



OC PUBLIC WORKS DEPARTMENT

SHANE SILSBY, DIRECTOR

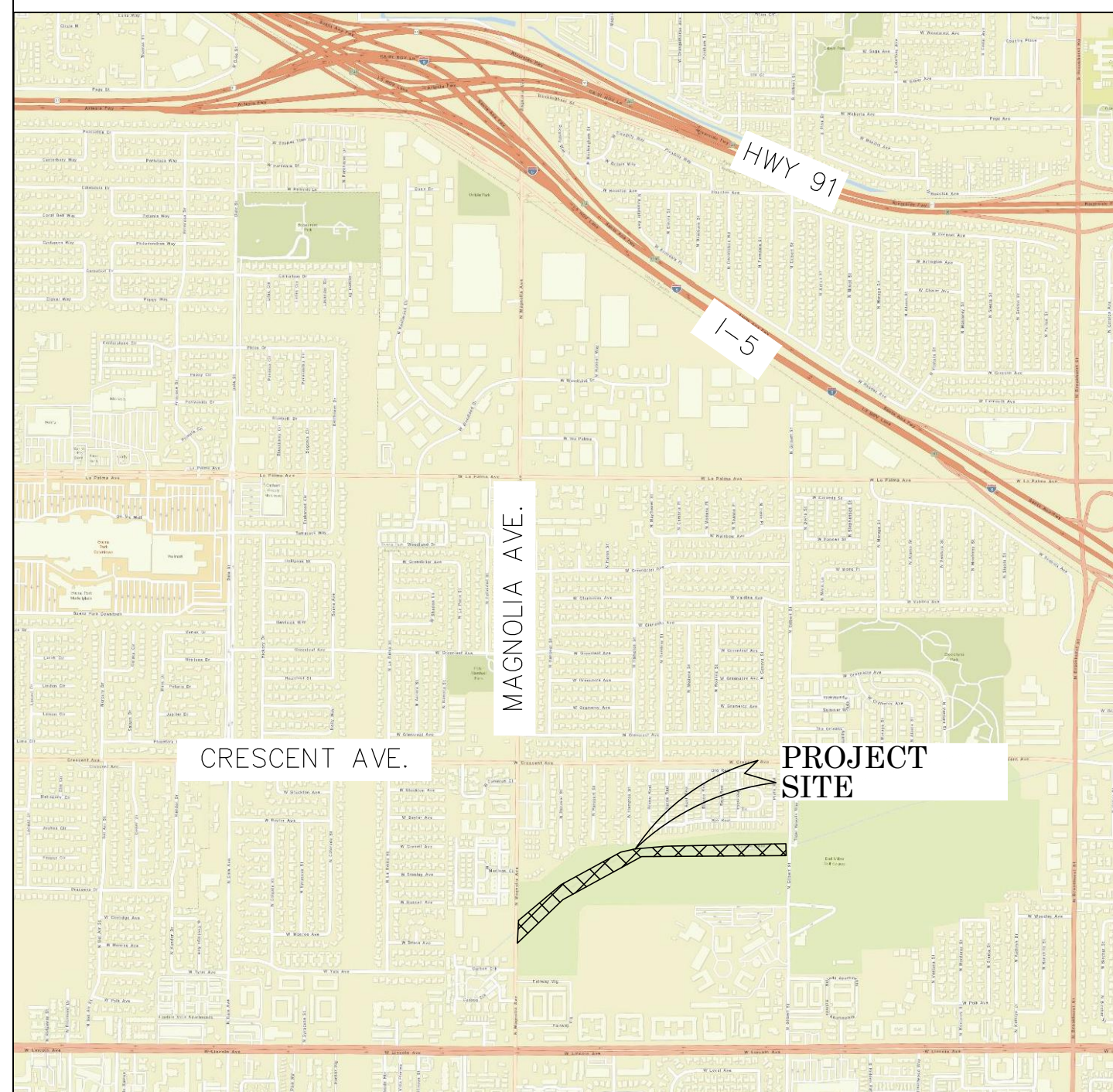
KEVIN HILLS, COUNTY SURVEYOR

CARBON CANYON CHANNEL (B01)

CHANNEL MAINTENANCE PROJECT



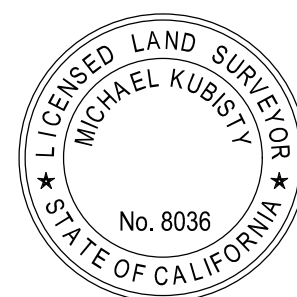
LOCATION MAP



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 26 DAY OF FEBRUARY 2020.

MICHAEL KUBISTY, PLS. SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 26 DAY OF FEBRUARY, 2020.

WADE WEAVER, PLS. DEPUTY COUNTY SURVEYOR



U.S. Survey Foot

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

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

IDENTICAL



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 (2017.50) EPOCH ADJUSTMENT, AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING STATIONS CGPS (CCCS) AND (BLSA) BEING NORTH 66°06'41" EAST 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 1.000006930.
COMBINATION FACTOR WAS HELD AT POINT 105 N:2252491.48' E:6038470.57', EL.= 97.93'
ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. 1G-143-69 ELEV. = 94.27 YEAR LEVELED: 2005
NAVD 1988 (O.C.S. 1995 ADJUSTMENT)
DESCRIPTION: FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1G-143-69", SET IN THE NORTHERLY END OF A CONCRETE HEADWALL FOR A FLOOD CONTROL CHANNEL. MONUMENT IS LOCATED ALONG THE EASTERLY SIDE OF MAGNOLIA AVENUE, 0.2 MILES NORTHERLY OF THE CENTERLINE OF LINCOLN AVENUE AND 38 FT. EASTERLY OF MAGNOLIA. MONUMENT IS SET LEVEL WITH THE SIDEWALK.

NOTES

THE SURVEY INFORMATION SHOWN HEREON IS TO BE USED FOR TOPOGRAPHIC RELATIONSHIPS AND BOUNDARY LOCATION ONLY AND IS NOT INTENDED FOR LAND ACQUISITION.
PARCELS SHOWN WITHOUT BEARING AND DISTANCES ARE FOR GRAPHICAL PURPOSES.

SHEET INDEX

SHEET	NO.	DESCRIPTION
SHEET 1	1	TITLE SHEET
SHEET 2-3	2-3	BOUNDARY
SHEET 4-9	4-9	TOPOGRAPHIC MAP

ALIGNMENT NOTE

THE CONSTRUCTION CENTERLINE ALIGNMENT SHOWN HEREON WAS ESTABLISHED BY HOLDING 311+82.32' PER DWG. NO. B01-701-2-A DATED JULY, 1959 AT THE CENTERLINE INTERSECTION OF MAGNOLIA AVE. AND THE DESCRIBED LINE OF BOOK 5175 PAGE 274 O.R. INCREASING IN STATION UPSTREAM TO GILBERT ST.

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP AND RIGHT OF WAY ESTABLISHMENT FOR THIS PORTION OF THE CARBON CANYON CHANNEL (B01).

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT			
			TITLE SHEET			
			FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.			
			DATE OF SURVEY: OCTOBER, 2019	BY: JOHNS & PARTY	SHEET NO. 1 of 9	
			TOPOGRAPHIC MAPPING	BY: R. BELTRAN		
			OFFICE CHECK	BY: M. KUBISTY, PLS.		
			FIELD CHECK	BY: JOHNS & PARTY		
MARK	DATE	ITEM	SCALE: N.T.S.	W.O. #EF21210	FILE NO. 1920PW-IN0012	
REVISIONS			FILE: Carbon_Canyon_Channel_Topo_2020.DWG			

ESTABLISHMENT NOTES

- Ⓐ ESTABLISHED THE SW CORNER OF THE SW 1/4 SECTION 7 TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY HOLDING RECORD DISTANCE PER R2, & R8 N'LY FROM FOUND MONUMENT 1 ALONG LINE ESTABLISHMENT ⓐ
- Ⓑ ESTABLISHED THE SW CORNER OF PARCEL 1 OF R19 HOLDING RECORD DISTANCE PER R19 N'LY FROM ESTABLISHMENT NOTE Ⓐ ALONG LINE ESTABLISHMENT ⓐ
- Ⓒ ESTABLISHED THE POINT OF BEGINNING OF DESCRIBED LINE PER R20, R21, R22 & R23 HOLDING RECORD DISTANCE N'LY FROM ESTABLISHMENT NOTE Ⓑ ALONG LINE ESTABLISHMENT ⓐ
- Ⓓ ESTABLISHED THE NW CORNER OF R19 HOLDING RECORD DISTANCE N'LY FROM ESTABLISHMENT POINT Ⓒ ALONG LINE ESTABLISHMENT ⓐ
- Ⓔ S.F.N. ESTABLISHED THE NW CORNER OF THE SW 1/4 OF THE SW 1/4 SECTION 7 TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY PROPORTION PER R1 BETWEEN ESTABLISHMENT NOTE Ⓐ & FOUND MONUMENT 2
- Ⓕ S.F.N. ESTABLISHED THE INTERSECTION OF THE N'LY PROLONGATION OF THE W'LY LINE OF R3 & LINE ESTABLISHMENT Ⓓ HOLDING RECORD DISTANCE W'LY FROM ESTABLISHMENT NOTE Ⓕ ALONG LINE ESTABLISHMENT ⓐ
- Ⓖ S.F.N. ESTABLISHED THE NE CORNER OF THE NW 1/4 OF THE SW 1/4 SECTION 7 TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY PROPORTION PER R1 BETWEEN FOUND MONUMENTS 2 & 3
- Ⓗ ESTABLISHED THE NE CORNER OF R19 HOLDING RECORD DISTANCE N'LY FROM ESTABLISHMENT NOTE Ⓓ ALONG LINE ESTABLISHMENT ⓐ
- Ⓙ ESTABLISHED THE S'LY TERMINUS OF THAT CERTAIN COURSE DESCRIBED IN R20, R22, R23, & R23 AS BEING DISTANT S00°37'35"E, 668.84 FROM THE INTERSECTION OF GILBERT ST. & CRESCENT AVE, MONUMENT NOTE 3
- ⓫ ESTABLISHED THE SE CORNER OF R19 HOLDING RECORD DISTANCE PER R19 S'LY FROM FOUND MONUMENT 3 ALONG LINE ESTABLISHMENT ⓐ
- Ⓚ S.F.N. ESTABLISHED THE NE CORNER OF THE SE 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY PROPORTION PER R1 BETWEEN ESTABLISHMENT NOTE 1 & FOUND MONUMENT 3
- Ⓛ ESTABLISHED THE SE CORNER OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES HOLDING RECORD DISTANCE PER R2 & R8 N'LY FROM MONUMENT NOTE 4 ALONG LINE ESTABLISHMENT ⓐ
- Ⓜ S.F.N. ESTABLISHED THE SW CORNER OF THE SE 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY PROPORTION PER R1 BETWEEN ESTABLISHMENT NOTES Ⓐ & 1
- Ⓝ S.F.N. ESTABLISHED THE CENTER OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W S.B.M., RANCHO LOS COYOTES BY INTERSECTION FROM PROPORTIONED ESTABLISHMENT NOTES Ⓔ Ⓒ Ⓚ & Ⓜ
- Ⓞ S.F.N. ESTABLISHED THE SE CORNER OF THE WEST 16.58 ACRES OF THE NW 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M. RANCH LOS COYOTES BY INTERSECTION HOLDING THE S'LY PROLONGATION OF LINE ESTABLISHMENT ⓫ S'LY FROM ESTABLISHMENT NOTE Ⓔ & E'LY FROM ESTABLISHMENT NOTE Ⓓ ALONG LINE ESTABLISHMENT ⓫
- Ⓟ S.F.N. ESTABLISHED THE NW CORNER OF THE EAST 20 ACRES OF THE SW 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10E, S.B.M., RANCHO LOS COYOTES HOLDING RECORD DISTANCE PER R4 E'LY FROM ESTABLISHMENT NOTE E ALONG LINE ESTABLISHMENT ⓫
- Ⓠ ESTABLISHED THE W'LY LINE OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES BETWEEN ESTABLISHMENT NOTE A & FOUND MONUMENT 2 ESTABLISHED & THE C/L OF MAGNOLIA AVE BETWEEN FOUND MONUMENTS 1 & 2
- Ⓡ ESTABLISHED THE N'LY LINE OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, BETWEEN FOUND MONUMENTS 2 & 3 ESTABLISHED LINE ALSO BEING THE C/L OF CRESCENT AVE.
- Ⓢ ESTABLISHED THE E'LY LINE OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, BETWEEN FOUND MONUMENT 3 & ESTABLISHMENT NOTE ⓫ ESTABLISHED THE C/L OF GILBERT ST. BETWEEN FOUND MONUMENTS 3 & 4
- Ⓣ ESTABLISHED THE S'LY LINE OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, BETWEEN ESTABLISHMENT NOTES Ⓐ & 1

- Ⓛ ESTABLISHED THE C/L OF LINCOLN AVE BETWEEN FOUND MONUMENTS 1 & 4
- ⓫ ESTABLISHED THE N'LY LINE OF THE S'LY 1/2 OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, BETWEEN ESTABLISHMENT NOTES Ⓔ & Ⓚ
- Ⓜ ESTABLISHED THE E'LY LINE OF THE W'LY 1/2 OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, BETWEEN ESTABLISHMENT NOTES Ⓒ & Ⓜ
- Ⓝ ESTABLISHED THE C/L OF HARCOURT ST. PER R3 BETWEEN FOUND MONUMENT 7 & ESTABLISHMENT NOTE Ⓕ
- Ⓞ ESTABLISHED THE E'LY LINE OF THE WEST 16.58 ACRES, OF THE NW 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES, HOLDING A LINE S'LY FROM ESTABLISHMENT NOTE Ⓔ PARALLEL WITH, & W'LY OF LINE ESTABLISHMENT ⓫
- Ⓟ ESTABLISHED DESCRIBED LINE PER R20, R21, R22, & R23 HOLDING RECORD ANGLES, DISTANCES, & CURVATURE INFORMATION PER R20, R21, R22, & R23 E'LY FROM ESTABLISHMENT NOTE Ⓒ BETWEEN ESTABLISHMENT NOTES ⓫ & 1
- Ⓠ EXCEPT AS NOTED ESTABLISHED THE N'LY LINE OF R19 HOLDING RECORD ANGLES, DISTANCES, & CURVATURE INFORMATION E'LY FROM ESTABLISHMENT NOTE Ⓓ BETWEEN ESTABLISHMENT NOTE Ⓓ & 1
- Ⓡ EXCEPT AS NOTED ESTABLISHED THE S'LY LINE OF R19 HOLDING RECORD ANGLES, DISTANCES, & CURVATURE INFORMATION W'LY FROM ESTABLISHMENT NOTE Ⓓ BETWEEN ESTABLISHMENT NOTE Ⓓ & Ⓛ
- Ⓢ ESTABLISHED THE SW CORNER OF THE NORTH 1/2 OF THE NE 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES AT MIDPOINT BETWEEN ESTABLISHMENT NOTES Ⓝ & Ⓢ
- Ⓣ ESTABLISHED THE SE CORNER OF THE NORTH 1/2 OF THE NE 1/4 OF THE SW 1/4 SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES AT MIDPOINT BETWEEN ESTABLISHMENT NOTE Ⓚ & FOUND MONUMENT 3
- Ⓤ ESTABLISHED THE S'LY LINE OF THE NORTH 1/2 OF THE NE 1/4 OF THE SW 1/4 OF SECTION 7, TOWNSHIP 4S, RANGE 10W, S.B.M., RANCHO LOS COYOTES BETWEEN ESTABLISHMENT NOTES Ⓒ & Ⓛ
- Ⓡ ESTABLISHED THE INTERSECTION OF CRESCENT AVE & HARCOURT ST. BY INTERSECTION HOLDING A LINE N'LY FROM FOUND MONUMENT 7 ALONG LINE ESTABLISHMENT Ⓚ & E'LY FROM FOUND MONUMENT 2 ALONG LINE ESTABLISHMENT ⓐ
- Ⓢ ESTABLISHED THE E'LY RIGHT OF WAY OF MAGNOLIA AVE HOLDING RECORD DIMENSIONS PARALLEL WITH, PERPENDICULAR TO, & E'LY OF LINE ESTABLISHMENT ⓫ PER R4, R5, & R7.
- Ⓣ ESTABLISHED THE S'LY RIGHT OF WAY OF CRESCENT AVE HOLDING RECORD DIMENSIONS PARALLEL WITH, PERPENDICULAR TO, & S'LY OF LINE ESTABLISHMENT ⓐ PER R3, P.M.B. 384/20, & TRACT 2451, M.M. 74/36–37 AS SHOWN
- Ⓤ ESTABLISHED THE W'LY RIGHT OF WAY OF GILBERT ST. HOLDING RECORD DIMENSIONS PARALLEL WITH, PERPENDICULAR TO, & W'LY OF LINE ESTABLISHMENT Ⓢ PER P.M.B. 202/14–15, R.S.B. 33/43, & R.S.B. 50/43–44.
- Ⓡ ESTABLISHED THE N'LY RIGHT OF WAY OF LINCOLN AVE HOLDING RECORD DIMENSIONS PARALLEL WITH, PERPENDICULAR TO, & N'LY OF LINE ESTABLISHMENT 1 PER P.M.B. 24/47, & R.S.B. 308/34,

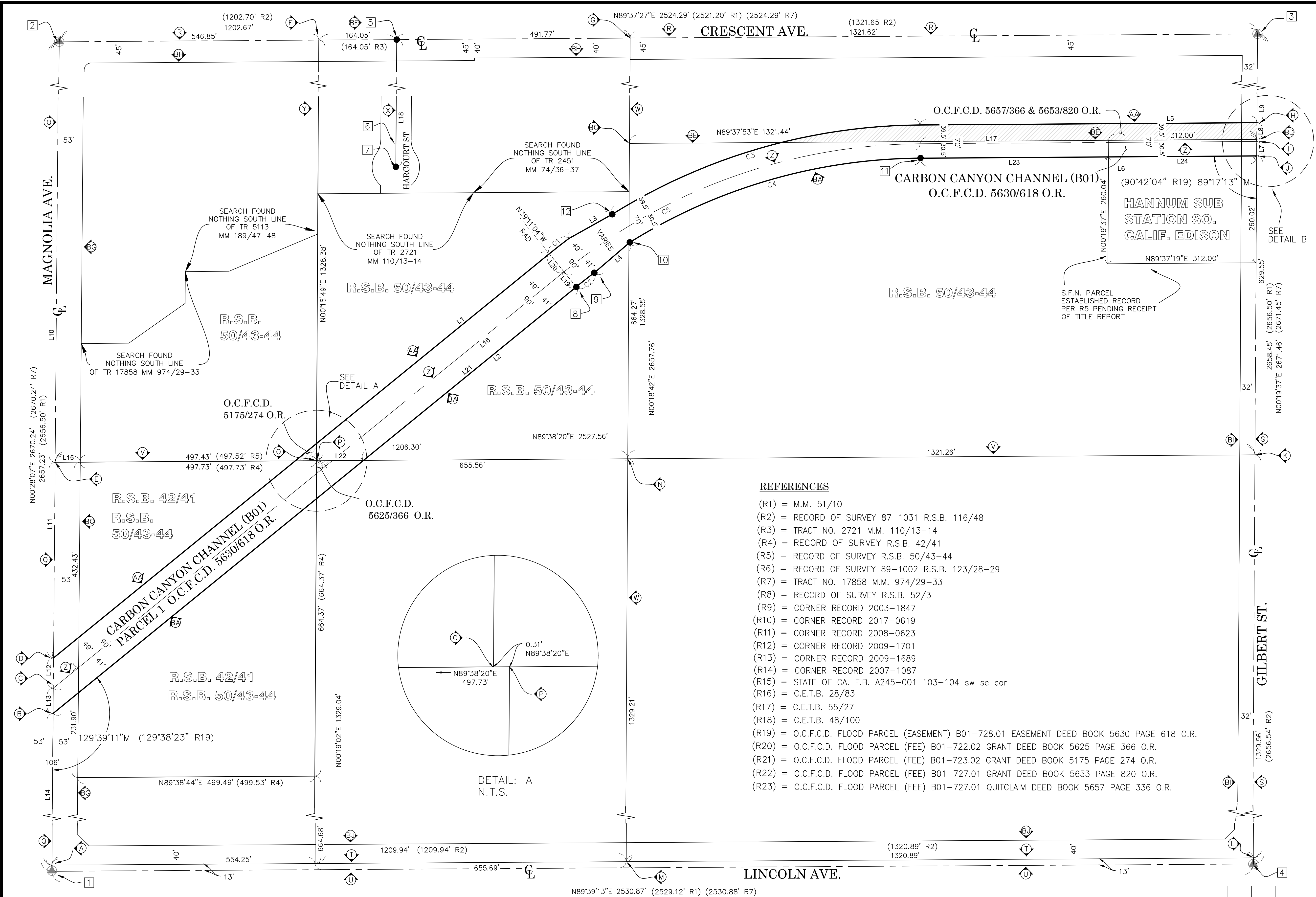
MONUMENT NOTES

- 1 FOUND 2" BRASS DISK STAMPED STATE OF CA. DIV. OF HIGHWAYS IN CITY OF ANAHEIM WELL MONUMENT, PER R10, R14, & R16, DN. 1.3' IN A.C. ACCEPTED AS C/L INTERSECTION OF MAGNOLIA AVE & LINCOLN AVE.
- 2 FOUND 2" BRASS DISK W/ PUNCH MARK IN CITY OF ANAHEIM WELL MONUMENT, PER R12, & R14, D.N. 1.5' IN A.C. ACCEPTED AS C/L INTERSECTION OF MAGNOLIA AVE & CRESCENT AVE ALSO BEING THE NW CORNER OF THE SW 1/4 OF SECTION 7 TOWNSHIP 4S, RANGE 10W, RANCHO LOS COYOTES.
- 3 FOUND 2" BRASS DISK W/ PUNCH MARK IN CITY OF ANAHEIM WELL MONUMENT, PER R11, & R17, D.N. 1.5' IN A.C. ACCEPTED AS C/L INTERSECTION OF GILBERT ST. & CRESCENT AVE. ALSO BEING THE NE CORNER OF THE SW 1/4 OF SECTION 7 TOWNSHIP 4S, RANGE 10W, RANCHO LOS COYOTES
- 4 FOUND 2" BRASS DISK STAMPED STATE OF CA. DIV. OF HIGHWAYS IN CITY OF ANAHEIM WELL MONUMENT, PER R12, & R14, DN. 1.3' IN A.C. ACCEPTED AS C/L INTERSECTION OF MAGNOLIA AVE & LINCOLN AVE.
- 5 FOUND PK NAIL WITH TAG STAMPED "CITY OF ANAHEIM" PER R9, FLUSH IN A.C. S00°18'49"W, 0.12' FROM C/L INTERSECTION CRESCENT AVE, & S. HARCOURT ST. ACCEPTED AS POINT ON C/L HARCOURT ST.
- 6 S.F.N. @ POINT ON C/L HARCOURT ST PER R10
- 7 FOUND GEAR SPIKE & WASHER STAMPED "C OF A SURVEY" PER R10, FLUSH IN A.C. ACCEPTED AS C/L RADIUS POINT S. HARCOURT ST.
- 8 FOUND 2" I.P. WITH BRASS TAG STAMPED "O.C.S." PER R6, FLUSH IN DIRT, N53°12'01"E 0.74' FROM B.C. OF S'LY LINE OF R19
- 9 FOUND 2" I.P. WITH BRASS TAG STAMPED "O.C.S." PER R6, FLUSH IN DIRT, N53°26'11"E 0.74' FROM E.C. OF S'LY LINE OF R19
- 10 FOUND 2" I.P. WITH BRASS TAG STAMPED "O.C.S." PER R6, FLUSH IN DIRT, N45°53'11"E 0.80' FROM B.C. OF S'LY LINE OF R19
- 11 FOUND 2" I.P. WITH BRASS TAG STAMPED "O.C.S." PER R6, FLUSH IN DIRT, N70°33'57"E 0.70' FROM B.C. OF S'LY LINE OF R19
- 12 FOUND 2" I.P. WITH BRASS TAG STAMPED "O.C.S." PER R6, FLUSH IN DIRT, N62°58'21"E 0.90' FROM E.C. OF N'LY LINE OF R19

REFERENCES

- (R1) = M.M. 51/10
(R2) = RECORD OF SURVEY 87–1031 R.S.B. 116/48
(R3) = TRACT NO. 2721 M.M. 110/13–14
(R4) = RECORD OF SURVEY R.S.B. 42/41
(R5) = RECORD OF SURVEY R.S.B. 50/43–44
(R6) = RECORD OF SURVEY 89–1002 R.S.B. 123/28–29
(R7) = TRACT NO. 17858 M.M. 974/29–33
(R8) = RECORD OF SURVEY R.S.B. 52/3
(R9) = CORNER RECORD 2003–1847
(R10) = CORNER RECORD 2017–0619
(R11) = CORNER RECORD 2008–0623
(R12) = CORNER RECORD 2009–1701
(R13) = CORNER RECORD 2009–1689
(R14) = CORNER RECORD 2007–1087
(R15) = STATE OF CA. F.B. A245–001 103–104 sw se cor
(R16) = C.E.T.B. 28/83
(R17) = C.E.T.B. 55/27
(R18) = C.E.T.B. 48/100
(R19) = O.C.F.C.D. FLOOD PARCEL (EASEMENT) B01–728.01 EASEMENT DEED BOOK 5630 PAGE 618 O.R.
(R20) = O.C.F.C.D. FLOOD PARCEL (FEE) B01–722.02 GRANT DEED BOOK 5625 PAGE 366 O.R.
(R21) = O.C.F.C.D. FLOOD PARCEL (FEE) B01–723.02 GRANT DEED BOOK 5175 PAGE 274 O.R.
(R22) = O.C.F.C.D. FLOOD PARCEL (FEE) B01–727.01 GRANT DEED BOOK 5653 PAGE 820 O.R.
(R23) = O.C.F.C.D. FLOOD PARCEL (FEE) B01–727.01 QUITCLAIM DEED BOOK 5657 PAGE 336 O.R.

			COUNTY OF ORANGE OC PUBLIC WORKS/ENGINEERING SERVICES OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			CARBON CANYON CHANNEL (B01) CHANNEL MAINTAINANCE PROJECT		
			BOUNDARY		
			PROJECT LIMITS: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.		
MARK	DATE	ITEM	DATE OF SURVEY:OCTOBER 2019	BY:JOHNS & PARTY	SHEET NO. 2 of 9
			TOPOGRAPHIC MAPPING	BY:R. BELTRAN	
			OFFICE CHECK	BY:M. KUBISTY, PLS	
			FIELD CHECK	BY:JOHNS & PARTY	
			SCALE:1"=100'	W.O. #EF21210	
REVISIONS			FILE:CARBON CANYON_CHANNEL_BOUNDARY_2020.DWG		

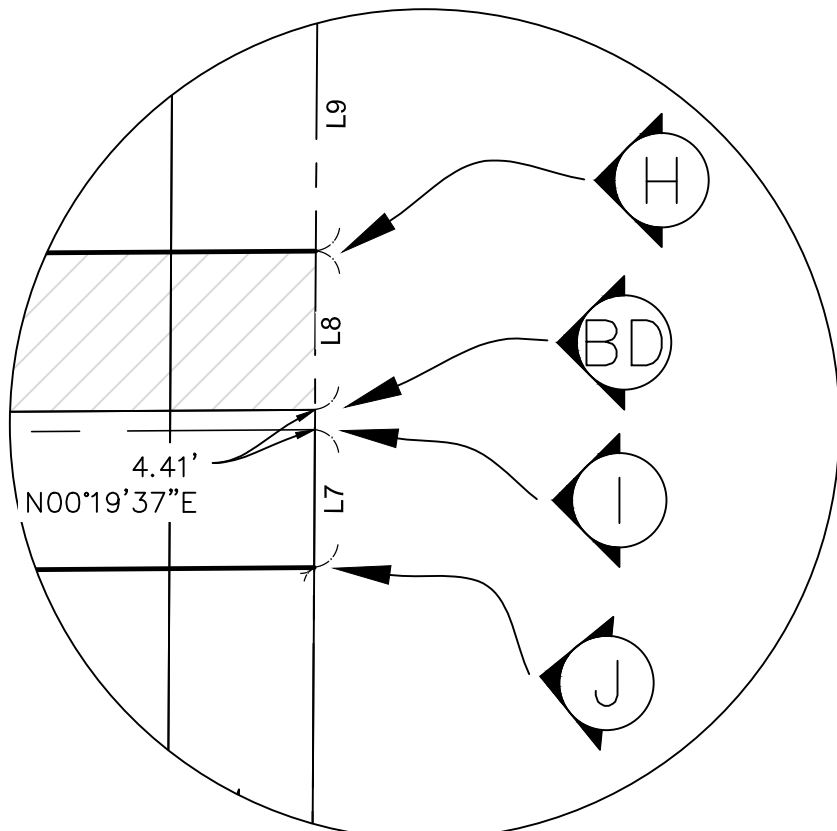


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CURVE TABLE						
CURVE #	LENGTH	RADIUS	DELTA	RECORD LENGTH	RECORD RADIUS	RECORD DELTA
C1	52.04	1248.98	002°23'14"	52.04 (R19)	1249.00 (R19)	2°23'14" (R19)
C2	48.29	1158.98	002°23'14"	800.11 (R19)	1159.00 (R19)	2°23'14" (R19)
C3	684.39	1239.48	031°38'11"	684.40 (R19)	1239.50 (R19)	31°38'11" (R19)
C4	645.74	1169.48	031°38'11"	645.75 (R19)	1169.50 (R19)	31°38'11" (R19)
C5	812.59	1200.00	038°47'54"	812.59 (R22)	1200.00 (R22)	38°47'54" (R19)

LINE TABLE			
LINE #	BEARING	MEASURED DISTANCE	RECORD DISTANCE
L1	N50°48'56"E	1347.33	1347.41 (R19)
L2	N50°48'56"E	1421.95	1421.97 (R19)
L3	N60°49'19"E	104.09	104.09 (R19)
L4	N49°25'02"E	97.56	97.56 (R19)
L5	N89°36'50"E	709.77	709.08 (R19)
L6	N89°36'50"E	708.88	708.20 (R19)
L7	N00°19'37"E	30.49	
L8	N00°18'37"E	35.10	
L9	N00°19'38"E	629.34	
L10	N00°28'07"E	1328.29	1328.29 (R7)
L11	N00°28'07"E	411.94	
L12	N00°28'06"E	63.65	
L13	N00°28'07"E	53.25	
L14	N00°28'07"E	800.10	800.11 (R19)
L15	N89°38'20"E	53.01	
L16	N50°48'59"E	1388.00	1388.00 (R22)
L17	N89°36'53"E	709.21	708.58 (R22)
L18	S00°18'49"W	711.15	711.00 (R22)
L19	S39°11'04"E	40.98	
L20	S39°11'04"E	49.03	
L21	N50°48'56"E	578.48	



DETAIL: B
N.T.S.

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				SCALE: 1"=100'	W.O. #EF21210	
		REVISIONS		FILE: CARBON_CANYON_CHANNEL_BOUNDARY_2020.DWG		

SYMBOL PATTERN KEY

4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted

Single Gate

Steel Sign

Single Light Pole

Pull box - Electrical

Tree Less Than 8" Unless Noted

Storm Drain Manhole

Vault Undefined

Double Gate

Electric Manhole

Hose Bib

Control Box Irrigation

Utility Pole

Palm Tree Less Than 8" Unless Noted

TV Cable Pull Box

Post

Guy Anchor

Control Point

ABBREVIATION KEY

RCP - Reinforced Concrete Pipe

PVC - Polyvinyl Chloride Pipe

CMP - Corrugated Metal Pipe

LINE PATTERN KEY

Centerline

Edge of Asphalt Pavement

Edge of Concrete Pavement

Guard Rail Steel

Flowline

R/W Right of Way

Street Striping

Concrete Wall

Block Wall

Hand Rail Steel

Chain Link Fence

hp Hinge Point

Exposed Pipe

AREA PATTERN KEY

Concrete

Dirt

Grass

Riprap

SEE SHEET 5

CP #110
N: 2251975.359'
E: 6037855.576'
94.98'

EXPOSED PVC PIPE
4"Ø
TOP PIPE EL.=85.46'

CP #101
N: 2251773.07'
E: 6037613.19'
EL.=93.69'

MAGNOLIA AVE.

RCP
60"Ø
INV EL.=83.91'

HEADWALL
TW EL.=94.21'
SOFFIT EL.=91.63'
CONC. FLOWLINE
EL.=81.38'

BEGIN C/L
CONSTRUCTION
ALIGNMENT
SEE SHEET 1
ALIGNMENT NOTE

CONC. FLOWLINE
EL.= 81.66'
RT GL.EL.= 82.04'
LT GL.EL.= 82.10'

SOFFIT EL.=93.5'
RT GRADELINE EL.=81.2'
LT GRADELINE EL.=83.4'

CONCRETE
PEDESTRIAN BRIDGE

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING				
			CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT				
			TOPOGRAPHIC MAP				
			FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.				
DATE OF SURVEY: OCTOBER, 2019		BY: JOHNS & PARTY		SHEET NO. 4 of 9			
TOPOGRAPHIC MAPPING		BY: R. BELTRAN					
OFFICE CHECK		BY: M. KUBISTY, PLS.					
FIELD CHECK		BY: JOHNS & PARTY					
SCALE: 1" = 20'		W.O. #EF21210		FILE NO. 1920PW-IN0012			
REVISIONS			FILE: Carbon Canyon_Channel_Topo_2020.DWG				

LEGEND

SYMBOL PATTERN KEY

4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted

Single Gate

Steel Sign

Single Light Pole

Pull box - Electrical

Tree Less Than 8" Unless Noted

Storm Drain Manhole

Vault Undefined

Double Gate

Electric Manhole

Hose Bib

Control Box Irrigation

Utility Pole

Palm Tree Less Than 8" Unless Noted

TV Cable Pull Box

Post

Guy Anchor

Control Point

ABBREVIATION KEY

RCP - Reinforced Concrete Pipe

PVC - Polyvinyl Chloride Pipe

CMP - Corrugated Metal Pipe

LINE PATTERN KEY

Centerline

Edge of Asphalt Pavement

Edge of Concrete Pavement

Guard Rail Steel

Flowline

R/W Right of Way

Street Striping

Concrete Wall

Block Wall

Hand Rail Steel

Chain Link Fence

Hinge Point

Exposed Pipe

AREA PATTERN KEY

Concrete

Dirt

Grass

Riprap

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			SHEET NO. 5 of 9	
CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT				
TOPOGRAPHIC MAP				
FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.				
DATE OF SURVEY: OCTOBER, 2019	BY: JOHNS & PARTY			
TOPOGRAPHIC MAPPING	BY: R. BELTRAN			
OFFICE CHECK	BY: M. KUBISTY, PLS.			
FIELD CHECK	BY: JOHNS & PARTY			
SCALE: 1" = 20'	W.O. #EF21210	FILE NO. 1920PW-IN0012		
FILE: Carbon Canyon_Channel_Topo_2020.DWG				
MARK	DATE	ITEM		
REVISIONS				

SYMBOL PATTERN KEY

4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted

Single Gate

Steel Sign

Single Light Pole

Pull box - Electrical

Tree Less Than 8" Unless Noted

Storm Drain Manhole

Vault Undefined

Double Gate

Electric Manhole

Hose Bib

Control Box Irrigation

Utility Pole

Palm Tree Less Than 8" Unless Noted

TV Cable Pull Box

Post

Guy Anchor

Control Point

ABBREVIATION KEY

RCP - Reinforced Concrete Pipe

PVC - Polyvinyl Chloride Pipe

CMP - Corrugated Metal Pipe

LINE PATTERN KEY

Centerline

Edge of Asphalt Pavement

Edge of Concrete Pavement

Guard Rail Steel

Flowline

Right of Way

Street Striping

Concrete Wall

Block Wall

Hand Rail Steel

Chain Link Fence

Hinge Point

Exposed Pipe

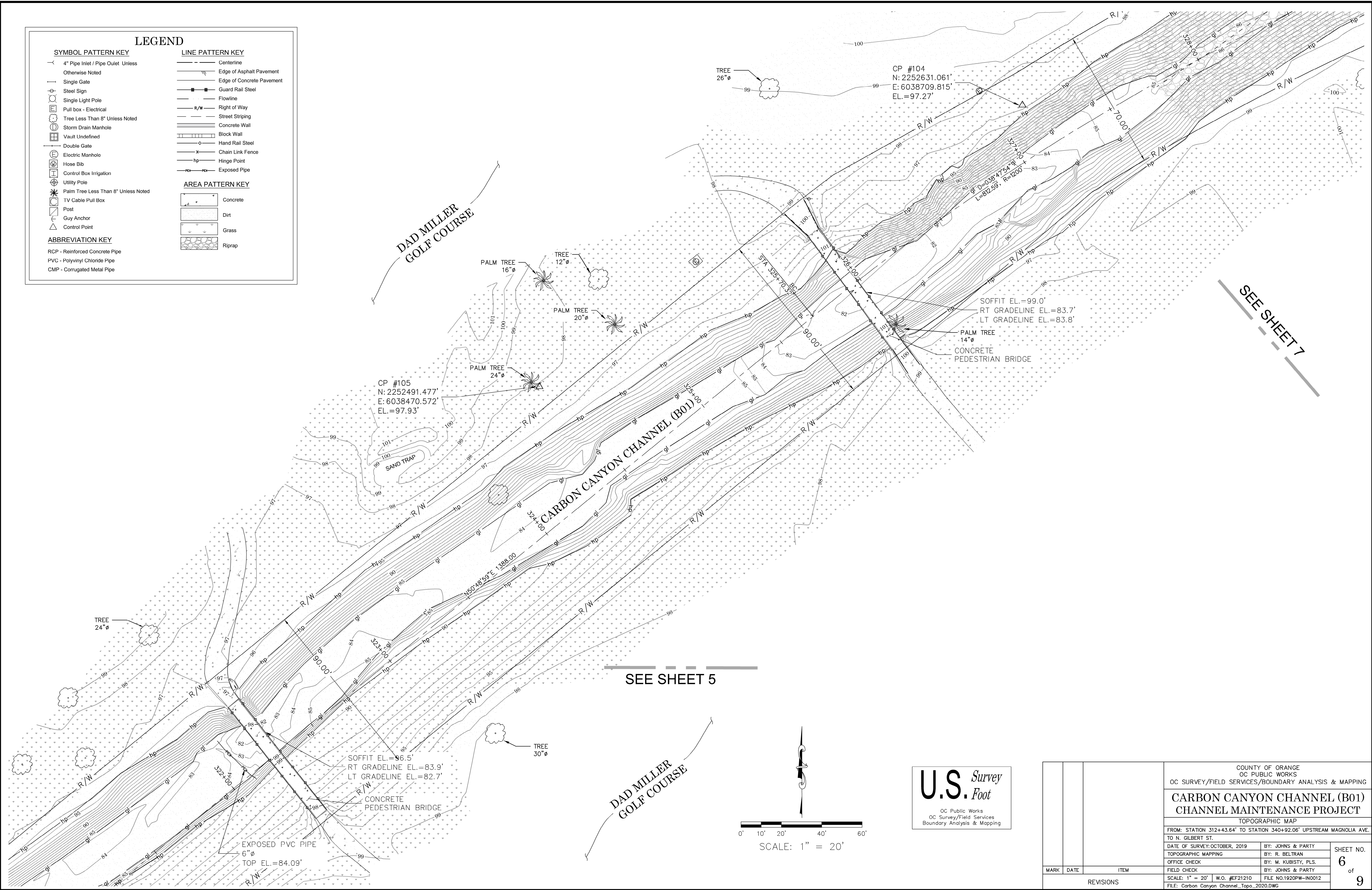
AREA PATTERN KEY

Concrete

Dirt

Grass

Riprap



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT			
			TOPOGRAPHIC MAP			
			FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.			
			DATE OF SURVEY:OCTOBER, 2019		BY: JOHNS & PARTY	
TOPOGRAPHIC MAPPING		BY: R. BELTRAN				
OFFICE CHECK		BY: M. KUBISTY, PLS.				
FIELD CHECK		BY: JOHNS & PARTY				
SCALE: 1" = 20'		W.O. #EF21210		FILE NO.1920PW-IN0012		
FILE: Carbon Canyon_Channel_Topo_2020.DWG						
MARK	DATE	ITEM				
REVISIONS						

LEGEND

SYMBOL PATTERN KEY

- 4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted
- Single Gate
- Steel Sign
- Single Light Pole
- Pull box - Electrical
- Tree Less Than 8" Unless Noted
- Storm Drain Manhole
- Vault Undefined
- Double Gate
- Electric Manhole
- Hose Bib
- Control Box Irrigation
- Utility Pole
- Palm Tree Less Than 8" Unless Noted
- TV Cable Pull Box
- Post
- Guy Anchor
- Control Point

LINE PATTERN KEY

- Centerline
- Edge of Asphalt Pavement
- Edge of Concrete Pavement
- Guard Rail Steel
- Flowline
- R/W Right of Way
- Street Striping
- Concrete Wall
- Block Wall
- Hand Rail Steel
- Chain Link Fence
- Hinge Point
- Exposed Pipe

AREA PATTERN KEY

- Concrete
- Dirt
- Grass
- Riprap

ABBREVIATION KEY

- RCP - Reinforced Concrete Pipe
- PVC - Polyvinyl Chloride Pipe
- CMP - Corrugated Metal Pipe

CASA HERMOSA
MOBILE HOME PARK

DIRT FLOWLINE
EL.=99.40'
HEADWALL
TW EL.=101.39'
24"Ø CMP INV EL.=97.37'
DIRT FLOWLINE
EL.=99.33'

CP #103
N: 2252748.86'
E: 6038934.42'
EL.=100.17'

DIRT FLOWLINE
EL.=100.15'

RCP
18"Ø
INV EL.=92.76'

CONCRETE PAD

DIRT MAINTENANCE ROAD

CARBON CANYON CHANNEL (B01)

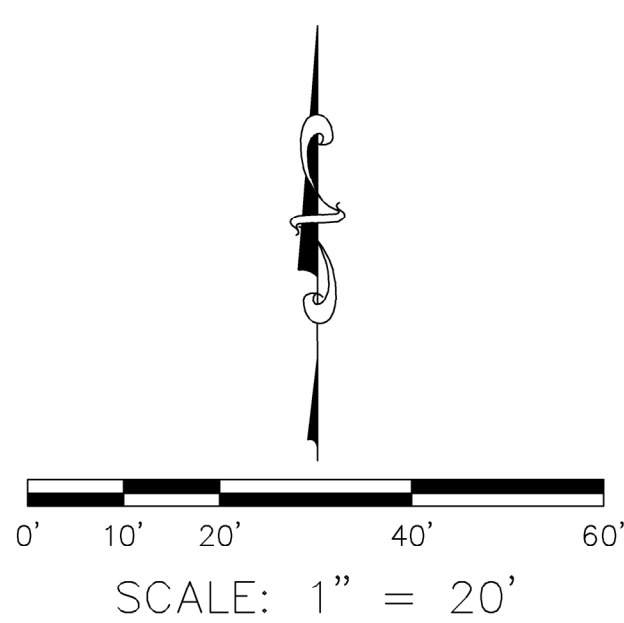
WOOD UTILITY POLE
#27851D

WOOD UTILITY POLE
NO TAG

SEE SHEET 8

DAD MILLER
GOLF COURSE

SEE SHEET 6



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		
CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT		
TOPOGRAPHIC MAP		
FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.		
DATE OF SURVEY: OCTOBER, 2019	BY: JOHNS & PARTY	SHEET NO. 7 of 9
TOPOGRAPHIC MAPPING	BY: R. BELTRAN	
OFFICE CHECK	BY: M. KUBISTY, PLS.	
FIELD CHECK	BY: JOHNS & PARTY	
SCALE: 1" = 20'	W.O. #EF21210	
FILE: Carbon Canyon_Channel_Topo_2020.DWG		

MARK	DATE	ITEM
REVISIONS		

CP #104
N: 2252631.061'
E: 6038709.815'
EL.=97.27'

SOFFIT EL.=99.0'
RT GRADELINE EL.=83.7'
LT GRADELINE EL.=83.8'

PALM TREE
14"Ø
CONCRETE
PEDESTRIAN BRIDGE

TWO TREES
12"Ø

TREE
18"Ø

WOOD UTILITY POLE
#27870D

WOOD UTILITY POLE
ILLEGIBLE TAG
#8611_D

WOOD UTILITY POLE
ILLEGIBLE TAG
#8612_D

TWO TREES
12"Ø

WOOD UTILITY POLE
ILLEGIBLE TAG
#11615_D

TREE
36"Ø

TREE
36"Ø

WOOD UTILITY POLE
#31731D

WOOD UTILITY POLE
ILLEGIBLE TAG
#11614_D

TREE
12"Ø

TREE
12"Ø

TREE
12"Ø

TREE
12"Ø

TREE
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12"Ø

TREE
12"Ø

SYMBOL PATTERN KEY

4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted

Single Gate

Steel Sign

Single Light Pole

Pull box - Electrical

Tree Less Than 8" Unless Noted

Storm Drain Manhole

Vault Undefined

Double Gate

Electric Manhole

Hose Bib

Control Box Irrigation

Utility Pole

Palm Tree Less Than 8" Unless Noted

TV Cable Pull Box

Post

Guy Anchor

Control Point

ABBREVIATION KEY

RCP - Reinforced Concrete Pipe

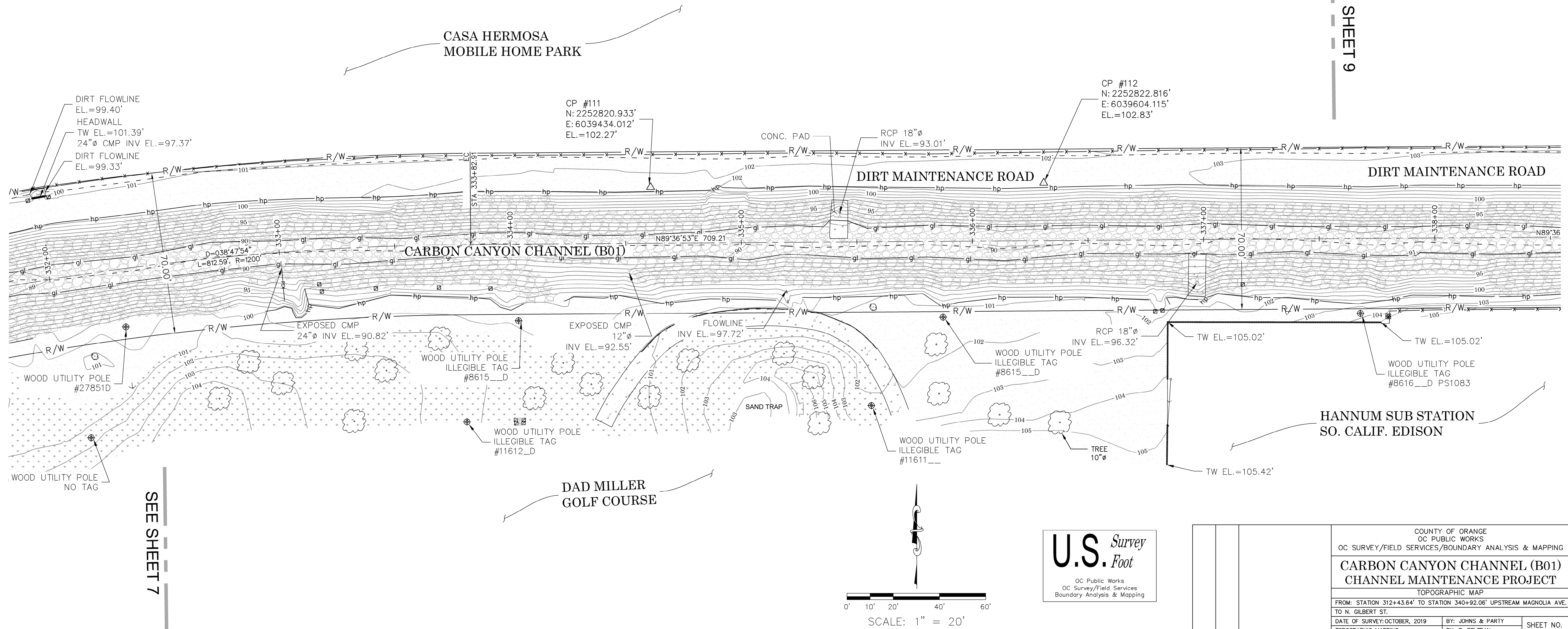
PVC - Polyvinyl Chloride Pipe

CMP - Corrugated Metal Pipe

LINE PATTERN KEY

CenterlineEdge of Asphalt PavementEdge of Concrete PavementGuard Rail SteelFlowlineRight of WayStreet StripingConcrete WallBlock WallHand Rail SteelChain Link FenceHinge PointExposed Pipe

AREA PATTERN KEY

ConcreteDirtGrassRiprap

SEE SHEET 9

SEE SHEET 7

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	
		CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT			
		TOPOGRAPHIC MAP			
		FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.			
		DATE OF SURVEY: OCTOBER, 2019		BY: JOHNS & PARTY	
		TOPOGRAPHIC MAPPING		BY: R. BELTRAN	
		OFFICE CHECK		BY: M. KUBISTY, PLS.	
		FIELD CHECK		BY: JOHNS & PARTY	
		SCALE: 1" = 20'		W.O. #EF21210	
				FILE NO.1920PW-IN0012	
		FILE: Carbon Canyon Channel_Topo_2020.DWG			
MARK	DATE	ITEM		SHEET NO. 8 of 9 9	
REVISIONS					

LEGEND

SYMBOL PATTERN KEY

4" Pipe Inlet / Pipe Outlet Unless Otherwise Noted

Single Gate

Steel Sign

Single Light Pole

Pull box - Electrical

Tree Less Than 8" Unless Noted

Storm Drain Manhole

Vault Undefined

Double Gate

Electric Manhole

Hose Bib

Control Box Irrigation

Utility Pole

Palm Tree Less Than 8" Unless Noted

TV Cable Pull Box

Post

Guy Anchor

Control Point

ABBREVIATION KEY

RCP - Reinforced Concrete Pipe

PVC - Polyvinyl Chloride Pipe

CMP - Corrugated Metal Pipe

LINE PATTERN KEY

Centerline

Edge of Asphalt Pavement

Edge of Concrete Pavement

Guard Rail Steel

Flowline

R/W Right of Way

Street Striping

Concrete Wall

Block Wall

Hand Rail Steel

Chain Link Fence

Hinge Point

Exposed Pipe

AREA PATTERN KEY

Concrete

Dirt

Grass

Riprap

SEE SHEET 8

CASA HERMOSA
MOBILE HOME PARK

The map shows the Carbon Canyon Channel (B01) flowing from left to right. Two parallel DIRT MAINTENANCE ROADS run along the top of the channel. The channel itself is filled with a riprap pattern. Stationing is marked along the top of the channel, ranging from 336+00 to 340+00. Various utility poles are shown, including wood utility poles with illegible tags and RCP 18" pipes. Elevation points are noted throughout the map, such as TW EL.=105.02' and TW EL.=105.42'. A vertical line on the right side indicates the location of GILBERT ST. and the end of the construction alignment. A north arrow and a scale bar (1" = 20') are located at the bottom center. A legend in the top left corner defines the symbols and patterns used on the map.

A north arrow pointing upwards and a scale bar indicating 0' to 60' in 10' increments. Below the scale bar, the text "SCALE: 1" = 20'" is written.

The logo for U.S. Foot, with the text "U.S. Foot" in a stylized font. Below it, in smaller text, are the words "OC Public Works", "OC Survey/Field Services", and "Boundary Analysis & Mapping".

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			CARBON CANYON CHANNEL (B01) CHANNEL MAINTENANCE PROJECT		
			TOPOGRAPHIC MAP		
			FROM: STATION 312+43.64' TO STATION 340+92.06' UPSTREAM MAGNOLIA AVE. TO N. GILBERT ST.		
			DATE OF SURVEY: OCTOBER, 2019	BY: JOHNS & PARTY	SHEET NO. 9 of 9
			TOPOGRAPHIC MAPPING	BY: R. BELTRAN	
			OFFICE CHECK	BY: M. KUBISTY, PLS.	
			FIELD CHECK	BY: JOHNS & PARTY	
			SCALE: 1" = 20'	W.O. #EF21210 FILE NO. 1920PW-IN0012 FILE: Carbon Canyon_Channel_Topo_2020.DWG	
MARK	DATE	ITEM	REVISIONS		