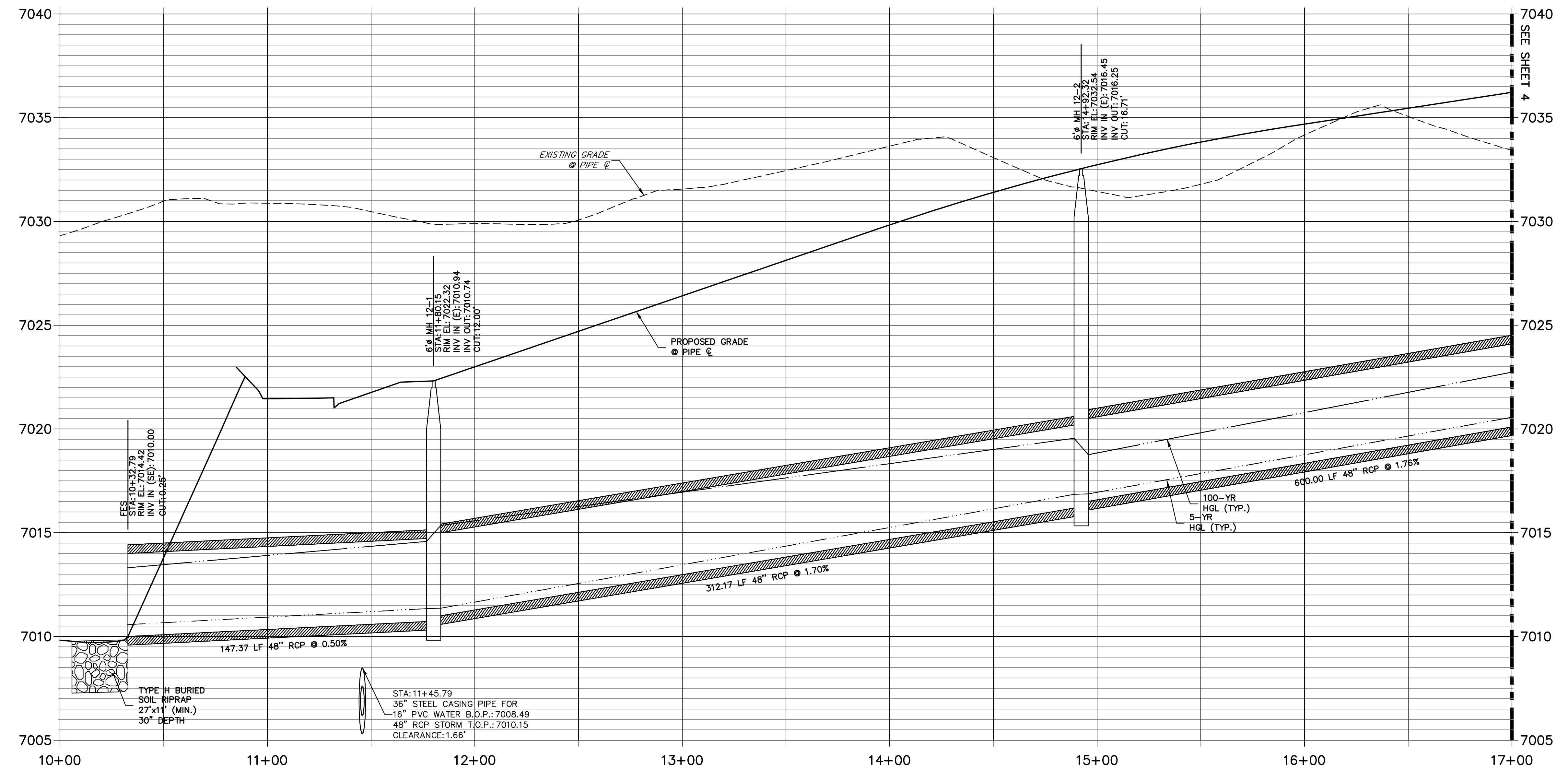
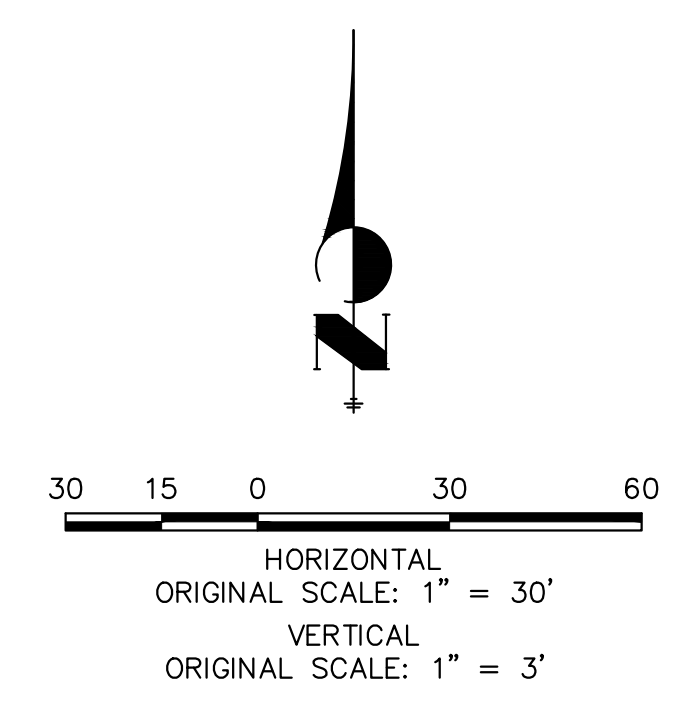


DP12 PROFILE (1)
STA 10+00.00 TO 17+00.00
 PUBLIC



NOTE:

- 1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
- 2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike Bramlett

32314

05/08/23

MIKE A. BRAMLETT, P.E. COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT SUITE 201
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY (719) 471-1742

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

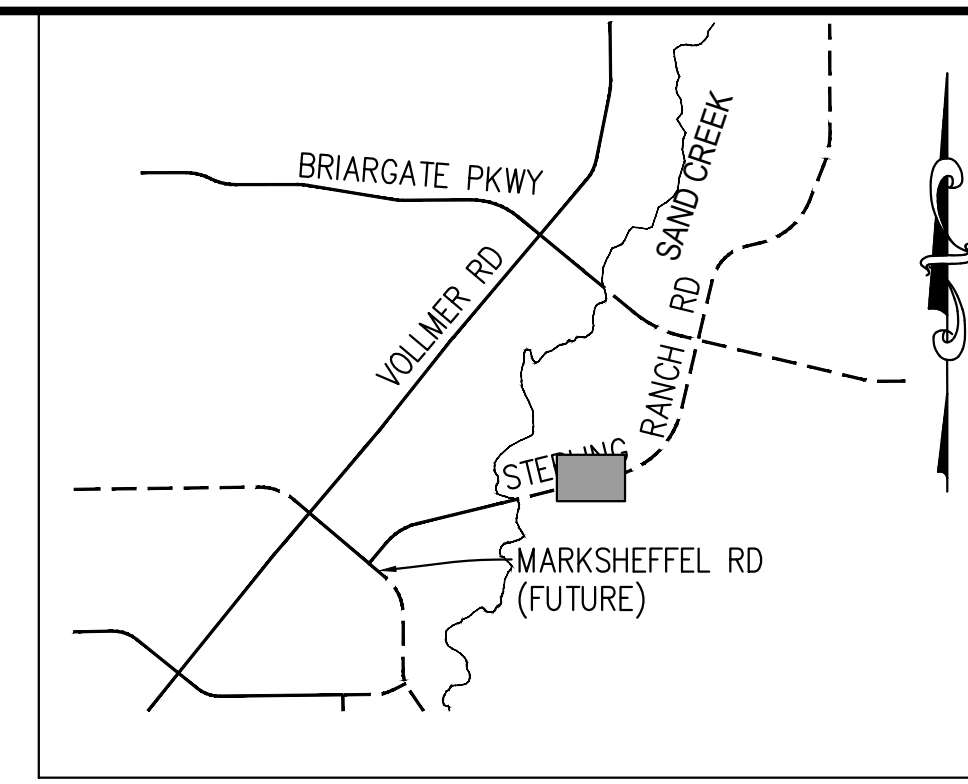
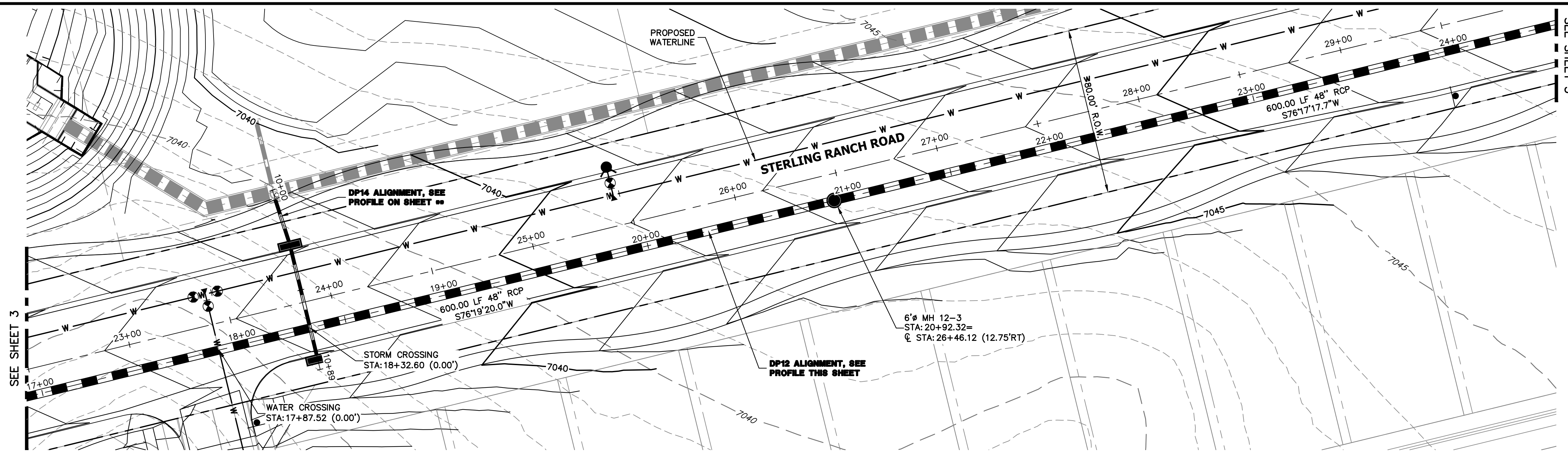
H-SCALE 1"=30'
 V-SCALE 1"=3'
 DATE 05/04/23
 DESIGNED BY MMC
 DRAWN BY MMC
 CHECKED BY

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS

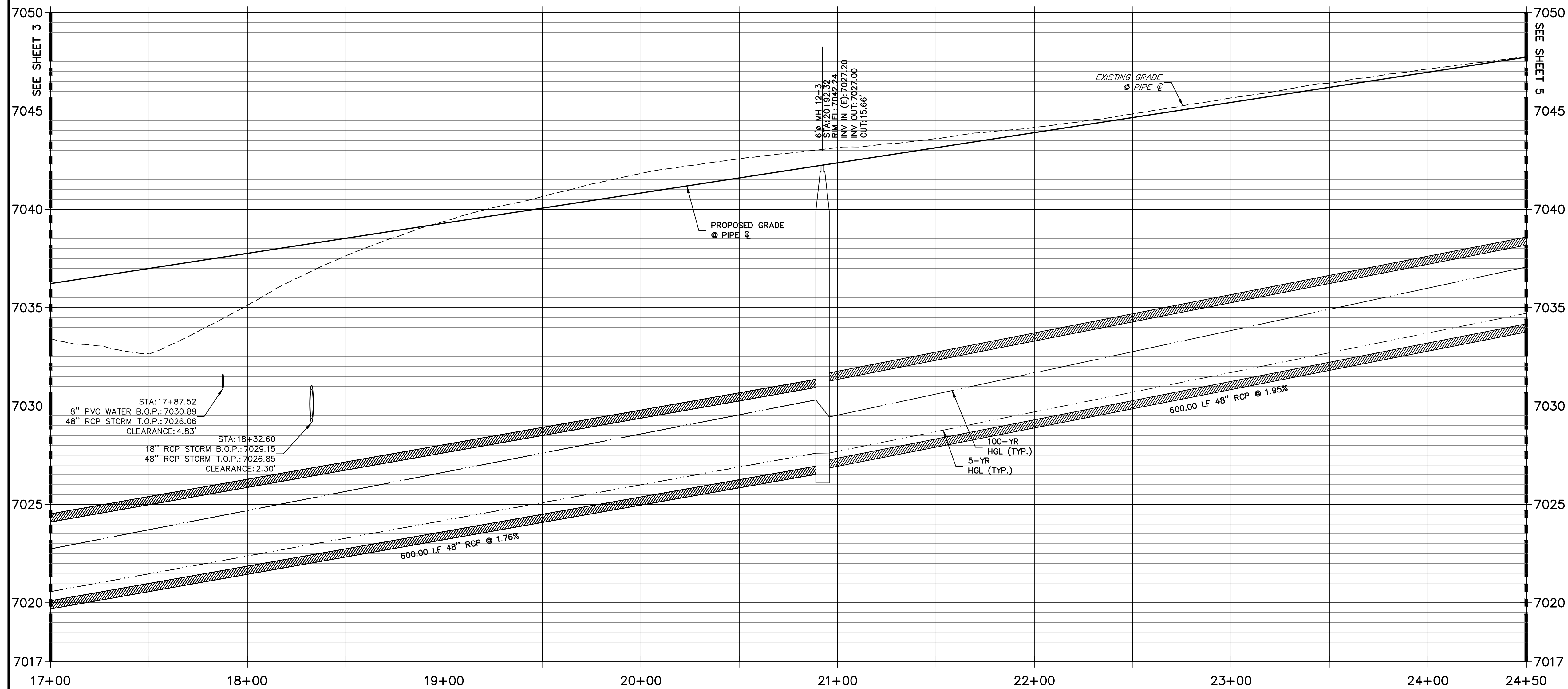
STORM SEWER PLAN & PROFILE

SHEET 3 OF 19

JOB NO. 25188.03



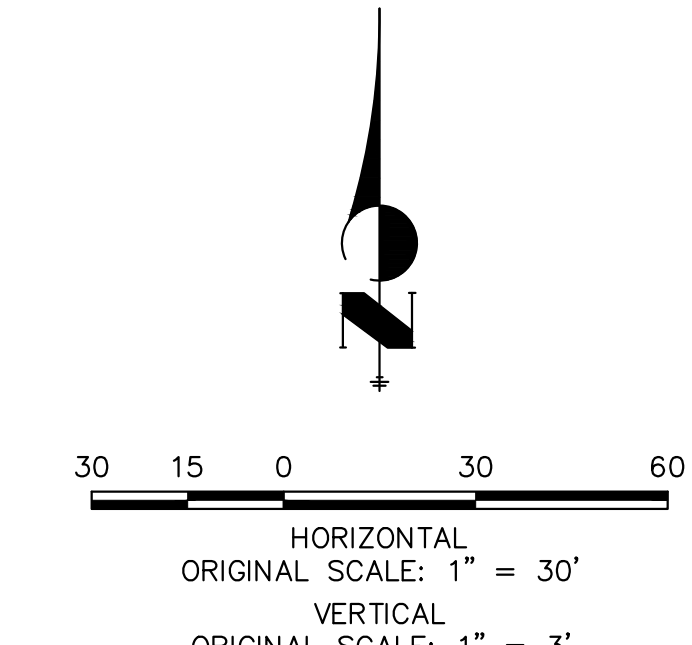
DP12 PROFILE(2)
STA 17+00.00 TO 24+50.00
PUBLIC



NOTE:

1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED

2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike Bramlett

MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314

DATE: 05/08/23

FOR AND ON BEHALF OF JR ENGINEERING, INC.

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PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
SUITE 201
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 471-1742

J.R. ENGINEERING
A Westman Company
Central: 303-740-9888 • Colorado Springs: 719-588-2583
Fort Collins: 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

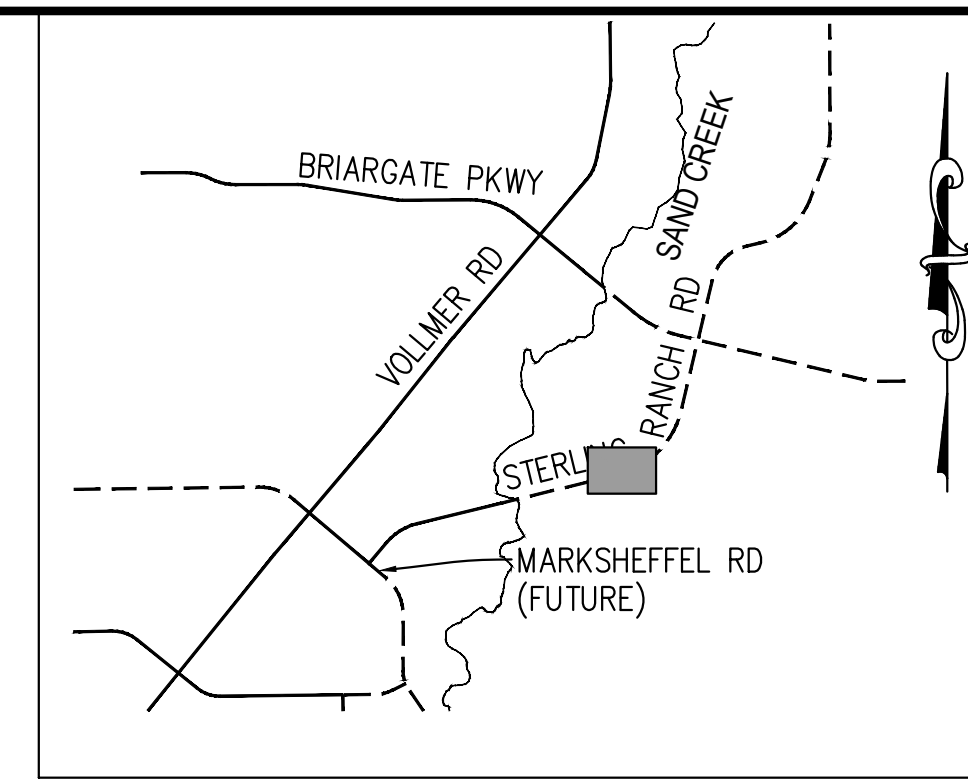
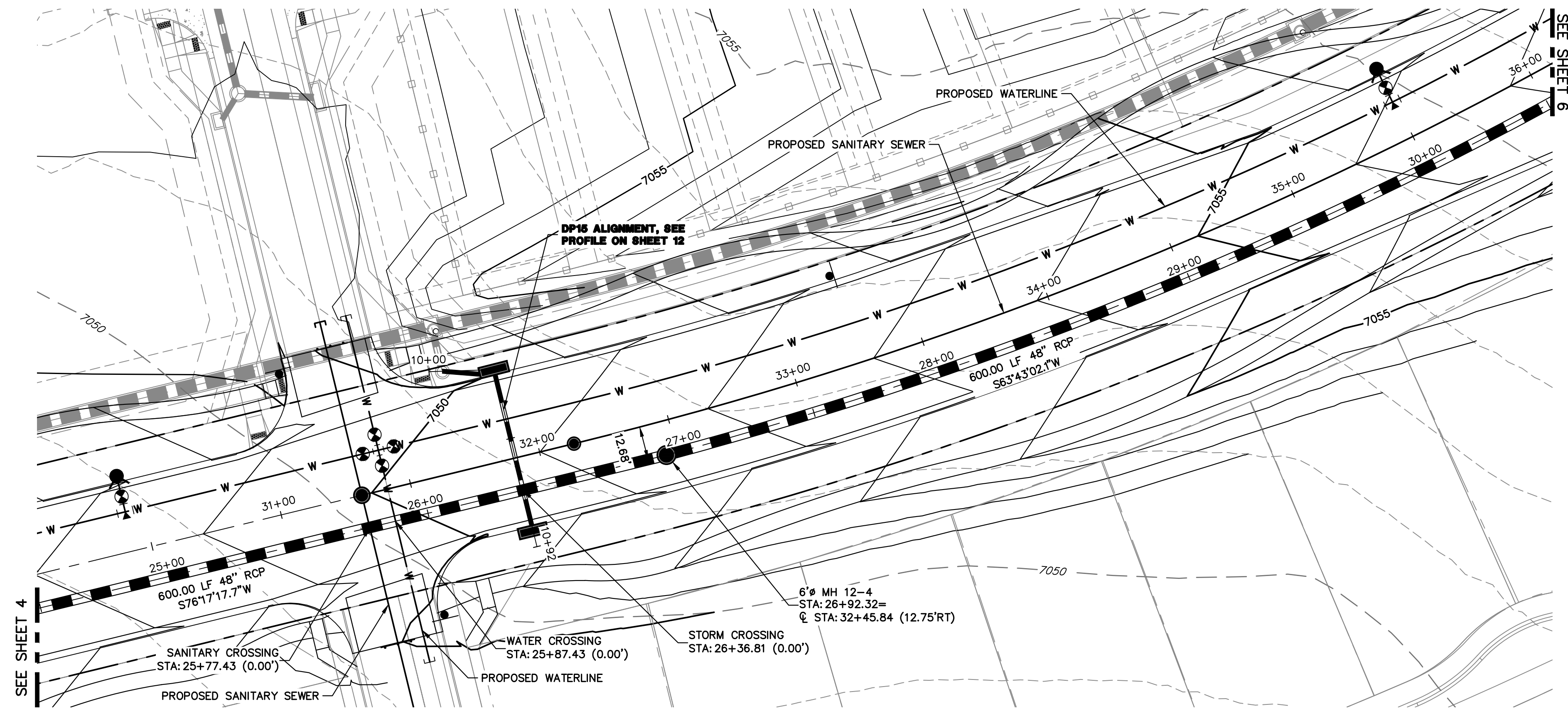
H-SCALE: 1"=30'
V-SCALE: 1"=3'
DATE: 05/04/23
DESIGNED BY: MMC
DRAWN BY: MMC
CHECKED BY: MMC

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS

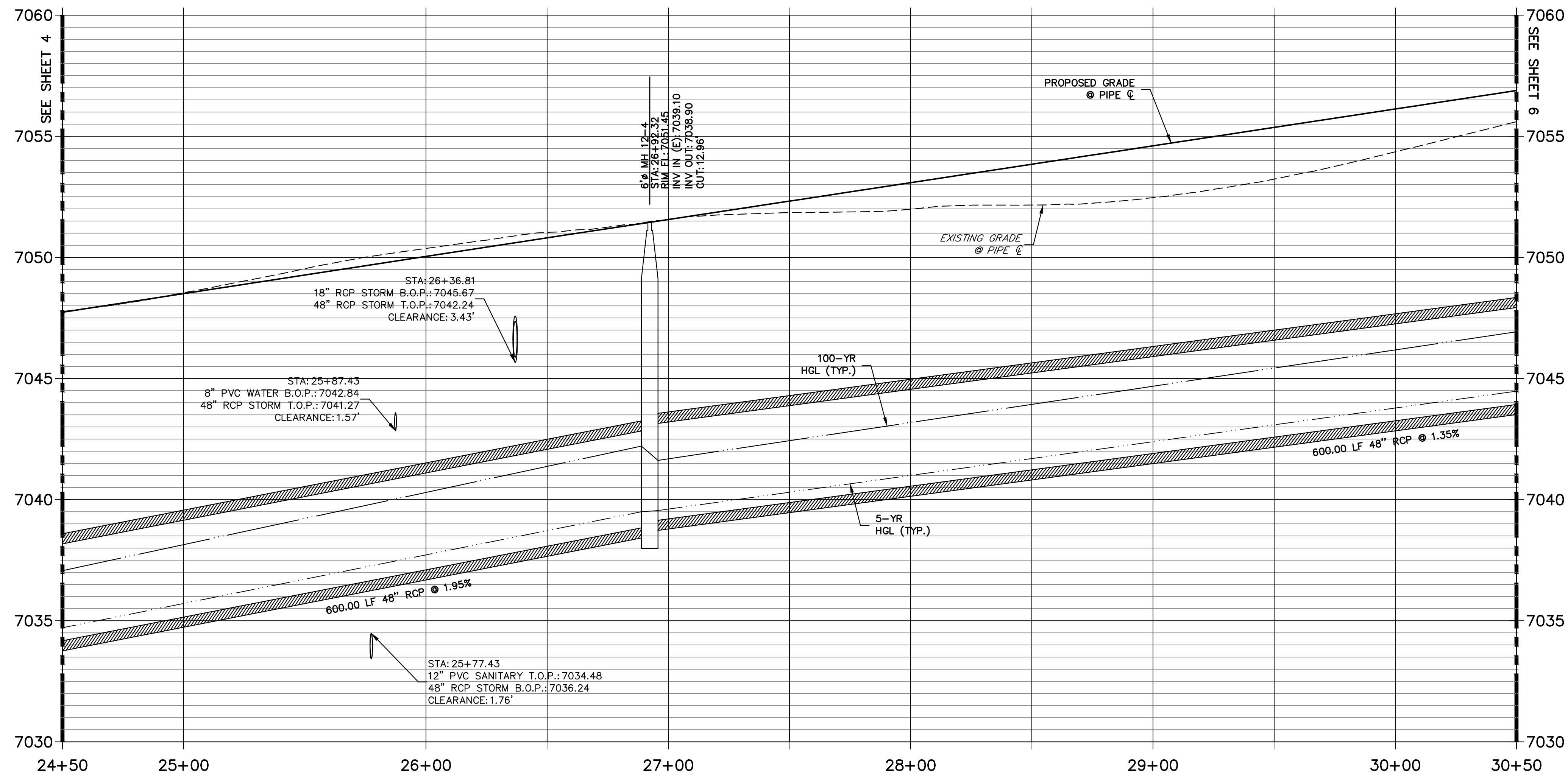
STORM SEWER PLAN & PROFILE

SHEET 4 OF 19

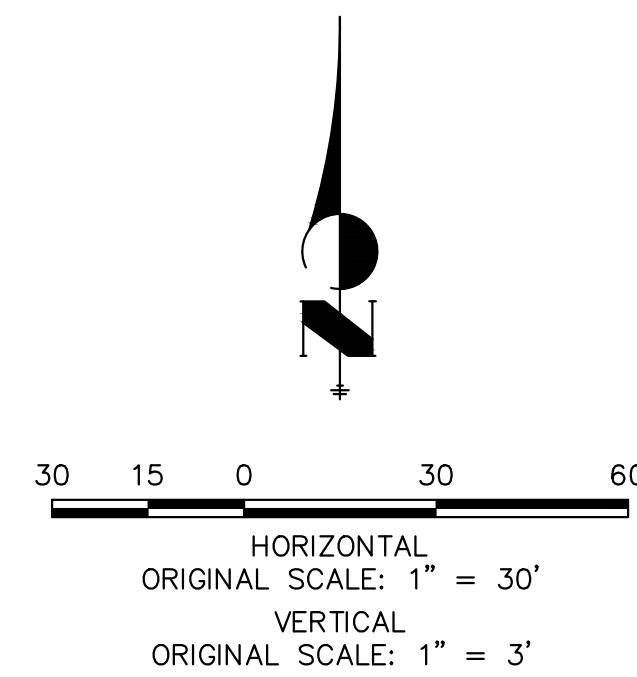
JOB NO. 25188.03



DP12 PROFILE(3)
STA 24+50.00 TO 30+50.00
 PUBLIC



NOTE:
 1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
 2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
 Mike A. Bramlett
 32314
 05/08/23
 MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING, LOCAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT SUITE 201
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY (719) 471-1742

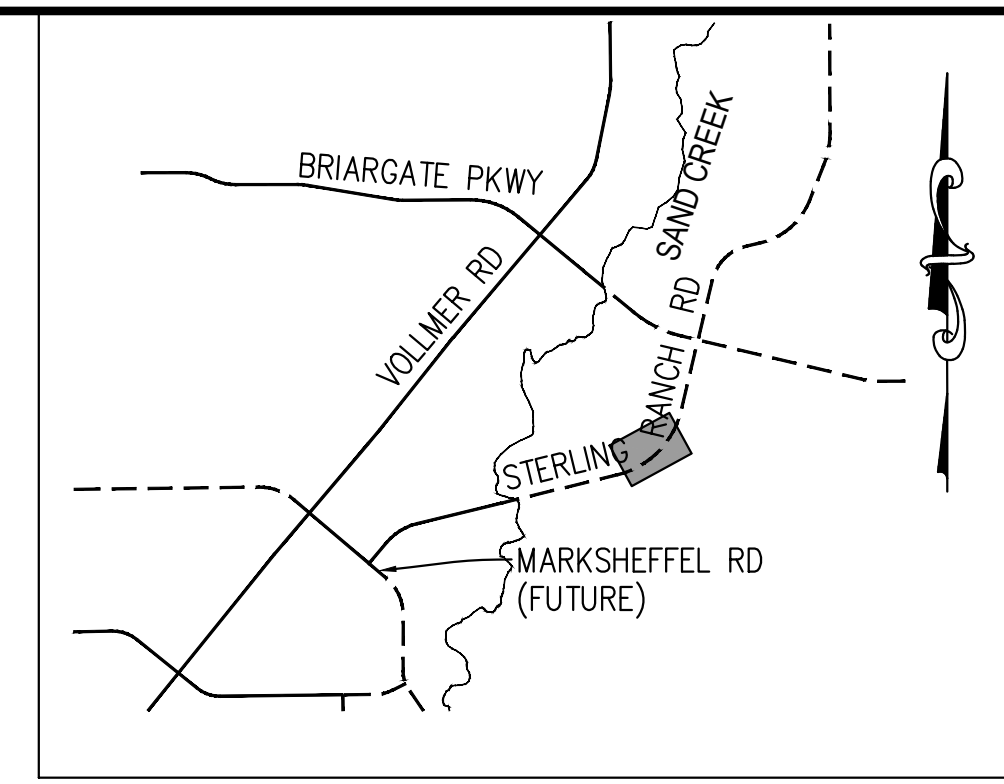
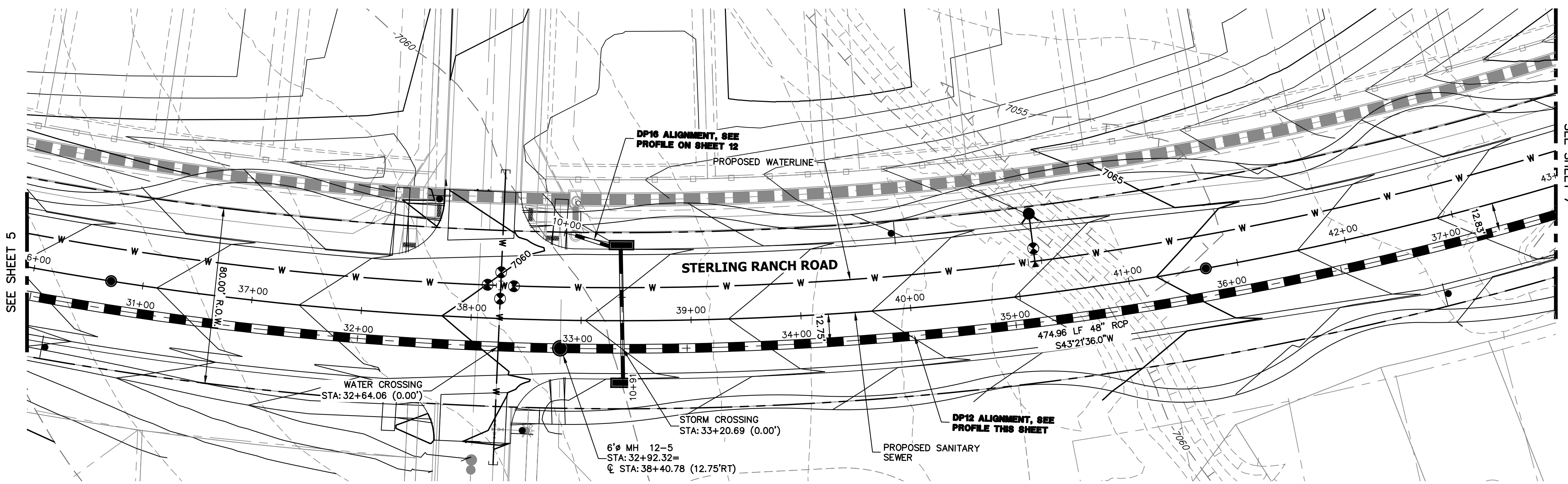
J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-588-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE 1"=30'
 V-SCALE 1"=3'
 DATE 05/04/23
 DESIGNED BY MMC
 DRAWN BY MMC
 CHECKED BY

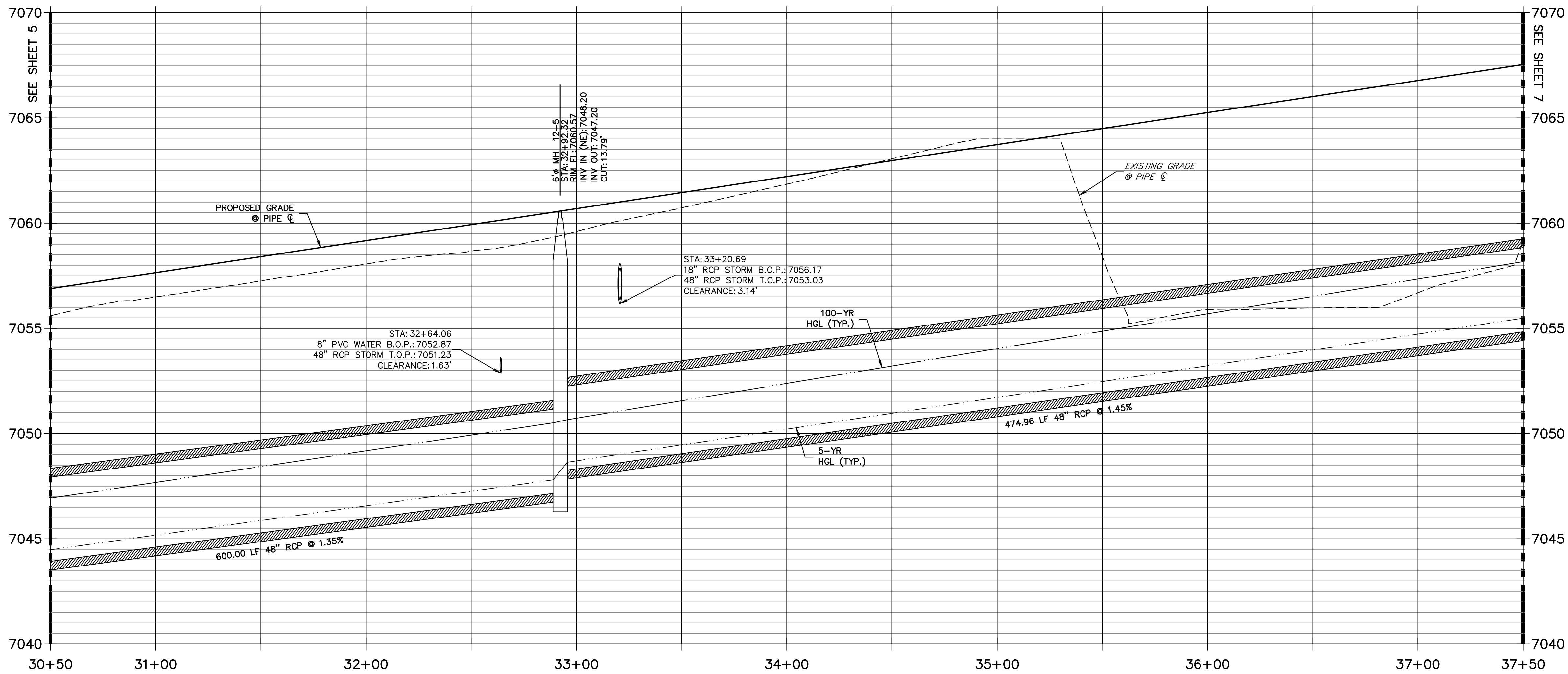
STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS
STORM SEWER PLAN & PROFILE

SHEET 5 OF 19
 JOB NO. 25188.03

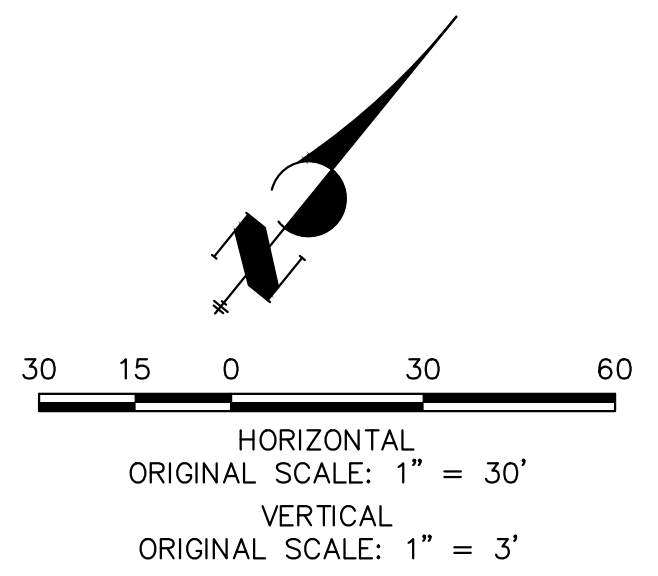


KEY MAP
N.T.S.

**DP12 PROFILE(4)
STA 30+50.00 TO 37+50.00**

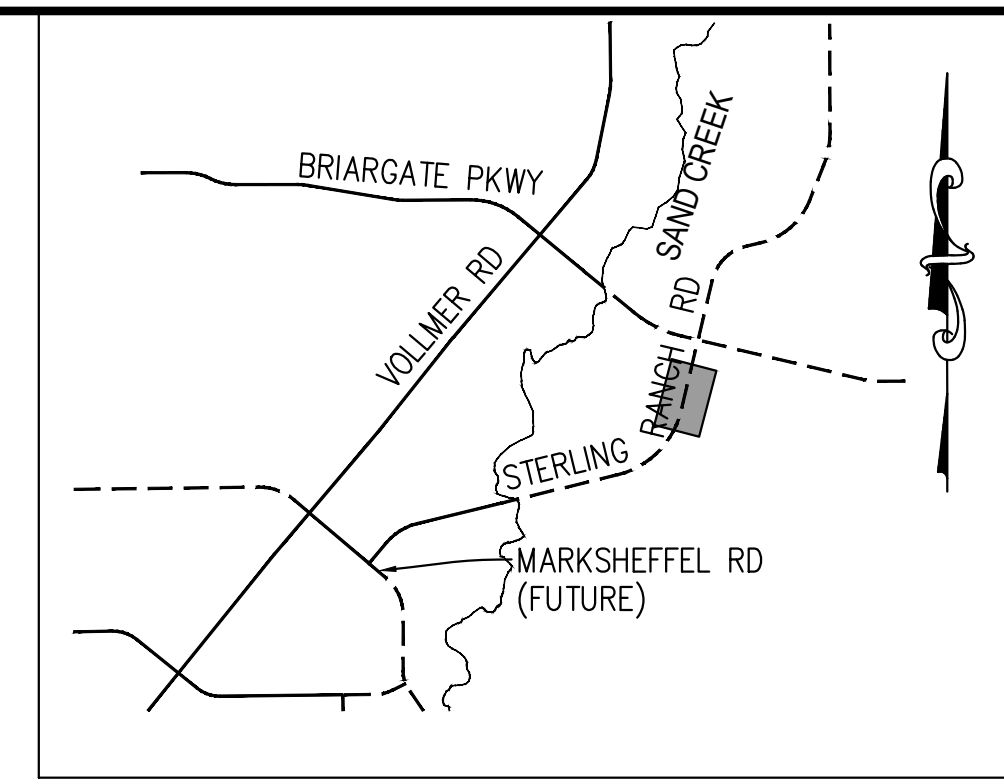
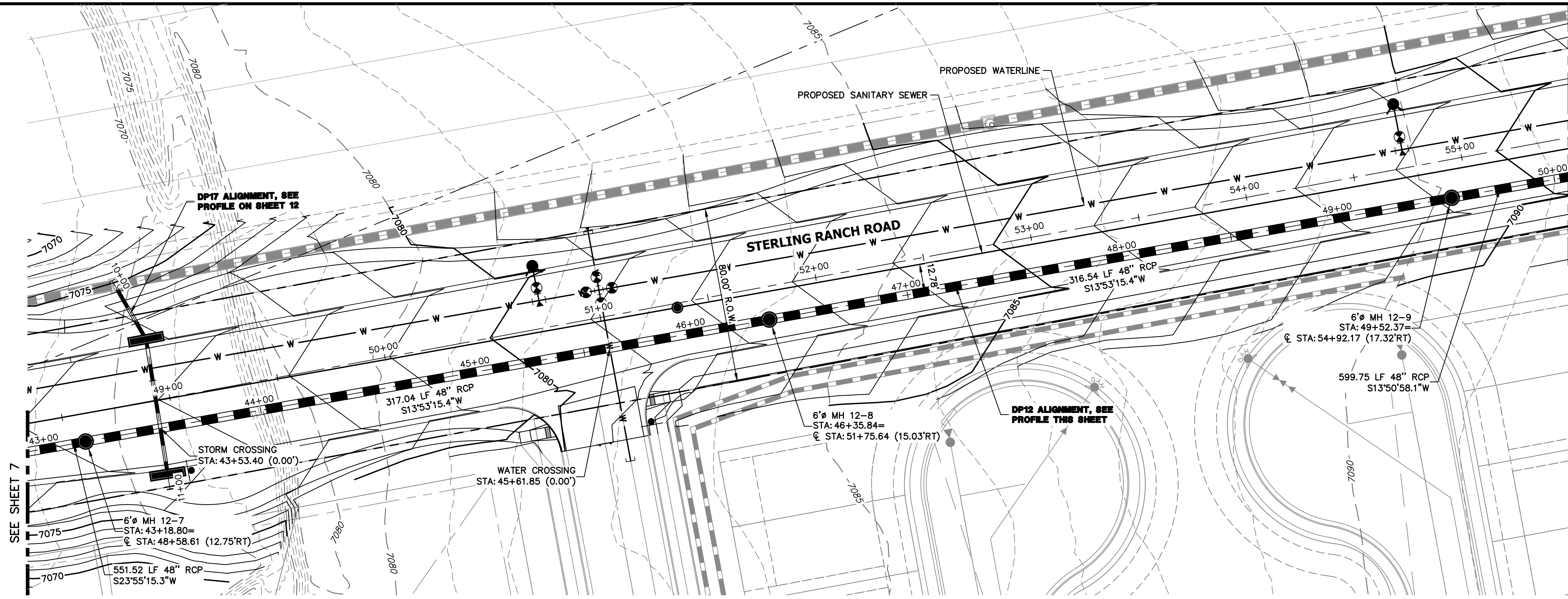


NOTE:
1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



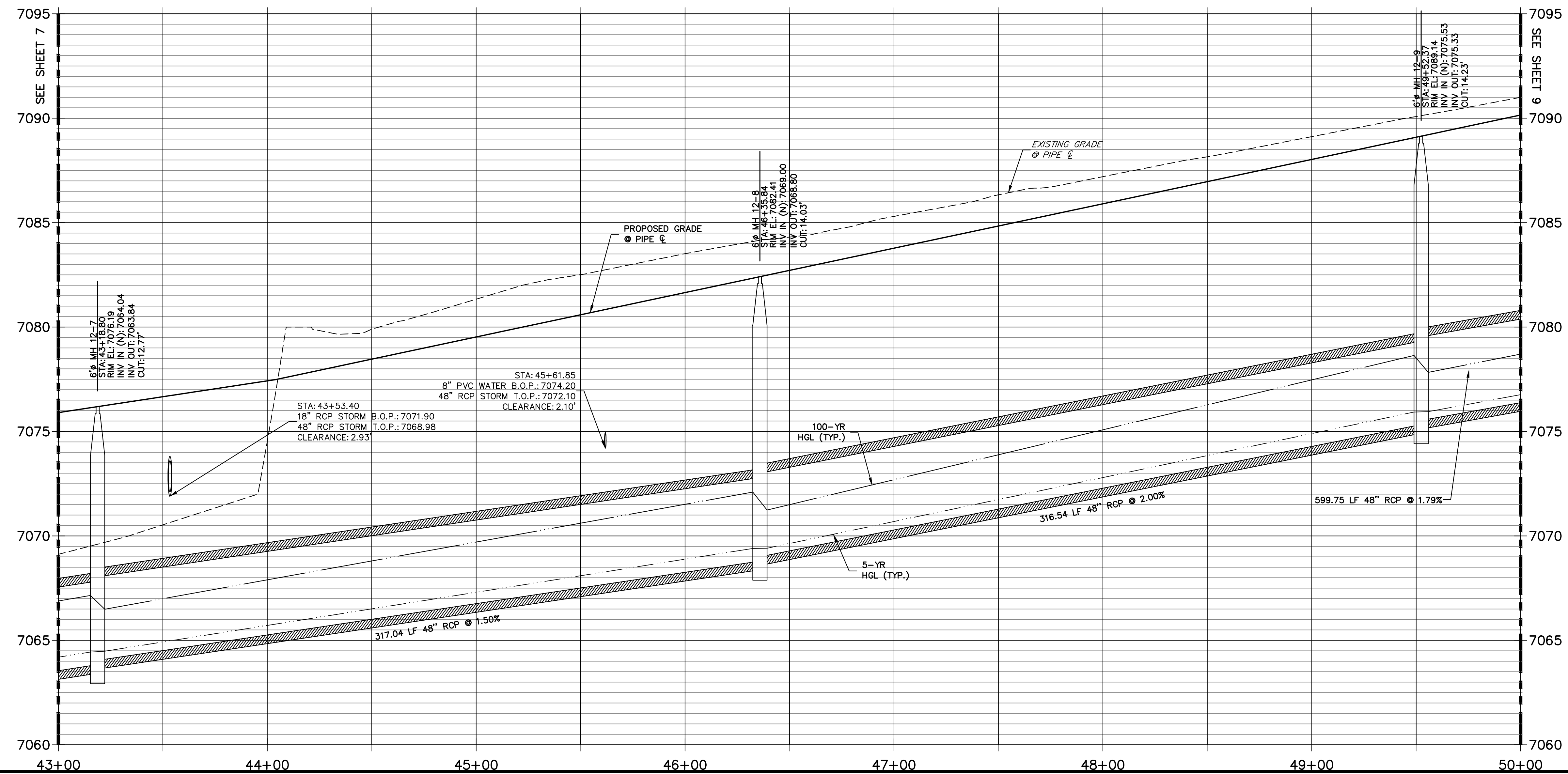
ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
Mike Bramlett
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING, INC.
DATE: 05/08/23

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
<p>J.R. ENGINEERING A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com</p>	
BY	DATE
No.	REVISION
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	05/04/23
DESIGNED BY	MMC
DRAWN BY	MMC
CHECKED BY	
STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS	
STORM SEWER PLAN & PROFILE	
SHEET	6 OF 19
JOB NO.	25188.03

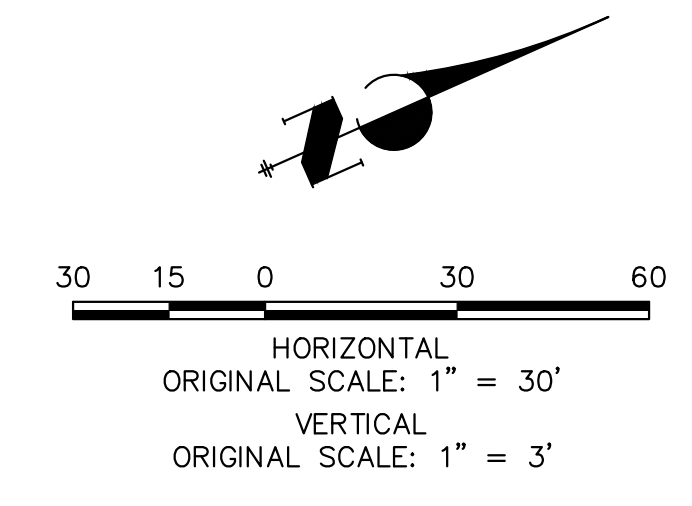


KEY MAP
N.T.S.

DP12 PROFILE(6)
STA 43+00.00 TO 50+00.00
PUBLIC



NOTE:
1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
Mike Bramlett
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING, INC. LOCAL ENGINEER
DATE 05/08/23

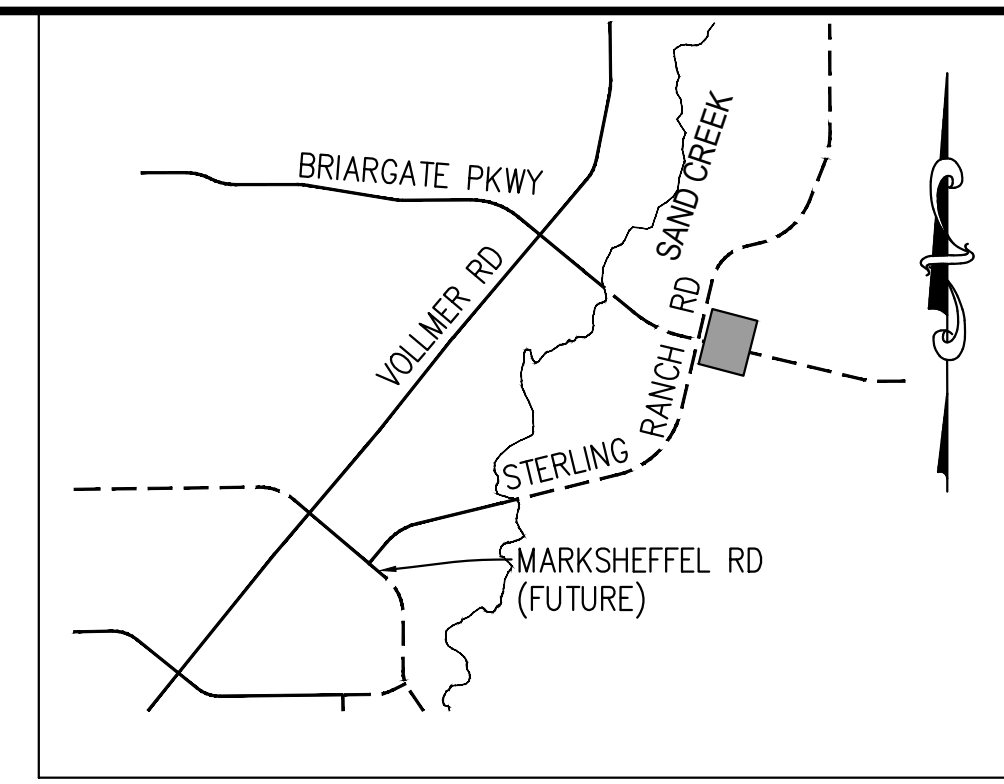
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE FOR PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
SUITE 201
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 471-1742

J.R. ENGINEERING
A Westman Company
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BY	DATE	No.	REVISION

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS
STORM SEWER PLAN & PROFILE
SHEET 8 OF 19
JOB NO. 25188.03



KEY MAP
N.T.S.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SR LAND, LLC
20 BOULDER CRESCENT
SUITE 201
COLORADO SPRINGS, CO 80903
JAMES F. MORLEY
(719) 471-1742

J.R. ENGINEERING
A Westman Company

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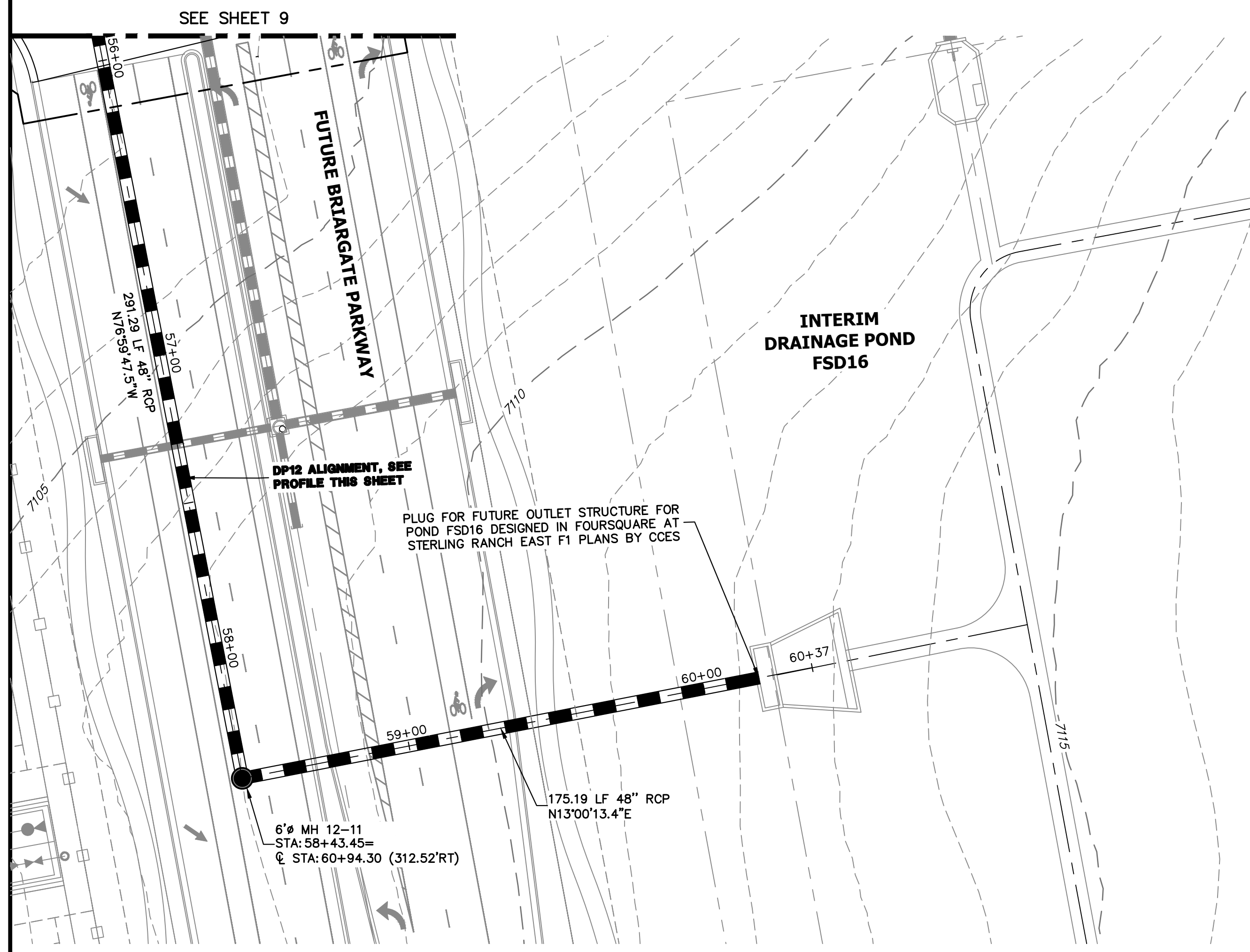
BY	DATE	No.	REVISION

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS

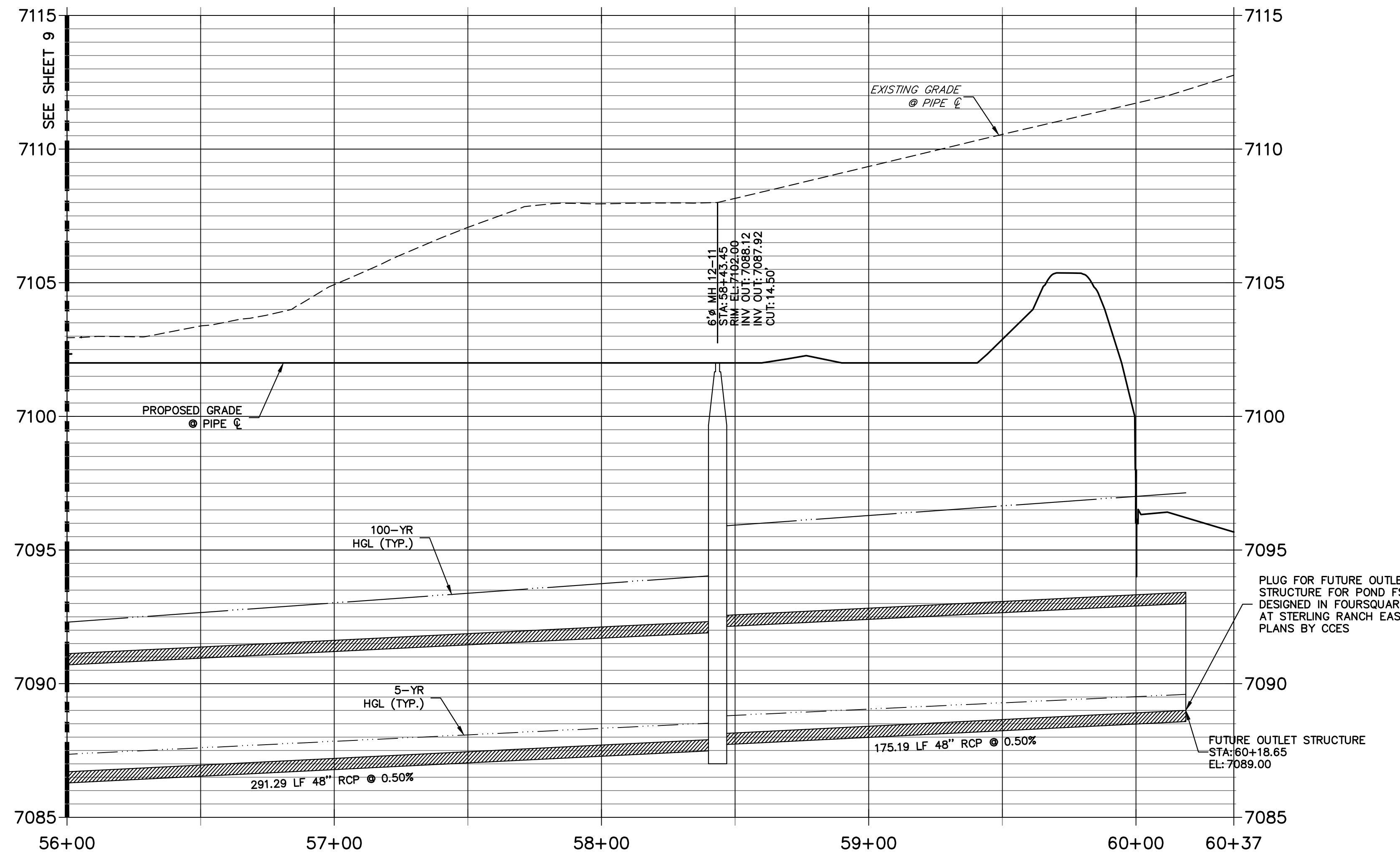
STORM SEWER PLAN & PROFILE

SHEET 10 OF 19

JOB NO. 25188.03



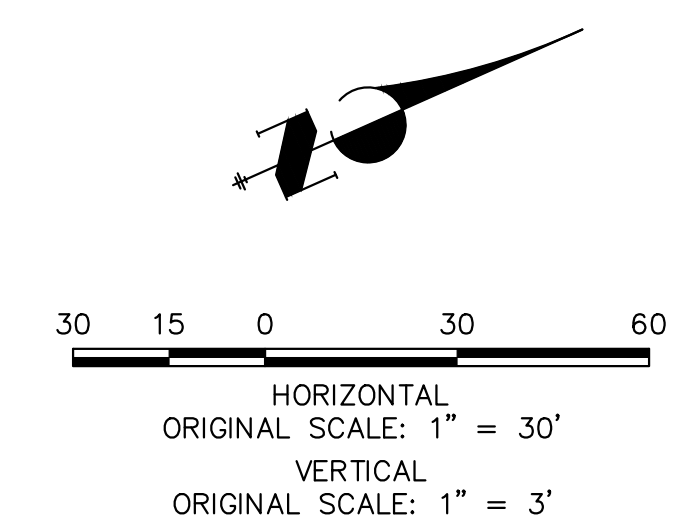
DP12 PROFILE(8)
STA 56+00.00 TO 60+36.64
PRIVATE (SRMD)



NOTE:

1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED

2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



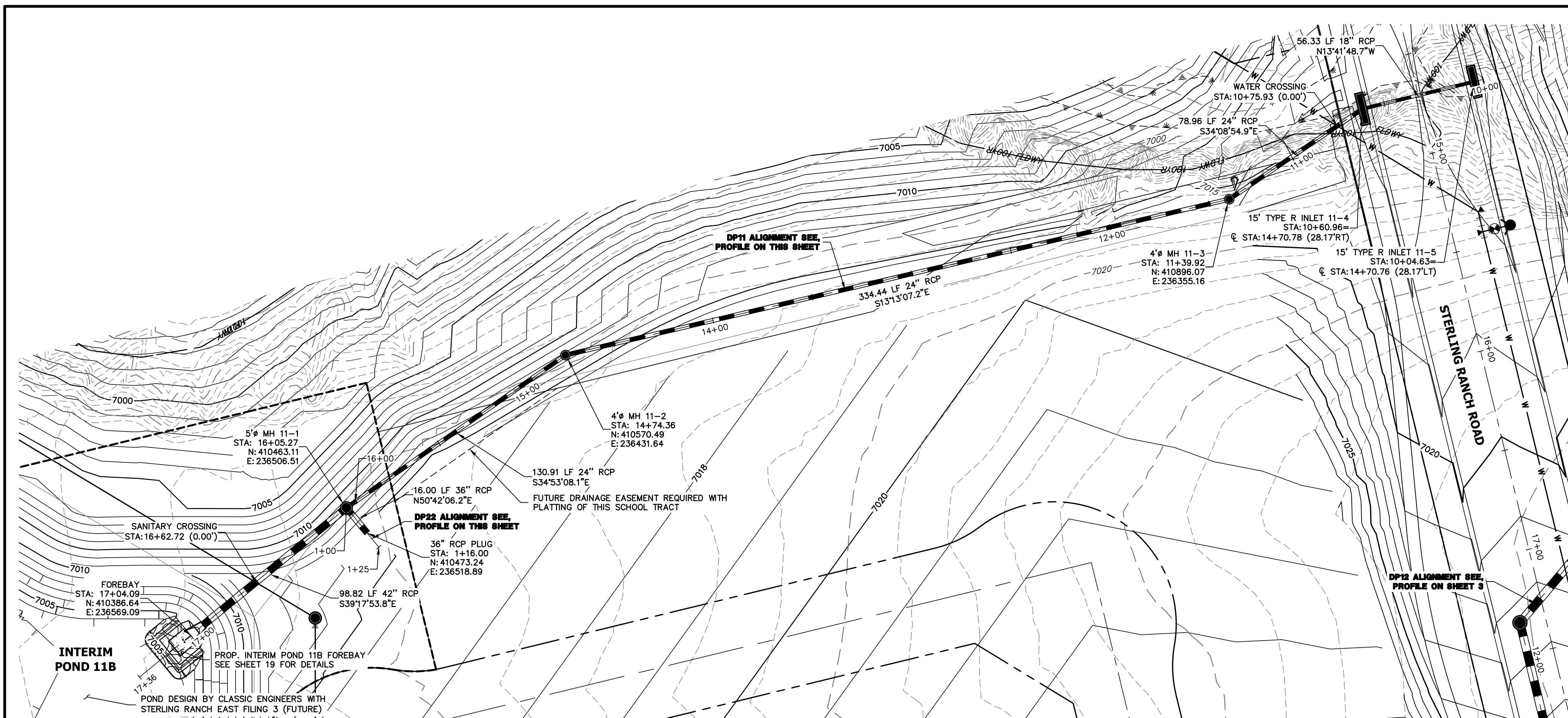
ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

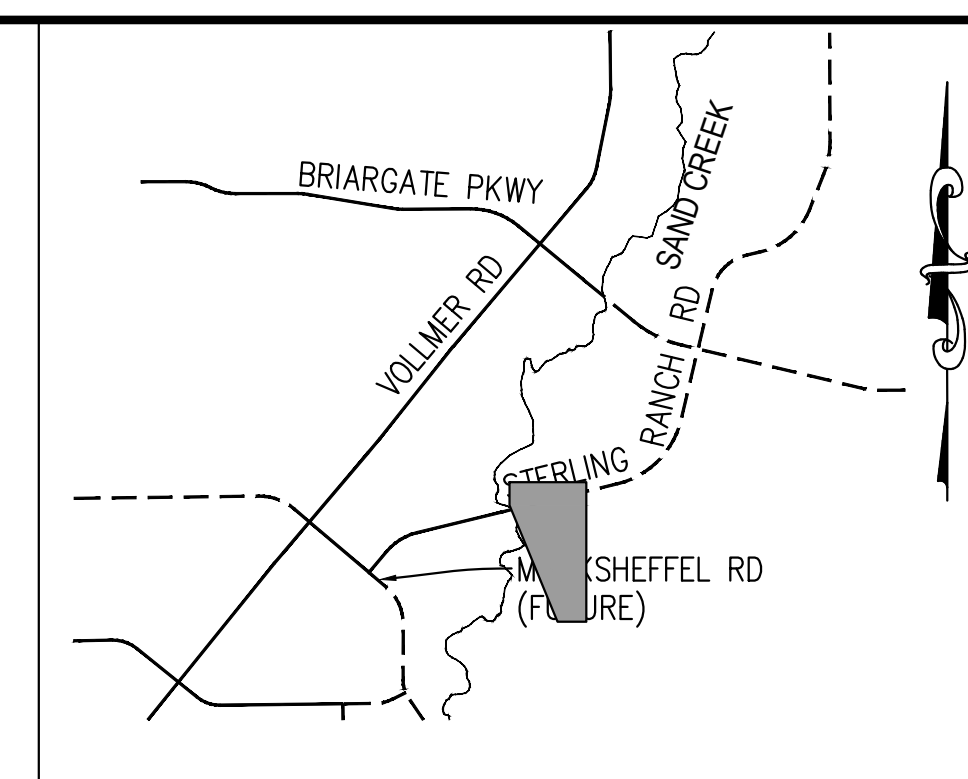
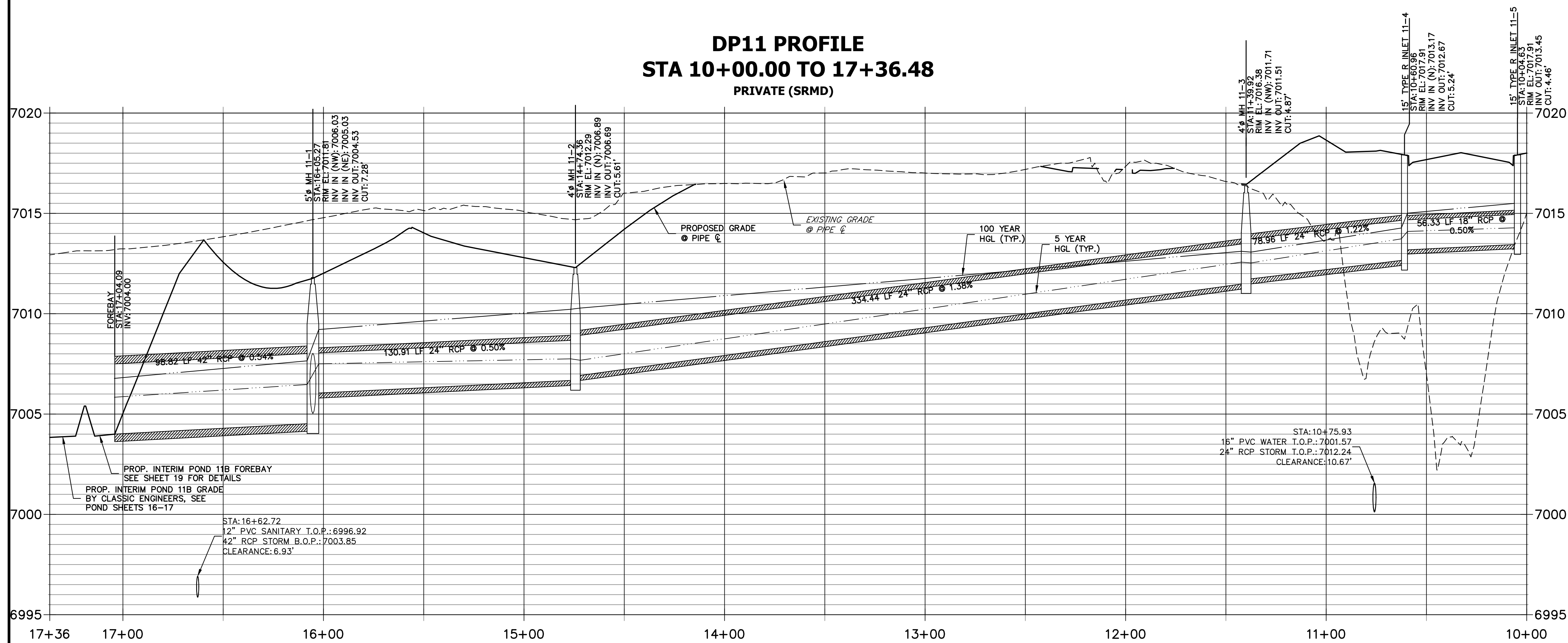
Mike Bramlett
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
FOR AND ON BEHALF OF JR ENGINEERING, INC.

DATE: 05/08/23

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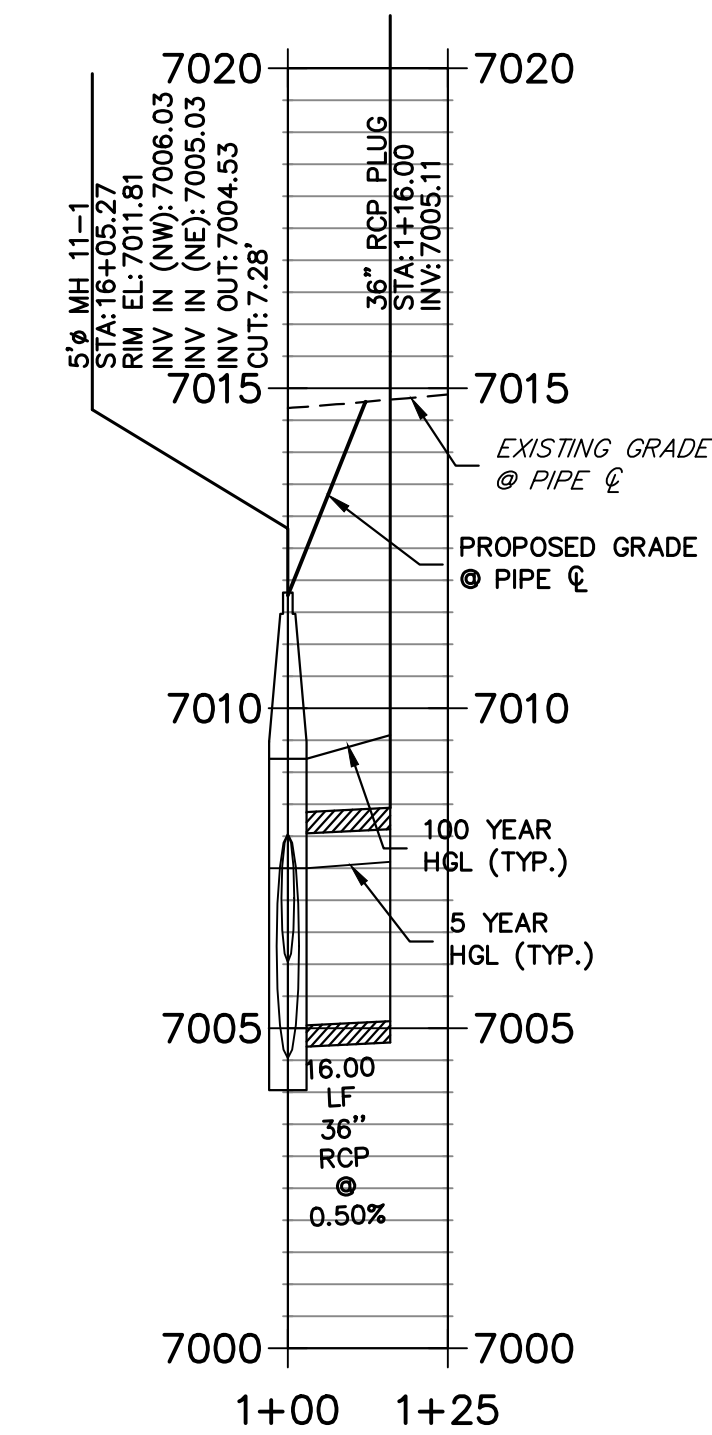


DP11 PROFILE
STA 10+00.00 TO 17+36.48
 PRIVATE (SRMD)



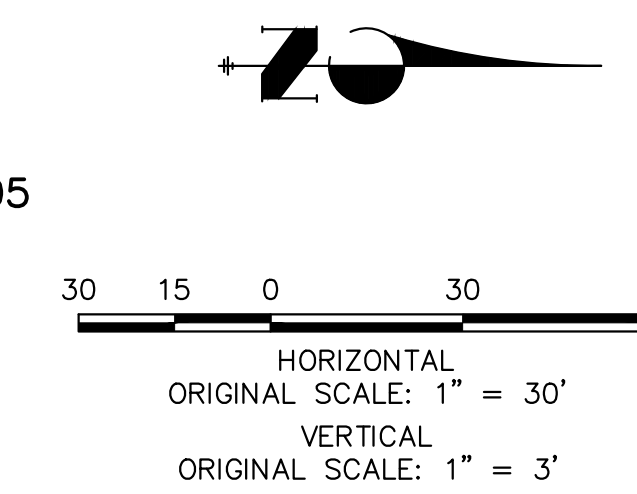
KEY MAP
 N.T.S.

DP22 PROFILE
STA 1+00.00 TO 1+25.00



NOTE:

- 1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED.
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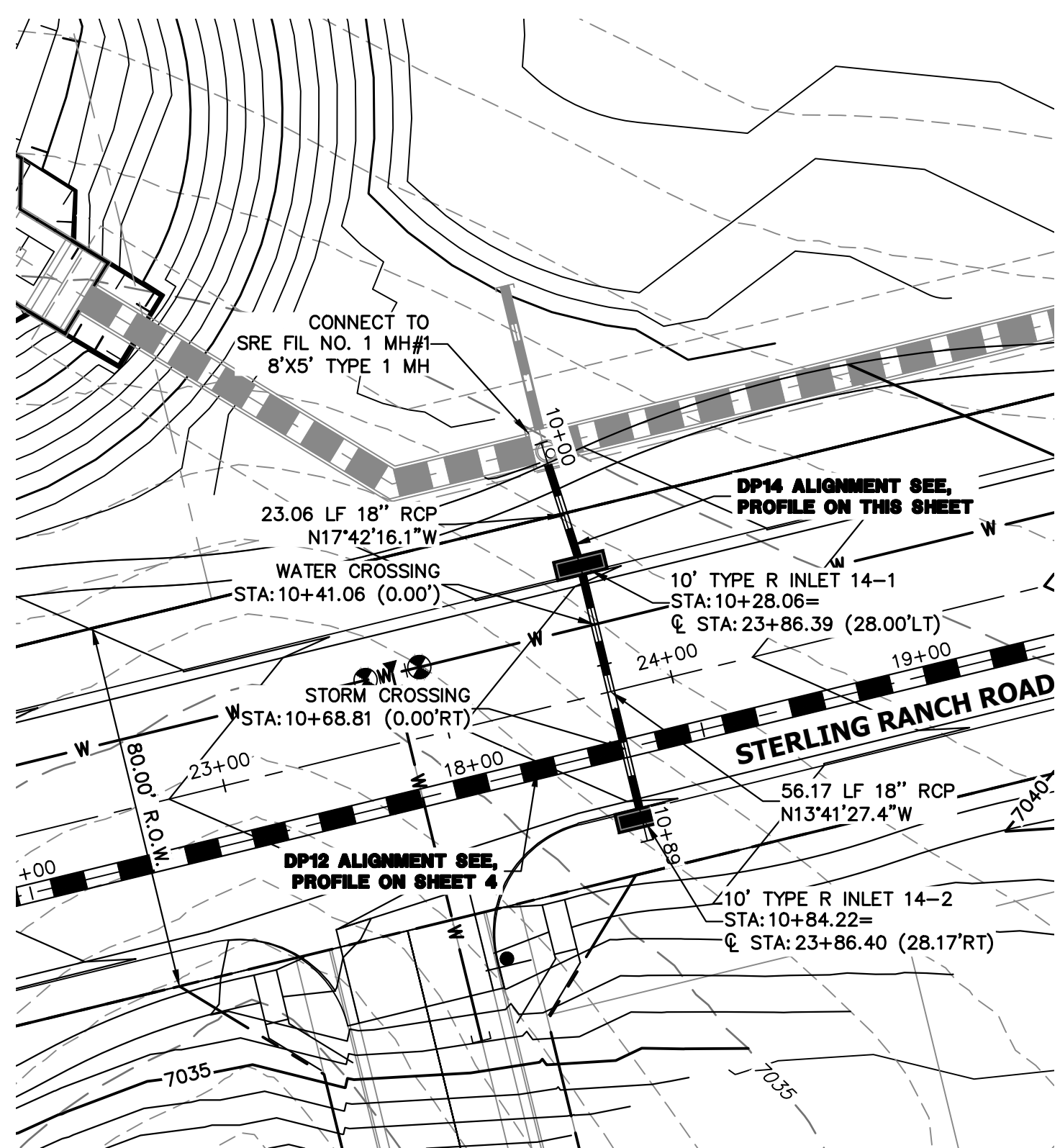


ENGINEER'S STATEMENT

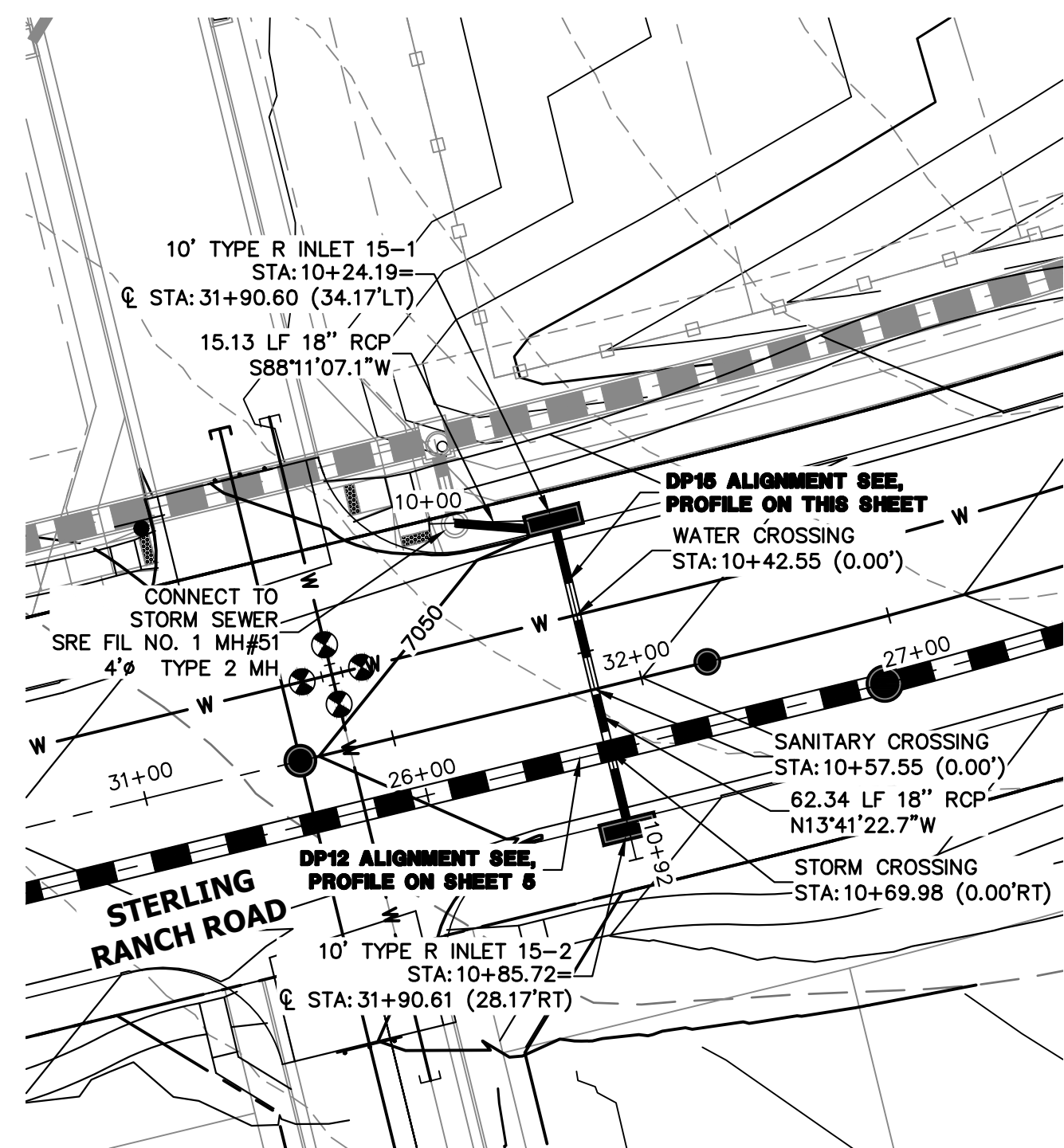
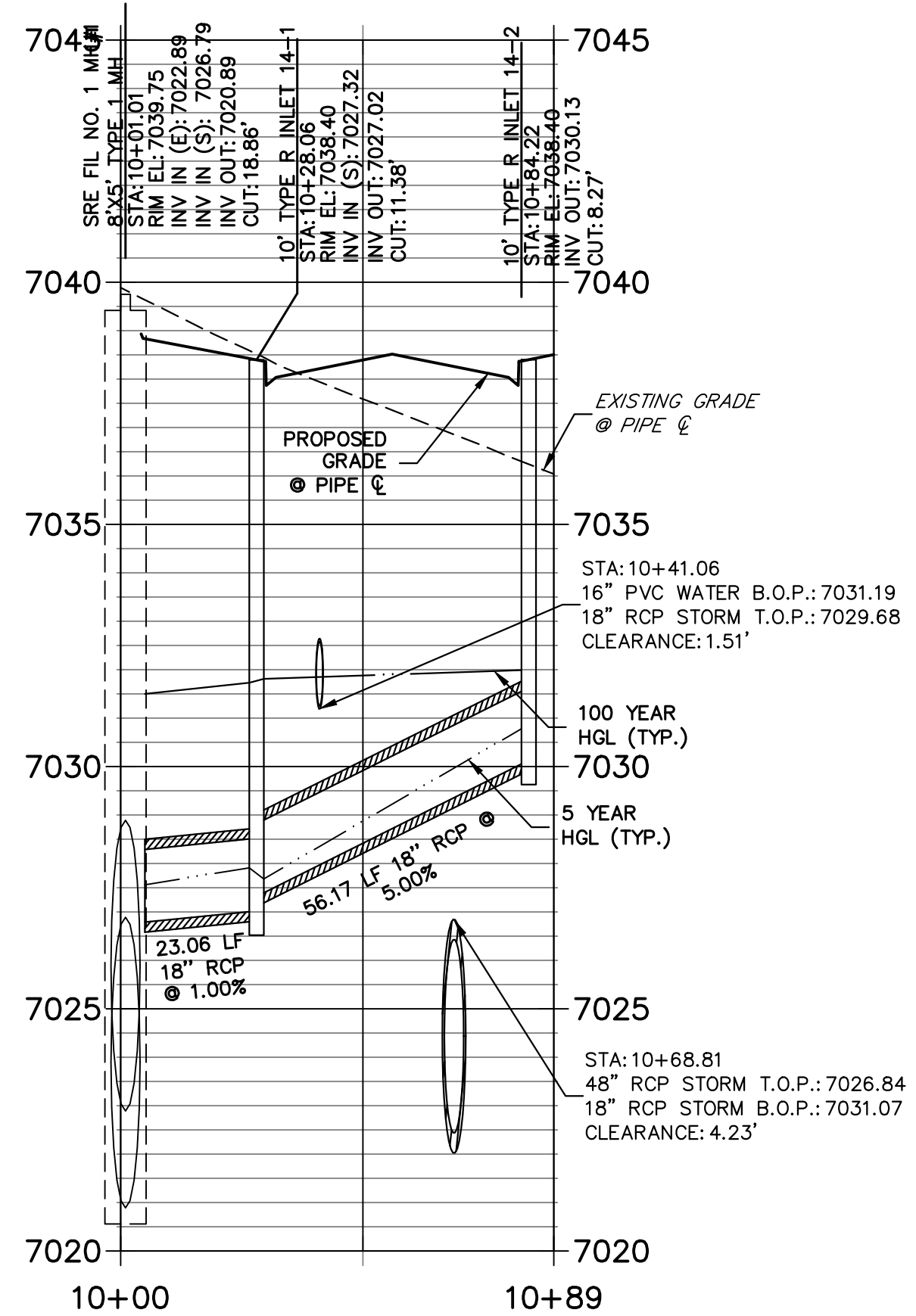
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
 MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING, INC.
 DATE: 05/08/23

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	
PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
BY	DATE
No.	REVISION
H-SCALE 1"=30'	V-SCALE 1"=3'
DATE 05/04/23	DESIGNED BY MMC
DRAWN BY MMC	CHECKED BY
STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS	
STORM SEWER PLAN & PROFILE	
SHEET 11 OF 19	JOB NO. 25188.03

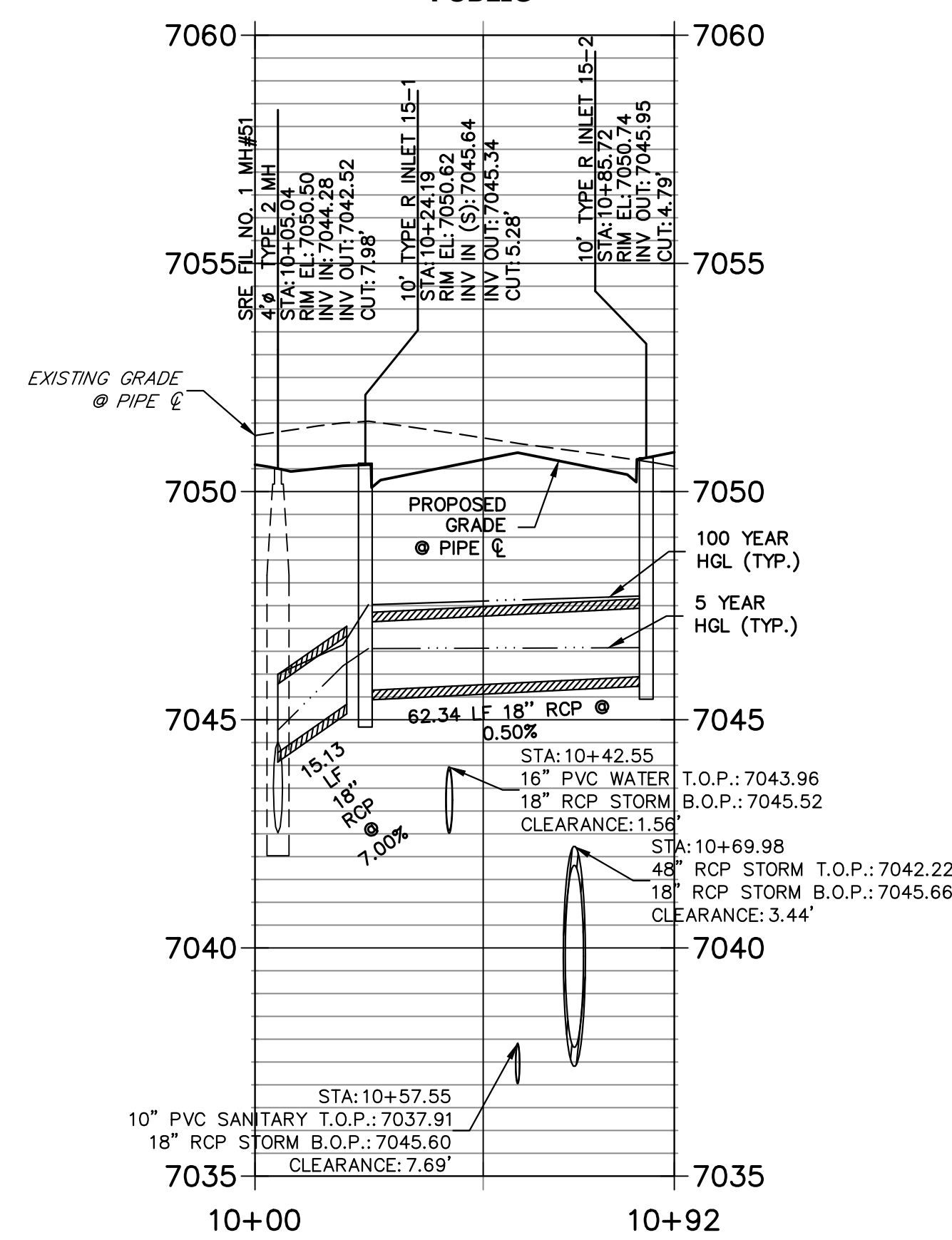
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DP14 PROFILE
STA 10+00.00 TO 10+89.39
 PUBLIC

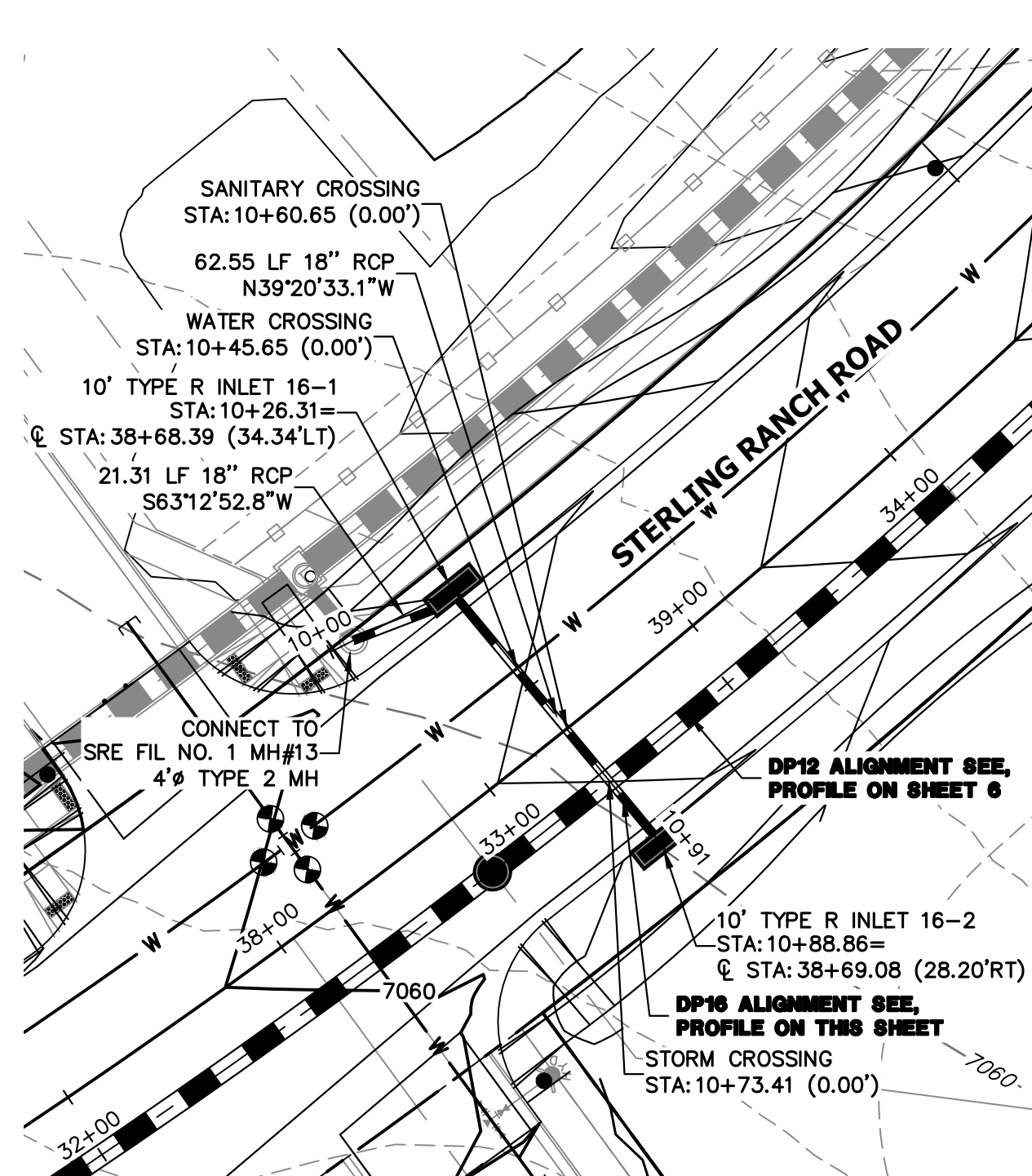


DP15 PROFILE
STA 10+00.00 TO 10+91.88
 PUBLIC

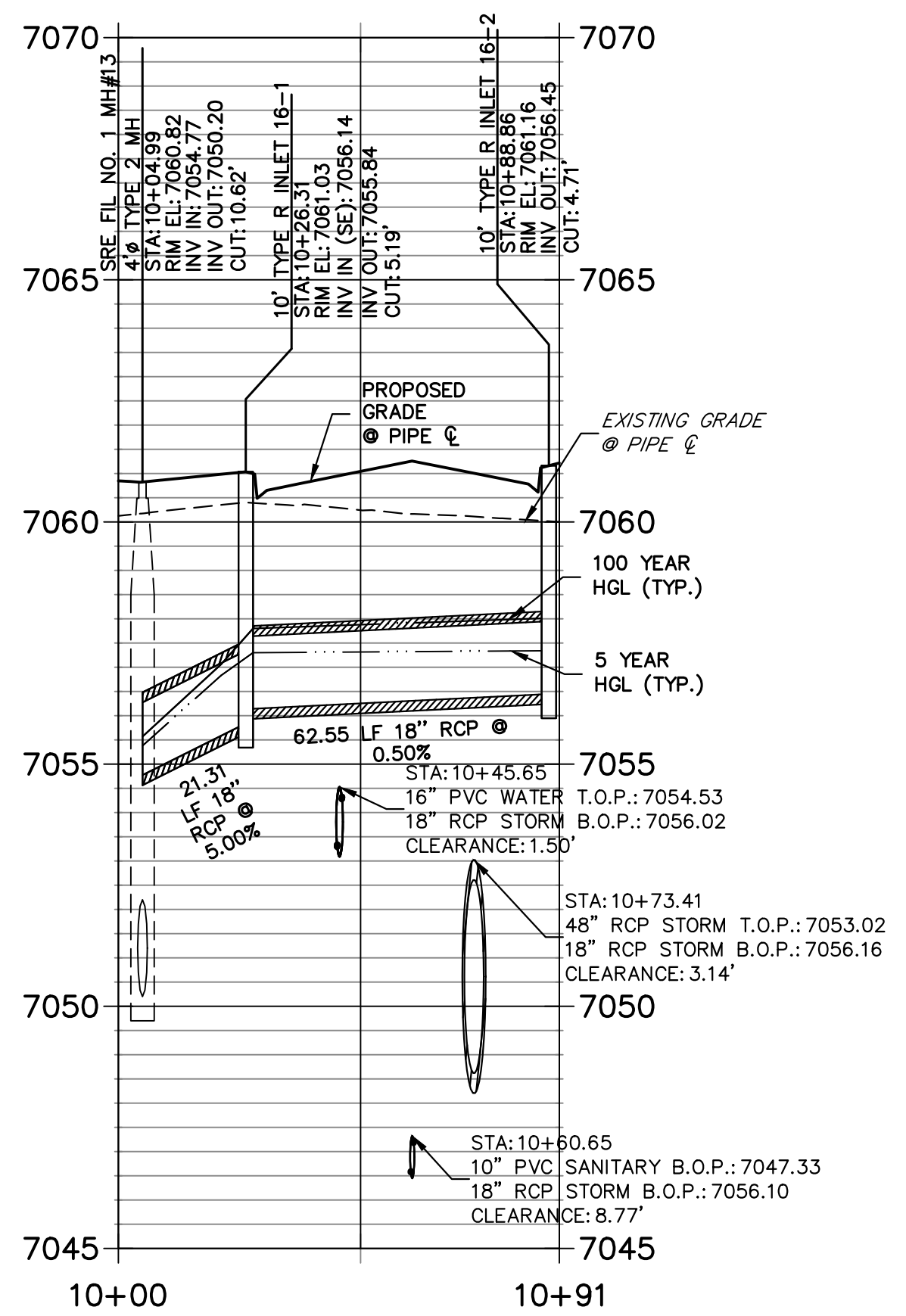


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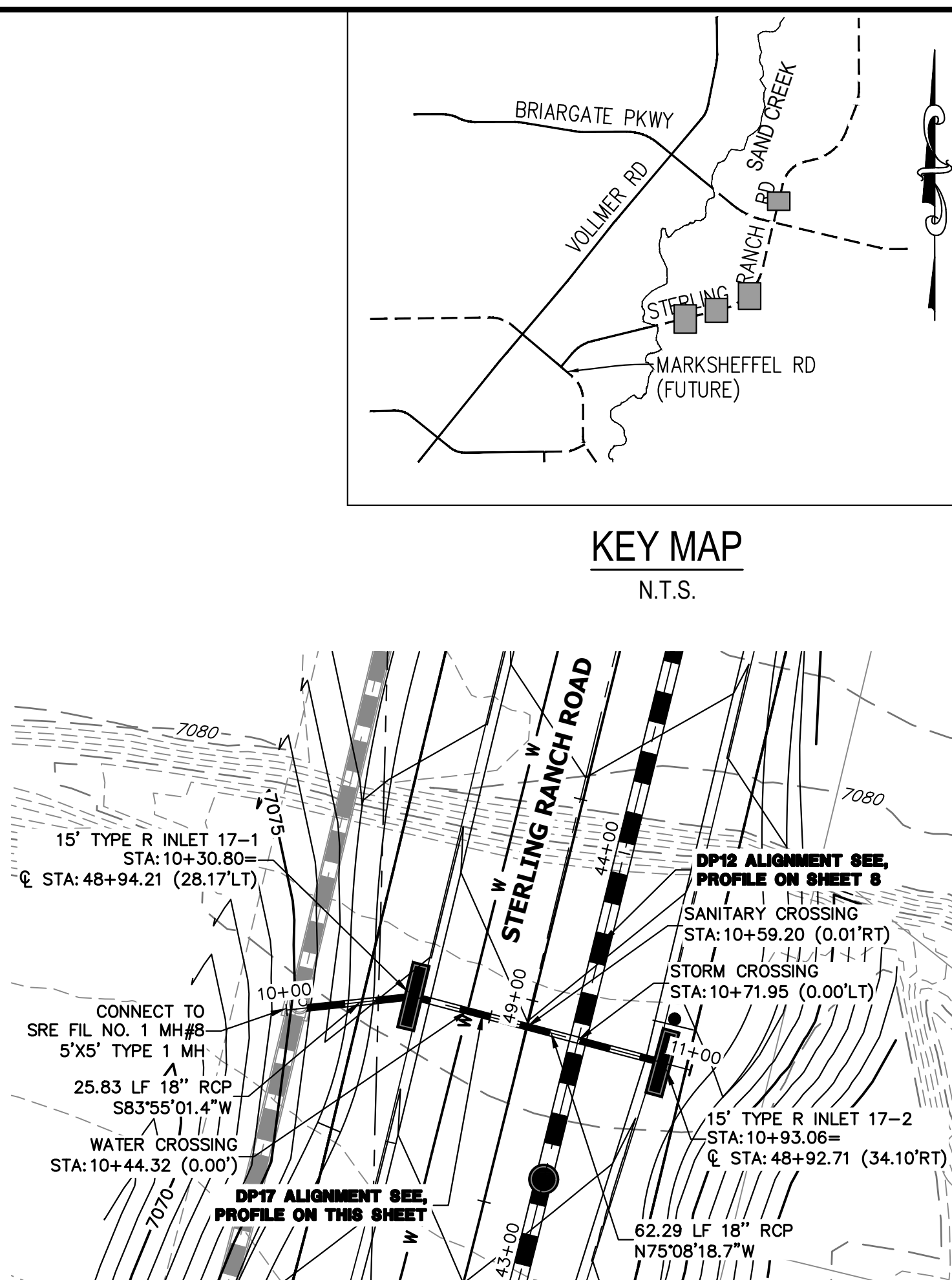
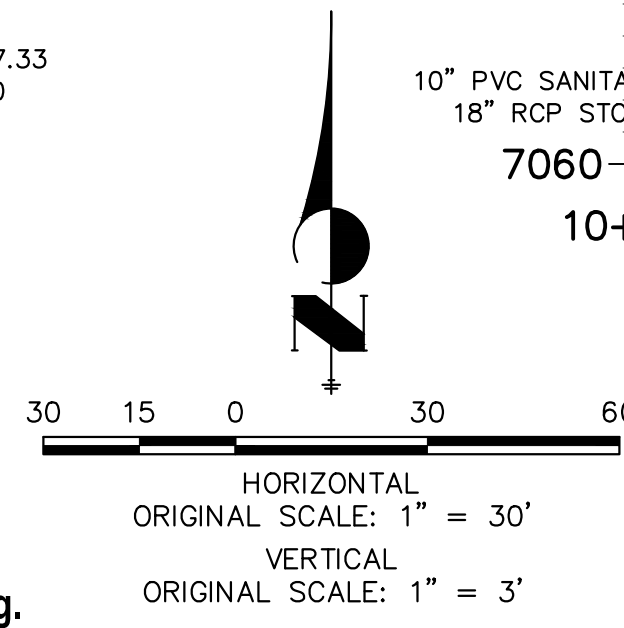
- 1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
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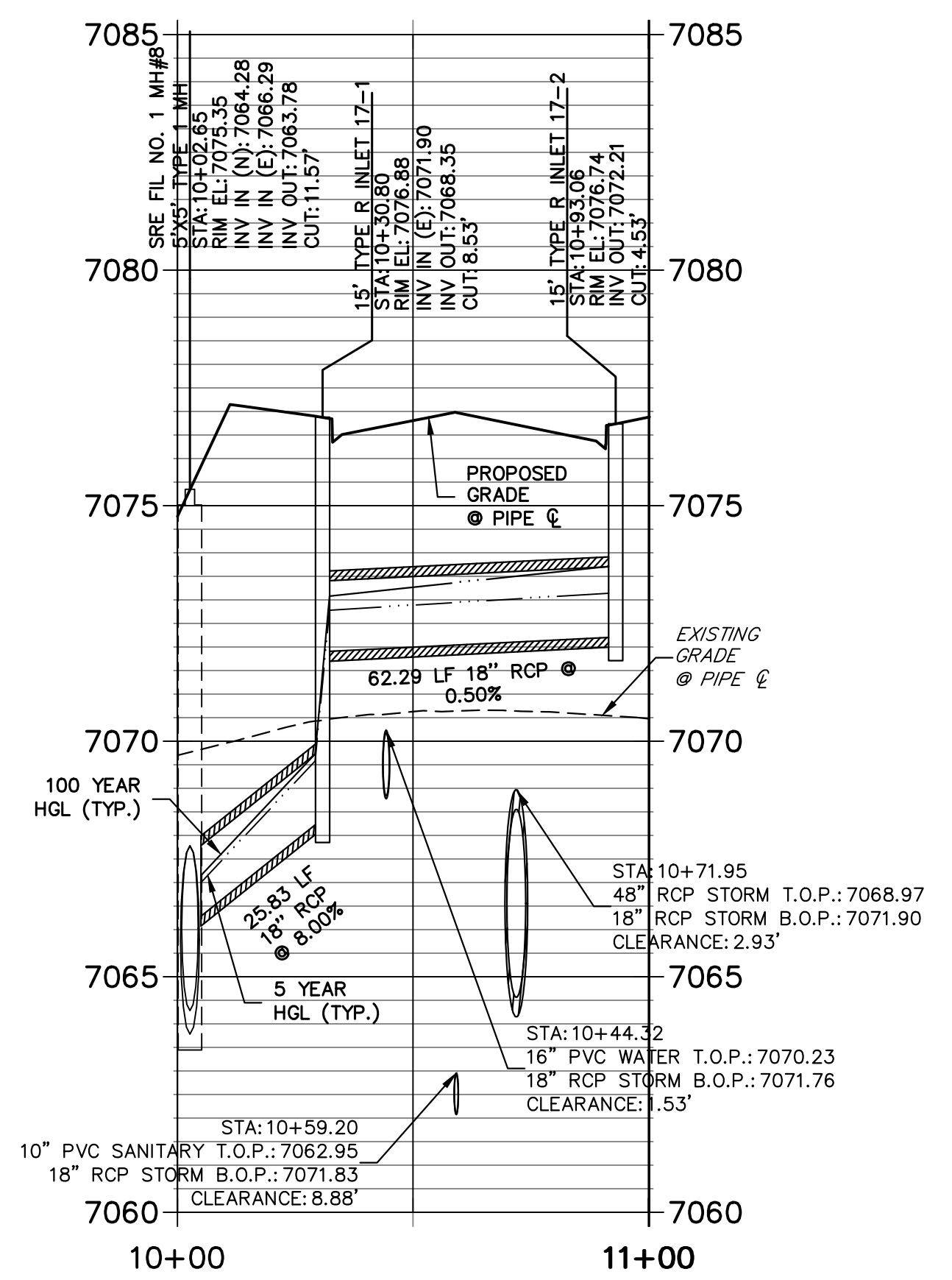
DP16 PROFILE
STA 10+00.00 TO 10+91.02
 PUBLIC



811
 Know what's below.
 Call before you dig.



DP17 PROFILE
STA 10+00.00 TO 11+00.23
 PUBLIC



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike Bramlett

MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, INC. LOCAL ENGINEER

DATE: 05/08/23

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE. THESE DRAWINGS ARE DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
 SR LAND, LLC
 20 BOULDER CRESCENT SUITE 201
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY (719) 471-1742

J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

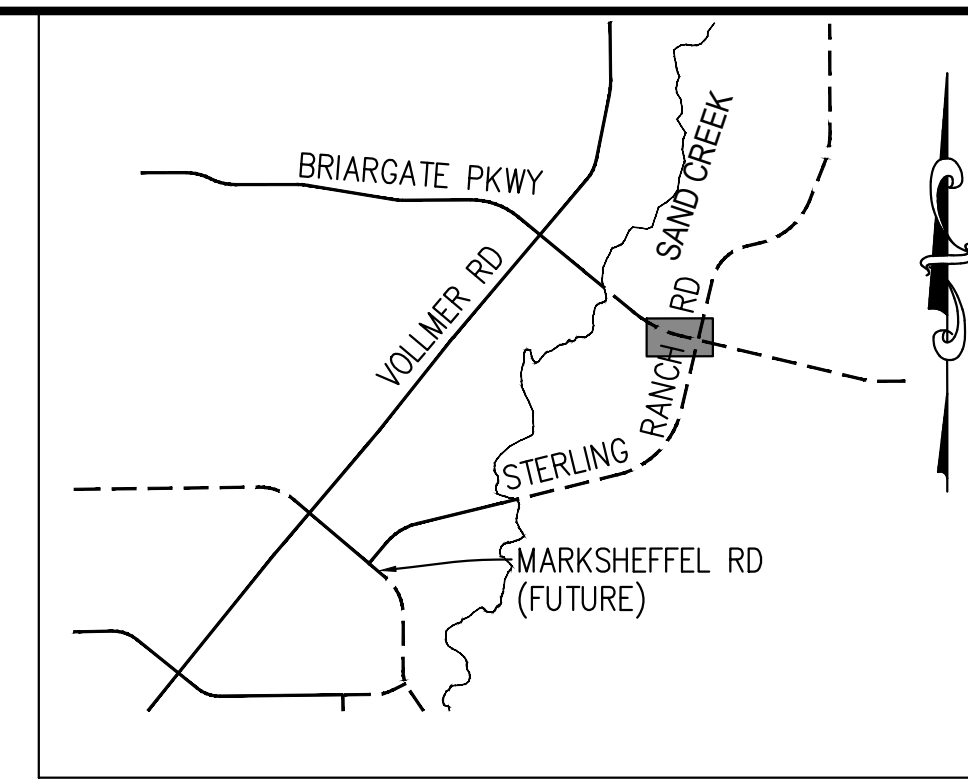
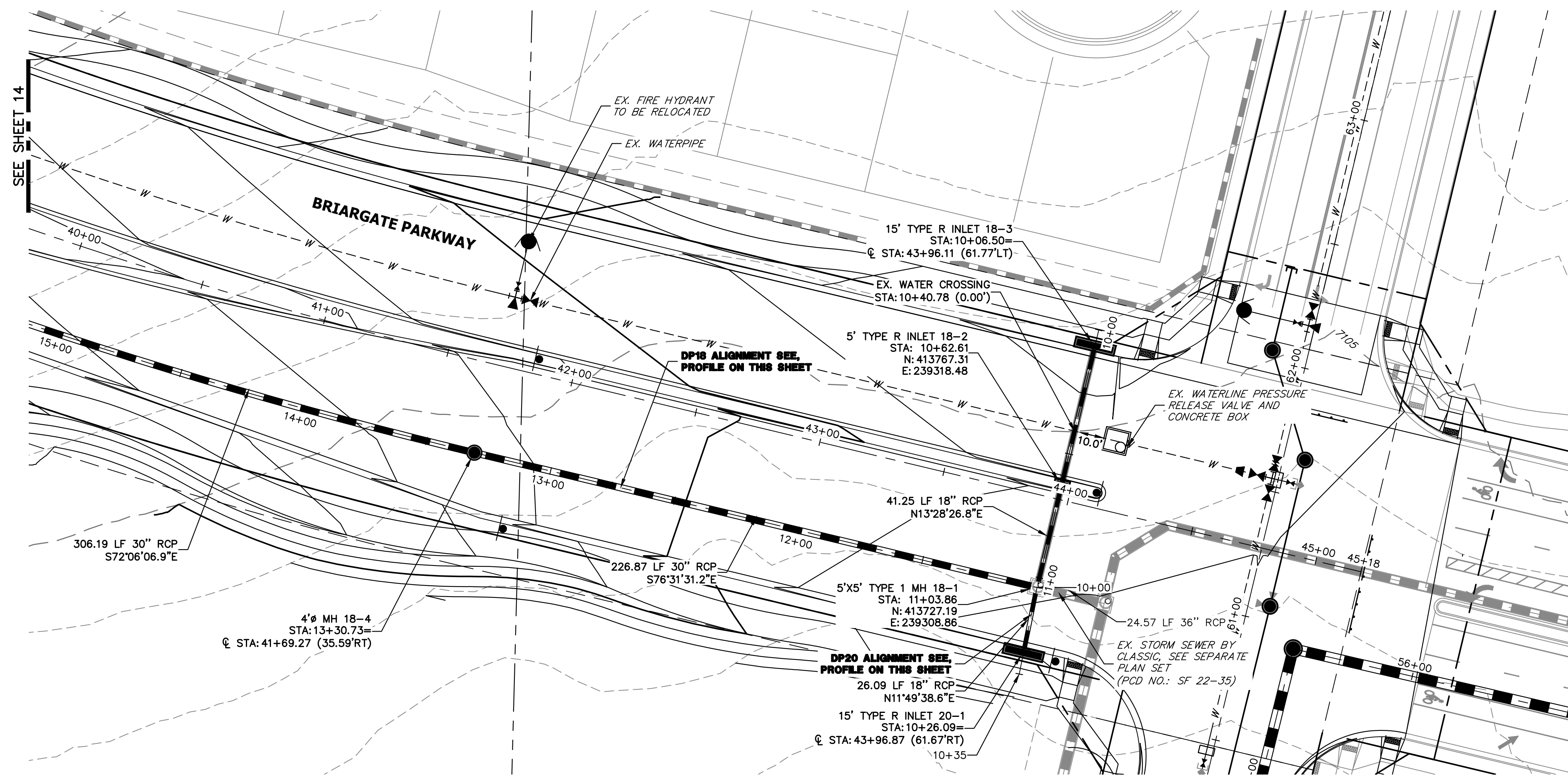
H-SCALE 1"=30'
 V-SCALE 1"=3'
 DATE 05/04/23
 DESIGNED BY MMC
 DRAWN BY MMC
 CHECKED BY

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS

STORM SEWER PLAN & PROFILE

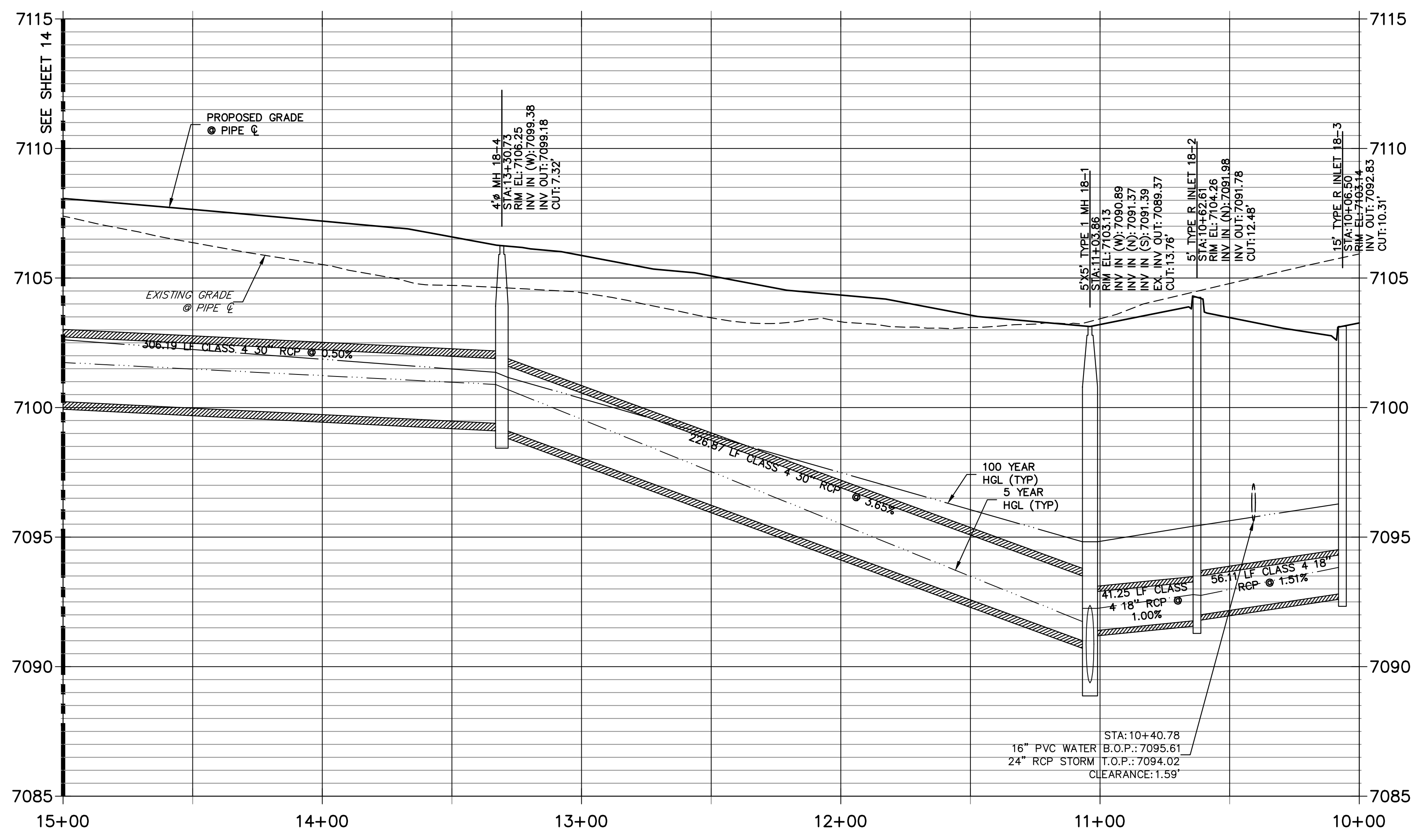
SHEET 12 OF 19

JOB NO. 25188.03

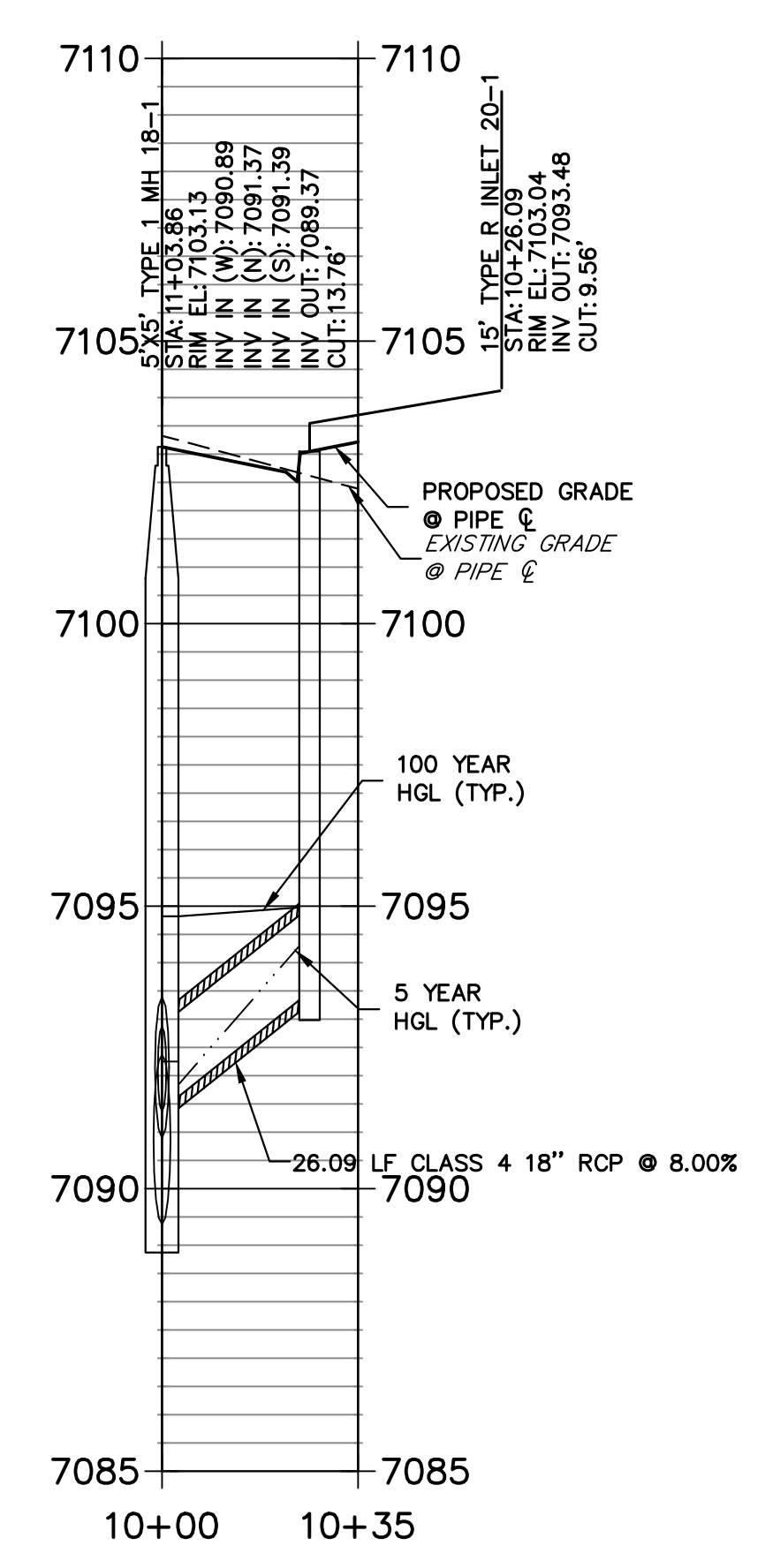


KEY MAP
N.T.S.

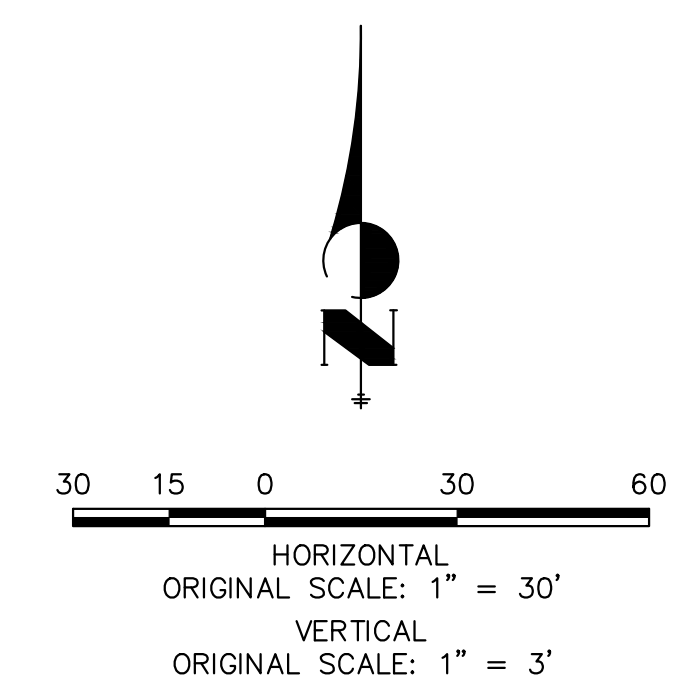
DP18 PROFILE(1)
STA 10+00.00 TO 15+00.00
PUBLIC



DP20 PROFILE
STA 10+00.00 TO 10+34.67
PUBLIC

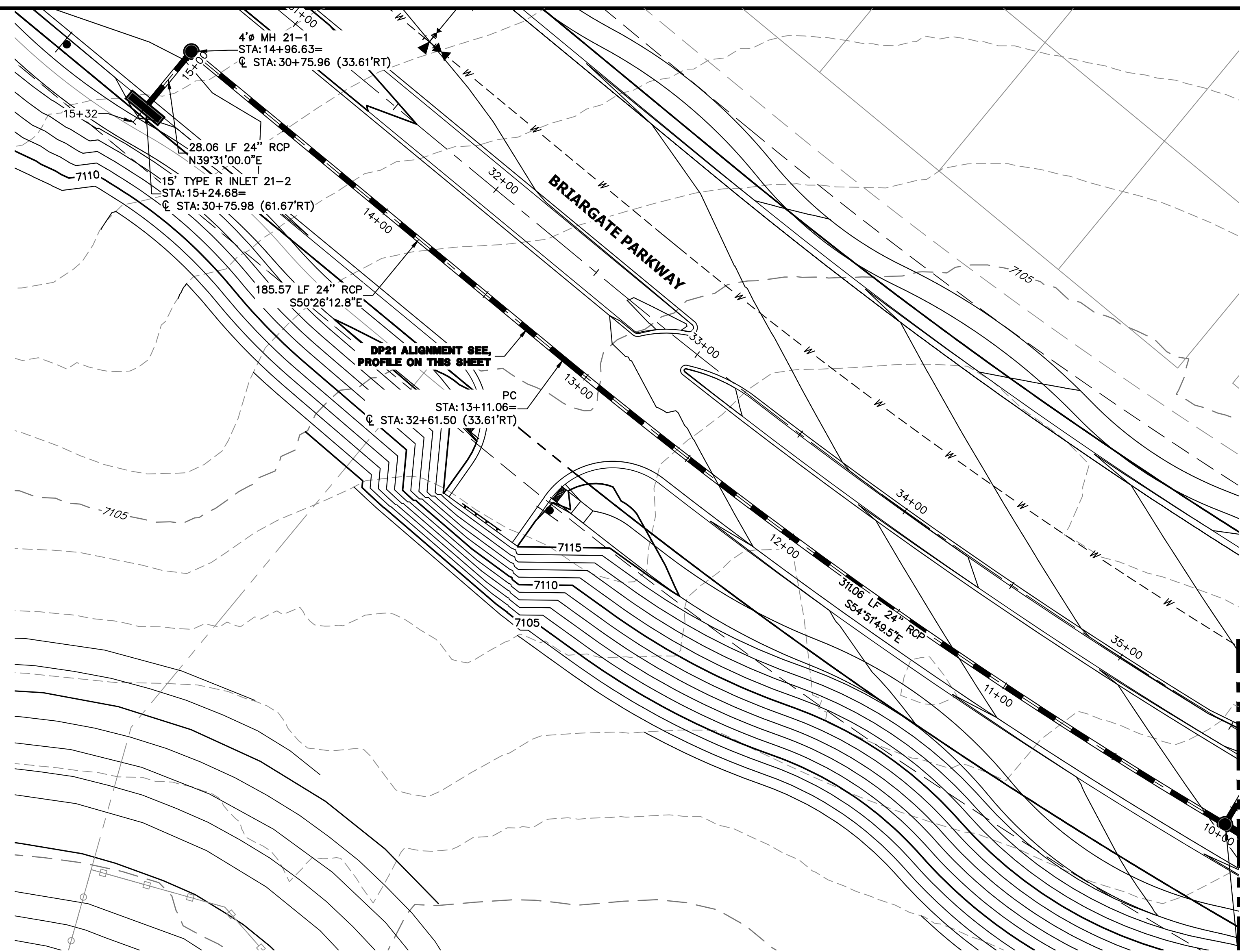


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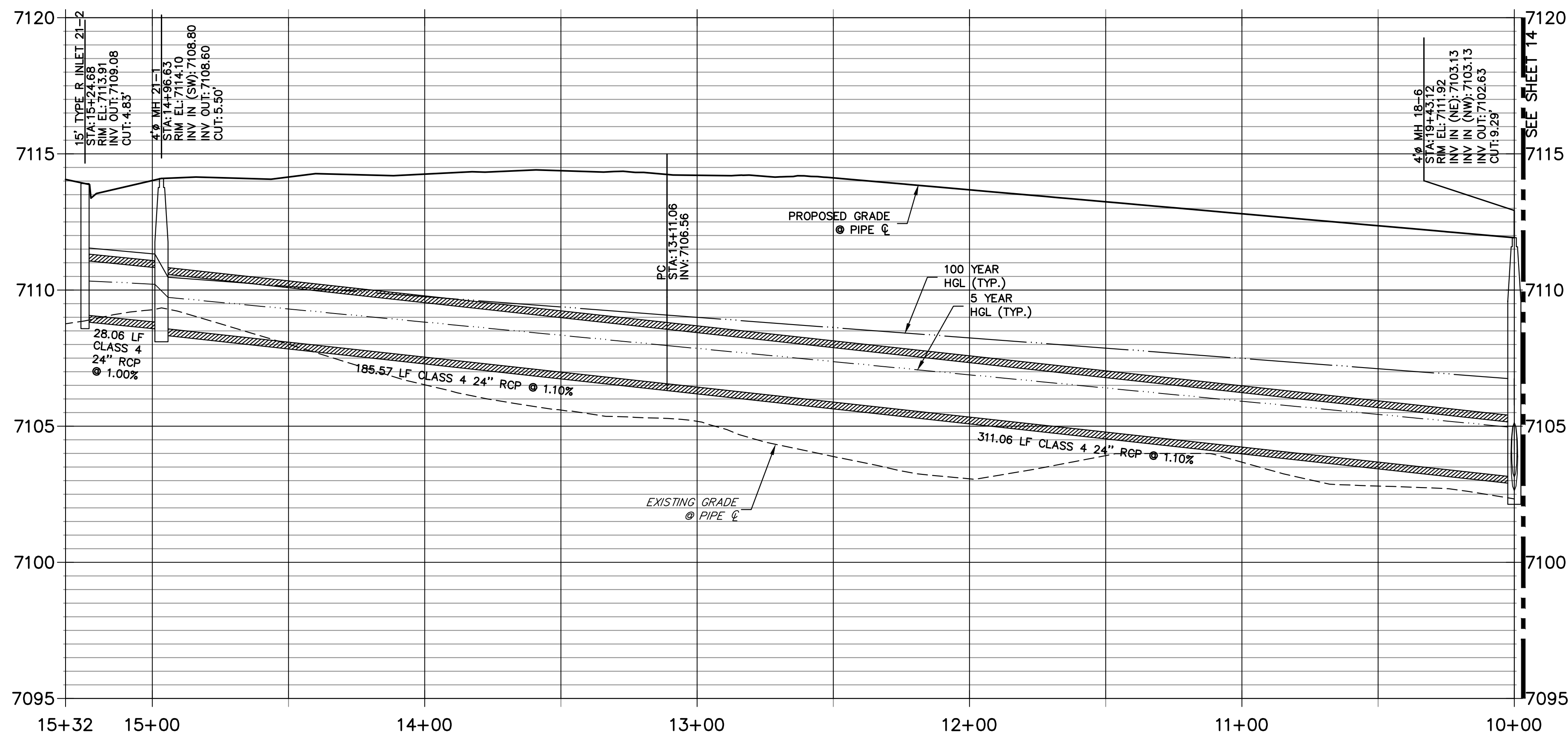


ENGINEER'S STATEMENT
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
Mike Bramlett
MIKE A. BRAMLETT, P.E.
COLORADO P.E. 32314
DATE 05/08/23

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PREPARED FOR	SR LAND, LLC 20 BOULDER CRESCENT SUITE 201 COLORADO SPRINGS, CO 80903 JAMES F. MORLEY (719) 471-1742
 A Westman Company Central 303-740-9888 • Colorado Springs 719-583-2583 Fort Collins 970-491-9888 • www.jrengineering.com	
BY	DATE
No.	REVISION
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	05/04/23
DESIGNED BY	MMC
DRAWN BY	MMC
CHECKED BY	
STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS	
STORM SEWER PLAN & PROFILE	
SHEET 13	OF 19
JOB NO.	25188.03

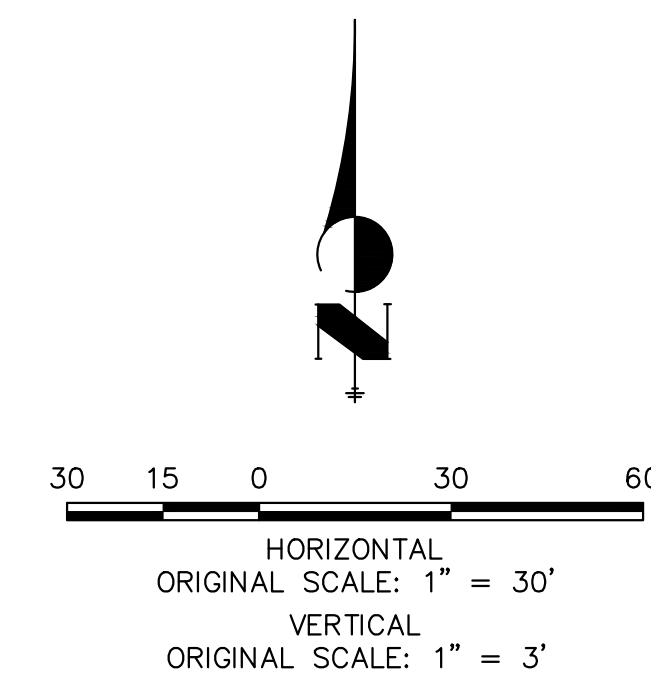


DP21 PROFILE
STA 10+00.00 TO 15+31.85
 PUBLIC



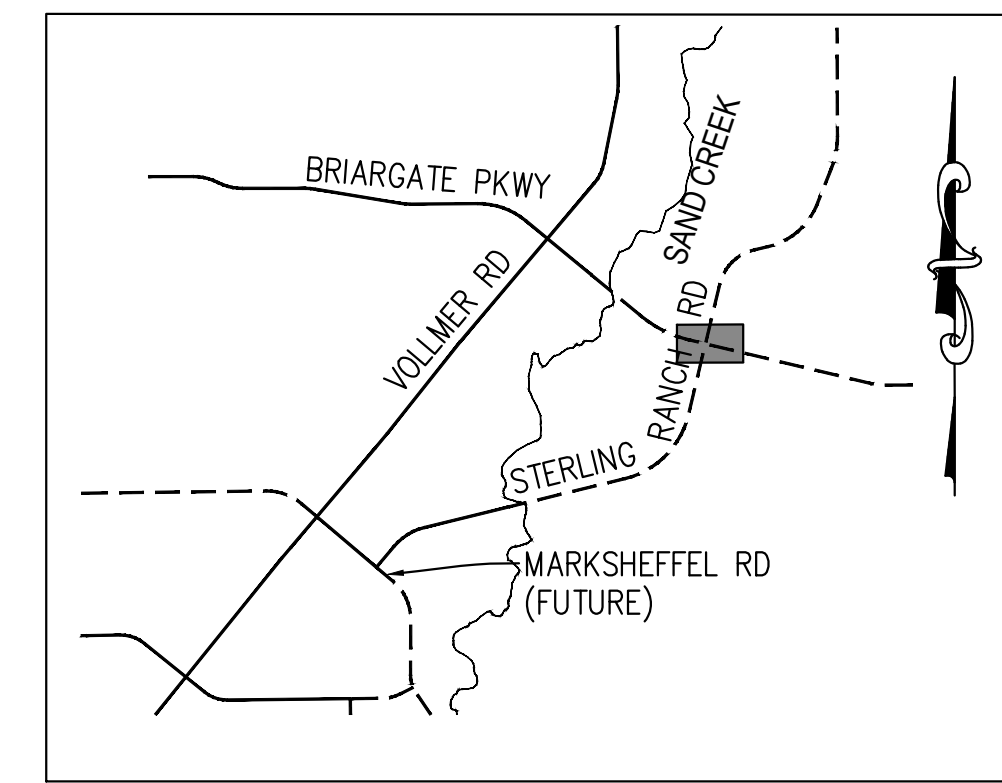
NOTE:

- 1) ADD WATER TIGHT JOINT WHEN 100 YR HGL SHOWS PIPE FULLY INUNDATED
- 2) ALL STORM PIPE INSTALLED IN BRIARGATE WILL NEED TO HAVE AN EXTENDED 100YR SERVICE LIFE PER ECM 3.3.1.B.2



ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING
Mike A. Bramlett
 MIKE A. BRAMLETT, P.E.
 COLORADO P.E. 32314
 FOR AND ON BEHALF OF JR ENGINEERING, INC.
 DATE 05/08/23



KEY MAP
 N.T.S.

PREPARED FOR
SR LAND, LLC
 20 BOULDER CRESCENT
 SUITE 201
 COLORADO SPRINGS, CO 80903
 JAMES F. MORLEY
 (719) 471-1742

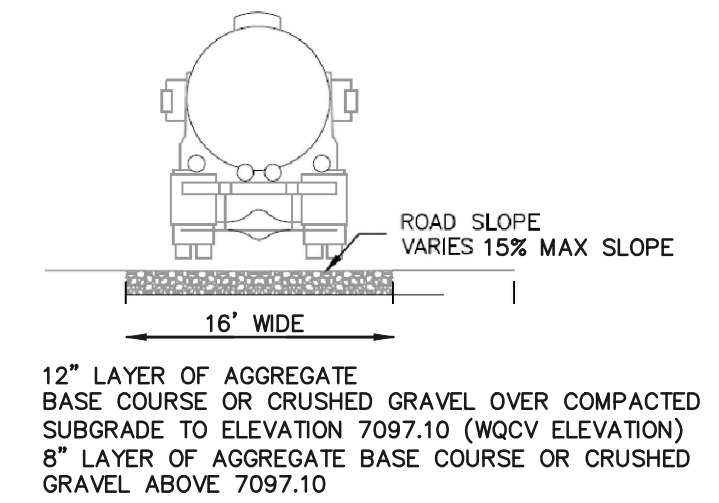
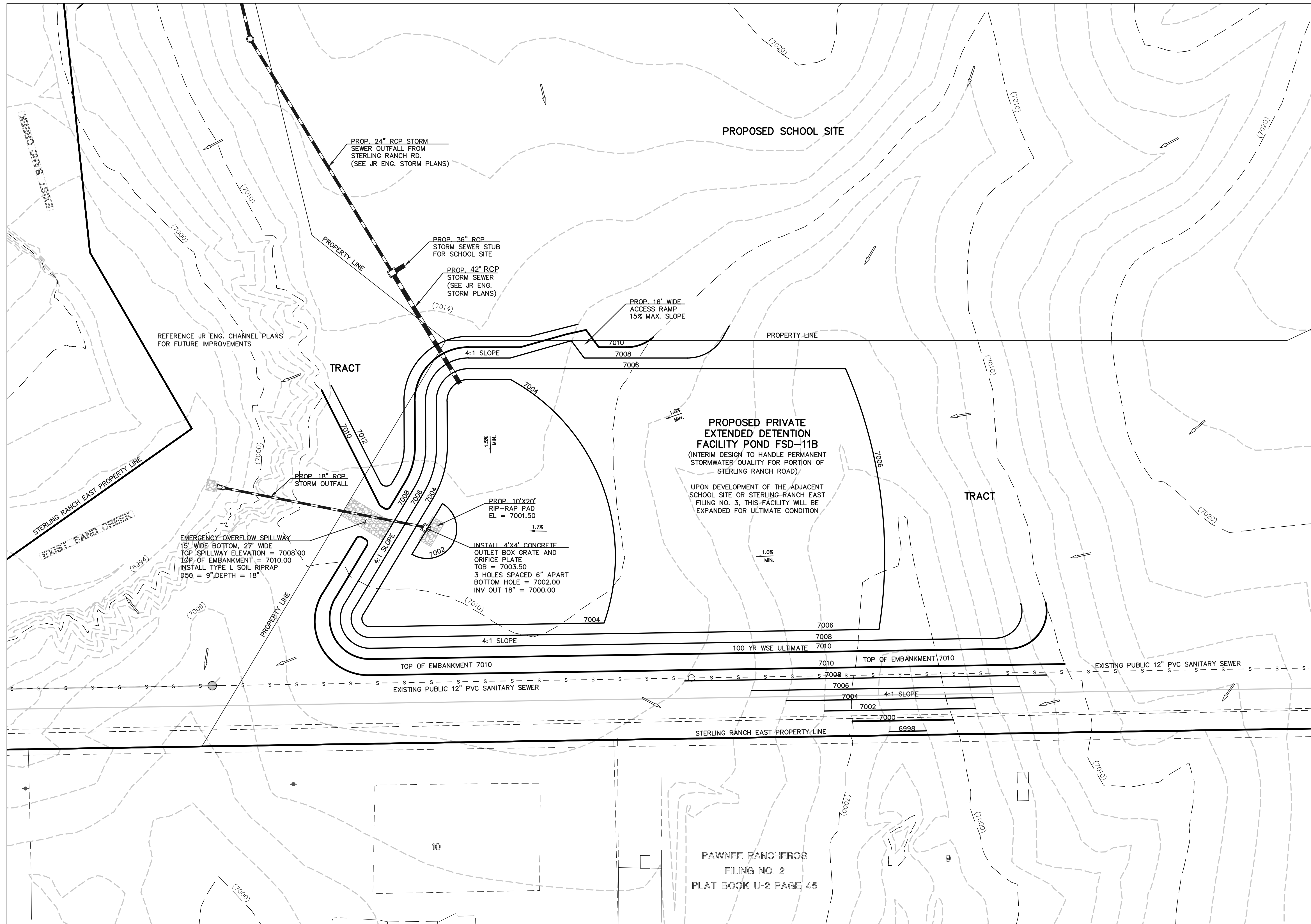
J.R. ENGINEERING
 A Westman Company
 Centennial 303-740-9888 • Colorado Springs 719-583-2583
 Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

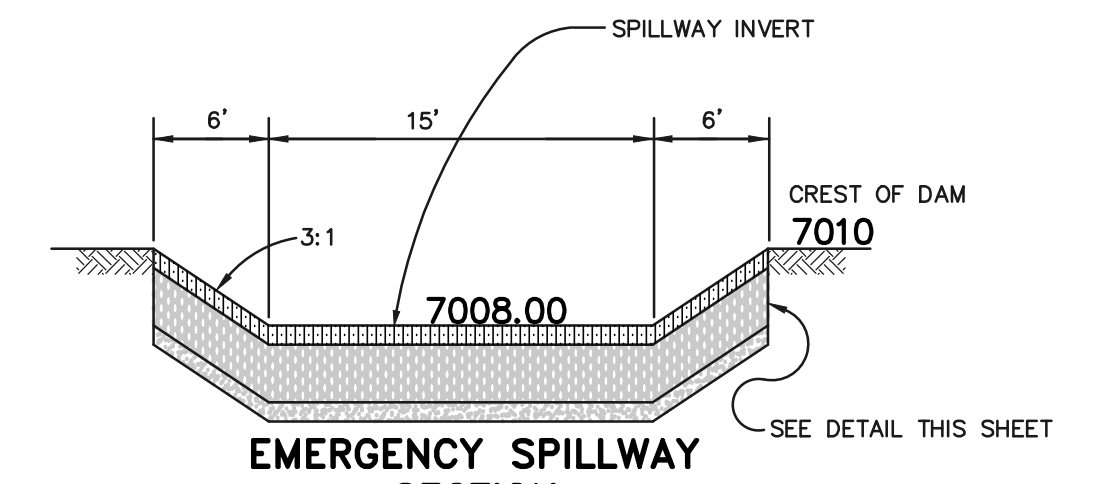
No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=30'	1"=3'	05/04/23	MMC	MMC	

STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS
 STORM SEWER PLAN & PROFILE

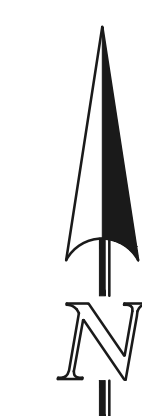


ACCESS ROAD



EMERGENCY SPILLWAY SECTION
100 YEAR WATER SURFACE = 7004.98
(PONDING PER UD-DETENTION)

SCALE: N.T.S.



SCALE: 1" = 40'

POND FSD-11B (INTERIM DESIGN)

<p>48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS</p> <p>811</p> <p>UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW</p> <p>THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.</p>	NO. REVISION	DATE

REVIEW:	DATE
PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC	
MARC A. WHORTON, COLORADO P.E. #37155	DATE

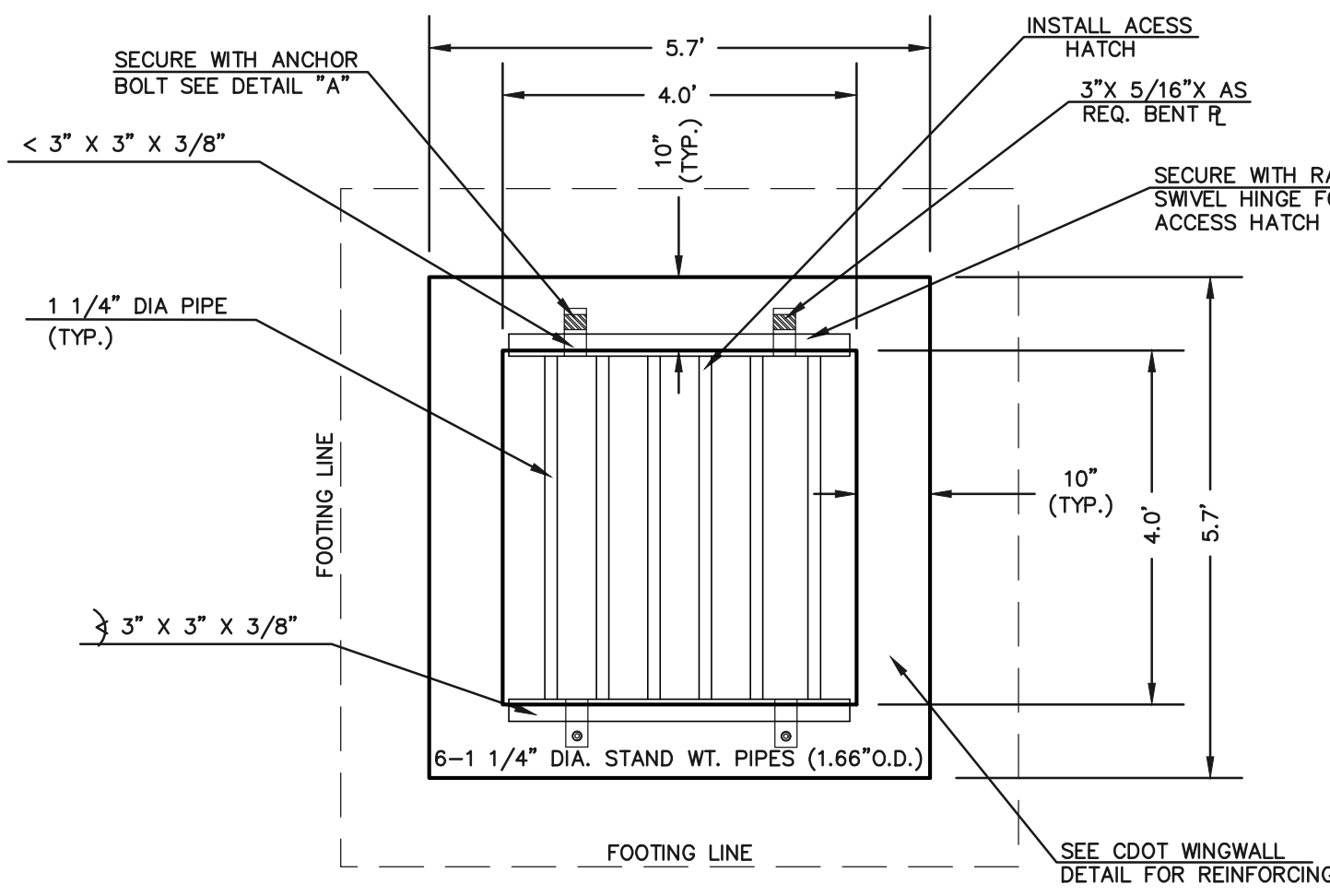
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903

(719)785-0790
(719)785-0799(Fax)

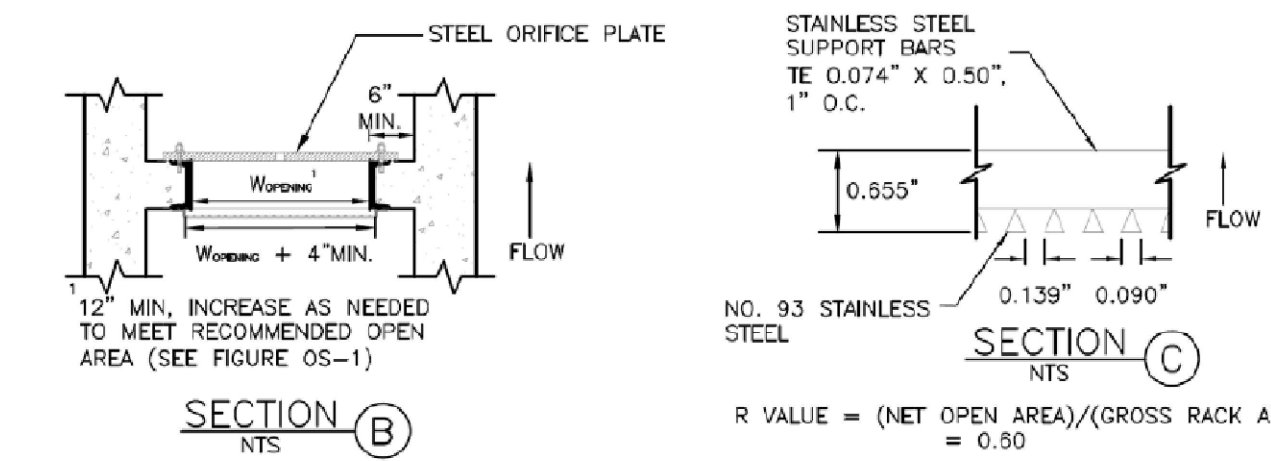
STERLING RANCH ROAD & BRIARGATE PARKWAY STORM PLANS			
PRIVATE POND FSD-11B (INTERIM DESIGN)			
POND PLAN			
DESIGNED BY	MAW	SCALE	DATE 4/5/23
DRAWN BY	ESO	(H) 1" = 40'	SHEET 16 OF 19
CHECKED BY		(V) 1" = N/A	JOB NO. 25188.03

NOTES:

- WELD PLATES MAY BE SUBSTITUTED FOR PIPE EMBEDMENT.
- DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH AASHTO STANDARDS.
- HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE WINGWALLS AND HEADWALLS.
- RAILING POSTS SHALL BE SET TO NORMAL TO GRADE. RAILS SHALL RUN PARALLEL TO THE SLOPES OF TOPS OF THE WALLS.
- ALL RAILS SHALL HAVE EXPANSION JOINTS SPACED AT 40'-0" MAX. JOINT ENDS SHALL BE FREE OF ANY SHARP EDGES OR CORNERS.

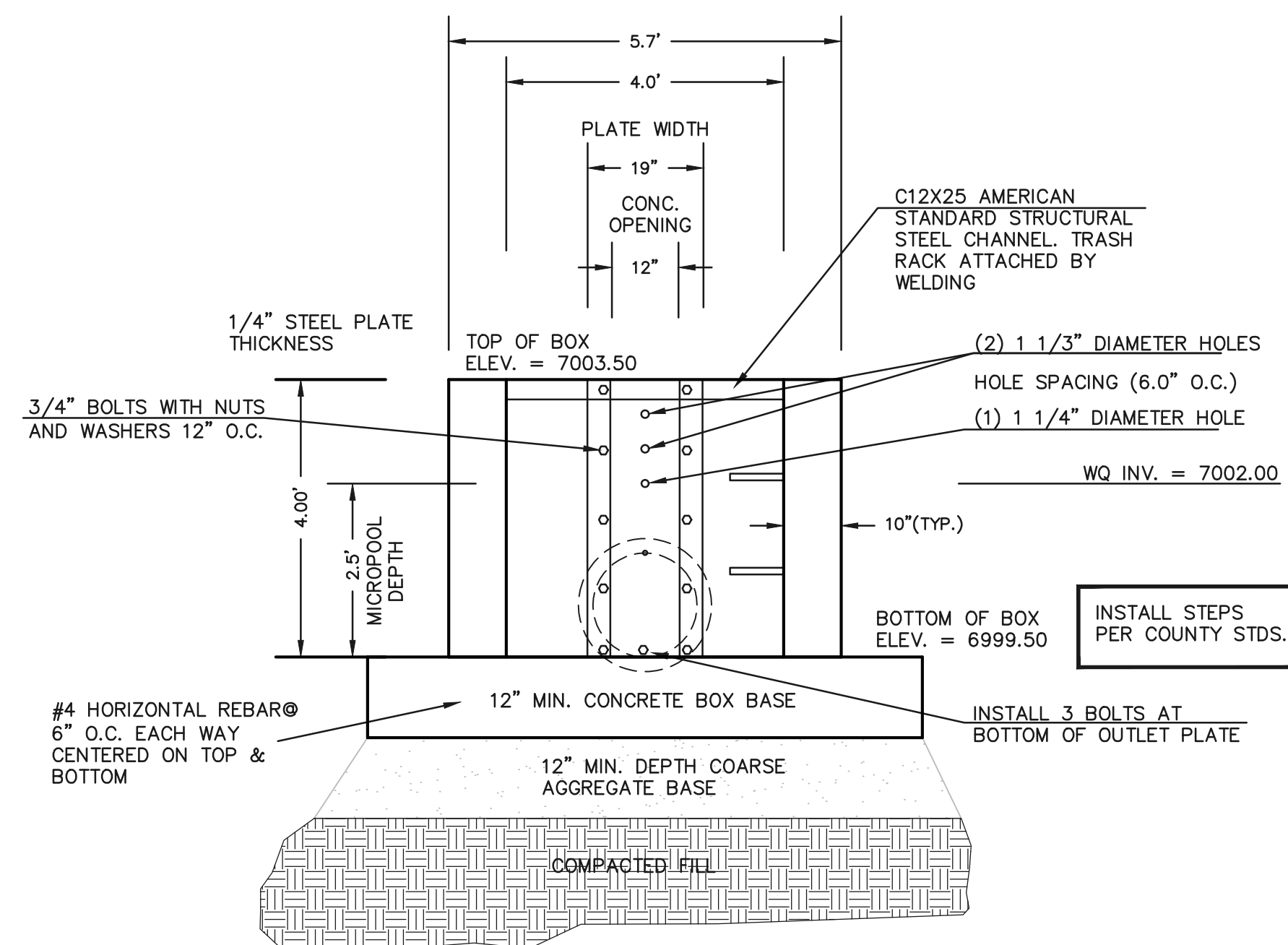


4'x4' OUTLET BOX OVERFLOW TRASH RACK
SCALE 1" = 2'

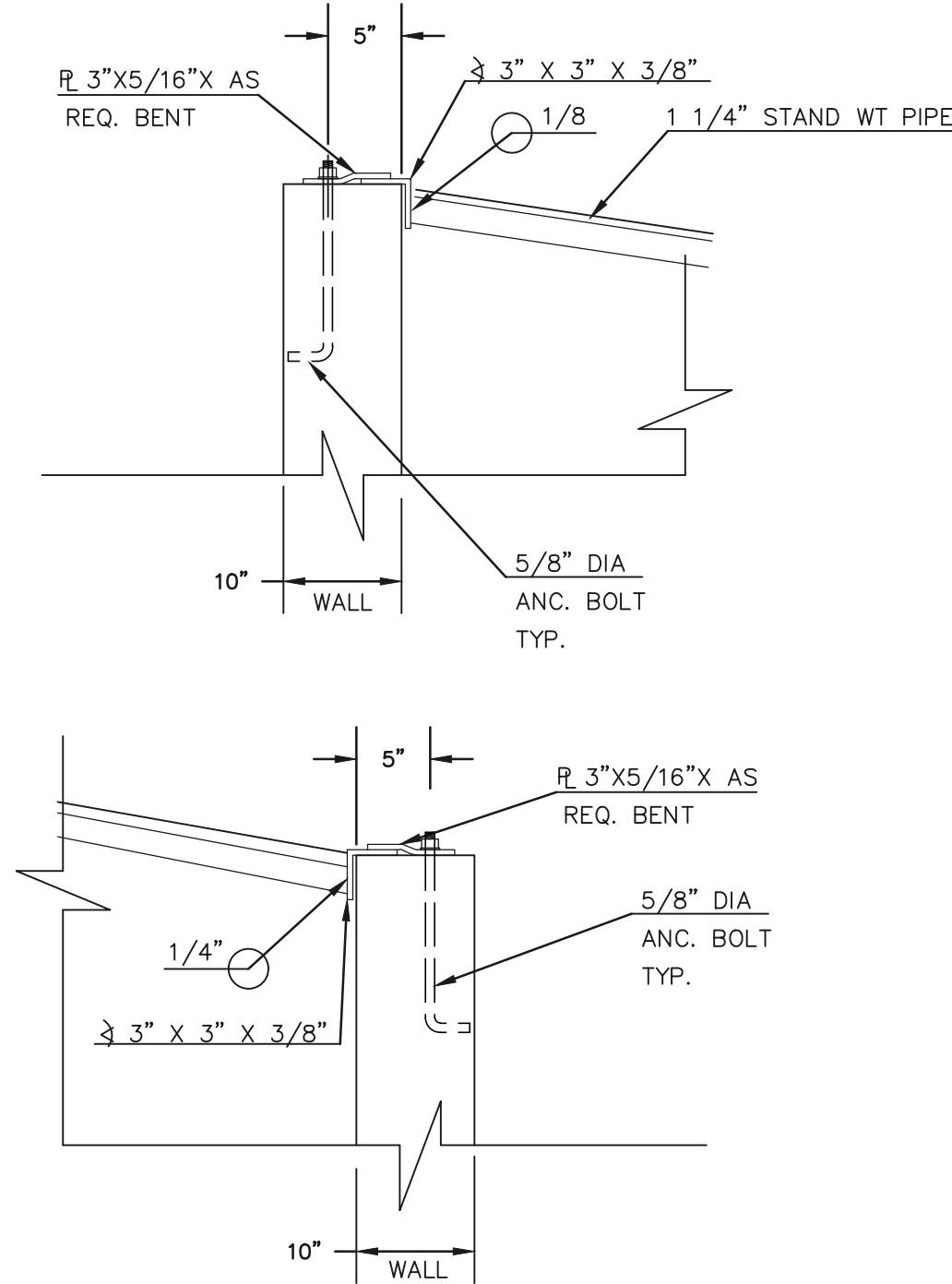


SECTION B

R VALUE = (NET OPEN AREA)/(GROSS RACK AREA) = 0.50



4'x4' OUTLET BOX ORIFICE PLATE
SCALE 1" = 2'



(ALL MATERIALS PER EL PASO COUNTY SPECIFICATIONS)

ORIFICE PLATE NOTES:

- INSTALL HOLES AS SHOWN ON DETAIL TO LEFT.
- PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE

EURV AND WQCV TRASH RACKS:

- WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
- BAR GRATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
- STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF RACK

OVERFLOW TRASH RACKS:

- ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS
- TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
- TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
- STRUCTURAL DESIGN OF THE TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

DETONATION BASIN STAGE-STORAGE TABLE BUILDER

Project: STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Sheet ID: POND-FSD-11B (Interim)

Water Level (ft)	Storage (cu ft)	Depth (ft)	Area (sq ft)	Volume (cu ft)	Area (sq ft)	Volume (cu ft)
7000	0	0.00	0	0	0	0
7005	1000	0.50	11000	11000	11000	11000
7010	4000	1.00	22000	44000	22000	44000
7015	9000	1.50	33000	82500	33000	82500
7020	16000	2.00	44000	132000	44000	132000
7025	25000	2.50	55000	207500	55000	207500
7030	36000	3.00	66000	318000	66000	318000
7035	49000	3.50	77000	460500	77000	460500
7040	64000	4.00	88000	632000	88000	632000
7045	81000	4.50	99000	831000	99000	831000
7050	100000	5.00	110000	1050000	110000	1050000

DETONATION BASIN OUTLET STRUCTURE DESIGN

Project: STERLING RANCH EAST PRELIMINARY PLAN NO. 1
Sheet ID: POND-FSD-11B (Interim)

Zone	WQCV (cfs)	EURV (cfs)	Outlet Type
Zone 1 (WQCV)	1.04	0.152	Orifice Plate
Zone 2 (EURV)	1.36	0.104	Orifice Plate
Zone 3 (100-year)	2.65	0.748	Well/Slope (Debris)
Total (all zones)			1.004

User Input: Orifice Plate with one or more orifices or Elliptical Slot. Typically used to drain WQCV and/or EURV in a sedimentation basin.

Calculated Parameters for Vertical Orifice:

Parameter	Value	Unit
Depth at top of Zone using Vertical Orifice	1.50	ft
Depth at top of Zone using Vertical Orifice	1.50	ft
Vertical Orifice Diameter	18.00	inches

Calculated Parameters for Overflow Weir:

Parameter	Value	Unit
Overflow Weir Front Edge Height, H _o	1.50	ft
Overflow Weir Front Edge Length	4.00	ft
Overflow Weir Crest Length	6.00	ft
Overflow Weir Crest Length	11.14	ft
Overflow Weir Crest Length	5.57	ft

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate:

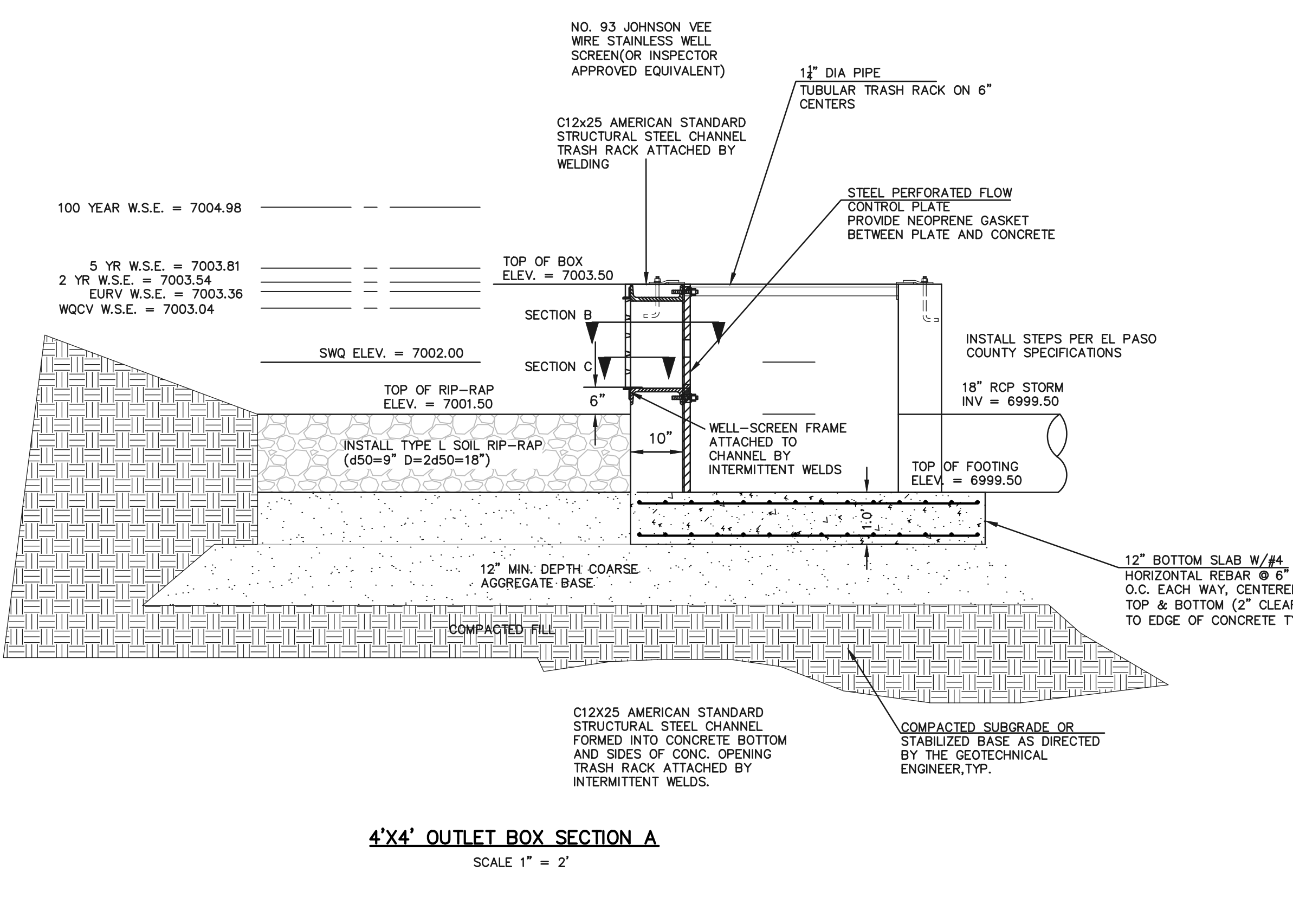
Parameter	Value	Unit
Depth to Invert of Outlet Pipe	2.50	ft
Outlet Pipe Diameter	18.00	inches
Restrictor Plate Height Above Pipe Invert	18.00	inches

Calculated Parameters for Spillway:

Parameter	Value	Unit
Spillway Crest Length	15.00	ft
Spillway End Slopes	3:00	H:V
Freeboard above Max Water Surface	1.00	ft

ROUTED HYDROGRAPH RESULTS

Design Storm Return Period	1 Year	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One Hour Rainfall Depth (in)	1.19	1.25	1.50	1.75	2.00	2.25	2.50	2.75
CLMP Runoff Volume (acre-ft)	0.152	0.256	0.363	0.601	1.239	2.019	3.317	5.500
Inflow Hydrograph Volume (acre-ft)	N/A	0.363	0.601	1.239	2.019	3.317	5.500	5.500
CLMP Peak Flow Rate Q (cfs)	N/A	2.9	8.1	12.3	22.0	37.5	62.0	97.0
CLMP Peak Flow Rate Q (cfs)	N/A	2.9	8.1	12.3	22.0	37.5	62.0	97.0
Peak Inflow Q (cfs)	N/A	4.7	10.1	14.3	26.4	43.7	72.7	111.0
Peak Outflow Q (cfs)	N/A	0.1	0.4	0.5	0.9	1.5	2.5	4.0
Ratio Peak Outflow to Peak Inflow	N/A	0.02	0.04	0.04	0.04	0.04	0.04	0.04
Max Velocity through Gate 1 (ft/s)	N/A	0.02	0.4	0.7	1.5	3.6	6.6	11.8
Max Velocity through Gate 2 (ft/s)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 95% of Inflow Volume (hours)	41	52	59	53	47	36	32	22
Time to Drain 95% of Inflow Volume (hours)	44	55	70	61	56	35	49	43
Maximum Pooling Depth (ft)	1.04	1.36	1.54	1.81	1.97	2.25	2.56	4.08
Area at Maximum Pooling Depth (sq-ft)	0.28	0.42	0.48	0.53	0.66	0.80	1.04	1.61
Maximum Volume Stored (acre-ft)	0.154	0.259	0.329	0.446	0.532	0.692	0.889	1.311



4'x4' OUTLET BOX SECTION A
SCALE 1" = 2'

48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS

811

UTILITY NOTIFICATION CENTER OF COLORADO
IT'S THE LAW

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NO.	REVISION	DATE

REVIEW:

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC

MARC A. WHORTON, COLORADO P.E. #37155 DATE

STERLING RANCH & BRIARGATE PARKWAY STORM PLANS
PRIVATE POND FSD-11B (INTERIM DESIGN)
OUTLET STRUCTURE DETAILS

DESIGNED BY MAW SCALE DATE 4/5/23
DRAWN BY MAW (H) 1"= N/A SHEET 17 OF 19
CHECKED BY (V) 1"= N/A JOB NO. 25188.03

CLASSIC CONSULTING

619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
(719) 785-0790
(719) 785-0799 (Fax)

V:\18333\DRAWINGS\CONSTRUCT\DRAW\STORM\18333-POND-INTERIM-2.dwg, 4/19/2023 12:28:28 PM, 1/1

