

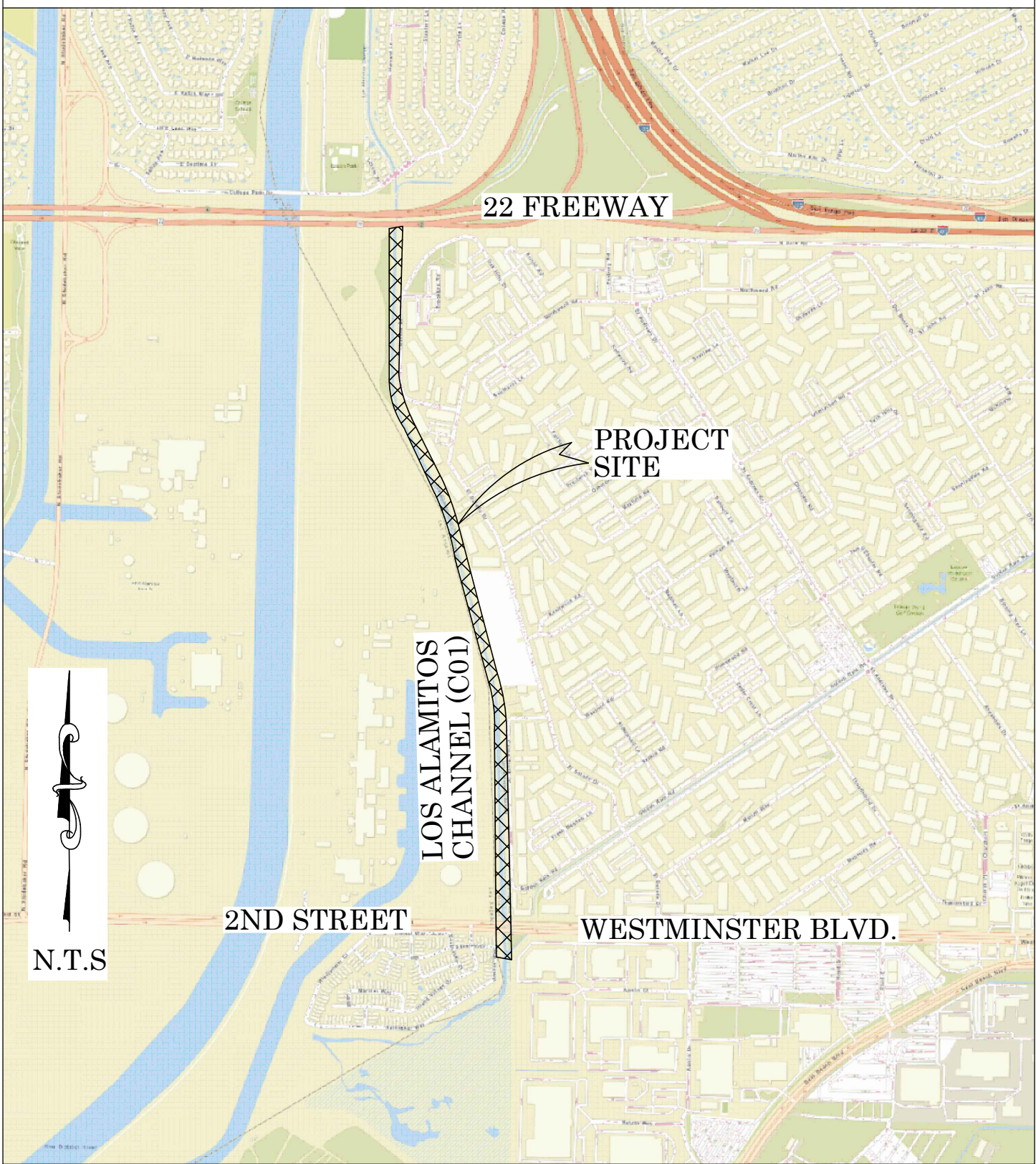


OC PUBLIC WORKS DEPARTMENT  
JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS  
KEVIN HILLS, COUNTY SURVEYOR  
LOS ALAMITOS CHANNEL (C01)



EARTHEN SLOPE IMPROVEMENTS

LOCATION MAP



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 SURVEYOR'S ACT; THIS 13TH DAY OF DECEMBER, 2021.

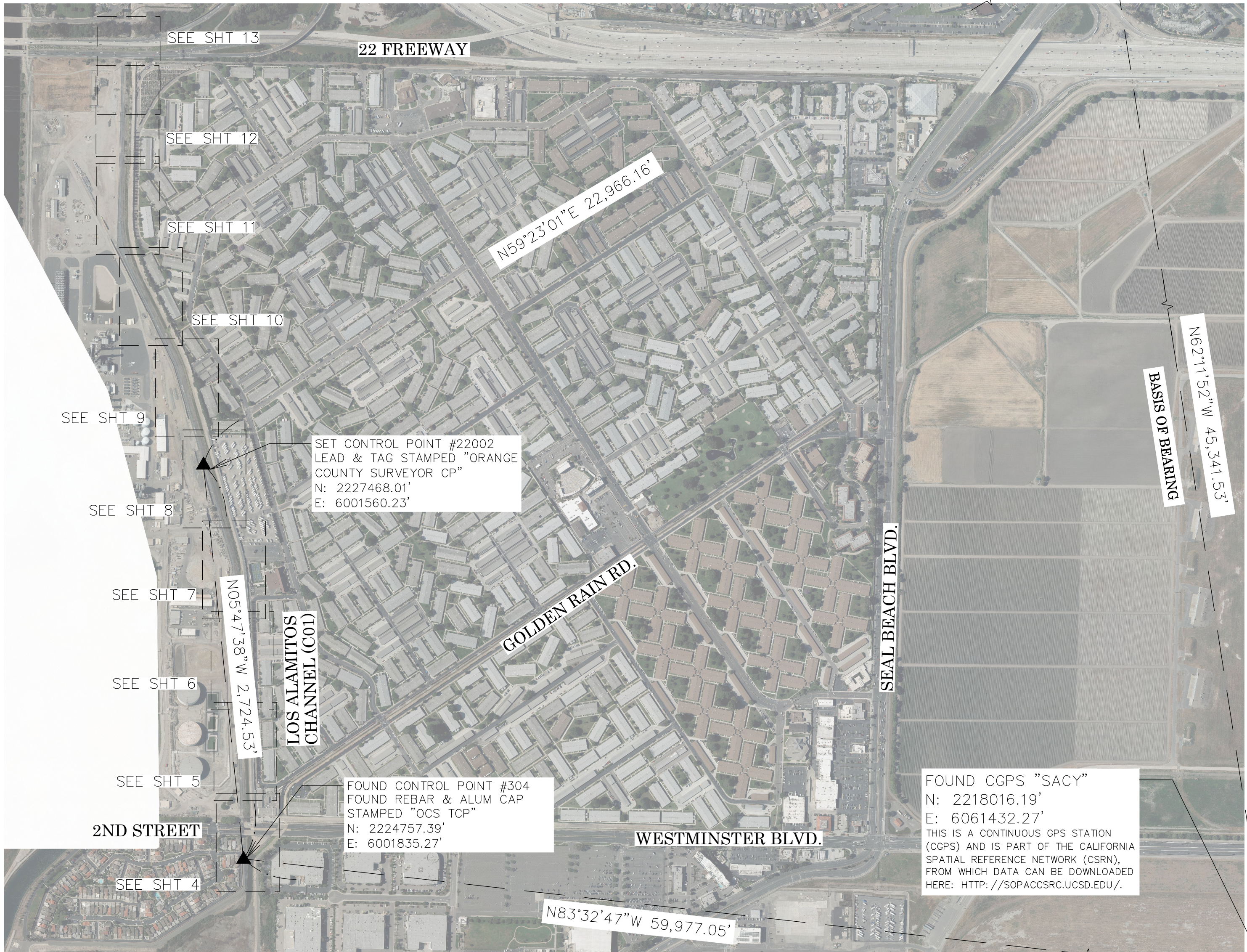
JESOM MORENO, PLS. SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 13TH DAY OF DECEMBER, 2021.

WADE WEAVER, PLS. DEPUTY COUNTY SURVEYOR



FOUND CGPS "BLSA"  
N: 2239164.39'  
E: 6021324.82'  
THIS IS A CONTINUOUS GPS STATION (CGPS) AND IS PART OF THE CALIFORNIA SPATIAL REFERENCE NETWORK (CSRN). FROM WHICH DATA CAN BE DOWNLOADED HERE: [HTTP://SOPACCSRC.UCSD.EDU/](http://SOPACCSRC.UCSD.EDU/).

FOUND CGPS "SACY"  
N: 2218016.19'  
E: 6061432.27'  
THIS IS A CONTINUOUS GPS STATION (CGPS) AND IS PART OF THE CALIFORNIA SPATIAL REFERENCE NETWORK (CSRN). FROM WHICH DATA CAN BE DOWNLOADED HERE: [HTTP://SOPACCSRC.UCSD.EDU/](http://SOPACCSRC.UCSD.EDU/).

SET CONTROL POINT #22002  
LEAD & TAG STAMPED "ORANGE COUNTY SURVEYOR CP"  
N: 2227468.01'  
E: 6001560.23'

FOUND CONTROL POINT #304  
FOUND REBAR & ALUM CAP STAMPED "OCS TCP"  
N: 2224757.39'  
E: 6001835.27'

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 CGPS STATIONS (BLSA) AND (SACY) BEING NORTH 62°11'52" 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 1.00001225.

THIS COMBINATION FACTOR WAS DERIVED BY HOLDING POINT #22002  
N: 2227468.01, E: 6001560.23, EL: 8.64'

ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. 1C-138-04 ELEV. = 10.463' YEAR LEVELED: 2005

NAVD 1988 (O.C.S. 1995 ADJUSTMENT)

DESCRIPTION: DESCRIBED BY OCS 2005 - FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1C-138-04", SET IN THE NORTHERLY CORNER OF A HEADWALL FOR AN R.C.B. UNDER SIDEWALK. MONUMENT IS LOCATED IN THE NORTHEASTERLY CORNER OF THE INTERSECTION OF WESTMINSTER AVENUE AND SEAL BEACH BOULEVARD, 65 FT. NORTHERLY OF THE CENTERLINE OF WESTMINSTER AND 58 FT. EASTERLY OF THE CENTERLINE OF SEAL BEACH BOULEVARD. MONUMENT IS SET LEVEL WITH THE SIDEWALK.

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	1	TITLE SHEET
SHEET 2-3	2-3	BOUNDARY MAP
SHEET 4-13	4-13	TOPOGRAPHIC MAP
SHEET 14-23	14-23	CROSS-SECTIONS

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP AND RIGHT OF WAY ESTABLISHMENT FOR THIS PORTION OF THE LOS ALAMITOS CHANNEL (C01).

BASIS OF STATIONING

STATIONING IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A" HOLDING STATION 58+24.66 AT THE INTERSECTION OF LOS ALAMITOS CHANNEL CONSTRUCTION CENTERLINE AND SOUTH LINE OF SECTION 1 T5S R12W SBM.

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS	
		TITLE SHEET	
		PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)	
		DATE OF SURVEY: 12/24/2020	BY: J. JOHNS
		MAPPING	BY: A. VU / H. AFTIM
		OFFICE CHECK	BY: J. MORENO, PLS
		FIELD CHECK	BY: J. JOHNS
		SCALE: NTS	W.O. #EF20403P
		FILE #2021PW-PR0001	FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG
MARK	DATE	ITEM	
REVISIONS			
			SHEET NO. 1 of 23



ESTABLISHMENT NOTES

- Ⓐ
- ESTABLISHED THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE BY HOLDING A LINE BETWEEN MONUMENTS 1, 2, 3, 4 AND 5
- Ⓑ
- ESTABLISHED THE CENTERLINE OF LOS ALAMITOS BLVD BY HOLDING A LINE BETWEEN MONUMENTS 7 AND 8
- Ⓒ
- ESTABLISHED THE NE CORNER OF SEC 1, T5S, R12W BY HOLDING RECORD DISTANCE OF 707.58' PER (R11) FROM MONUMENT 8 NORTHERLY ALONG PROLONGATION OF LINE ESTABLISHMENT Ⓒ
- Ⓓ
- ESTABLISHED THE INTERSECTION OF THE COUNTY LINE AND NLY LINE OF SECTION 2, T5S, R12WB Y PRORATION BETWEEN MONUMENTS 4 AND 5 PER (R3)
- Ⓔ
- ESTABLISHED THE CENTERLINE OF GARDEN GROVE FWY BY HOLDING A LINE BETWEEN ESTABLISHMENTS Ⓒ AND Ⓓ
- Ⓕ
- ESTABLISHED THE NW CORNER OF SECTION 1, T5S, R12W BY HOLDING RECORD DISTANCE OF 710.71' PER (R2) FROM ESTABLISHMENT Ⓓ E'LY ALONG ESTABLISHMENT NOTE Ⓔ
- Ⓖ
- ESTABLISHED THE CENTERLINE OF WESTMINSTER BLVD BY HOLDING A LINE BETWEEN MONUMENTS 6 AND 7
- Ⓗ
- ESTABLISHED THE INTERSECTION OF COUNTY LINE AND WESTMINSTER BLVD CENTERLINE BY INTERSECTION HOLDING WLY PROLONGATION OF LINE ESTABLISHMENT Ⓓ AND LINE ESTABLISHMENT Ⓐ
- Ⓘ
- ESTABLISHED THE SW CORNER OF SECTION 1, T5S, R12W BY HOLDING RECORD DISTANCE OF 932.65' PER (R12) FROM ESTABLISHMENT NOTE Ⓖ W'LY ALONG LINE ESTABLISHMENT Ⓒ
- Ⓚ
- ESTABLISHED THE W 1/4 CORNER OF SECTION 1 BY LEAST SQUARE ADJUSTMENT BETWEEN ESTABLISHMENT NOTES Ⓓ AND Ⓘ PER (R2)
- Ⓛ
- ESTABLISHED THE W'LY LINE OF SW 1/4 OF SECTION 1, T5S, R12W BY HOLDING A LINE BETWEEN ESTABLISHMENT NOTES Ⓕ AND Ⓙ
- Ⓜ
- ESTABLISHED THE W'LY LINE OF NW 1/4 OF SECTION 1, T5S, R12W BY HOLDING A LINE BETWEEN ESTABLISHMENT NOTES Ⓕ AND Ⓙ
- Ⓜ
- ESTABLISHED THE W'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN ESTABLISHMENT NOTES Ⓐ AND Ⓜ
- Ⓝ
- ESTABLISHED THE W'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN ESTABLISHMENT NOTES Ⓕ AND Ⓜ
- Ⓞ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE PARALLEL WITH AND RECORD DISTANCE OF 100' PER (R1) E'LY FROM LINE ESTABLISHMENT Ⓐ
- Ⓟ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE PARALLEL WITH AND RECORD DISTANCE OF 100' PER (R1) E'LY FROM LINE ESTABLISHMENT Ⓐ
- Ⓠ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD RADIUS PER (R1) AND TANGENT TO LINE ESTABLISHMENTS Ⓕ AND Ⓙ
- Ⓡ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE PARALLEL WITH AND RECORD DISTANCE OF 100' PER (R1) E'LY FROM LINE ESTABLISHMENT Ⓐ
- Ⓢ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD RADIUS PER (R1) AND TANGENT TO LINE ESTABLISHMENTS Ⓙ AND Ⓕ
- Ⓣ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE PARALLEL WITH AND RECORD DISTANCE OF 100' PER (R1) E'LY FROM LINE ESTABLISHMENT Ⓐ
- Ⓤ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD RADIUS PER (R1) AND TANGENT TO LINE ESTABLISHMENTS Ⓙ AND Ⓕ
- Ⓥ
- ESTABLISHED THE ANGLE POINT ON E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD DISTANCE OF 1689.20' PER (R1) FROM THE SOUTHERLY TERMINUS OF LINE ESTABLISHMENT Ⓙ ALONG LINE ESTABLISHMENT Ⓣ
- Ⓦ
- ESTABLISHED THE PORTION OF E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD ANGLE AND DISTANCE PER (R1) AT ESTABLISHMENT NOTE Ⓥ FROM LINE ESTABLISHMENT Ⓣ
- Ⓧ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE PARALLEL WITH AND RECORD DISTANCE OF 110' PER (R1) E'LY OF LINE ESTABLISHMENT Ⓐ AT THE E'LY TERMINUS OF LINE ESTABLISHMENT Ⓦ
- Ⓨ
- ESTABLISHED THE INTERSECTION OF E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) WITH CENTERLINE OF WESTMINSTER BY INTERSECTION HOLDING LINE ESTABLISHMENTS Ⓧ AND Ⓒ
- Ⓩ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING RECORD DISTANCE OF 58.85' PER (R1) FROM ESTABLISHMENT NOTE Ⓣ ALONG S'LY PROLONGATION OF LINE ESTABLISHMENT Ⓧ
- Ⓐ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN MONUMENT 9 AND S'LY TERMINUS OF LINE ESTABLISHMENT Ⓒ
- Ⓐ
- ESTABLISHED THE ANGLE POINT ON E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY DISTANCE DISTANCE INTERSECTION METHOD HOLDING RECORD DISTANCE OF 75.00' PER (R6) FROM MONUMENT 9 AND RECORD DISTANCE OF 102.71' PER (R6) FROM MONUMENT 11
- Ⓐ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN MONUMENT 9 AND ESTABLISHMENT NOTE Ⓐ
- Ⓐ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN MONUMENT 10 AND ESTABLISHMENT NOTE Ⓐ
- Ⓐ
- ESTABLISHED THE E'LY LINE OF THE LOS ALAMITOS CHANNEL PER (R1) BY HOLDING A LINE BETWEEN MONUMENTS 11 AND 12

MONUMENT NOTES

- 1
- FOUND 6" IRON PIPE & 5" IRON CAP, WITH RAISED "2" IN WELL MONUMENT PER (R4), DOWN 3.5', ACCEPTED AS ANGLE POINT ON THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE
- 2
- FOUND 6" IRON PIPE & PUNCHED 5" IRON CAP, WITH RAISED "3" PER (R4), DOWN 0.5' IN DIRT, ACCEPTED AS ANGLE POINT ON THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE
- 3
- FOUND MONUMENT WELL WITH 2 1/2" BRASS DISK, STAMPED "RE 11915 COUNTY ENGINEER LA CO OR CO STA 4 NOV92" PER (R4), DOWN 1.5', ACCEPTED AS ANGLE POINT ON THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE
- 4
- FOUND 2 1/2" BRASS DISK IN CONCRETE STAMPED "RE 11915 COUNTY ENGINEER LA CO OR CO STA 5 NOV92" PER (R4), DOWN 1' IN DIRT, ACCEPTED AS ANGLE POINT ON THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE
- 5
- FOUND 2 1/2" BRASS DISK IN CONCRETE STAMPED "LA COUNTY ENGINEER STA 6 RE 5869" DOWN 1.6' IN DIRT PER (R4), ACCEPTED AS ANGLE POINT ON THE BOUNDARY LINE BETWEEN THE COUNTIES OF LOS ANGELES AND ORANGE
- 6
- FOUND GEAR SPIKE & 1-1/2" TAG STAMPED "LS 5411" FLUSH IN CONCRETE ASPHALT PER (R8), ACCEPTED AS THE CENTERLINE INTERSECTION OF WESTMINSTER BLVD AND APOLLO DR. PER (R6)
- 7
- FOUND HEX BAR IN WELL MONUMENT PER (R9), DOWN 2' IN AC, ACCEPTED AS CENTERLINE INTERSECTION OF SEAL BEACH BLVD AND WESTMINSTER BLVD
- 8
- FOUND SPIKE WITH 1 1/2" ILLEGIBLE TAG, IN LIEU OF SPIKE AND WASHER "LS 3997" PER (R11), DOWN 0.3' IN A.C. ACCEPTED AS A PONT ON CENTERLINE OF BAY BLVD (LOS ALAMITOS BLVD) PER (R5)
- 9
- FOUND LEAD & TACK ON CONCRETE FOOTING OF FENCE POST PER (R6), ACCEPTED AS AN ANGLE POINT ON THE WESTERLY LINE OF LOT "A" PER (R6)
- 10
- FOUND 2" IRON PIPE & 3/4 BRASS TAG STAMPED "LS 2488" PER (R7), DOWN 0.2' IN DIRT, S88°19'27"W 1.01' FROM ESTABLISHED NOTE Ⓐ
- 11
- FOUND LEAD & TACK ON CONCRETE FOOTING OF FENCE POST PER (R12), ACCEPTED AS AN ANGLE POINT ON THE NW'LY LINE OF LOT "3" PER (R6)
- 12
- FOUND 2" IRON PIPE AND 3/4" BRASS TAG STAMPED "LS 2383" PER (R12), DOWN 0.2' IN DIRT, ACCEPTED AS AN ANGLE POINT ON THE NW'LY LINE OF LOT "3" PER (R6)

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 CGPS STATIONS (BLSA) AND (SACY) BEING NORTH 62°11'52" 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 DISTANCE MULTIPLY A GRID DISTANCE BY 1.00001225.

COMBINATION FACTOR WAS HELD AT POINT NUMBER 22002  
N: 2227468.01', E: 6001560.23', ELEVATION= 8.64'

RECORD DISTANCES SHOWN HEREON ARE AS THEY APPEAR ON THE DOCUMENT OF RECORD. DISTANCES MAY BE EITHER GRID OR GROUND, AS PER SAID RECORD.

ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

NOTES

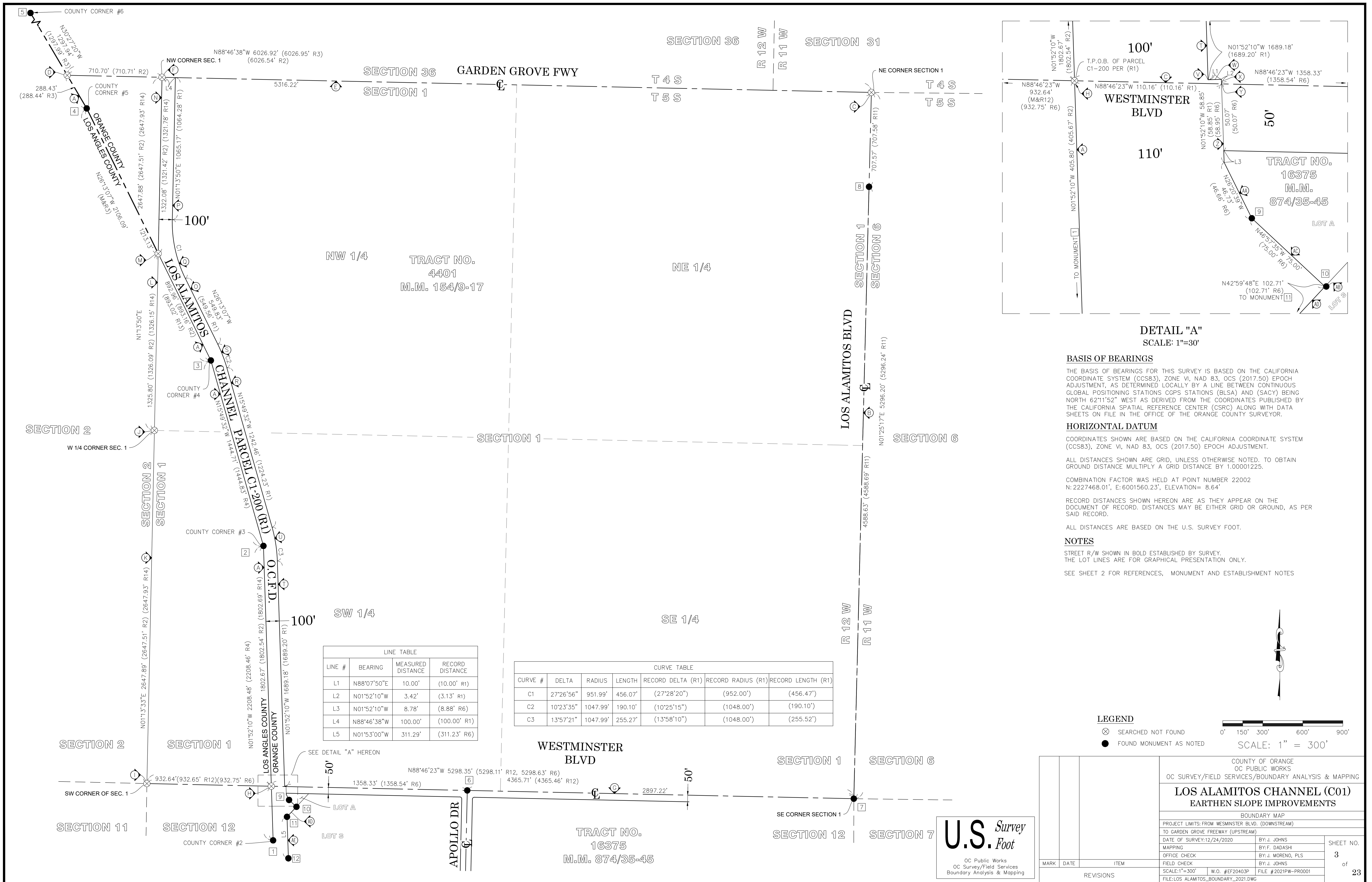
STREET R/W SHOWN IN BOLD ESTABLISHED BY SURVEY.  
THE LOT LINES ARE FOR GRAPHICAL PRESENTATION ONLY.

REFERENCES

- (R1) = GRANT DEED, O.R. 5609/51
- (R2) = TRACT NO. 4242, M.M. 179/35-38
- (R3) = RECORD OF SURVEY NO. 2009-1076, R.S.B. 286/1-40
- (R4) = RECORD OF SURVEY NO. 92-1117, R.S.B 156/32-44
- (R5) = PARCEL MAP, P.M.B. 15/3
- (R6) = TRACT NO. 16375, M.M. 874/35-45
- (R7) = O.C.S. ALIGNMENT NOTE A/5-11&12, PGS. 797-808
- (R8) = CORNER RECORD, C.R. 2017-2953
- (R9) = CORNER RECORD, C.R. 2009-3101
- (R10) = TRACT NO. 4337, M.M. 150/3-7
- (R11) = RECORD OF SURVEY NO. 95-1041, R.S.B. 152/35-40
- (R12) = RECORD OF SURVEY , R.S.B. 83/22
- (R13) = LOS ANGES COUNTY ENGINEER FIELD BOOK, CEFB 862/241-249
- (R14) = LOS ALAMITOS CHANNEL, CO, FE 94/95-12



MARK	DATE	ITEM	COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
			BOUNDARY MAP		
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020		SHEET NO.  2 of 23
			MAPPING		
			OFFICE CHECK		
			FIELD CHECK		
			SCALE: 1"=300'      W.O. #EF20403P		
			REVISIONS		FILE # 2021PW-PR0001
FILE: LOS ALAMITOS_BOUNDARY_2021.DWG					



LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Double
- Gate, Rolling
- Gate, Single
- Grate Inlet
- Guy Wire Anchor
- Manhole Storm Drain
- Manhole Water
- Meter Undefined
- Meter Water
- Pipe Inlet/Outlet
- Post
- Sign Post
- Utility Pole, Underground
- Valve Unidentified
- Valve Water
- Vault Electrical
- Vault Undefined
- Vent Pipe

LINE PATTERN KEY

- Block Wall
- Building Outline
- Centerline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Fence Wrought Iron
- Flowline
- Grade Line
- Guard Rail
- Hinge Point
- Property Line
- Retaining Wall
- Right of Way

AREA PATTERN KEY

- Concrete
- Dirt
- Gravel
- Rip Rap
- Wood

ABBREVIATION

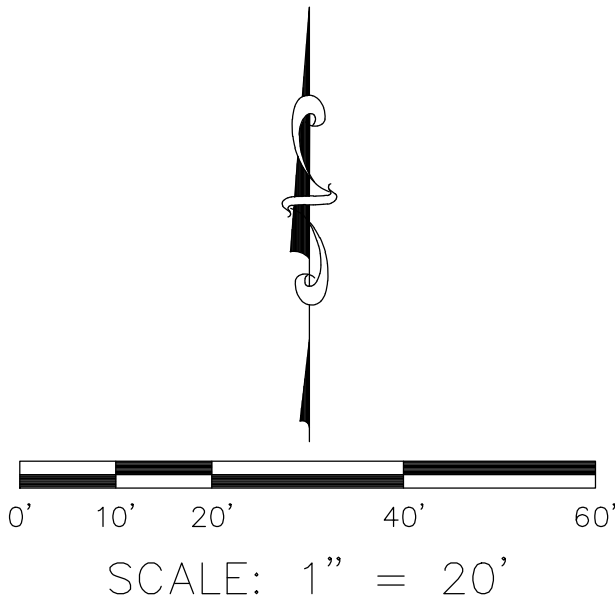
- CB Catch Basin
- CONC Concrete
- CP Control Point
- DIA Diameter
- ECMH Electrical Manhole
- EL Elevation
- ENC Encroachment
- FS Finished Surface
- FL Flowline
- FD Found
- INV Invert
- PED Pedestrian
- TW Top of Wall

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.

WESTMINSTER BLVD.

LOS ALAMITOS CHANNEL (C01)



U.S. Survey Foot

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

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
			DATE OF SURVEY: 12/24/2020		BY: J. JOHNS	SHEET NO.  4 of 23
			MAPPING		BY: A. VU / H. AFTIM	
			OFFICE CHECK		BY: J. MORENO, PLS	
			FIELD CHECK		BY: J. JOHNS	
MARK	DATE	ITEM	SCALE: 1" = 20'		W.O. #EF20403P	FILE #2021PW-PR0001
REVISIONS			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG			



LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Double
- Gate, Rolling
- Gate, Single
- Grate Inlet
- Guy Wire Anchor
- Manhole Storm Drain
- Manhole Water
- Meter Undefined
- Meter Water
- Pipe Inlet/Outlet
- Post
- Sign Post
- Utility Pole, Underground
- Valve Unidentified
- Valve Water
- Vault Electrical
- Vault Undefined
- Vent Pipe

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- Block Wall
- Building Outline
- Centerline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
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- Flowline
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- Guard Rail
- Hinge Point
- Property Line
- Retaining Wall
- Right of Way

AREA PATTERN KEY

- Concrete
- Dirt
- Gravel
- Rip Rap
- Wood

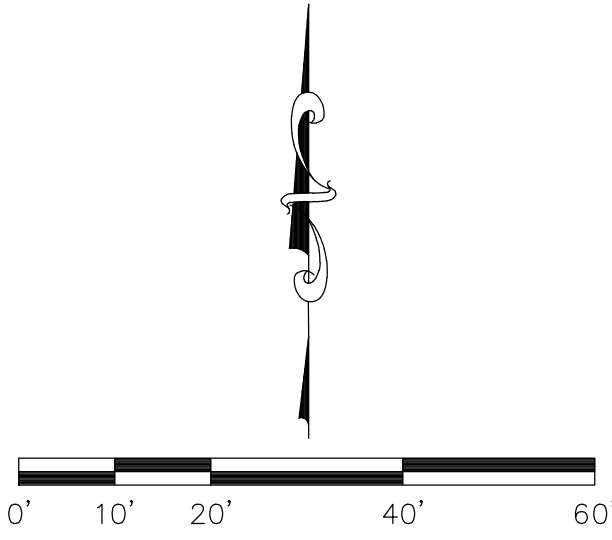
ABBREVIATION

- CB Catch Basin
- CONC Concrete
- CP Control Point
- DIA Diameter
- ECMH Electrical Manhole
- EL Elevation
- ENC Encroachment
- FS Finished Surface
- FL Flowline
- FD Found
- INV Invert
- PED Pedestrian
- TW Top of Wall

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A", ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.

CANOE BROOK DR.



SCALE: 1" = 20'

U.S. Survey Foot

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

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
			DATE OF SURVEY: 12/24/2020		BY: J. JOHNS	SHEET NO.  5 of  23
			MAPPING		BY: A. VU / H. AFTIM	
			OFFICE CHECK		BY: J. MORENO, PLS	
			FIELD CHECK		BY: J. JOHNS	
MARK	DATE	ITEM	SCALE: 1" = 20'		W.O. #EF20403P	23
REVISIONS			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG		FILE # 2021PW-PR0001	



LEGEND

SYMBOL	LINE PATTERN KEY

ABBREVIATION	
CB	Catch Basin
CONC	Concrete
CP	Control Point
DIA	Diameter
ECMH	Electrical Manhole
EL	Elevation
ENC	Encroachment
FS	Finished Surface
FL	Flowline
FD	Found
INV	Invert
PED	Pedestrian
TW	Top of Wall

ALIGNMENT NOTE  
ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.

CANOE BROOK DR.

LOS ALAMITOS CHANNEL (C01)

CP# 502  
SET LEAD & TAG STAMPED  
"ORANGE COUNTY SURVEYOR CP"  
N: 2226024.37'  
E: 6001786.87'  
EL: 7.23'

PIPE OUTLET  
18"Ø CMP  
INV EL = -2.28'

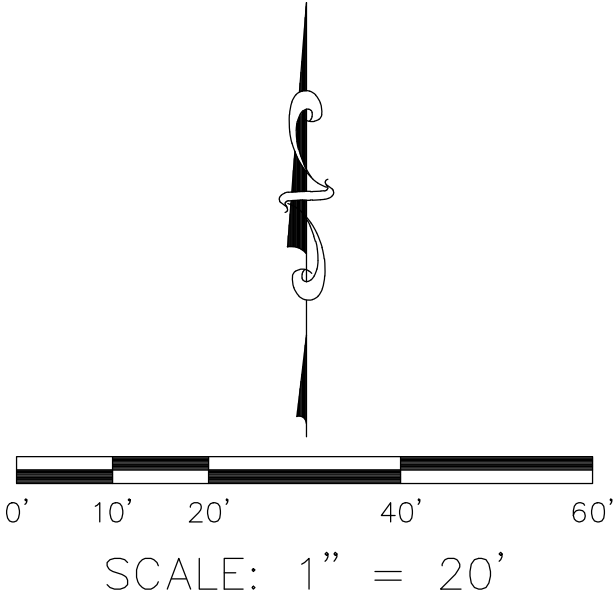
CONC HEADWALL  
TW EL = 7.31'  
18"Ø CMP  
INV EL = 6.13'

PIPE OUTLET  
18"Ø PVC  
INV EL = -1.81'

CONC HEADWALL  
TW EL = 7.78'  
18"Ø PVC  
INV EL = 6.65'

PIPE OUTLET  
18"Ø PVC  
INV EL = -1.56'

CONC HEADWALL  
TW EL = 7.71'  
18"Ø PVC  
INV EL = 6.59'



U.S. Survey  
Foot  
OC Public Works  
OC Survey/Field Services  
Boundary Analysis & Mapping

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
TOPOGRAPHIC MAP PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO.  6 of 23
MAPPING	BY: A. VU / H. AFTIM	
OFFICE CHECK	BY: J. MORENO, PLS	
FIELD CHECK	BY: J. JOHNS	
SCALE: 1" = 20'	W.O. #EF20403P FILE #2021PW-PR0001 FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG	
MARK	DATE	ITEM
REVISIONS		

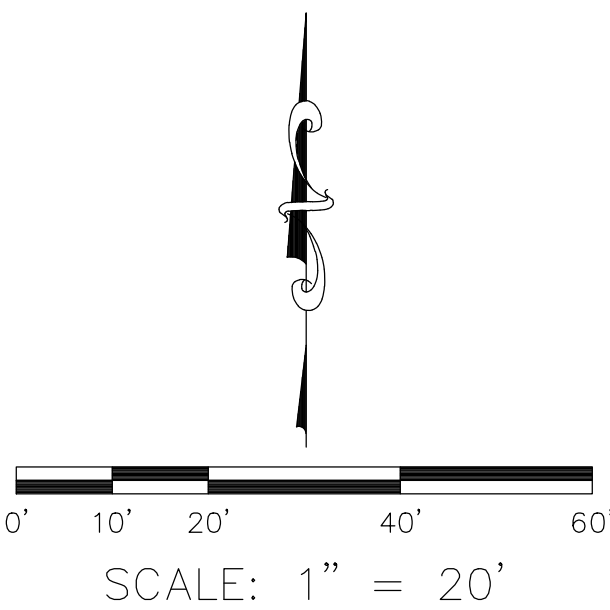


LEGEND

SYMBOL		LINE PATTERN KEY	
	Control Box Undefined		Block Wall
	Control Point		Building Outline
	Gate, Double		Centerline
	Gate, Rolling		Concrete Wall
	Gate, Single		Edge of Concrete
	Grate Inlet		Edge of Asphalt Pavement
	Guy Wire Anchor		Fence Chainlink
	Manhole Storm Drain		Fence Wrought Iron
	Manhole Water		Flowline
	Meter Undefined		Grade Line
	Meter Water		Guard Rail
	Pipe Inlet/Outlet		Hinge Point
	Post		Property Line
	Sign Post		Retaining Wall
	Utility Pole, Underground		Right of Way
	Valve Unidentified	AREA PATTERN KEY	
	Valve Water		Concrete
	Vault Electrical		Dirt
	Vault Undefined		Gravel
	Vent Pipe		Rip Rap
			Wood
ABBREVIATION			
CB	Catch Basin		
CONC	Concrete		
CP	Control Point		
DIA	Diameter		
ECMH	Electrical Manhole		
EL	Elevation		
ENC	Encroachment		
FS	Finished Surface		
FL	Flowline		
FD	Found		
INV	Invert		
PED	Pedestrian		
TW	Top of Wall		

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT-OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



U.S. Survey Foot

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

SEE SHEET 6

CP# 501  
SET LEAD & TAG STAMPED  
"ORANGE COUNTY SURVEYOR CP"  
N: 2226729.36'  
E: 6001770.76'  
EL: 6.65'

PIPE OUTLET  
18"Ø CMP  
INV EL = -3.39'

PIPE OUTLET  
12"Ø CMP  
INV EL = -0.91'

CONC HEADWALL  
TW EL = 6.40'  
12"Ø CMP  
INV EL = 5.30'

CONC HEADWALL  
TW EL = -1.67'  
13"Ø CAST IRON  
INV EL = -3.79'

PIPE OUTLET  
18"Ø PVC  
INV EL = -1.28'

CONC HEADWALL  
TW EL = 8.51'  
18"Ø PVC  
INV EL = 7.30'

CONC HEADWALL  
TW EL = 4.14'  
60"Ø RCP  
INV EL = -5.39'

CANOE BROOK DR.

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS	
		TOPOGRAPHIC MAP PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)	
		DATE OF SURVEY: 12/24/2020	BY: J. JOHNS
		MAPPING	BY: A. VU / H. AFTIM
		OFFICE CHECK	BY: J. MORENO, PLS
		FIELD CHECK	BY: J. JOHNS
		SCALE: 1" = 20'	W.O. #EF20403P
		FILE: #2021PW-PR0001	
		FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG	
MARK	DATE	ITEM	
REVISIONS			
			SHEET NO. 7 of 23



LEGEND

SYMBOL	LINE PATTERN KEY	
		Block Wall
		Building Outline
		Centerline
		Concrete Wall
		Edge of Concrete
		Edge of Asphalt Pavement
		Fence Chainlink
		Fence Wrought Iron
		Flowline
		Grade Line
		Guard Rail
		Hinge Point
		Property Line
		Retaining Wall
		Right of Way

AREA PATTERN KEY

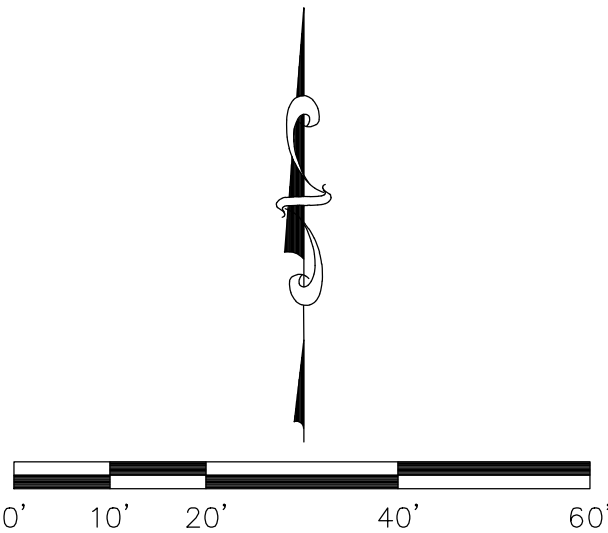
ABBREVIATION

CB	Catch Basin
CONC	Concrete
CP	Control Point
DIA	Diameter
ECMH	Electrical Manhole
EL	Elevation
ENC	Encroachment
FS	Finished Surface
FL	Flowline
FD	Found
INV	Invert
PED	Pedestrian
TW	Top of Wall

	Concrete
	Dirt
	Gravel
	Rip Rap
	Wood

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



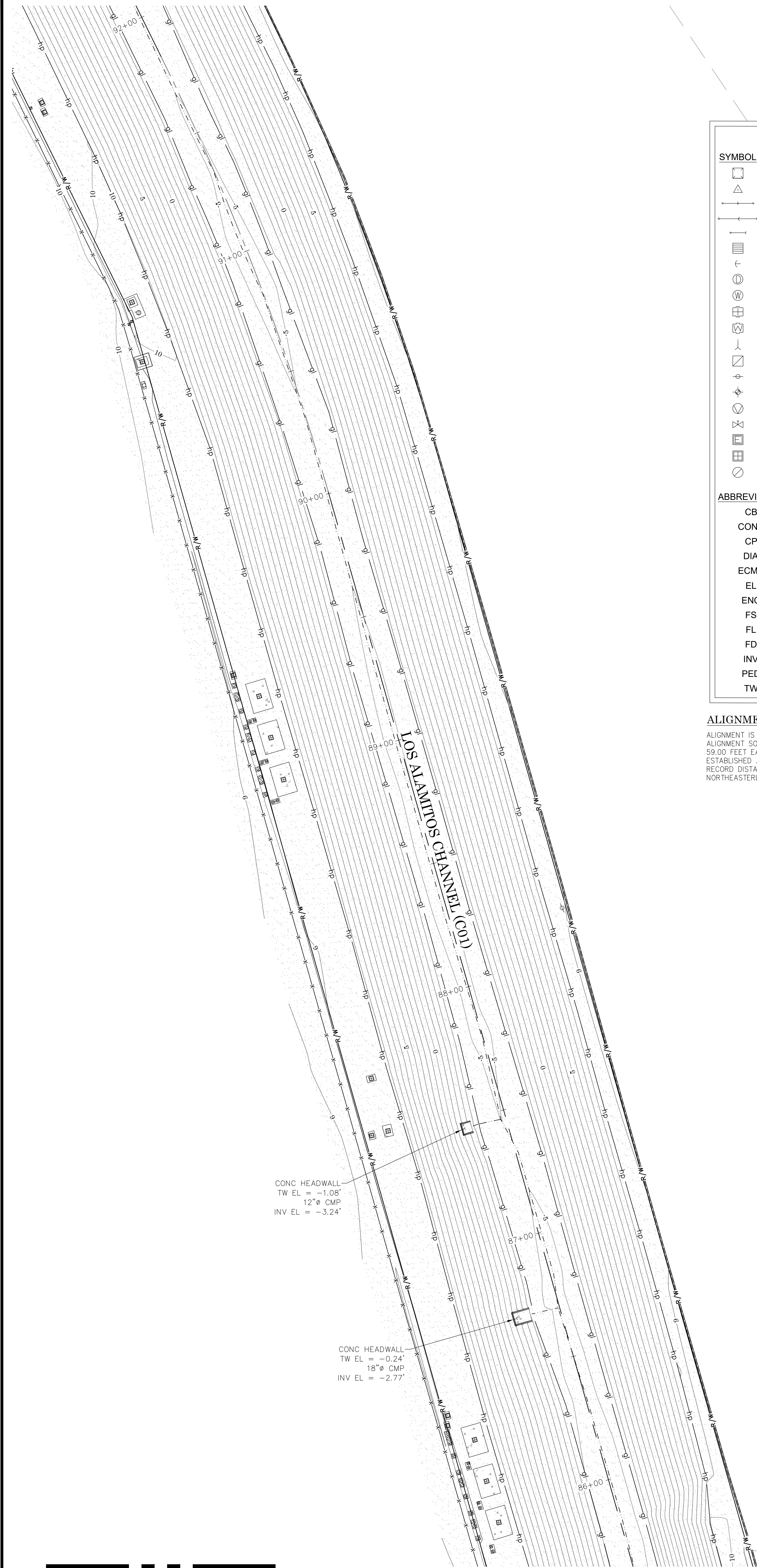
SCALE: 1" = 20'

U.S. Survey Foot

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

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS	
		TOPOGRAPHIC MAP PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)	
		DATE OF SURVEY: 12/24/2020 MAPPING OFFICE CHECK FIELD CHECK SCALE: 1" = 20' FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG	BY: J. JOHNS BY: A. VU / H. AFTIM BY: J. MORENO, PLS BY: J. JOHNS W.O. #EF20403P FILE #2021PW-PR0001
MARK	DATE	ITEM	SHEET NO. 8 of 23
REVISIONS			




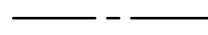
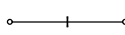

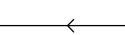












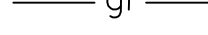

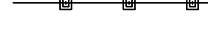

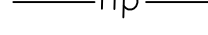












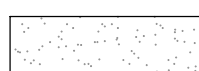
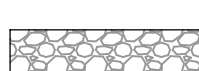






CONC HEADWALL  
TW EL = -1.08'  
12"Ø CMP  
INV EL = -3.24'

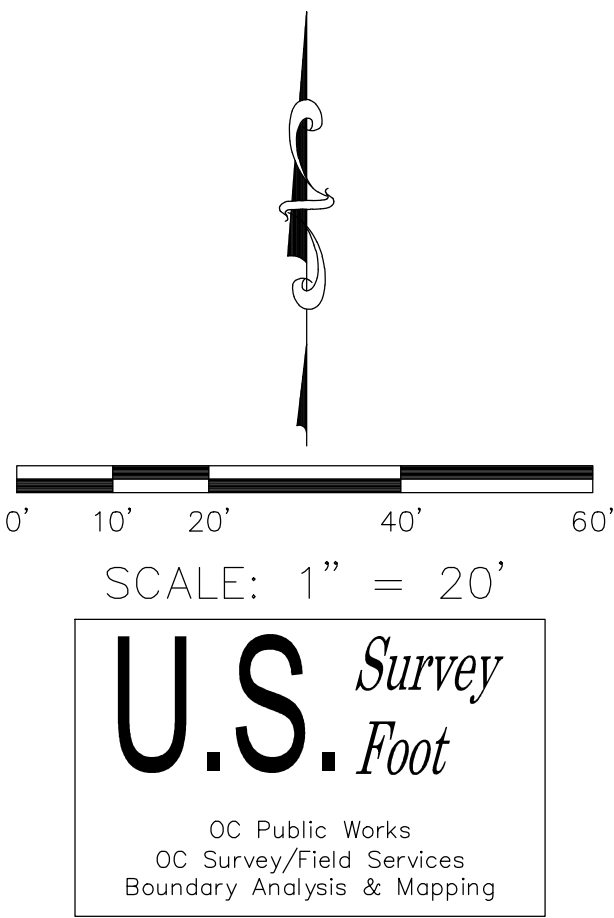
CONC HEADWALL  
TW EL = -0.24'  
18"Ø CMP  
INV EL = -2.77'

LEGEND

SYMBOL		LINE PATTERN KEY	
	Control Box Undefined		Block Wall
	Control Point		Building Outline
	Gate, Double		Centerline
	Gate, Rolling		Concrete Wall
	Gate, Single		Edge of Concrete
	Grate Inlet		Edge of Asphalt Pavement
	Guy Wire Anchor		Fence Chainlink
	Manhole Storm Drain		Fence Wrought Iron
	Manhole Water		Flowline
	Meter Undefined		Grade Line
	Meter Water		Guard Rail
	Pipe Inlet/Outlet		Hinge Point
	Post		Property Line
	Sign Post		Retaining Wall
	Utility Pole, Underground		Right of Way
	Valve Unidentified		
	Valve Water		
	Vault Electrical		
	Vault Undefined		
	Vent Pipe		
ABBREVIATION		AREA PATTERN KEY	
CB	Catch Basin		Concrete
CONC	Concrete		Dirt
CP	Control Point		Gravel
DIA	Diameter		Rip Rap
ECMH	Electrical Manhole		Wood
EL	Elevation		
ENC	Encroachment		
FS	Finished Surface		
FL	Flowline		
FD	Found		
INV	Invert		
PED	Pedestrian		
TW	Top of Wall		

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
MARK	DATE	ITEM	DATE OF SURVEY:12/24/2020		BY:J. JOHNS	SHEET NO.  9 of  23
			MAPPING		BY:A. VU / H. AFTIM	
			OFFICE CHECK		BY:J. MORENO, PLS	
			FIELD CHECK		BY:J. JOHNS	
			SCALE:1" = 20'		W.O. #EF20403P	
REVISIONS			FILE #2021PW-PR0001			
			FILE:LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG			

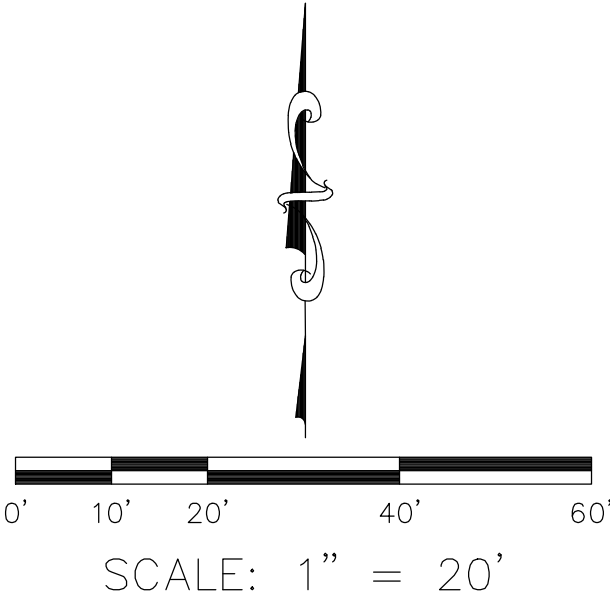
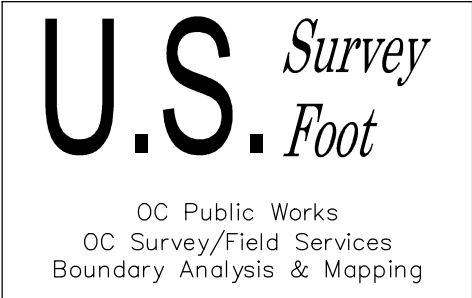


LEGEND

SYMBOL		LINE PATTERN KEY	
	Control Box Undefined		Block Wall
	Control Point		Building Outline
	Gate, Double		Centerline
	Gate, Rolling		Concrete Wall
	Gate, Single		Edge of Concrete
	Grate Inlet		Edge of Asphalt Pavement
	Guy Wire Anchor		Fence Chainlink
	Manhole Storm Drain		Fence Wrought Iron
	Manhole Water		Flowline
	Meter Undefined		Grade Line
	Meter Water		Guard Rail
	Pipe Inlet/Outlet		Hinge Point
	Post		Property Line
	Sign Post		Retaining Wall
	Utility Pole, Underground		Right of Way
	Valve Unidentified	AREA PATTERN KEY	
	Valve Water		Concrete
	Vault Electrical		Dirt
	Vault Undefined		Gravel
	Vent Pipe		Rip Rap
			Wood
ABBREVIATION			
CB	Catch Basin		
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DIA	Diameter		
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TW	Top of Wall		

ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		<b>LOS ALAMITOS CHANNEL (C01)</b> <b>EARTHEN SLOPE IMPROVEMENTS</b>	
		TOPOGRAPHIC MAP	
		PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)	
MARK	DATE	DATE OF SURVEY: 12/24/2020	BY: J. JOHNS
		MAPPING	BY: A. VU / H. AFTIM
		OFFICE CHECK	BY: J. MORENO, PLS
		FIELD CHECK	BY: J. JOHNS
REVISIONS		SCALE: 1" = 20'	W.O. #EF20403P
		FILE #2021PW-PR0001	
		FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG	
			SHEET NO. <b>10</b> of <b>23</b>



LEGEND

SYMBOL	LINE PATTERN KEY	
		Block Wall
		Building Outline
		Centerline
		Concrete Wall
		Edge of Concrete
		Edge of Asphalt Pavement
		Fence Chainlink
		Fence Wrought Iron
		Flowline
		Grade Line
		Guard Rail
		Hinge Point
		Property Line
		Retaining Wall
		Right of Way

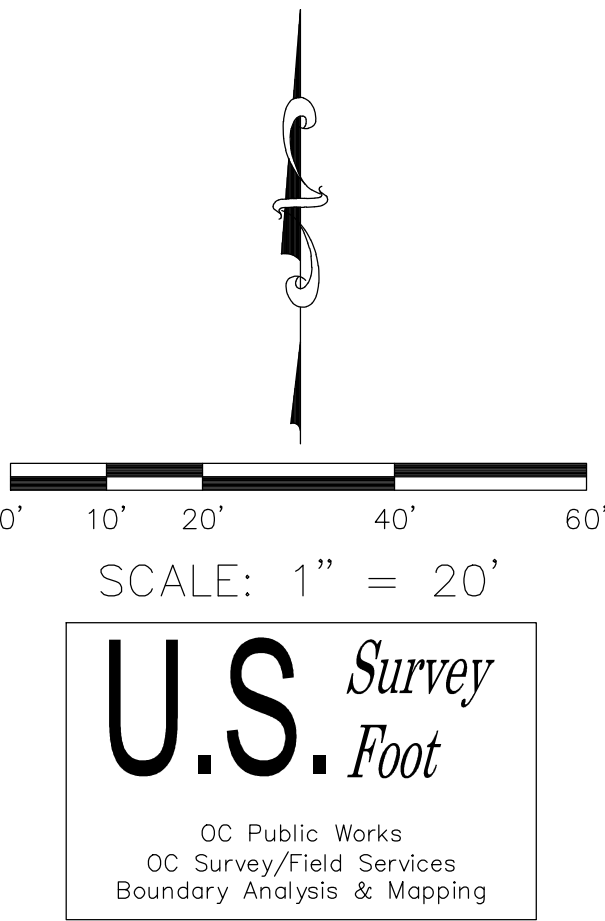
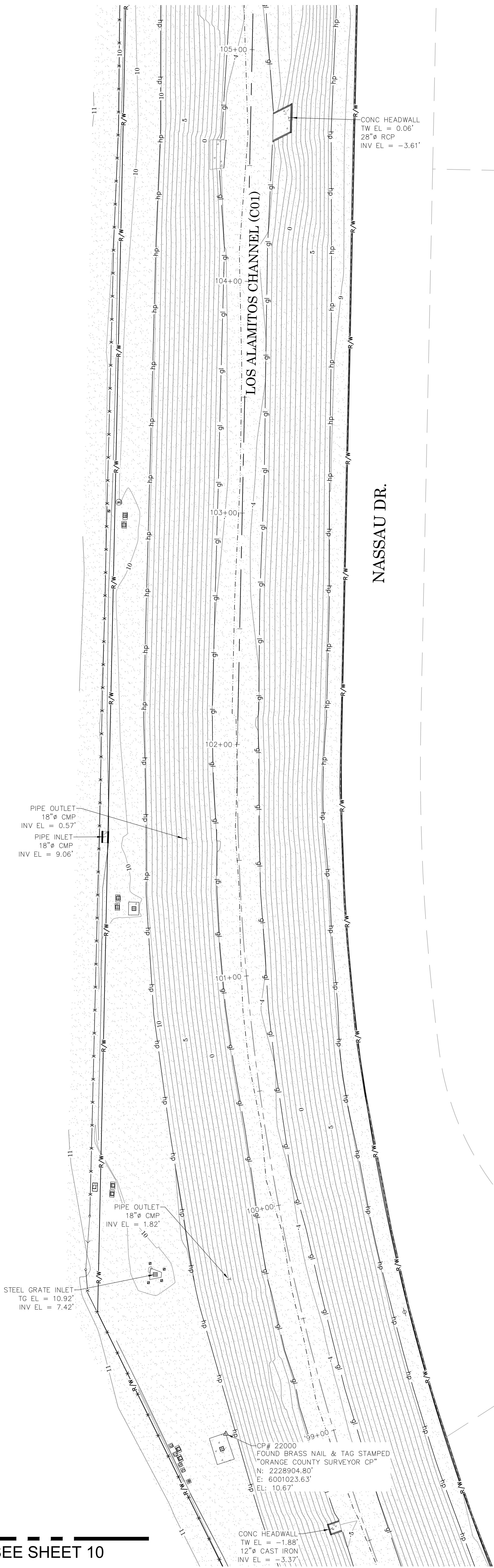
AREA PATTERN KEY	
	Concrete
	Dirt

ABBREVIATION	
CB	Catch Basin
CONC	Concrete
CP	Control Point
DIA	Diameter
ECMH	Electrical Manhole
EL	Elevation
ENC	Encroachment
FS	Finished Surface
FL	Flowline
FD	Found
INV	Invert
PED	Pedestrian
TW	Top of Wall

AREA PATTERN KEY	
	Concrete
	Dirt
	Gravel
	Rip Rap
	Wood

ALIGNMENT NOTE

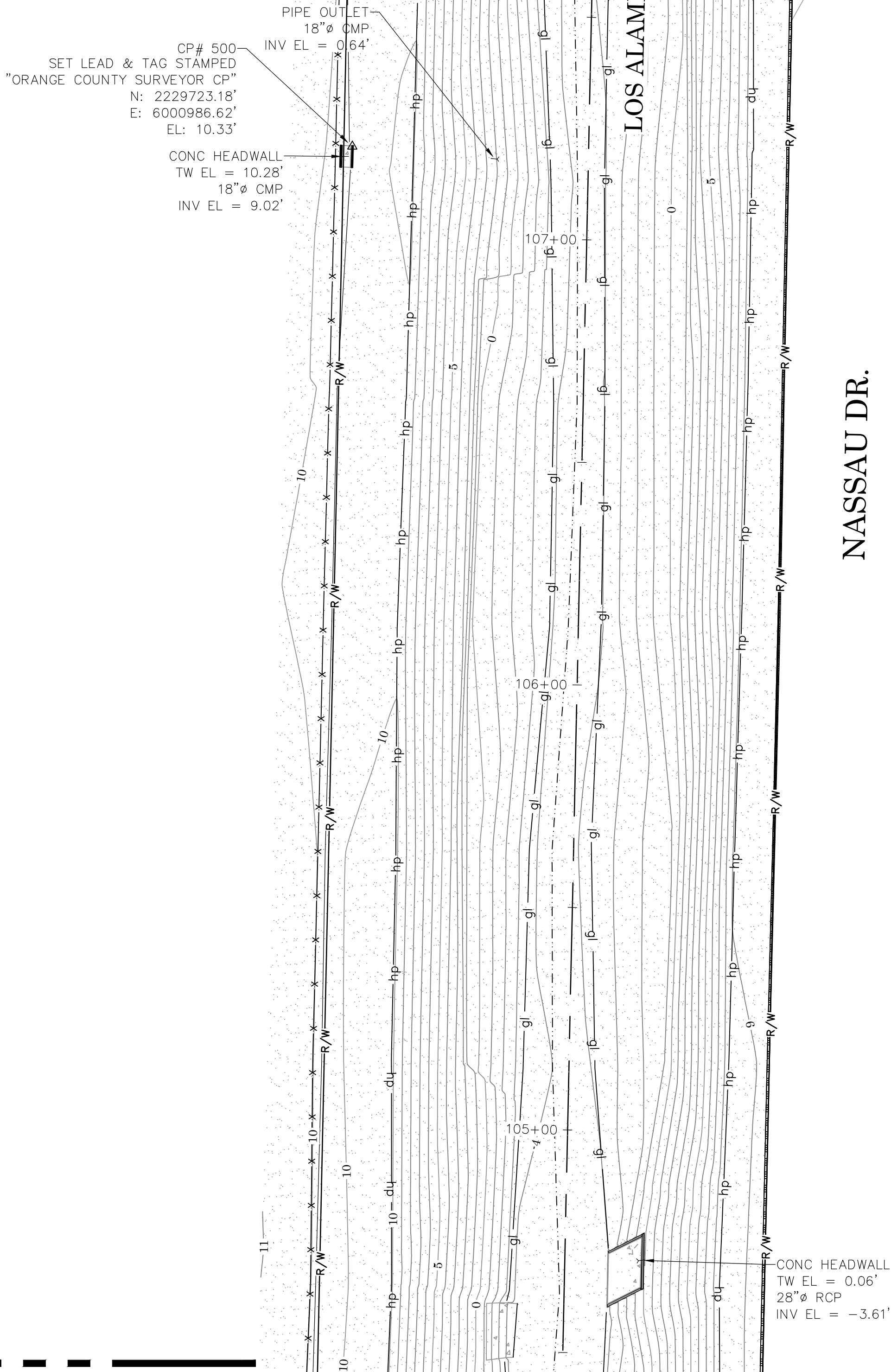
ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A", ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
			DATE OF SURVEY: 12/24/2020		BY: J. JOHNS	SHEET NO.  11 of  23
			MAPPING		BY: A. VU / H. AFTIM	
			OFFICE CHECK		BY: J. MORENO, PLS	
			FIELD CHECK		BY: J. JOHNS	
MARK	DATE	ITEM	SCALE: 1" = 20'		W.O. #EF20403P	FILE # 2021PW-PR0001
REVISIONS			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG		FILE # 2021PW-PR0001	
			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG			



SEE SHEET 13



SEE SHEET 11

FOXBURG RD.

NASSAU DR.

## LEGEND

### SYMBOL

- Control Box Undefined
- Control Point
- Gate, Double
- Gate, Rolling
- Gate, Single
- Grate Inlet
- Guy Wire Anchor
- Manhole Storm Drain
- Manhole Water
- Meter Undefined
- Meter Water
- Pipe Inlet/Outlet
- Post
- Sign Post
- Utility Pole, Underground
- Valve Unidentified
- Valve Water
- Vault Electrical
- Vault Undefined
- Vent Pipe

### LINE PATTERN KEY

- Block Wall
- Building Outline
- Centerline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Fence Wrought Iron
- Flowline
- Grade Line
- Guard Rail
- Hinge Point
- Property Line
- Retaining Wall
- Right of Way

### AREA PATTERN KEY

- Concrete
- Dirt
- Gravel
- Rip Rap
- Wood

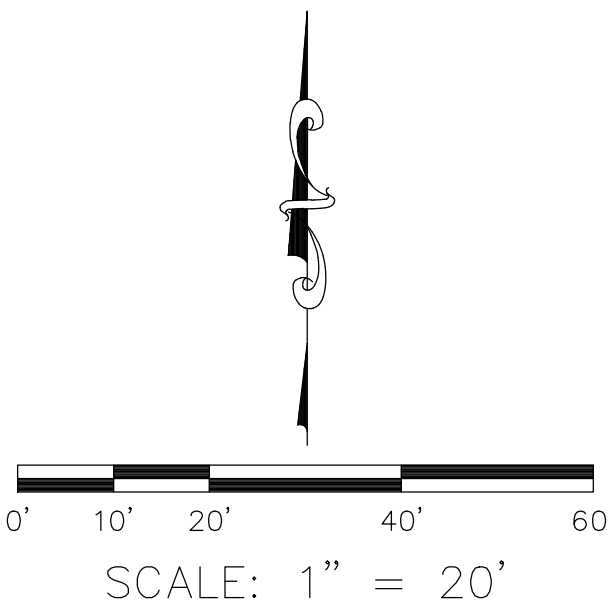
### ABBREVIATION

- CB Catch Basin
- CONC Concrete
- CP Control Point
- DIA Diameter
- ECMH Electrical Manhole
- EL Elevation
- ENC Encroachment
- FS Finished Surface
- FL Flowline
- FD Found
- INV Invert
- PED Pedestrian
- TW Top of Wall

### ALIGNMENT NOTE

ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A", ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.

BROOKLINE RD.




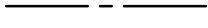

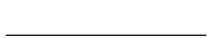

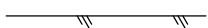



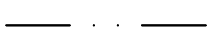

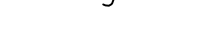









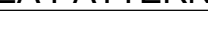















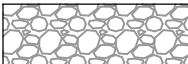


**U.S. Survey Foot**  
OC Public Works  
OC Survey/Field Services  
Boundary Analysis & Mapping

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
			DATE OF SURVEY: 12/24/2020		BY: J. JOHNS	SHEET NO.  12 of 23
			MAPPING		BY: A. VU / H. AFTIM	
			OFFICE CHECK		BY: J. MORENO, PLS	
			FIELD CHECK		BY: J. JOHNS	
MARK	DATE	ITEM	REVISIONS			
			SCALE: 1" = 20'	W.O. #EF20403P	FILE # 2021PW-PR0001	
			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG			



LEGEND

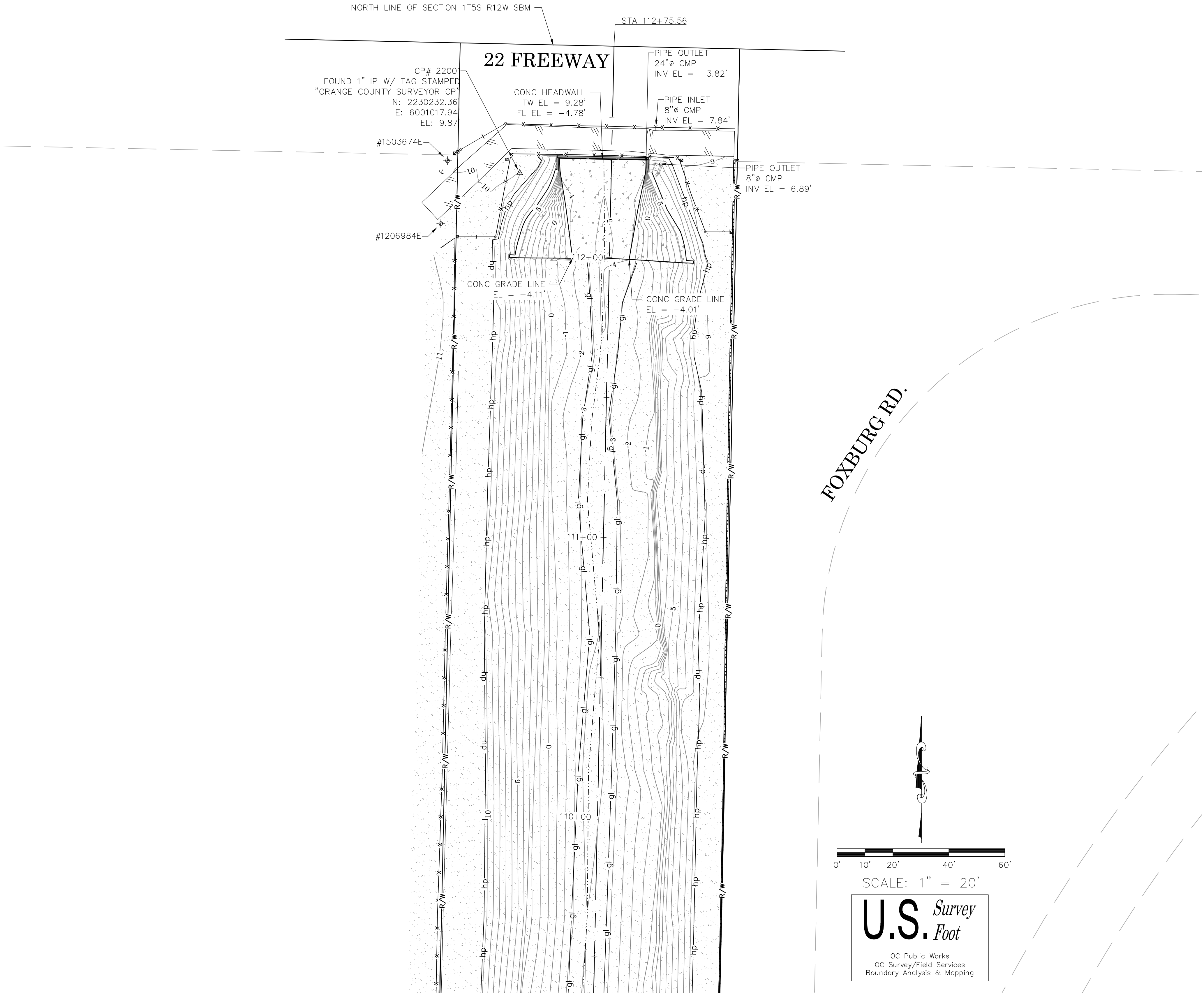
SYMBOL		LINE PATTERN KEY	
	Control Box Undefined		Block Wall
	Control Point		Building Outline
	Gate, Double		Centerline
	Gate, Rolling		Concrete Wall
	Gate, Single		Edge of Concrete
	Grate Inlet		Edge of Asphalt Pavement
	Guy Wire Anchor		Fence Chainlink
	Manhole Storm Drain		Fence Wrought Iron
	Manhole Water		Flowline
	Meter Undefined		Grade Line
	Meter Water		Guard Rail
	Pipe Inlet/Outlet		Hinge Point
	Post		Property Line
	Sign Post		Retaining Wall
	Utility Pole, Underground		Right of Way
	Valve Unidentified		
	Valve Water		
	Vault Electrical		
	Vault Undefined		
	Vent Pipe		

AREA PATTERN KEY	
	Concrete
	Dirt
	Gravel
	Rip Rap
	Wood

ABBREVIATION	
CB	Catch Basin
CONC	Concrete
CP	Control Point
DIA	Diameter
ECMH	Electrical Manhole
EL	Elevation
ENC	Encroachment
FS	Finished Surface
FL	Flowline
FD	Found
INV	Invert
PED	Pedestrian
TW	Top of Wall

ALIGNMENT NOTE

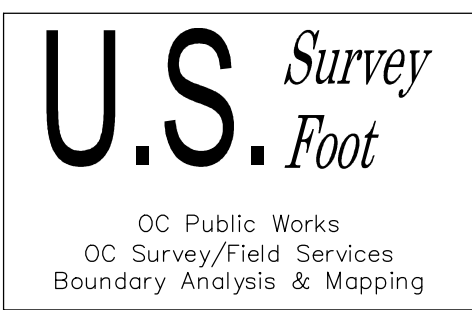
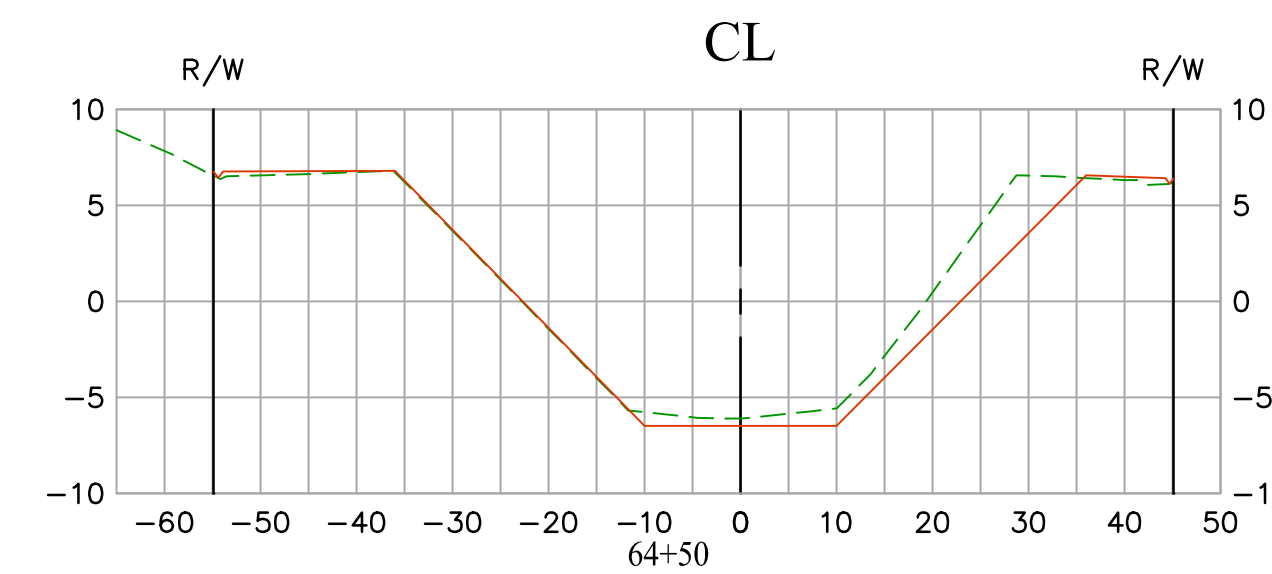
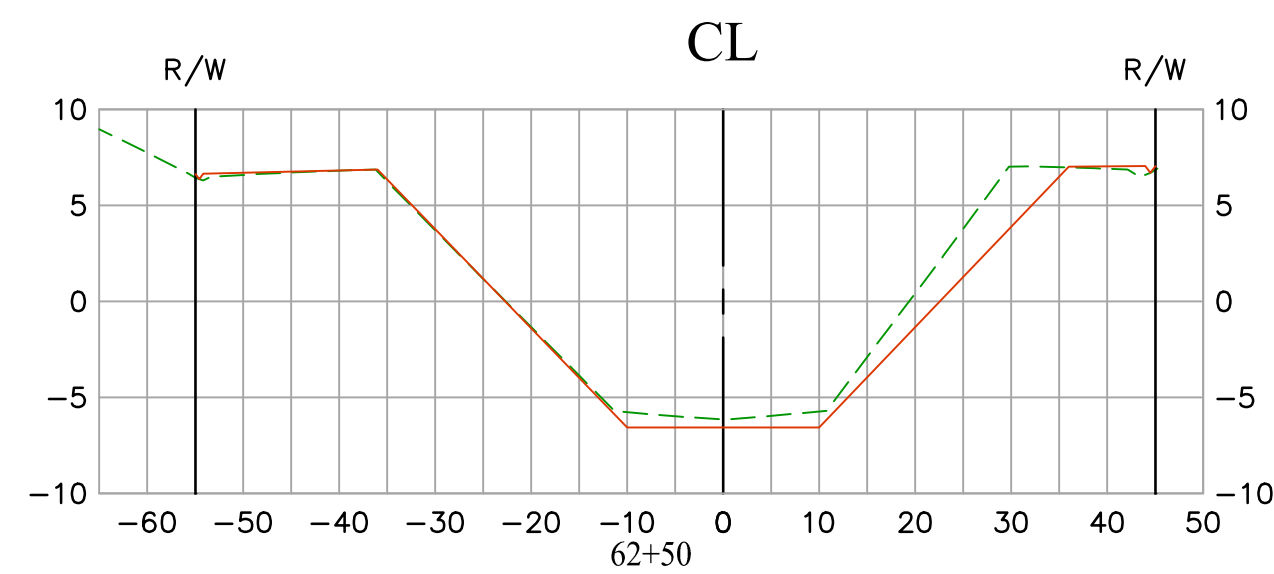
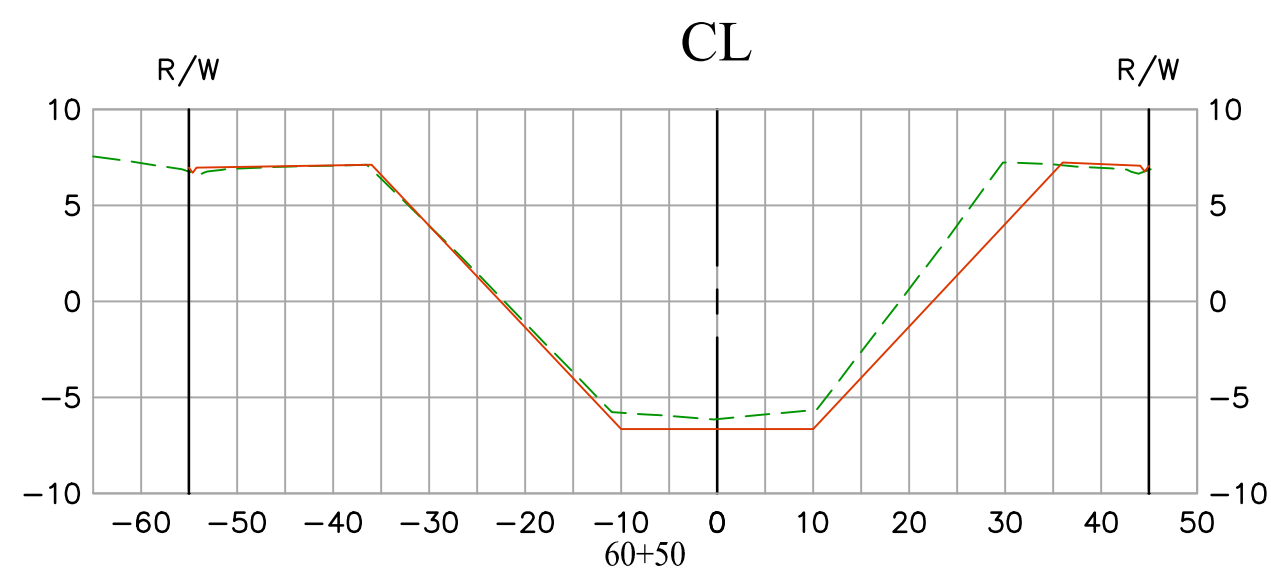
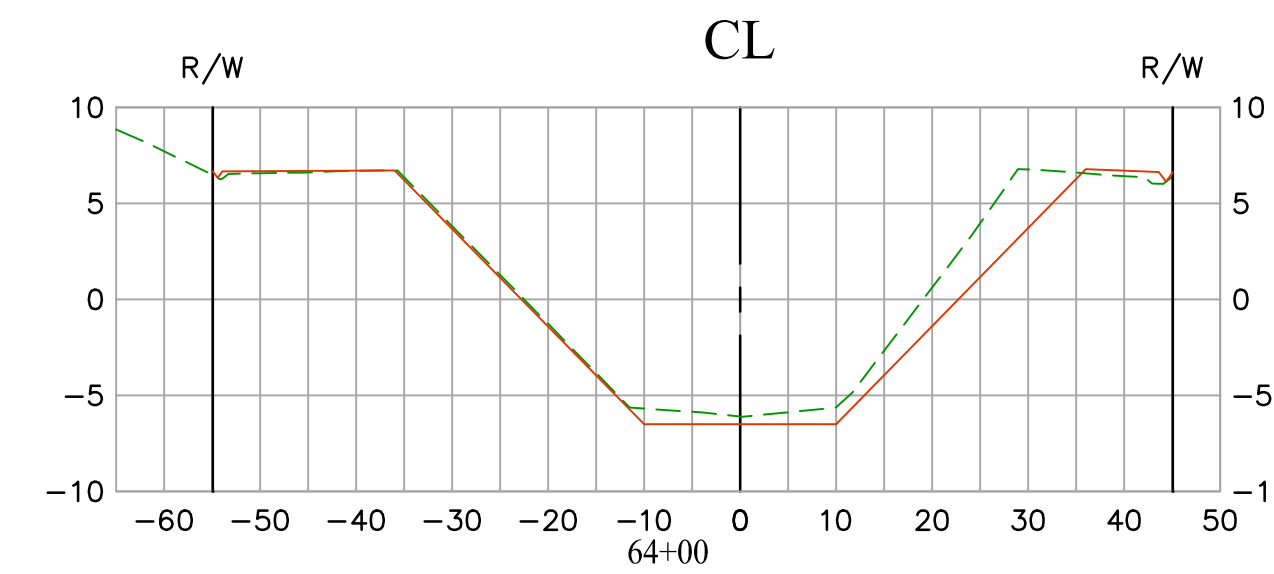
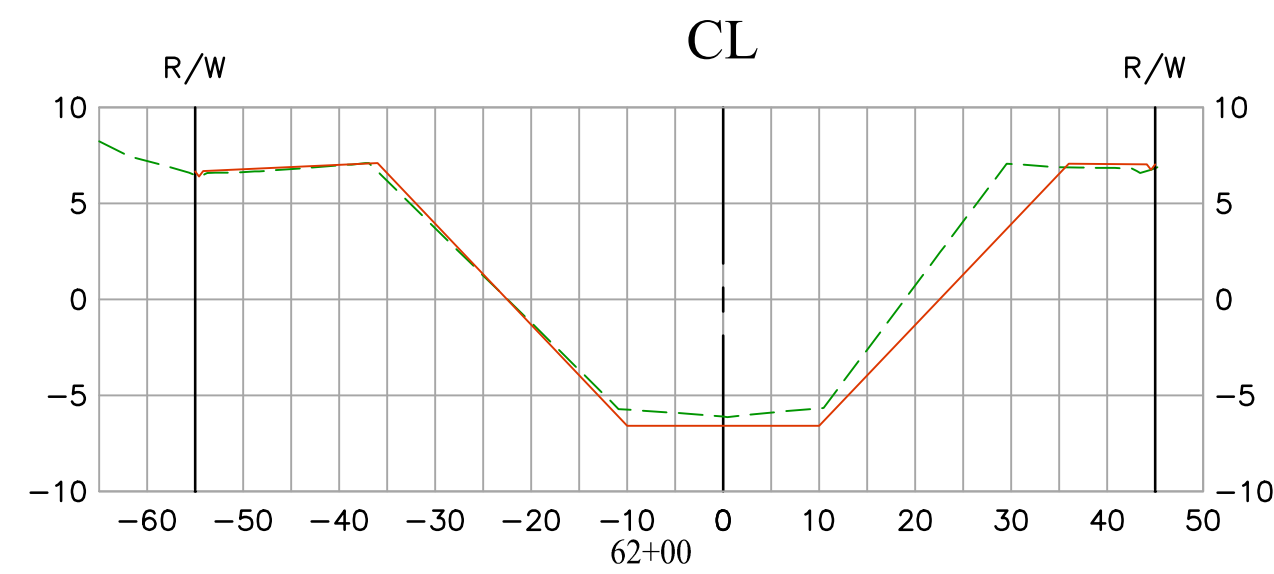
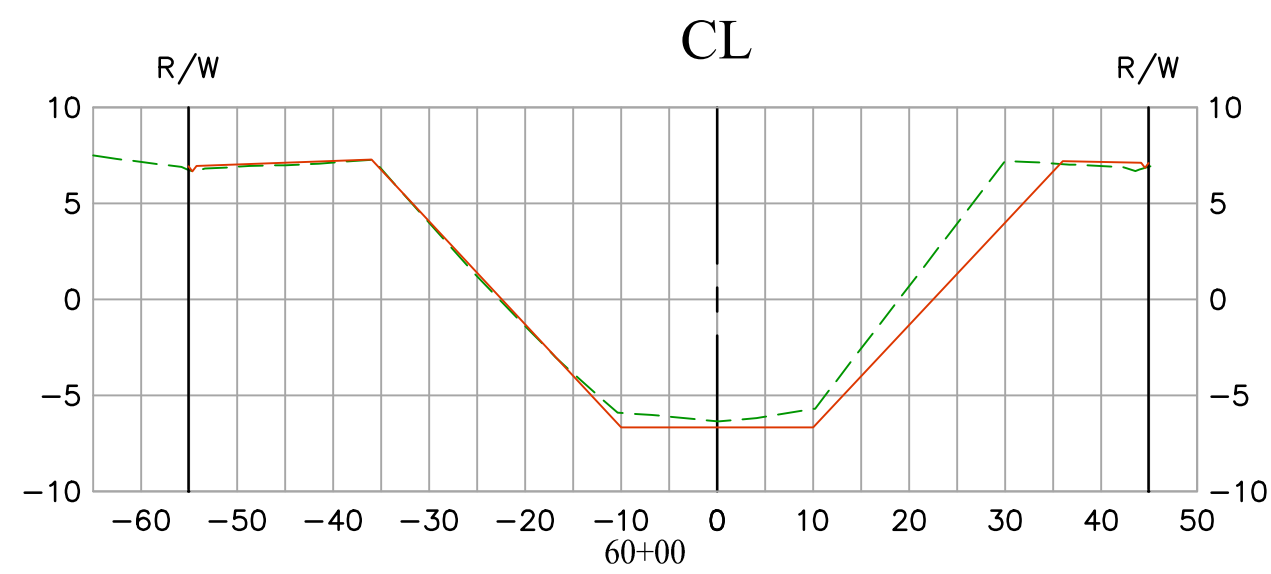
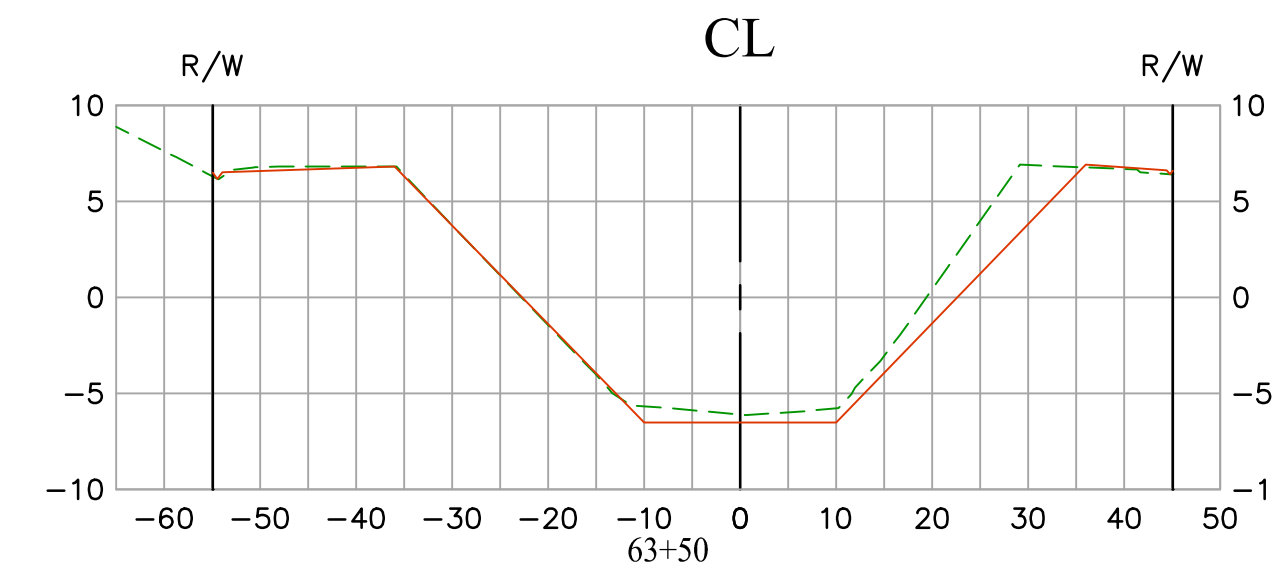
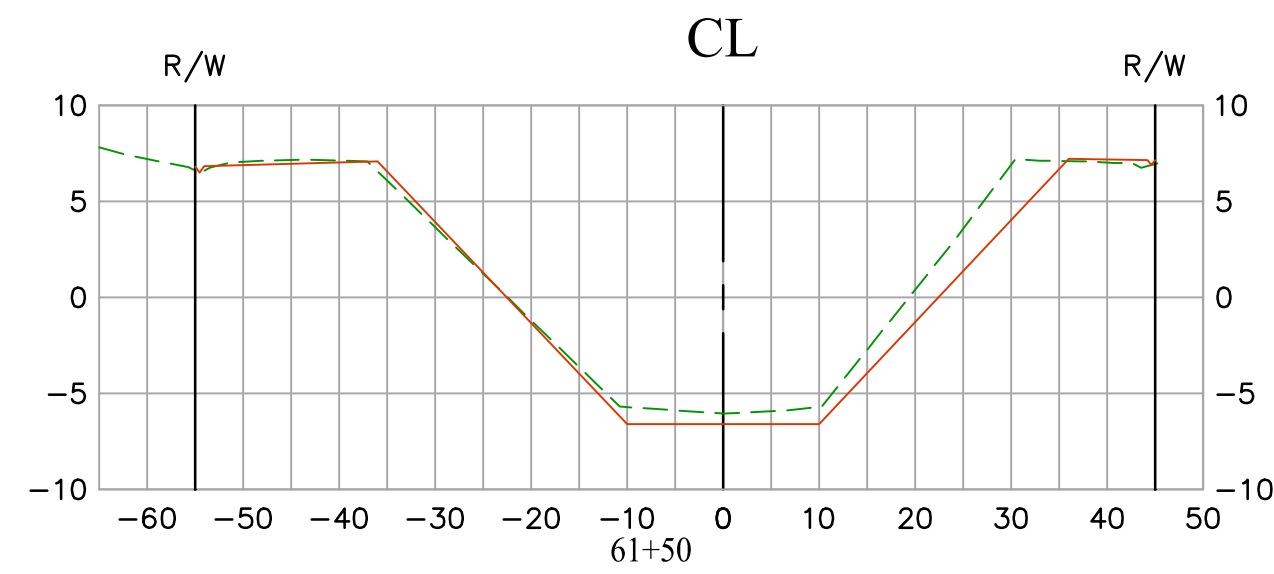
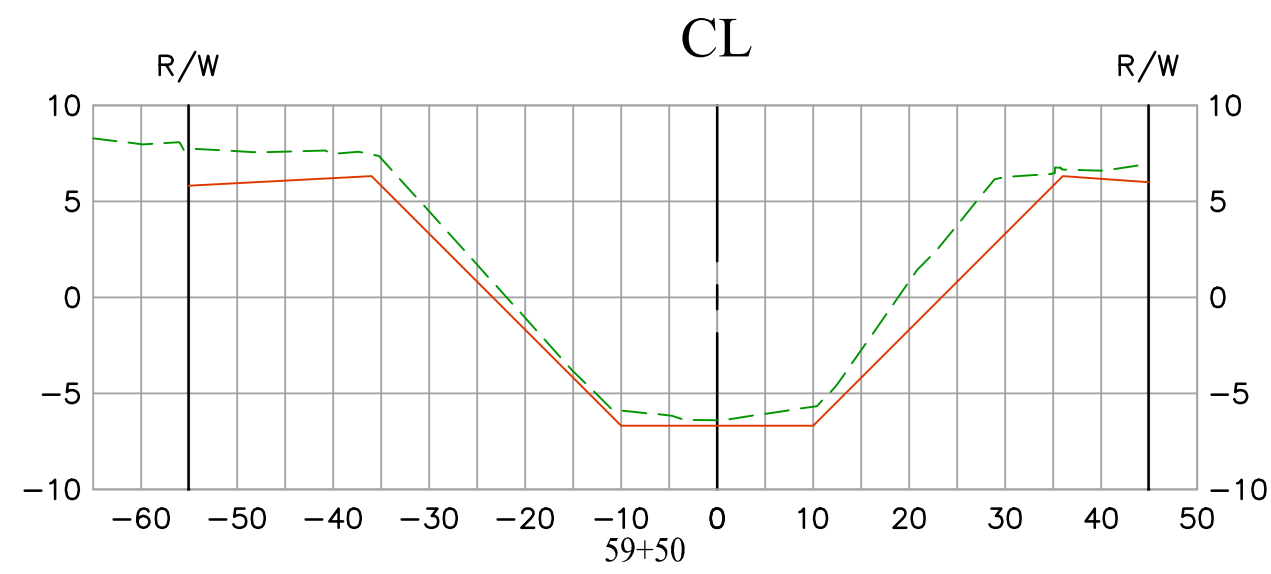
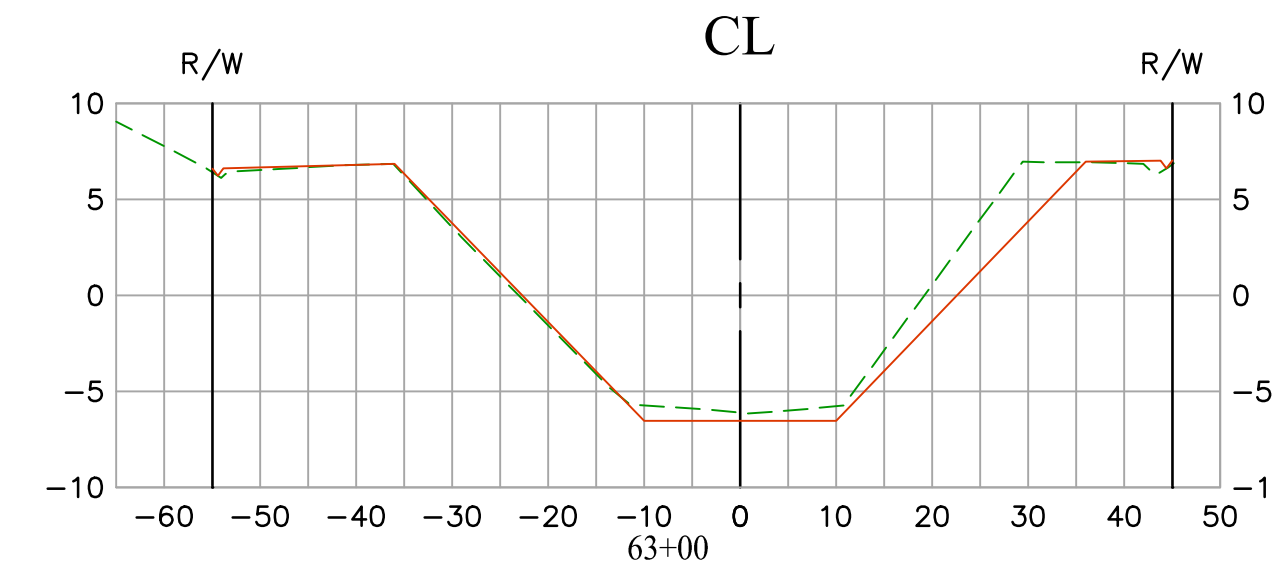
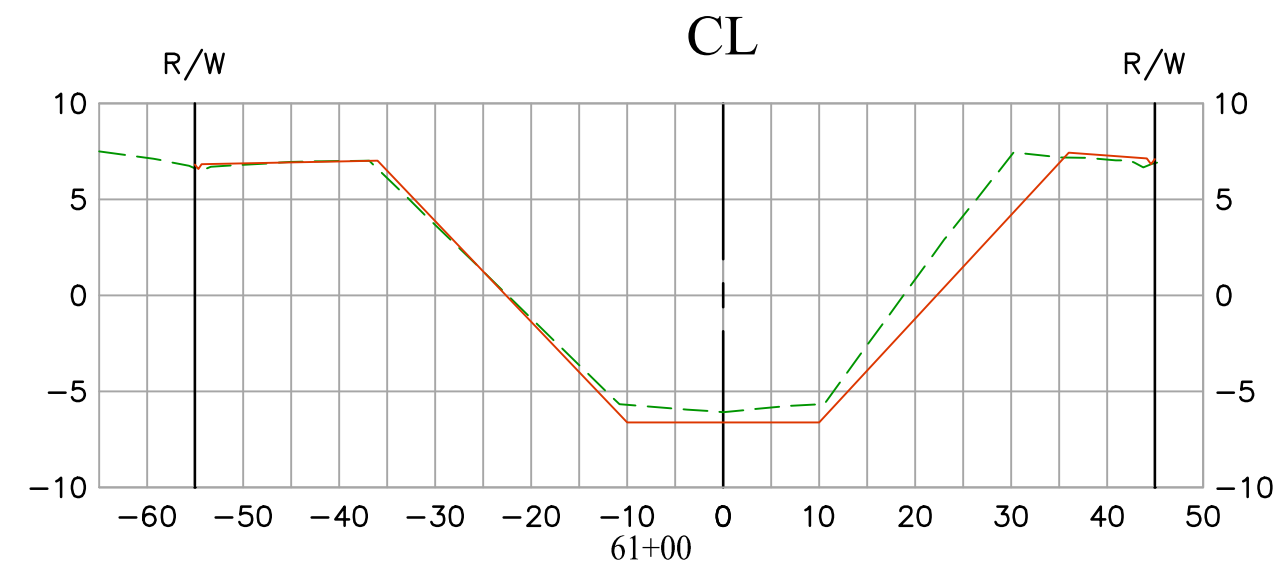
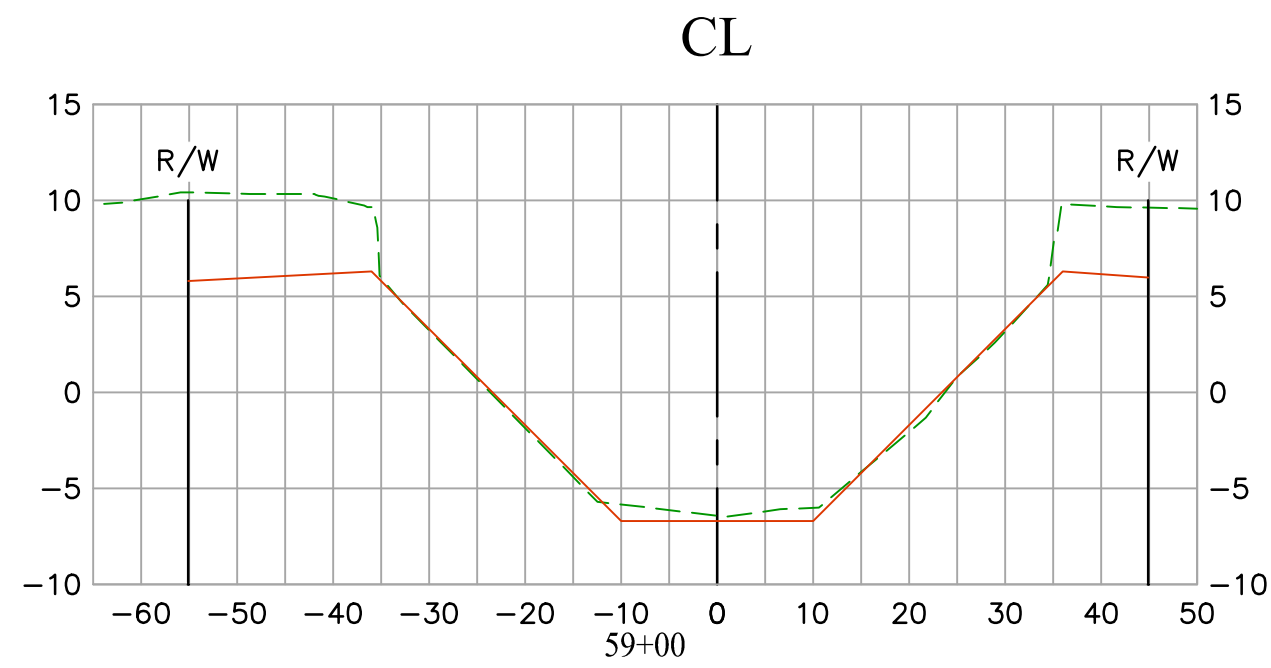
ALIGNMENT IS BASED ON AS-BUILT PLAN DRAWING "C01-701-1A". ESTABLISHED ALIGNMENT SOUTH OF WESTMINSTER BY HOLDING PARALLEL AND RECORD DISTANCE 59.00 FEET EAST OF WEST RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL. ESTABLISHED ALIGNMENT NORTH OF WESTMINSTER BLVD. HOLDING PARALLEL AND RECORD DISTANCE 45.00 FEET WEST AND SOUTHWESTERLY OF EAST AND NORTHEASTERLY RIGHT OF WAY LINE OF LOS ALAMITOS CHANNEL.



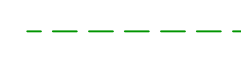
SEE SHEET 12

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM WESTMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
			DATE OF SURVEY: 12/24/2020		BY: J. JOHNS	SHEET NO.  13 of 23
			MAPPING		BY: A. VU / H. AFTIM	
			OFFICE CHECK		BY: J. MORENO, PLS	
MARK	DATE	ITEM	FIELD CHECK		BY: J. JOHNS	
REVISIONS			SCALE: 1" = 20'	W.O. #EF20403P	FILE # 2021PW-PR0001	
			FILE: LOS ALAMITOS CHANNEL (C01)_TOPO_2021.DWG			





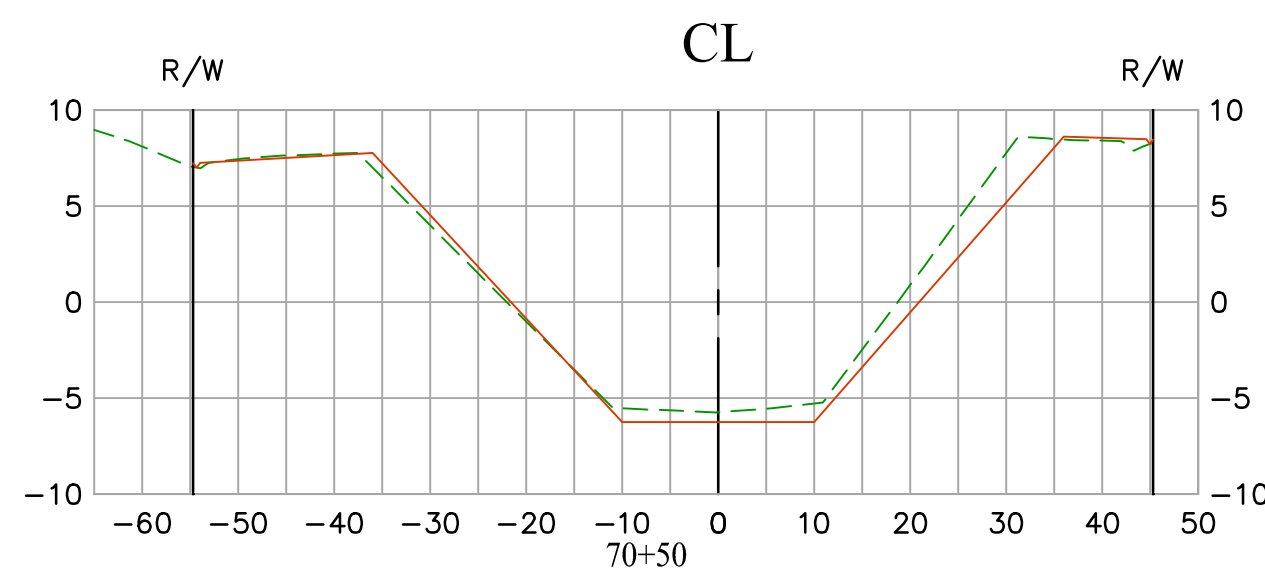
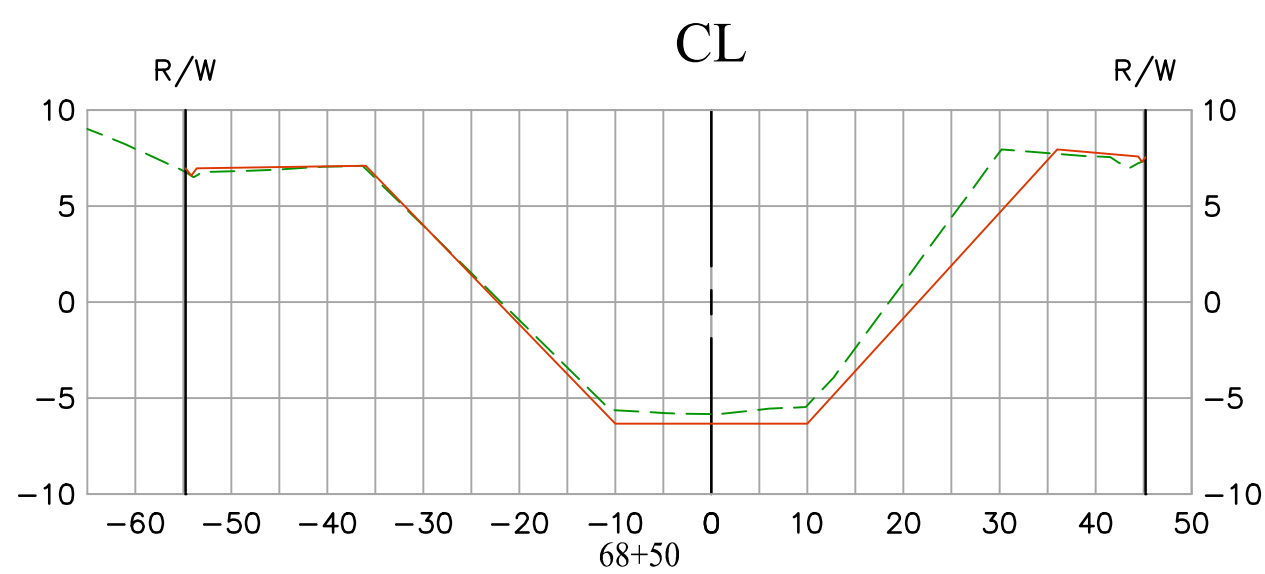
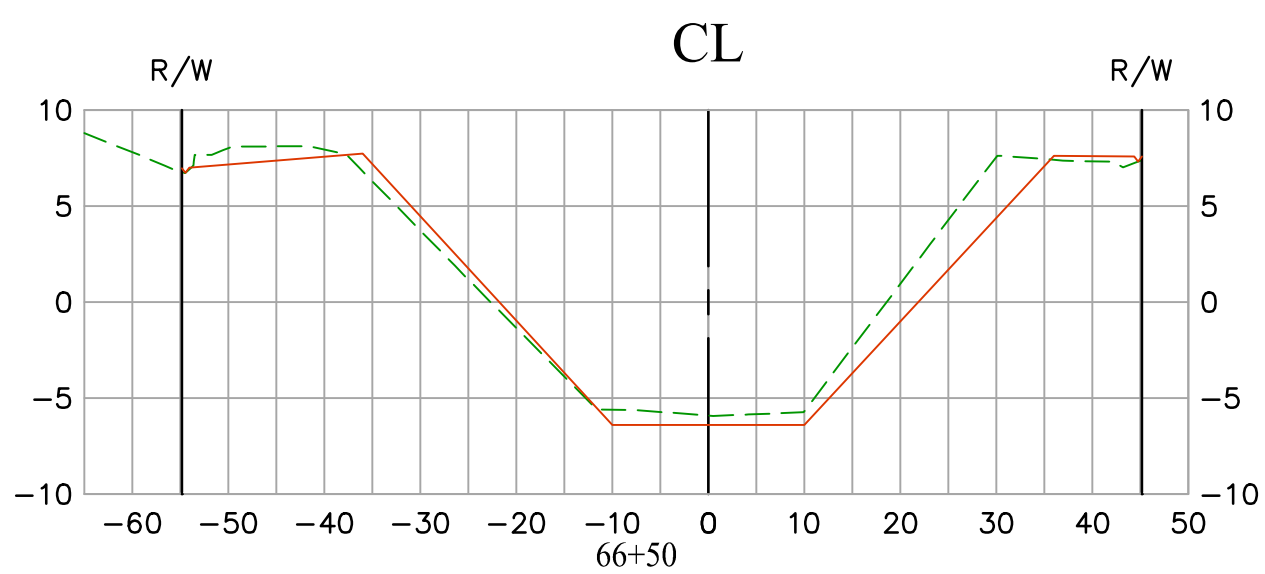
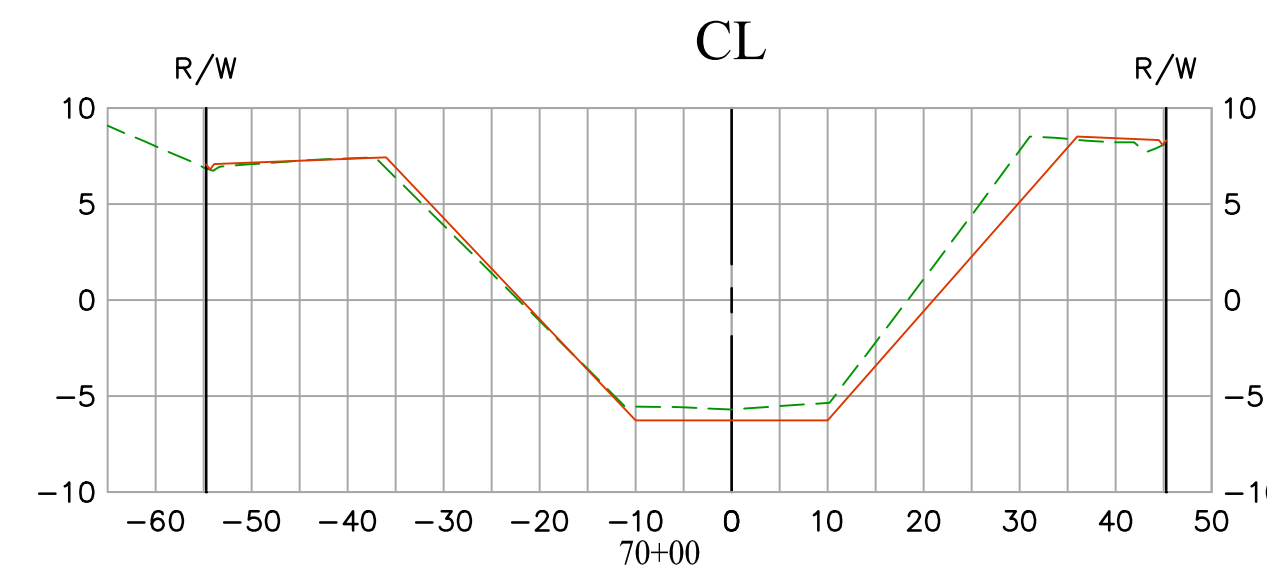
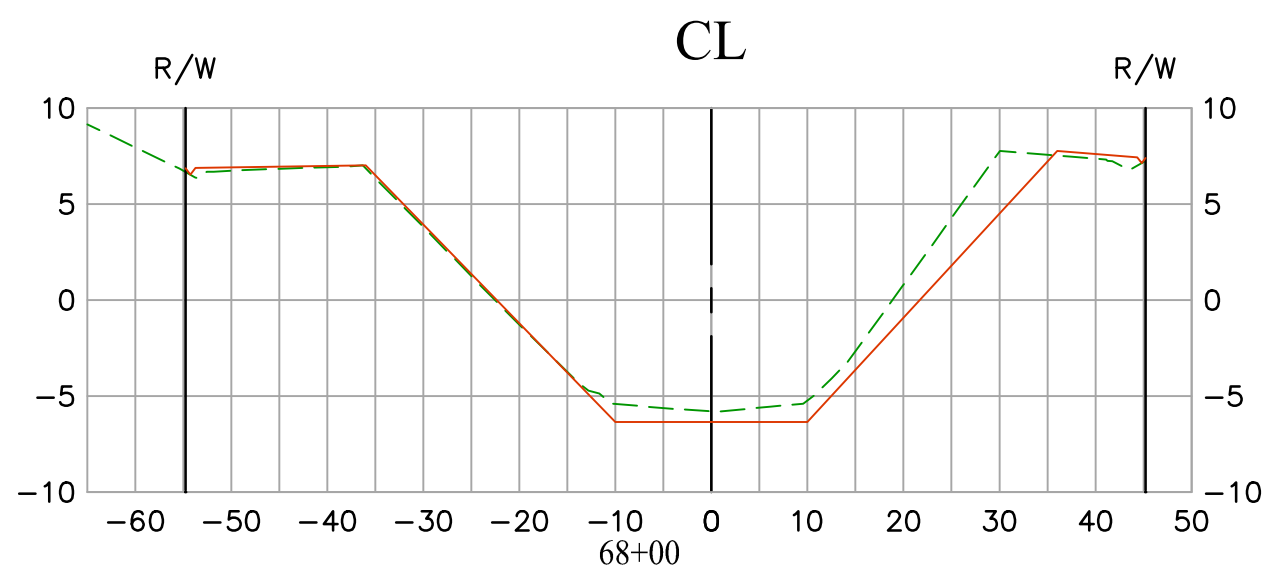
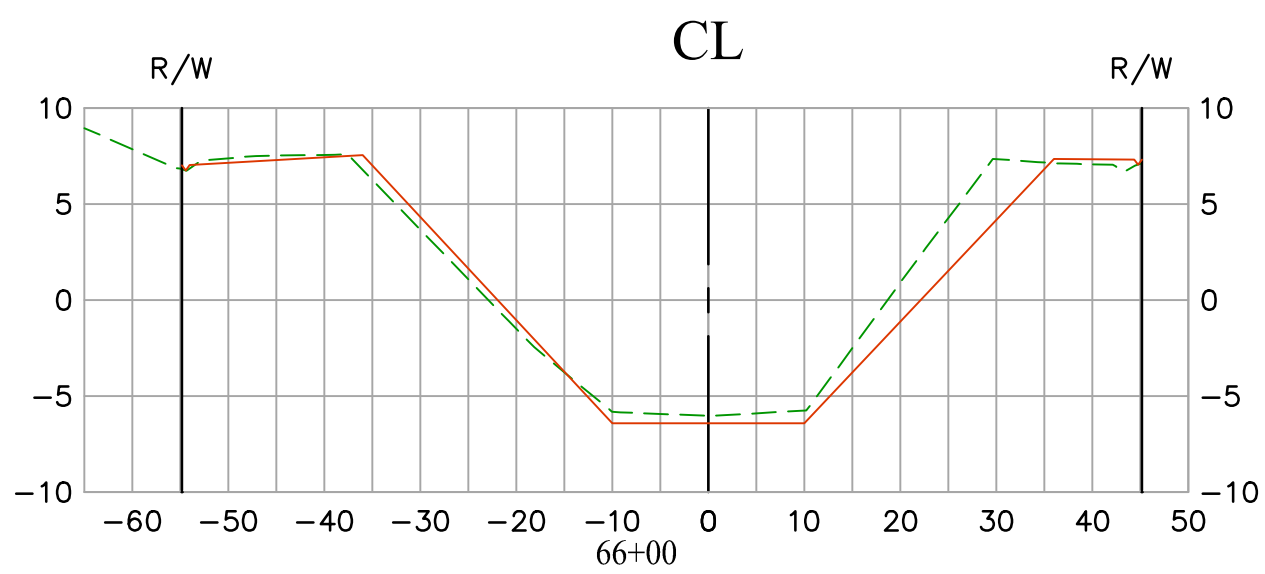
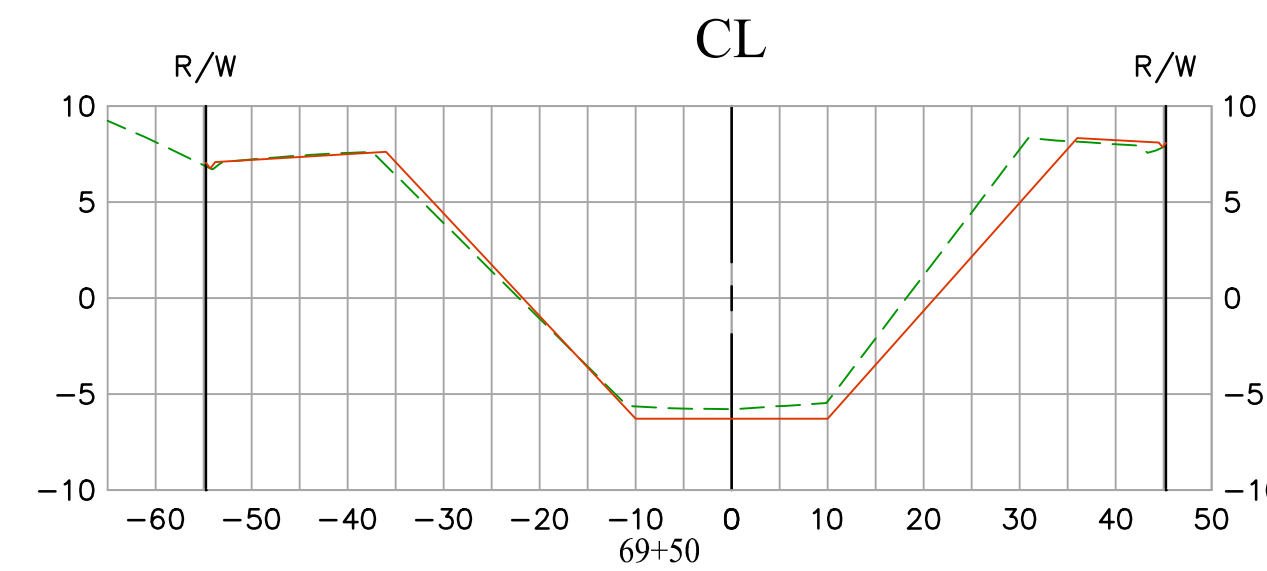
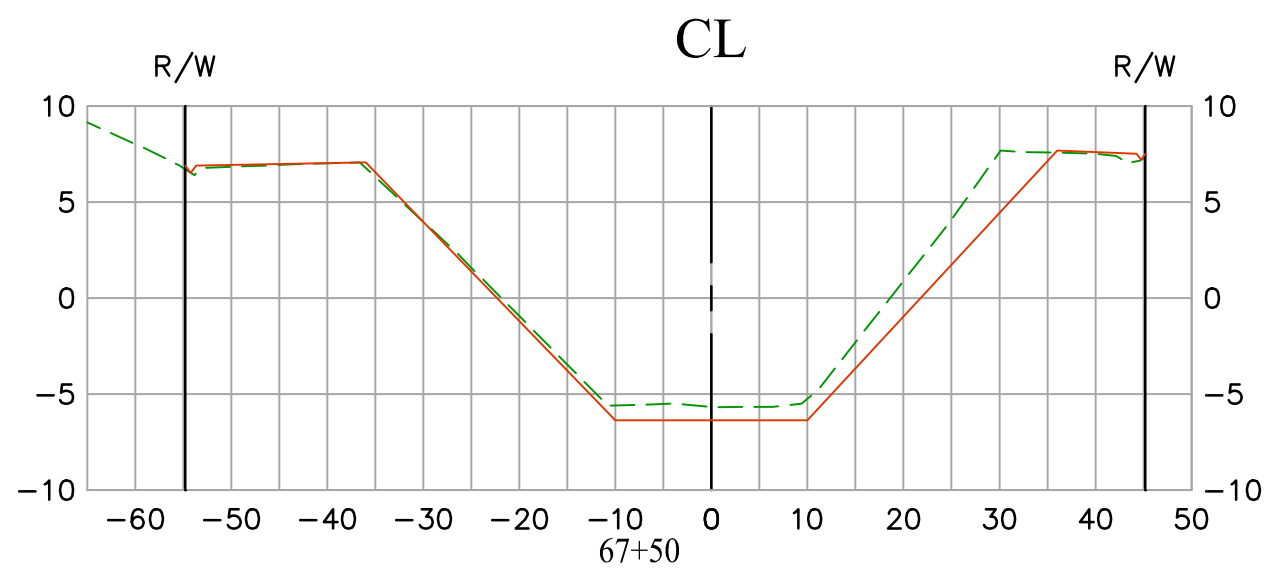
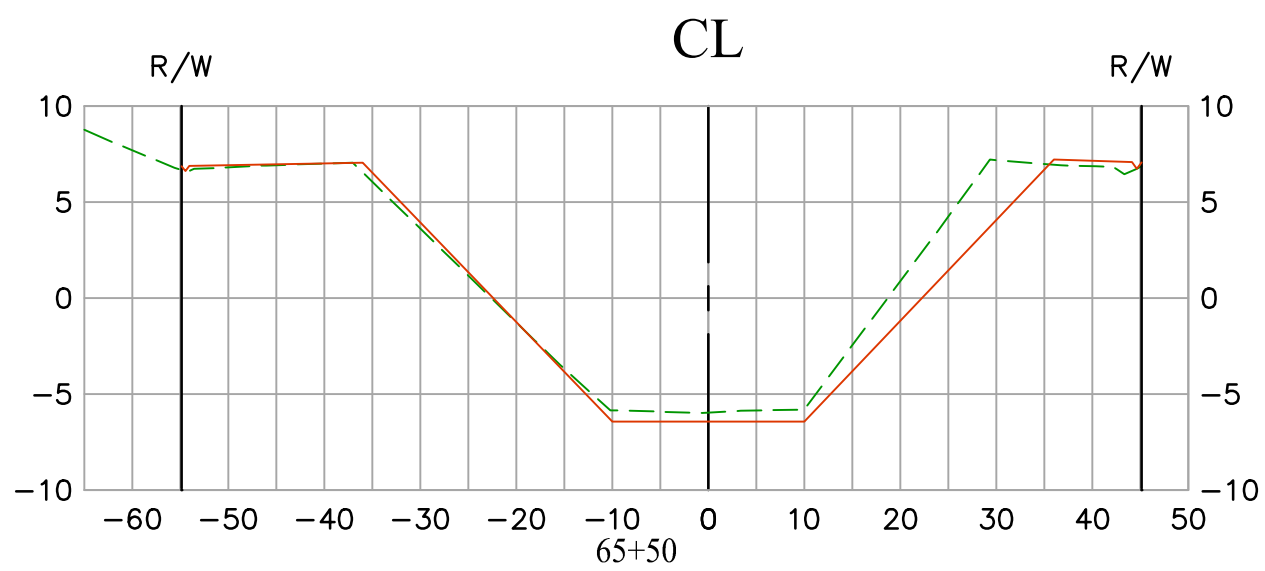
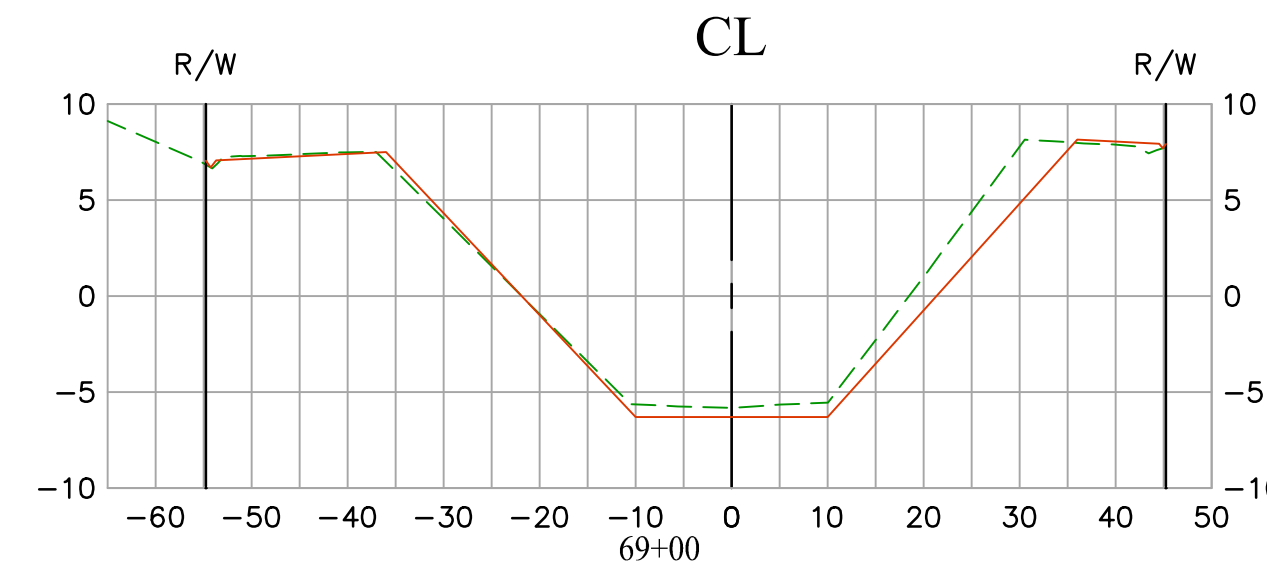
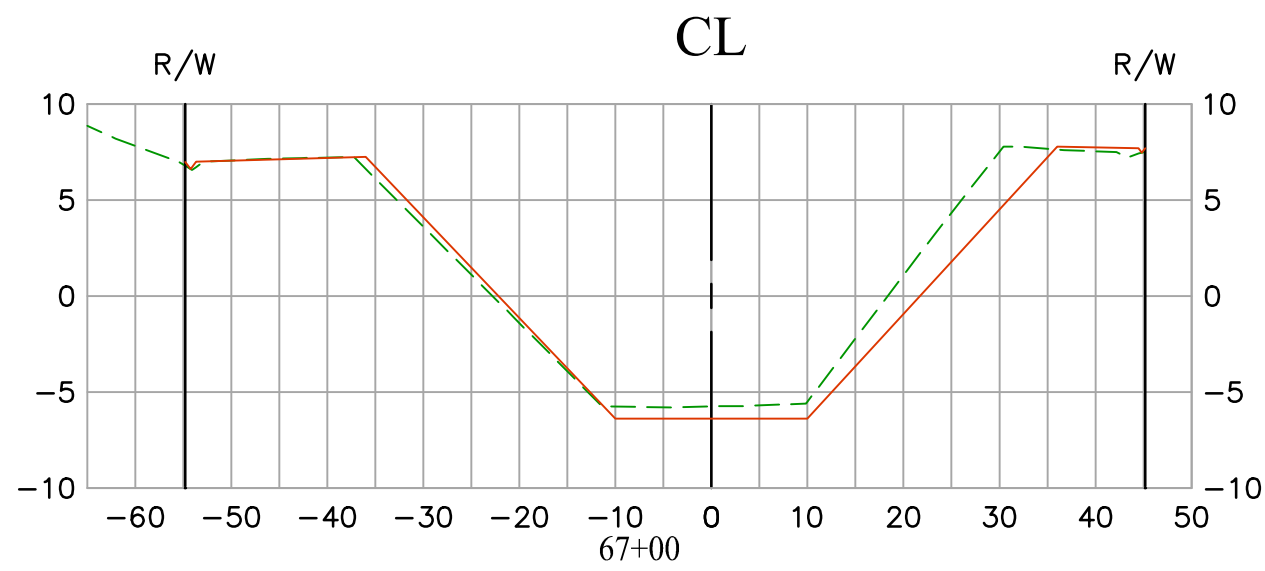
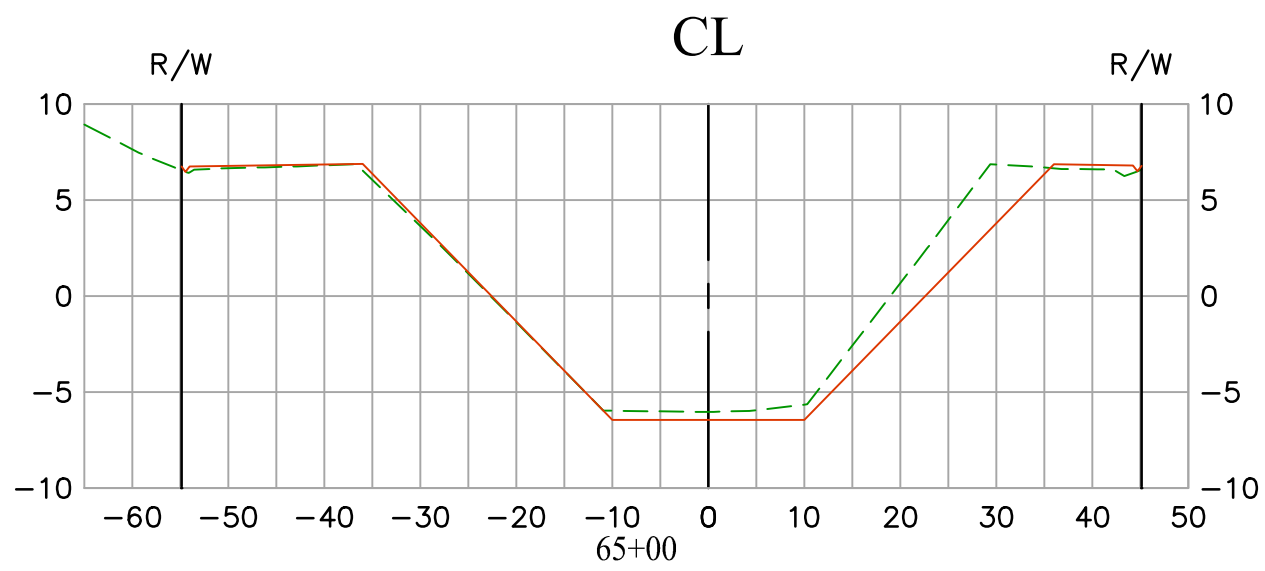
EXISTING CONDITION 12/24/2020  
RECORD DRAWINGS: 001-701-1A  
DATE PREPARED: 12/13/2021



Vert. Scale: 1"=10'  
Hor. Scale: 1"=20'

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
SECTIONS		
PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>14</b> of <b>23</b>
MAPPING	BY: A. YU / H. AFTIM	
OFFICE CHECK	BY: J. MORENO, PLS	
FIELD CHECK	BY: J. JOHNS	
SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PRO001
FILE: LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS SECTIONS 2021.DWG		



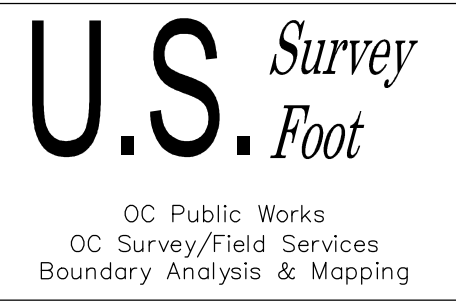
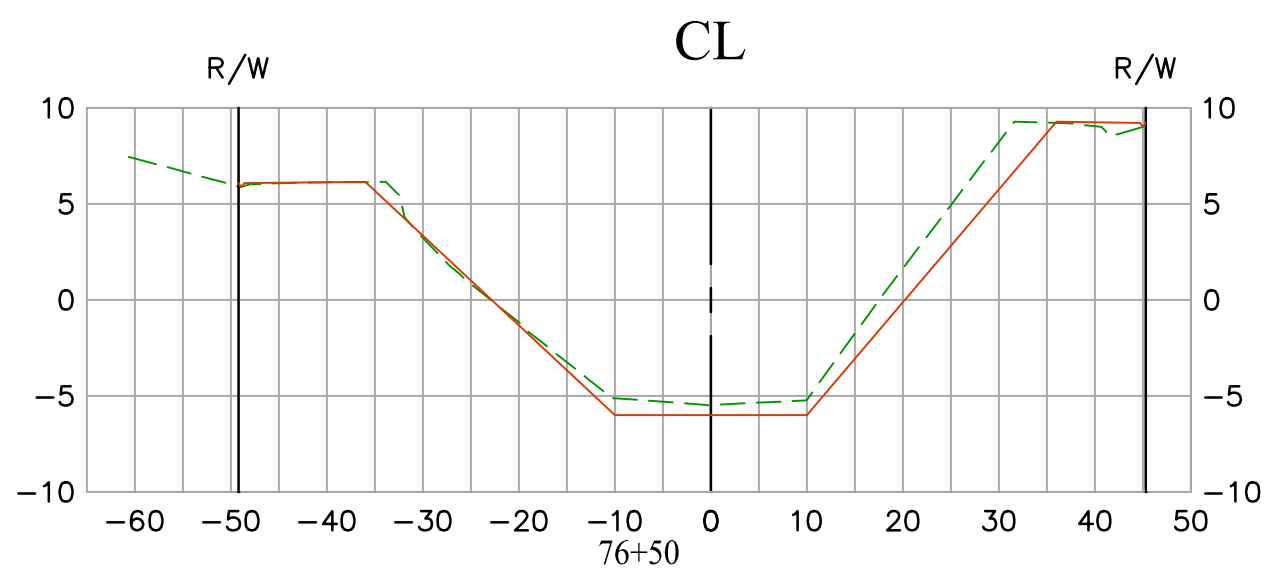
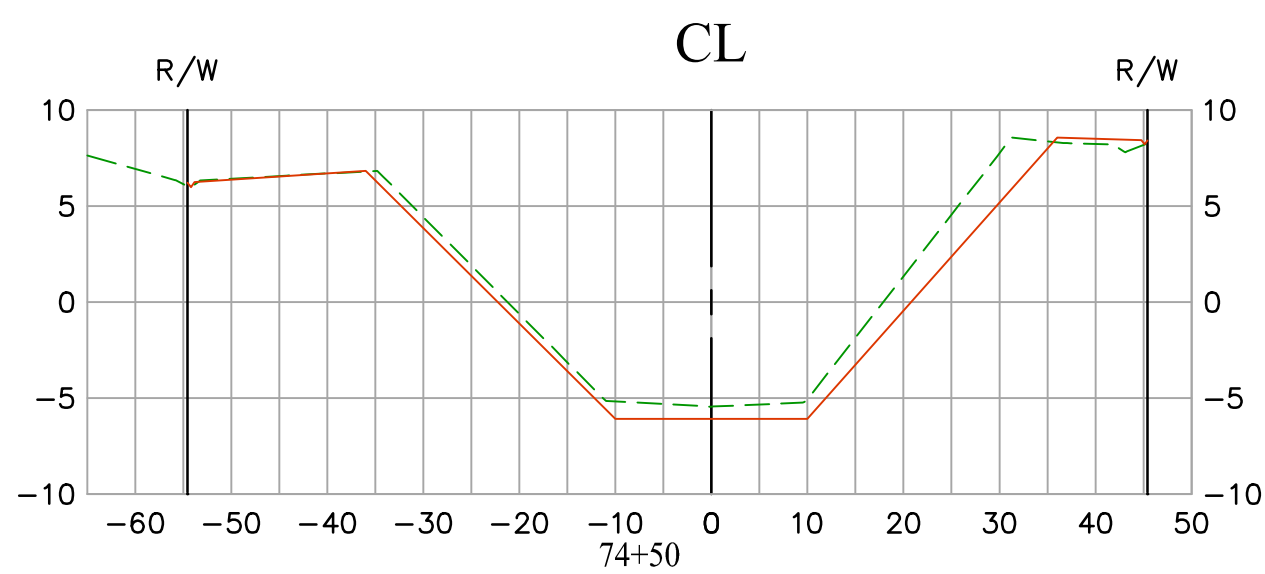
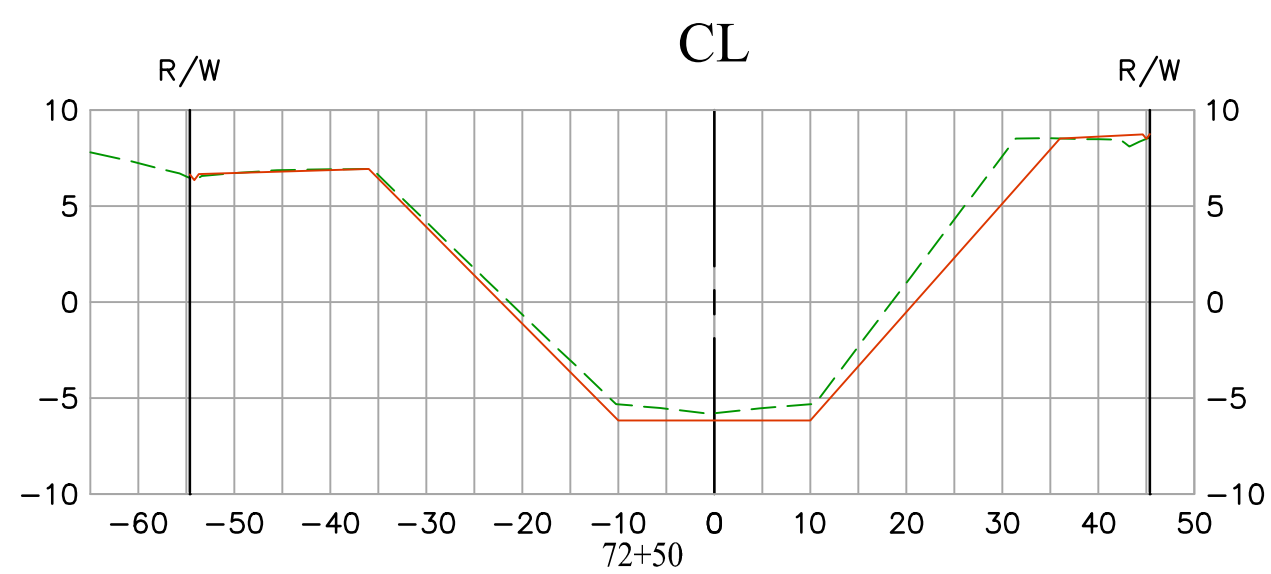
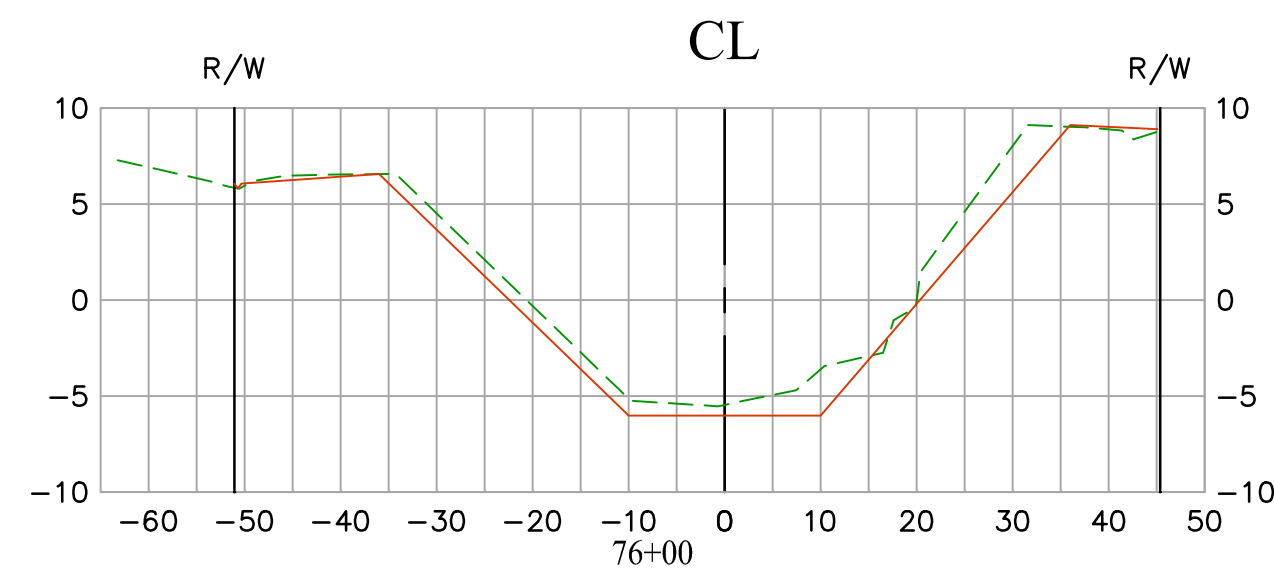
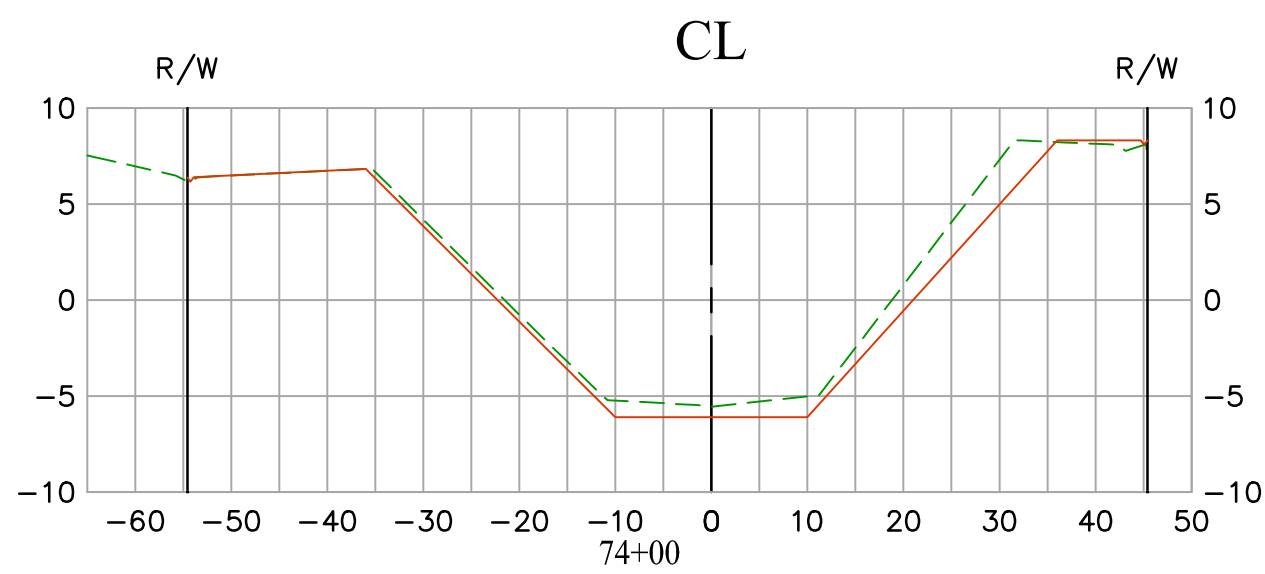
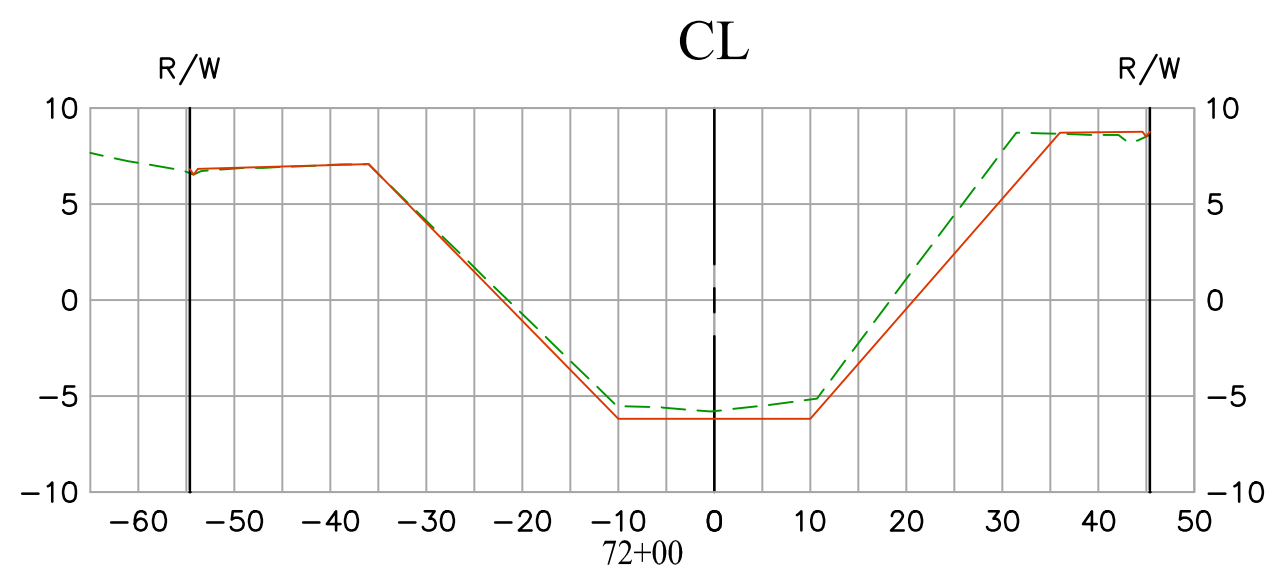
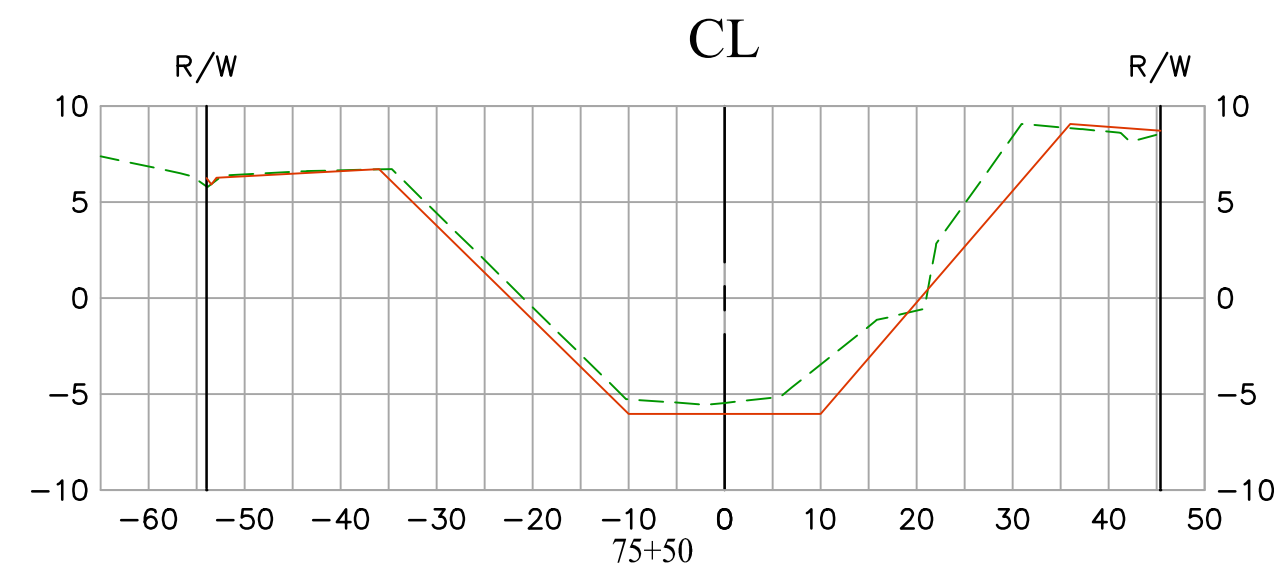
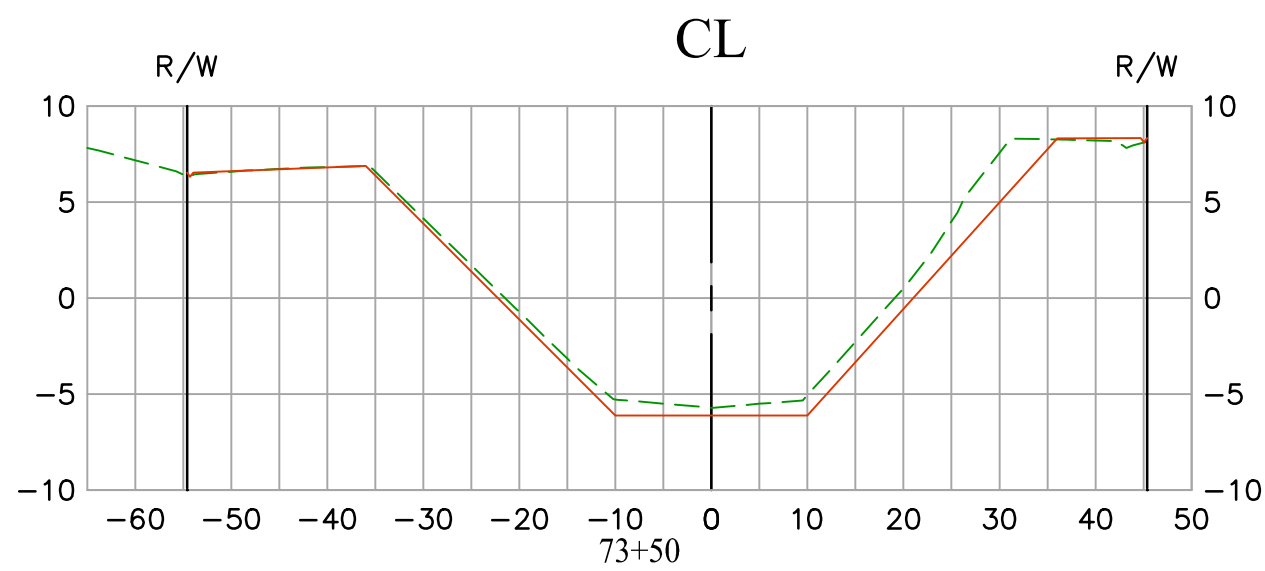
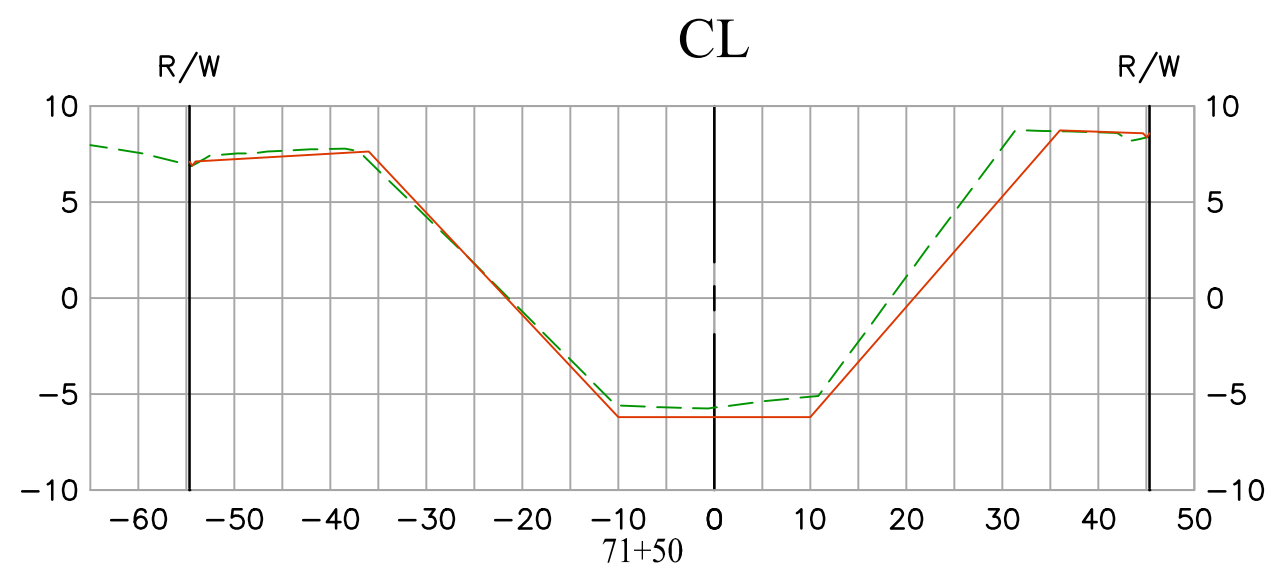
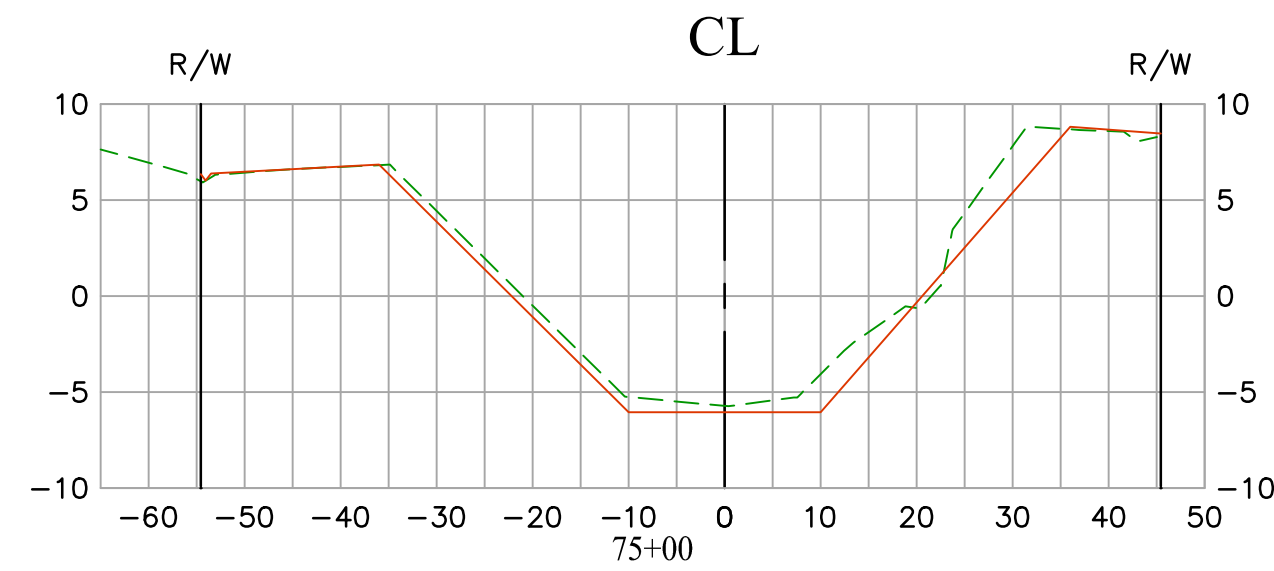
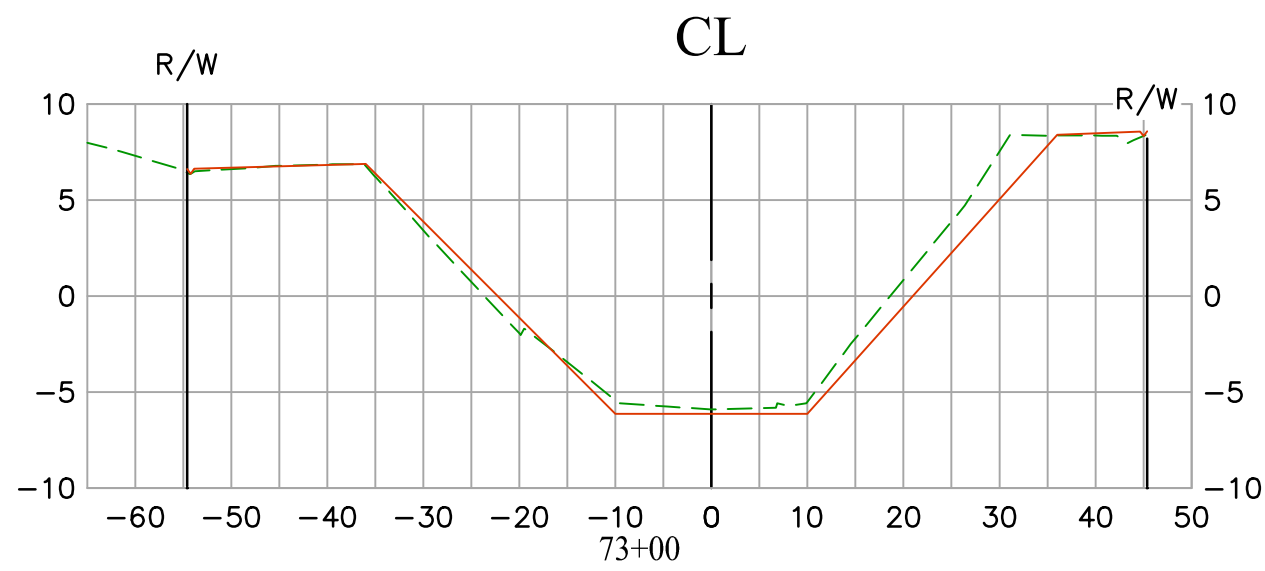
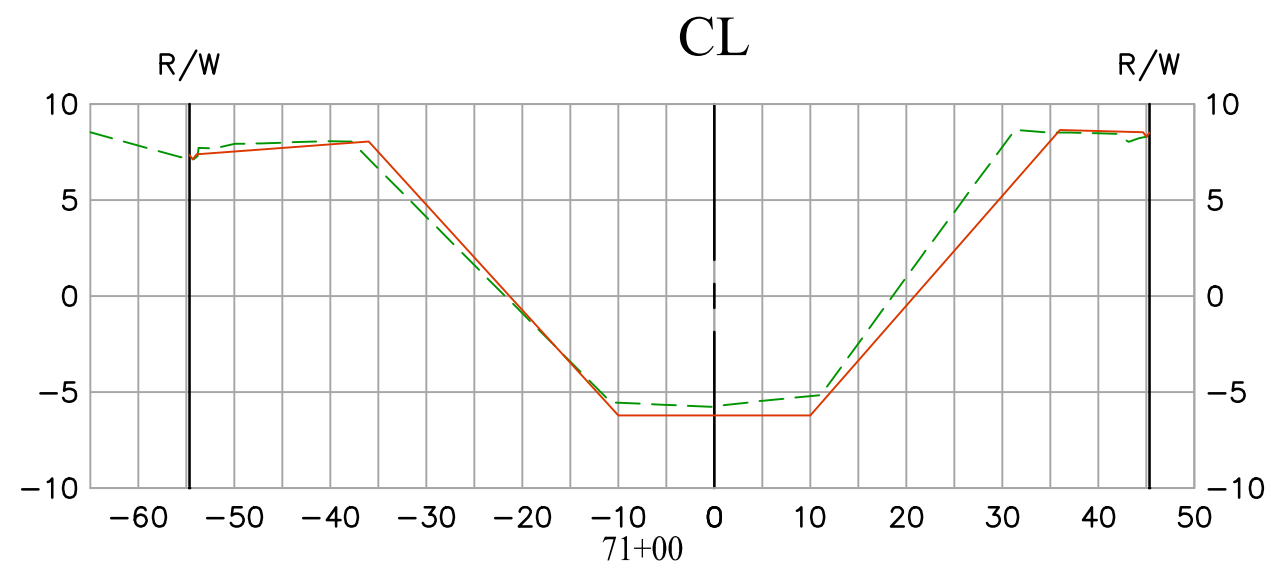


EXISTING CONDITION 12/24/2020  
RECORD DRAWINGS: C01-701-1A  
DATE PREPARED: 12/13/2021

Vert. Scale: 1"=10'  
Hor. Scale: 1"=20'

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS			
SECTIONS			
PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)			
DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>15</b> of <b>23</b>	
MAPPING	BY: A. YU / H. AFTIM		
OFFICE CHECK	BY: J. MORENO, PLS		
FIELD CHECK	BY: J. JOHNS		
SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PRO001	FILE: LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS SECTIONS 2021.DWG



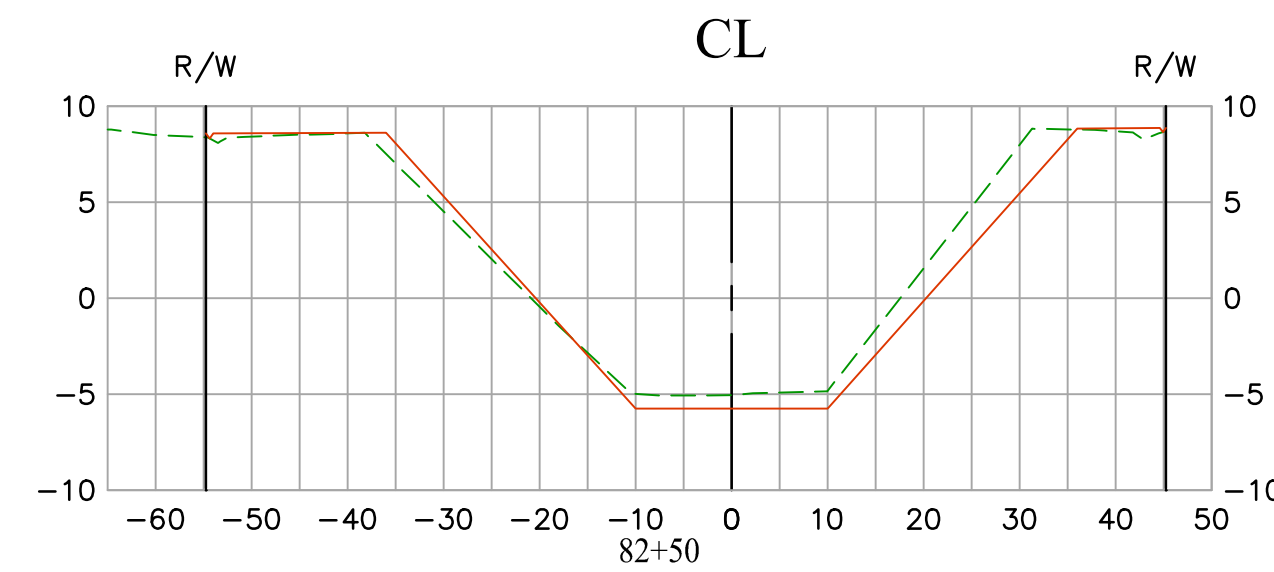
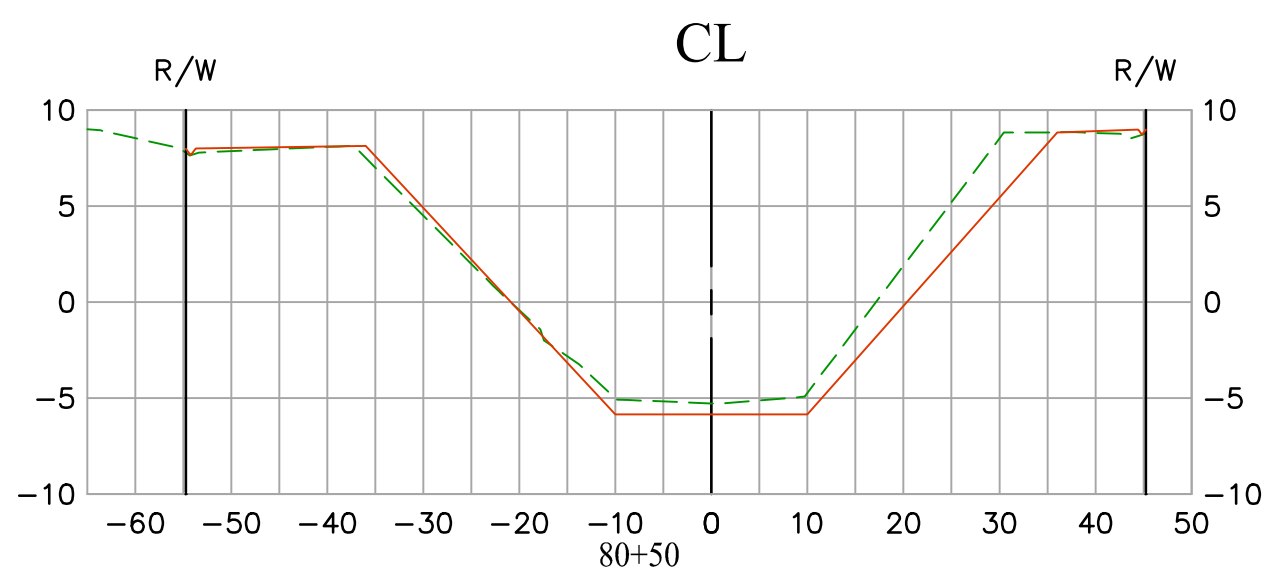
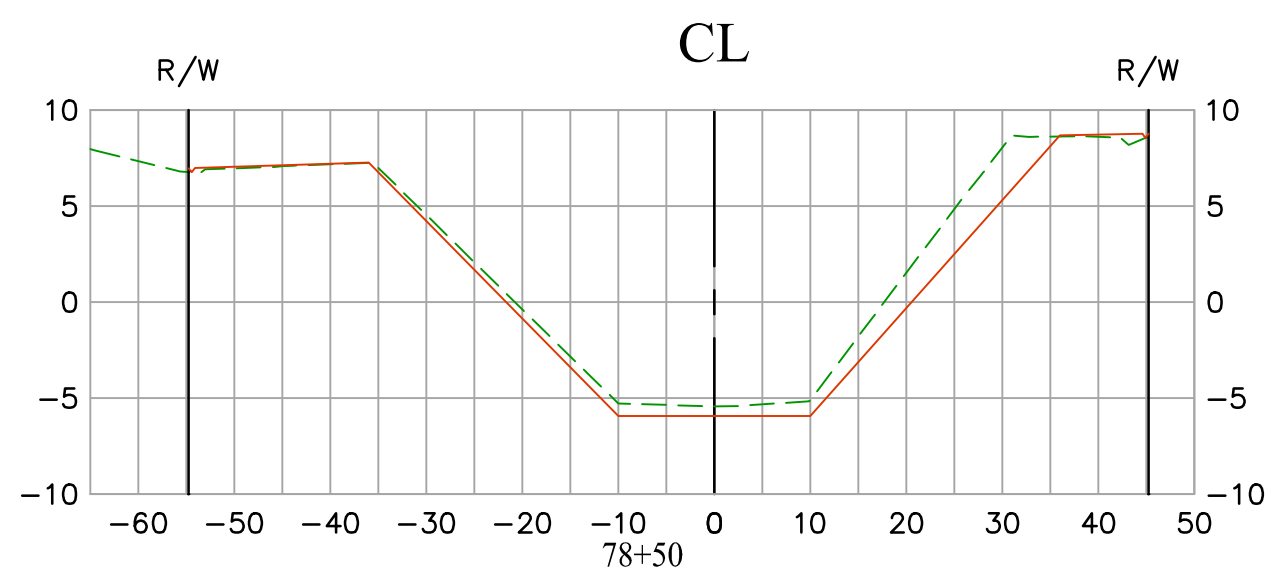
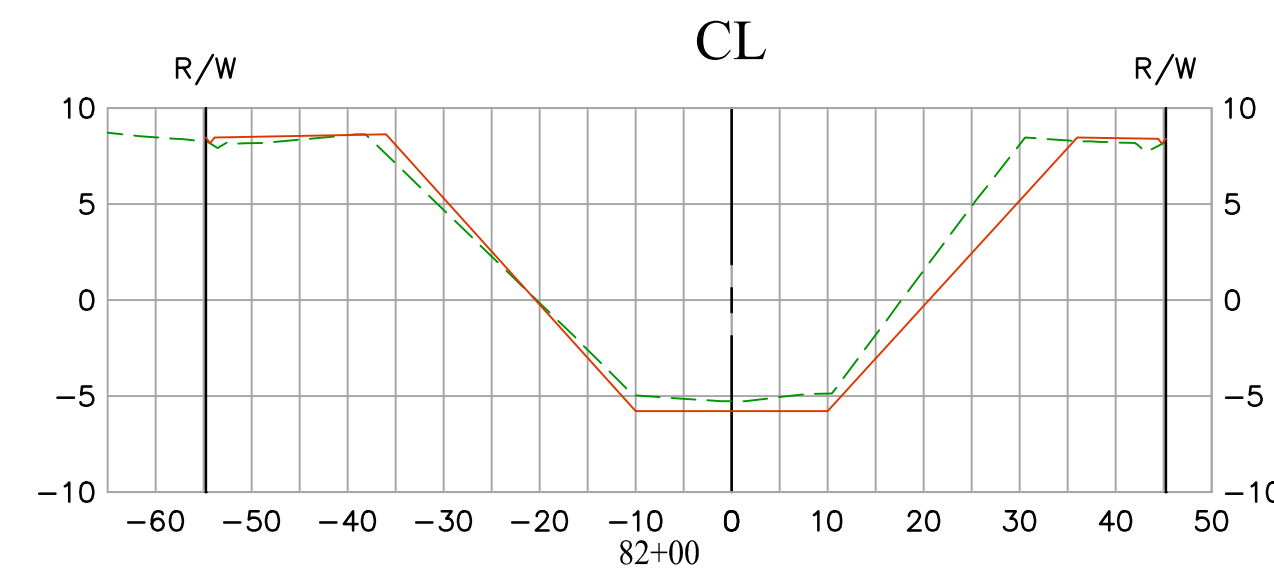
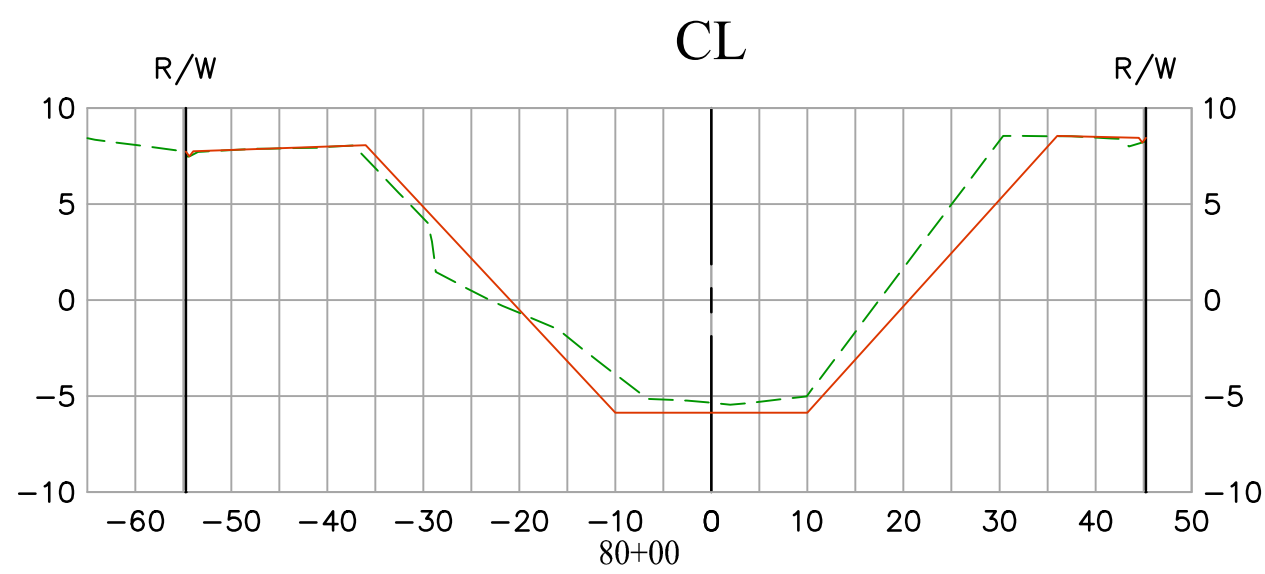
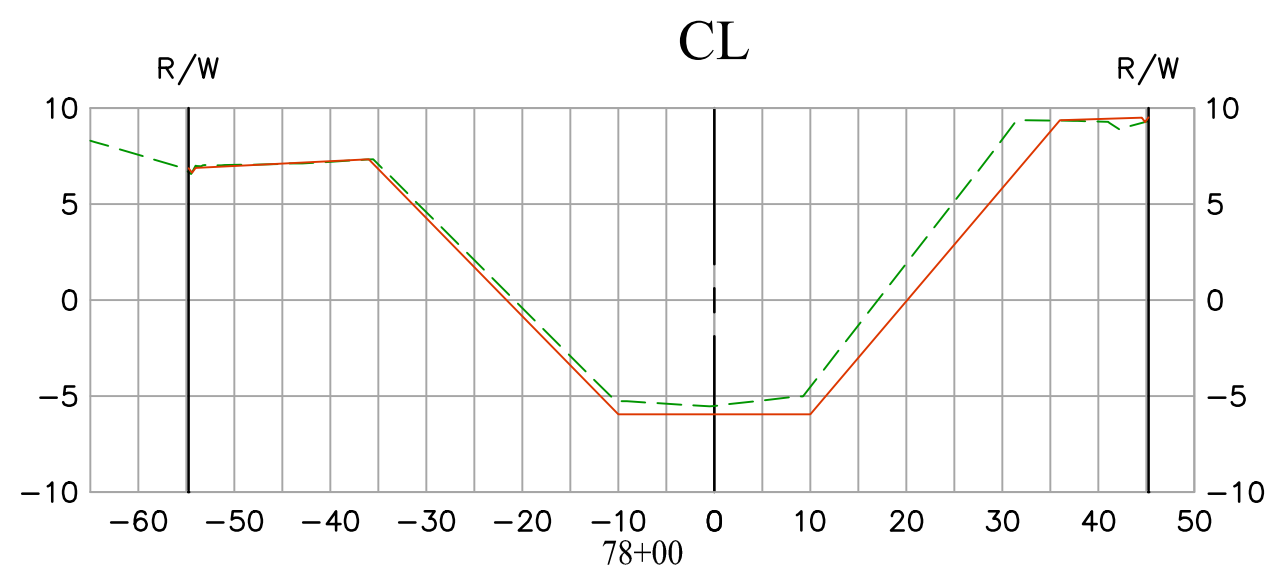
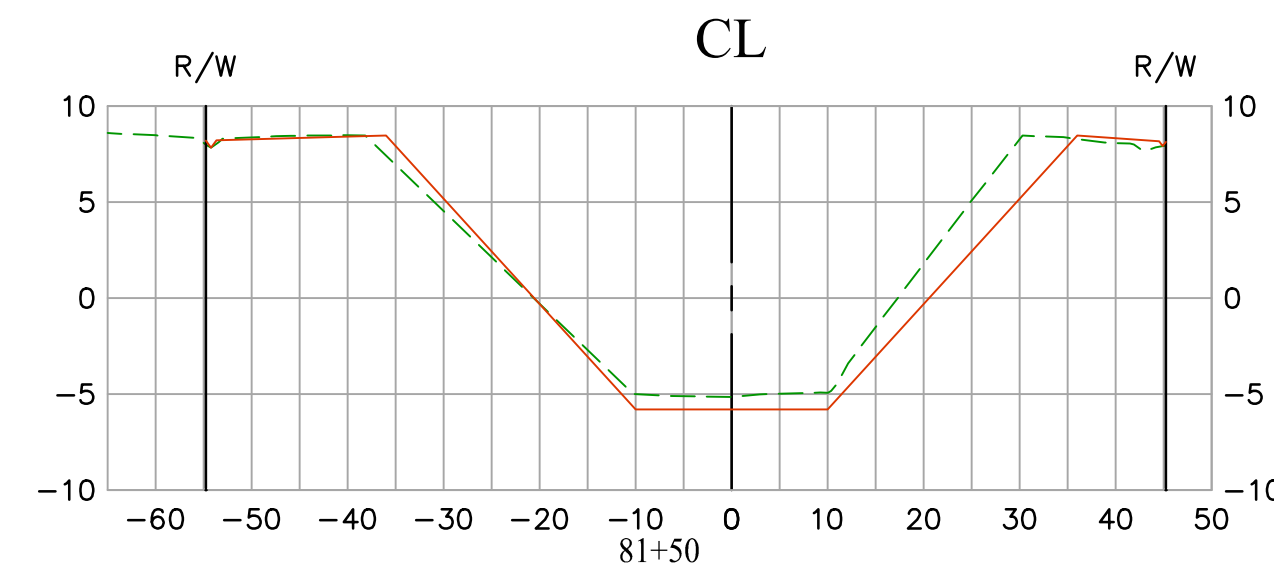
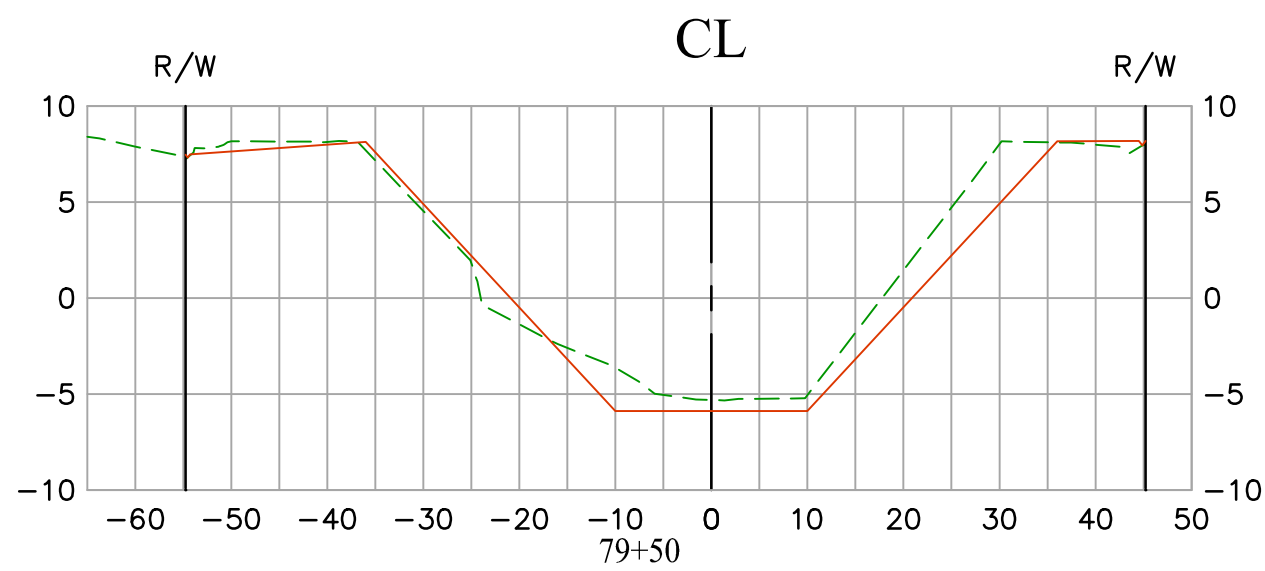
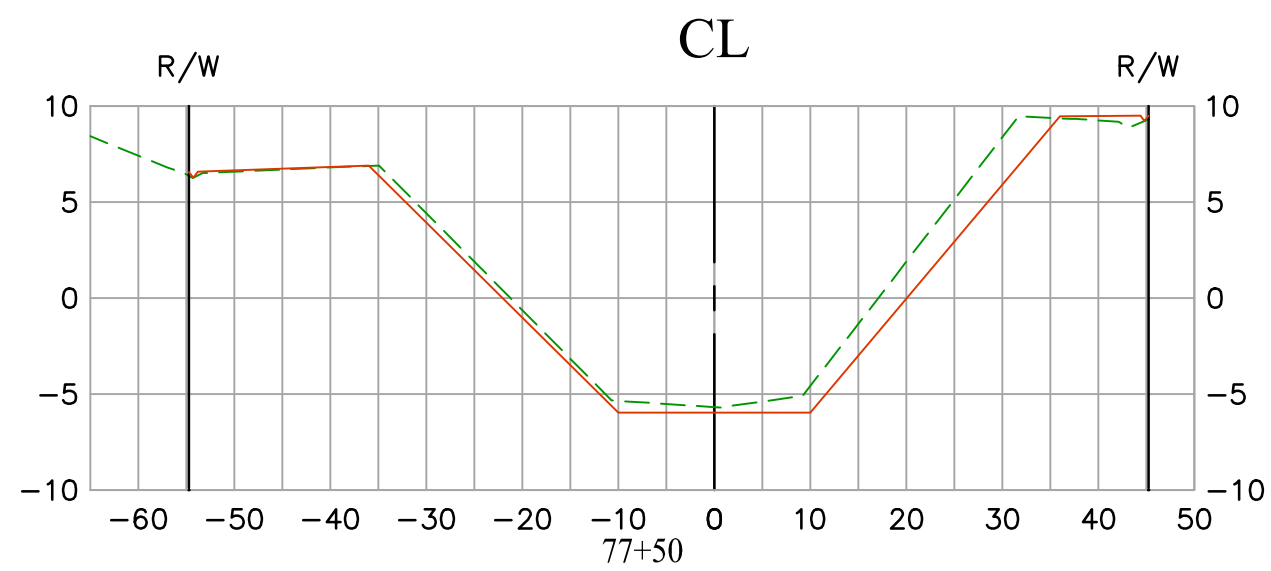
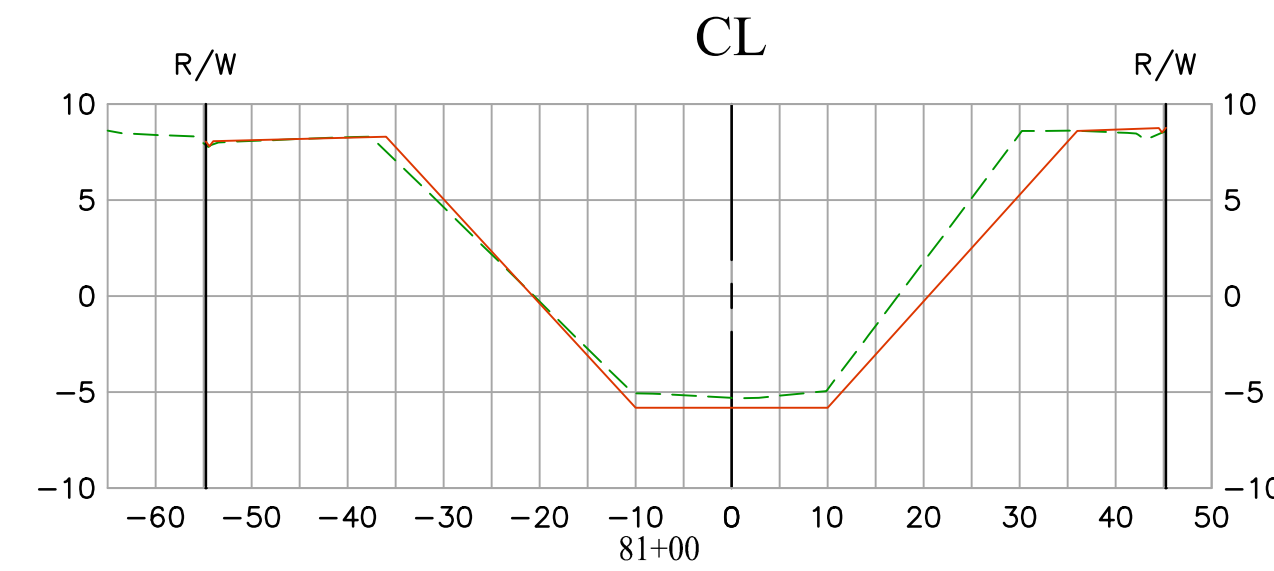
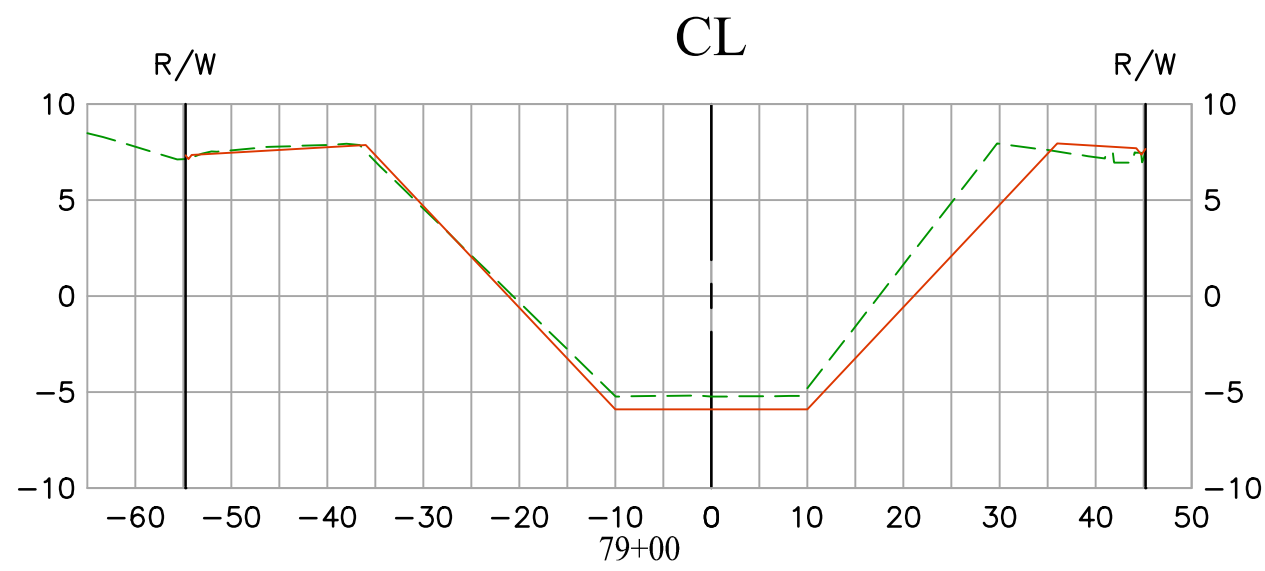
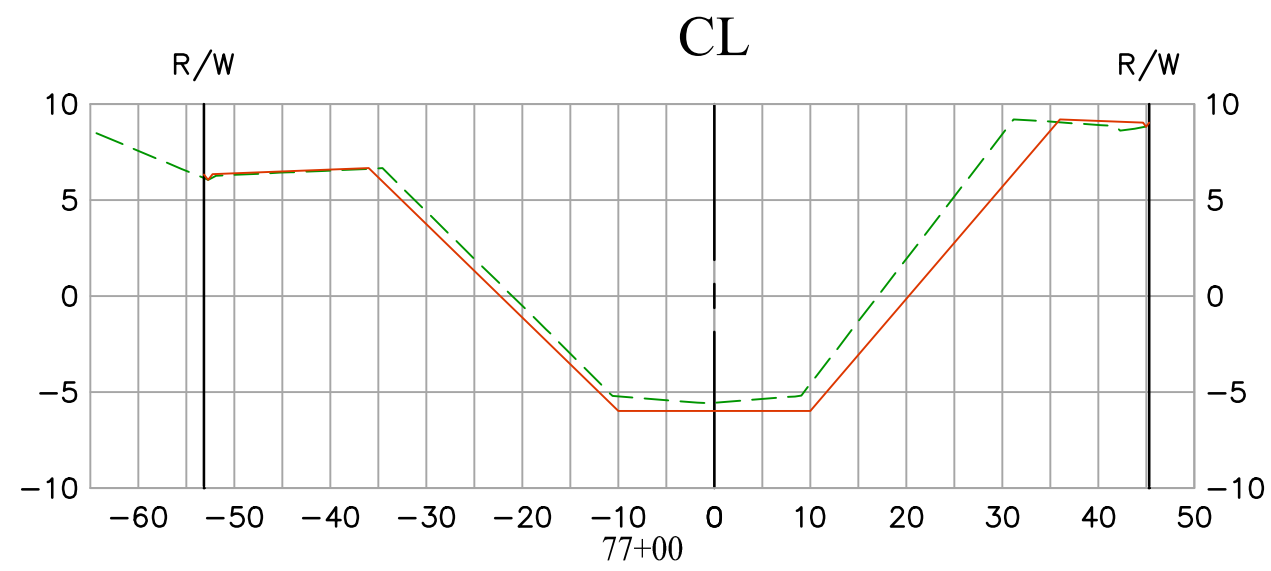


EXISTING CONDITION 12/24/2020  
RECORD DRAWINGS: C01-701-1A  
DATE PREPARED: 12/13/2021

Vert. Scale: 1"=10'  
Hor. Scale: 1"=20'

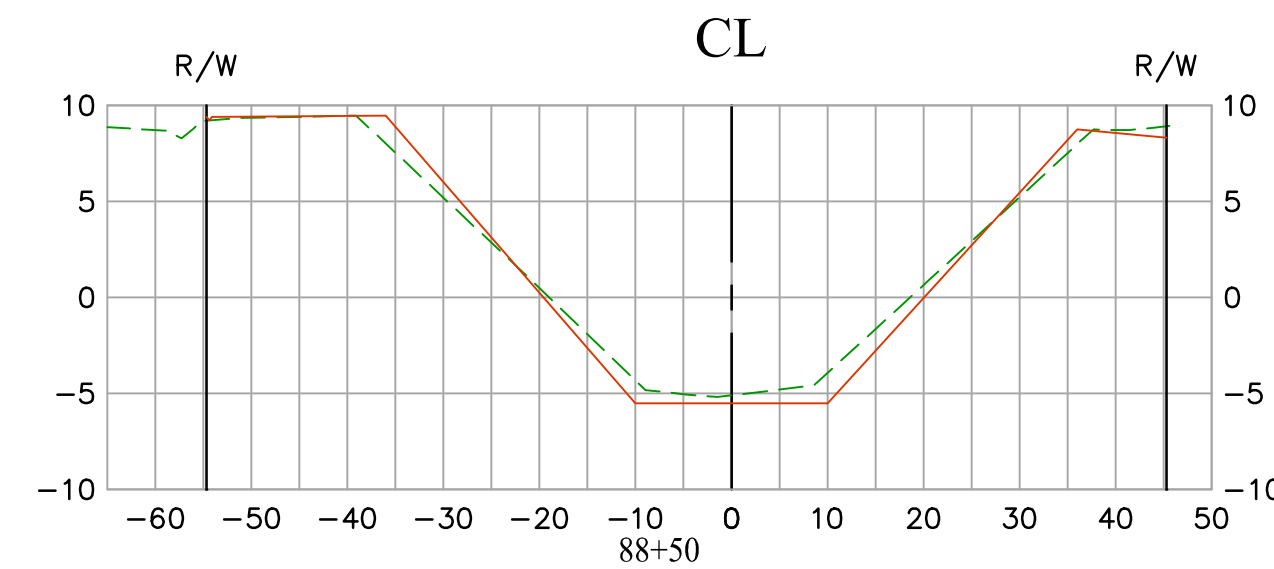
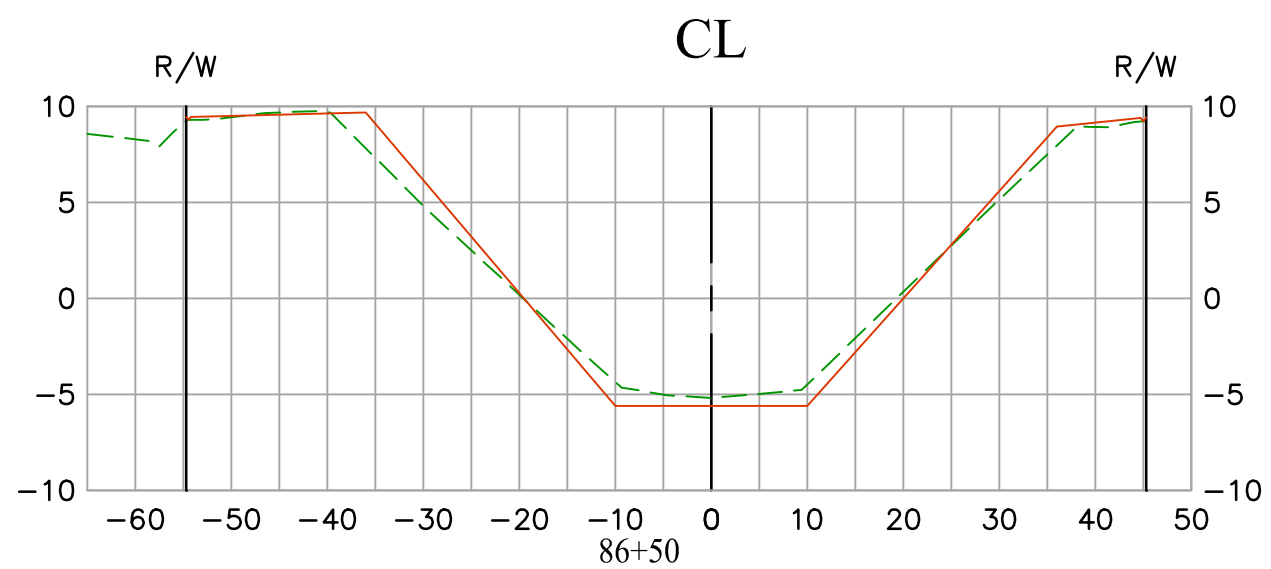
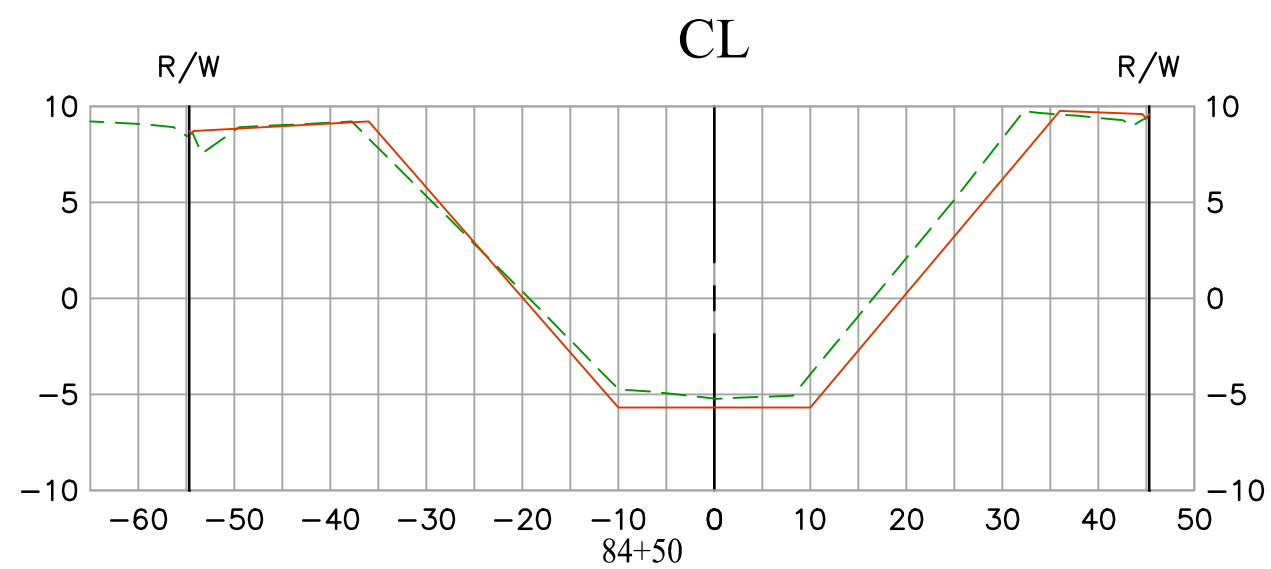
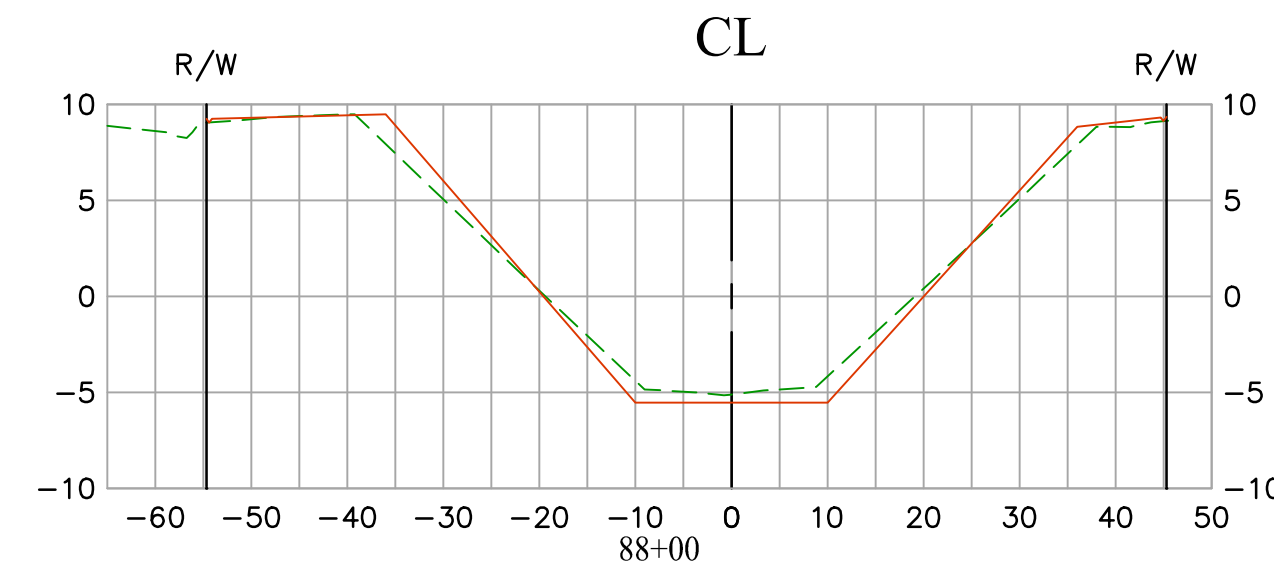
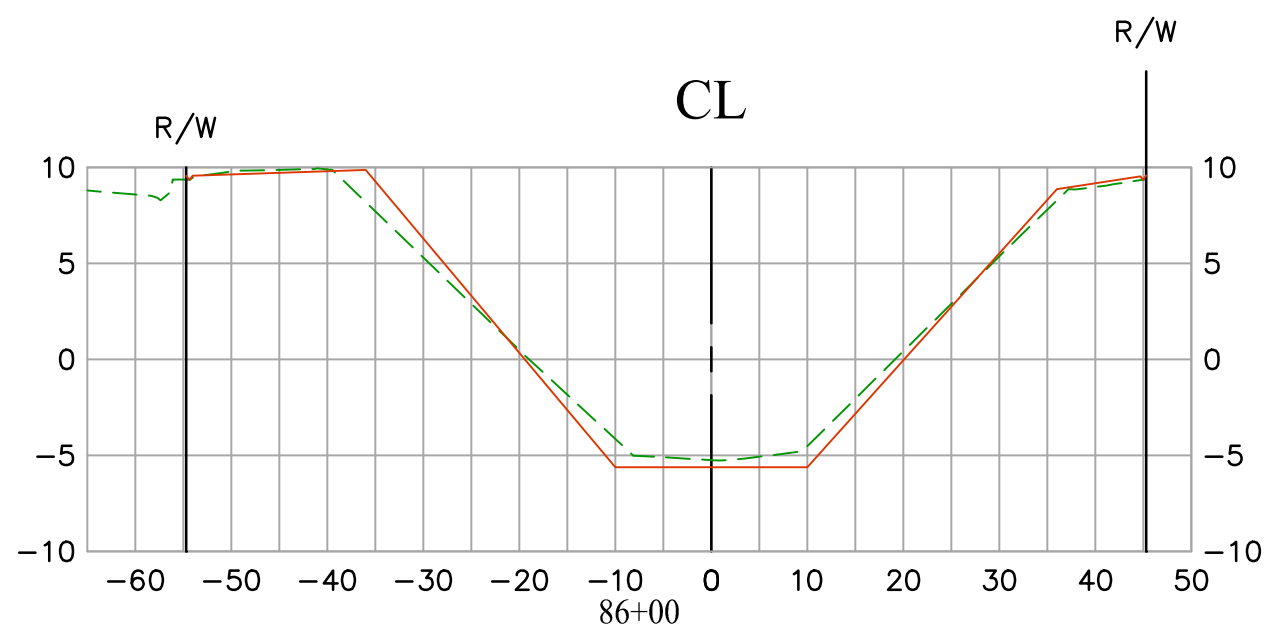
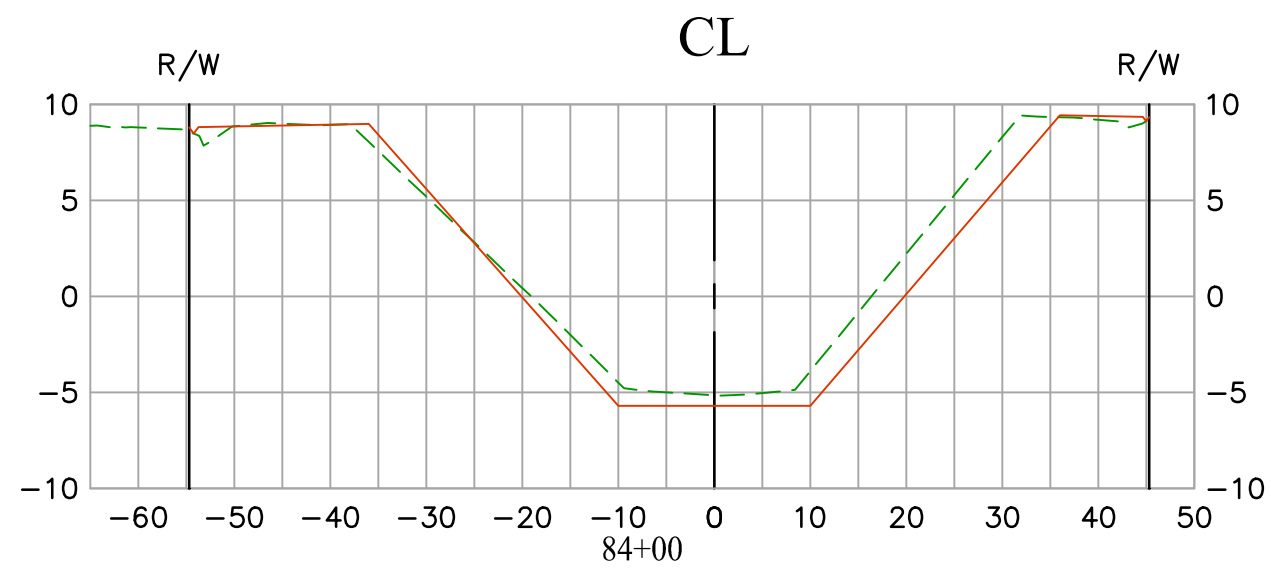
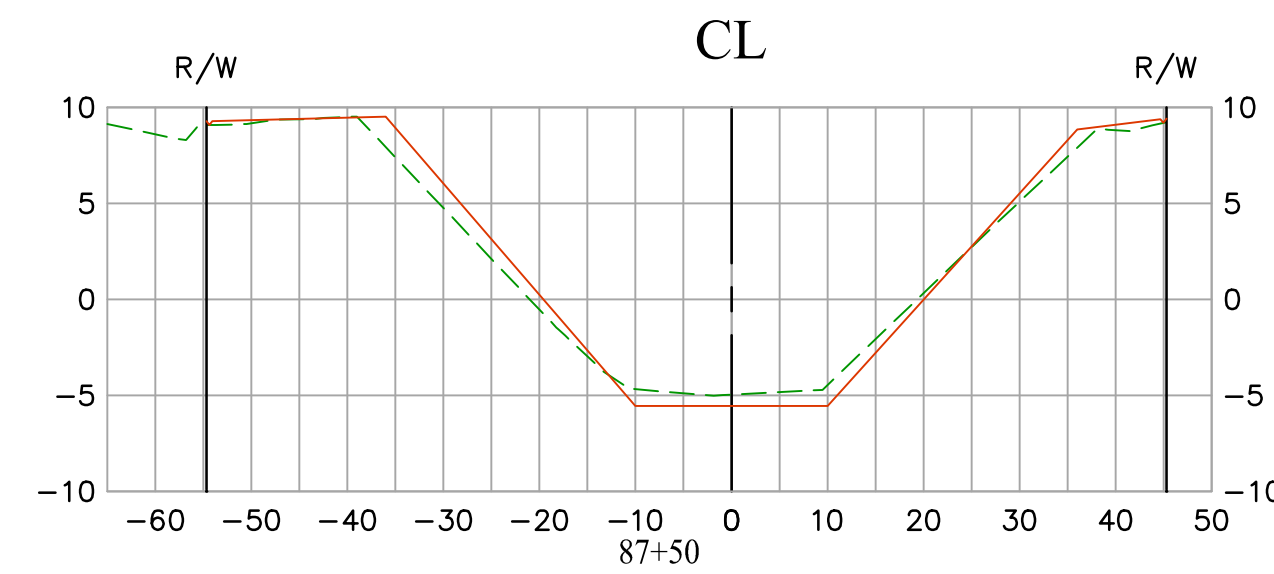
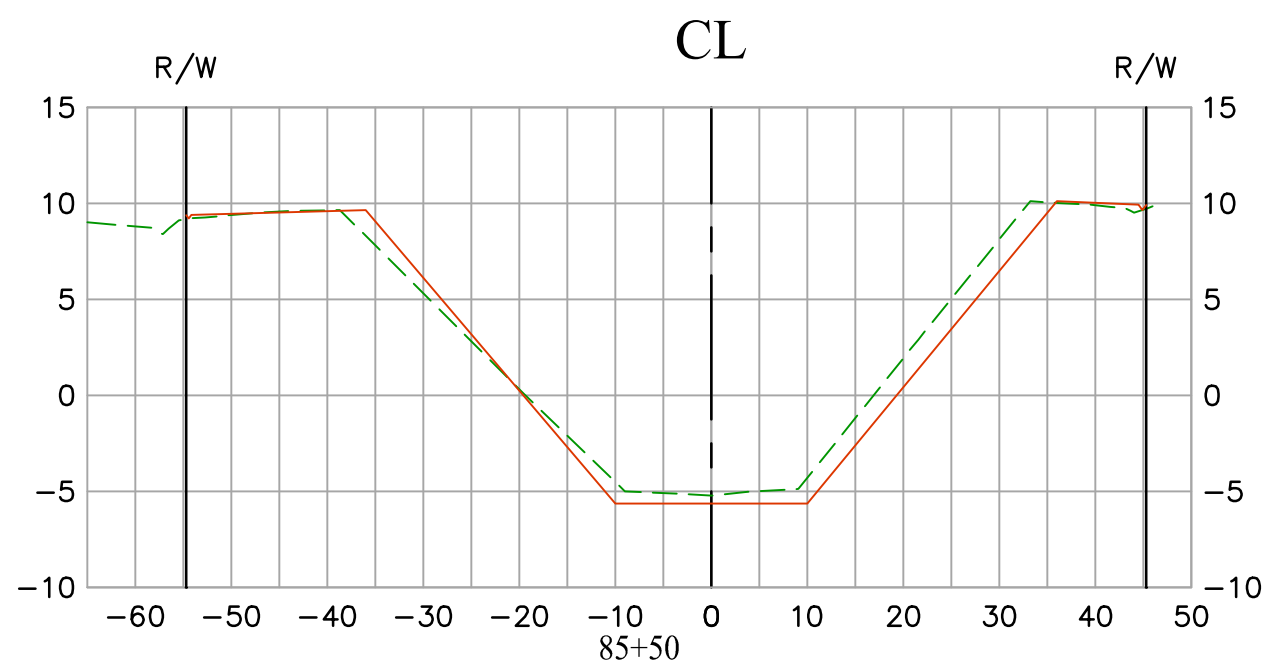
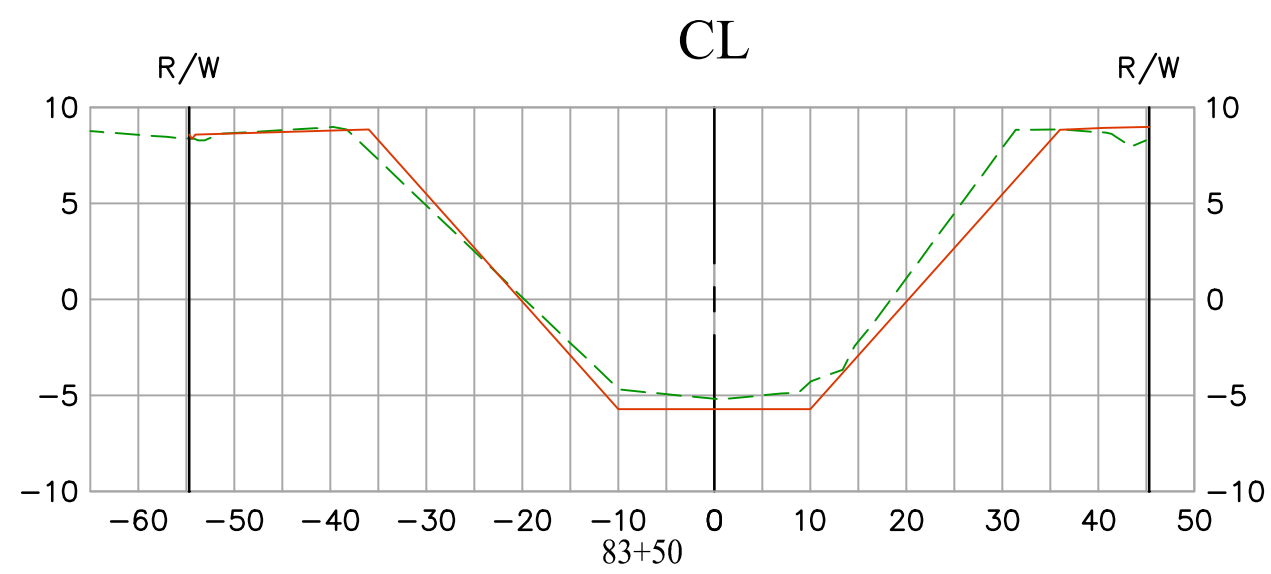
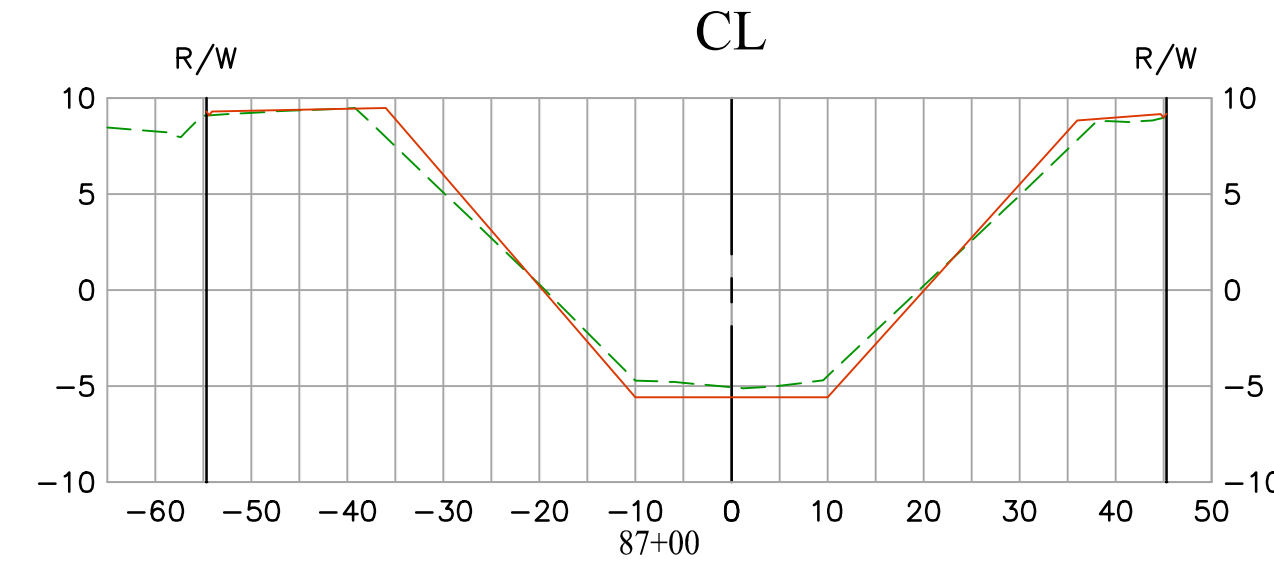
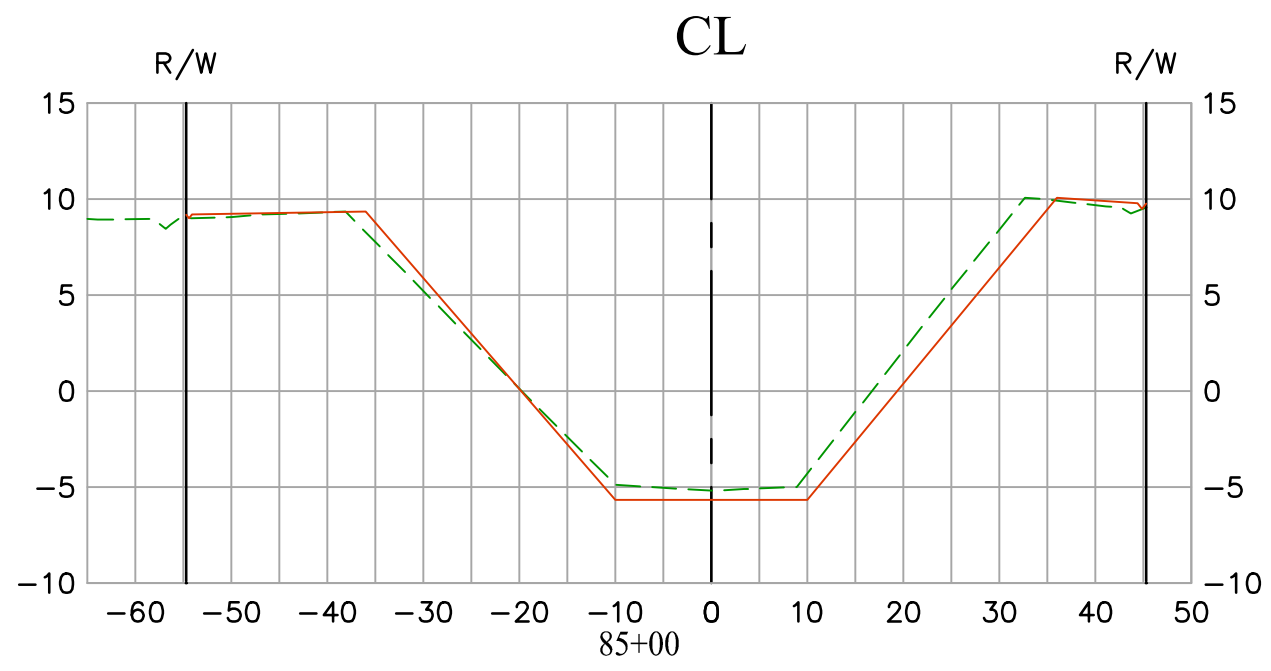
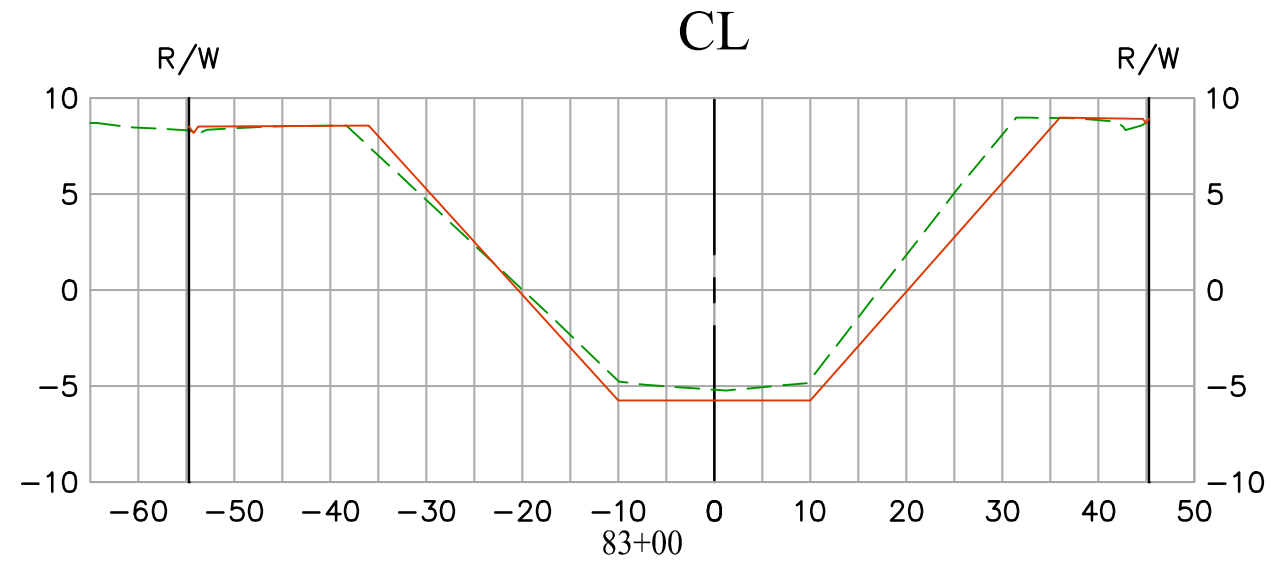
			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
			SECTIONS		
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>16</b> of <b>23</b>
			MAPPING	BY: A. YU / H. AFTIM	
			OFFICE CHECK	BY: J. MORENO, PLS	
			FIELD CHECK	BY: J. JOHNS	
			SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PR0001
			FILE: LOS_ALAMITOS_CHANNEL(C01)1A.DWG		
MARK	DATE	ITEM	REVISIONS		



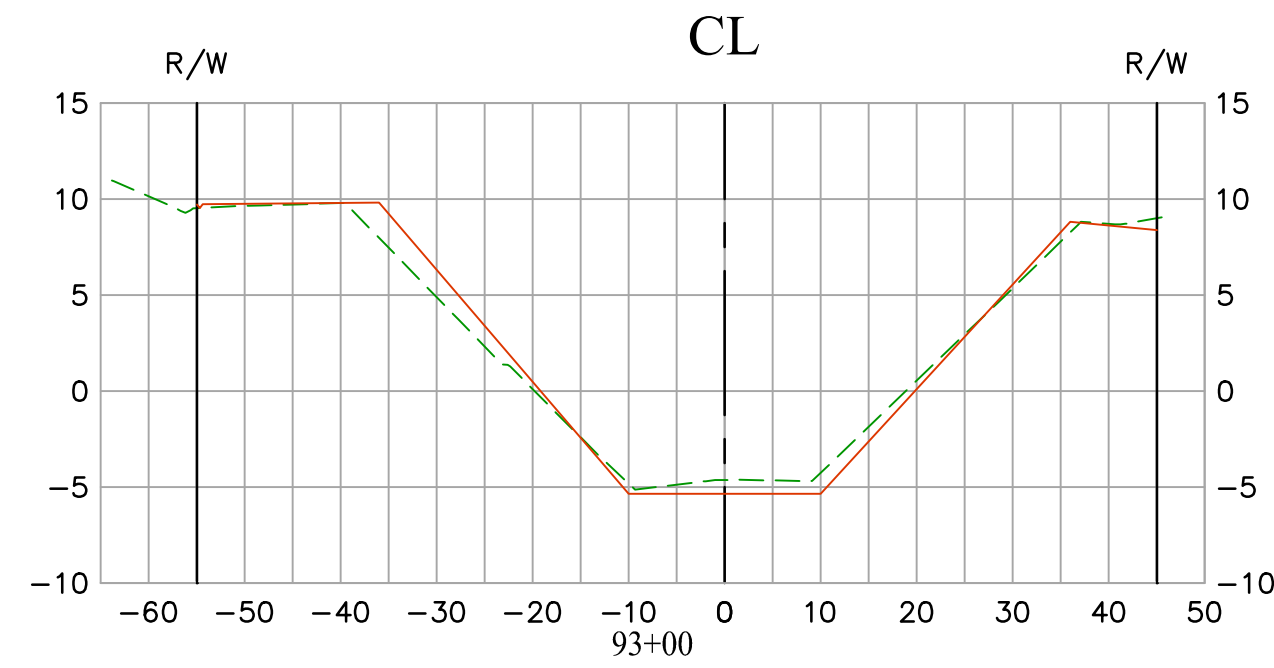
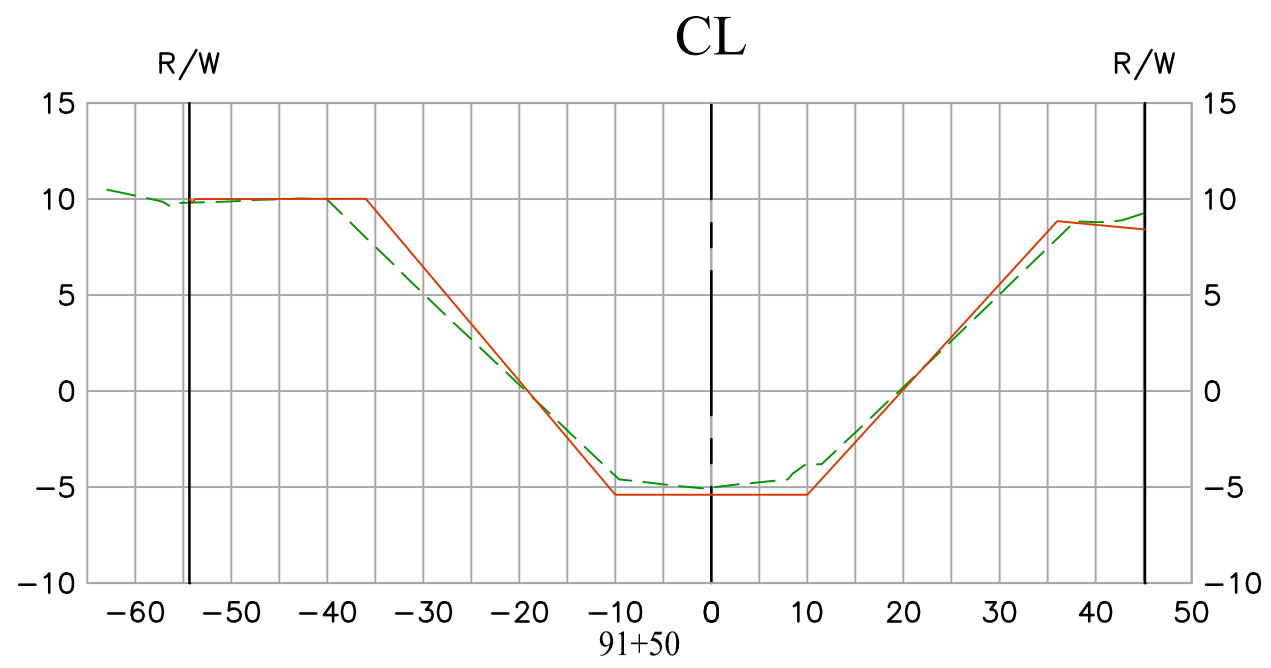
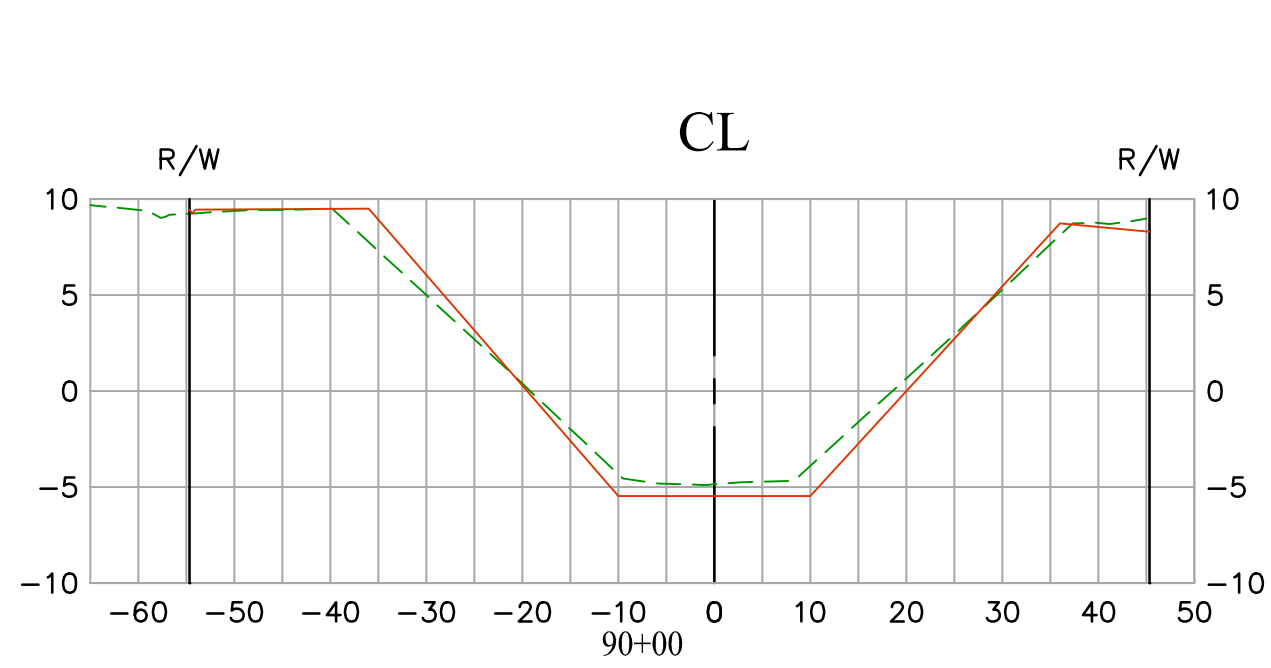
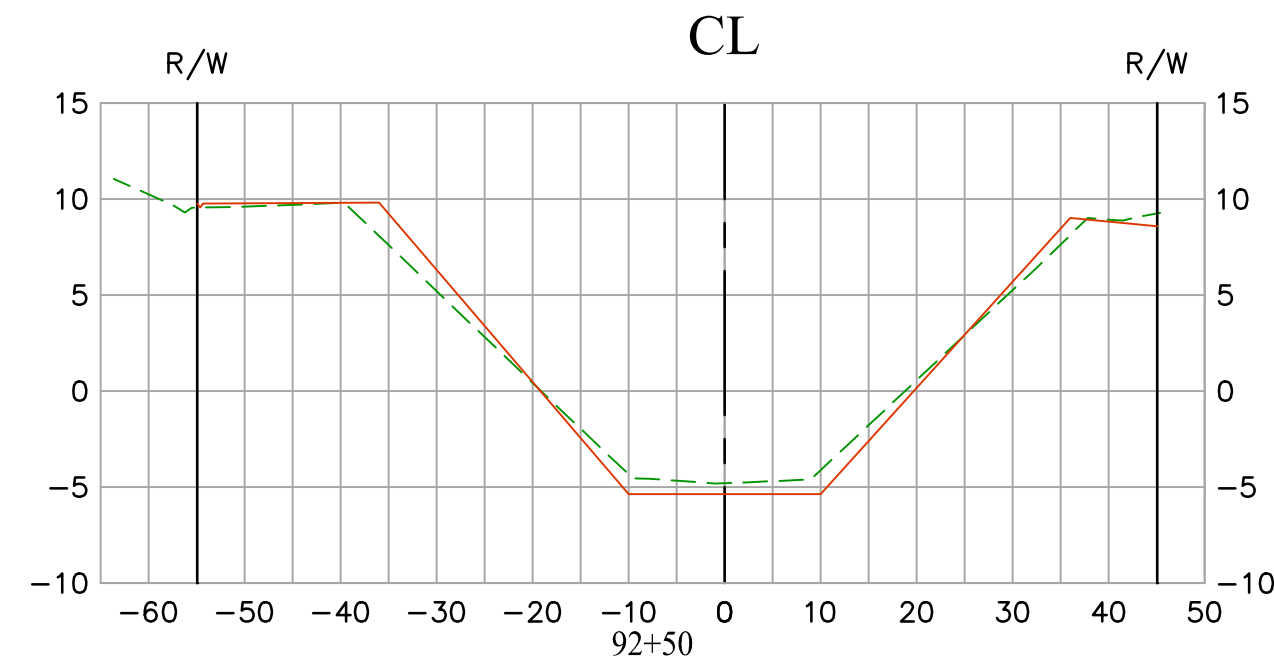
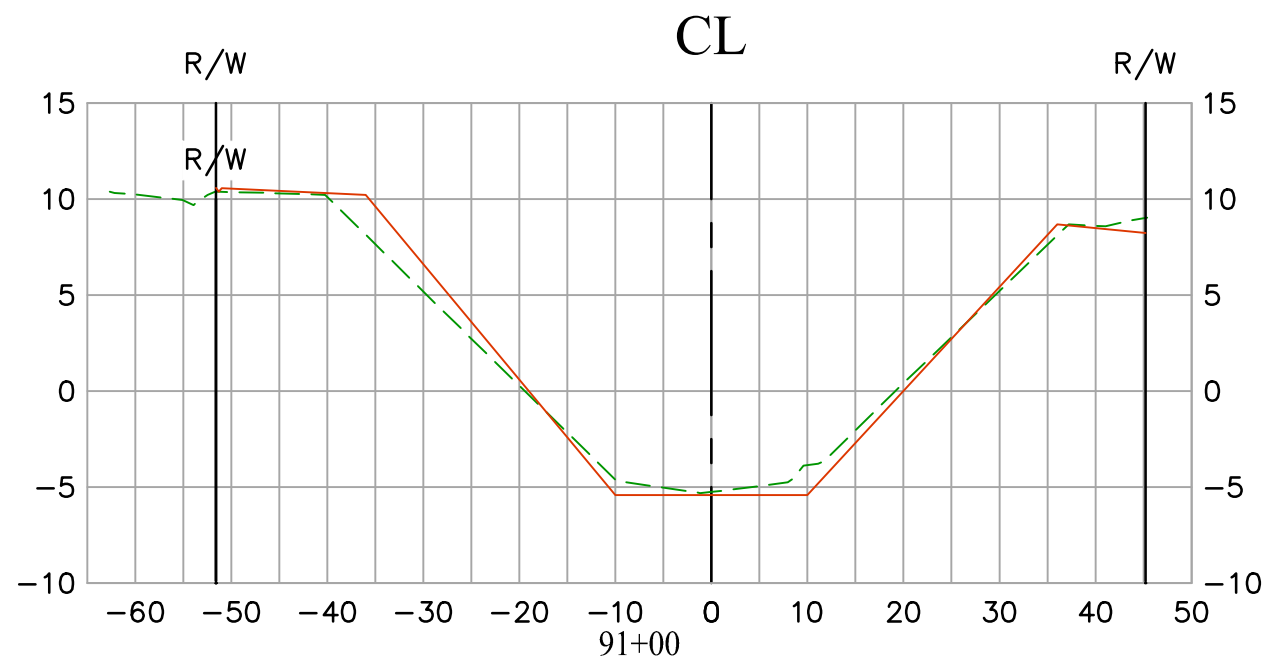
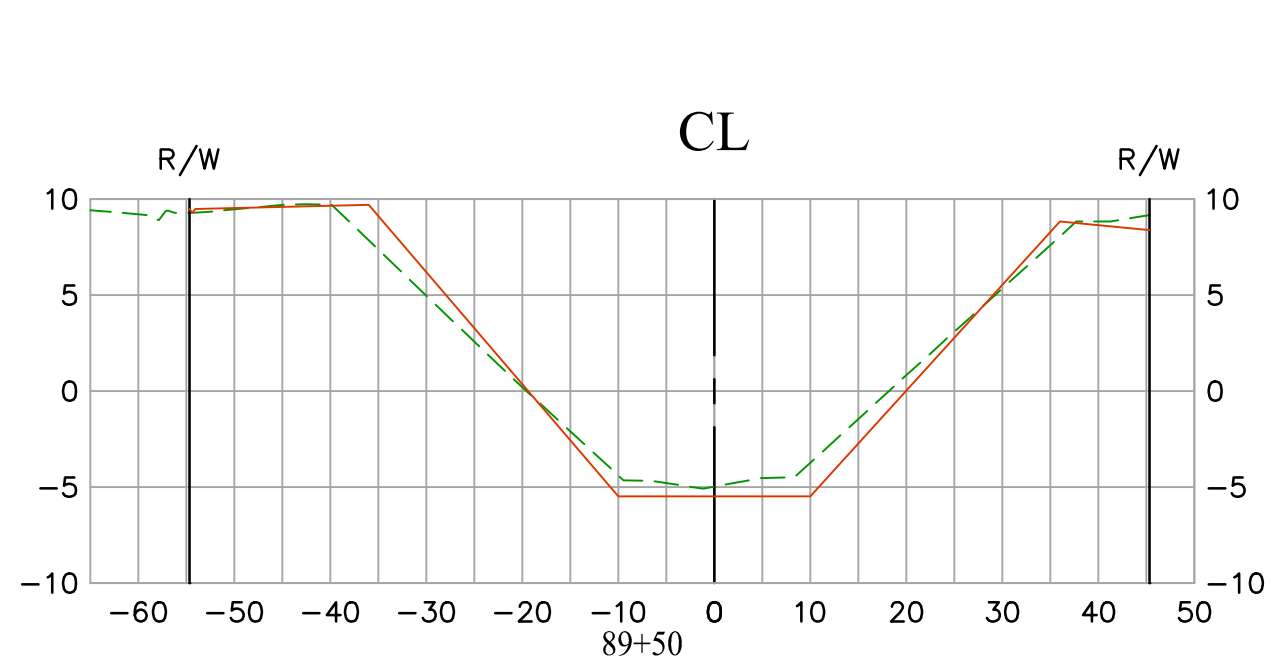
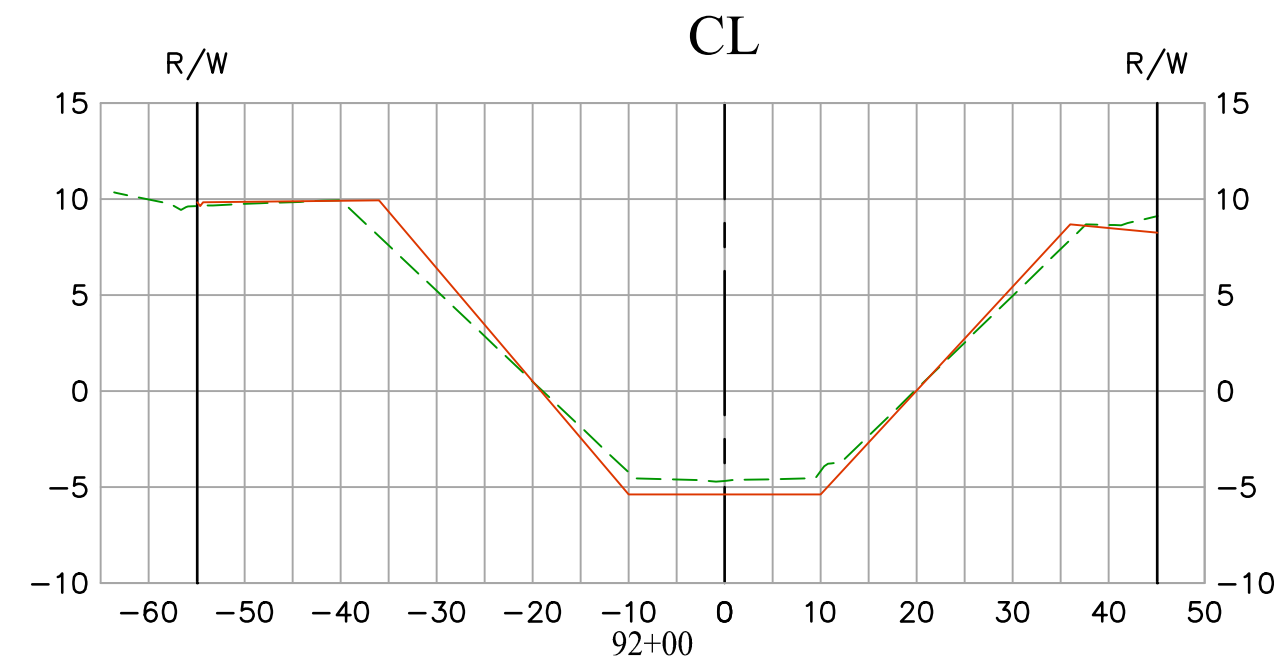
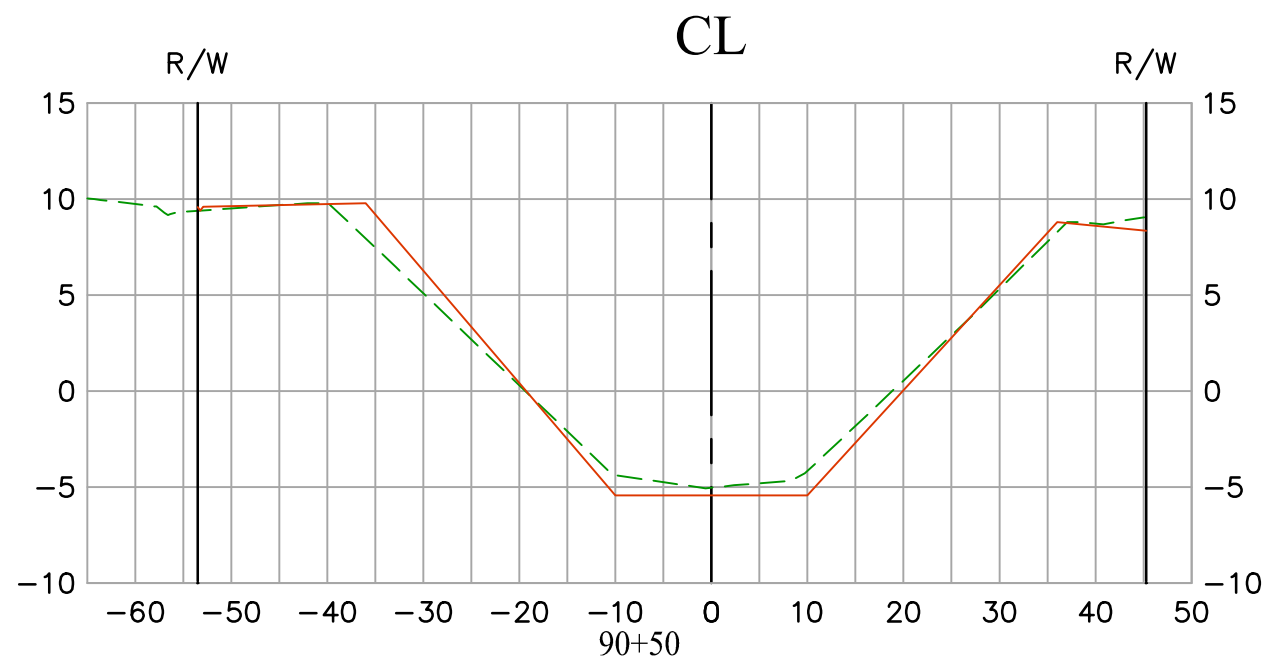
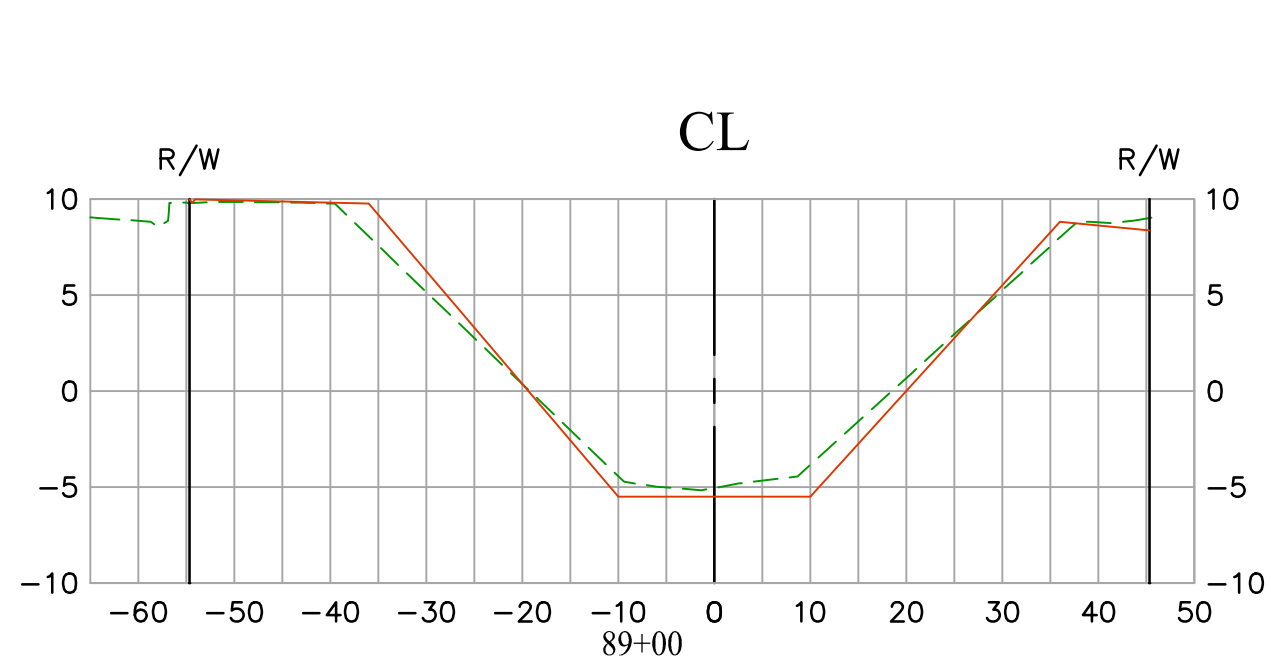


			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			<b>LOS ALAMITOS CHANNEL (C01)</b> <b>EARTHEN SLOPE IMPROVEMENTS</b>		
			SECTIONS		
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>17</b> of <b>23</b>
			MAPPING	BY: A. YU / H. AFTIM	
			OFFICE CHECK	BY: J. MORENO, PLS	
			FIELD CHECK	BY: J. JOHNS	
			SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PRO001
			REVISIONS		
MARK	DATE	ITEM			



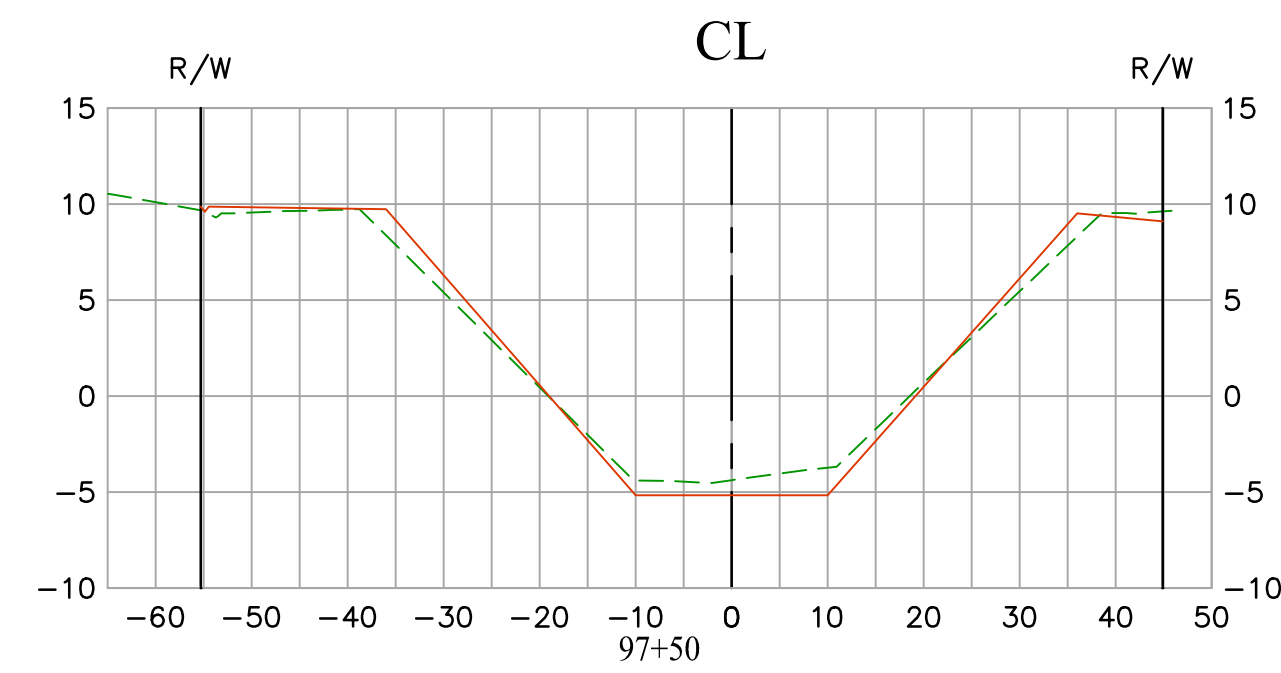
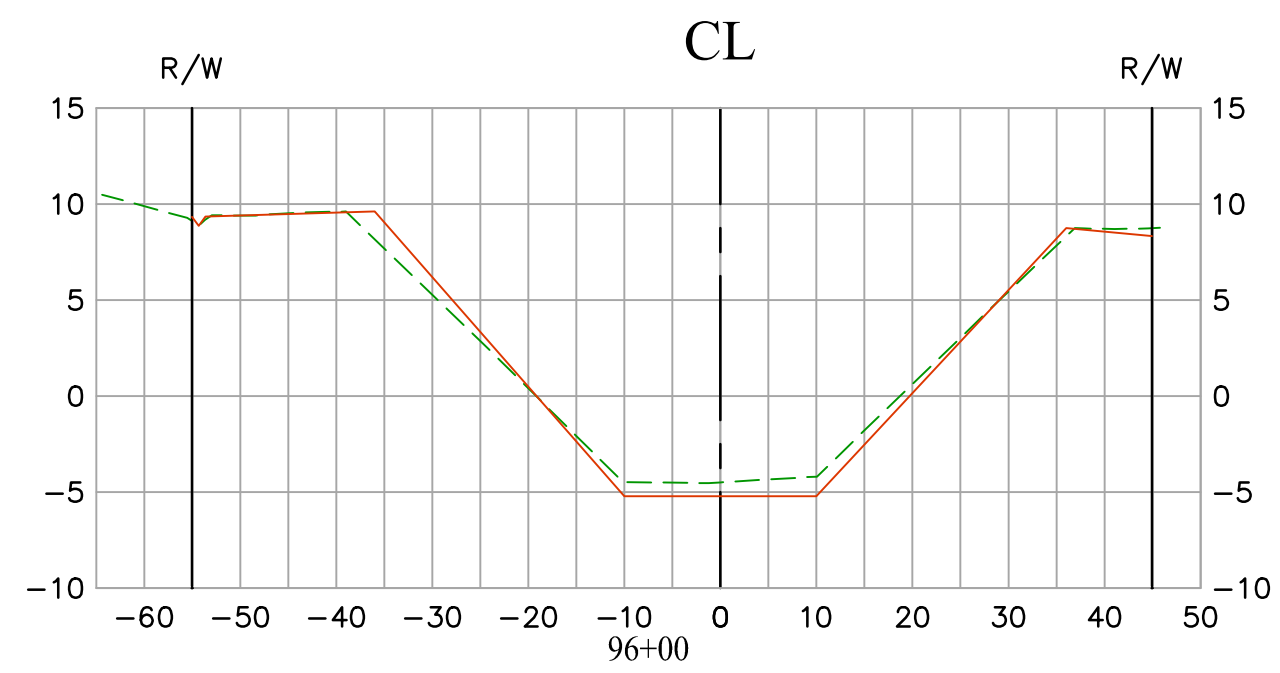
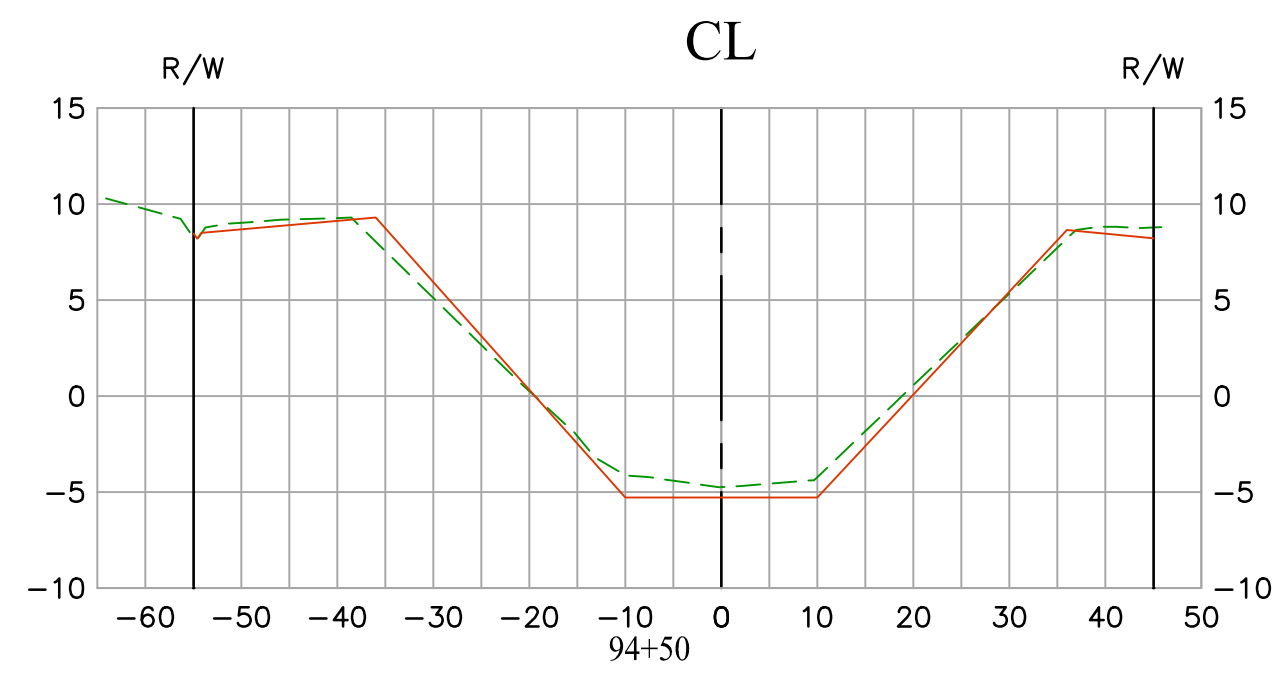
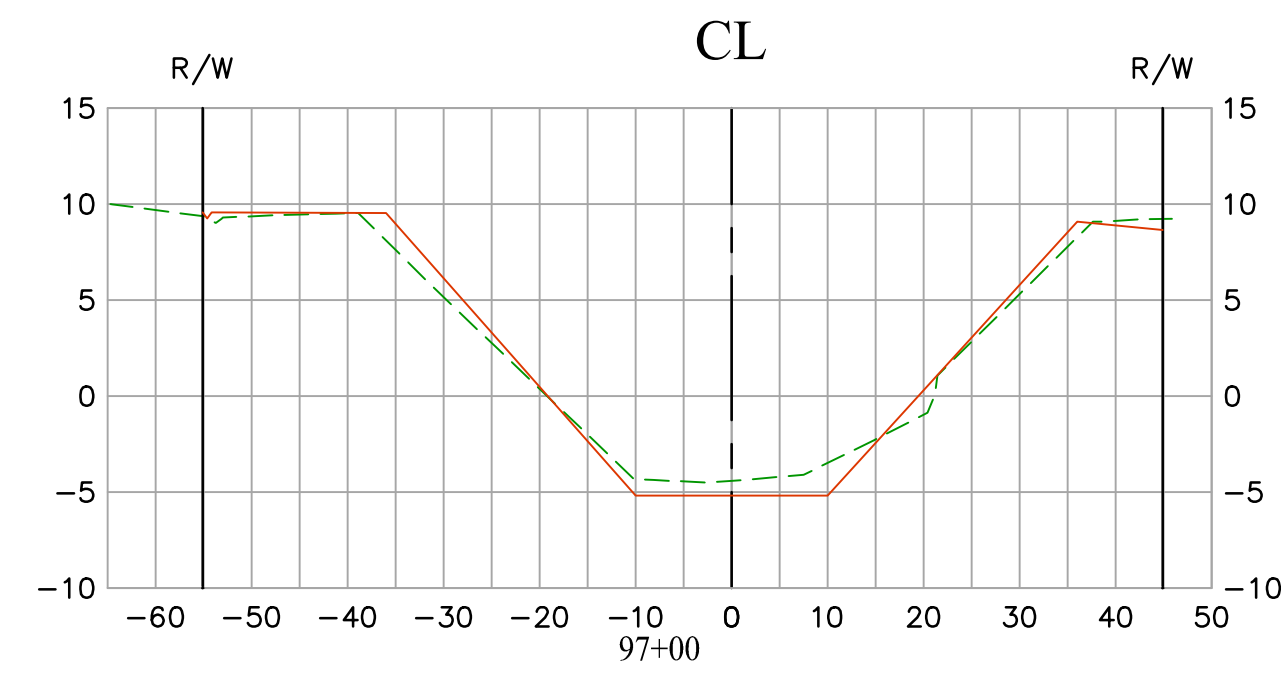
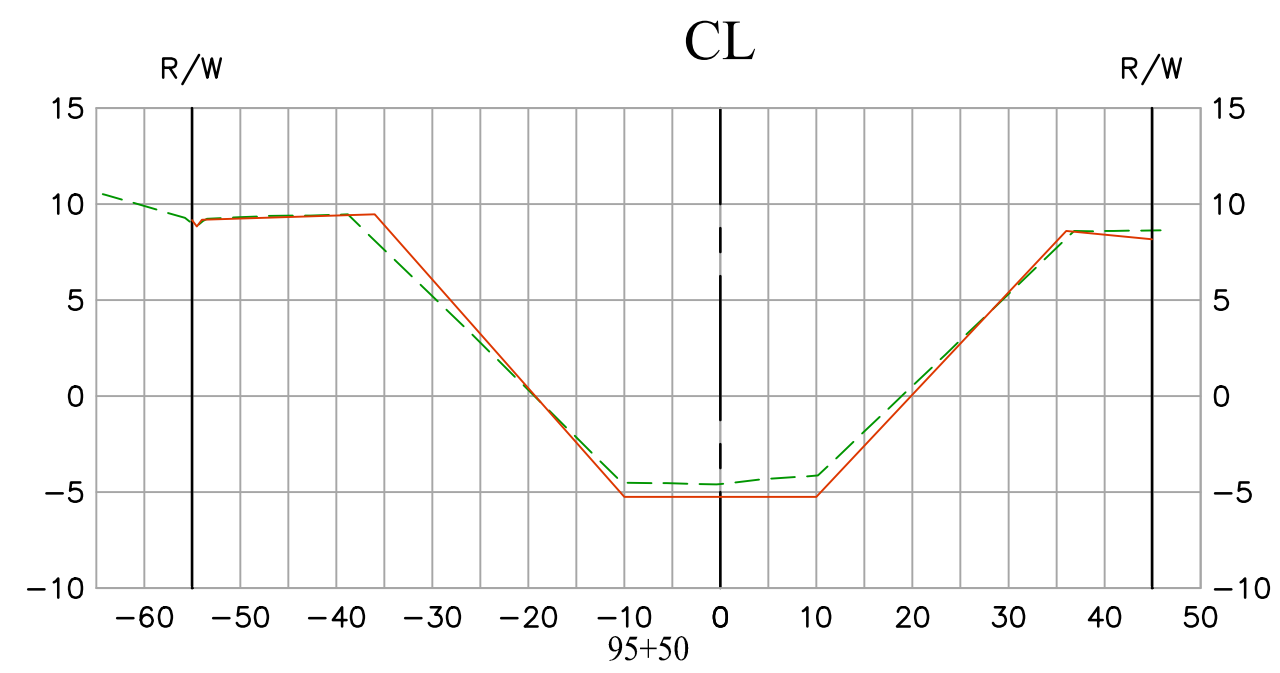
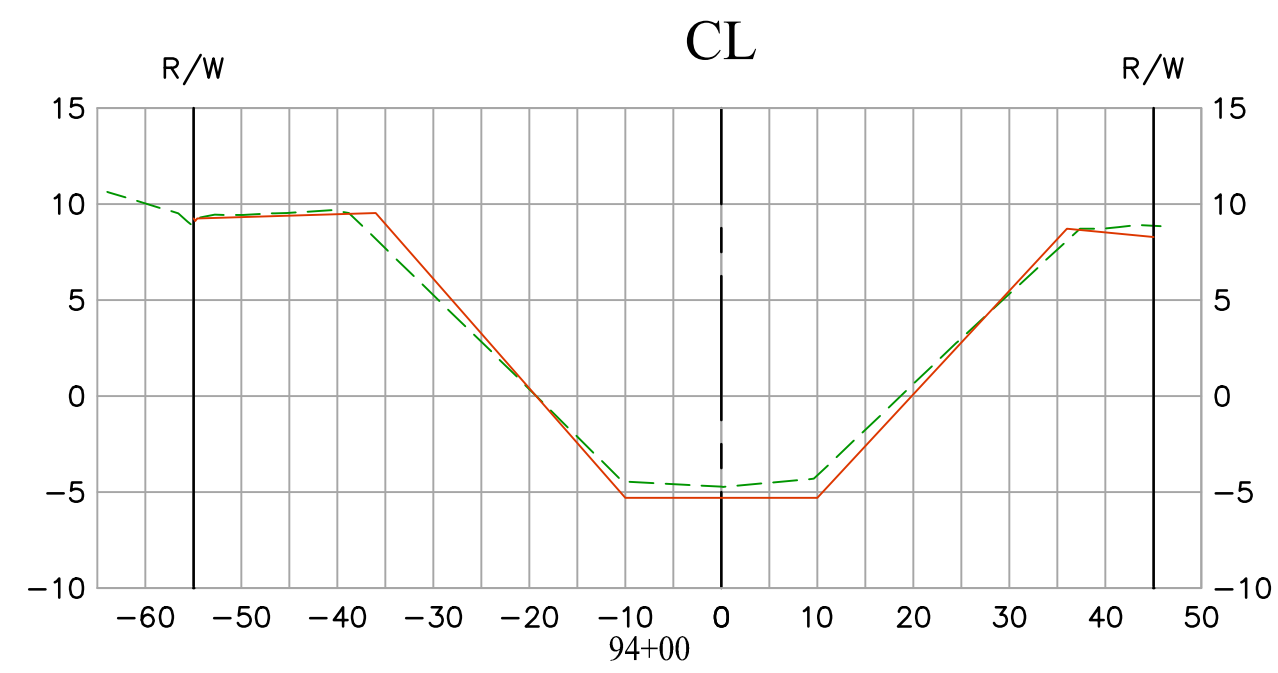
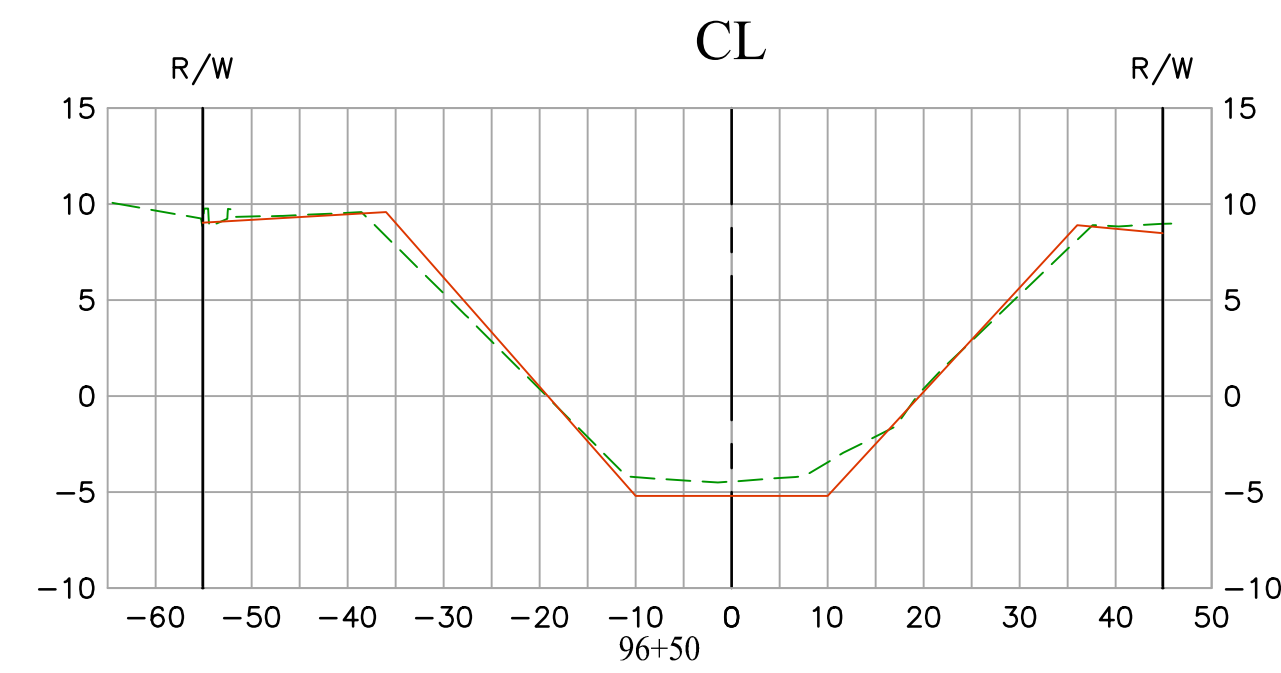
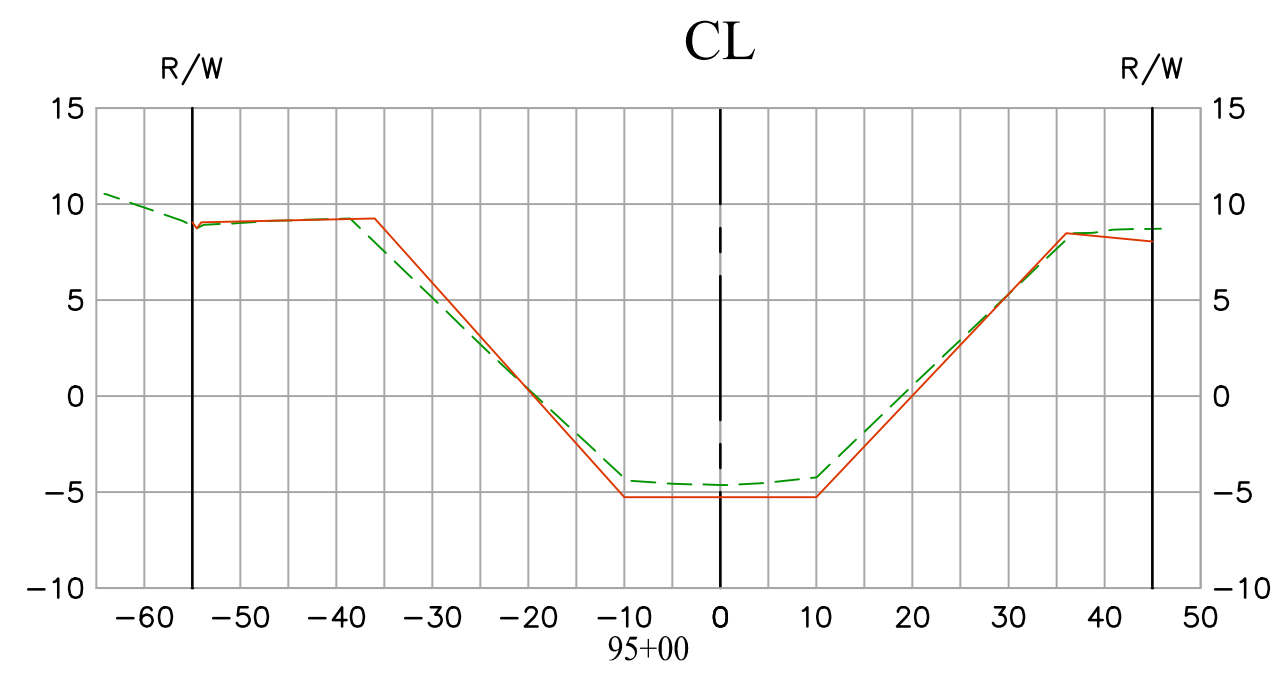
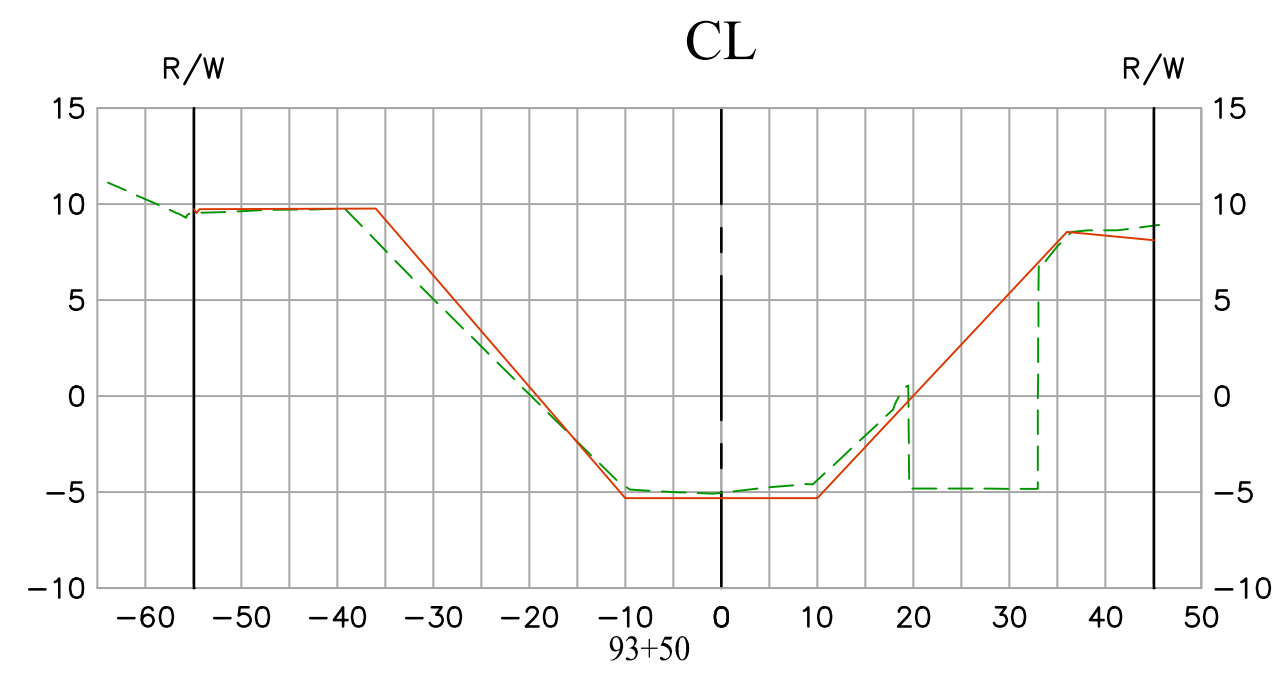




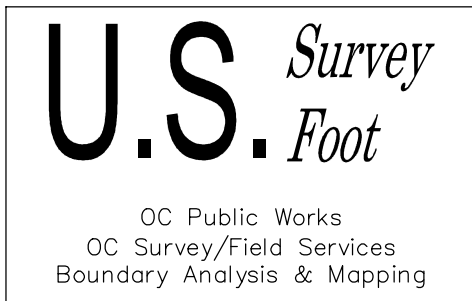
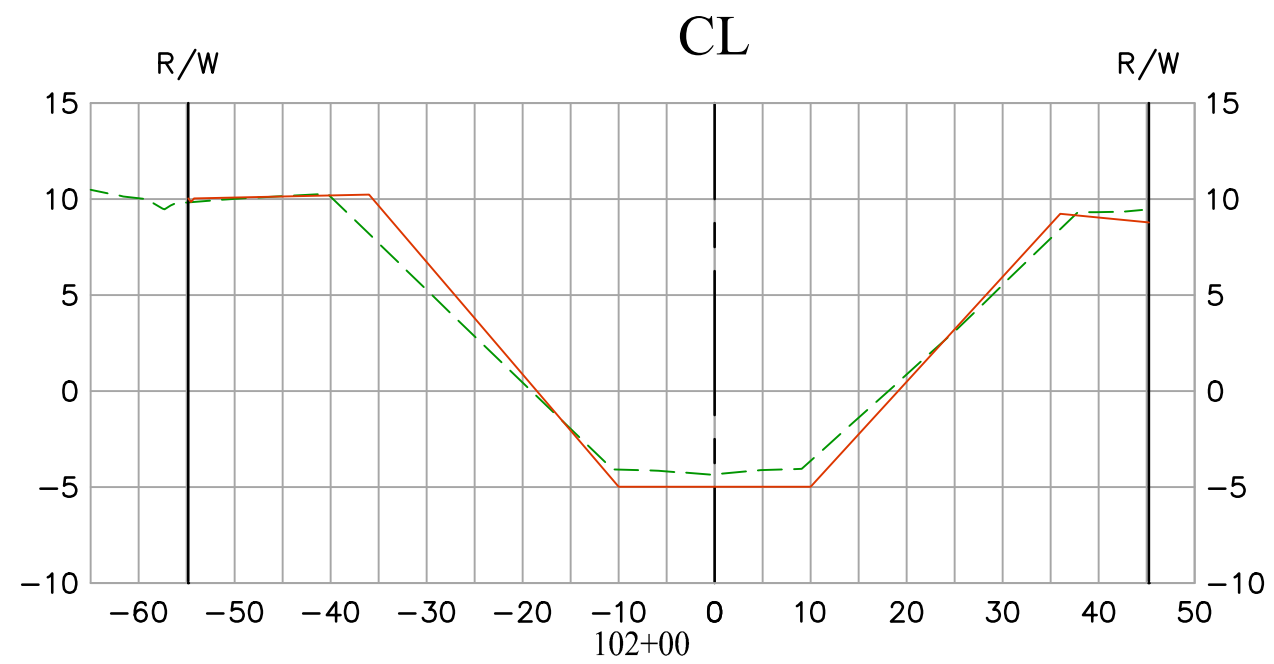
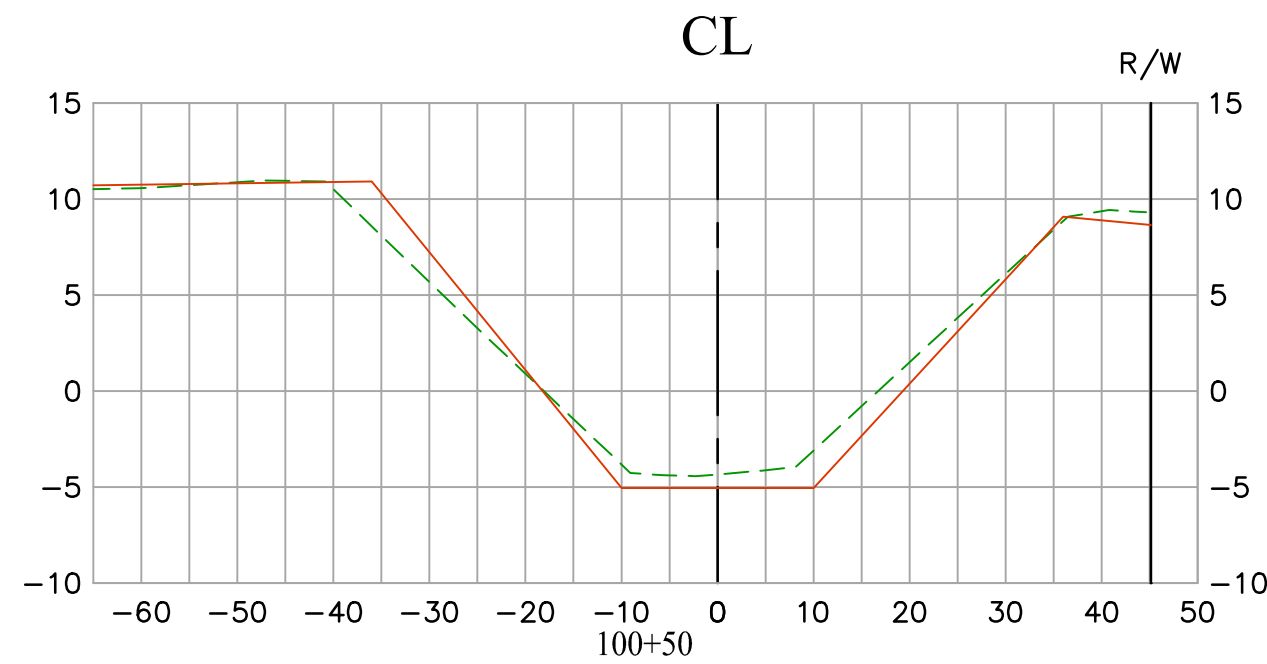
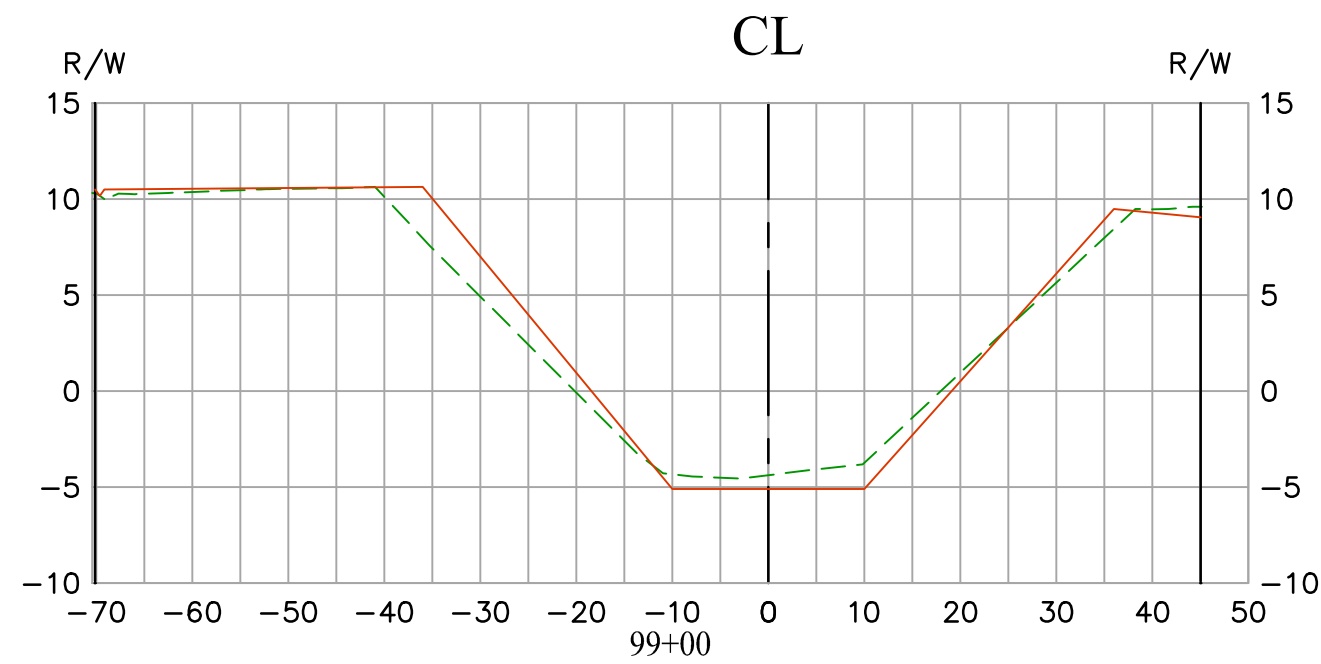
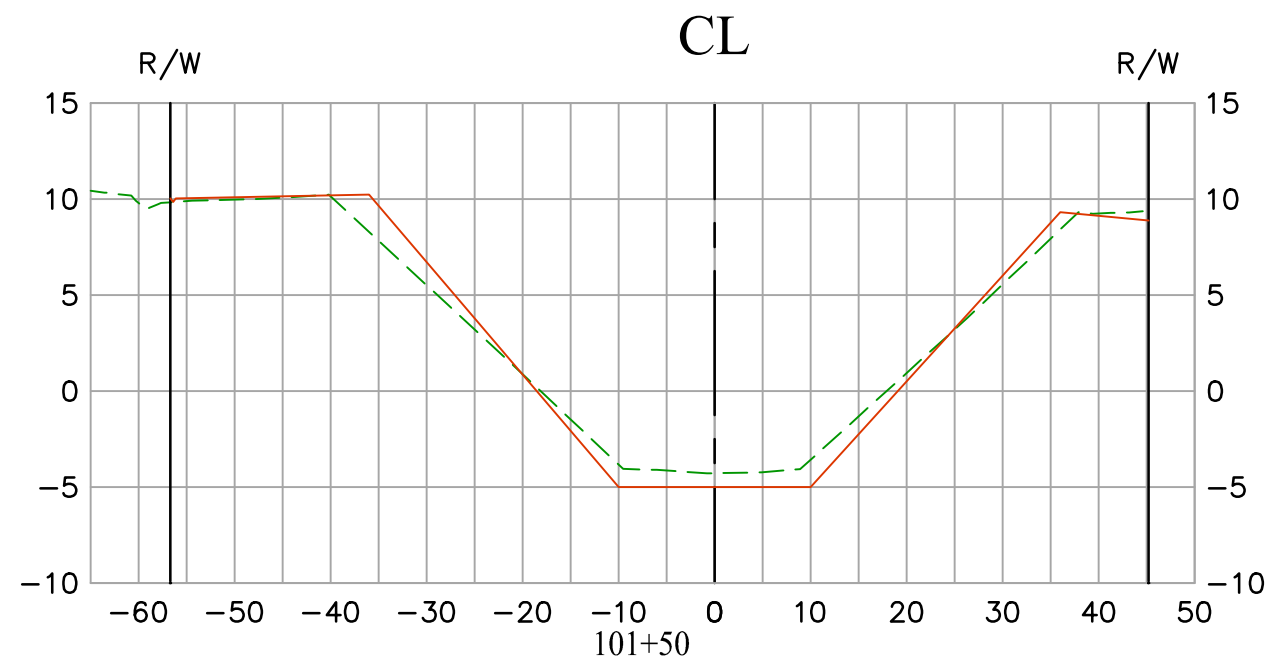
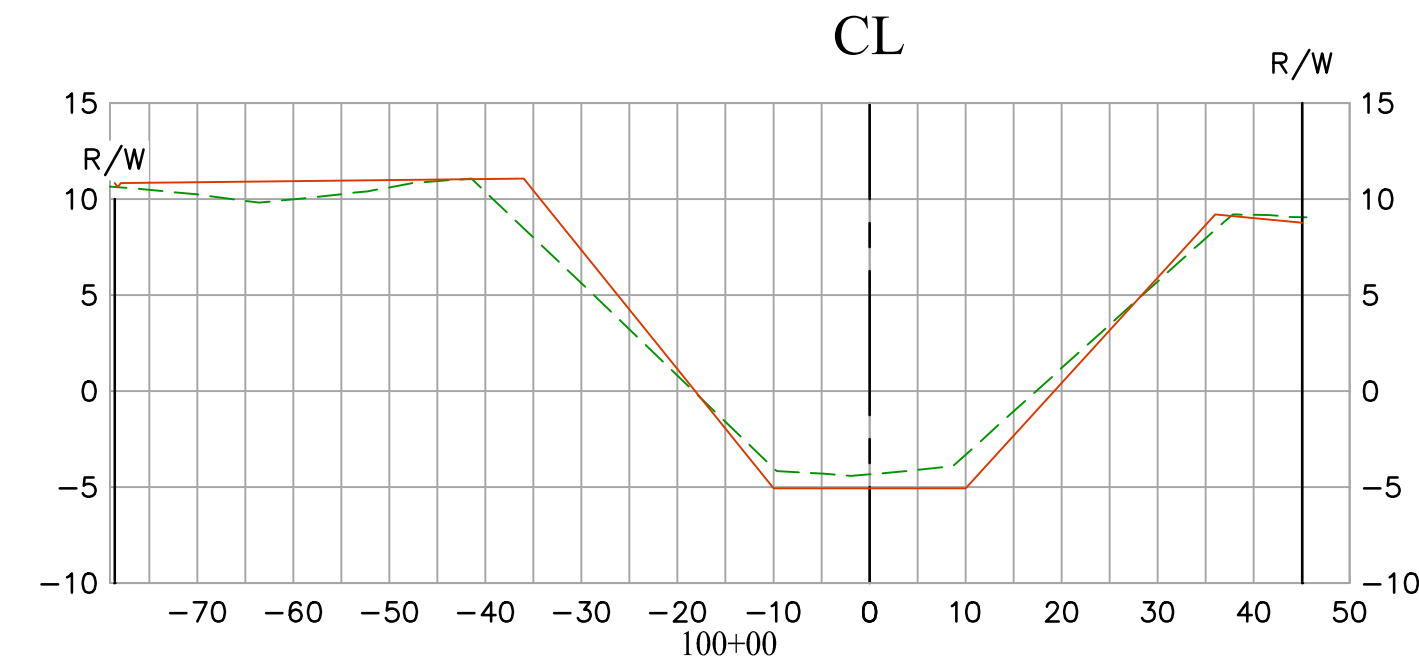
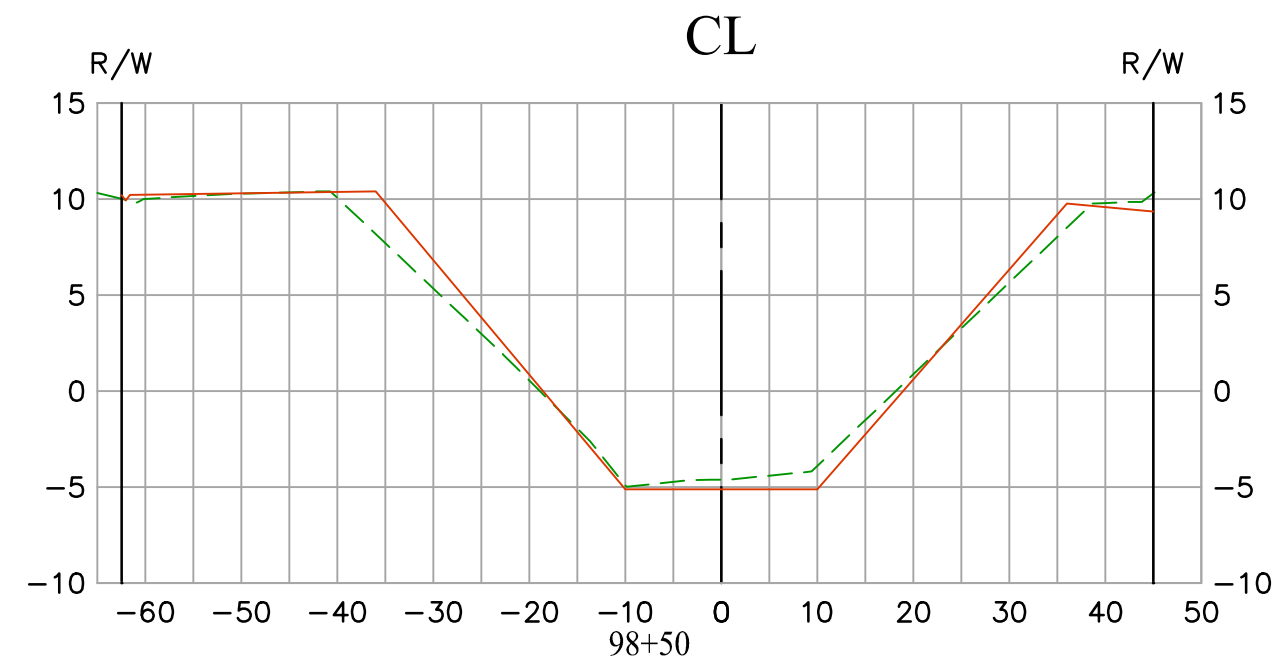
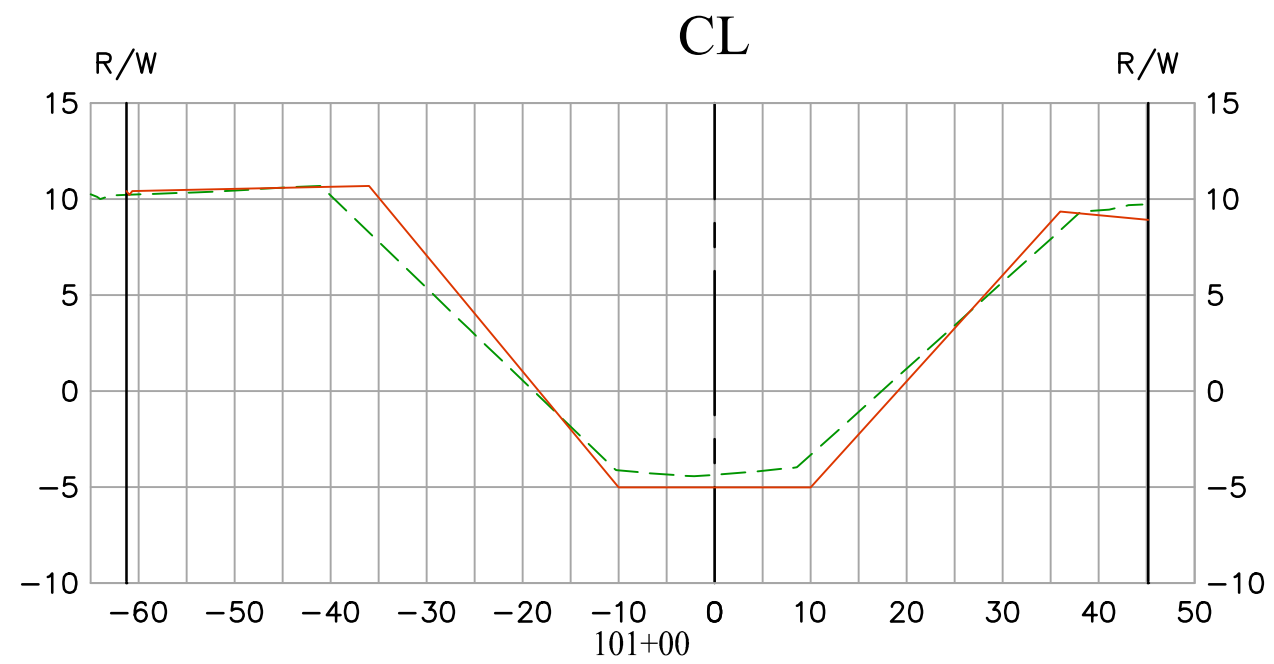
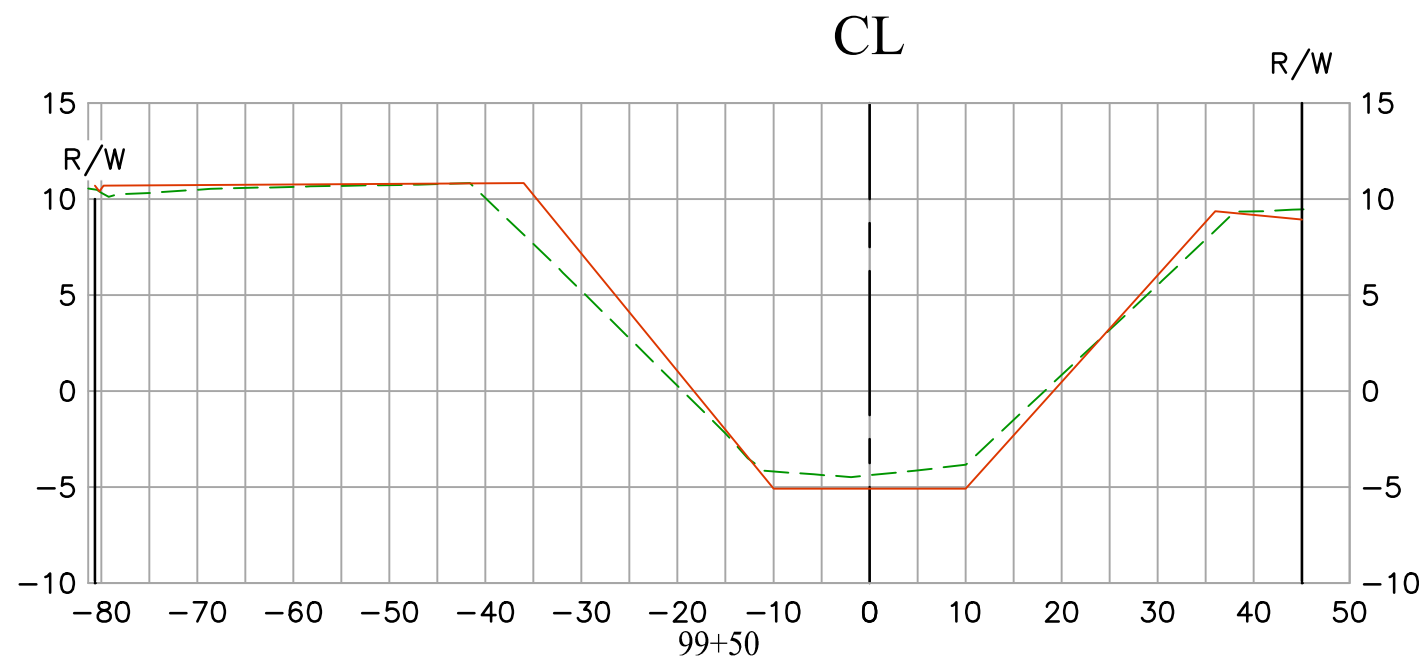
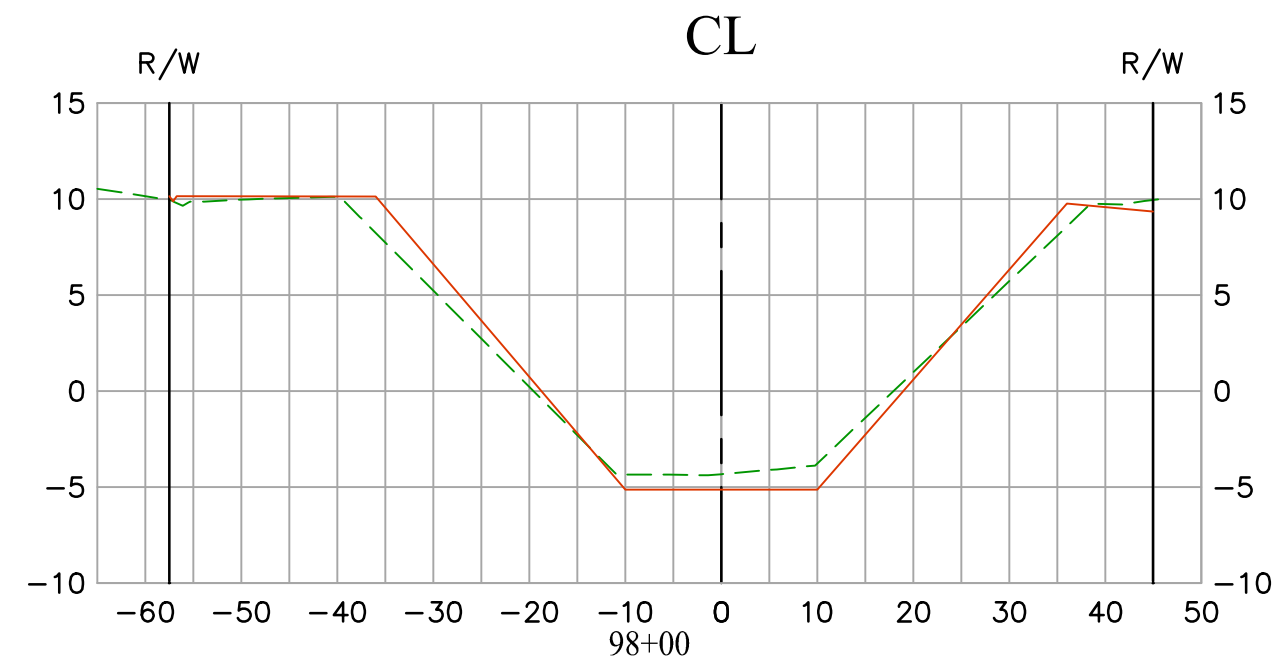


			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
			SECTIONS		
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>19</b> of <b>23</b>
			MAPPING	BY: A. YU / H. AFTIM	
			OFFICE CHECK	BY: J. MORENO, PLS	
			FIELD CHECK	BY: J. JOHNS	
			SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PR0001
			FILE: LOS ALAMITOS CHANNEL (C01) 1A 0101EN 2022 FIDW IMPROVEMENTS SECTIONS 2021.DWG		
MARK	DATE	ITEM	REVISIONS		







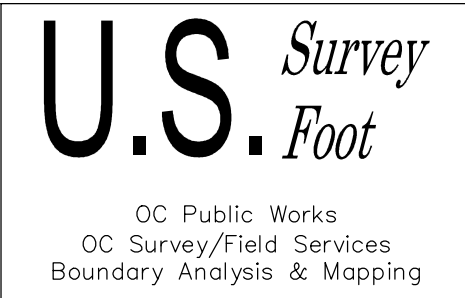
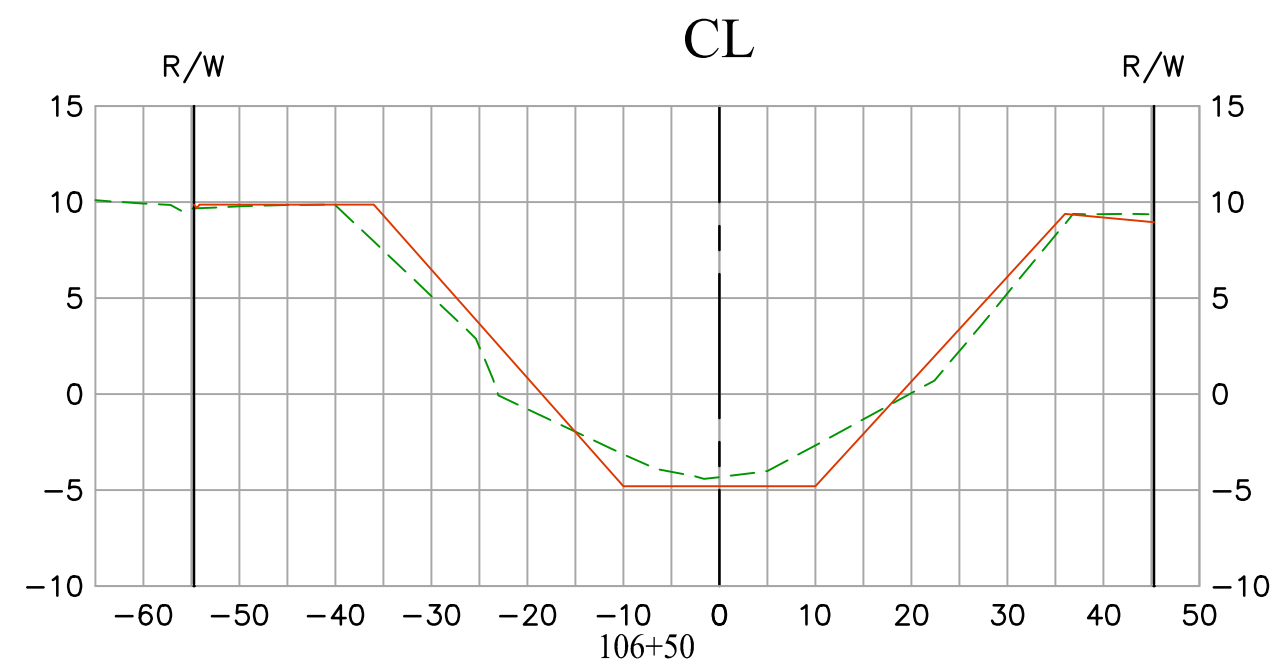
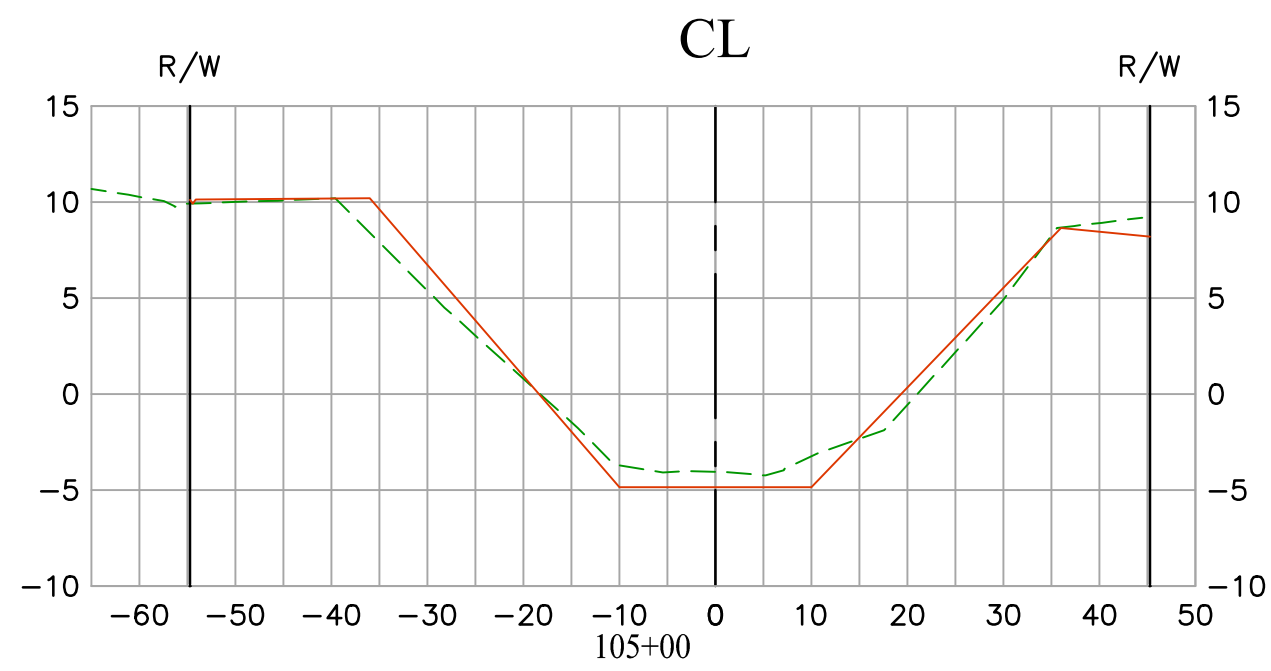
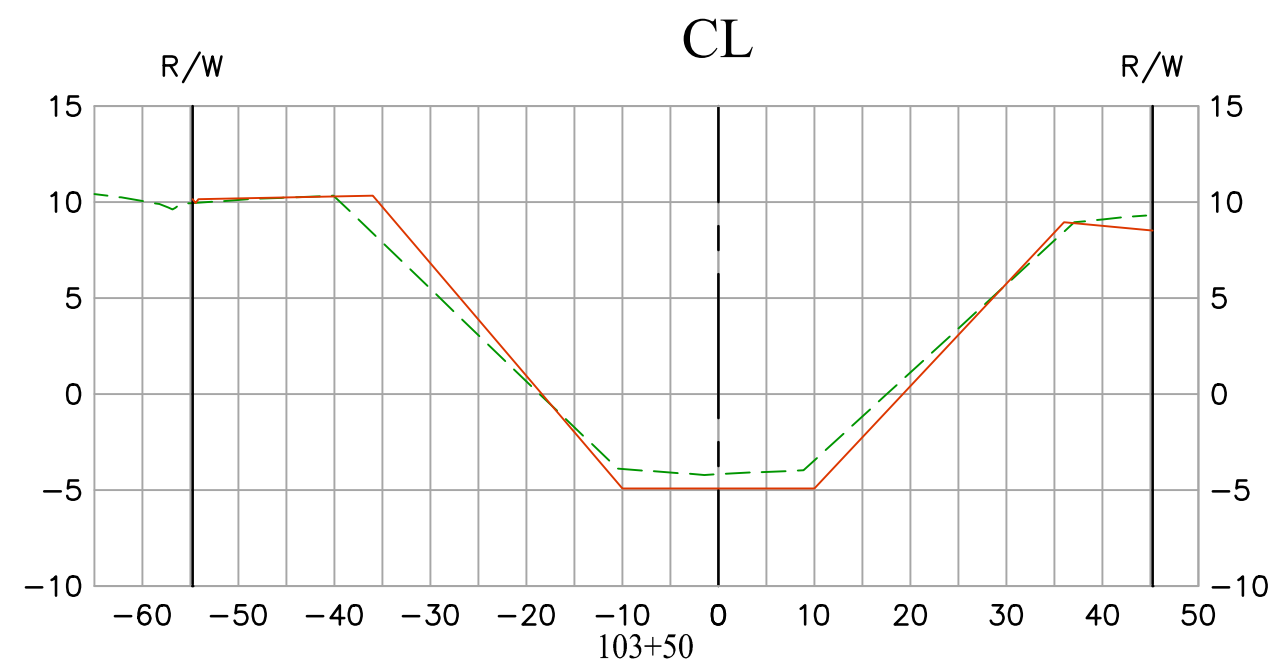
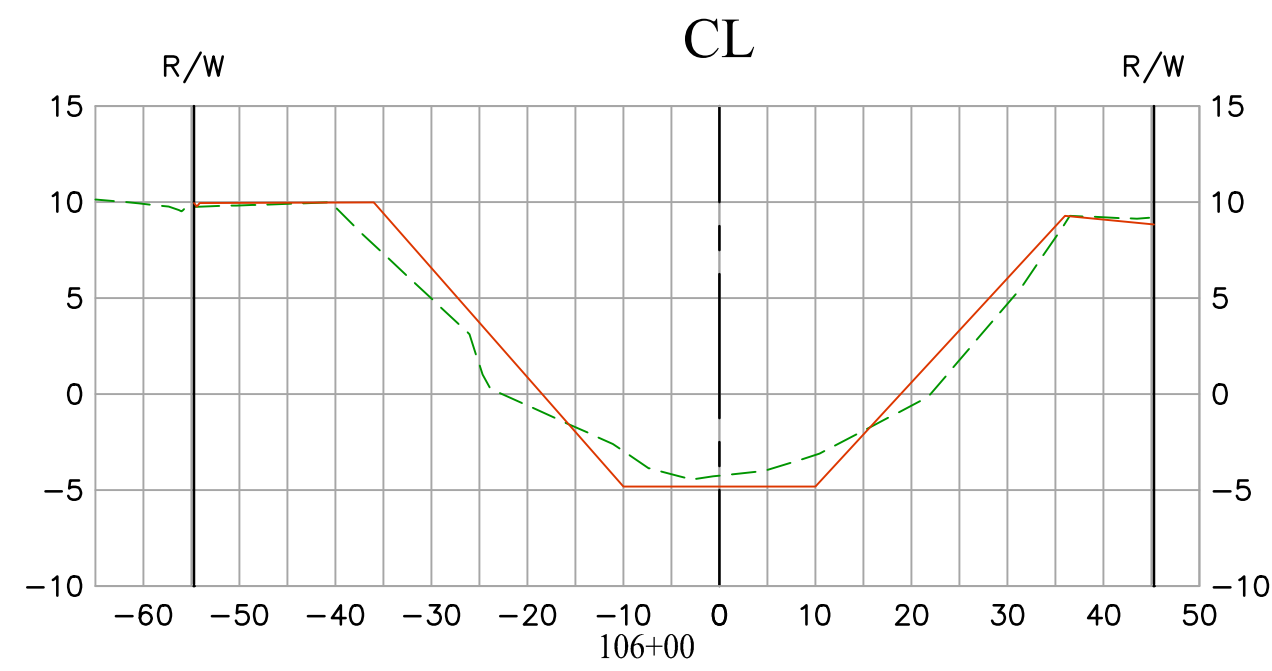
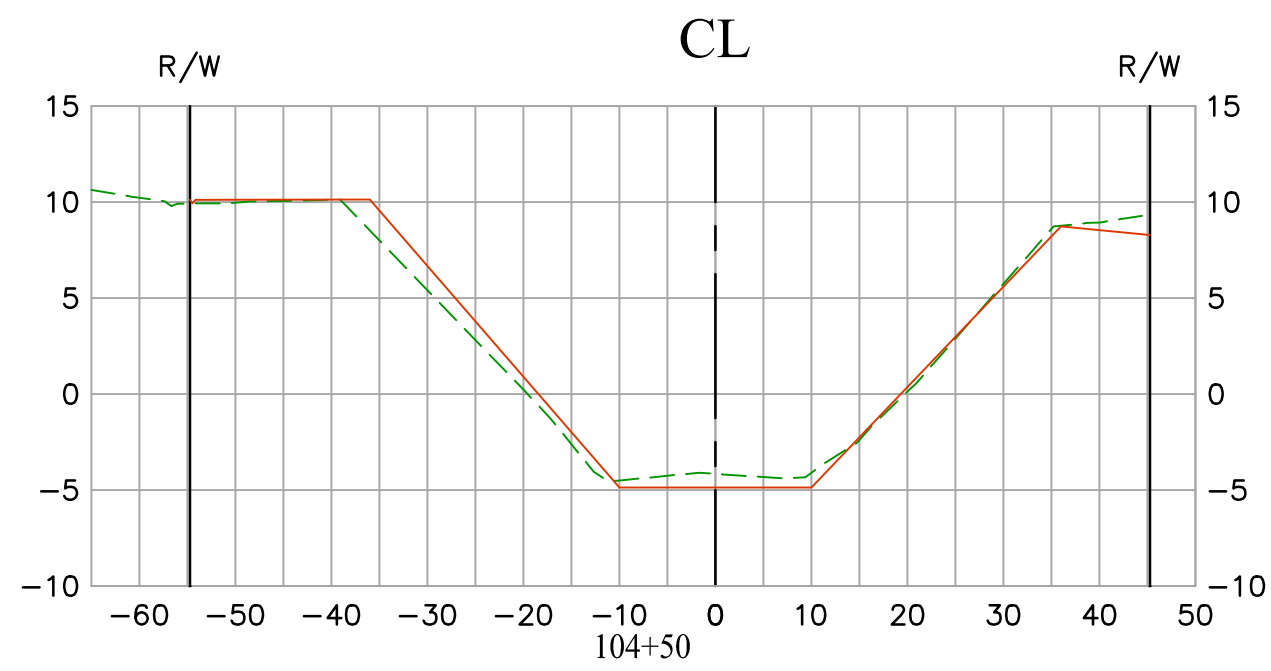
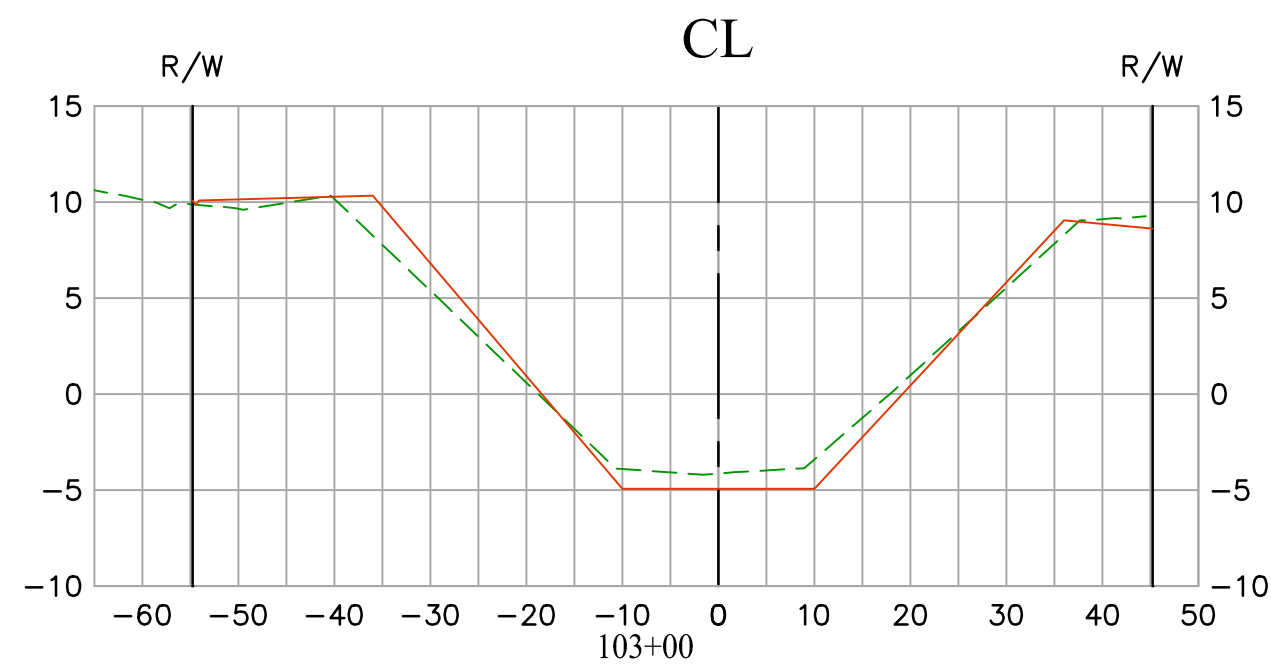
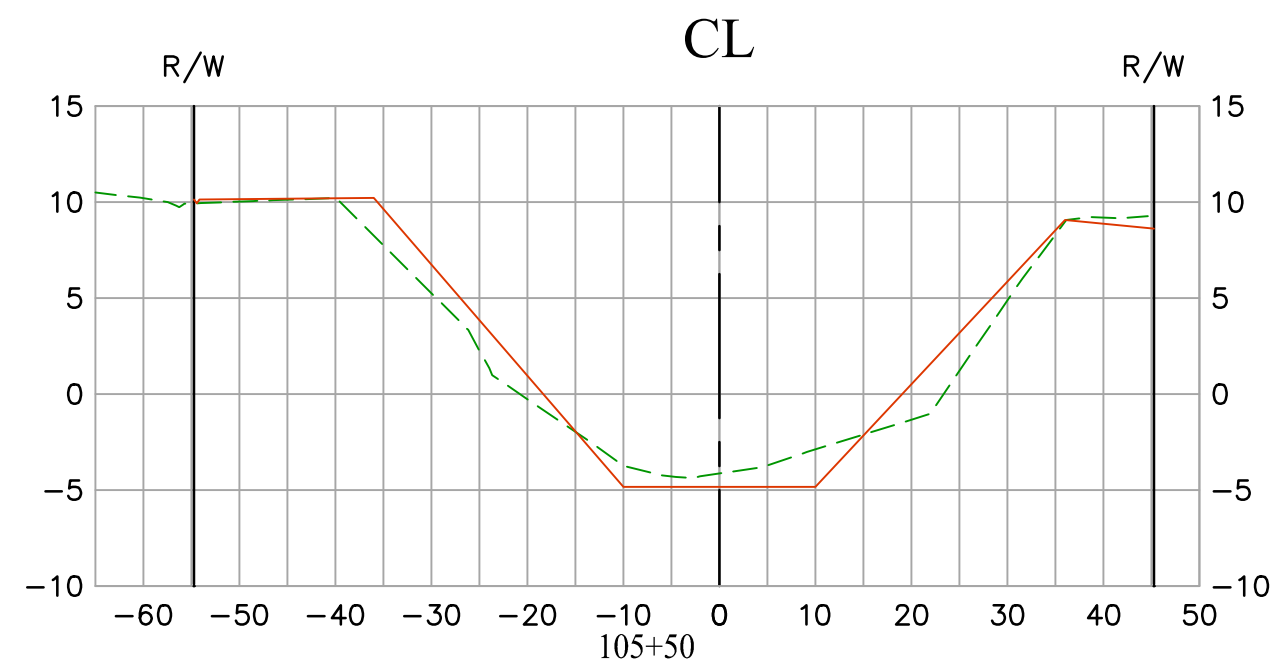
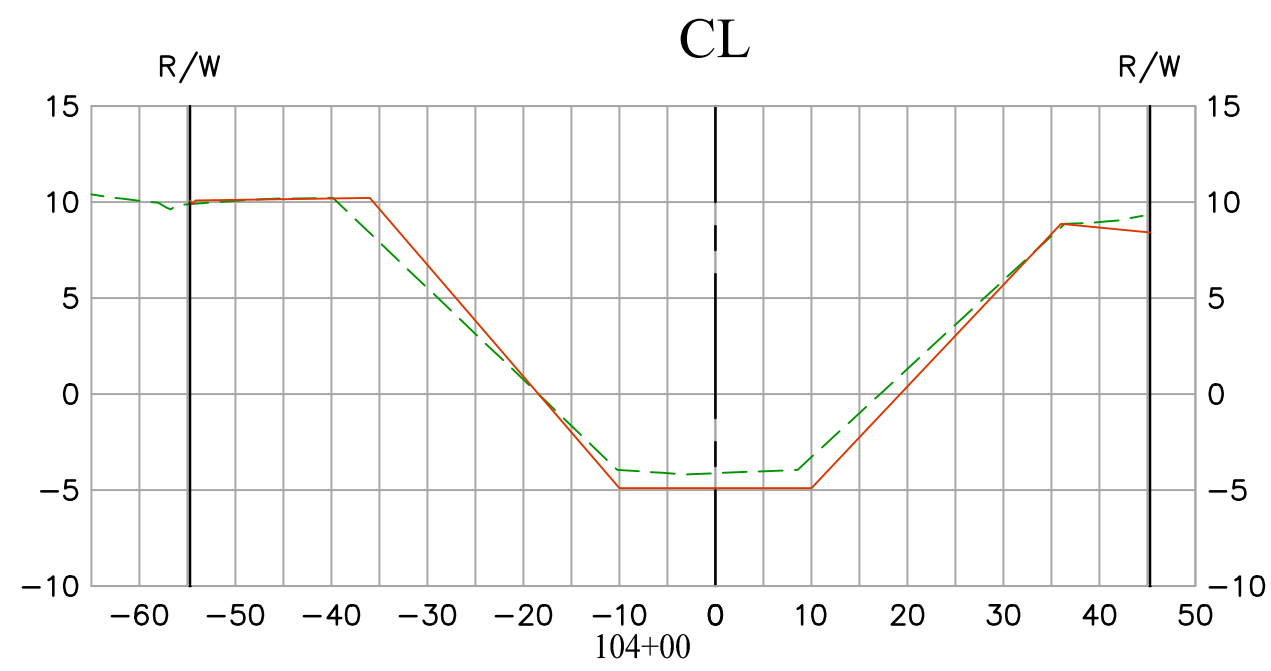
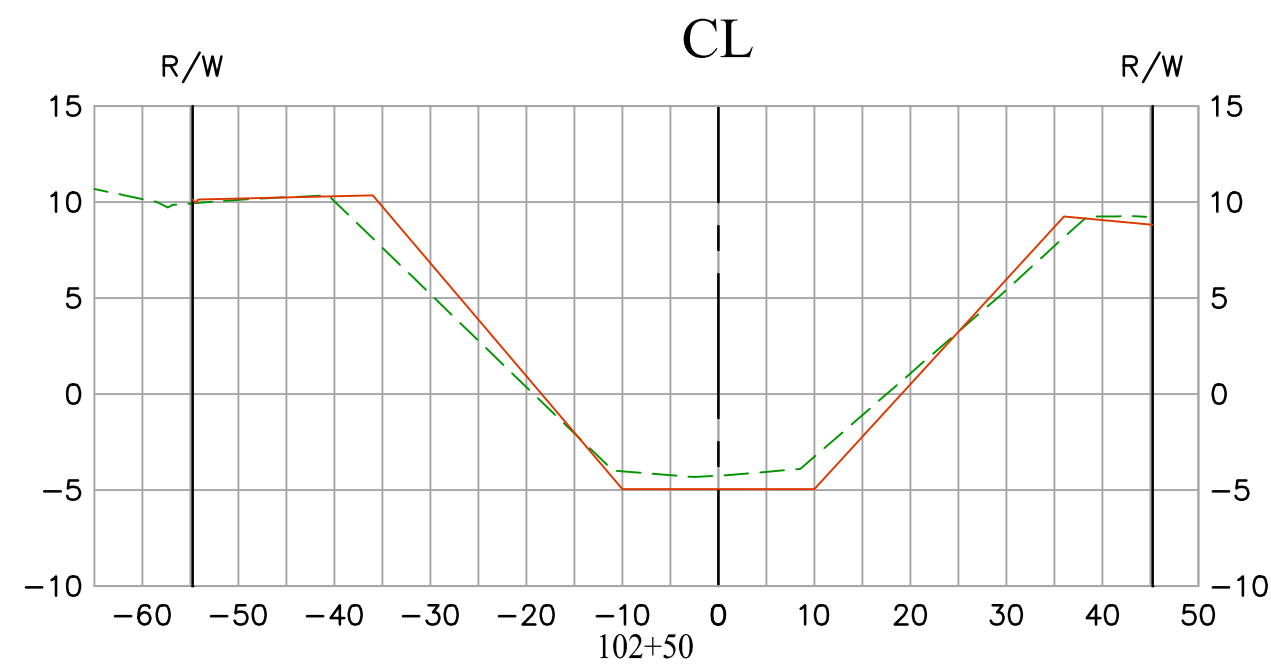


EXISTING CONDITION 12/24/2020  
RECORD DRAWINGS: C01-701-1A  
DATE PREPARED: 12/13/2021

Vert. Scale: 1"=10'  
Hor. Scale: 1"=20'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
			SECTIONS		
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. 21 of 23
			MAPPING	BY: A. YU / H. AFTIM	
			OFFICE CHECK	BY: J. MORENO, PLS	
			FIELD CHECK	BY: J. JOHNS	
			SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PRO001
			FILE: LOS ALAMITOS CHANNEL (C01) 1: AROPHEN 2020 FIDW IMPROVEMENTS_SECTIONS_2021.DWG		
MARK	DATE	ITEM	REVISIONS		





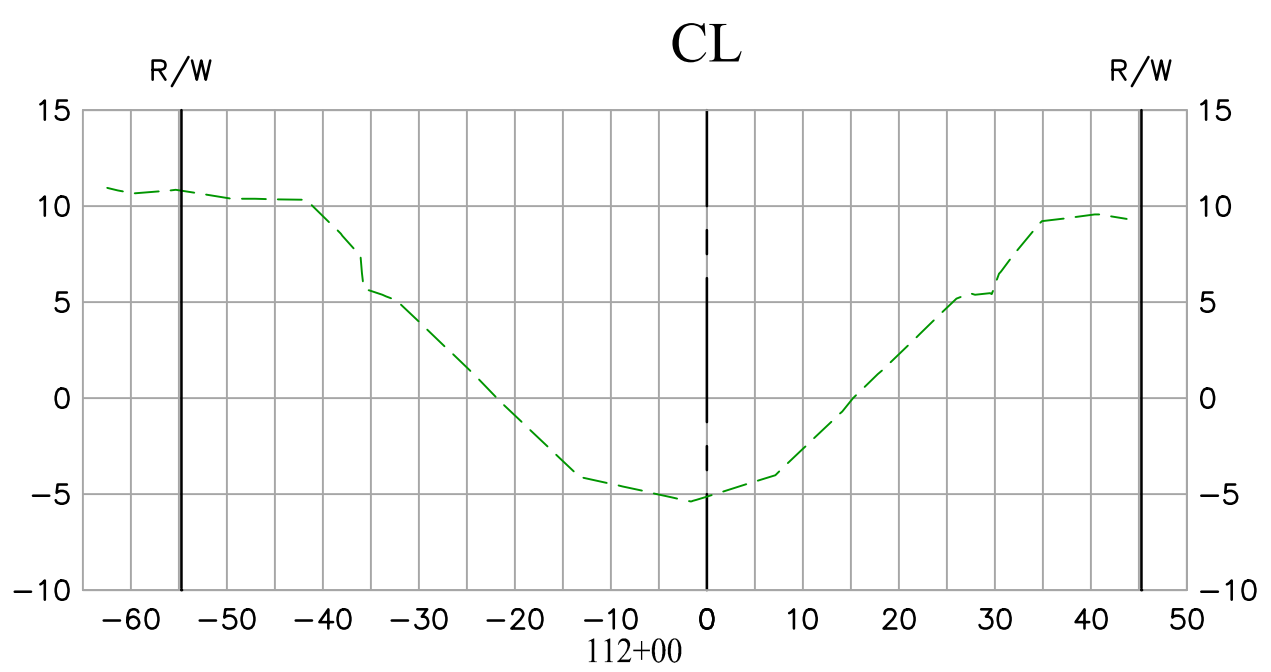
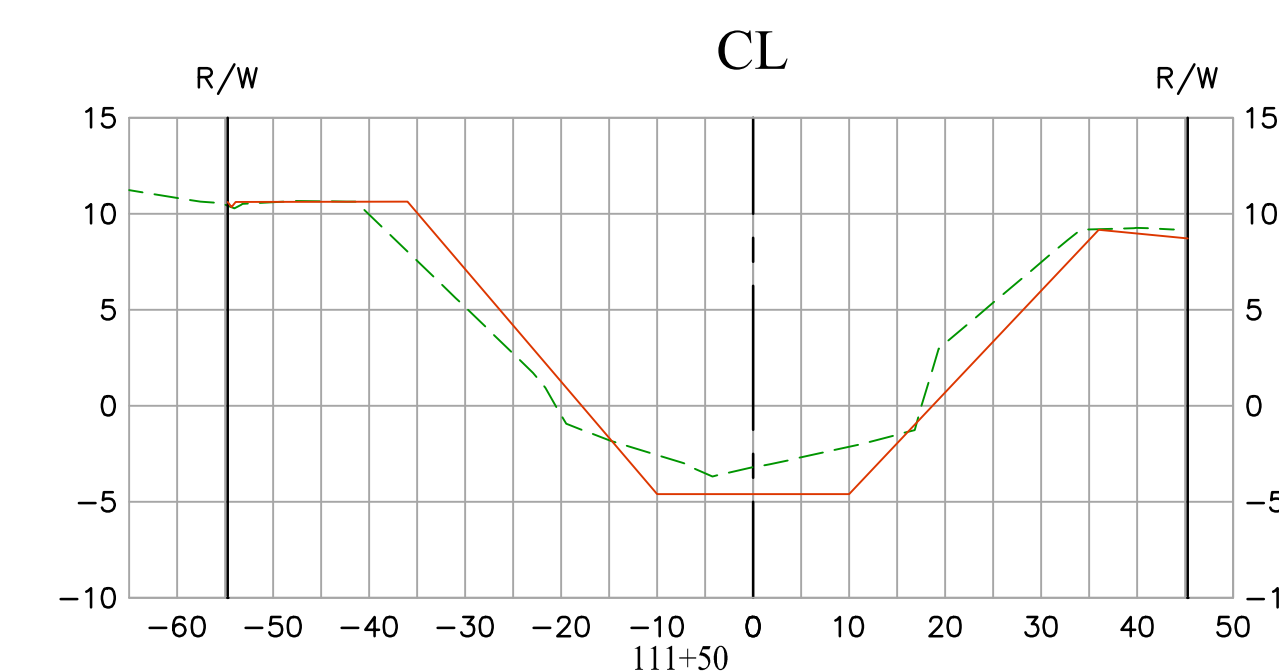
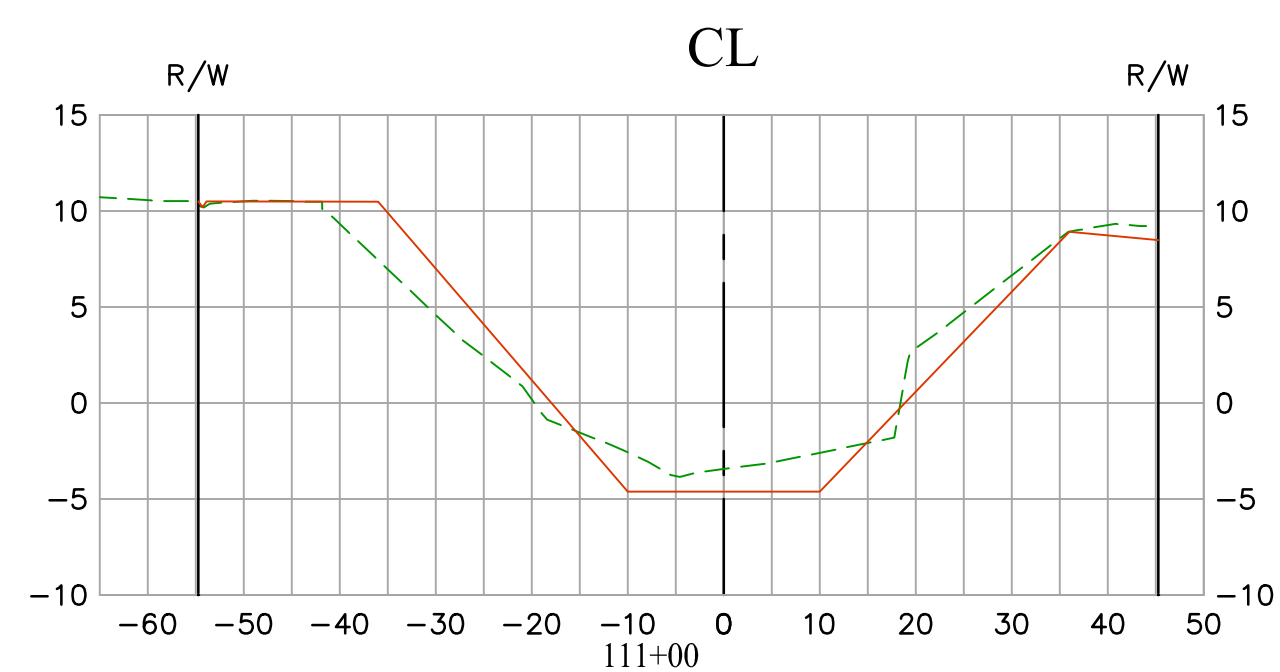
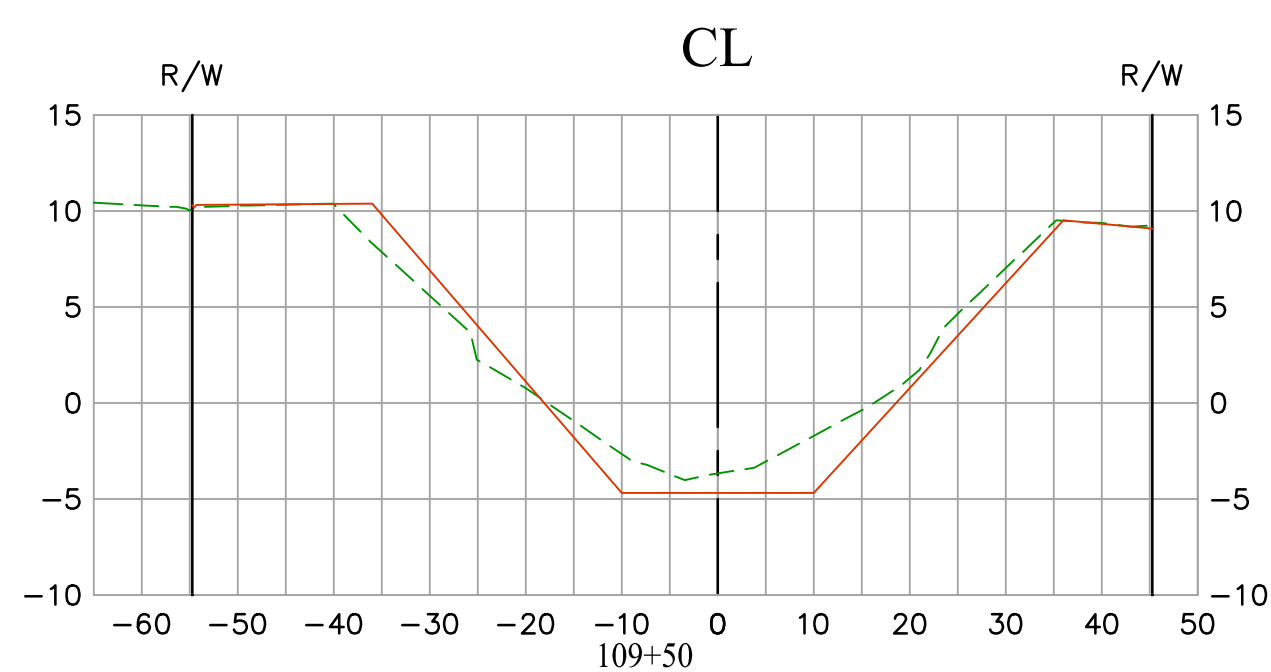
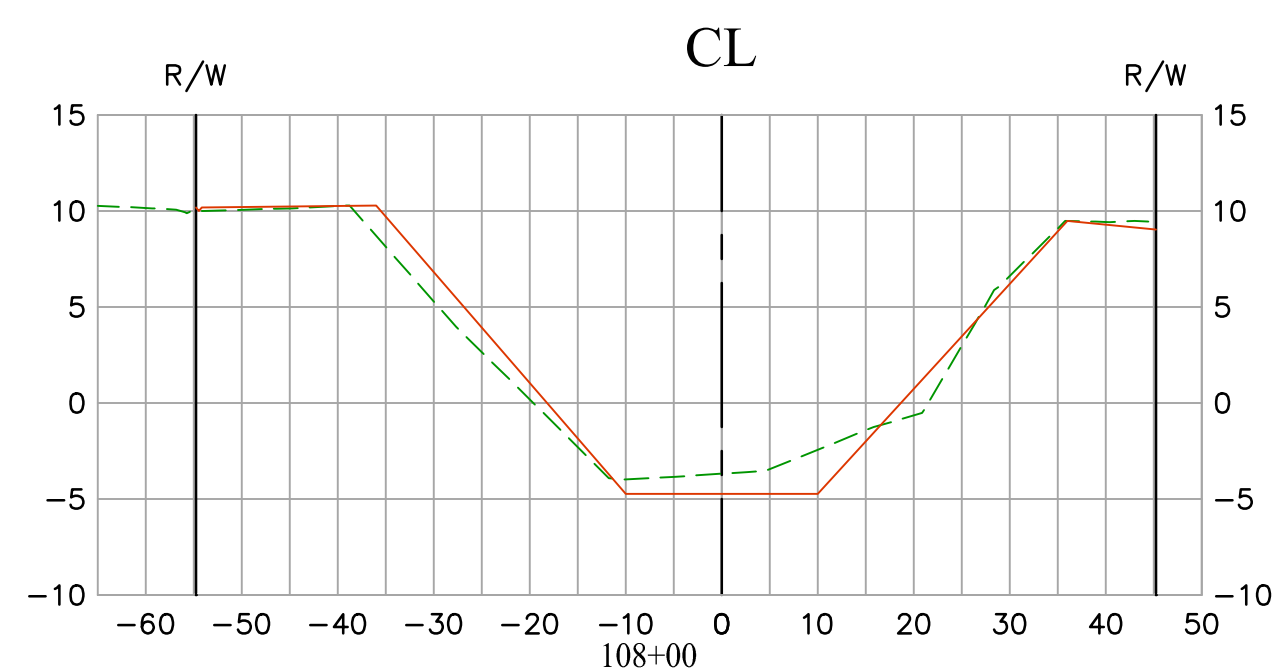
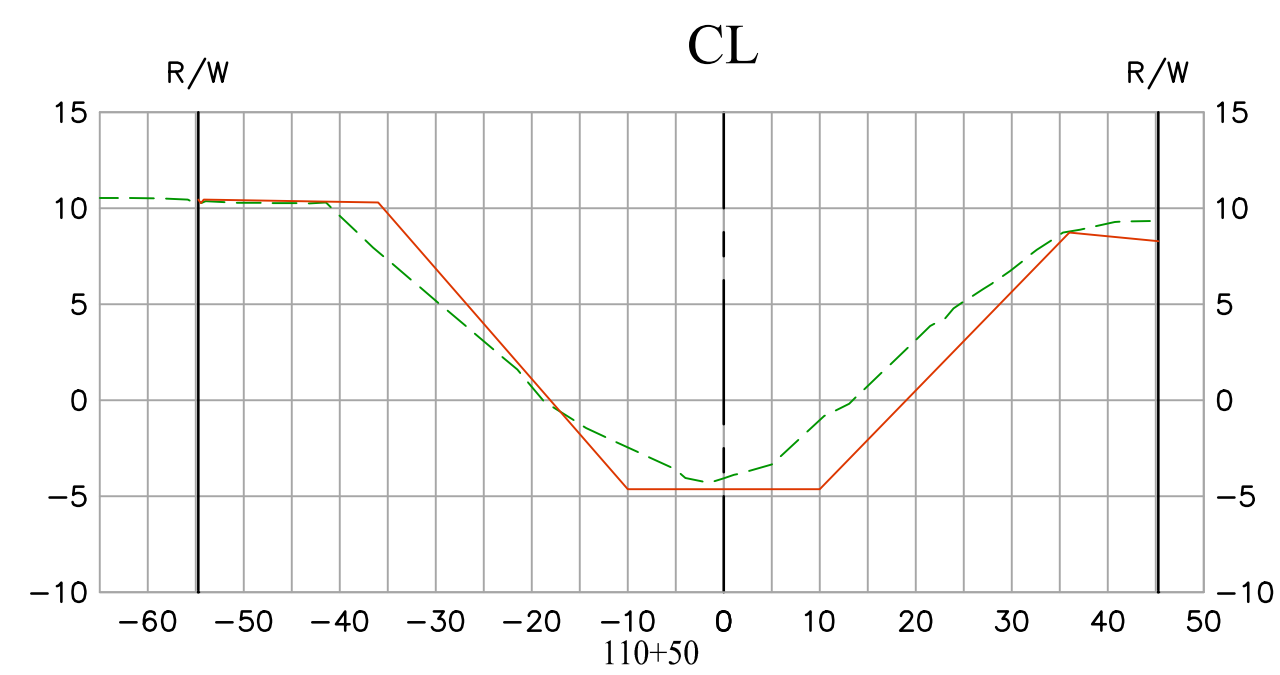
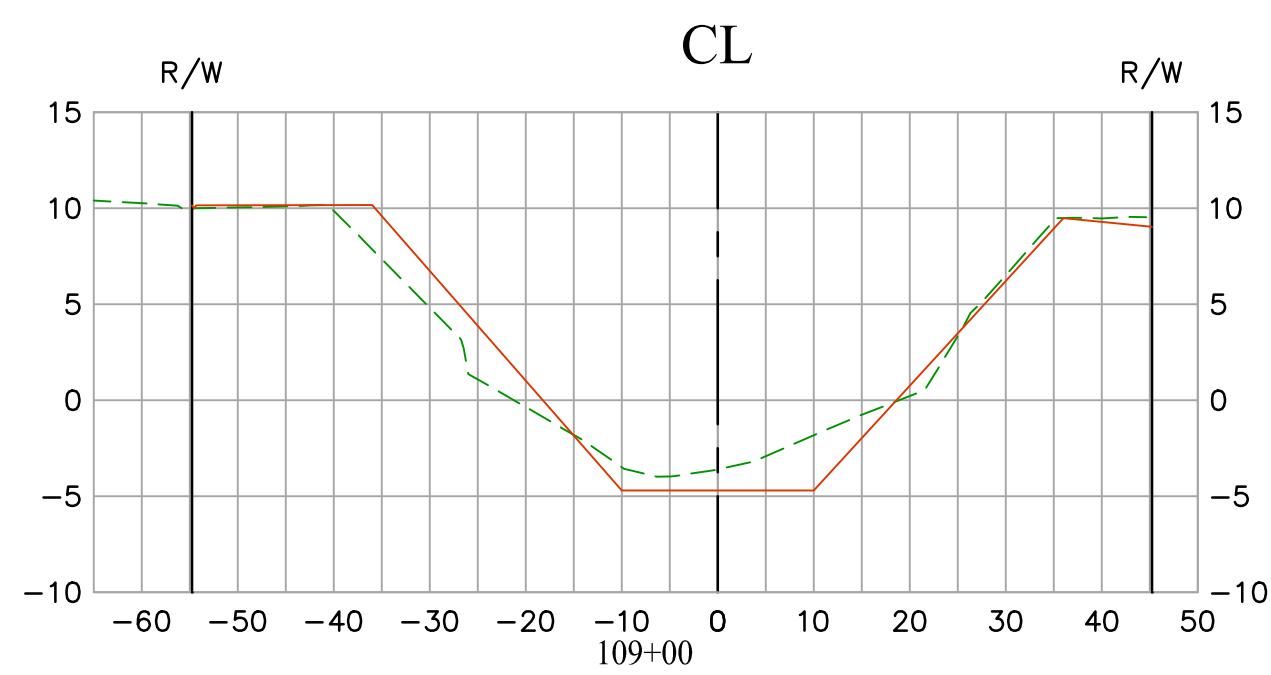
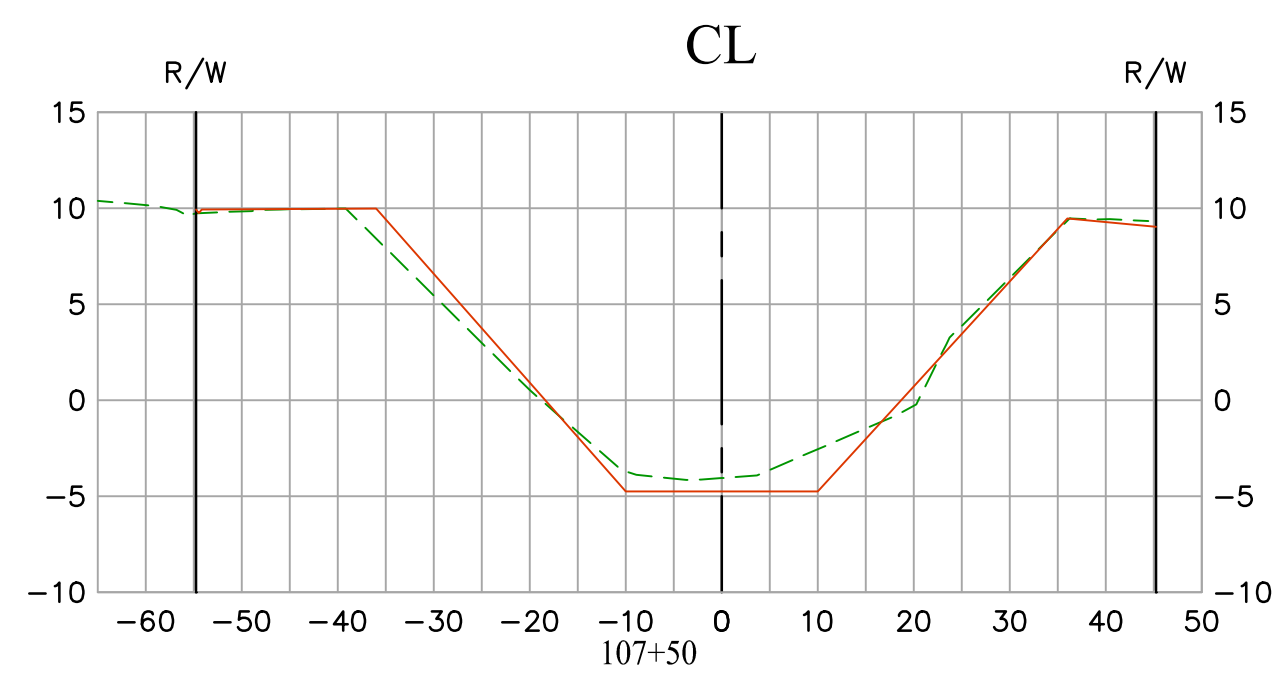
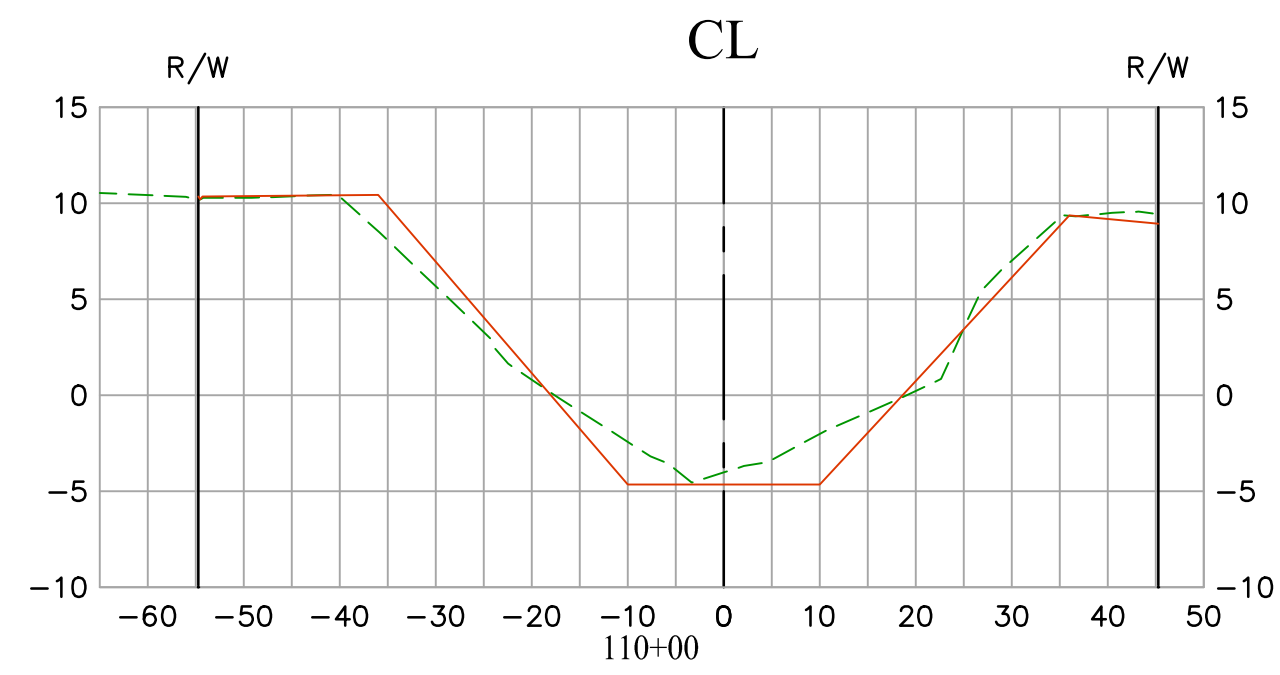
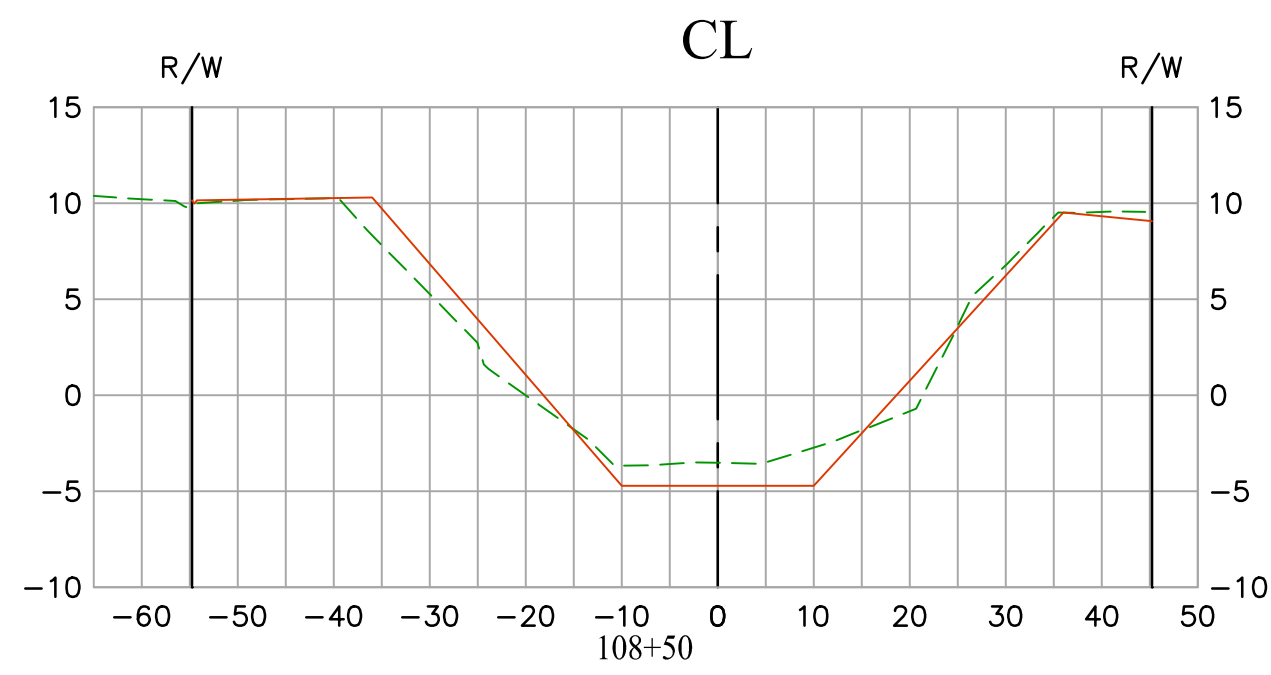
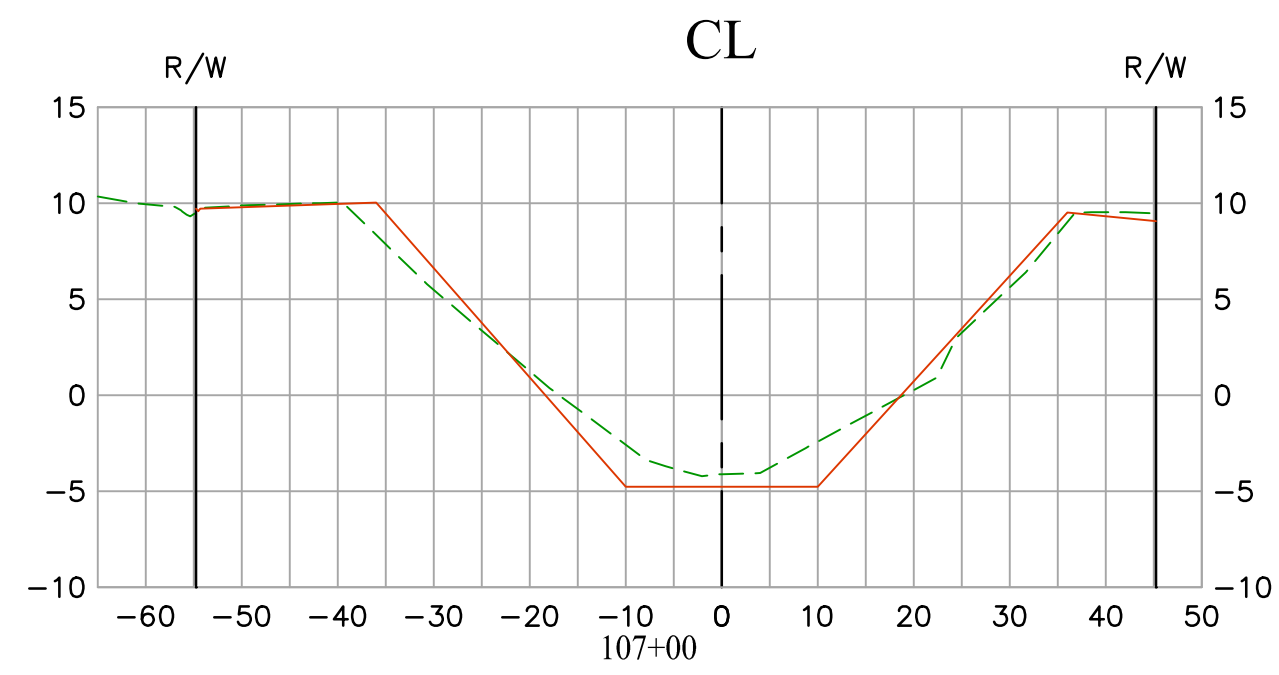
EXISTING CONDITION 12/24/2020  
RECORD DRAWINGS: C01-701-1A  
DATE PREPARED: 12/13/2021

Vert. Scale: 1"=10'  
Hor. Scale: 1"=20'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS	
			SECTIONS	
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)	
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS
			MAPPING	BY: A. VU / H. AFTIM
			OFFICE CHECK	BY: J. MORENO, PLS
			FIELD CHECK	BY: J. JOHNS
			SCALE: 1" = 20'	W.O. #EF20403P
			FILE: #2021PW-PRO001	
			FILE: LOS_ALAMITOS_CHANNEL(C01)EARTHEN_SLOPE_IMPROVEMENTS_SECTIONS_2021.DWG	
MARK	DATE	ITEM		
REVISIONS				

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22  
of  
23





			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS		
			SECTIONS		
			PROJECT LIMITS: FROM WESMINSTER BLVD. (DOWNSTREAM) TO GARDEN GROVE FREEWAY (UPSTREAM)		
			DATE OF SURVEY: 12/24/2020	BY: J. JOHNS	SHEET NO. <b>23</b> of <b>23</b>
			MAPPING	BY: A. YU / H. AFTIM	
			OFFICE CHECK	BY: J. MORENO, PLS	
			FIELD CHECK	BY: J. JOHNS	
			SCALE: 1" = 20'	W.O. #EF20403P	FILE #2021PW-PRO001
			REVISIONS		
			FILE: LOS ALAMITOS CHANNEL (C01) EARTHEN SLOPE IMPROVEMENTS SECTIONS 2021.DWG		