

STATUS MEMORANDUM

Flying Horse North Jurisdictional Dam

(State Dam ID: 080459)

April 1, 2018

Nina Ruiz, PM/Planner II
El Paso County Planning and Community Development
2880 International Circle, Suite 110
Colorado Springs, CO 80910

Dear Nina,

As you may be aware, we received comments of our jurisdictional dam plans from the State on February 16, 2018. We are continuing to address their comments while incorporating the comments received from your office on the 30% submittal report and plans. We anticipate to make a re-submittal to the State by mid-April and hope to have State approval by Mid-May. Please find attached our 100% submittal for your formal review.

We acknowledge the requirement of these jurisdictional plans being approved by the State prior to scheduling BOCC hearing but would request that all other on-site construction drawings are able to be approved by the County Engineer prior to State approval.

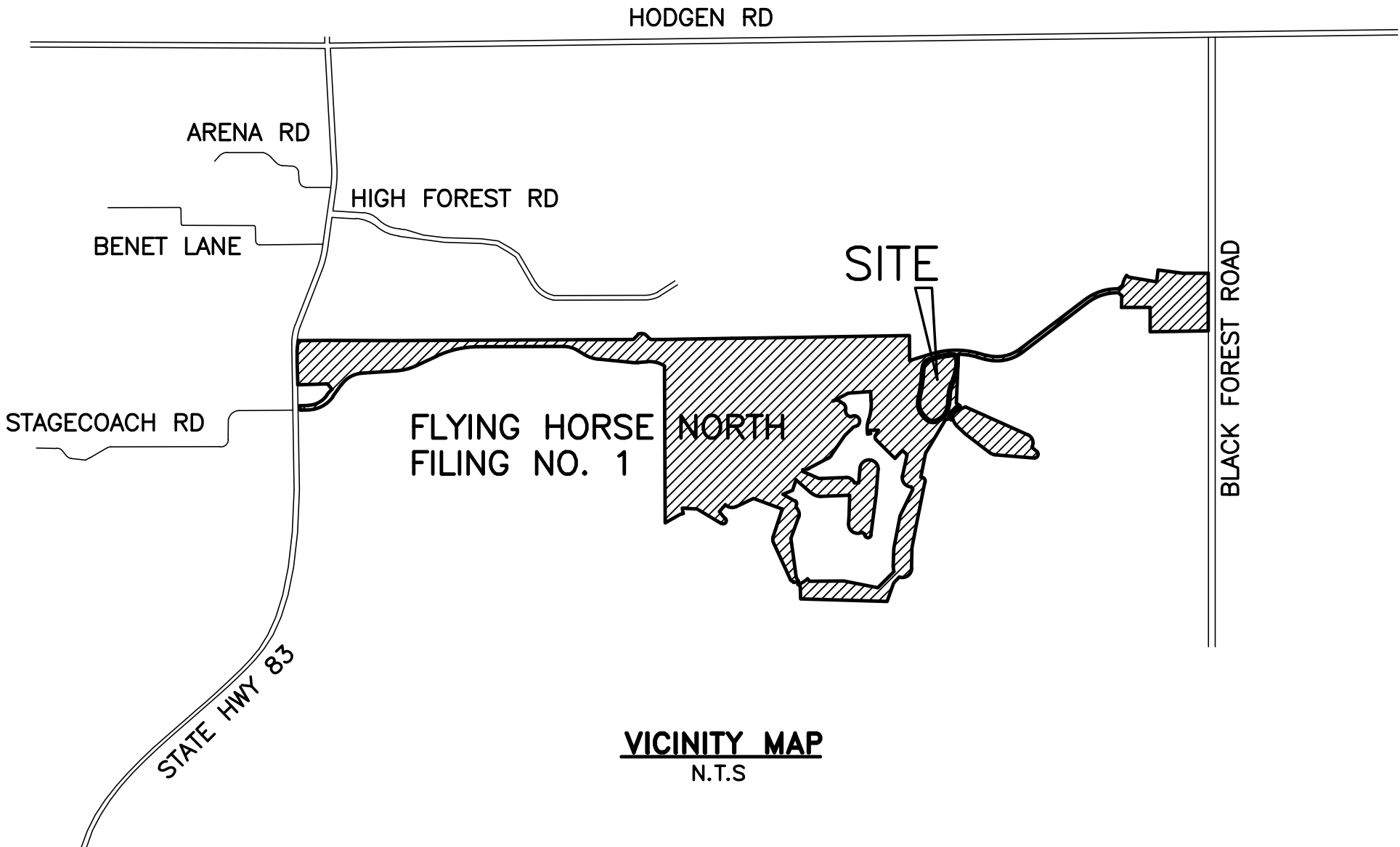
Sincerely,

A handwritten signature in blue ink, appearing to read 'Marc A. Whorton', with a stylized, flowing script.

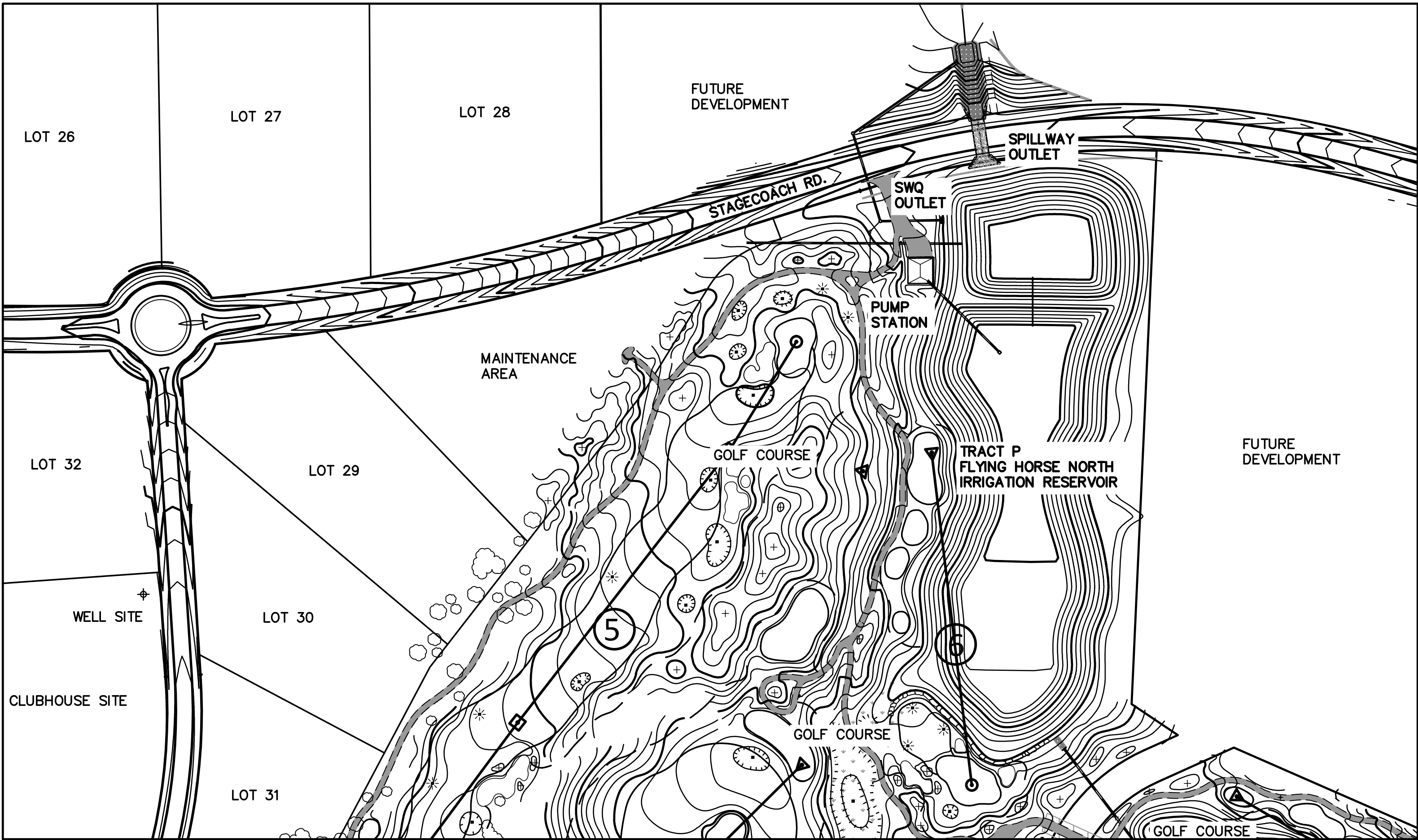
Marc A. Whorton, P.E.
For and on behalf of Classic Consulting

FLYING HORSE NORTH
COUNTY OF EL PASO, STATE OF COLORADO
IRRIGATION RESERVOIR EMBANKMENT
SECTION 31, TOWNSHIP 11 SOUTH, RANGE 65 WEST OF 6TH PRINCIPAL MERIDIAN
WATER DIVISION 2, WATER DISTRICT 10

Submit the associated design report for review.



VICINITY MAP
N.T.S.



KEY MAP
N.T.S.

CONTACT INFORMATION:

PROPERTY OWNER/DEVELOPER: PRI #2 LLC
6385 CORPORATE DRIVE, SUITE 200
COLORADO SPRINGS, CO 80919
MR. DREW BALSICK, (719) 592-9333

CIVIL ENGINEER: CLASSIC CONSULTING ENGINEERS & SURVEYORS
619 N. CASCADE, SUITE 200
COLORADO SPRINGS, CO 80903
MR. MARC A. WHORTON, P.E. (719) 785-2802

GEOTECHNICAL ENGINEER: ENTECH ENGINEERING LLC
505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
MR. JOE GOODE, P.E. (719) 531-5599

DAM SAFETY ENGINEER: COLORADO DIVISION OF WATER RESOURCES
4255 SINTON ROAD
COLORADO SPRINGS, CO 80907
MR. JOHN HUNYADI, P.E. (719) 227-5294

COUNTY ENGINEERING EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, COLORADO 80903
MR. GILBERT LAFORCE, (719) 520-7945

Include the County's standard signature blocks and notes since these plans also include facilities that will be owned/maintained by the county.

SHEET INDEX

SHEET 1 OF 12 TITLE SHEET
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SHEET 5 OF 12 EMBANKMENT SPILLWAY PLAN
SHEET 6 OF 12 EMBANKMENT SPILLWAY DETAILS
SHEET 7 OF 12 SPILLWAY ROCK CHUTE DESIGN
SHEET 8 OF 12 SWQ OUTFALL PLAN AND PROFILE
SHEET 9 OF 12 SWQ OUTFALL BOX DETAILS
SHEET 10 OF 12 EMBANKMENT PROFILE / TOE DRAIN DESIGN
SHEET 11 OF 12 DETAIL SHEET
SHEET 12 OF 12 DETAIL SHEET

STATE ENGINEER APPROVAL:

APPROVED ON THE ____ DAY OF _____ 2018

STATE ENGINEER

BY: _____
DEPUTY STATE ENGINEER

THESE PLANS REPRESENT THE AS-CONSTRUCTED CONDITIONS OF THE FLYING HORSE NORTH IRRIGATION RESERVOIR EMBANKMENT TO THE BEST OF OUR KNOWLEDGE AND JUDGEMENT, BASED IN PART ON INFORMATION FURNISHED BY OTHERS, AS OF THE ____ DAY OF _____ 2018.

FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC
MARC A. WHORTON, P.E. #57155

DESIGN ENGINEER SIGNATURE:

STATE ENGINEER'S FILE NUMBER: _____

48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS 811 UTILITY NOTIFICATION CENTER OF COLORADO IT'S THE LAW <small>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.</small>		<table><thead><tr><th>NO.</th><th>REVISION</th><th>DATE</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		NO.	REVISION	DATE																						REVIEW: PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC MARC A. WHORTON, P.E. #57155 DATE _____		<div>CLASSIC CONSULTING ENGINEERS & SURVEYORS</div> <div>619 N. Cascade Avenue, Suite 200 Colorado Springs, Colorado 80903 (719)785-0790 (719)785-0799(fax)</div>		FLYING HORSE NORTH IRRIGATION RESERVOIR EMBANKMENT TITLE SHEET <table><thead><tr><th>DESIGNED BY</th><th>MAW</th><th>SCALE</th><th>DATE</th><th>1-4-18</th></tr></thead><tbody><tr><td>DRAWN BY</td><td>MAW</td><td>(H) 1"= N/A</td><td>SHEET 1 OF 12</td><td> </td></tr><tr><td>CHECKED BY</td><td> </td><td>(V) 1"= N/A</td><td>JOB NO.</td><td>1096.11</td></tr></tbody></table>		DESIGNED BY	MAW	SCALE	DATE	1-4-18	DRAWN BY	MAW	(H) 1"= N/A	SHEET 1 OF 12		CHECKED BY		(V) 1"= N/A	JOB NO.	1096.11
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CLASSIC
ENGINEERS & SURVEYORS



WELL NAME: FLYING HORSE NORTH A-1

LOCATION: SEC. 36, T 11 SOUTH, R 66 WEST, 6TH P.M.

NORTHING: 1445275.0

EASTING: 3202345.0

(STATE PLANE)

PERMIT # 81145-F

ISSUE DATE: 7/24/17

WATER DIVISION 1



WATER DISTRICT 8

ARAPAHOE AQUIFER

TOTAL DEPTH 2400 FT.

47170 FLYING HORSE GOLF PUMP TEST.xls47170 FLYING HORSE GOLF PUMP TEST.xls47170 FLYING HORSE GOLF PUMP TEST.xlsx

Form No. GWS-31 02/2017	WELL CONSTRUCTION AND YIELD ESTIMATE REPORT State of Colorado, Office of the State Engineer 1313 Sherman St., Room 821, Denver, CO 80203 303.866.3518 www.water.state.co.us and dwpermit@stateengineer.state.co.us	For Office Use Only																																																												
Receipt Number: 3680462																																																														
1. Well Permit Number: I454-F																																																														
2. Owner's Well Designation: A1																																																														
3. Well Owner Name: PRR22																																																														
4. Well Location Street Address: N/A																																																														
5. As Built: GPS Well Location (required): <input checked="" type="checkbox"/> Zone 12 <input type="checkbox"/> Zone 13 Easting: 523876.9 Northing: 4322274.4																																																														
6. Well Location: NE 1/4, NE 1/4, Sec. 36 Twp. 11 <input type="checkbox"/> N or S <input type="checkbox"/> Range 66 <input type="checkbox"/> E or W <input type="checkbox"/> 6 P.M.																																																														
County: El Paso																																																														
Subdivision: _____, Lot: _____, Block: _____, Filling (Unit): _____																																																														
7. Ground Surface Elevation: _____ feet Date completed: 11/15/2017 Drilling Method: Reverse Air																																																														
8. Completed Aquifer Name: Arapahoe Total Depth: 2555 feet Depth completed: 2540 feet																																																														
9. Advance Notification: Was Notification Required prior to Construction? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, Date Notification Given: _____																																																														
10. Aquifer Type: <input type="checkbox"/> Type I (One Confining Layer) <input checked="" type="checkbox"/> Type I (Confining Layers) <input type="checkbox"/> Laramie-Fox Hills (check one) <input type="checkbox"/> Type II (Not overlain by Type III) <input type="checkbox"/> Type II (overlain by Type III) <input type="checkbox"/> Type III (alluvial/colluvial)																																																														
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Well Yield Estimate Method: Submersible Pump																																																														
Static Level: 1534 Estimated yield (gpm) 450																																																														
Date/Time measured: 12/1/2017 Estimate Length (hrs) 24																																																														
Remarks:																																																														
I, I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing only) and certified in accordance with Rule 17.4 of the Well Construction Rules, 2 CCR 402-2. The filing of, this document that contains false statements is a violation of section 27-91 (18B-1), C.R.S., and is punishable by fines up to \$1,000 or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.																																																														
Company Name: _____ Email: mike.schanaman@layne.com Phone w/ area code: (303) 795-1281 License Number: 1290																																																														
Mailing Address: 17800 E22nd Ave, Aurora Colorado 80011																																																														
Sign (or enter name if filing online) _____ Print Name and Title Mike Schanaman, Project Manager Date: 12/04/2017																																																														

<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	<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WHORTON, P.E. #37155</p> <p>DATE _____</p>	 <p>619 N. Cascade Avenue, Suite 200 (719)785-0790 Colorado Springs, Colorado 80903 (719)785-0799(Fax)</p>	<p>FLYING HORSE NORTH IRRIGATION RESERVOIR EMBANKMENT</p> <p>WELL SITE / TEST REPORTS</p> <table border="1"> <tr> <td>DESIGNED BY</td> <td>MAW</td> <td>SCALE</td> <td colspan="2">1-4-18</td> </tr> <tr> <td>DRAWN BY</td> <td>MAW</td> <td>(H) 1"= N/A</td> <td>SHEET 2</td> <td>OF 12</td> </tr> <tr> <td>CHECKED BY</td> <td></td> <td>(V) 1"= N/A</td> <td>JOB NO.</td> <td>1096.11</td> </tr> </table>				DESIGNED BY	MAW	SCALE	1-4-18		DRAWN BY	MAW	(H) 1"= N/A	SHEET 2	OF 12	CHECKED BY		(V) 1"= N/A	JOB NO.	1096.11	
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PUMP STATION SPECIFICATIONS:
NAME: FLYING HORSE RANCH
STATION MODEL:
VTV-1-75x3(75)/5ST-480-3-2250(3000)-110

STATION TOTAL PERFORMANCE:
2250GPM @ 110PSI
3000GPM @ 110PSI (FUTURE)

PUMP HORSEPOWER:
SUSTAIN PUMP: 5HP
PUMP NO.1-3: 75HP
PUMP NO.4: 75HP (FUTURE PUMP/MOTOR)

CHECK VALVE SIZE
SUSTAIN: BUILT IN
PUMP NO.1-2: 6"

ISOLATION VALVE SIZES:
SUSTAIN PUMP: 2"
PUMP NO.1-2: 5" (EBV)

DISCHARGE ISOLATION VALVE: 10"
RELIEF VALVE SIZE: 6"

PUMP STATION DISCONNECT: 600 AMP
POWER REQUIREMENTS:
480V, 60 HZ, 3 PZ, 386 FLA
EXHAUST FAN REQ'D FOR BUILDING:
5400 CFM

WET WELL DIMS: Ø96"

WET WELL DEPTH:25'-0"

MAIN LINE CONNECTION: 16" FLANGED
NOMINAL PIPE SIZE: NA

DROP PIPE COVER: 48"
INTAKE FLUME PIPE SIZE:30"
INTAKE FLUME MATERIAL:.....SDR35 PVC
OD32"

PLEASE VERIFY ALL INFO WITH
YOUR INITIALS AND DATE

PLEASE INDICATE POWER SUPPLY CONDITION BELOW FOR
FCC COMPLIANCE. REFER TO WATERTRONICS DRAWING #
FCC-1 FOR ADDITIONAL INFORMATION

- ☐ A: CONNECTED THROUGH A COMMERCIAL BUILDING
☐ B: CONNECTED THROUGH A DEDICATED TRANSFORMER
☐ C: CONNECTED THROUGH A PAD TRANSFORMER SHARED
WITH OTHER NON-RESIDENTIAL EQUIPMENT.
☐ D: CONNECTED TO A POLE TRANSFORMER ON A
RESIDENTIAL POWER GRID.
☐ E: CONNECTED TO A PAD TRANSFORMER SHARED WITH
RESIDENTIAL DWELLINGS.

PLEASE USE THE SPACE BELOW FOR ANY ADDITIONAL COMMENTS:
1. MIN. WATER LEVEL IN THE WET WELL 56" FROM THE BOTTOM
2. NORMAL WATER LEVEL AT THE WET WELL ??
3. MAX/HIGH WATER LEVEL IN THE WET WELL ??
4. TO DRAIN THE BOND COMPLETELY THE BOTTOM OF THE BOND NEED
TO BE LOWER THAN THE BOTTOM OF WET WELL I

☐ APPROVED AS SUBMITTED
☐ APPROVED AS NOTED
☐ REVISE AND RESUBMIT

REVIEWED BY: _____

NAME: _____

DATE: _____

DIMENSIONS AND SIZES OF EXISTING STRUCTURES, AND/OR COMPONENTS
MUST BE VERIFIED TO WATERTRONICS BEFORE STATION CONSTRUCTION
BEGINS.

UNLESS SPECIFIED BY THE CUSTOMER, PUMP HOUSE/CONCRETE SLAB
DIMENSIONS ARE RECOMMENDED MINIMUMS FOR NEC AND SERVICE
CLEARANCE, AND ARE FOR ILLUSTRATION PURPOSES ONLY. PROJECT
MANAGER SHALL BE CONSULTED ON FINAL DESIGN.

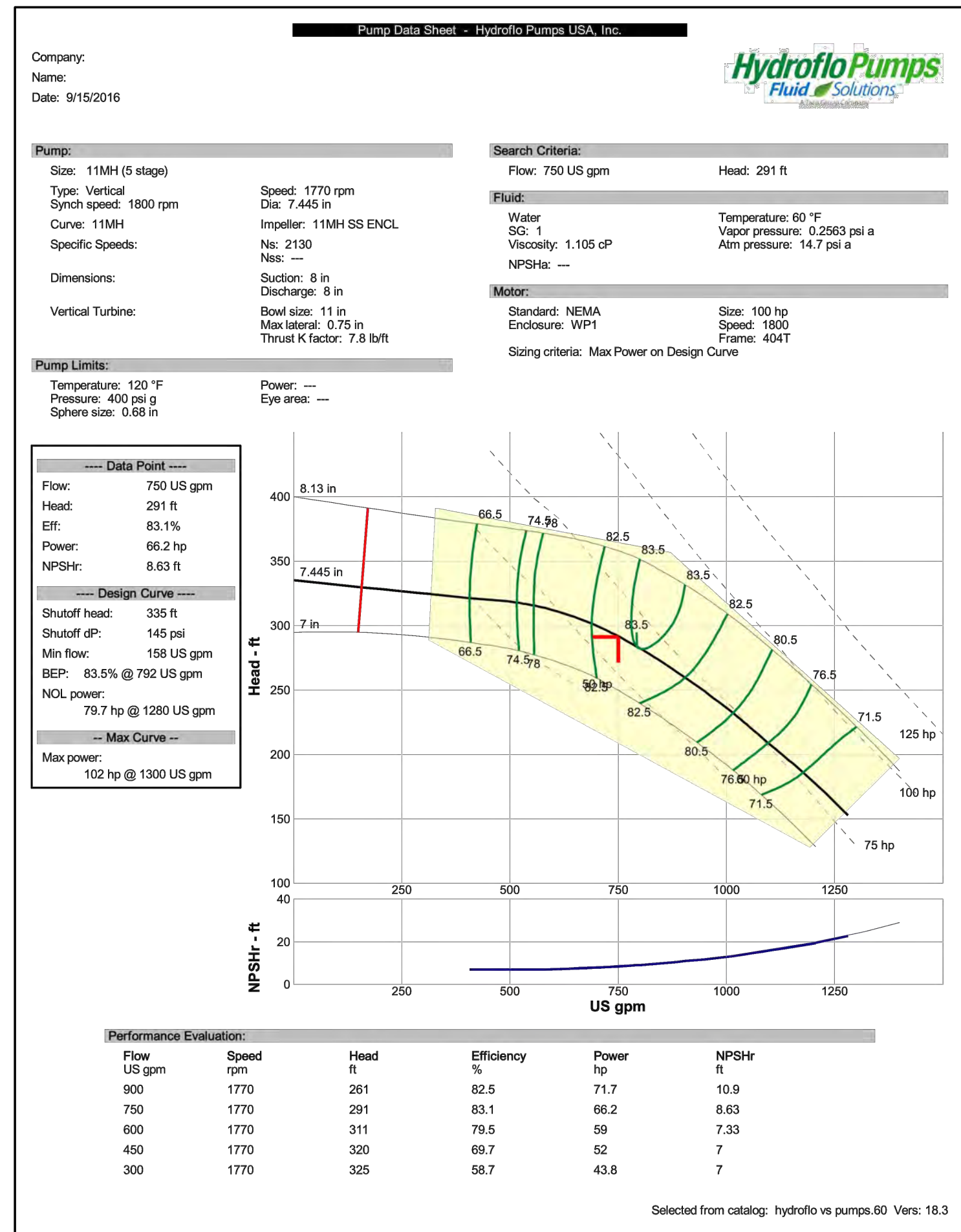
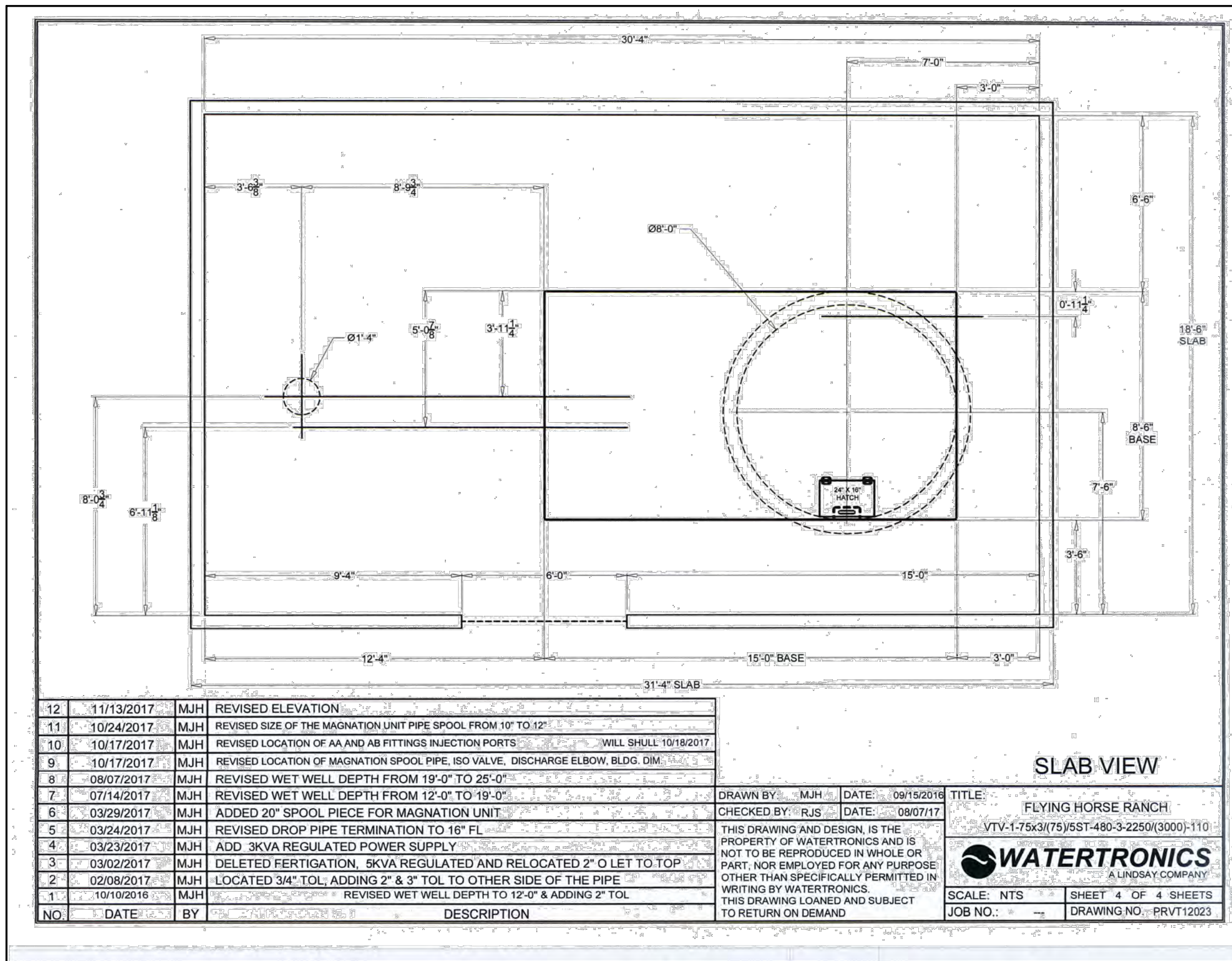
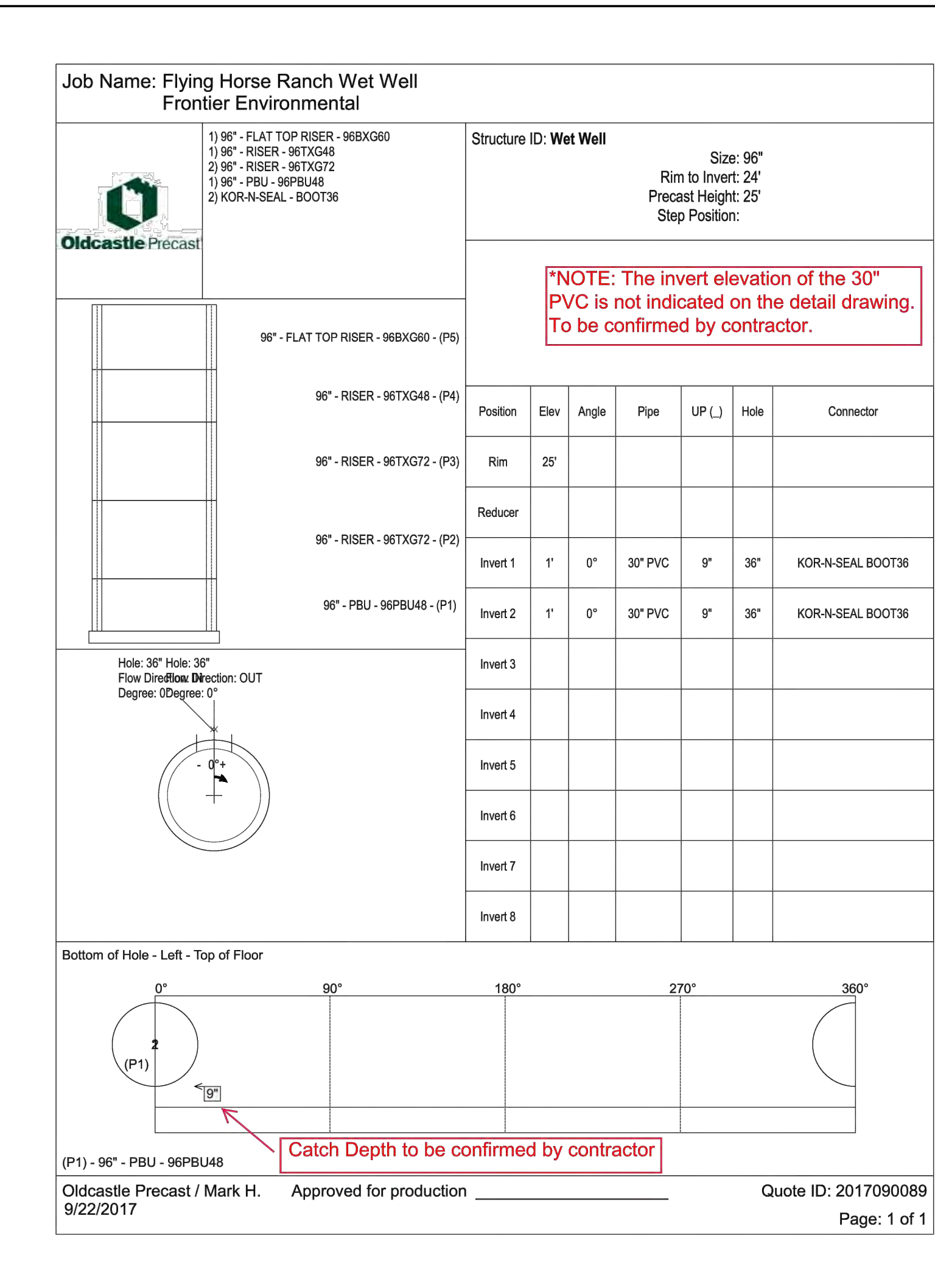
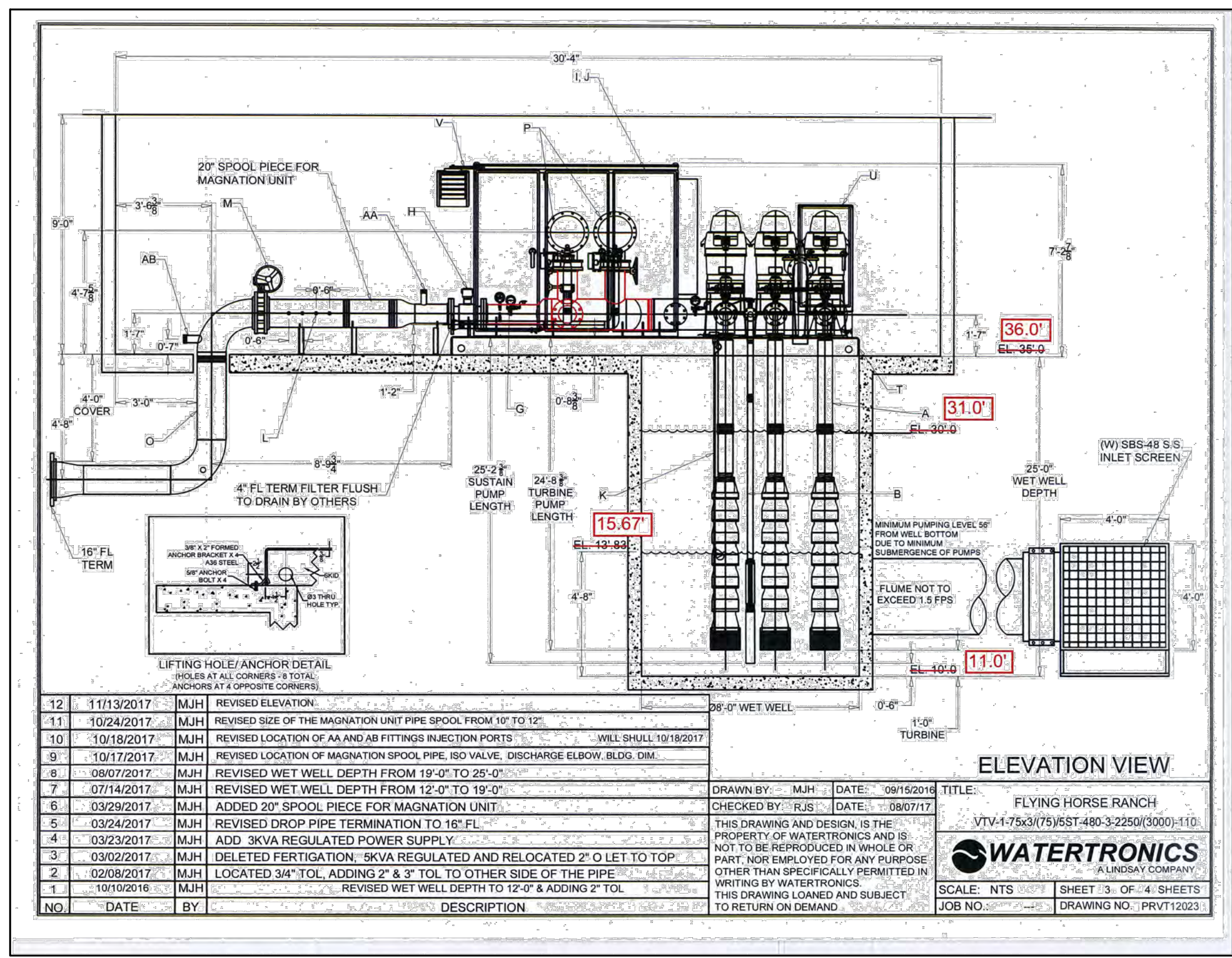
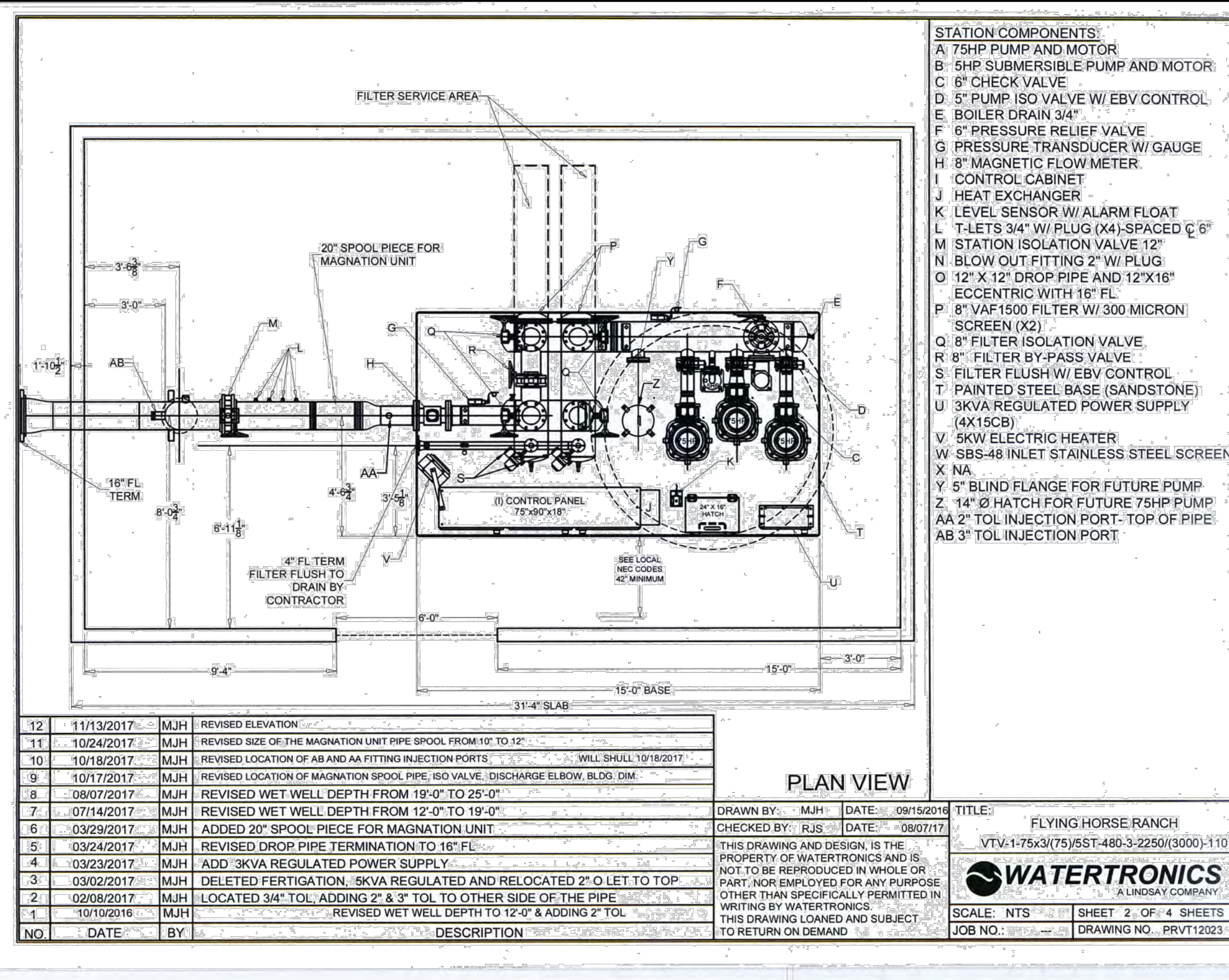
THE PUMP STATION PROPOSED HEREIN IS DESIGNED TO BE PLACED IN A
PUMP HOUSE FOR PROTECTION FROM THE ENVIRONMENT. IF A PUMP HOUSE
IS NOT USED, WATERTRONICS MUST BE NOTIFIED AT TIME OF QUOTATION
SO SPECIAL PROVISIONS CAN BE MADE.

WATERTRONICS
A LINDSAY COMPANY

PHONE: 1-262-367-5000
FAX: 1-262-367-5001

SHEET 1 OF 4 SHEETS

DRAWING NO. PRVT12023 09/15/2016



48 HOURS BEFORE YOU DIG,
CALL UTILITY LOCATORS

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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, P.E. #37155

DATE

CLASSIC
CONSULTING
ENGINEERS & SURVEYORS

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

FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT

PUMP STATION PLAN / DETAILS

DESIGNED BY	MAW	SCALE	DATE	1-4-18
DRAWN BY	MAW	(H) 1"= N/A	SHEET 3 OF 12	
CHECKED BY		(V) 1"= N/A	JOB NO.	1096.11

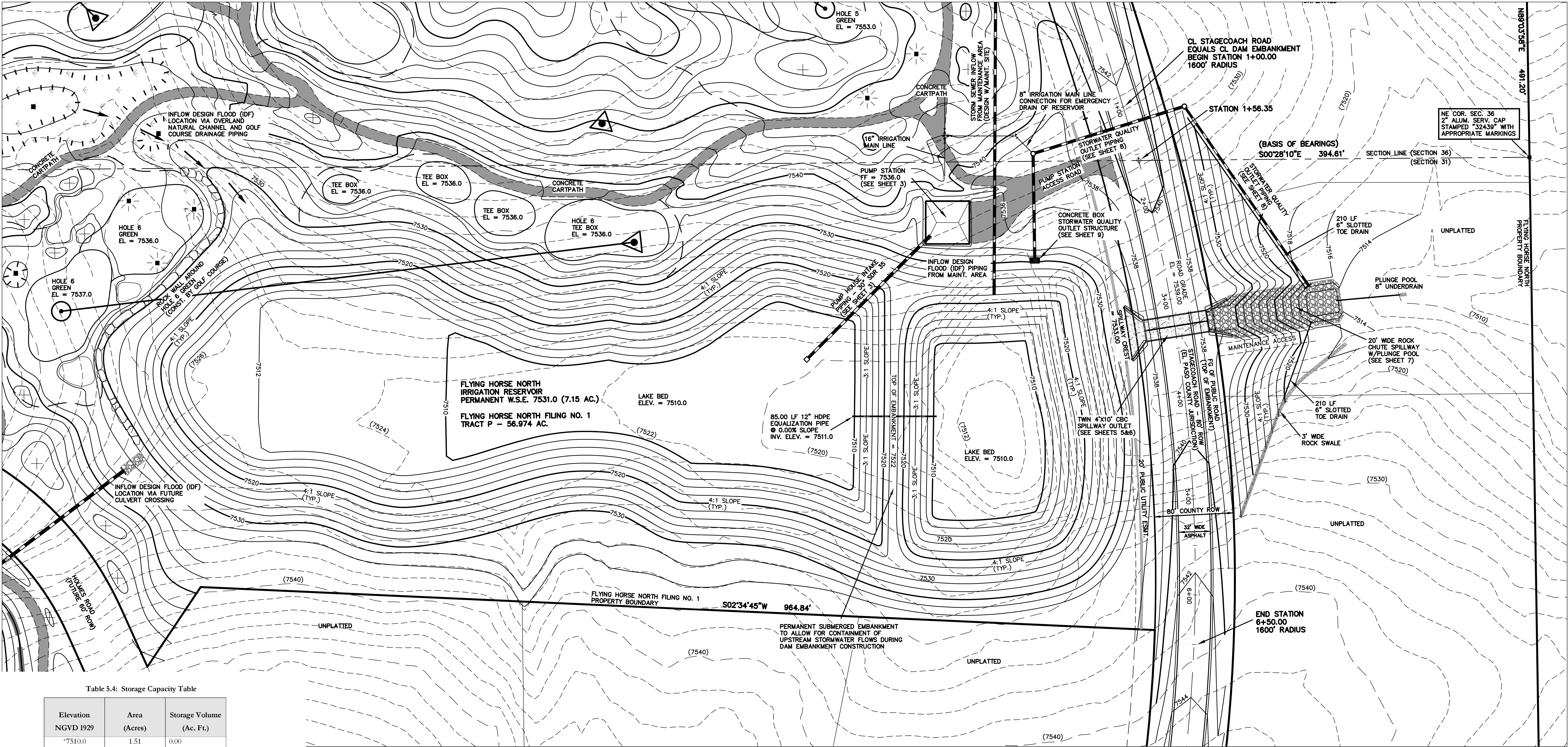


Table 5.4: Storage Capacity Table

Elevation NGVD 1929	Area (Acres)	Storage Volume (Ac. Ft.)
7510.0	1.51	0.00
7511.0	1.99	1.74
7512.0	2.52	3.99
7513.0	2.85	6.68
7514.0	3.05	9.63
7515.0	3.26	12.78
7516.0	3.48	16.15
7517.0	3.70	19.74
7518.0	3.93	23.56
7519.0	4.16	27.60
7520.0	4.40	31.88
7521.0	4.64	36.40
7522.0	4.88	41.16
7523.0	5.14	46.17
7524.0	5.36	51.42
7525.0	5.59	56.89
7526.0	5.84	62.61
7527.0	6.08	68.57
7528.0	6.33	74.77
7529.0	6.57	81.22
7530.0	6.81	87.91
7531.0	7.15	94.89
7532.0	7.52	102.22
7533.0	7.83	109.90
7534.0	8.37	118.00
7535.0	8.77	126.57
7536.0	9.17	135.53

*Indicates dead storage below pumping ability

Table 5.5: Reservoir Discharge Table

Elevation	Discharge (cfs)	Discharge (cfs)	Discharge (cfs)
	(SWQ Outlet Box)	(Twin CBC Spillway)	(Total)
7531.0	0.0	0.0	0.0
7532.0	13.89	0.0	13.89
7533.0	27.77	0.0	27.77
7534.0	51.31	49.05	100.36
7535.0	69.52	138.56	208.08
7536.0	74.61	254.72	329.33

Permanent WSE = 7531.0

Top of SWQ Outlet box = 7533.0

Spillway elevation = 7533.0

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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

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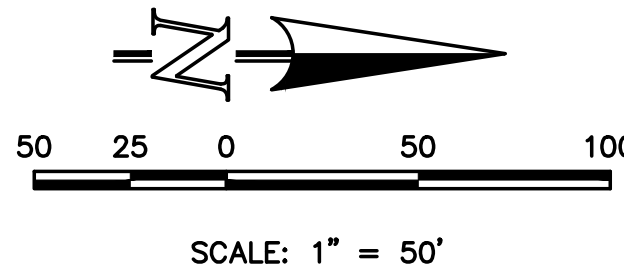
619 N. Cascade Avenue, Suite 200
Colorado Springs, Colorado 80903
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(719)785-0799(Fax)

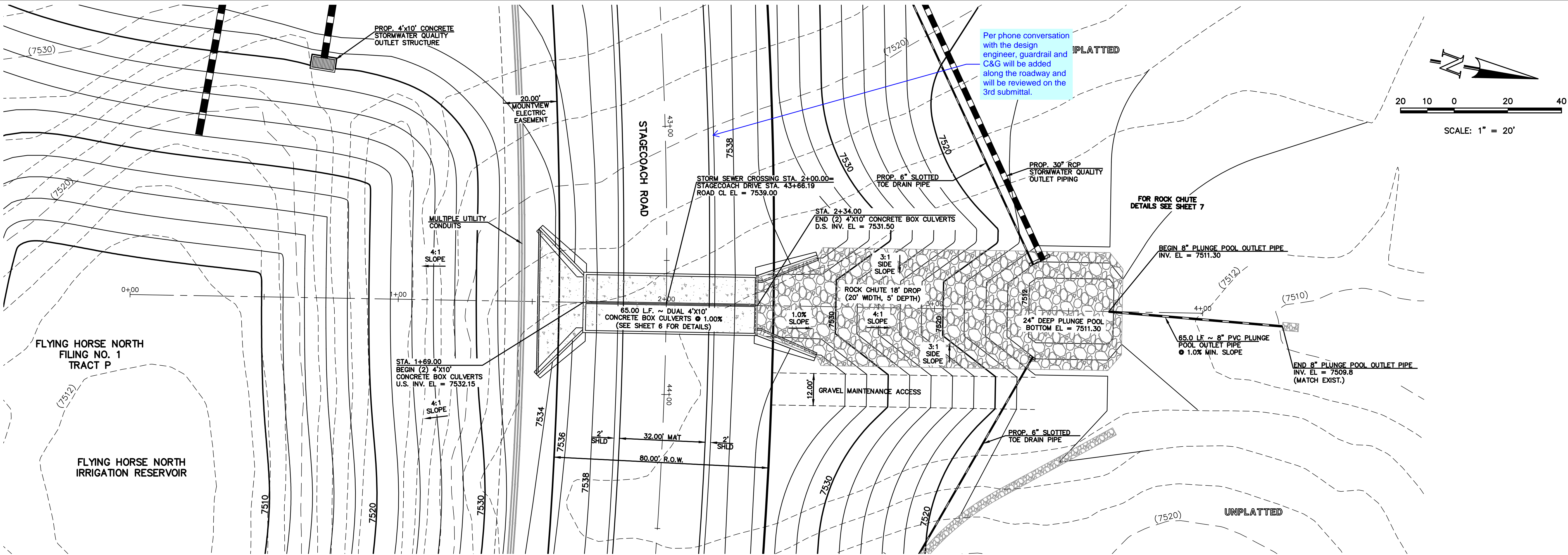
FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT
SITE LAYOUT WITH GRADING

DESIGNED BY	MAW	SCALE	DATE	1-4-18
DRAWN BY	MAW	(H) 1"= 50'	SHEET 4	OF 12
CHECKED BY		(V) 1"= N/A	JOB NO.	1096.11

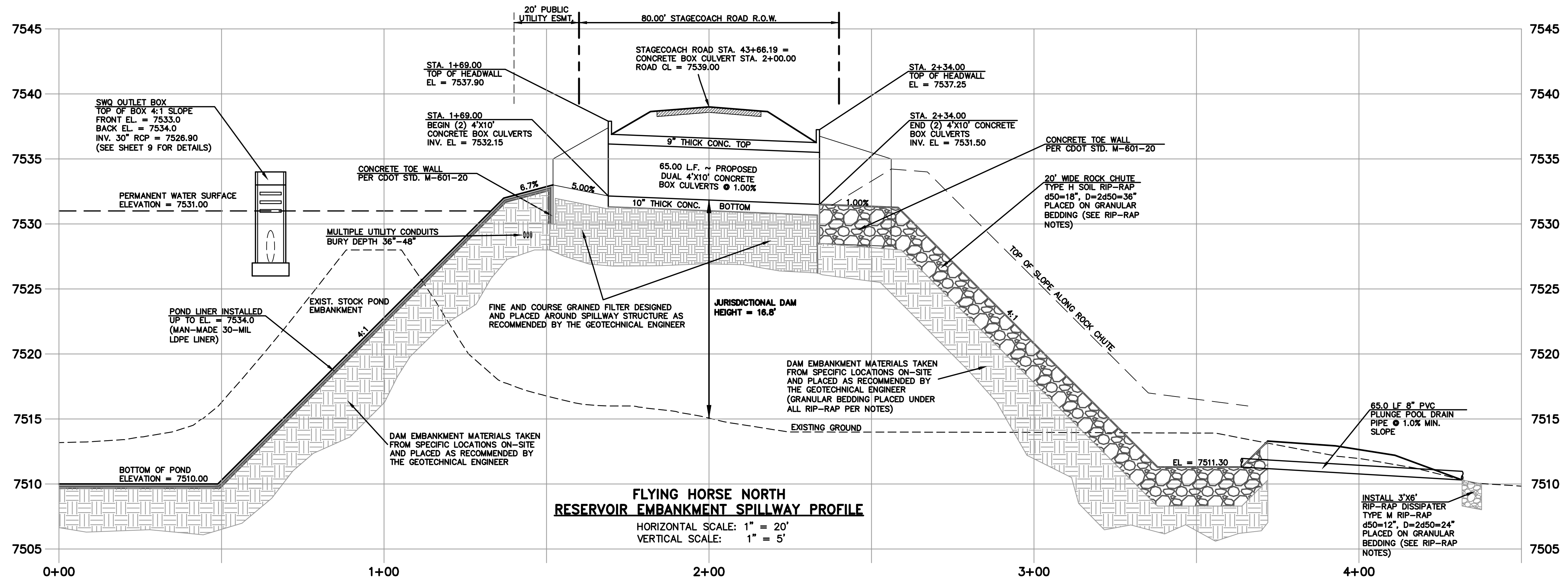
NOTES:

- TOPOGRAPHIC BASE MAPPING PRODUCED FROM AERIAL PHOTOGRAPHY PROVIDED BY NORTH AMERICAN MAPPING IN 2009. HORIZONTAL CONTROL IS BASED ON LOCAL CALIBRATION TIED TO SECTION CORNER AND VERTICAL CONTROL IS BASED ON NGVD 1929 DATUM.
- PERMANENT WSE = 7531.0
- RESERVOIR LINER INSTALLED UP TO ELEVATION 7534.0





FLYING HORSE NORTH
RESERVOIR EMBANKMENT SPILLWAY PLAN



FLYING HORSE NORTH
RESERVOIR EMBANKMENT SPILLWAY PROFILE

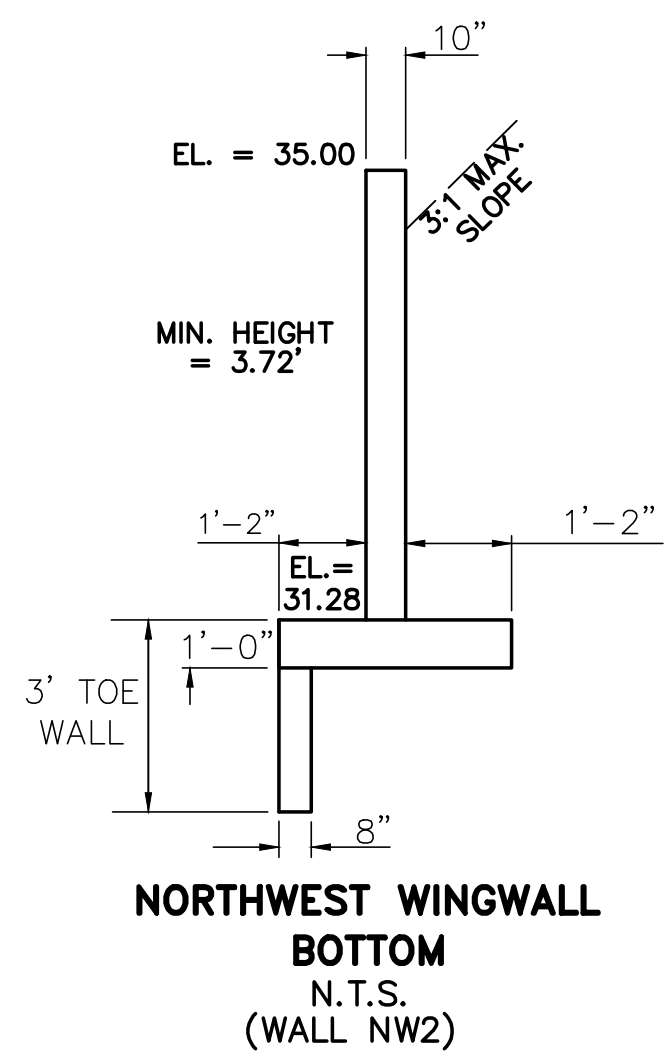
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		DATE	
		DATE	

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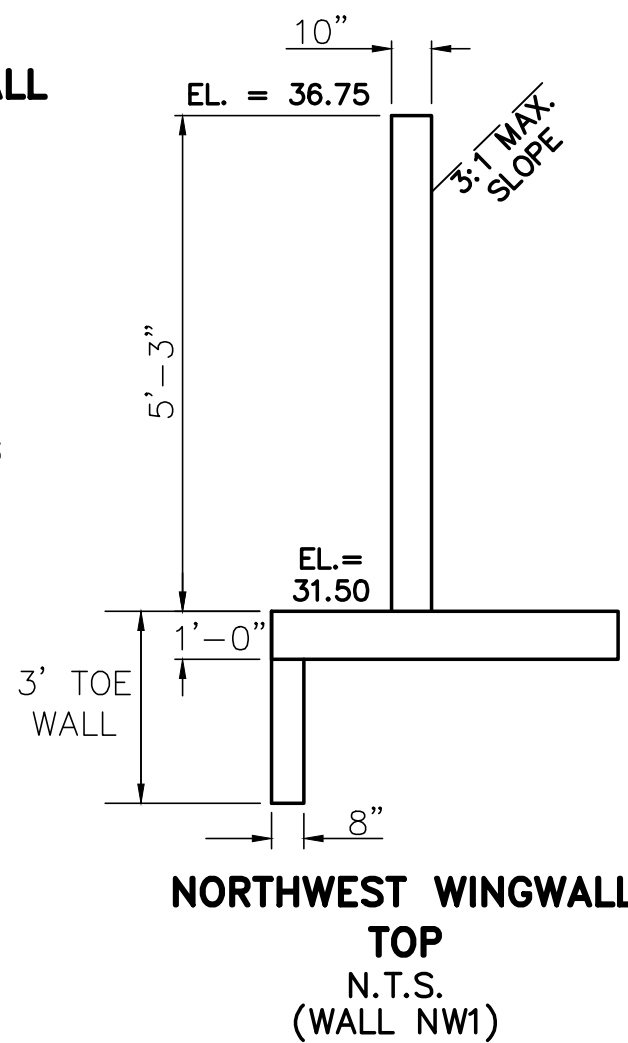
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Colorado Springs, Colorado 80903
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(719) 785-0799 (fax)

FLYING HORSE NORTH IRRIGATION RESERVOIR EMBANKMENT EMBANKMENT SPILLWAY PLAN				
DESIGNED BY	MAW	SCALE	DATE	1-4-18
DRAWN BY	MAW	(H) 1"= 20'	SHEET	5 OF 12
CHECKED BY		(V) 1"= 5'	JOB NO.	1096.11

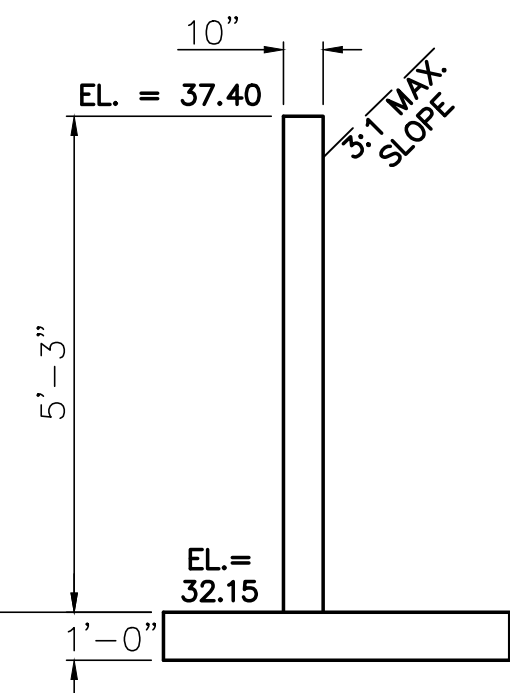
N:\09611\DRAWINGS\CONSTRUCTION\jurisdictional Plans\5-JD POND - Spillway Profile.dwg, 1/12/2018 1:29:28 PM, DWG To PDF.pc3



NORTHWEST WINGWALLS
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
CBC INV. EL = 7531.50
EL AT TOP OF CBC = 7537.25
EL AT TOP OF WINGWALL NW1 = 7536.75
EL AT TOP OF WINGWALL NW2 = 7535.00

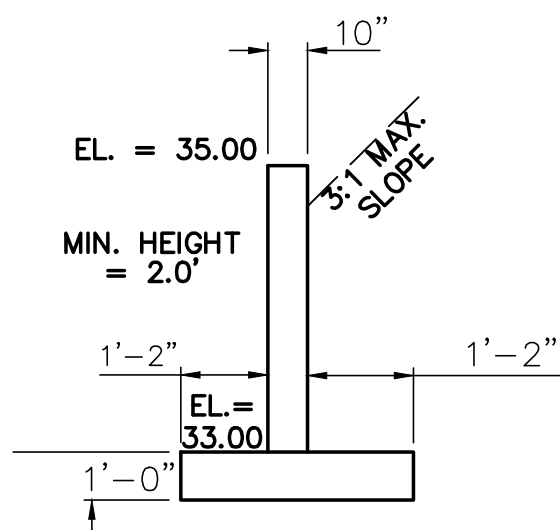


NORTHWEST WINGWALL TOP
N.T.S.
(WALL NW1)

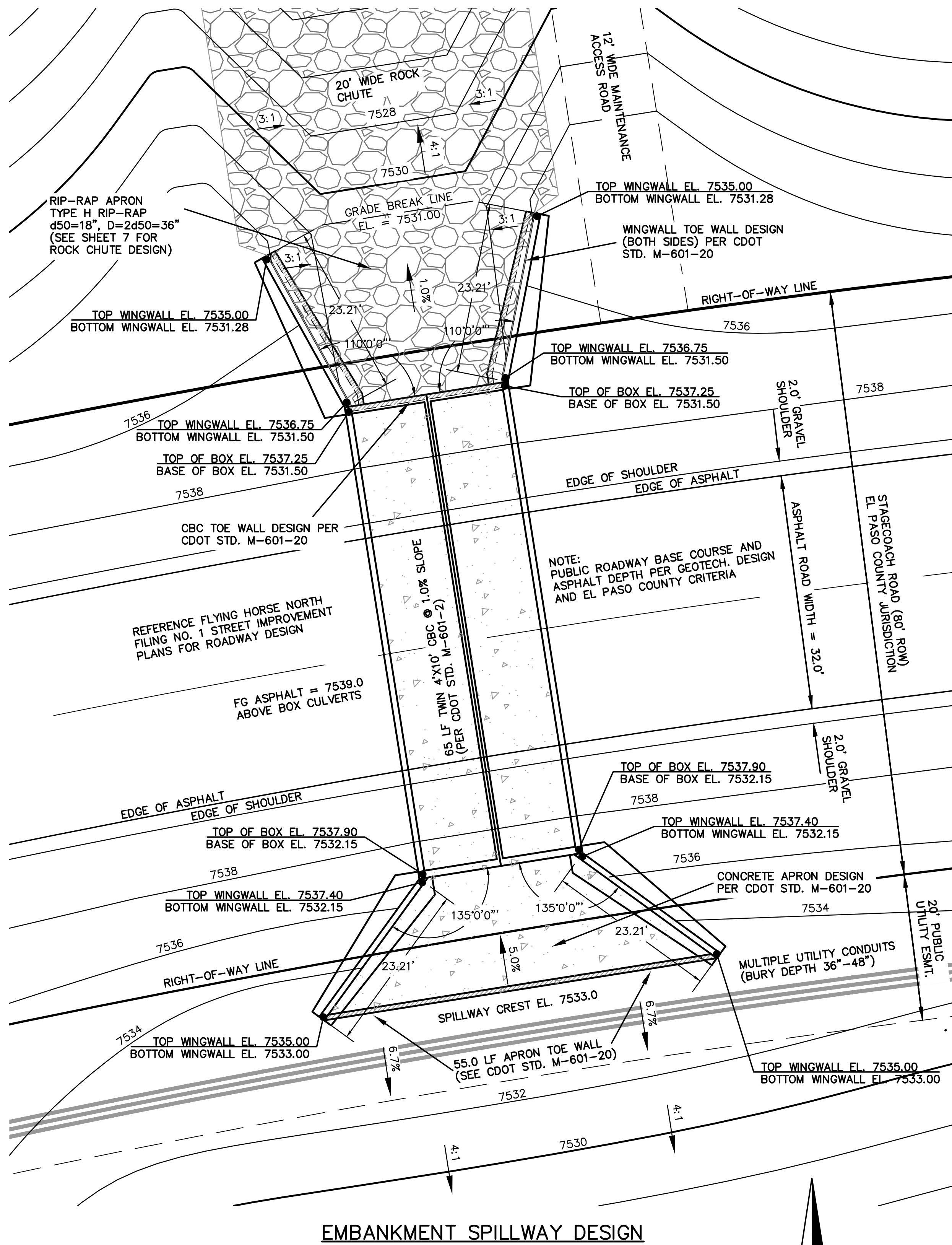


SOUTHWEST WINGWALLS
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
CBC INV. EL = 7532.15
EL AT TOP OF CBC = 7537.90
EL AT TOP OF WINGWALL SW1 = 7537.40
EL AT TOP OF WINGWALL SW2 = 7535.00

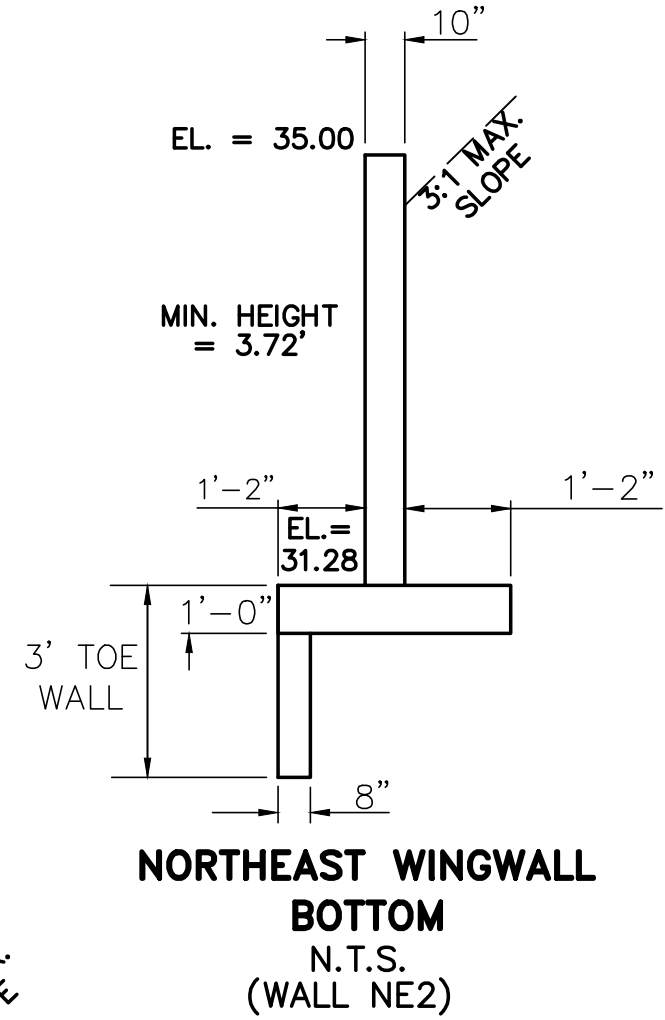
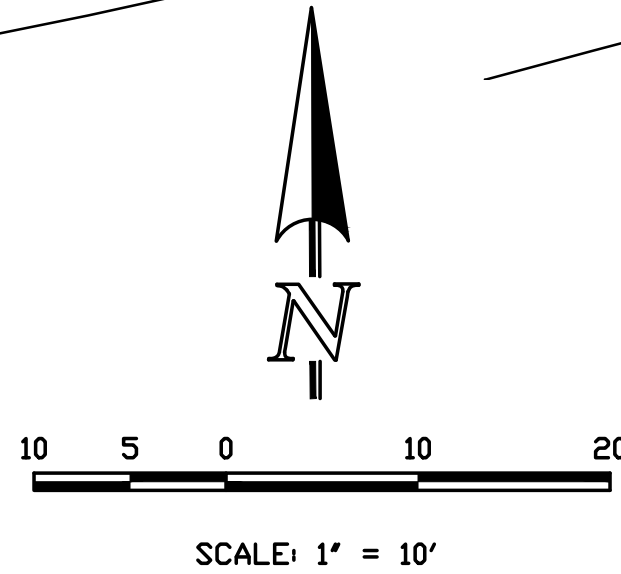
SOUTHWEST WINGWALL TOP
N.T.S.
(WALL SW1)



SOUTHWEST WINGWALL BOTTOM
N.T.S.
(WALL SW2)

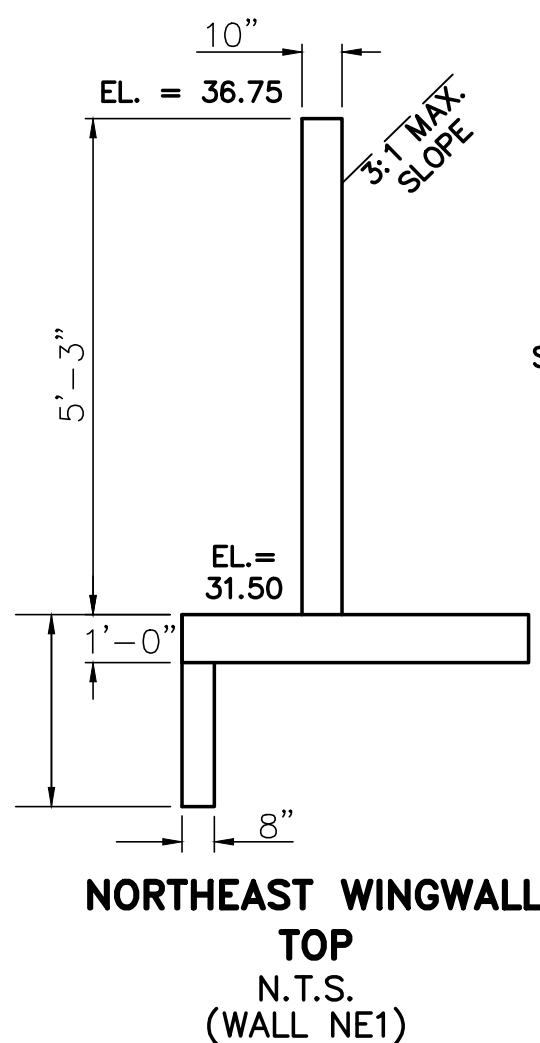


EMBANKMENT SPILLWAY DESIGN

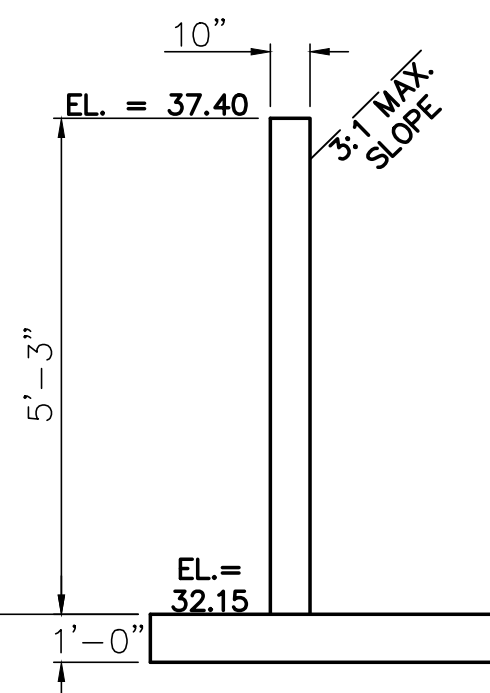


NORTHEAST WINGWALL BOTTOM
N.T.S.
(WALL NE2)

NORTHEAST WINGWALLS
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
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EL AT TOP OF CBC = 7537.25
EL AT TOP OF WINGWALL NE1 = 7536.75
EL AT TOP OF WINGWALL NE2 = 7535.00

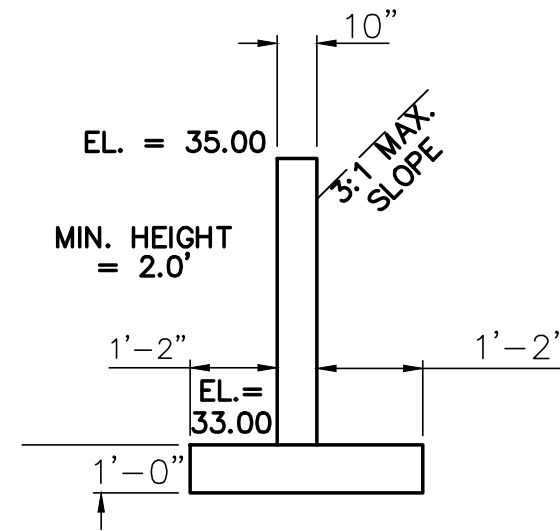


NORTHEAST WINGWALL TOP
N.T.S.
(WALL NE1)



SOUTHEAST WINGWALL TOP
N.T.S.
(WALL SE1)

SOUTHEAST WINGWALLS
SEE CDOT M-601-20 FOR DESIGN REQUIREMENTS
CBC INV. IN EL = 7532.15
EL AT TOP OF CBC = 7537.90
EL AT TOP OF WINGWALL SE1 = 7537.40
EL AT TOP OF WINGWALL SE2 = 7535.00



SOUTHEAST WINGWALL BOTTOM
N.T.S.
(WALL SE2)

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DATE

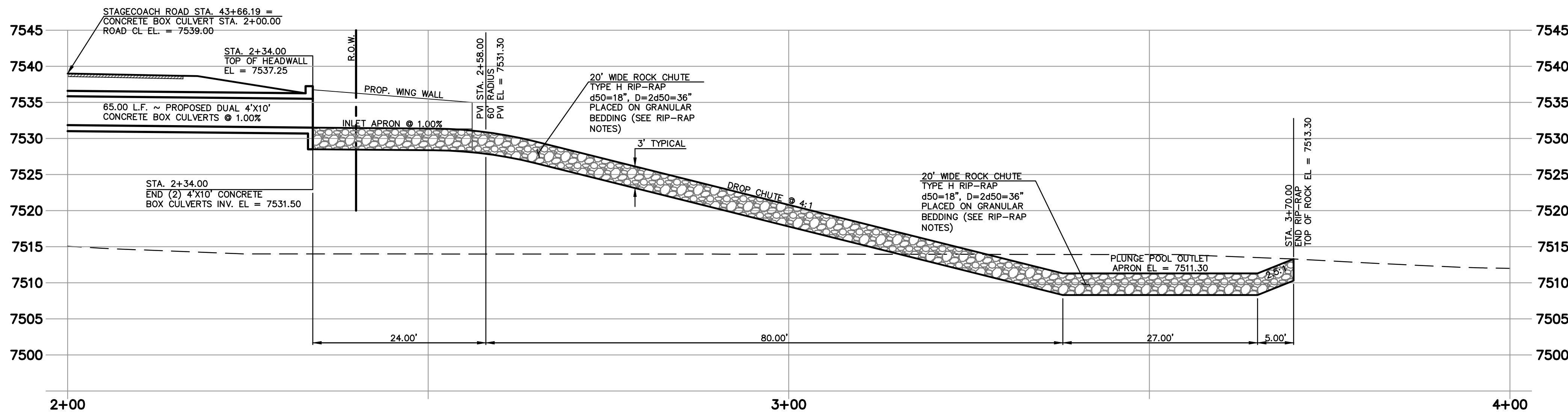
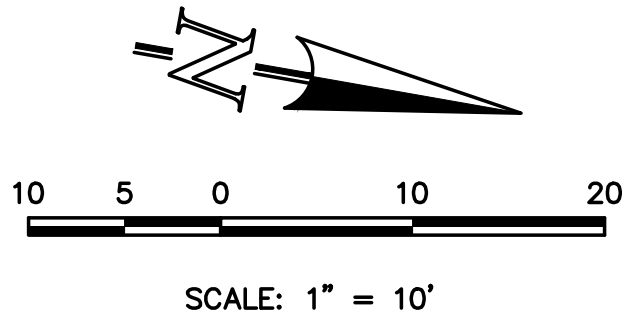
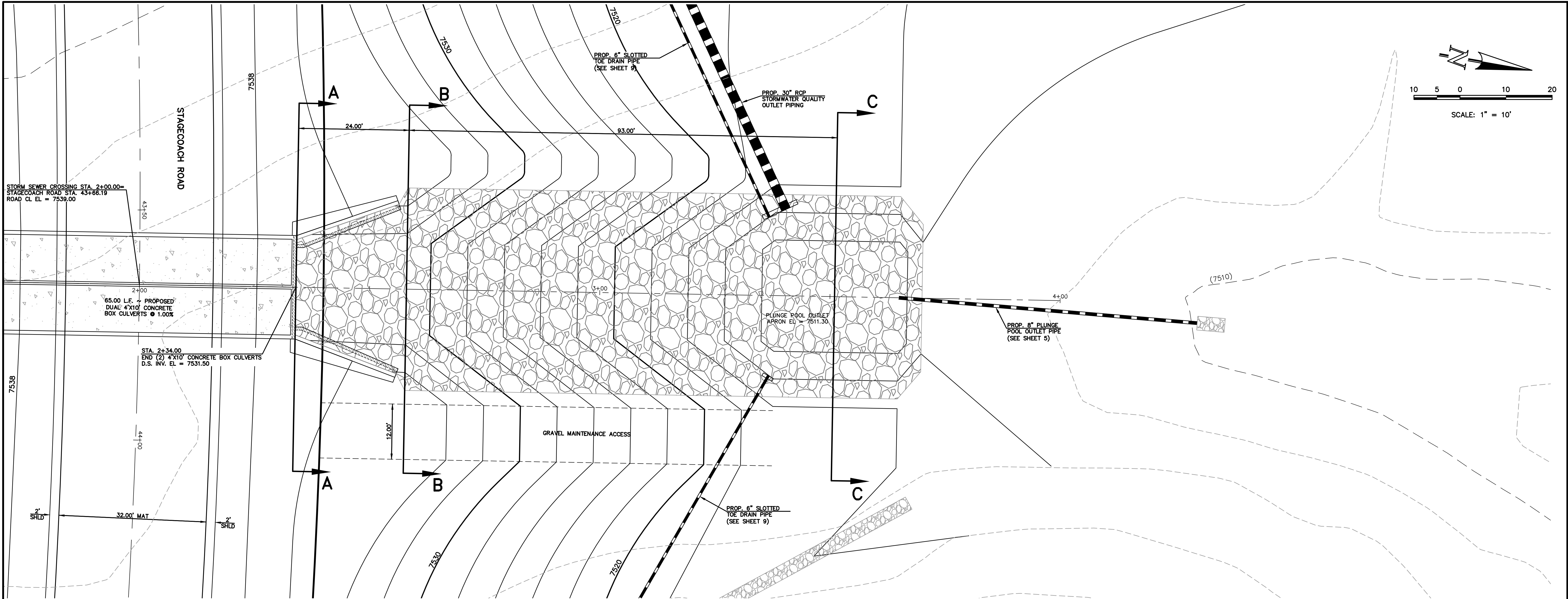


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FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT
EMBANKMENT SPILLWAY DETAILS

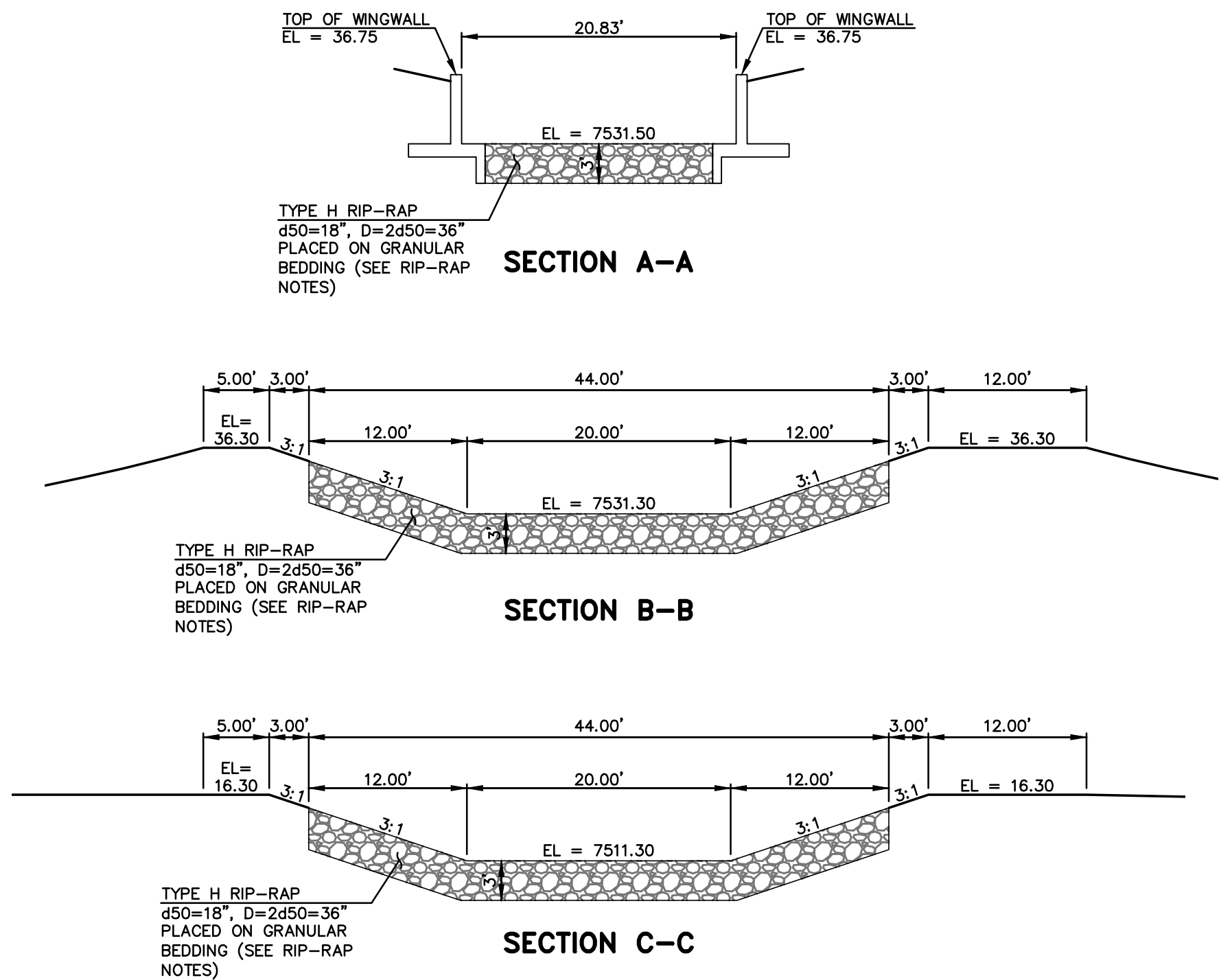
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DRAWN BY	MAW	(H) 1"= 20'	SHEET	6 OF 12
CHECKED BY		(V) 1"= N/A	JOB NO.	1096.11





SPILLWAY ROCK CHUTE PROFILE

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 1'



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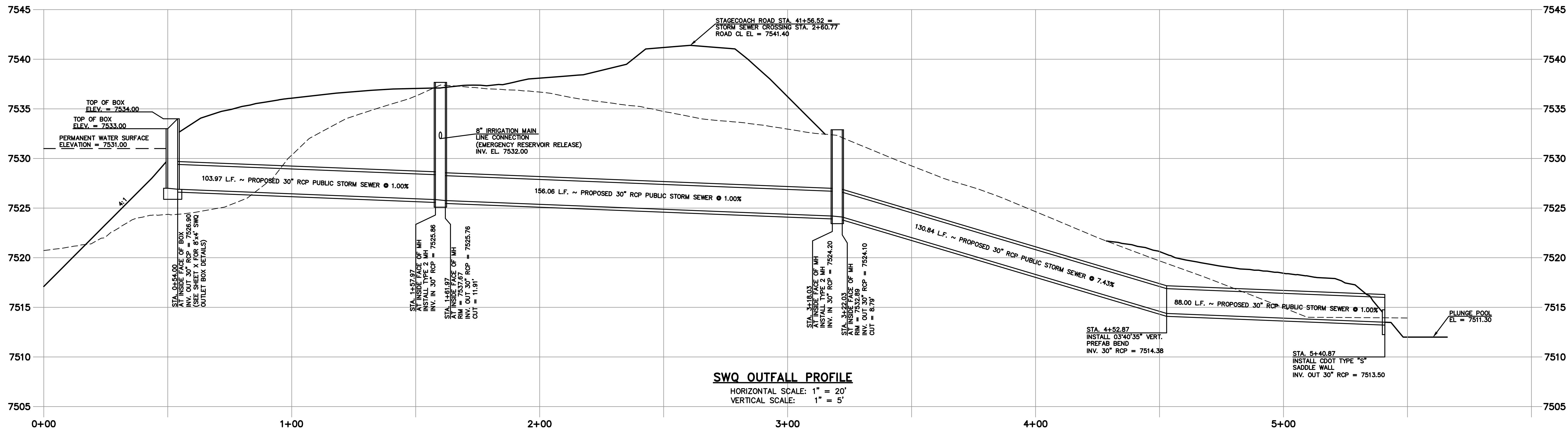
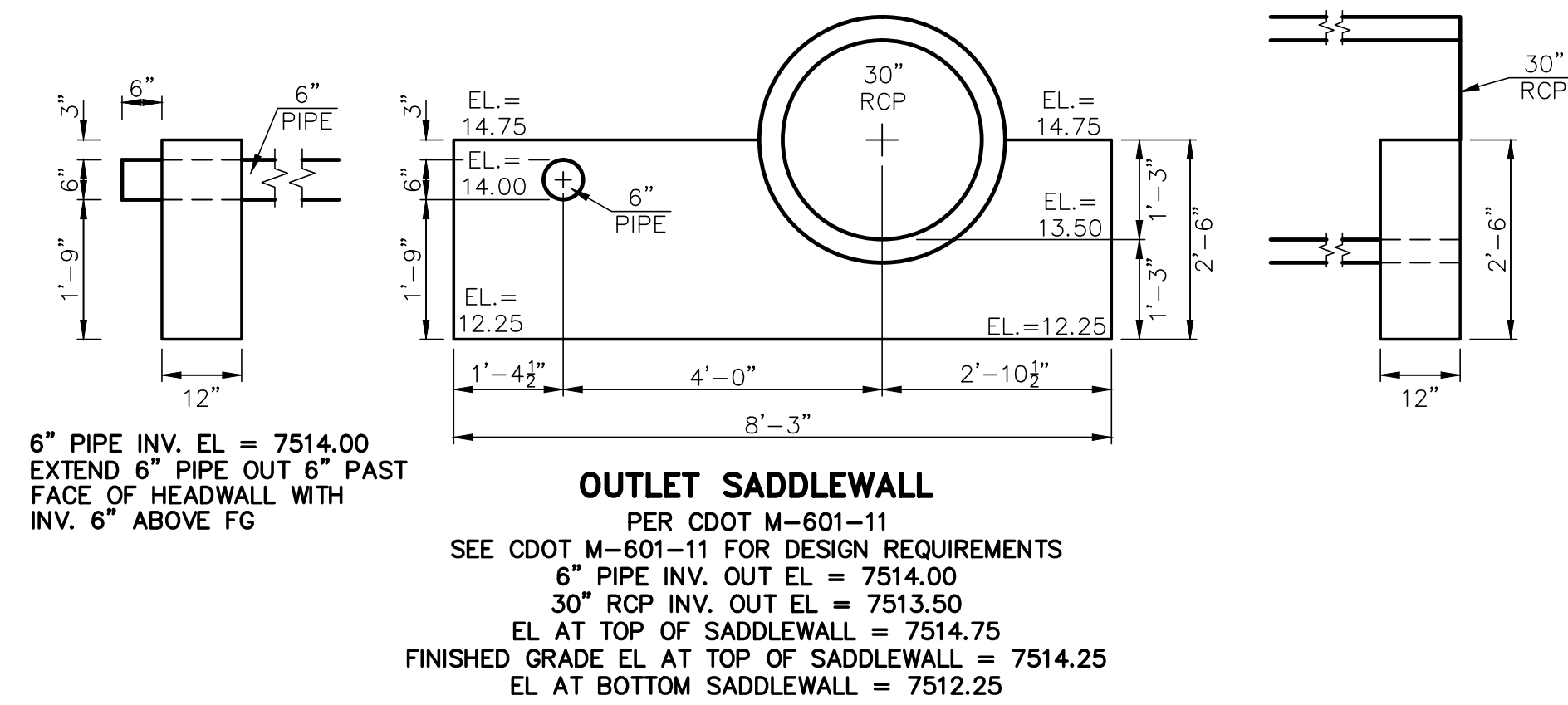
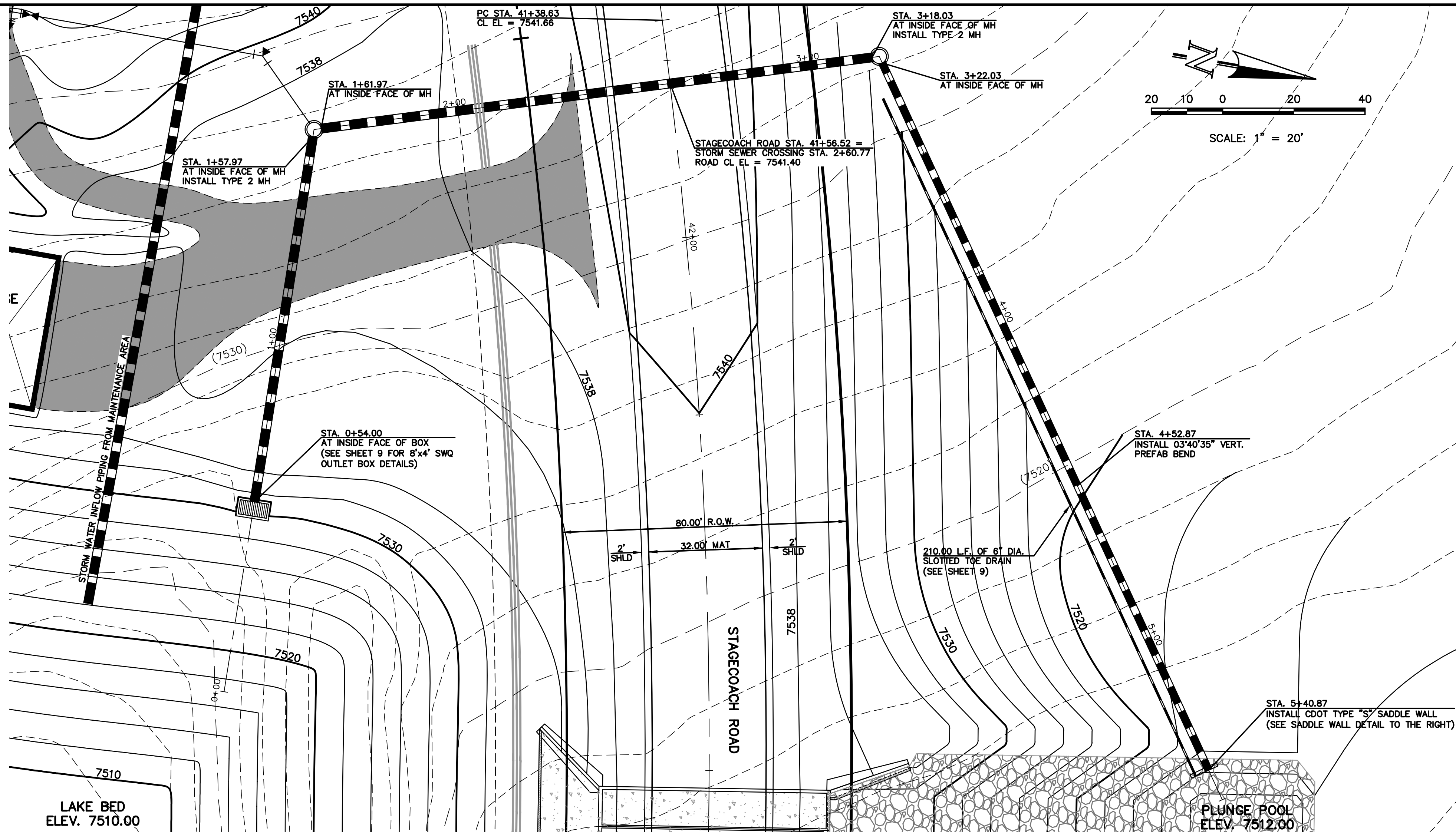
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FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT
SPILLWAY ROCK CHUTE DESIGN

DESIGNED BY	MAW	SCALE	DATE	1-4-18
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CHECKED BY		(V) 1"= 1'	JOB NO.	1096.11

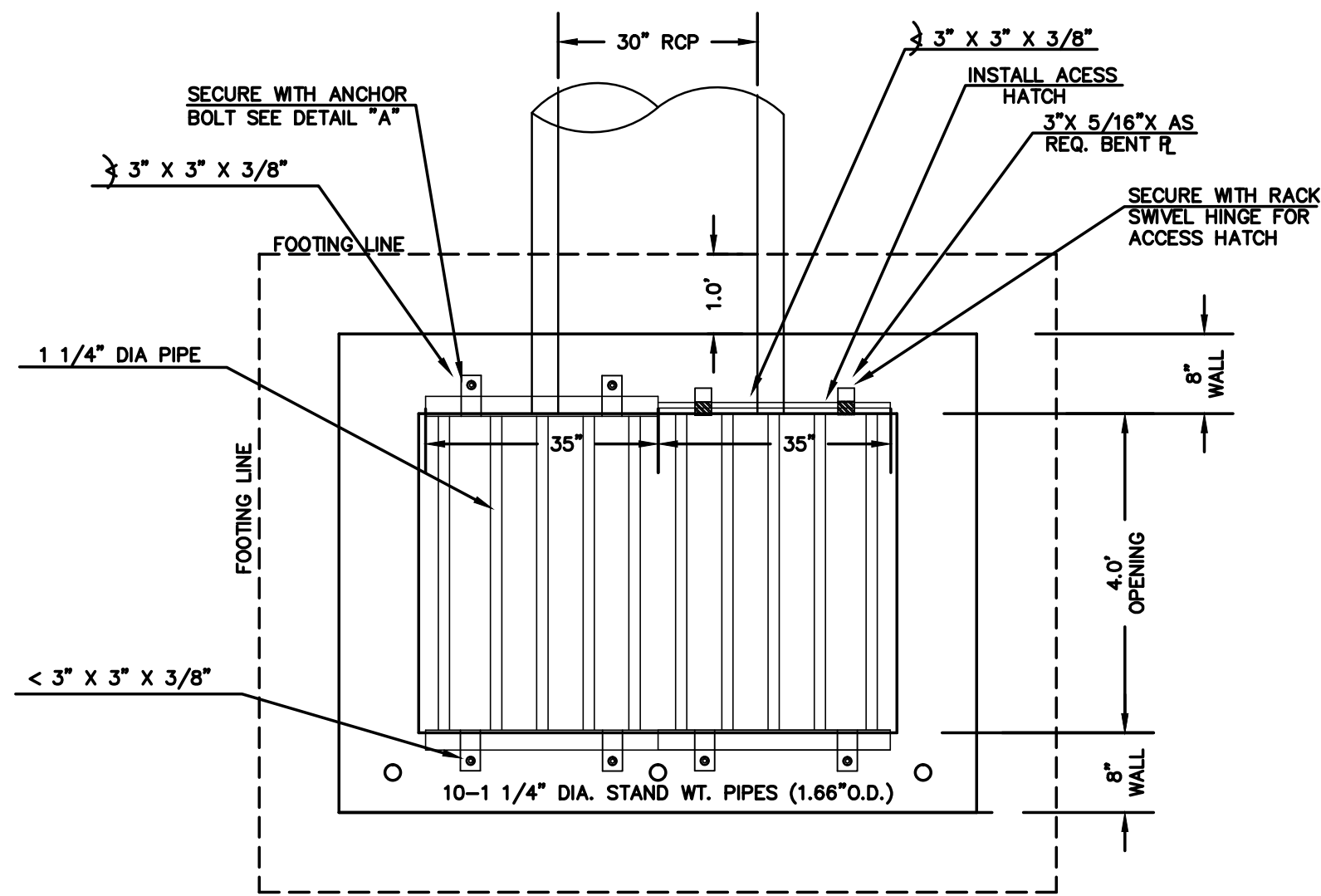
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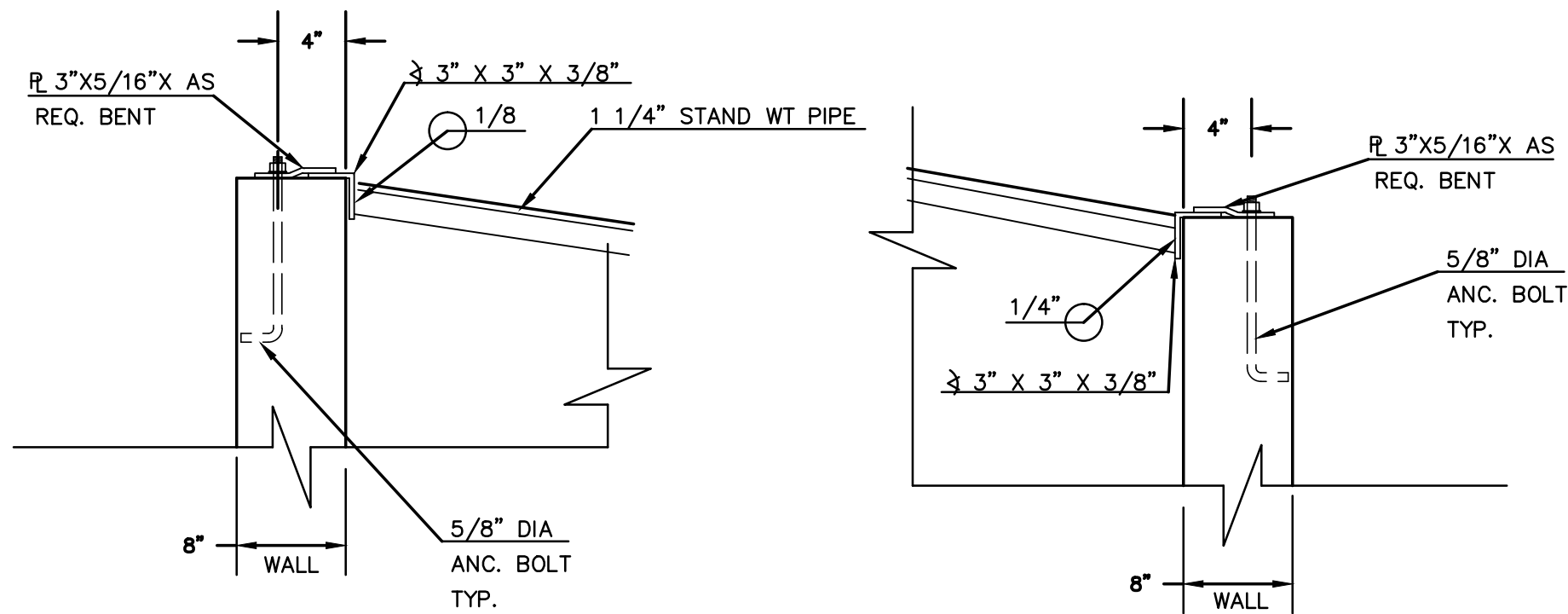


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DESIGNED BY	MAW	SCALE	DATE	1-4-18																																																	
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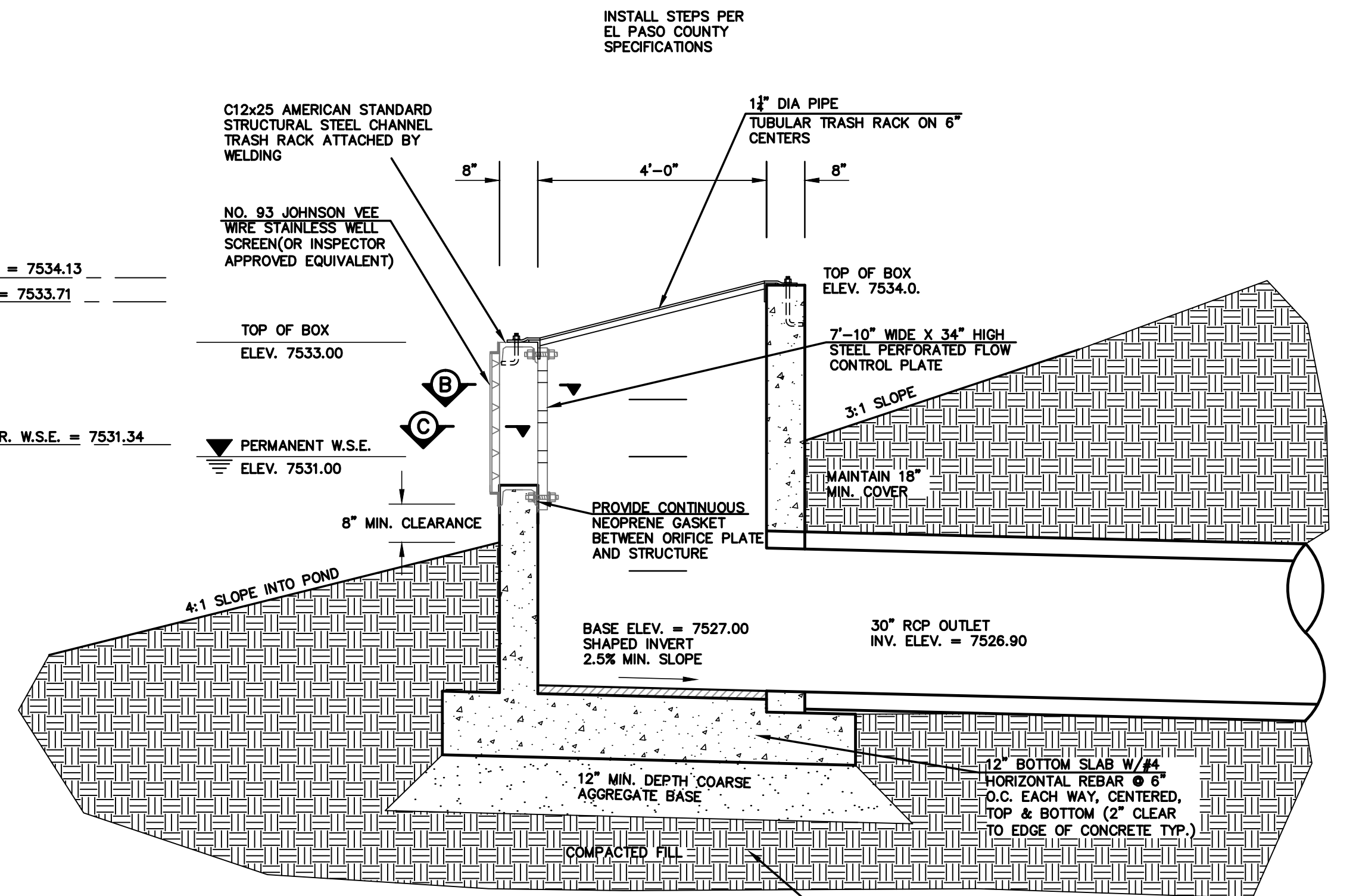


TRASH RACK
ALL WELDED CONSTRUCTION
N.T.S.



100 YR. W.S.E. = 7534.13
50 YR. W.S.E. = 7533.71

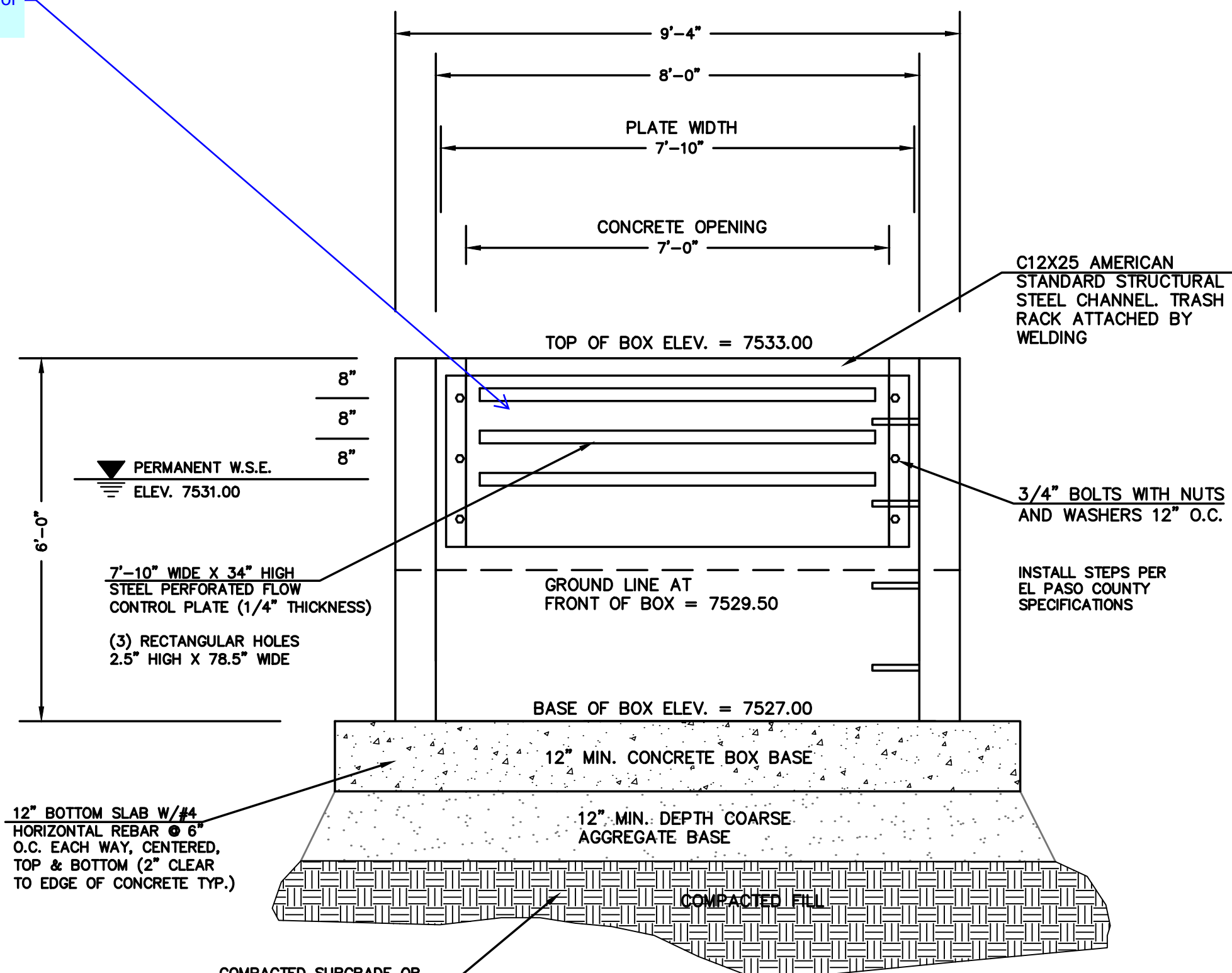
2 YR. W.S.E. = 7531.21 / 5 YR. W.S.E. = 7531.34



SECTION A
N.T.S.

**8'x4' SWQ OUTLET BOX WITH
FLOW CONTROL PLATE**

SCALE: 1"=2'



**8'x4' SWQ OUTLET BOX WITH
FLOW CONTROL PLATE**

SCALE: 1"=2'

(ALL MATERIALS PER EL PASO COUNTY SPECIFICATIONS)

ORIFICE PLATE NOTES:

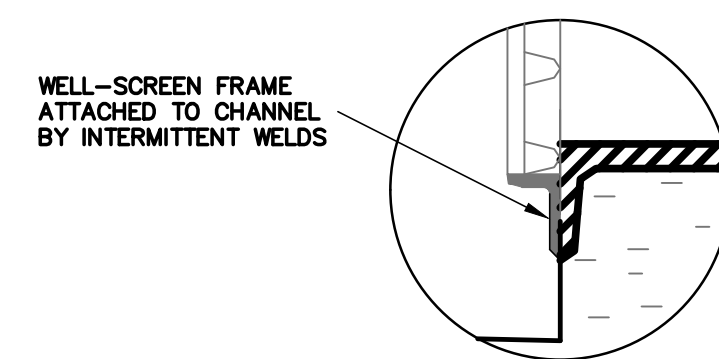
1. INSTALL HOLES AS SHOWN ON DETAIL TO RIGHT.
2. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.

EURY AND WQCV TRASH RACKS:

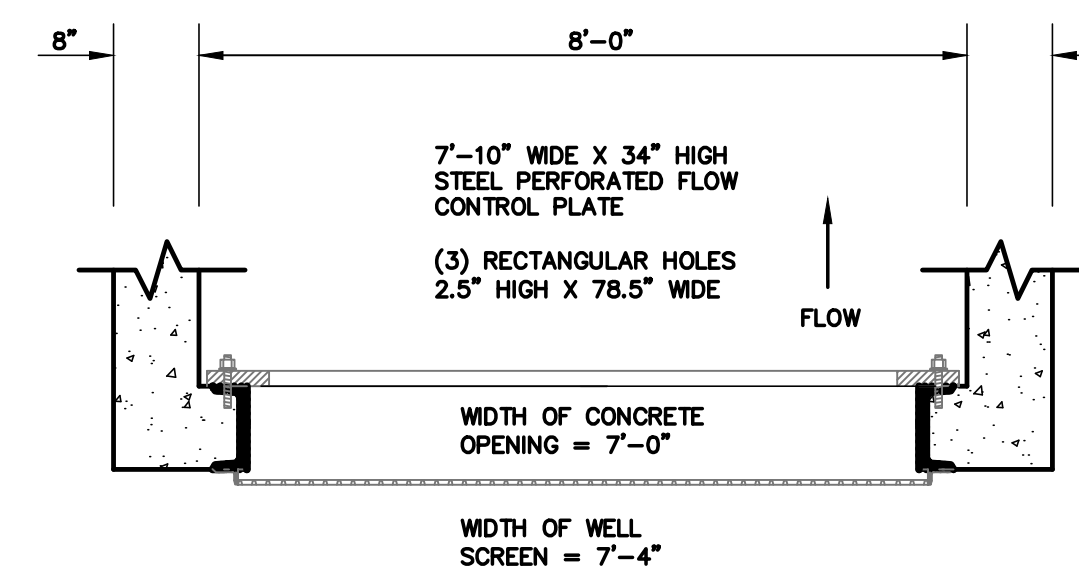
3. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
4. BAR GRATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
5. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD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

OVERFLOW TRASH RACKS:

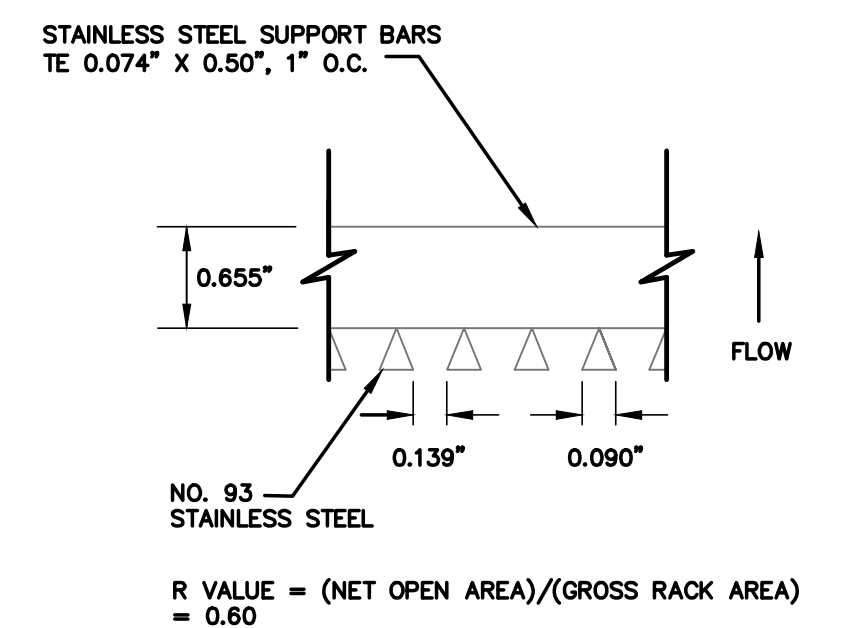
1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS
2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
3. TRASH RACKS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



SECTION B
N.T.S.



SECTION C
N.T.S.



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DATE

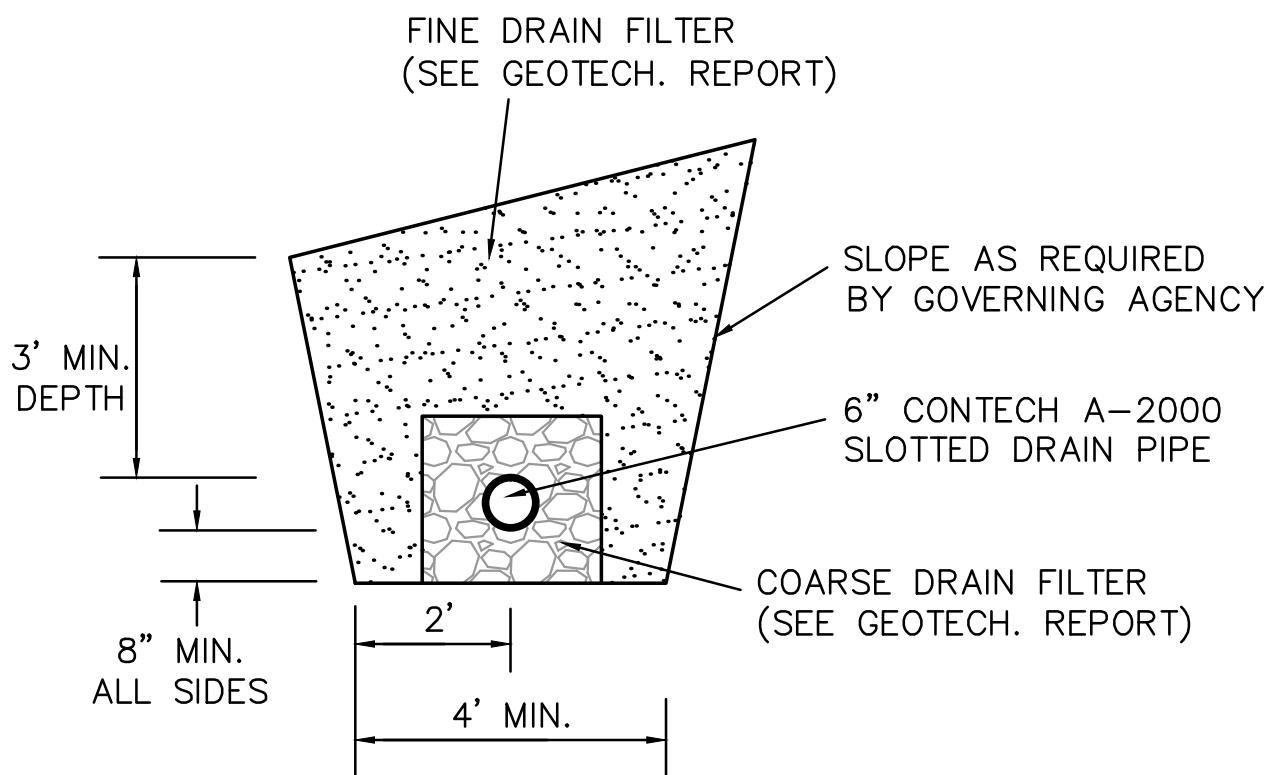
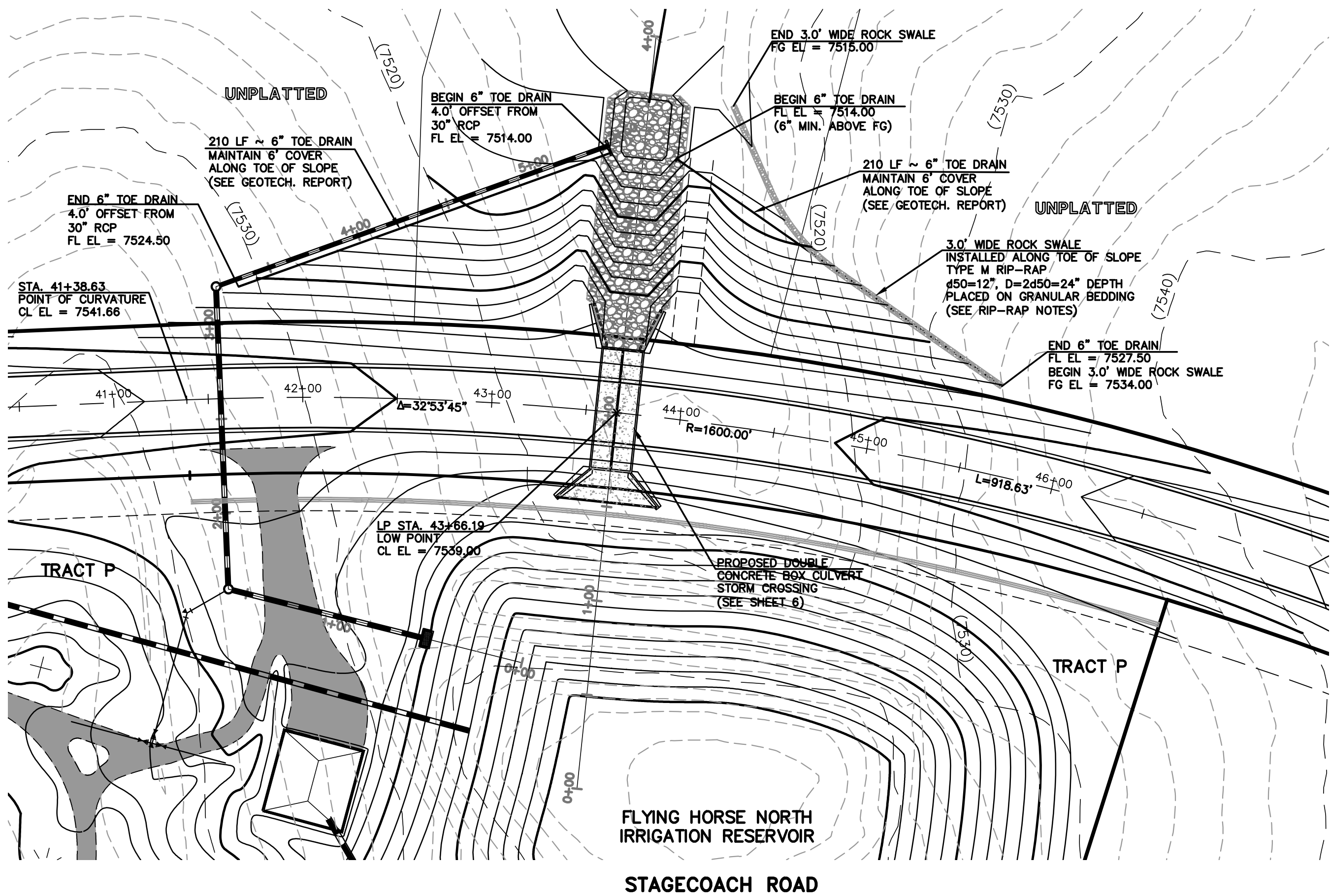
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Colorado Springs, Colorado 80903
(719) 785-0790
(719) 785-0799 (fax)

FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT
DETENTION/SWQ OUTLET BOX DESIGN

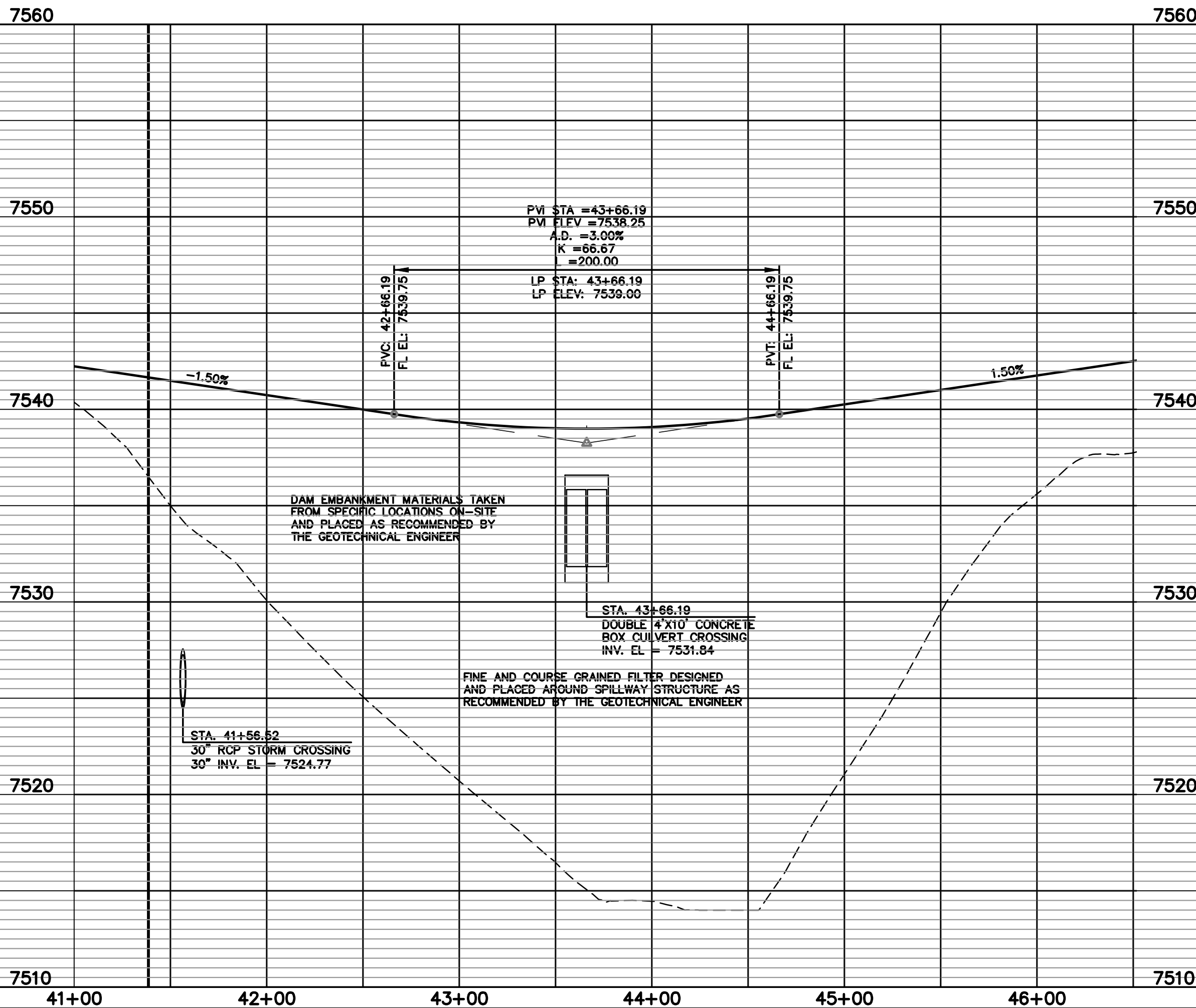
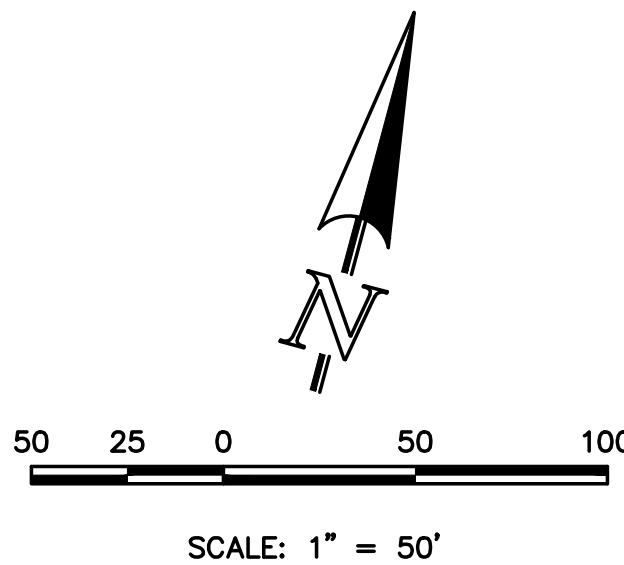
DESIGNED BY	MAW	SCALE	DATE	1-4-18
DRAWN BY	MAW	(H) 1"= 2'	SHEET 9 OF 12	
CHECKED BY		(V) 1"= 2'	JOB NO.	1096.11

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DRAIN FILTER WITH
SLOTTED DRAIN DETAIL
N.T.S.

NOTE:
SEE GEOTECH. REPORT APPENDIX D
FOR FILTER CALCULATIONS/DETAILS.



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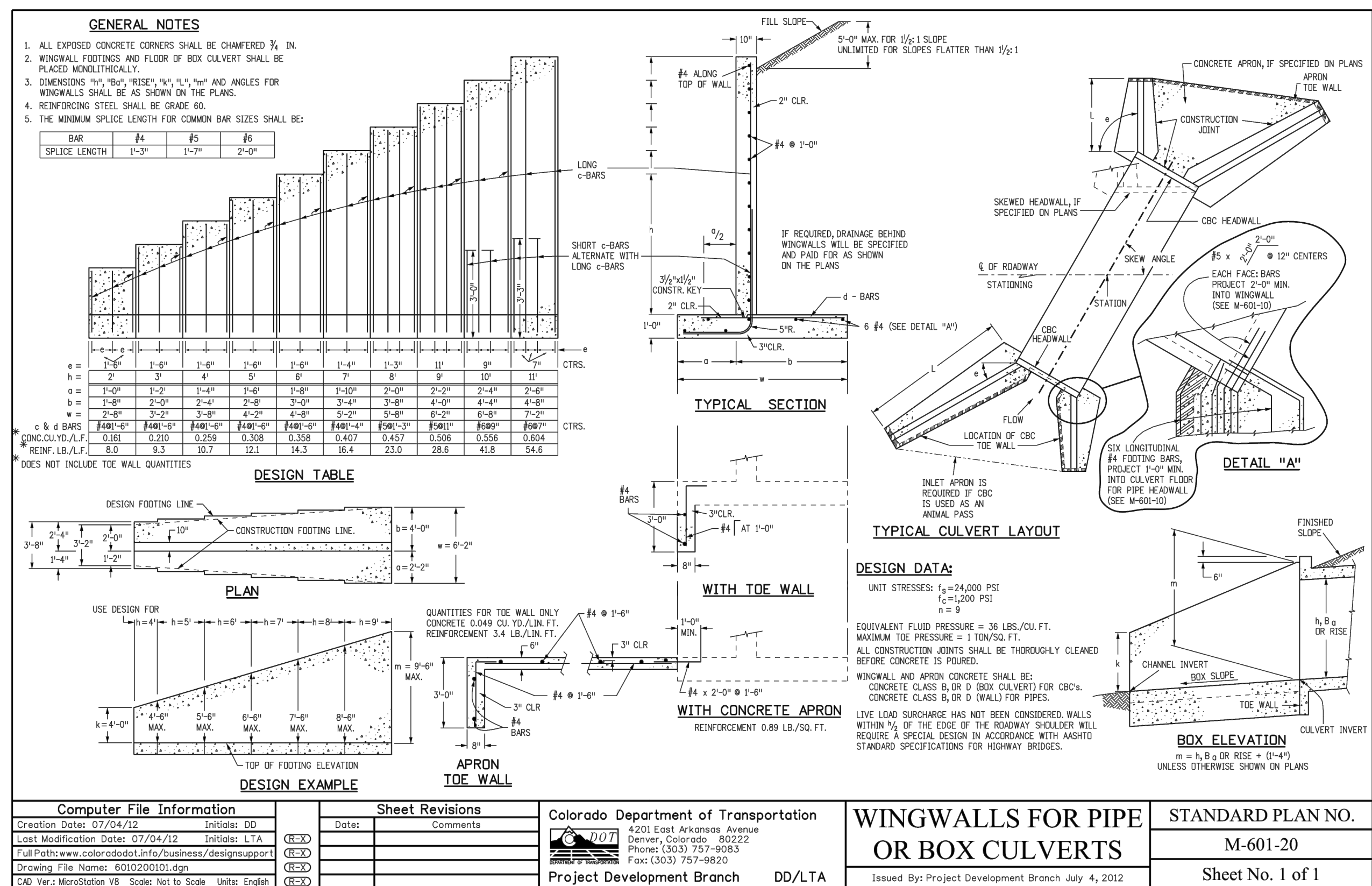




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Colorado Springs, Colorado 80903
(719)785-0790
(719)785-0799(Fax)

FLYING HORSE NORTH
IRRIGATION RESERVOIR EMBANKMENT
STAGECOACH ROAD EMBANKMENT
TOE DRAIN DESIGN / DETAIL

DESIGNED BY	MAW	SCALE	DATE	1-4-18
DRAWN BY	MAW	(H) 1"= 50'	SHEET 10	OF 12
CHECKED BY		(V) 1"= 5'	JOB NO.	1096.11



[illegible]

<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		<p>REVIEW:</p> <p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF CLASSIC CONSULTING ENGINEERS AND SURVEYORS, LLC</p> <p>MARC A. WHORTON, COLORADO P.E. #37155</p> <p>DATE</p>	 <p>619 N. Cascade Avenue, Suite 200 (719)785-0790 Colorado Springs, Colorado, 80903 (719)785-0799(Fax)</p>	<p>FLYING HORSE NORTH IRRIGATION RESERVOIR EMBANKMENT</p> <p>DETAIL SHEET</p>				
							DESIGNED BY	MAW	SCALE	DATE	1-4-18
							DRAWN BY	MAW	(H) 1"= 20'	SHEET 12	OF 12
							CHECKED BY	(V) 1"= 5'		JOB NO.	1096.11