

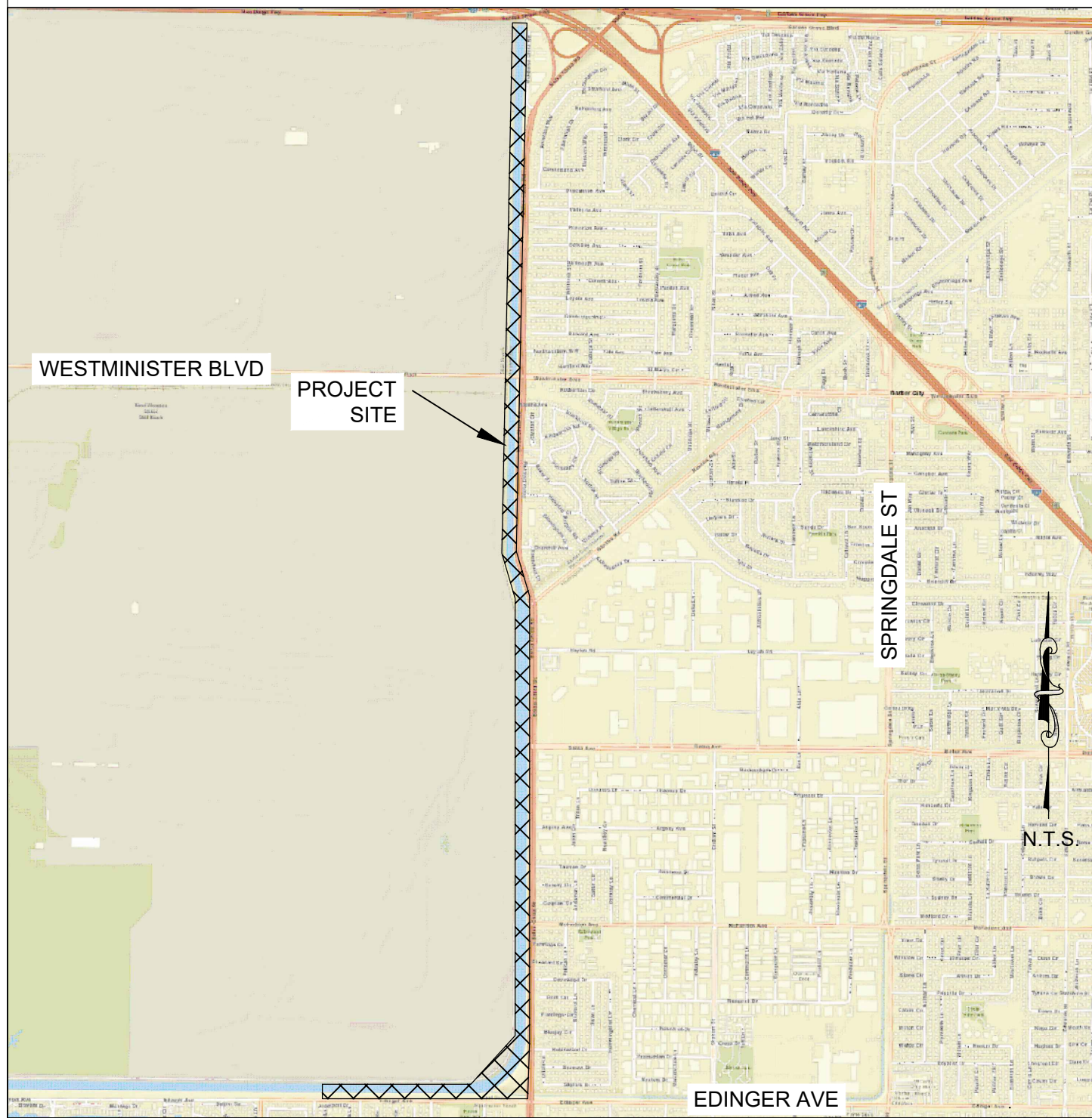


OC PUBLIC WORKS DEPARTMENT
JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS
KEVIN HILLS, COUNTY SURVEYOR
BOLSA CHICA CHANNEL (C02) PHASE II
LIMITS: EDINGER AVE TO 405 FREEWAY



FD CGPS "LBC2"
N 2237057.28'
E 5977358.87'
THIS IS AS CONTINUOUS GPS STATION
(CGPS) AND IS PART OF THE
CALIFORNIA SPATIAL REFERENCE
NETWORK (CSRN). FROM WHICH DATA
CAN BE DOWNLOADED HERE:
HTTP://SOPACCSRC.UCSO.EDU/

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 16TH DAY OF JUNE, 2020.

ELLIOTT MEDINA PLS SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE
PROFESSIONAL LAND SURVEYOR'S ACT; THIS 16TH DAY
OF JUNE, 2020.

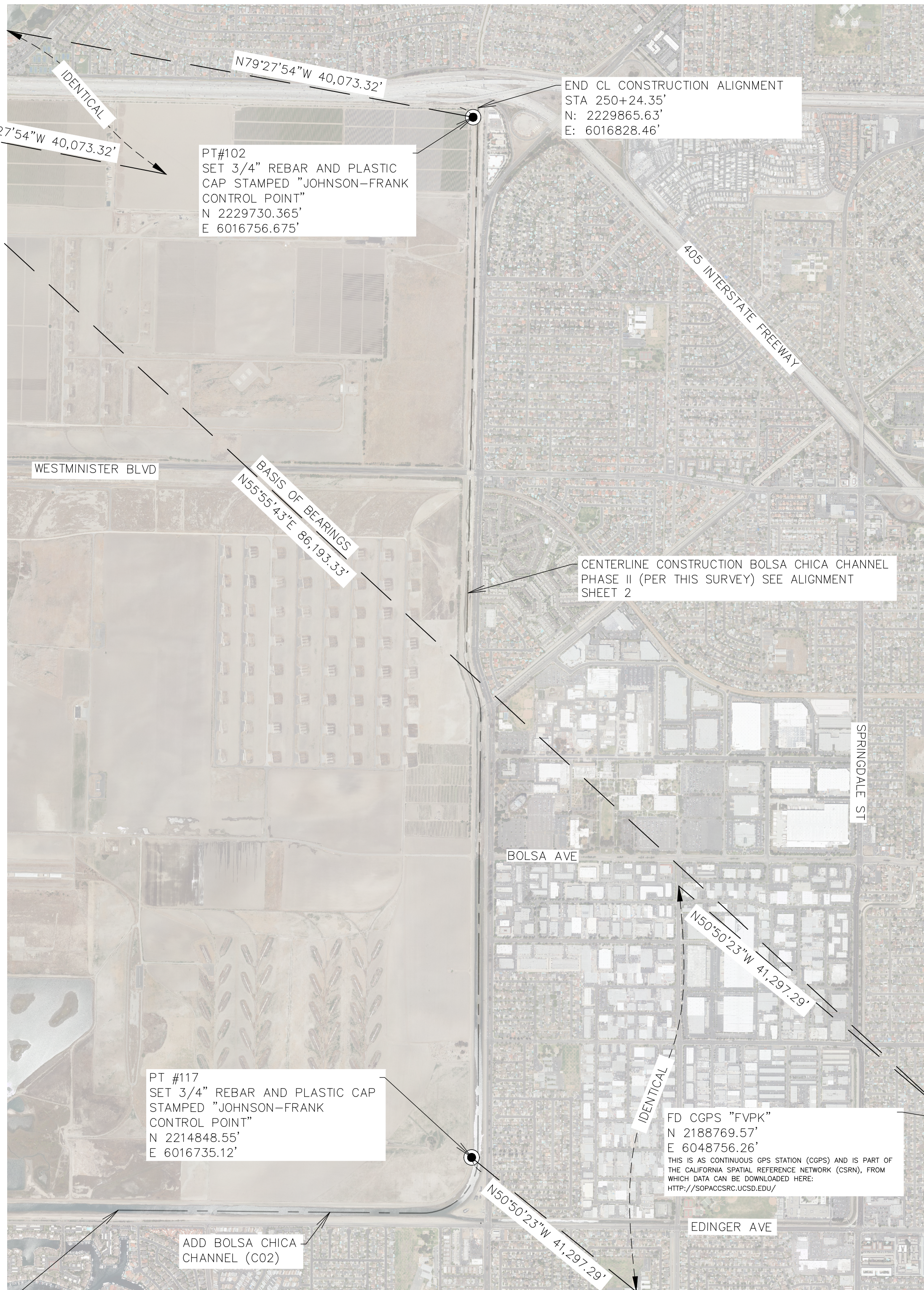
WADE WEAVER PLS DEPUTY COUNTY SURVEYOR



U.S. Survey
Foot

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

BEGIN CL CONSTRUCTION ALIGNMENT
STA 43+75.53'
N: 2214094.83'
E: 6011675.90'



TOPOGRAPHIC MAPPING PROJECT

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON THE CALIFORNIA
COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2007.00) EPOCH ADJUSTMENT,
AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING
STATIONS (CGPS) "FVPK" AND "LBC2", BEING N55°55'43"E AS DERIVED FROM THE
COORDINATES ESTABLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC)
ALONG WITH DATASHEETS ON FILE IN THE OFFICE OF ORANGE COUNTY SURVEYOR.

HORIZONTAL DATUM

COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE
SYSTEM (CCS83), ZONE VI, 1983 NORTH AMERICAN DATUM (2017.50 EPOCH
O.C.S. G.P.S. ADJUSTMENT).

ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED.
MULTIPLY A GRID DISTANCE BY 1.000014710 TO OBTAIN GROUND DISTANCE. THE
COMBINATION FACTOR WAS HELP AT POINT NUMBER 107 N=2221965.10'
E=6016596.92' ELEV=20.601'.

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

VERTICAL DATUM

O.C.S. BM. HB-235-75 ELEV. = 15.512' YEAR LEVELED: 2005
NAVD 1988 (O.C.S. 1995 ADJUSTMENT)

DESCRIBED BY OCS 2002- FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK
STAMPED "HB-235-75" SET IN THE TOP OF A CONCRETE BRIDGE DECK.
MONUMENT IS LOCATED IN THE NORTHEAST CORNER OF THE INTERSECTION OF
EDINGER AVENUE AND BOLSA CHICA STREET, 41 FT. NORTHERLY OF THE
CENTERLINE OF EDINGER AVENUE AND 49 FT. EASTERLY OF THE CENTERLINE OF
BOLSA CHICA STREET. MONUMENT IS SET LEVEL WITH THE BRIDGE DECK.

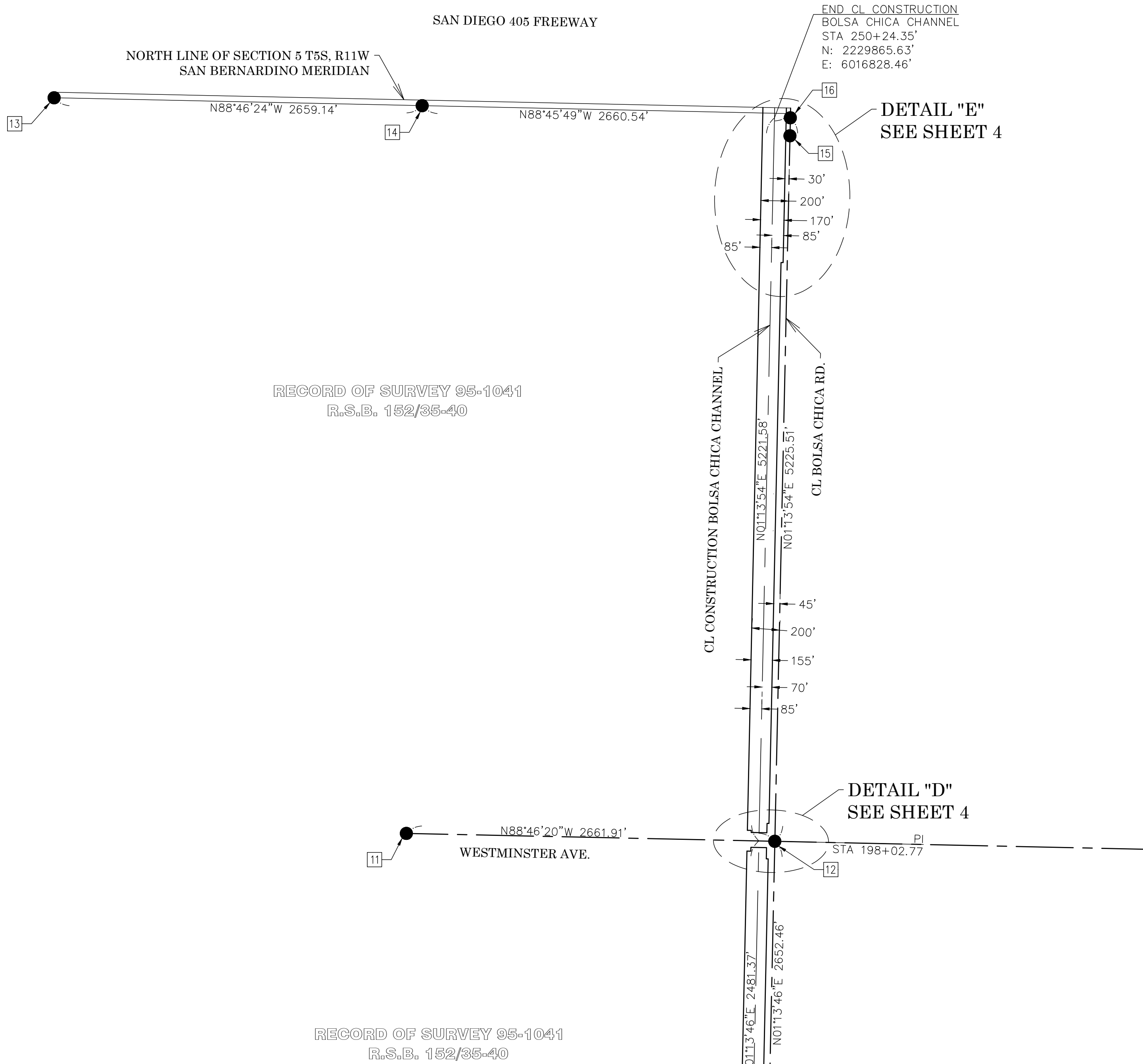
PURPOSE OF SURVEY

THIS PROJECT CONSIST OF THE MAINTENANCE OF THE EARTHEN/RIP RAP
SLOPES AND THE GRADING OF THE ACCESS ROADS. A TOPOGRAPHIC
SURVEY WAS REQUESTED WITHIN THE FENCED LIMITS OF THE CHANNEL.

SHEET INDEX

SHEET NO.	DESCRIPTION
SHEET #1	TITLE SHEET
SHEET #2-4	ALIGNMENT ESTABLISHMENT
SHEET #5-25	TOPOGRAPHIC MAP

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 1 of 25
			BOLSA CHICA CHANNEL PHASE II (C02) TOPOGRAPHIC SURVEY			
			TITLE SHEET			
			LOCATION: BOLSA CHICA CHANNEL PHASE II, CITY OF HUNTINGTON BEACH, CA			
			DATE OF SURVEY: 01-25-2020 TOPOGRAPHIC MAPPING OFFICE CHECK FIELD CHECK SCALE: N.T.S. FILE: BOLSA CHICA CHANNEL PHASE II_TOPO_2019.DWG			
MARK	DATE	ITEM	BY: JFA & PARTY BY: K. AHMED & A. VU BY: E. MEDINA, PLS BY: JFA & PARTY WO#: EF21454			
		REVISIONS				

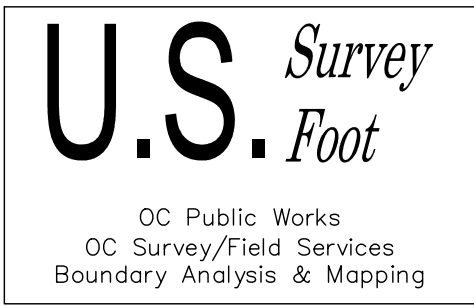
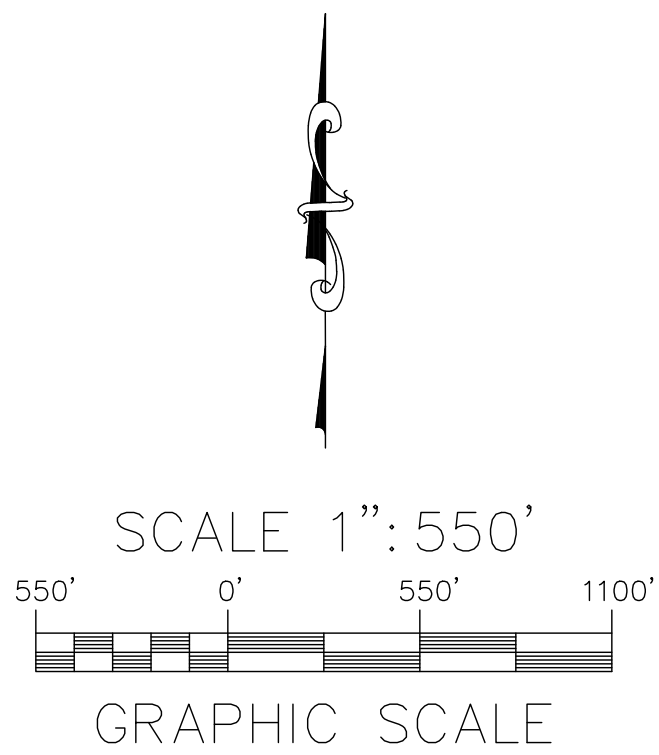


REFERENCES

- (R1) = RECORD OF SURVEY 95-1041, R.S.B. 152/35-40
(R2) = RECORD OF SURVEY 2002-1107, R.S.B. 196/37-46
(R3) = RECORD OF SURVEY 85-1030, R.S.B. 111/30-31
(R4) = CORNER RECORD, C.R. 2007-2921B
(R5) = CORNER RECORD, C.R. 2007-2916B
(R6) = CORNER RECORD, C.R. 2007-0920B
(R7) = CORNER RECORD, C.R. 2001-0772
(R8) = CORNER RECORD, C.R. 2011-0645
(R9) = CORNER RECORD, C.R. 2015-1740
(R10) = CORNER RECORD, C.R. 2011-0642

MONUMENT NOTES

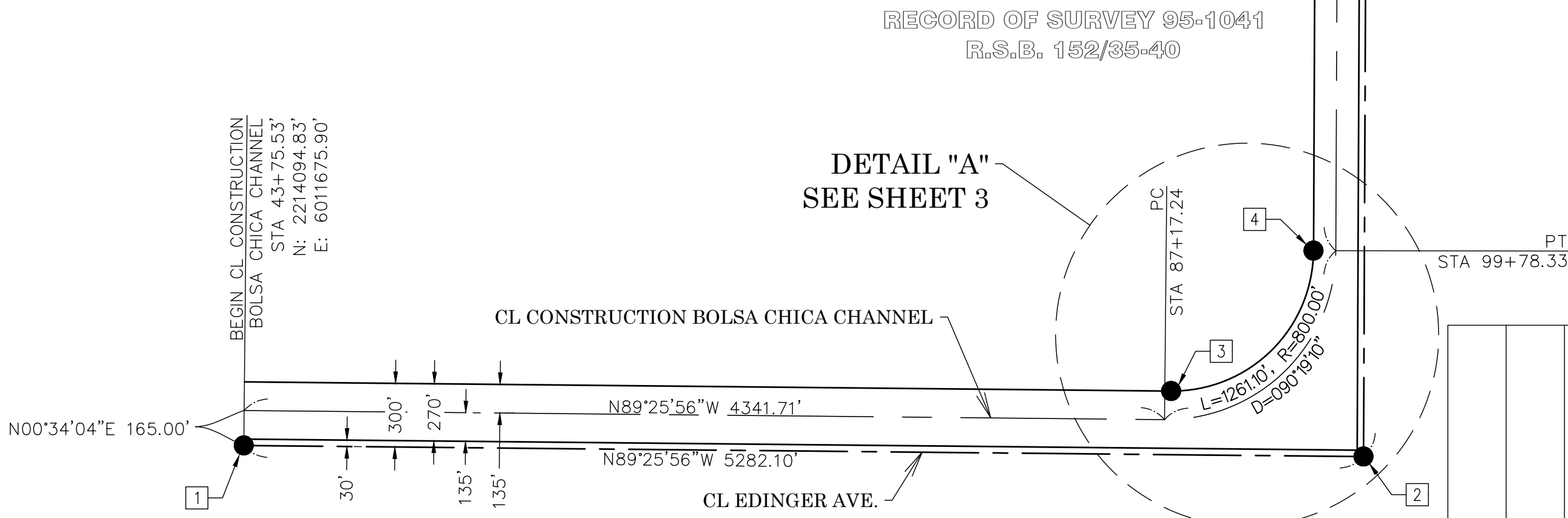
- [1] FOUND 2 1/2" BRASS CAP IN CONCRETE STAMPED "ORANGE COUNTY SURVEYOR T5S R11W 18 17 19 20 MAR 1977" DOWN 0.8' IN WELL.
[2] FOUND 2" IRON PIPE W/ TACK AND TAG STAMPED "RCE 10655" PER (R3), DOWN 1.2' IN CITY OF HUNTINGTON BEACH WELL MONUMENT.
[3] FOUND 2" IRON PIPE W/ PK NAIL AND WASHER STAMPED "ORANGE COUNTY SURVEYOR 8-85 RW" PER (R3) DOWN 1.0', S82°31'59"E 0.16' FROM N'LY RIGHT OF WAY OF BOLSA CHICA CHANNEL.
[4] FOUND 2" IRON PIPE W/ PK NAIL AND WASHER STAMPED "ORANGE COUNTY SURVEYOR 8-85 RW" PER (R3), DOWN 0.3', N79°34'49"E 0.13' FROM W'LY RIGHT OF WAY OF BOLSA CHICA CHANNEL.
[5] FOUND MANHOLE W/ 4 MAG NAILS AND WASHER STAMPED "LS 6970" 3' TANGENT OVER TIES PER (R4).
[6] FOUND 2" IRON PIPE W/ PK NAIL AND WASHER STAMPED "ORANGE COUNTY SURVEYOR 8-85 RW" PER (R3), DOWN 1.0'.
[7] FOUND MAG NAIL AND WASHER STAMPED "LS 6970" PER (R5), FLUSH IN AC.
[8] FOUND 1 1/2" BRASS CAP IN CONCRETE STAMPED "OCS 7-83" PER (R3), DOWN 1.7' IN OCS WELL MONUMENT.
[9] FOUND 2" IRON PIPE W/ PK NAIL AND WASHER STAMPED "ORANGE COUNTY SURVEYOR 8-85 RW" PER (R3), DOWN 0.5', 30' OFFSET FROM CENTERLINE OF BOLSA CHICA RD.
[10] FOUND MAG NAIL AND WASHER STAMPED "LS 6970" PER (R6), FLUSH IN AC.
[11] FOUND PUNCHED HEX BAR PER (R3), DOWN 1.6' IN OCS MONUMENT WELL.
[12] FOUND GEAR SPIKE AND WASHER STAMPED "RCE 18752" PER (R7). FLUSH IN AC.
[13] FOUND 1" IRON PIPE W/ TACK AND TAG STAMPED "LS 8105" PER (R8), DOWN 0.3'.
[14] FOUND 1" IRON PIPE W/ TACK AND TAG STAMPED "LS 8105" PER (R9), DOWN 0.1'.
[15] FOUND PUNCHED SPIKE AND WASHER STAMPED "CAL TRANS" PER (R10), FLUSH IN AC.
[16] FOUND BOAT SPIKE AND WASHER STAMPED "CAL TRANS" PER (R10), FLUSH IN AC, ACCEPTED AS THE APPARENT CUL DE SAC RADIUS POINT AT THE NORTH END OF OLD BOLSA CHOCA ROAD.



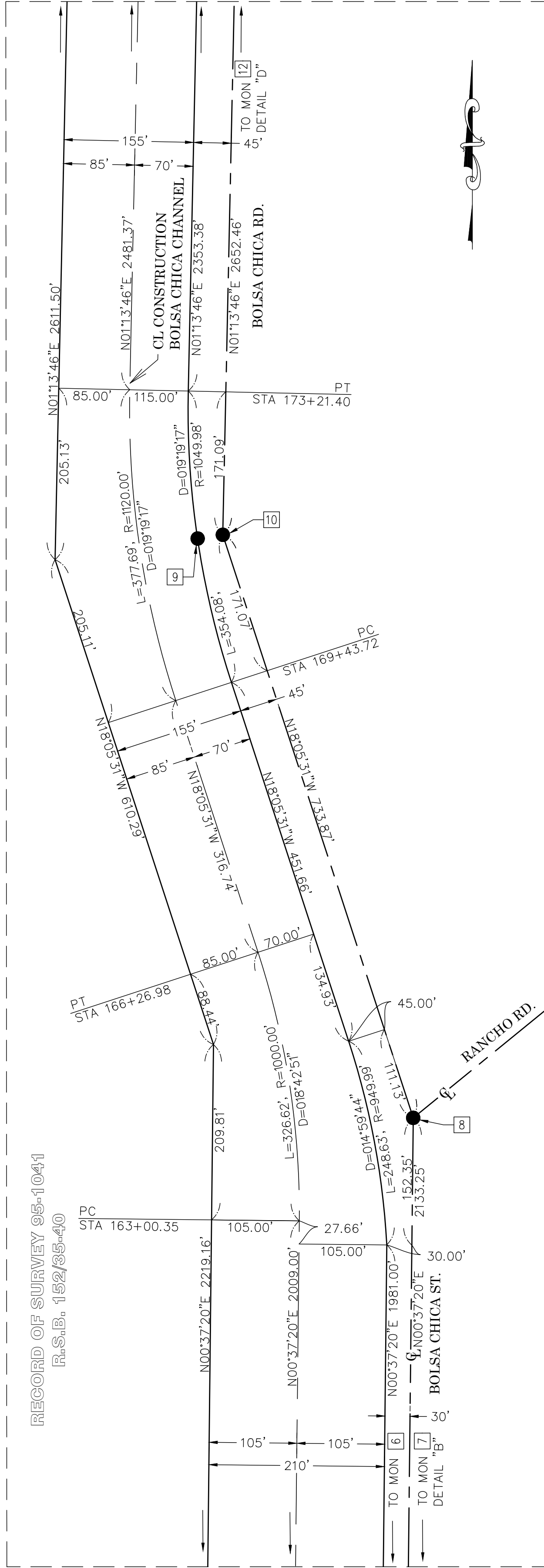
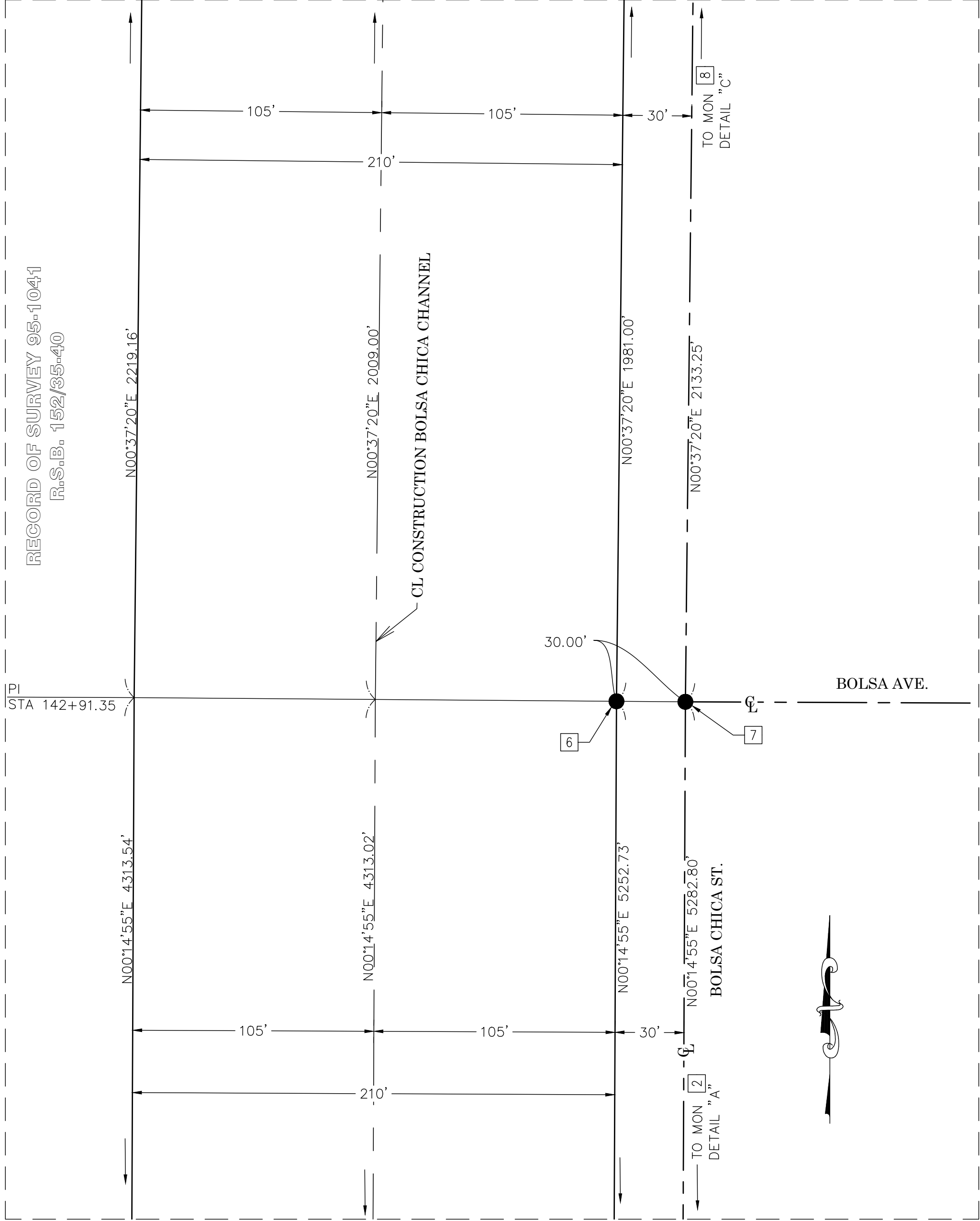
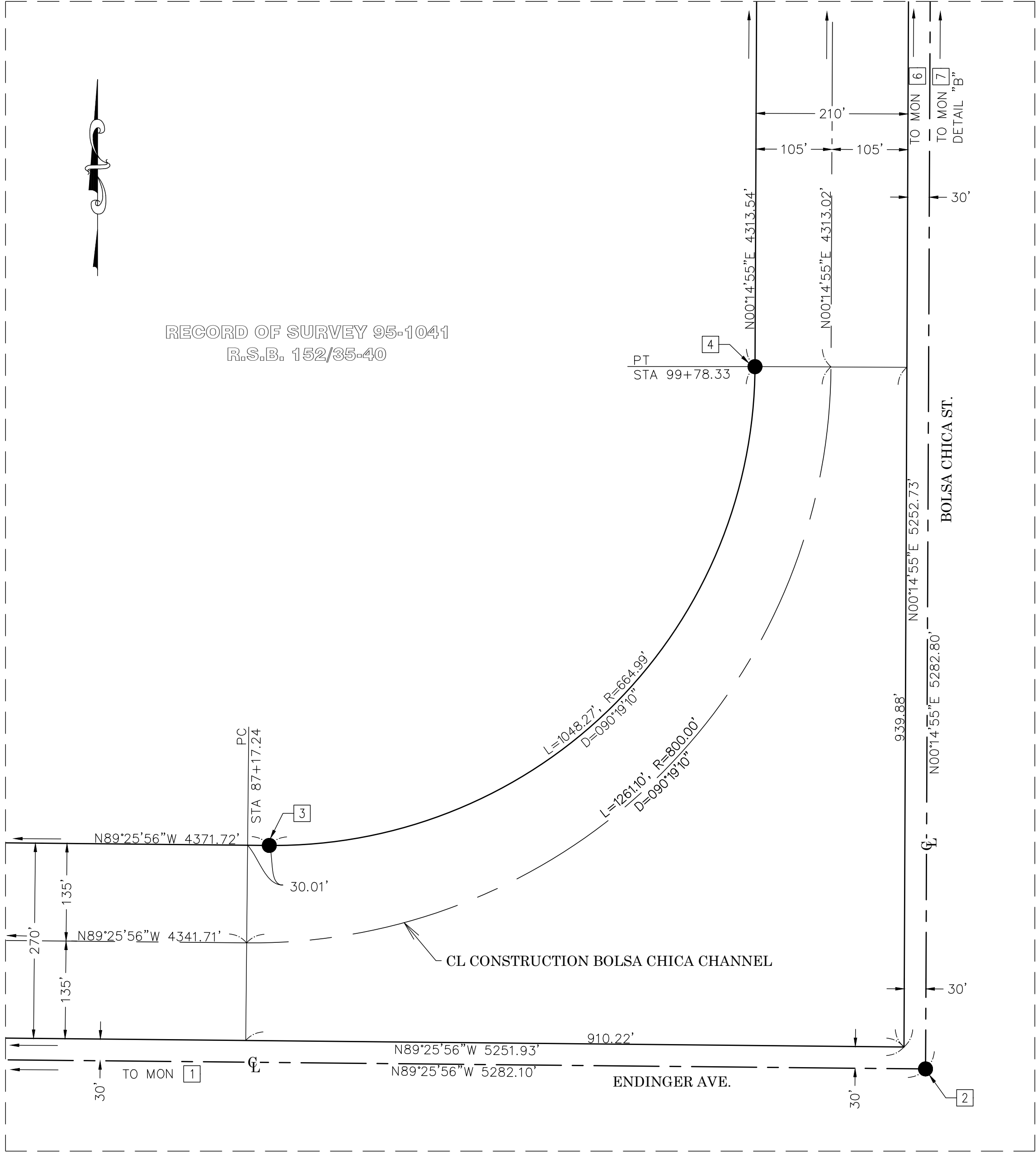
LEGEND		
ABBREVIATION	LINE PATTERN KEY	SYMBOL
(R) RECORD	— — — ALIGNMENT CENTERLINE	[#] MONUMENT NOTE
PC POINT ON CURVE	— — — RIGHT OF WAY LINE	
PT POINT OF TANGENCY	— — — STREET CENTERLINE	

ALIGNMENT ESTABLISHMENT

THE CL CONSTRUCTION ALIGNMENT SHOWN HEREON WAS DERIVED BY HOLDING A RECORD OFFSET DISTANCE PER RECORD DRAWINGS C02-101-4A, FROM THE ESTABLISHED WESTERLY AND SOUTHERLY RIGHT OF WAY PER A RECORD OF SURVEY PENDING IN THE COUNTY SURVEYOR'S OFFICE. THE BASIS FOR STATIONING IS DERIVED FROM RECORD DRAWINGS C02-101-4A, HELD AT THE INTERSECTION OF WESTMINSTER BLVD AND BOLSA CHICA CHANNEL AT STATION 198+15.80. BEGINNING AT THE RIGHT OF WAY ESTABLISHMENT AT 43+75.53' AND ENDING AT STATION 250+24.35'.



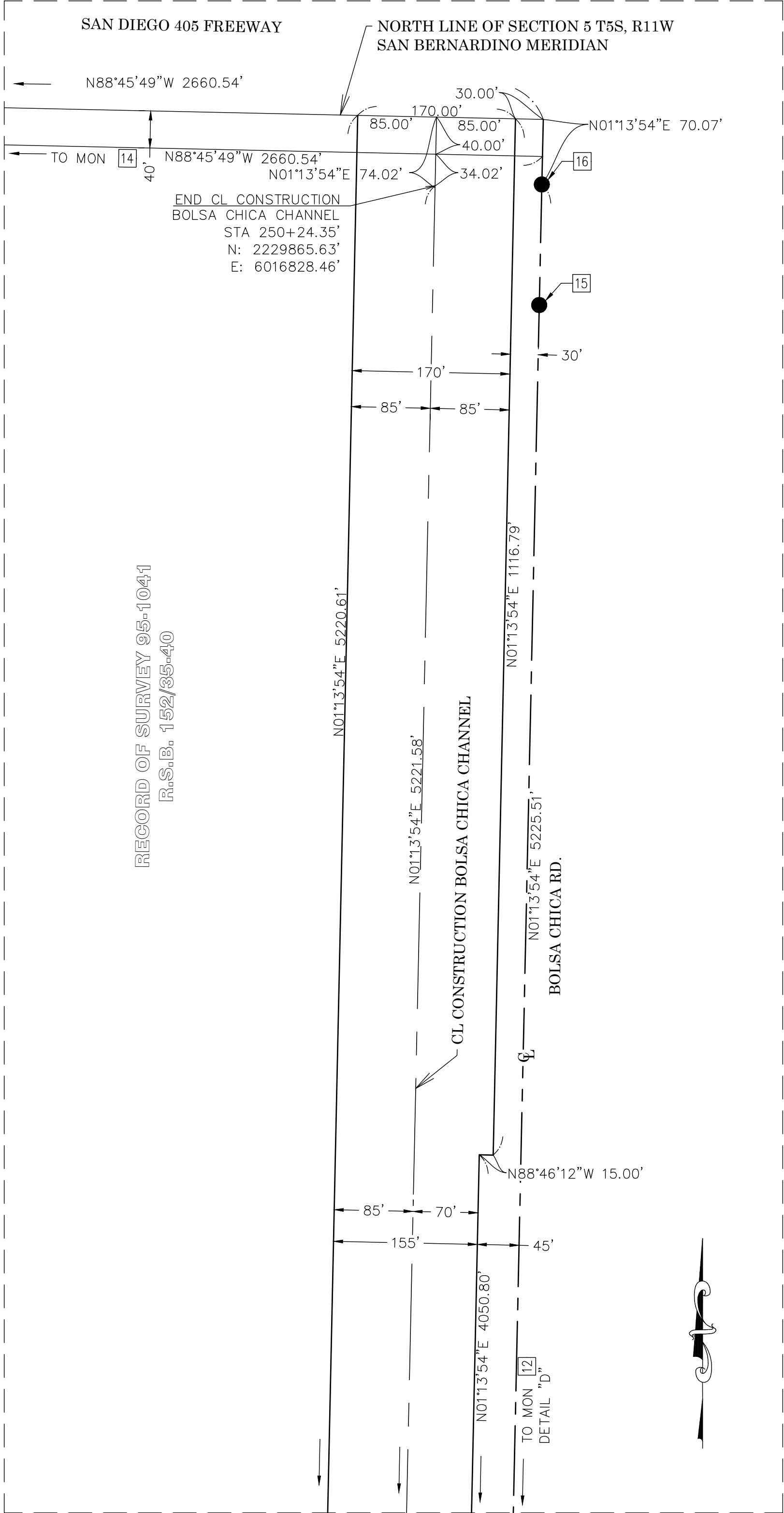
			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 2 of 25
			BOLSA CHICA CHANNEL(C02) TOPOGRAPHIC SURVEY			
			ALIGNMENT SHEET			
			LOCATION: BOLSA CHICA CHANNEL PHASE II, CITY OF HUNTINGTON BEACH, CA			
			DATE OF SURVEY: 01/25/2020		BY: JFA & PARTY	
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU	
			OFFICE CHECK		BY: E. MEDINA PLS	
			FIELD CHECK		BY: JFA & PARTY	
MARK	DATE	ITEM	SCALE: 1"=550' W.O. # EF21454			
REVISIONS			BOLSA CHICA CHANNEL PHASE II_TOPO_2019.dwg			



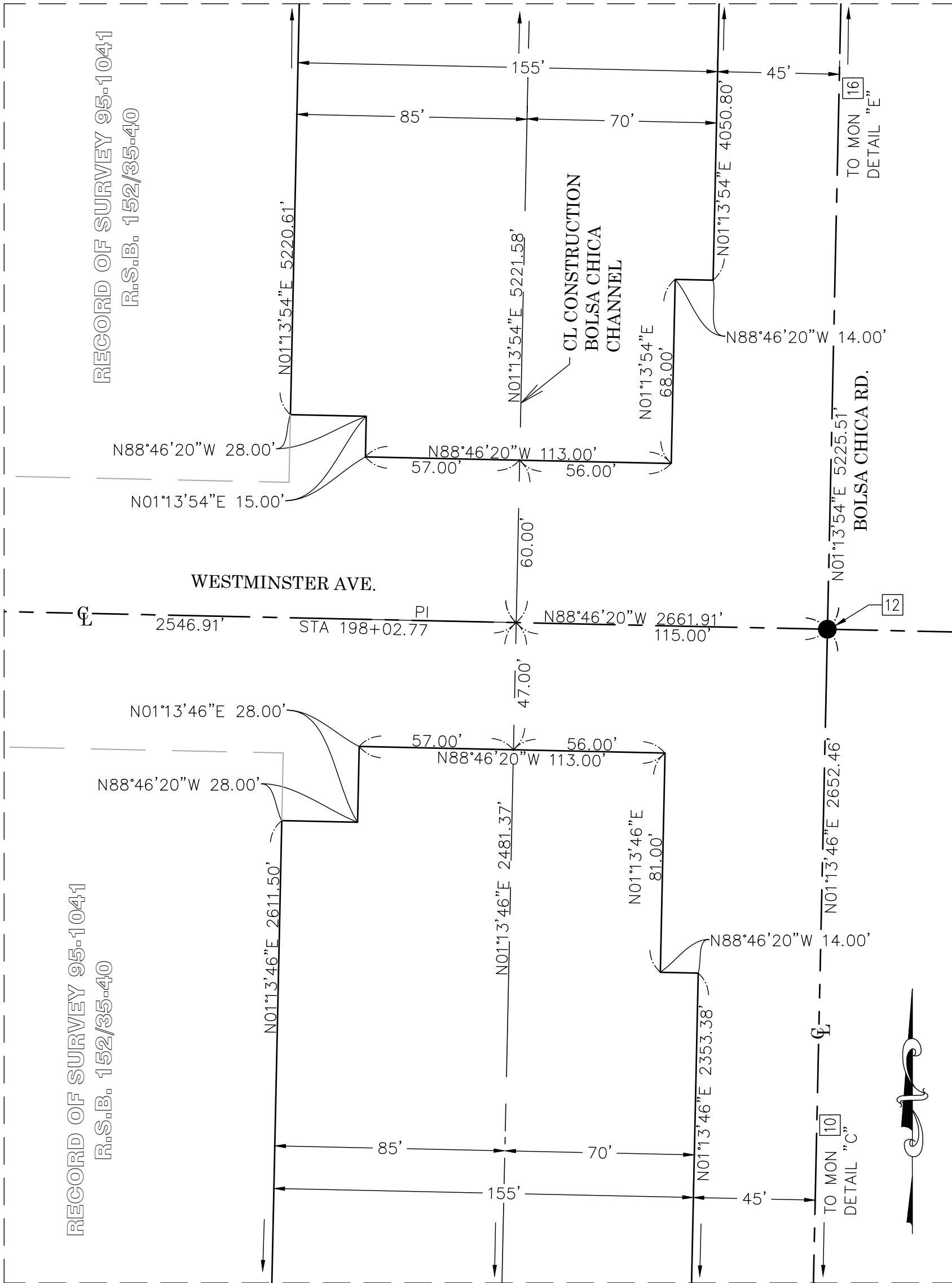
			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			BOLSA CHICA CHANNEL(C02) TOPOGRAPHIC SURVEY		
			ALIGNMENT DETAILS		
			LOCATION: BOLSA CHICA CHANNEL PHASE II, CITY OF HUNTINGTON BEACH, CA		
MARK	DATE	ITEM	DATE OF SURVEY: 01/25/2020		SHEET NO. 3 of 25
			TOPOGRAPHIC MAPPING		
			OFFICE CHECK		
			FIELD CHECK		
			SCALE: AS NOTED W.O. # EF21454		
REVISIONS			BOLSA CHICA CHANNEL PHASE II_TOPO_2019.dwg		

NOTES

DASHED LOT LINES ARE FOR GRAPHICAL PURPOSES ONLY.



DETAIL "E"
SCALE:1"=100'



DETAIL "D"
SCALE:1"=40'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING				
			BOLSA CHICA CHANNEL(C02) TOPOGRAPHIC SURVEY				
			ALIGNMENT DETAILS				
			LOCATION: BOLSA CHICA CHANNEL PHASE II, CITY OF HUNTINGTON BEACH, CA				
			DATE OF SURVEY: 01/25/2020		BY: JFA & PARTY		SHEET NO. 4 of 25
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU		
			OFFICE CHECK		BY: E. MEDINA PLS		
			FIELD CHECK		BY: JFA & PARTY		
			SCALE: AS NOTED W.O. # EF21454				
MARK	DATE	ITEM	REVISIONS				
BOLSA CHICA CHANNEL PHASE II_TOPO_2019.dwg							

SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPI
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP
- Control Box - Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole - Water
- Meter-Electric
- Monitor Well
- Pull Box - Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

LEGEND

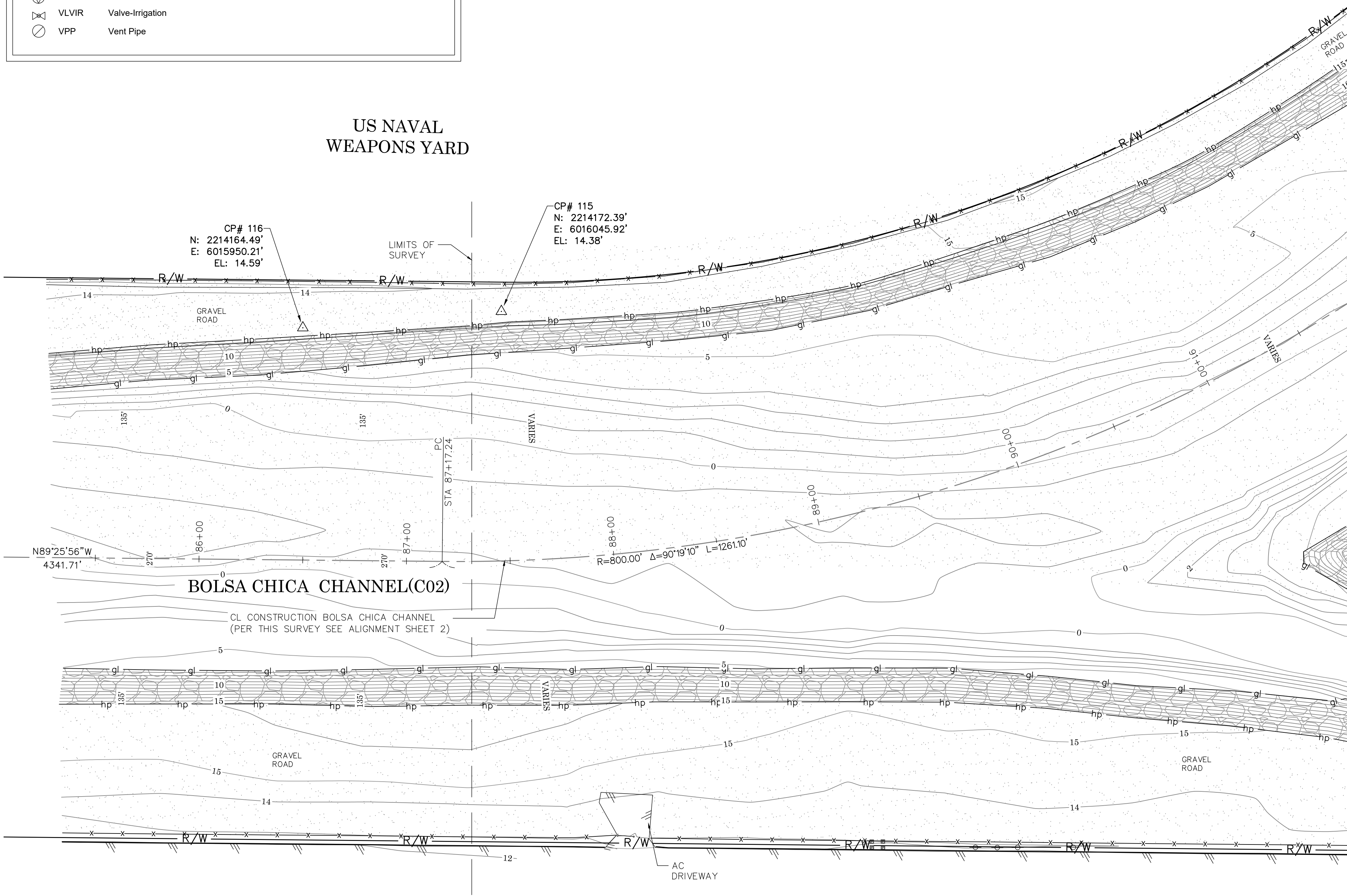
LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence - Chain Link
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

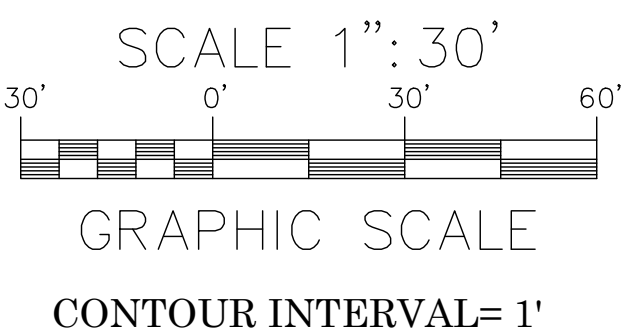
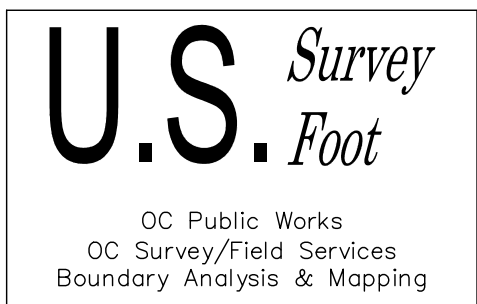
- Concrete
- Dirt/Gravel
- Rip-Rap

US NAVAL
WEAPONS YARD



EDINGER AVENUE

MATCHLINE - SEE SHEET 6



		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING					
		BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY					
		TOPOGRAPHIC MAP					
		LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA					
MARK	DATE	ITEM	DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY		SHEET NO. 5 of 25
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU		
			OFFICE CHECK		BY: E. MEDINA, PLS		
			FIELD CHECK		BY: R. MACIAS, PLS		
			SCALE: 1" = 30'		W.O. #EF21454		
			FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG				
REVISIONS							

SYMBOL

	CBXIR	Control Box- Irrigation
	DII	Drop Inlet
	FHH	Fire Hydrant
	DGT	Gate - Double
	SGT	Gate - Single
	GRI	Grate Inlet
	LPL	Light Pole - Single
	MHHEL	Manhole - Electrical
	MHHSW	Manhole - Sewer
	MHHUN	Manhole - Undefined
	MTRWA	Meter - Water
	PBXEL	Pull Box - Electrical
	PBXTL	Pull Box - Telephone
	PPO/PPI	Pipe Outlet/Inlet
	SNN	Sign Post
	CONC	Concrete
	UP1WD	Utility Pole-Wood
	TRE	Tree
	GYA	Guy Wire
	HBB	Hose Bibb
	MHHWA	Manhole- Water
	MTREL	Meter-Electric
	MWL	Monitor Well
	PBXTR	Pull Box- Traffic
	PCNST	Pier Column- Steel
	PSTST	Post- Steel
	SGL	Traffic Signal
	UWS	Utility Warning Sign
	VLTTL	Vault- Telephone
	VLVGA	Valve-Gas
	VLVIR	Valve-Irrigation
	VPP	Vent Pipe

LEGEND

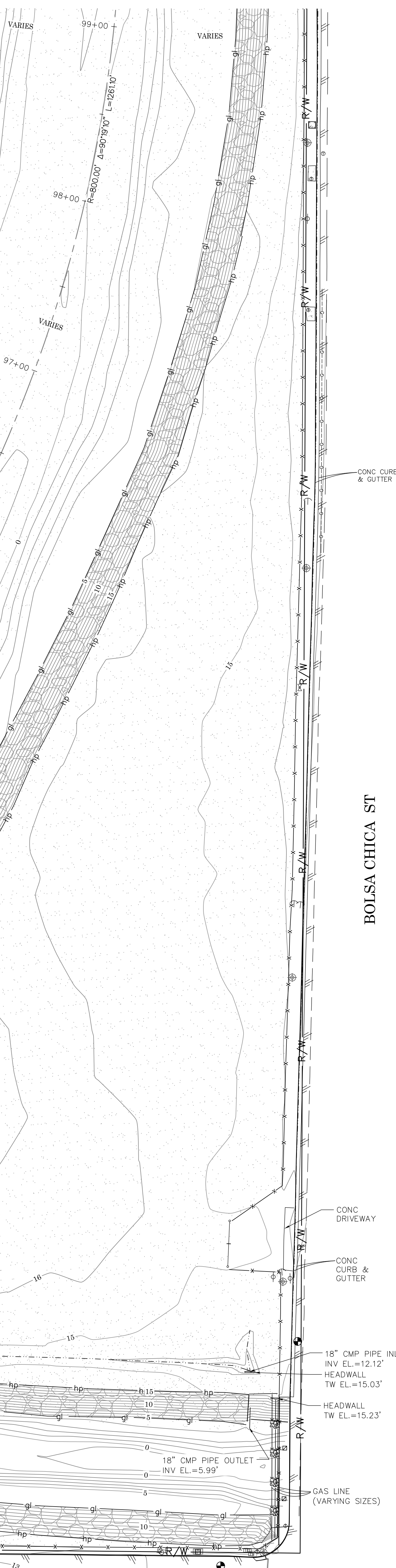
LINE PATTERN KEY

	Bush Row Outline
	Centerline
	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Flowline
	Guard Rail
	Hinge Point
	Lot/ Easement Line
	Planter Wall
	Property Line
	Right-of-Way
	Striping
	Wall - Concrete
	Wall - Stone

AREA PATTERN KEY

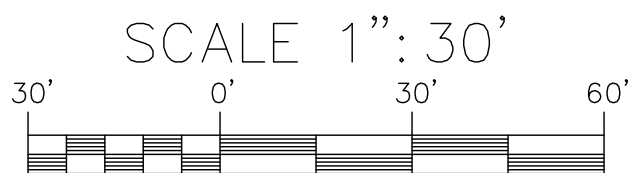
	Concrete
	Dirt/Gravel
	Rip-Rap

MATCHLINE - SEE SHEET 7

US NAVAL
WEAPONS YARD

BOLSA CHICA ST

EDINGER AVENUE

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

GRAPHIC SCALE

CONTOUR INTERVAL= 1'

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
		BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
		TOPOGRAPHIC MAP		
		LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
		DATE OF SURVEY:09/15/2019	BY: JFA & PARTY	SHEET NO. 6 of 25
		TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU	
		OFFICE CHECK	BY: E. MEDINA, PLS	
		FIELD CHECK	BY: R. MACIAS, PLS	
		SCALE: 1" = 30'	W.O. #EF21454	
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG				
MARK	DATE	ITEM		
REVISIONS				

SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPI
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP

Control Box - Irrigation

Drop Inlet

Fire Hydrant

Gate - Double

Gate - Single

Grate Inlet

Light Pole - Single

Manhole - Electrical

Manhole - Sewer

Manhole - Undefined

Meter - Water

Pull Box - Electrical

Pull Box - Telephone

Pipe Outlet/Inlet

Sign Post

Concrete

Utility Pole-Wood

Tree

Guy Wire

Hose Bibb

Manhole- Water

Meter-Electric

Monitor Well

Pull Box- Traffic

Pier Column- Steel

Post- Steel

Traffic Signal

Utility Warning Sign

Vault- Telephone

Valve-Gas

Valve-Irrigation

Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence - Chain Link
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

MATCHLINE - SEE SHEET 8

BOLSA CHICA ST

48" CONC PIPE OUTLET
INV. EL.=4.34'

MATCHLINE - SEE SHEET 6

US NAVAL
WEAPONS YARD

BOLSA CHICA CHANNEL(C02)

CP# 118
N: 2214949.04'
E: 6016736.05'
EL: 15.94'

CP# 117
N: 2214848.55'
E: 6016735.12'
EL: 15.90'

STA 99+78.33

CONC CURB
& GUTTER



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

U.S. Survey
Foot

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

US NAVAL
WEAPONS YARD

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
			TOPOGRAPHIC MAP			
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA			
			DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY	
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU	
			OFFICE CHECK		BY: E. MEDINA, PLS	
			FIELD CHECK		BY: R. MACIAS, PLS	
			SCALE: 1" = 30'		W.O. #EF21454	
			FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG			
MARK	DATE	ITEM	SHEET NO. 7 of 25			
REVISIONS						

MATCHLINE - SEE SHEET 9

BOLSA CHICA ST

MATCHLINE - SEE SHEET 7

SYMBOL

CBXIR

Control Box- Irrigation

DII

Drop Inlet

FHH

Fire Hydrant

DGT

Gate - Double

SGT

Gate - Single

GRI

Grate Inlet

LPL

Light Pole - Single

MHHEL

Manhole - Electrical

MHHSW

Manhole - Sewer

MHHUN

Manhole - Undefined

MTRWA

Meter - Water

PBXEL

Pull Box - Electrical

PBXTL

Pull Box - Telephone

PPO/PPI

Pipe Outlet/Inlet

SNN

Sign Post

CONC

Concrete

UP1WD

Utility Pole-Wood

TRE

Tree

GYA

Guy Wire

HBB

Hose Bibb

MHHWA

Manhole- Water

MTREL

Meter-Electric

MWL

Monitor Well

PBXTR

Pull Box- Traffic

PCNST

Pier Column- Steel

PSTST

Post- Steel

SGL

Traffic Signal

UWS

Utility Warning Sign

VLTTL

Vault- Telephone

VLVGA

Valve-Gas

VLVIR

Valve-Irrigation

VPP

Vent Pipe

LEGEND

LINE PATTERN KEY

Bush Row Outline

Centerline

Edge of Concrete

Edge of Asphalt Pavement

Fence - Chain Link

Flowline

Guard Rail

Hinge Point

Lot/ Easement Line

Planter Wall

Property Line

Right-of-Way

Striping

Wall - Concrete

Wall - Stone

AREA PATTERN KEY

Concrete

Dirt/Gravel

Rip-Rap

U.S. Survey

Foot

OC Public Works

OC Survey/Field Services

Boundary Analysis & Mapping

SCALE 1" = 30'

30'

0'

30'

60'

GRAPHIC SCALE

CONTOUR INTERVAL= 1'

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 8 of 25	
BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY				
TOPOGRAPHIC MAP				
LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA				
DATE OF SURVEY: 09/15/2019	BY: JFA & PARTY			
TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU			
OFFICE CHECK	BY: E. MEDINA, PLS			
FIELD CHECK	BY: R. MAGIAS, PLS			
SCALE: 1" = 30'	W.O. #EF21454			
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG				
MARK	DATE	ITEM	REVISIONS	

MATCHLINE - SEE SHEET 10

16" CMP PIPE OUTLET
INV EL.=14.88'

HEADWALL
TW EL.=12.20'
48" CONC PIPE OUTLET
INV EL.=5.54'

BOLSA CHICA ST

BOLSA CHICA CHANNEL(C02)

US NAVAL
WEAPONS YARD

CP# 110
N: 2216520.64'
E: 6016742.90'
EL: 18.18'

U.S. *Survey*
Foot

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



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

MATCHLINE - SEE SHEET 8

BOLSA CHICA CHANNEL (C02)
TOPOGRAPHIC SURVEY

TOPOGRAPHIC MAP
LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA

DATE OF SURVEY: 09/15/2019	BY: JFA & PARTY
TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU
OFFICE CHECK	BY: E. MEDINA, PLS
FIELD CHECK	BY: R. MAGIAS, PLS
SCALE: 1" = 30'	W.O. #EF21454
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG	

SHEET NO.
9 of 25

MARK	DATE	ITEM
REVISIONS		

SYMBOL

- CBXIR

Control Box- Irrigation
- DII

Drop Inlet
- FHH

Fire Hydrant
- DGT

Gate - Double
- SGT

Gate - Single
- GRI

Grate Inlet
- LPL

Light Pole - Single
- MHHEL

Manhole - Electrical
- MHHSW

Manhole - Sewer
- MHHUN

Manhole - Undefined
- MTRWA

Meter - Water
- PBXEL

Pull Box - Electrical
- PBXTL

Pull Box - Telephone
- PPO/PPI

Pipe Outlet/Inlet
- SNN

Sign Post
- CONC

Concrete
- UP1WD

Utility Pole-Wood
- TRE

Tree
- GYA

Guy Wire
- HBB

Hose Bibb
- MHHWA

Manhole- Water
- MTREL

Meter-Electric
- MWL

Monitor Well
- PBXTR

Pull Box- Traffic
- PCNST

Pier Column- Steel
- PSTST

Post- Steel
- SGL

Traffic Signal
- UWS

Utility Warning Sign
- VLTTL

Vault- Telephone
- VLVGA

Valve-Gas
- VLVIR

Valve-Irrigation
- VPP

Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

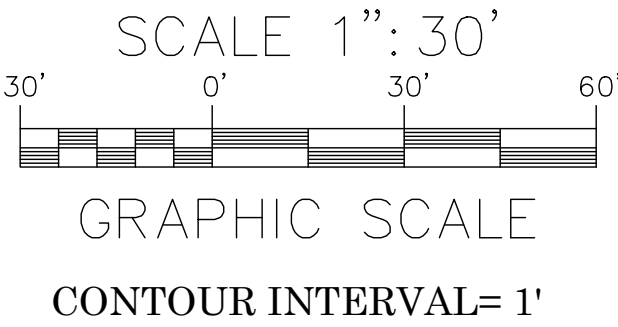
MATCHLINE - SEE SHEET 11

HEADWALL
TW EL.=12.73'
48" CONC PIPE OUTLET
INV EL.=5.99'

BOLSA CHICA ST



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



MATCHLINE - SEE SHEET 9

US NAVAL
WEAPONS YARD

BOLSA CHICA CHANNEL(C02)

16" CMP PIPE OUTLET
INV EL.=14.88'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 10 ^{of} 25
BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY						
TOPOGRAPHIC MAP						
LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA						
DATE OF SURVEY: 09/15/2019			BY: JFA & PARTY			
TOPOGRAPHIC MAPPING			BY: K. AHMED & A. VU			
OFFICE CHECK			BY: E. MEDINA, PLS			
FIELD CHECK			BY: R. MACIAS, PLS			
SCALE: 1" = 30'			W.O. #EF21454			
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG						
MARK	DATE	ITEM	REVISIONS			

SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPI
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP
- Control Box - Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole - Water
- Meter-Electric
- Monitor Well
- Pull Box - Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

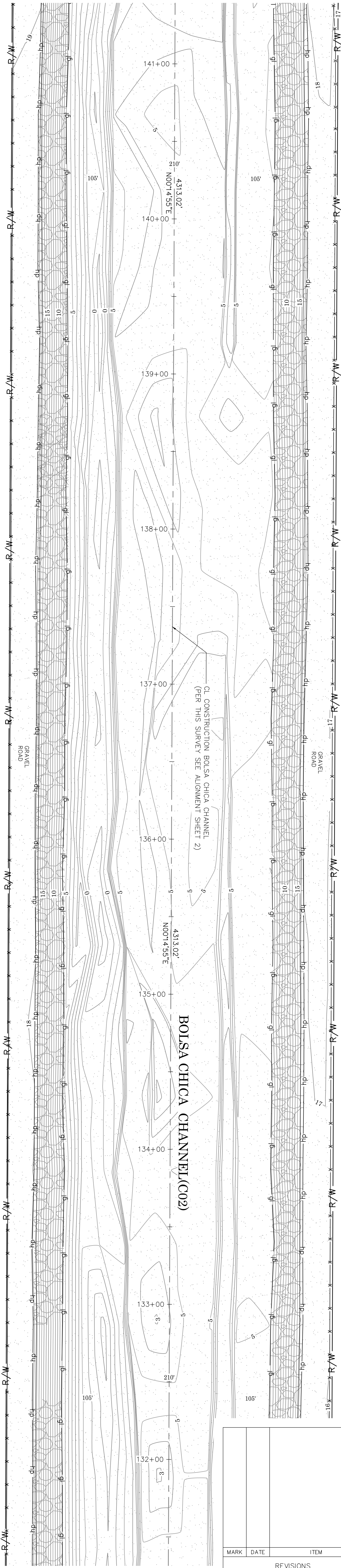
LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

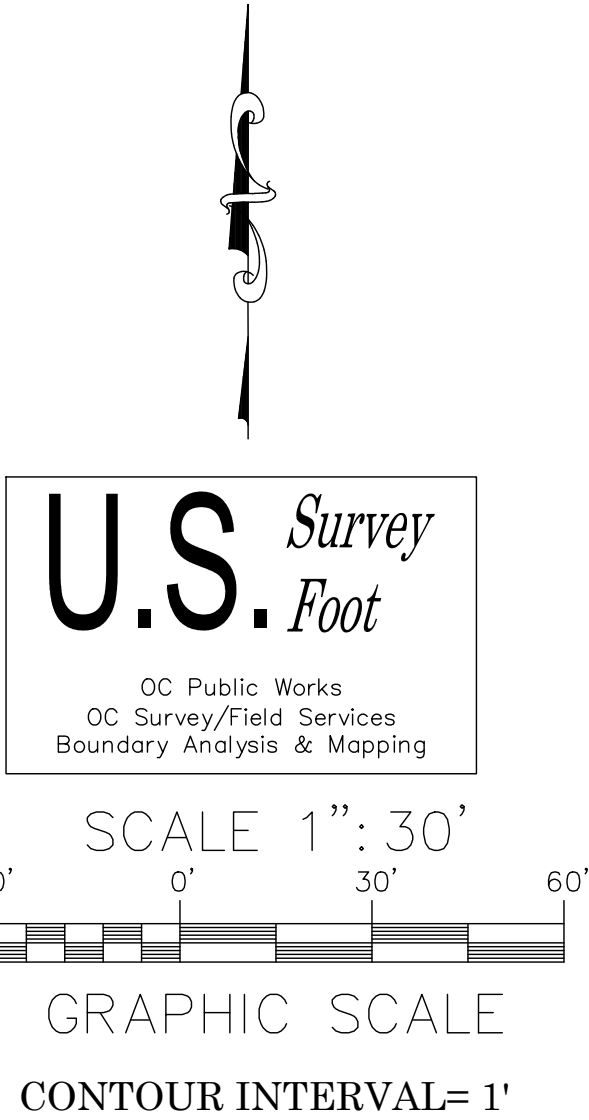


MATCHLINE - SEE SHEET 10

MATCHLINE - SEE SHEET 12

BOLSA CHICA ST

US NAVAL
WEAPONS YARD



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
			TOPOGRAPHIC MAP		
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
			DATE OF SURVEY:09/15/2019	BY: JFA & PARTY	SHEET NO. 11 ^{of} 25
			TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU	
			OFFICE CHECK	BY: E. MEDINA, PLS	
			FIELD CHECK	BY: R. MACIAS, PLS	
			SCALE: 1" = 30'	W.O. #EF21454	
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG					
MARK	DATE	ITEM			
REVISIONS					

SYMBOL

- CBXIR Control Box- Irrigation
DII Drop Inlet
FHH Fire Hydrant
DGT Gate - Double
SGT Gate - Single
GRI Grate Inlet
LPL Light Pole - Single
MHHEL Manhole - Electrical
MHHSW Manhole - Sewer
MHHUN Manhole - Undefined
MTRWA Meter - Water
PBXEL Pull Box - Electrical
PBXTL Pull Box - Telephone
PPO/PPI Pipe Outlet/Inlet
SNN Sign Post
CONC Concrete
UP1WD Utility Pole-Wood
TRE Tree
GYA Guy Wire
HBB Hose Bibb
MHHWA Manhole- Water
MTREL Meter-Electric
MWL Monitor Well
PBXTR Pull Box- Traffic
PCNST Pier Column- Steel
PSTST Post- Steel
SGL Traffic Signal
UWS Utility Warning Sign
VLTTL Vault- Telephone
VLVGA Valve-Gas
VLVIR Valve-Irrigation
VPP Vent Pipe

LEGEND

LINE PATTERN KEY

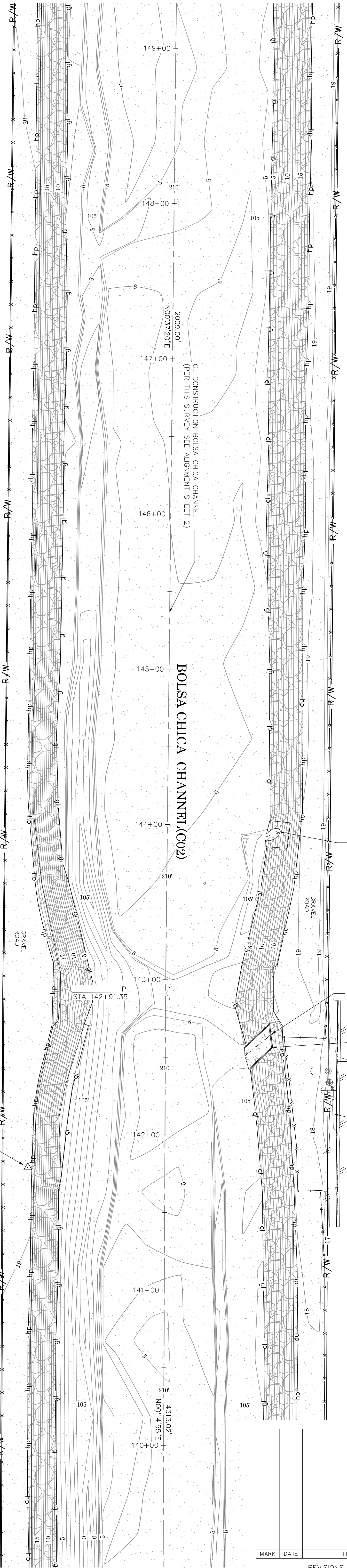
- Bush Row Outline
Centerline
Edge of Concrete
Edge of Asphalt Pavement
Fence - Chain Link
Flowline
Guard Rail
Hinge Point
Lot/ Easement Line
Planter Wall
Property Line
Right-of-Way
Striping
Wall - Concrete
Wall - Stone

AREA PATTERN KEY

- Concrete
Dirt/Gravel
Rip-Rap

US NAVAL
WEAPONS YARD

CP# 109
N: 2219048.95'
E: 6016755.18'
EL: 19.02'



MATCHLINE - SEE SHEET 13

BOLSA CHICA ST

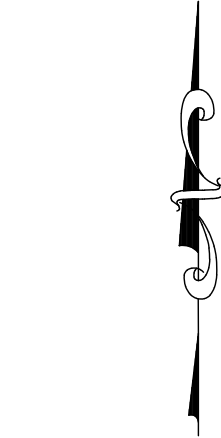
72" CONC PIPE OUTLET
INV EL.=4.20'

72" CONC PIPE OUTLET
INV EL.=5.91'

HEADWALL
TW EL.=14.99'

CONC CURB

CONC DRIVEWAY



U.S. Survey
Foot

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

SCALE 1"= 30'



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

MATCHLINE - SEE SHEET 11

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		SHEET NO. 12^{of}25	
		BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
		TOPOGRAPHIC MAP			
		LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA			
MARK	DATE	ITEM	DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU
			OFFICE CHECK		BY: E. MEDINA, PLS
			FIELD CHECK		BY: R. MACIAS, PLS
			SCALE: 1" = 30'		W.O. #EF21454
REVISIONS		FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG			

CP# 111
N: 2220447.00'
E: 6016766.21'
EL: 20.68'

72" CONC PIPE OUTLET
INV EL.=5.32'

MATCHLINE · SEE SHEET 14

BOLSA CHICA ST

BOLSA CHICA CHANNEL(C02)

US NAVAL
WEAPONS YARD

SYMBOL

- Control Box- Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole- Water
- Meter-Electrical
- Monitor Well
- Pull Box- Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence - Chain Link
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

U.S. Survey

Foot

OC Public Works

OC Survey/Field Services

Boundary Analysis & Mapping

SCALE 1" = 30'

GRAPHIC SCALE

CONTOUR INTERVAL= 1'

MATCHLINE · SEE SHEET 12

				COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		SHEET NO. 13 of 25
BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY						
TOPOGRAPHIC MAP						
LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA						
DATE OF SURVEY: 09/15/2019			BY: JFA & PARTY			
TOPOGRAPHIC MAPPING			BY: K. AHMED & A. VU			
OFFICE CHECK			BY: E. MEDINA, PLS			
FIELD CHECK			BY: R. MACIAS, PLS			
SCALE: 1" = 30'			W.O. #EF21454			
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG						
MARK	DATE	ITEM	REVISIONS			

MATCHLINE - SEE SHEET 15

RANCHO RD

BOLSA CHICA RD

SKYLAB WEST ST

MATCHLINE - SEE SHEET 13

US NAVAL
WEAPONS YARD

CP# 111
N: 2220447.00'
E: 6016766.21'
EL: 20.68'

CP# 108
N: 2221224.99'
E: 6016774.62'
EL: 21.10'

SYMBOL

- | | |
|--|--------------------------|
| | Control Box - Irrigation |
| | Drop Inlet |
| | Fire Hydrant |
| | Gate - Double |
| | Gate - Single |
| | Grate Inlet |
| | Light Pole - Single |
| | Manhole - Electrical |
| | Manhole - Sewer |
| | Manhole - Undefined |
| | Meter - Water |
| | Pull Box - Electrical |
| | Pull Box - Telephone |
| | Pipe Outlet/Inlet |
| | Sign Post |
| | Concrete |
| | Utility Pole-Wood |
| | Tree |
| | Guy Wire |
| | Hose Bibb |
| | Manhole - Water |
| | Meter-Electric |
| | Monitor Well |
| | Pull Box - Traffic |
| | Pier Column- Steel |
| | Post- Steel |
| | Traffic Signal |
| | Utility Warning Sign |
| | Vault- Telephone |
| | Valve-Gas |
| | Valve-Irrigation |
| | Vent Pipe |

LEGEND

LINE PATTERN KEY

- | | |
|--|--------------------------|
| | Bush Row Outline |
| | Centerline |
| | Edge of Concrete |
| | Edge of Asphalt Pavement |
| | Fence - Chain Link |
| | Flowline |
| | Guard Rail |
| | Hinge Point |
| | Lot/ Easement Line |
| | Planter Wall |
| | Property Line |
| | Right-of-Way |
| | Striping |
| | Wall - Concrete |
| | Wall - Stone |

AREA PATTERN KEY

- | | |
|--|-------------|
| | Concrete |
| | Dirt/Gravel |
| | Rip-Rap |

U.S. Survey
Foot

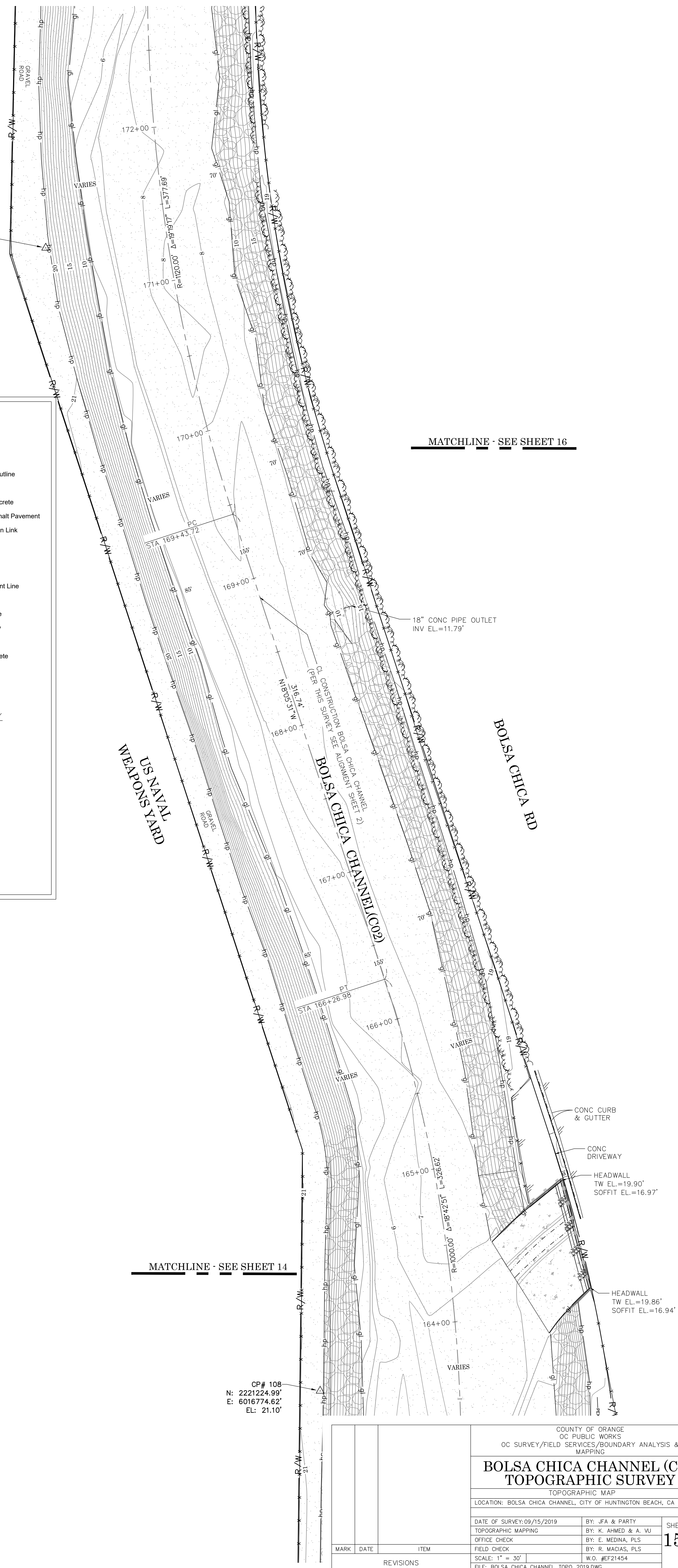
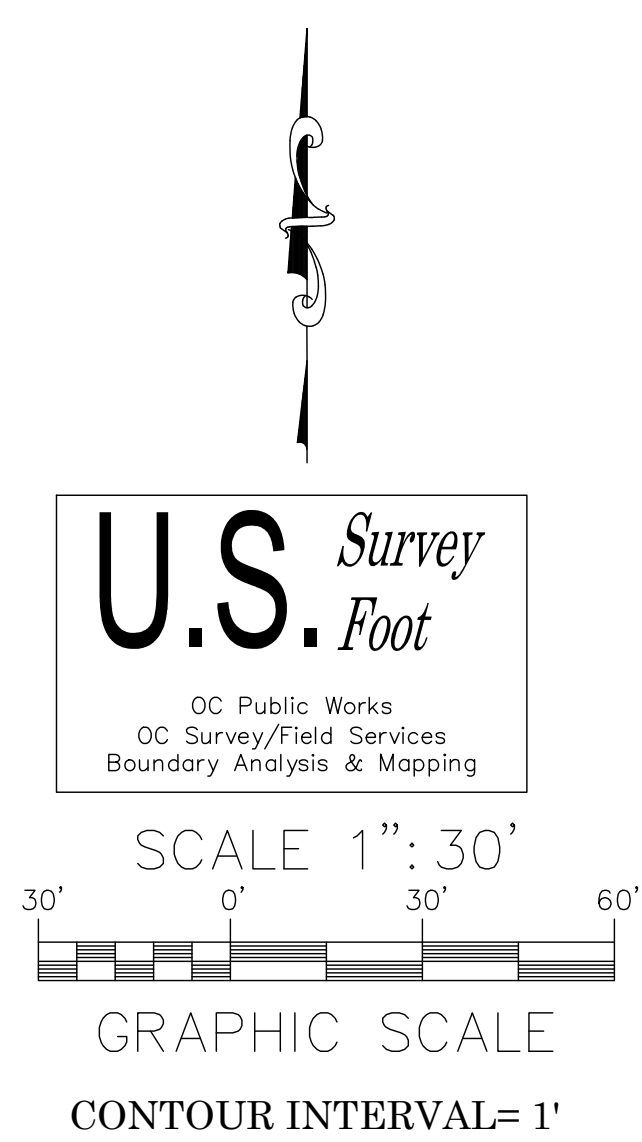
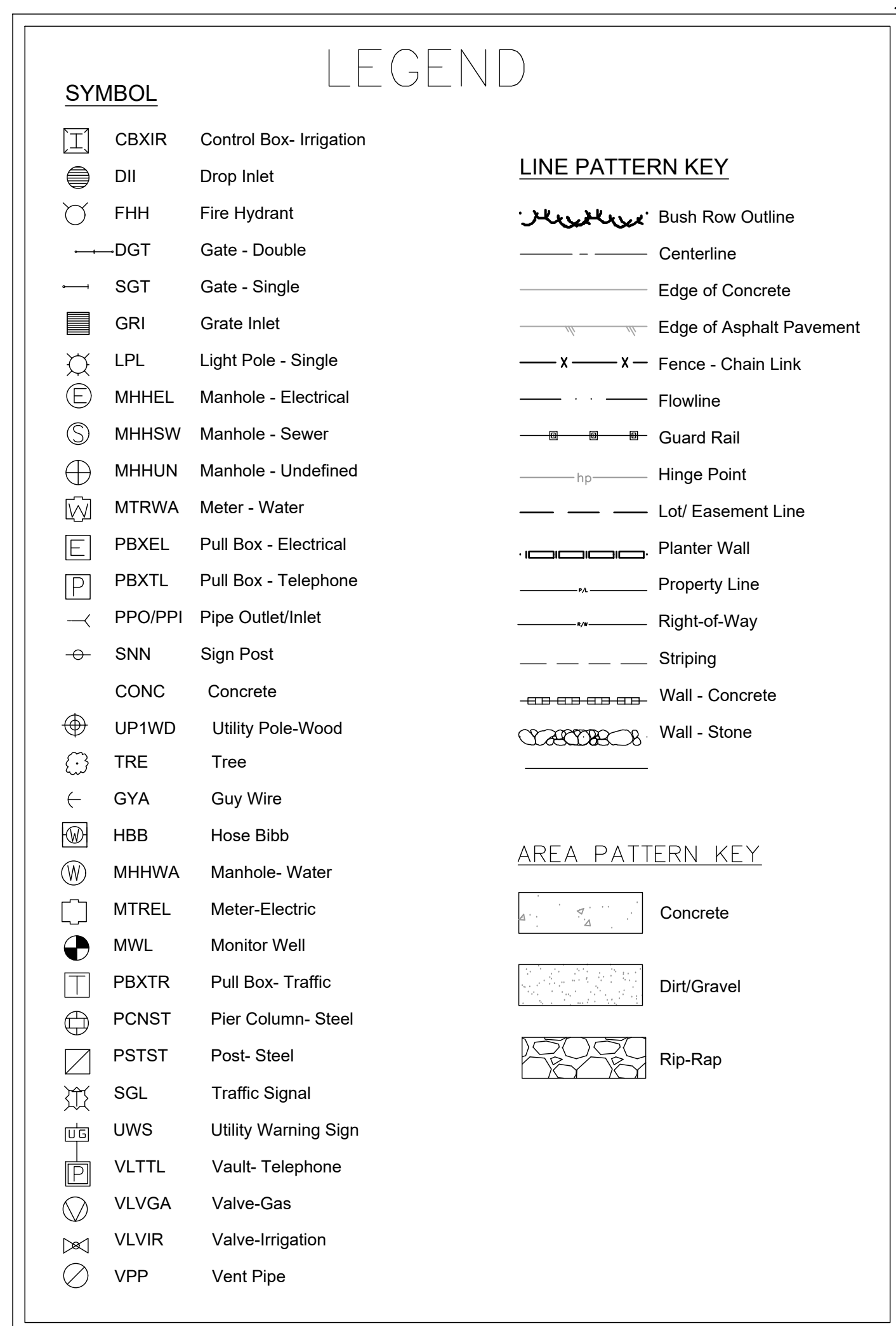
OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
		BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
		TOPOGRAPHIC MAP		
		LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
		DATE OF SURVEY:09/15/2019		
		BY: JFA & PARTY		SHEET NO. 14 ^{of} 25
		TOPOGRAPHIC MAPPING		
		OFFICE CHECK		
		FIELD CHECK		
		SCALE: 1" = 30'		
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG				
MARK	DATE	ITEM		
REVISIONS				



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 15 of 25
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
			TOPOGRAPHIC MAP			
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA			
			DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY	
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU	
			OFFICE CHECK		BY: E. MEDINA, PLS	
			FIELD CHECK		BY: R. MACIAS, PLS	
			SCALE: 1" = 30'		W.O. #EF21454	
MARK	DATE	ITEM	FILE: BOLSA CHICA_CHANNEL_TOPO_2019.DWG			
REVISIONS						

SYMBOL

- CBXIR

Control Box- Irrigation
- DII

Drop Inlet
- FHH

Fire Hydrant
- SGT

Gate - Single
- DGT

Gate - Double
- GRI

Grate Inlet
- LPL

Light Pole - Single
- MHHEL

Manhole - Electrical
- MHHSW

Manhole - Sewer
- MHHUN

Manhole - Undefined
- MTRWA

Meter - Water
- PBXEL

Pull Box - Electrical
- PBXTL

Pull Box - Telephone
- PPO/PPI

Pipe Outlet/Inlet
- SNN

Sign Post
- CONC

Concrete
- UP1WD

Utility Pole-Wood
- TRE

Tree
- GYA

Guy Wire
- HBB

Hose Bibb
- MHHWA

Manhole- Water
- MTREL

Meter-Electric
- MWL

Monitor Well
- PBXTR

Pull Box- Traffic
- PCNST

Pier Column- Steel
- PSTST

Post- Steel
- SGL

Traffic Signal
- UWS

Utility Warning Sign
- VLTTL

Vault- Telephone
- VLVGA

Valve-Gas
- VLVIR

Valve-Irrigation
- VPP

Vent Pipe

LEGEND

LINE PATTERN KEY

-
- Bush Row Outline
-
- Centerline
-
- Edge of Concrete
-
- Edge of Asphalt Pavement
-
- Flowline
-
- Guard Rail
-
- Hinge Point
-
- Lot/ Easement Line
-
- Planter Wall
-
- Property Line
-
- Right-of-Way
-
- Striping
-
- Wall - Concrete
-
- Wall - Stone

AREA PATTERN KEY

-
- Concrete
-
- Dirt/Gravel
-
- Rip-Rap

US NAVAL
WEAPONS YARD

BOLSA CHICA CHANNEL(C02)

BOLSA CHICA RD

MATCHLINE - SEE SHEET 17

U.S. Survey
Foot

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

SCALE 1"= 30'



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

CP# 107
N: 2221965.10'
E: 6016596.92'
EL: 20.60'

MATCHLINE - SEE SHEET 15

36" CONG PIPE OUTLET
INV EL.=7.08'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
						TOPOGRAPHIC MAP		
						LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
DATE OF SURVEY: 09/15/2019						BY: JFA & PARTY		SHEET NO. 16 of 25
TOPOGRAPHIC MAPPING						BY: K. AHMED & A. VU		
OFFICE CHECK						BY: E. MEDINA, PLS		
FIELD CHECK						BY: R. MACIAS, PLS		
SCALE: 1" = 30'						W.O. #EF21454		
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG								
MARK	DATE	ITEM	REVISIONS					

SYMBOL

CBXIR

DII

FHH

DGT

SGT

GRI

LPL

MHHEL

MHHSW

MHHUN

MTRWA

PBXEL

PBXTL

PPO/PPI

SNN

CONC

UP1WD

TRE

GYA

HBB

MHHWA

MTREL

MWL

PBXTR

PCNST

PSTST

SGL

UWS

VLTTL

VLVGA

VLVIR

VPP

Control Box- Irrigation

Drop Inlet

Fire Hydrant

Gate - Double

Gate - Single

Grate Inlet

Light Pole - Single

Manhole - Electrical

Manhole - Sewer

Manhole - Undefined

Meter - Water

Pull Box - Electrical

Pull Box - Telephone

Pipe Outlet/Inlet

Sign Post

Concrete

Utility Pole-Wood

Tree

Guy Wire

Hose Bibb

Manhole- Water

Meter-Electric

Monitor Well

Pull Box- Traffic

Pier Column- Steel

Post- Steel

Traffic Signal

Utility Warning Sign

Vault- Telephone

Valve-Gas

Valve-Irrigation

Vent Pipe

LINE PATTERN KEY

Bush Row Outline

Centerline

Edge of Concrete

Edge of Asphalt Pavement

Flowline

Guard Rail

Hinge Point

Lot/ Easement Line

Planter Wall

Property Line

Right-of-Way

Striping

Wall - Concrete

Wall - Stone

AREA PATTERN KEY

Concrete

Dirt/Gravel

Rip-Rap

US NAVAL
WEAPONS YARD

BOLSA CHICA RD

MATCHLINE - SEE SHEET 16

MATCHLINE - SEE SHEET 18

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 17 of 25	
BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY				
TOPOGRAPHIC MAP LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA				
DATE OF SURVEY: 09/15/2019 TOPOGRAPHIC MAPPING OFFICE CHECK FIELD CHECK SCALE: 1" = 30' FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG	BY: JFA & PARTY BY: K. AHMED & A. VU BY: E. MEDINA, PLS BY: R. MAGIAS, PLS W.O. #EF21454			
MARK	DATE	ITEM	REVISIONS	

SYMBOL

- CBXIR

Control Box - Irrigation
- DII

Drop Inlet
- FHH

Fire Hydrant
- DGT

Gate - Double
- SGT

Gate - Single
- GRI

Grate Inlet
- LPL

Light Pole - Single
- MHHEL

Manhole - Electrical
- MHHSW

Manhole - Sewer
- MHHUN

Manhole - Undefined
- MTRWA

Meter - Water
- PBXEL

Pull Box - Electrical
- PBXTL

Pull Box - Telephone
- PPO/PPI

Pipe Outlet/Inlet
- SNN

Sign Post
- CONC

Concrete
- UP1WD

Utility Pole-Wood
- TRE

Tree
- GYA

Guy Wire
- HBB

Hose Bibb
- MHHWA

Manhole - Water
- MTREL

Meter-Electric
- MWL

Monitor Well
- PBXTR

Pull Box - Traffic
- PCNST

Pier Column- Steel
- PSTST

Post- Steel
- SGL

Traffic Signal
- UWS

Utility Warning Sign
- VLTTL

Vault- Telephone
- VLVGA

Valve-Gas
- VLVIR

Valve-Irrigation
- VPP

Vent Pipe

LEGEND

LINE PATTERN KEY

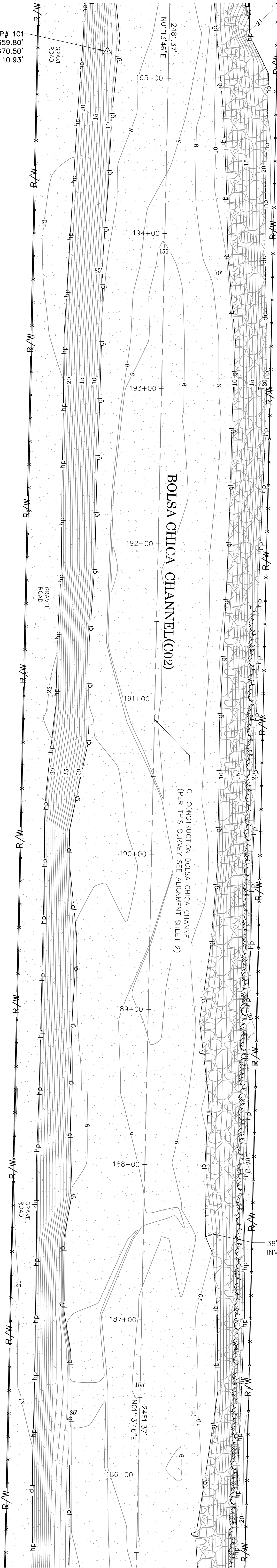
-
- Bush Row Outline
-
- Centerline
-
- Edge of Concrete
-
- Edge of Asphalt Pavement
-
- Fence - Chain Link
-
- Flowline
-
- Guard Rail
-
- Hinge Point
-
- Lot/ Easement Line
-
- Planter Wall
-
- Property Line
-
- Right-of-Way
-
- Striping
-
- Wall - Concrete
-
- Wall - Stone

AREA PATTERN KEY

-
- Concrete
-
- Dirt/Gravel
-
- Rip-Rap

US NAVAL
WEAPONS YARD

CP# 101
N: 2224359.80'
E: 6016670.50'
EL: 10.93'

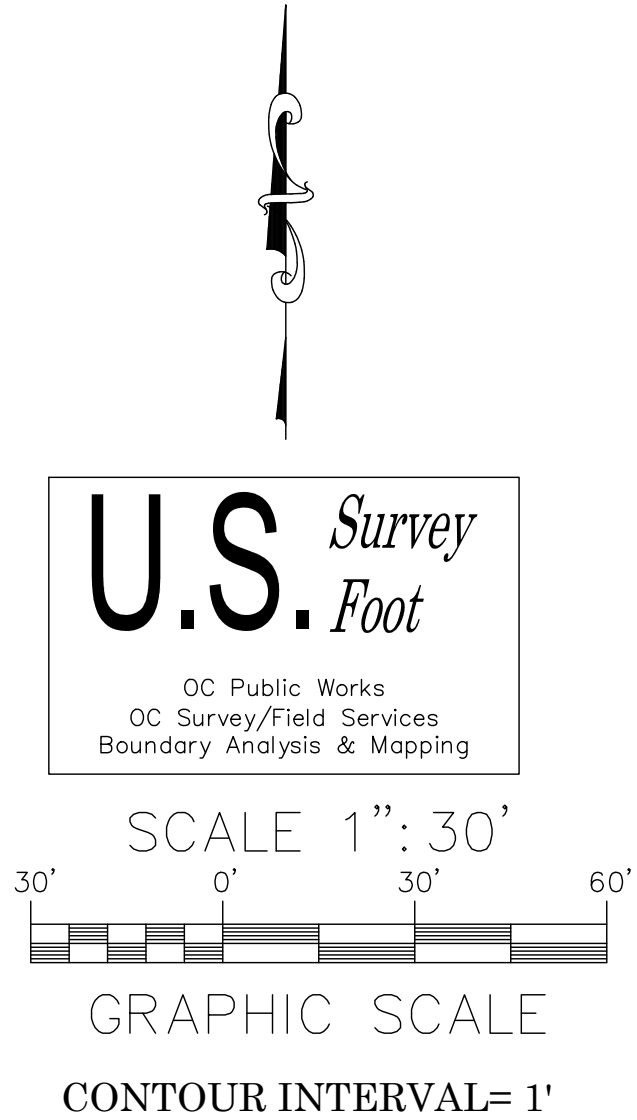


MATCHLINE - SEE SHEET 19

BOLSA CHICA RD

38" CONC PIPE OUTLET
INV EL.=9.80'

MATCHLINE - SEE SHEET 17



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 18 of 25
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
			TOPOGRAPHIC MAP			
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA			
			DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY	
			TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU	
			OFFICE CHECK		BY: E. MEDINA, PLS	
			FIELD CHECK		BY: R. MACIAS, PLS	
			SCALE: 1" = 30'		W.O. #EF21454	
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG						
MARK	DATE	ITEM				
REVISIONS						

SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPi
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP

Control Box- Irrigation

Drop Inlet

Fire Hydrant

Gate - Double

Gate - Single

Grate Inlet

Light Pole - Single

Manhole - Electrical

Manhole - Sewer

Manhole - Undefined

Meter - Water

Pull Box - Electrical

Pull Box - Telephone

Pipe Outlet/Inlet

Sign Post

Concrete

Utility Pole-Wood

Tree

Guy Wire

Hose Bibb

Manhole - Water

Meter-Electric

Monitor Well

Pull Box- Traffic

Pier Column- Steel

Post- Steel

Traffic Signal

Utility Warning Sign

Vault- Telephone

Valve-Gas

Valve-Irrigation

Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence - Chain Link
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

MATCHLINE - SEE SHEET 20

US NAVAL
WEAPONS YARD

CP# 100
N: 2224837.23'
E: 6016657.76'
EL: 22.62'

US NAVAL
WEAPONS YARD

CP# 101
N: 2224359.80'
E: 6016670.50'
EL: 10.93'

WESTMINISTER BOULEVARD

U.S. *Survey*
Foot

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

SCALE 1" = 30'



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

BOLSA CHICA RD

BOLSA CHICA RD

BOLSA CHICA CHANNEL(C02)

CP# 103
N: 2224554.25'
E: 6016795.86'
EL: 20.78'

MATCHLINE - SEE SHEET 18

				COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
				BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
						TOPOGRAPHIC MAP	
						LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA	
		DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY		SHEET NO. 19 of 25	
		TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU			
		OFFICE CHECK		BY: E. MEDINA, PLS			
		FIELD CHECK		BY: R. MACIAS, PLS			
		SCALE: 1" = 30'		W.O. #EF21454			
		FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG					
MARK	DATE	ITEM		REVISIONS			

SYMBOL

	Control Box- Irrigation
	Drop Inlet
	Fire Hydrant
	Gate - Double
	Gate - Single
	Grate Inlet
	Light Pole - Single
	Manhole - Electrical
	Manhole - Sewer
	Manhole - Undefined
	Meter - Water
	Pull Box - Electrical
	Pull Box - Telephone
	Pipe Outlet/Inlet
	Sign Post
	Concrete
	Utility Pole-Wood
	Tree
	Guy Wire
	Hose Bibb
	Manhole- Water
	Meter-Electric
	Monitor Well
	Pull Box- Traffic
	Pier Column- Steel
	Post- Steel
	Traffic Signal
	Utility Warning Sign
	Vault- Telephone
	Valve-Gas
	Valve-Irrigation
	Vent Pipe

LEGEND

LINE PATTERN KEY

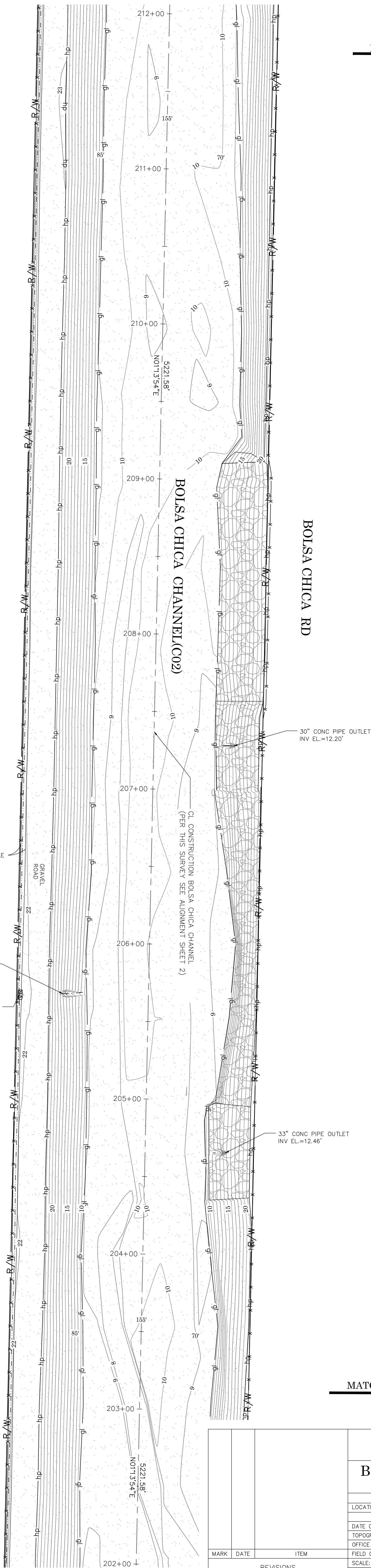
	Bush Row Outline
	Centerline
	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Flowline
	Guard Rail
	Hinge Point
	Lot/ Easement Line
	Planter Wall
	Property Line
	Right-of-Way
	Striping
	Wall - Concrete
	Wall - Stone

AREA PATTERN KEY

	Concrete
	Dirt/Gravel
	Rip-Rap

US NAVAL
WEAPONS YARD

GRAVEL SWALE

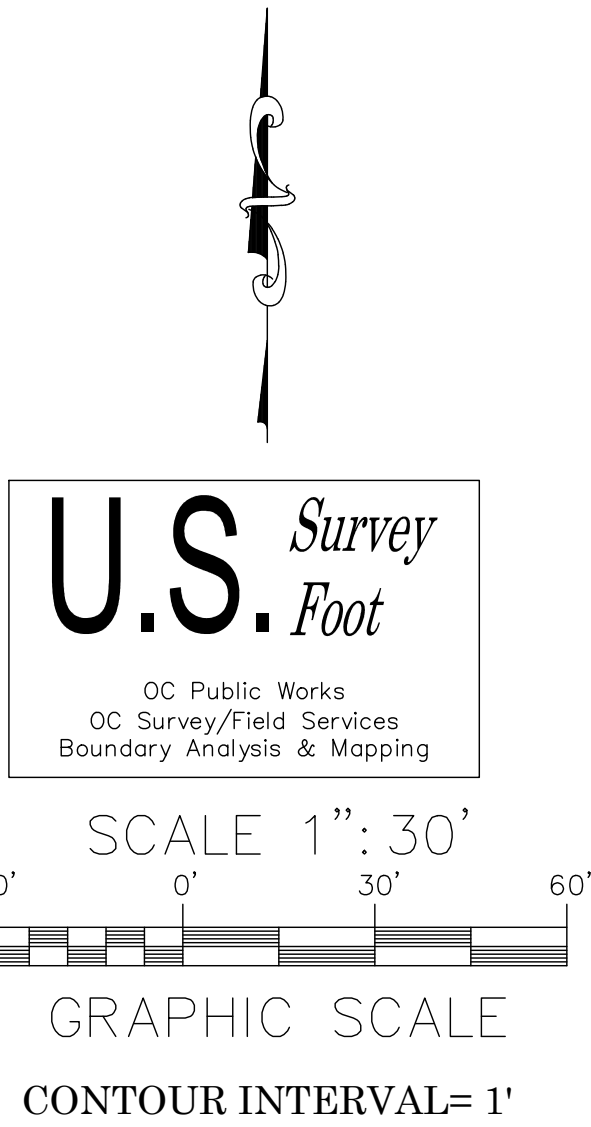
18" CONC PIPE OUTLET
INV EL.=15.76'18" CMP INLET
INV EL.=19.78'

MATCHLINE - SEE SHEET 19

BOLSA CHICA RD

30" CONC PIPE OUTLET
INV EL.=12.20'

BOLSA CHICA CHANNEL(C02)

CL. CONSTRUCTION BOLSA CHICA CHANNEL
(PER THIS SURVEY SEE ALIGNMENT SHEET 2)33" CONC PIPE OUTLET
INV EL.=12.46'

MATCHLINE - SEE SHEET 19

		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			SHEET NO. 20 ^{of} 25
		BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY			
		TOPOGRAPHIC MAP			
		LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA			
		DATE OF SURVEY: 09/15/2019		BY: JFA & PARTY	
		TOPOGRAPHIC MAPPING		BY: K. AHMED & A. VU	
		OFFICE CHECK		BY: E. MEDINA, PLS	
		FIELD CHECK		BY: R. MACIAS, PLS	
		SCALE: 1" = 30'		W.O. #EF21454	
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG					
MARK	DATE	ITEM			
REVISIONS					

SYMBOL

CBXIR

DII

FHH

DGT

SGT

GRI

LPL

MHHEL

MHHSW

MHHUN

MTRWA

PBXEL

PBXTL

PPO/PPI

SNN

CONC

UP1WD

TRE

GYA

HBB

MHHWA

MTREL

MWL

PBXTR

PCNST

PSTST

SGL

UWS

VLTTL

VLVGA

VLVIR

VPP

Control Box- Irrigation

Drop Inlet

Fire Hydrant

Gate - Double

Gate - Single

Grate Inlet

Light Pole - Single

Manhole - Electrical

Manhole - Sewer

Manhole - Undefined

Meter - Water

Pull Box - Electrical

Pull Box - Telephone

Pipe Outlet/Inlet

Sign Post

Concrete

Utility Pole-Wood

Tree

Guy Wire

Hose Bibb

Manhole- Water

Meter-Electric

Monitor Well

Pull Box- Traffic

Pier Column- Steel

Post- Steel

Traffic Signal

Utility Warning Sign

Vault- Telephone

Valve-Gas

Valve-Irrigation

Vent Pipe

LINE PATTERN KEY

Bush Row Outline

Centerline

Edge of Concrete

Edge of Asphalt Pavement

Flowline

Guard Rail

Hinge Point

Lot/ Easement Line

Planter Wall

Property Line

Right-of-Way

Striping

Wall - Concrete

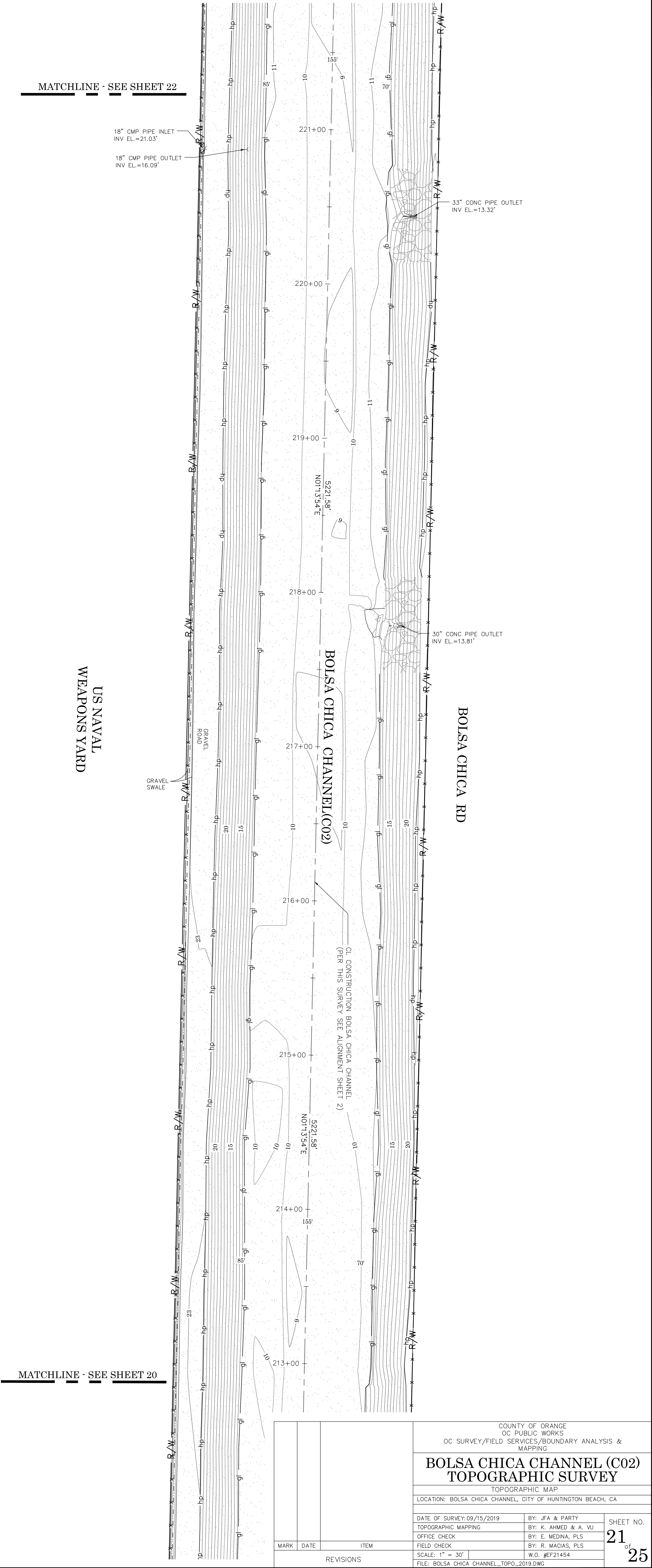
Wall - Stone

AREA PATTERN KEY

Concrete

Dirt/Gravel

Rip-Rap



SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPI
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP
- Control Box - Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole - Water
- Meter-Electric
- Monitor Well
- Pull Box - Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence - Chain Link
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

US NAVAL
WEAPONS YARD

GRAVEL SWALE

GRAVEL ROAD

BOLSA CHICA CHANNEL(C02)

BOLSA CHICA RD

24" CMP PIPE OUTLET
INV EL.=13.81'

42" CONC PIPE OUTLET
INV EL.=11.14'

27" CONC PIPE OUTLET
INV EL.=15.67'

33" CONC PIPE OUTLET
INV EL.=13.32'

18" CMP PIPE INLET
INV EL.=21.03'

18" CMP PIPE OUTLET
INV EL.=16.09'

MATCHLINE - SEE SHEET 23

U.S. *Survey*
Foot

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

SCALE 1"=30'



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

MATCHLINE - SEE SHEET 21

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
			TOPOGRAPHIC MAP		
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
			DATE OF SURVEY: 09/15/2019	BY: JFA & PARTY	SHEET NO. 22 of 25
			TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU	
			OFFICE CHECK	BY: E. MEDINA, PLS	
			FIELD CHECK	BY: R. MACIAS, PLS	
			SCALE: 1" = 30'	W.O. #EF21454	
			FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG		
MARK	DATE	ITEM			
REVISIONS					

SYMBOL

- Control Box- Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole- Water
- Meter-Electric
- Monitor Well
- Pull Box- Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

LEGEND

LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

MATCHLINE - SEE SHEET 24

OLD BOLSA CHICA RD

BOLSA CHICA CHANNEL(C02)

CL CONSTRUCTION BOLSA CHICA CHANNEL
(PER THIS SURVEY SEE ALIGNMENT SHEET 2)

BOLSA CHICA RD

CP# 106
N: 2228182.05'
E: 6016870.54'
EL: 25.32'



U.S. Survey
Foot

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



GRAPHIC SCALE

CONTOUR INTERVAL= 1'

MATCHLINE - SEE SHEET 22

US NAVAL
WEAPONS YARD

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
			TOPOGRAPHIC MAP		
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
			DATE OF SURVEY:09/15/2019	BY: JFA & PARTY	SHEET NO. 23 of 25
			TOPOGRAPHIC MAPPING	BY: K. AHMED & A. VU	
			OFFICE CHECK	BY: E. MEDINA, PLS	
			FIELD CHECK	BY: R. MACIAS, PLS	
			SCALE: 1" = 30'	W.O. #EF21454	
FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG					
MARK	DATE	ITEM			
REVISIONS					

SYMBOL

- CBXIR
- DII
- FHH
- DGT
- SGT
- GRI
- LPL
- MHHEL
- MHHSW
- MHHUN
- MTRWA
- PBXEL
- PBXTL
- PPO/PPI
- SNN
- CONC
- UP1WD
- TRE
- GYA
- HBB
- MHHWA
- MTREL
- MWL
- PBXTR
- PCNST
- PSTST
- SGL
- UWS
- VLTTL
- VLVGA
- VLVIR
- VPP
- Control Box - Irrigation
- Drop Inlet
- Fire Hydrant
- Gate - Double
- Gate - Single
- Grate Inlet
- Light Pole - Single
- Manhole - Electrical
- Manhole - Sewer
- Manhole - Undefined
- Meter - Water
- Pull Box - Electrical
- Pull Box - Telephone
- Pipe Outlet/Inlet
- Sign Post
- Concrete
- Utility Pole-Wood
- Tree
- Guy Wire
- Hose Bibb
- Manhole - Water
- Meter-Electric
- Monitor Well
- Pull Box - Traffic
- Pier Column- Steel
- Post- Steel
- Traffic Signal
- Utility Warning Sign
- Vault- Telephone
- Valve-Gas
- Valve-Irrigation
- Vent Pipe

LEGEND

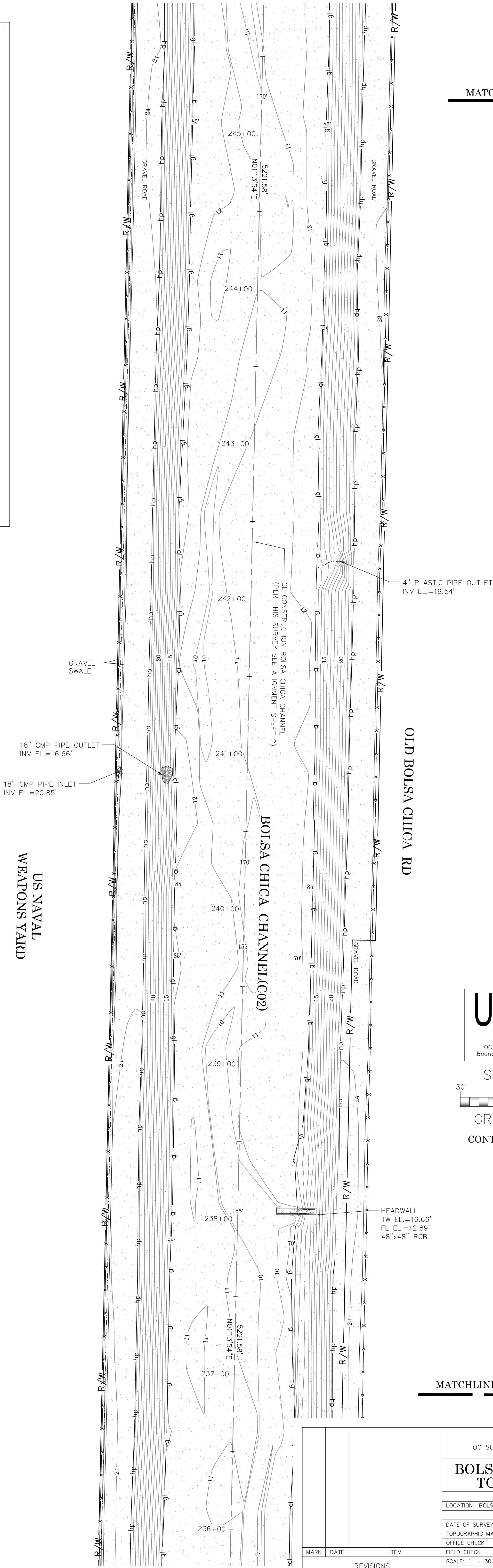
LINE PATTERN KEY

- Bush Row Outline
- Centerline
- Edge of Concrete
- Edge of Asphalt Pavement
- Flowline
- Guard Rail
- Hinge Point
- Lot/ Easement Line
- Planter Wall
- Property Line
- Right-of-Way
- Striping
- Wall - Concrete
- Wall - Stone

AREA PATTERN KEY

- Concrete
- Dirt/Gravel
- Rip-Rap

MATCHLINE - SEE SHEET 25



OLD BOLSA CHICA RD

BOLSA CHICA CHANNEL(C02)

US NAVAL
WEAPONS YARD

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

SCALE 1"= 30'
GRAPHIC SCALE
CONTOUR INTERVAL= 1'

MATCHLINE - SEE SHEET 23

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			BOLSA CHICA CHANNEL (C02) TOPOGRAPHIC SURVEY		
			TOPOGRAPHIC MAP		
			LOCATION: BOLSA CHICA CHANNEL, CITY OF HUNTINGTON BEACH, CA		
			DATE OF SURVEY: 09/15/2019		SHEET NO. 24_{of}25
			TOPOGRAPHIC MAPPING		
			OFFICE CHECK		
			FIELD CHECK		
			SCALE: 1" = 30'		
			FILE: BOLSA CHICA CHANNEL_TOPO_2019.DWG		
MARK	DATE	ITEM			
REVISIONS					

