City of Santa Barbara
California

PLANNING COMMISSION
STAFF REPORT

REPORT DATE: January 9, 2006

AGENDA DATE: January 12, 2006

SUBJECT: Project Selection and Prioritization Criteria for California Public Utilities Commission Rule 20A Utility Undergrounding Projects

TO: Planning Commission

FROM: Public Works, Engineering Division, (805) 564-5372
Homer F. Smith II, Principal Engineer

Executive Summary

On September 12, 2005, City Council and the Planning Commission held a work session on utility undergrounding. The work session covered definitions applicable to undergrounding, provided a history of undergrounding that has been accomplished in Santa Barbara, discussed undergrounding issues, explained the undergrounding process including both rate payer funded and privately funded projects, and provided recommendations and next steps for undergrounding.

The work session outcome relating to Rule 20A projects (see below) was for the Planning Commission to serve as the Underground Advisory Committee and recommend priorities for projects based on defined criteria.

The California Public Utilities Commission (CPUC) Rule 20 sets the policies and procedures for conversion of overhead power lines to underground. Under Rule 20, there are three types of undergrounding:

- Rule 20A, projects financed by utility rate money;
- Rule 20B, projects financed by private groups; and
- Rule 20C, projects financed by individuals

Today's presentation relates to Rule 20A projects only. In Santa Barbara, these projects are financed primarily by Southern California Edison (SCE). Portions of Rule 20A projects may require funds from municipal or residential/commercial sources, unless a municipality authorizes use of SCE funds for the entire project in advance. City funds are used to support staff costs, and are funded within the new SCE ½% Franchise surcharge designated for Undergrounding.

This presentation reiterates the CPUC requirements for Rule 20A projects, recommends project development and prioritization methods, identifies potential projects and costs,

characterizes how these projects conform to various City planning documents, identifies pros and cons for each project, and presents a prioritization matrix for use by the Planning Commission.

Two potential projects are evaluated using the matrix as an example. If accepted by the Planning Commission, this methodology will be the basis for the prioritization process. At a subsequent session, the Planning Commission will prioritize the projects into a list, with the intent that the top priority project will be submitted to Council for inclusion in the FY 2007 Capital Improvement Program (CIP). Upon Council approval of the CIP as part of the FY 2007 budget, and subsequent passing of a Resolution creating an Underground Utility District for the project area, SCE will commence design and construction of the project.

Discussion

Rule 20A Qualification Criteria

CPUC Rule 20A details four criteria that potential Rule 20A projects must meet; however, only one criterion needs to be met. Since SCE rate-payer funds are used to fund the projects, SCE determines if a proposed project meets the criterion:

- Location is an arterial or major collector road;
- Location has an unusually heavy concentration of overhead lines;
- Location is heavily traveled; and/or
- Location is a civic, recreational or scenic area

Since Rule 20A is a recurring source of funding, it provides the opportunity to accomplish undergrounding projects meeting the criteria throughout the City. However, undergrounding is very expensive. As discussed below, the cost for undergrounding above average overhead lines in commercial areas equates to approximately $1.5 million per typical City block (510 lineal feet), and residential blocks with lesser overhead lines cost approximately $250,000 per residential tract block. Costs for some Santa Barbara hillside roads with limited right of way will likely cost significantly more. Residential areas that meet the scenic Rule 20A criteria would likely be a low priority unless ancillary aspects discussed below also exist.

Additionally, SCE reports that materials costs for undergrounding (concrete, conduit, fuel costs for excavators, and underground structures for transformers) increased 20-30% in 2005. Moreover, SCE also reports that labor resources are in short supply and some of their current undergrounding Rule 20A projects are taking longer periods of time to accomplish than previously experienced.

Funding

Rule 20A projects are paid for by all SCE rate payers. Cities and counties receive annual

allocations (based on a calendar year), although the actual accounts are held in escrow by SCE. Santa Barbara's current annual allocation is $596,000, and the current balance in the City's account is $2,200,000. This includes the just allocated amount for January 2006. The method to determine how much funding a locale receives is based on a formula that compares above ground facilities to underground facilities. The more a locale undergrounds, the less they receive in future allocations.

SCE reports that the time required to accomplish a Rule 20A project is 3-4 years. This includes project design, coordination with the other utilities (telephone and cable), construction and connection to structures, and subsequent removal of the overhead system. The debit from the account to pay for the project is at completion of the project.

Typically, SCE extends the underground "lateral" 100 feet onto private property, and the municipality or the property owner is responsible for completing the remaining system (if any) and the conversion of the electrical panel from overhead to underground. However, there is an alternative. SCE recommends that municipalities, when they pass the resolution creating a utility underground district, also include the requirement for SCE to extend the lateral from the street to the structure's electrical panel. There have been instances wherein a residence or commercial facility not promptly making the conversion has extended removal of the overhead system for several years beyond projected completion when this requirement is not included. Staff will recommend this approach to City Council. This means there will be no cost to parcel owners.

When a city passes a resolution creating a utility underground district, that resolution, by definition, requires removal of all overhead facilities, and precludes further construction of new overhead facilities. Telephone and cable companies' facilities are required by ordinance to be undergrounded at their own cost. Typically, they place their undergrounded lines in the same trench used by SCE.

SCE also permits municipalities to mortgage up to five years of allocations. There are benefits associated with mortgaging, in that it affords the opportunity to accomplish larger cost projects. This can maximize the use of current dollars and offset future construction cost inflation. However, the negative side of mortgaging is that there are extended periods of time between projects. For example, with the City's current balance of $2.2 million, a five year mortgage would increase the funds allowable by approximately another $3 million (5 years X $596,000). Thus, the City could accomplish a $5.2 million project, and staff recommends that this approach be used for the FY 2007 Capital Project.

SCE's recommended approach is to accomplish a $2 – 2.5 million project every 2-3 years. This approach would permit four $2 million projects to be accomplished in the same time frame that the two mortgaged projects were completed. However, inflation will reduce the limits of these projects in the later years, and the projects will also be subject to individual construction mobilization costs and also reduced is scope to account for this cost. As shown

in Exhibit A, this approach accomplishes nearly the same dollar value as two mortgaged projects, and permits two additional areas of the City to have incremental portions of very dense overhead lines removed. As previously discussed, staff does not recommend this approach.

Project Development and Prioritization Strategy

Applying the Rule 20A criteria provides the opportunity for identifying numerous City streets that meet the criteria. While only one of the criteria needs to be met, SCE reports that commercial areas with heavy overhead line concentrations generally are favored since undergrounding results in a visually enhanced shopping area and increased economic activity.

However, for private development projects that have undergrounding as a condition of approval, such as the Cottage Hospital modernization, Rule 20A could effectively extend the undergrounding on adjacent roads, if they are major collector roads and/or are heavily traveled. For example, the daily traffic density around Cottage Hospital and the adjacent clinics and medical offices should meet the SCE criteria.

Staff has conducted a tour of the City with the SCE Regional Manager for Rule 20A projects. Streets classified by SCE as fully meeting the Rule 20A criteria and very heavily impacted with overhead lines were Mission Street and Cliff Drive. However, the rough cost provided by SCE to underground of these 2 streets in the developed areas is $12-14 million each. This cost, which is refined by SCE during project design, requires that streets such as these two be split into increments to match existing funds available. As discussed below, Mission Street would require two increments to provide projects in the $5 million maximum mortgage range, and Cliff Drive would require three increments. From a timing viewpoint, a street such as Mission Street would each require approximately eight to ten years to accomplish the entire project, using the maximum mortgaging concept and providing no other projects were undertaken at the same time.

Another consideration for prioritization is determining the initial increment, whether it is a start point of the overhead utility, or a mid-point with more overhead concentration. As an example, using Cliff Drive, the initial increment could commence at the western end of the developed area at Flora Vista Road and proceed up to Mira Mesa Drive, or it could commence at the Mira Mesa Drive and proceed east to Loma Alta Drive. From a cost point of view, starting at a start point would require only one reinforced end pole, whereas a mid-point would require two reinforced end poles. However, starting at mid-point if there is more overhead density and greater traffic and pedestrian flows may lead to safer, more visible streets and intersections.

Other prioritization considerations include how undergrounding a proposed area also

enhances other City planning concepts and documents, such as the Circulation Element, Local Coastal Plan and Conservation Element Visual Resources Policies, Safe Routes to School, and pedestrian accessibility. Additionally, project selection in varying areas of the City allows projects to be completed in a balance throughout the City.

Exhibit B provides a Prioritization Matrix that facilitates compliance with the factors discussed above in comparing potential projects. Rather than use a subjective 1-5 ranking system, a more objective evaluation is proposed. In the following discussion, several projects are evaluated using this matrix to demonstrate its function. In the discussion below, potential projects and the merits of particular increments are characterized to allow the Planning Commission to determine priorities.

Potential Projects Costs and Prioritization Using the Matrix

As noted above, undergrounding is very expensive on major roads with heavy concentration of overhead lines. Staff has selected four potential streets/intersections that were viewed during the tour with SCE. The increments are based on using the maximum mortgaging concept. They are, in no particular order:

- Cliff Drive – a total of three increments (two increments from Flora Vista Road east to Loma Alta Drive, and a third increment from Flora Vista Road west to Las Positas Road when State Route 225 is relinquished to the City).
- Mission Street – two increments from Highway 101 east to Laguna Street.
- De la Vina Street – two increments from Alamar Avenue south to Mission Street.
- San Andres Street/Micheltorena Street intersection – one increment

Each street increment and the one intersection increment are in the maximum mortgage $3-5 million range. Exhibit C addresses each increment, citing pros and cons as to how that increment meets various City planning doctrine and public safety. Photos of the increments will be presented at Planning Commission.

From this list, the Planning Commission can create a "short list" of 5-6 potential projects for subsequent prioritization.

To demonstrate how the proposed Prioritization Matrix would function, two increments of Mission Street and the San Andres/Micheltorena Streets Intersection are evaluated in Exhibit D.

Project Prioritization for FY 2007 CIP

It is recommended that, at a Planning Commission meeting in the very near future, the Planning Commission prioritize these potential projects to a short list. The top priority project

will be included in the City CIP submitted to City Council for FY 2007 budget. Following Council approval of the project and adoption of a Resolution creating the Utility Underground District, the project will be submitted to SCE to commence project design and cost estimate.

Environmental Review

Undergrounding projects are categorically exempt from California Environmental Quality Agency (CEQA) review.

Exhibits:

A. Comparison of Maximum Mortgaging to Consistent Funding
B. Prioritization Matrix
C. Potential Projects and Pros and Cons
D. Example of Prioritization matrix use on several Potential Projects

UNDERGROUNDING PROJECT OPTIONS - MAXIMUM MORTGAGE

Project	CY 07	CY 08	CY 09	CY 10	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16	CY 17
A		$5.2									
B								$3.0			
C											
D											
Funds Available (millions)	$2.2	$2.8	$3.4	-$1.2	-$0.6	$0.0	$0.6	$1.2	$1.8	-$1.2	-$0.6

Notes:
Current funds FY06 = $1.6 million
Annual allocation = $0.6 million
Maximun mortgage is 5 years = $3 million
Projects charged at completion
Black outline around the next Six Year CIP

EXHIBIT A

UNDERGROUNDING PROJECT OPTIONS - CONSISTENT INCREMENTS

Project	CY 07	CY 08	CY 09	CY 10	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16
A		$2.0								
B				$2.0						
C						$2.0				
D								$2.0		
Funds Available (millions)	$2.2	$2.8	$3.4	$2.0	$2.6	$1.2	$1.8	$0.4	$1.0	-$0.4

Notes:
Current funds = $1.6 million
Annual allocation = $0.6 million
Projects charged at completion
Black outline around the next Six Year CIP

Exhibit A2

CPUC Rule 20A
Prioritization Matrix

	Criteria	Value (+\-\Neutral)	Remarks
A	CPUC Rule 20A	Yes or No only	
B	Municipal Code		
C	City Policies		
D	Cost		
E	Other Efficiency Balance		
	Total		

Scoring:

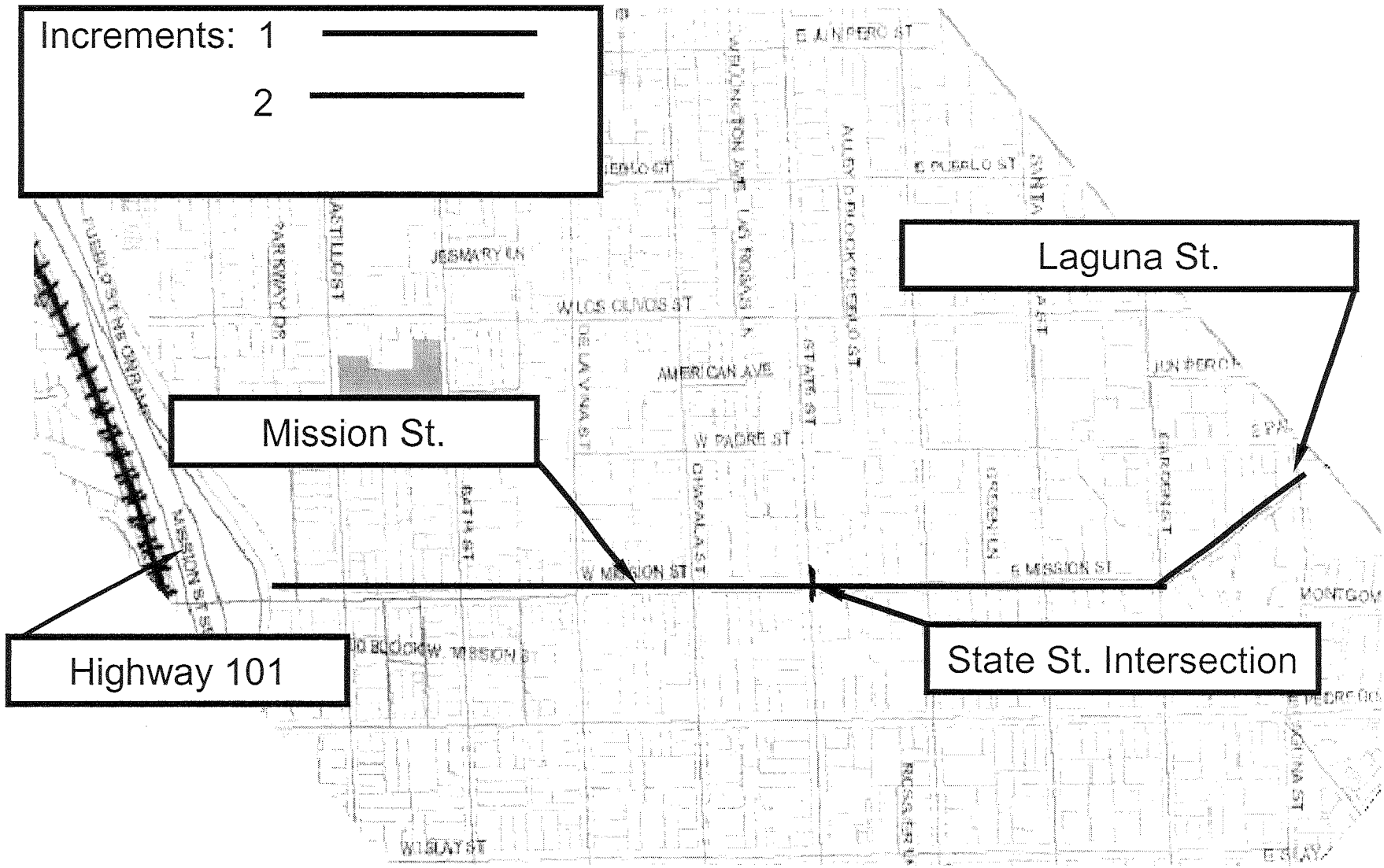
A - Criteria of CPUC Rule 20A must be "Yes" to continue as a project
B through E – Scored as "+", "-", or "Neutral"

- **Municipal Code applies to primarily City street extensions by the City, not land developments (e.g.: Garden St.)**
- **City Policies include compliance with documents such as the Circulation Element, and policy such as pedestrian safety, vehicle safety such as reducing visual congestion at busy intersections, etc. Can be multiple "+"**
- **Cost to underground versus the benefit derived, (e.g.: a higher cost project that provides greater end result can outscore a lower cost project; or starting at an end point yields same benefit as starting at a mid point and costs less)**
- **Other**
  - **Efficiency – includes added benefit, such as is there a capital improvement (such as Cottage Hospital undergrounding) that would increase the area undergrounded**
  - **Balance – addresses location of projects throughout the City**
- **Value can include more than one "+" if there are more than one criteria met (i.e.: City Policies could have two "+" if the project meets both a Circulation Element and pedestrian safety elements**
- **Projects with most "+" are highest priority**

Potential Rule 20A Projects

EXHIBIT C

Mission St. – Hwy 101 to Laguna St.



Mission St. (Hwy 101 to State St.)

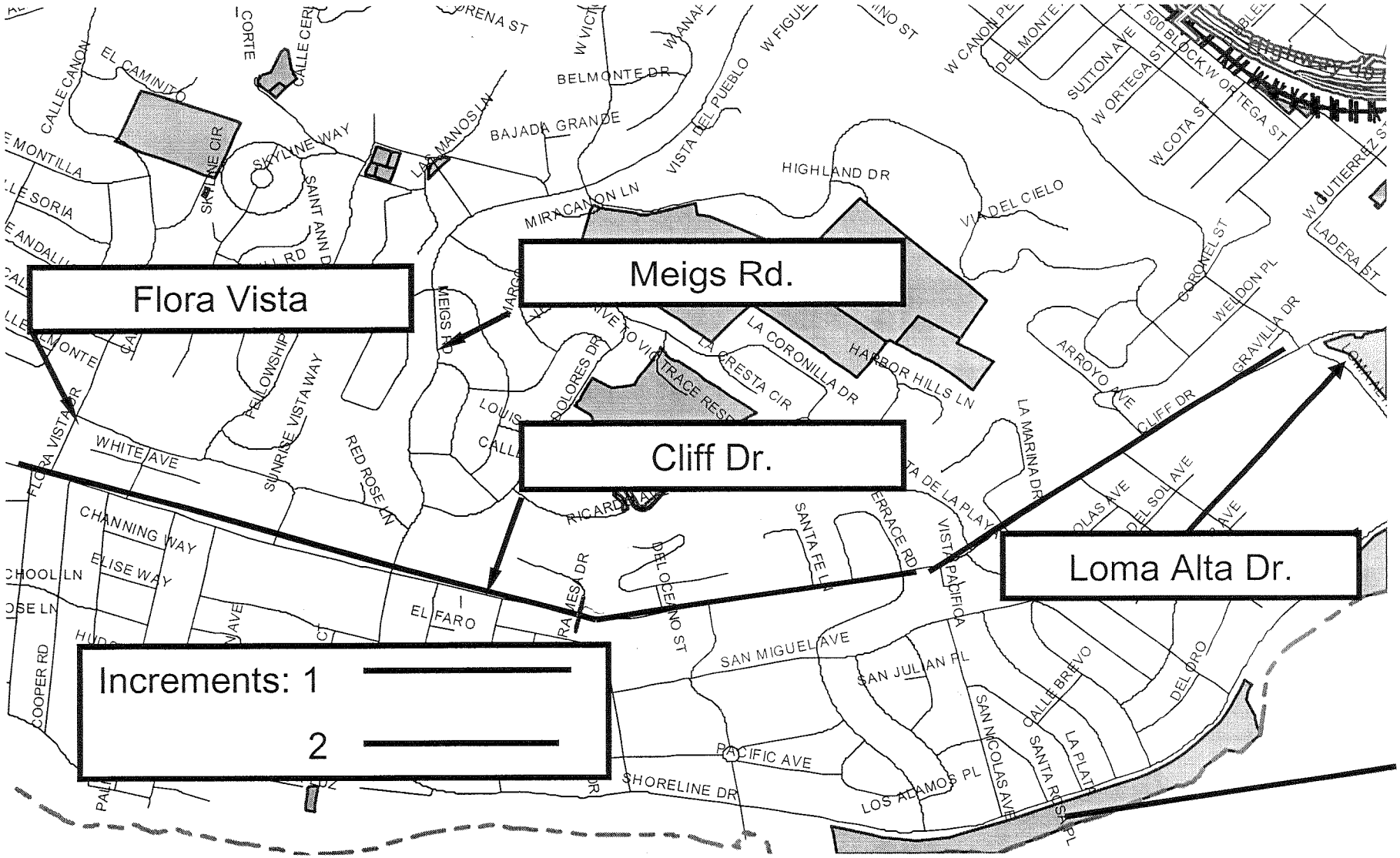
- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major artery
    - Heavy concentration of overhead lines
    - Main bus tourist route to Santa Barbara Mission
  - Commercial traffic frequently strike power poles
  - Start at Hwy. 101 requires only 1 end pole at State St.

- Cons
  - Single lane traffic with parking will require traffic impact during construction

Mission St. – State St. to Laguna St.

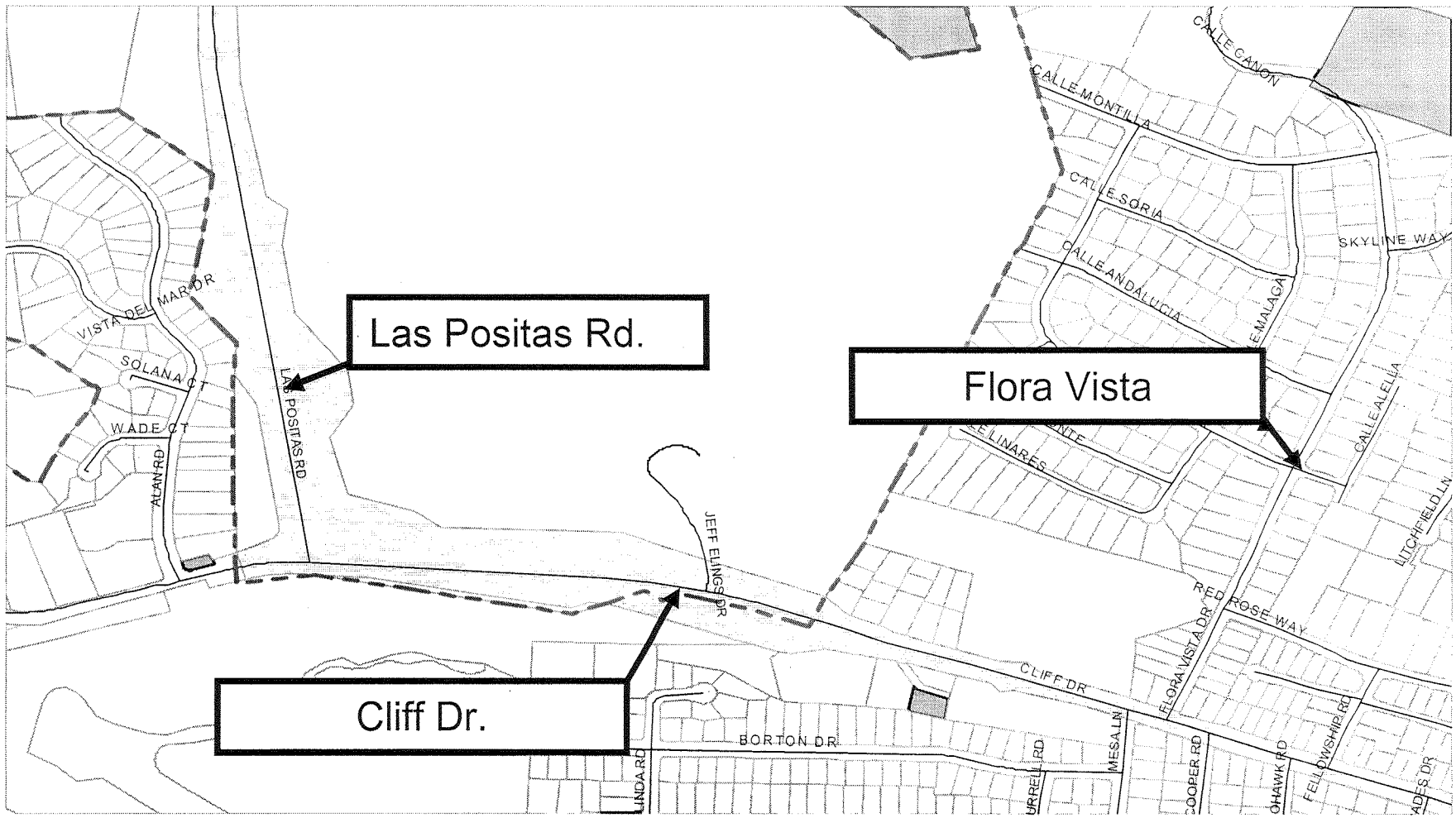
- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major artery
    - Heavy concentration of overhead lines
    - Main bus tourist route to Santa Barbara Mission
    - Commercial traffic frequently strike power poles
- Cons
  - Single lane traffic with parking will require traffic impact during construction
  - Will require 2 end poles

Cliff Dr. – Flora Vista to Loma Alta Dr.



Future Cliff Dr. Increment

Flora Vista Dr. to Las Positas Rd.



Cliff Dr (Flora Vista Dr. to Mira Mesa Dr.)

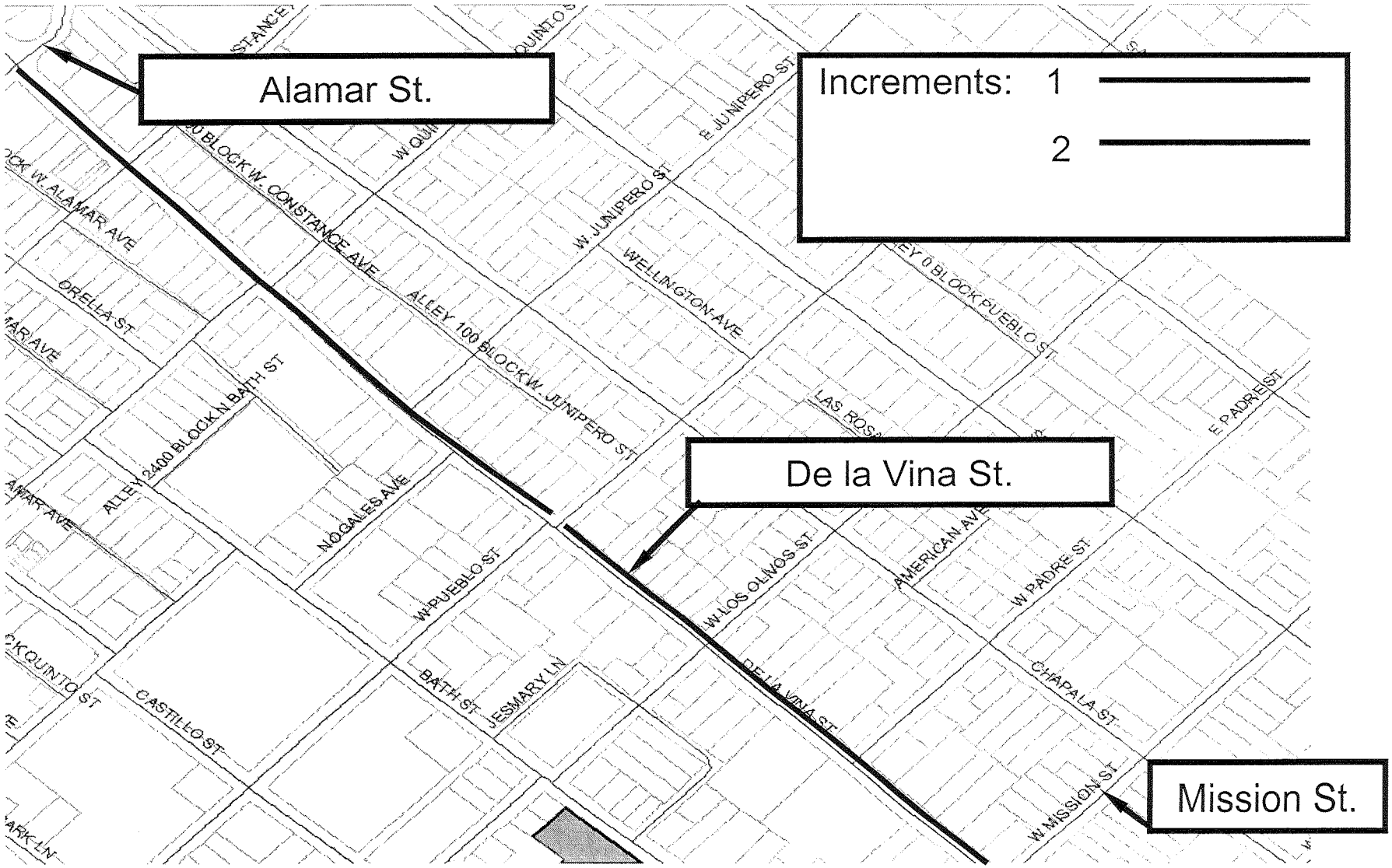
- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major artery
    - Heavy concentration of overhead lines
    - Scenic area
  - Improves pedestrian and vehicle safety – City Planning criteria
  - Improves ocean views for many residents
- Cons
  - Requires 2 end poles

Cliff Dr (Mira Mesa Dr. to Loma Alta Dr.)

- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major artery
    - Heavy concentration of overhead lines
    - Scenic area
  - Improves pedestrian and vehicle safety – City Planning criteria
  - Improves ocean views for many residents
  - Requires 1 end pole

- Cons
  - N/A

De la Vina St. – Alamar Ave. to Mission St.



De la Vina Street (Alamar St. to Pueblo St.)

- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major collector road
    - Heavy concentration of overhead lines – both sides of road
  - Improves pedestrian and vehicle safety – City Planning criteria
  - Requires 1 end pole

- Cons
  - Not as heavy vehicle traffic as other potential projects
  - Not a route for bus tourist traffic

De la Vina Street (Los Olivos St. to Mission St.)

- Pros
  - Meets Rule 20A criteria
    - Heavily traveled road – major collector road
    - Heavy concentration of overhead lines – both sides of road
  - Improves pedestrian and vehicle safety – City Planning criteria

- Cons
  - Requires 2 end poles
  - Not as heavy vehicle traffic as other potential projects
  - Not a route for bus tourist traffic

San Andres & Micheltorena Streets Intersection

San Andres and Micheltorena Sts. intersection

San Andres and Micheltorena Sts. intersection

- Pros
  - Meets Rule 20A criteria
    - Major collector roads
    - Heavily traveled
    - Heavy concentration of overhead lines
    - Key Westside hub intersection
- Cons
  - Intersection recently significantly upgraded, including pedestrian amenities

Examples of Prioritization Matrix

EXHIBIT D

CPUC Rule 20A Prioritization Matrix
Example: Mission St.: Hwy 101 to State St.

	Criteria	Value (+\-\Neutral)	Remarks
A	CPUC Rule 20A	Yes	
B	Municipal Code	Neutral	N/A
C	City Policies	+	Vehicle and pedestrian safety
D	Cost	-	Very high cost due to heavy concentration
E	Other Efficiency Balance	+	Balance projects throughout City in a commercial area
	Total	2 +/ 1 -	

CPUC Rule 20A Prioritization Matrix
Example: Mission St.: State St to Laguna St.

	Criteria	Value (+\-\Neutral)	Remarks
A	CPUC Rule 20A	Yes	
B	Municipal Code	Neutral	N/A
C	City Policies	+	Vehicle and pedestrian safety
D	Cost	-	Very high cost due to heavy concentration
E	Other Efficiency Balance	Neutral	Mostly residential and professional occupancy
	Total	1 +/ 1 -	

CPUC Rule 20A Prioritization Matrix
Example: San Andres and Micheltorena Intersection

	Criteria	Value (+\-\Neutral)	Remarks
A	CPUC Rule 20A	Yes	
B	Municipal Code	Neutral	
C	City Policies	Neutral	
D	Cost	+	Not an extensive area
E	Other Efficiency Balance	-	Intersection recently received a makeover
	Total	2 +/ 1 -	