



OC PUBLIC WORKS DEPARTMENT

JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS

KEVIN HILLS, COUNTY SURVEYOR

LOWER SANTA ANA RIVER SAND MANAGEMENT PROJECT

NEWPORT BEACH POST-DEPOSIT TRANSECTS



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 (SACY) AND (FVPK) BEING NORTH 23°25'58" 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 ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, 2007.00 EPOCH, 1983 NORTH AMERICAN DATUM, 1995 O.C.S. GPS ADJUSTMENT.

ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. MULTIPLY A GRID DISTANCE BY 1.00002898 TO OBTAIN A GROUND DISTANCE.

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

VERTICAL DATUM

OCS BENCHMARK "1L-99-91" ELEVATION = 22.334'

NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29)

OCS 1995 ADJUSTMENT, LEVELED 2005

SHEET INDEX

SHEET NO.	DESCRIPTION
SHEET 1	TITLE SHEET
SHEET 2	ALIGNMENT SHEET
SHEETS 3-4	PROFILE

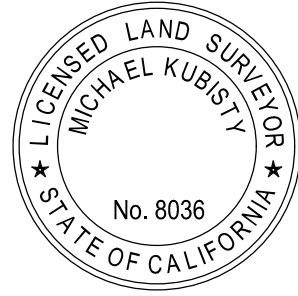
PURPOSE OF SURVEY

THE PURPOSE OF THIS SURVEY IS TO PROVIDE AN ANNUAL MONITORING OF THE TOPOGRAPHY WITHIN THE AREA SHOWN HEREON IN CONJUNCTION WITH THE LOWER SANTA ANA RIVER SAND MANAGEMENT PROJECT PLANS FOR O.C.F.C.D. FACILITY NO. E01, DRAWING NO. E01-701-24 DATED JULY 2016 IN ORDER TO DETERMINE THE SAND PLACEMENTS IMPACT ON THIS AREA.

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 21ST DAY OF JULY, 2021.

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 21ST DAY OF JULY, 2021.

WADE WEAVER, PLS. DEPUTY COUNTY SURVEYOR



U.S. Survey Foot

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

LOCAL CONTROL POINTS				
POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
400	2173659.88	6047196.23	9.39	FOUND LEAD AND 3/4" TAG STAMPED "PLS 8576"
401	2172930.99	6047908.26	8.95	FOUND LEAD AND 3/4IN TAG STAMPED "LS 5411"
402	2172320.30	6048252.29	10.27	FOUND LEAD AND 3/4IN TAG STAMPED "LS 4599"
403	2171861.94	6048774.05	9.07	FOUND LEAD AND 3/4IN TAG STAMPED "LS 5411"
404	2175024.27	6045285.63	7.78	FOUND LEAD AND 3/4IN TAG STAMPED "LS 4212"
405	2171016.96	6048774.06	9.12	SET LEAD AND 3/4IN TAG STAMPED "OCS CP"

OCS BENCHMARK "TIDAL 2NP"
FOUND 3 1/2" BRASS USGS CAP
STAMPED "2NP 1955"
N: 2166900.32'
E: 6064167.53'
EL: 8.26'

SEDIMENT MONITORING PROJECT

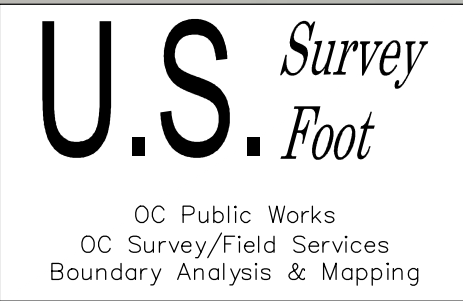
			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			LSAR SAND MGMNT. PROJECT NEWPORT BEACH POST-DEPOSIT TRANSECTS			
5	2021	UPDATE FOR 2021	TITLE SHEET			
4	2020	UPDATE FOR 2020	FROM: STA. 674+63 (+/- 56TH ST)			
3	2019	UPDATE FOR 2019	TO: 741+31 (+/- 26TH ST)			
2	2018	UPDATE FOR 2018	DATE OF SURVEY: JUNE 2021		BY: RUSSO & PARTY	
1	2017	UPDATE FOR 2017	TOPOGRAPHIC MAPPING		BY: A.VU	
0	2016	ORIGINAL SUBMISSION	OFFICE CHECK		BY: M.KUBISTY, PLS	
NO.	DATE	ITEM	FIELD CHECK		BY: M.RUSSO	
REVISIONS			SCALE: N.T.S.		FILE NO. 2021PW-IN0001	
			FILE: LSAR_TRANSECTS_2021.DWG			
			SHEET NO. 1 of 4			

ALIGNMENT POINT TABLE		
POINT NO.	NORTHING	EASTING
1	2174911.86	6045216.18
2	2170640.27	6042428.53
3	2173592.56	6047079.35
4	2169739.86	6042002.68
5	2172844.52	6047832.83
6	2169377.93	6043264.94
7	2172376.31	6048122.01
8	2168787.65	6043393.27
9	2171727.56	6048610.64
10	2168319.40	6044077.10
11	2171002.48	6049194.70
12	2167737.41	6044851.50
13	2170146.18	6049785.15
14	2167186.13	6045732.12

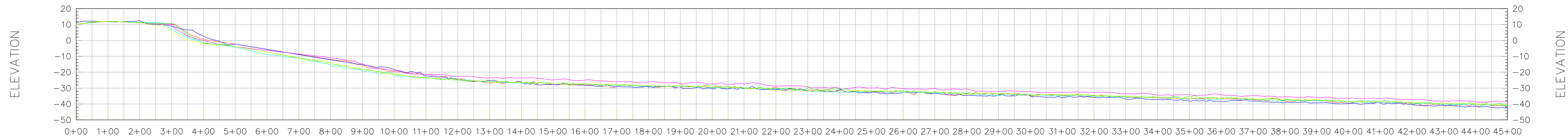


BASIS OF STATIONING

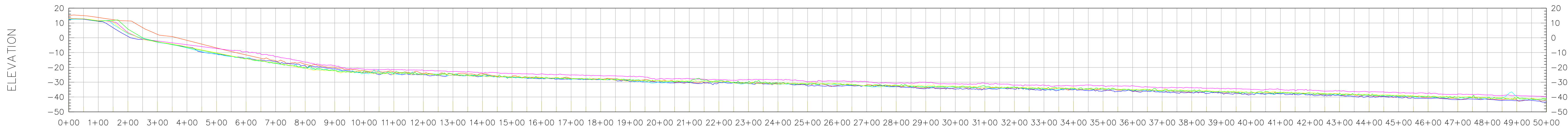
- BASIS OF STATIONING PER "COAST OF CALIFORNIA STORM AND TIDAL WAVE STUDY" EXHIBIT, DRAWN BY ARMY CORPS OF ENG., PUBLIC FACILITIES & RESOURCES DEPT., GIS MAPPING UNIT, CARMEN COPIL OANCEA. PROVIDED BY OC PARKS ENGINEERING, DATED 12-07-2000.
- (SA-#S) = REFERENCED FROM NEWPORT BEACH FALL 2015 BEACH PROFILE SURVEY, PREPARED BY COASTAL FRONTIERS DOCUMENT #CFC-911C.
- THE TERM "HISTORIC TRANSECT" RELATES TO THE HISTORICAL HORIZONTAL STATIONING ONLY, AS SHOWN BY THE ABOVE DOCUMENTS.



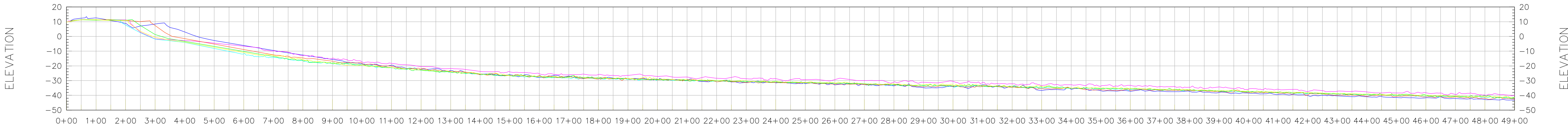
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2	2018	UPDATE FOR 2018	DATE OF SURVEY: JUNE 2021	BY: RUSSO & PARTY	SHEET NO. 2 of 4
1	2017	UPDATE FOR 2017	TOPOGRAPHIC MAPPING	BY: A.WU	
0	2016	ORIGINAL SUBMISSION	OFFICE CHECK	BY: M.KUBISTY, PLS	
NO.	DATE	ITEM	FIELD CHECK	BY: M.RUSSO	
REVISIONS			SCALE: 1" = 400' W.O. #EF21246	FILE NO. 2021PW-IN0001	4
			FILE: LSAR_TRANSECTS_2021.DWG		



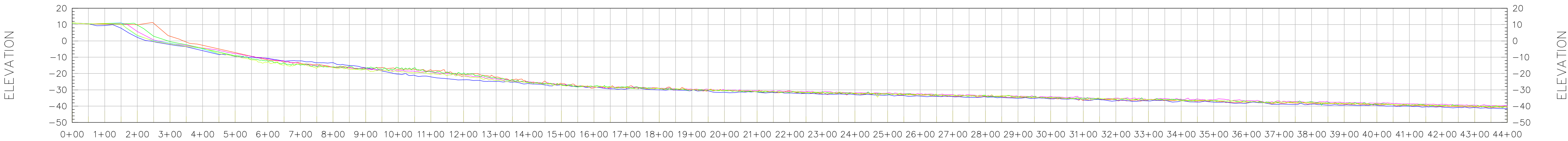
Alignment Sta. 674+63
0+00.00 to 45+00



Alignment Sta. 697+47
0+00.00 to 50+00



Alignment Sta. 708+01
0+00.00 to 49+00



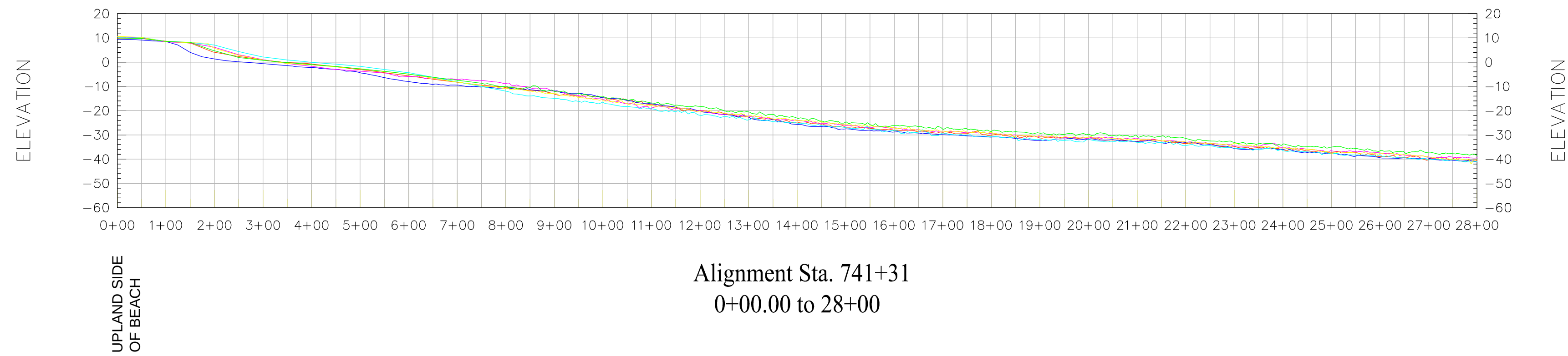
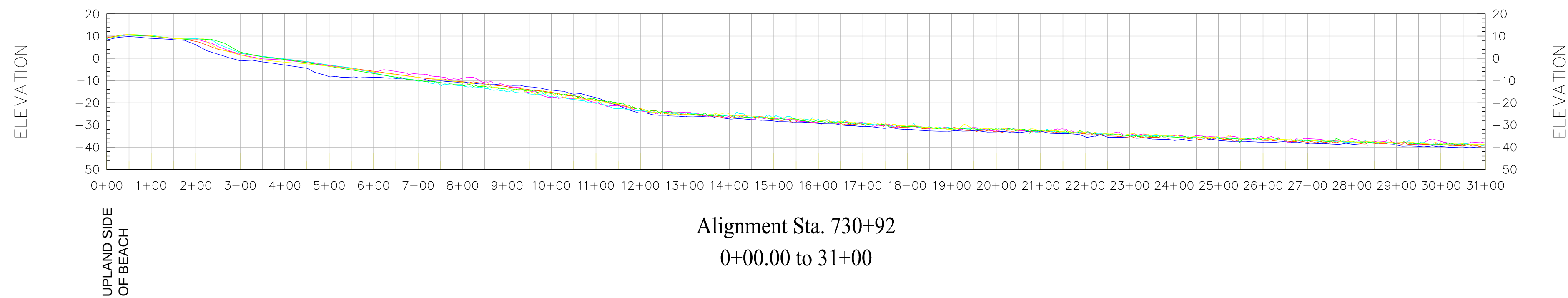
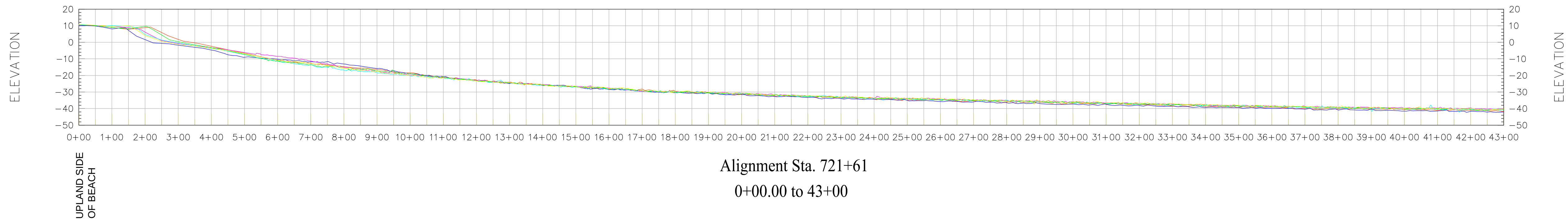
Alignment Sta. 713+49
0+00.00 to 44+00

PROFILE LEGEND

- POST-DEPOSIT TRANSECTS (06/21)
 - POST-DEPOSIT TRANSECTS (06/20)
 - POST-DEPOSIT TRANSECTS (06/19)
 - POST-DEPOSIT TRANSECTS (08/18)
 - POST-DEPOSIT TRANSECTS (07/17)
 - PRE-DEPOSIT TRANSECTS (09/16)
- (TRANSECTS 674+63 & 708+01 ADDED 02/17)

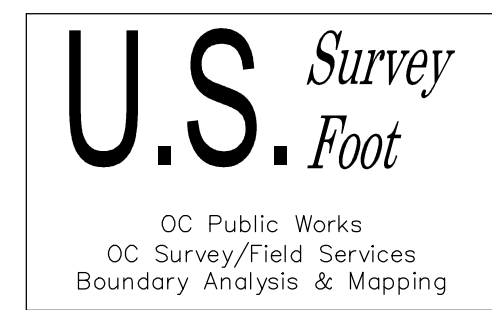


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1	2017	UPDATE FOR 2017	TOPOGRAPHIC MAPPING	BY: A.VU	
0	2016	ORIGINAL SUBMISSION	OFFICE CHECK	BY: M.KUBISTY, PLS	
NO.	DATE	ITEM	FIELD CHECK	BY: M.RUSSO	
REVISIONS			SCALE: N/A	W.O. #EF21246	FILE NO. 2021PW-IN0001
			FILE: LSAR_TRANSECTS_2021.DWG		



PROFILE LEGEND

- POST-DEPOSIT TRANSECTS (06/21) — Yellow line
- POST-DEPOSIT TRANSECTS (06/20) — Cyan line
- POST-DEPOSIT TRANSECTS (06/19) — Magenta line
- POST-DEPOSIT TRANSECTS (08/18) — Green line
- POST-DEPOSIT TRANSECTS (07/17) — Orange line
- PRE-DEPOSIT TRANSECTS (09/16) — Blue line
- (TRANSECTS 674+63 & 708+01 ADDED 02/17)



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4	2020	UPDATE FOR 2020	TO: 741+31 (+/- 26TH ST)		
3	2019	UPDATE FOR 2019			
2	2018	UPDATE FOR 2018	DATE OF SURVEY: JUNE 2021	BY: RUSSO & PARTY	SHEET NO. 4 of 4
1	2017	UPDATE FOR 2017	TOPOGRAPHIC MAPPING	BY: A.VU	
0	2016	ORIGINAL SUBMISSION	OFFICE CHECK	BY: M.KUBISTY, PLS	
NO.	DATE	ITEM	FIELD CHECK	BY: M.RUSSO	
REVISIONS			SCALE: N/A	W.O. #EF21246	FILE NO. 2021PW-IN0001
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