

Memorandum

TAB 70

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: August 10-11, 2011

Reference No.: 2.4c.

REPLACEMENT ITEM
Action Item

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: Brent L. Green
Chief
Division of Right of Way
and Land Surveys

Subject: **AIRSPACE LEASE – CONCEPTUAL APPROVAL OF LEASE TERMS – SACRAMENTO MUNICIPAL UTILITIES DISTRICT (SMUD)**

RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) conceptually approve lease terms of two airspace leases between the Department and Sacramento Municipal Utilities District (SMUD) in support of solar development within operating right of way.

SUMMARY:

The two airspace parcels targeted for solar panel development are located within the Highway 50 corridor in Sacramento County. See attached Exhibits B & C for location and airspace parcel mapping. The Commission approved Direct Negotiations in July 2010 and granted a six-month extension to subject negotiations at the June 2011 Commission meeting.

SMUD, in conjunction with a private partner that will be selected via a competitive bid process, proposes to develop, finance, construct, own, operate and maintain solar photovoltaic (PV) facilities within the Highway 50 corridor in the Sacramento area. This proposal serves as a demonstration project for SMUD to establish the feasibility and best method of placing utility-scale solar PV power installations on Department property. This is a design-build project. This project serves as an evaluative pilot for the Department for installation of future solar PV facilities in operating right of way throughout the State.

Direct Negotiations have resulted in the following lease terms and conditions applicable to both parcels:

Use:	Solar Panel Power Generation
Term:	25 years
Negotiated Rent:	\$4,500 combined minimum annual base rent for both parcels or a 6 percent return on gross income, whichever is greater. Construction phase lease rate of \$50 per month, consistent with industry practice.
Escalations:	None.

Lease Terms and Conditions Discussion:

Term: The term of subject lease is set for 25 years because this is the normal economic life for subject facilities.

Negotiated Rent: Comparable sales data provided by Bender Rosenthal, Incorporated, a respected California based appraisal firm, demonstrate that the current market lease rates can vary between 5 to 7 percent of gross income for lease of land for solar power generation purposes. The Department negotiated a 6 percent mid-range of this comparable sales income percentage number. In addition, the Department negotiated a provision for application of a nominal base rent during the construction period because no income will be generated during this time.

Reevaluation: The Department proposes both the Department (Lessor) and SMUD (Tenant) have the option to request reevaluation at the one-year, 10-year, 16-year and 21-year anniversaries of the solar panel commercial operation. This would be a check and balance to ensure fair market rent is applied throughout the lease term.

Escalations: A Consumer Price Index adjustment was not included in the lease term provisions because attracting capital investment from the private sector during this downward economic cycle is seen as a potential problem for construction of this proposed solar facility. Future cost variables relative to this project may make construction financing either unavailable or prohibitively expensive. Given that the lease rate is based on a percentage of gross revenue, inflationary adjustments are already taken into account in the lease rate.

Liability for Cost of Removal (Vacate Clauses):

- a) Facility-caused Safety Issues: Provisions for safety hazard elimination, mitigation, and solar panel facility removal are included in the lease terms as methods to respond to safety issues, dependent on safety issue severity. Tenant will pay for costs of solar panel facility removal and there will be no Department liability or compensation for lost revenue if removal is required. A final determination of the need to remove the improvements will be made only after allowing Tenant a reasonable period to develop and propose acceptable mitigation.
- b) Transportation Issues: In the event the Department determines within the first 20 years of the lease term that the highway facilities require enhancement, maintenance or safety improvements other than those that are Facility-caused, the Department will be responsible for costs to remove the improvements. The Department will not pay a penalty or compensation for lost revenue. Tenant shall be responsible for the entire cost of removal and disposal of hazardous materials introduced to the premises by Tenant.

In addition to the specific issues discussed above relative to lease terms, negotiated lease terms also dictate Tenant's compliance with Lessor's siting criteria for protection of the traveling public and the operating facility. Subject siting criteria is included (Exhibit A) to the negotiated lease terms.

Attachments:

Exhibit A: Siting Criteria

Exhibit B: Location Maps

Exhibit C: Airspace Parcel Maps

Exhibit A

Site Criteria for SMUD's Solar Project on Highway 50

I. General

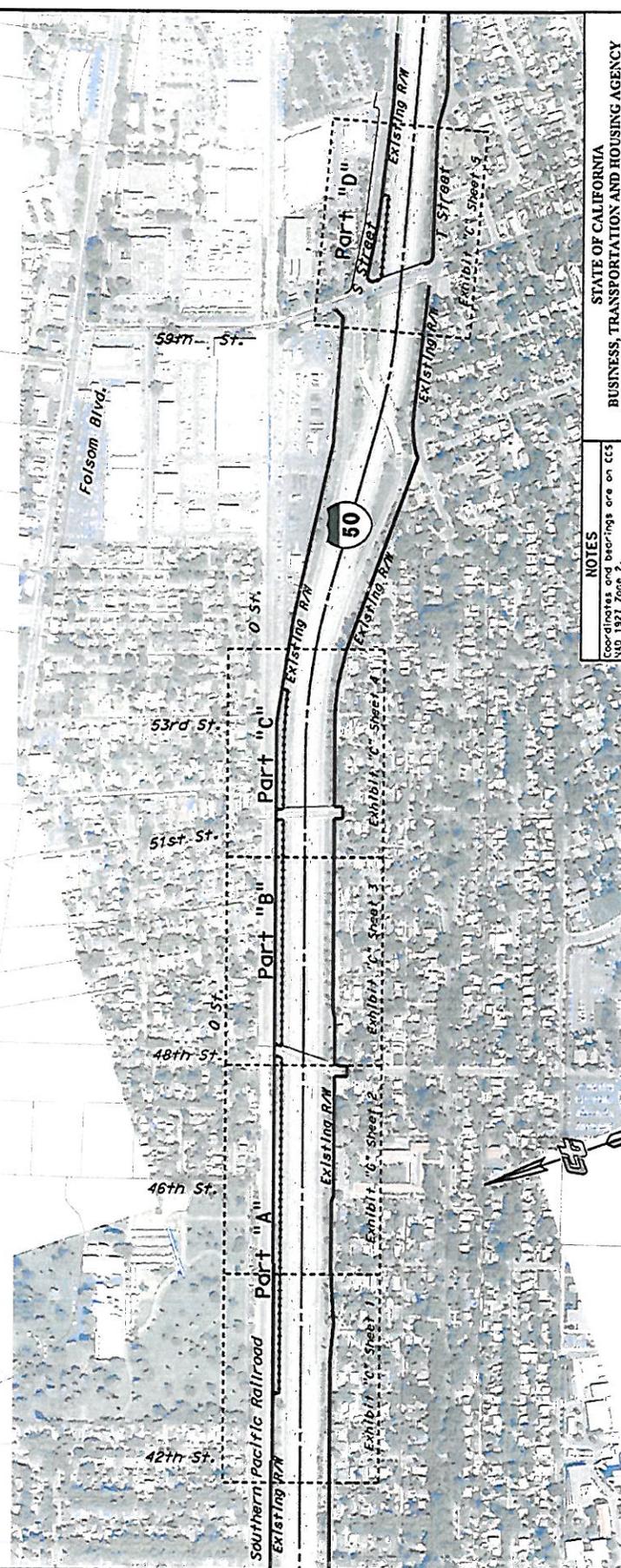
1. The locations for the SMUD installations were negotiated between Caltrans and SMUD in late 2008 and early 2009. The locations were conceptually agreed to in April 2009 for further study.
2. There are no adverse affects to highway safety and traffic operations anticipated.
3. The present use and future plans for these locations on Highway 50 have been reviewed. No interference to facility operations is anticipated by the construction of the proposed SMUD Solar project.
4. An endorsement letter from the City of Rancho Cordova and the City of Sacramento will be used to document local jurisdictional support of the concept of the solar installation. An agreement was reached between Jody Jones and Terry Abbott on March 30, 2011 to accept a letter of support from the locals instead of a resolution for the proposed SMUD project.
5. SMUD will return the highway right of way to a self sustainable condition at the end of the lease period.

II. Design and Placement Standards

1. SMUD's proposed solar installations meet all of the following requirements:
 - a. Provides a minimum clear recovery area of 52 feet or a minimum 8 foot vertical distance up-slope from the edge of travelled way.
 - b. Does not introduce any new guardrail or other shielding devices to reduce the minimum clear recovery area requirements.
 - c. Uses local roads or frontage roads for maintenance access from outside the access control limits
 - d. Will use best management practices to control potential erosion and minimize storm water pollution.
 - e. Is not being installed on a Scenic Highway/Scenic Byway.
 - f. Is not placed in the median.
 - g. Is not placed in any gore areas.
 - h. Designed to be self supporting and not affixed to highway structures or roadway fixtures (rails, barriers, signs, light standards, etc.)
 - i. Is not being placed on the outside of curved highway alignments.
 - j. Is not being placed inside a loop ramp or between a slip ramp and the through lanes of controlled access facilities.
 - k. Does not interfere with official traffic control devices or interfere with the operational right of way above the roadway.
 1. Will mitigate for the removal of existing trees.
2. SMUD's proposed solar installations will be developed during the detailed design phase to meet the following requirements:
 - a. Require low maintenance to minimize exposure risks to maintenance workers and others.
 - b. Maintain sight distance and visibility of highway signage.
 - c. Account for existing highway facilities and features (signs, drainage patterns).
 - d. Minimize effects to the design, construction, operation, maintenance, or stability of the highway facility.
 - e. Will not contain displays of any sort, advertising, decorative banners, or flags.
 - f. Minimize or avoid the use of area lighting. Some lighting may be necessary for security.

EXHIBIT B

NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.



STATE OF CALIFORNIA
BUSINESS, TRANSPORTATION AND HOUSING AGENCY
DEPARTMENT OF TRANSPORTATION

**RIGHT OF WAY
FREEWAY LEASE AGREEMENT
MAP NO. 03-SAC050-0027**

FOR PREVIOUS R/W INFORMATION SEE
MAP(S) R-3744, 4-R3744.1, R-3744.5N

FEET 0 187.5 375 750 1125

TO DESIGN	08/30/10	EA(0)195212	FAB1
DISTRICT	COUNTY ROUTE	SHEET PM	SHEET NO/TOTAL SHEETS
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NOTES

Coordinates and bearings are on CCS MD 1927 Zone 2.

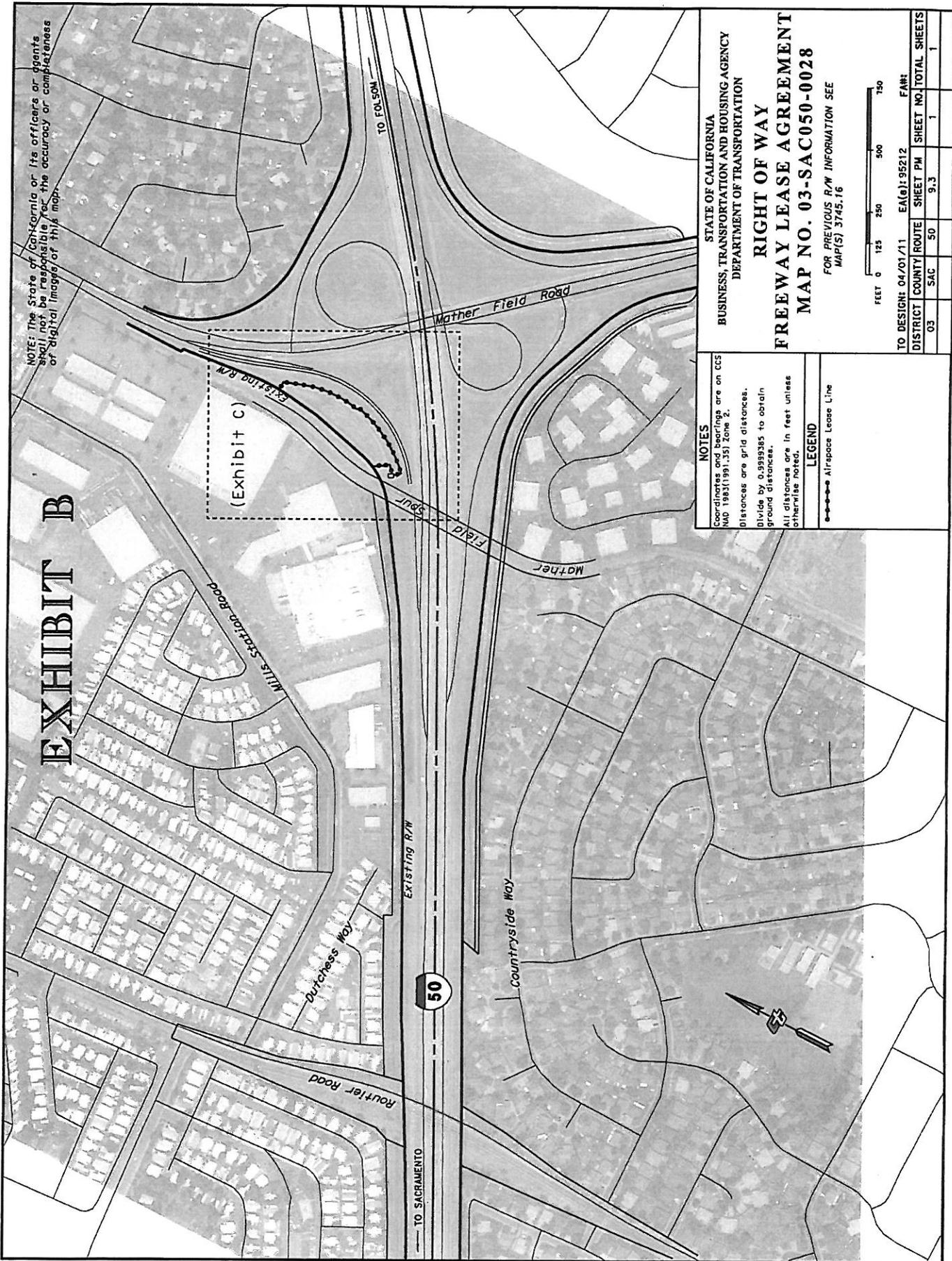
Distances are grid distances.
Divide by 0.9993285 to obtain ground distances.
All distances are in feet unless otherwise noted.

LEGEND

----- Airspace Lease Line

EXHIBIT B

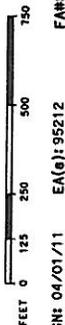
NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.



NOTES
 Coordinates and bearings are on CCS NAD 1983(1991, 2011) Zone 2.
 Distances are grid distances.
 Divide by 0.999385 to obtain ground distances.
 All distances are in feet unless otherwise noted.

LEGEND
 Airspace Lease Line

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY
FREeway LEASE AGREEMENT
MAP NO. 03-SAC050-0028
 FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) 5745.16



TO DESIGN: 04/01/11	EA(E): 95212	F&M:
DISTRICT: 03	COUNTY: 50	ROUTE: 9.3
SAC:	SHEET PM:	SHEET NO./TOTAL SHEETS:
		1 / 1

Exhibit B

EXHIBIT C

NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.

Southern Pacific Railroad

Existing R/W

S 71°02'39" E

POB

N 18°57'21" E

31.00'

320.00'

942.80'

622.80'

Part "A" - 55,050 Sq. Ft.

Part "A"

8' AREA - 12,870 Sq. Ft.

TO SACRAMENTO

50

TO RANCHO CORDOVA

Existing R/W



43rd St.

42nd St.

NOTES

Coordinates and bearings are on tcs
 114, 1993(602.00) Zone 2.
 Distances are grid distances.
 Divide by 0.999916 to obtain
 ground distances.
 All distances are in feet.

LEGEND

--- Airspace Lease Line
 POB Point of Beginning

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION

**RIGHT OF WAY
 FREEWAY LEASE AGREEMENT
 MAP NO. 03-SAC050-0027**

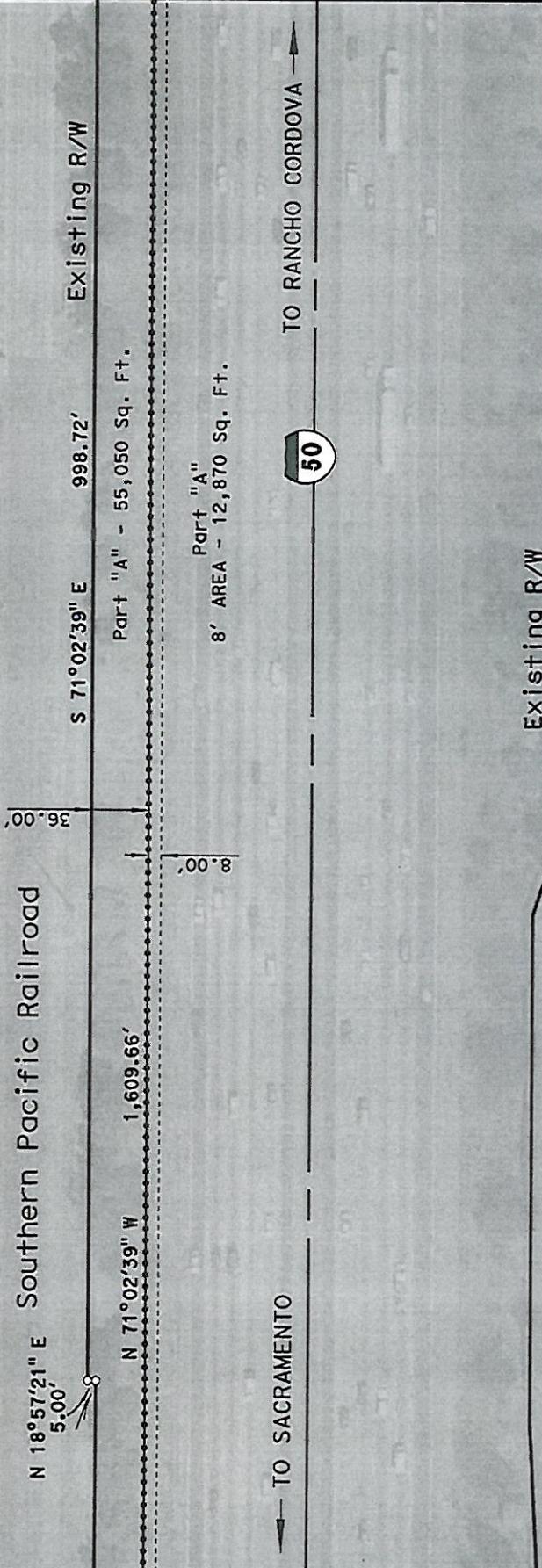
FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) R-3744.4



TO DESIGN: 03/21/11		EA(0):95212		FAB:	
DISTRICT	COUNTY ROUTE	SHEET PM	SHEET NO	TOTAL SHEETS	
03	SAC 50	1.2	1	5	

EXHIBIT C

NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.



TO SACRAMENTO



TO RANCHO CORDOVA

NOTES
 Coordinates and bearings are on CCS and 1983(2002.00) Zone 2. Distances are grid distances. Divide by 0.999916 to obtain ground distances. All distances are in feet.

LEGEND
 ——— All-rapese Lease Line
 ●—— Point of Beginning

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY
FREEWAY LEASE AGREEMENT
MAP NO. 03-SAC050-0027
 FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) R-3744.5

FEET 0 25 50 100 150

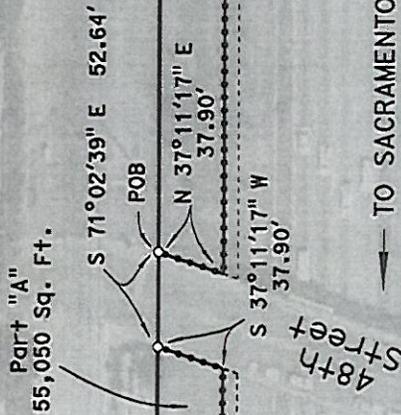
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DISTRICT 03	COUNTY ROUTE 50	SHEET PH 1.35
	SAC	SHEET NO. 2
		TOTAL SHEETS 5



46th St.

EXHIBIT C

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Southern Pacific Railroad

Existing R/W

S 71°02'39" E 1,077.10'

Part "B" - 39,020 Sq. Ft.

N 71°02'39" W 1,090.56'

Part "B"

8' AREA - 8,740 Sq. Ft.

TO SACRAMENTO

TO RANCHO CORDOVA



Existing R/W

Discovery Way

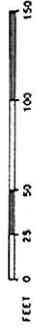
NOTES
Coordinates and bearings are on CCS NAD 1983(2011) Zone 2. Distances are grid distances. Divide by 0.999916 to obtain ground distances. All distances are in feet.

LEGEND
--- Airspace Lease Line
--- Point of Beginning

STATE OF CALIFORNIA
BUSINESS, TRANSPORTATION AND HOUSING AGENCY
DEPARTMENT OF TRANSPORTATION

**RIGHT OF WAY
FREEWAY LEASE AGREEMENT
MAP NO. 03-SAC050-0027**

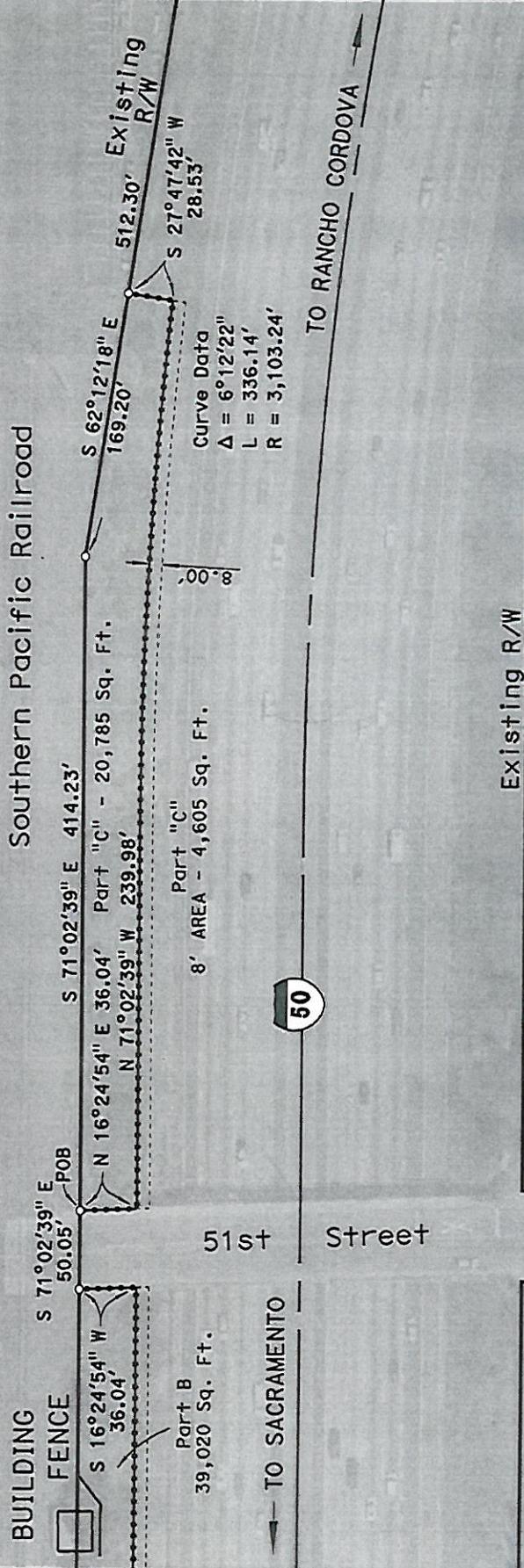
FOR PREVIOUS R/W INFORMATION SEE
MAP(S) R-3744.5, 3744.6



TO DESIGN: 03/21/11		EA(S): 95212		FAB:	
DISTRICT	COUNTY/ROUTE	SHEET PM	SHEET NO.	TOTAL SHEETS	
03	SAC 50	1.55	3	5	

EXHIBIT C

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NOTES
 Coordinates and bearings are on CGS NAD 1983(2002.00) Zone 2. Distances are grid distances. Divide by 0.999376 to obtain ground distances. All distances are in feet.

LEGEND
 - - - - - Airspace Lease Line
 POB Point of Beginning

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION

**RIGHT OF WAY
 FREeway LEASE AGREEMENT
 MAP NO. 03-SAC050-0027**

FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) R-3744.7

TO DESIGN: 03/21/11 EA(6): 95212 FANT
 DISTRICT COUNTY ROUTE SHEET PM SHEET NO. TOTAL SHEETS
 03 50 1.7 4 5

FEET 0 25 50 100 150

NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.

EXHIBIT C

Book 39 SURVEYS Page 37
 -AND-
 Book 71-06-11
 O.R.
 Page 369

Curve Data (A)
 $\Delta = 121^\circ 20' 11''$
 $L = 52.94'$
 $R = 25.00'$

S $59^\circ 38' 13''$ E 239.93'
 (N $59^\circ 04' 26''$ W 239.83')
 (BK39 Surveys Pg37)

Curve Data
 $\Delta = 04^\circ 32' 45''$
 $L = 160.98'$
 $R = 2,028.95'$

S Street

S $59^\circ 38' 13''$ E 173.01'
 Part "D" - 15,230 Sq. Ft.
 Part "D"
 8' AREA - 3,260 Sq. Ft.

S $64^\circ 10' 58''$ E 458.34'
 S $25^\circ 49' 02''$ W 21.26'

Existing R/W

TO SACRAMENTO

50

TO RANCHO CORDOVA

Existing R/W

T Street

NOTES
 Coordinates and bearings are on CCS
 (NAD 1983/2002.00) Zone 2.
 Distances are grid distances.
 Divide by 0.993316 to obtain
 ground distances.
 All distances are in feet.

LEGEND

--- Airspace Lease Line
 POB Point of Beginning

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY
FREEMAN LEASE AGREEMENT
 MAP NO. 03-SAC050-0027
 FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) R-3744,SN



TO DESIGN: 03/21/11	EA(0): 95212	FAR:
DISTRICT: 03	COUNTY: SAC	ROUTE: 50
SHEET: PM	SHEET: 2.2	TOTAL SHEETS: 5

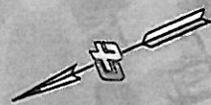
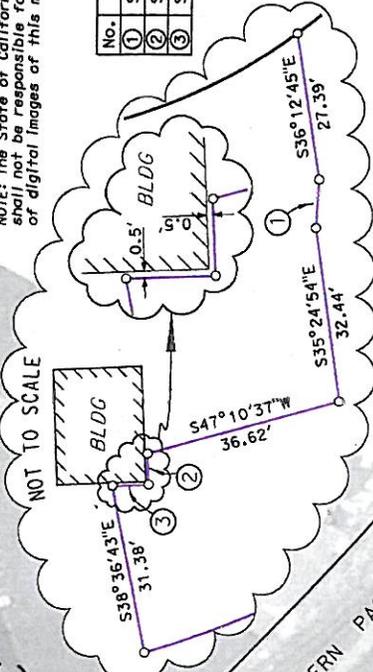


EXHIBIT C

NOTE: The State of California or its officers or agents shall not be responsible for the accuracy or completeness of digital images of this map.

LINE TABLE

NO.	BEARING	DISTANCE
①	S 23° 50' 28" E	8.99'
②	S 30° 02' 34" E	5.72'
③	S 60° 33' 11" W	6.65'



51,480 Sq Ft
 10' Road 4,893 Sq Ft
 Total 56,373 Sq Ft

Existing R/W

SOUTHERN PACIFIC RAILROAD

MATHER FIELD ROAD WB ONRAMP

MATHER FIELD ROAD

CURVE TABLE

No.	R	Δ	L
Ⓐ	299.98'	11° 56' 01"	62.48'
Ⓑ	744.97'	03° 48' 34"	49.53'

50

NOTES

Coordinates and bearings are on CCS NAD 1983 (1995) datum. Distances are grid distances. Divide by 0.9999385 to obtain ground distances. All distances are in feet unless otherwise noted.

LEGEND

— Airspace Lease Line
 POB Point of Beginning

STATE OF CALIFORNIA
 BUSINESS, TRANSPORTATION AND HOUSING AGENCY
 DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY
 FREEWAY LEASE AGREEMENT
 MAP NO. 03-SAC050-0028

FOR PREVIOUS R/W INFORMATION SEE
 MAP(S) R-3745.16



TO DESIGN:	04/01/11	EA(6):	95212	FA#:							
DISTRICT:	03	COUNTY:	SAC	ROUTE:	50	SHEET:	9.3	PM:	2	TOTAL SHEETS:	2