

CURVE	RADIUS	Δ	L	T
(A)	R = 200'	51°00'41"	178.06'	95.42'
(B)	R = 200'	40°35'50"	141.71'	73.98'
(C)	R = 1520'	8°17'34"	220.00'	110.19'
(D)	R = 200'	50°44'59"	177.15'	94.86'

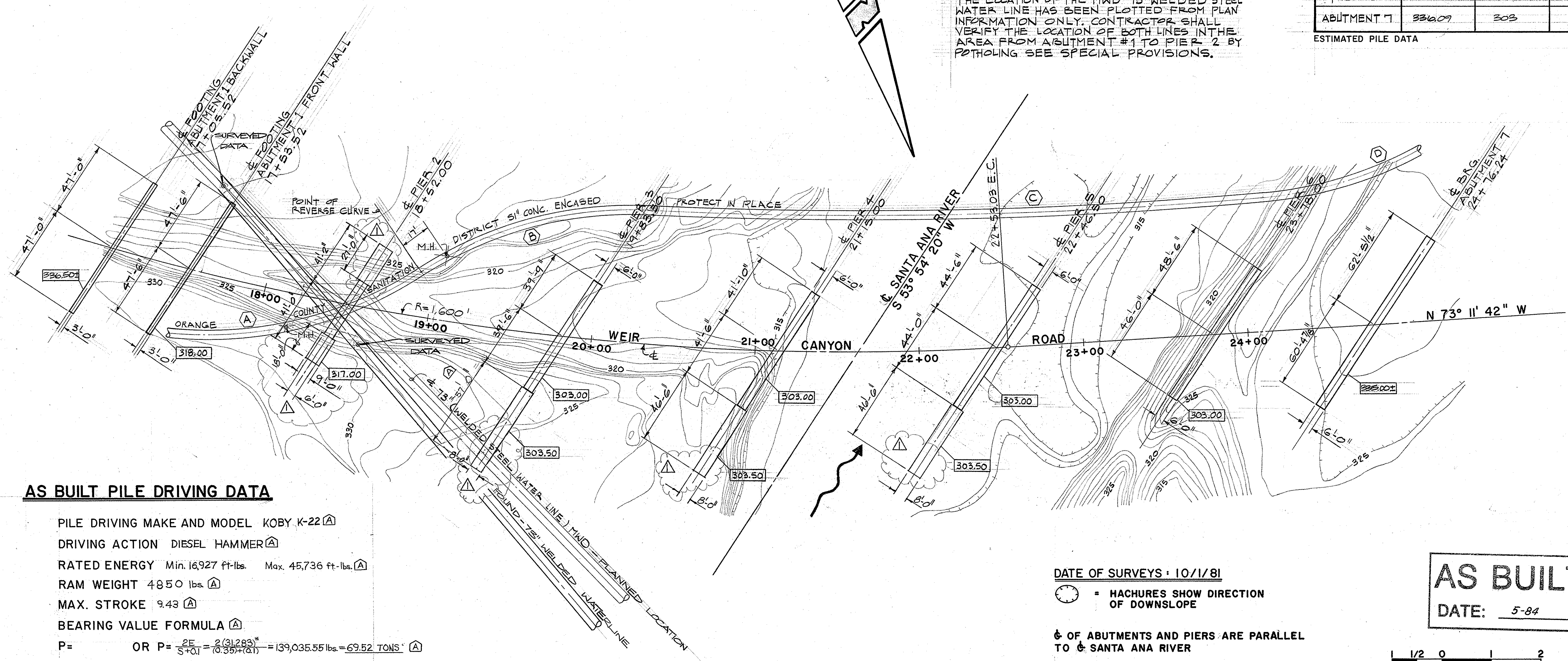
OCSD 51" SEWER LINE CURVE DATA

NOTES

1. THE O.C.S.D. 51" CONCRETE ENCASED SEWER LINE HAS BEEN PLOTTED FROM FIELD SURVEYS OF THE MANHOLES AND FROM AVAILABLE PLANS. THE LOCATION OF THE MWD 78" WELDED STEEL WATER LINE HAS BEEN PLOTTED FROM PLAN INFORMATION ONLY. CONTRACTOR SHALL VERIFY THE LOCATION OF BOTH LINES IN THE AREA FROM ABUTMENT #1 TO PIER 2 BY POTHOLING SEE SPECIAL PROVISIONS.

LOCATION	CUT OFF ELEVATION	MINIMUM PENETRATION ELEVATION	ESTIMATED LENGTH
ABUTMENT 1 BACKWALL	336.92	278	29
ABUTMENT 1 FRONTWALL	318.42	278	20
PIER 2	317.42	275	42
PIER 3	304.50	280	24
PIER 4	304.50	280	24
PIER 5	304.50	280	24
PIER 6	303.42	280	24
ABUTMENT 7	336.09	303	33

ESTIMATED PILE DATA



AS BUILT PILE DRIVING DATA

PILE DRIVING MAKE AND MODEL KOBAY K-22 (A)

DRIVING ACTION DIESEL HAMMER (A)

RATED ENERGY Min. 16,927 ft.-lbs. Max. 45,736 ft.-lbs. (A)

RAM WEIGHT 4850 lbs. (A)

MAX. STROKE 9.43 (A)

BEARING VALUE FORMULA (A)

$P = \frac{2E}{S+0.1} = \frac{2(31,283)}{(0.35)+(0.1)} = 139,035.55 \text{ lbs.} = 69.52 \text{ TONS} (A)$

*31,283 ft.-lb is rated energy for stroke of 6.45'

LOCATION	CUT-OFF ELEVATION (A)	AVG. TIP ELEVATION (A)	AVG. STROKE HEIGHT (A)	AVG. BLOWS PER FOOT (A)	AVG. BEARING VALUE (TONS) (A)
ABUTMENT 1 BACKWALL	336.92	289.79	6.45 (C)	34.56	69.52 TONS
ABUTMENT 1 FRONTWALL	318.42	285.13			
PIER 2	317.42	273.68			
PIER 3	304.50	268.43			
PIER 4	304.50	248.37			
PIER 5	304.50	245.35			
PIER 6	303.42	262.12			
ABUTMENT 7	336.09	284.61			

NOTE: FOR USE OF PROJECT ENGINEER UPON COMPLETION OF CONSTRUCTION.

FOUNDATION PLAN

1" = 30'

PILE NOTE
STEEL PILES HP 10X57
(DESIGN LOADING 70 TONS)
SPECIFIED TIP ELEV.

ABUT 1 298
PIER 2 275
PIER 3-6 280 (A)
ABUT 7 303

DATE OF SURVEYS: 10/1/81

⊙ = HACHURES SHOW DIRECTION OF DOWNSLOPE

⊙ OF ABUTMENTS AND PIERS ARE PARALLEL TO Ⓢ SANTA ANA RIVER

000.00 INDICATES BOTTOM OF FOOTING ELEVATION

AS BUILT
DATE: 5-84

1/2 0 1 2
3 inches on original drawing

(A) AS BUILT 5-15-84

WHEELER & GRAY
CONSULTING ENGINEERS
2512 Chambers Road, Suite 205
Tustin, California 92680

George W. Gray
S.E. 764

ORANGE COUNTY
ENVIRONMENTAL MANAGEMENT AGENCY
WEIR CANYON ROAD BRIDGE
(SA -3)
ACROSS SANTA ANA RIVER

FOUNDATION PLAN

MARK	DATE	DESCRIPTION	PREPARED UNDER SUPERVISION OF	DATE	SHEET
DESIGNED	W.F. POND	REVISIONS	SCALE	DATE	OWG. NO.
DRAWN	E.G.	CHECKED	AS SHOWN	2-1-82	B-4