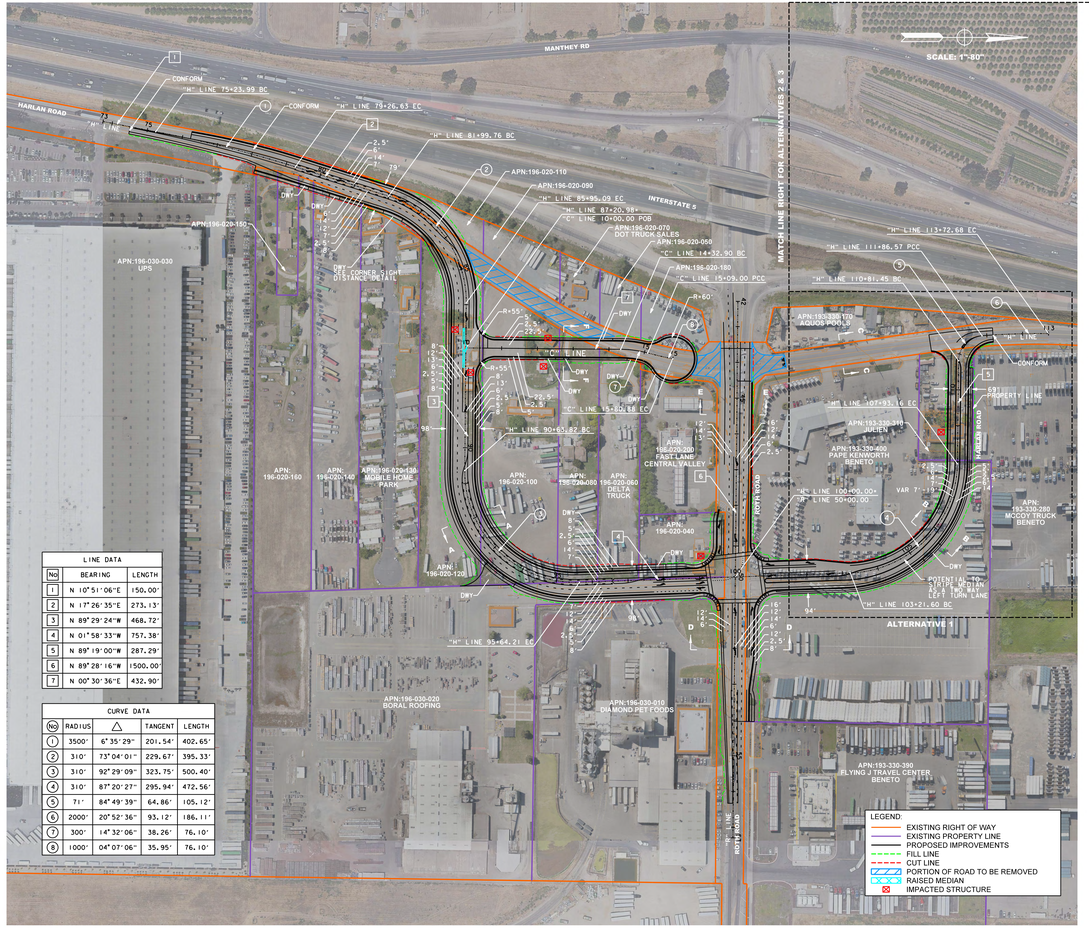
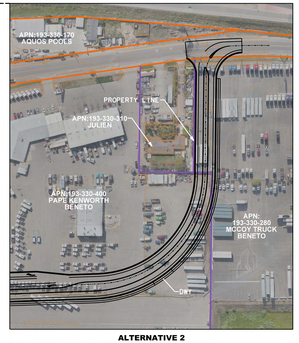


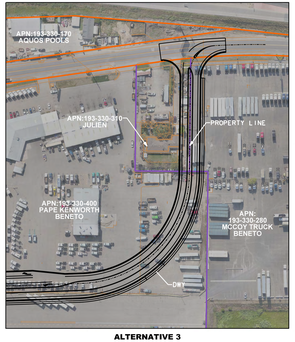
SCALE: 1"=300'

LINE DATA		
No	BEARING	LENGTH
1	N 10°51'06"E	150.00'
2	N 17°26'35"E	273.13'
3	N 89°29'24"W	468.72'
4	N 01°58'33"W	757.38'
5	N 89°19'00"W	287.29'
6	N 89°28'16"W	1500.00'
7	N 00°30'36"E	432.90'

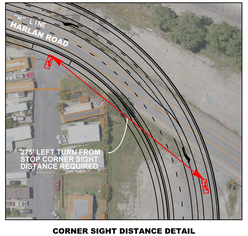
CURVE DATA				
No	RADIUS	△	TANGENT	LENGTH
1	3500'	6°35'29"	201.54'	402.65'
2	310'	73°04'01"	229.67'	395.33'
3	310'	92°29'09"	323.75'	500.40'
4	310'	87°20'27"	295.94'	472.56'
5	71'	84°49'39"	64.86'	105.12'
6	2000'	20°52'36"	93.12'	186.11'
7	300'	14°32'06"	38.26'	76.10'
8	1000'	04°07'06"	35.95'	76.10'



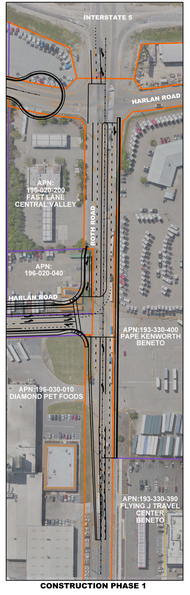
ALTERNATIVE 2



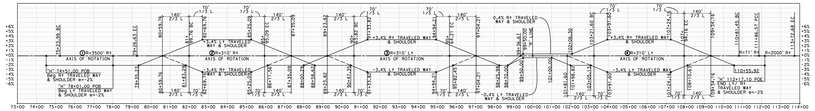
ALTERNATIVE 3



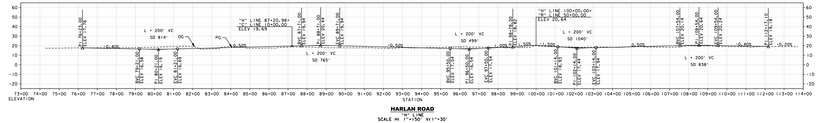
CORNER SIGHT DISTANCE DETAIL



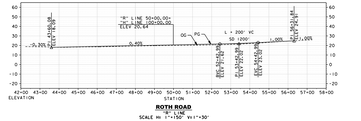
CONSTRUCTION PHASE 1



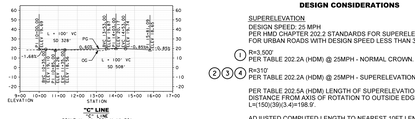
SUPERELEVATION DIAGRAM
HARLAN ROAD
SCALE: H:1"=150' V:1"=6.0S



HARLAN ROAD
"H" LINE
SCALE: H: 1"=100' V:1"=30'



ROTH ROAD
SCALE: H: 1"=100' V:1"=30'



"C" LINE
SCALE: H: 1"=100' V:1"=30'

DESIGN CONSIDERATIONS

SUPERELEVATION
DESIGN SPEED: 25 MPH
PER HMD CHAPTER 202.2 STANDARDS FOR SUPERELEVATION, EMAX=4% FOR URBAN ROADS WITH DESIGN SPEED LESS THAN 35 MPH.

(1) R=3,500'
PER TABLE 202.2A (HDM) @ 25MPH - NORMAL CROWN.

(2) (3) (4) R=310'
PER TABLE 202.2A (HDM) @ 25MPH - SUPERELEVATION RATE E(%)=3.4.

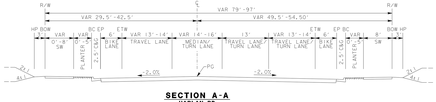
PER TABLE 202.5A (HDM) LENGTH OF SUPERELEVATION RUNOFF L=150DE
DISTANCE FROM AXIS OF ROTATION TO OUTSIDE EDGE OF LANES=39'
L=150(39)/3.4)=1958.9'.

ADJUSTED COMPUTED LENGTH TO NEAREST 10FT LENGTH DIVISIBLE BY 3:
L=210', 1/3L=70' & 2/3L=140'.

CORNER SIGHT DISTANCE
PER CHAPTER 405.1 SIGHT DISTANCE (HDM) CORNER SIGHT DISTANCE IS DETERMINED BY THE EQUATION: SD=(1.47)(Vm)(Tg)

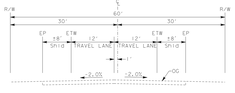
PER FIGURE 405.1A CORNER SIGHT DISTANCE (HDM) FOR LEFT TURN FROM STOP, Tg=7.5(s)

SD=(1.47)(25)(7.5)=275.6'

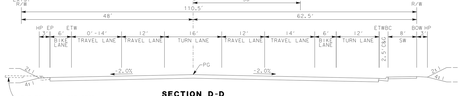


SECTION A-A
HARLAN RD
"H" LINE

SECTION B-B
HARLAN RD
"H" LINE

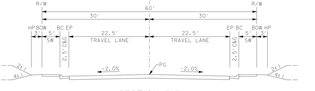


SECTION C-C
EXISTING HARLAN RD



SECTION D-D
ROTH RD
"R" LINE

SECTION E-E
ROTH RD
"R" LINE



SECTION F-F
"C" LINE

HARLAN ROAD REALIGNMENT PROJECT

PRECISE PLAN LINE

OCTOBER 2020

DOKKEN ENGINEERING
110 BLUE RAVINE ROAD, SUITE 200
FOLSOM, CA 95630
(916) 858-0642