



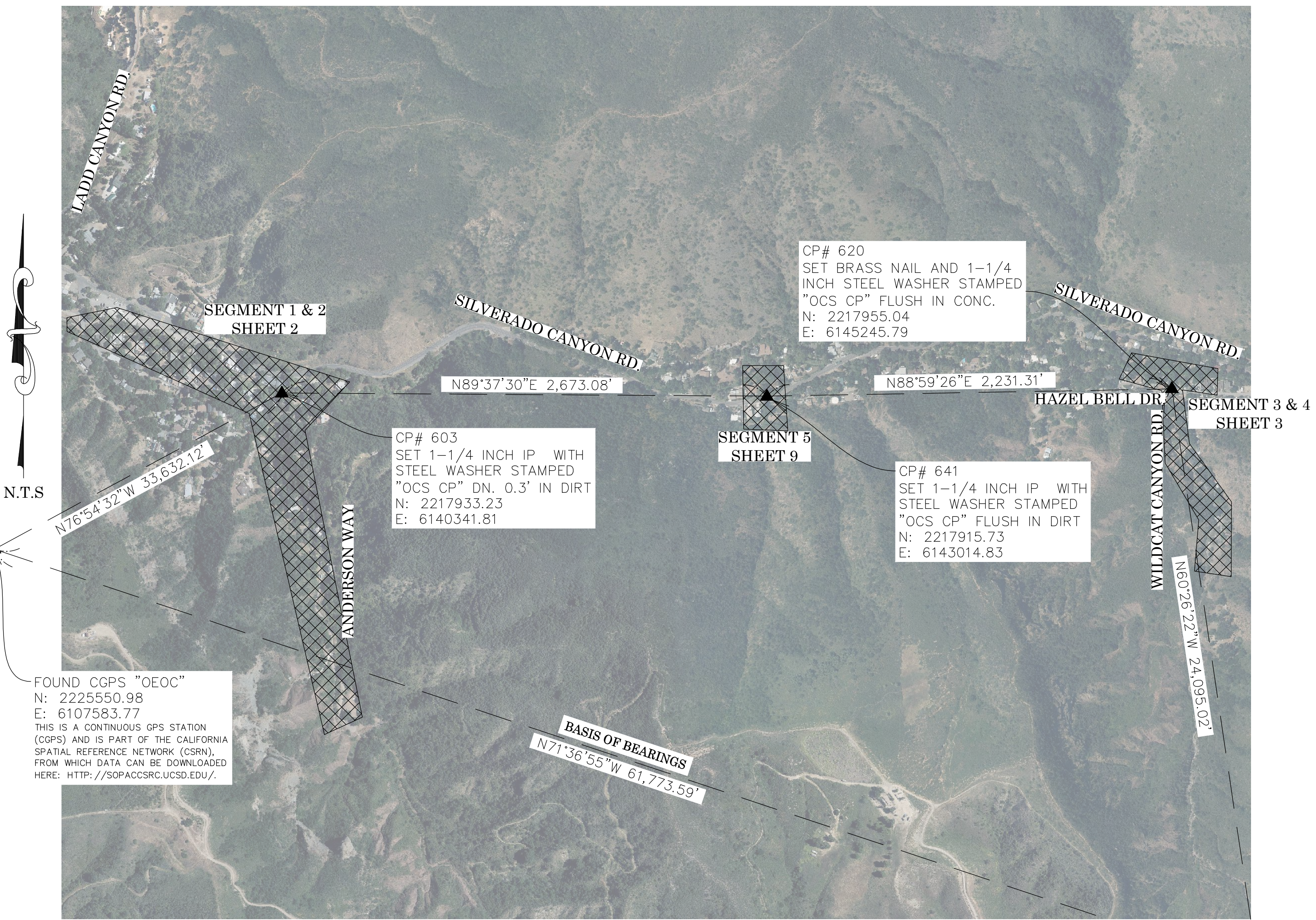
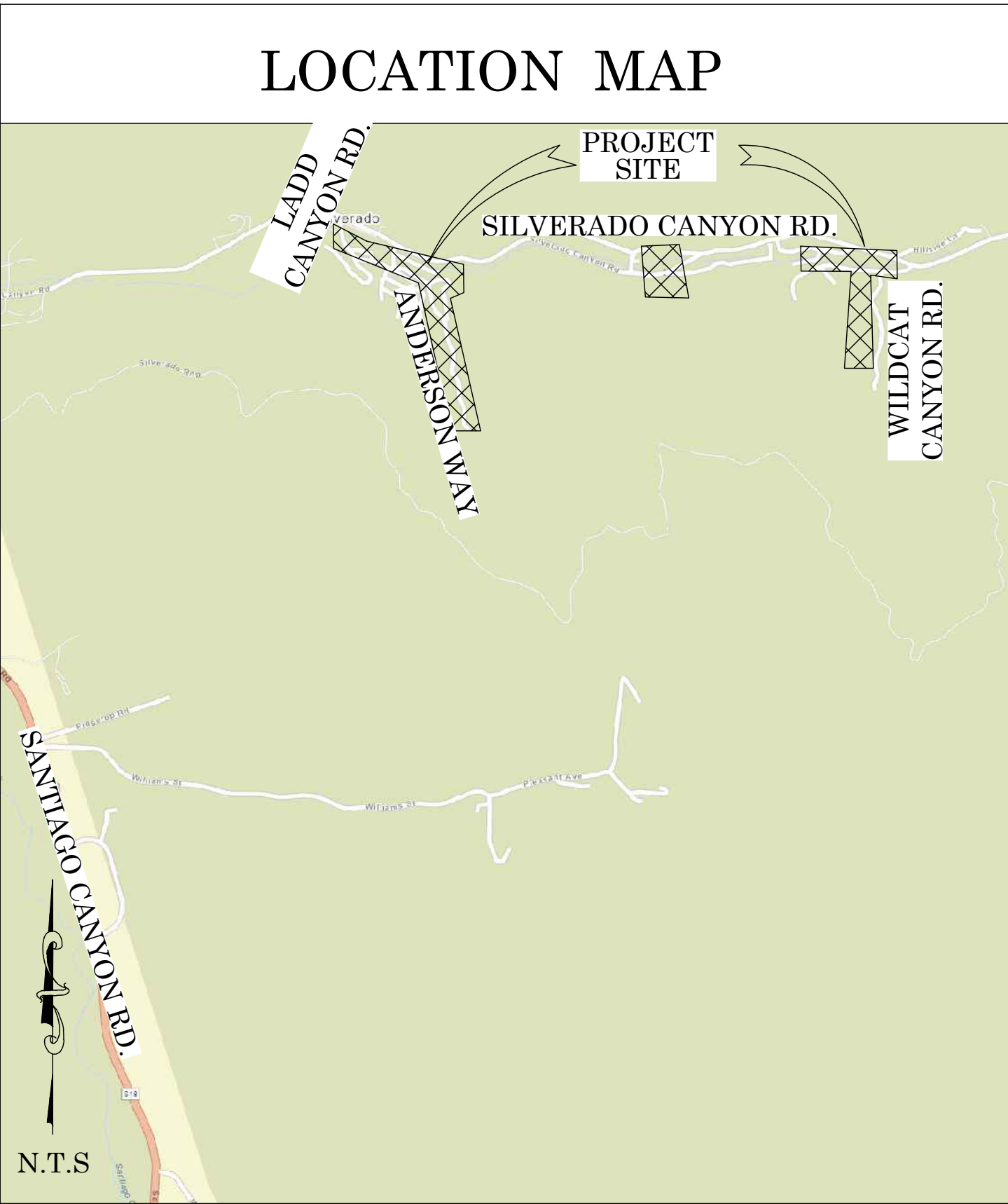
OC PUBLIC WORKS DEPARTMENT

JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS

KEVIN HILLS, COUNTY SURVEYOR

SILVERADO CANYON DEBRIS REMOVAL ASBUILT

NATURAL RESOURCES CONSERVATION SERVICE (NRCS)



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 (MJP) AND (OECC) BEING NORTH 71°36'55\"/>

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 1.00007642. THIS COMBINATION FACTOR WAS AVERAGED BETWEEN:
CP# 603
N: 2217933.23' E: 6140341.81' EL: 1207.43'
CP# 620
N: 2217955.04' E: 6145245.79' EL: 1365.45
ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. 3V-4-80 ELEV. = 1181.444' YEAR LEVELED: 1992
NAVD 1988 (O.C.S. 1995 ADJUSTMENT)
DESCRIPTION: FOUND 3 3/4\"/>

NOTES

THE PRE CONSTRUCTION SURFACE (03/22) AND ASBUILT SURFACE POST CONSTRUCTION (11/22) WERE DERIVED BY USING TERRESTRIAL AND AERIAL LIDAR SCANNING. THE FOOTPRINT OF THE HOUSES WHICH ARE SURROUNDING THE CREEK BEDS ARE EXCLUDED FROM THE EXISTING SURFACE AND VOLUME REPORT.
THE CONSTRUCTION ALIGNMENTS SHOWN HEREON ARE DERIVED BY HOLDING THE APPROXIMATED FLOWLINE FROM THE BASELINE SURFACE (USGS 2018) AND ARE TO BE USED FOR THIS PROJECT ONLY.

SHEET INDEX

SHEET	NO.	DESCRIPTION
1	1	TITLE SHEET
2-3	2-3	ALIGNMENT SHEETS
4-8	4-8	HEAT MAP
9	9	TOPOGRAPHIC MAP

BASIS OF STATIONING

THE BASIS FOR STATIONING ARE ASSUMED, ANDERSON CREEK = 10+00, SILVERADO CREEK AREA #1 = 40+00, WILDCAT CREEK = 60+00, AND SILVERADO CREEK AREA #2 = 80+00, AND TO BE USED FOR CONSTRUCTION PURPOSES ONLY.

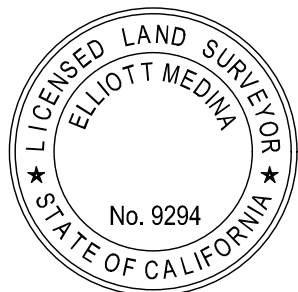
PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A VOLUMES REPORT THAT ESTIMATES THE AMOUNT OF DEBRIS REMOVED BETWEEN THE PRE CONSTRUCTIONS SURFACE & POST CONSTRUCTION SURFACE.

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 19 DAY OF DECEMBER, 2022.

ELLIOTT MEDINA, PLS. SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT; THIS 19 DAY OF DECEMBER, 2022.

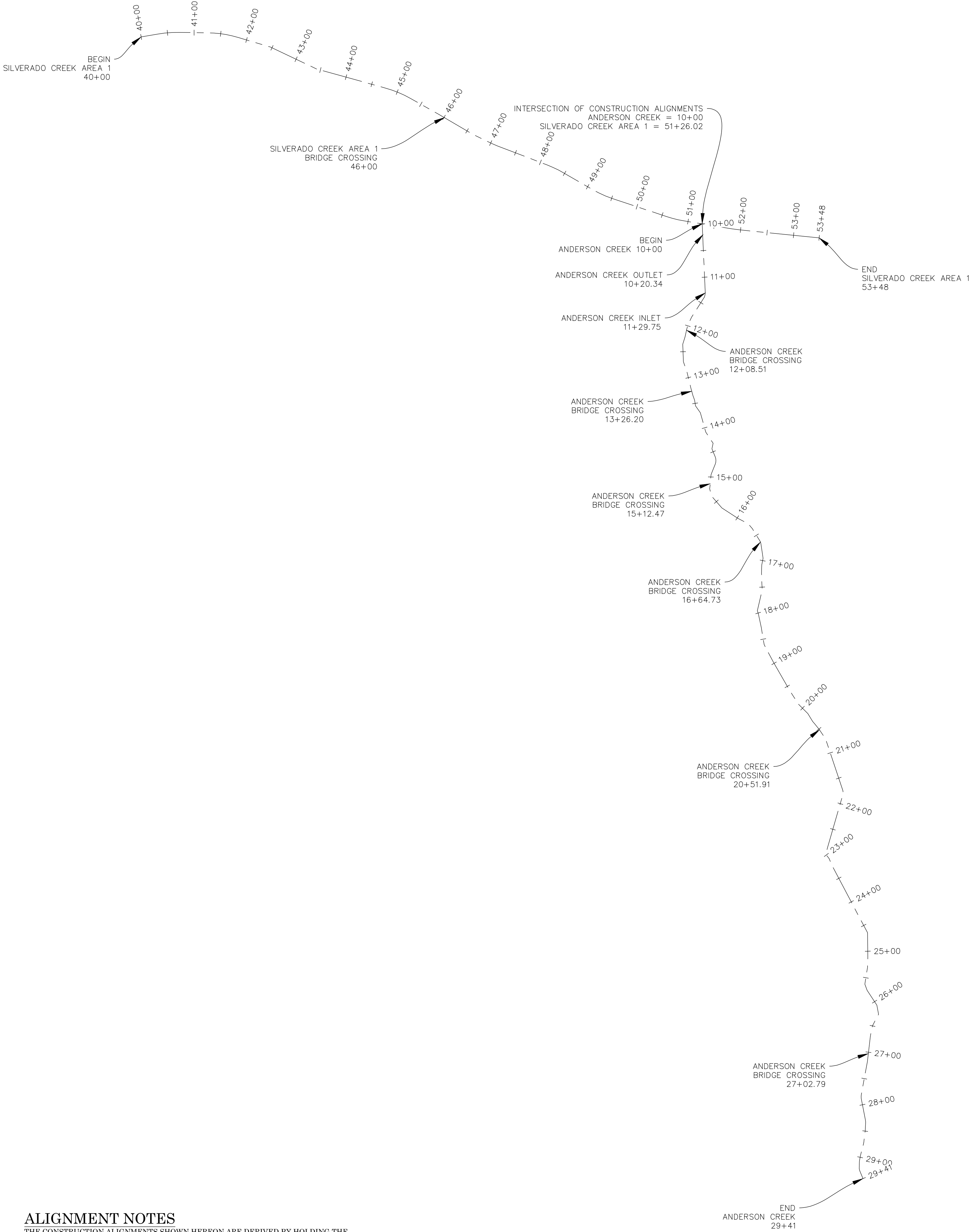
MICHAEL LAFONTAINE, PLS. DEPUTY COUNTY SURVEYOR



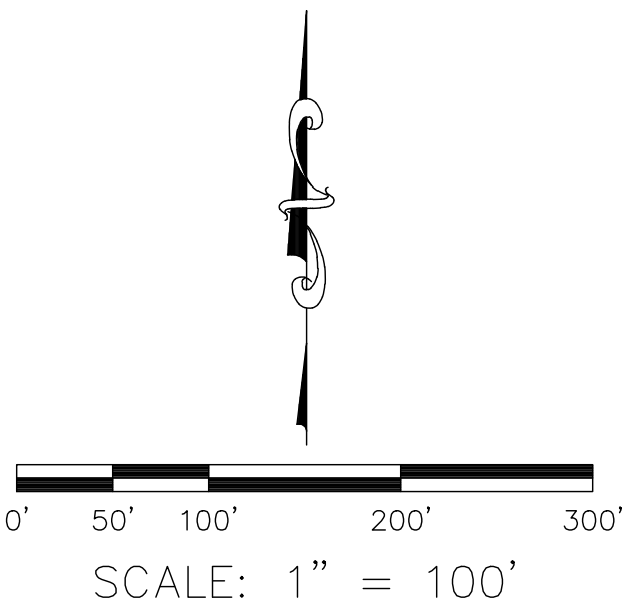
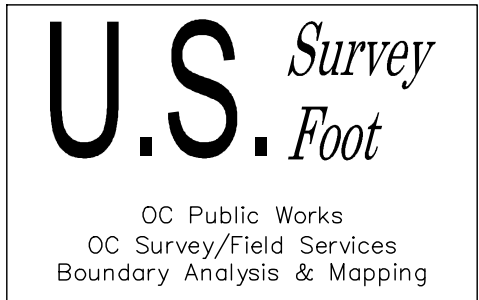
VOLUMES QUANTITIES PROJECT

FOUND CGPS "MJP"
N: 2206067.91
E: 6166204.47
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/).

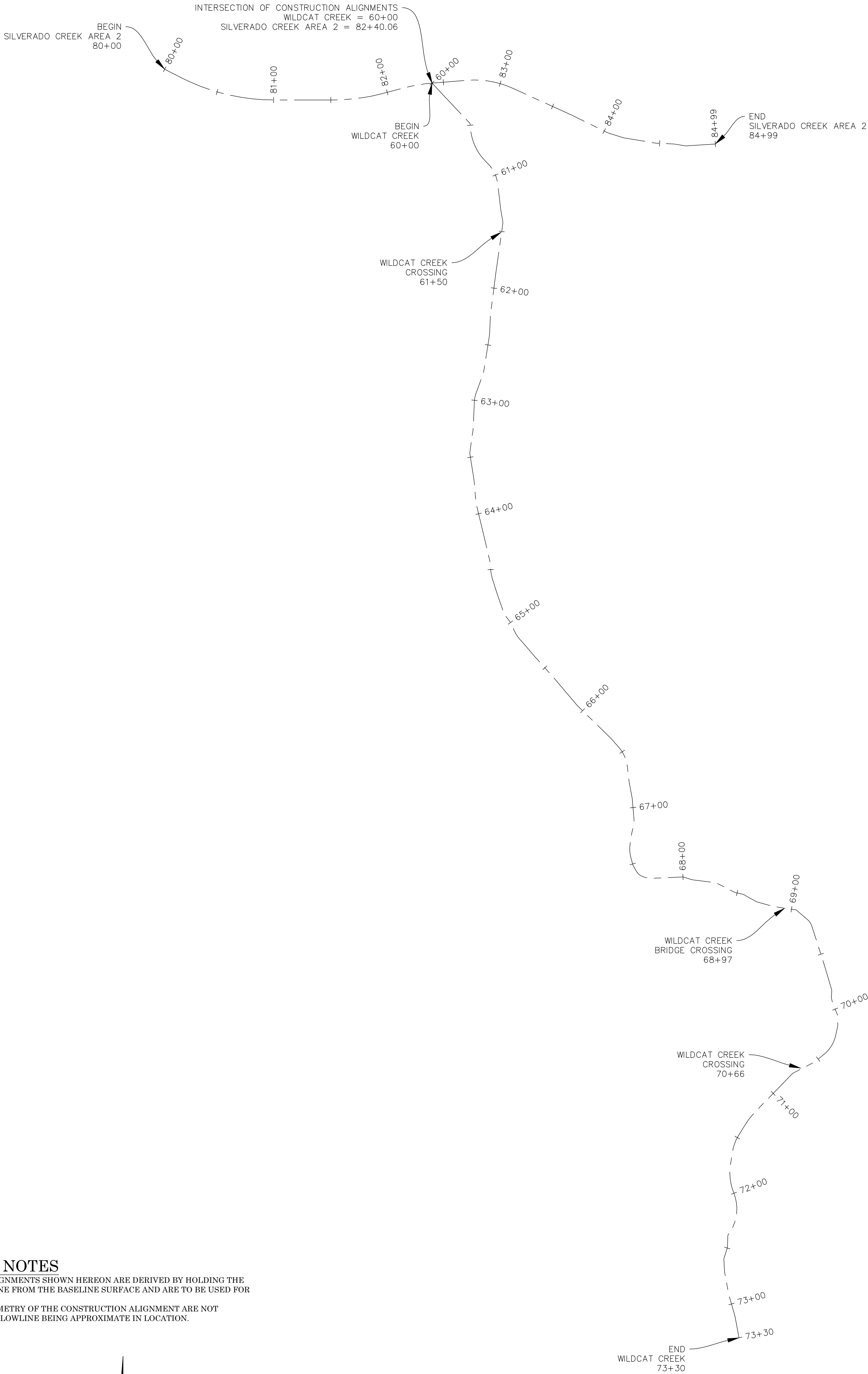
		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		SILVERADO CANYON ASBUILT N.R.C.S.	
		TITLE	
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON AREA	
		DATE OF SURVEY: 12/01/2022	BY: MAGUIRE / UAV DRONE
		MAPPING	BY: J. PEDRETTI
		OFFICE CHECK	BY: E. MEDINA, PLS.
		FIELD CHECK	BY: E. MEDINA, PLS.
		SCALE: VARIES	W.O. #E020606
		FILE: #2122PW-OP0003	
		FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG	
MARK	DATE	ITEM	SHEET NO.
REVISIONS			1 of 9



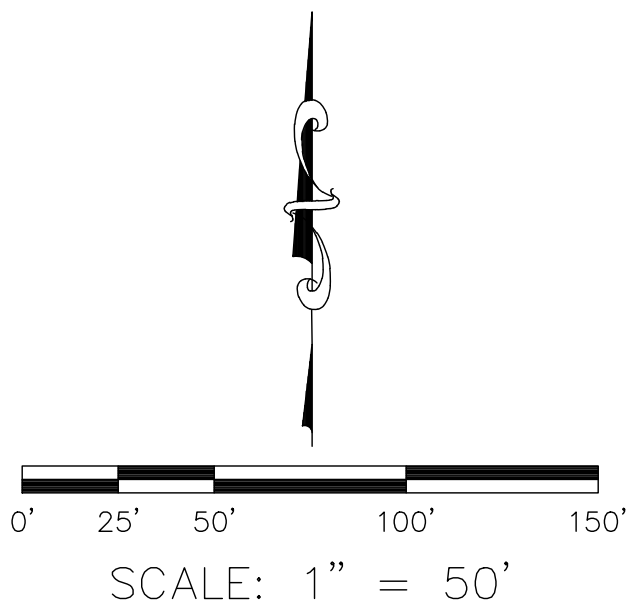
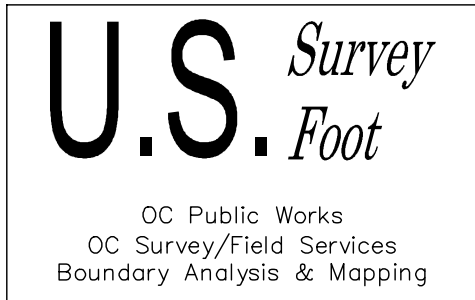
ALIGNMENT NOTES
THE CONSTRUCTION ALIGNMENTS SHOWN HEREON ARE DERIVED BY HOLDING THE APPROXIMATED FLOWLINE FROM THE BASELINE SURFACE AND ARE TO BE USED FOR THIS PROJECT ONLY. COORDINATES AND GEOMETRY OF THE CONSTRUCTION ALIGNMENT ARE NOT PROVIDED DUE TO THE FLOWLINE BEING APPROXIMATE IN LOCATION.



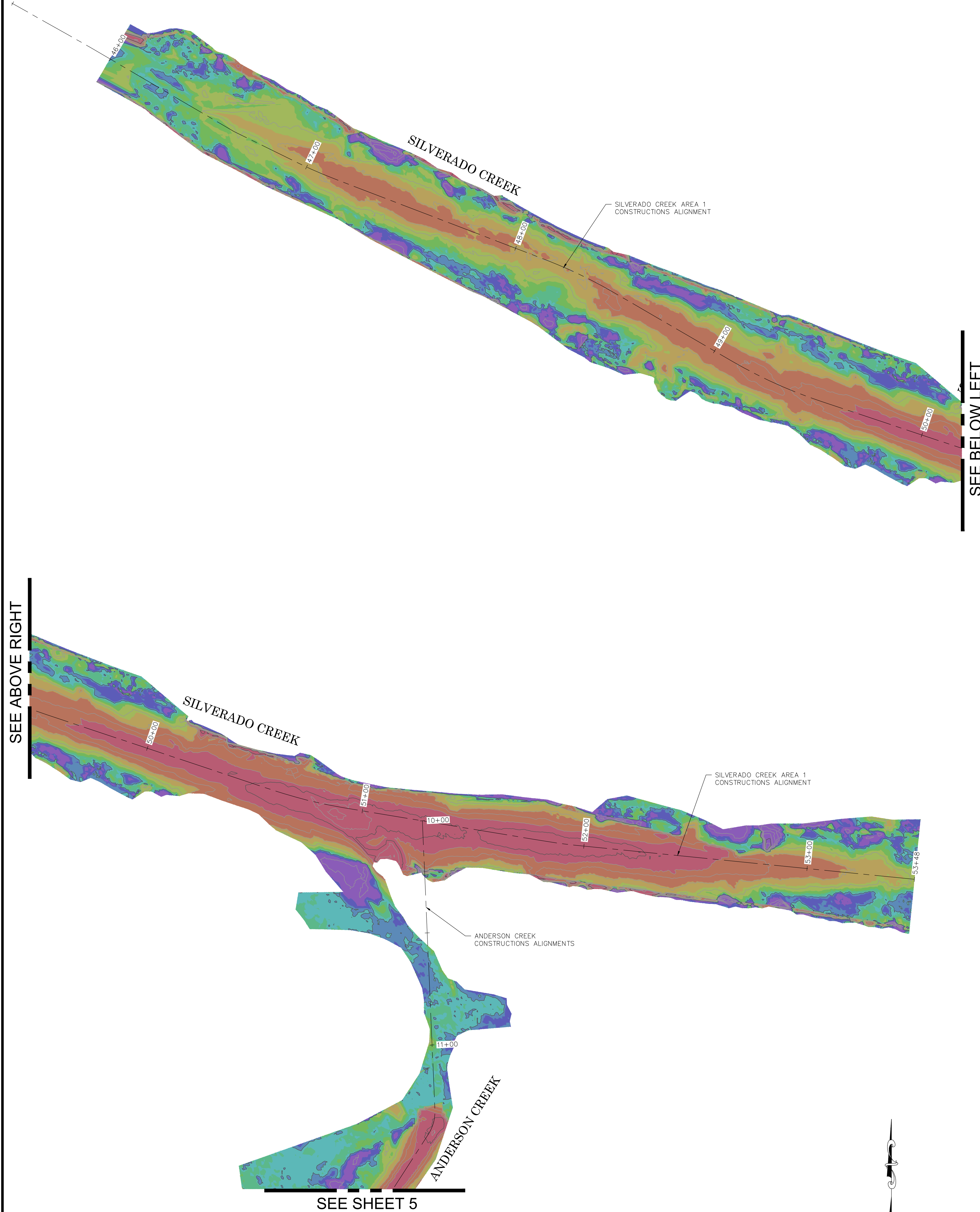
				COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
				SILVERADO CANYON ASBUILT N.R.C.S.	
				ALIGNMENT MAP	
				PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON AREA	
				DATE OF SURVEY: 12/01/2022	
		MAPPING		BY: J. PEDRETTI	
		OFFICE CHECK		BY: J. MORENO, PLS	
		FIELD CHECK		BY: E. MEDINA, PLS	
		SCALE: 1" = 100'		W.O. #E020606	FILE # 2122PW-0P0003
MARK	DATE	ITEM		FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG	
		REVISIONS			



ALIGNMENT NOTES
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		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		SILVERADO CANYON ASBUILT N.R.C.S.	
		ALIGNMENT MAP		SHEET NO. 3 of 9	
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON AREA			
		DATE OF SURVEY: 12/01/2022			
		MAPPING			
MARK	DATE	OFFICE CHECK		BY: J. PEDRETTI	
		FIELD CHECK		BY: J. MORENO, PLS	
		SCALE: 1" = 50'		BY: E. MEDINA, PLS	
		W.O. #E020606		FILE #2122PW-OP0003	
REVISIONS		FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG			



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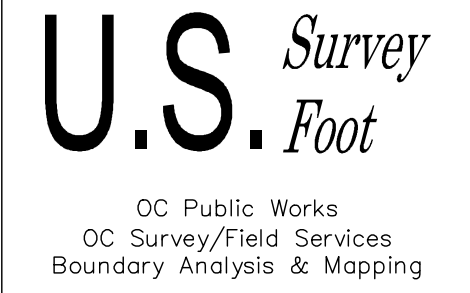
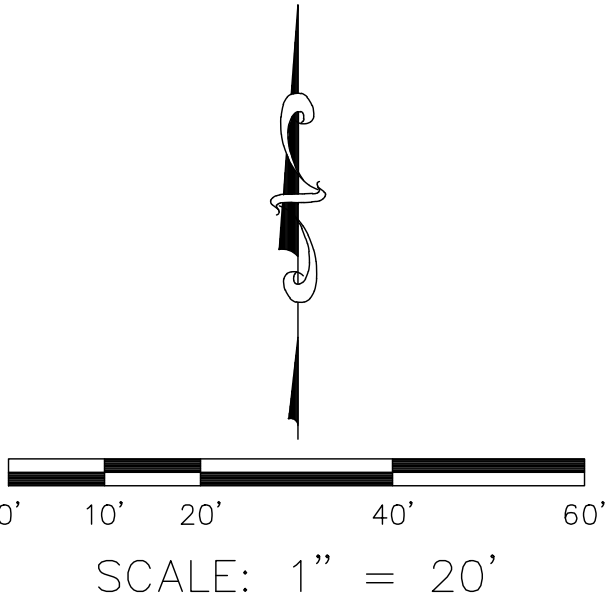
SEE BELOW LEFT

SEE SHEET 5

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ELEVATION TABLE NOTE
DELTA ELEVATIONS SHOWN IN ELEVATIONS TABLE WERE MEASURED BETWEEN THE PRE-CONSTRUCTIONS AND POST-CONSTRUCTION SURVEYS.
DELTA INTERVALS VARY TO EMPHASIZE VISUALIZATION.

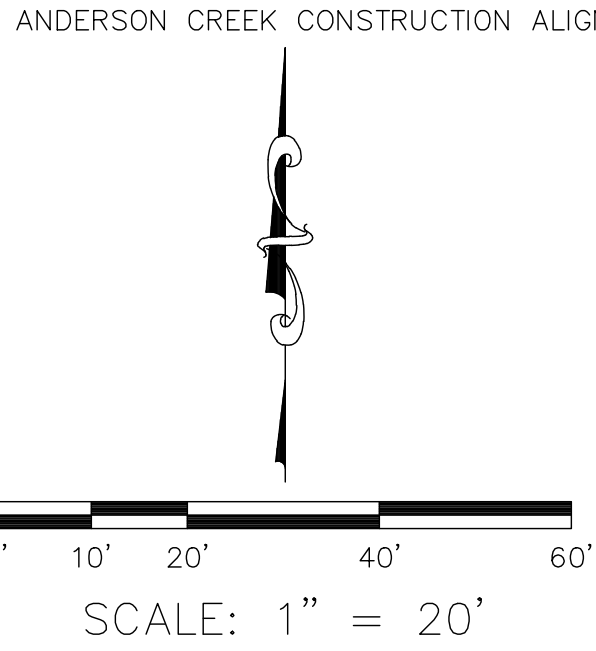
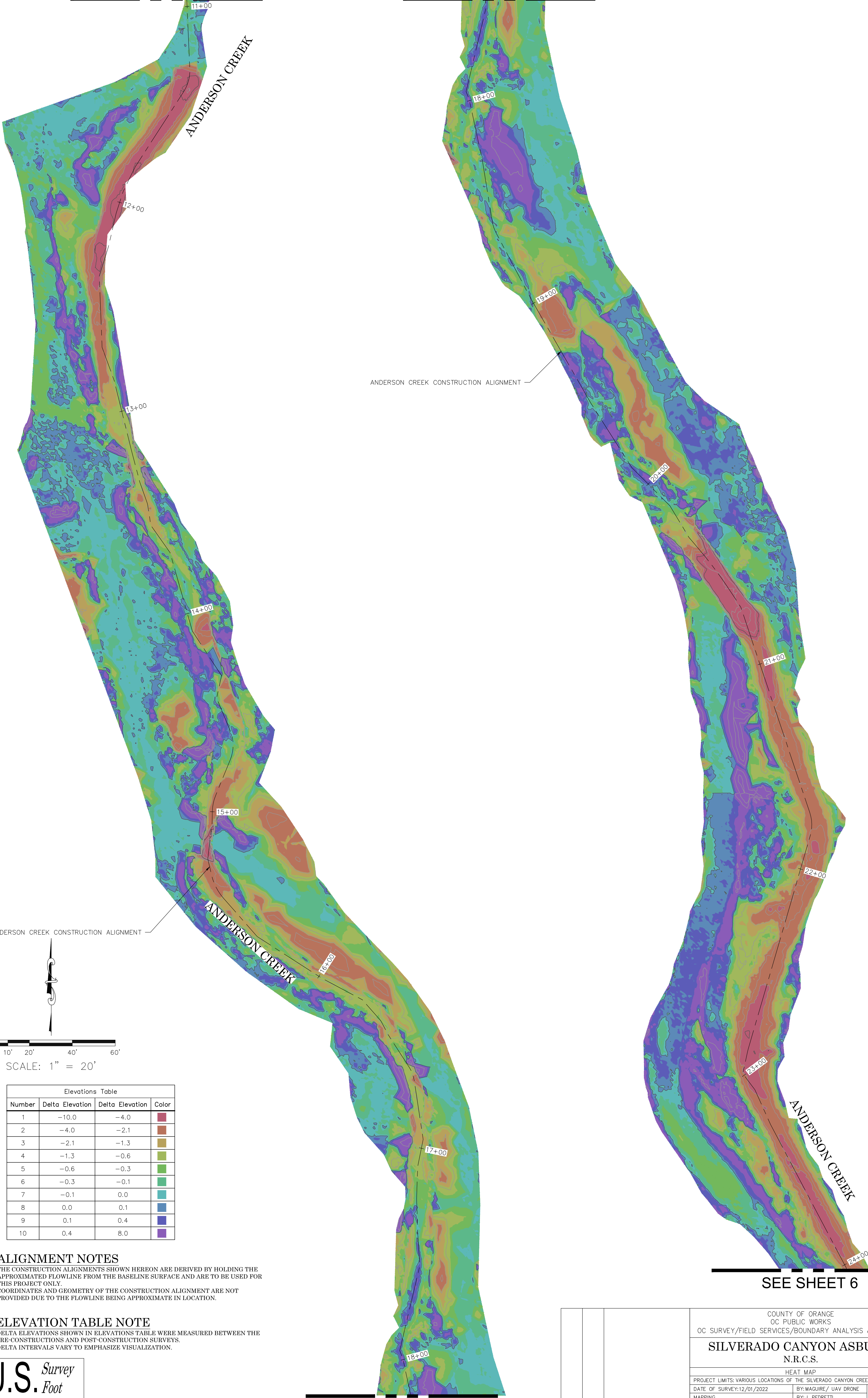
Elevations Table			
Number	Delta Elevation	Delta Elevation	Color
1	-10.0	-4.0	
2	-4.0	-2.1	
3	-2.1	-1.3	
4	-1.3	-0.6	
5	-0.6	-0.3	
6	-0.3	-0.1	
7	-0.1	0.0	
8	0.0	0.1	
9	0.1	0.4	
10	0.4	8.0	



		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		SHEET NO. 3 of 9	
		SILVERADO CANYON ASBUILT N.R.C.S.			
		HEAT MAP			
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON CREEK			
		DATE OF SURVEY: 12/01/2022	BY: MAGUIRE/ UAV DRONE		
		MAPPING	BY: J. PEDRETTI		
		OFFICE CHECK	BY: J. MORENO, PLS		
MARK	DATE	ITEM	FIELD CHECK		BY: E. MEDINA, PLS
			SCALE: 1" = 20'		W.O. #E020606
		REVISIONS	FILE #2122PW-OP0003		
			FILE: SILVERADO CREEK ASBLT_TOPO_2022.DWG		

SEE SHEET 4

SEE BELOW LEFT



Elevations Table			
Number	Delta Elevation	Delta Elevation	Color
1	-10.0	-4.0	
2	-4.0	-2.1	
3	-2.1	-1.3	
4	-1.3	-0.6	
5	-0.6	-0.3	
6	-0.3	-0.1	
7	-0.1	0.0	
8	0.0	0.1	
9	0.1	0.4	
10	0.4	8.0	

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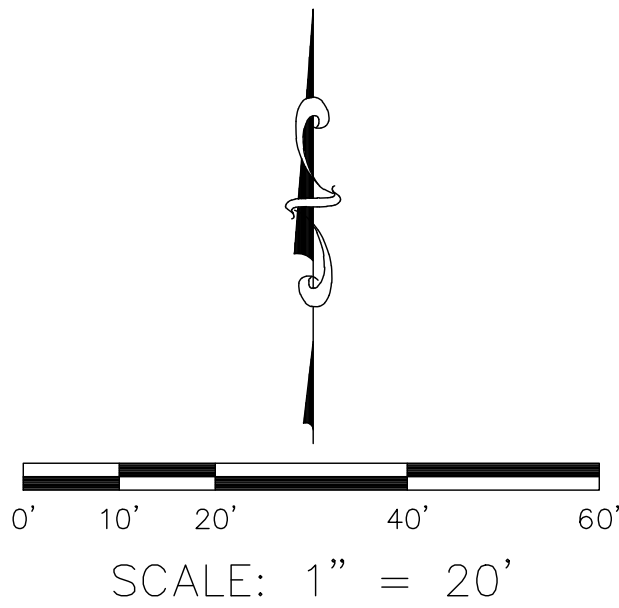
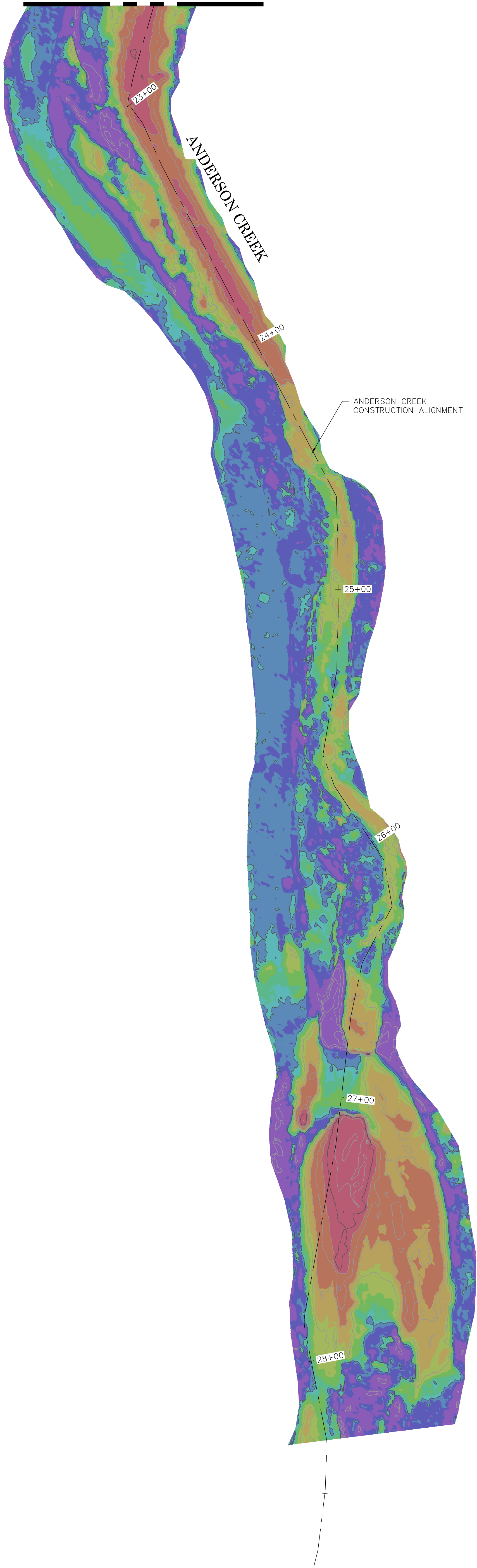
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DELTA INTERVALS VARY TO EMPHASIZE VISUALIZATION.

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				
			SILVERADO CANYON ASBUILT N.R.C.S.				
			HEAT MAP				
			PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON CREEK				
			DATE OF SURVEY: 12/01/2022		BY: MAGUIRE / UAV DRONE		SHEET NO. 5 of 9
			MAPPING		BY: J. PEDRETTI		
			OFFICE CHECK		BY: J. MORENO, PLS		
			FIELD CHECK		BY: P. MAGUIRE, PLS		
			SCALE: 1" = 20'		W.O. #E020606		
			FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG		FILE # 2122PW-0P0003		
MARK	DATE	ITEM		REVISIONS			

SEE SHEET 5



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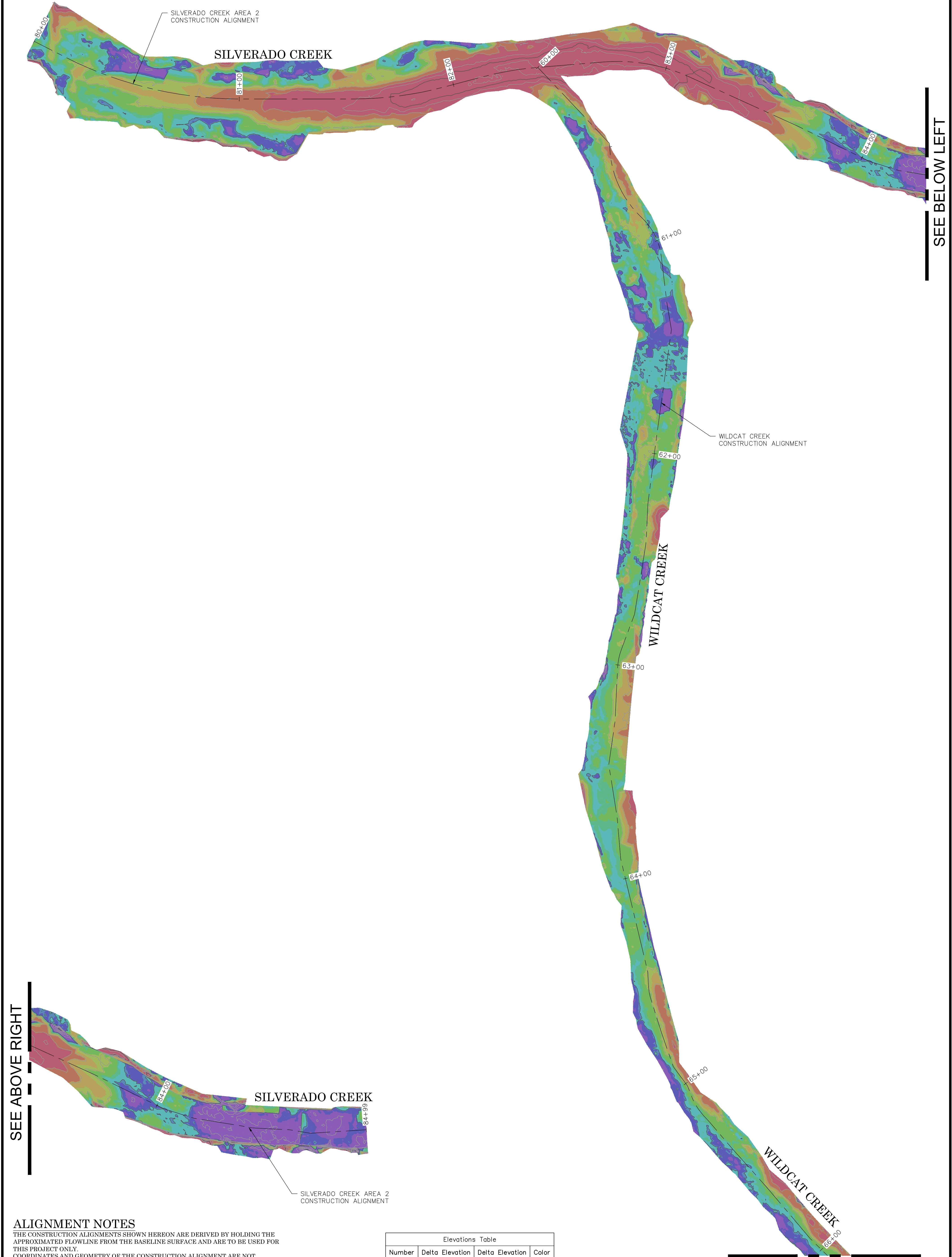
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1	-10.0	-4.0	
2	-4.0	-2.1	
3	-2.1	-1.3	
4	-1.3	-0.6	
5	-0.6	-0.3	
6	-0.3	-0.1	
7	-0.1	0.0	
8	0.0	0.1	
9	0.1	0.4	
10	0.4	8.0	

		COUNTY OF ORANGE OC PUBLIC WORKS	
		OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		SILVERADO CANYON ASBUILT N.R.C.S.	
		HEAT MAP	
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON CREEK	
		DATE OF SURVEY: 12/01/2022	BY: J. MACQUIRE / UAV DRONE
		MAPPING	BY: J. PEDRETTI
		OFFICE CHECK	BY: J. MORENO, PLS
		FIELD CHECK	BY: E. MEDINA, PLS
		SCALE: 1" = 20'	W.O. #EQ20606
		FILE #2122PW-0P0003	
		FILE: SILVERADO_CREEK_ASBLT_TOPO_2022.DWG	
MARK	DATE	ITEM	
REVISIONS			

U.S. Survey Foot

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



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ALIGNMENT NOTES

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U.S. Survey Foot

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

SCALE: 1" = 20'

Elevations Table			
Number	Delta Elevation	Delta Elevation	Color
1	-10.0	-3.1	
2	-3.1	-2.1	
3	-2.1	-1.4	
4	-1.4	-0.9	
5	-0.9	-0.5	
6	-0.5	-0.3	
7	-0.3	0.0	
8	0.0	0.1	
9	0.1	0.4	
10	0.4	8.0	

MARK	DATE	ITEM
REVISIONS		

COUNTY OF ORANGE
OC PUBLIC WORKS
OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING

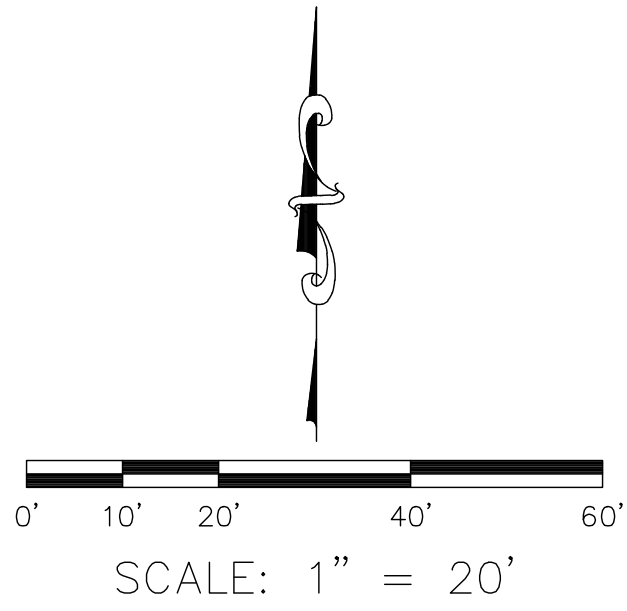
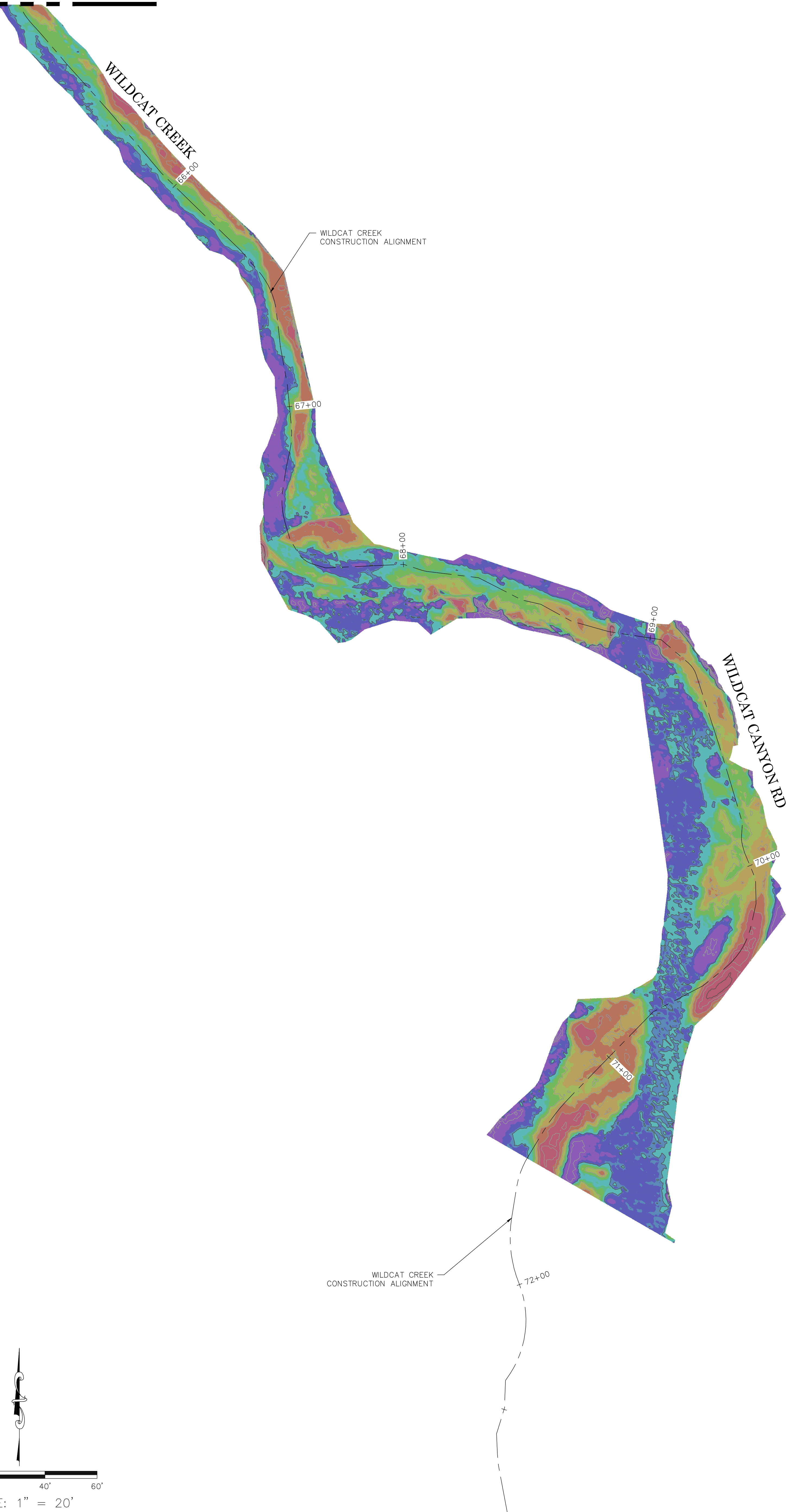
SILVERADO CANYON ASBUILT
N.R.C.S.

HEAT MAP

PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON CREEK

DATE OF SURVEY: 12/01/2022	BY: J. MAQUIRE / UAV DRONE	SHEET NO. 7 of 9	
MAPPING	BY: J. PEDRETTI		
OFFICE CHECK	BY: J. MORENO, PLS		
FIELD CHECK	BY: E. MEDINA, PLS		
SCALE: 1" = 20'	W.O. #EQ20606	FILE #2122PW-OP0003	
FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG			

SEE SHEET 7



ALIGNMENT NOTES

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ELEVATION TABLE NOTE

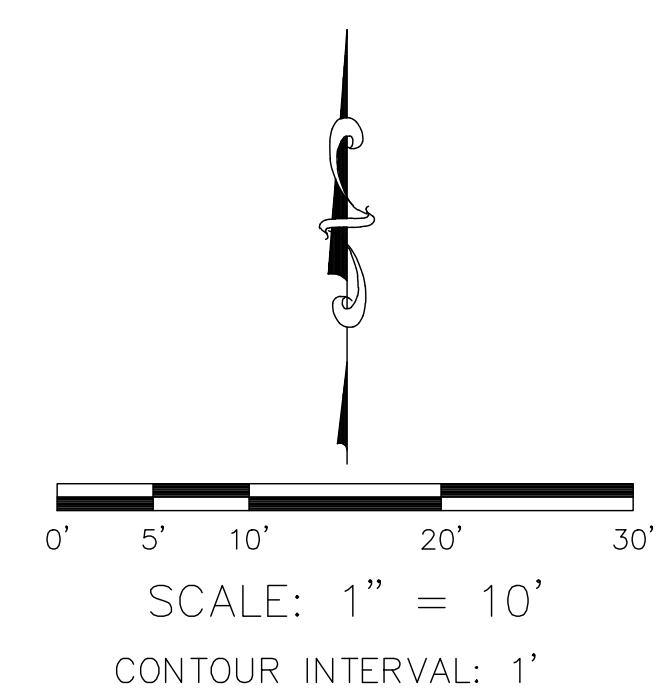
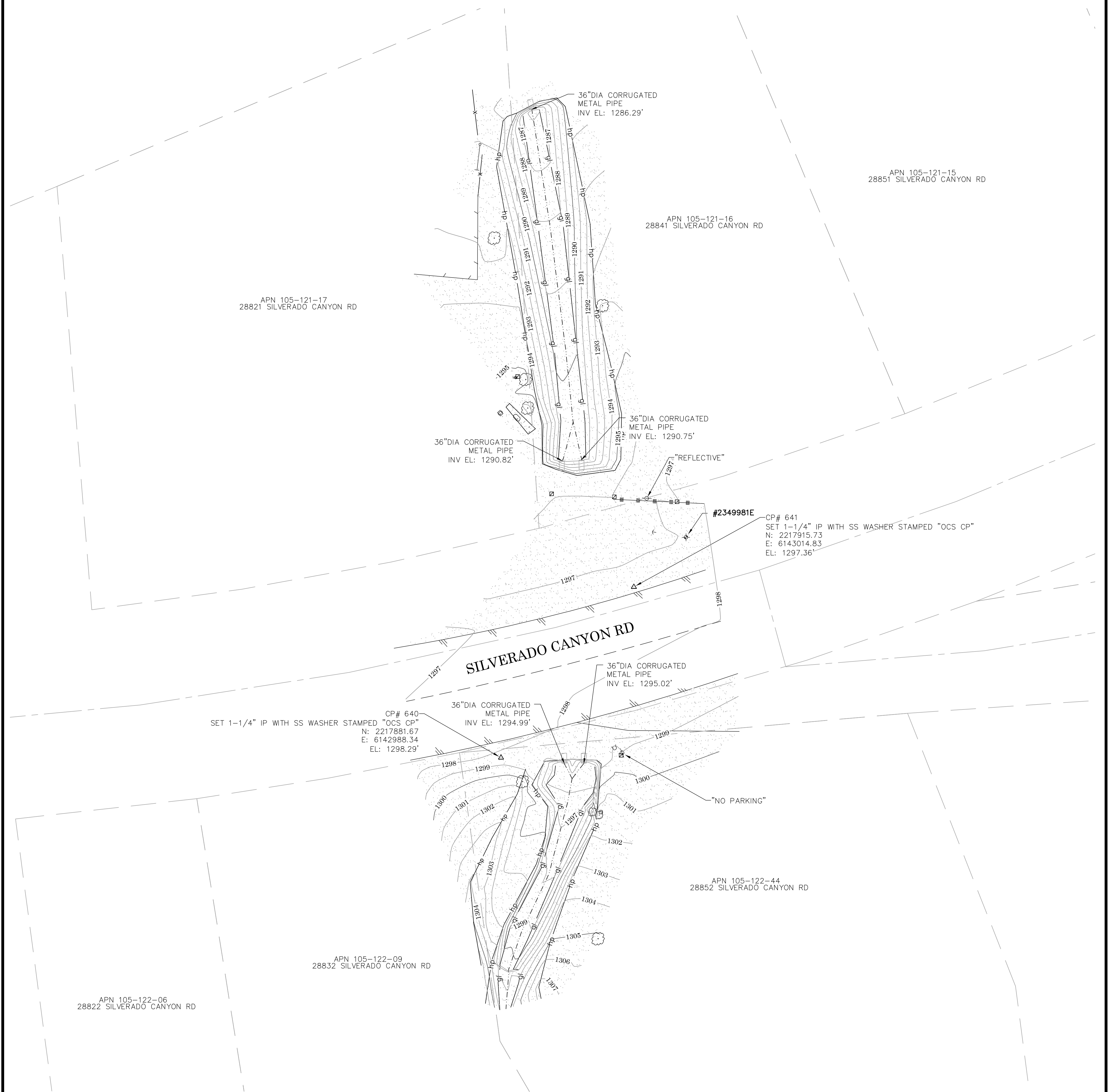
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Elevations Table			
Number	Delta Elevation	Delta Elevation	Color
1	-10.0	-3.1	
2	-3.1	-2.1	
3	-2.1	-1.4	
4	-1.4	-0.9	
5	-0.9	-0.5	
6	-0.5	-0.3	
7	-0.3	0.0	
8	0.0	0.1	
9	0.1	0.4	
10	0.4	8.0	







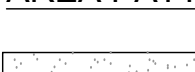





		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		SHEET NO. 8 of 9
		SILVERADO CANYON ASBUILT N.R.C.S.		
		HEAT MAP		
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON CREEK		
MARK	DATE	DATE OF SURVEY: 12/01/2022		BY: J. MAGUIRE / UAV DRONE BY: J. PEDRETTI BY: J. MORENO, PLS BY: E. MEDINA, PLS FILE #2122PW-0P0003 FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG
		MAPPING		
		OFFICE CHECK		
		FIELD CHECK		
		SCALE: 1" = 20' W.O. #E020606		
		REVISIONS		









U.S. Survey
Foot

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



NOTES:
-A TOPOGRAPHIC SURVEY OF THE PRE-EXISTING CONDITION WAS NOT REQUESTED FOR THIS AREA, THEREFOR A VOLUME REPORT CANNOT BE GENERATED
-ALL RIGHT OF WAY LINES AND PARCEL LINES SHOWN HEREON ARE BASED ON THE OC LANDBASE. THEY ARE PLACED HEREON FOR REFERENCE PURPOSES ONLY AND ARE APPROXIMATE IN LOCATION.

LEGEND			
SYMBOL		ABBREVIATION	
	Bush	CP	Control Point
	Fire Hydrant	EL	Elevation
	Gate, Single	FL	Flowline
	Guy Wire Anchor	FD	Found
	Meter Gas	AREA PATTERN KEY	
	Post		Concrete
	Sign Post		Dirt
	Tank		
	Tree		
	Utility Pole, Underground		

LINE PATTERN KEY	
	Building Outline
	Edge of Asphalt Pavement
	Fence Barbed-Wire
	Flowline
	Grade Line
	Guard Rail
	Hinge Point
	Striping

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	
		SILVERADO CANYON ASBUILT N.R.C.S.	
		TOPOGRAPHIC MAP	
		PROJECT LIMITS: VARIOUS LOCATIONS OF THE SILVERADO CANYON AREA	
MARK	DATE	ITEM	SHEET NO.
			9 of 9
REVISIONS		SCALE: 1" = 10'	W.O. #EQ20606 FILE #2122PW-OP0003 FILE: SILVERADO CREEK ASBUILT_TOPO_2022.DWG