CHAPTER 2

Project Initiation

Overview

This chapter provides guidelines on the project initiation phase of a project. This phase of work is completed prior to beginning the design and environmental phase of a project. The project initiation phase defines the purpose and need of a project and includes the preparation of a formal Project Report used to authorize the design of a project, or an Informational Project Scope and Estimate used for preliminary information.

SECTION 2-1

Informational Project Scoping & Estimating

PURPOSE

This section provides guidance on the preparation of preliminary project scope and estimates in response to stakeholder inquiries for preliminary information. For developing a scope of work and cost estimate for programming purposes, see Section 2-2, Project Reports.

DEFINITIONS / ABBREVIATIONS

CIP .....Capital Improvement Program

F&PD .....Funding and Project Development

PM .....Project Manager

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

All informational project scope and cost estimates for stakeholder information purposes are to be prepared by F&PD staff.

An informational scope and estimate is not be used in place of a Project Report and is not to be used for programming or budgeting. Prior to programming and budgeting, a Project Report must be completed in accordance with Section 2-2, Project Reports.

Informational project scope and estimates are to be transmitted with the standard transmittal form memorandum contained in Attachment 1.

AUTHORITY

All informational project scope and estimates are to be reviewed and approved by the F&PD Supervising Engineer.

RESPONSIBILITIES

Project Manager

The F&PD PM is responsible for coordinating and for preparing informational project scope and estimates. This includes preparing conceptual plans and the transmittal memorandum, as required.

Senior Engineer

The F&PD Senior Engineer is in "responsible charge" for development of the informational project scope and estimate. The F&PD Senior Engineer provides a thorough review and audit of all information.

F&PD Supervising Engineer

The F&PD Supervising Engineer provides F&PD staff oversight and is ultimately responsible for the informational project scope and estimate.

GUIDELINES FOR PREPARING INFORMATIONAL ESTIMATES

There are generally two methods for preparing an informational project scope and estimate: an order of magnitude estimate, or a detailed cost estimate as outlined in Section 2-2, Project Reports. An order of magnitude estimate may be needed if an estimate is required within a very short period of time. Order of magnitude

estimates are extremely rare and should be avoided whenever possible.

The PM is to use professional judgment and the following guidelines in preparing an order of magnitude estimate:

- Aerials may be used to calculate areas (landscaping, overlay, reconstruction, etc.) and for preparing conceptual plans.
- A field visit is required to observe existing conditions and to verify that proposed improvements are feasible.
- Recently completed comparable projects of similar size and type may be used in calculating the Total Construction Cost. The "square foot" or "per each" or other appropriate unit method may be used for determining the Total Construction Cost.
- Construction cost contingencies are typically 20% to 25% of the construction cost. Higher contingencies may be considered if there is uncertainty in the scope of work and/or potential risk associated with the project.
- Engineering design and environmental cost is typically 25% of the total construction cost, which includes the contingency amount. For very small projects design costs may be factored in up to 50%.
- Construction Management, including staking, testing, inspection, and construction oversight is typically 10% to 20% of the total construction cost.
- Right of way activities, including utility relocations, are to be included in the cost estimate.
- Costs should be escalated for the year of construction.
- Costs should be reported as a range of costs, rounded to appropriate significant figures.

ATTACHMENT

Attachment.1: Standard Transmittal Form Memorandum Sample

ATTACHMENT 1

Standard Transmittal Form Memorandum Sample

DEPARTMENT OF TRANSPORTATION
ENGINEERING SERVICES DIVISION

CITY OF SACRAMENTO
CALIFORNIA

915 I STREET, ROOM 2000
SACRAMENTO, CA
95814-2604

PH. (916) 808-8300
FAX (916) 264-8281

MEMORANDUM

November 27, 2006

To: Mark Griffin, Special Districts

From: Ryan Moore, Senior Engineer

SUBJECT: LIBRARY STREET COST ESTIMATE

The cost estimate for the Library Street Extension, including construction and soft costs, is attached. The extension is 620' long. It's in an 88' wide Right of Way with the following symmetrical cross section: 11' lanes, 8' bike lanes, 3' Curb & Gutter, 11' planter strip, 11' sidewalk. Note that this may or may not end up being the final cross section, but an assumption was necessary in order to develop a cost estimate.

This cost estimate is for concept planning purposes only, and is not to be used for programming funds or as a commitment on the part of DOT to deliver this project. If the project is to proceed further, a Project Report will need to be prepared for approval by the Engineering Services Division of the Department of Transportation which may be used for programming purposes. The Project Report will contain a detailed scope and estimate of the project and a schedule and cost for the development of preliminary engineering, environmental clearance, right-of-way acquisition, design, and construction management.

Please contact me if you have questions of if you would like additional information.

RM/rm

attachment

SECTION 2-2

Project Reports

PURPOSE

This section delineates the necessary steps to develop a Project Report which establishes a project's approved scope, budget and schedule for programming and delivery.

DEFINITIONS / ABBREVIATIONS

CIP .....Capital Improvement Program

ROW .....Right of Way

TPG .....Transportation Programming Guide

F&PD .....Funding and Project Development

PAAF .....Project Approval and Authorization Form

For additional abbreviations, please see the Abbreviations section at the end of this Manual.

POLICY

The Project Report is to clearly define the proposed project need and purpose, scope, cost estimate, funding source, and schedule. All work incidental to the project is to be included in the Project Report, such as right of way impacts, utility conflicts, anticipated environmental document, recommendations on inter-departmental/agency coordination, recommendations on public outreach, and all pertinent information to deliver the project within the approved budget and schedule.

The following policy applies to all projects. Any exceptions must be approved in writing by the Engineering Division Manager.

- All Project Reports will be prepared by F&PD staff.
- All projects will have a Project Report. No design expenditures are to be incurred without an approved Project Report.
- All Project Reports must have an approved PAAF.
- No changes to the project budget, schedule or scope are to be made without an amended PAAF.
- No design is to be started without the establishment of a CIP with sufficient funds to cover the full cost of design.

AUTHORITY

All approved Project Reports are to be signed by the F&PD Supervising Engineer, Civil and Electrical Design Supervising Engineer, and City Traffic Engineer as an initial approval. Final approval of the Project Report is within the authority of the Engineering Services Division Manager.

RESPONSIBILITIES

Project Manager

The F&PD PM is responsible for coordinating and monitoring development of all elements of the Project Report. This includes preparing conceptual plans and cost estimates, obtaining information on anticipated environmental document(s), coordinating with other City staff (Environmental Services, Civil and Electrical Design, Traffic Engineering, etc.), agencies, and seeking input from City Council members and stakeholder groups. The F&PD PM is

responsible for establishing the CIP for the project.

Senior Engineer

The F&PD Senior Engineer is in "responsible charge" for development of the Project Report. The F&PD Senior Engineer provides a thorough review and audit of all information provided in the Project Report including cost estimates.

F&PD Supervising Engineer

The F&PD Supervising Engineer provides F&PD staff oversight and is ultimately responsible for all elements of the Project Report. This oversight includes ensuring that the necessary funding is programmed to deliver the project per the approved scope and schedule. The F&PD Supervising Engineer also recommends the approval of the Project Report.

Civil & Electrical Design Supervising Engineer / Construction Supervising Engineer

The Civil & Electrical Supervising Engineer, and the Construction Supervising Engineer, are responsible for reviewing the proposed Project Report for issues relating to staffing, feasibility, constructability, schedule and budget relating to their respective areas of responsibility. Upon review and any necessary changes, they recommend approval of the Project Report to the Engineering Services Division Manager.

City Traffic Engineer

The City Traffic Engineer is responsible for making sure that the project report is consistent with the Traffic Engineering section's guidelines and policies on geometric design, safety, and traffic operations.

Engineering Services Division Manager

The Engineering Services Division Manager is responsible for final approval of the Project Report.

REVIEW AND APPROVAL PROCESS

The following steps are to be followed for completion of the Project Report:

- The F&PD PM develops the draft Project Report.
- The F&PD Senior Engineer reviews the draft Project Report and cost estimates and provides comments within one week.
- The F&PD PM incorporates the comments of the Senior Engineer and revises the draft Project Report.
- The F&PD Supervising Engineer reviews the draft Project Report and provides comments to the Senior Engineer within one week.
- The F&PD PM incorporates comments of the Supervising Engineer, in consultation with the Senior Engineer, and revises the draft Project Report.
- The F&PD PM forwards a copy of the draft Project Report to Civil and Electrical Design and Traffic Engineering staff that will have responsibility for delivery of the project. Copies of the draft Project Report are also to be forwarded, at a minimum, to the Civil and Electrical Design Supervising Engineer, the City Traffic Engineer, Construction Supervising Engineer, and assigned Civil & Electrical Design Engineers.
- Within one week of sending the draft Project Report to Civil & Electrical Design, Construction Inspection, and Traffic Engineering, a meeting is to be scheduled by the F&PD PM to review the draft Project Report and answer any questions.
- Within two weeks of receiving the draft Project Report, Civil and Electrical Design, Construction Inspection and Traffic Engineering provides comments to the F&PD PM.

- The F&PD PM incorporates the comments of Civil and Electrical Design, Construction Inspection, and Traffic Engineering.
- The F&PD PM, Senior Engineer, and Supervising Engineer meet to review the comments collected on the draft Project Report.
- The F&PD PM collects the signatures needed for the Project Report and the PAAF.
- The F&PD Senior Engineer and Supervising Engineer meet with the Engineering Services Division Manager to review the final Project Report and seek final approval.
- After the Project Report and PAAF are signed, the Project Report is forwarded to the Admin Budget and Accounting Section for logging of the approved budget and schedule per the phases shown in the PAAF and appropriating the necessary funds for design. The PAAF budget and schedule is tracked for performance benchmarking.

ELEMENTS OF A PROJECT REPORT

The Project Report should have sufficient detail to fully address all elements that will affect project scope, budget and schedule. The standard Project Report format provides for addressing all elements of delivering a project (see Attachment 1). If the PM finds that an element does not apply to the project, that element should not be deleted, but should be indicated as “Does Not Apply”. An element can also be added to the Project Report, if necessary.

Details on developing the content for a standard Project Report are included in Attachments 1 through 5.

PROJECT APPROVAL AND AUTHORIZATION FORM

A PAAF is required to be attached to all Project Reports. The PAAF is a one-page form that identifies the authorized project scope, cost, schedule, and funding (see Attachment 2). The Form must be signed by the F&PD Supervising Engineer, Civil and Electrical Design Supervising Engineer, and Construction Supervising Engineer recommending approval. Final approval of the PAAF is within the authority of the Engineering Services Division Manager. The original approved PAAF is kept with Admin Budget and Accounting.

Amendments to the PAAF budget, scope or schedule will only be approved for reasons outside of the PM’s control. This will allow the Division to track and benchmark the Division’s project delivery performance, apply best management practices where necessary, and strive to improve on the cost of project delivery and customer service.

An amended PAAF is initiated by the PM and should be circulated for review and signatures within two weeks of determining the need for an amendment. Proposed amendments to the PAAF must be signed by the Section Managers and the Engineering Services Division Manager and filed with the Division’s Admin Budget and Accounting Section.

ATTACHMENTS

Attachment 1:	Elements of a Standard Project Report
Attachment 2:	Sample PAAF
Attachment 3:	Sample Cost Estimate
Attachment 4:	Project Report Quality Control Checklist
Attachment 5:	Project Report Review Checklist

ATTACHMENT 1

Elements of a Standard Project Report

Project Background and Description

This section of the Project Report states, in general, the purpose of the project. It provides the project limits and the extent of the proposed improvements. It also explains how the project was initiated such as referring to its ranking in the TPG or referring to a previously prepared feasibility study. This section of the project report explains the consistency of the proposed project with approved plans (General Plan, Community Plan, etc) by stating what the existing planning documents are for the project area, and how the project is consistent with this plan. This section also highlights the funding sources for the project and general cost estimates.

Project Objectives

The ultimate output of the project is presented in this section including a brief explanation of how the project will improve the conditions at the project site and/or benefit to the City or community. For example, the project will improve pedestrian safety by reducing the pedestrian crossing distance, or the project will relieve congestion by adding a turn lane.

Existing Conditions and Proposed Improvements

It is essential to provide an adequate description of the existing conditions and the proposed improvements. Through this section, the reader should be able to visualize the proposed project site and project need. Attachment of pictures and plans in addition to the description is desirable. Typical description will include: project limits, type of the existing road, average daily traffic volumes per current traffic counts, elements of the roadway cross section, general description of the surrounding environment, and accident data, if applicable.

It is also essential to clearly state the proposed improvements in detail. Provide the nature of the new improvements, its location, any necessary dimensions, boundaries, and so on. In order to provide better understanding of the project, the Project Report will include:

Conceptual Plan: The purpose of a conceptual plan of the improvements is to provide the designer with a general picture of the proposed project. It is understood that conceptual plans are not design documents. It will show the layout of major proposed improvements, preferably, on an orthorectified aerial photo relating it to the existing conditions. Conceptual plans are not required to have a scale. However, providing plans on scale 1:40 or 1:80 is preferred. Traffic signal projects and minor projects including providing sidewalks and pavement maintenance might not require providing conceptual plans.

Cross Section: A street cross section of the before and after conditions of the project is recommended if the project proposes changes to the existing cross section. The cross section will provide the width of travel lanes, sidewalks, bike lanes, and the width of the median, if applicable. It will also provide the location of the sidewalk, the number of lanes, location of utility poles, right of way boundaries, and existing and proposed ground surfaces.

Optional Improvements: Optional improvements can also be listed in this section of the Project Report with an explanation of the conditions under which these improvements will be considered as part of the project.

Alternates & Preliminary Analysis

This section of the Project Report summarizes any alternates to the proposed project previously considered but were rejected. Examples of previous studies would include feasibility studies, traffic reports, Project Study Reports, and technical memorandums. These studies could be included in the Project Report as an appendix if relevant. The Project Report should not be finalized without identifying the preferred project alternative.

Phasing

Some projects cannot be constructed all at once; therefore phasing the project design and/or construction may be necessary to meet certain expectations or funding requirements. The Project Report must discuss, if applicable, the sequence, elements, and delivery date of each phase.

Design Variances

It is essential to ensure consistent application of City of Sacramento design standards. Known variances to design standards are discussed as early as possible in the project development process, especially where the project concept or cost estimate depends on the proposed design variances.

Right of Way

It is necessary to determine an order of magnitude of any proposed right of way (ROW) acquisition for the proposed project. Existing ROW for the project can be determined by evaluating parcel maps and as built plans. If additional ROW is needed for the project, a map and a list of the parcels that would most likely be impacted by the project should be included in the Project Report. ROW needs should be broken down to construction easements and permanent fee purchases. Utility conflicts are discussed in the utilities section; however, conflicts requiring easement or fee takes should be summarized in the Right of Way section.

Risks

Outline extra-ordinary risks that include risks of not constructing the project and risks during the construction of the project. Examples of risks that may affect the City's ability to deliver a project include adverse public opinion, lack of appropriate funding (or a funding deadline), staff availability, environmental issues, and concerns of outside agencies.

Preliminary Environmental Review

The Project Report shall identify the appropriate level of environmental documentation anticipated for the project. Coordination with City Environmental staff is needed to determine the extent of the environmental documentation. For exempt projects, and if time allows, environmental clearance might be obtained as part of the Project Report. Projects that require an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) must have a Project Report completed after finishing the environmental document. The Project Report should outline the major issues and impacts identified in the EIR/EIS

Permits

Permits are required whenever a City project encroaches or otherwise impacts space that falls under the jurisdiction of another agency. All known permits that will be required for the project should be listed in this section. Examples of agencies from which permits may be required include the Public Utilities Commission, Caltrans, County, and others.

Cost Estimates

It is important to provide cost estimates that reflect the worse case scenario in order to ensure that the project is fully funded for design and/or construction. At the Project Report stage, the cost estimate is planning level and should include major elements of the project. These cost estimates are not intended for bidding purposes. The following elements must be included as a minimum in the Project Report:

Construction Cost: The construction cost must be estimated by tabulating the preliminary project quantities and unit costs for construction materials. Unit costs should be based on recent bids and should consider economies of scale and escalation factors based on the proposed construction date.

Construction Contingency: This is a cost that accounts for "unknowns and minor items" associated with the project. Due to the fact that the Project Report is prepared in the early phase of a project, it is common to have significant unknowns associated with price fluctuations, final design, minor items, stakeholder involvement, etc. For this reason, a relatively high contingency may be needed. The contingency used in the Project Report is usually between 20% and 35% of the *Construction Items Cost*.

Total Construction Cost: This item is the summation of the *Construction Cost* and *Construction Contingency.*

Engineering Design: This figure is to be based on the level of effort needed, including an estimate of the cost of staff hours needed for preparing the project design, including surveying, right of way, and environmental review. This number is typically 15% to 25% of the *Total Construction Cost*. In some situations, such as very small projects, requiring significant planning and resolution of design issues, or small projects with a significant amount of unknowns, this figure can go as high as 35% to 50%.

Right of Way Acquisition and Utility Relocation: All costs related to the acquisition of right-of-way and construction easements are to be included in the project cost estimate. In addition, the cost of relocation of utilities which is to be borne by the City is to be included in the estimate.

Construction Management: This is the cost associated with construction inspection, testing, construction management and contract administration, and staking. This number is typically estimated at between 10% and 20% of the *Total Construction Cost*. The estimate should be based on the staffing necessary, and the number of working days for construction.

Total Project Cost: The sum of the Total Construction Cost, Engineering Design, and Construction Management.

All costs estimates must receive an independent peer and/or senior review for accuracy and completeness prior to signing off the final Project Report. All costs above should be

rounded to the appropriate significant figures. If a ROW estimation is needed for the project, coordination with City's ROW staff is recommended to estimate the price per square foot of land, and the cost of the incidental work that will be required as part of the ROW acquisition.

Funding

Describe the existing and anticipated funding sources and associated schedule of availability. For projects with more complex funding situations, a chart may be used to clarify the funding sources and schedules. If applicable, this section should discuss any project phasing required during design or construction due to schedule of available funding. For State or Federal funded projects, participating and non-participating costs should be outlined. If funding is contingent upon external circumstances (i.e. development projects, environmental mitigations, etc.), these circumstances should be specified.

Project Schedule

This section identifies all key project milestones and anticipated start and completion dates. At a minimum, the following milestones and dates are to be included: start design date, finish design date, right of way, award contract date, and finish construction date. This schedule is coordinated with design staff and is to include critical dates such as, funding availability dates, cooperative agreement execution dates, environmental approval date, etc.

In addition, a critical path method (CPM) schedule, in Microsoft Project format, showing major tasks and phases is to be attached to the Project Report. The electronic file is to be transmitted to the design project manager at the completion of the Project Report.

Public Outreach/Stakeholders

State level of involvement with Council Member office(s). Discuss past involvement and/or future involvement needed with stakeholder groups. Such groups could include groups like Walk Sacramento, Bicycle Advisory Committee, neighborhood associations, schools, businesses, etc. If outreach meetings have already taken place, outline issues and decisions from the meetings.

Coordination with Other Agencies

Identify and list contact information (if known) for all agencies, which are impacted and/or adjacent to the project. Briefly state what coordination efforts have been made, including the reason why the outside agencies have a stake in the project.

Coordination with Utilities

Identify and list contact information (if known) for all internal and external utility companies/ departments, which may be impacted and/or are adjacent to the project. Briefly state what coordination efforts have been made, including the reason why the utility may have a stake in the project. Describe any rights and/or easements that may exist and any agreements that may be needed for utility relocation and/or upgrade. State the assumptions made relative to reimbursement and/or cost sharing. If warranted (street reconstruction and/or widening), Pre-A Utility letters shall be sent to the respective utilities.

Agreements

Describe any agreements made with other agencies. Discuss any on-going negotiations with outside agencies in the pursuit of an agreement. If current agreements are in place, briefly discuss the terms of those agreements and any amendments that may be needed. Attach copies of existing agreement(s) to the Project Report appendix. If agreements will be needed in the future, they should also be listed in this section.

Project Approval and Authorization Form (PAAF)

A PAAF is required to be attached to all Project Reports. The PAAF is a one-page form that identifies and locks the approved project scope, cost, schedule, and funding (see Attachment 2). The Form must be signed by the F&PD Supervising Engineer, Civil and Electrical Design Supervising Engineer, and Construction Supervising Engineer as an initial approval. Final approval of the PAAF is within the authority of the Engineering Services Division Manager. The original approved Form is kept with F&PD Fiscal Support personnel. Modifications to the PAAF require approval by the managers listed above and shall be made on an amended Form.

Attachments

This includes a list of all attachments to the Project Report. It states the attachment number and name. At a minimum, the attachments should include:

a. Location map

b. Cost estimates sheets (see example in Attachment 3)

c. Conceptual plans

d. Copies of previous studies

e. PAAF

f. Project Report Quality Control Check List (see Attachment 4)

ATTACHMENT 2

Sample Project Approval and Authorization Form (PAAF)

DEL PASO STREETSCAPE AR-EC (TF81)

Approved Scope

Convert Del Paso Boulevard from a 4-lane road with parallel parking to a 2-lane road with angled parking. Also, construct a new left turn lane from westbound Arden Way to southbound Del Paso Boulevard.

Location

Del Paso Boulevard between El Camino Avenue and Arden Way and on Arden Way between Del Paso Boulevard and Oxford Road.

Approved Schedule, Cost, and Budget

Phase	Begin Date	End Date	Cost	Approved Budget
Pre-Design	07/29/2005	10/10/2005	$ 70,000	$ 70,000
Scoping	07/29/2005	10/10/2005	$ 25,000	
Environmental	12/15/2005	04/10/2006	$ 45,000	
Design	12/15/2005	05/01/2006	$ 509,000	$ 30,000
Construction Management	07/01/2006	10/30/2007	$ 301,000	
Construction	08/01/2006*	09/30/2007*	$2,335,000	
TOTAL			$3,215,000	$ 100,000

* Finish Construction of Angled Parking on October 30, 2006
Finish Construction on Arden Left Turn on September 30, 2007 (Start April 30, 2007)

Approvals

Hector Barron (Supervising Engineer) _____ Date _____

Tim Mar (Supervising Engineer) _____ Date _____

Jon Blank (Supervising Engineer) _____ Date _____

Nicholas Theocharides (Engineering Manager) _____ Date _____

APPROVED AMENDMENT WITH JUSTIFICATION IS REQUIRED IF ANY OF THE FOLLOWING HAS CHANGED:
Project scope, begin date or end date of project phases, and cost of any phase that would change the total project cost.

ATTACHMENT 3

Sample Cost Estimate Sheet

Median Landscaping: TW86

Del Paso Road between Town Center Drive and Truxel Road

Prepared by: Ryan Moore 12/12/2005

Checked by: Saed Hasan 12/14/2005

Item	Description	Quantity	Unit	Unit Cost	Total
1	Clear and Grub	1	LS	$50,000	$50,000
2	Aggregate Base	3447	CY	$45	$155,133
3	Asphalt Concrete	2327	T	$125	$290,875
4	Irrigation Controller & Electrical Service	4	EA	$2,500	$10,000
5	Irrigation System	1	LS	$40,000	$40,000
6	2" Irrigation Service w/ RP Backflow	4	EA	$5,500	$22,000
7	New Tree (median)	39	EA	$150	$5,850
8	Imported Topsoil (median)	1941	CY	$45	$87,337
9	Groundcover (planting strip)	16038	SF	$1.25	$20,048
10	New Tree (planting strip)	56	EA	$150	$8,400
11	Imported Topsoil (planting strip)	594	CY	$45	$26,730
12	No. 14 Curb	7788	LF	$17	$132,396
13	New Sidewalk	21384	SF	$10	$213,840
14	New No. 4 Curb & Gutter	2800	LF	$30	$84,000

Item	Description	Quantity	Unit	Unit Cost	Total
15	Roadway Excavation	5334	CY	$35	$186,690
16	Remove Existing Striping	6060	LF	$8	$48,480
17	Striping & Marking	8943	LF	$5	$44,715
18	Remove Existing Raised Median	795	SF	$12	$9,540
19	Signal Modification	1	LS	$30,000	$30,000
20	Lighting	1	LS	$280,000	$280,000
21	Install DI	6	EA	$3,000	$18,000
22	Drainage Lateral	450	LF	$150	$67,500
23	Backfill Area Near Inlet Structure	100	CY	$70	$7,000
24	Modify Driveway	1	LS	$30,000	$30,000
25	Truncated Dome	3	EA	$750	$2,250
26	3 Months Maintenance	1	LS	$13,000	$13,000

Unadjusted Construction Cost	$1,884,000
Construction Contingency (25%)	$471,000
CONSTRUCTION COST	**$2,355,000**
ENGINEERING DESIGN (20%)	**$471,000**
CONSTRUCTION MANAGEMENT (12%)	**$283,000**
RIGHT OF WAY	**$0**
UTILITY RELOCATION	**$0**
TOTAL COST	**$3,109,000**

ATTACHMENT 4

Project Report Quality Control Checklist

_____

Project Name & No.

Prepared By _____ Date _____

Project Manager

Reviewed By _____ Date _____

Senior Engineer

Reviewed By _____ Date _____

Supervising Engineer

FUNDING		YES	NO	N/A	INITIAL
1.	Does the project have an established CIP No.?	☐	☐	☐	_____
2.	Does the project have State and/or Federal funds?	☐	☐	☐	_____
3.	If project has State/Federal funds, does City have Authorization to Proceed?	☐	☐	☐	_____
4.	Is there a deadline to use project funds?	☐	☐	☐	_____
5.	If project has funding from SHRA, does City have an executed IPA?	☐	☐	☐	_____
6.	Is the project considered fully funded?	☐	☐	☐	_____
7.	If project is not fully funded, scope of work has been reduced/modified?	☐	☐	☐	_____
8.	Did project sponsors review and consent to reduced/modified scope of work?	☐	☐	☐	_____
9.	Are there additional funds coming to the project at later date?	☐	☐	☐	_____

SCOPE AND ESTIMATE	YES	NO	N/A	INITIAL
1. Has typical street section been approved?	☐	☐	☐	_____
2. Design Variances approved?	☐	☐	☐	_____
3. Is project consistent with a Master Plan or Urban Design Plan?	☐	☐	☐	_____
4. Is project consistent with approved PSR or a Technical Study?	☐	☐	☐	_____
5. Have as-built plans been reviewed?	☐	☐	☐	_____
6. Have field visit with measurements and pictures been taken?	☐	☐	☐	_____
7. Does the project need upgraded curb ramps?	☐	☐	☐	_____
8. Is there an existing drainage system?	☐	☐	☐	_____
9. Is there an existing sewer and or water system?	☐	☐	☐	_____
10. Pre-A Utility letter sent?	☐	☐	☐	_____
11. Does the project require new signal coordination?	☐	☐	☐	_____
12. Has electrical group provided cost estimates?	☐	☐	☐	_____
13. Has City Real Estate provided right-of-way cost estimates?	☐	☐	☐	_____
14. Have estimates been reviewed by F&PD Senior Engineer?	☐	☐	☐	_____

SCHEDULE	YES	NO	N/A	INITIAL
1. A critical path method schedule in Microsoft Project format is completed?	☐	☐	☐	_____
2. Project schedule has been reviewed by Design Supervising Engineer?	☐	☐	☐	_____

COORDINATION	YES	NO	N/A	INITIAL
1. Did City Utilities review project plans/scope?	☐	☐	☐	_____
2. Did City Utilities agree to reimbursement/cost sharing?	☐	☐	☐	_____
3. Did City Environmental Services review project plans/scope?	☐	☐	☐	_____
4. Did City Electrical group review project plans/scope?	☐	☐	☐	_____
5. Did DOT ADA coordinator review project plans/scope?	☐	☐	☐	_____
6. Did City Traffic Engineering review project plans/scope?	☐	☐	☐	_____
7. Did Street Maintenance review project plans/scope?	☐	☐	☐	_____
8. Did Bike and Pedestrian Coordinator review project plans/scope?	☐	☐	☐	_____
9. Did City Right of Way review project plans/scope?	☐	☐	☐	_____
10. Was relevant Councilmember(s) office briefed on the scope of work?	☐	☐	☐	_____

FINAL REVIEW	YES	NO	N/A	INITIAL
1. Did Design PM review Project Report?	☐	☐	☐	_____
2. Did Traffic Engineering review Project Report?	☐	☐	☐	_____
3. Was there a briefing meeting for Design and Traffic?	☐	☐	☐	_____

ATTACHMENT 5

Project Report Review Checklist

_____

Project Name & No.

First Draft:

FUNDING AND PROJECT DEVELOPMENT REVIEW

Reviewed By _____ Date _____
Senior Engineer

Reviewed By _____ Date _____
Supervising Engineer

Second Draft:

CIVIL DESIGN REVIEW

Reviewed By _____ Date _____
Project Manager

Reviewed By _____ Date _____
Senior Engineer

Reviewed By _____ Date _____
Supervising Engineer

ELECTRICAL DESIGN REVIEW

Reviewed By _____ Date _____
Senior Engineer

Reviewed By _____ Date _____
Senior Engineer

Traffic Engineering

Reviewed By _____ Date _____

Senior Engineer

Reviewed By _____ Date _____

Traffic Engineer

Construction

Reviewed By _____ Date _____

Supervising Engineer

Final Draft:

Funding and Project Development Review

Reviewed By _____ Date _____

Senior Engineer

Reviewed By _____ Date _____

Supervising Engineer