

TUDOR ENGINEERING COMPANY
WORK LOAD

March 1, 1955

We are busy and will probably be busier in the months ahead. It has been a little difficult to keep up with events lately, and not at all possible to keep everyone in the organization informed even though we know of your interest. Perhaps this memo will help bring you up to date, and that is its purpose.

The projects for which we have contracts are, as follows:

1. City of Los Angeles

This is a management survey and report on the operation of the City Engineer's office. Many of our recommendations have already been put into effect. The job is approximately 60% complete and is scheduled for completion on May 15, 1955. It is being handled in a branch office in Los Angeles.

2. Contra Costa County

This involves the preparation of contract plans and specifications for 5 miles of highway along the southwest side of San Pablo Reservoir. Estimated cost of construction is \$1,500,000. Work has just been started, and is scheduled for completion by Dec. 15, 1955.

3. South San Joaquin and Oakdale Irrigation Districts

This is a joint-venture contract with Bert Goodenough under which the venture will supervise the construction of three dams on the Stanislaus River, each with a power house and including one 34,000 foot hard rock tunnel. Our contract is contingent upon successful financing by revenue bonds, but the probability is excellent. In that event, work will start about June. Time of construction is four years. Estimated construction cost is \$28,000,000.

4. Port of Astoria, Oregon

This is a study of the feasibility of a toll highway bridge across the mouth of the Columbia River. Coverdale and Colpitts are making the traffic and revenue estimates. Financing now appears very doubtful. Estimated construction cost is \$22,000,000. Our report is due April 1, 1955.

5. Port of Hood River, Oregon

We have a continuing contract to make periodic inspections of this highway toll bridge across the Columbia River and generally supervise its management. This continues for the life of the revenue bond issue. (We originally prepared the plans and supervised major repairs to this bridge.)

6. Wasco County, Oregon

As at Hood River we have a continuing contract to make periodic inspections of The Dalles highway toll bridge across the Columbia River and generally supervise its management. This continues for the life of the revenue bond issue. (We originally prepared the plans and supervised the construction of this bridge.)

7. Umatilla County, Oregon

We prepared the plans and are now supervising construction of a highway toll bridge across the Columbia River at Umatilla, Oregon. The bond issue was \$5,100,000. The bridge is nearly complete and is scheduled for opening on April 15, 1955. Thereafter we have a continuing contract to make periodic inspections and generally supervise its management for the life of the bond issue.

8. City of Spokane, Washington

We are preparing contract plans and specifications for a four-lane highway toll bridge across the Spokane River in Spokane. Preliminary plans and cost estimates were made some time ago. Final plans are just being started. These are scheduled for completion on September 1, 1955. Estimated project cost is \$4,610,000.

9. Washington Toll Bridge Authority

We have joint ventured with J. E. Greiner Company of Baltimore, Maryland to prepare general plans, make cost estimates, right-of-way appraisals, and submit a general engineering report on a 65-mile toll highway that starts just south of Tacoma, goes through that city and downtown Seattle to Everett. Estimated cost is \$194,000,000. We have just completed this phase of the work. It appears very likely that the project will be financed within the next six months. In that event we anticipate that the joint venture will be given a contract to manage all of the engineering including field inspection. This work will extend over 3½ years, and will be handled from an office in Seattle. This is one of the largest toll highways in the United States and the first to go through the heart of a large city. It is unique.

10. City of Walnut Creek, California

This is a joint venture with Byron Nishkian and is for the design of streets and parking areas in Walnut Creek. Work has just started and is due for completion in September, 1955. Estimated project cost is \$1,500,000.

11. Dock Commission, Portland, Oregon

This is a prospective contract to prepare contract plans and specifications for new docks and bulk-handling equipment. Work has not yet started but will probably start in the near future and continue through to 1956. Estimated project cost is \$3,595,000. We are also checking shop drawings for steel grain storage tanks.

12. Sacramento District, U. S. Engineers

This is a contract to prepare contract plans and specifications for several large warehouses at McClellan Field near Sacramento. Work is nearing completion and is due March 31, 1955. Estimated project cost is \$11,500,000.

13. City of Bremerton, Washington

While we do not yet have a contract for this project there is excellent reason to expect we will have one shortly. It is for the preparation of contract plans and specifications for a new toll highway bridge across Port Washington Narrows in Bremerton, and some remodeling and improvement of approaches to a nearby existing bridge. Estimated project cost, including street improvements which will probably be added, will be of the order of \$5,000,000.

14. Washington Toll Bridge Authority

Ralph Tudor is a member of a board of consultants reviewing plans for a bridge across Puget Sound generally between Seattle and Bremerton. Estimated project cost is ~~\$8,000,000~~ \$8,000,000. This project may go ahead although it is doubtful if both it and the nearby toll highway can be financed simultaneously.

In addition there are other projects in the discussion stage for which we may be retained.

That is a lot of work, experience, and interest for all of us for awhile.

Ralph

Ralph A. Tudor

Leslie

Leslie A. Helgesson

Carl

Carl A. Trexel

TUDOR ENGINEERING COMPANY

Items of Interest

June 15, 1955

Since the March memorandum we have reshuffled a bit. It became necessary to expand the San Francisco office and, for lack of space at our present address, we added two drafting rooms in the Sharon Building across the street.

The Tudor-Greiner office in Seattle has been closed as well as our branch office in the City Hall in Los Angeles.

An office has been opened at the Harbor Department, City of Los Angeles. At Strawberry, California a Tudor-Goodenough office has been opened to handle the Tri-Dam project.

As of this date we have a total of 31 employees in our own offices, and 8 more on the joint-venture Tri-Dam project.

We have completed the management survey and report on the operations of the Los Angeles City Engineer's office, and the report on the proposed bridge across the Columbia River at Astoria. The latter will be most difficult to finance, and there is no prospect of further early progress on this job.

Our current contracts are, as follows:

1. Contra Costa County

We are continuing with the preparation of contract plans and specifications for 5 miles of highway along the southwest side of the San Pablo Reservoir. Estimated cost of construction is \$1,500,000

2. Tri-Dam Project

After many difficulties this project is now under way. A contract for \$31,200,000 for the construction of two power and storage dams on the north fork of the Stanislaus River was awarded early this month. It appears very probable that funds will be available for the third dam (estimated to cost \$8,000,000) before the end of this year.

We are joint venturing with Bert Goodenough, and he is the Project Manager. Our contract calls for engineering supervision of all construction including inspection of materials. An office has been established at Strawberry, and all of the key staff members are already on the job. Allowable construction time is four years but, in all probability, about one year will be saved.

3. Port of Hood River

We have a continuing contract to generally supervise the maintenance and operation of this toll bridge across the Columbia River. This continues for the life of the revenue bond issue which amounted to \$1,600,000.

We have just been awarded a small contract with the Port to make general plans and estimate the cost of development of some riverfront property for industrial use. It is planned to use this report to re-finance the bridge and increase the bond issue to provide funds for the property improvement.

4. Wasco County, Oregon

As at Hood River, we have a continuing contract to generally supervise the maintenance and operation of The Dalles toll bridge across the Columbia River. This continues for the life of the revenue bond issue which amounted to \$3,550,000.

5. Umatilla County, Oregon

We have prepared plans and supervised construction of a toll bridge across the Columbia River at Umatilla and have a continuing contract to generally supervise maintenance and operation for the life of the revenue bond issue which amounted to \$5,100,000. The bridge was opened for traffic on April 15, but painting will not be completed until late this summer.

6. City of Spokane

We are preparing contract plans and specifications for a four-lane toll bridge including rather complicated approaches to cross the Spokane River. Surveys have been completed and foundation explorations are now under way. The total bond issue will probably be for approximately \$5,250,000.

7. City of Bremerton, Washington

We made the original studies and report for a toll bridge across Port Washington Narrows in Bremerton. Financing is contingent on reinstating tolls on the nearby Manette Bridge, and this was authorized by recent act of the Washington Legislature. We have just been advised that the city desires to sign a contract with us to prepare plans and specifications for the work and will advance money for fees until revenue bonds can be sold. There is still a small chance that financing will be blocked by opponents to the project, but, in any event, this should be only temporary.

The bond issue for the new bridge (Warren Avenue) will be approximately \$4,150,000. It is quite possible that as much as \$1,100,000 of new approaches and improvements to the existing Manette Bridge will be added.

8. Second Lake Washington Bridge

We are retained by investment bankers to review cost estimates for this floating bridge. The project has been tangled up in controversies concerning approaches, but seems to be straightening out.

9. Tacoma-Seattle-Everett Toll Road

This is a joint venture with J. E. Greiner Company of Baltimore. We finished our estimate of cost on February 15 (on schedule). It is \$194,000,000 which will make a bond issue of about \$227,000,000.

Revenues estimated by Coverdale & Colpitts are sufficient to pay for the project, but not sufficiently in excess of costs to make the bond issue attractive. Therefore, the state legislature authorized a contingent guarantee of up to \$5,000,000 a year to support the bonds. Assurance has been given by investment bankers that the bonds can be sold. However, before this can be finalized the law must be tested in the courts; this is now under way. The courts should rule sometime late this fall. Thereafter, sale of bonds can proceed.

It is now estimated that we will re-establish our joint-venture office in Seattle around the first of 1956. In the meantime, we are advising with attorneys, investment bankers, and the Toll Bridge Authority.

The project will be under such high pressure that we expect to subcontract most of the design and supervision of construction and, in effect, act as engineering managers. Our contract will provide for general supervision of maintenance and operation for the life of the bonds.

10. Puget Sound Crossing

The Washington Toll Bridge Authority is continuing the study of a toll bridge crossing of Puget Sound in the vicinity of Seattle, and Ralph Tudor is a member of the Board of Consulting Engineers. This will require a bond issue in excess of \$100,000,000, and it will be difficult to finance this in addition to the toll highway in the immediate vicinity at the same time.

11. Port of Everett

We have been retained to prepare plans for repair of a pier bulkhead, repair of some protecting bulkheads for the yacht basin, and new construction of a dike and filled ground for industrial development.

12. Portland Dock Commission

This is a substantial job of design and general supervision of construction of two new piers, repair of part of an existing pier, and providing bulk cargo handling equipment on two piers. We made the original report on this development that was largely responsible for a successful general obligation bond issue election.

The engineering is now under way, and we have approximately one year to complete.

13. Pacific Far East Line, Inc.

In this instance we have just completed a study and report on the operations of one of the largest and most modern shipping lines operating between the United States and the Orient. It involved a presentation of the general problems of the shipping industry in Trans-Pacific trade and the

specific record of this company. We have also judged the reasonableness of the estimates of the company as to its future. This report was requested by investment bankers in connection with the proposed issuance and sale of \$3,000,000 of stock of the company.

14. McClellan Air Force Base

We have been designated as the prime engineering firm for McClellan Air Force Base. At the present time we have just completed Phase 2 of the Westerly Base expansion (estimated construction cost \$6,500,000).

We are working in association with Blanchard and Mayer, architects, and Kellier and Cannon, mechanical engineers, on contract drawings for the fiscal year 1956 program. (Estimated construction cost \$2,600,000). Plans are to be completed by September 1, 1955.

We have just started preparation of Project Planning Reports and preliminary plans for the fiscal year 1957 program. (Estimated construction cost \$2,100,000). Completion dates for the various items are staggered from September 15 to December 1, 1955.

15. Harbor Department, City of Los Angeles

We have been retained by the Harbor Department, City of Los Angeles, to make an industrial and administrative survey of that Department. It is a five-month job, to be completed October 15, 1955.

16. Walnut Creek Street and Parking Improvement

We are associated with Byron Nishkian in preparation of contract plans for street improvements, parking areas, and culverts for the City of Walnut Creek. (Estimated construction cost \$1,500,000). Plans are to be completed in September, 1955.