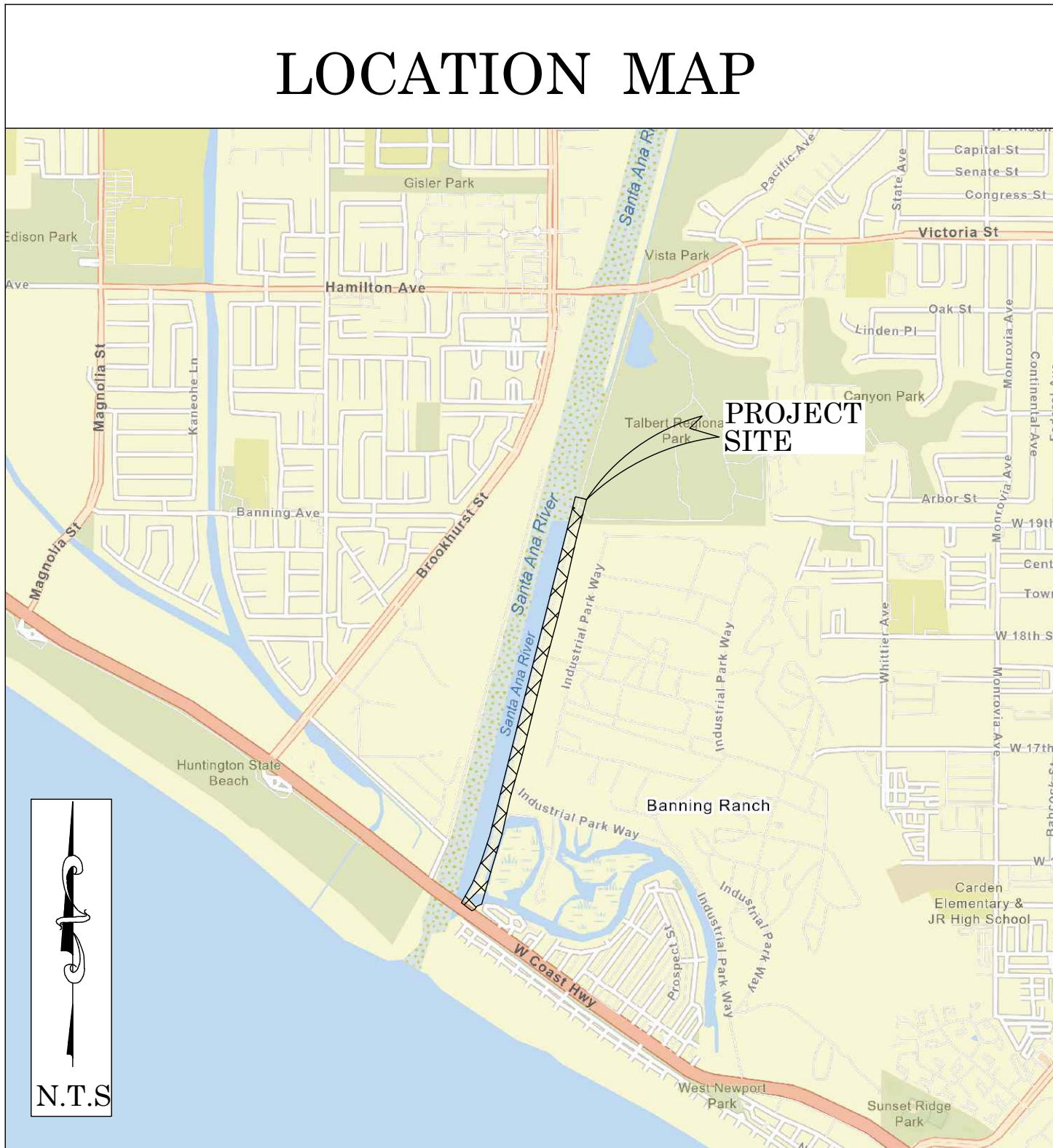




OC PUBLIC WORKS DEPARTMENT
KEVIN ONUMA, DIRECTOR OF PUBLIC WORKS
AVIO TIDE GATES



BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2017.50) EPOCH ADJUSTMENT, AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING STATIONS "TRAK" AND "FVPK" BEING NORTH 67°14'53.47" WEST AS DERIVED FROM THE COORDINATES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) ALONG WITH DATA SHEETS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

HORIZONTAL DATUM

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2017.50) EPOCH ADJUSTMENT.
ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCES MULTIPLY GRID BY A COMBINED FACTOR OF 1.00002740.
THIS COMBINATION FACTOR WAS HELD AT: CP# 4115
N: 2177600.08 E: 6041681.25 EL: 10.77'
ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

MEAN LOWER-LOW WATER (MLLW), PER NOAA TIDE STATION 9410580 - NEWPORT BAY ENTRANCE, TIDAL EPOCH 1983-2001.
OCS BM 1L-99-91 ELEV. = 24.742' YEAR LEVELED 2005 NAVD 88 (OCS 1995 ADJUSTMENT) + 0.18' = 24.922' MLLW
DESCRIPTION: FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1L-99-91", SET IN THE WEST END OF A CONCRETE BRIDGE ABUTMENT. MONUMENT IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF PACIFIC COAST HIGHWAY AND THE SANTA ANA RIVER CROSSING, 52 FT. WESTERLY OF THE CENTERLINE OF PCH AND AT THE WESTERLY END OF THE NORTHERLY BRIDGE ABUTMENT. MONUMENT IS SET LEVEL WITH THE BIKE TRAIL.

NOTES

THE SURVEY INFORMATION SHOWN HEREON IS TO BE USED FOR TOPOGRAPHIC RELATIONSHIPS ONLY AND IS NOT INTENDED FOR LAND ACQUISITION OR BOUNDARY PURPOSES.

SHEET INDEX

SHEET NO.	DESCRIPTION
SHEET 1	TITLE SHEET
SHEET 2-12	TOPOGRAPHIC MAP

BASIS OF STATIONING

THE BASIS OF STATIONING FOR THE BEGINNING OF THE SANTA ANA RIVER ALIGNMENT SHOWN HEREON IS 6+50 PER RECORD DRAWINGS E01-101-29R.

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP FOR THIS PORTION OF THE SANTA ANA RIVER AND ADJACENT MARSH LANDS AND PROVIDE INFORMATION ON THE STORM DRAIN STRUCTURES WITHIN.

SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT; THIS 13 DAY OF AUGUST, 2025.

Michael Kubisty

MICHAEL KUBISTY, PLS. SENIOR LAND SURVEYOR



SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT; THIS 13 DAY OF AUGUST, 2025.

Tate Lofgreen

TATE LOFGREEN, PLS. SENIOR LAND SURVEYOR



U.S. Survey Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping

TOPOGRAPHIC MAPPING PROJECT

				COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES	
				AVIO TIDE GATES	
				TITLE SHEET	
				PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK	
		DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
		MAPPING		BY: I. ISLAS	
		OFFICE CHECK		BY: M. KUBISTY, PLS	
		FIELD CHECK		BY: E. HERTZ & CREW	
		SCALE: N.T.S.		W.O. #EF21489	
		FILE: AVO TIDE GATES_TOPO_2025.DWG		FILE # 2425PW-CM0012	
MARK	DATE	ITEM			
REVISIONS					
				SHEET NO. 1 of 13	

SEE SHEET 3

20+00

SANTA ANA RIVER (E01)

MARSHLANDS

PACIFIC COAST HIGHWAY

CP# 2108
FD 4" CORP OF ENGINEERS U.S.
ARMY SURVEY MARK CAP IN HEADWALL
N: 2177482.13'
E: 6042231.45'
EL: 9.96'

STEEL GRATE
TG EL = 5.75'
TW EL=9.88'
FS EL=-1.76'
(PHOTO)
FS EL=-1.70'
(BURRIED)

TW EL=7.19'
FS EL=0.74'
(PHOTO)
FS EL=0.59'

TOP STEP
FS EL=-1.78'
(PHOTO)
BOTTOM STEP
FS EL=-3.61'

AVIO ARM
FS EL=-4.02'

TW EL=7.15'
FS EL=2.30'
(PHOTO)
FS EL=2.17'

TW EL=11.00'
FS EL=4.31'
(PHOTO)
FS EL=4.16'

TW EL=11.80'
FS EL=5.76'
(PHOTO)
FS EL=5.89'

TW EL=8.48'
FS EL=3.48'
(PHOTO)
FS EL=3.84'

CP# 2100
SET SURVEY SPIKE & 1-1/4"
OCS CP WASHER IN AC
N: 2177352.29'
E: 6042338.34'
EL: 21.51'

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

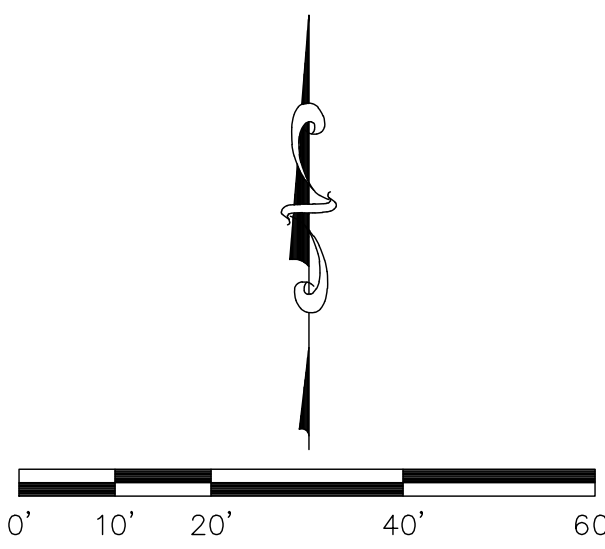
- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

U.S. Survey
Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SCALE: 1" = 20'
CONTOUR INTERVAL: 1'

			COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES		
			AVIO TIDE GATES		
			TITLE SHEET		
			PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK		
			DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO. 2 of 13
			MAPPING	BY: I. ISLAS	
			OFFICE CHECK	BY: M. KUBISTY, PLS	
			FIELD CHECK	BY: E. HERTZ & CREW	
MARK	DATE	ITEM	SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012
		REVISIONS	FILE: AVIO TIDE GATES_TOPO_2025.DWG		

SEE SHEET 4

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

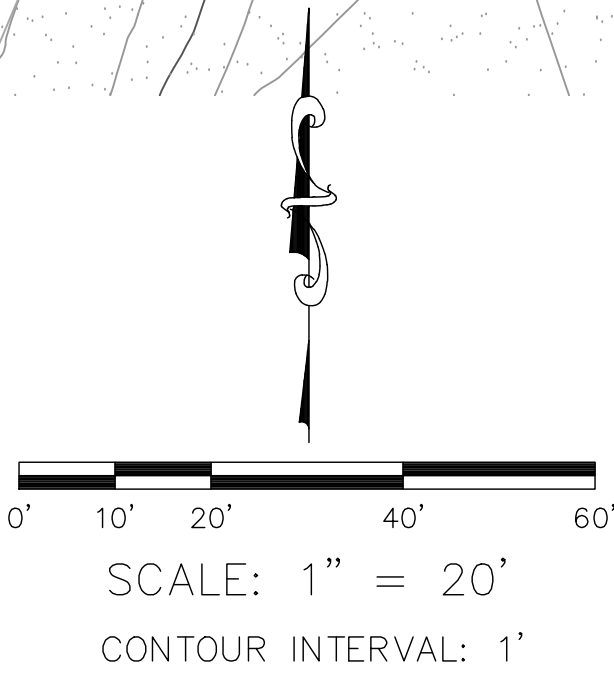
LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	PEX	ENC	Encroachment
	Fence Barbed-Wire	FD	Found
	Fence Chainlink	FS	Finished Surface
	Fence Wrought Iron	MLLW	Mean Lower-Low Water
	Hand Rail	TW	Top of Wall
	Hinge Point		
	Right of Way		
	Striping		

SEE SHEET 2

U.S. Survey
Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



		COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES		SHEET NO.
		AVIO TIDE GATES		
		TITLE SHEET		3 of 12
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK		
		DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	
		MAPPING	BY: I. ISLAS	
		OFFICE CHECK	BY: M. KUBISTY, PLS	
		FIELD CHECK	BY: E. HERTZ & CREW	
		SCALE: 1"=20'	W.O. #EF21489 FILE # 2425PW-CM0012	
		FILE: AVIO TIDE GATES_TOPO_2025.DWG		

SANTA ANA RIVER (E01)

MARSHLANDS

LEGEND

SYMBO

- | | |
|---|---------------------------|
|  | Control Box Undefined |
|  | Control Point |
|  | Gate, Single |
|  | Grate Inlet |
|  | Monitor Well |
|  | Sign Board |
|  | Sign Post |
|  | Utility Pole, Underground |

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

LINE PATTERN KEY

- | | |
|--|--------------------|
| | Building Outline |
| | Bush Row Outline |
| | Concrete Wall |
| | Edge of Concrete |
| | Edge of Asphalt |
| | Pavement |
| | Exposed Pipe |
| | Fence Barbed-Wire |
| | Fence Chainlink |
| | Fence Wrought Iron |
| | Hand Rail |
| | Hinge Point |
| | Right of Way |
| | Striping |

ABBREVIATION

- | | |
|------|----------------------|
| AC | Asphalt Concrete |
| CL | Centerline |
| CLR | Clearance |
| CONC | Concrete |
| CP | Control Point |
| EL | Elevation |
| ENC | Encroachment |
| FD | Found |
| FS | Finished Surface |
| MLLW | Mean Lower-Low Water |
| TW | Top of Wall |



SCALE: 1" = 20'

CONTOUR INTERVAL: 1

			COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES		
			AVIO TIDE GATES		
			TITLE SHEET		
			PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK		
			DATE OF SURVEY: 06/09/2025		SHEET NO. 4 of 12
			MAPPING		
			OFFICE CHECK		
			FIELD CHECK		
			SCALE: 1"=20'		
			MARK	DATE	ITEM
REVISIONS					

SEE SHEET 6

35+00

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

TW EL=12.99'
FS EL=1.25'
(PHOTO)
FS EL=1.25'
(BURRIED)

CP# 2109
SET MAG SPIKE & 1-1/2"
OCS CP WASHER IN AC
N: 2178986.23'
E: 6042763.57'
EL: 16.73'

CP# 2103
SET SURVEY SPIKE & 1-1/4"
OCS CP WASHER IN AC
N: 2178896.76'
E: 6042740.15'
EL: 16.37'

FS EL=-0.93'
(PHOTO)

GRANIEL ROAD

SEE SHEET 4

NOTE

- NO ACCESS AT THIS TIME

0' 10' 20' 40' 60'

SCALE: 1" = 20'

CONTOUR INTERVAL: 1'

			COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
			AVIO TIDE GATES			
			TITLE SHEET			
			PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
			DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW		SHEET NO. 5 of 12
			MAPPING	BY: I. ISLAS		
			OFFICE CHECK	BY: M. KUBISTY, PLS		
			FIELD CHECK	BY: E. HERTZ & CREW		
MARK	DATE	ITEM	SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
		REVISIONS	FILE: AVIO TIDE GATES_TOPO_2025.DWG			

SEE SHEET 7

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

SEE SHEET 5

COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
MAPPING		BY: I. ISLAS	
OFFICE CHECK		BY: M. KUBISTY, PLS	
FIELD CHECK		BY: E. HERTZ & CREW	
SCALE: 1"=20'		W.O. #EF21489	FILE #2425PW-CM0012
FILE: AVIO TIDE GATES_TOPO_2025.DWG			

MARK	DATE	ITEM
REVISIONS		

SHEET NO.
6
of
12

SEE SHEET 8

CP# 2110
SET MAG SPIKE & 1-1/2"
OCS CP WASHER IN AC
N: 2180329.79'
E: 6043092.52'
EL: 17.97'

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

DIRT ROAD LEADING TO BRIDGE

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- PEX
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- R/W
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

SEE SHEET 6

SEE SHEET 9

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

SEE SHEET 7

			COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			SHEET NO. 8 of 12
			AVIO TIDE GATES			
			TITLE SHEET			
			PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
			DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
			MAPPING		BY: I. ISLAS	
			OFFICE CHECK		BY: M. KUBISTY, PLS	
			FIELD CHECK		BY: E. HERTZ & CREW	
			SCALE: 1"=20'		W.O. #EF21489	
			FILE: AVIO TIDE GATES_TOPO_2025.DWG		FILE # 2425PW-CM0012	
MARK	DATE	ITEM				
REVISIONS						

SEE SHEET 10

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

TW EL=7.68'
FS EL=2.21"
(PHOTO)
36"Ø STEEL PIPES (3)
INV EL = 2.65'
FS EL=2.12'

TW EL=8.47'
FS EL=2.86'
(PHOTO)
FS EL=2.92'

CP# 2102
SET SURVEY SPIKE & 1-1/4"
OCS CP WASHER IN AC
N: 2181186.17'
E: 6043320.85'
EL: 18.97'

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- | | |
|------|----------------------|
| AC | Asphalt Concrete |
| CL | Centerline |
| CLR | Clearance |
| CONC | Concrete |
| CP | Control Point |
| EL | Elevation |
| ENC | Encroachment |
| FD | Found |
| FS | Finished Surface |
| MLLW | Mean Lower-Low Water |
| TW | Top of Wall |

SEE SHEET 8

SEE SHEET 11

SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

NOTE

- NO ACCESS AT THIS TIME

SEE SHEET 9

				COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES	
		AVIO TIDE GATES			
		TITLE SHEET			
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
		DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
MAPPING		BY: I. ISLAS			
OFFICE CHECK		BY: M. KUBISTY, PLS			
FIELD CHECK		BY: E. HERTZ & CREW			
MARK	DATE	ITEM	SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012
REVISIONS			FILE: AVIO TIDE GATES_TOPO_2025.DWG		

65+00 N: 2182135.52
E: 6043298.51

SANTA ANA RIVER (E01)

TW EL=9.78'
FS EL=4.50'
(PHOTO)
FS EL=3.99'

MARSHLANDS

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

SEE SHEET 10

TW EL=9.29'
FS EL=3.92'
30"Ø RCP
(PHOTO)
FS EL=3.71'

CP # 2101
SET SURVEY SPIKE & 1-1/4"
OCS CP WASHER IN AC
N: 2181893.88'
E: 6043501.16'
EL: 20.23'

TW EL=11.66'
FS EL=6.58'
(PHOTO)
FG EL=9.76'

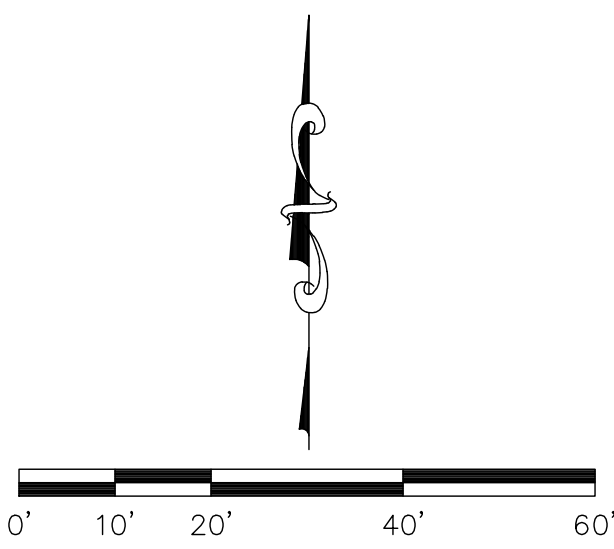
SANTA ANA RIVER (E01)

A.C. BIKE TRAIL

MARSHLANDS

U.S. Survey
Foot

OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



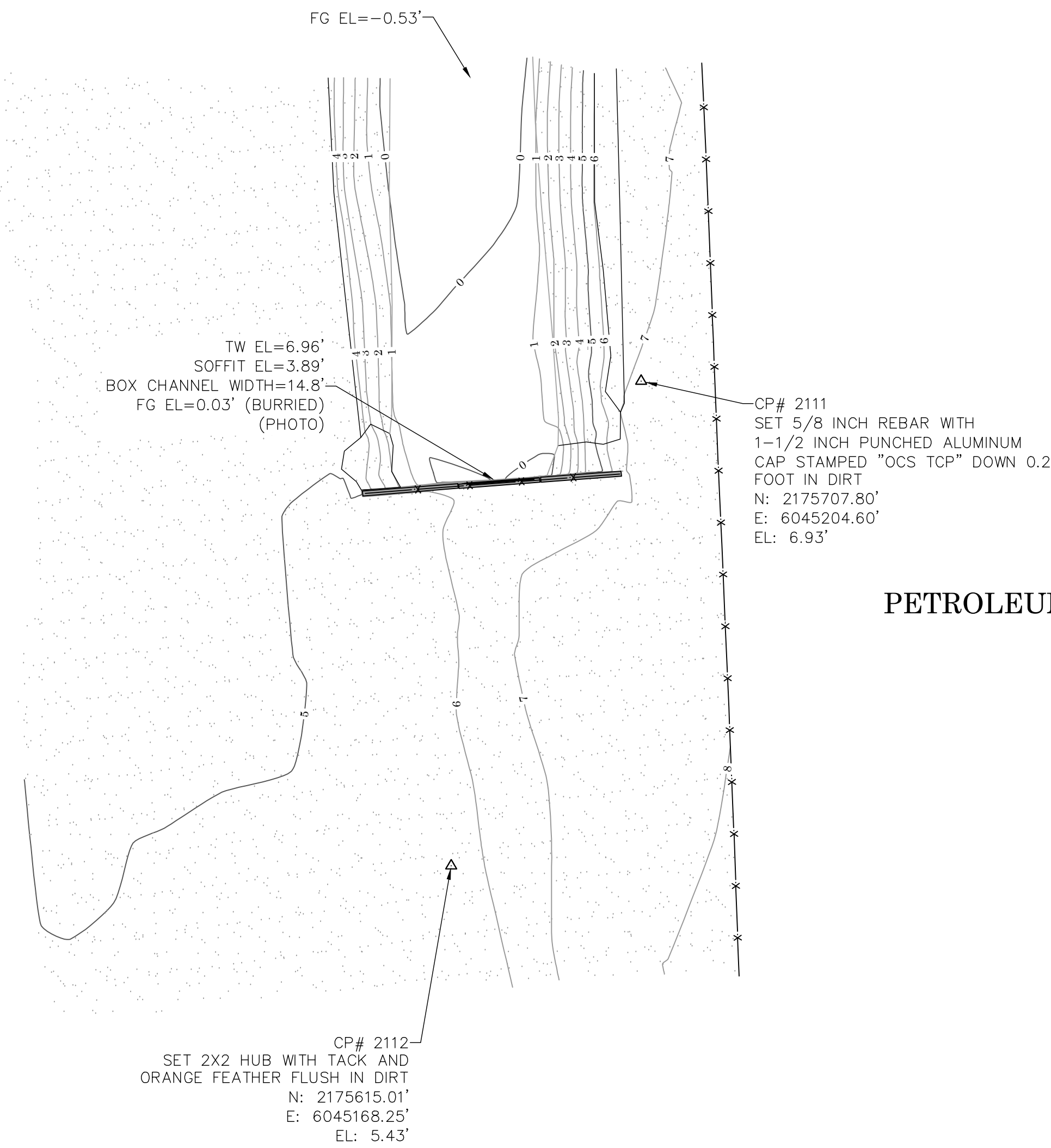
SCALE: 1" = 20'
CONTOUR INTERVAL: 1'

		COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES	
		AVIO TIDE GATES	
		TITLE SHEET	
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK	
		DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW
		MAPPING	BY: I. ISLAS
		OFFICE CHECK	BY: M. KUBISTY, PLS
		FIELD CHECK	BY: E. HERTZ & CREW
		SCALE: 1"=20'	W.O. #EF21489
		FILE: #2425PW-CM0012	
		FILE: AVIO TIDE GATES_TOPO_2025.DWG	
MARK	DATE	ITEM	
REVISIONS			

SHEET NO.
11
of
12

NEWPORT SHORES DRIVE

PETROLEUM FACILITY



LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

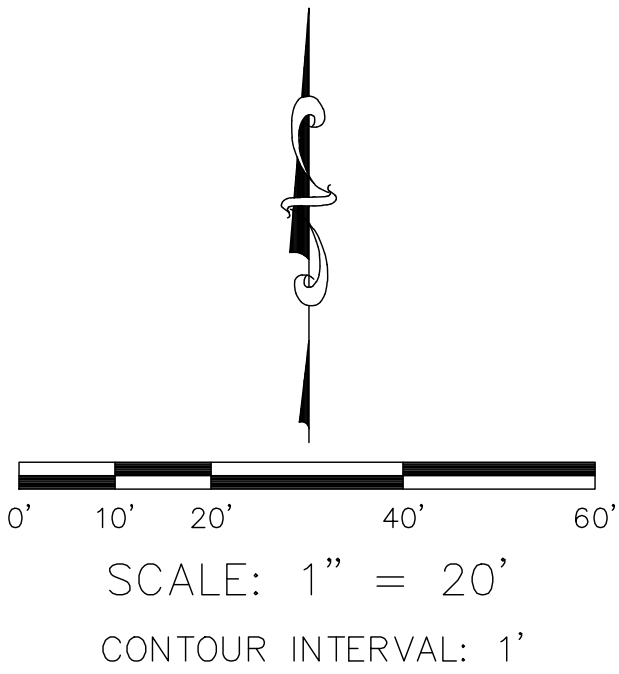
LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

				COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES	
		AVIO TIDE GATES			
		TITLE SHEET			
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
		DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
MAPPING		BY: I. ISLAS			
OFFICE CHECK		BY: M. KUBISTY, PLS			
FIELD CHECK		BY: E. HERTZ & CREW			
SCALE: 1"=20'		W.O. #EF21489			
MARK	DATE	ITEM	FILE: AVIO TIDE GATES_TOPO_2025.DWG		FILE #2425PW-CM0012
REVISIONS					





LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

AREA PATTERN KEY

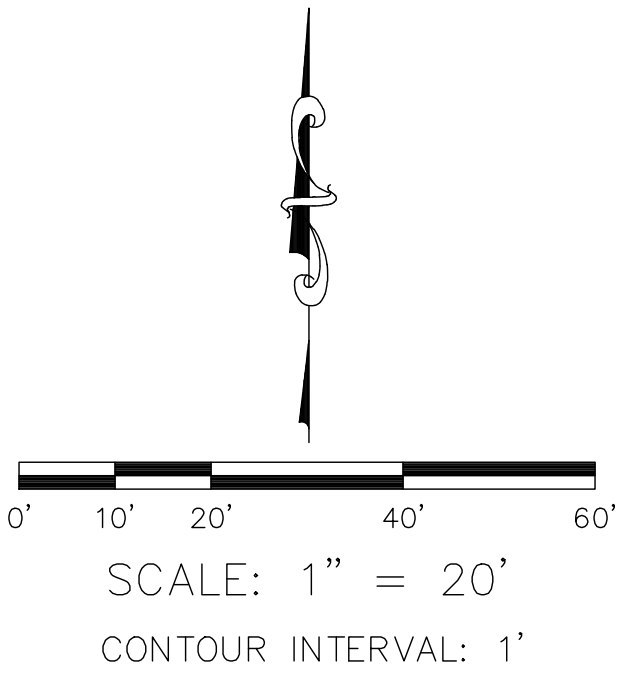
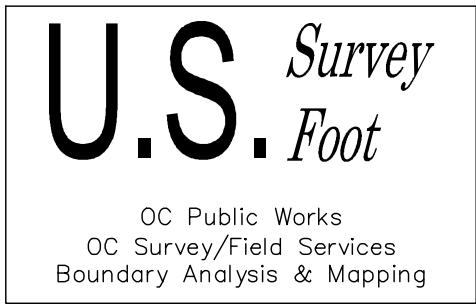
- Concrete
- Dirt
- Rip Rap

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall



			COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
			AVIO TIDE GATES			
			TITLE SHEET			
			PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
			DATE OF SURVEY: 06/09/2025		BY: E. HERTZ & CREW	
MAPPING		BY: I. ISLAS				
OFFICE CHECK		BY: M. KUBISTY, PLS				
FIELD CHECK		BY: E. HERTZ & CREW				
MARK	DATE	ITEM	SCALE: 1"=20'		W.O. #EF21489	FILE #2425PW-CM0012
			REVISIONS			
			FILE: AVIO TIDE GATES_TOPO_2025.DWG			