VLB ARRAY MEMO No. 86



To: <u>Kellermann</u> Dote: <u>5/10/82</u>

From: P. Napier

Here is the information on building costs in Socorro and Albuquerque for the VLBA study.

\$50 per sqft in Socorro
\$60 per sqft in Albuquerque
seems like reasonable estimates.

National Radio Astronomy Observatory

Very Large Array May 10, 1982

- To: Peter Napier
- From: Emory Egler
- Subject: Building Costs
 - 1. Location VLA Site Building - VLA Visitors Center Year Constructed - 1982 Size & Gross Area - 30 ft. x 80 ft. = 2400 ft.² Building Construction: Wood frame, concrete footing and block stem wall, flat wood floor and roof trusses plywood siding, roof and floor, sheet rock and work stud partitions, membrane roof covering and slump block veneer wall covering. Building total cost: \$113,500

Building cost per sq. ft.: \$47.29

2. Location - VLA Site
Building - VLA SLOB Building Addition
Year Constructed - 1980
Size & Gross Area - 120'-6" x 26'-6" = 3193 ft.²

Building Construction: Concrete footing and block stem wall. Wood frame, wood floor beams with plywood flooring, wood roof trusses and plywood sheeting with asphalt shingle covering. Thermo-ply siding. Sheet rock and wood stud partitions. Slump block veneer wall covering.

Building total cost: \$117,500

Building cost per sq. ft.: \$36.80

3. Location - Socorro, NMT Building - Driscol Hall-Dormitory Year constructed - 1981 Gross Area - 12,200 ft.²

Building Construction: Two story, concrete foundations and floor slab, steel frame prestressed concrete panels. 2nd floor and roof. Tile roof covering. Stucco exterior. Sheet rock and steel stud partitions. Building total cost: \$534,782 Building cost per sq. ft.: \$43.83/ft.²

4. Location - Socorro, NMT Building - Jones Hall - Chem. Lab Year Constructed - 1980 Gross Area - 44,827 ft.²

> Building Construction: Two story, concrete foundations and floor slab, steel frame prestressed concrete panels built up roof. Co-Polymer stucco panels. Sheet rock and steel stud partitions.

Building total cost: \$1,969,217

Building cost per sq. ft.: \$43.92/ft.²

- 5. Recent estimates by John Reed an Albuquerque Architect, who has designed numerous buildings for NMT, has advised them to use for preliminary cost estimates the following:
 - a). 133,056 ft.² 20 ft. high warehouse with 10% offices all concrete insulated tees.

Estimated cost - \$45/sq. ft.

b). 40,000 ft.² - 30 ft. high, 30 offices, Cafeteria for 200 people, nurses station, concrete construction.

Estimated cost - \$50/sq. ft.

EE/ev



May 4, 1982

Mr. Emory Egler c/o NRAO P. O. Box O Socorro, New Mexico 87801

Dear Mr. Egler,

I have been asked by Mr. R. L. Gibson to write to you concerning probable costs for a proposed building in Socorro.

He gave me the following information about the project: approximately 22,000 SF - to be used as offices and electronics labs, with refrigerated air, and two floors.

Based upon experience with similar buildings, and assuming that the unknowns are not excessive or unusual, I am sure that a very successful project can be accomplished for approximately \$60 per square foot. This would also include normal exterior work, such as parking areas, walks and some landscaping.

We recently completed plans for a large essentially office space building for the University of New Mexico, with steel frame, bar joists, composite exterior panels, well insulated, with many special HVAC and electrical requirements. The construction cost is approximately \$55 per square foot.

Also, we developed two projects for the Inn of the Mountain Gods resort near Ruidoso - 120 guest room building (5 floors), and a 40,000 square foot Conference Center (2 floors). Together these averaged about \$60 - precast concrete construction.

Two buildings at New Mexico Tech in Socorro, which we designed and which were constructed within the past three years - the Petroleum Recovery Research Center and the Mineral Resources Center (Jones Hall) cost under \$50 per square foot.

Hopefully these examples will help you. More accurate cost information and perhaps a tentative wall section and exterior sketch can be developed with detailed information concerning requirements, site, etc.

Let me know if we can provide additional help with the development of the project.

Sincerely yours,

John Reed, Architect 2323 SAN PEDRO, NE CC: Mr. R. L. Gibson

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