

ROAD CURVE DATA (DELTA, RADIUS, ARC)

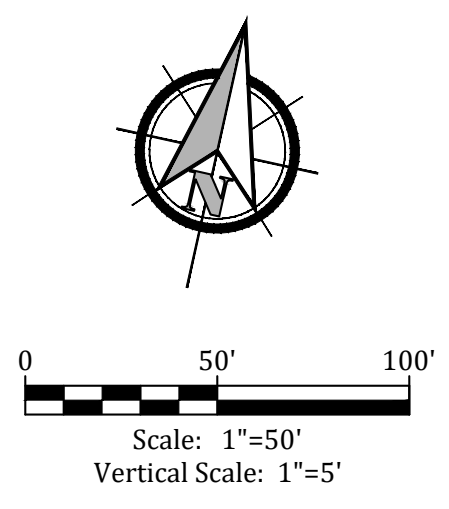
1 Δ=92°56'47"	R=20.00'	L=32.44'	10 Δ=63°15'16"	R=100.00'	L=110.40'
2 Δ=86°56'39"	R=20.00'	L=30.35'	11 Δ=45°15'34"	R=88.00'	L=98.60'
3 Δ=88.00'	R=20.00'	L=30.35'	12 Δ=85°32'55"	R=25.00'	L=37.33'
4 Δ=44°35'14"	R=88.00'	L=98.60'	13 Δ=99°49'02"	R=25.00'	L=37.33'
5 Δ=44°35'14"	R=100.00'	L=110.40'	14 Δ=02°13'29"	R=389.86'	L=119.90'
6 Δ=44°35'14"	R=100.00'	L=110.40'	15 Δ=02°13'29"	R=389.86'	L=119.90'
7 Δ=61°06'12"	R=462.00'	L=497.70'	16 Δ=04°58'43"	R=1809.31'	L=157.21'
8 Δ=61°06'12"	R=462.00'	L=497.70'	17 Δ=04°58'19"	R=1777.31'	L=154.23'
9 Δ=53°27'34"	R=112.00'	L=104.50'	18 Δ=107°01'00"	R=30.00'	L=56.03'

SANITARY SEWER LINE DATA

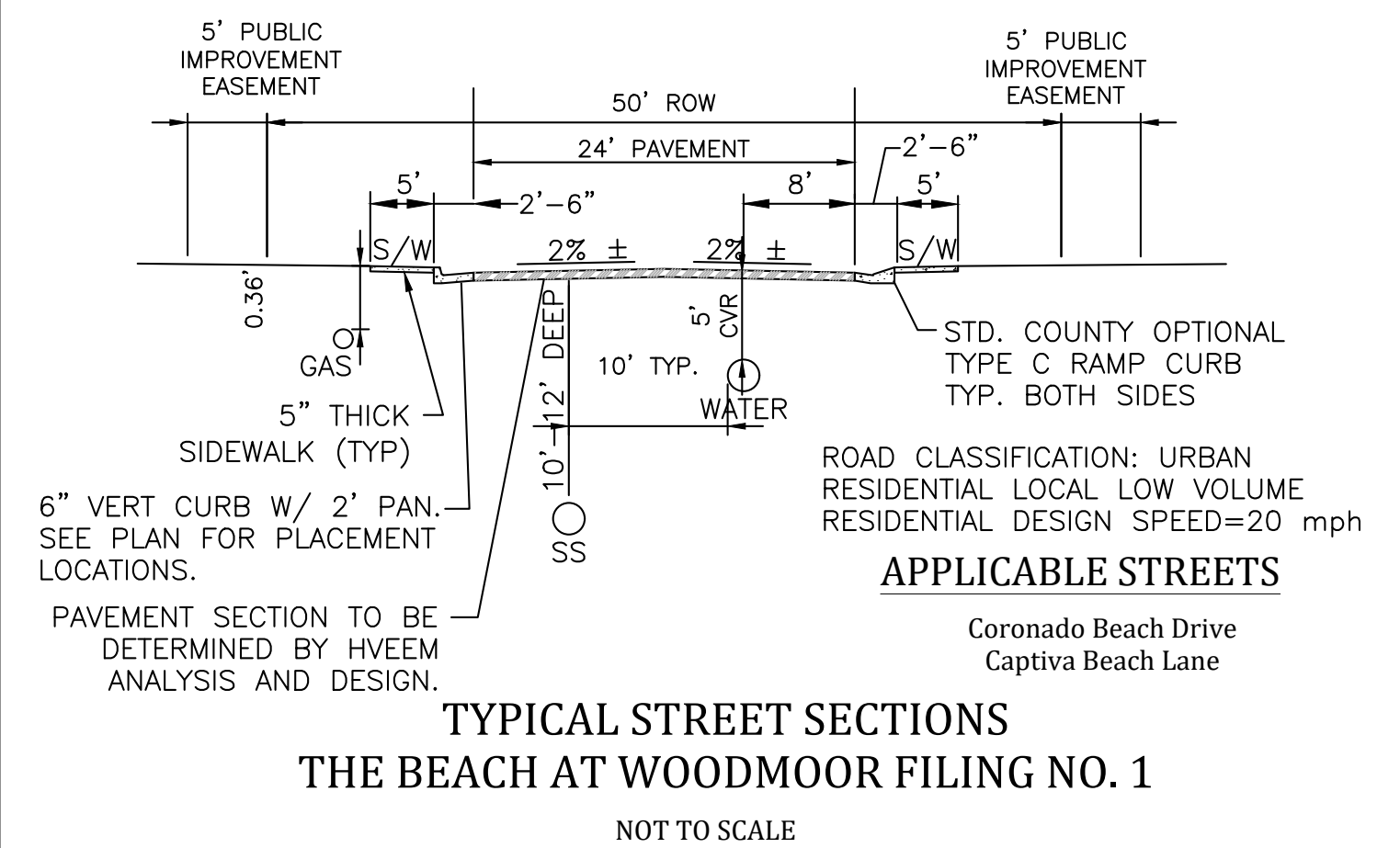
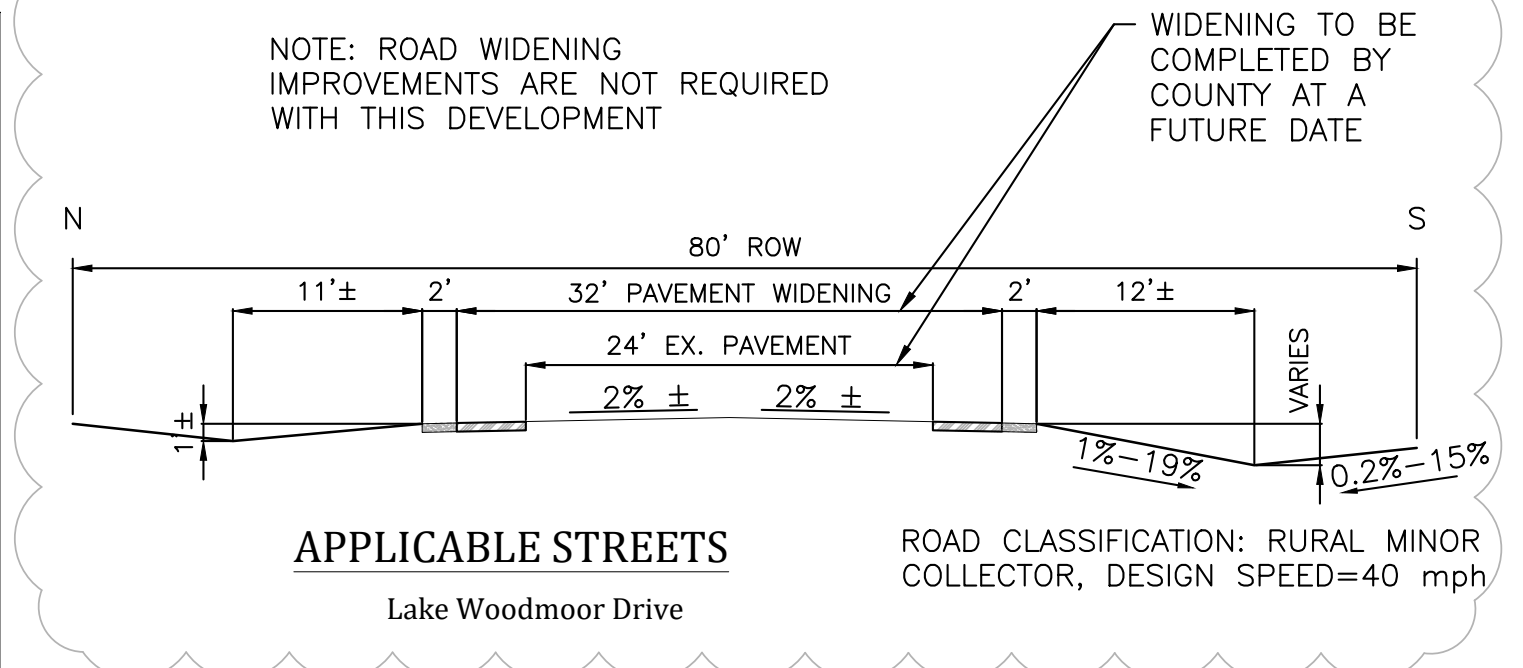
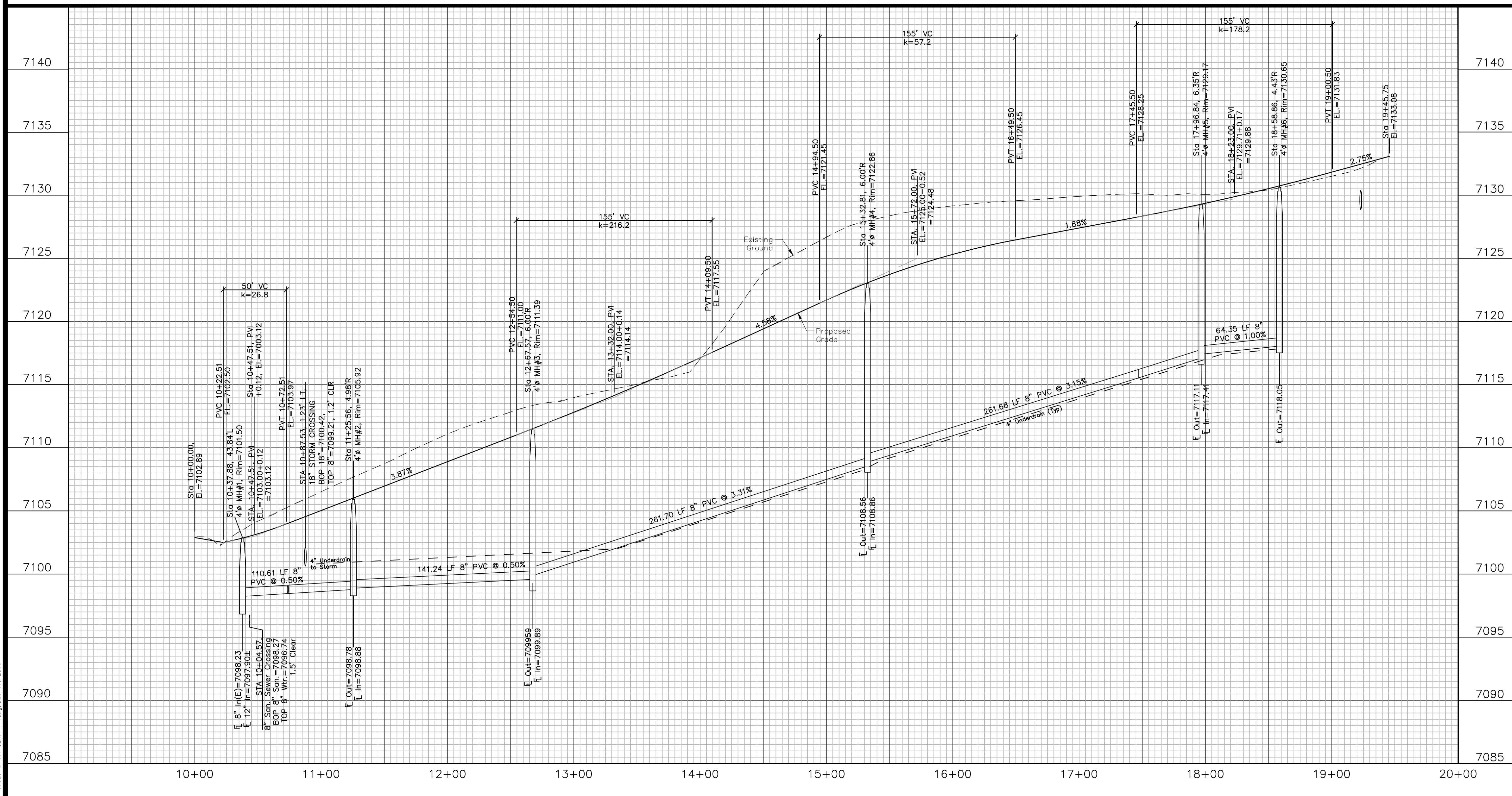
Bearing	Distance
1 N 29°19'36" E	110.61'
2 N 39°17'32" E	141.24'
3 Δ=33°46'15", R=444, 261.70'-ARC	
4 Δ=27°19'57", R=444, 211.81'-ARC	
5 S 79°36'16" E	49.87'
6 N 76°19'28" E	64.35'

ROAD LINE DATA

19 N 55°48'31" W	N 39°17'32" E
L=79.54'	L=127.35'
20 S 79°36'16" E	N 23°57'43" W
L=41.20'	L=29.93'



Coronado Beach Drive
Urban Local - 50' ROW



Engineering Record Drawing (As-Built)

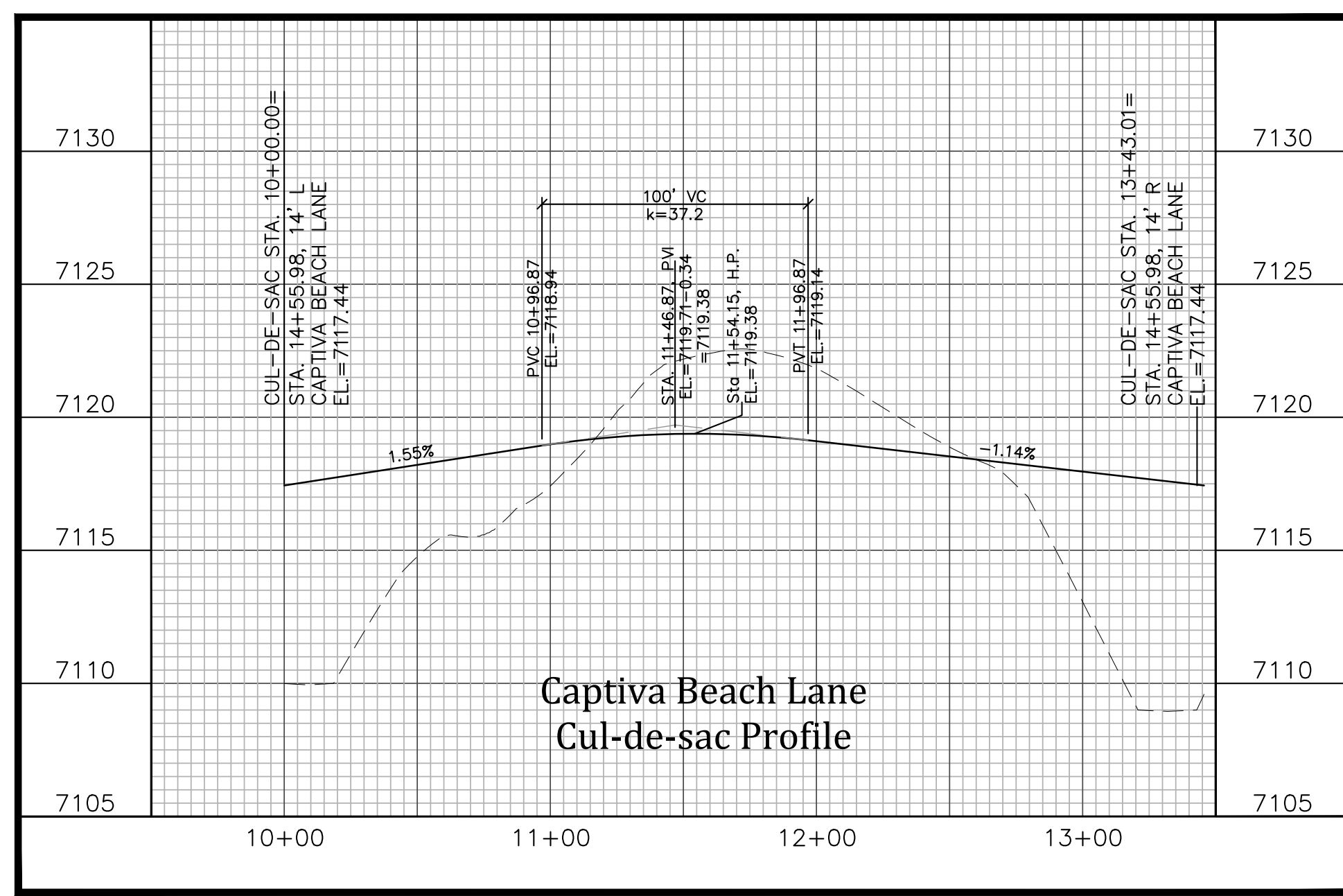
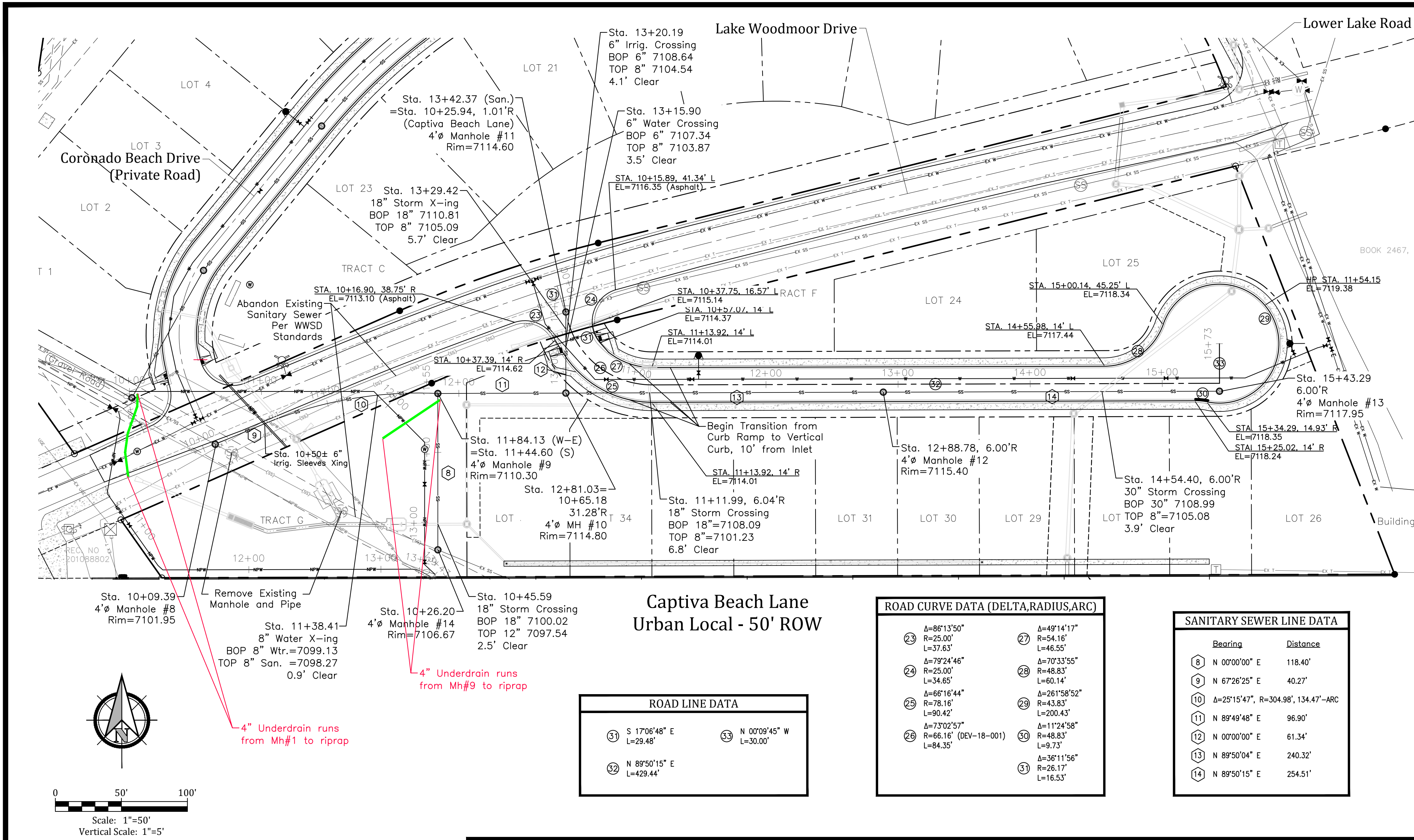
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WOODMOOR WATER & SANITATION DISTRICT NO. 1
APPROVED FOR CONSTRUCTION

Date: _____ By: _____

These plans have been reviewed only for general conformance with District Rules and Regulations and System Specifications. Review and construction approval by the District does not relieve the Developer/Owner and/or Contractor from responsibility for compliance with any Rules, Regulations, or Specifications required by the District.

Project No.:	16059
Date:	October 24, 2018
Design:	JAK
Drawn:	JAK
Check:	AWMc
Revisions:	1 - 9/24/18
	Lake Woodmoor Cross Section
	2 - 1/28/19 & Alignments
	3 - 3/26/19 WWS Comments
	4 - 4/24/19 WWS Comments



Engineering Record Drawing (As-Built)

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ROAD LINE DATA

① S 17°06'48" E L=29.48'	③ N 0°09'45" W L=30.00'
② N 89°50'15" E L=433.44'	

ROAD CURVE DATA (DELTA,RADIUS,ARC)

② Δ=86°13'50" R=25.00' L=37.63'	⑦ Δ=49°14'17" R=54.16' L=46.55'
③ Δ=79°24'46" R=25.00' L=34.65'	⑧ Δ=70°33'55" R=48.83' L=60.14'
④ Δ=66°16'44" R=78.16' L=80.42'	⑨ Δ=261°58'52" R=43.83' L=200.43'
⑤ Δ=73°02'57" R=66.16' (DEV-18-001) L=84.35'	⑩ Δ=112°4'58" R=48.83' L=9.73'
⑥ Δ=36°11'56" R=26.17' L=16.33'	

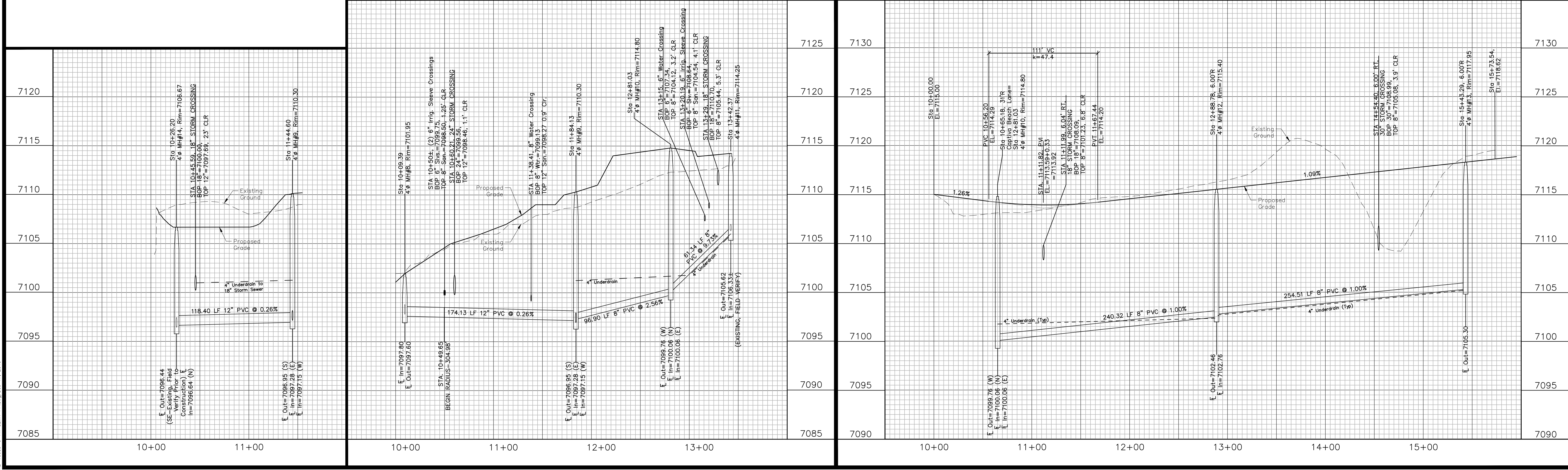
SANITARY SEWER LINE DATA

Rearing	Distance
⑧ N 0°00'00" E	118.40'
⑨ N 67°26'25" E	40.27'
⑩ Δ=25°15'47", R=304.98', 134.47'-ARC	
⑪ N 89°49'48" E	96.90'
⑫ N 0°00'00" E	61.34'
⑬ N 89°50'04" E	240.32'
⑭ N 89°50'15" E	254.51'

WOODMOOR WATER & SANITATION DISTRICT NO. 1
 APPROVED FOR CONSTRUCTION

Date: _____ By: _____

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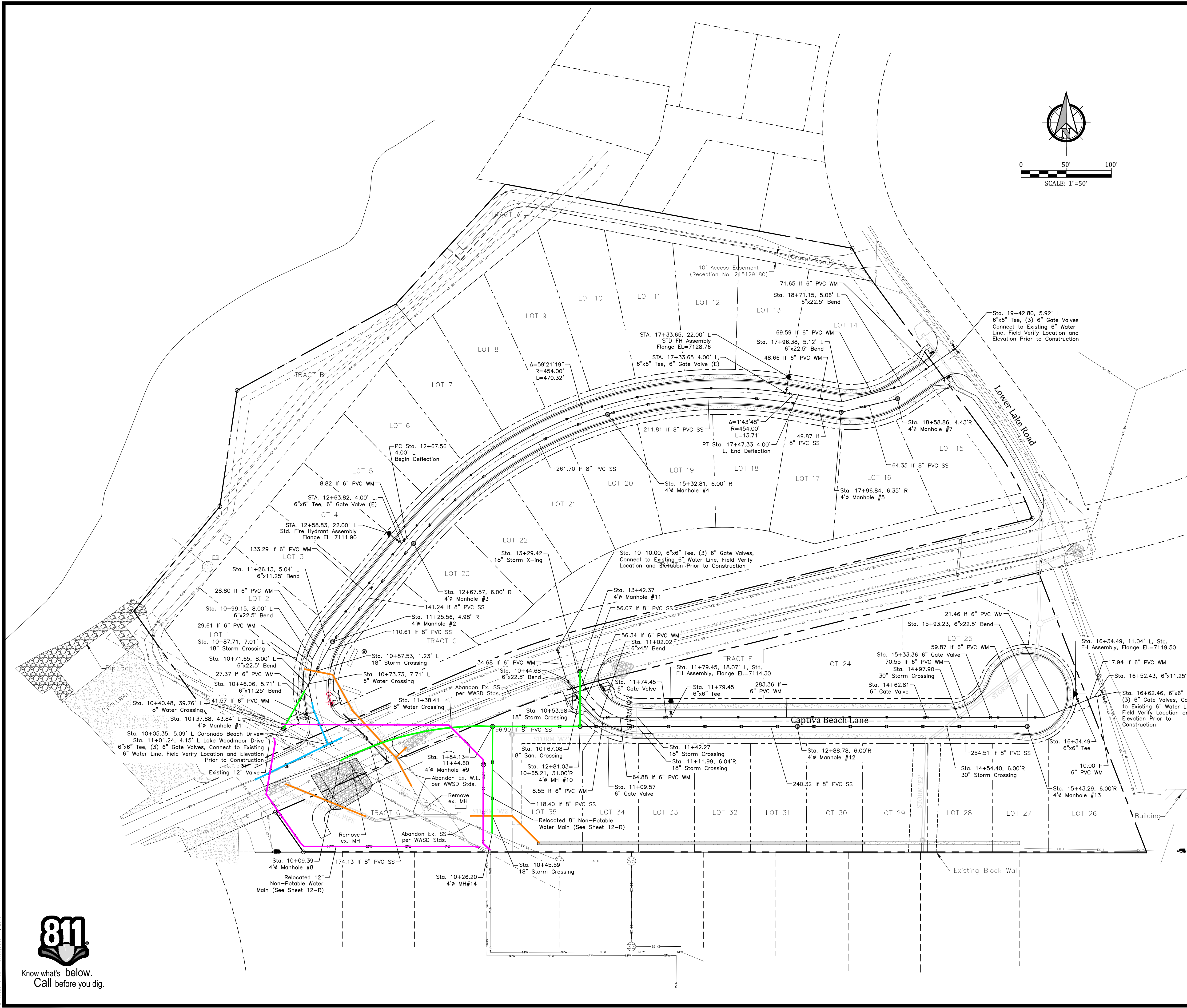


Project No.: 16059
 Date: October 24, 2018
 Design: JAK
 Drawn: JAK
 Check: AWWC
 Revisions: 2 - 10/24/18 Grading
 3 - 1/28/19 Grading/Utilities
 4 - 3/12/19 Sanitary Sewer
 5 - 3/26/19 WWS Comments
 6 - 4/24/19 WWS Comments

The Beach at Woodmoor Filing No. 1
Utility System Plan
El Paso County, Colorado

Project No.:	16059
Date:	October 24, 2018
Design:	JAK
Drawn:	JAK
Check:	AWMc
Revisions:	10/24/18 Grading 1/22/19 Water Mains 3/26/19 WWSD Comments 4/24/19 WWSD Comments
Sheet	

9-R-AB



LEGEND

- Sanitary Sewer Manhole
- Water Manhole
- Water Valve
- Fire Hydrant
- Well
- Electric Transformer
- Electric Vault
- Electric Box
- Electric Pedestal
- Utility Pole
- Guy Anchor
- Telephone Pedestal
- Sanitary Sewer Line
- Water Line
- Existing Electric Line
- Existing Telephone Line (Underground)
- Existing Telephone Line (Overhead)
- Concrete Area

- PRE-EXCAVATION CHECKLIST**
- Gas and other utility lines of record shown on the plans.
 - Utilities Central Locating called at least 2 business days ahead. (1-800-922-1987)
 - Utilities located and marked.
 - Employees briefed on marking and color codes.*
 - Employees trained on excavation and safety procedures for natural gas lines.
 - When excavation approaches gas lines, employees expose lines by careful probing and hand digging.

***A.G.A./A.P.W.A. STANDARD UTILITY MARKING COLOR CODE**

Natural Gas	Yellow
Electric	Red
Water	Blue
Wastewater	Green

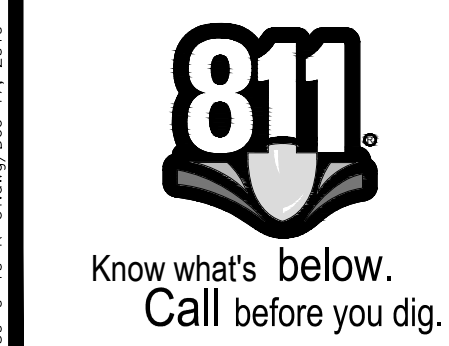
- WATER FIELD RECORD DATA
- WASTEWATER FIELD RECORD DATA
- NOTPOTABLE WATER FIELD RECORD DATA
- STORMWATER FIELD RECORD DATA

Engineering Record Drawing (As-Built)
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WOODMOOR WATER & SANITATION DISTRICT NO. 1
APPROVED FOR CONSTRUCTION

Date: 01/29/19 By: *Jeff Hepler*

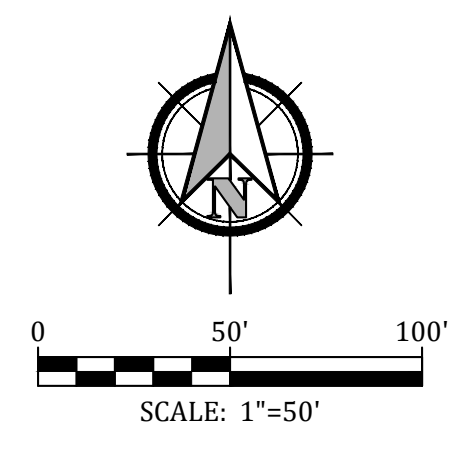
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The Beach at Woodmoor No. 1
Utility Services Plan
El Paso County, Colorado

Project No.:	16059
Date:	October 24, 2018
Design:	JAK
Drawn:	JAK
Check:	AWMc
Revisions:	1/28/19 Services
	3/12/19 Services Lots 35,34,&28
	3/26/19 WWSD Comments
	4/24/19 WWSD Comments

Sheet
10-R-AB



LEGEND

	Sanitary Sewer Manhole
	Water Manhole
	Water Valve
	Fire Hydrant
	Well
	Electric Transformer
	Electric Vault
	Electric Box
	Electric Pedestal
	Utility Pole
	Guy Anchor
	Telephone Pedestal
	Sanitary Sewer Line
	Water Line
	Existing Electric Line
	Existing Telephone Line (Underground)
	Existing Telephone Line (Overhead)
	Concrete Area

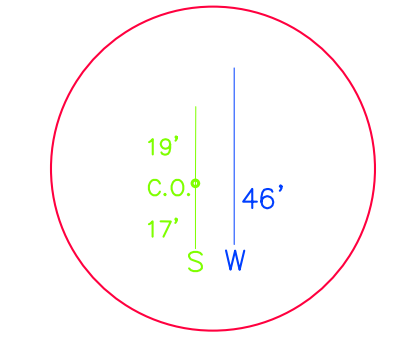
- Notes:**
1. Install water and wastewater service per Details G-5, G-6, G-7, and G-8 of the Woodmoor Water and Sanitation District No. 1 Systems Specifications.
 2. Provide metal T-post at curb stop when construction of the water service stubout is completed.
 3. Provide metal T-post at cleanout when construction of the wastewater service stubout is completed.

PRE-EXCAVATION CHECKLIST

- Gas and other utility lines of record shown on the plans.
- Utilities Central Locating called at least 2 business days ahead. (1-800-922-1987)
- Utilities located and marked.
- Employees briefed on marking and color codes.*
- Employees trained on excavation and safety procedures for natural gas lines.
- When excavation approaches gas lines, employees expose lines by careful probing and hand digging.

***A.G.A./A.P.W.A. STANDARD UTILITY MARKING COLOR CODE**

Natural Gas	Yellow
Electric	Red
Water	Blue
Wastewater	Green



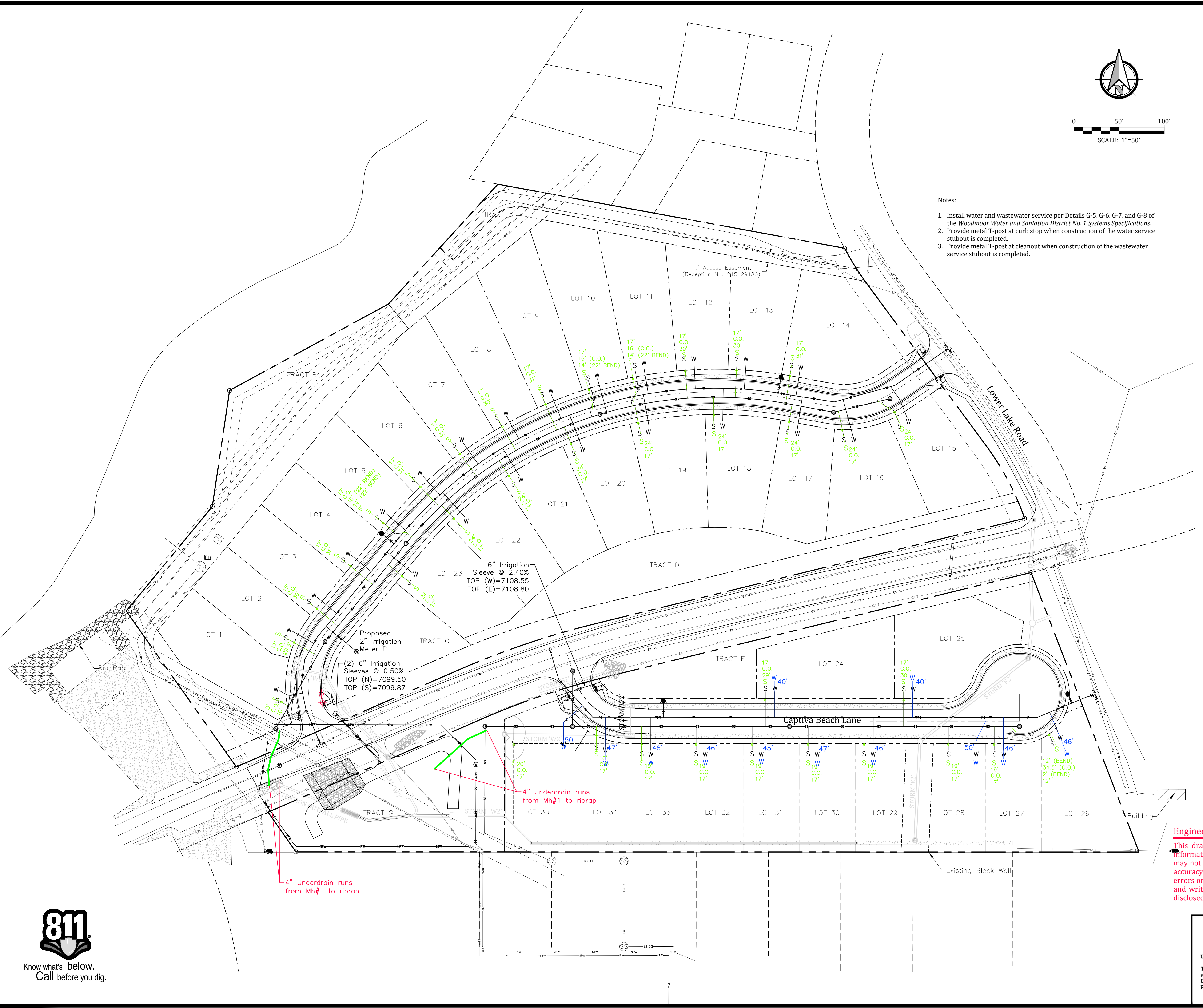
Engineering Record Drawing (As-Built)

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WOODMOOR WATER & SANITATION DISTRICT NO. 1
APPROVED FOR CONSTRUCTION

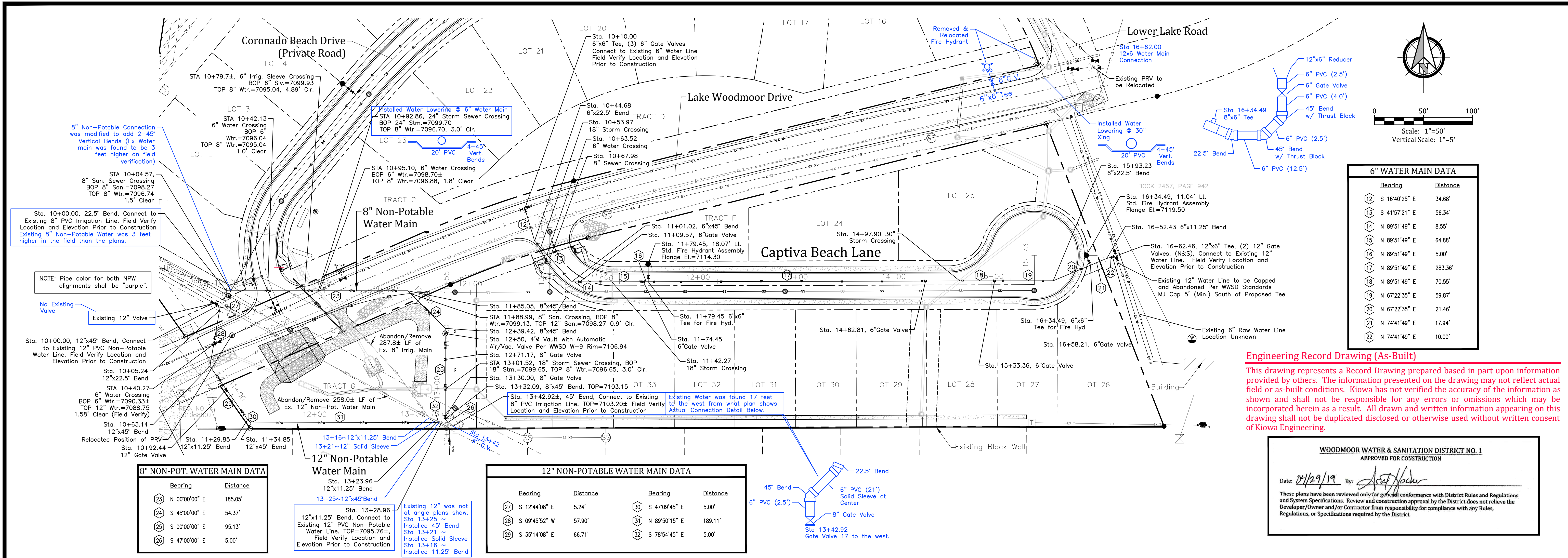
Date: 04/29/19 By: *David Hicken*

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AB-16059-9-10-R-10-UT-Rev7/Dec 17, 2019





6" WATER MAIN DATA

Bearing	Distance
12 S 16°40'25" E	34.68'
13 S 41°57'21" E	56.34'
14 N 89°51'49" E	8.55'
15 N 89°51'49" E	64.88'
16 N 89°51'49" E	5.00'
17 N 89°51'49" E	283.36'
18 N 89°51'49" E	70.55'
19 N 67°22'35" E	59.87'
20 N 67°22'35" E	21.46'
21 N 74°41'49" E	17.94'
22 N 74°41'49" E	10.00'

8" NON-POT. WATER MAIN DATA

Bearing	Distance
23 N 0°00'00" E	185.05'
24 S 45°00'00" E	54.37'
25 S 0°00'00" E	95.13'
26 S 47°00'00" E	5.00'

12" NON-POTABLE WATER MAIN DATA

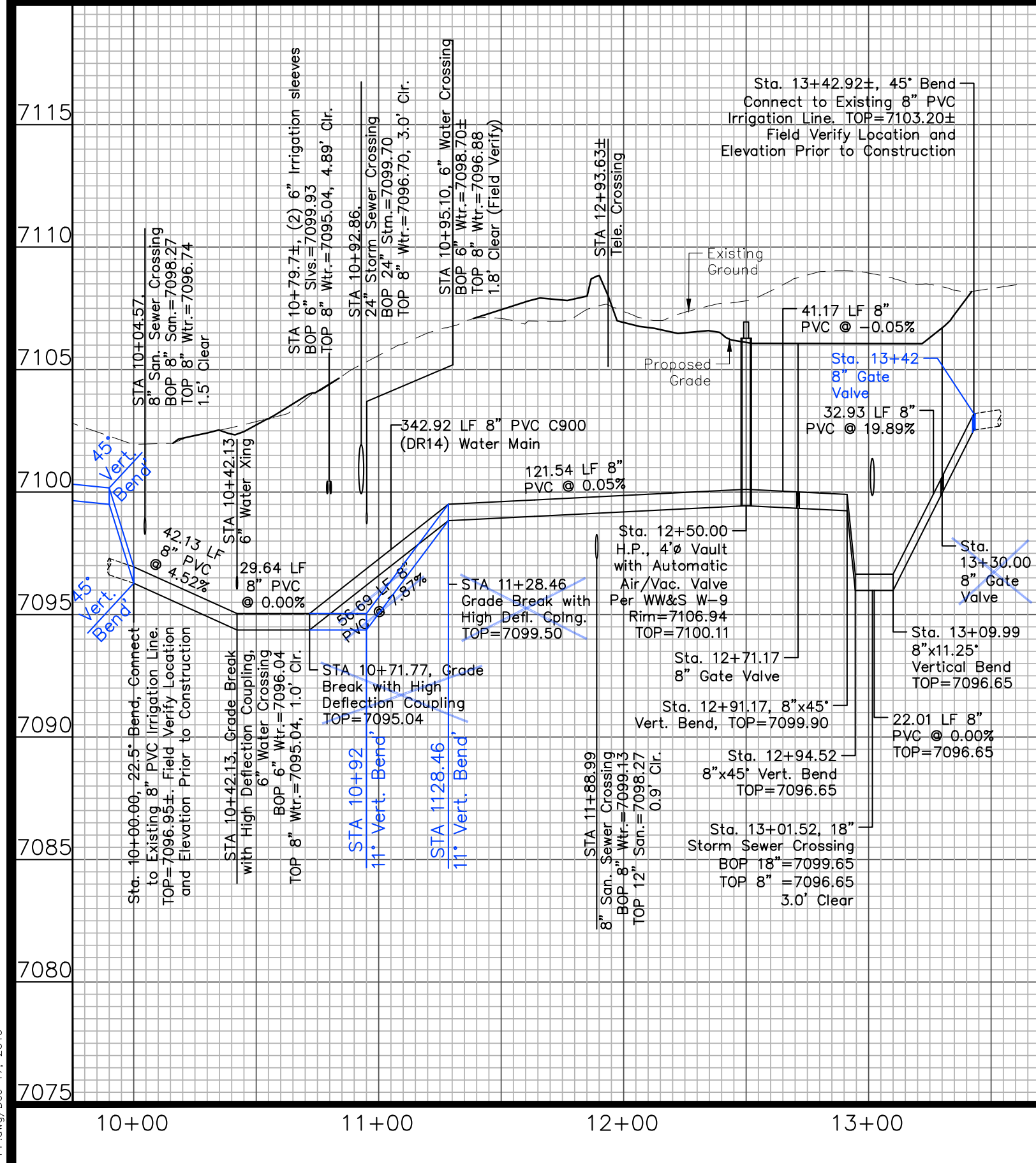
Bearing	Distance	Bearing	Distance
27 S 12°44'08" E	524'	30 S 47°09'45" E	5.00'
28 S 09°45'52" W	57.90'	31 N 89°50'15" E	189.11'
29 S 35°14'08" E	66.71'	32 S 78°54'45" E	5.00'

Engineering Record Drawing (As-Built)
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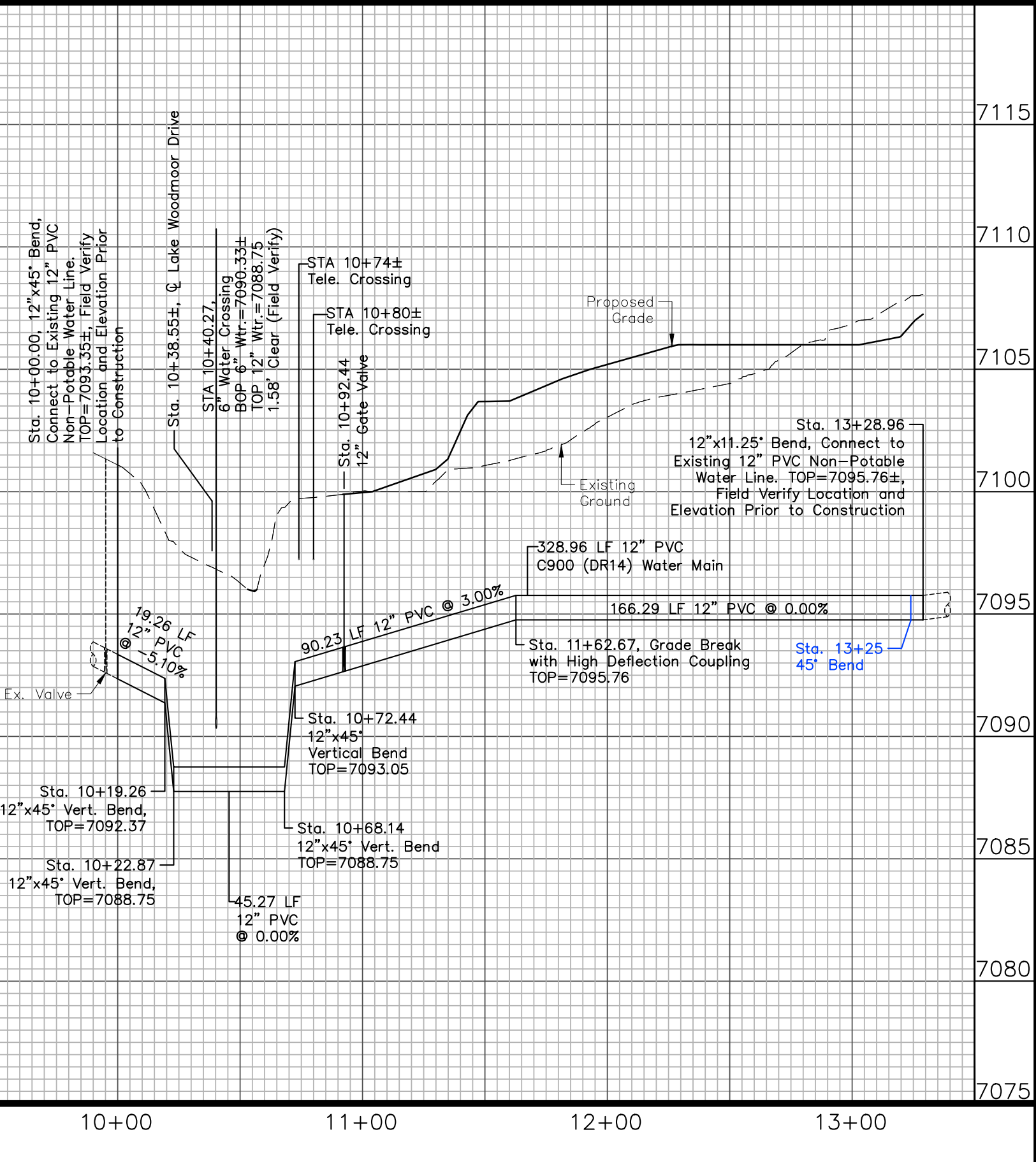
WOODMOOR WATER & SANITATION DISTRICT NO. 1
APPROVED FOR CONSTRUCTION

Date: 04/29/19 By: *[Signature]*

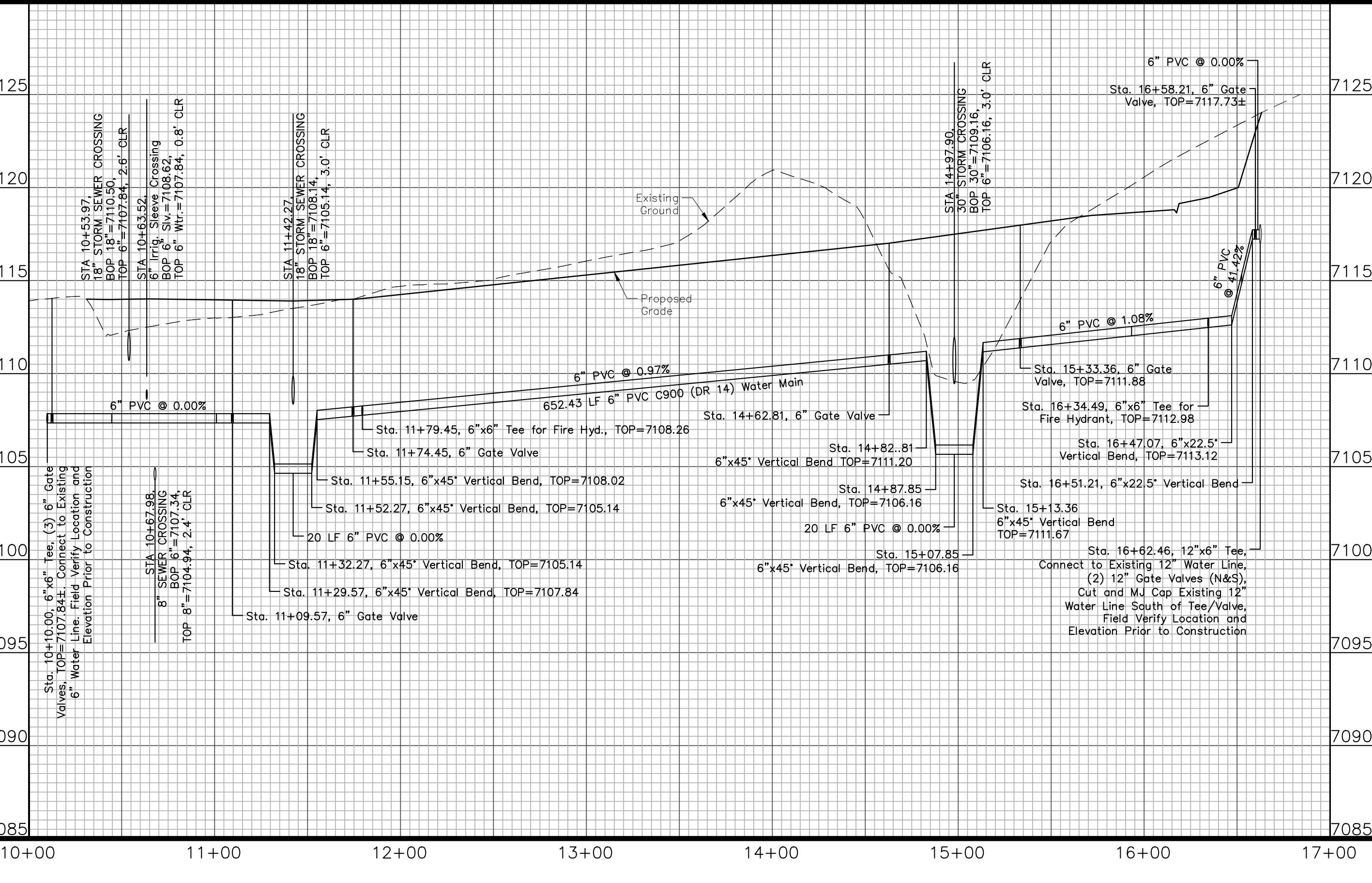
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8" NON-POTABLE MAIN



12" NON-POTABLE WATER MAIN



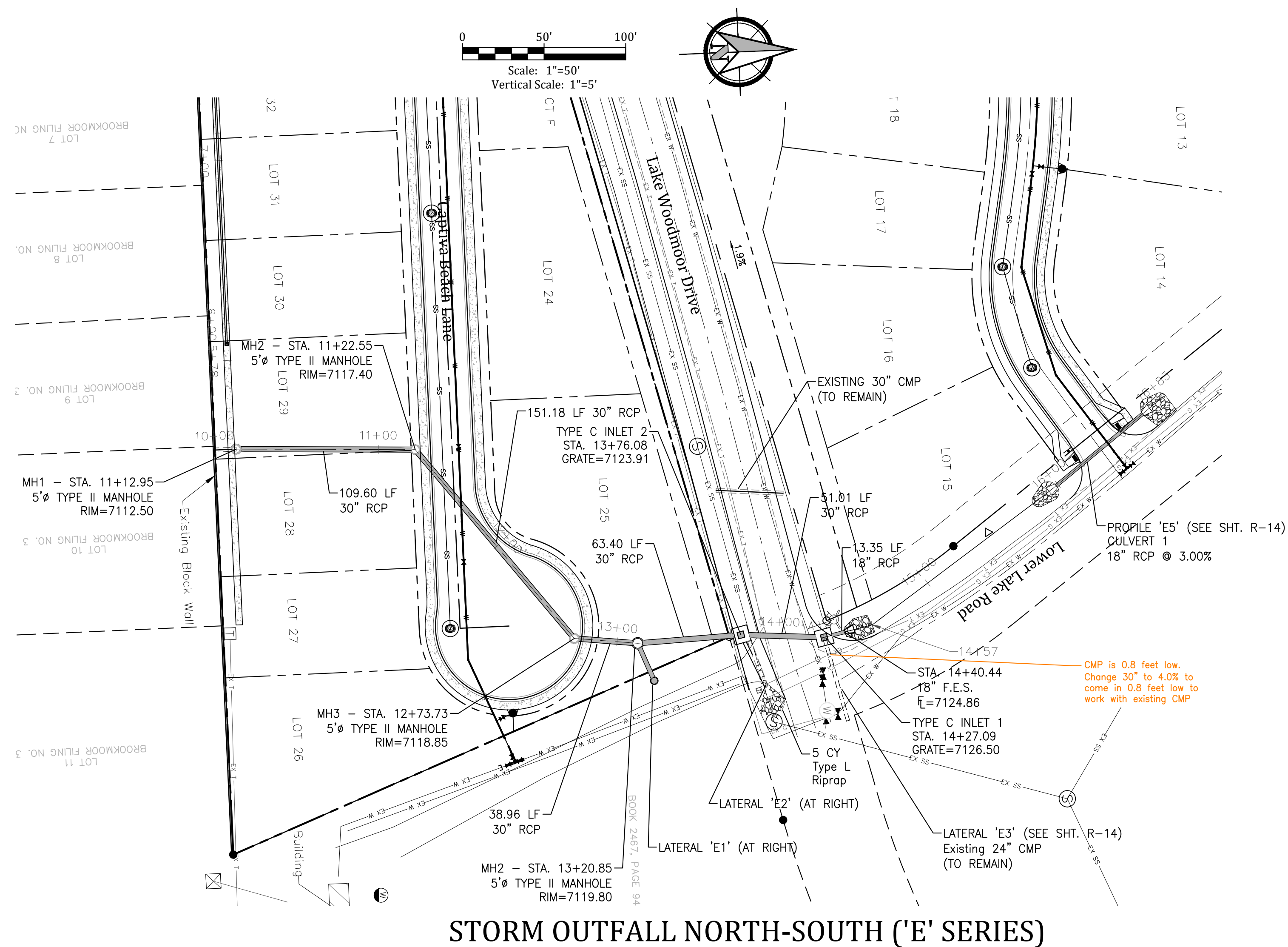
6" WATER MAIN - CAPTIVA BEACH LANE

The Beach at Woodmoor Filing No. 1
Captiva Beach Lane -- Plan and Profile
Water -- Plan and Profile
El Paso County, Colorado

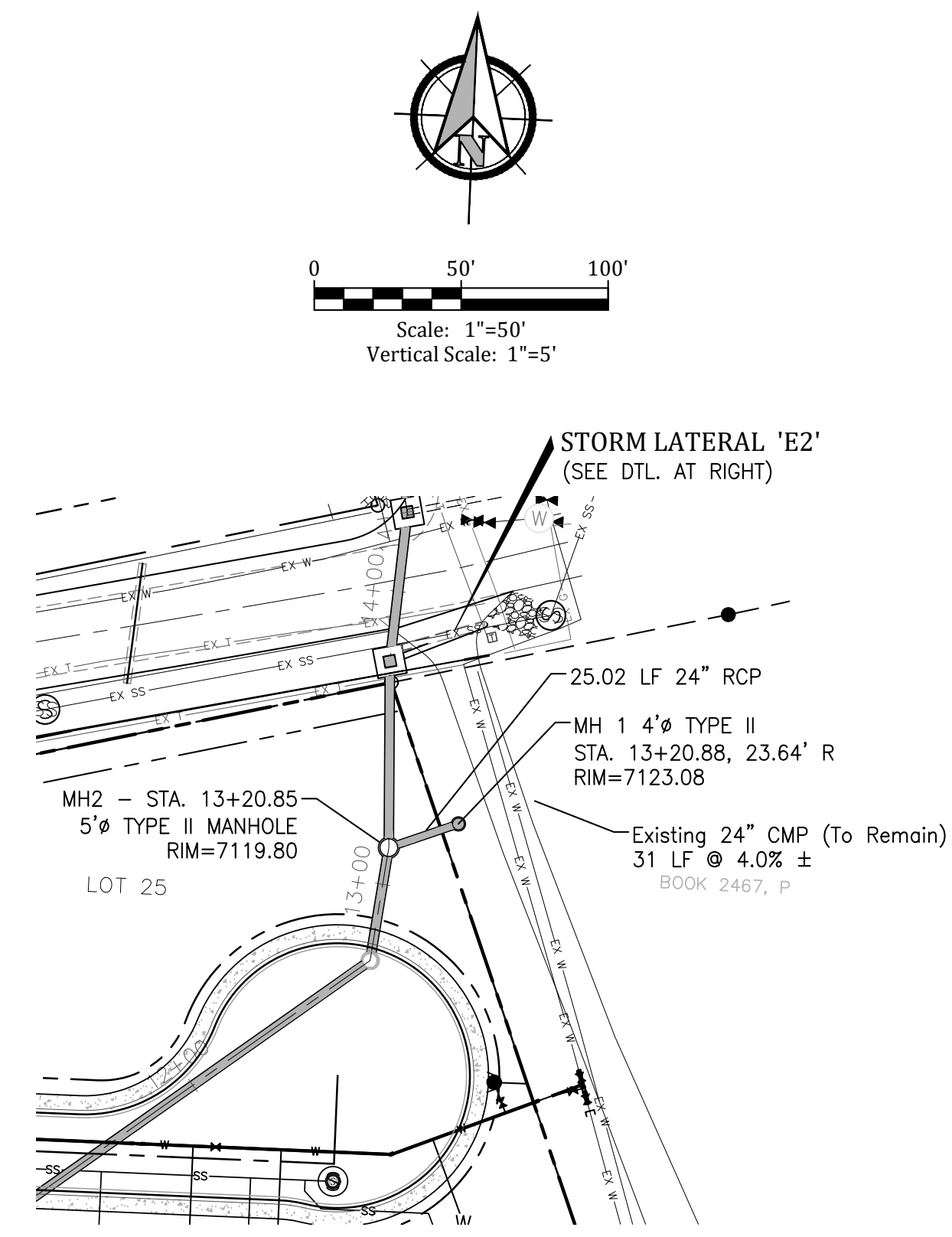
Project No.:	16059
Date:	October 24, 2018
Design:	JAK
Drawn:	JAK
Check:	AWMc
Revisions:	10/2/18 Grading
	1/28/19 6" Water Main, Data
	3/12/19 Irrig. & N.P. Mains
	3/26/19 WWSD Comments
	4/24/19 WWSD Comments

Sheet

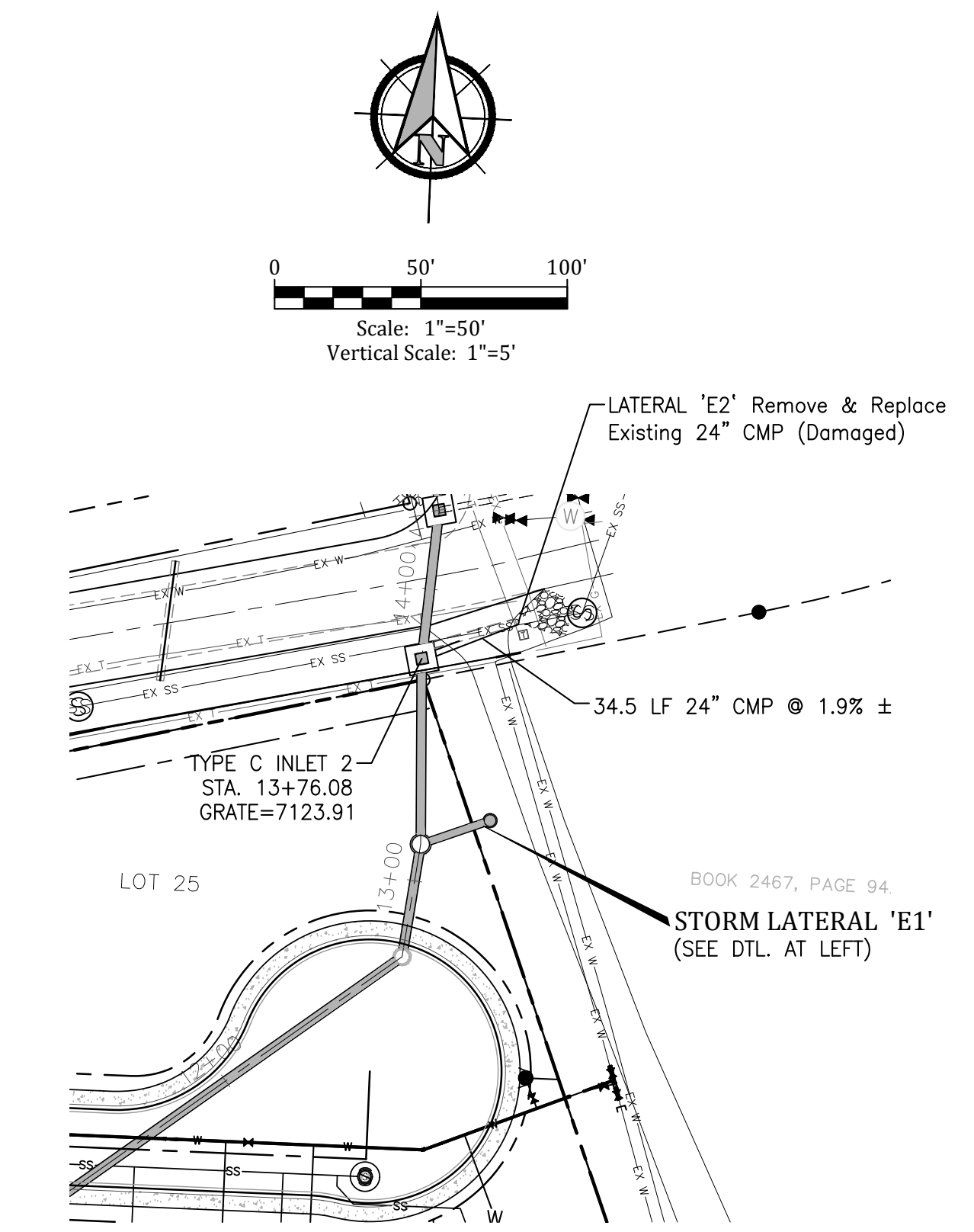
12-R-AB



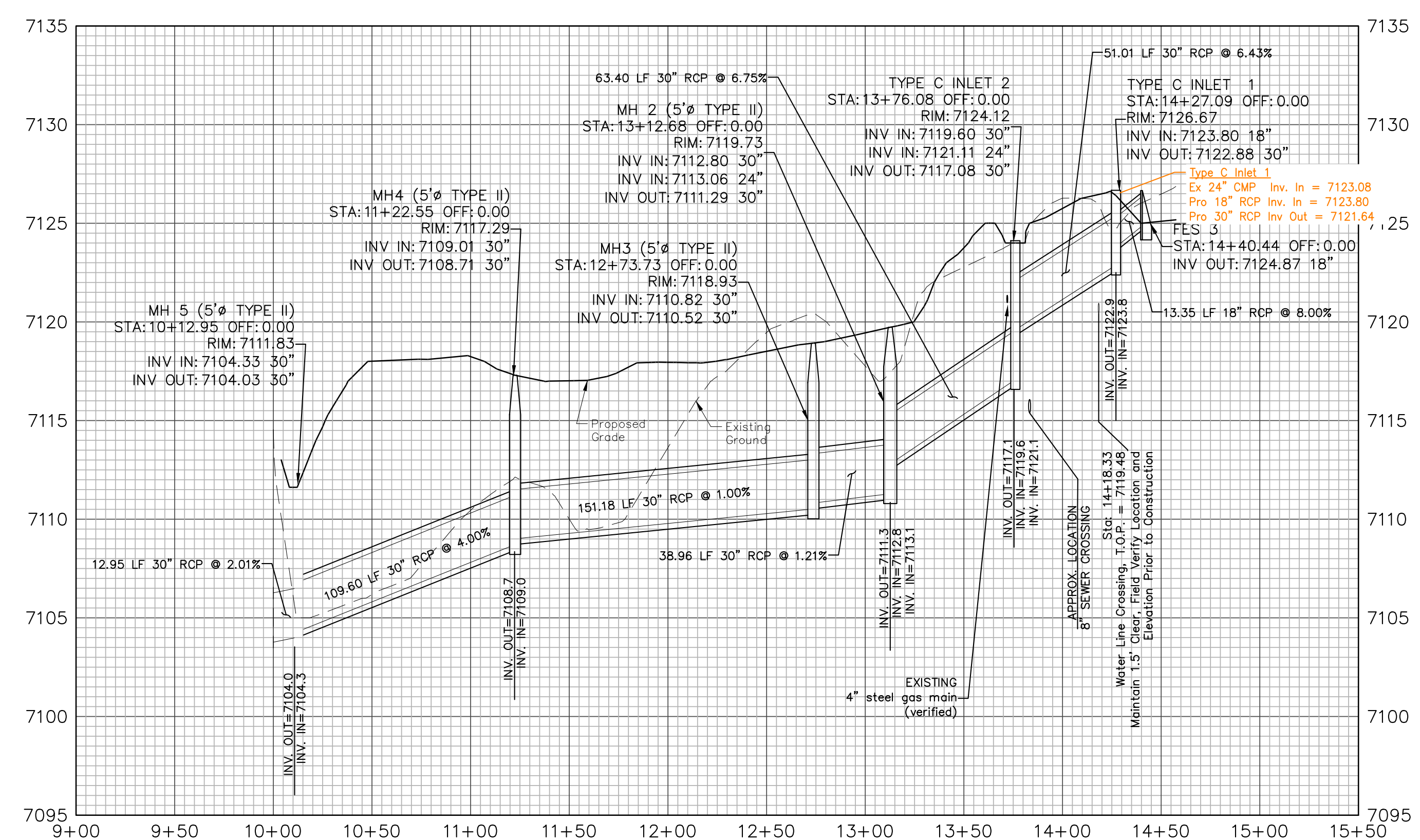
STORM OUTFALL NORTH-SOUTH ('E' SERIES)



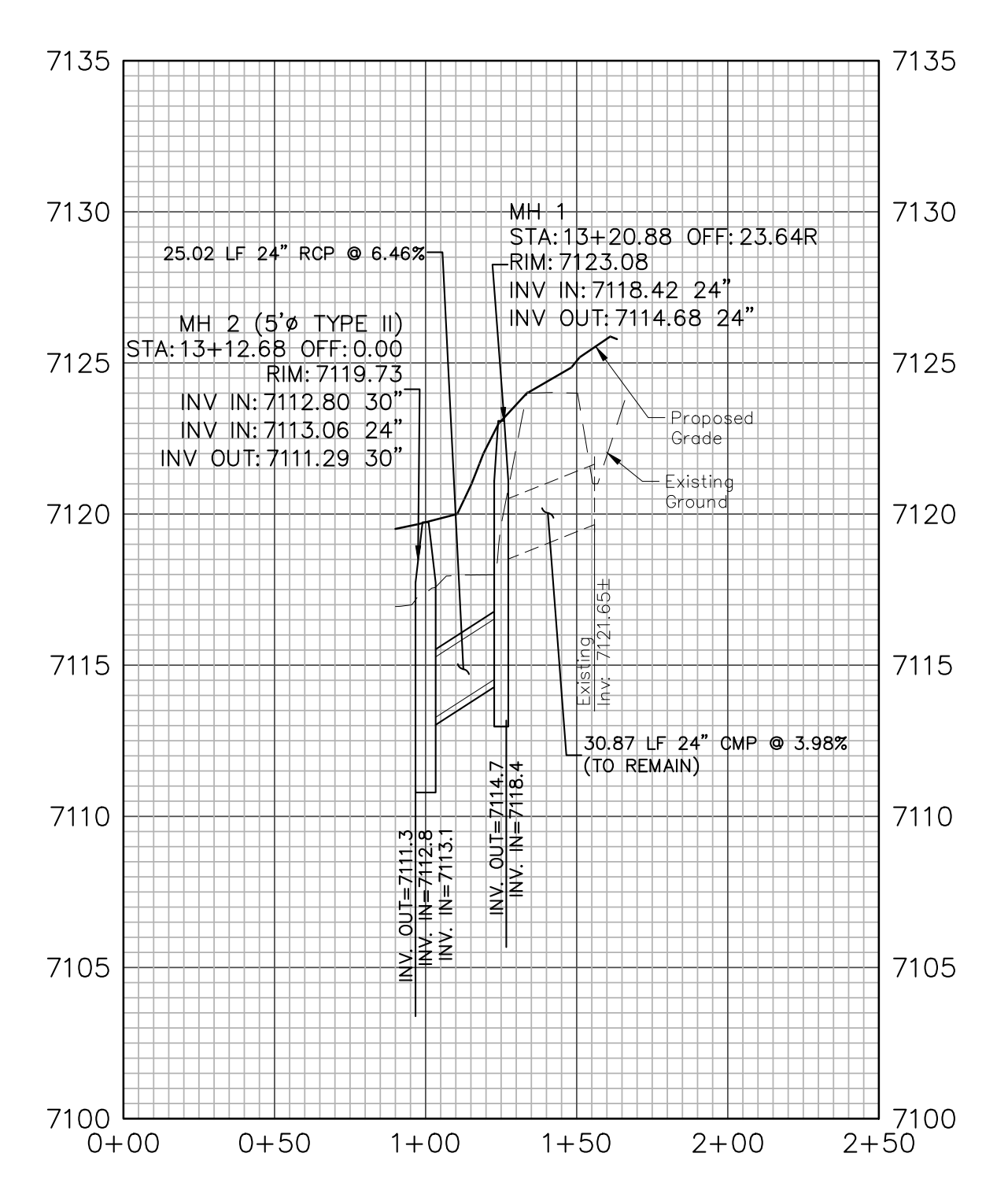
STORM LATERAL 'E1' - PUBLIC



STORM LATERAL 'E2' - PUBLIC



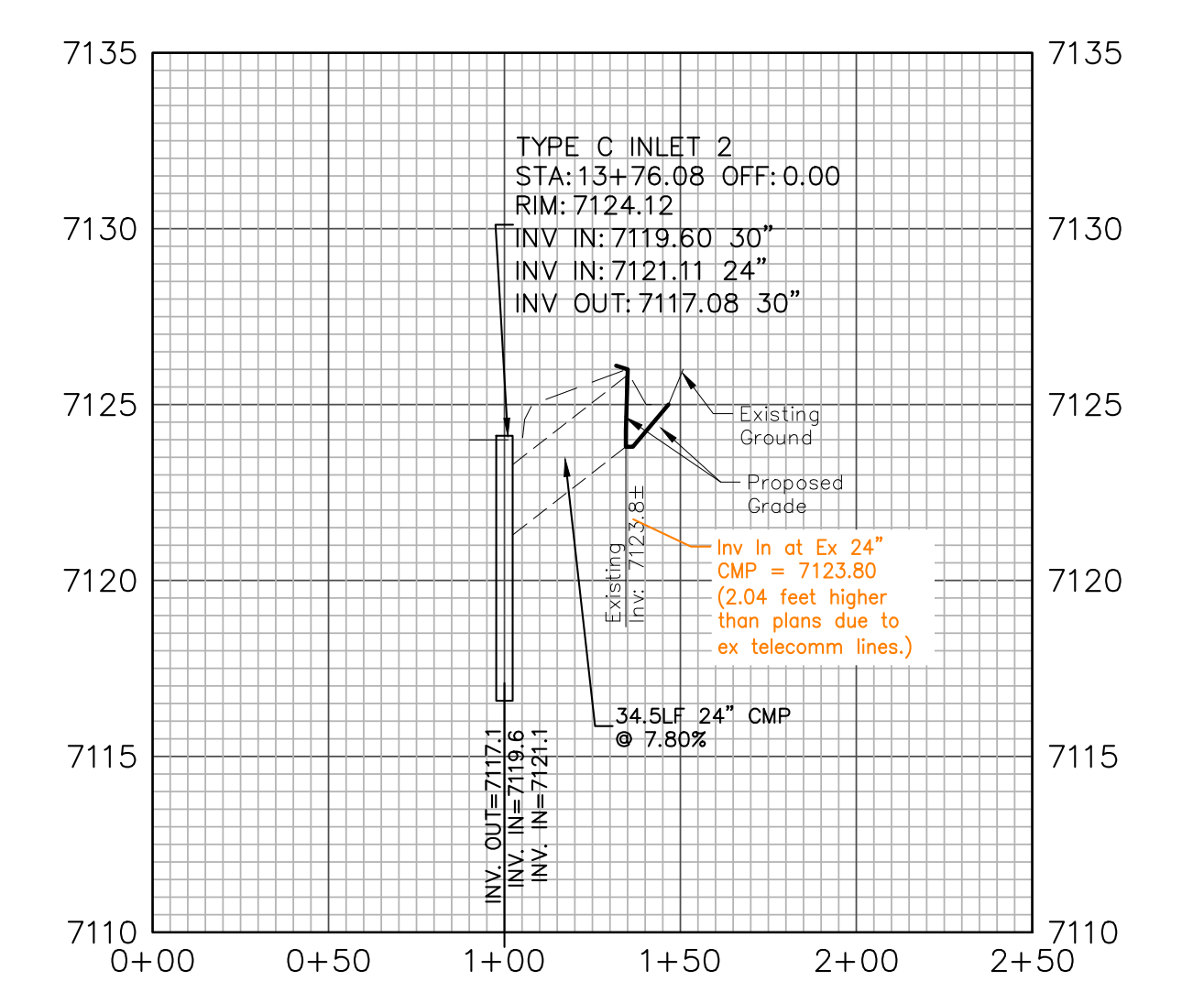
STORM OUTFALL NORTH-SOUTH ('E' SERIES)



STORM LATERAL 'E1' PROFILE - PUBLIC

Engineering Record Drawing (As-Built)

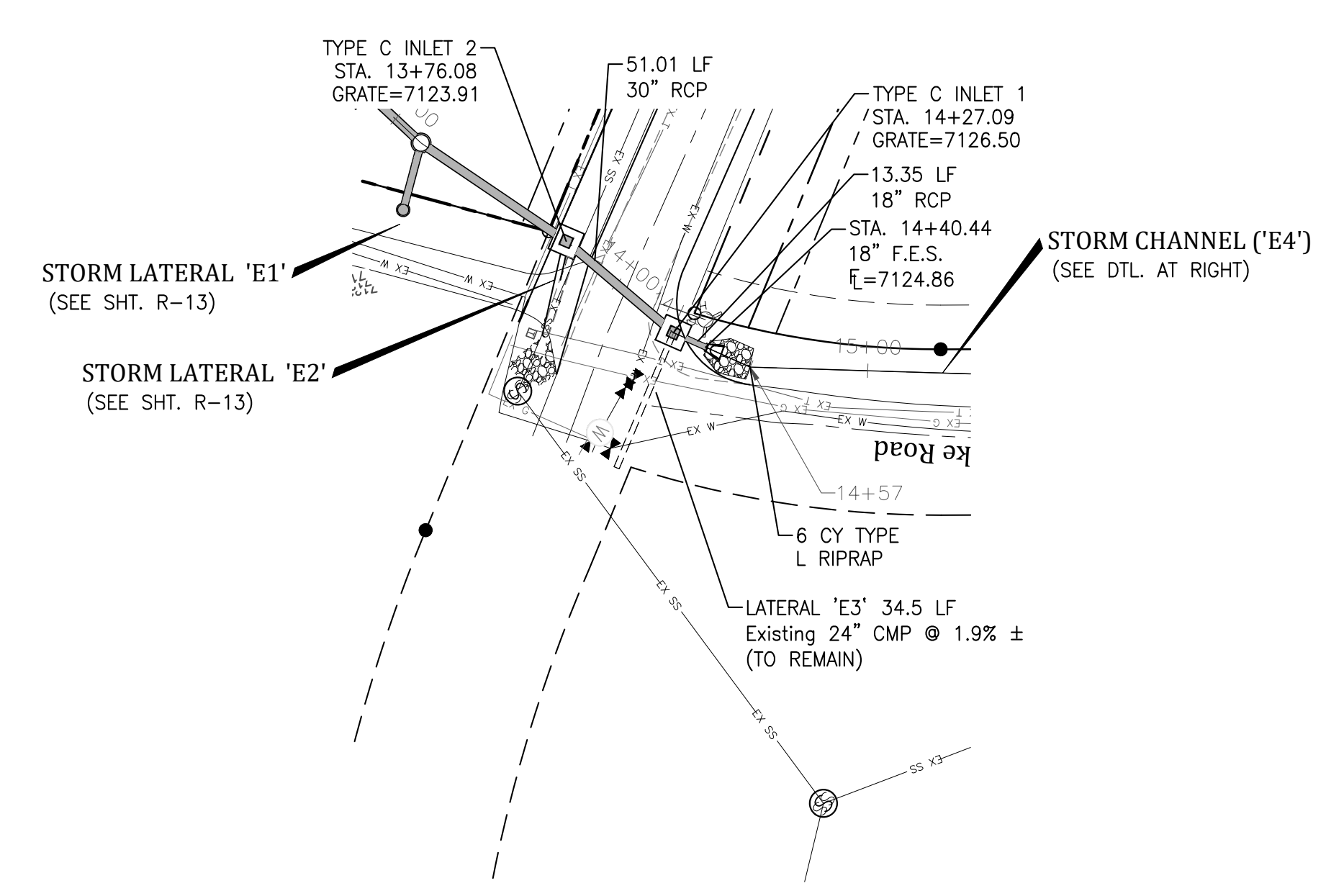
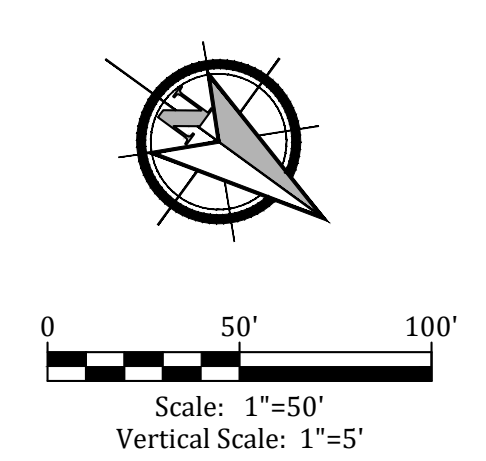
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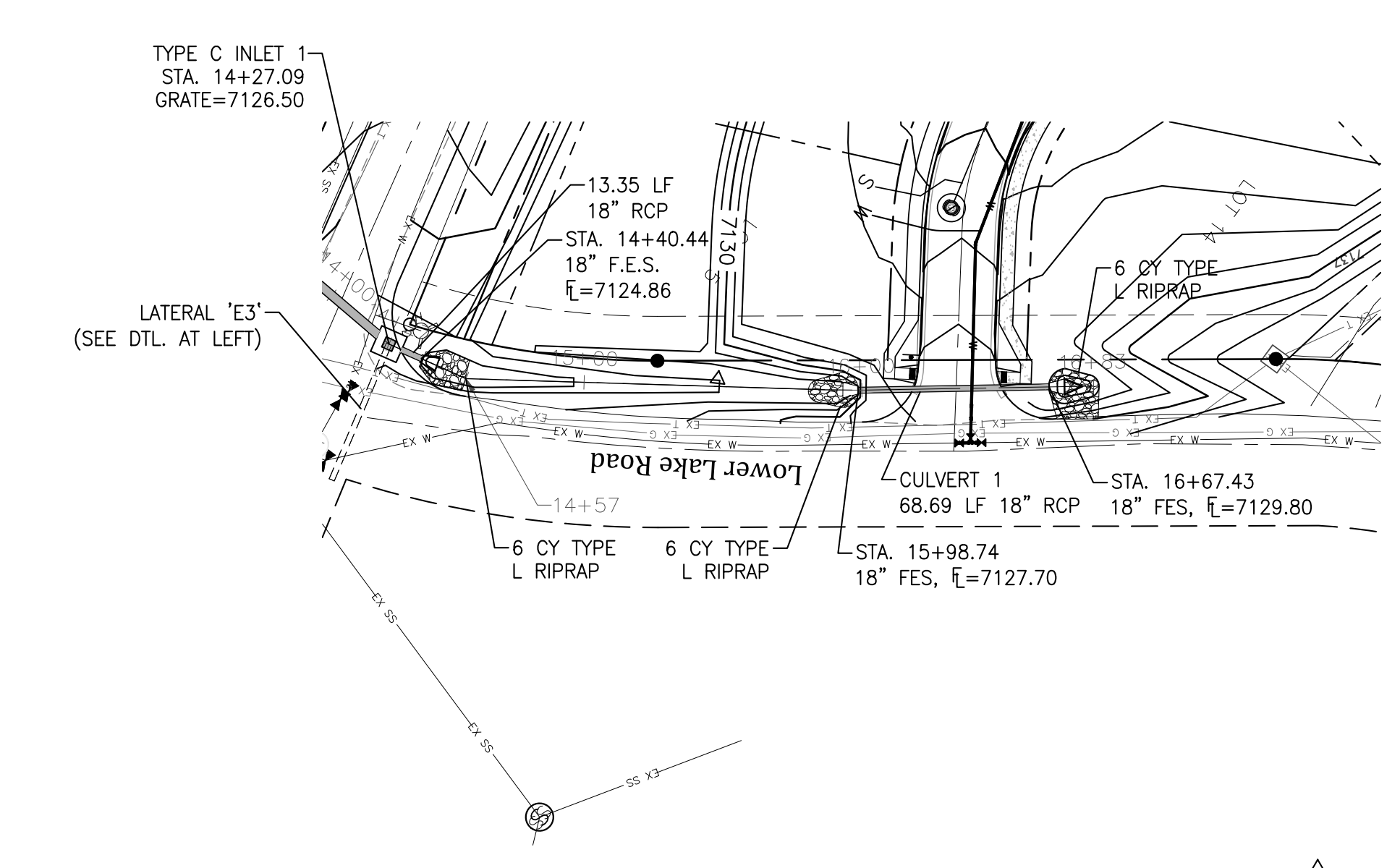
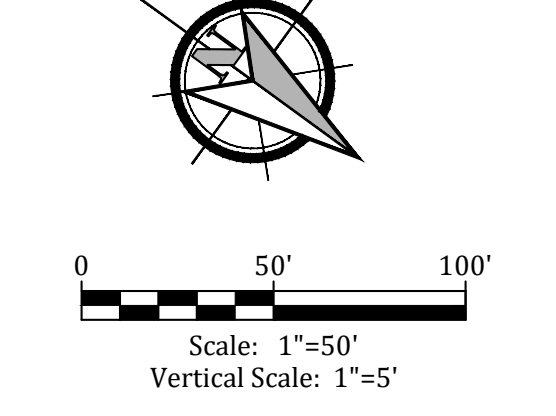
STORM LATERAL 'E2' PROFILE - PUBLIC

APPROVED
Engineering Department
09/03/2019 3:16:17 AM
Kednjikang
EPC Planning & Community
Development Department
Please provide as-built
drawings at the end of
the project.

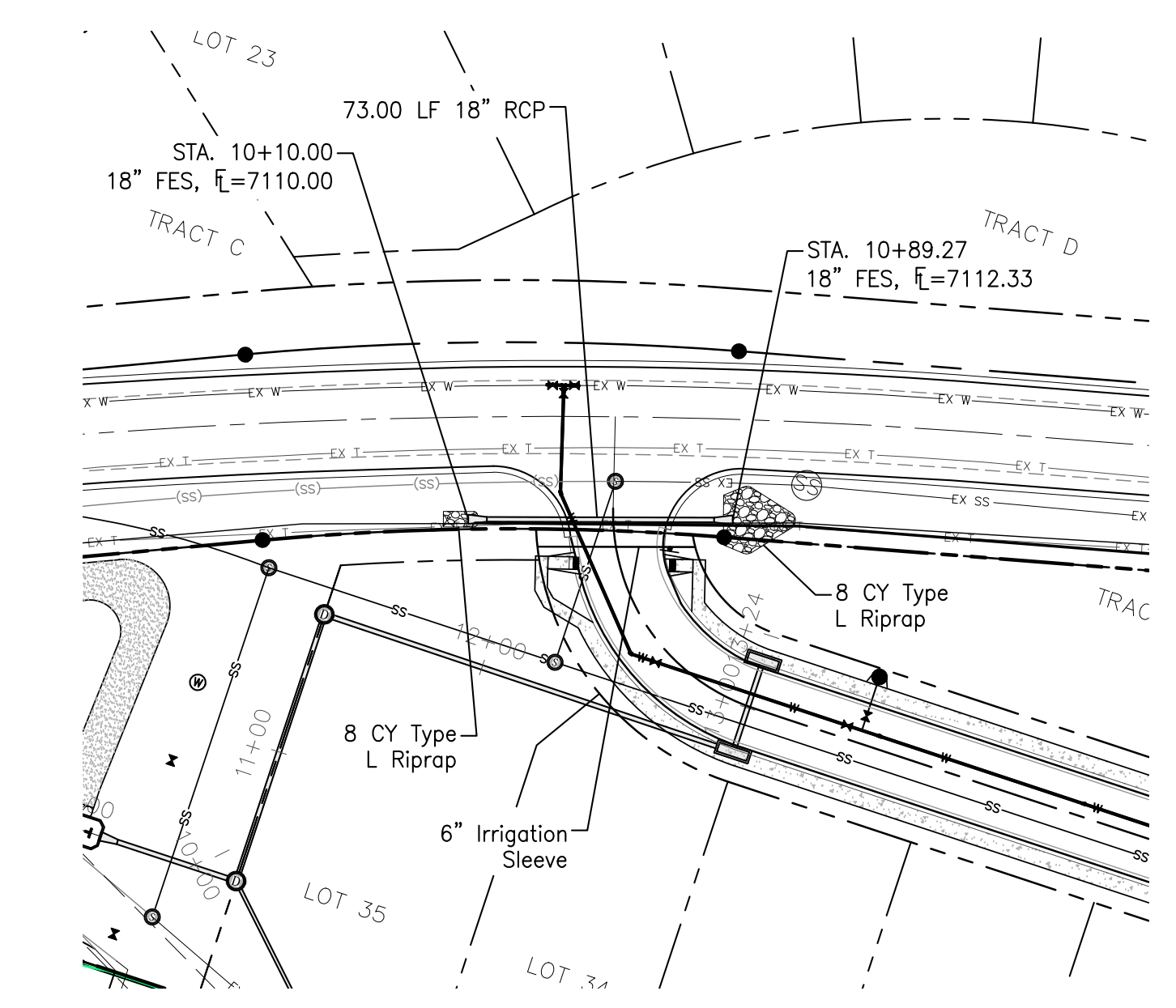
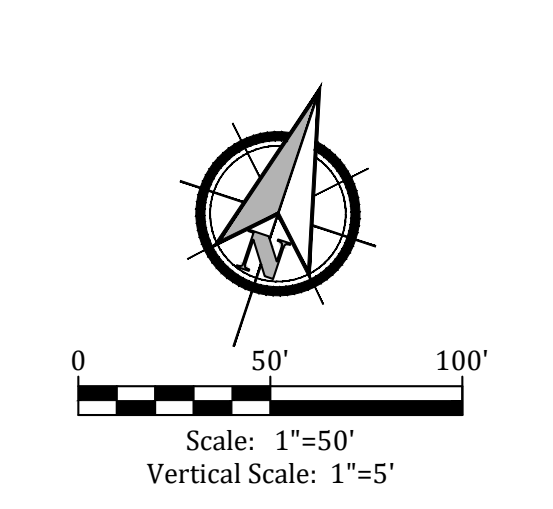
Project No.:	16059
Date:	October 24, 2018
Design:	JAK / MJK
Drawn:	JAK / MJK
Check:	AWMc
Revisions:	2 10/24/18 Grading 3 1/28/19 Storm Sewer 4 8/25/19 Storm Sewer



STORM LATERAL 'E3' - PUBLIC

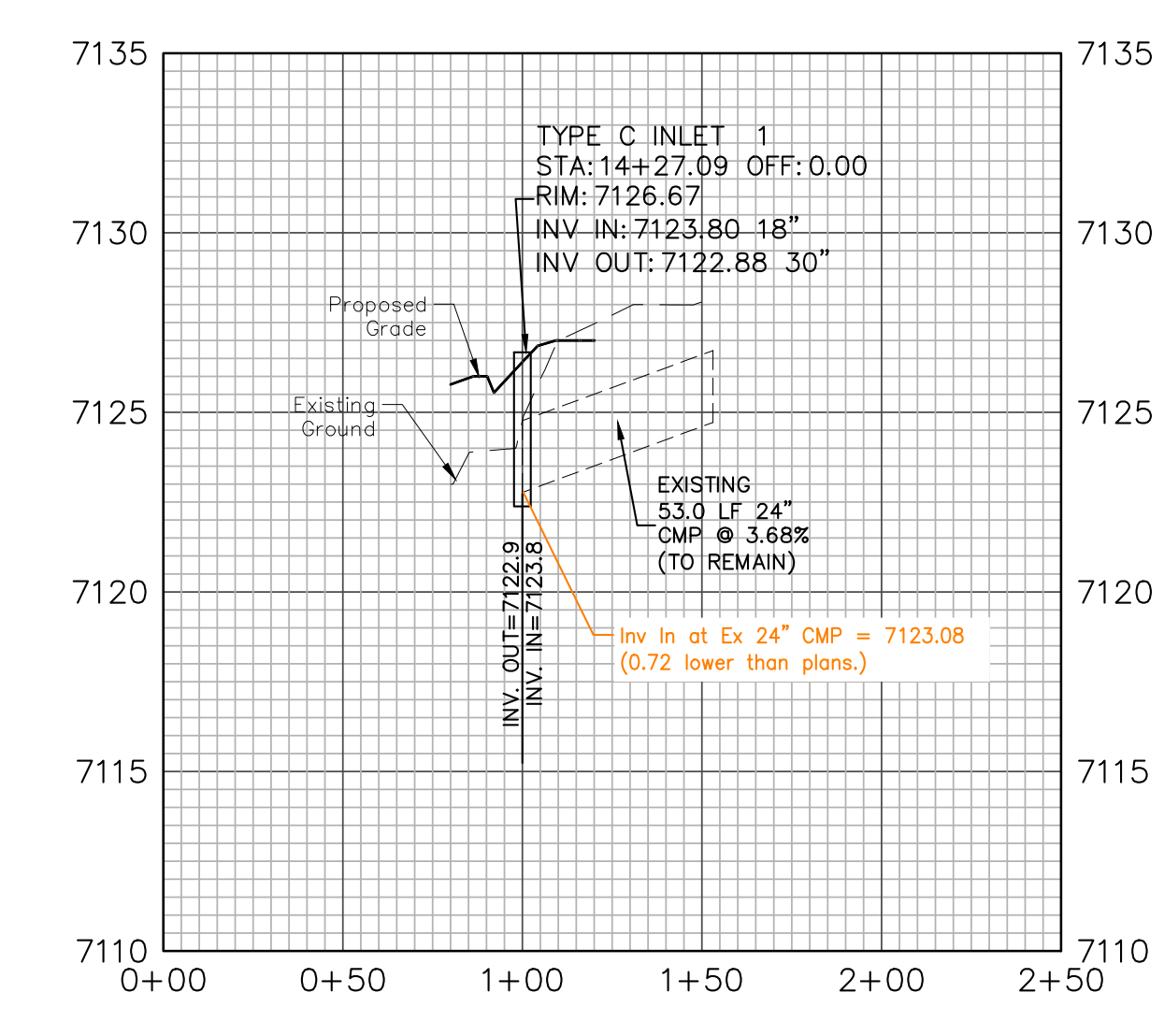


CULVERT 1 & CHANNEL - 'E4' - PUBLIC

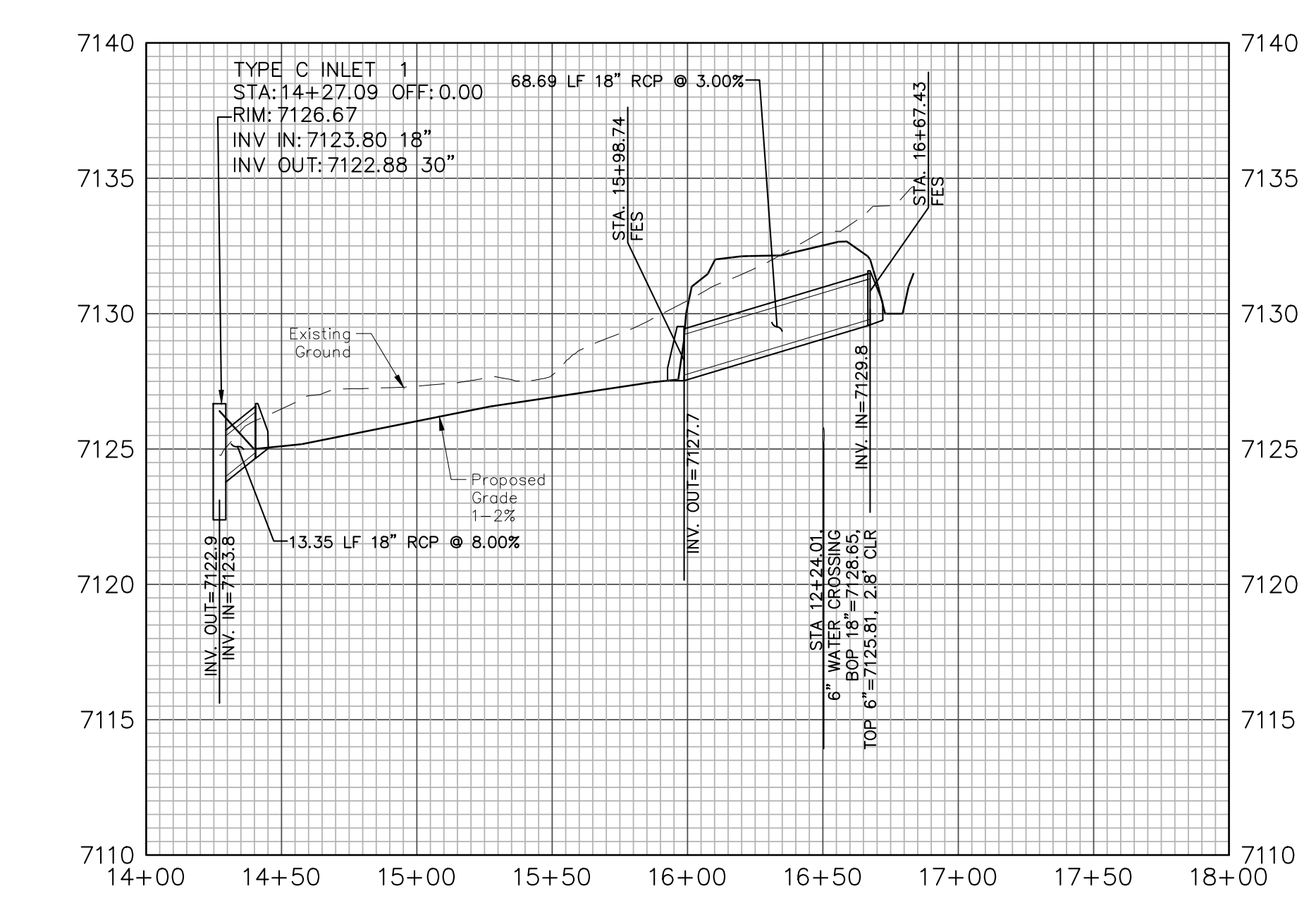


CULVERT - 'S2' - PUBLIC

APPROVED
Engineering Department
09/03/2019 10:34 AM
EPC Planning & Community
Development Department
Please provide as-built
drawings at the end of
the project.

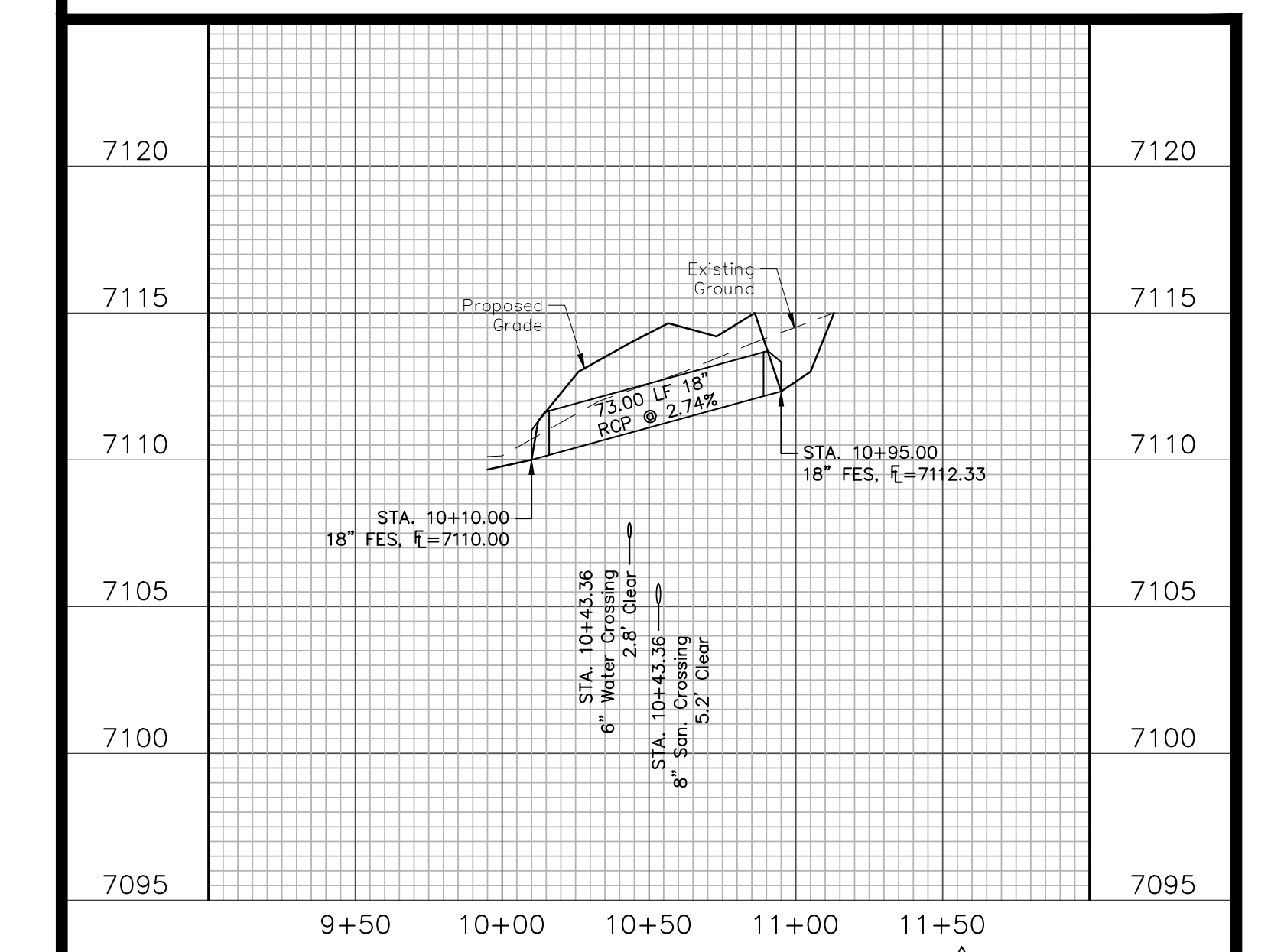


STORM LATERAL 'E3' - PUBLIC



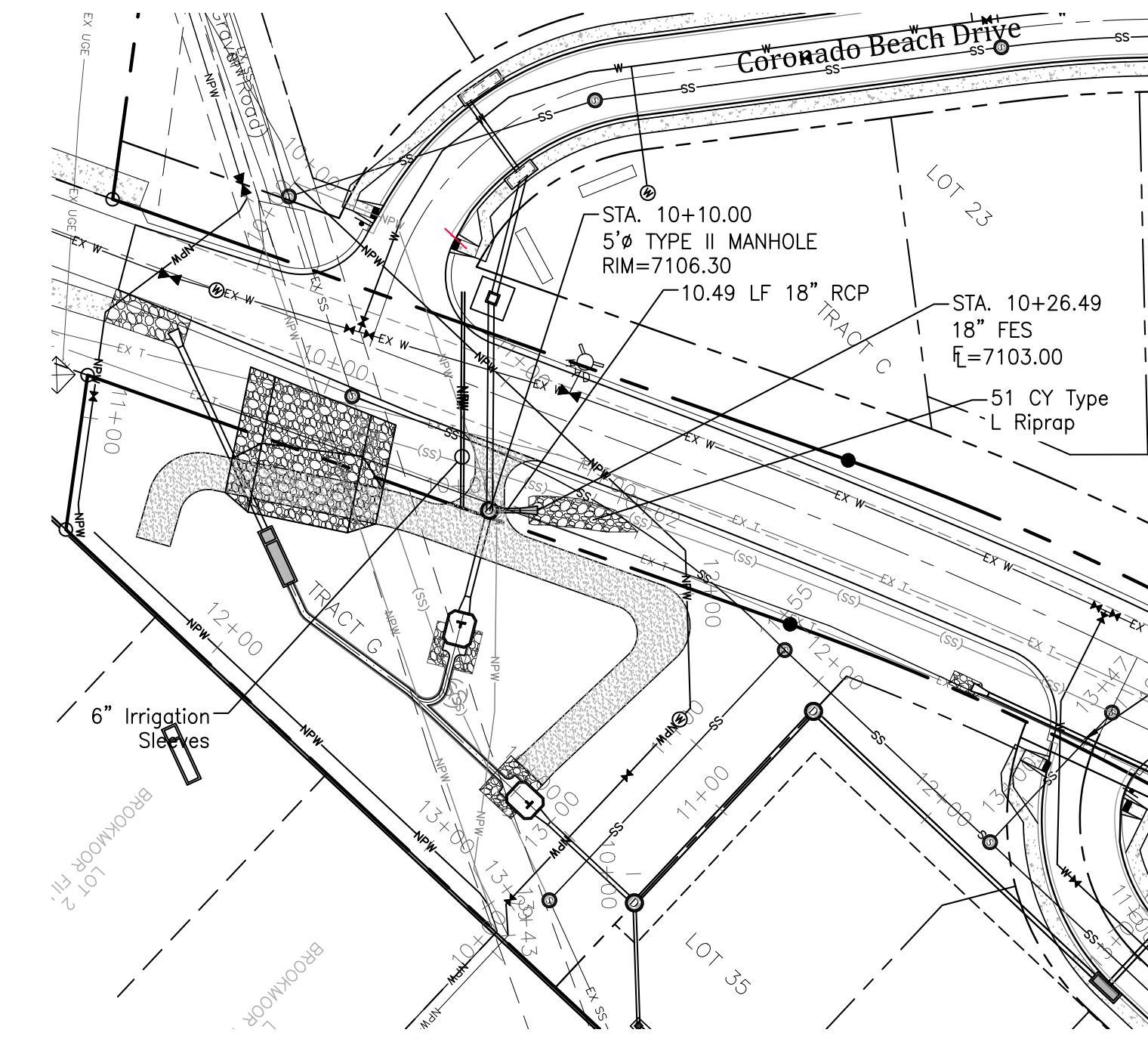
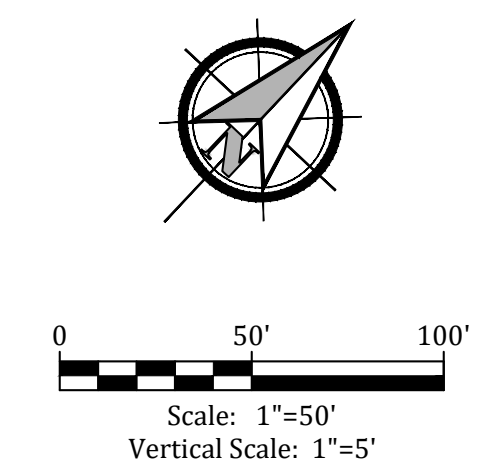
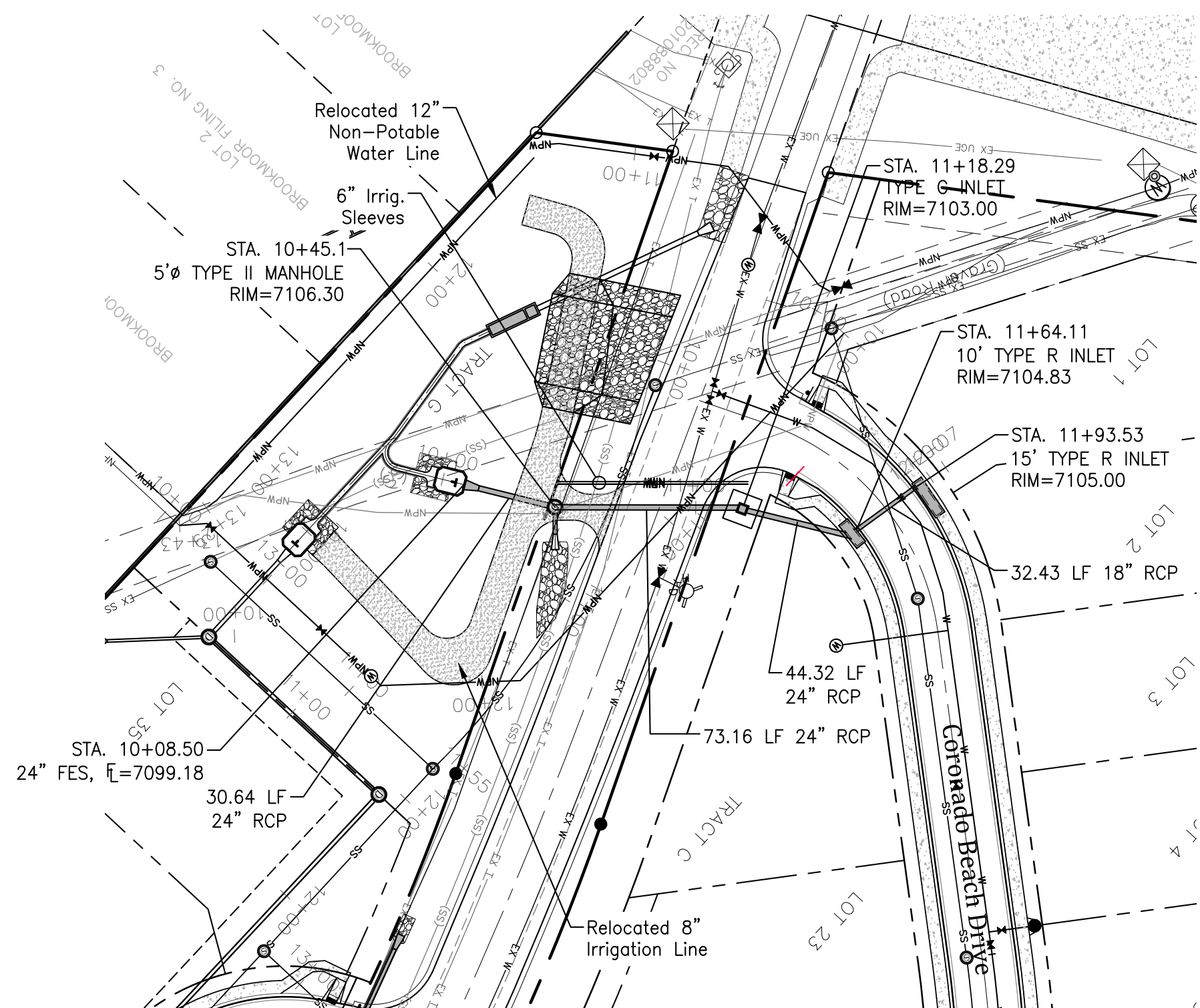
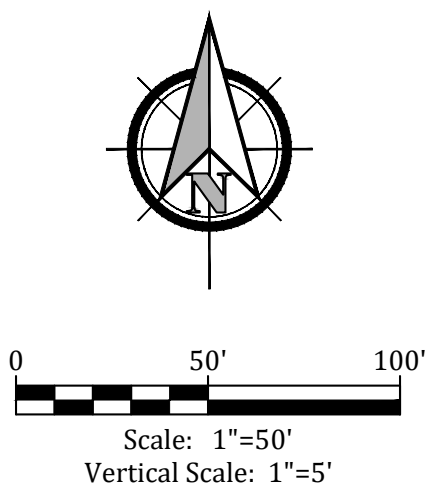
CULVERT 1 & CHANNEL - 'E4' - PUBLIC

Engineering Record Drawing (As-Built)
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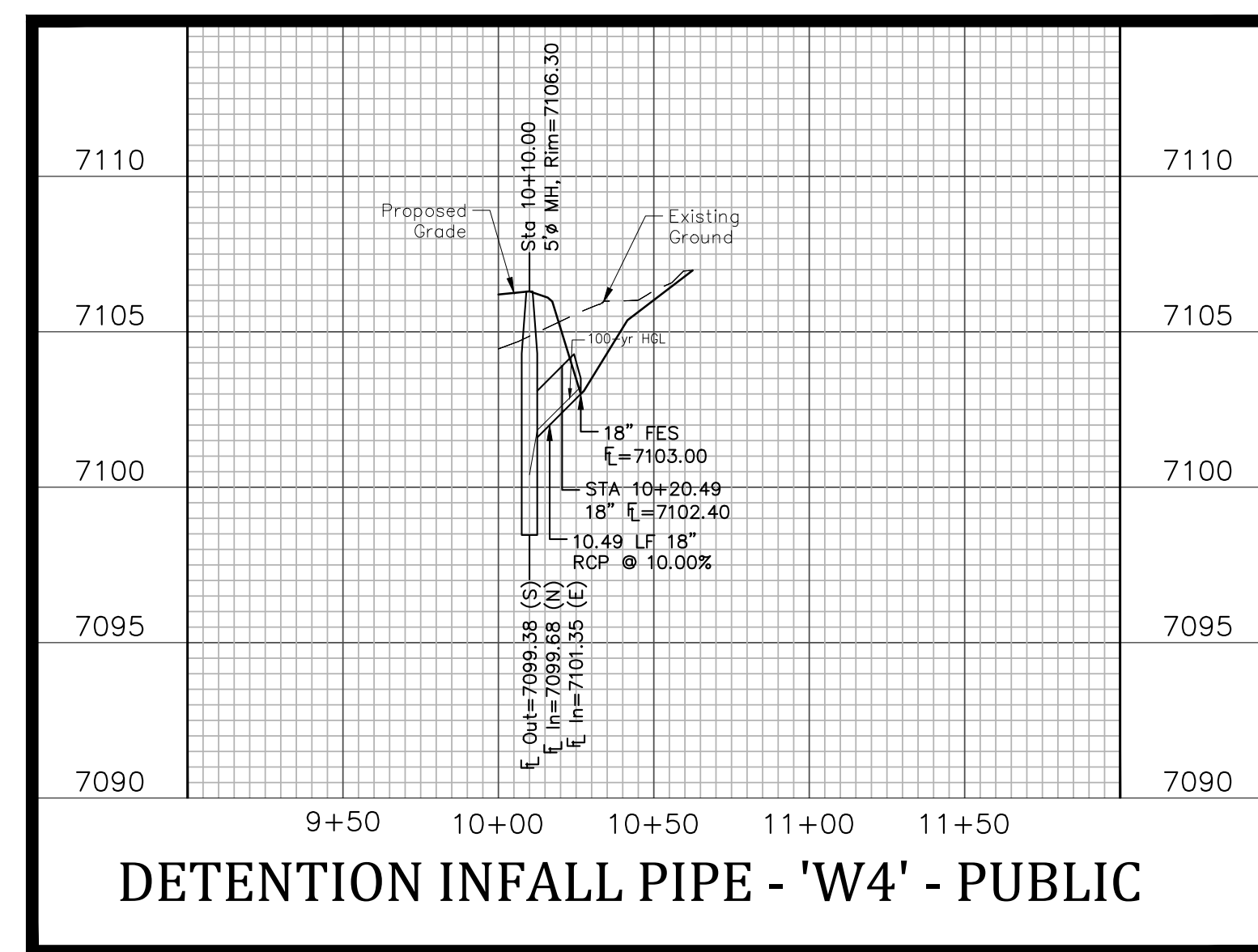
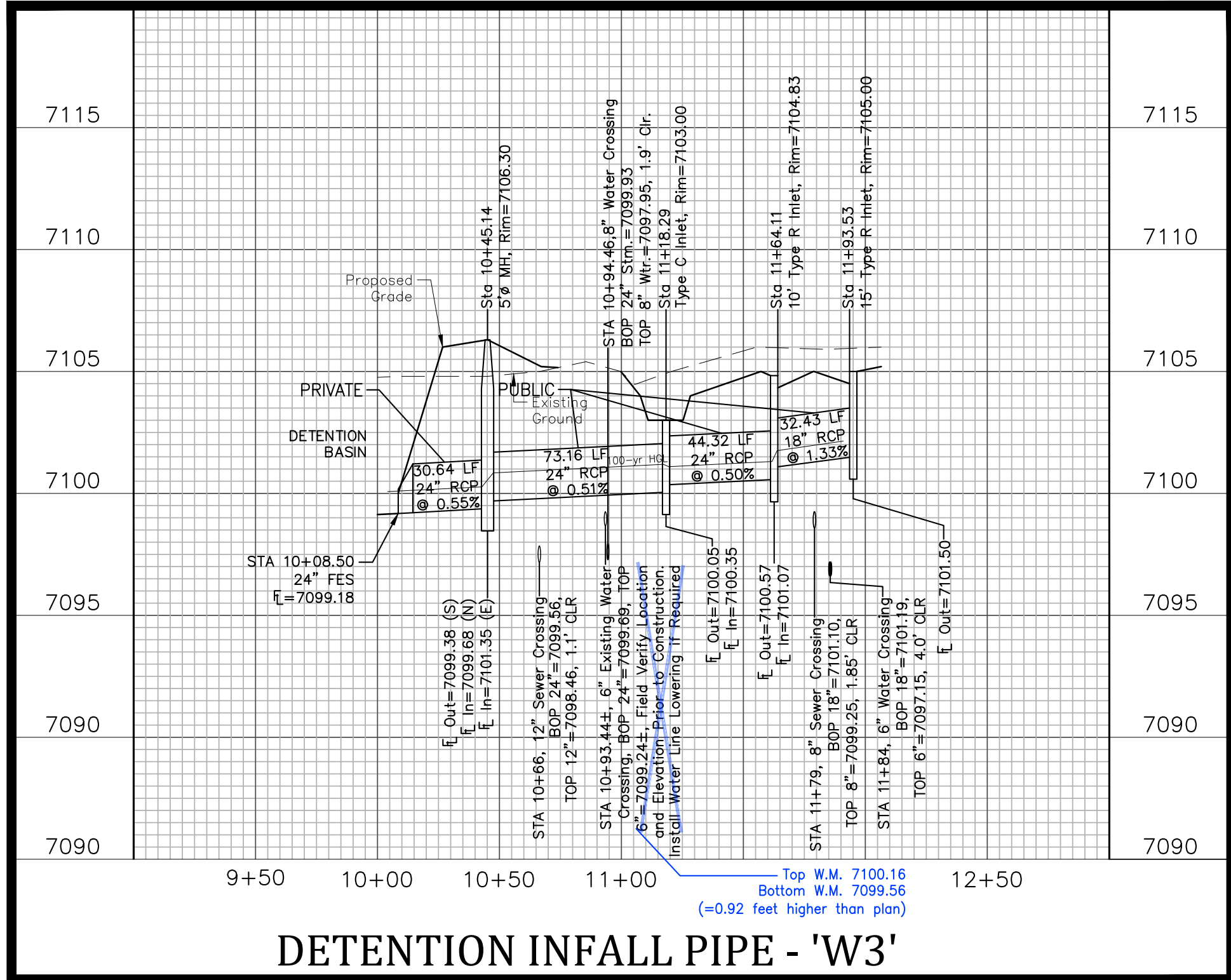


CULVERT - 'S2' - PUBLIC

Project No.:	16059
Date:	October 24, 2018
Design:	JAK/MJK
Drawn:	JAK/MJK
Check:	AWMc
Revisions:	2 10/24/18 Grading 3 1/28/19 Storm Sewer 4 8/25/19 Storm Sewer

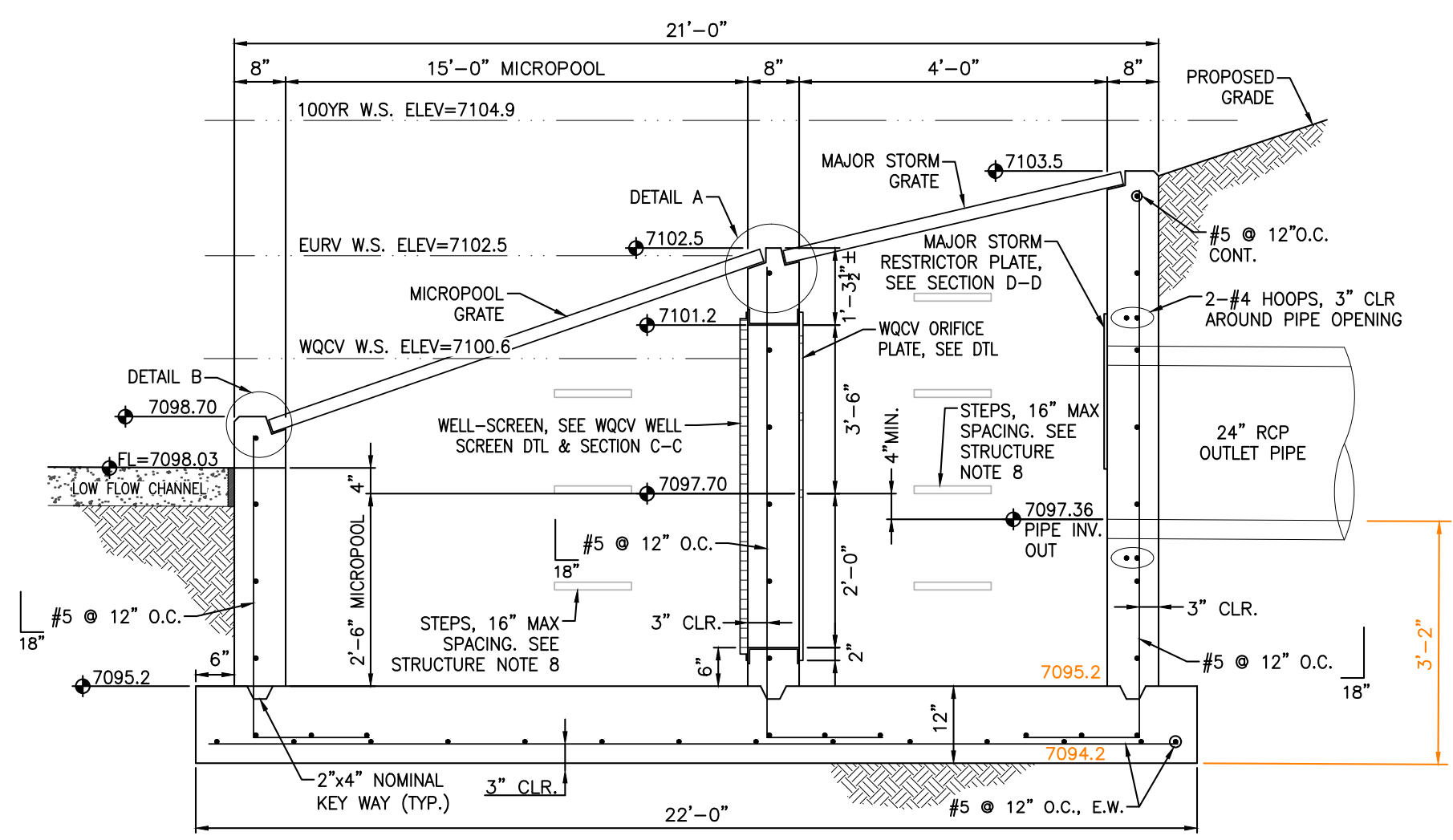


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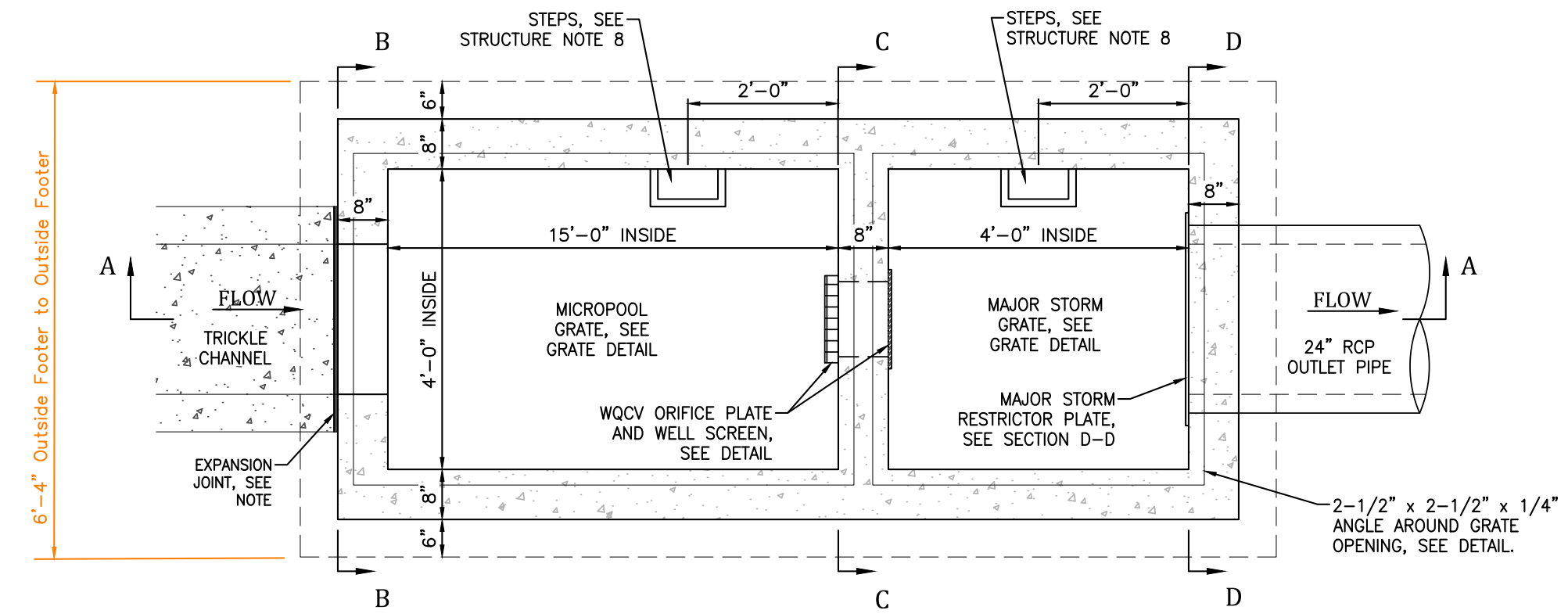


The Beach at Woodmoor Filing No. 1
East Storm Drain
Storm Sewer Plan and Profiles
 El Paso County, Colorado

Project No.:	16059
Date:	October 24, 2018
Design:	JAK
Drawn:	JAK
Check:	AWMc
Revisions:	2 10/24/18 Grading
	3 1/28/19 Storm Sewer



A SECTION A-A
SCALE: NTS

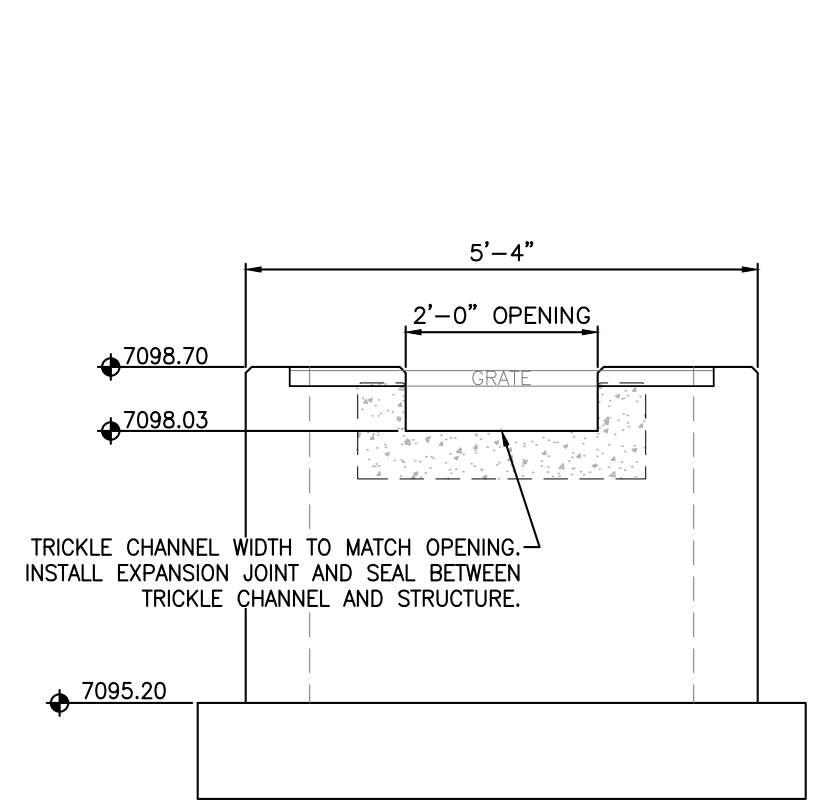


L OUTLET STRUCTURE DETAIL
SCALE: NTS

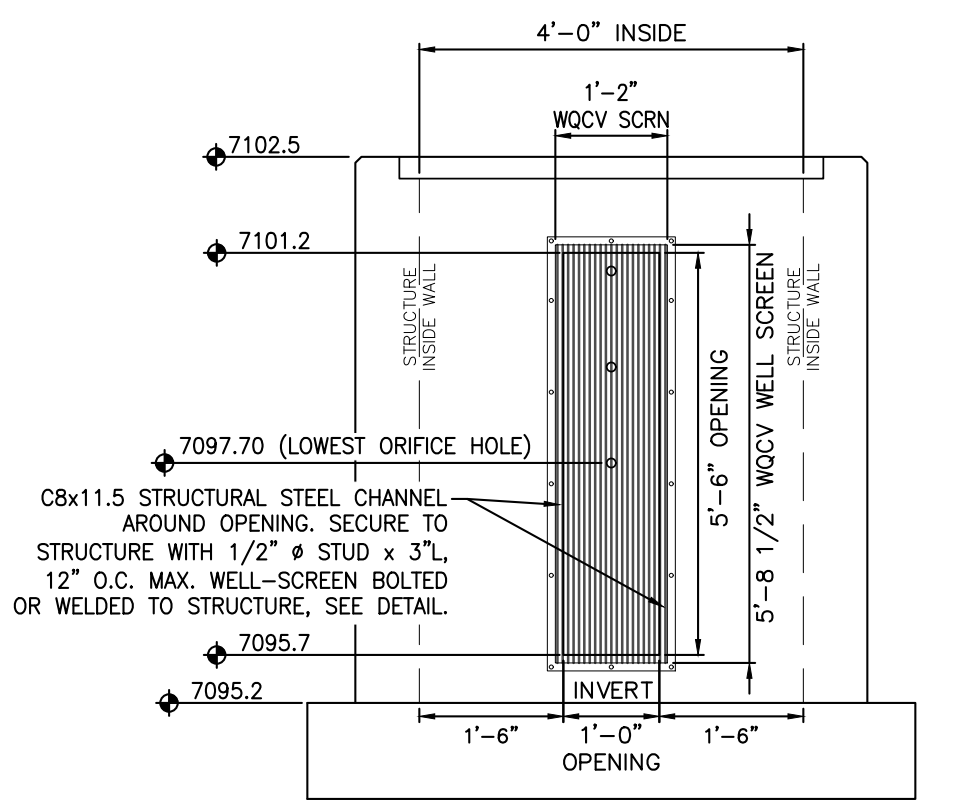
STRUCTURE NOTES:

- PRIOR TO CONSTRUCTION, CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
- GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPlice LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE 2-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE AND 3-INCH MIN CLEARANCE TO EDGE OF CONCRETE PLACED AGAINST SOIL, UNLESS OTHERWISE NOTED.
- MIN. SPlice LENGTH: 1'-3" (1'-7" 2'-0")
- CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAYS SHALL BE CDOT CLASS D CONCRETE.
- EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
- ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4-INCH CHAMFER UNLESS OTHERWISE NOTED.
- BACKFILLING AGAINST WALLS SHALL NOT COMMENCE UNTIL CONCRETE HAS OBTAINED ITS FULL SEVEN DAY STRENGTH.
- SUBGRADE TO BE 12" THK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURES.
- OUTLET STRUCTURE STEPS SHALL CONFORM TO AASHTO M199.
- FOREBAY: CONSTRUCTION JOINTS SHALL BE INSTALLED AT 10' O.C. MAXIMUM. THE JOINTS SHALL BE SEALED WITH A JOINT SEALANT.

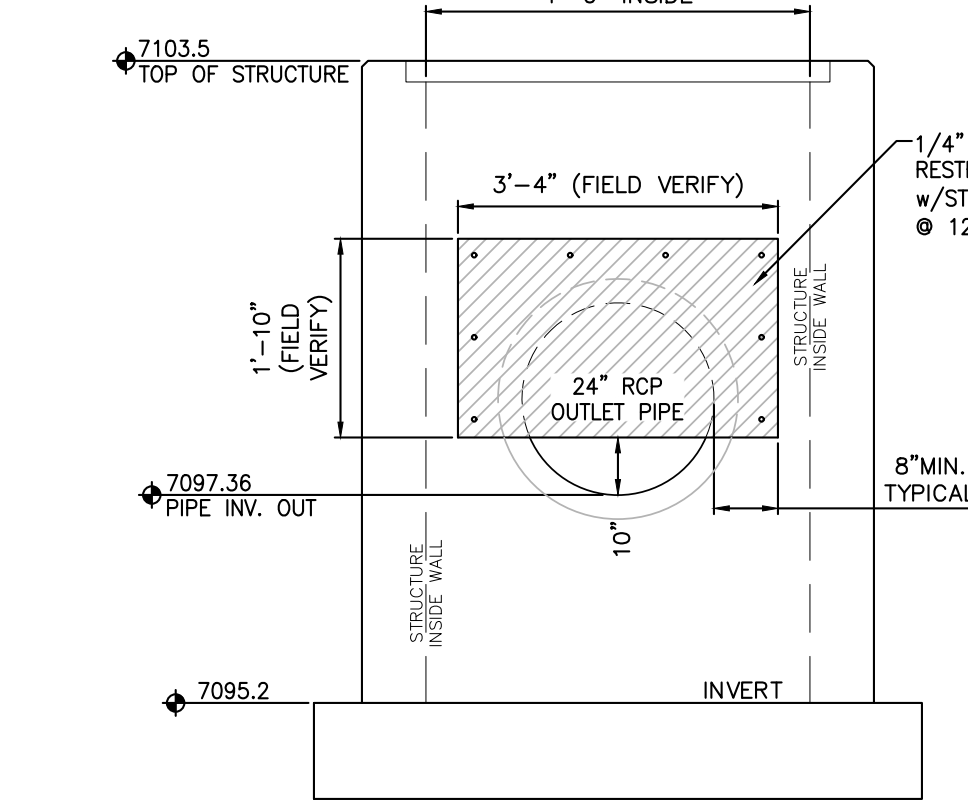
Engineering Record Drawing (As-Built)
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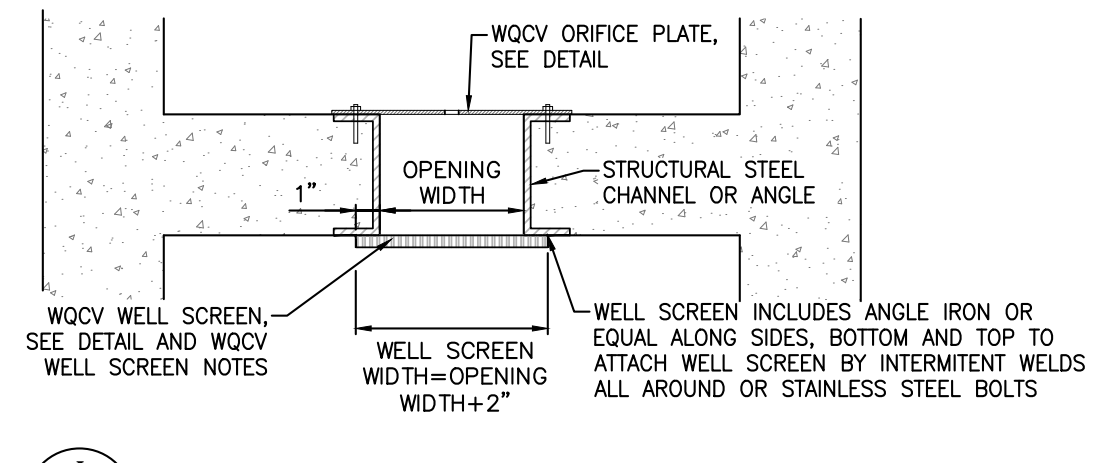
B SECTION B-B
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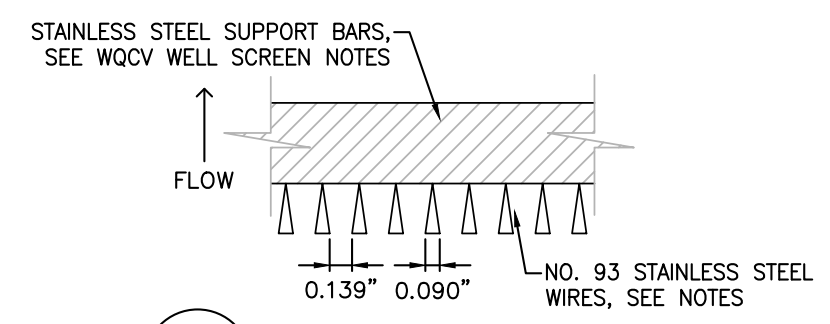
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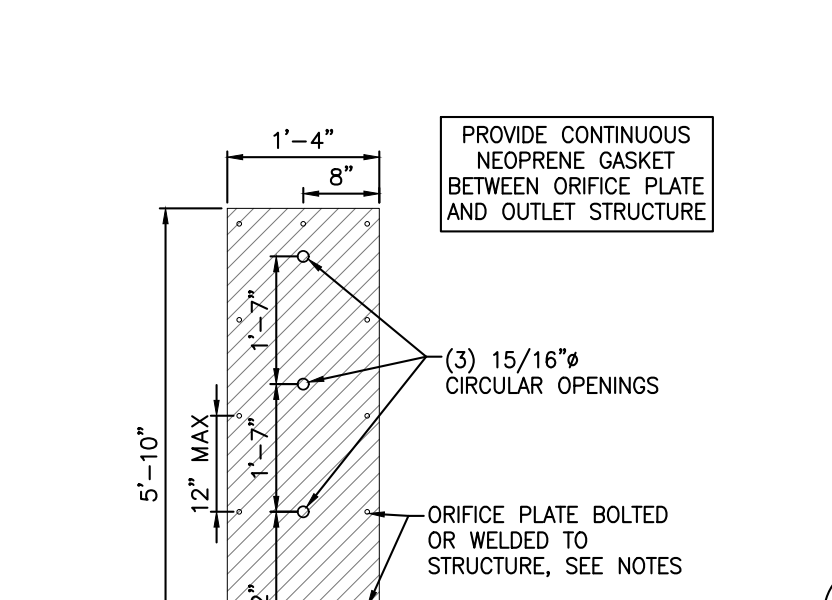
D SECTION D-D
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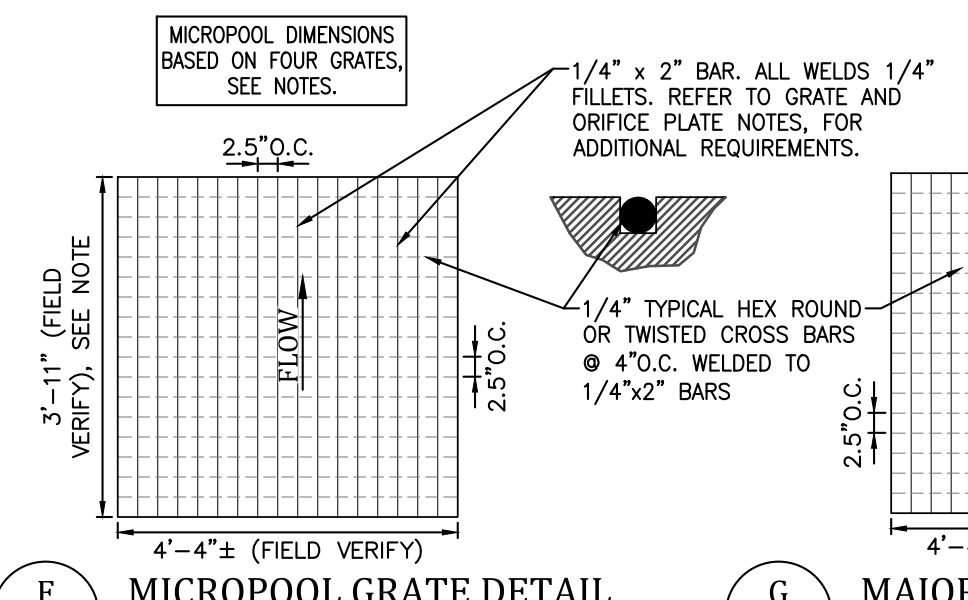
J WQCV ORIFICE PLATE AND WELL SCREEN
SCALE: NTS



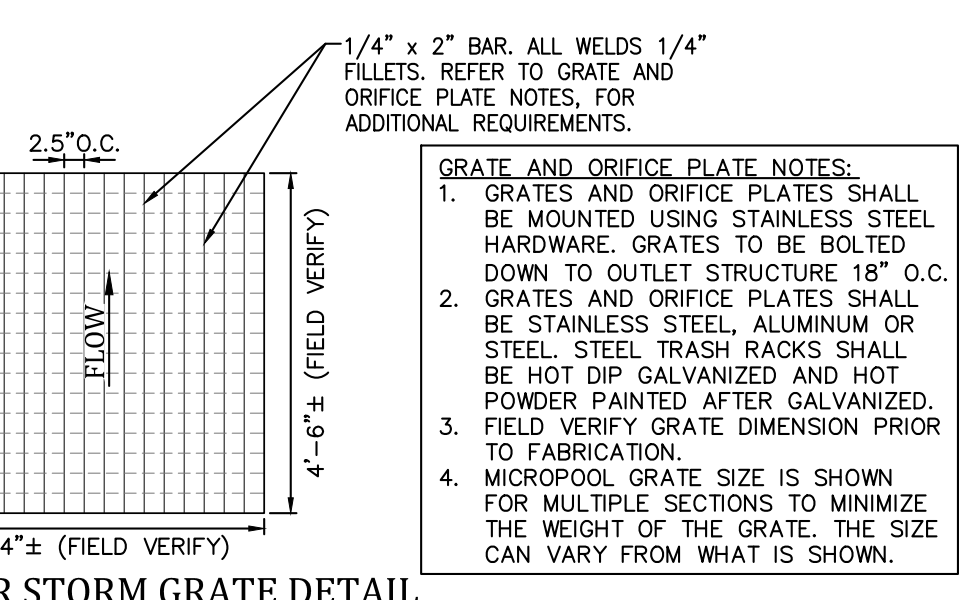
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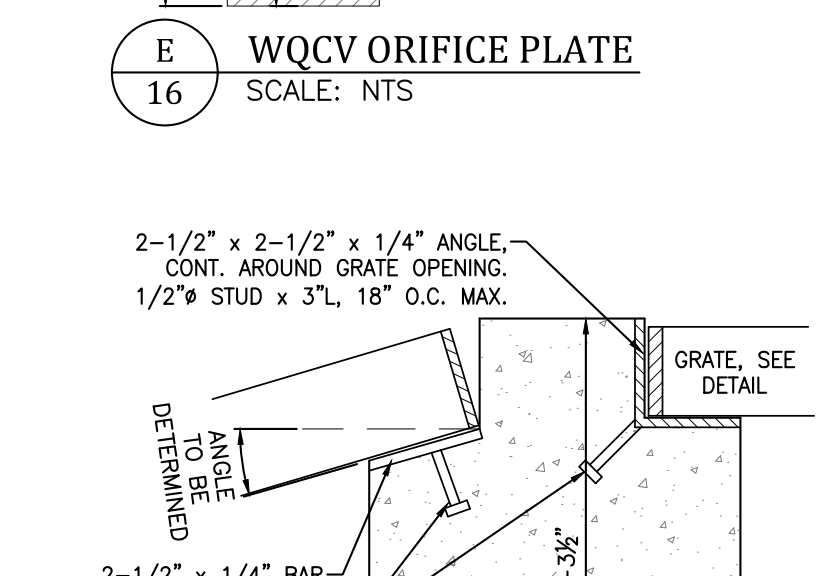
E WQCV ORIFICE PLATE
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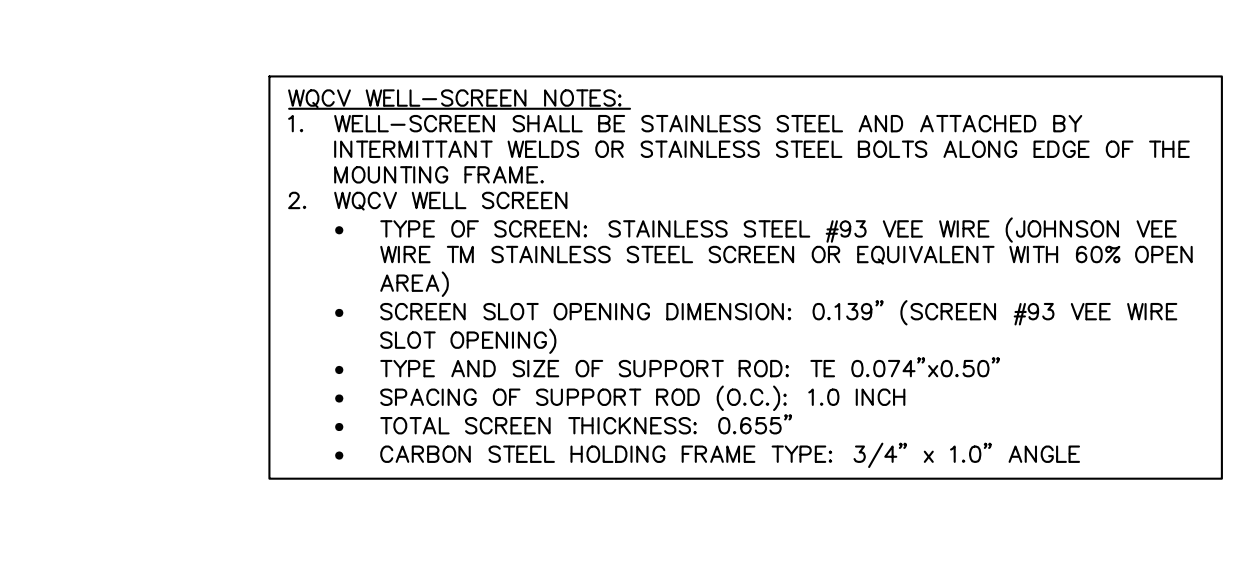
F MICROPOOL GRATE DETAIL
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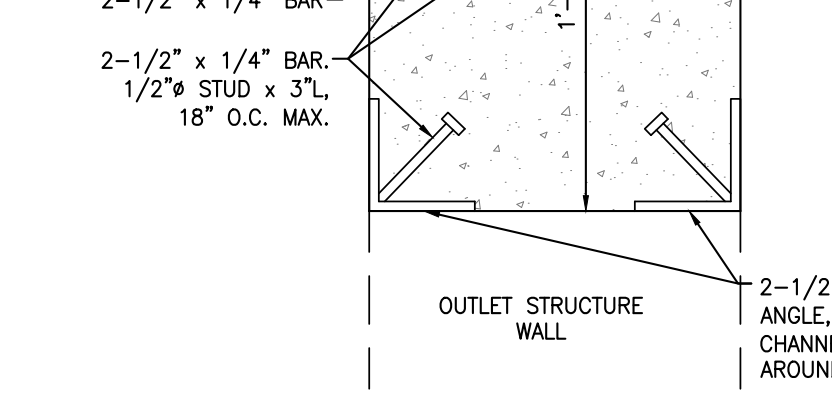
G MAJOR STORM GRATE DETAIL
SCALE: NTS



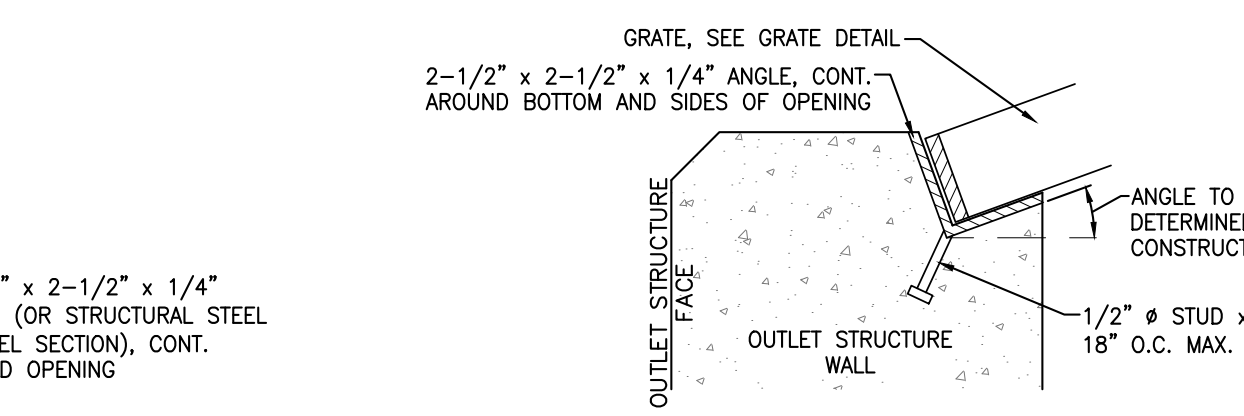
H DETAIL A
SCALE: NTS



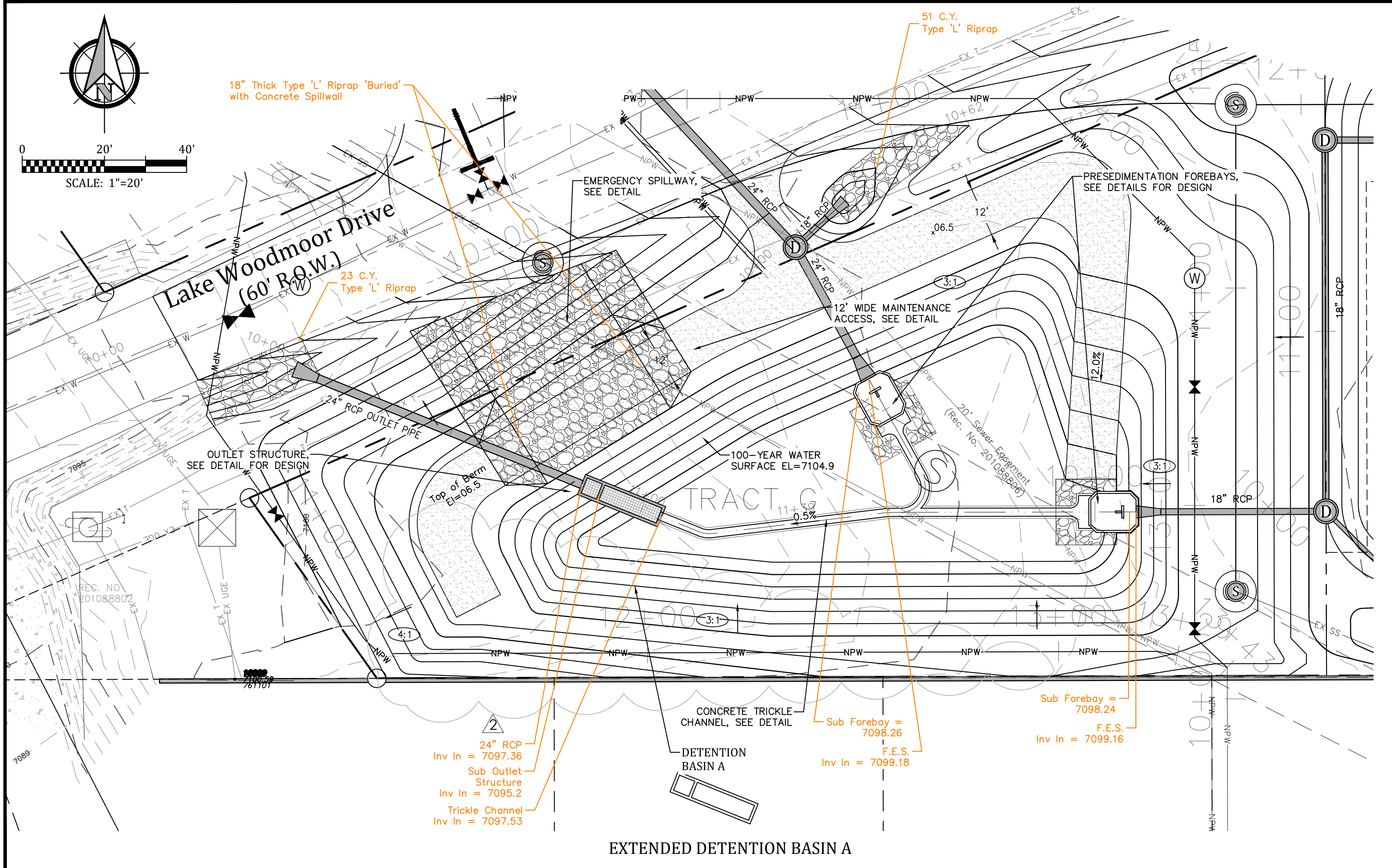
I DETAIL B
SCALE: NTS



H DETAIL A
SCALE: NTS



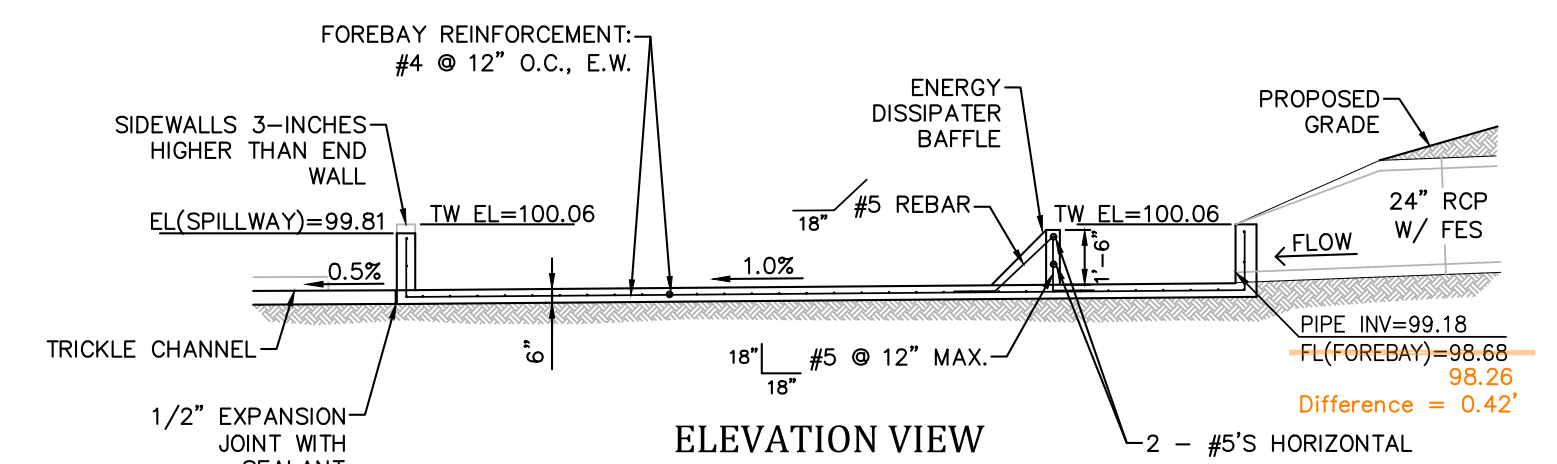
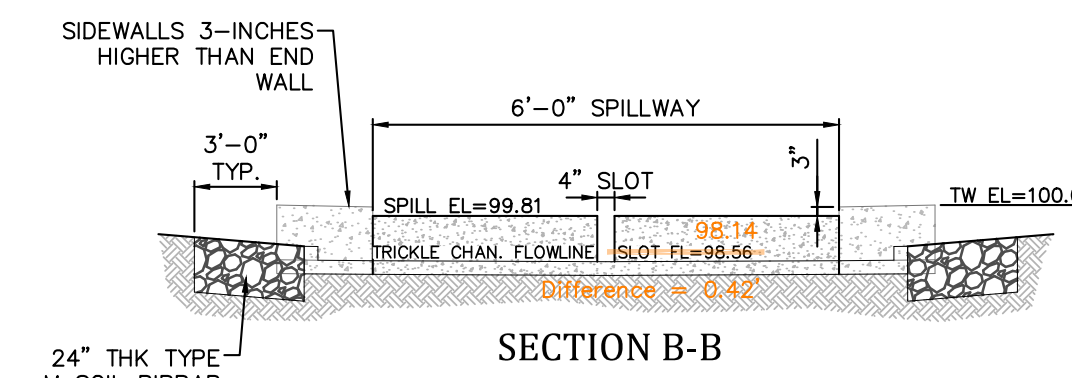
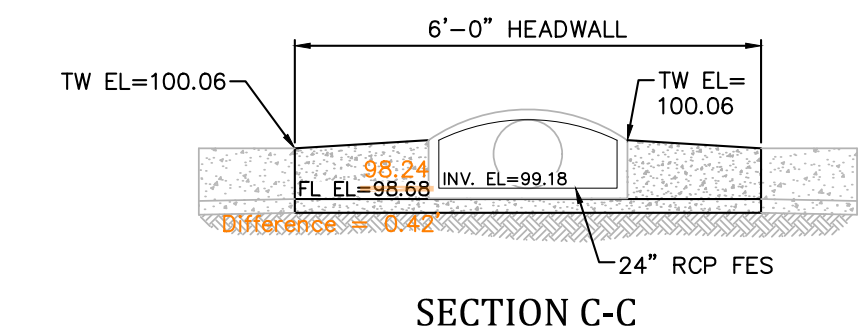
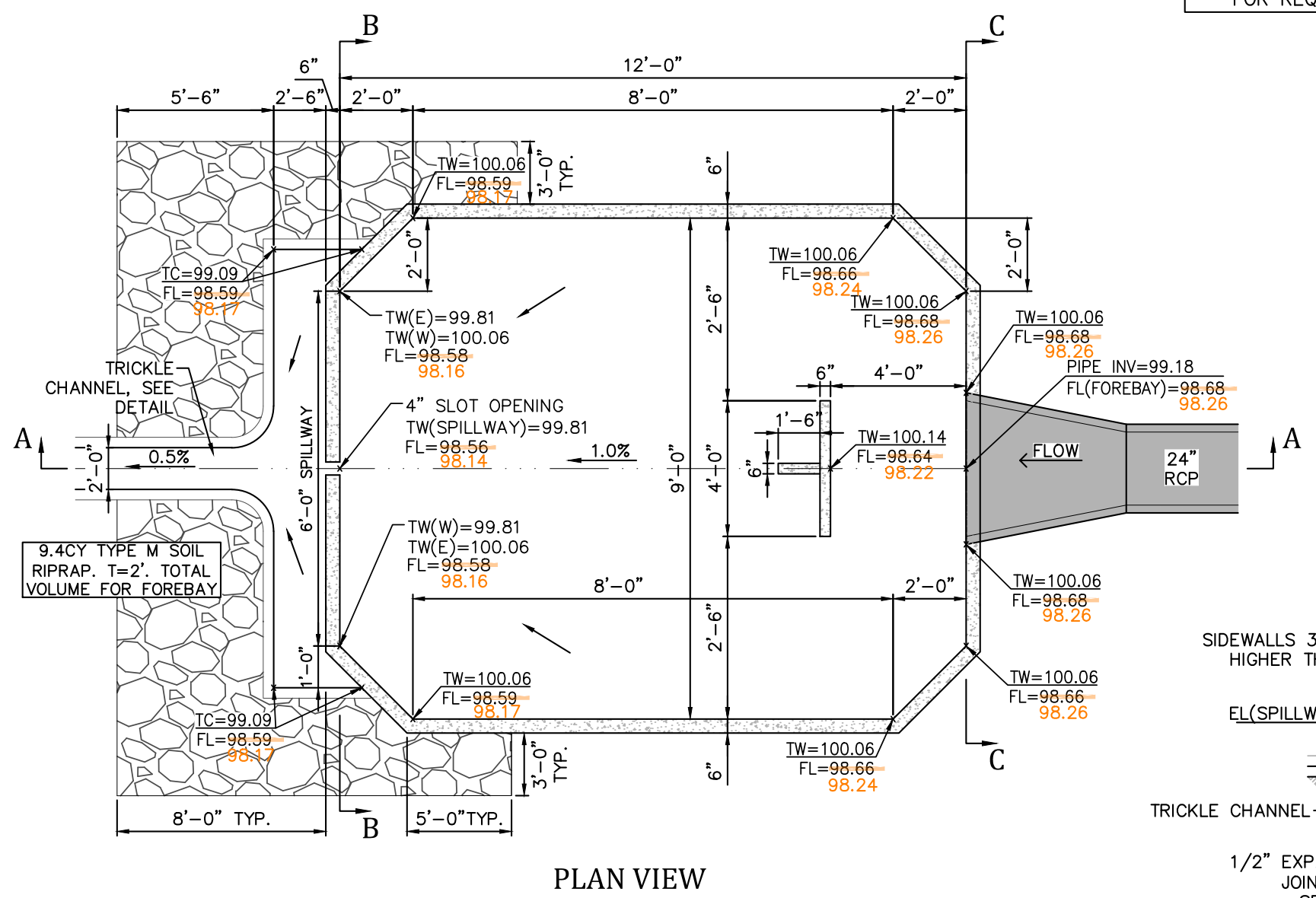
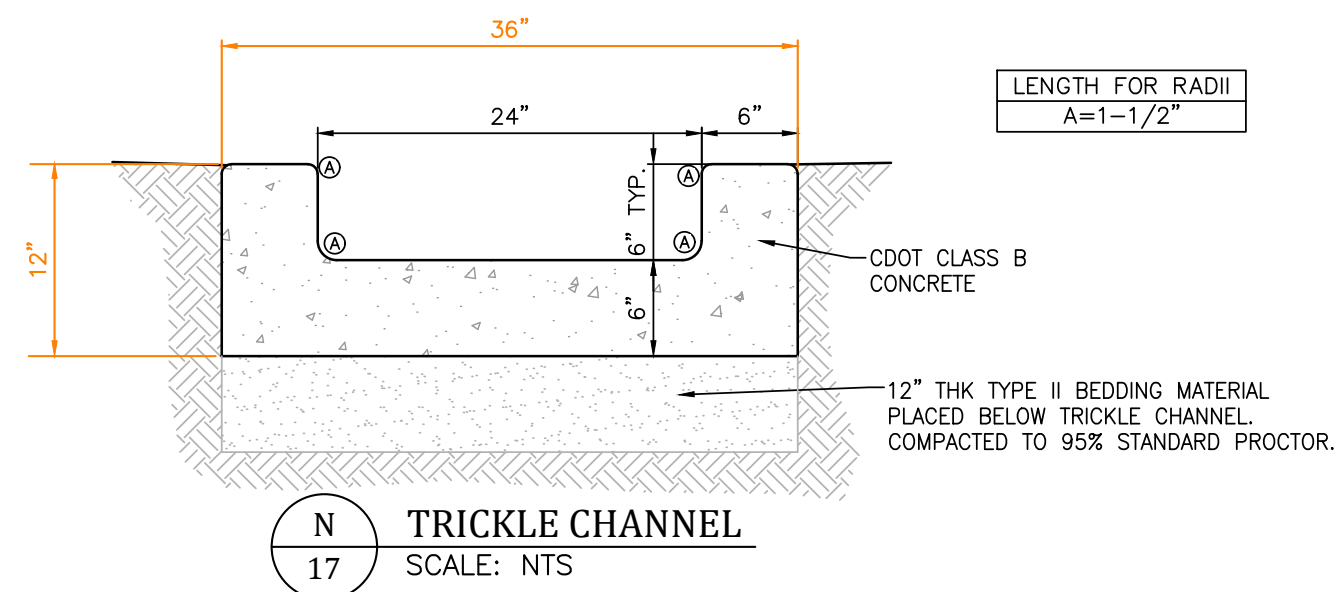
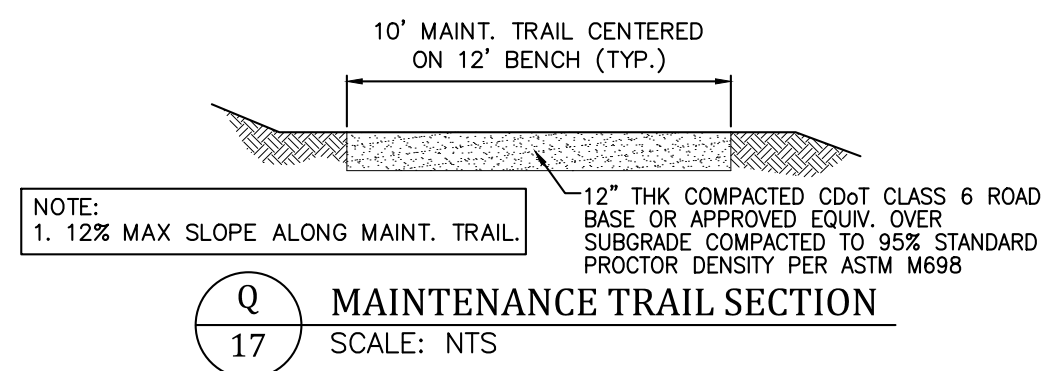
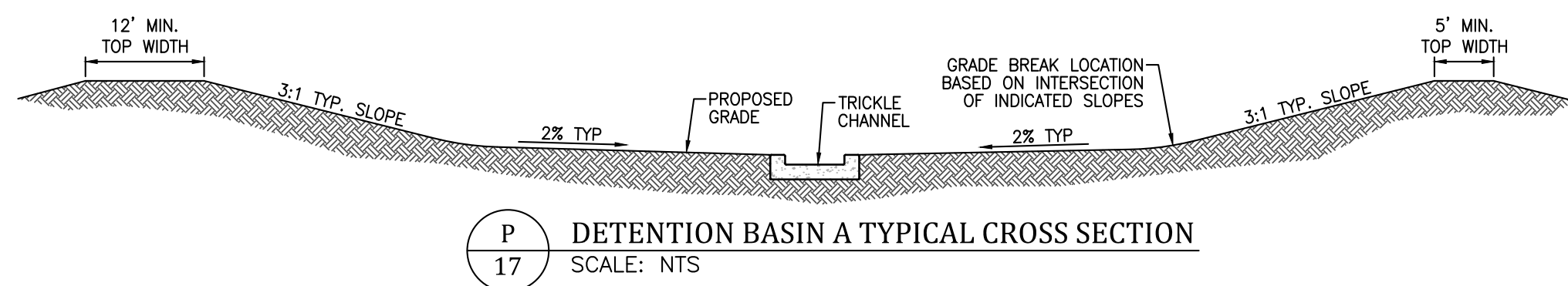
I DETAIL B
SCALE: NTS



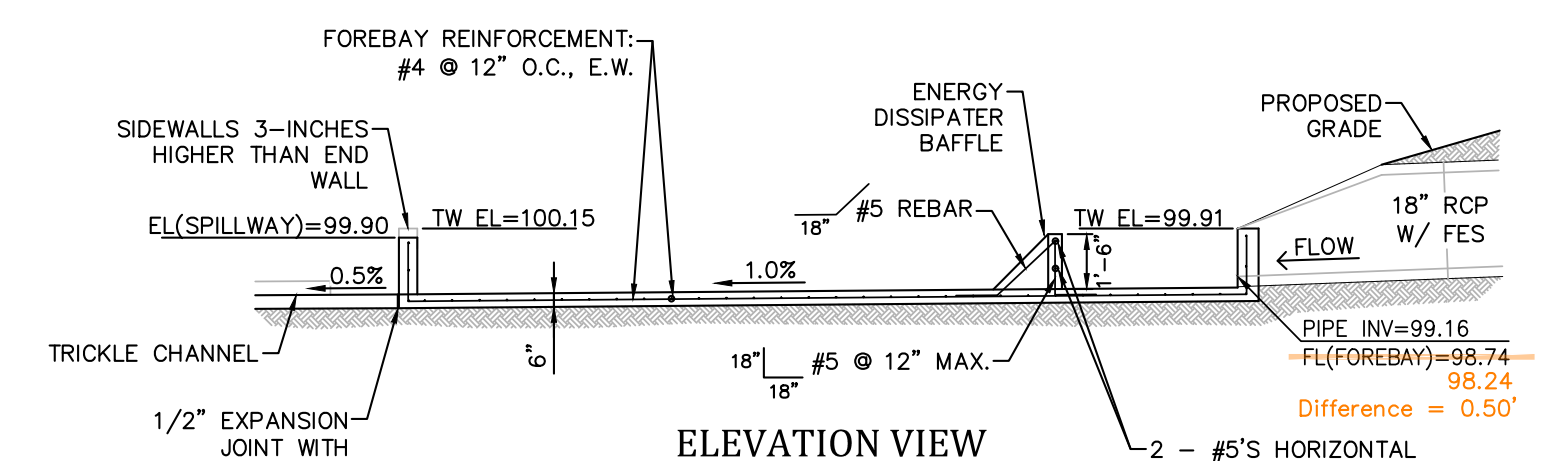
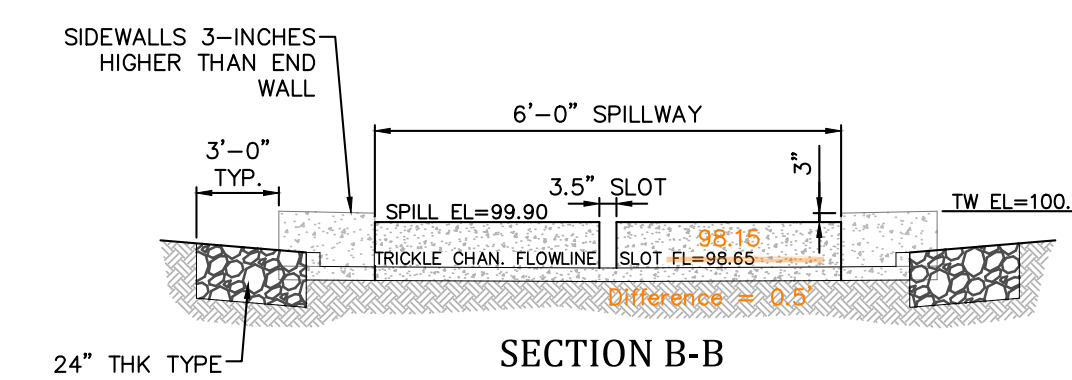
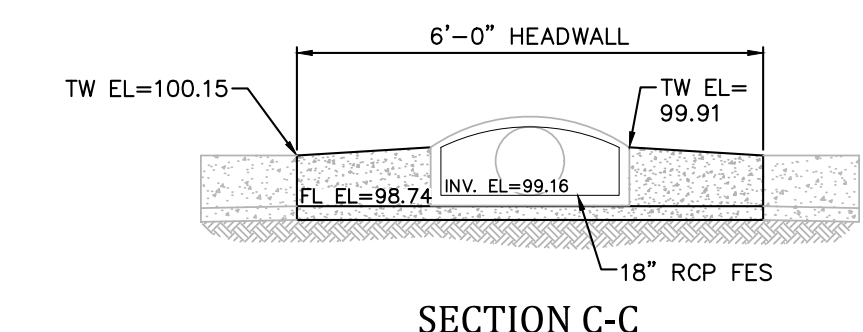
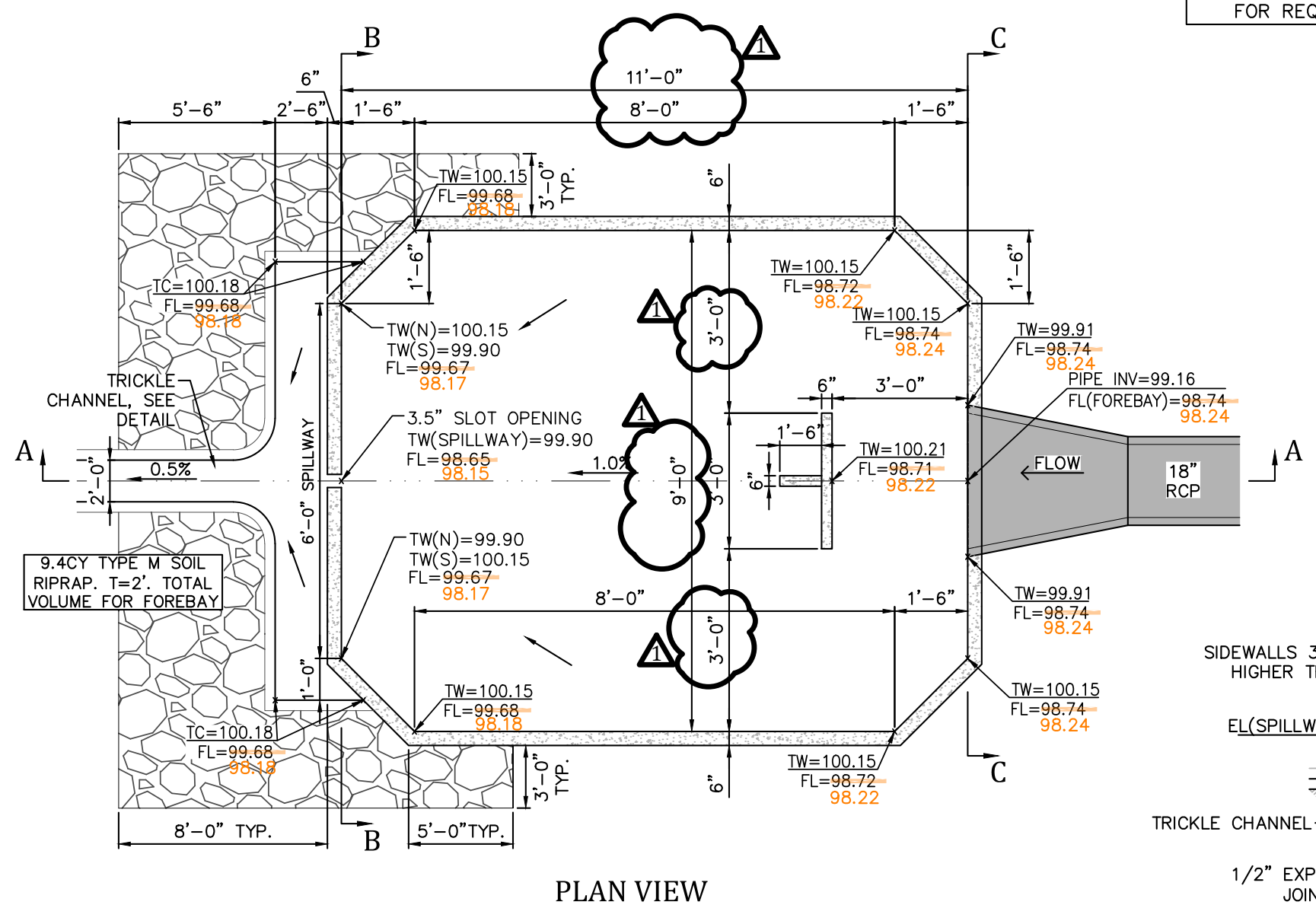
EXTENDED DETENTION BASIN A

Project No.: 16059
Date: October 24, 2018
Design: CJC
Drawn: CJC
Check: AWMc
Revisions: 2 September 27, 2018
Detention Grading Revised

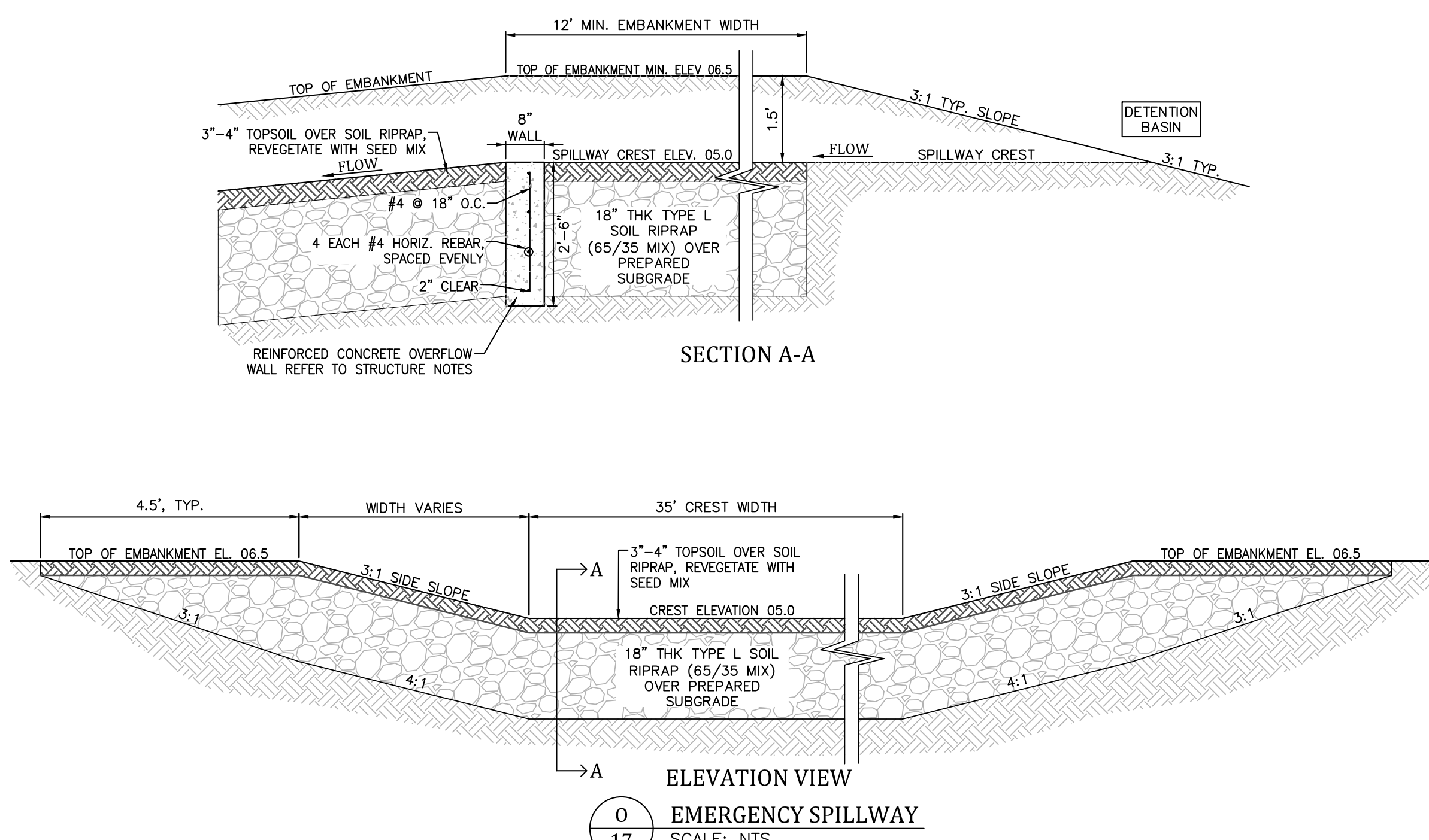
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R NORTH PRESEDIMENTATION FOREBAY
SCALE: NTS



S EAST PRESEDIMENTATION FOREBAY
SCALE: NTS



NOTES:
1. REFER TO "STRUCTURE NOTES" FOR REQUIREMENTS.

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Project No.:	16059
Date:	October 24, 2018
Design:	CJC
Drawn:	CJC
Check:	AWMc
Revisions:	
	September 30, 2019