CALTRANS GENERAL NOTES

1) AN ENCROACHMENT PERMIT IS REQUIRED BEFORE ANY WORK MAY BEGIN IN OR NEAR THE STATE RIGHT-OF-WAY.

2) ALL WORK WITHIN THE STATE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST STATE STANDARD PLANS & SPECIFICATIONS OR AS DIRECTED BY THE STATE'S REPRESENTATIVE (STANDARDS OTHER THAN STATE MUST BE PRE-APPROVED AND JUSTIFIED).

3) NO EQUIPMENT OR MATERIALS MAY BE STORED ON THE STATE RIGHT-OF-WAY.

4) ALL DISTURBED AREAS IN THE STATE RIGHT-OF-WAY MUST BE TREATED FOR EROSION CONTROL (HYDROSEEDING OR EQUIVALENT, OR AS DIRECTED BY THE STATE'S REPRESENTATIVE). THE RESPONSIBILITY FOR MAINTAINING EROSION CONTROL WILL NOT BE RELEASED UNTIL THE SEEDING IS WELL ESTABLISHED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF CALTRANS CLEANING ANY DRAINAGE STRUCTURES/CHANNELS WHICH HAVE BECOME CLUTTERED WITH DEBRIS AND/OR SILT AS A RESULT OF, OR CAUSED BY, THE CONSTRUCTION PROJECT.

5) ACCESS CONTROL ON THE FREEWAY WILL BE MAINTAINED AT ALL TIMES, I.E., THE WORK INSIDE THE STATE RIGHT-OF-WAY MUST BE FENCED OFF WITH NO ACCESS TO THE WORK AREA FROM THE FREEWAY.

6) NO FREEWAY RAMPS OR FREEWAY LANES MAY BE CLOSED OR OBSTRUCTED AT ANYTIME UNLESS SPECIFICALLY ALLOWED PER THE ENCROACHMENT PERMIT AND/OR AS DIRECTED BY THE STATE'S REPRESENTATIVE.

7) ALL FENCE RELOCATED TO FACILITATE THE CONSTRUCTION OF THIS PROJECT INSIDE THE STATE RIGHT-OF-WAY SHALL BE REPLACED WITH CL-6 FENCE AS SHOWN IN THE STATE'S STANDARD PLANS OR WITH A BLOCK WALL IN ACCORDANCE WITH ACCEPTABLE LOCAL AGENCY STANDARDS.

8) WHERE TYPE CL-6 FENCE DOES NOT EXIST, THE STATE RIGHT-OF-WAY FENCE MUST BE UPGRADED TO TYPE CL-6 FENCE, AS SHOWN IN THE STANDARD PLANS.

9) WHERE SURVEY MONUMENTS EXIST, SUCH MONUMENTS SHALL BE PROTECTED OR SHALL BE REFERENCED AND RESET PURSUANT TO BUSINESS AND PROFESSIONS CODE, SECTIONS 8700 TO 8805 (LAND SURVEYOR'S ACT).

10) ALL SIGNING, STRIPING AND PAVEMENT MARKINGS WITHIN STATE RIGHT-OF-WAY SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE TRAFFIC MANUAL, PUBLISHED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, AND THE SPECIAL PROVISIONS. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED ON THE PLANS.

11) THE EXACT LOCATION OF ALL SIGNS SHALL BE DETERMINED IN THE FIELD BY THE STATE'S REPRESENTATIVE.

12) ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS NOT SHOWN ON THE PLANS SHALL BE REMOVED FROM THE PAVEMENT BY SANDBLASTING BY THE CONTRACTOR.

13) ALL CONFLICTING SIGNS SHALL BE EITHER REMOVED OR RELOCATED BY THE CONTRACTOR. RELOCATABLE SIGNS SHALL BE INSTALLED AS SPECIFIED ON THE PLANS OR AS DETERMINED IN THE FIELD BY THE STATE'S REPRESENTATIVE.

14) ALL SIGNS, ROADSIDE MARKERS, ELECTROLIERS, ETC., SHALL BE PROTECTED AND/OR REPLACED IN-KIND ACCORDING TO THE CURRENT STATE STANDARD PLANS AND THE CURRENT TRAFFIC MANUAL, AT NO COST TO THE STATE.

GENERAL CONSTRUCTION NOTES

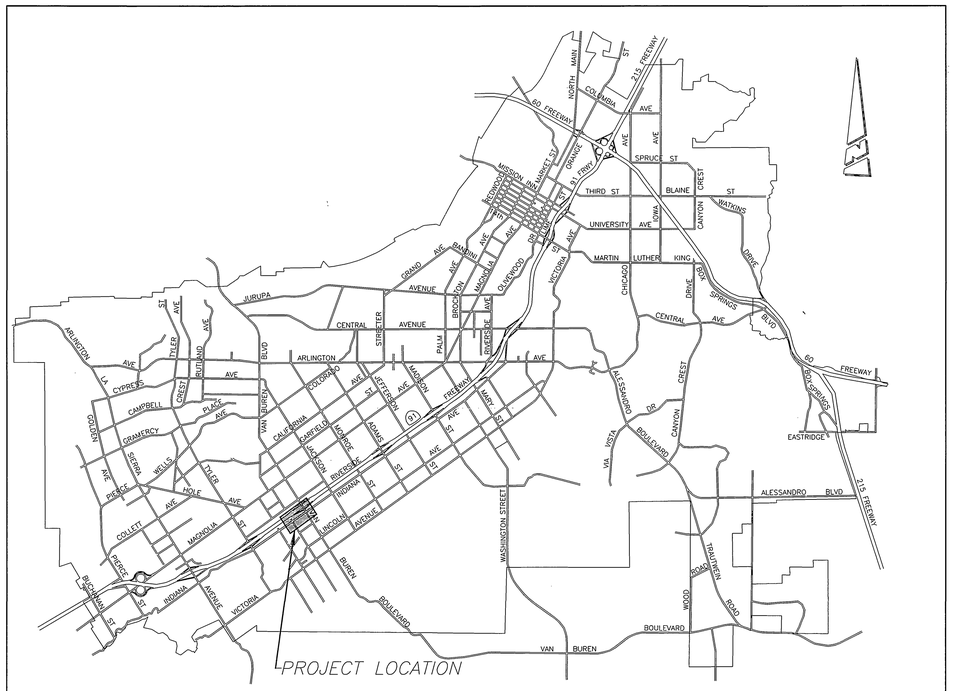
1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE STANDARD DRAWINGS ANS STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1994 EDITION.
2. EXISTING UTILITIES SHOWN ON THIS PLAN ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN. IF THE COVER OF A UTILITY IS KNOWN, IT IS SHOWN IN THE PROFILE. UTILITIES SHOWN IN THE PROFILE AS ——(?)——, INDICATES THAT THE COVER IS UNKNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.
3. ALL ELEVATIONS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD.
4. PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS A OR C-12 LICENSE.
5. ALL FENCE INSTALLATIONS FOR PARCELS ON EASTERLY SIDE OF INDIANA AVENUE SHALL BE PER CITY STANDARD DRAWING 380.

RIVERSIDE CALIFORNIA

CITY OF RIVERSIDE — INCORPORATED 1883

PUBLIC WORKS DEPARTMENT

EAST BOUND 91 FREEWAY OFFRAMP
AT VAN BUREN BOULEVARD AND INDIANA AVENUE



PROJECT LOCATION PLAN

0 KM. 1 KM. 5 KM 10 KM.
0' 3,000' 6,000' 12,000' 18,000' 24,000' 30,000' 36,000'

SCALE : 1" = 6,000'

EXISTING UNDERGROUND & TOPOGRAPHY LEGEND

EXISTING UNDERGROUND UTILITIES:

SANITARY SEWER	8"S	TELEPHONE CONDUIT	T T
WATER LINE	6"W	ELECTRICAL CONDUIT	E E
STORM DRAIN	24"SD	ELECTROLIER LIGHTING CONDUIT	ELC
GAS LINE	3"G	TRAFFIC SIGNAL	SIG SIG
ABANDONDED UTILITY	6"G(ABAN'D.)	FIRE ALARM	F F

EXISTING TOPOGRAPHY:

- BLOCK WALL
- BOARD FENCE
- WIRE FENCE
- CHAIN LINK FENCE
- TOP OF SLOPE
- TOE OF SLOPE
- DIRECTION OF FLOW

SANITARY SEWER M.H.	POLE & GUY ANCHOR	PEDESTRIAN PUSH BUTTON
SANITARY SEWER CLEANOUT	POWER POLE	RAILROAD TRACKS
STORM DRAIN M.H.	TELEPHONE POLE	RAILROAD SIGN
IRRIGATION WEIR	TELEPHONE RISER	RAILROAD SIGNAL
WATER M.H.	JOINT USE POLE	TRAFFIC SIGNAL
GAS M.H.	PULL BOX	TRAFFIC SIGNAL ON MAST ARM
ELECTRIC M.H.	TRAFFIC SIGN	TRAFFIC SIGNAL CONTROLLER
TELEPHONE M.H.	PARKING METER	TRAFFIC SIGNAL PRESSURE DETECTOR
WATER METER	FIRE ALARM BOX	TRAFFIC SIGNAL LOOP DETECTOR
FIRE HYDRANT	STREET NAME SIGN	STREET LIGHT & TRAFFIC SIGNAL ON MAST ARM
SPRINKLER HEAD	GAS METER	STREET LIGHT (UPRIGHT)
VALVE	MAIL BOX	STREET LIGHT ON MAST ARM
AIR VALVE	FAUCET	STEEL POST
AIR VENT	WALK-DON'T WALK PEDESTRIAN SIGNAL	WOOD POST
BUS STOP SIGN	ELECTROLYSIS TEST STATION	
BLOW-OFF VALVE	WHEEL STOP	
IRRIGATION STAND PIPE	A.C. BERM	
CONCRETE		
ASPHALT		
BUILDING		
EDGE OF PAVEMENT		

SPECIFIC CONSTRUCTION NOTES

⬢ NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY. UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.

◯ NUMBERS IN A CIRCLE ON THE PLAN REFER TO THE RESPECTIVE CALTRANS STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY. SPECIFIC ALTERNATE TO BE CONSTRUCTED IS INDICATED.

CONSTRUCTION LEGEND

CENTER LINE	℄	TOP OF SLOPE	
RIGHT-OF-WAY	R/W	TOE OF SLOPE	
SUBDIVISION LOT LINE	PL	DIRECTION OF FLOW	

- ADJ — ADJUST SEWER, STORM DRAIN, ELECTRIC OR WATER MANHOLE OR GATE VALVE TO GRADE. ADJUSTMENT TO GRADE OR RELOCATION OF GAS AND TELEPHONE COMPANY'S FACILITIES WILL BE DONE BY OTHERS.
- OL — CONSTRUCT A VARIABLE THICKNESS DGAC OVERLAY.
- S1 — CONSTRUCT STRUCTURAL SECTION OF 0.50' AC OVER 0.70' BASE. (OFFRAMP)
- S2 — CONSTRUCT STRUCTURAL SECTION OF 0.50' AC OVER 0.70' BASE. (INDIANA)
- SL — INSTALL STREET LIGHT PER C/R PUBLIC UTILITIES PLAN L5-1110
- ST — INSTALL PCC STEPS FROM SIDEWALK TO PCC WALKWAY. RISE = 6", RUN = 18" W=6' (1)
- F1 — REMOVE EXISTING 4' CLF. INSTALL 4' CLF AT R/W WITH ROLLING GATES.
- F2 — REMOVE EXISTING 5' WIRE MESH FENCE WITH BARBED WIRE. INSTALL 4' CLF AT R/W WITH ROLLING GATE.
- F3 — REMOVE EXISTNG 3' CLF. INSTALL 4' CLF AT R/W WITH ROLLING GATE.
- F4 — PROTECT EXISTING 4' CLF. REMOVE ROLLING GATE AND INSTALL 4' CLF AT R/W.
- F5 — REMOVE EXISTING 6' CLF. INSTALL 4' CLF AT R/W. NO GATE.
- F6 — PROTECT IN PLACE EXISTING PILASTER BLOCK WALL AND WROUGHT IRON FENCE.
- F7 — INSTALL 4' CLF.
- R — REMOVE TREE. CLASS AS NOTED IN LOWER HALF.
- T — TRANSPLANT PALM TREE TO STATION INDICATED, OFFSET TO BE 34' LEFT, CLASS AS NOTED IN LOWER HALF. APPROXIMATE PLANTING LOCATIONS ARE SHOWN AS ○.

PC 3812 - P

BENCHMARK:

PK NAIL & CITY ENGINEERS TAG IN N'LY CURB OF INDIANA AVE. ABOUT 215' E'LY OF ℄ VAN BUREN BLVD. PER CRFB 1021/5

ELEVATION: 814.983

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call
CALL TOLL FREE
TWO WORKING DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-422-4133

REGISTERED PROFESSIONAL ENGINEER — DUANE K. GREENWOOD — No. 43965 — Exp. 6/30/97 — CIVIL — STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 9/6/95

MARK	REVISIONS	APPR.	DATE
1	Modified size of steps	DKG	12/19/96

DESIGNED BY ddy DRAWN BY bvg CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RM.G	7/8/97
PRINCIPAL ENGINEER	JC	7/8/97
CHIEF P.W. INSPECTOR	RPE	7/7/97
STREET SERVICES	CE	7-7-97
SURVEYOR	MJS	7/7/97
TRAFFIC DIVISION	JS	7/7/97
PARKS DEPARTMENT	LM	7-7-97

APPROVED BY _____
PUBLIC WORKS DIRECTOR
DATE 9/12/95

91 FWY E'BOUND HOOKRAMP @ VAN BUREN AND INDIANA

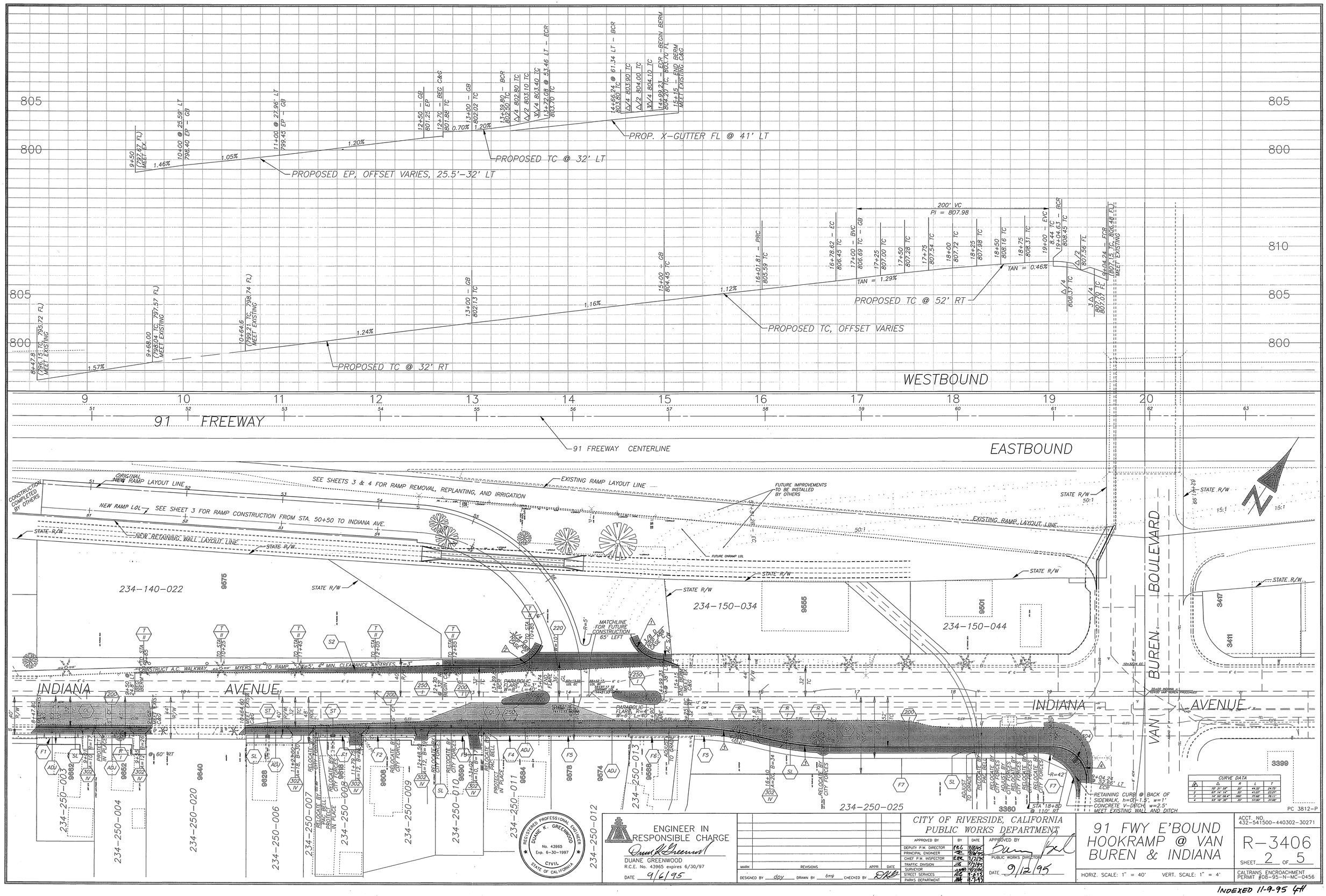
ACCT. NO. 432-541500-440302-30271

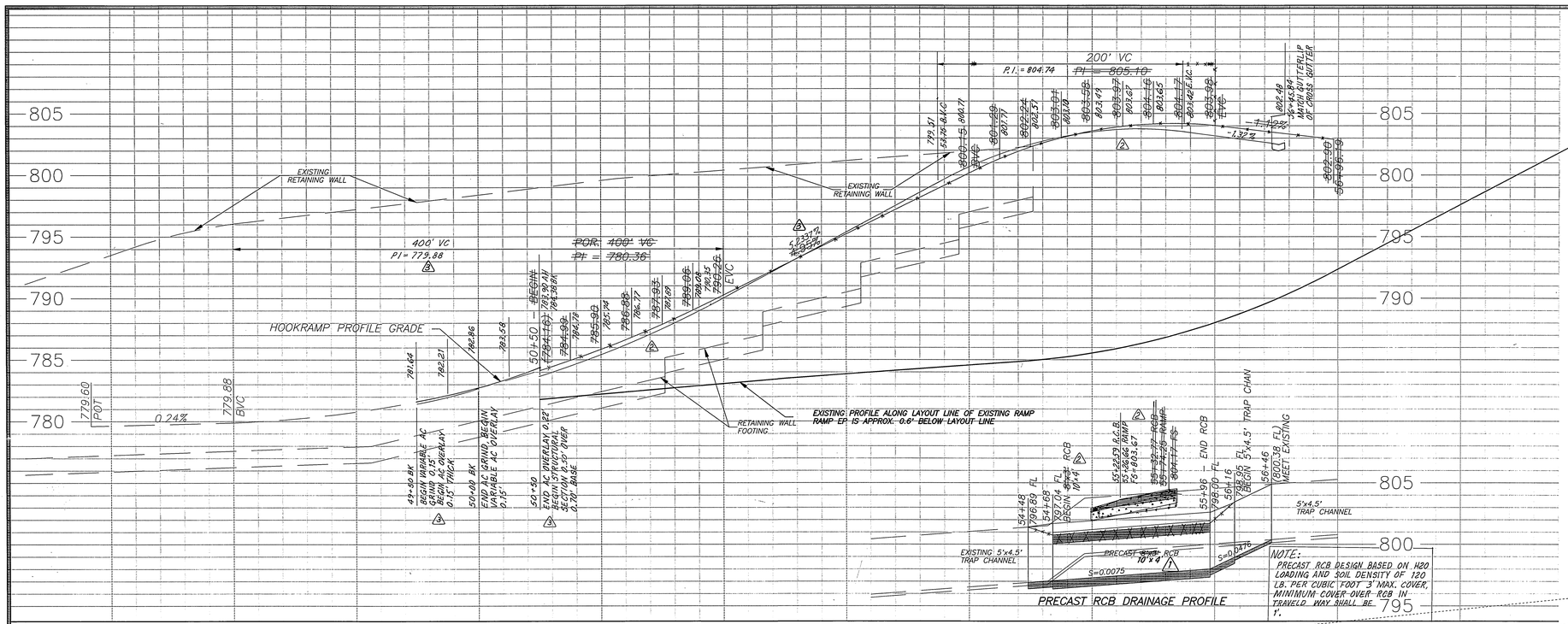
R-3406

SHEET 1 OF 5

CALTRANS ENCROACHMENT PERMIT 08-95-N-MC-0456

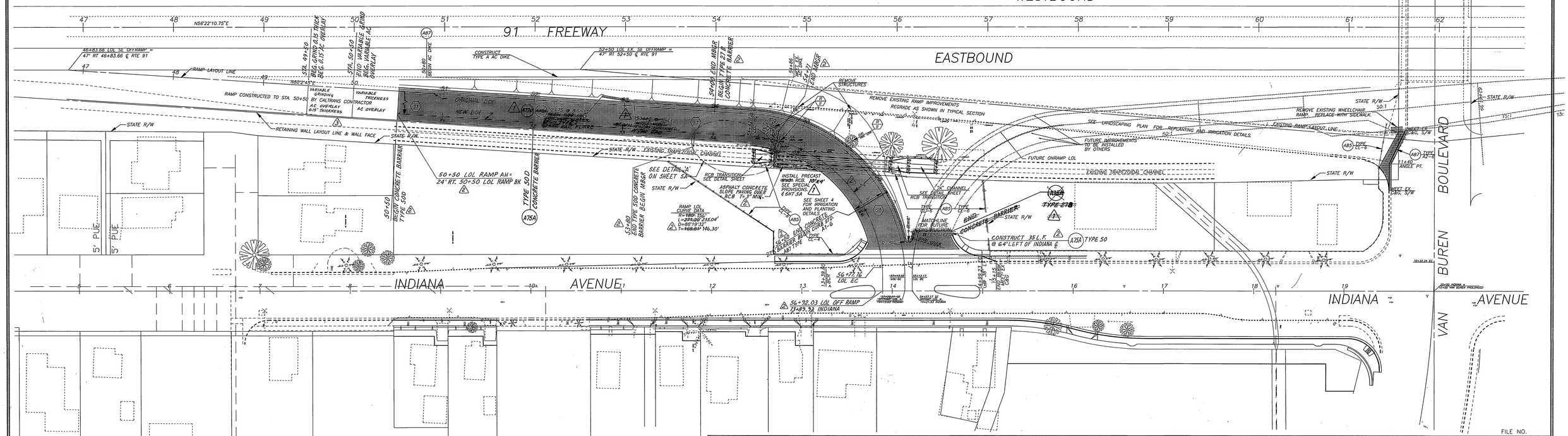
INDEXED 11-9-95 GA


9+50 (797.67 FL) MEET EX.
1.46%
10+00 @ 25.59' LT 796.40 EP – GB
1.05%
11+00 @ 27.96' LT 799.45 EP – GB
1.20%
12+50 – GB 801.25 EP
12+70 – BEG C&G 801.88 TC
0.70%
13+00 – GB 802.02 TC
1.20%
13+19.80 – BCR 802.30 TC
△/4 802.80 TC
△/2 803.10 TC
3△/4 803.40 TC
13+72.08 @ 53.46 LT – ECR 803.70 TC
14+56.24 803.80 TC @ 61.34 LT – BCR
△/4 803.90 TC
△/2 804.00 TC
3△/4 804.10 TC
14+99.23 – ECR – BEGIN BERM 804.21 TC, 803.70 FL
15+15 – END BERM MEET EXISTING C&G
PROP. X-GUTTER FL @ 41' LT
PROPOSED TC @ 32' LT
PROPOSED EP, OFFSET VARIES, 25.5'–32' LT
805
800
8+47.8 (796.15 TC, 795.72 FL) MEET EXISTING
1.57%
9+68.00 (798.04 TC, 797.57 FL) MEET EXISTING
10+64.6 (799.21 TC, 798.74 FL) MEET EXISTING
1.24%
13+00 – GB 802.13 TC
PROPOSED TC @ 32' RT
1.16%
15+00 – GB 804.45 TC
16+01.81 – PRC 805.59 TC
1.12%
PROPOSED TC, OFFSET VARIES
16+78.62 – EC 806.45 TC
200' VC PI = 807.98
17+00 – BVC 806.69 TC – GB
17+25 807.00 TC
17+50 807.28 TC
17+75 807.54 TC
18+00 807.72 TC
18+25 807.98 TC
18+50 808.16 TC
18+75 808.31 TC
19+00 – EVC 808.43 TC – BCR
808.45 TC
△/2 807.56 FL
△/4 808.37 TC
3△/4 807.70 TC 807.01 FL
19+04.24 808.48 FL
19+12.43 TC, 808.48 FL MEET EXISTING
TAN = 1.29%
TAN = 0.46%
PROPOSED TC @ 52' RT
810
805
800
WESTBOUND
9
10
11
12
13
14
15
16
17
18
19
20
51
52
53
54
55
56
57
58
59
60
61
62
63
91 FREEWAY
91 FREEWAY CENTERLINE
EASTBOUND
CONSTRUCTION COMPLETED BY OTHERS
ORIGINAL NEW RAMP LAYOUT LINE
NEW RAMP LOL
SEE SHEETS 3 & 4 FOR RAMP REMOVAL, REPLANTING, AND IRRIGATION
SEE SHEET 3 FOR RAMP CONSTRUCTION FROM STA. 50+50 TO INDIANA AVE.
EXISTING RAMP LAYOUT LINE
FUTURE IMPROVEMENTS TO BE INSTALLED BY OTHERS
NEW RETAINING WALL LAYOUT LINE
STATE R/W
FUTURE OVERHAND LOL
EXISTING RAMP LAYOUT LINE
50:1
15:1
234–140–022
234–150–034
234–150–044
9575
9555
9501
3417
3411
3399
3360
MATCHLINE FOR FUTURE CONSTRUCTION 65' LEFT
CONSTRUCT A.C. WALKWAY 23.5'± MYERS ST TO RAMP, W=5', 4' MIN. CLEARANCE AROUND TREES
INDIANA AVENUE
VAN BUREN BOULEVARD
20+00 INDIANA ℄ 109°00' VAN BUREN PROJECTED
PARABOLIC FLARE, R=3', W=8', L=40'
RAISED 8" AC ISLAND
PARABOLIC FLARE, R=6', W=6', L=40'
MAINT. AC ISLAND
RETAINING CURB @ BACK OF SIDEWALK, h=0'–1.5', w=1'
CONCRETE V-DITCH, w=2.5'
MEET EXISTING WALL AND DITCH
STA 18+80 @ 110' RT
9+04.24 52.86' LT
234–250–003
234–250–004
234–250–020
234–250–006
234–250–007
234–250–008
234–250–009
234–250–010
234–250–011
234–250–012
234–250–013
234–250–025
9582
9602
9628
9640
9618
9606
9590
9584
9578
9574
9588
9560
9304
CURVE DATA
1 | 70° 31' 59" | 35' | 44.32' | 24.75'
2 | 87° 14' 14" | 35' | 53.27' | 33.27'
3 | 14° 56' 06.4" | 300' | 77.86' | 78.11'
4 | 93° 18' 38" | 35' | 57.00' | 37.08'
PC 3812–P
REGISTERED PROFESSIONAL ENGINEER DUANE K. GREENWOOD No. 43965 Exp. 6–30–1997 CIVIL STATE OF CALIFORNIA
ENGINEER IN RESPONSIBLE CHARGE
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 9/6/95
MARK REVISIONS APPR. DATE
DESIGNED BY dpv DRAWN BY bnψ CHECKED BY DKG
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY | BY | DATE
DEPUTY P.W. DIRECTOR | RBL | 9/8/95
PRINCIPAL ENGINEER | | 9/8/95
CHIEF P.W. INSPECTOR | RBL | 9/7/95
TRAFFIC DIVISION | | 9/7/95
SURVEYOR | | 9/7/95
STREET SERVICES | RC | 9-8-95
PARKS DEPARTMENT | MK | 9-7-95
APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 9/12/95
91 FWY E'BOUND HOOKRAMP @ VAN BUREN & INDIANA
ACCT. NO. 432–541500–440302–30271
R–3406
SHEET 2 OF 5
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
CALTRANS ENCROACHMENT PERMIT #08–95–N–MC–0456
INDEXED 11-9-95 GH



CONSTRUCTION NOTE

CONTRACTOR TO CUT OFF ALL WEEP HOLE DRAIN LINES FROM WALL FOR CONSTRUCTION OF RAMP STRUCTURAL SECTION.



REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6-30-1997
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 9/6/95

MARK	REVISIONS	APPR.	DATE
3	Added grinding & overlay Sta. 49+50 - 50+50, modified ramp profile	DKG	4/3/96
2	Moved ramp LOL, revised concrete barriers, guardrail, profile and slope paving	DKG	3/21/96
1	Revised concrete barriers and R.C.B. size	DKG	11/2/95

DESIGNED BY DPY DRAWN BY GMH CHECKED BY KRE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR		11/8/95
PRINCIPAL ENGINEER		11/8/95
CHIEF P.W. INSPECTOR		11/7/95
TRAFFIC DIVISION		11/7/95
SURVEYOR		9/7/95
STREET SERVICES		9/8/95
PARKS DEPARTMENT		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 9/12/95

91 FWY E'BOUND HOOKRAMP @ VAN BUREN & INDIANA

HORIZ. SCALE: 1" = 50' VERT. SCALE: 1" = 5'

FILE NO.
ACCT. NO. 432-541500-440302-30271
R-3406
SHEET 3 OF 5
CALTRANS ENCROACHMENT PERMIT #08-95-N-MC-0456

INDEXED 11-9-95 GH

SYMBOL LEGEND

- (R II) REMOVE TREE. DIAMETER SIZE CLASS AS NOTED IN LOWER HALF.
- (T II) TRANSPLANT TREE PER CITY OF RIVERSIDE PALM TREE PLANTING SPECIFICATIONS TO INDICATED LOCATION. DIAMETER SIZE CLASS AS NOTED IN LOWER HALF.
- EXISTING TREE
- EXISTING PALM TREE
- PROPOSED 24" BOX TREE, TO BE FIELD LOCATED AT TIME OF CONSTRUCTION
- PROPOSED PALM TREE RELOCATION @ 34' LT ON INDIANA AVE.
- EXISTING SPRINKLER HEAD
- PROPOSED GATE VALVE
- (11/2"-A-4-##) REMOTE CONTROL VALVE SIZE, STATION, NUMBER, AND FLOWRATE
- PROPOSED GROUND COVER PLANTING
- PROPOSED GORE AREA SLOPE PAVING

SPRINKLER SCHEDULE

SYMBOL	TYPE	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE	PLUS/MINUS 5% DISCHARGE GPM	GPH	RADIUS FT.	W X L (FT)	MATERIAL	NOZZLE SIZE	INLET CONNECTION (NPT IN)	POSITIVE LOCKING ANTI-SIPHON VALVE	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL	ADJ. DISCHARGE	RISER MATERIAL TYPE	RISER MATERIAL PLASTIC	RISER MATERIAL GALVANIZED	RISER SIZE (IPS IN)	RISER HEIGHT (IN)	SWING JOINT (TYPE)	RISER SUPPORT	SPRINKLER PROTECTOR (TYPE)	REMARKS
(12)	A-12	GEAR DRIVEN	P	35	1.3	–	31	–	PL	(5) ¾	–	–	X	–	X	X	5	X	–	¾	–	II	–	–	(3)(5)(6) 12" POPUP
(12)	A-12	GEAR DRIVEN	F	35	1.3	–	31	–	PL	(5) ¾	–	–	X	–	X	X	5	X	–	¾	–	II	–	–	(3)(5)(6) 12" POPUP
(13)	A-13	GEAR DRIVEN	P	35	.65	–	22	–	PL	(5) ¾	–	–	X	–	X	X	5	X	–	¾	–	II	–	–	(3)(5)(6) 12" POPUP

X: DENOTES REQUIREMENT

APPLICABLE WHEN CIRCLED

1 – ARC STOP SHALL BE FITTED WITH A NUT AND BOLT.
2 – VINYL-COATED CAST IRON HOUSING.
(3) – SWING JOINTS REQUIRED ADJACENT TO SHOULDERS, CURBS, SIDEWALKS & DIKES.
4 – UNLESS OTHERWISE SHOWN ON PLANS.
(5) – SEE SPECIAL PROVISIONS.;
(6) – HEADS ON SLOPE SHALL INCLUDE CHECK VALVES.
7 – PRESSURE COMPENSATING SCREENS.
(8) – LOW ANGLE NOZZLES @ TOP OF SLOPE

ABBREVIATIONS

F	: FULL CIRCLE	L	: LENGTH OF COVERAGE
P	: PART CIRCLE	FT	: FEET/FOOT
F/P	: FULL/PART CIRCLE	IN	: INCH(ES)
Q	: QUARTER CIRCLE	GPM	: GALLONS PER MINUTE
T	: THIRD CIRCLE	GPH	: GALLONS PER HOUR
H	: HALF CIRCLE	ADJ	: ADJUSTABLE
TT	: TWO-THIRD CIRCLE	PL	: PLASTIC
TQ	: THREE QUARTER CIRLCE	B/B	: BRASS/BRONZE
CST	: CENTER STRIP	B/PL	: BRASS/PLASTIC
SST	: SIDE STRIP	B/B/PL	: BRASS/BRONZE/PLASTIC
EST	: END STRIP	NPT	: NATIONAL PIPE THREAD
PSI	: POUNDS PER SQUARE INCH	IPS	: IRON PIPE SIZE
W	: WIDTH OF COVERAGE	FG	: FINISHED GRADE
CNC	: CONTROL AND NEUTRAL CONDUCTOR		

IRRIGATION NOTES

ALL WORK IN CONNECTION WITH HIGHWAY PLANTING WITHIN STATE RIGHT-OF-WAY SHALL CONFORM TO SECTION 20-5, IRRIGATION SYSTEMS, OF THE CALIFORNIA STANDARD SPECIFICATIONS, DATED JULY, 1992.

ALL PLASTIC PIPE SUPPLY LINES AND CONTROL AND NEUTRAL CONDUCTORS SHALL BE LOCATED 18 INCHES FROM EDGE OF CHANNEL.

TYPE A, PART CIRCLE SPRINKLERS SALL BE INSTALLED A MINIMUM OF 3 FEET FROM CURBS, SHOULDERS, DIKES, FENCES, SIDEWALKS AND PAVED STRIPS.

ALL PLASTIC PIPE SUPPLY LINES SHALL BE 3/4" UNLESS OTHERWISE SPECIFIED.

ALL REMOTE CONTROL VALVES SHALL HAVE A GATE VALVE (SAME SIZE) AS PER SPECIAL PROVISIONS.

CONTRACTOR TO VERIFY LOCATION AND PROTECT IN PLACE EXISTING IRRIGATION SYSTEM ALONG RAMP TO BE REMOVED. CONTRACTOR SHALL ADJUST THROW PATTERN AND INSTALL ADDITIONAL HEADS, IF NECESSARY, TO ACHIEVE HEAD TO HEAD COVERAGE.

PLAN REVISION #3 NOTES AND LEGEND

ABANDON LINES B7, B8 AND B10. CUT AND CAP SUPPLY LINES. LINES B1 AND B4 PREVIOUSLY ABANDONED.

INSTALL #5 PULLBOX NEAR REMOTE CONTROL VALVE B5. SPLICE CNC FOR VALVES B1, B4, B7, B8 AND B10 IN PULLBOX.

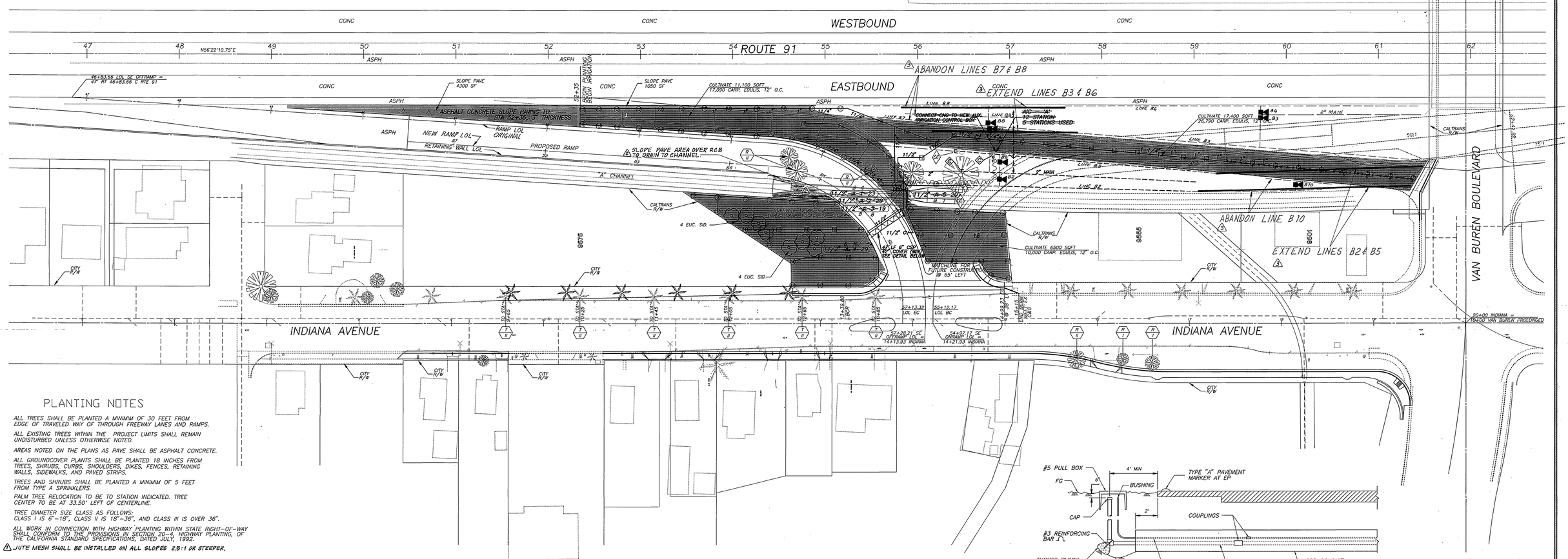
INTERCEPT LINES B3 & B6 AND B2 & B5 AT APPROXIMATE LOCATIONS SHOWN. EXTEND LINES WITH 3/4" PVC. INSTALL APPROPRIATE SPRINKLER HEADS TO OBTAIN ADEQUATE COVERAGE.

ALL SALVAGED SPRINKLER HEADS AND VALVES ARE TO BE RETURNED TO CALTRANS LANDSCAPE OPERATIONS.

(C) CONNECT

(CC) CUT AND CAP

EXISTING REMOTE CONTROL VALVE WITH I.D. #



PLANTING NOTES

ALL TREES SHALL BE PLANTED A MINIMIM OF 30 FEET FROM EDGE OF TRAVELED WAY OF THROUGH FREEWAY LANES AND RAMPS.

ALL EXISTING TREES WITHIN THE PROJECT LIMITS SHALL REMAIN UNDISTURBED UNLESS OTHERWISE NOTED.

AREAS NOTED ON THE PLANS AS PAVE SHALL BE ASPHALT CONCRETE.

ALL GROUNDCOVER PLANTS SHALL BE PLANTED 18 INCHES FROM TREES, SHRUBS, CURBS, SHOULDERS, DIKES, FENCES, RETAINING WALLS, SIDEWALKS, AND PAVED STRIPS.

TREES AND SHRUBS SHALL BE PLANTED A MINIMIM OF 5 FEET FROM TYPE A SPRINKLERS.

PALM TREE RELOCATION TO BE TO STATION INDICATED. TREE CENTER TO BE AT 33.50' LEFT OF CENTERLINE.

TREE DIAMETER SIZE CLASS AS FOLLOWS: CLASS I IS 6"–18", CLASS II IS 18"–36", AND CLASS III IS OVER 36".

ALL WORK IN CONNECTION WITH HIGHWAY PLANTING WITHIN STATE RIGHT-OF-WAY SHALL CONFORM TO THE PROVISIONS IN SECTION 20-4 HIGHWAY PLANTING, OF THE CALIFORNIA STANDARD SPECIFICATIONS, DATED JULY, 1992.

⚠ JUTE MESH SHALL BE INSTALLED ON ALL SLOPES 2.5:1 OR STEEPER.

PLANT LIST AND PLANT SPECIFICATIONS

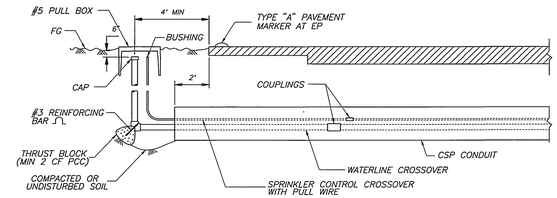
PLANT GROUP	PLANT NUMBER	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	QUANTITY	COMMERCIAL FERTILIZER	PLANT SPACING	HOLE SIZE	BASIN TYPE (SIZE)	IRON SULFATE	SOIL AMENDMENT	MULCH
H	1		CARPOBROTUS EDULIS	HOTTENTOTFIG (ICE PLANT)	10" MIN. CUTTINGS	GROUND COVER	74,355	15 LB/1000 SQ FT	12" O.C.	SEE SPEC. PROV.	——	——	——	——
K	2		EUCALYPTUS SIDEROXYLON	PINK IRONBARK EUCALYPTUS	24" BOX	TREE	8	3/4 LB	SEE PLANS	36" DIA x 48" DEEP	TYPE II (3' DIA)	0.5 LB/PLANT	1.5 CF/PLANT	2 CF/PLANT

NOTE: UNDERLINED PORTIONS OF BOTANICAL NAME INDICATE ABBREVIATION USED ON PLANS.

STAKE AND TIE TREES IN ACCORDANCE WITH CALTRANS STANDARD DRAWING H-4.

PIPE SIZING LEGEND PR 200 PVC

GPM	SIZE
0–10	3/4"
10.1–16	1"
16.1–26	1 1/4"
26.1–35	1 1/2"
35.1–55	2"



SECTION
IRRIGATION CROSSOVER
N.T.S.

REGISTERED PROFESSIONAL ENGINEER — DUANE K. GREENWOOD — No. 43965 Exp. 6-30-1997 — CIVIL — STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 9/6/95

MARK	REVISIONS	APPR	DATE
⚠	Added Jute Mesh Requirement.	RKG	3/9/96
⚠	Eliminated Irrigation Branch And Ground Cover Planting Over RCB. Westerly Side Area Over RCB Shall Be Slope Paved.	RKG	3/12/96
3	Added existing irrigation. Deleted auxiliary controller. Modified irrigation layout along existing ramp. Changed valve I.D. numbers. See plan revision #3 notes & legend above.	RKG	6/7/96

DESIGNED BY DPY DRAWN BY bmw CHECKED BY RKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	KMG	1/8/96
PRINCIPAL ENGINEER	RKG	3/9/96
CHIEF P.W. INSPECTOR	DPY	3/9/96
TRAFFIC DIVISION	RKG	3/9/96
SURVEYOR	[illegible]	3/7/96
STREET SERVICES	RC	6-3-96
PARKS DEPARTMENT		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 9/12/96

PC 3812 – P

91 FWY E'BOUND HOOKRAMP AT VAN BUREN AND INDIANA

HORIZ. SCALE: 1" = 50' VERT. SCALE: 1" = 4'

ACCT. NO. 432-541500-440302-30271

R-3406

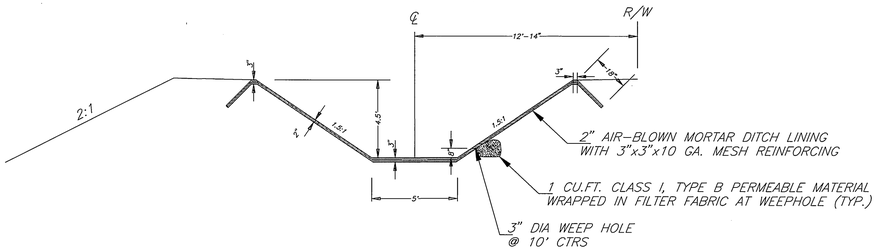
SHEET 4 OF 5

CALTRANS ENCROACHMENT PERMIT #08-95-N-MC-0456

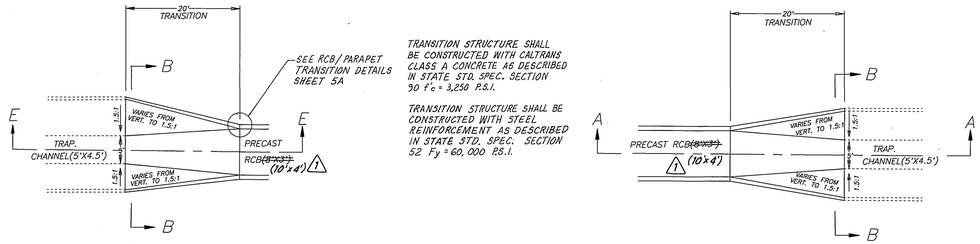
INDEXED 11-9-95 GH

DETAILS

CHANNEL "A" PLANS



CHANNEL TRANSITION PLANS



PLAN VIEW

NO SCALE

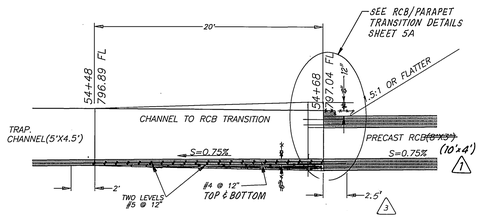
TRANSITION STRUCTURE SHALL BE CONSTRUCTED WITH CALTRANS CLASS A CONCRETE AS DESCRIBED IN STATE STD. SPEC. SECTION 90 f'c = 3,250 P.S.I.

TRANSITION STRUCTURE SHALL BE CONSTRUCTED WITH STEEL REINFORCEMENT AS DESCRIBED IN STATE STD. SPEC. SECTION 52 Fy = 60,000 P.S.I.

10'x4' PRECAST ~~8'x3'~~ RCB MEETS REQUIREMENTS OF ASTM SPECIFICATION C850, H520 LOADING. RCB TO TRANSITION CONNECTION DETAILS SHALL BE PER CALTRANS STD PLAN ~~D86~~ D86A

PLAN VIEW

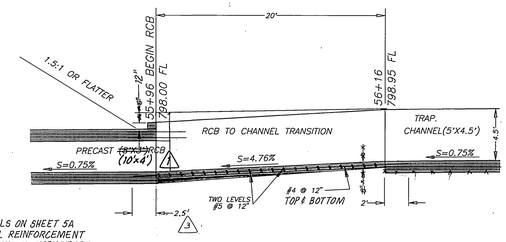
NO SCALE



SECTION E-E

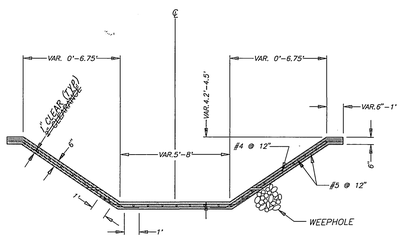
NO SCALE

SEE DETAILS ON SHEET 5A FOR STEEL REINFORCEMENT OF TRANSITION STRUCTURE



SECTION A-A

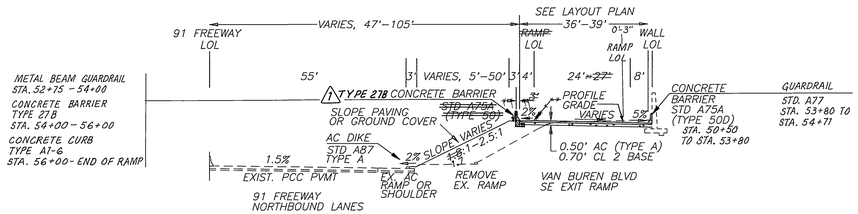
NO SCALE



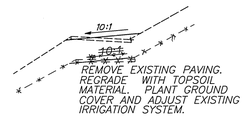
SECTION B-B

NO SCALE

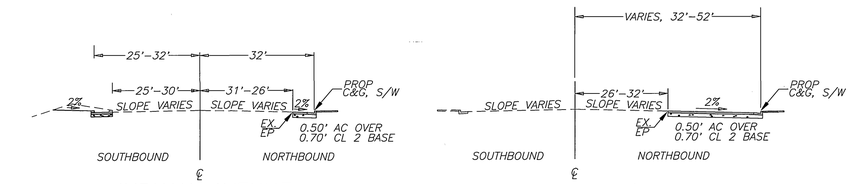
TYPICAL ROADWAY SECTIONS



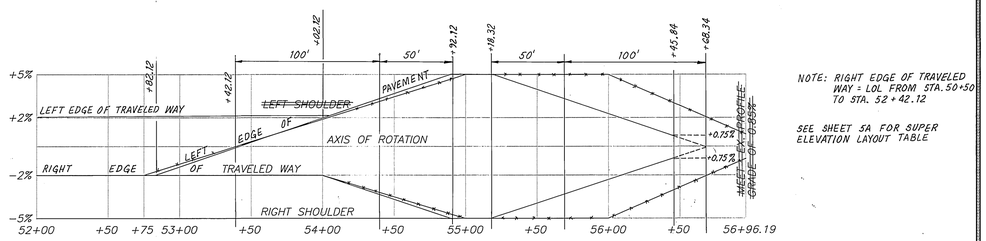
EASTBOUND 91 VAN BUREN BOULEVARD HOOKRAMP
STA 50+50-57+00



REMOVAL AND REGRADING
OF EXISTING RAMP
STA 55+50-61+50



INDIANA AVENUE
STA 8+50-15+00



RAMP SUPERELEVATION DIAGRAM

NOTE: RIGHT EDGE OF TRAVELED WAY = LOL FROM STA. 50+50 TO STA. 52+42.12

SEE SHEET 5A FOR SUPER ELEVATION LAYOUT TABLE

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6-30-1997
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 9/6/95

MARK	REVISIONS	APPR.	DATE
3	Added lap splicing see details sht. 5A	DPY	3/29/96
2	Moved ramp LOL, revised concrete barriers, and modified transition details	DPY	3/21/96
1	Revised concrete barriers and R.C.B. size	DPY	11/6/95

DESIGNED BY DPY DRAWN BY bmp CHECKED BY DKG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
DEPUTY P.W. DIRECTOR	RWC	9/18/95
PRINCIPAL ENGINEER	DKG	9/18/95
CHIEF P.W. INSPECTOR	GFE	9/7/95
TRAFFIC DIVISION	[illegible]	9/11/95
SURVEYOR	[illegible]	9/12/95
STREET SERVICES	[illegible]	9-15-95
PARKS DEPARTMENT	—	—

APPROVED BY [signature] PUBLIC WORKS DIRECTOR
DATE 9/12/95

SCALE: NOT TO SCALE

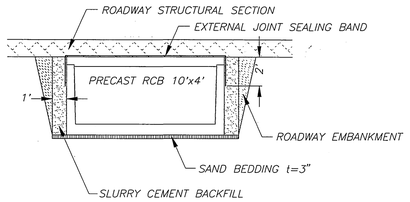
91 FWY E'BOUND HOOKRAMP @ VAN BUREN & INDIANA

FILE NO.
ACCT. NO. 432-541500-440302-30271
R-3406
SHEET 5 OF 5
CALTRANS ENCROACHMENT PERMIT #08-95-N-MC-0456

INDEXED 11-9-95 GH

DETAILS

PRECAST RCB CULVERT EXCAVATION AND BACKFILL DETAILS



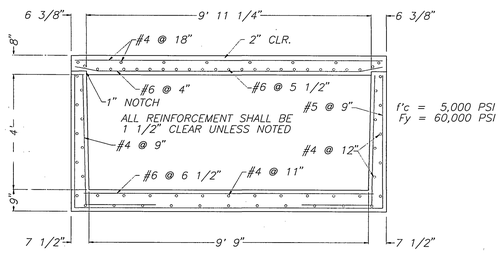
CONSTRUCTION OF ROADWAY STRUCTURAL SECTION SHALL NOT DISTURB THE EXTERNAL SEALING BAND INSTALLATION

DIMENSIONS SHOWN ARE MINIMUM.

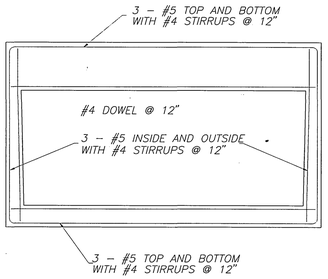
SLOPE OR SHORE SIDE EXCAVATIONS AS NECESSARY.

PRECAST RCB REINFORCEMENT DETAIL

(PER ASSOCIATED CONCRETE PRODUCTS)
(CALC. J1-2866, DWG. 89B-1446)

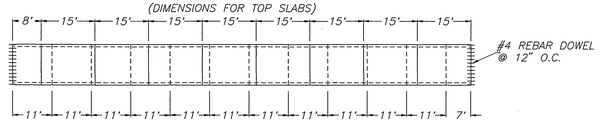


RCB/PARAPET END ELEVATION



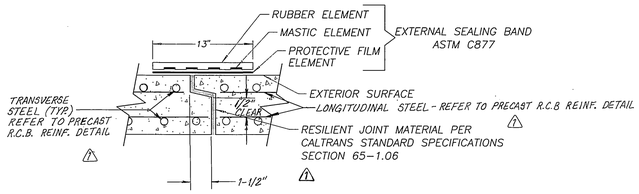
PRECAST RCB LAYOUT DETAIL

(DIMENSIONS FOR TOP SLABS)

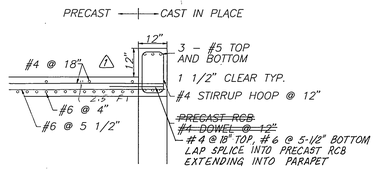


(DIMENSIONS FOR BASE SECTIONS)

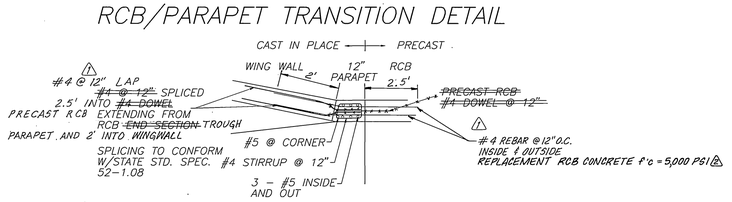
PRECAST RCB JOINT DETAIL



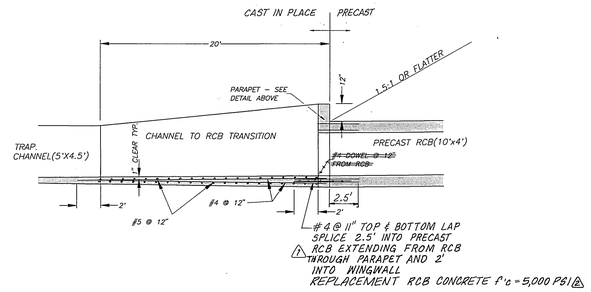
PARAPET DETAIL



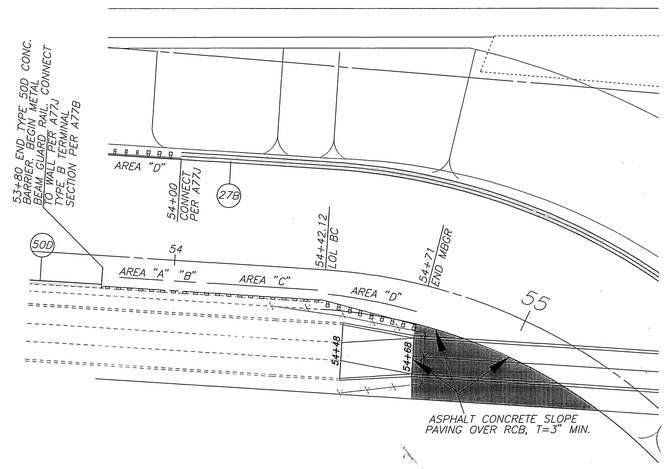
RCB/PARAPET TRANSITION DETAIL



TRANSITION REINFORCEMENT DETAIL



DETAIL A

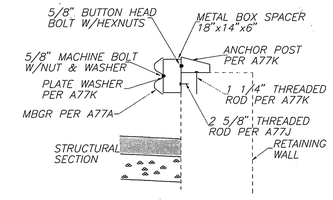


GUARD RAIL CONSTRUCTION NOTES

GUARD RAIL ANCHORAGE SHALL BE AS FOLLOWS:
AREA "A" - ANCHORAGE TO WALL SHALL BE AS SHOWN ON STD A77J.
AREA "B" - ANCHORAGE TO WALL SHALL BE AS SHOWN ON DETAIL AT RIGHT.
AREA "C" - ANCHORAGE TO WALL SHALL BE AS SHOWN ON STD A77K, CONNECTION DETAIL A. ANCHOR POST HEIGHT VARIES TO MAINTAIN 1'9" MBGR TO GROUND CLEARANCE.
AREA "D" - DF POSTS AND BLOCKS AS SHOWN ON STD A77B

ANCHORAGE AND POST SPACING SHALL BE 3'1".

USE METAL BOX SPACERS ALONG WALL.



(2) SUPERELEVATION LAYOUT TABLE

STA.	LOL	LETW	RETW	LEP	REP	COMMENT
52+82.12	794.64	795.12		795.04	794.24	BEGIN SUPERELEVATION
53+00	795.58	796.06		796.00	795.18	
53+25	796.89	797.37		797.35	796.49	
53+42.12	797.79	798.27		798.27	797.39	
53+50	798.20	798.68		798.65	797.80	
53+75	799.51	799.99		800.03	799.11	BVC LOL
54+00	800.71	801.19		801.27	800.31	
54+02.12	800.80	801.28		801.36	800.40	
54+25	801.71	802.37		802.48	801.31	
54+42.12	802.28	803.08		803.21	801.88	BC, REP @ 8'
					801.73	RETW @ LOL, REP @ 11'
54+50	802.51	803.37	802.49	803.52	801.97	RETW @ 0.43'
54+75	803.10	804.16	803.01	804.34	802.56	RETW @ 1.97'
54+92.12	803.39	804.59	803.24	804.79	802.84	RETW @ 3'
55+00	803.49	804.69	803.34	804.89	802.94	
55+18.34	803.64	804.84	803.49	805.04	803.09	
55+25	803.67	804.83	803.53	805.02	803.14	
55+50	803.65	804.60	803.53	804.75	803.22	
55+68.34	803.50	804.30	803.40	804.43	803.13	
55+75	803.42	804.17	803.33	804.29	803.08	EVC LOL
56+00	803.09	803.64	803.02	803.73	802.84	
56+25	802.76	803.11	802.72	803.16	802.60	
56+45.84	802.48	802.66	802.46	802.69	802.40	MEET GUTTER LIP

THIS PLAN SHEET SUPPLEMENTS PLAN R-3406, SHEET 5.

REGISTERED PROFESSIONAL ENGINEER
DUANE K. GREENWOOD
No. 43965
Exp. 6-30-1997
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
Duane K. Greenwood
DUANE GREENWOOD
R.C.E. No. 43965 expires 6/30/97
DATE 3/21/96

MARK	REVISIONS	APPR.	DATE
(3)	Replaced superelevation table	RKL	4/2/96
(2)	Replacement RCB Concrete f'c = 5000 PSI	DKD	4/3/96
(1)	Added lap splicing	DKD	3/6/96

DESIGNED BY _____ DRAWN BY: bmp CHECKED BY: DKD

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY:		DATE
DEPUTY P.W. DIRECTOR	RKL	4/4/96
PRINCIPAL ENGINEER	[illegible]	4/5/96
CHIEF P.W. INSPECTOR	[illegible]	4/5/96
TRAFFIC DIVISION		
SURVEYOR		
STREET SERVICES		
PARKS DEPARTMENT		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 3/22/96

91 FWY E'BOUND HOOKRAMP @ VAN BUREN & INDIANA

SCALE: NOT TO SCALE

ACCT. NO. 432-541500-440302-30271

R-3406
SHEET 5A OF 5

CALTRANS ENCROAGHMENT PERMIT #08-95-N-MC-0456

INDEXED 11-13-97 GH