

REDONDO 2000

- The Beautification of the South Santa Monica Bay
through Technology Transfer

By G.L. Pat Ervin



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EXECUTIVE SUMMARY

Redondo 2000 The Beautification of the South Santa Monica Bay through Technology Transfer is a proposal to utilize modern, aesthetically pleasing technology to replace electrical transmission lines and substations at the Southern California Edison (SCE) Redondo Generating Station. The area beautification will assist with the transformation of an older industrial park bordering the the power plant into a modern residential/ commercial complex.

SCE's Redondo Generating Station borders the beach cities of Redondo and Hermosa located in the South Santa Monica Bay 15 miles Southwest of Los Angeles. The SCE power plant is an ongoing profitable venture which has made major capital expenditures to successfully control noise and air pollution. Initially sited away from densely populated areas in 1948, the power plant is now situated in the midst of Hermosa Beach residential areas and Redondo Beach's King Harbor and Port Royal Marina. Although SCE has made significant efforts to beautify the front of the power plant, the balance of the plant blights the community.

Technology transfer refers to the utilization of compact, modern technology to underground or hide transmission lines and substations. During the construction of the power plant, the post war technology available was open air insulated switchyards and overhead transmission lines. Present day technology now permits undergrounding of transmission systems which are economically viable, more reliable, and safer to operate. SCE Corporation has satisfactory experience over the past decade with the new technologies.

Funding for the project is to be obtained by the commercial and residential development of 10,723,300 square feet of space reclaimed from 5680 foot SCE right of way. The SCE right of way is presently leased as a very low income producing plant nursery. In the event the value of the reclaimed land does not offset the project cost, redevelopment funds will be sought from the City of Redondo Beach.









SECTION 2
PRICING SUMMARY
69 kV & 220 kV REDONDO BEACH
BEAUTIFICATION PROJECT
BASE BID

- ◆ Disassemble Existing 69 kV Overhead System (0.7 Mile)
- ◆ Disassemble Existing 220 kV Overhead System (0.7 Mile)
- ◆ Disassemble Existing 69 kV Substation
- ◆ Disassemble Existing 220 kV Substation
- ◆ Design, Fabrication and Installation of the 69 kV Gas Insulated Substation (16 Breaker, Multi-ring Configuration)
- ◆ Design, Fabrication and Installation of the 220 kV Gas Insulated Substation (12 Breaker, 1 1/2 Configuration)
- ◆ Installation of 69 kV Solid Dielectric Cable (3 Circuits, 0.7 Mile)
- ◆ Installation of 220 kV Solid Dielectric Cable (4 Circuits, 0.7 Mile)

\$30,354,000

LEGEND

RESIDENTIAL DISTRICTS

	R-1 - 8.8 units/net acre; 5,000 sq. ft. lot minimum
	R-1-A - 17.5 units/net acre; 2,500 sq. ft. lot minimum
	R-2 - 14.6 units/net acre; 6,000 sq. ft. lot minimum
	R-3 - 17.5 units/net acre; 5,000 sq. ft. lot minimum
	RMD - 23.3 units/net acre; 5,000 sq. ft. lot minimum
	RH - 28.0 units/net acre

MIXED USE DISTRICTS (RESIDENTIAL AND COMMERCIAL)

	MU-1 - Commercial only; 0.5 floor area ratio Residential only; 35.0 units/net acre Mixed-Use; 1.5 floor area ratio*
	MU-2 - Commercial only; 0.7 floor area ratio Residential only; 35.0 units/net acre Mixed-Use; 1.5 floor area ratio*
	MU-3 - Commercial only; 1.0 floor area ratio Mixed-Use; 1.5 floor area ratio*

* The commercial component of integrated commercial and residential development in all mixed use districts is limited to a maximum 0.7 floor area ratio within the entire project, except in the CR zone where the commercial component is limited to a maximum of 1.0 floor area ratio

** A number of areas within the commercial districts have been designated as pedestrian overlay zones, subject to additional design standards (see General Plan Land Use Section text for the specific requirements)

COMMERCIAL DISTRICTS **

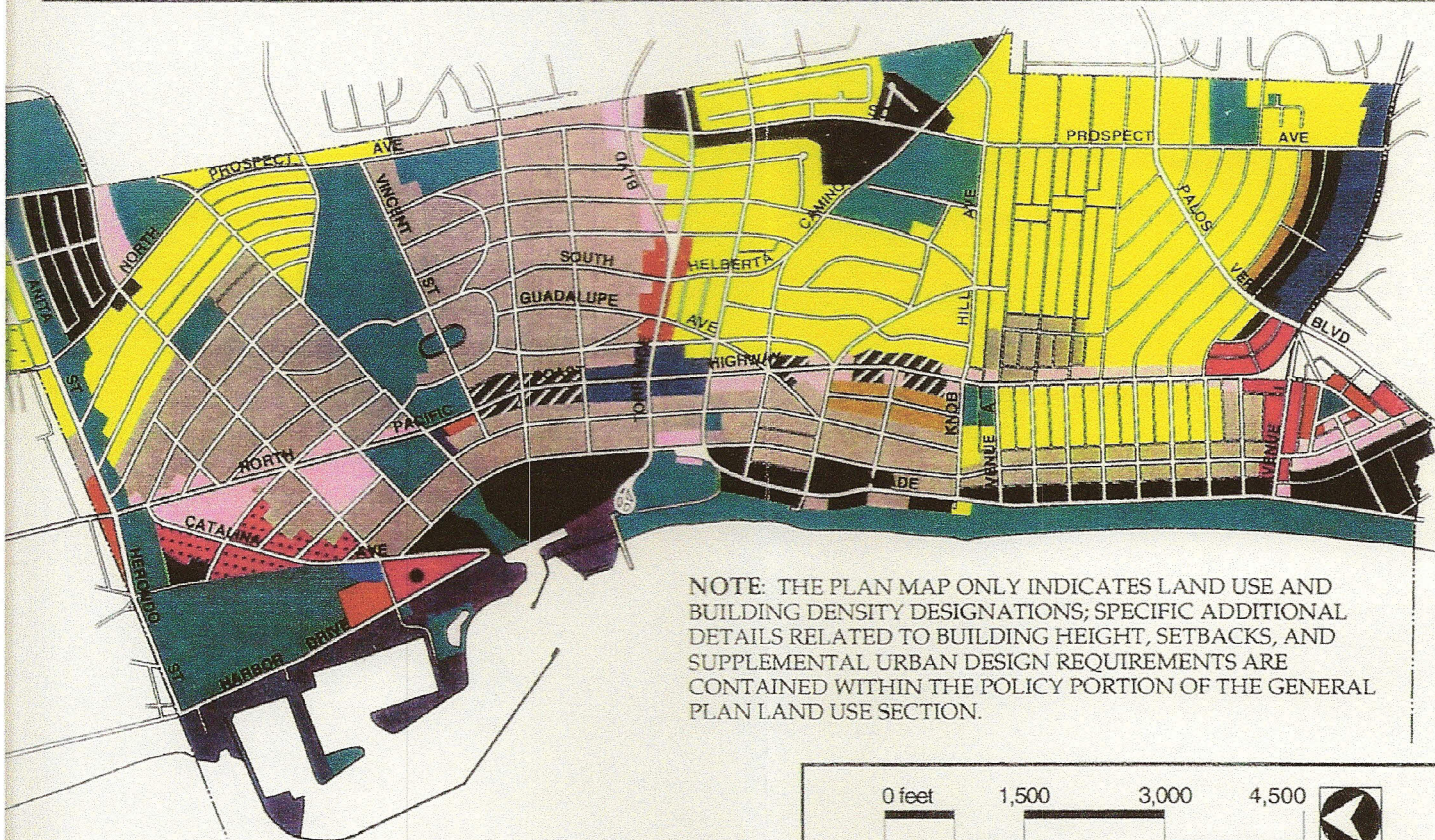
	C-1 - 0.35 floor area ratio
	C-2 - 0.5 floor area ratio
	C-3 - 0.7 floor area ratio
	C-4 - 1.0 floor area ratio
	C-5 - 0.7 floor area ratio for commercial uses; additional standards for light industrial uses
	CR - Commercial only; 1.0 floor area ratio; Mixed-Use; 1.5 floor area ratio*
	CC - 0.35 district-wide floor area ratio, specific parcel densities to be allotted based on additional public review and approval
	- 2.25 floor area ratio

INDUSTRIAL DISTRICTS

	I-1 - 0.7 floor area ratio
	I-2 - 1.0 floor area ratio

PUBLIC / INSTITUTIONAL DISTRICTS

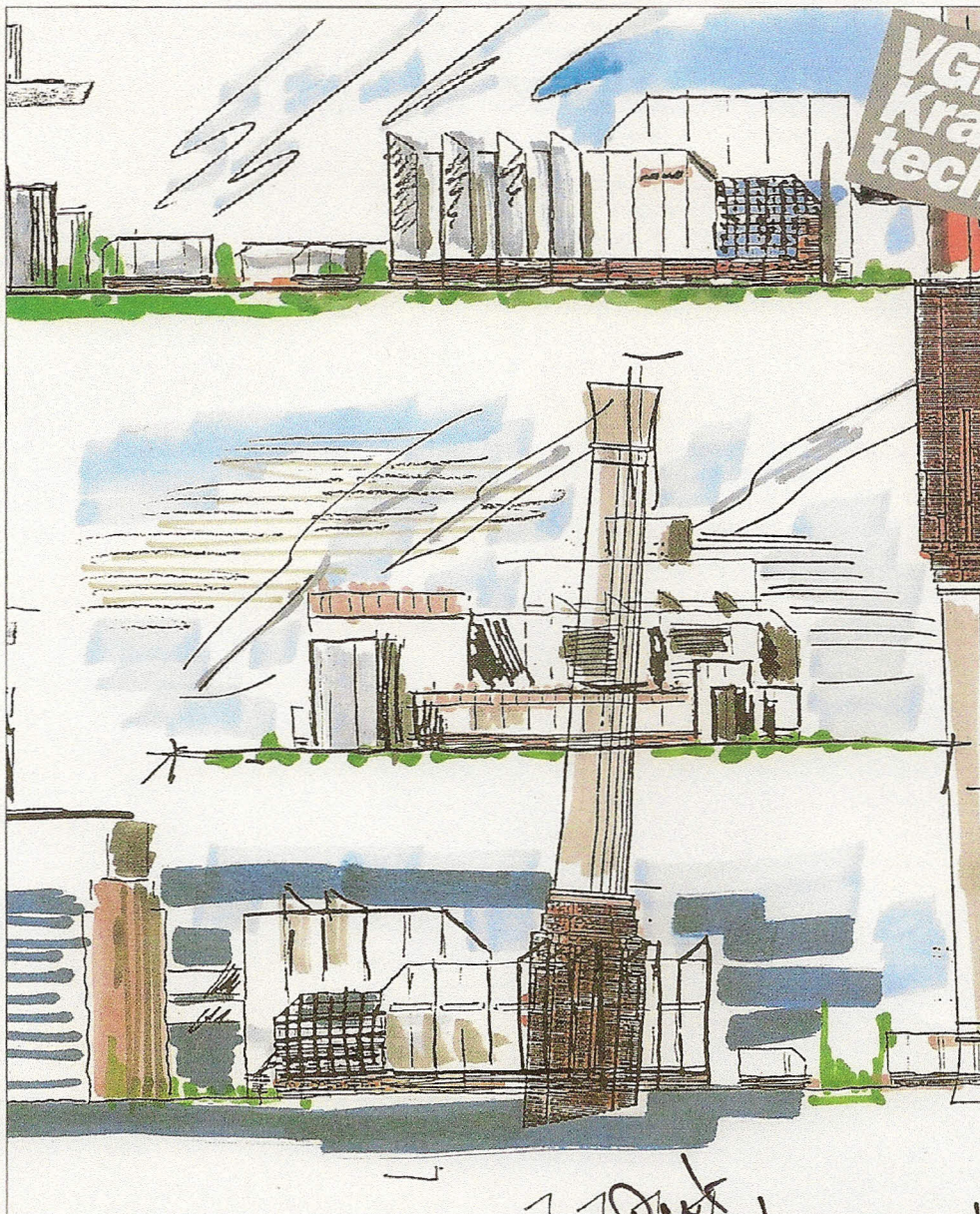
	P - Public or institutional use
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(LAND USE PLAN)

FIGURE
4

Architecture in Power Plant Construction



VGB
Kraftwerks-
technik 3/93

Reprint

Dear Peter,
at your request
with best regards
Ulrich Rieck

ABB Power Generation

ABB