CONTRACT NO.: 07-1W6101
ID No. : 0712000410

INFORMATION HANDOUT

INFORMATION

ADL INVESTIGATION REPORT AND BILL OF LADING

FIBER OPTIC SYSTEM AS-BUILT DRAWINGS

ROUTE : 07-LA-1, 47, 91, 110, 405, 710
PM : Var

RCVD 10-10-03

ID# 618

GEOCON

CONSULTANTS, INC.

ENVIRONMENTAL
GEOTECHNICAL
MATERIALS

ADL INVESTIGATION REPORT

EA 180001 – ROUTE 91 (KP 28.6/30.2) FROM 0.1 KM WEST OF PIONEER BOULEVARD OVERCROSSING TO 0.2 KM EAST OF NORWALK BOULEVARD OVERCROSSING ARTESIA AND CERRITOS, CALIFORNIA CONTRACT NO. 43A0078 TASK ORDER NO. 07-180001-3D

PREPARED FOR

CALIFORNIA DEPARTMENT
OF TRANSPORTATION
DISTRICT 07
LOS ANGELES, CALIFORNIA

PREPARED BY

GEOCON CONSULTANTS, INC.
6970 FLANDERS DRIVE
SAN DIEGO, CALIFORNIA 92121
Tel. (858) 558-6100 Fax. (858) 558-8437
Email: environmental@geoconinc.com

GEOCON PROJECT NO. 09100-06-81

OCTOBER 9, 2003

I. EXECUTIVE SUMMARY

Geocon Consultants, Inc. (Geocon) has performed an aerially deposited lead (ADL) investigation at the site consisting of the exposed soils located at the Pioneer Boulevard and Artesia Boulevard on and off ramps to Route 91 in Artesia and Cerritos, Los Angeles County, California. The California Department of Transportation (Caltrans) proposes to excavate soil at the site to place rock blankets and install maintenance vehicle pullouts (MVPs).

The investigation was performed to evaluate the presence of lead resulting from the historical combustion of leaded fuels from freeway traffic. Data from the investigation was used to evaluate the potential reuse or disposal considerations for soil excavated at the site, and to inform Caltrans of potential health and safety issues concerning the presence of lead in soil for workers at the site during construction activities.

Soil samples collected from the site were subsequently analyzed for total lead, soluble lead using the Waste Extraction Test method using citric acid (WET-Citric) as the extractant, and soluble lead using a modified WET method using deionized water (WET-DI) as the extractant. In addition, selected soil samples were analyzed for soluble lead using the Toxicity Characteristic Leaching Procedure (TCLP) method, California Code of Regulations (CCR) Title 22 metals, and pH.

Laboratory analytical results and statistical analysis using one-sided 90% upper confidence limits (UCLs) were compared to the guidelines of the Department of Toxic Substances Control (DTSC) Lead Variance issued to Caltrans, Assembly Bill 414, and the DTSC Variance modification letter dated December 13, 2002, to develop recommendations for re-use of soil. Offsite disposal conclusions were based upon comparison of the total lead 95% UCLs to the California Health and Safety Code (HSC) threshold of 350 milligrams per kilogram (mg/kg) and predicted WET-Citric results to the California Code of Regulations (CCR) Title 22 soluble lead threshold of 5 mg/l.

Analysis of the soil sample exhibiting the highest lead concentration for CCR Title 22 metals did not indicate the presence of any of these elements (other than lead) at or above their respective Total Threshold Limit Concentration (TTLCs) or 10 times their respective Soluble Threshold Limit Concentration (STLC).

Separate conclusions regarding ADL at MVP locations, rock blanket locations, and the combined data set are presented below.

Combined Data

Based upon the 90-percent UCLs and WET-DI results, soils from up to 0.6 m beneath the surface would likely be suitable for reuse according to the DTSC Variance. Based upon the 95% UCLs and predicted WET-Citric results, if the upper 0.3 m of excavated soil is excavated separately to be disposed of, it would likely be classified as a hazardous material with respect to soluble-lead content. Underlying soil to a depth of 0.6 m would likely be characterized as non-hazardous. Since only one of six samples analyzed from MVP locations exhibited a TCLP result above 5 mg/l, it is unlikely that the soils would be classified as a RCRA waste; however, additional testing would be required to fully characterize the soil.

Geocon recommends that if any portion of the upper 0.6 m of soil excavated from the site is to be reused on-site, it should be placed a minimum of 1.5 meters above the maximum water table elevation and covered with at least 0.3 meters of non-hazardous soil in accordance with the DTSC Variance. If the upper 0.3 m is excavated separately for disposal, it should be treated as a hazardous material with respect to soluble lead. Underlying soil to a depth of 0.6 m would likely be disposed of as non-hazardous. If the entire soil column to a depth of 0.6 m is excavated for disposal, it should be handled as a hazardous material with respect to lead content.

MVP Locations

Based upon the 90-percent UCLs and WET-DI results, soils from up to 0.6 m beneath the surface would likely be suitable for reuse according to the DTSC Variance. Based upon the 95% UCLs and predicted WET-Citric results, if the upper 0.3 m of excavated soil is excavated separately to be disposed of, it would likely be classified as a hazardous material with respect to soluble-lead content. Underlying soil to a depth of 0.6 m would likely be characterized as non-hazardous. Since only one of six samples analyzed from MVP locations exhibited a TCLP result above 5 mg/l, it is unlikely that the soils would be classified as a RCRA waste; however, additional testing would be required to fully characterize the soil.

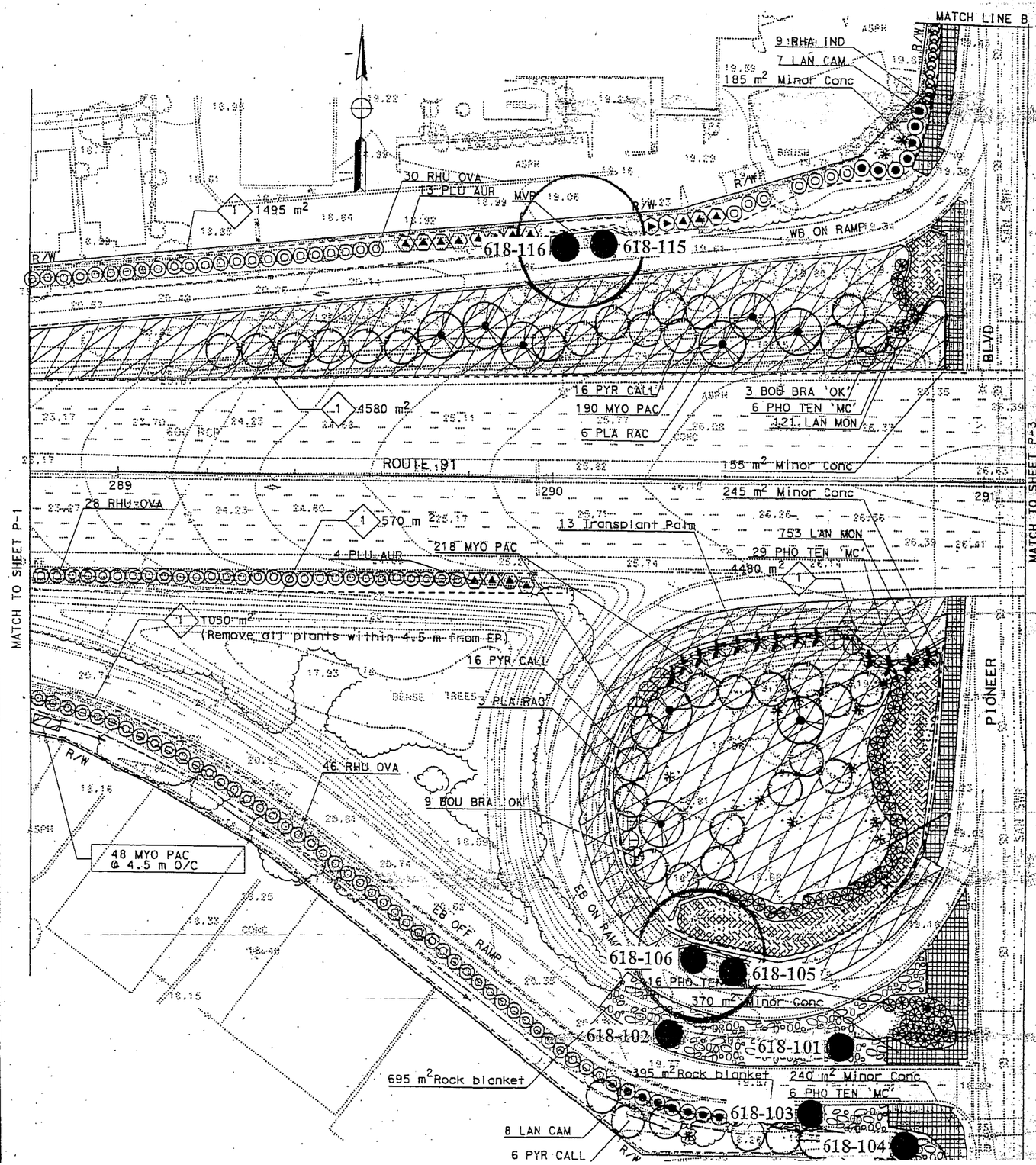
Geocon recommends that if any portion of the upper 0.6 m of soil excavated from the site is to be reused on-site, it should be placed a minimum of 1.5 meters above the maximum water table elevation and covered with at least 0.3 meters of non-hazardous soil in accordance with the DTSC Variance. If the upper 0.3 m is excavated separately for disposal, it should be treated as a hazardous material with respect to soluble lead. Underlying soil to a depth of 0.6 m would likely be disposed of as non-hazardous. If the entire soil column to a depth of 0.6 m is excavated for disposal, it should be handled as a hazardous material with respect to lead content

Rock Blanket Locations

Based upon the 90-percent UCLs and WET-DI results, soils from up to 0.15 m beneath the surface would likely be suitable for reuse according to the DTSC Variance. Based upon the 95% UCLs and predicted WET-Citric results, if the upper 0.15 m of excavated soil is to be disposed of, it would likely be classified as a hazardous material with respect to soluble-lead content. Since none of the five samples analyzed from rock blanket locations exhibited a TCLP result above 5 mg/l, it is unlikely that the soils would be classified as a RCRA waste; however, additional testing would be required to fully characterize the soil.

Geocon recommends that if any portion of the upper 0.15 m of soil excavated from the site is to be reused on-site, it should be placed a minimum of 1.5 meters above the maximum water table elevation and covered with at least 0.3 meters of non-hazardous soil in accordance with the DTSC Variance. If the upper 0.15 m is excavated for disposal, it should be treated as a California hazardous material with respect to soluble lead.

Caltrans should notify the contractors performing the construction activities that hazardous concentrations of lead may be present in onsite soil at both MVP and rock blanket locations and that appropriate health and safety measures should be taken to minimize the exposure to lead.



Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP (mg/l)	pH
618-101-0.15	0.15	260	14	ND	1.2	6.74
618-102-0.15	0.15	230	8.9	ND	0.46	--
618-103-0.15	0.15	310	15	0.27	0.82	--
618-104-0.15	0.15	150	8.1	ND	--	--
618-105-0.15	0.15	190	15	ND	0.76	--
618-105-0.3	0.3	36	--	--	--	--
618-105-0.6	0.6	37	--	--	--	--
618-106-0.15	0.15	110	5.8	ND	--	--
618-106-0.3	0.3	50	--	--	--	--
618-106-0.6	0.6	43	--	--	--	--
618-115-0.15	0.15	4,300	--	--	15	--
618-115-0.3	0.3	490	68	0.50	2.3	--
618-115-0.6	0.6	18	--	--	--	--
618-116-0.15	0.15	720	26	ND	--	--
618-116-0.3	0.3	19	--	--	--	7.53
618-116-0.6	0.6	70	7.7	ND	--	--

ANALYTE	618-115-0.15	618-116-0.15
Antimony	1.5	1
Arsenic	2.9	16
Barium	110	63
Beryllium	ND	ND
Cadmium	1.3	ND
Chromium	22	10
Cobalt	5.7	4.6
Copper	38	19
Lead	4,600	430
Mercury	0.11	ND
Molybdenum	2.3	ND
Nickel	16	7.7
Selenium	ND	8.7
Silver	ND	ND
Thallium	ND	ND
Vanadium	21	16
Zinc	410	88

BORING LOCATION MAP

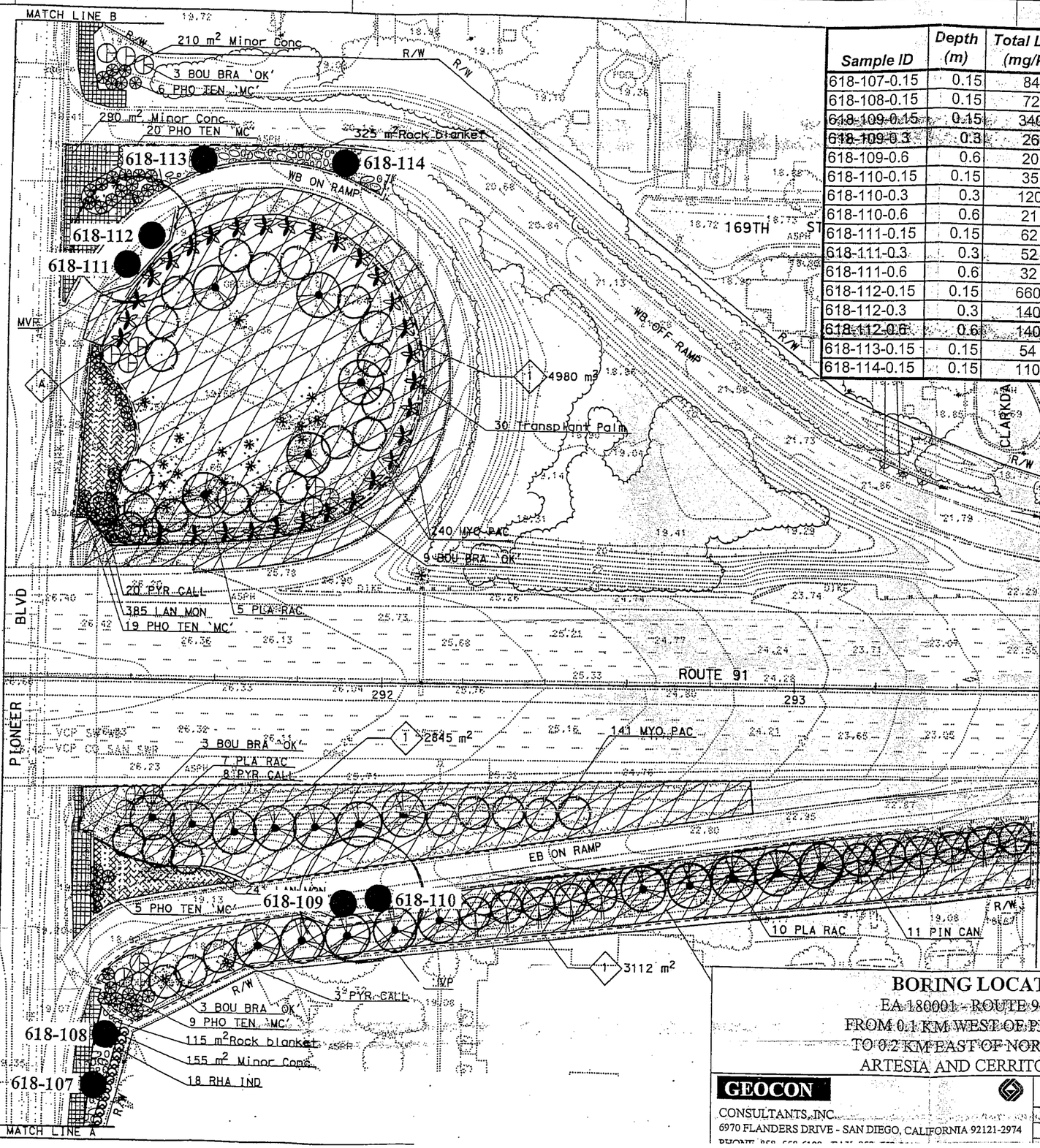
EA 180001 - ROUTE 91, KP 28.6/30.2
FROM 0.1 KM WEST OF PIONEER BLVD. UC
TO 0.2 KM EAST OF NORWALK BLVD. UC
ARTESIA AND CERRITOS, CALIFORNIA

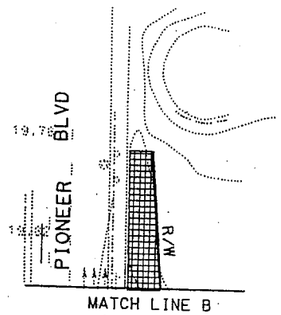
GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974
PHONE 858 558-6100 FAX 858 558-6159

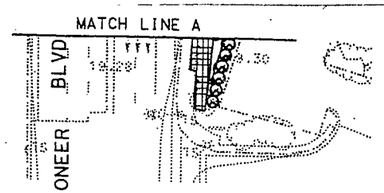
PROJECT NO. 09100-06-81
FIGURE 2, PLATE 1
TO # 07-180001-3D

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
PROJECT LANDSCAPE ARCHITECT
GEORGE OLGUIN
CALCULATED/DESIGNED BY
CHECKED BY
DATE
REVISED BY
DATE REVISED

FOR COMPLETE R/W AND ACCURATE ACCESS DATA
SEE R/W RECORD MAPS AT DISTRICT OFFICE







Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP (mg/l)	pH
618-107-0.15	0.15	84	6.6	ND	--	7.63
618-108-0.15	0.15	72	6.8	ND	--	--
618-109-0.15	0.15	340	18	0.47	0.92	--
618-109-0.3	0.3	26	--	--	--	--
618-109-0.6	0.6	20	--	--	--	--
618-110-0.15	0.15	35	--	--	--	--
618-110-0.3	0.3	120	9.1	ND	--	--
618-110-0.6	0.6	21	--	--	--	--
618-111-0.15	0.15	62	4.6	--	--	--
618-111-0.3	0.3	52	4.8	--	--	--
618-111-0.6	0.6	32	--	--	--	7.40
618-112-0.15	0.15	660	120	0.42	2.3	--
618-112-0.3	0.3	140	13	0.23	--	--
618-112-0.6	0.6	140	9.8	0.25	--	--
618-113-0.15	0.15	54	3.9	--	--	--
618-114-0.15	0.15	110	5.5	0.20	--	--

BORING LOCATION MAP

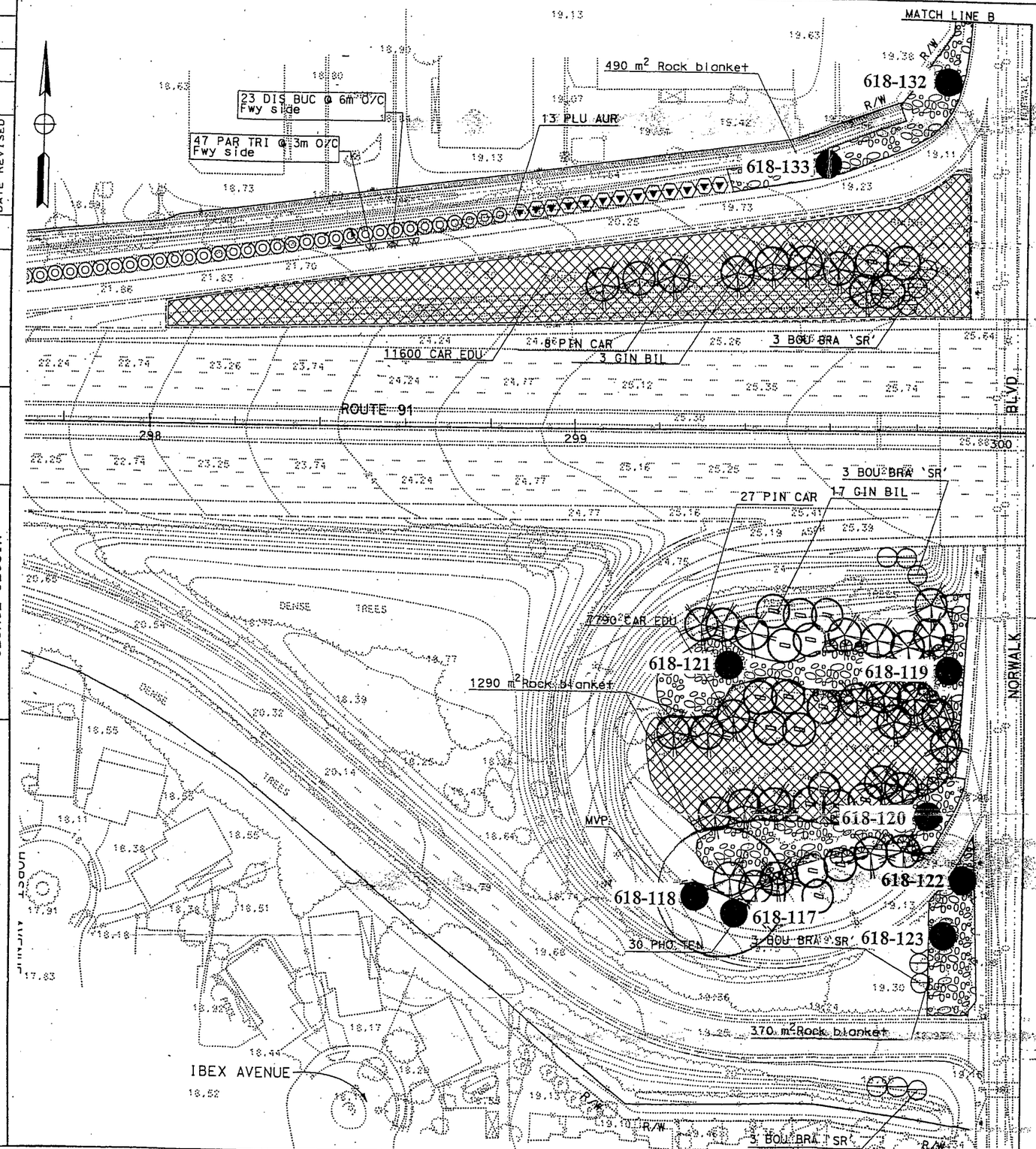
EA 180001 - ROUTE 91, KP 28.6/30.2
FROM 0.1 KM WEST OF PIONEER BLVD. UC
TO 0.2 KM EAST OF NORWALK BLVD. UC
ARTESIA AND CERRITOS, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974

PROJECT NO. 09100-06-81
FIGURE 2, PLATE 2 | TO # 07-180001-3D

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

PROJECT LANDSCAPE ARCHITECT: GEORGE OLGUIN
CALCULATED/DESIGNED BY
CHECKED BY
DATE REVISED BY
DATE REVISED



Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP (mg/l)	pH
618-117-0.15	0.15	42	--	--	--	--
618-117-0.3	0.3	11	--	--	--	--
618-117-0.6	0.6	7.5	--	--	--	--
618-118-0.15	0.15	24	--	--	--	--
618-118-0.3	0.3	12	--	--	--	--
618-118-0.6	0.6	11	--	--	--	--
618-119-0.15	0.15	51	3.6	--	--	--
618-120-0.15	0.15	44	--	--	--	6.76
618-121-0.15	0.15	31	--	--	--	--
618-122-0.15	0.15	77	4.3	--	--	--
618-123-0.15	0.15	17	--	--	--	--
618-132-0.15	0.15	130	13	ND	--	6.97
618-133-0.15	0.15	110	8.7	ND	--	--

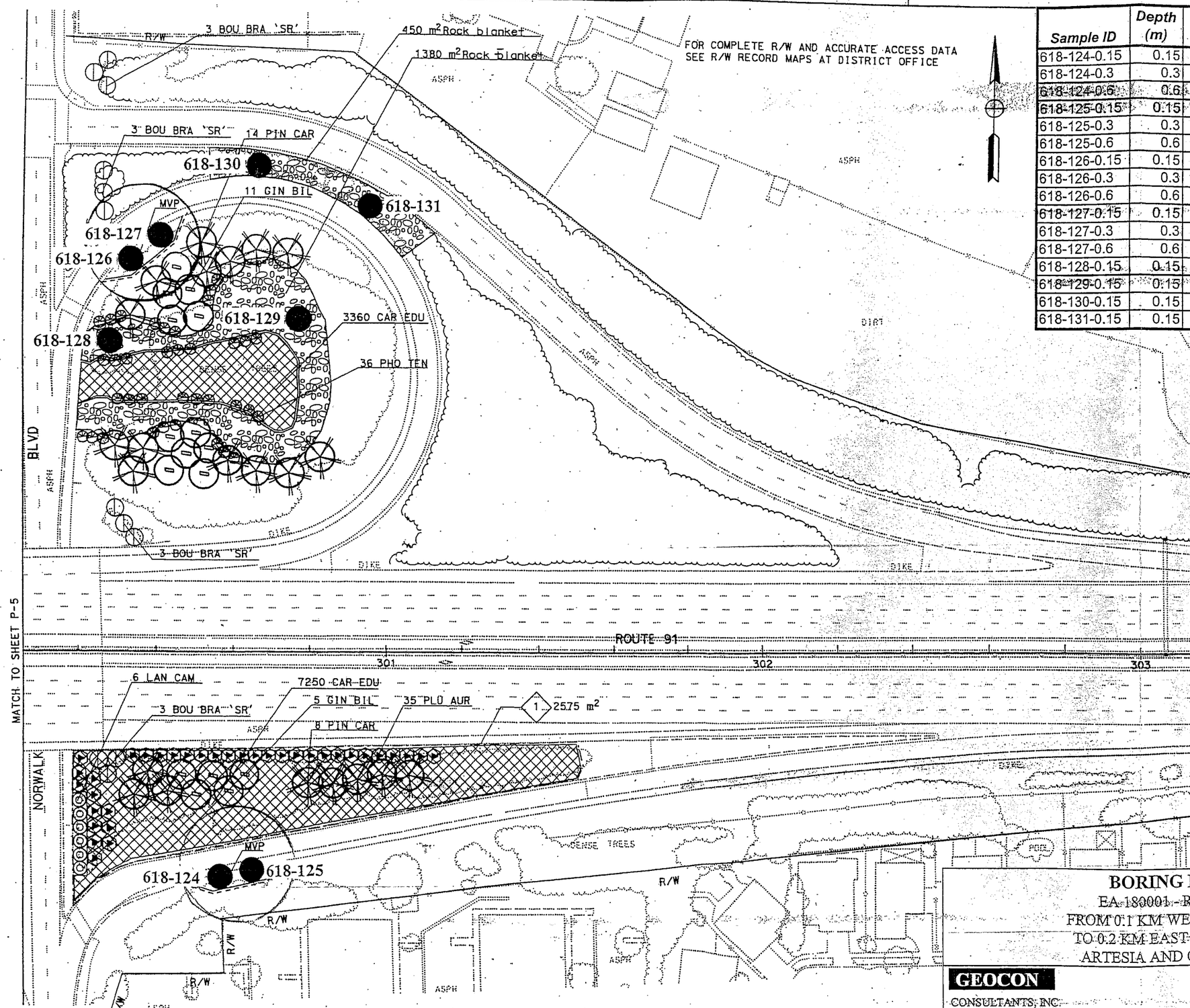
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
PROJECT LANDSCAPE ARCHITECT
GEORGE OLGUIN
CALCULATED/DESIGNED BY
CHECKED BY
DATE
REVISED BY
DATE REVISED

BORING LOCATION MAP

EA 180001 - ROUTE 91, KP 28.6/30.2
FROM 0.1 KM WEST OF PIONEER BLVD. UC
TO 0.2 KM EAST OF NORWALK BLVD. UC
ARTESIA AND CERRITOS, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974

PROJECT NO: 09100-06-81
FIGURE 2, PLATE 3
TO # 07-180001-3D



Sample ID	Depth (m)	Total Lead (mg/kg)	Wet Citric (mg/l)	Wet-DI (mg/l)	TCLP (mg/l)	pH
618-124-0.15	0.15	91	5.3	ND	--	--
618-124-0.3	0.3	ND	--	--	--	--
618-124-0.6	0.6	39	--	--	--	--
618-125-0.15	0.15	190	17	ND	0.76	--
618-125-0.3	0.3	6.2	--	--	--	--
618-125-0.6	0.6	7.6	--	--	--	--
618-126-0.15	0.15	180	9.1	ND	--	6.77
618-126-0.3	0.3	75	5.1	ND	--	--
618-126-0.6	0.6	38	--	--	--	--
618-127-0.15	0.15	110	6.8	ND	--	--
618-127-0.3	0.3	33	--	--	--	--
618-127-0.6	0.6	42	--	--	--	--
618-128-0.15	0.15	200	15	ND	0.74	--
618-129-0.15	0.15	150	11	ND	--	--
618-130-0.15	0.15	150	14	ND	--	--
618-131-0.15	0.15	190	9.8	ND	0.68	--

ANALYTE	618-125-0.15	618-128-0.15
Antimony	ND	ND
Arsenic	6	ND
Barium	66	110
Beryllium	ND	ND
Cadmium	ND	1.3
Chromium	11	20
Cobalt	5	8.8
Copper	12	34
Lead	210	220
Mercury	ND	ND
Molybdenum	1.1	2.2
Nickel	9.2	16
Selenium	3	4.5
Silver	ND	ND
Thallium	ND	ND
Vanadium	21	30
Zinc	77	240

BORING LOCATION MAP

EA 180001 - ROUTE 91, KP 28.6/30.2
FROM 0.1 KM WEST OF PIONEER BLVD. UC
TO 0.2 KM EAST OF NORWALK BLVD. UC
ARTESIA AND CERRITOS, CALIFORNIA

GEOCON
CONSULTANTS, INC.
6970 FLANDERS DRIVE - SAN DIEGO, CALIFORNIA 92121-2974

PROJECT NO. 09100-06-81
FIGURE 2, PLATE 4 | TO # 07-180001-3D

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE

PROJECT LANDSCAPE ARCHITECT: GEORGE OLGUIN
CALCULATED/DESIGNED BY
CHECKED BY
DATE
REVISED BY
DATE REVISED

Fok, Paul@DOT

From: Sarmiento, Marlon@DOT
Sent: Wednesday, February 19, 2014 12:52 PM
To: Chan, Steve@DOT
Cc: Fok, Paul@DOT
Subject: RE: 07-1W6101-Spec 14-11.03

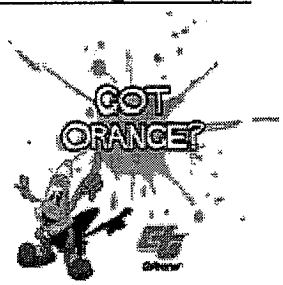
Thank you again for the quick response.

Marlon

From: Chan, Steve@DOT
Sent: Wednesday, February 19, 2014 11:37 AM
To: Sarmiento, Marlon@DOT
Cc: Enjily, Shawn@DOT; Choudhury, Anm W@DOT
Subject: RE: 07-1W6101-Spec 14-11.03

There won't be any bill of landing since no material will be reused (i.e. Type Y). However, you can leave the paragraph in place and the contractor can ignore it as it won't apply to the project.

Steve Chan, P.E.
Senior Transportation Engineer
Office of Environmental Design (OED)
Division of Design
213-897-3646
steve.chan@dot.ca.gov



From: Sarmiento, Marlon@DOT
Sent: Wednesday, February 19, 2014 10:06 AM
To: Chan, Steve@DOT
Cc: Enjily, Shawn@DOT; Choudhury, Anm W@DOT
Subject: FW: 07-1W6101-Spec 14-11.03

Steve,

Thank You for the quick response. OE responded below asking for the bill lading copies, as mentioned below.

Thank You,
Marlon

DIST	COUNTY	ROUTE	PLANNING SEQ. TOTAL PROJ. EA	SHEET No.	TOTAL SHEETS
07	LA	47	0.0/3.0	23	93

Conway Chu
REGISTERED ELECTRICAL ENGINEER
8-20-05
PLANS APPROVAL DATE
CONWAY CHU E15305 3/31/07 ELECTRICAL STATE OF CALIFORNIA
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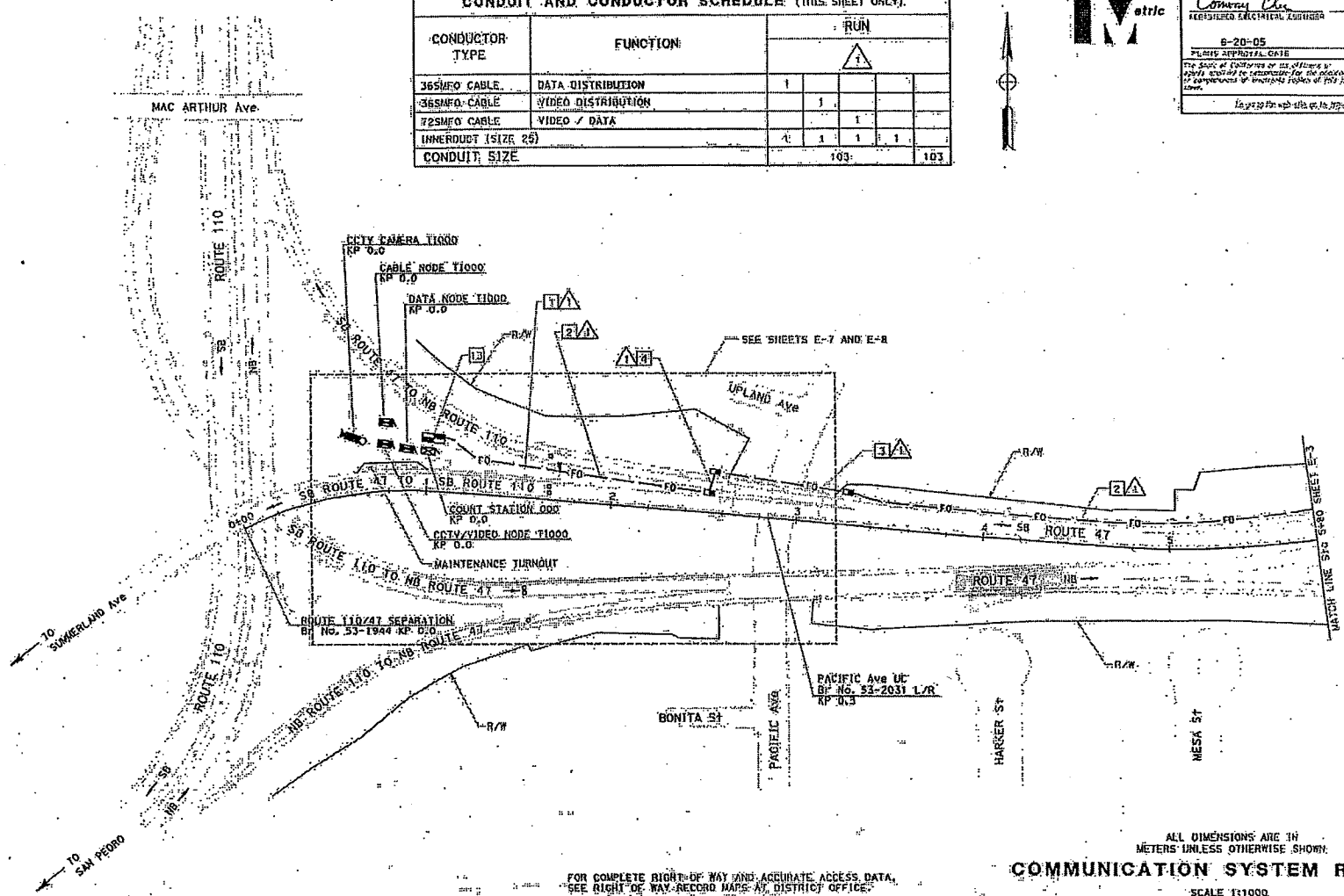
Layout for web site is in http://www.dot.ca.gov

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY).

CONDUCTOR TYPE	FUNCTION	RUN 1				
36SMFO CABLE	DATA DISTRIBUTION	1				
36SMFO CABLE	VIDEO DISTRIBUTION		1			
72SMFO CABLE	VIDEO / DATA			1		
INNERDUCT (SIZE 25)		1	1	1	1	
CONDUIT SIZE		103				103



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-2

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	DATE REVISED BY	DATE REVISED
Caltrans ITS DEVELOPMENT	CONWAY CHU	LRS / CHECKED BY CC	5/06	9/04

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME = [illegible] PER FILE = [illegible]

CU 07388 | EA 129951

DGN FILE NAME: 07-LA-47 PM 0.0/3.0 ROUTE 23 SHEET 23 OF 93
DATE PLOTTED: 08-08-05 TIME PLOTTED: 13:56

DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	47	0.0/3.0	24	93

Conway Chu
REGISTERED ELECTRICAL ENGINEER

6-20-05
PLANS APPROVAL DATE

CONWAY CHU
E15305
3/31/07
ELECTRICAL
STATE OF CALIFORNIA

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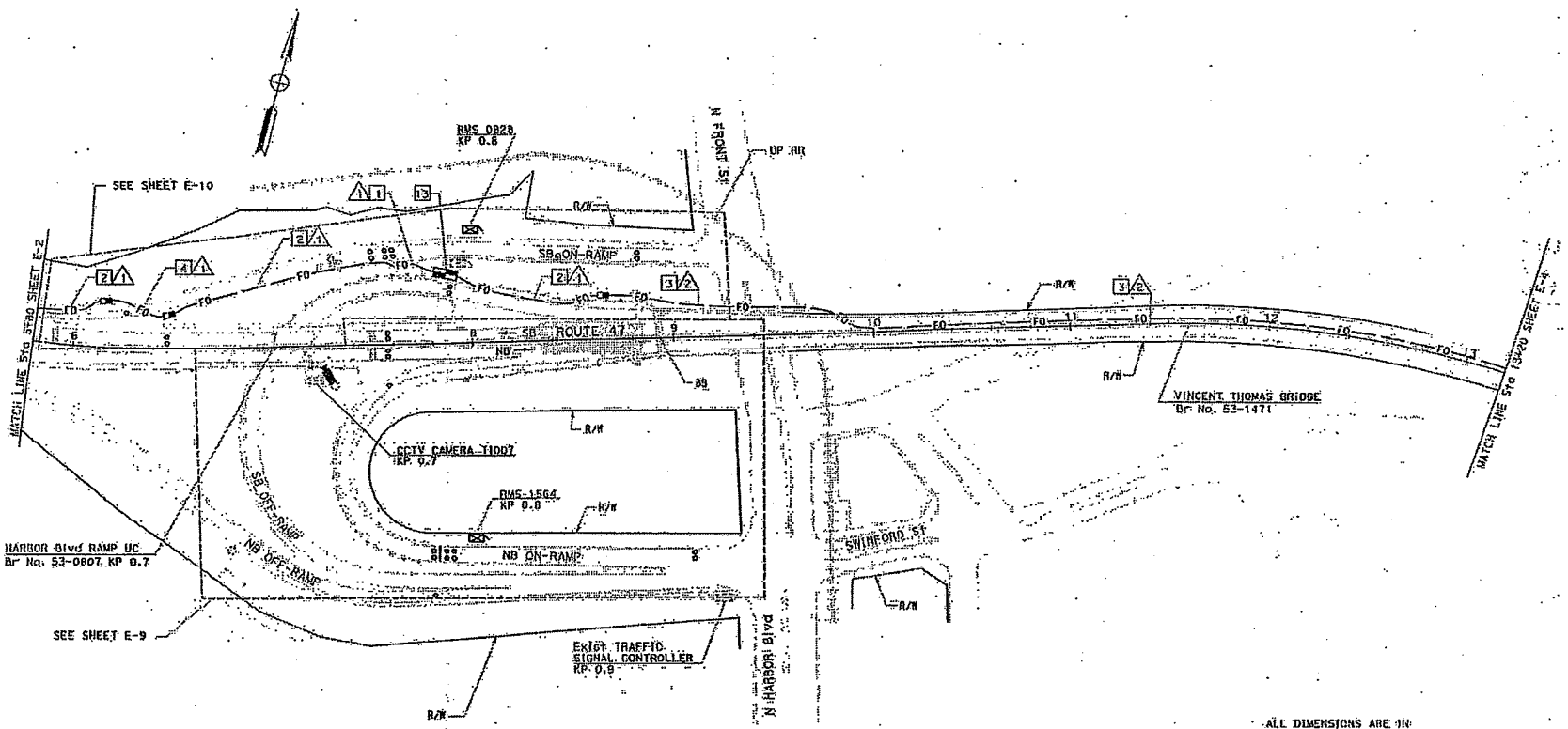
Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1					RUN 2		
36SMFO CABLE	DATA DISTRIBUTION	1						1	
36SMFO CABLE	VIDEO DISTRIBUTION		1					1	
72SMFO CABLE	VIDEO / DATA			1			1		
INNERDUCT (SIZE 25)		1	1	1	1				
CONDUIT SIZE		103				103	53	53	53



FOR COMPLETE RIGHT-OF-WAY AND ACCURATE ACCESS DATA, SEE RIGHT-OF-WAY RECORD MAPS AT DISTRICT OFFICE. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-3

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION	PROJECT ENGINEER	CALCULATED/DESIGNED BY	CHECKED BY	DATE REVISED BY	DATE REVISED
Caltrans ITS DEVELOPMENT	CONWAY CHU	LRS	CC	3/04	5/04

RELATIVE BORDER SCALE IN MILLIMETERS 0 20 40 60 80 100

USERNAME v1.0-0-0-0 DGN: ...

CU 07388 | EA 129951

DATE PLOTTED >> 21-JUN-2005
TIME PLOTTED >> 15:07

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	47	0.0/3.0	25	93

Conway Chu
REGISTERED ELECTRICAL ENGINEER

6-20-05
PLANS APPROVAL DATE

CONWAY CHU
E15305
3/31/07
ELECTRICAL
STATE OF CALIFORNIA

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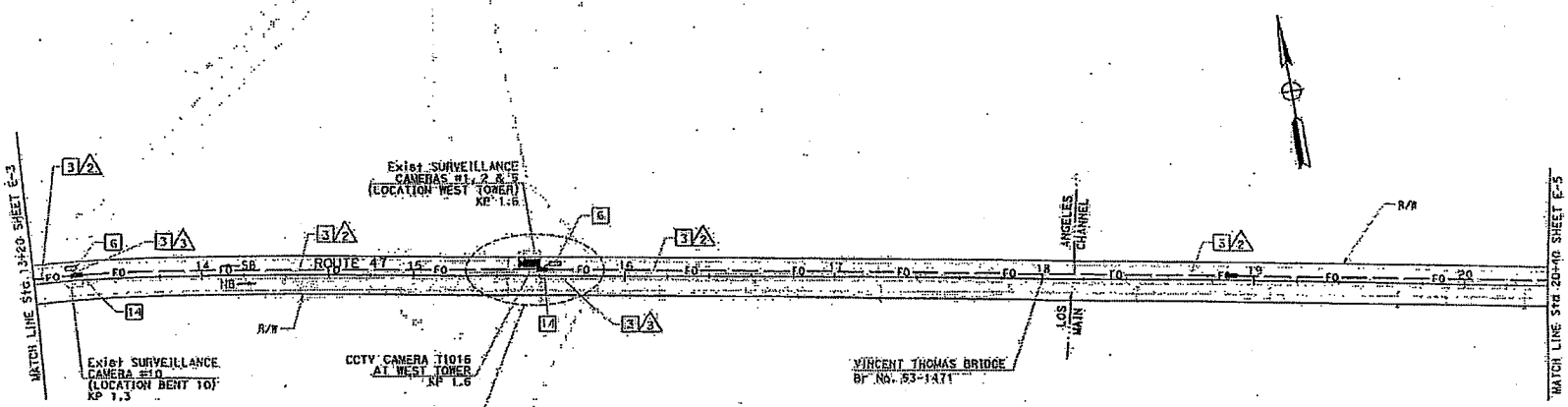
To get to the web site go to http://www.dot.ca.gov

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2			RUN 3
36SMFO CABLE	DATA DISTRIBUTION		1		
36SMFO CABLE	VIDEO DISTRIBUTION		1		
72SMFO CABLE	VIDEO / DATA	1			
12SMFO CABLE	DATA / VOICE				1
CONDUIT SIZE		53	53	53	53



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-4

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER: CONWAY CHU
CALCULATED/DESIGNED BY: LRS — DATE REVISED BY: 3/06
CHECKED BY: GC — DATE REVISED: 9/06

RELATIVE BORDER SCALE TO BE IN MILLIMETERS

USERNAME: s-chuconway
DGN FILE: s-chuconway-e4.dgn

CU 07388 | EA 129951

DIST	COUNTY	ROUTE	EXCLUSIVE PROJECT TOTAL PROJECT	SHEET 25	TOTAL SHEETS
07	LA	47	0.0/3.0	26	93

Conway Chu
REGISTERED ELECTRICAL ENGINEER

6-20-05
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CONWAY CHU
No. E15305
Exp. 3/31/07
ELECTRICAL
STATE OF CALIFORNIA

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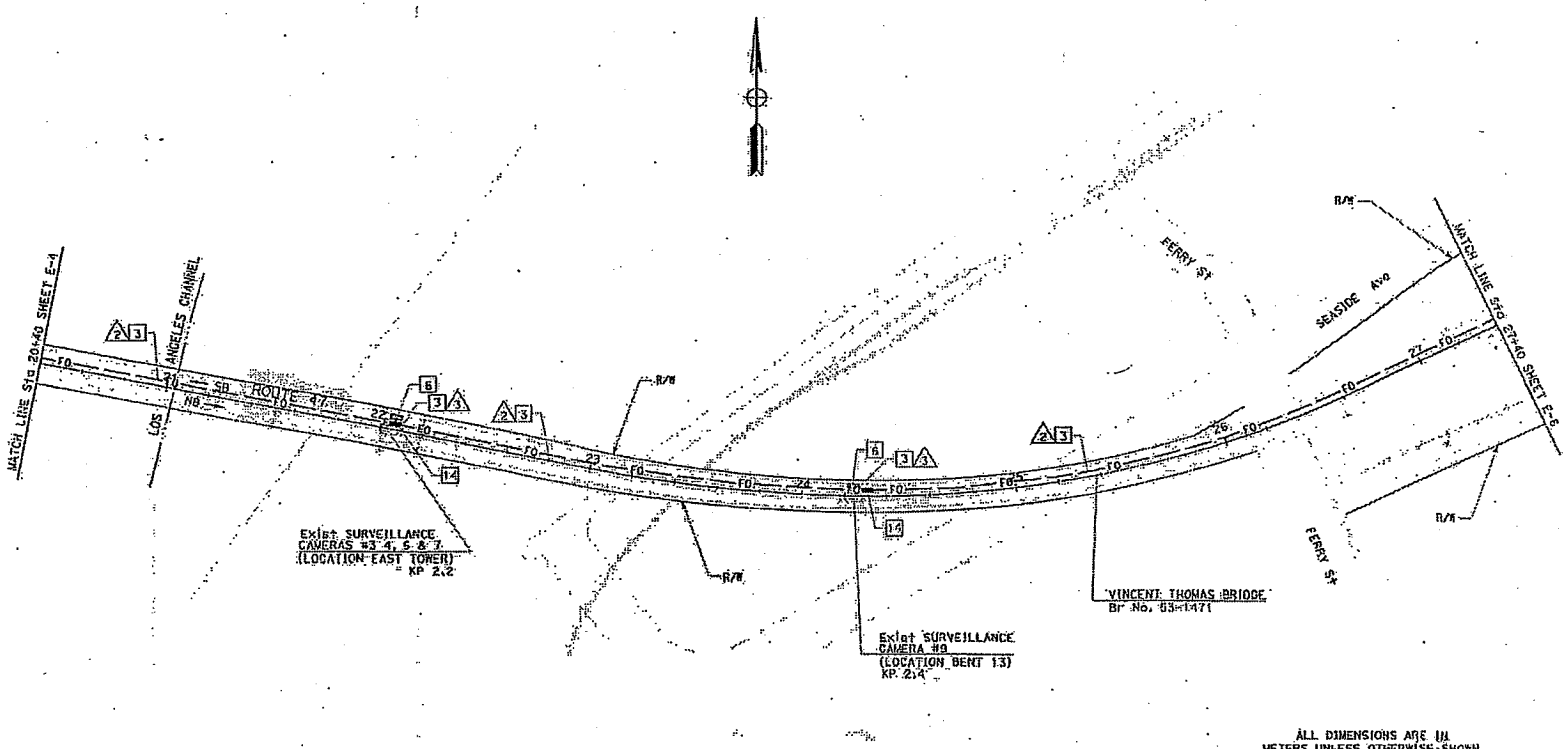
To see the original plan, go to http://www.dot.ca.gov

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 3	RUN 4
36SMFO CABLE	DATA DISTRIBUTION		1		
36SMFO CABLE	VIDEO DISTRIBUTION		1		
72SMFO CABLE	VIDEO / DATA	1			
12SMFO CABLE	DATA / VOICE				1
CONDUIT SIZE		53	53	53	53



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT-OF-WAY RECORD MAPS AT DISTRICT OFFICE.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER: CONWAY CHU
CALCULATED/DESIGNED BY: LRS
CHECKED BY: CC
DATE 3/04 REVISED BY
9/04 DATE REVISED

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

CU 07388 | EA 129951

00-00-00 TIME PLOTTED 12:31 AM-PDT

DIST	COUNTY	ROUTE	POSTMILE TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	47	0.0/3.0	27	93

Conway Chu
REGISTERED ELECTRICAL ENGINEER
5-20-05
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER CONWAY CHU No. E15305 3/31/07 ELECTRICAL STATE OF CALIFORNIA

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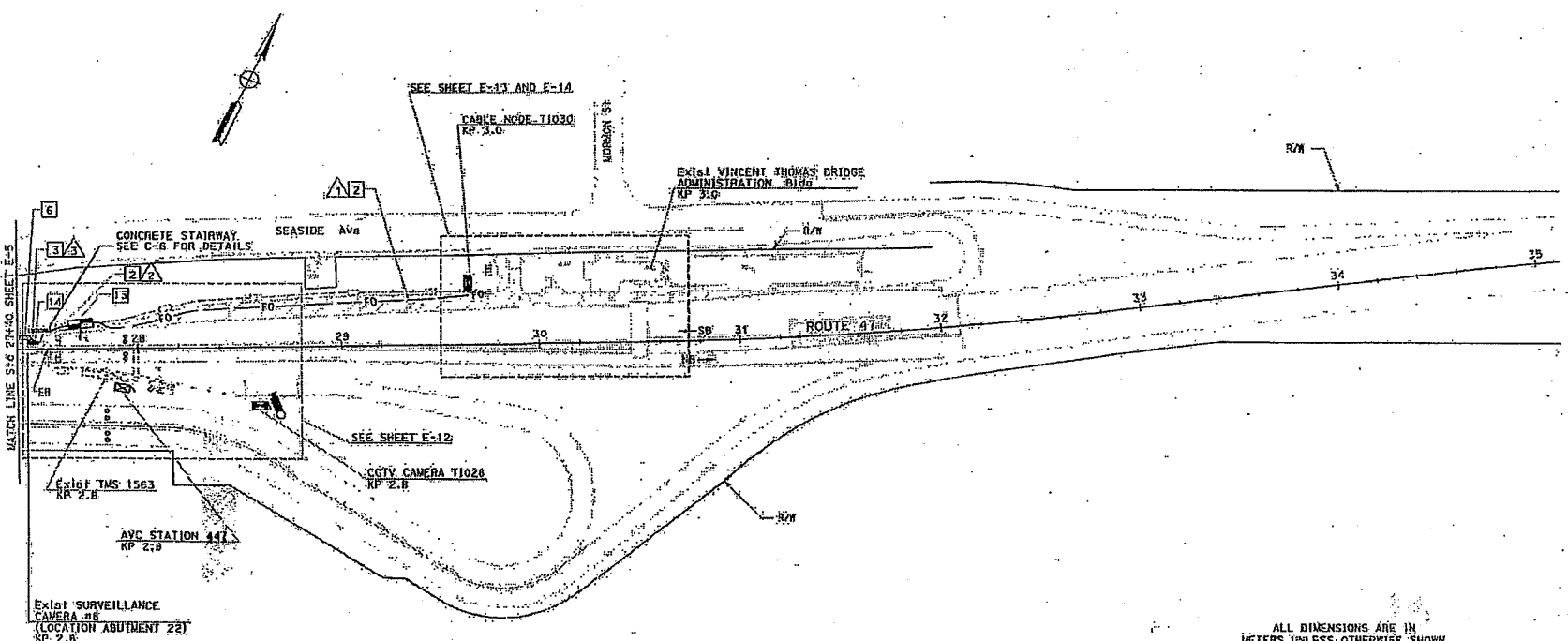
To get to the web site, go to http://www.dot.ca.gov

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1					RUN 2			RUN 3
36SMFO CABLE	DATA DISTRIBUTION	1						1		
36SMFO CABLE	VIDEO DISTRIBUTION		1					1		
72SMFO CABLE	VIDEO / DATA			1			1			
12SMFO CABLE	DATA / VOICE									1
INNERDUCT (SIZE 25)		1	1	1	1					
CONDUIT SIZE		103				103	53	53	53	53



FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-6

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT

PROJECT ENGINEER: CONWAY CHU
CALCULATED/DESIGNED BY: LRS
CHECKED BY: CC
DATE REVISED: 3/04
DATE REVISED: 9/04

RELATIVE BORDER SCALE IS IN MILLIMETERS. 0 20 40 60 80 100

CU 07388 | EA 129951

DGN FILE: 07-LA-47-0.0/3.0 PM 27.0/27.8 ITS-E-06 DATE PLOTTED: 23-JUN-2005 TIME PLOTTED: 13:19

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	47	0.0/3.0	26	93

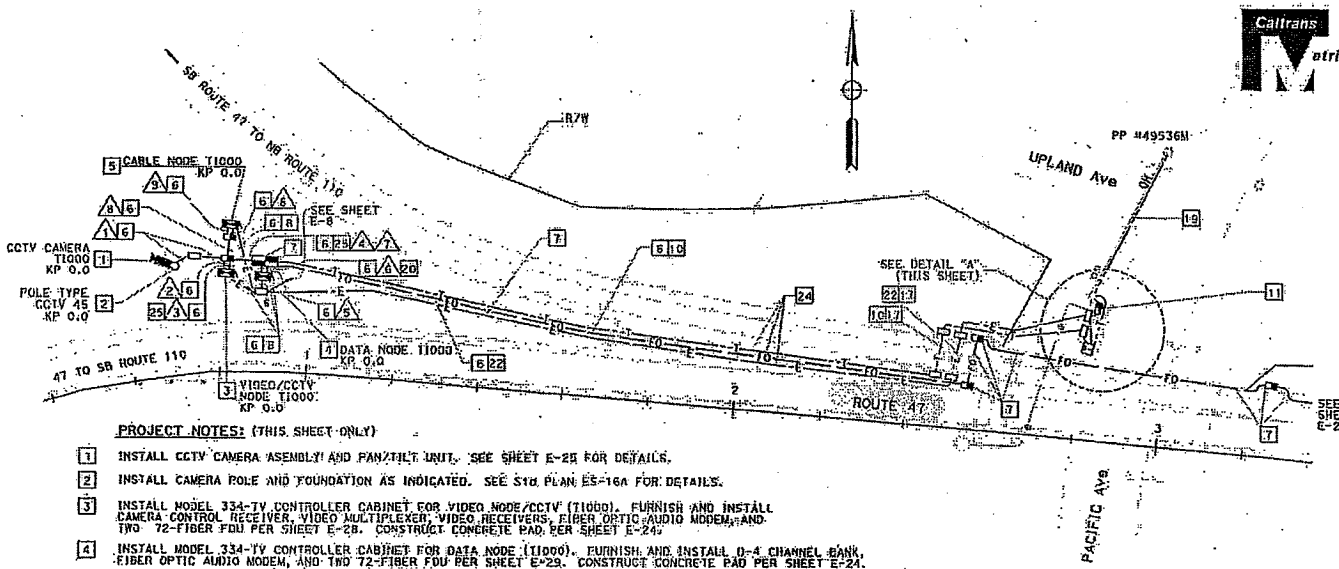
Conway Chu
REGISTERED ELECTRICAL ENGINEER

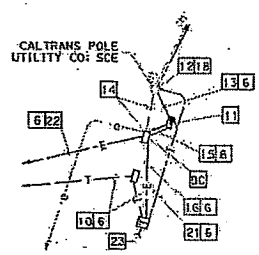
6-20-05
PLANS APPROVAL DATE

CONWAY CHU No. E15305 3/31/07 ELECTRICAL STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this map or data.

To get to the web site go to http://www.dot.ca.gov





DETAIL "A"
SCALE 1:200

PROJECT NOTES: (THIS SHEET ONLY)

1. INSTALL CCTV CAMERA ASEMBLY AND PAN/TILT UNIT. SEE SHEET E-29 FOR DETAILS.
2. INSTALL CAMERA POLE AND FOUNDATION AS INDICATED. SEE STD PLAN ES-16A FOR DETAILS.
3. INSTALL MODEL 334-TV CONTROLLER CABINET FOR VIDEO NODE/CCTV (T1000). FURNISH AND INSTALL CAMERA CONTROL RECEIVER, VIDEO MULTIPLEXER, VIDEO RECEIVERS, FIBER OPTIC AUDIO MODEM, AND TWO 72-FIBER FDU PER SHEET E-28. CONSTRUCT CONCRETE PAD PER SHEET E-24.
4. INSTALL MODEL 334-TV CONTROLLER CABINET FOR DATA NODE (T1000). FURNISH AND INSTALL 0-4 CHANNEL BANK, FIBER OPTIC AUDIO MODEM, AND TWO 72-FIBER FDU PER SHEET E-29. CONSTRUCT CONCRETE PAD PER SHEET E-24.
5. INSTALL TWO 72-FIBER FDU IN A TYPE 334-TV CONTROLLER CABINET FOR CABLE NODE. TERMINATE 72SMFO. CONSTRUCT CONCRETE PAD PER SHEET E-24. TERMINATE TELEPHONE CABLE IN TERMINAL BLOCK.
6. TRENCH AND INSTALL CONDUIT IN UNPAVED AREA.
7. SHOWN FOR REFERENCE ONLY. FOR INSTALLATION REFER TO SHEET E-2.
8. INSTALL 53C, 2#4.
10. INSTALL 41C, 2 CAT-5E CABLES.
11. INSTALL 120/240 V, 100 A TYPE III-BF METERED SERVICE EQUIPMENT ENCLOSURE AND FOUNDATION WITH:
    (1) 240 V, 2P, 100 A CB FOR MAIN DISCONNECT
    (1) 120 V, 1P, 30 A CB FOR CCTV/VIDEO NODE
    (1) 120 V, 1P, 20 A CB FOR IRRIGATION (EXISTING)
    (1) 120 V, 1P, 30 A CB FOR DATA NODE
    (1) 120 V, 1P, 30 A CB FOR CABLE NODE
    (1) 120 V, 1P, 20 A CB FOR DEMARCATION
    (1) 120 V, 1P, 30 A CB FOR COUNT STATION
    ADDRESS: 661 ½ PACIFIC AVE
    ID No. 07-53-047R-000279
12. INSTALL 78C, MT, TYPE H SERVICE RISER AND CONDUIT ON EXISTING POLE. UTILITY COMPANY TO INSTALL CONDUCTORS. REMOVE AND SALVAGE EXISTING POLE-MOUNTED SERVICE FOR IRRIGATION.
13. INSTALL 78C, MT (CONDUCTORS BY OTHERS).
14. PULL BACK EXISTING SERVICE CABLES FROM EXISTING SERVICE TO NEW PULL BOX. ABANDON EXISTING CONDUIT.
15. INSTALL 2-53C, 8#4 (VN/CCTV, CN, DN, COUNT STATION), 2#10 (DEMARC) AND EXISTING SERVICE CABLES (IRRIGATION) FROM NEW PULL BOX TO NEW TYPE III-BF SERVICE EQUIPMENT ENCLOSURE.
16. INSTALL 53C, 2#10.
17. JACK CONDUIT BENEATH ROADWAY.
18. INSTALL 41C, MT, TELEPHONE TYPE II RISER AND CONDUIT ON EXISTING POLE, CONDUCTORS BY OTHERS.
19. TELEPHONE CONDUCTORS BY OTHERS.
20. INSTALL 6 CAT-5E CABLES.
21. INSTALL 41C, MT (CONDUCTORS BY OTHERS).
22. INSTALL 78C, 8#4.
23. INSTALL TYPE C TELEPHONE DEMARCATION CABINET.
24. INSTALL CONDUITS IN THE SAME TRENCH.
25. INSTALL 4 CAT-5E CABLES.

FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES, SEE SHEET E-1.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	4	5	6	7	8	9
12SMFO CABLE	DATA / VOICE					1				
12SMFO CABLE	VIDEO / VOICE		1		1					
36SMFO CABLE	DATA DISTRIBUTION					1				
36SMFO CABLE	VIDEO DISTRIBUTION		1		1					
72SMFO CABLE	VIDEO / DATA				1				1	
SEE TABLE 1, SHEET E-1	CCTV WIRING	1		1						
2P22	DATA / VOICE			1			1	1		
INNERDUCT (SIZE 26)										
CONDUIT SIZE		53	103	103	103	103	103	103	103	103

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

CABLE NODE (LOCATION T1000)
VIDEO NODE/CLOSED CIRCUIT TELEVISION CAMERA (LOCATION T1000)
DATA NODE (LOCATION T1000)

SCALE 1:500

E-7

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
ITS DEVELOPMENT

PROJECT ENGINEER: CONWAY CHU
CALCULATED/DESIGNED BY: LRS
CHECKED BY: CC
DATE REVISED BY: 3/04
DATE REVISED: 3/04

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME = [illegible]
DGN FILE = [illegible]

CU 07368

EA 129951

DATE PLOTTED: 06-20-05
TIME PLOTTED: 14:13

Rte 91

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	5.5/14.6	57	127

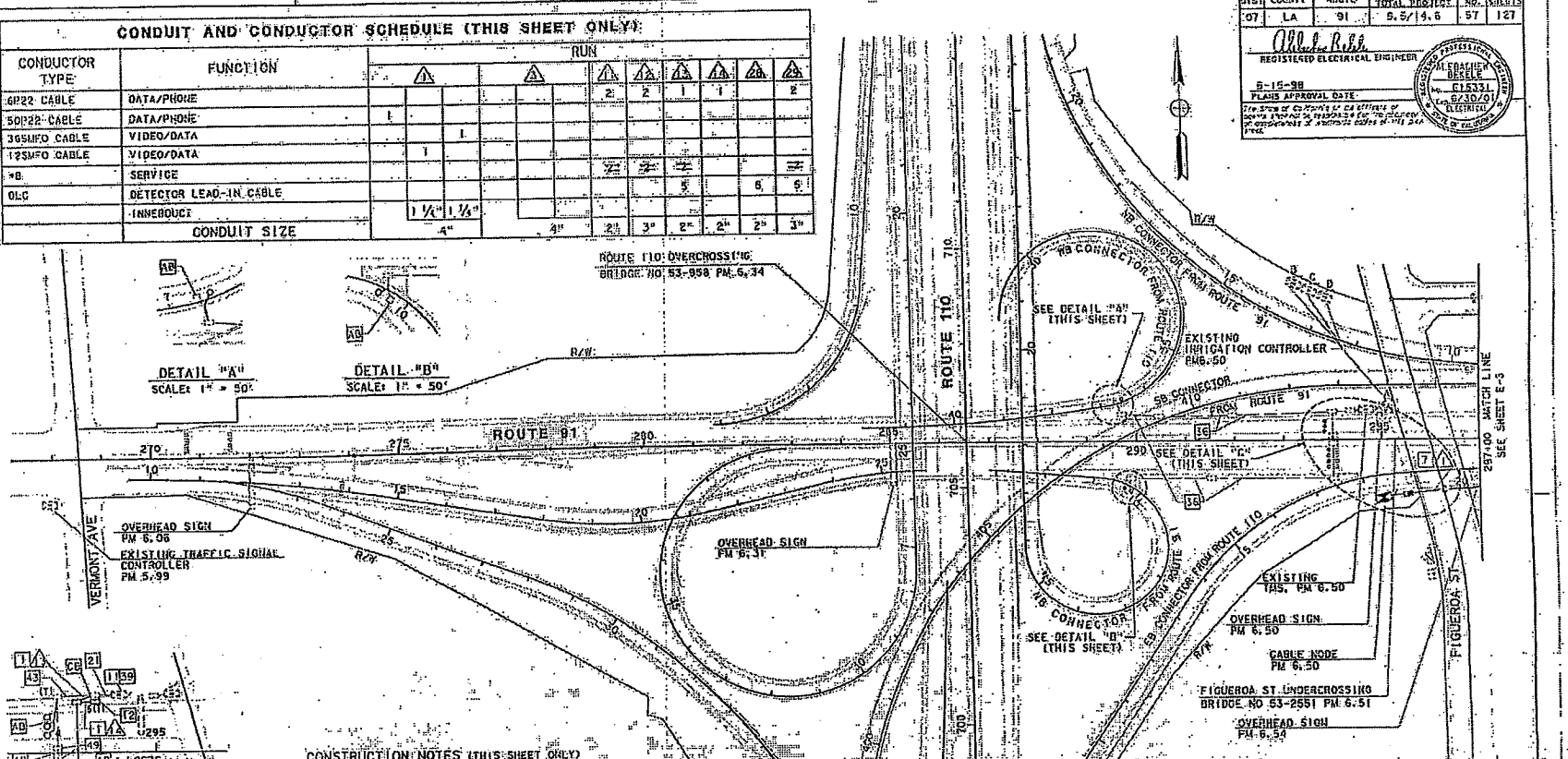
REGISTERED ELECTRICAL ENGINEER

5-15-98
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER ALEXANDER BESELE No. E15331 6/30/01 ELECTRICAL STATE OF CALIFORNIA

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			RUN 2			RUN 3	RUN 4	RUN 5	RUN 6	RUN 7	RUN 8
6P22 CABLE	DATA/PHONE							2	2	1	1		2
50P22 CABLE	DATA/PHONE	1											
36SMFO CABLE	VIDEO/DATA			1									
12SMFO CABLE	VIDEO/DATA		1										
#8	SERVICE							2	2	2			2
DLC	DETECTOR LEAD-IN CABLE									5		6	5
	INNERDUCT		1 1/4"	1 1/4"									
	CONDUIT SIZE	4"			4"			2"	3"	2"	2"	2"	3"



CONSTRUCTION NOTES (THIS SHEET ONLY)

21 ADD 1 6P22 CABLE, ~~3-25 PAIRS OR CABLE NODE CABINET~~ & 9 DLC. REMOVE 6 DLC IN EXISTING CONDUIT.

22 INSTALL TYPE 334-TV CABINET, FIBER DISTRIBUTION FRAME WITH 36 OPTICAL BULKHEAD ADAPTERS AND 3-25 PAIR TERMINAL BLOCKS. TERMINATE 36SMFO, 12SMFO SHORT HAUL VIDEO AND 50P22 CABLES IN CABLE NODE. SEE SHEET E-46. INSTALL CONCRETE PAD FOR ONE 334-TV CABINET. SEE SHEET E-39.

36 ADD 1 DLC. REMOVE 1 DLC IN EXISTING CONDUIT.

39 TERMINATE 9 DLC IN EXISTING CABINET & INSTALL 3 STATE-FURNISHED LOOP DETECTOR SENSOR UNITS.

43 ADD 4 DLC. REMOVE 6 DLC IN EXISTING CONDUIT.

49 REMOVE AND DISPOSE OF PULL BOX/HANDHOLE. FILL OPENING WITH PCC AND AC TO MATCH EXISTING (0.1' MIN. ACT).

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND PROJECT NOTES. SEE SHEET U-2 FOR EXISTING UTILITIES.

AS-BUILT
Contract No. 07- 120984
Resident Engineer: LUKE NGUYEN
Completion Date: 09/28/2001

DETECTOR LOOP, CABLE NODE AND COMMUNICATIONS SYSTEM ROUTING

SCALE AS SHOWN

E-2

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION Caltrans

PROJECT ENGINEER PAT SULLIVAN

CALCULATED/DESIGNED BY HHT DATE 6/97 REVISED BY
CHECKED BY NT 6/97 DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS 10 INCHES

CU 07396 EA 120981

LAST CLEANED 08-08-97

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	6.5/14.6	64	127

REGISTERED ELECTRICAL ENGINEER

6-15-98

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

ALEBACHEW HEKELE No. E15331 Exp. 6/30/01 ELECTRICAL

AS-BUILT

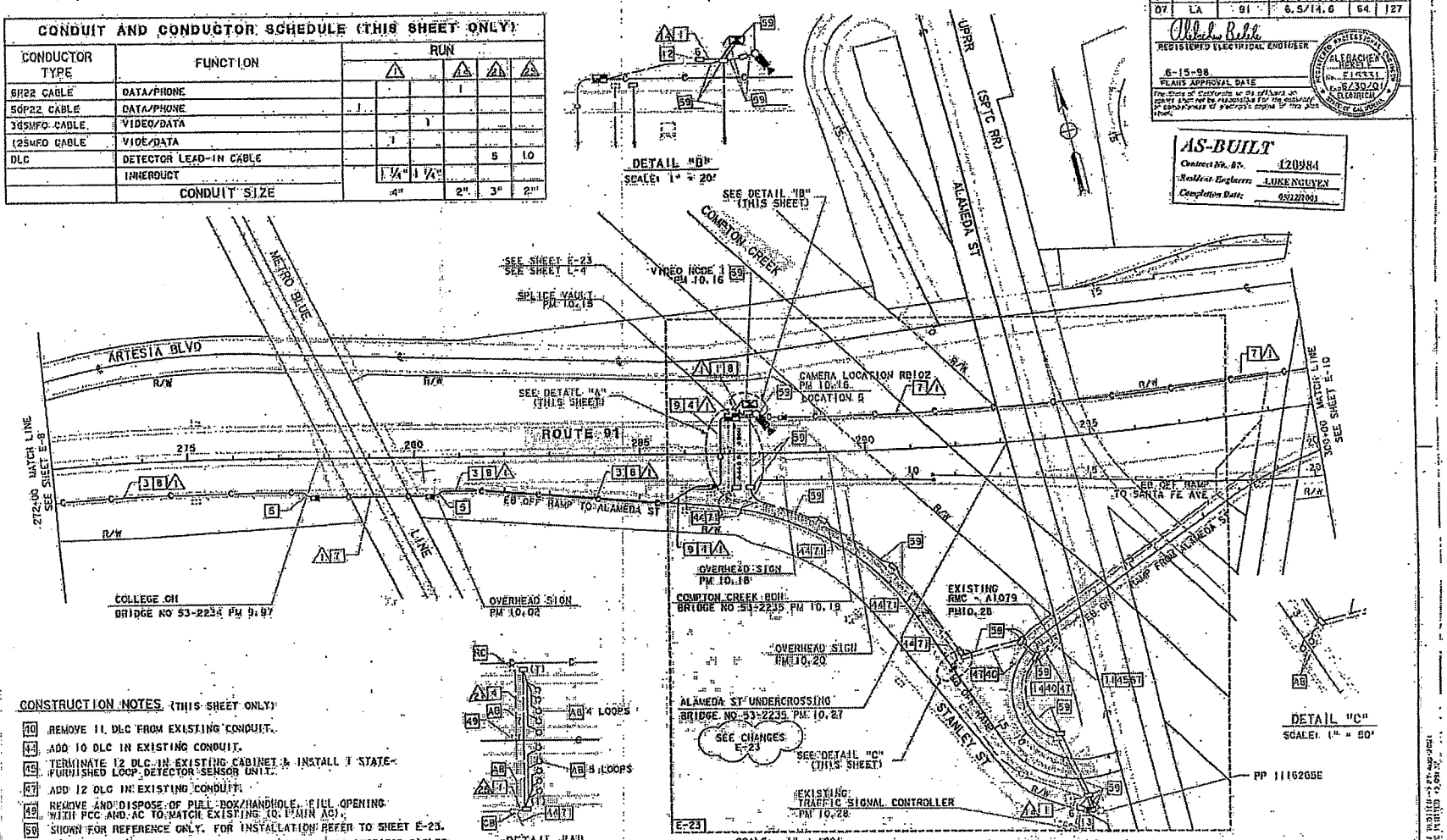
Contract No. 87- 120984

Resident Engineer: LUKE NGUYEN

Completion Date: 05/12/2001

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1			1A	2A	2A
6R22 CABLE	DATA/PHONE				1		
50P22 CABLE	DATA/PHONE	1					
365MFO CABLE	VIDEO/DATA			1			
125MFO CABLE	VIDEO/DATA		1				
DLC	DETECTOR LEAD-IN CABLE					5	10
	INNERDUCT		1 1/4"	1 1/4"			
	CONDUIT SIZE		4"		2"	3"	2"



CONSTRUCTION NOTES (THIS SHEET ONLY)

- 40 REMOVE 11 DLC FROM EXISTING CONDUIT.
- 44 ADD 10 DLC IN EXISTING CONDUIT.
- 45 TERMINATE 12 DLC IN EXISTING CABINET & INSTALL 1 STATE-FURNISHED LOOP DETECTOR SENSOR UNIT.
- 47 ADD 12 DLC IN EXISTING CONDUIT.
- 49 REMOVE AND DISPOSE OF PULL BOX/HANDHOLE. FILL OPENING WITH PCC AND AC TO MATCH EXISTING (0.1' MIN AC).
- 50 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION REFER TO SHEET E-23.
- 67 REUSE AND RE-TAG EXISTING DLC. RECONFIGURE LOOP DETECTOR CABLES IN CABINET TO PROVIDE REVISED DETECTOR LOOP OPERATION.
- 71 REMOVE 9 DLC FROM EXISTING CONDUIT.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND PROJECT NOTES. SEE SHEET U-9 FOR EXISTING UTILITIES.

DETECTOR LOOP, CLOSED CIRCUIT TELEVISION CAMERA (LOCATION RB102), VIDEO NODE 1 (LOCATION RB102) AND COMMUNICATIONS SYSTEM ROUTING

SCALE AS SHOWN

E-9

CALCULATED/DESIGNED BY	DATE	REVISED BY
NHT	6/97	
CHECKED BY	DATE REVISED	
NT	6/97	

PROJECT ENGINEER: PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

CU 07396 | EA 120981

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	6.5/14.0	68	127

REGISTERED ELECTRICAL ENGINEER

6-15-98
PLANS APPROVAL DATE

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CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	2	3	4	5	6	7
6P22 CABLE	DATA/PHONE				1			
50P22 CABLE	DATA/PHONE	1						
36SMFO CABLE	VIDEO/DATA			1				
12SMFO CABLE	VIDEO/DATA		1					
DLC	DETECTOR LEAD-IN CABLE				6	12	9	15
	INNERDUCT		1 1/2"	1 1/4"				
	CONDUIT SIZE	4"	2"	3"	3"	3"	3"	

CONSTRUCTION NOTES (THIS SHEET ONLY)

42 TERMINATE 12 DLC IN EXISTING CABINET & INSTALL 1 STATE-FURNISHED LOOP DETECTOR SENSOR UNITS.

49 REMOVE AND DISPOSE OF PULL BOX/HANDHOLE. FILL OPENING WITH PCC AND AC TO MATCH EXISTING (0.1' MIN AC).

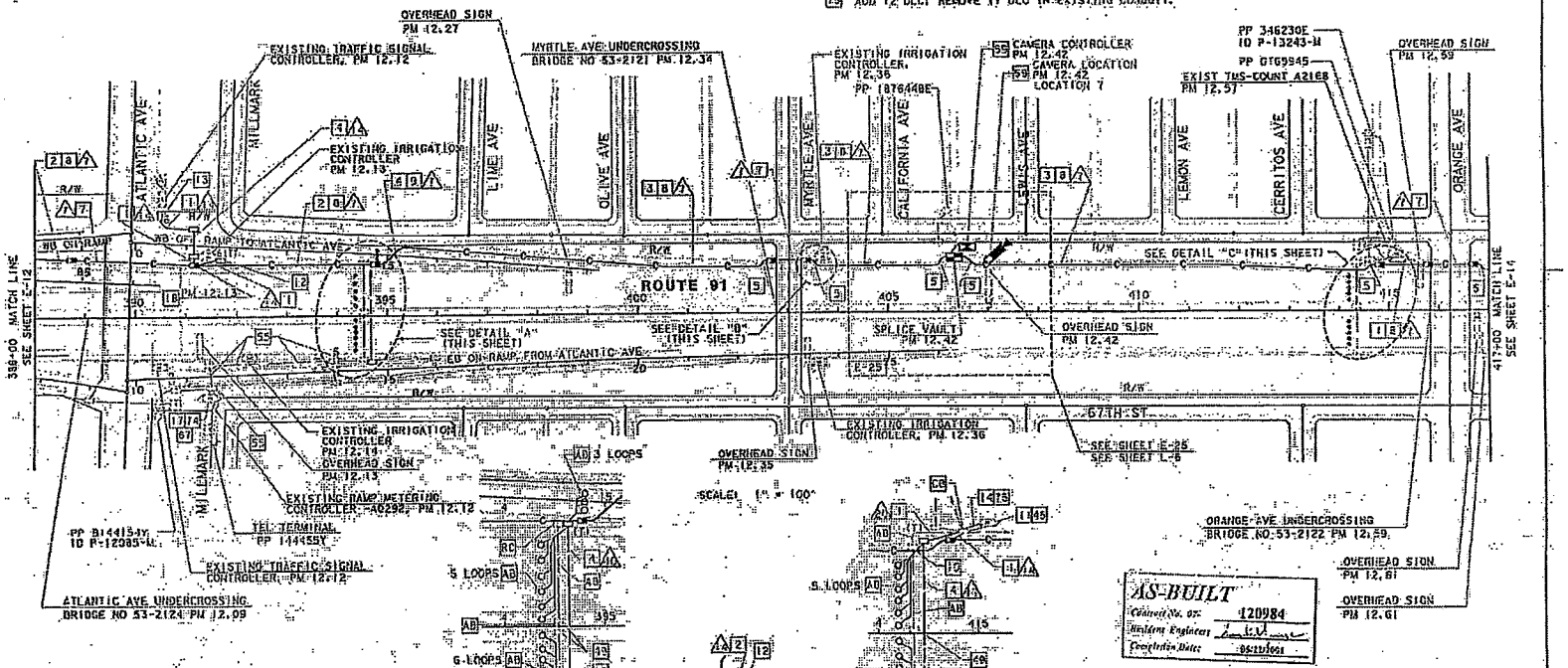
55 ADD 15 DLC, REMOVE 14 DLC IN EXISTING CONDUIT.

59 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION REFER TO SHEET E-25.

67 REUSE AND RETAG EXISTING DLC. RECONFIGURE LOOP DETECTOR CABLES IN CABINET TO PROVIDE REVISED DETECTOR LOOP OPERATION.

74 TERMINATE 15 DLC IN EXISTING CABINET & INSTALL 1 STATE-FURNISHED LOOP DETECTOR SENSOR UNITS.

75 ADD 12 DLC, REMOVE 11 DLC IN EXISTING CONDUIT.



NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY
SEE SHEET E-1 FOR LEGEND AND PROJECT NOTES
SEE SHEET U-13 FOR EXISTING UTILITIES

DETECTOR LOOP, CLOSED CIRCUIT TELEVISION SYSTEM (LOCATION AR124) AND COMMUNICATIONS SYSTEM ROUTING

SCALE AS SHOWN

E-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

PROJECT ENGINEER: PAT SULLIVAN

CALCULATED/DESIGNED BY: HHT 06/97 | REVISED BY: DATE
CHECKED BY: NT 06/97 | DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

CU 07396 | EA 120981

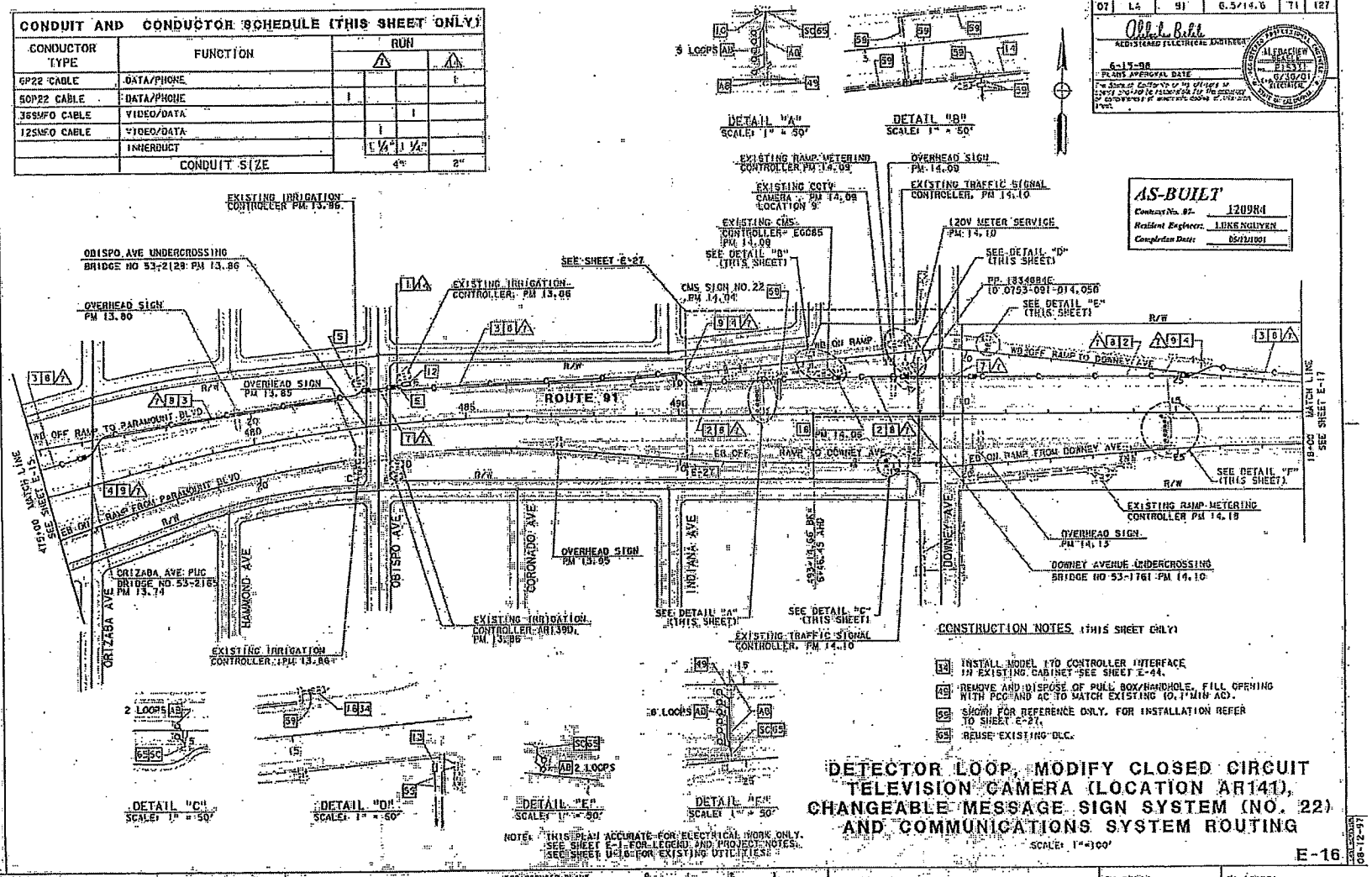
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	6.5/14.6	71	127

REGISTERED ELECTRICAL ENGINEER
6-15-98
PLANS APPROVAL DATE

AS-BUILT
Contract No. 07- 120984
Resident Engineer: LUKE NGUYEN
Completion Date: 05/12/1991

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN △			△
6P22 CABLE	DATA/PHONE				1
50P22 CABLE	DATA/PHONE	1			
36SMFO CABLE	VIDEO/DATA			1	
12SMFO CABLE	VIDEO/DATA		1		
	INNERDUCT		1 1/4"	1 1/4"	
	CONDUIT SIZE		4"		2"



CONSTRUCTION NOTES (THIS SHEET ONLY)

- 34 INSTALL MODEL 170 CONTROLLER INTERFACE IN EXISTING CABINET SEE SHEET E-44.
- 49 REMOVE AND DISPOSE OF PULL BOX/HANDHOLE. FILL OPENING WITH PCC AND AC TO MATCH EXISTING (0.1' MIN AC).
- 55 SHOWN FOR REFERENCE ONLY. FOR INSTALLATION REFER TO SHEET E-27.
- 65 REUSE EXISTING DLC.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND PROJECT NOTES. SEE SHEET U-16 FOR EXISTING UTILITIES.

DETECTOR LOOP, MODIFY CLOSED CIRCUIT TELEVISION CAMERA (LOCATION AR141), CHANGEABLE MESSAGE SIGN SYSTEM (NO. 22) AND COMMUNICATIONS SYSTEM ROUTING

SCALE: 1"=100'

E-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: HHT DATE 06/97
CHECKED BY: NT 06/97
REVISED BY
DATE REVISED

CU 07396 EA 120981

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	14.6/20.7	45	107

REGISTERED ELECTRICAL ENGINEER

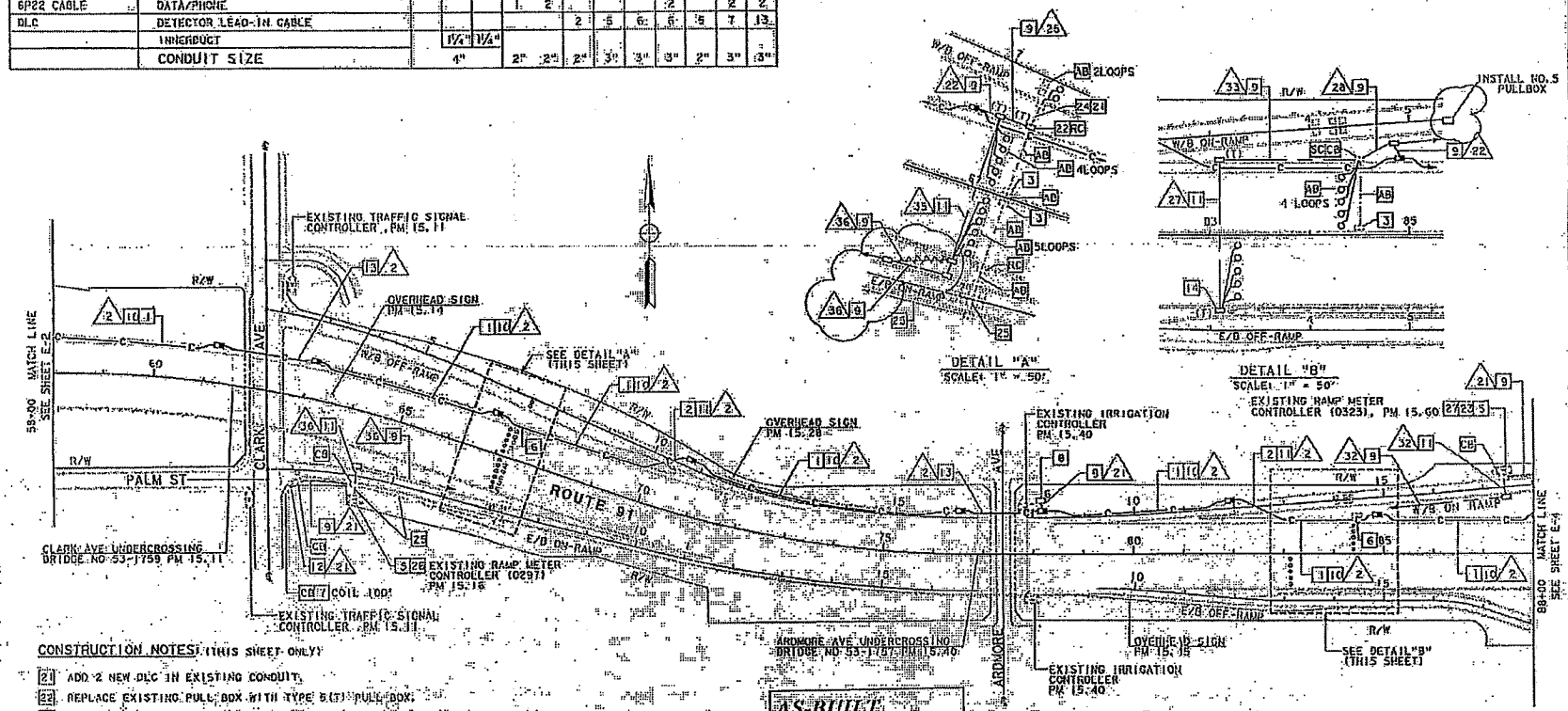
6-1-98
PLANS APPROVAL DATE

ALBERTA BERTELE No. E15331 6/30/01 ELECTRICAL STATE OF CALIFORNIA

The Date of Certification or Certificate of each author is responsible for the accuracy of information of electrical items of this plan sheet.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 2		21	22	25	27	28	32	33	35	36
50P22 CABLE	DATA/PHONE	1										
3GSMFO	VIDEO/DATA		1									
12SMFO	VIDEO/DATA			1								
6P22 CABLE	DATA/PHONE				1	2			2		2	2
DLC	DETECTOR LEAD-IN CABLE					2	5	6	6	5	7	13
	INNERDUCT		1¼"	1¼"								
	CONDUIT SIZE		4"		2"	2"	2"	3"	3"	3"	2"	3"	3"



AS BUILT
Contract No. 07- 120991
Resident Engineer NGUYEN, H.
Completion Date 07/15/2000

CONSTRUCTION NOTES (THIS SHEET ONLY)

21. ADD 2 NEW DLC IN EXISTING CONDUIT.
22. REPLACE EXISTING PULL BOX WITH TYPE 5(T) PULL BOX.
23. TERMINATE 6 NEW DLC IN CABINET. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET. INSTALL 3 STATE-FURNISHED LOOP DETECTOR SENSOR UNIT.
24. REMOVE 2 EXISTING DLC FROM EXISTING CONDUIT.
25. REMOVE 11 EXISTING MAINLINE DLC FROM EXISTING CONDUIT.
26. TERMINATE 13 NEW DLC IN CABINET. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET. INSTALL 7 STATE-FURNISHED LOOP DETECTOR SENSOR UNIT.
27. INSTALL ADDITIONAL 5-2WAY 4-WIRE BRIDGE FOR RECONFIGURATION OF INTERCONNECT RMS BRIDGES.

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND NOTES.

DETECTOR LOOP AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-3

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: HHT 6/97 — REVISED BY
CHECKED BY: HT 6/97 — DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS 1 INCHES

CU 07356 | EA 120991

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	14.6/20.7	46	107

REGISTERED ELECTRICAL ENGINEER

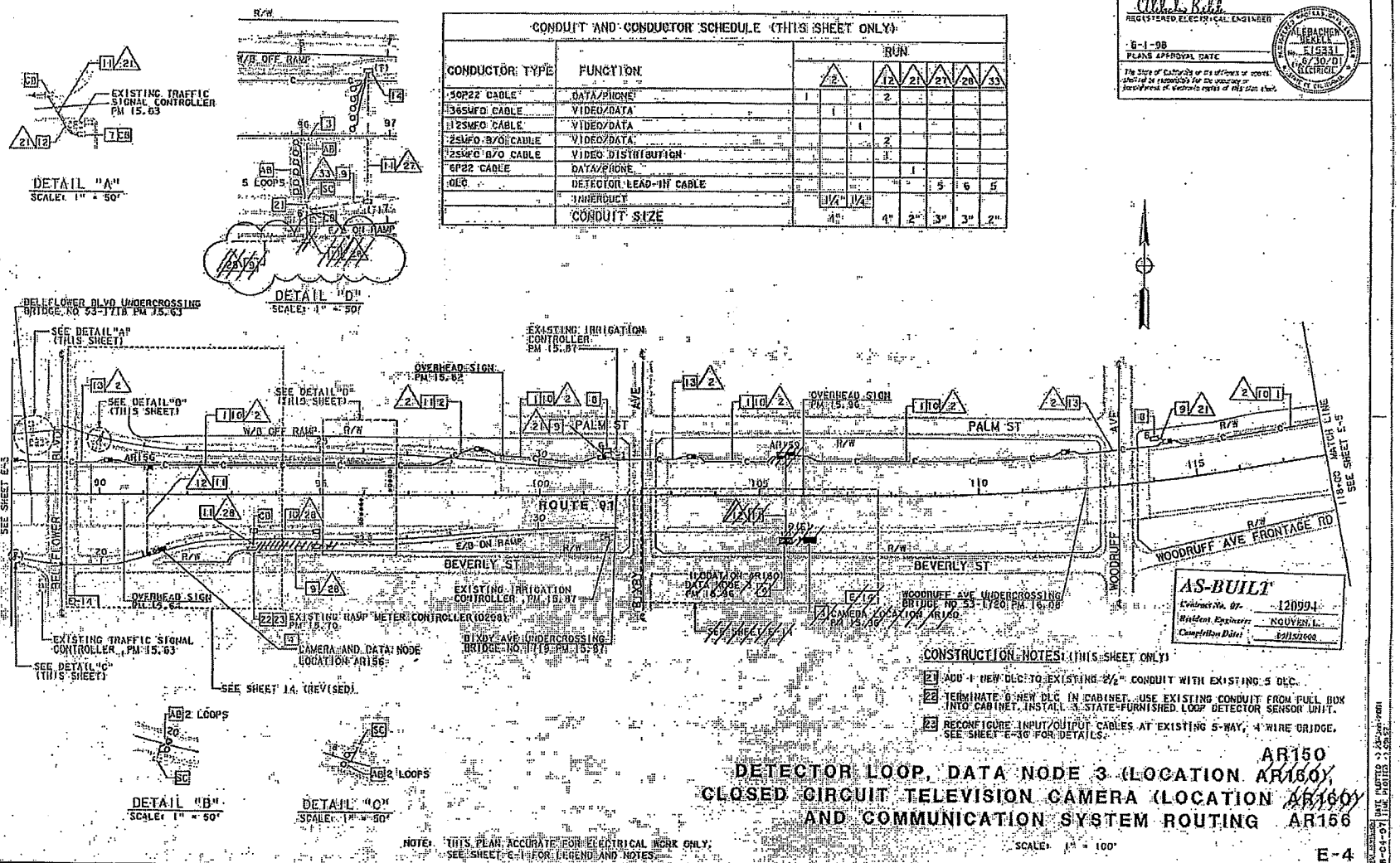
6-1-98

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

ALEBACHEW BEKELE E15331 6/30/01 ELECTRICAL

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)									
CONDUCTOR TYPE	FUNCTION	RUN 2			12	21	27	28	33
50P22 CABLE	DATA/PHONE	1			2				
36SMFO CABLE	VIDEO/DATA		1						
12SMFO CABLE	VIDEO/DATA			1					
2SMFO B/O CABLE	VIDEO/DATA				2				
2SMFO B/O CABLE	VIDEO DISTRIBUTION				1				
6P22 CABLE	DATA/PHONE					1			
DLC	DETECTOR LEAD-IN CABLE						5	6	5
	INNERDUCT		1¼"	1¼"					
	CONDUIT SIZE		4"		4"	2"	3"	3"	2"



CONSTRUCTION NOTES: (THIS SHEET ONLY)

21 ADD 1 NEW DLC TO EXISTING 2½" CONDUIT WITH EXISTING 5 DLC.

22 TERMINATE 6 NEW DLC IN CABINET. USE EXISTING CONDUIT FROM PULL BOX INTO CABINET. INSTALL 3 STATE-FURNISHED LOOP DETECTOR SENSOR UNIT.

23 RECONFIGURE INPUT/OUTPUT CABLES AT EXISTING 5-WAY, 4 WIRE BRIDGE. SEE SHEET E-36 FOR DETAILS.

DETECTOR LOOP, DATA NODE 3 (LOCATION ~~AR160~~ AR150), CLOSED CIRCUIT TELEVISION CAMERA (LOCATION ~~AR160~~ AR156) AND COMMUNICATION SYSTEM ROUTING

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND NOTES.

SCALE: 1" = 100'

E-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

PROJECT ENGINEER: PAT SULLIVAN

CALCULATED/DESIGNED BY: HHT DATE 6/97 REVISED BY

CHECKED BY: NT 6/97 DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

CU 07396 EA 120991

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	14.6/20.7	47	107

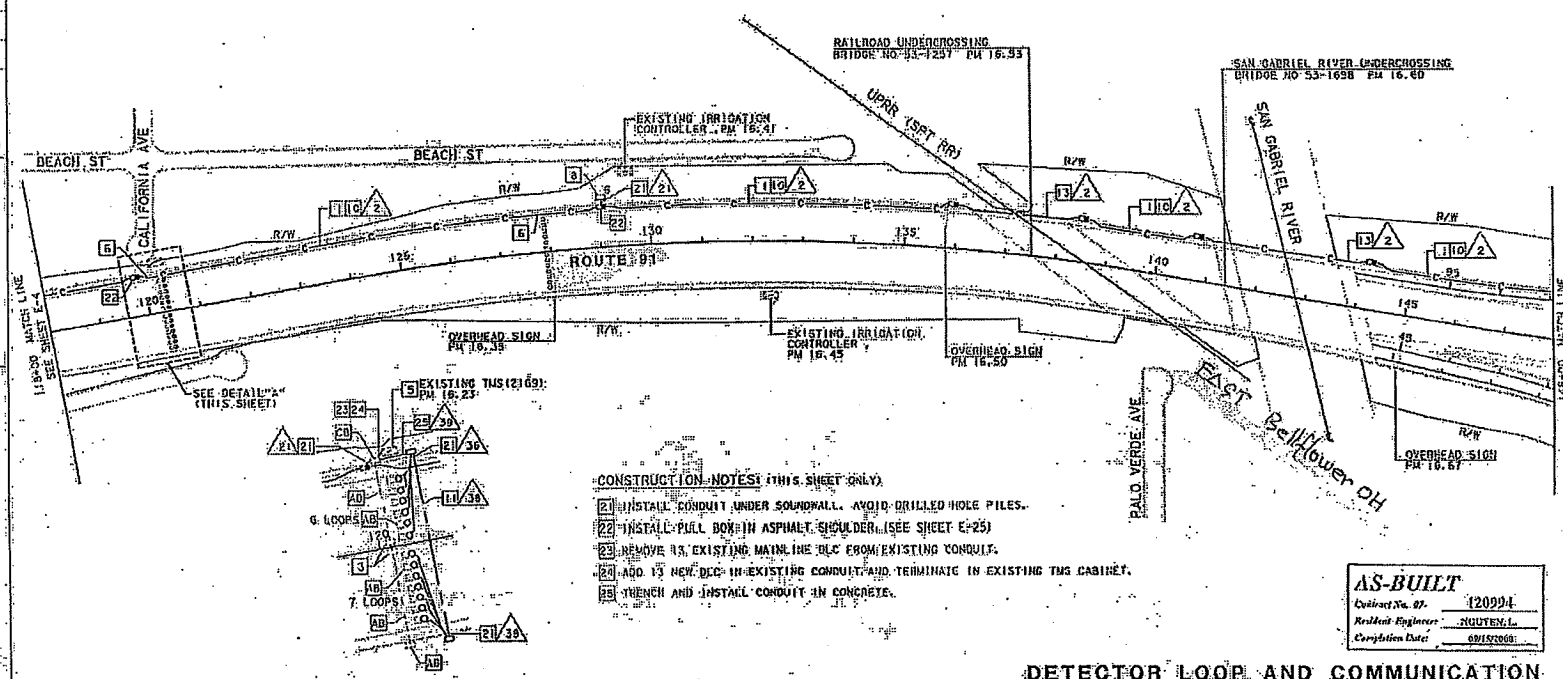
REGISTERED ELECTRICAL ENGINEER

6-1-98
PLANS APPROVAL DATE

ALEXANDER HERSLE No. E19331 6/30/01 ELECTRICAL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of, or omissions from, this plan.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)					
CONDUCTOR TYPE	FUNCTION	RUN 2	21	38	39
60P22 CABLE	DATA/PHONE	1			
36SMFO	VIDEO/DATA	1			
12SMFO	VIDEO/DATA		1		
6P22 CABLE	DATA/PHONE		1		
DLC	DETECTOR LEAD-IN CABLE			7	13
	INNERDUCT	1/4"	1/4"		
	CONDUIT SIZE	4"	2"	3"	3"



CONSTRUCTION NOTES (THIS SHEET ONLY)

21 INSTALL CONDUIT UNDER SOUNDWALL. AVOID DRILLED HOLE PILES.
22 INSTALL PULL BOX IN ASPHALT SHOULDER. (SEE SHEET E-25)
23 REMOVE 13, EXISTING MAINLINE DLC FROM EXISTING CONDUIT.
24 ADD 13 NEW DLC IN EXISTING CONDUIT AND TERMINATE IN EXISTING TMS CABINET.
25 TRENCH AND INSTALL CONDUIT IN CONCRETE.

AS-BUILT
Contract No. 07- 12099A
Resident Engineer NGUYEN, L.
Completion Date 09/15/2000

DETECTOR LOOP AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND NOTES.

E-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: MT 6/97 DATE REVISED BY
CHECKED BY: MF 6/97 DATE REVISED

FOR REDUCED PLATE ORIGINAL SCALE IS IN INCHES 1 2 3 4 5

CU 07396 EA 12099

DATE PLOTTED 23-Apr-1998 TIME PLOTTED 12:23:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL NO. SHEETS
07	LA	91	14.6/20.7	48	107

REGISTERED ELECTRICAL ENGINEER

6-1-98
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALFRED H. BESELE
No. E13331
6/30/01
ELECTRICAL
STATE OF CALIFORNIA

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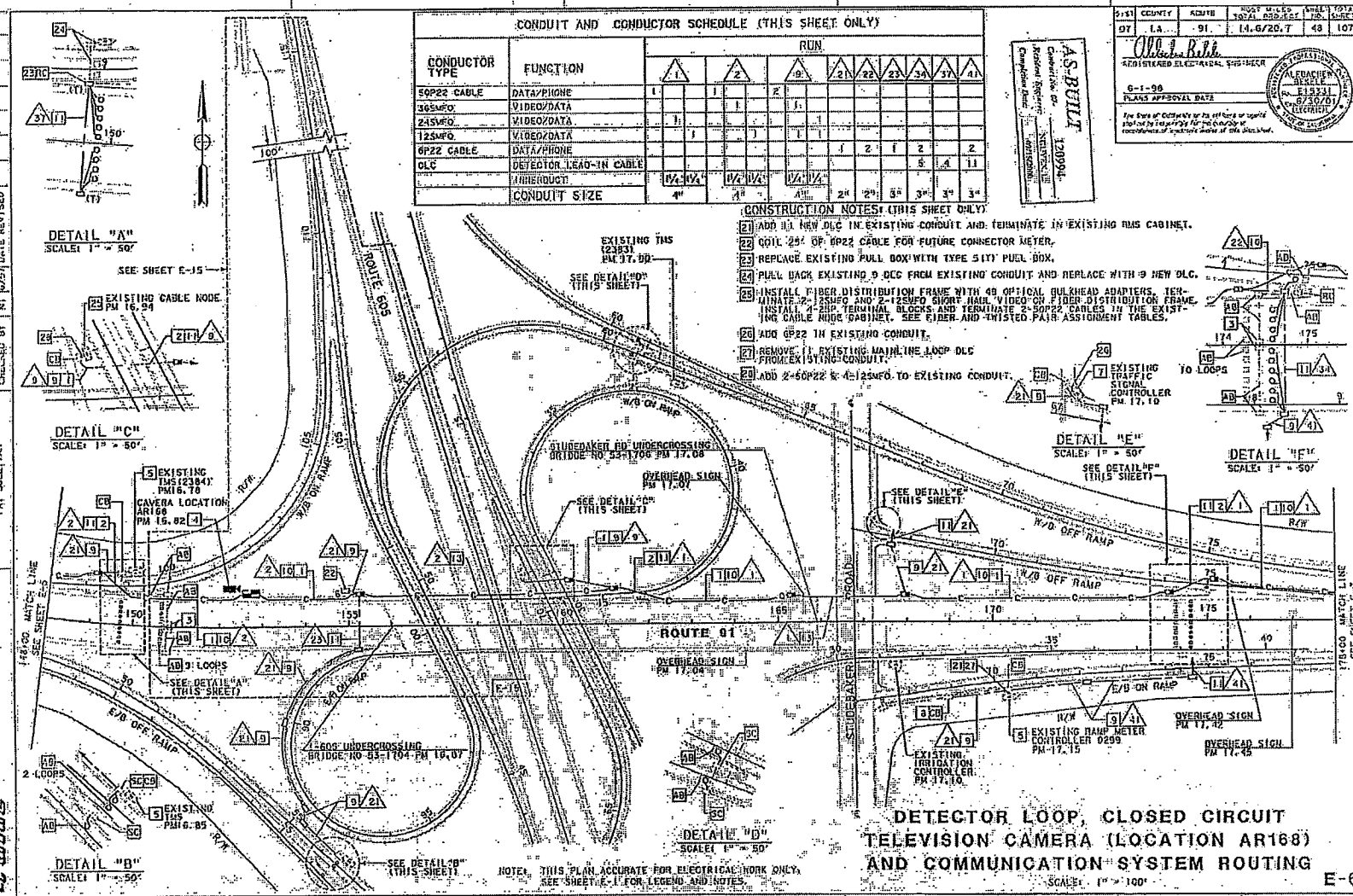
AS-BUILT
120994
Contractor
Resident Engineer
Completion Date
Submitted
Certified

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 9	RUN 21	RUN 22	RUN 23	RUN 34	RUN 37	RUN 41
50P22 CABLE	DATA/PHONE	1	1	2						
36SMFO	VIDEO/DATA		1	1						
24SMFO	VIDEO/DATA	1								
12SMFO	VIDEO/DATA	1	1	1	1					
6P22 CABLE	DATA/PHONE				1	2	1	2		2
DLC	DETECTOR LEAD-IN CABLE							5	4	11
	INNERDUCT	1¼" 1¼"	1¼" 1¼"	1¼" 1¼"						
	CONDUIT SIZE	4"	4"	4"	2"	2"	3"	3"	3"	3"

CONSTRUCTION NOTES: (THIS SHEET ONLY)

21. ADD 11 NEW DLC IN EXISTING CONDUIT AND TERMINATE IN EXISTING RMS CABINET.
22. COIL 25' OF 6P22 CABLE FOR FUTURE CONNECTOR METER.
23. REPLACE EXISTING PULL BOX WITH TYPE 5(T) PULL BOX.
24. PULL BACK EXISTING 9 DLC FROM EXISTING CONDUIT AND REPLACE WITH 9 NEW DLC.
25. INSTALL FIBER DISTRIBUTION FRAME WITH 48 OPTICAL BULKHEAD ADAPTERS. TERMINATE 2-12SMFO AND 2-12SMFO SHORT HAUL VIDEO ON FIBER DISTRIBUTION FRAME. INSTALL 4-25P TERMINAL BLOCKS AND TERMINATE 2-50P22 CABLES IN THE EXISTING CABLE NODE CABINET. SEE FIBER AND TWISTED PAIR ASSIGNMENT TABLES.
26. ADD 6P22 IN EXISTING CONDUIT.
27. REMOVE 1 EXISTING MAINLINE LOOP DLC FROM EXISTING CONDUIT.
28. ADD 2-50P22 & 4-12SMFO TO EXISTING CONDUIT.



NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND NOTES.

DETECTOR LOOP, CLOSED CIRCUIT TELEVISION CAMERA (LOCATION AR168) AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: HT 6/97 | REVISED BY
CHECKED BY: NT 6/97 | DATE REVISED
by Caltrans

CU 07396 | EA 120991

FORM DC-06-97-AR (REV. 3/98)

FOR REDUCED PLANS: ORIGINAL SCALE IS IN INCHES

08-04-97 11:36 PM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	91	14.0/20.7	54	107

REGISTERED ELECTRICAL ENGINEER

6-1-98
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
ALFRED BELLE
E15331
6/30/01
ELECTRICAL
STATE OF CALIFORNIA

The seal of registered engineer on any document indicates responsibility for the security of engineered or engineered parts of this document.

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

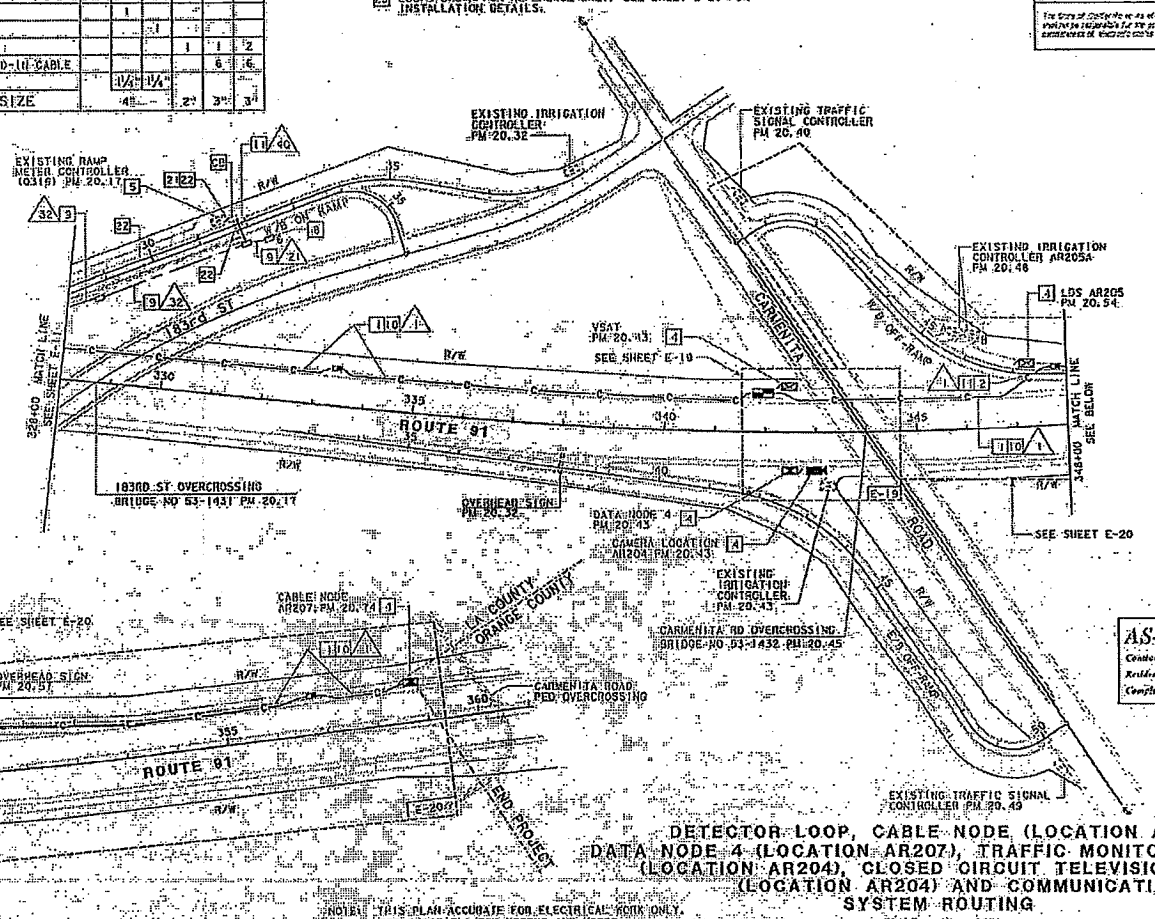
CONDUCTOR TYPE	FUNCTION	RUN 1	RUN 2	RUN 40	RUN 32
50R22 CABLE	DATA/PHONE	1			
24SMFO	VIDEO/DATA		1		
12SMFO	VIDEO/DATA			1	
6P22 CABLE	DATA/PHONE			1	1 2
DLC	DETECTOR LEAD-IN CABLE				6 6
	INNERDUCT	1 1/4"	1 1/4"		
	CONDUIT SIZE	4"	2"	3"	3"

CONSTRUCTION NOTES: (THIS SHEET ONLY)

21 ADD 6P22 CABLE & 6 NEW DLC TO EXISTING CONDUIT AND TERMINATE IN EXISTING RAMP METER CONTROLLER CABINET.

22 REMOVE 5 EXISTING EAST BOUND MAIN-LINE DLC FROM EXISTING CONDUIT.

23 LOOPS SHOWN FOR REFERENCE ONLY. SEE SHEET E-20 FOR INSTALLATION DETAILS.



AS-BUILT
Contract No. 07- 120994
Resident Engineer NGUYEN, L.
Completion Date 05/13/2010

DETECTOR LOOP, CABLE NODE (LOCATION AR207), DATA NODE 4 (LOCATION AR207), TRAFFIC MONITORING STATION (LOCATION AR204), CLOSED CIRCUIT TELEVISION CAMERA (LOCATION AR204) AND COMMUNICATION SYSTEM ROUTING

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND NOTES.

SCALE: 1" = 100'

E-12

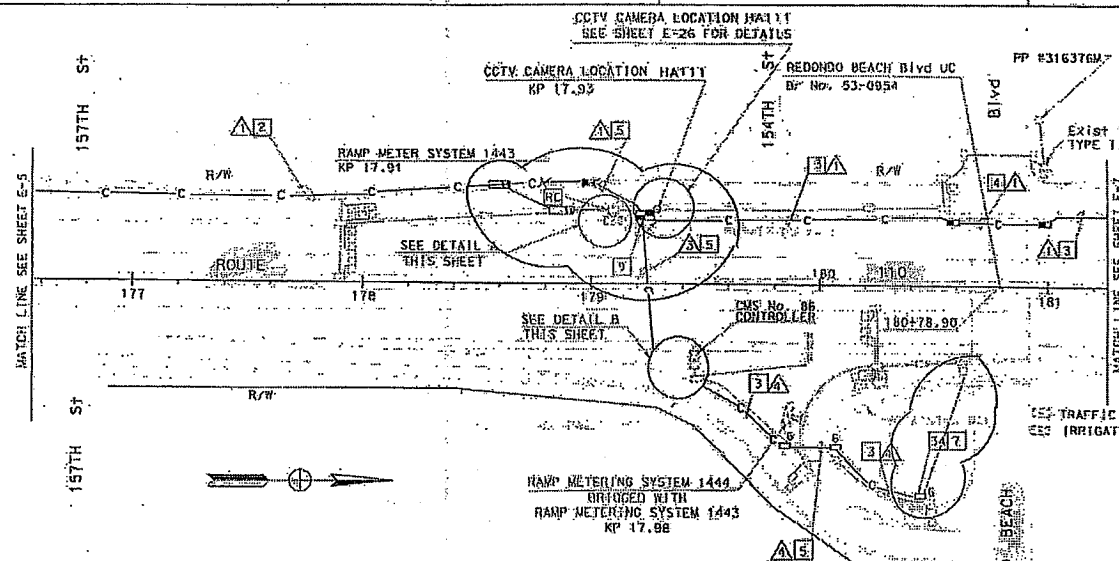
STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER: PAT SULLIVAN
CALCULATED/DESIGNED BY: HAY — DATE REVISED BY: 6/97
CHECKED BY: KT — DATE REVISED: 6/97

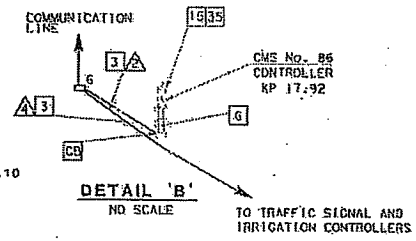
FORM OC-OC-92-FF (REV. 2/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1

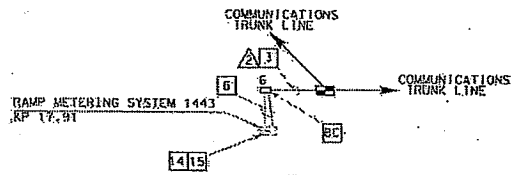
CU: 07396 | EA 120991

OR-5-97





DETAIL 'B'
NO SCALE



DETAIL A
NO SCALE

NOTES: (THIS SHEET ONLY)

2. INSTALL CONDUIT IN TRENCH IN CONCRETE. SEE E-33 FOR DETAILS.
3. INSTALL CONDUIT(S) IN TRENCH IN ASPHALT. MAINTAIN A MINIMUM DISTANCE OF 1.2 m FROM EDGE OF TRAVELED WAY, FOR INSTALLATION OF 103C, SEE SHEET E-33 FOR DETAILS.
4. INSTALL CONDUITS ON BRIDGE STRUCTURE. SEE STRUCTURE PLANS FOR DETAILS.
5. JACK TYPE 1 CONDUIT(S) UNDER ROADWAY. FOR INSTALLATION OF 103C, SEE SHEET E-34 FOR DETAILS.
6. ADD 6P22 CABLE(S) AND CONNECT TO EXISTING CONTROLLER.
7. COIL 30 m OF 6P22 CABLE IN PULL BOX FOR TRAFFIC SIGNAL CONTROLLER. SPLICE CABLE IN SPLICE VAULT AT 179+23.
9. CORE THROUGH WALL. SEE SHEET C-8 FOR DETAILS.
14. INSTALL TELEPHONE BRIDGE AND 12-PAIR TERMINAL BLOCK IN EXISTING CONTROLLER CABINET. SEE SHEET E-38 FOR DETAILS.
15. DISCONNECT EXISTING TELCO DEMARCATION CABLE ONLY AFTER TESTING ALL INSTALLED EQUIPMENT AND VERIFYING THE INSTALLATION IS OPERATIONAL.
34. COIL 30 m OF 6P22 CABLE IN PULL BOX FOR IRRIGATION CONTROLLER. SPLICE CABLE IN SPLICE VAULT AT 179+23.
35. INSTALL 2 TELEPHONE BRIDGES AND 12-PAIR TERMINAL BLOCK IN EXISTING CONTROLLER CABINET. SEE SHEET E-39 FOR DETAILS.

ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE NOTED.

FOR COMPLETE R/W AND ACCURATE ACCESS DATA, SEE R/W RECORD MAPS AT THE DISTRICT OFICE. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

AS-BUILT
Contract No. 07- 168114
Resident Engineer PAUL WANG
Completion Date 8/11/05

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)						
CONDUIT AND CONDUCTOR TYPE AND SIZE	FUNCTION	RUN 1			2	3	4
50P22 CABLE	DATA/PHONE	1					
24SMFO CABLE	VIDEO/DATA		1				
12SMFO CABLE	VIDEO DISTRIBUTION			1			
6P22 CABLE	DATA/PHONE				1	3	2
SIZE 32 INNERDUCT			1	1			
CONDUIT SIZE		103		103	53	103	53

CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE 1:1000

E-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ITS DEVELOPMENT
PROJECT ENGINEER DAVID PADILLA
CALCULATED/DESIGNED BY
CHECKED BY
DATE REVISED BY
DATE REVISED

DIST	COUNTY	ROUTE	TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	10,91,101, 105,110,405	15.3/28.0	55	165

REGISTERED ELECTRICAL ENGINEER 11-02
3-17-03
PLANS APPROVAL DATE
TAN JACQUELINE No. E15611 12-31-04 ELECTRICAL

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	LA	5, 110, 405	Var	62	164

Kenneth D. Camp 7/8/94
REGISTERED ELECTRICAL ENGINEER

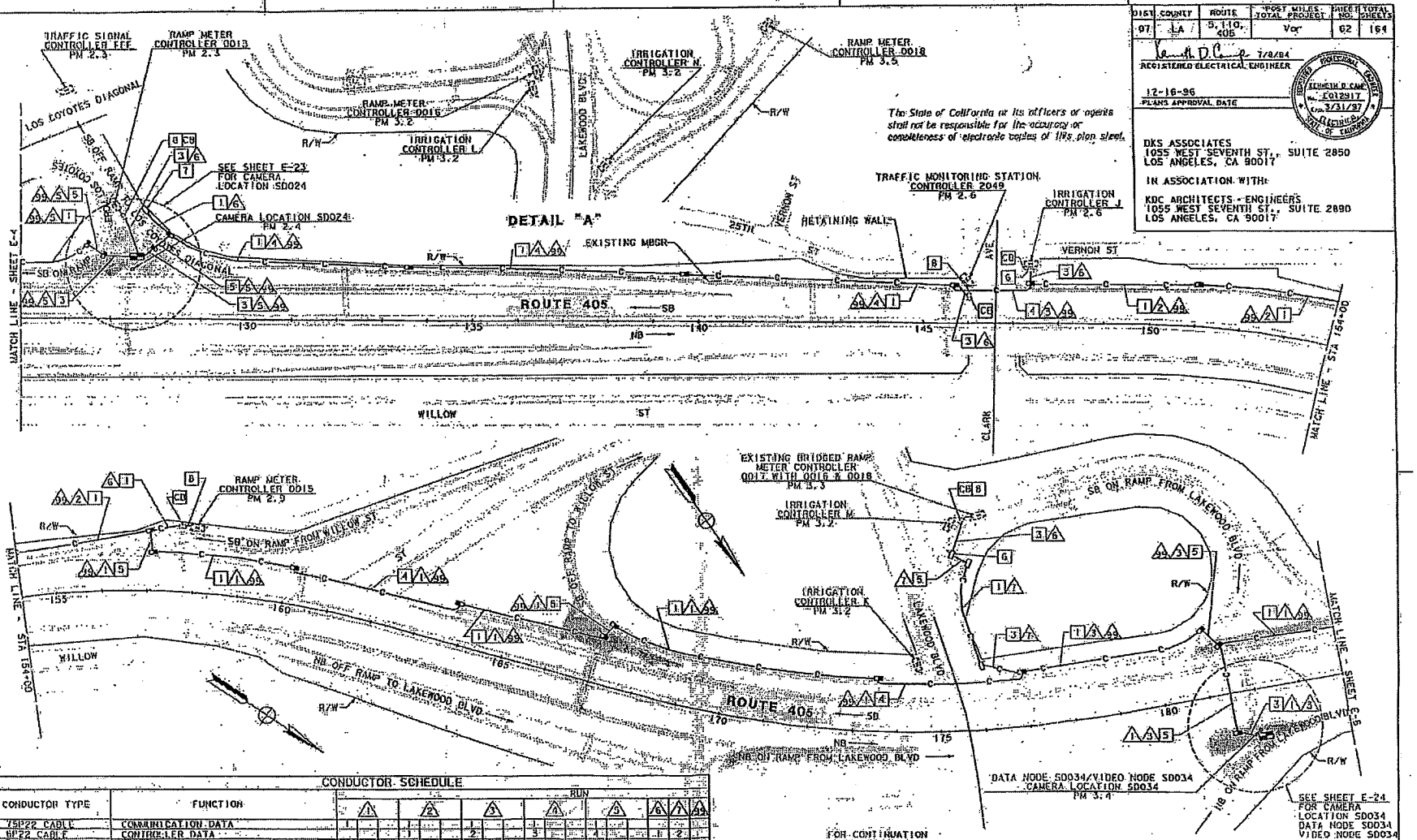
12-16-96
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KENNETH D. CAMP No. E012917 Exp. 3/31/97 ELECTRICAL STATE OF CALIFORNIA

DKS ASSOCIATES
1055 WEST SEVENTH ST., SUITE 2850
LOS ANGELES, CA 90017

IN ASSOCIATION WITH:

KDC ARCHITECTS - ENGINEERS
1055 WEST SEVENTH ST., SUITE 2890
LOS ANGELES, CA 90017



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CONDUCTOR SCHEDULE

CONDUCTOR TYPE	FUNCTION	RUN 1		RUN 2		RUN 3		RUN 4		RUN 5		RUN 6	RUN 7	RUN 99
75P22 CABLE	COMMUNICATION DATA	1		1		1		1		1				
6P22 CABLE	CONTROLLER DATA			1		2		3		4		1	2	
72SMFO	DATA/VIDEO NODE TO HUB		1		1		1		1		1			
12SMFO	CCTV CAMERA TO VIDEO DISTRIBUTION		1		1		1		1		1			
	INNERDUCT		1/4" 1/4"		1/4" 1/4"		1/4" 1/4"		1/4" 1/4"		1/4" 1/4"			
	CONDUIT SIZE		4"		4"		4"		4"		4"	2"	2"	4"

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. SEE SHEET E-1 FOR LEGEND AND PROJECT NOTES.

CCTV AND COMMUNICATION SYSTEM ROUTING

SCALE: 1" = 100'

E-5

CALCULATED/DESIGNED BY	DATE	REVISED BY	DESIGN OVERSIGHT
DP	7/94		
CHECKED BY	RL	7/94	DATE REVISED

PAT SULLIVAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

CU 07396 | EA 120821

DIST	COUNTY	ROUTE	MILEPOST TOTAL PROJECT	SHEET TOTAL NO.	SHEETS
07	LA	710	15.1/29.8	599	756

4-30-06
REGISTERED ELECTRICAL ENGINEER

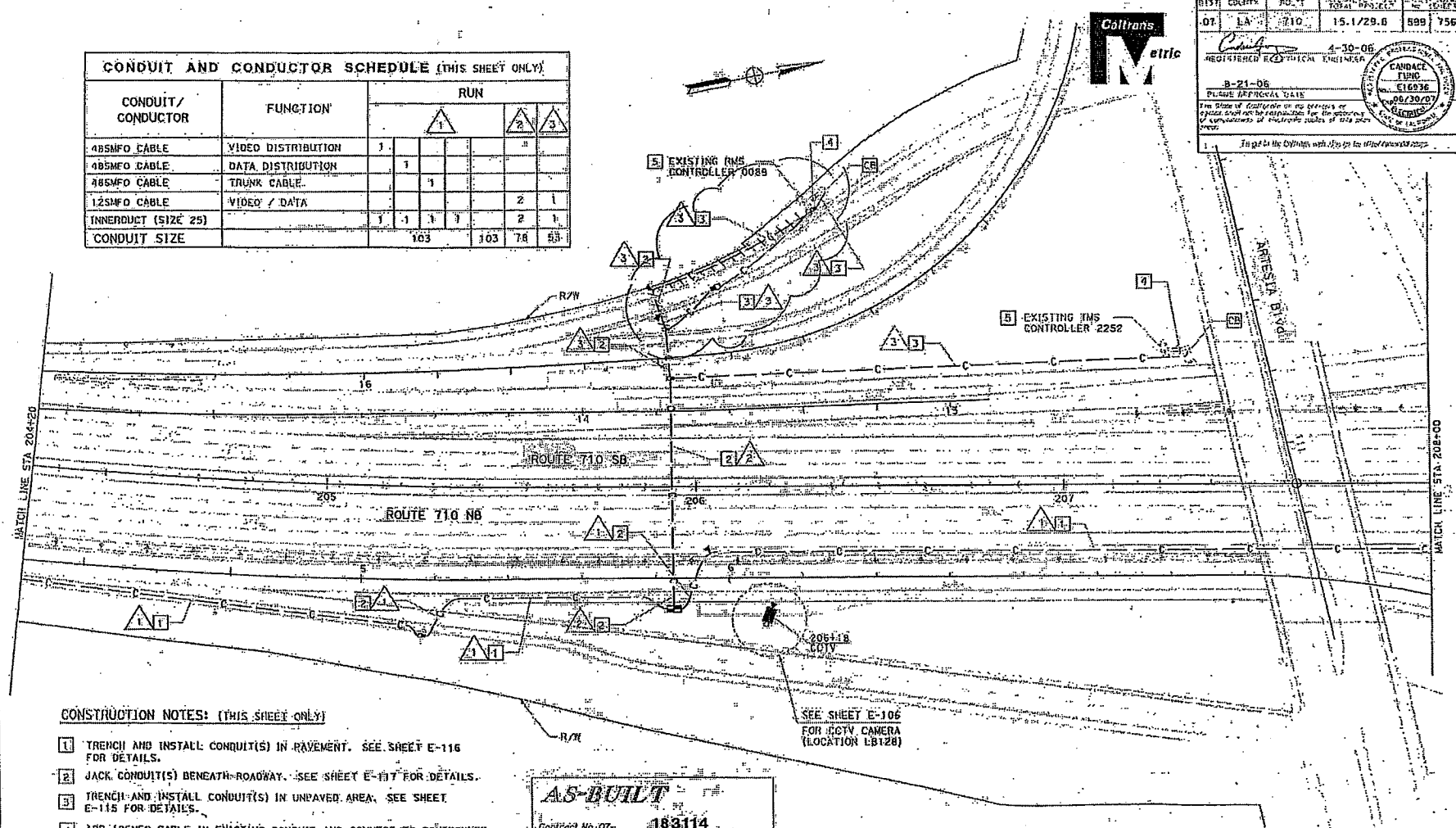
8-21-06
PLANS APPROVAL DATE

CANDACE FUNG
E16936
06/30/07
ELECTRICAL

Caltrans Metric

CONDUIT AND CONDUCTOR SCHEDULE (THIS SHEET ONLY)

CONDUIT/ CONDUCTOR	FUNCTION	RUN 1					RUN 2	RUN 3
48SMFO CABLE	VIDEO DISTRIBUTION	1					1	
48SMFO CABLE	DATA DISTRIBUTION		1					
48SMFO CABLE	TRUNK CABLE			1				
12SMFO CABLE	VIDEO / DATA						2	1
INNERDUCT (SIZE 25)		1	1	1	1		2	1
CONDUIT SIZE		103				103	78	53



CONSTRUCTION NOTES: (THIS SHEET ONLY)

1. TRENCH AND INSTALL CONDUIT(S) IN PAVEMENT. SEE SHEET E-116 FOR DETAILS.
2. JACK CONDUIT(S) BENEATH ROADWAY. SEE SHEET E-117 FOR DETAILS.
3. TRENCH AND INSTALL CONDUIT(S) IN UNPAVED AREA. SEE SHEET E-115 FOR DETAILS.
4. ADD 12SMFO CABLE IN EXISTING CONDUIT AND CONNECT TO CONTROLLER.
5. INSTALL FOTM AND FDU IN CONTROLLER CABINET. SEE SHEET E-122 FOR DETAILS.

AS-BUILT
Contract No. 07- 183114
Resident Engineer: N. MOUSSA
Completion Date: 06/29/11

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY. FOR LEGEND AND GENERAL NOTES SEE SHEET E-67.

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

COMMUNICATION SYSTEM ROUTING

SCALE 1:500

E-83

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ITS DEVELOPMENT

PROJECT ENGINEER: CANDACE FUNG
CALCULATED/DESIGNED BY: CANDACE FUNG
CHECKED BY: JACQUELINE TAN
DATE REVISED BY: 5/05
DATE REVISED: 5/05

RELATIVE BORDER SCALE IS IN MILLIMETERS

CU 07388 | EA 183111