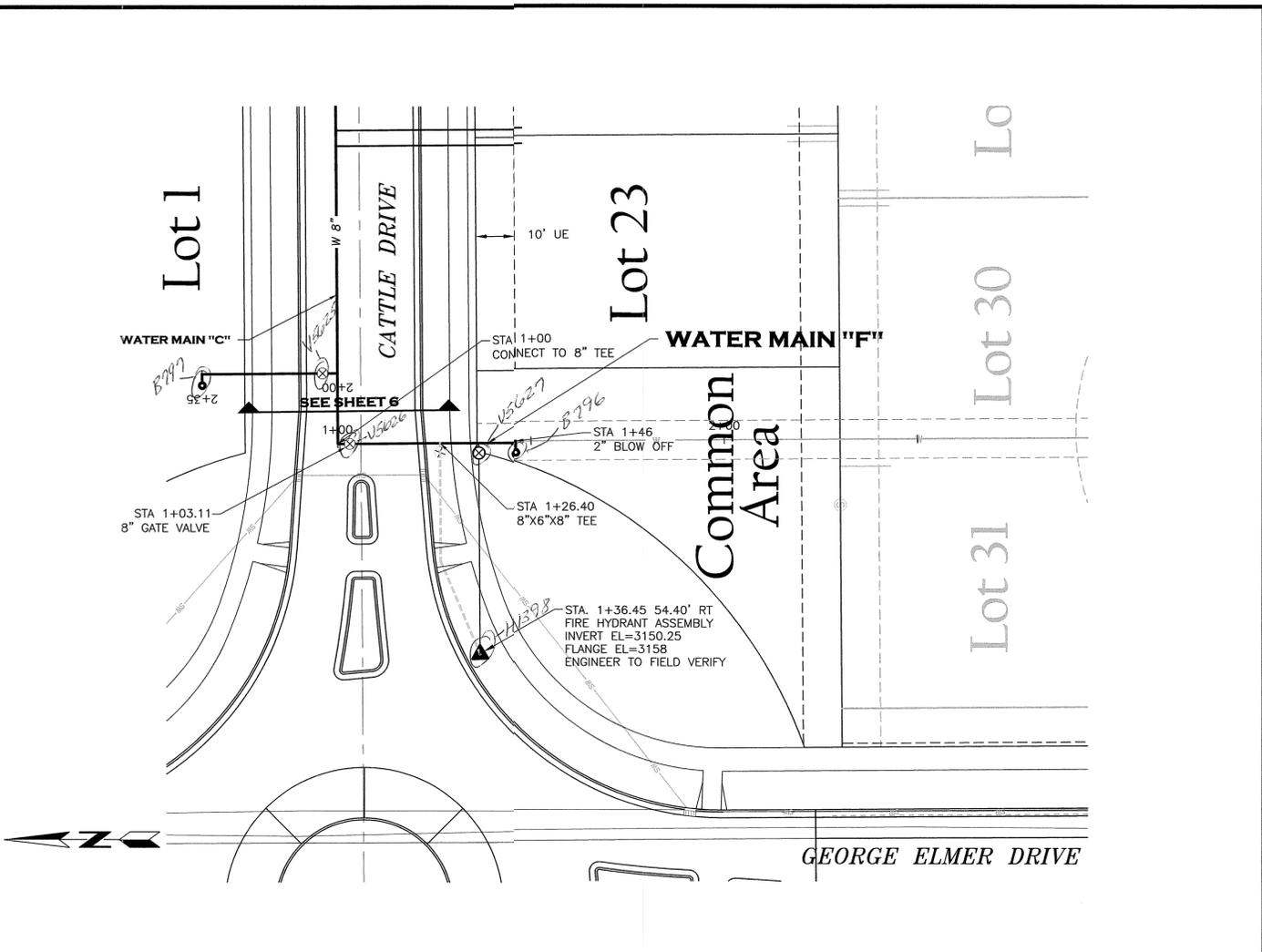
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 WATER MAIN 'A' - STA. 20+00 TO STA. 25+75  
 PLAN AND PROFILE**

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JOB 3107006  
 DRAWING 504-C

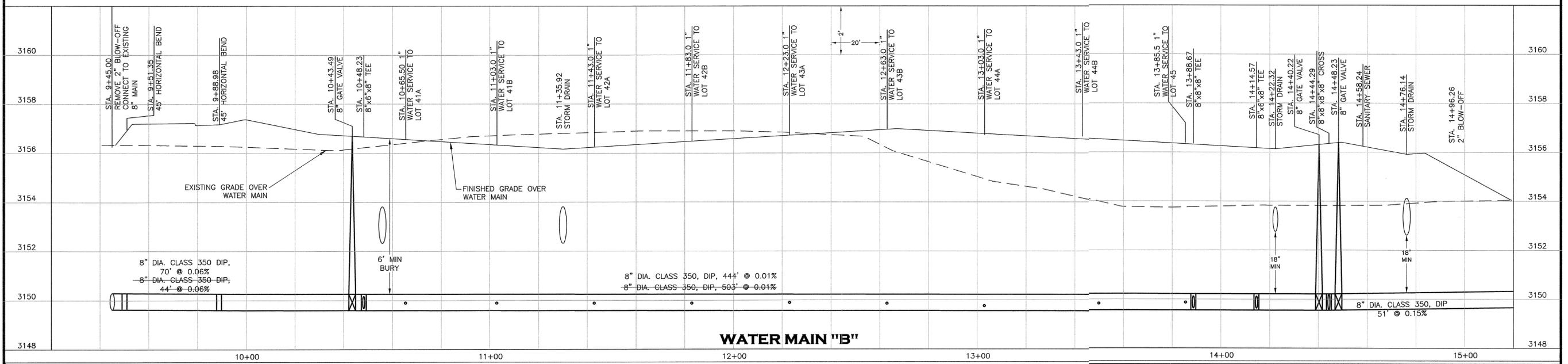
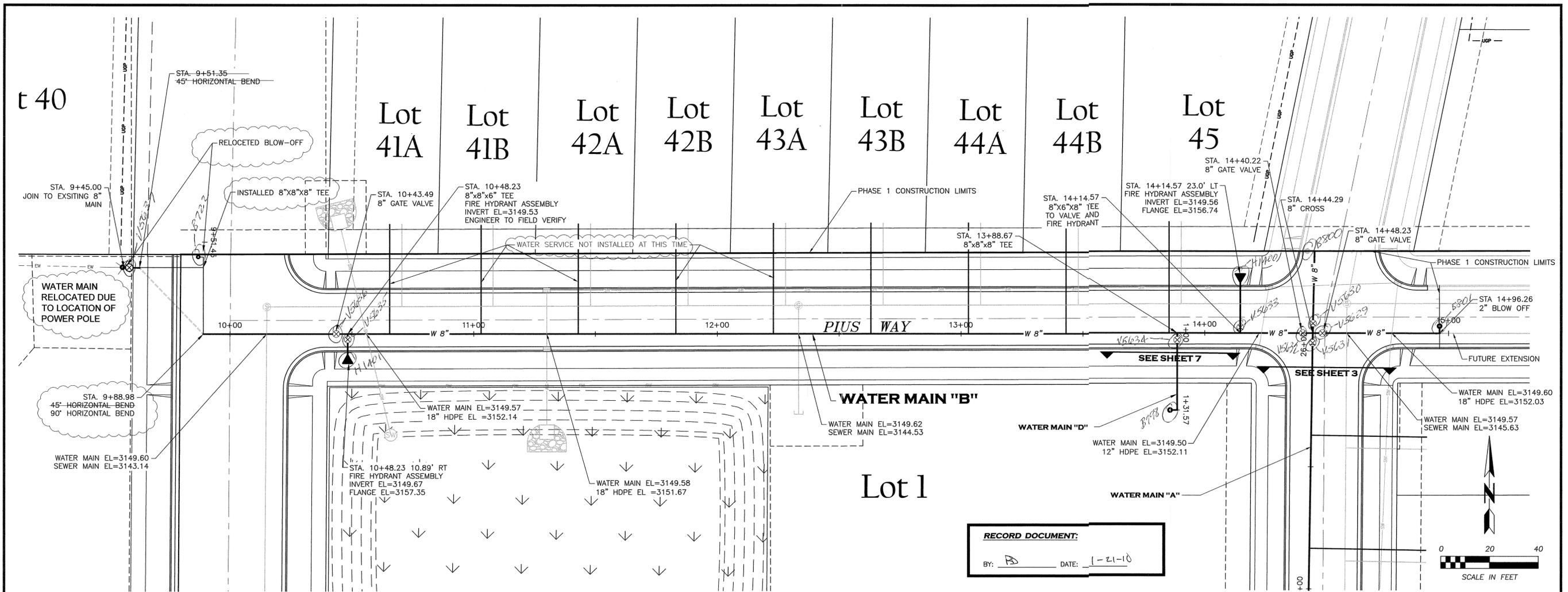


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 BY: PD DATE: 1-21-10



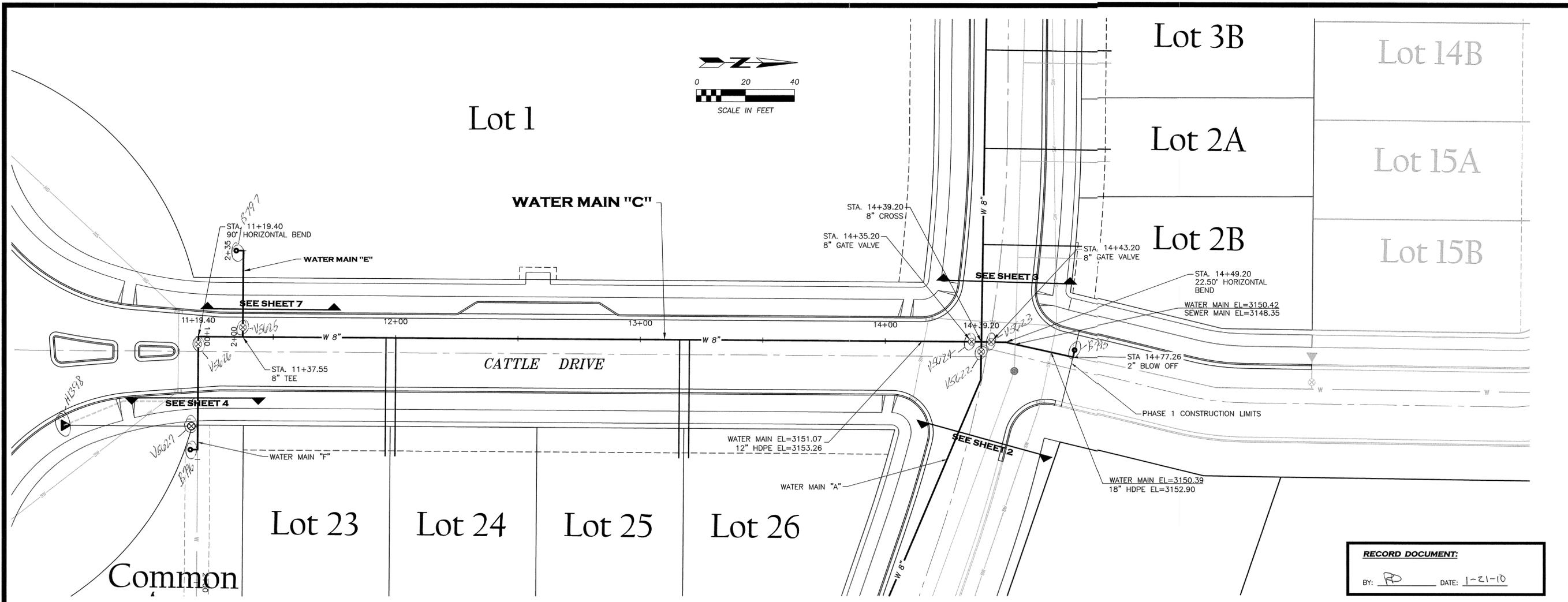
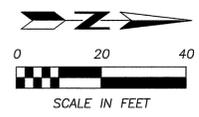
BY: JLC	DATE: 12/2009	REVISION DESCRIPTION: RECORD DRAWINGS	DESIGN: PD	PROJ. NO.: 5109	 3203 Russell Street, Missoula, Montana 59801-8291 Phone: 406/721-4329 Fax: 406/548-6371	<b>FLYNN RANCH        PHASE 1</b>	<b>WATER IMPROVEMENTS - PLAN AND PROFILE        WATER MAIN 'A' - STA. 25+75 TO STA. 26+27        WATER MAIN 'E'</b>	SHEET	OF
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 DRAWING 507-C

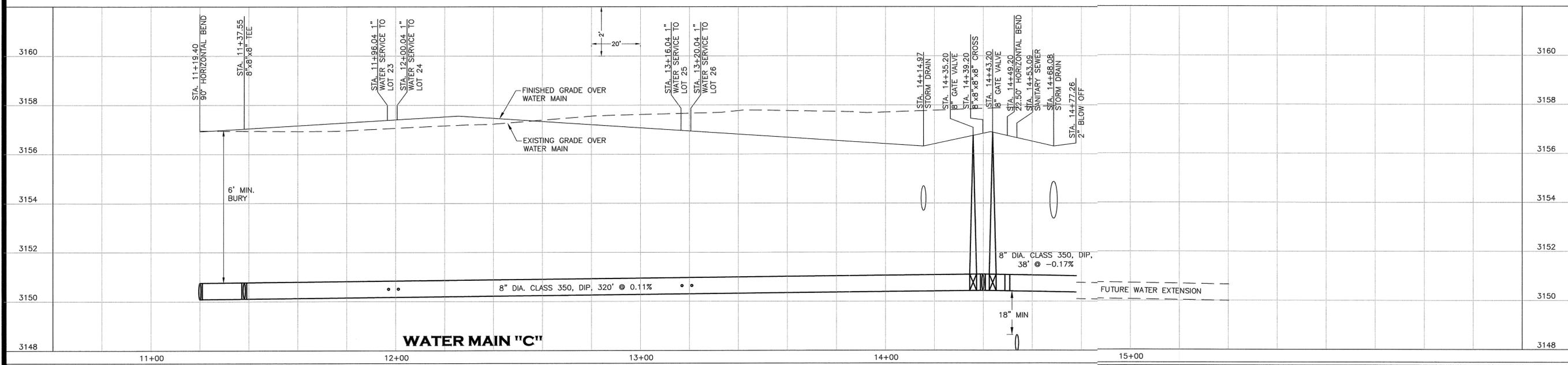


BY JLC	DATE 12/2009	REVISION DESCRIPTION RECORD DRAWINGS	DESIGN PD	PROJ. NO. _5109_	 <b>FLYNN RANCH PHASE 1</b>	<b>WATER IMPROVEMENTS WATER MAIN 'B' - STA. 9+00 TO STA. 14+85.44 PLAN AND PROFILE</b>	SHEET <b>5</b>	OF <b>9</b>
DRAWN D.J.L.	DATE 5/08	CHECKED D.J.A.	SURVEYED D.J.A.					

JOB 3109A006  
DRAWING 504C



**RECORD DOCUMENT:**  
 BY: *JD* DATE: 1-21-10



BY	DATE	REVISION DESCRIPTION
JLC	12/2009	RECORD DRAWINGS

DESIGN	PD	PROJ. NO.	5109
DRAWN	DJL	DATE	5/08
CHECKED		SURVEYED	DJA

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 CONSULTING ENGINEERS & LAND SURVEYORS  
3203 Russell Street, Missoula, Montana 59801-8091  
 Phone: 406/721-4320 Fax: 406/548-6371

**FLYNN RANCH  
 PHASE 1**

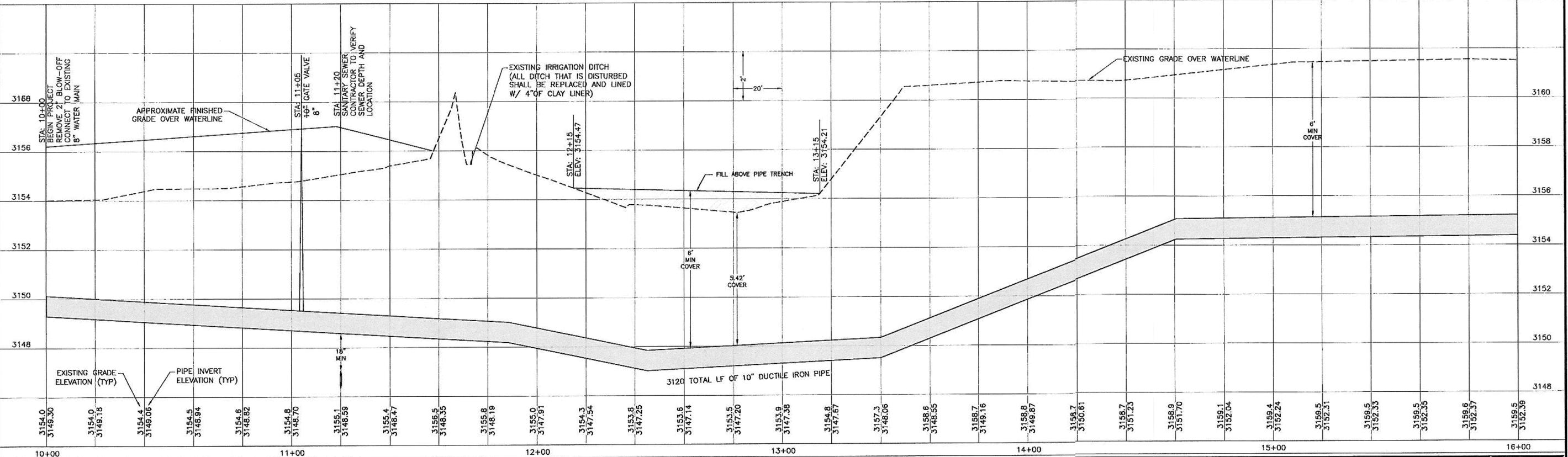
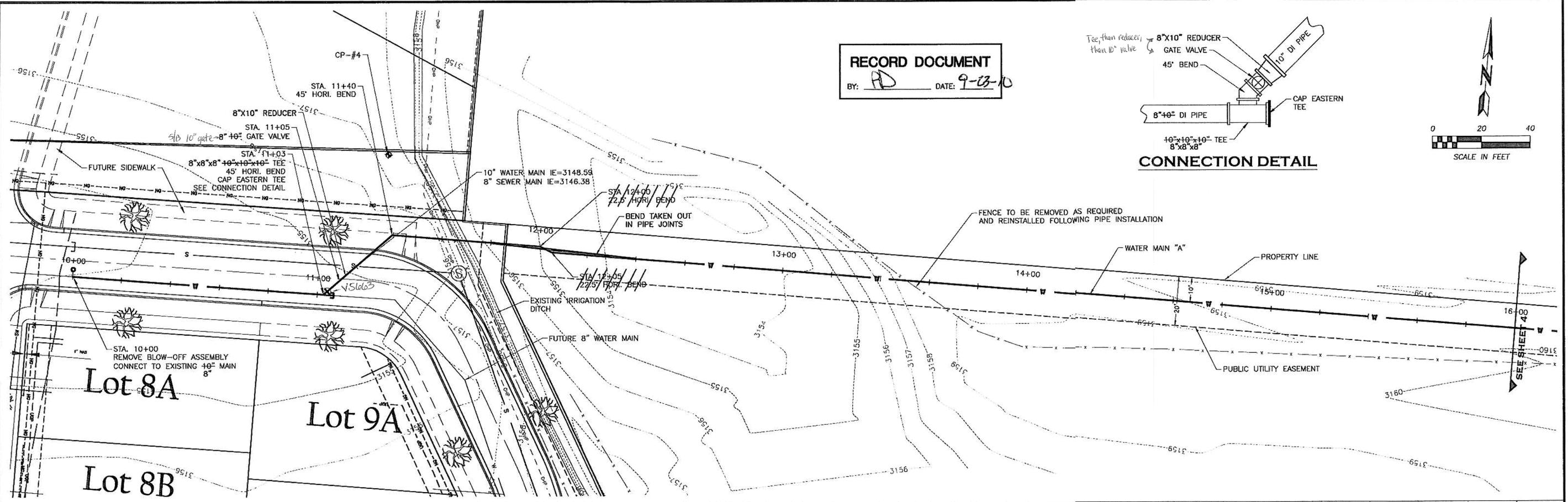
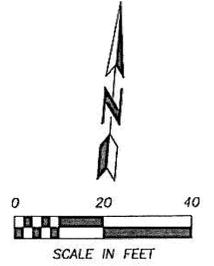
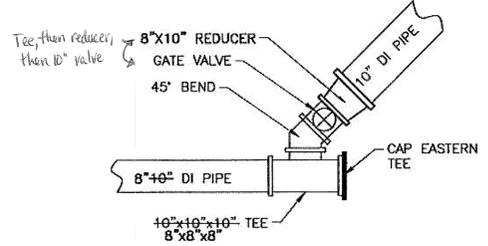
**WATER IMPROVEMENTS  
 WATER MAIN 'C' - STA. 11+39 TO STA. 14+39.20  
 PLAN AND PROFILE**

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*JOB 3109A006  
 DRAWING 504-C*



**RECORD DOCUMENT**  
 BY: *PD* DATE: *9-13-10*



BY	DATE	REVISION DESCRIPTION
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PD	5725
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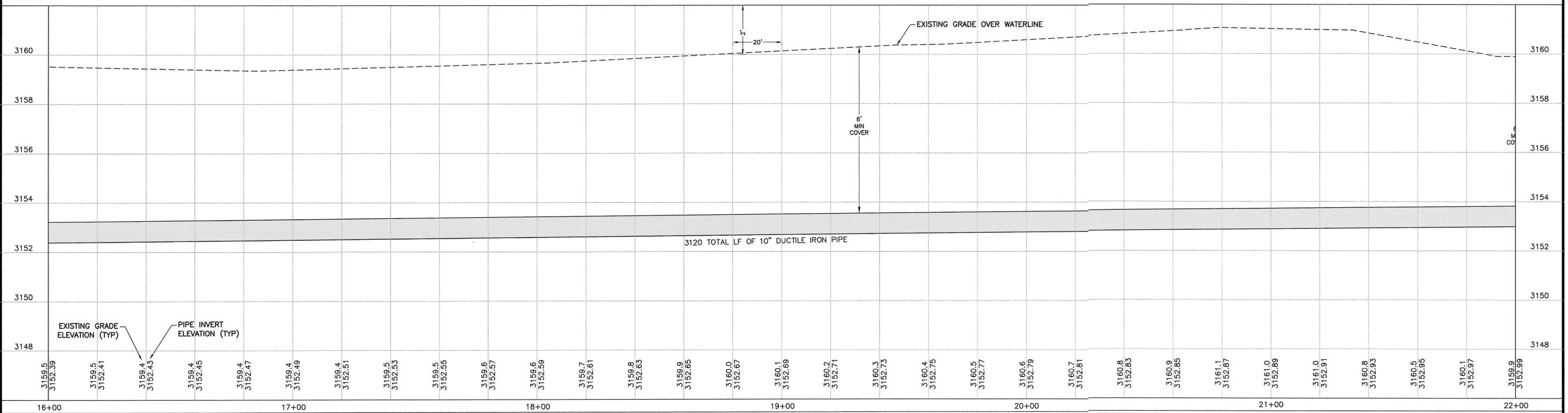
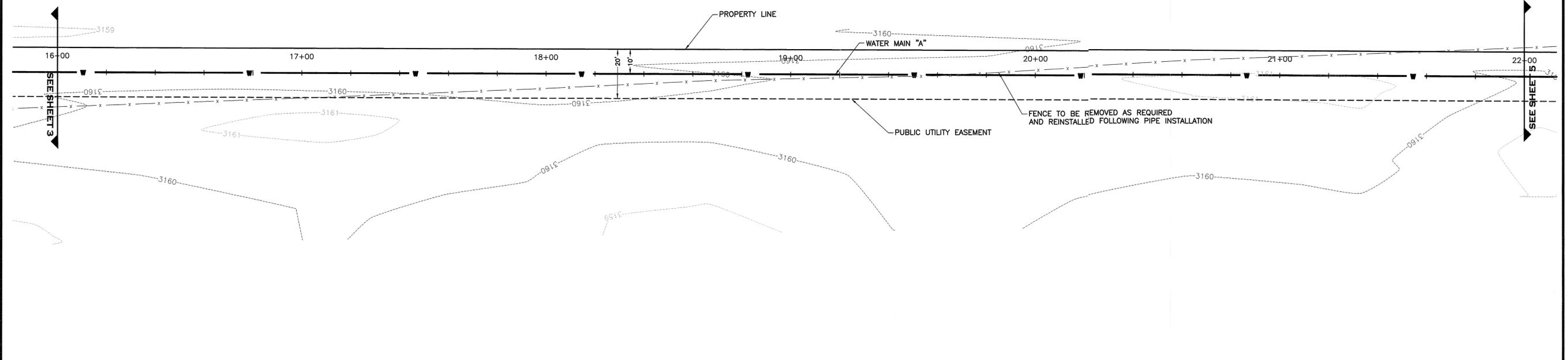
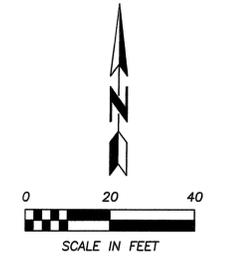
**Dj&A, P.C.**  
 CONSULTING ENGINEERS & LAND SURVEYORS  
 2023 Russell Street, Muskogee, Missouri 65801-8591  
 Phone 406/721-4320 Fax 406/648-6371

**PLEASANT VIEW TO FLYNN RANCH  
 WATER MAIN LOOP EXTENSION**

**WATER IMPROVEMENTS  
 WATER MAIN 'A' - STA. 10+00 TO STA. 16+00  
 PLAN AND PROFILE**  
 DRW 504-C  
 Job 3109A10

SHEET	OF
3	11

**RECORD DOCUMENT**  
 BY:  DATE: 6-3-10



BY	DATE	REVISION DESCRIPTION
KBE	06/2010	AS-BUILT

DESIGN	PD	PROJ. NO.	5725
DRAWN	KE	DATE	11/2009
CHECKED		SURVEYED	DJA

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 Phone: 409/721-4320 Fax: 409/549-6371

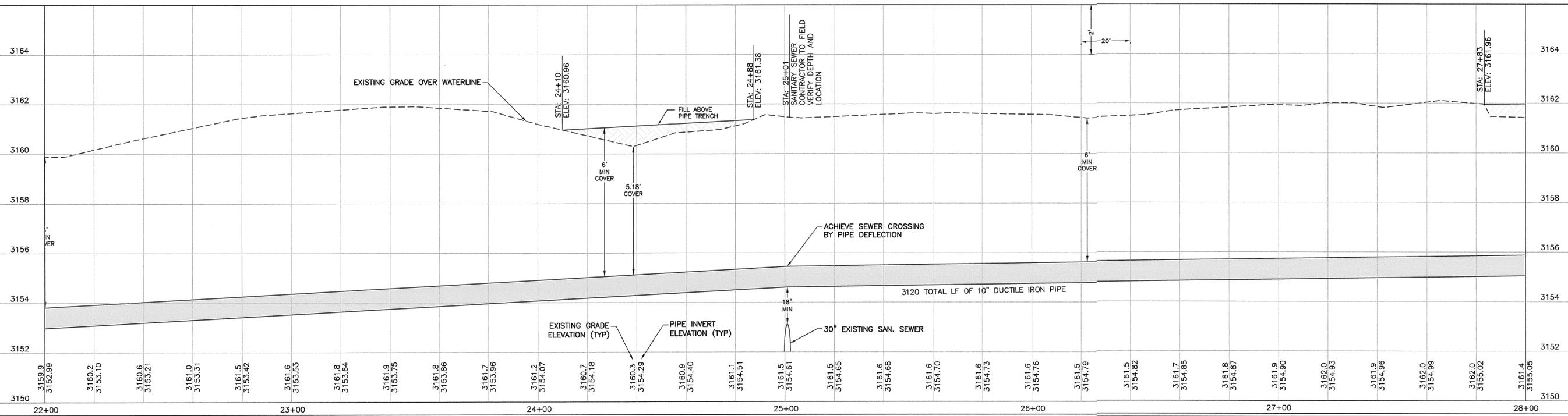
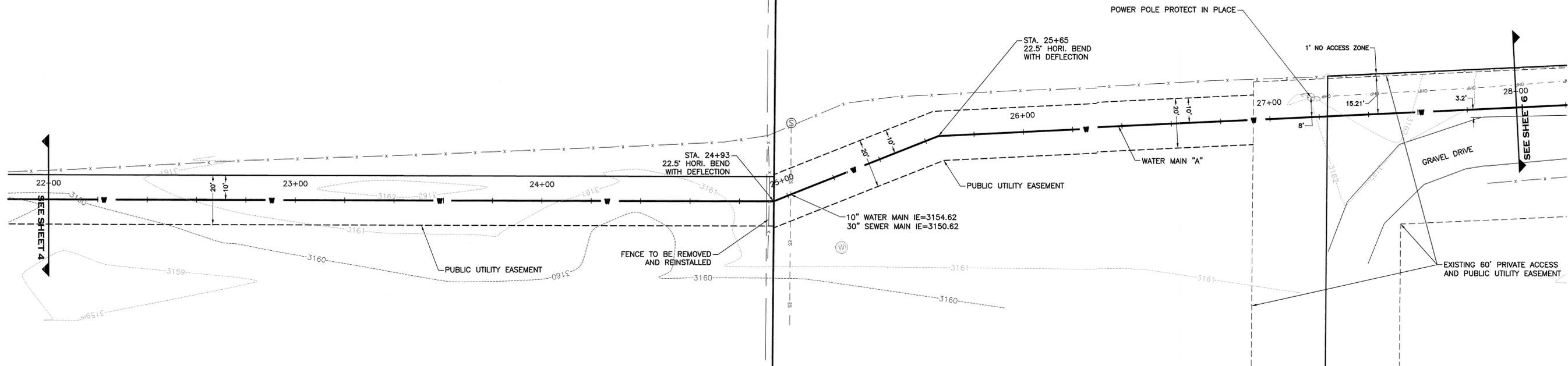
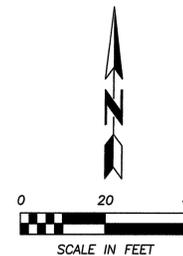
**PLEASANT VIEW TO FLYNN RANCH  
 WATER MAIN LOOP EXTENSION**

**WATER IMPROVEMENTS  
 WATER MAIN 'A' - STA. 16+00 TO STA. 22+00  
 PLAN AND PROFILE**  
 DRW S04-E  
 10/23/09 AD10

SHEET	OF
4	11

**RECORD DOCUMENT**

BY: *[Signature]* DATE: 6-3-10



BY	DATE	REVISION DESCRIPTION
KBE	06/2010	AS-BUILT

DESIGN	PD	PROJ. NO.
KE		5725
DRAWN	DATE	
	11/2009	
CHECKED	SURVEYED	
	DJA	

**D&A P.C.**  
 CONSULTING ENGINEERS & LAND SURVEYORS  
3203 Russell Street, Missoula, Montana 59801-8291  
 Phone: 406/721-4220 Fax: 406/549-0371

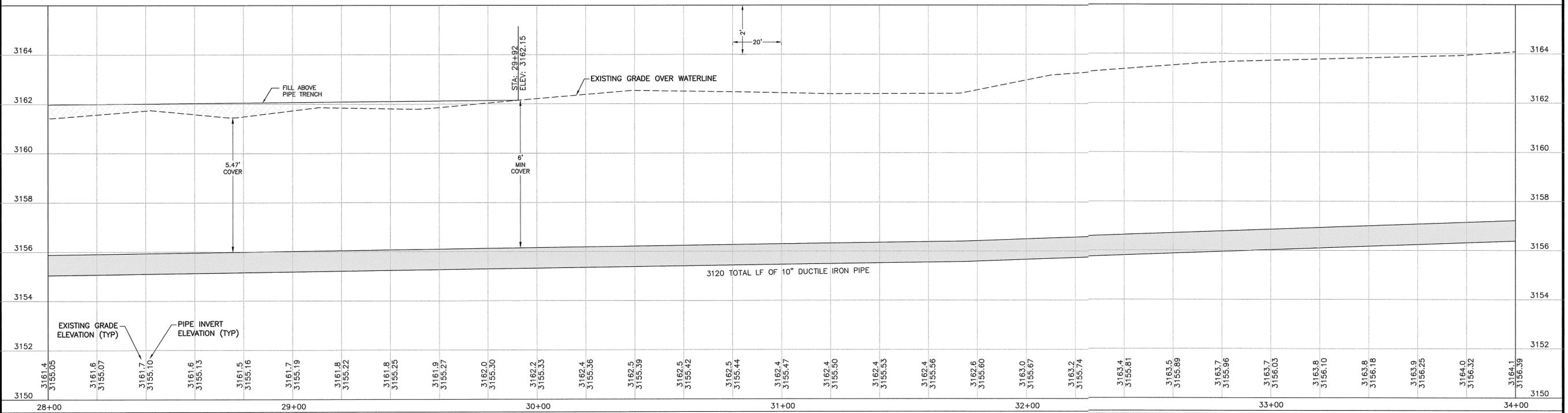
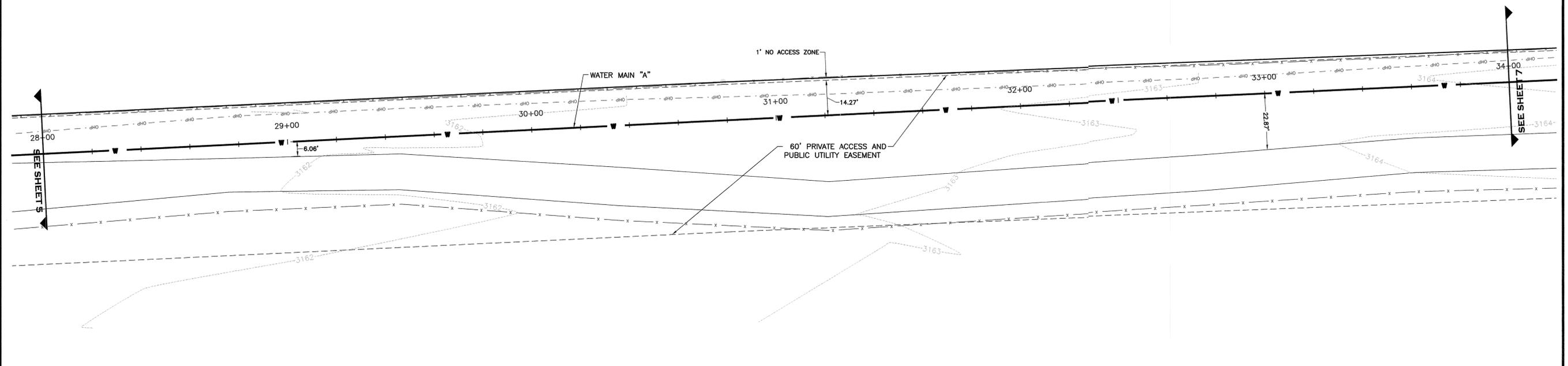
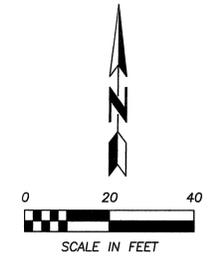
**PLEASANT VIEW TO FLYNN RANCH**  
**WATER MAIN LOOP EXTENSION**

**WATER IMPROVEMENTS**  
**WATER MAIN 'A' - STA. 22+00 TO STA. 28+00**  
**PLAN AND PROFILE**  
*DRW 504-C*  
*job 31094010*

SHEET	OF
<b>5</b>	<b>11</b>

**RECORD DOCUMENT**

BY: JD DATE: 6-3-10



BY	DATE	REVISION DESCRIPTION	DESIGN	PROJ. NO.
KBE	06/2010	AS-BUILT	PD	5725
			KE	11/2009
				DJA

EXISTING GRADE ELEVATION (TYP)	PIPE INVERT ELEVATION (TYP)
3161.4	3155.05
3161.6	3155.07
3161.7	3155.10
3161.6	3155.13
3161.5	3155.16
3161.7	3155.19
3161.8	3155.22
3161.8	3155.25
3161.9	3155.27
3162.0	3155.30
3162.2	3155.33
3162.4	3155.36
3162.5	3155.39
3162.5	3155.42
3162.5	3155.44
3162.4	3155.47
3162.4	3155.50
3162.4	3155.53
3162.4	3155.56
3162.6	3155.60
3163.0	3155.67
3163.2	3155.74
3163.4	3155.81
3163.5	3155.89
3163.7	3155.96
3163.7	3156.03
3163.8	3156.10
3163.8	3156.18
3163.9	3156.25
3164.0	3156.32
3164.1	3156.39



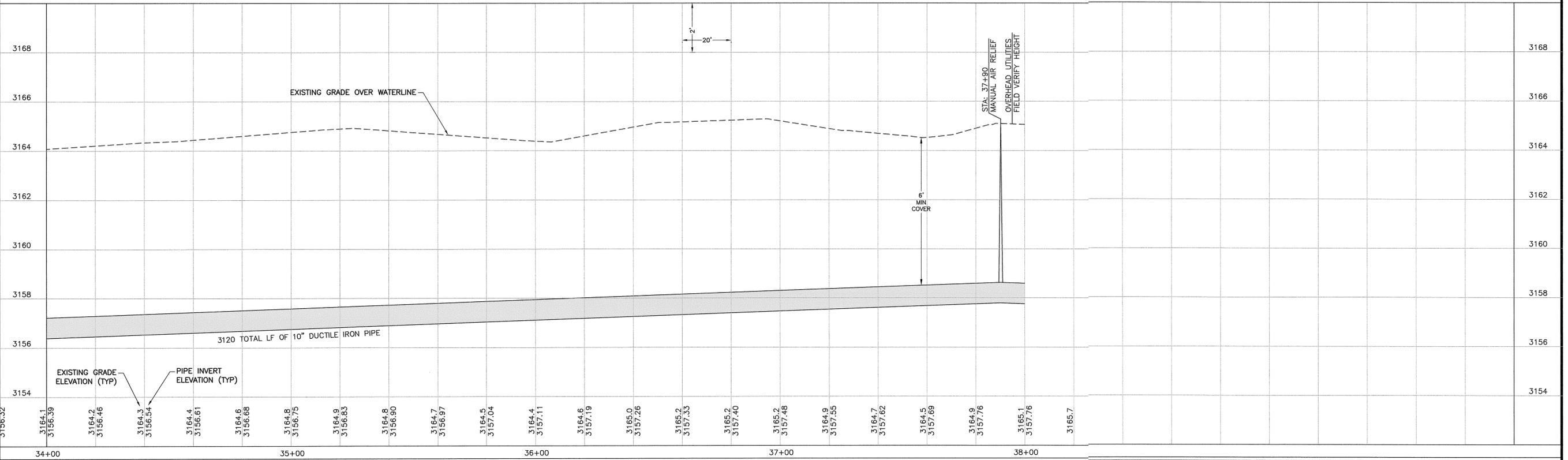
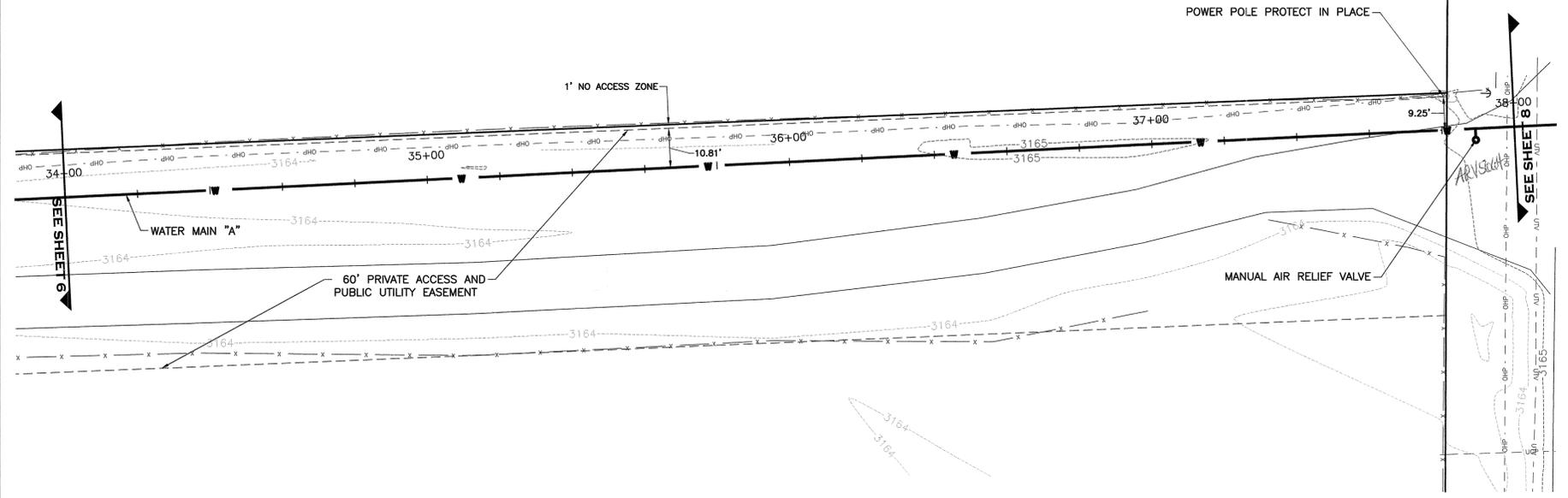
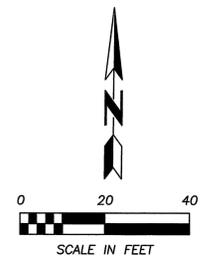
**PLEASANT VIEW TO FLYNN RANCH  
WATER MAIN LOOP EXTENSION**

**WATER IMPROVEMENTS  
WATER MAIN 'A' - STA. 28+00 TO STA. 34+00  
PLAN AND PROFILE**

DRW 504-C  
JOB 3109A010

SHEET	OF
<b>6</b>	<b>11</b>

**RECORD DOCUMENT**  
 BY: KB DATE: 6-3-10



BY	DATE	REVISION DESCRIPTION
KB	06/2010	AS-BUILT

DESIGN	PD	PROJ. NO.	5725
DRAWN	KE	DATE	11/2009
CHECKED		SURVEYED	DJA

**D&A, P.C.**  
 CONSULTING ENGINEERS & LAND SURVEYORS  
3203 Russell Street, Missoula, Montana 59801-8291  
 Phone: 406/721-4209 Fax: 406/540-4371

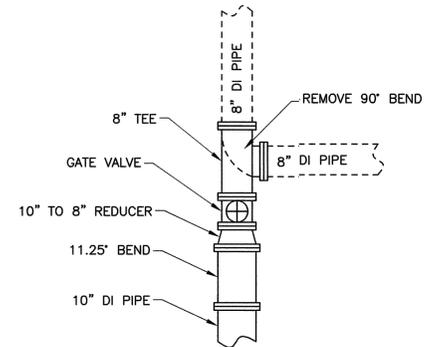
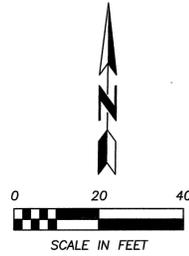
**PLEASANT VIEW TO FLYNN RANCH**  
**WATER MAIN LOOP EXTENSION**

**WATER IMPROVEMENTS**  
**WATER MAIN 'A' - STA. 34+00 TO STA. 38+00**  
**PLAN AND PROFILE**  
 DRW 504-C  
 JOB 319A10

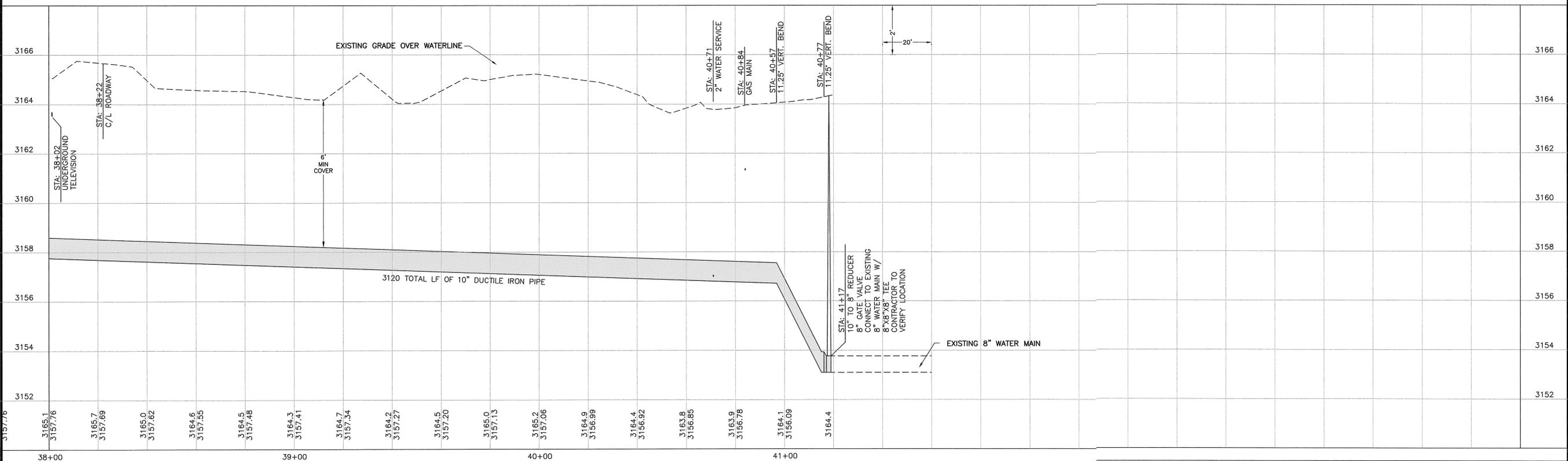
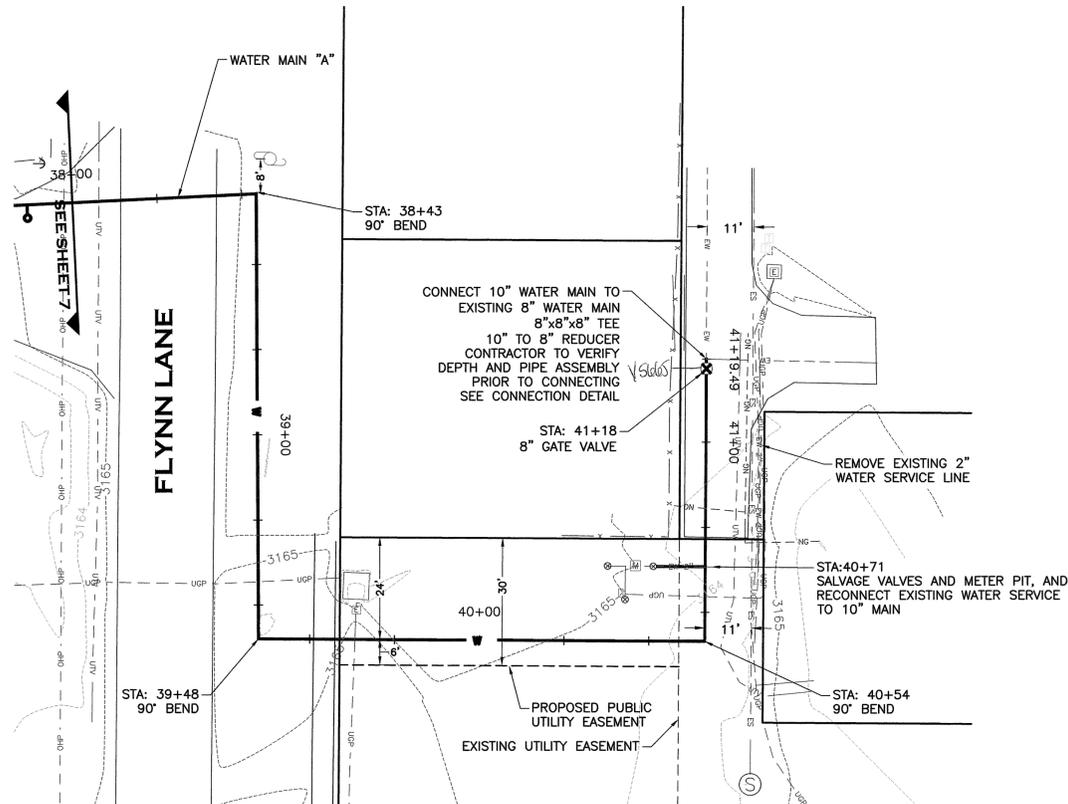
SHEET	
OF	
7	11

**RECORD DOCUMENT**

BY: *J* DATE: 6-3-10



**CONNECTION DETAIL**



BY KBE	DATE 06/2010	REVISION DESCRIPTION AS-BUILT	DESIGN PD	PROJ. NO. 5725	 3203 Russell Street, Missoula, Montana 59801-8691 Phone 406/721-4320 Fax 406/549-6371	<b>PLEASANT VIEW TO FLYNN RANCH WATER MAIN LOOP EXTENSION</b>	<b>WATER IMPROVEMENTS WATER MAIN 'A' - STA. 38+00 TO STA. 40+80 PLAN AND PROFILE</b> DRW 504-C Job 3109A010	SHEET		
			DRAWN KE	DATE 11/2009				8	OF	11
			CHECKED	SURVEYED DJA						



## DEVELOPMENT SERVICES – ENGINEERING DIVISION

435 RYMAN • MISSOULA, MT 59802 - 4297 • (406) 552-6630 • FAX: (406) 552-6053

CORR 2020-0131

25 August 2020

Matt Hammerstein  
matt@woitheng.com  
Woith Engineering, Inc.

RE: McNett Flats - Intent to Serve Water and Sewer Availability  
Project **#2020-037**

Matt,

**The intent of this letter is to satisfy requirements for the subdivision application. At this time, our expectation is that you will also need a water and sewer availability letter to satisfy Montana Department of Environmental Quality (DEQ) regulations. Upon request, the water and sewer availability letter will be provided when the infrastructure plan is submitted to DEQ.**

It is the City of Missoula's intent to provide public water and sanitary sewer for the McNett Flats Subdivision. It is the obligation of the developer to design and construct infrastructure necessary to serve the development. The City will review and approve design prior to construction.

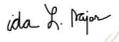
If the planned sanitary sewer infrastructure is designed and constructed that meets City of Missoula standards and capacity criteria (including main size, lift station size, and plant capacity), then service will be available to the property at Project McNett Flats Subdivision, legally described as Parcel 8A of C.O.S. 6109, Section 12, Township 13 North, Range 20 West. With respect to its water system, given the information provided to the City and known at this time, the City intends to serve the McNett Flats Subdivision connecting to the existing system at the northern terminus of George Elmer Drive and the intersection of Pius Way and Old Ranch Road. Additional connections will be at the boundary with the proposed Remington Flats Subdivision.

The property is within the City of Missoula Wastewater and Water Facilities Service Area boundaries. This property is also outside the City's incorporated boundary and the City cannot legally provide sanitary sewer in the future unless the property developer owner contracts to receive service. Please ensure to comply with the below requirements:

1. Include **Project #2019-037** on all future correspondence for this project;
2. Obtain State Department of Environmental Quality approval of the proposed water and sewer system if a public water and sewer main extension is proposed;
3. Submit design report(s) to City Engineering for review;

4. Obtain City approval of plans design report and specifications from the City Engineering Division if a water and sewer main extension is proposed;
5. Prior to connection to water and sewer systems, the property owners must pay the necessary utility development, connection or other applicable fees, and sign the appropriate legal documents as applicable;
6. Arrange for a City licensed and bonded contractor to obtain the necessary excavation permits and perform the installation of the sewer and utility lines;
7. Prior to construction startup, verify information regarding depth and location of the existing water and sewer lines with Missoula Water and Utility Services staff; and
8. If the sewer is dry-laid, it will be the responsibility of the parcel/lot owners to bring the dry-laid sanitary sewer into compliance with City standards at the time of connection.

Sincerely,

 Digitally signed by Ida Sajor  
Date: 2020.08.25 15:10:56 -06'00'

Ida Sajor  
City Engineering

cc: Kevin Slovarp  
Troy Monroe  
Logan McInnis  
Ross Mollenhauer  
Andy Schultz  
Mickey Morin  
Pat Brook  
Bob Hayes  
Triston Firth  
Aaron Lebsack