

COUNTY OF VENTURA
PUBLIC WORKS AGENCY

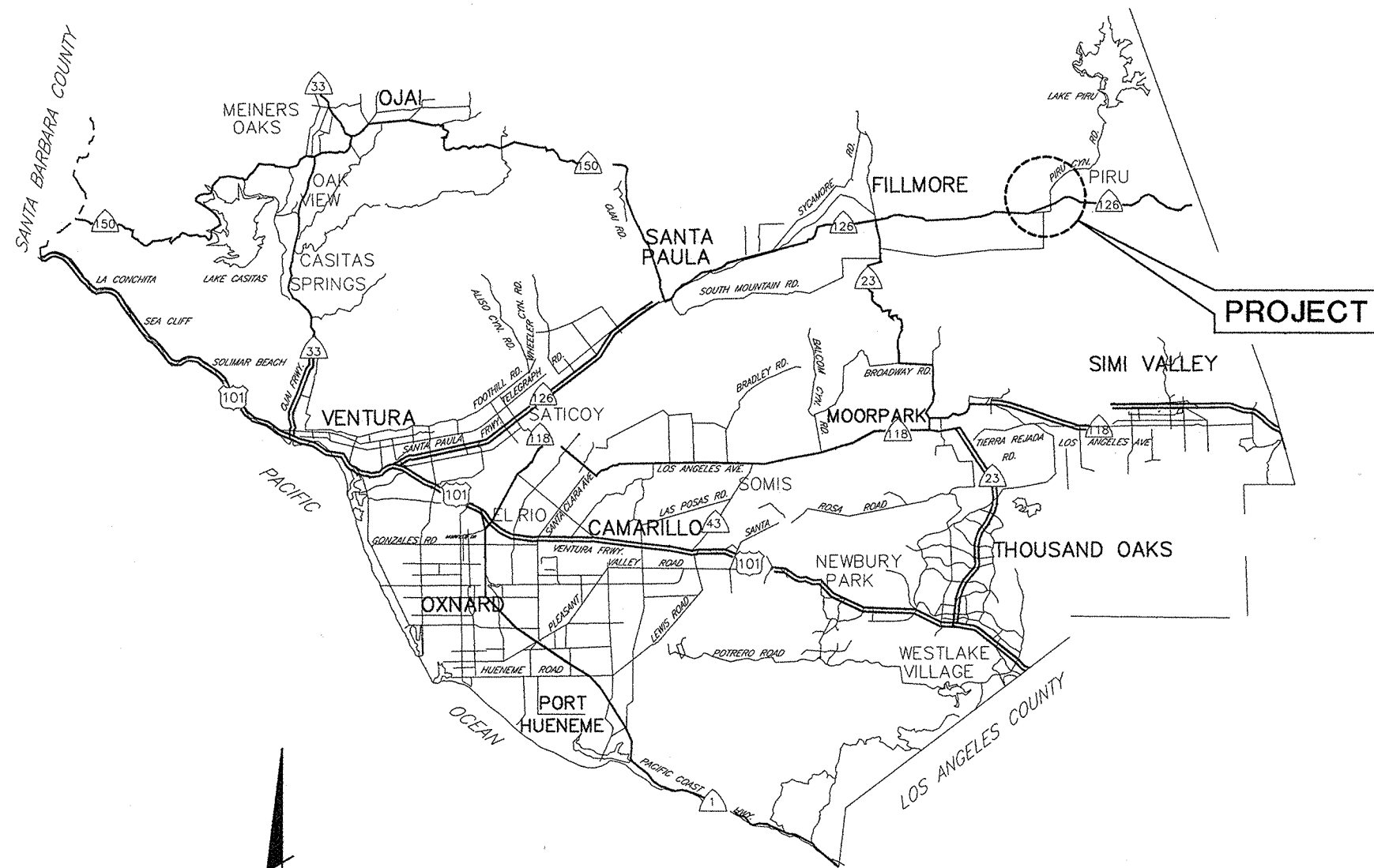
VENTURA COUNTY WATERSHED PROTECTION DISTRICT

ZONE 2

PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT

INDEX TO SHEETS

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	SITE INDEX, SOIL BORINGS, HORIZONTAL AND VERTICAL CONTROL PLAN
3.	PLAN AND PROFILE - CENTER STREET STORM DRAIN SYSTEM
4.	PLAN AND PROFILE - MANHOLE INSTALLATIONS
5.	PLAN AND PROFILE - 42" INCH STORM DRAIN SYSTEM
6.	MISCELLANEOUS DETAILS
7.	HIGH CAPACITY STORM WATER TREATMENT DEVICE DETAILS
8.	STORM WATER TREATMENT DEVICE DETAILS



VICINITY MAP

N.T.S.

GENERAL NOTES

- ELEVATIONS SHOWN ARE IN FEET, NORTH AMERICAN VERTICAL DATUM OF 1988, NGS PUB 1995.
- STATIONS SHOWN ON DRAWINGS ARE ALONG CENTERLINE OF STRUCTURE AND/OR SURVEY CONTROL LINE.
- NUMBERS IN $\#$ INDICATE BID ITEMS FOR WHICH PAYMENT WILL BE MADE.
- LETTER AND NUMBER IN $\frac{X}{XX}$ INDICATE THE DETAIL CALL-OUT AND SHEET ON WHICH REFERENCE DETAIL IS SHOWN.
- NUMBERS IN Δ REFER TO NOTES ON SAME SHEET UNLESS OTHERWISE NOTED.
- TREES DESIGNATED BY [Symbol] SHALL BE REMOVED. ALL OTHER TREES SHALL BE PROTECTED IN PLACE UNLESS INDICATED OTHERWISE.
- [Symbol] DELINEATES LIMITS OF VCWPD RIGHT OF WAY.
- [Symbol] DELINEATES LIMITS OF TEMPORARY WORK AREA.
- TOPOGRAPHY AND CROSS SECTIONS FOR THIS PROJECT ARE BASED AN AERIAL AND FIELD SURVEYS THAT BEGAN IN NOVEMBER OF 2017 AND WERE COMPLETED IN FEBRUARY OF 2018 FOR THE AREA NEAR CENTER STREET AND WERE PERFORMED IN MARCH OF 2016 FOR THE SOUTHERN PORTION OF THE PROJECT.
- SYMBOL Δ INDICATES THE LOCATION OF HORIZONTAL AND VERTICAL CONTROL POINTS WHICH WILL BE FURNISHED BY THE AGENCY FOR CONSTRUCTION USE.

SURVEY CONTROL POINTS

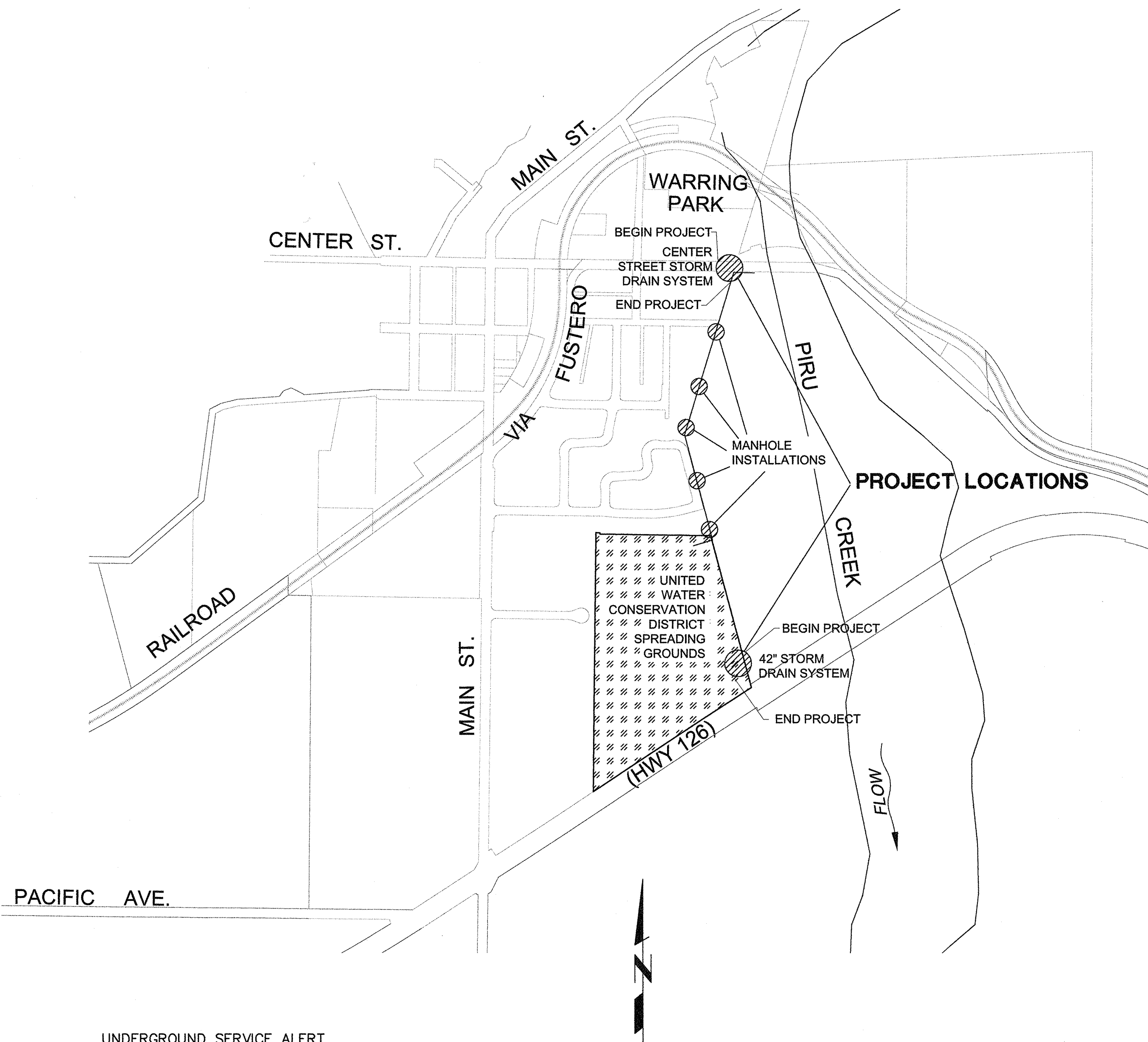
PT 1103	NORTHING/Y: 1,974,518.97	EASTING/X: 6,322,499.85	ELEV/Z: 693.03
PT 2010	NORTHING/Y: 1,974,466.13	EASTING/X: 6,323,276.89	ELEV/Z: 686.67
PT 1130	NORTHING/Y: 1974,500.66	EASTING/X: 6,323,565.37	ELEV/Z: 694.00
PT 3102	NORTHING/Y: 1,974,148.77	EASTING/X: 6,322,504.46	ELEV/Z: 689.38
PT 1132	NORTHING/Y: 1,922,807.95	EASTING/X: 6,323,400.51	ELEV/Z: 671.77

- SOIL TEST BORINGS SHOWN FOR THE PROJECT WERE MADE ON OCTOBER OF 2015 AND MAY OF 2012 AND THEIR LOCATION IS MARKED BY THE SYMBOL [Symbol] . REFER TO THE SPECIFICATIONS FOR ADDITIONAL GEOTECHNICAL REPORT INFORMATION. SUBSURFACE SOIL INVESTIGATION RESULTS ARE FURNISHED FOR INFORMATION ONLY IN ACCORDANCE WITH SUBSECTION 2-7 OF THE STANDARD SPECIFICATIONS, AND NO WARRANTY IS MADE THEREFOR.
- EXISTING IMPROVEMENTS WITHIN THE RIGHT OF WAY AND WORK AREAS SHALL REMAIN AND SHALL BE PROTECTED UNLESS OTHERWISE NOTED. DAMAGED IMPROVEMENTS SHALL BE REPLACED IN KIND TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
- UTILITIES ARE SHOWN AS KNOWN TO EXIST AT TIME OF SURVEY. UTILITIES MAY HAVE BEEN OMITTED, MISPLACED, AND/OR RELOCATED. CONTRACTOR SHALL EXERCISE CARE IN EXCAVATION AND SHALL PROTECT ALL UTILITIES.
- CONTRACTOR SHALL NOTIFY UTILITY OWNERS A MINIMUM OF 48 HOURS PRIOR TO STARTING WORK IN AREAS AFFECTING THEIR FACILITIES.

AT&T CO.	TEL. NO. (661) 267-7525	BRIAN MONTGOMERY
SOUTHERN CALIFORNIA EDISON CO.	TEL. NO. (805) 256-2127	RYAN PILLADO
CALIFORNIA RESOURCES CORPORATION	TEL. NO. (818) 525-8008	MARK BLANKENSHIP
UNITED WATER CONSERVATION DISTRICT	TEL. NO. (805) 525-4431	MARYAM BRAL
	TEL. NO. (805) 485-5114	MIKE ELLIS
WARRING WATER SERVICE	TEL. NO. (805) 524-2068	GLEN PACE
VENTURA COUNTY TRANSPORTATION DEPARTMENT	TEL. NO. (805) 654-2071	GERALD WEEKS JR.
TIME WARNER CABLE	TEL. NO. (805) 654-2055	JOE MAYSICK
SOUTHERN CALIFORNIA GAS CO.	TEL. NO. (818) 701-3319	KEVIN EDWARDS

UNDERGROUND SERVICE ALERT

1-800-422-4133
CALL USA/SC
FOR UNDERGROUND LOCATION
2 WORKING DAYS BEFORE YOU DIG



GENERAL PLAN

500 250 0 500 1000
SCALE OF FEET

INDEX OF STANDARD PLANS
USED BY REFERENCE

- SPPWC STANDARD PLAN 320-2 MANHOLE PIPE TO PIPE, MAINLINE ID=36" OR LARGER.
- SPPWC STANDARD PLAN 331-3 JUNCTION STRUCTURE - PIPE TO PIPE INLET ID > 1/2 MAIN LINE ID.
- SPPWC STANDARD PLAN 322-2 MANHOLE PIPE TO PIPE.
- SPPWC STANDARD PLAN 324-2 MANHOLE SHAFT WITH ECCENTRIC REDUCER.
- SPPWC STANDARD PLAN 380-4 CONCRETE COLLAR FOR RCB.

INDEX OF DISTRICT PLANS
USED BY REFERENCE

- COUNTY OF VENTURA PUBLIC WORKS AGENCY ROAD STANDARDS:
- PLATE E-2a COMMERCIAL DRIVEWAYS
- PLATE E-11 PAVEMENT REPAIRS FOR TRENCHING

REFERENCE DOCUMENTS

- OLD TELEGRAPH ROAD DRAINAGE DRAWING NOS. 102296, 102297, 102298
- TRACK 4845-2 STORM DRAIN IMPROVEMENTS DRAWING NOS. 62846, 62847, 62848
- PIRU STORM DRAIN DRAWING NOS. 112211, 112212, 112213, 112214, 112215, 112216

Note: Schedule II work not included in contract due to inability to get easement modification



11/24/07
2/12/19

AVE DATE: 2/12/19 106500 K:\PROJECTS\ZONE2\MULTIBENEFITBMP\40565_PIRU_STORMWATER_CAPTURE\DESIGN\DESIGNDRAWINGS\100_PCT_PLANS\40565_SH11.DWG

REVISION	DESCRIPTION	APP.	DATE
D			
C			
B			
A			
△			

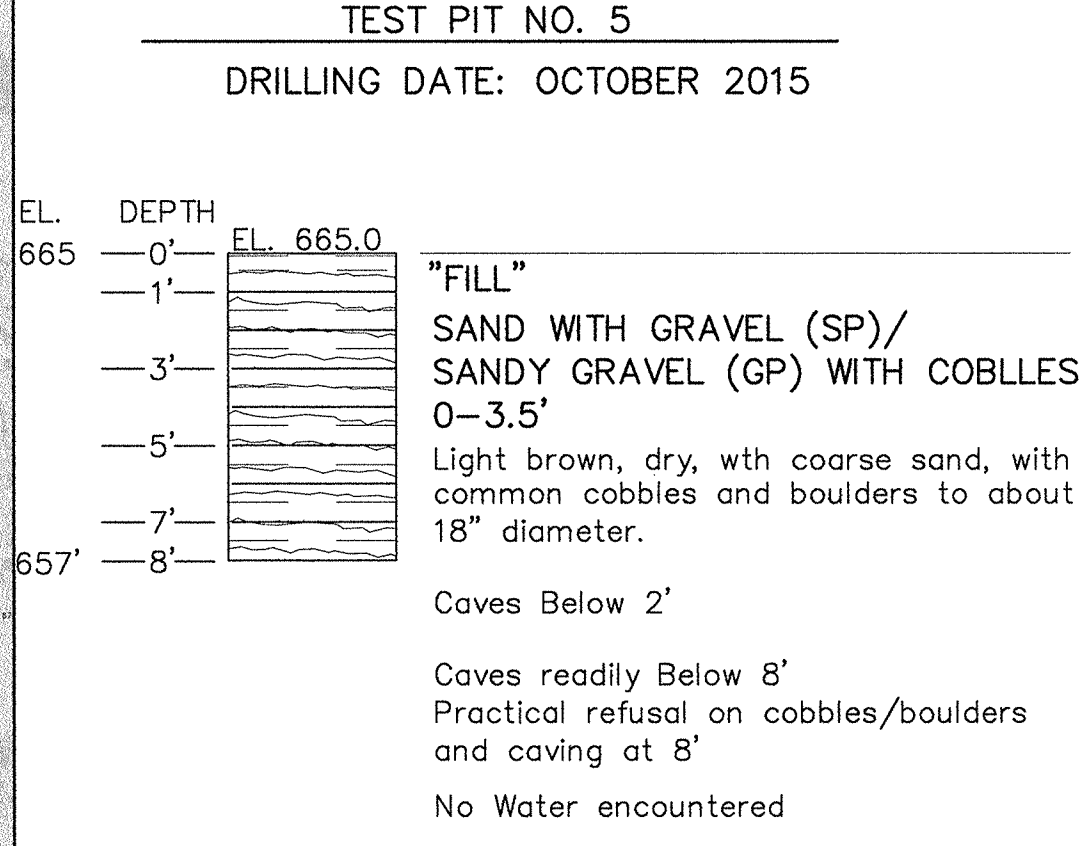
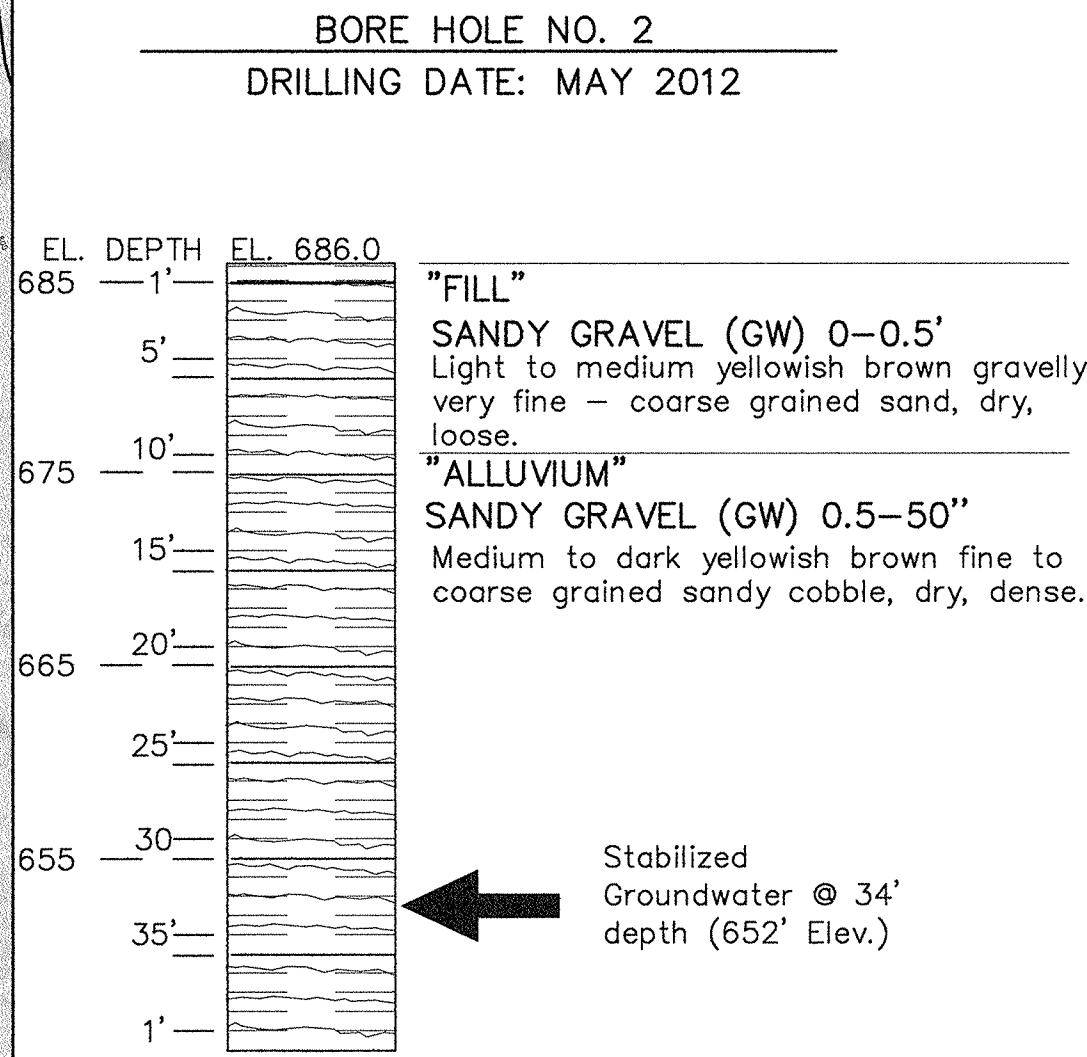
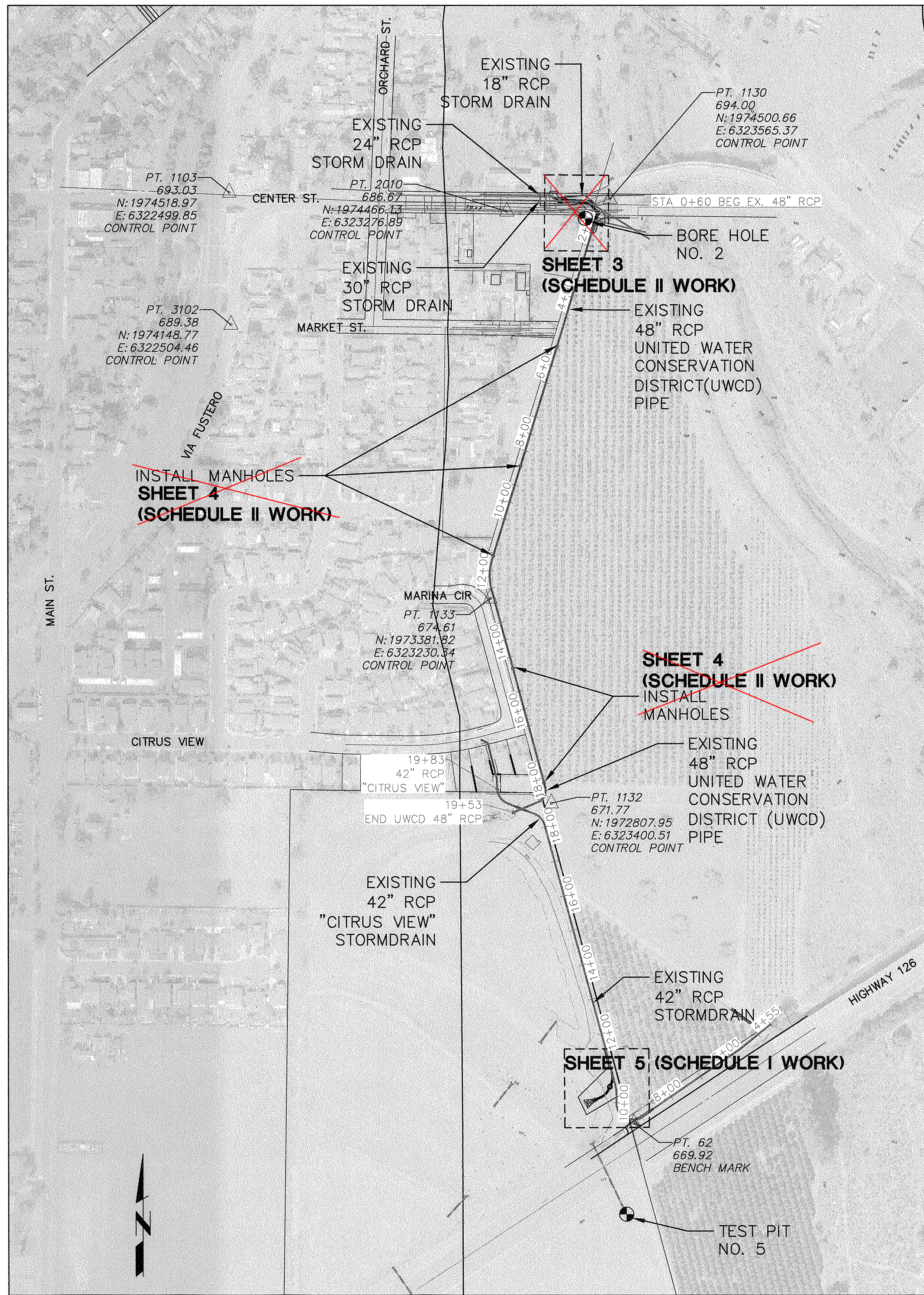
DEPUTY DIRECTOR	2/12/19
DISTRICT DIRECTOR	2/14/19
AGENCY INCHARGE	2/14/19

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
WATERSHED PROTECTION DISTRICT

SPEC. NO.
WP19-07
PROJ. NO.
40565

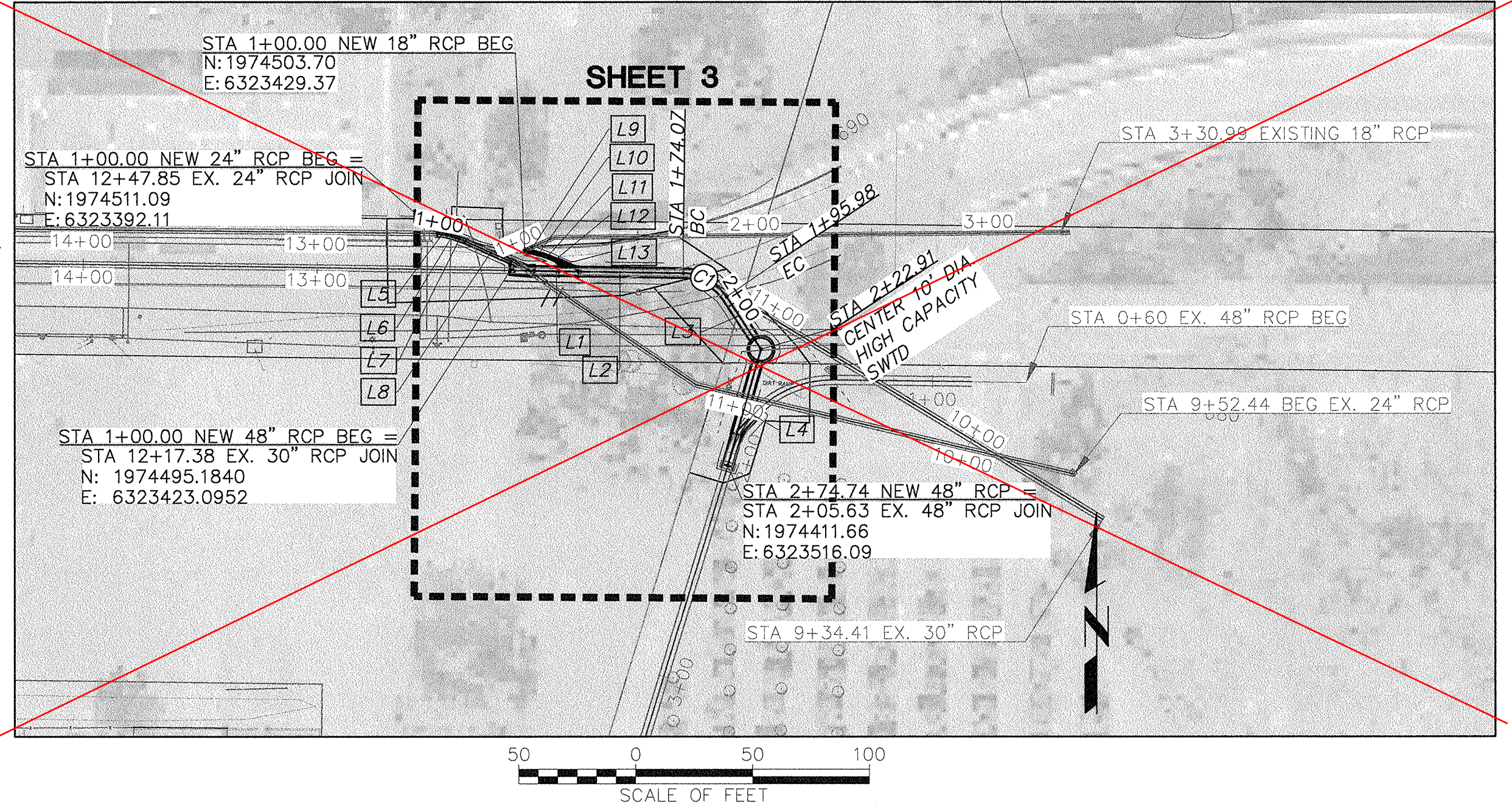
PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT
GENERAL PLAN

SHEET 1
OF 8
DRAWING NO.
Y-2-3933



UNIFIED SOIL CLASSIFICATION SYSTEM

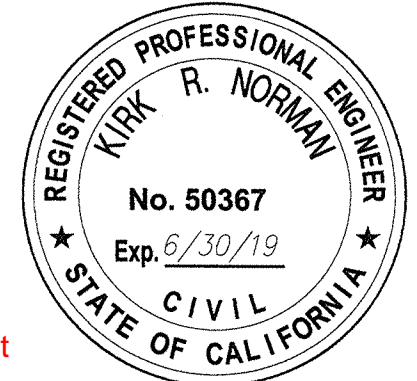
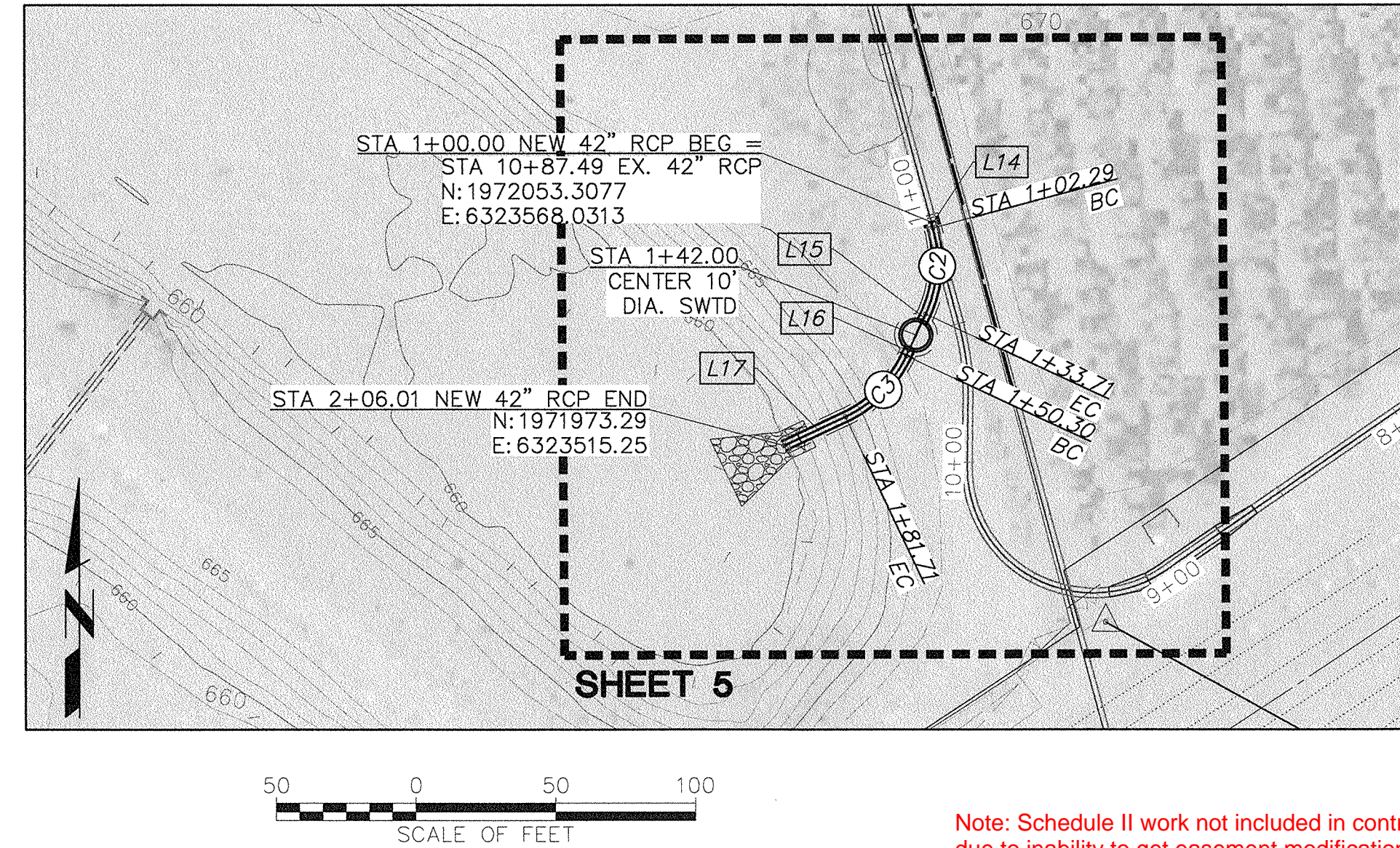
GW - WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES
 GP - POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
 GM - SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
 GC - CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
 SW - WELL GRADED SANDS, SAND-GRAVEL MIXTURES
 SP - POORLY GRADED SANDS, GRAVELLY SANDS
 SM - SILTY SANDS, SAND-SILT MIXTURES
 SC - CLAYEY SANDS, SAND-CLAY MIXTURES
 ML - SILTS AND VERY FINE SANDS, LIQUID LIMITS LESS THAN 50
 MH - SILTS WITH LIQUID LIMIT ABOVE 50
 CL - CLAYS WITH LIQUID LIMIT OF 50 OR LESS
 CH - CLAYS WITH LIQUID LIMIT ABOVE 50
 OL - ORGANIC SILTS AND CLAYS WITH LIQUID LIMIT OF 50 OR LESS
 OH - ORGANIC SILTS AND CLAYS WITH LIQUID LIMIT ABOVE 50



LINE DATA				LINE DATA				LINE DATA			
TAG NO.	ALIGNMENT	LENGTH	BEARING	TAG NO.	ALIGNMENT	LENGTH	BEARING	TAG NO.	ALIGNMENT	LENGTH	BEARING
L1	NEW 48" RCP	19.96'	S89°09'24"E	L5	NEW 24" RCP	4.00'	S79°23'27"E	L9	NEW 18" RCP	4.00'	S79°43'21"E
L2	NEW 48" RCP	43.96'	S89°09'24"E	L6	NEW 24" RCP	4.00'	S74°23'27"E	L10	NEW 18" RCP	4.00'	S74°43'21"E
L3	NEW 48" RCP	21.93'	S33°21'32"E	L7	NEW 24" RCP	4.00'	S69°23'27"E	L11	NEW 18" RCP	4.00'	S69°43'21"E
L4	NEW 48" RCP	46.84'	S16°03'16"W	L8	NEW 24" RCP	22.03'	S66°01'14"E	L12	NEW 18" RCP	3.28'	S64°43'21"E
								L13 - NEW 18" RCP - 5.48' - S64°43'28"E			

CURVE DATA							
CURVE	ALIGNMENT	DELTA	RADIUS	LENGTH	TANGENT	BC STATION	EC STATION
C1	NEW 48" RCP	55°47'52"	22.50'	21.91'	11.91'	1+74.07	1+95.98
C2	NEW 42" RCP	40°00'00"	45.00'	31.42'	16.38'	1+02.29	1+33.71
C3	NEW 42" RCP	40°00'00"	45.00'	31.42'	16.38'	1+50.30	1+81.71

LINE DATA			
TAG NO.	ALIGNMENT	LENGTH	BEARING
L14	NEW 42" RCP	2.29'	S15°04'20"E
L15	NEW 42" RCP	3.29'	S24°55'40"W
L16	NEW 42" RCP	3.29'	S24°55'40"W
L17	NEW 42" RCP	24.29'	S64°55'40"W



Note: Schedule II work not included in contract due to inability to get easement modification

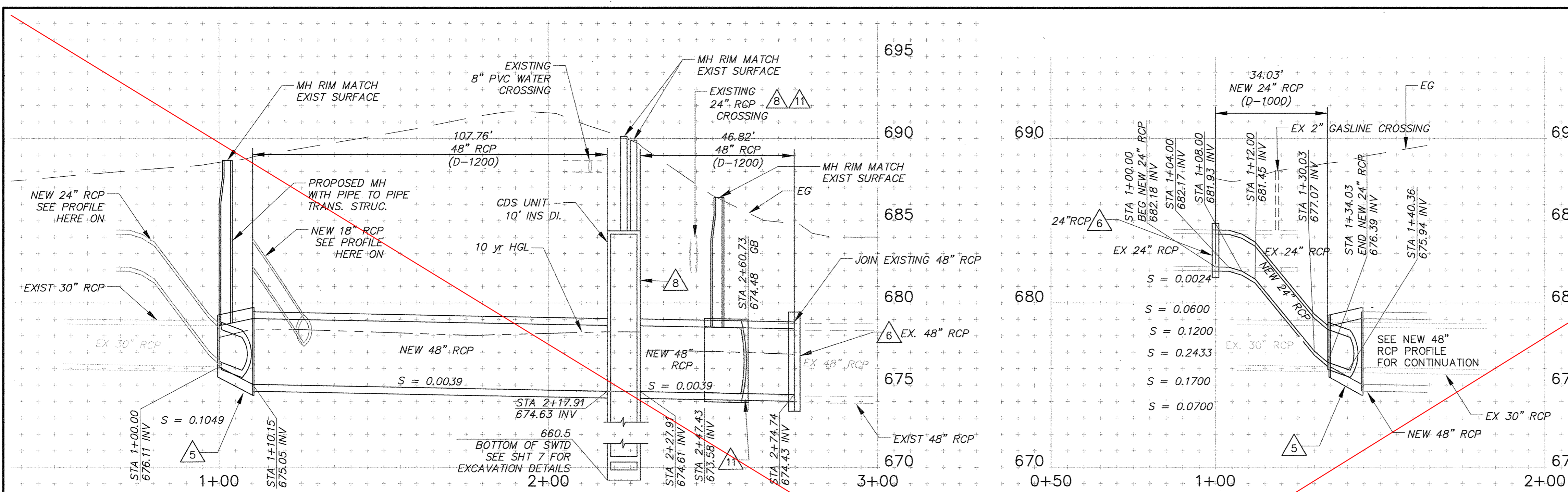
DESIGNED	JAM	DATE	2.12.19
DRAWN	JAM	DATE	2/12/19
CHECKED		DATE	

**COUNTY OF VENTURA
 PUBLIC WORKS AGENCY
 WATERSHED PROTECTION DISTRICT**

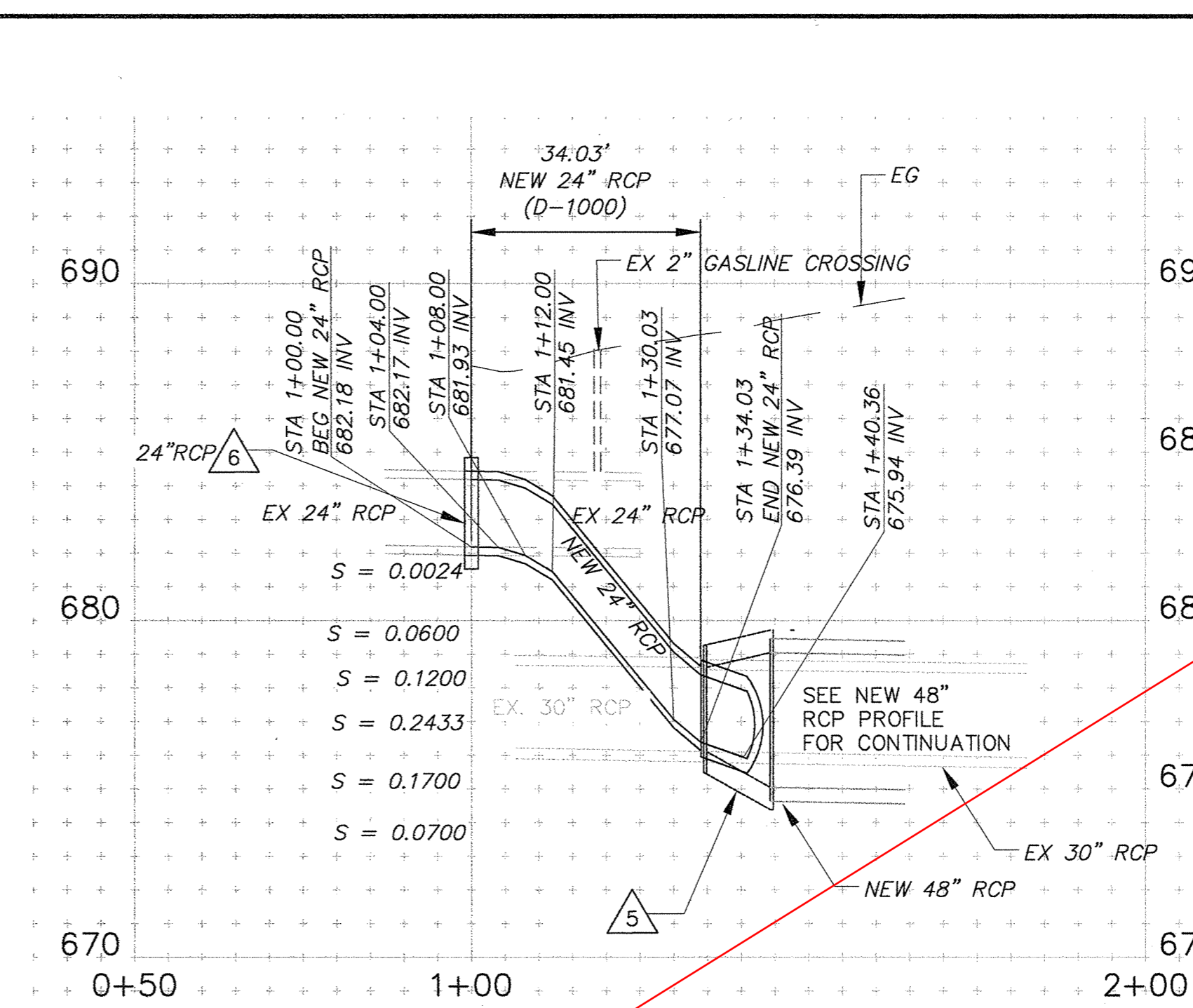
SPEC. NO.
 WP19-07
 PROJ. NO.
 40565

**PIRU STORMWATER CAPTURE FOR
 GROUNDWATER RECHARGE PROJECT**
 SITE INDEX, SOIL BORINGS, HORIZONTAL AND
 VERTICAL CONTROL PLAN

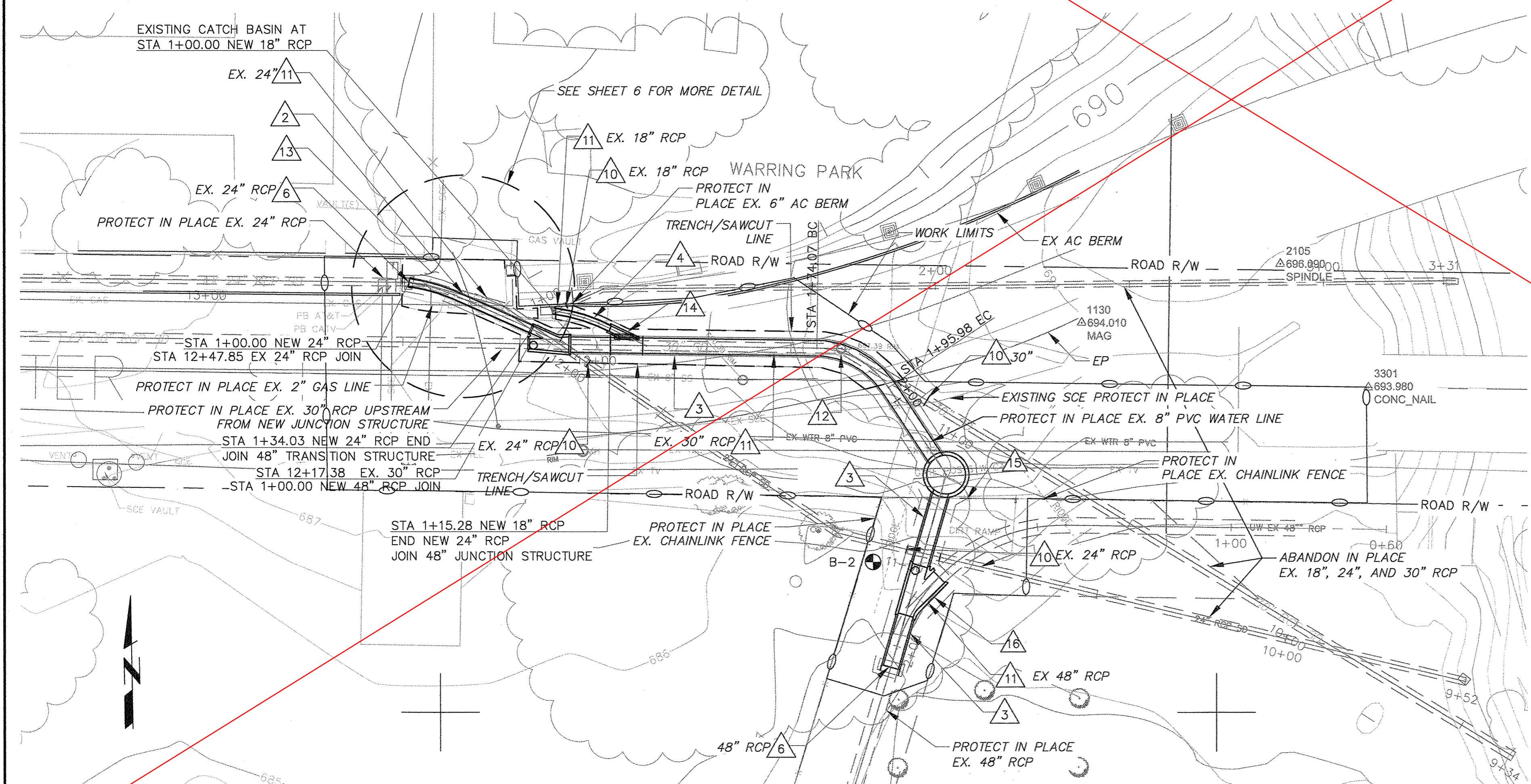
SHEET 2
 OF 8
 DRAWING NO.
 Y-2-3934



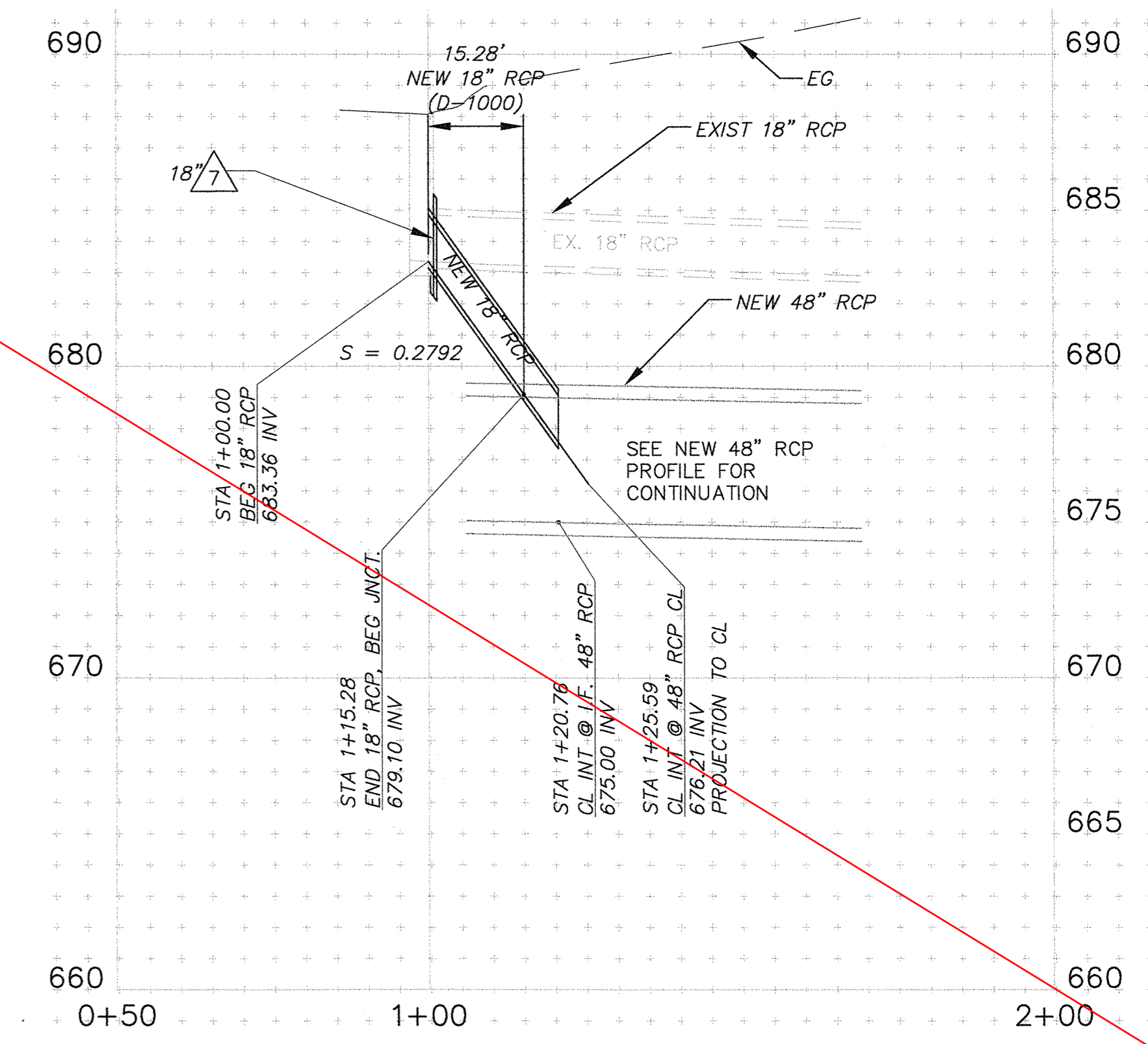
**PROFILE
NEW 48" RCP**
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'



**PROFILE
NEW 24" RCP**
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'



PLAN
SCALE OF FEET



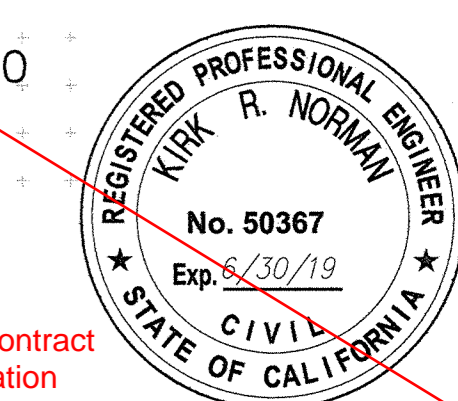
**PROFILE
NEW 18" RCP**
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

- NOTES:**
- TEMPORARY WORK AREA LIMITS SHALL BE STAKED PRIOR TO COMMENCEMENT OF WORK AND ALL EQUIPMENT SHALL BE OPERATED WITHIN THE TEMPORARY WORK AREA LIMITS.
 - INSTALL 24" RCP PER COUNTY OF VENTURA PUBLIC WORKS ROAD STANDARDS PLATE E-11 AND PER PLAN AND PROFILE. (32)
 - INSTALL 48" RCP PER COUNTY OF VENTURA PUBLIC WORKS ROAD STANDARDS PLATE E-11 AND PER PLAN AND PROFILE. (33)
 - INSTALL 18" RCP PER COUNTY OF VENTURA PUBLIC WORKS ROAD STANDARDS PLATE E-11 AND PER PLAN AND PROFILE. (31)
 - INSTALL 24" X 30" X 48" JUNCTION WITH MANHOLE STRUCTURE PER SPPWC STD PLAN 322-2. PLAN AND PROFILE PER THIS SHEET HERE ON. (27)
 - INSTALL CONCRETE COLLAR PER SPPWC STD PLAN 380-4. SIZE PER PLAN. (25)(26)
 - INSTALL MODIFIED CONCRETE COLLAR PER DETAIL AND PER SPPWC STANDARD PLAN 380-4. SIZE PER PLAN. (A)(6)(24)
 - INSTALL 10" INS DIA. HIGH CAPACITY SWTD, CONTECH CDS UNIT MODEL CDS5678-10-C OR EQUAL, PER PLAN AND PROFILE AND PER DETAILS ON SHEET 7. (23)
 - REPLACE EXISTING AC PAVEMENT IN KIND. (21)(34)
 - INSTALL ABANDONMENT SEAL, SIZE PER PLAN. (21)
 - REMOVE AND DISPOSE OF INTERFERING PORTION OF EXISTING RCP, SIZE PER PLAN. (21)
 - REMOVE AND DISPOSE EXISTING MANHOLE. (21)
 - SAWCUT, REMOVE AND REPLACE EXISTING COMMERCIAL CONCRETE DRIVEWAY PER SPPWC STANDARD PLAN 110 TYPE A AND PER COUNTY OF VENTURA PUBLIC WORKS AGENCY ROAD STANDARDS PLATE E-2a. (C)(6)(21)(35)
 - INSTALL 18" X 48" PIPE TO PIPE JUNCTION STRUCTURE PER SPPWC STANDARD PLAN 331-3. (28)
 - REMOVE INTERFERING PORTION OF EXISTING 7' CHAIN LINK FENCE AND GATE, BARBED WIRE, SALVAGE AND REINSTALL AFTER CONSTRUCTION TO PROPERTY OWNERS SATISFACTION. (21)
 - INSTALL 48" X 48" X 48" JUNCTION STRUCTURE WITH MANHOLE PER SPPWC STD PLAN 322-2. PLAN AND PROFILE PER THIS SHEET HERE ON. (29)

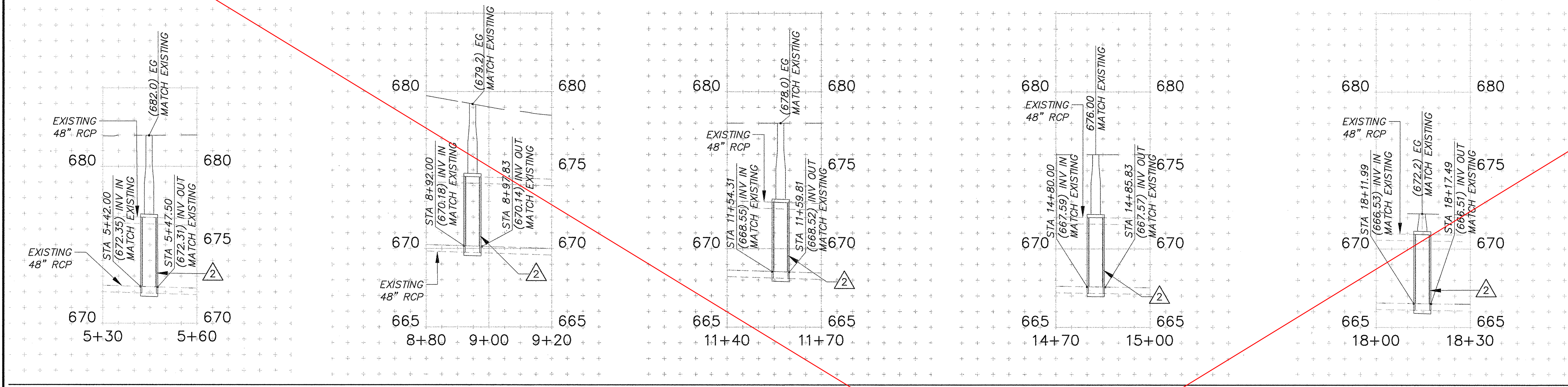
NOTE:
LOCATIONS AND INVERTS SHOWN FOR EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE AS-BUILT DATA. ALL UNDERGROUND UTILITIES ARE TO BE POT-HOLED FOR FIELD VERIFICATION.

Note: Schedule II work not included in contract due to inability to get easement modification

D C B A Δ	REVISION	DESCRIPTION	APP.	DATE	JAM	DESIGNED	2-12-19	Hyd R. Norman DISTRICT PROJECT MANAGER DATE	2-12-19 DATE	2-12-19 DATE	2-19-19 DATE	COUNTY OF VENTURA PUBLIC WORKS AGENCY WATERSHED PROTECTION DISTRICT	SPEC. NO.	WP19-07	PIRU STORMWATER CAPTURE FOR GROUNDWATER RECHARGE PROJECT PLAN AND PROFILE - CENTER STREET STORM DRAIN SYSTEM	SHEET	3			
	JAM	DRAWN			JAM	CHECKED							PROJ. NO.	40565		OF	8			
																			DRAWING NO.	Y-2-3935

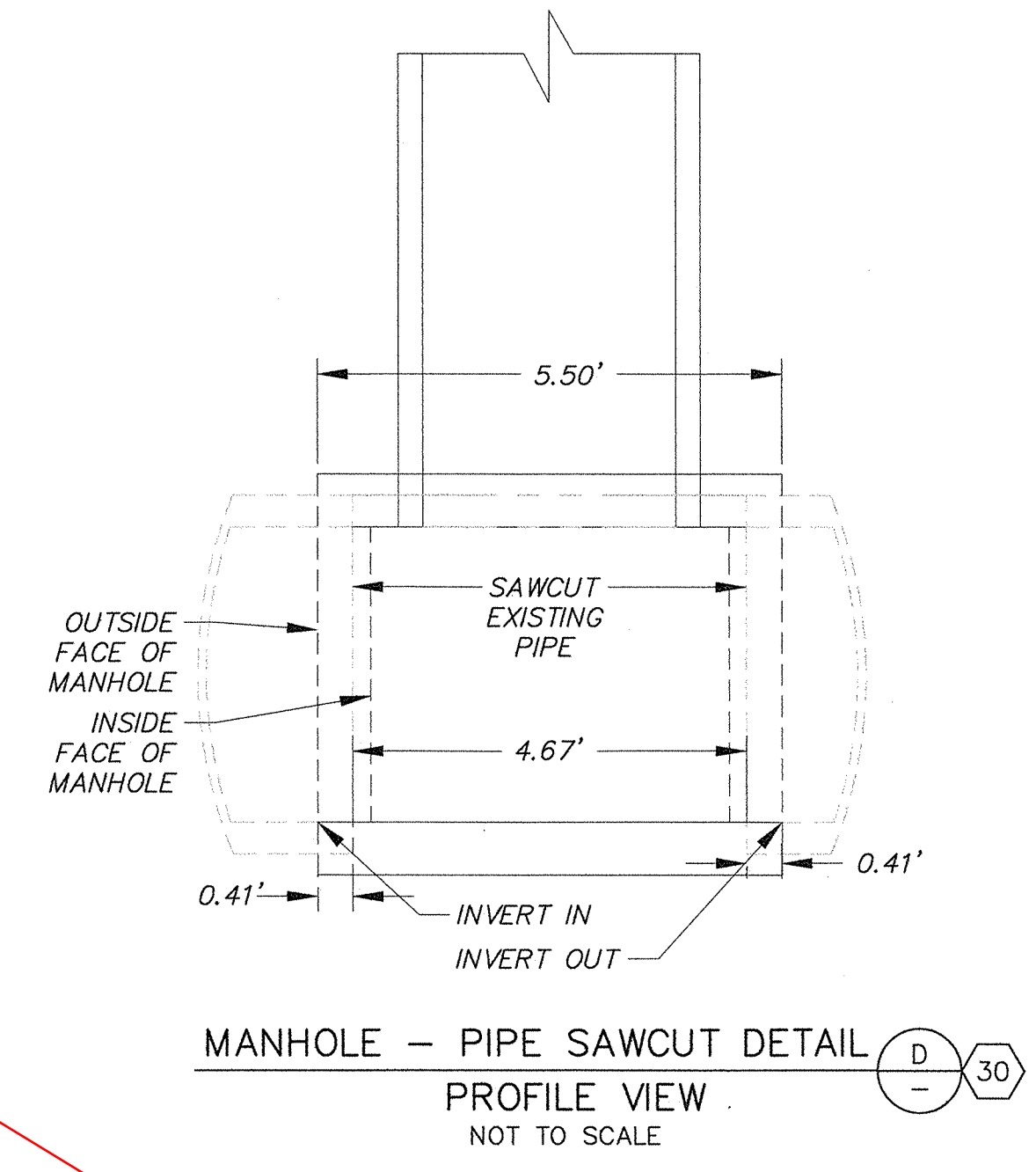
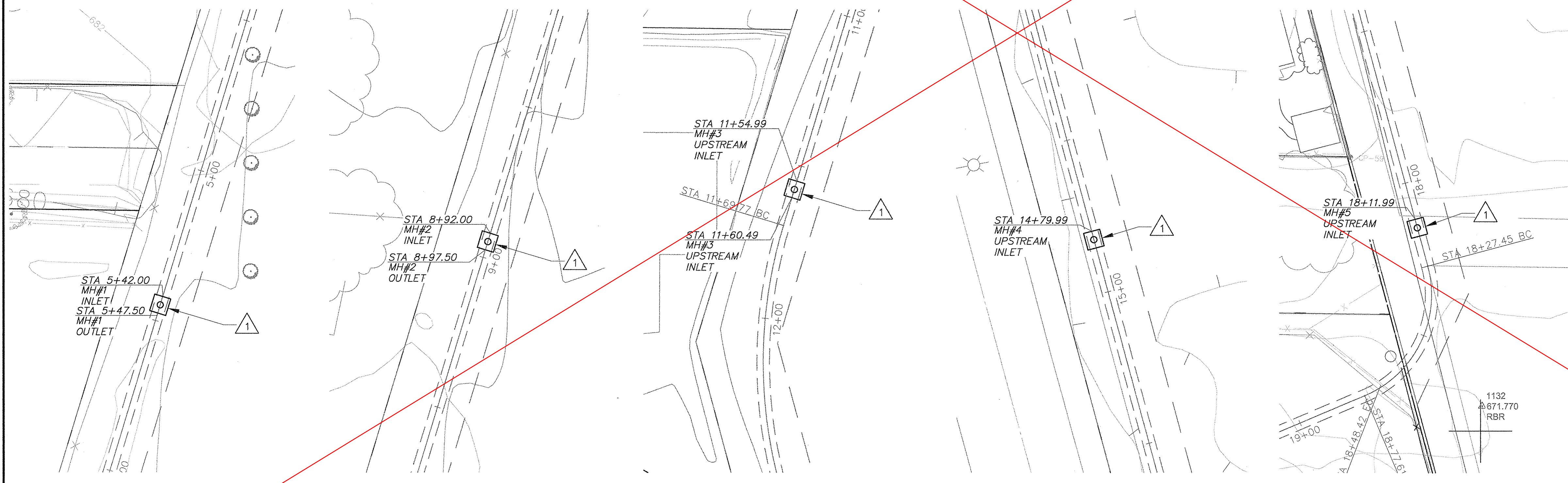


- NOTES:**
- INSTALL MANHOLE AND MANHOLE SHAFT PER SPPWC STANDARD PLAN 320-2 AND 321-2. (30)
 - SAWCUT TO NEAT LINE, REMOVE INTERFERING PORTION OF EXISTING 48" RCP TO INSTALL MANHOLE PER DETAIL (D) HERE ON. (21) (30)



PROFILE

SCALE: HORZ: 1" = 20'
VERT: 1" = 4'



PLOT DATE: 2/12/19

SAVE DATE: 2/12/19 - MUELLER, JOHN K:\PROJ\CTS\2019\2\MULTIBENEFIT\PM\5140565_PIRU_STORMWATER_CAPTURE\DESIGN\DESIGN\DR\4\WGS\100_PCT_PLANS\40565-SHT3-B.DWG

D				
C				
B				
A				
△	REVISION	DESCRIPTION	APP.	DATE

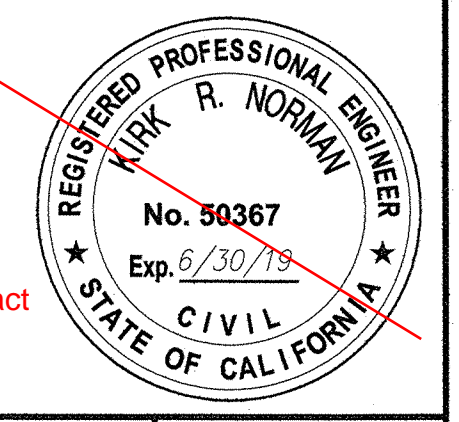
JAM	DESIGNED	<i>Alfred R. Norman</i>	2/12/19
JAM	DRAWN	<i>[Signature]</i>	2/16/19
	CHECKED	<i>[Signature]</i>	2/19/19

**COUNTY OF VENTURA
PUBLIC WORKS AGENCY
WATERSHED PROTECTION DISTRICT**

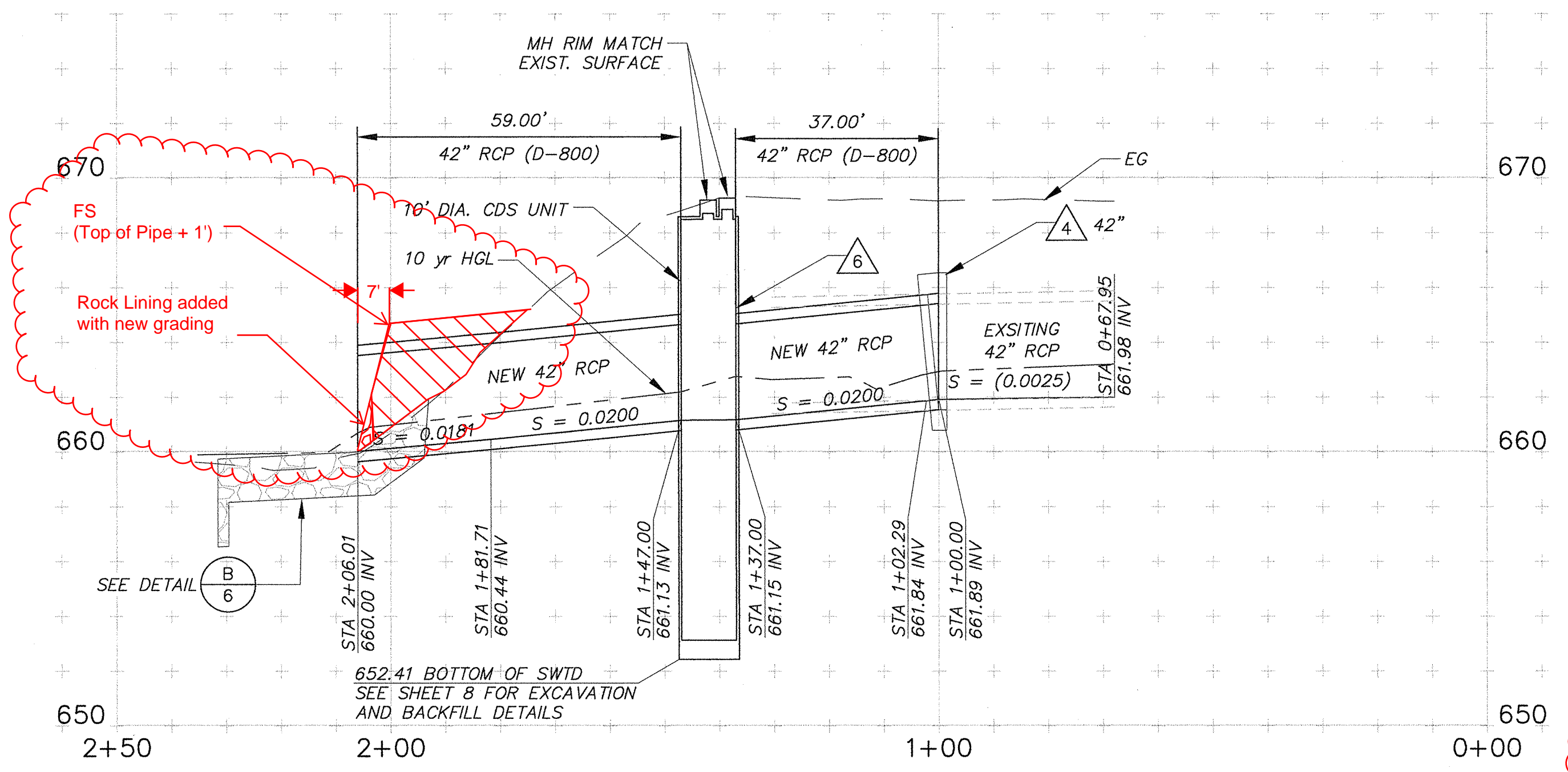
SPEC. NO.
WP19-07
PROJ. NO.
40565

**PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT**
PLAN AND PROFILE

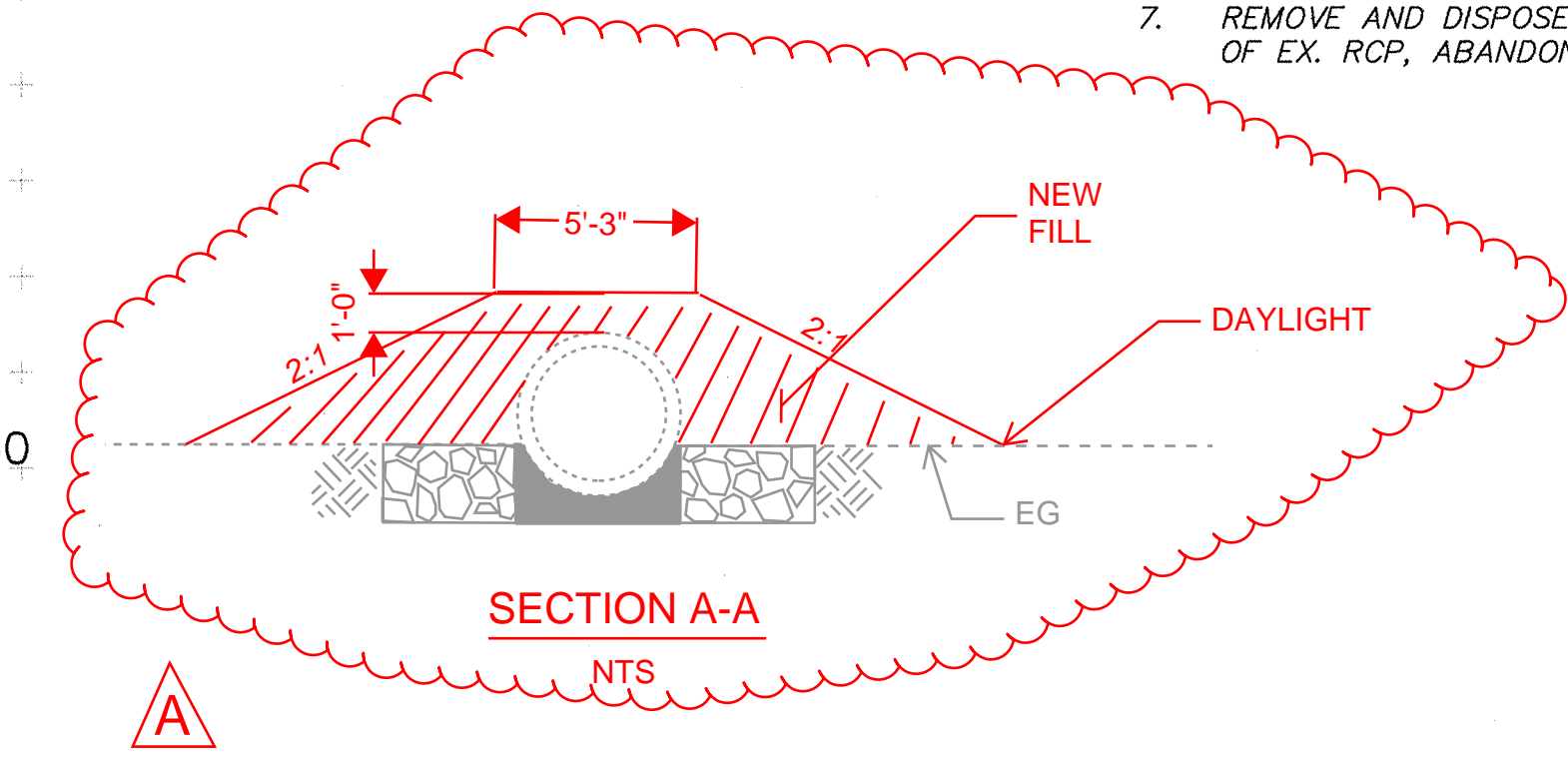
SHEET 4
OF 8
DRAWING NO.
Y-2-3936



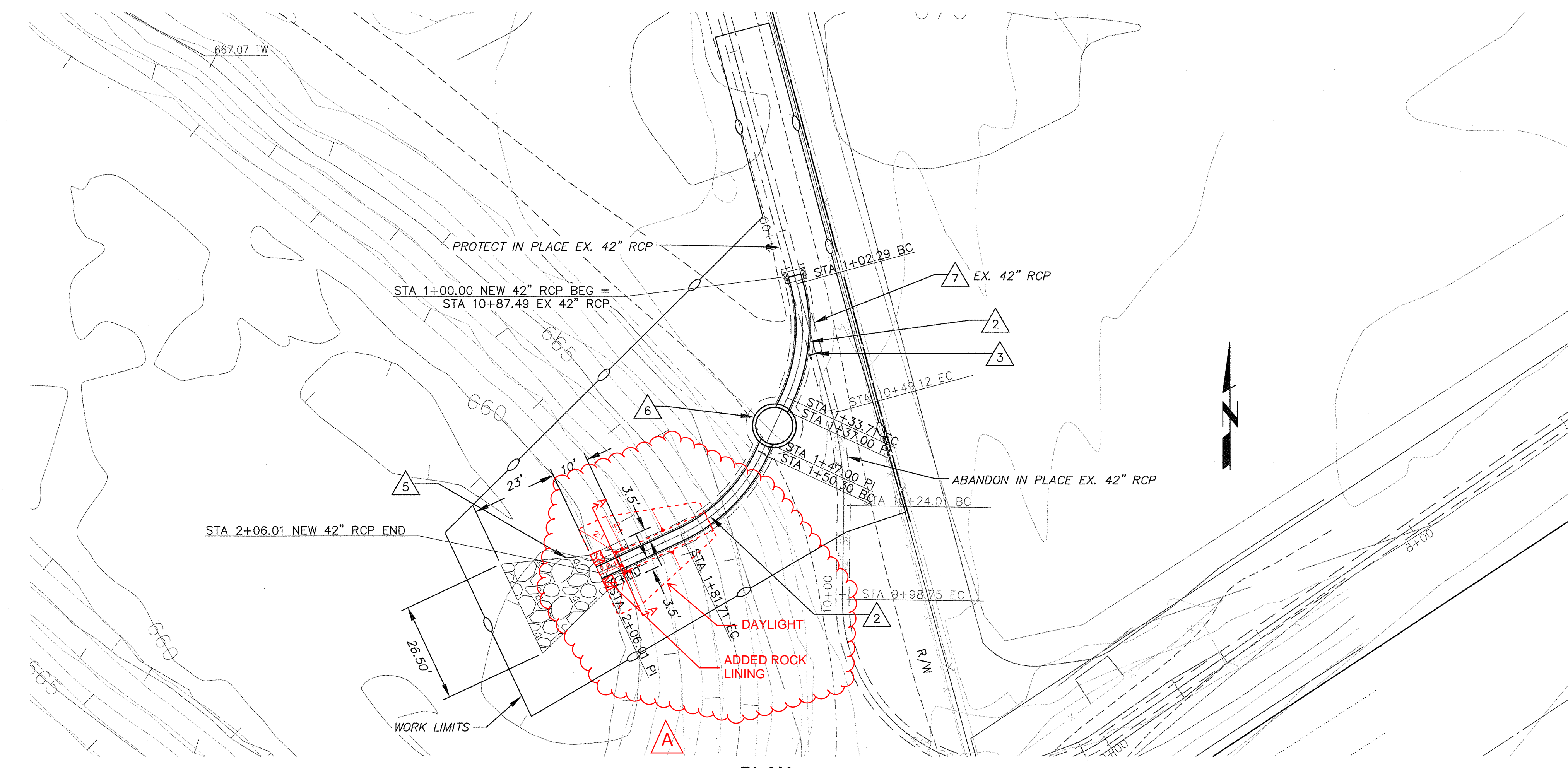
Note: Schedule II work not included in contract due to inability to get easement modification



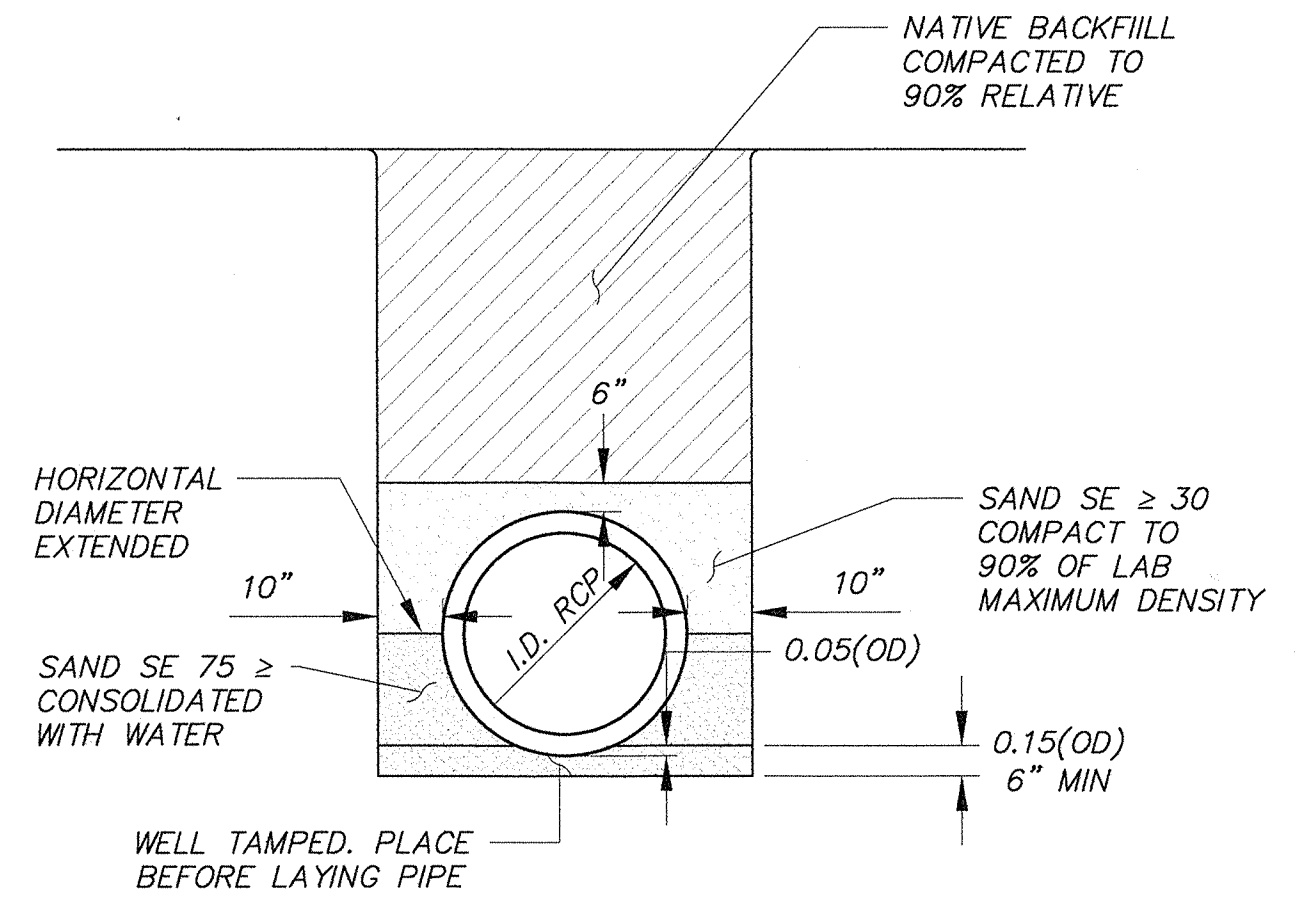
**PROFILE
NEW 42" RCP**
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'



- NOTES:**
1. TEMPORARY WORK AREA LIMITS SHALL BE STAKED PRIOR TO COMMENCEMENT OF WORK AND ALL EQUIPMENT SHALL BE OPERATED WITHIN THE TEMPORARY WORK AREA LIMITS.
 2. INSTALL 42" RCP PER PLAN, PROFILE AND DETAIL (C/5) (12)
 3. INSTALL ABANDONMENT SEAL (8)
 4. INSTALL 42" CONCRETE COLLAR PER SPPWC STD PLAN 380-4.
 5. INSTALL RIP RAP PER DETAIL (B/6) (7) (13)
 6. INSTALL 10" INS DIA SWTD, CONTECH CDS UNIT MODEL CDS5653-10-C OR EQUAL, PER PLAN 10 AND PROFILE AND PER DETAILS ON SHEET 8.
 7. REMOVE AND DISPOSE INTERFERING PORTION OF EX. RCP, ABANDON REMAINDER IN PLACE. (8)



PLAN
SCALE OF FEET



42" RC PIPE INSTALLATION
NOT TO SCALE (C)

NOTE:
LOCATIONS AND INVERTS SHOWN FOR EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND BASED ON AVAILABLE AS-BUILT DATA. ALL UNDERGROUND UTILITIES ARE TO BE POT-HOLED FOR FIELD VERIFICATION.

SAVE DATE: 2/12/19 MUELLER, JOHN K:\PROJECTS\ZONE2\MULTIBENEFIT\BMP\40565_PIRU_STORMWATER_CAPTURE\DESIGN\DESIGNDRAWINGS\100_PCT_PLANS\40565-SHT1-8.DWG

REVISION	DESCRIPTION	APP.	DATE
A	FILL ADDED TO COVER PIPE JOINT PER CCO #2		1/14/2020

JAM	DESIGNED	2/12/19
JAM	DRAWN	2/12/19
	CHECKED	2/14/19

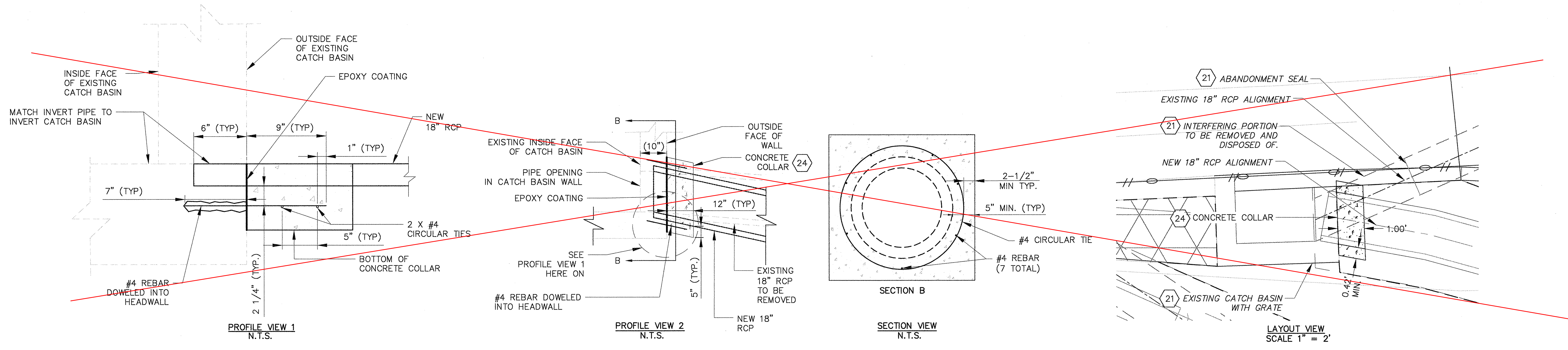
**COUNTY OF VENTURA
PUBLIC WORKS AGENCY
WATERSHED PROTECTION DISTRICT**

SPEC. NO.	WP19-07
PROJ. NO.	40565

**PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT**
PLAN AND PROFILE - 42 INCH STORM DRAIN SYSTEM

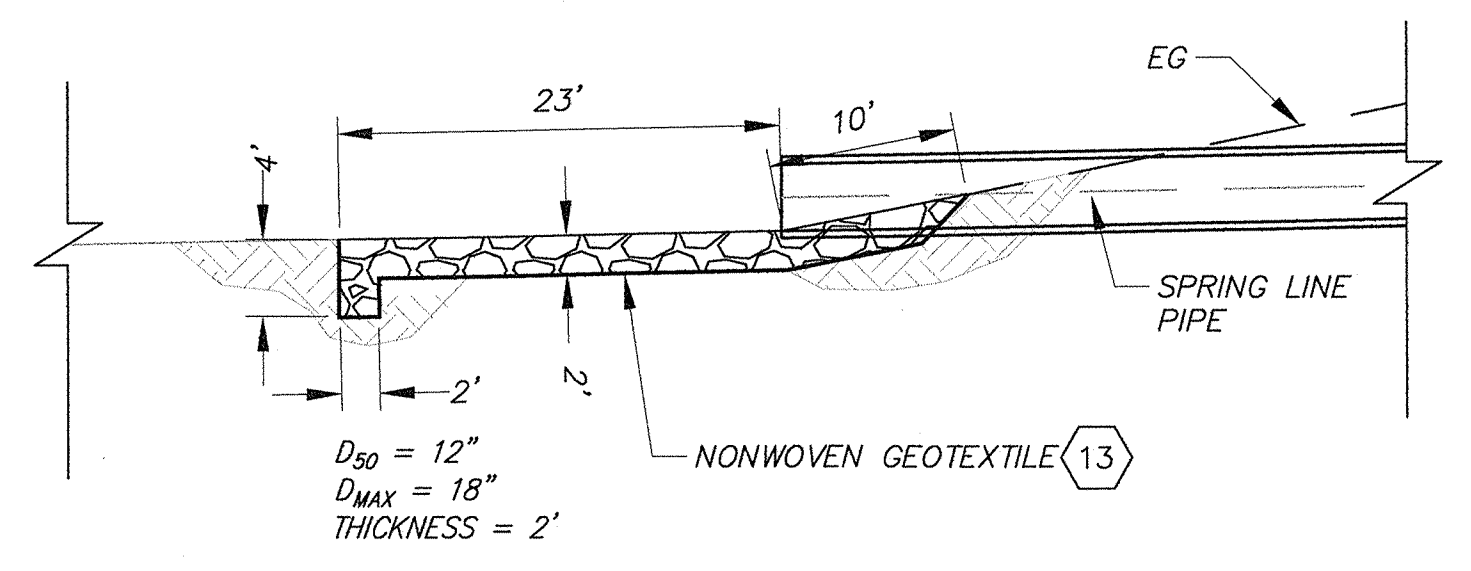
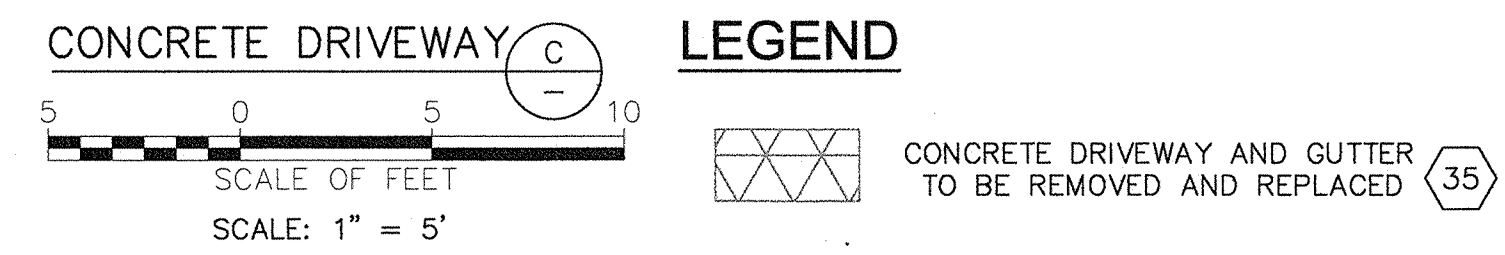
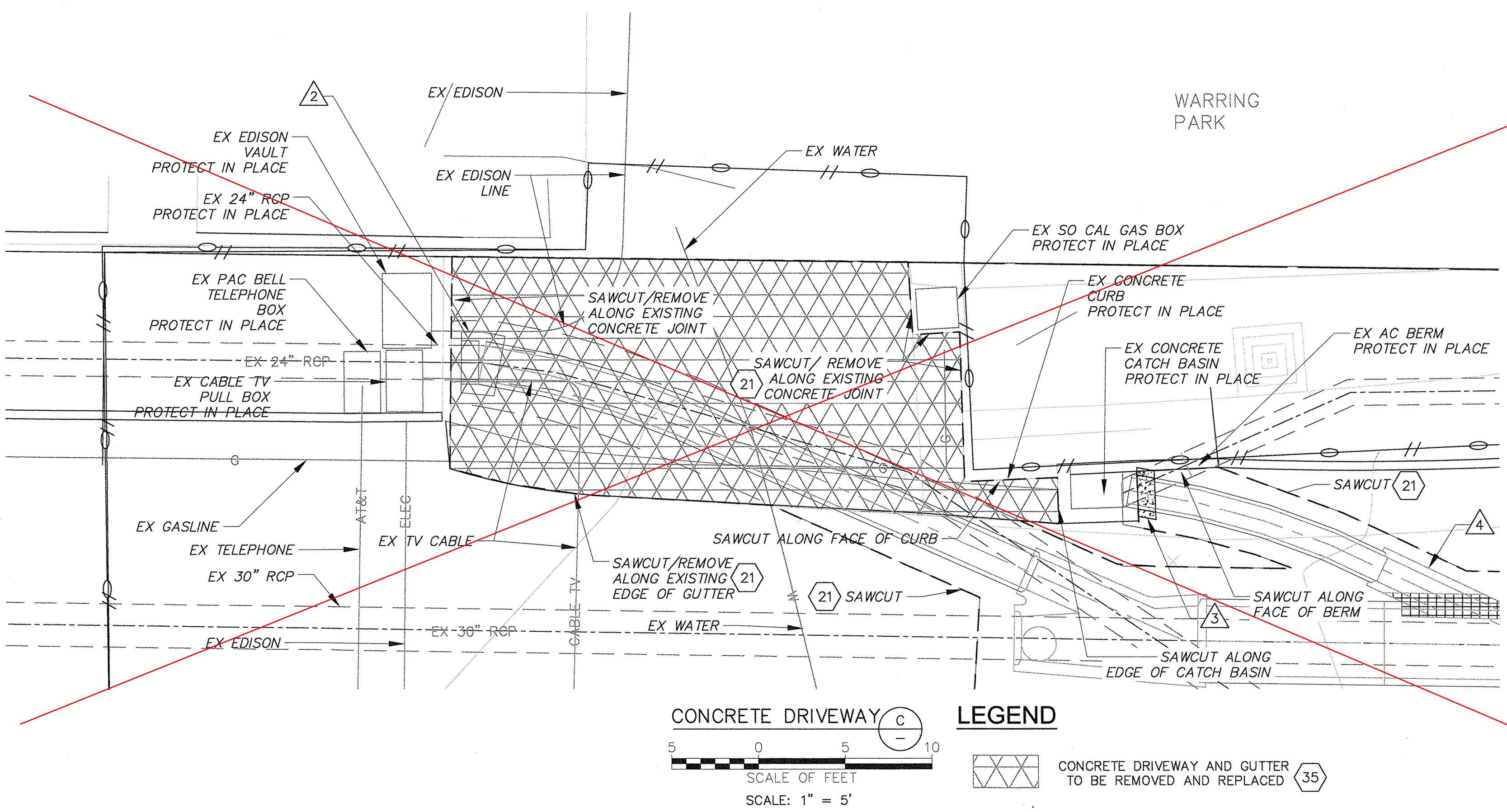
SHEET	5
OF	8
DRAWING NO.	Y-2-3937





18" CONCRETE COLLAR (A)
NOT TO SCALE

- NOTES:
- TEMPORARY WORK AREA LIMITS SHALL BE STAKED AND ALL EQUIPMENT SHALL BE OPERATED WITHIN THE TEMPORARY WORK AREA LIMITS.
 - ~~INSTALL 24" CONCRETE COLLAR PER SPPWC STD PLAN 380-4.~~
 - ~~INSTALL 18" MODIFIED CONCRETE COLLAR PER DETAIL (A) (24) AND PER SPPWC STANDARD PLAN 380-4.~~
 - ~~INSTALL 18" x 48" PIPE TO PIPE JUNCTION STRUCTURE PER SPPWC STANDARD PLAN 331-3.~~



ROCK RIP RAP DETAIL (B) (7) (13)
NOT TO SCALE



Note: Schedule II work not included in contract due to inability to get easement modification

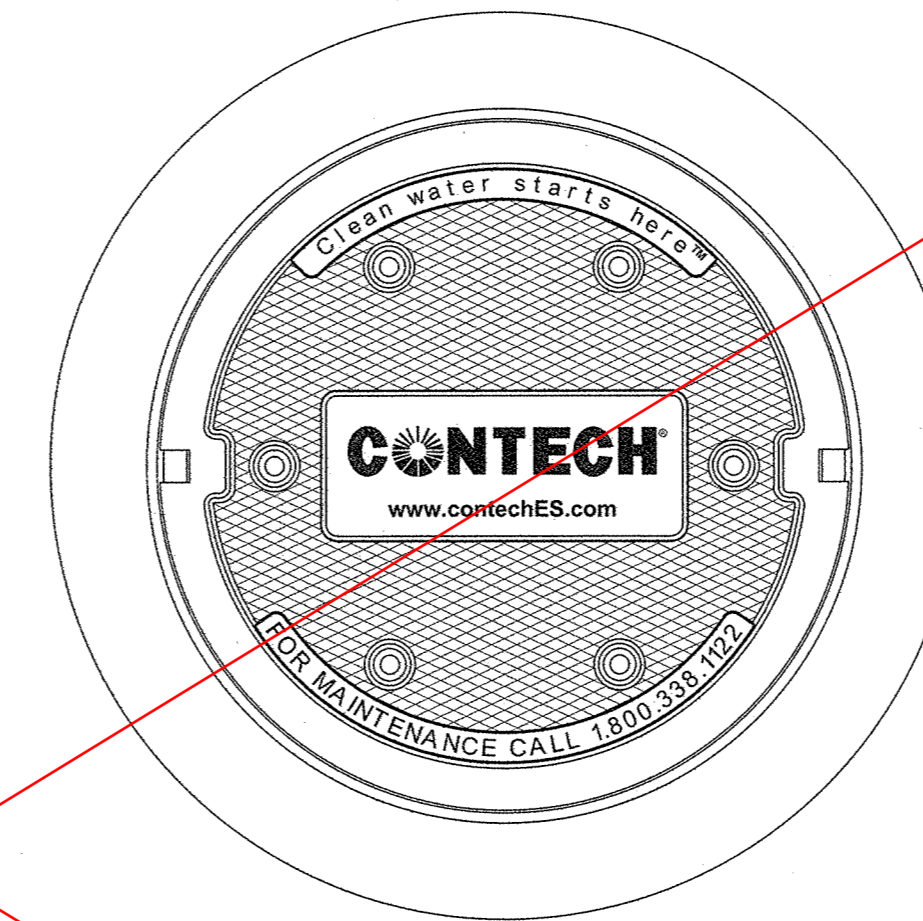
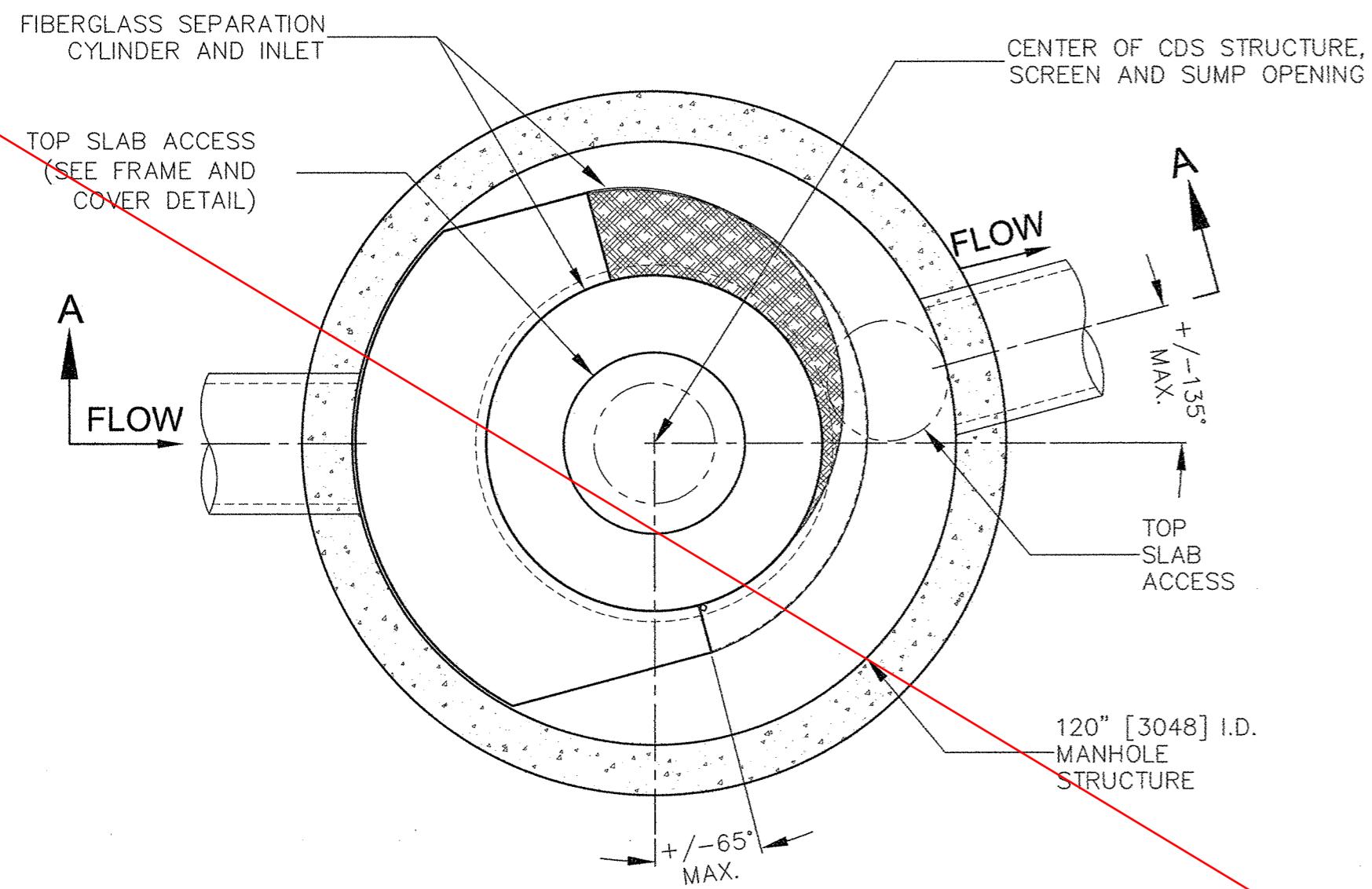
D C B A △	REVISION DESCRIPTION APP. DATE	JAM DESIGNED JAM DRAWN - CHECKED	Kirk R. Norman DISTRICT PROJECT MANAGER DATE 2/12/19 Kirk R. Norman DISTRICT DEPUTY DIRECTOR DATE 2/12/19 Kirk R. Norman DISTRICT DIRECTOR DATE 2/14/19	COUNTY OF VENTURA PUBLIC WORKS AGENCY WATERSHED PROTECTION DISTRICT	SPEC. NO. WP19-07 PROJ. NO. 40565	PIRU STORMWATER CAPTURE FOR GROUNDWATER RECHARGE PROJECT MISCELLANEOUS DETAILS	SHEET 6 OF 8 DRAWING NO. Y-2-3938
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CDS5678-10-C DESIGN NOTES

THE STANDARD CDS5678-10-C CONFIGURATION IS SHOWN.

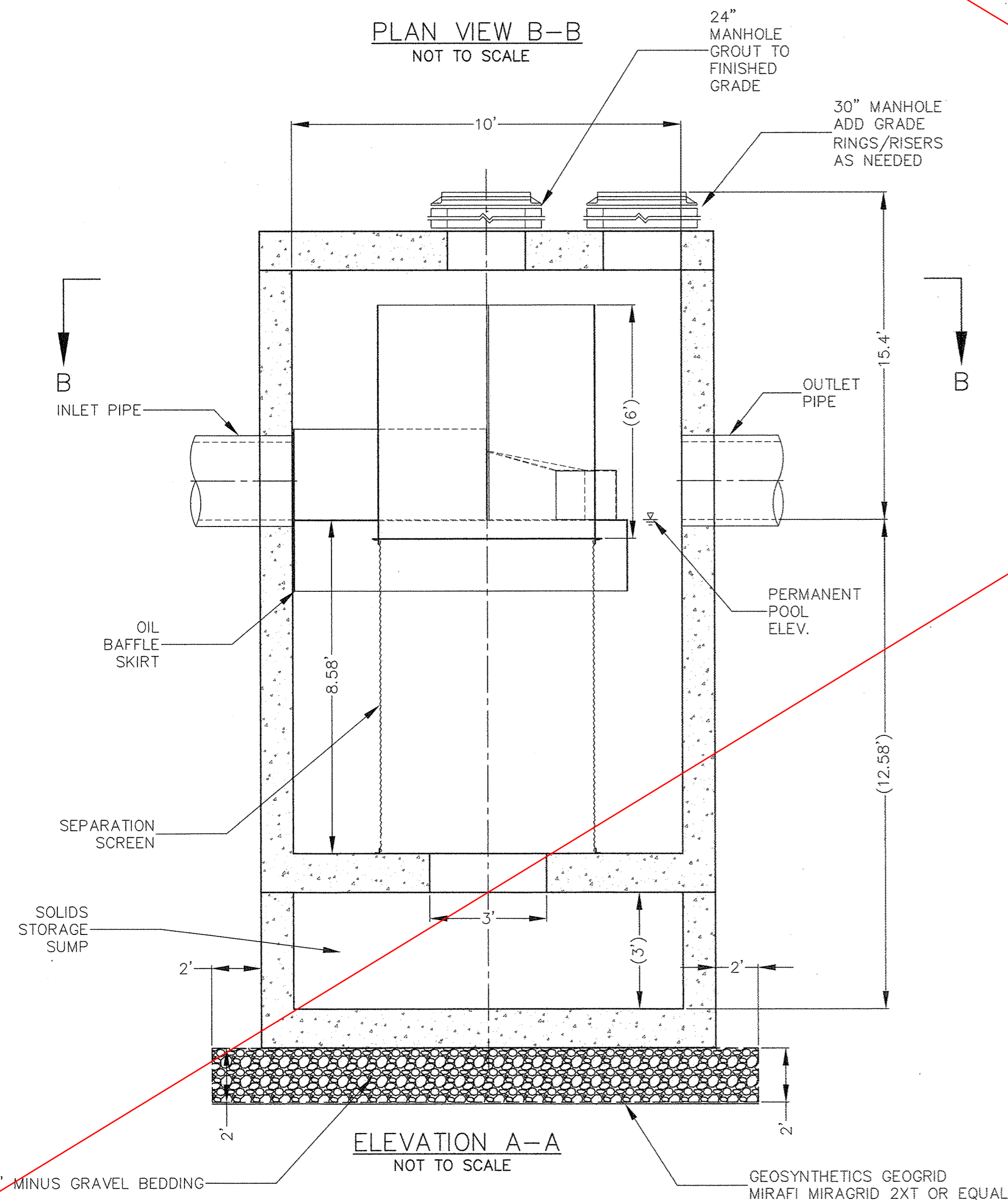
SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS)	25
PEAK FLOW RATE (CFS)	66
RETURN PERIOD OF PEAK FLOW (YRS)	10
SCREEN APERTURE (2400 OR 4700)	4700
PIPE DATA:	I.E. MATERIAL DIAMETER
INLET PIPE 1	674.63 RCP 48"
INLET PIPE 2	N/A * *
OUTLET PIPE	674.61 RCP 48"
RIM ELEVATION	690.0
ANTI-FLOTATION BALLAST	WIDTH HEIGHT
	N/A *
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

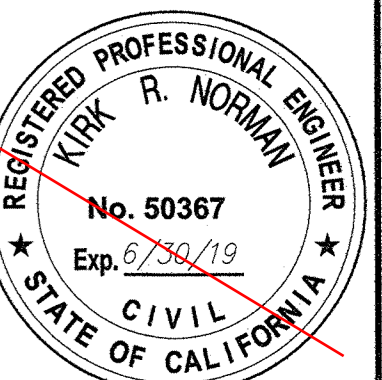
GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECHENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

Note: Schedule II work not included in contract due to inability to get easement modification



PLOT DATE: 2/12/19

SAVE DATE: 2/12/19 MUELLER, JOHN K:\PROJECTS\ZONE2\MULTIBENEFIT\BMP5\40565_PIRU_STORMWATER_CAPTURE\DESIGN\DESIGNDRAWINGS\100_PCT_PLANS\40565-SHT3-B.DWG

D				
C				
B				
A				
Δ	REVISION	DESCRIPTION	APP.	DATE

JAM	DESIGNED	2/12/19
JAM	DRAWN	2/12/19
	CHECKED	2/14/19

DISTRICT PROJECT MANAGER

 DISTRICT DEPUTY DIRECTOR

 DISTRICT DIRECTOR

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
WATERSHED PROTECTION DISTRICT

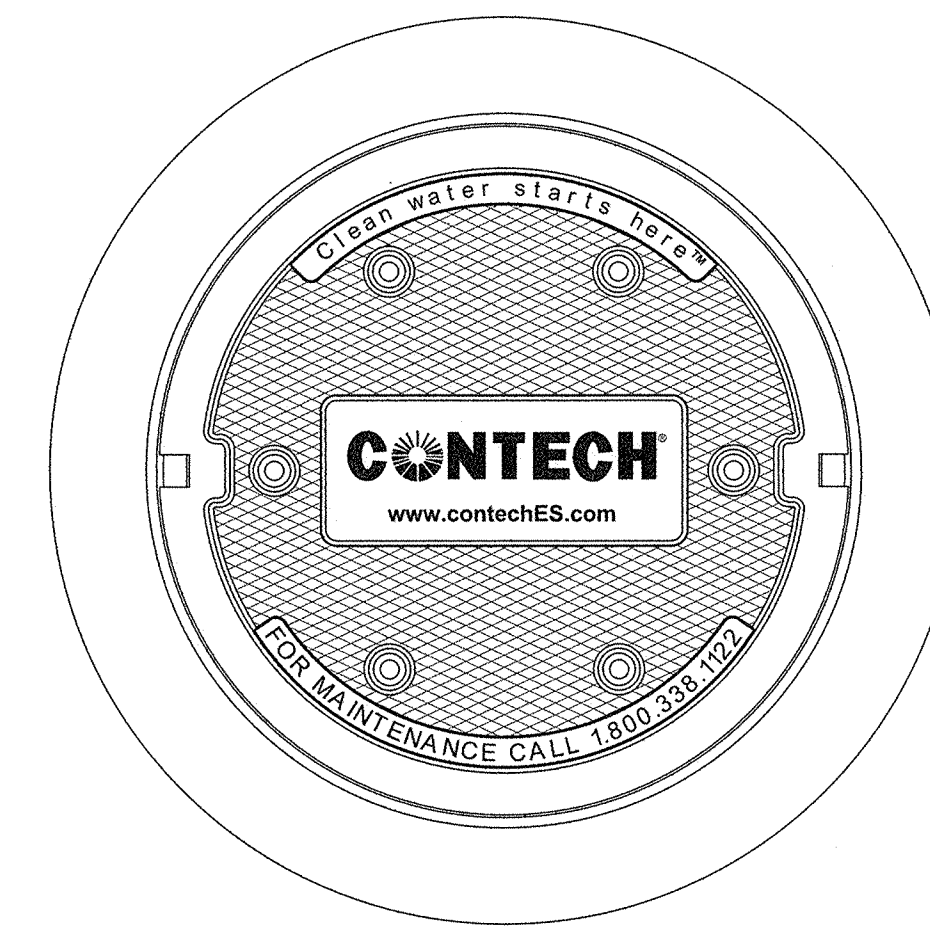
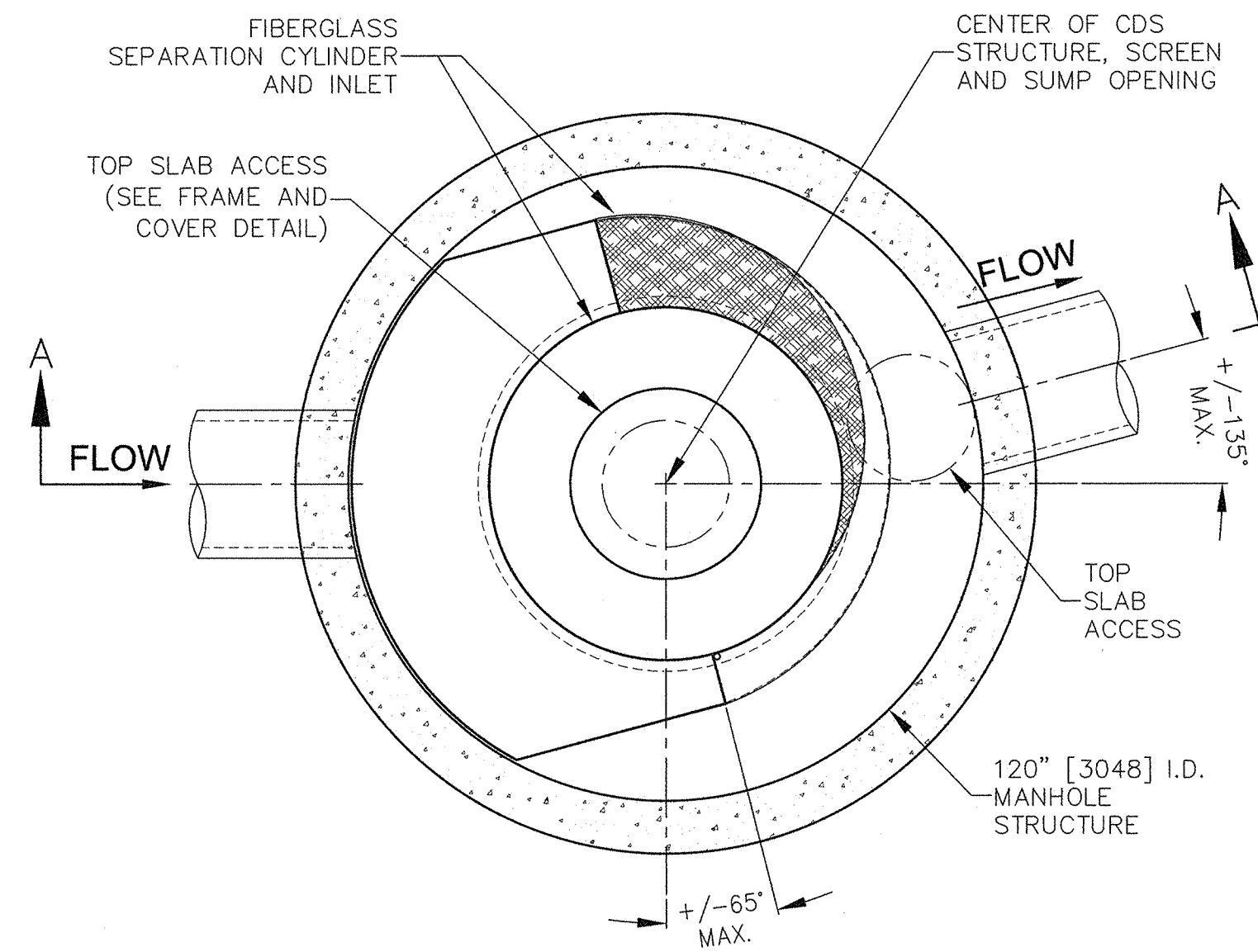
SPEC. NO.	WP19-07
PROJ. NO.	40565

PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT
 HIGH CAPACITY STORM WATER TREATMENT DEVICE DETAILS

SHEET	7
OF	8
DRAWING NO.	Y-2-3940

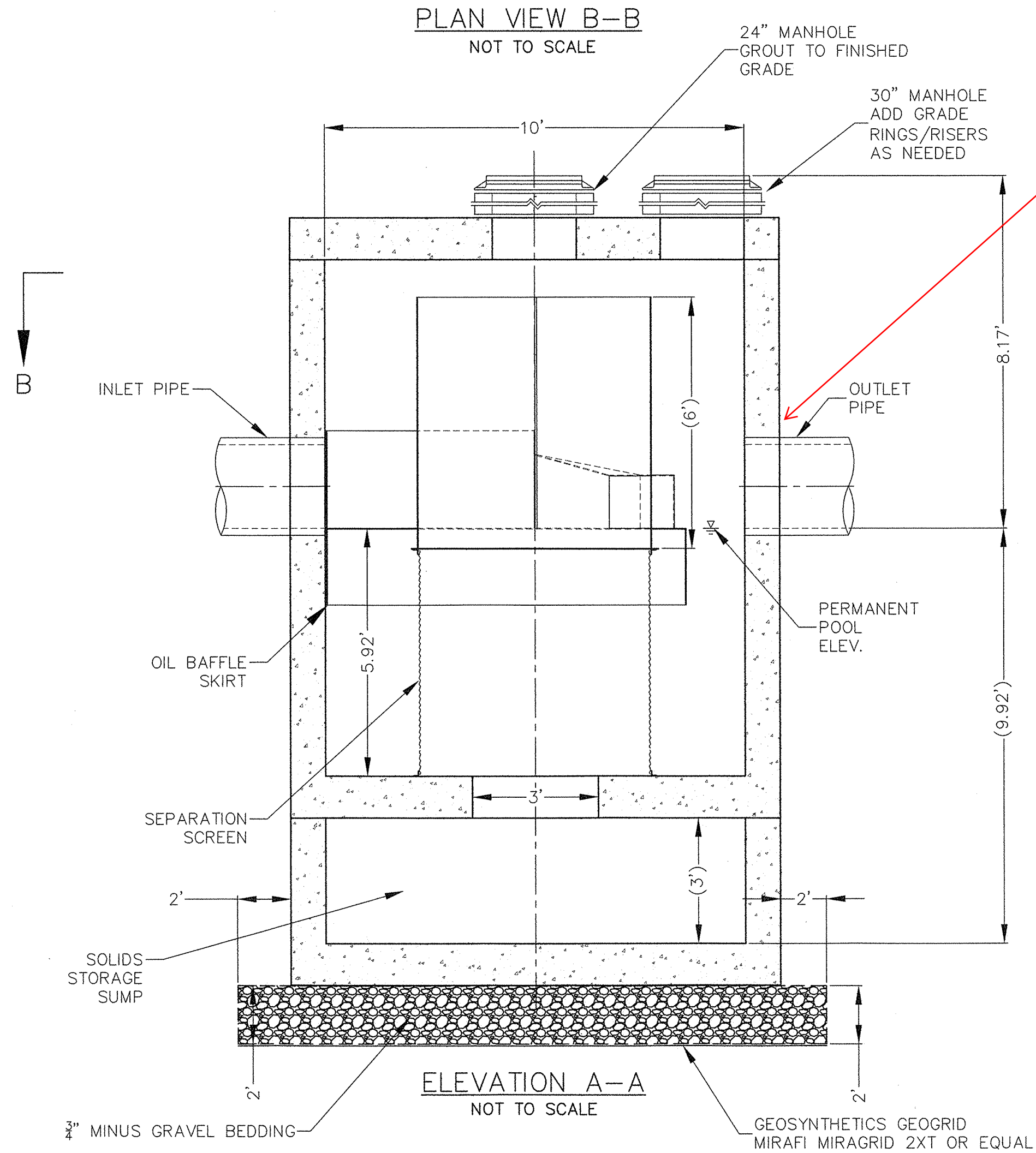
CDS5653-10-C DESIGN NOTES

THE STANDARD CDS5653-10-C CONFIGURATION IS SHOWN.



SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS)	14		
PEAK FLOW RATE (CFS)	18		
RETURN PERIOD OF PEAK FLOW (YRS)	10		
SCREEN APERTURE (2400 OR 4700)	4700		
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	661.15	RCP	42"
INLET PIPE 2	N/A	N/A	N/A
OUTLET PIPE	661.13	RCP	48"
RIM ELEVATION	669.3		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	N/A	N/A	
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

See Note at bottom of page.



See Note at bottom of page.

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET HS20 (AASHTO M 306) AND BE CAST WITH THE CONTECH LOGO.
- IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

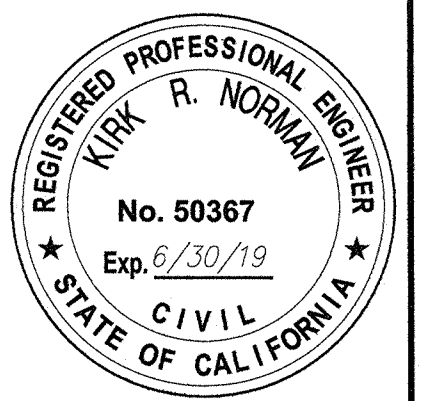
INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

Note:
Actual pipe size was 42", but unit was delivered with an opening at the outlet to accommodate a 48" pipe. This matches the value indicated in the "Site Specific Data Requirements" Table.

Contech was contacted and said there would be no adverse affects in using a 42" pipe. However, it would require the use of more dry pack.

Contractor constructed and unit was used as delivered.



PLT DATE: 2/12/19

SAVE DATE: 2/12/19 MUELLER, JOHN K:\PROJECTS\ZONE2\MULTIBENEFITRMP\40565_PIRU_STORMWATER_CAPTURE\DESIGN\DESIGNDRAWINGS\100_PCT_PLANS\40565-SHT3-B.DWG

REVISION	DESCRIPTION	APP.	DATE
D			
C			
B			
A			

JAM	DESIGNED	2-12-19
JAM	DRAWN	2/12/19
	CHECKED	2/14/19

Kirk R. Norman
DISTRICT PROJECT MANAGER
Tom S. Sideris
DISTRICT DEPUTY DIRECTOR
Shawn Haffner
DISTRICT DIRECTOR

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
WATERSHED PROTECTION DISTRICT

SPEC. NO.	WP19-07
PROJ. NO.	40565

PIRU STORMWATER CAPTURE FOR
GROUNDWATER RECHARGE PROJECT
STORM WATER TREATMENT DEVICE DETAILS

SHEET	8
OF	8
DRAWING NO.	Y-2-3939