

Design Sequencing Pilot Guidelines

Version 3

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California Department of Transportation

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1. GENERAL INFORMATION

1.1. Legal basis

Assembly Bills 405 (Knox & Torlakson), Statutes of 1999, and 2607 (Knox & Torlakson), Statutes of 2000, authorized the California Department of Transportation (Department) to conduct a pilot program to use design-sequencing contracts for the design and construction of no more than 12 transportation projects (see Appendix 9.1.). The legislation further requires that the Department:

- Prepare and submit, no later than July 1 of each year, a status report to Legislature on the pilot program's contracting methods, procedures, costs, and delivery schedules;
- Upon completion of all design-sequencing contracts, establish a Peer Review Committee to prepare a final report for submittal to Legislature that will evaluate the outcome of the contracts by stating both the positive and negative aspects of using Design-Sequencing as an alternative project delivery method.

Design-sequencing is defined as a method of contracting that enables the sequencing of design activities to permit each construction phase to commence when design for that phase is complete, instead of requiring design for the entire project to be completed before beginning construction. Design-sequencing aims to accelerate project delivery by allowing the Department to award a project to a contractor based on plans that are a minimum of 30 percent complete of the contractor's bidding documents (bid package) while the project continues to be designed in subsequent sequences thereafter.

The Department's goal is for the final report to Legislature to not only evaluate the positive and negative aspects of the design sequencing method of contracting, but also establish final guidelines that can be used for future applications of the design sequencing contracting method.

1.2. Purpose and objectives of guidelines

The goal of the pilot program is to test whether the Design-Sequencing method of contracting is beneficial in the administration of highway improvement projects. The objectives of the pilot guidelines are to share lessons learned from previous design-sequenced projects and provide guidance to districts on activities related to the development of future design-sequencing projects. While legislation allows some flexibility in the implementation of this pilot program, it has been determined that design-sequenced projects shall be developed in accordance with these guidelines. Exceptions to deviate from these guidelines will be heard on a project-by-

project basis and should be submitted to the Headquarters Program Manager.

It is anticipated that these draft guidelines will evolve as the Department acquires experience using the design-sequencing method of contracting throughout this pilot program. These guidelines will be updated on an as needed basis and will be distributed to the appropriate stakeholders.

2. ELIGIBILITY CRITERION

Proposed projects must satisfy all of the following conditions to be considered as candidates for Design-Sequencing:

- Minimal public controversy
- Complete Environmental Document
- Granted project approval (approved Project Report)
- Established and set project footprint
- Identification of all possible utility conflicts

3. SELECTION AND APPROVAL PROCEDURES

3.1. Selection Criterion

Nomination Fact and Selection Criteria sheets (see Appendix 9.2. and 9.3., respectively) must be prepared and submitted to the Division of Design in Headquarters, Office of Special Projects (OSP), for all candidate design-sequencing projects. The following information must be included with each project nomination in a brief, concise format:

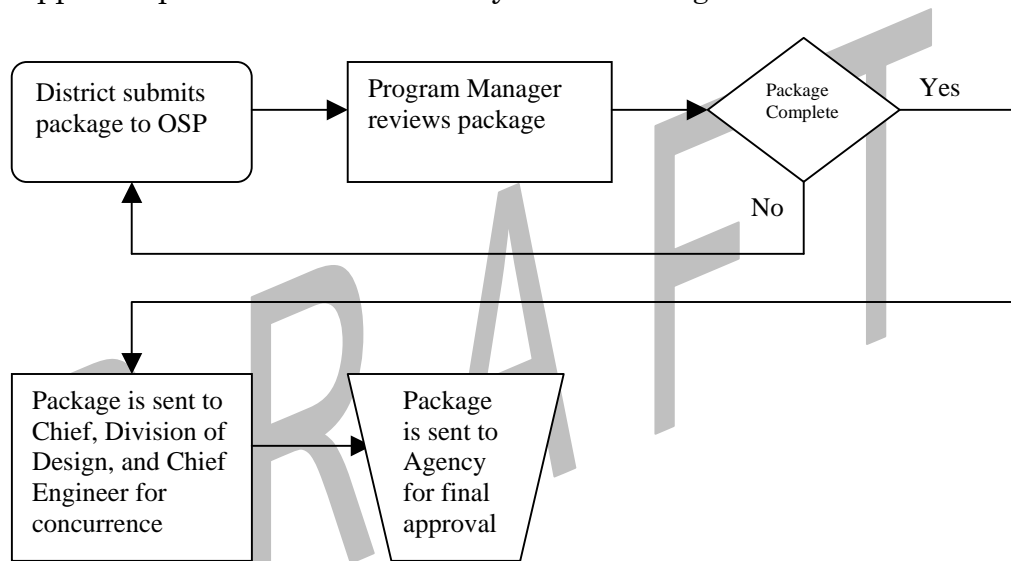
- Co/Rte/KP
- EA
- Project Limits and Description
- Project Background
- Funding Programming
- Cost (Capital and Support)
- Schedule, including proposed design sequence milestones
- Funding Program and Program Year
- Project Sponsor
- Why nominated project is a good design-sequencing candidate

Electronic copies of the Nomination Fact and Selection Criteria sheets can be obtained by contacting the OSP.

3.2. Approval Process

The approval process is initiated by the submittal of the Nomination Fact and Selection Criteria sheets (hereinafter referred to as 'package') to the OSP. The Program Manager reviews and analyzes the package to insure the candidate project is consistent with the intent of the authorizing legislation and the departmental goals of the pilot program. The package is then forwarded to the Chief, Division of Design, and the Chief Engineer for concurrence. The next step in the process is transmittal of the package to Business, Transportation, and Housing Agency (Agency) for final approval. The timeframe for approval can take up to 12 weeks from submittal of the package.

The approval process is illustrated by the following flowchart.



4. RESPONSIBILITIES OF FUNCTIONAL UNITS

4.1. Design

All projects will use the Standard Specifications and Standard Plans that are current at the time of contract award.

Bid Package includes:

- 100% complete project concept and scope (enough information to bid on). Scope changes will not be allowed after PA&ED (Project Approval and Environmental Document).

- Plans and estimate developed to a level sufficient to define project scope and to allow for the selection of all anticipated subcontractors.
- The estimate may include items not shown on plans. The estimate is to include all anticipated items and quantities of the complete design with the understanding that some items may be deleted at a later date.
- All utility conflicts shall be identified and relocation plans approved by the Project Engineer. Project Engineer shall make every effort to avoid, mitigate or design around potential utility conflicts. Relocation of utilities in conflict shall be addressed in the Bid Package with attention given to the date when such utilities will be cleared. Any coordination required between the contractor and the utility company's work to complete the relocation must be shown in the Bid Package. The project Engineer's Certification form is the preferred documentation to show that this task has been completed. The actual utility relocations may be performed during construction.
- The Entire project must be certified with a special design sequencing certification (R/W Certification #3 DS) which must specify contracted delivery dates for all parcels and each segment of the project, and any approved workarounds.
- Workaround for sequence 1 (if any) must be clearly identified in the bid package including date certain when parcel is available to the contractor.
- Work around for any subsequent sequences (2,3, etc.) will be clearly identified in the bid package specifications and provide a date certain when each sequence will be available to the contractor.
- Bid package must contain contractual date certain for delivery of 100% complete design of each sequence, which must be provided to the contractor prior to construction of that sequence. NOTE: The contractor may start on a subsequent sequence only upon receipt of an updated R/W Certification for that sequence and with approval from the Resident Engineer (RE). Work can be advanced from subsequent sequences if the work does not affect the ongoing design effort, the proper right of way clearances are in hand, and adequate progress is being made on the current construction sequence.

4.2. Environmental

Prior to R/W acquisition and utility relocation, all design sequencing projects must have an approved environmental document, except in cases where advance acquisition has been approved by HQ R/W in accordance with R/W Early Acquisition Guidelines dated December 9, 2002.

All mitigation must be identified.

All necessary permits must be identified, obtained, and executed by the responsible resource agencies.

4.3. Right-of-Way (R/W)

For Appraisal, Acquisition, and Certification:

Design - Must have progressed to the point where final R/W requirements can be set with certainty, including identifying:

- Project hydraulic and drainage requirements,
- Temporary easements,
- Utility easements,
- Design features affecting parcels can be described with certainty for appraisal and acquisition purposes,
- Design must be in adequately supported detail to assure approval of a Resolution of Necessity by the California Transportation Commission or a local board(s).
- Completion of Hazardous Waste Investigation Report and approved Project Development Certificate of Sufficiency provided.

R/W - Can use early acquisition process prior to Project Approval & Environmental Document with HQ R/W approval, if project fits criteria as stated in Right of Way Early Acquisition Guidelines dated December 9, 2002.

Construction - If the contractor's work is delayed due to failure to meet the Certification schedule with any work-arounds as outlined in the special provisions, the resident engineer will process additional compensation to the contractor pursuant to Section 8-1.09, Right of Way Delays, of the Standard Specifications. In addition, contracts with the time-related overhead bid item and specification, the time-related overhead contract item is compensated for the number of days the controlling item of work is delayed.

- For contracts without the time-related overhead item, additional overhead compensation is only provided to the contractor after an independent CPA audit has been submitted by the contractor after contract acceptance and Office of Audits and Investigations has completed an audit review.

For R/W Certification:

- Entire project will be certified with a special design sequencing certification (R/W Certification #3 DS). The initial R/W project certification, and each subsequent sequence update, requires Headquarters and Federal Highway Administration approval, 30 days, prior to Certification. Work-around for specific sequences or parcels are to be provided with a date certain of physical possession by the State and included in the Bid Package.
- The project certification #3 DS must meet the requirements of a R/W Certification 3 or better for the first construction sequence, and include a R/W parcel certification schedule for each subsequent sequence.
- Except for sequence one, which requires a Cert #3 or better, remaining sequences may initially be certified project #3 DS without Resolutions of Necessity having been passed. A first written offer must have been made on all parcels included in subsequent design-sequences, prior to issuing the initial R/W Certification #3 DS. The first written offer will allow the State to assess the property owner's response and identify delivery risks to the sequencing schedule.
- The Certification schedule for each subsequent sequence and any workarounds represents a contractual commitment to the bidding contractor. NOTE: Non-performance is a breach of that contract, potentially resulting in substantial contractor delay costs. The R/W Certification schedule is an estimated schedule that should be overestimated rather than underestimated, however, it is not a breach of contract when the schedule is underestimated in the contract. Our contracts have a mechanism of payment under SS8-1.09, "R/W Delays" that allows for compensation when delays occur. No breach of contract occurs solely due to a State-caused delay.
- Updated sequence certifications will be provided in accordance with the sequence certification schedule set forth in the initial

certification for the overall project. A certification for a subsequent sequence or portion thereof can be advanced with R/W concurrence if in the best interest of the Department upon request from the Resident Engineer (RE). A corresponding updated certification for that sequence or portion thereof is concurrently required.

- It is important to note that there is NO Cert 3 option available for utilities. Utility certification will provide a statement as to the status of all utilities located within entire project area.

For Railroads:

- Design
- Must have progressed to the point where all railroad impacts and conflicts (including clearances, drainage, etc.) can be identified.
 - All temporary and permanent easements must be identified.
 - For railroad overhead structures, design must meet railroad standards and have progressed to the point where a General Plan must be ready to submit to the Railroad. All dimensions to railroad tracks and facilities must be shown on the General Plan and not subject to change.
 - For railroad underpass structures, design must be 100% complete before railroad approval can be obtained.
 - Railroads Plan approval for RR structures must be obtained.
- R/W
- Special design sequencing certification with work around may be used for railroad parcels if situation allows.
 - It is preferred that all necessary Railroad, Construction, and Maintenance Agreements; or Service Contracts be executed and any required California Public Utilities Commission approval(s) be obtained prior to Advertising; but in any case **MUST** occur prior to Bid Opening.

For Utilities:

- Design
- Must have progressed to the point that all utility conflicts have been identified.
 - Design features including hydraulics and drainage are developed to allow utility relocation plans to be prepared by

utility company and replacement of utility relocation easements identified.

- Compliance with high-low risk policy is required as with all projects.
- Utility relocation plans are approved and relocation notices (Notice to Owners) can be issued.

NOTE: The complexity of project design and the significance of any existing utilities will greatly impact the ability of design to meet these requirements for a design-sequenced project.

- R/W
- The advance utility design process can be utilized with prior HQ R/W approval if the project fits the criteria and the design has progressed (i.e. utility locations verified and conflicts identified, utility relocation plans prepared and approved, and utility agreements prepared), however, relocation notice can not be issued until environmental clearance is obtained.
 - May authorize ordering long lead-time materials utilizing state funds only after environmental approval.
 - Must have identified and acquired, or have possession of any necessary utility replacement easements.
 - Utilities relocation notices must be issued prior to R/W certification (as for all projects). All known obstructions must be shown on the plans along with the date they will be cleared and any required coordination with the contractor must be part of the Bid Package and indicated in the Special Provisions.

- Construction
- Underground service alert notifications are made by the contractor and verified by the resident engineer prior to working in areas of existing utilities. The contractor must not be allowed to work in areas of existing utilities prior to their relocations in subsequent design-sequences.

For Relocation Assistance:

- All occupants in R/W must be relocated in accordance with Uniform Act prior to sequence certification update.
- When project schedule dictates, projects may be certified as a special design sequence certification with a work around of remaining occupants on a particular sequence or parcel.

- However, R/W must first stipulate that replacement housing has been made available and that occupants remaining in R/W after contract advertising and award will not result in unnecessary inconvenience or disproportionate injury and that this action will not be coercive in nature. The date they will be cleared must be detailed in the Special Provisions.
- Contractors are directed to be careful to not disturb or encroach on occupants to be relocated or property that will be cleared in the future and prior to subsequent design-sequences.

NOTE: R/W may not issue a Notice to Vacate (30 or 90 days) until environmental clearance is obtained.

For Demolition and Clearance:

- All known utility related obstructions must be shown on the plans and the date they will be cleared must be indicated in the Special Provisions
- Timing may dictate when the contractor performs demolition operations after R/W Certification. Any demolition operations are to be done in compliance with all applicable laws, statutes, and regulations. During demolition operations, the resident engineer must verify the contractor doesn't damage improvements constructed or existing facilities to remain in place throughout the current or subsequent design sequences.

4.4. Construction

A+B bidding or incentive/disincentive (I/D) specifications are normally not incorporated into design-sequenced projects because of the potential for substantial State-caused delays due to the unknown nature of subsequent design-sequences. Use of A+B bidding or I/D provisions are especially discouraged when other issues (besides design-sequencing) exist that may cause delays, such as Right-of-Way issues or potential utility conflicts. I/D provisions are only recommended for portions of the work with completed design. If any portion of the work is to be done in a later design-sequence, I/D provisions for that work are not recommended.

1. Use of multiple calendars and use of 6-day or 7-day calendars are not recommended due to variability of subsequent design-sequences and the compressed engineering schedule it would require.

2. The Time-Related Overhead (non A+B) and Progress Schedule (CPM) specifications should always be incorporated into all design-sequencing projects, since the Engineer's Estimate is generally greater than \$5 million on these projects.
3. The resident engineer should communicate routinely with the project engineer. It is essential that these two individuals have a close working relationship. In the event there are conflicting or overlapping work between the contract documents of the initial sequence and subsequent design-sequences, the resident engineer will consult with the project engineer to verify the conflict or overlap and to determine the remedy.
4. The initial pre-construction meeting prior to awarding the contract should include representatives of all functional units anticipated to be involved throughout all design-sequences and should cover the final design of the first sequence as well as anticipated designs of following sequences.
5. The initial pre-construction meeting should notify the contractor that no early fabrication of materials anticipated to be used in subsequent design-sequences is permitted, unless advancement of work in later sequences is approved, fabrication of materials involved in the advanced work is permitted, but no early fabrication of materials not to be incorporated in the advanced work shall be permitted, unless approved in writing by the resident engineer.
6. Mini-pre-construction meetings should be held for each subsequent design-sequences as well. The mini-pre-construction meetings should only include representatives of functional units anticipated to be involved in the upcoming sequence. These meeting should be scheduled immediately after the contractor receives the project plans and specifications of the next sequence from district office engineer. The resident engineer should confirm in this meeting that there are no conflicts or overlapping work between documents of the current sequence and previous contract documents.
7. The resident engineer's review and analysis of the contract prior to the pre construction meetings should verify that the "Order of Work" specification is complete and coordinated with the design-sequencing of the project. Stage construction separately within each sequence, and throughout all sequences, should be reviewed, analyzed, and verified. If significant changes are

needed, the project engineer should be requested to re-design the stage construction as needed at highest priority.

8. The Critical Path Method baseline schedule is developed by the contractor to include milestones of subsequent design-sequences. The resident engineer should thoroughly review and analyze the baseline schedule and not accept the baseline by requesting re-submittal by the contractor in the event that any of the estimated activity milestones and/or durations are not realistic.
9. Baseline schedule activity durations assigned to sequences other than the initial sequence that are unknown at the time of development of the baseline schedule are included in the baseline by the contractor as estimated durations. The baseline schedule is not changed once it is accepted and approved by the resident engineer. The estimated durations are updated or revise, if necessary, in CPM monthly updates or revised CPM schedules as new information becomes available.
10. Revised CPM schedules are submitted by the contractor within 15 days after receipt of subsequent design-sequences for approval for any new activities required by the design-sequence.
11. Proposed changes to specifications, including those related to subsequent design-sequences, are made in contract change orders requiring Division of Construction approval.
12. A list of contract items anticipated by Design to significantly increase or decrease, or be eliminated in the next sequences is provided to the resident engineer from the project engineer. Changes in quantities and elimination of contract items are made pursuant to Section 4-1.03, "Changes," of the Standard Specifications. In addition, a list of items of supplemental work anticipated by Design to be added in following sequences is provided to the resident engineer from the project engineer.
13. The resident engineer will compensate the contractor in accordance with Section 4-1.03D, "Extra Work," of the Standard Specifications. Upon receipt of each contract package for subsequent design-sequences, the resident engineer deletes any contract items that were anticipated to be needed during the design phase but are discovered to be unnecessary during construction due to new information made available during construction. If details presented in the project plans and specifications of the subsequent design-sequences materially changes the character of the work of a contract item in the

initial contract, an adjustment in compensation is made in accordance with Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications.

14. The resident engineer should verify that the district office engineer sends a letter to the contractor that accompanies each design-sequence contract package informing the contractor of the provision of the project plans and specifications for the Design-Sequence No. XX. The district office engineer sends a copy of this letter to the resident engineer.
15. Supplemental Work and Contingencies provided should be at least 10%, but not more than 15%, of the Engineer's Estimate. If it is not, a G-12 supplemental funds request may be necessary immediately.
16. The Right-of-Way office may provide tentative railroad clauses in the initial design-sequence and therefore the final form of railroad clauses may not be available in the initial design-sequence. Modification of the clauses may be necessary as more design information becomes available, and in that event, updates to the railroad clauses are made in contract change orders requiring Division of Construction approval.
17. The project engineer must deliver a finalized design package of each sequence prior to the start of work on that sequence to the district office engineer, who delivers to the contractor.
18. The contractor shall submit a request for approval by the resident engineer to start work on each new sequence. The contractor may only start work on a new sequence after the resident engineer approves the written request by the contractor. This request and approval may be done in writing at the mini-pre-construction meeting.
19. Work may be advanced from subsequent design-sequences only by approval from the resident engineer and only if the following apply:
 - The resident engineer obtains concurrence from the Right-of-Way Division to advance Right-of-Way Certification of the subsequent design-sequence.
 - All work-arounds are clearly identified in the contract.
 - The advanced work does not impede the on-going work.
 - Satisfactory progress is maintained on entire project.
 - Progress by the contractor on the current sequence is no later than 5% behind schedule.

20. The Certification schedule, any specified work-arounds, detailed descriptions of work in subsequent design-sequences, as well as the dates specified in the special revisions of when the subsequent design-sequence packages will be delivered to the contractor are all contractual. If these schedules are not met and the contractor is delayed, compensation is made pursuant to Section 8-1.09, "Right of Way Delay," of the Standard Specifications and if the controlling operation is delayed, compensation is made pursuant to the "time-related overhead" specification. If the controlling operation is delayed, contract time is granted on a contract change order. If changes in subsequent design-sequences occur and the controlling operation is delayed, a commensurate amount of contract time is granted on a contract change order as well.
21. The exact time of delay is determined by requiring a time impact analysis from the contractor, and acceptance by the resident engineer after verifying it's accuracy. In the event of a delay to any of the contractor's operations (especially the controlling operation), the resident engineer should consider advancing work from subsequent design-sequences in order to mitigate the delay.
22. Eliminating or decreasing contract item(s) may be necessitated by advancing work that was originally planned in subsequent design-sequences.
23. District office engineer will deliver project plans and specifications for subsequent design-sequences to the contractor no later than the targeted date specified in the Special Provisions. In addition, district office engineer should send a letter to the contractor, and a copy to the resident engineer, accompanying each sequenced set of project plans and specifications, informing the contractor of provision of the next set of project plans and specifications for the design-sequence no. XX.
24. If district office engineer is late in delivering subsequent design-sequences, obtain a new target date by consulting with the project engineer and district office engineer. Consider directing removal of contractor's equipment and labor forces from the job site. In addition, consider removal of the contractor's field office from the job site.

25. Time-related overhead is not eligible for compensation after the contractor's field office is demobilized. Any compensation for unabsorbed home office overhead after removal of the field office must be justified after contract acceptance and only after the contractor has submitted an independent CPA Audit showing an unabsorbed amount is due for the delay. Typically, if the delay is four or more months, it is more economical to direct demobilization and re-mobilization of the contractor's field office than to pay time-related overhead for four or more months.
26. Escrowed bid documents are made available to the resident engineer from the Division of Engineering Services – Office Engineer for analysis and responding to notices of potential claims.

5. PREPARING THE INITIAL BID PACKAGE

The initial bid package is defined as Plans, Specifications and Estimates (PS&Es) for construction contracts that Caltrans advertises, awards, and administers. Design-Sequencing allows the department to enter into a construction contract with at least 30% complete plans, and begin constructing the project while subsequent phases of the project are under final design.

5.1. General

1. All Design Sequencing projects shall be categorized and submitted as “regular” projects to the Division of Engineering Services – Office Engineer (DES-OE). DES-OE will login and track the PS&E milestone dates and the status of all the documents pertaining to the project.
2. The PS&E submittal memo and the Attachment A should indicate that the project being submitted is a Design-Sequencing project. Information as to the percent of project completion and the number of sequences the project will have and when sequence milestones are expected to be met during the contract should be mentioned.
3. Avoid sequencing item(s) of work that are unfamiliar to the Contractor, e.g., mechanical, electrical work, which may require a lot of plan details to complete the work. If this cannot be avoided, provide assumptions that the contractor can use to base the bid.

4. For any work that will be design sequenced, the plans and the specifications should contain enough information necessary to bid the contract item(s) involved. For bidding purposes, some information may be assumed. Assumptions may be verified later in the subsequent sequence(s) when the project is in construction.
5. The Contract Books (Notice To Contractors and Special Provisions book and the Proposal and Contract book) will be marked with the label "Design Sequencing Project" on the front covers.
6. Inclusion of Pre-bid or Pre-award meetings is discouraged. Pre-bid and Pre-award meetings are usually reserved for projects with extraordinary issues on safety that need to be brought forward and addressed prior to start of bidding and construction. In any case, inclusion of Pre-Bid and Pre-Award Qualification meetings requires prior approval by the Deputy Director, which is then approved by the District Director. (Note: It is often difficult for DES-OE and District personnel to set up and attend these meetings.
7. Use of A+B Method of Contracting should be investigated for Design-Sequence Projects. However, close attention should be given to loss of time-savings in the analysis.
8. There will be no changes to the Disadvantaged Business Enterprise /Disabled Veteran Business Enterprise requirements (DBE/DVBE).
9. The Partnering specification will be added regardless of the Project's cost. This will allow the Contractor to provide suggestions for the development of subsequent sequence(s) and recommend schedule adjustments to facilitate project completion.
10. "Escrow of Bid Documentation" will be added in the special provisions regardless of the Project's cost for use in the resolution of Contractor disputes.
11. The Engineer's Estimate should list all contract items that will be or may be involved in the project. Each contract item should have corresponding details on the plans and specifications. Again for bidding purposes, information may be assumed to complete the design details for some contract items, which can be verified in subsequent sequence(s).

12. The criteria for evaluating the increases and decreases in contract items by 25% and for eliminating contract items as specified in Section 4-1.03B of the Standard Specifications will not change.
13. The use of incentive/disincentive (I/D) should only apply to portion(s) of work in the project where the design is complete and when the estimate of the number of (internal) working days to finish such portion has been finalized. I/D should not apply to portion(s) of work which will be design-sequenced.
14. The cost reduction incentive specifications should not change.

5.2. Project Plans

1. The title sheet will be marked "Preliminary For Bidding Purposes Only."
2. A project plan sheet or group of project plan sheets where the details of work are to be completed in the next sequences should be marked, "Preliminary For Bidding Purposes Only."
3. The title sheet should be signed and sealed by the Project Engineer. The signature and seal of plan sheets where the details shown are already completed may be signed and sealed. For all other sheets the signature and seal may be left blank.
4. Project plan sheets showing details that are partially complete or assumed should be marked, " Preliminary For Bidding Purposes Only."
5. The Project Plans together with the Standard Plans should be able to show the design details (be it complete, partial or assumed) of all contract items listed in the Engineer's Estimate.
6. Stage construction sheets of the project plans should closely coincide with the project's design sequencing segments (i.e., if the portion to be completed by the next sequence is at the tail end of the project schedule, the stage construction should reflect this).
7. DES-OE will fill-in the "Plans Approval Date," plan sheet number, and the federal aid number (if applicable).

8. The Utility Plans should show all utilities anticipated to be relocated, abandoned, or protected in all design-sequences.

5.3. Specifications

1. The front covers of the contract books will have a special identification as in the example below:

**Contract No. 04-259014
(DESIGN SEQUENCING CONTRACT)
04-Sol-80-R16.6**

2. Book 1 will contain a special notice alerting the bidders that the project is a design-sequencing project. The special notice will read as follows:

Special Notice

This project is part of a pilot program for "Design Sequencing", per Section 217, et seq., of the Streets and Highways Code (Assembly Bills 405 and 2607). The purpose of the pilot program is to evaluate design sequencing as a tool for acceleration of project completion. Design sequencing is a method of contracting where bids are based on partial project design, and final design activities are sequenced to permit each construction phase to commence when the design of that phase is complete. The project plans, specifications, and estimate for this project are not considered complete to construct the work anticipated by the contract, and the Engineer's Estimate may contain anticipated items of work that are not indicated on the project plans. Design and final project plans, specifications and estimate of quantities, will be completed after initial construction begins. Changes in character of work, elimination of and / or adjustments to the contract items and / or quantities will be in conformance with the Standard Specifications.

3. Section 1 of the boilerplate will be modified to provide or say the following:
 - a) In the Notice To Contractors, the heading will be as shown:

NOTICE TO CONTRACTORS

THIS IS A DESIGN SEQUENCING CONTRACT

**Contract No. 04-259014
04-Sol-80-R16.6**

- b) The project plans are not complete and that the project will be completed in sequence after approval of the contract.
 - c) A schedule showing when the next set of project plans (including changes to the specifications and estimate) will be received by the contractor after approval of contract. If the next set of project plans is received later than the schedule shows and the contractor is delayed, compensation for delay is made in accordance with the specifications.
 - d) A detailed description as to what the next set of plans would include for the next design-sequences, and the work that will be required.
- 4. No changes to the boiler sections regarding DBE or DVBE requirements.
 - 5. Include the non-standard special provisions, "Escrow of Bid Documentation" to be used in the resolution of disputes in the project.
 - 6. Pre-bid and/or pre-qualification meetings are not recommended though they may be necessary when there are extraordinary safety measures that will be required from the Contractor and only when such meeting(s) is justified and approved by the District Director.
 - 7. The "Partnering" SSP will be included in all design-sequencing projects.
 - 8. In the "Order of Work" SSP:
 - a) If an order of work is to be specified, the order of work should be coordinated with the design-sequencing of the project.
 - b) Mention that the Contractor shall not order fabricated materials for items of work until the design for such items of work requiring fabricated materials are complete except when approved by the Engineer.
 - c) Mention that the Contractor may be allowed to continue to work and complete the construction of an item of work(s) pending the complete design of the item of work(s) when approved by the Engineer.
 - d) If there is a particular way of working around an obstruction where the details of its relocation are incomplete, and around areas with pending R/W, specify this. This is also true for working around railroad parcels.

- e) Mention that the Critical Path Method (CPM) shall be updated when the Contractor receives subsequent design-sequences.
 - f) State that upon approval by the Resident Engineer, the contractor may work in subsequent sequence(s) if design is sufficiently complete, and R/W certification has been achieved for that sequence. RE must determine that sufficient progress has been made in the current sequence before approving work on subsequent sequences.
9. In the "Obstructions" SSP:
- a) List all the utilities that will be relocated or abandoned before and during construction and include the target dates as to when they will be relocated or abandoned. If some dates are still being negotiated and are not available until the next sequence, provide a reasonable assumed target date per consultation with District utility coordinator.
 - b) Include the number of days the utility owners require to relocate or abandon their utilities. A reasonable number can be estimated if data is unavailable per consultation with District utility coordinator.
 - c) Underestimating contract time to relocate or abandon utilities should be avoided. If the number of days to relocate or abandon utilities is not yet provided by the utility company and estimated by the Engineer, any underestimate will result in compensation for Right of Way delay, and if the controlling operation is delayed, may result in time-related overhead for the number of days underestimated.
 - d) Utilities mentioned in this SSP should match the utilities shown on the Utility Plan sheets.
10. All design-sequencing projects should include the "Progress Schedule (CPM)" SSP. The Baseline Schedule should include milestones based on Contractor's targeted receipt of subsequent sequence(s).
11. Section 13, "RAILROADS"
If railroad is involved, the RR clauses should be provided. To the extent possible, the final form of the RR clauses should be included. Otherwise, the R/W Section should be consulted and asked if a draft of the RR clause can be used and to be modified later in the subsequent sequence(s).
12. Items paid by Lump Sum (LS) are not adjusted in accordance with the adjustment provisions of Section 4-1.03, "Changes," of the Standard Specifications. Adjustments in compensation for

lump sum items will be made only for increased or decreased item work required by changes ordered by the Engineer and will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications.

5.4. Cost Estimate

1. While it is true that the Estimate should include all the items of work to complete the project, the Estimate should only include the items of work, which are mentioned or described on the plans and in the specifications of the bid package. Additional items can be added later as needed in the subsequent sequences.
2. Assign (F)-final pay to a contract item only if it is anticipated that its quantity will not change in the subsequent sequence(s).
3. Assign (S) to all specialty items.
4. Items paid for by lump sum (LS) should be based only on the details shown on the plans and in the specifications of the bid package.
5. Uncommon or unusual items should be avoided unless enough bid information is presented on the Plans and Specifications of the bid package.
6. In the Supplemental Work portion, consider additional funds for the potential overrun of contract item quantities; reserve money for R/W delays; allow compensation due to changes to targeted schedules in utility work by others and unanticipated "work-arounds" or changes in the character of work.
7. Supplemental work and contingencies should be increased to 15% of the construction contract allotment for all design-sequencing projects.

5.4. Addenda

1. Issuing addenda for design-sequencing project shall be limited to changes in conditions involving R/W, permits, project site, utility locations and relocations, and agreements with locals and railroad.

6. ASSEMBLY AND SUBMITTAL OF SUBSEQUENT SEQUENCES

6.1. General

1. The District Office Engineer (DOE) will be responsible for delivering the subsequent sequence(s) to the Contractor on or before the targeted date(s) specified in the special provisions (Section 1). Upon request of the DOE, DES-OE will facilitate the final preparation, including reproduction of the project plans and specifications involved in the subsequent sequence(s).
2. The District Project Engineer (PE) will be responsible for the preparation of the highway portion of the project plans that will go into the next sequence(s). He will be coordinating with the other functional units in the District and will be responsible for incorporating their changes on the plans. The PE will also be in charge of submitting the highway plans to the DOE.
3. The PE will inform the DES-Structures Specifications Branch and DES-Structures Design of the coming sequence(s) and will request Structures to send the structure plans and specifications for the next sequence(s) to the DOE.
4. The DOE will generate the specifications to go along with the highway plans submitted by the PE for the next sequence(s).
5. The DOE will be responsible for combining the highway and structures portions for the next sequence(s). The DOE will finalize the document for the next sequence(s) and will circulate the document to the appropriate District functional units including Structures for comments.
6. After circulation and when all comments are resolved, the DOE shall reproduce copies of the document and will deliver it to the Contractor on or before the specified dates.
7. If DES-OE is requested to participate in the delivery of the next sequence(s), all project plans should be submitted in CADD and the specification in "word" format. DES-OE will reproduce copies of the document and return the copies to the DOE for delivery to the Contractor.
8. A letter to the Contractor may accompany each subsequent sequence informing the contractor that he is being given a set of plans and specifications for the design-sequence no. XX.

6.2. Project Plans

1. All sheets should be marked, "Design-Sequence No. XX" as the case may be.
2. Tag or identify the details that are added or revised by the sequence. Use a symbol, which is unique for the sequence to tag or marked the added or revised details.
3. Each plan sheet has a signature and seal, complete with printed name.
4. Verify that accurate district, county, route, and post kilometer designations appear in the project identification block at the upper right corner of each sheet. Make sure that it matches the original bid plans.
5. The sheet identification codes should be correct.
6. Include applicable new and revised Standard Plans, which were not included in the bid package.
7. Make sure the Federal Aid Number (if applicable) is shown on the upper left corner of the Title sheet, to the left of the project identification block.
8. Make sure the "Plans Approval Date" has been added on all plan sheets. It should be the same date as the one in the bid package.
9. DOE reviews the project plans and should ensure that all comments and changes from all the functional units involved including those from structures are incorporated.
10. DOE will print and reproduce from 20 to 50 half-sized copies of the project plans for distribution.

6.3. Specifications

1. The set of specifications for the next sequence(s) will be bound and the front cover should be identified with "Design-Sequence No. XX" as the case may be.
2. Make sure that the Engineer's signature and seal is included. Verify that the Contract number is correct.

3. Verify that the specifications are not redundant and that they cover the new or added items or details of work shown on the plans for the sequence.
4. Verify that measurement and payment clauses of each specifications are correct since some items which are added by the sequence may be paid for by extra work.
5. Carefully examine any non-standard, new, or original specifications for clarity, standard nomenclature, style and format.
6. Verify the use of "full compensation" clauses. They may not be appropriate for some work that is being revised or added by the sequence(s).
7. Terminology in the Special Provisions should be consistent with that used in the bid package.
8. Make sure the Special Provisions being provided are sectioned accordingly and consistent with the bid package Special Provisions.
9. DOE will combine the specifications from structures with the highway portion. DOE will review, finalize, print, and reproduce the specifications for the subsequent sequence(s) for distribution and delivery to the Contractor.

6.4. Cost Estimate

1. A list of contract items that will significantly increase or decrease, or be eliminated in the next sequence(s) should be given to the Construction RE by the DOE. The RE will monitor these items during construction and will adjust the contractor's compensation as specified in Section 4-1.03B of the Standard Specifications.
2. The list of items of work that will be added in the next sequences should also be given to the RE. The RE will compensate the contractor as specified in Section 4-1.03D of the Standard Specifications.
3. If the details presented in the plans and specifications of the subsequent sequence(s) materially changes the character of work of a contract item in the bid package, adjustment in compensation will be made in accordance with Section 4-1.03C

of the Standard Specifications. Inclusion of Pre-Bid and Pre-Award Qualification requires prior approval by the District Director to be approved by the Deputy Director for Project Delivery per memo dated March 22, 2002 (see Attachment A).

7. PLANNING AND CHARGING PRACTICES

Proper planning and charging is critical to managing project costs. The need is even greater when implementing new processes that have the purpose of delivering projects faster while remaining within budget and maintaining a high level quality.

Whenever reasonably possible, State Highway project costs must be charged to specific multi-phase project expenditure authorizations (EAs). The Department has long-standing product-oriented charging rules (see Appendix 9.3.). These are built around project phases that produce specific products, namely:

Product	EA phase(s) in TRAMS
PSR, PSSR and similar project initiation documents	K
Project Report and Environmental Document	0
Awarded Construction Contract	1
Right of Way clearance and documentation	<ul style="list-style-type: none"> • 2 (Caltrans employees and related expenses); • 9 (Planned Capital Outlay); • H (Hardship Capital Outlay)
Physical Improvement to the State Highway (Construction)	<ul style="list-style-type: none"> • 3 (Caltrans employees and related expenses); • 4 (Capital Outlay)

The core principle is “Plan the work, Work the plan.” Work must be planned to produce specific products, the plans must be recorded in XPM, the planned work must be performed, and the actual cost of production must be recorded. As plans change, they must be updated in XPM.

With Design Sequencing projects, there is a decrease in the work needed to award a construction contract (EA Phase 1) and an increase in the work needed to prepare construction change orders (a part of EA Phase 3). The special designation field will be used to separate the costs of developing the change order for each sequence after construction award. Special designations should be used on timesheets, Travel Expense Claims, Local Requests, and other charging forms. (See Appendix 9.5.)

8. FHWA COORDINATION

FHWA requires environmental approval for the entire project prior to the award of any phase or sequence of the project, and full compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Right of way must be appropriately certified as defined in Section 4.3. of these guidelines. There should be no hidden problems. Bid opening cannot occur until an updated R/W Certification approved by HQ R/W and FHWA. Additionally, subsequent sequences must be approved by HQ R/W and FHWA prior to beginning work on that sequence.

FHWA will not participate in any delays due to reasons within our control. FHWA will participate if delays are related to natural events such as emergencies, acts of nature, etc. In the event the delays are related to failures in meeting project milestones (due to staffing issues, project priorities or the like) the State will be 100% responsible for all claims made by the contractor.

Scope changes will not be allowed after Environmental Document and Project Approval.

FHWA encourages close communication between their reviewers and the districts that have design-sequencing projects.

9. APPENDIX

Appendix 9.1. Assembly Bills 405 & 2607

BILL NUMBER: AB 405 CHAPTERED
BILL TEXT

CHAPTER 378
FILED WITH SECRETARY OF STATE SEPTEMBER 15, 1999
APPROVED BY GOVERNOR SEPTEMBER 15, 1999
PASSED THE ASSEMBLY AUGUST 26, 1999
PASSED THE SENATE AUGUST 23, 1999
AMENDED IN SENATE AUGUST 16, 1999
AMENDED IN SENATE JULY 13, 1999
AMENDED IN SENATE JUNE 28, 1999
AMENDED IN ASSEMBLY MAY 28, 1999
AMENDED IN ASSEMBLY APRIL 12, 1999

INTRODUCED BY Assembly Members Knox and Torlakson

FEBRUARY 12, 1999

An act to add and repeal Article 6.5 (commencing with Section 217) of Chapter 1 of Division 1 of the Streets and Highways Code, relating to highways, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

AB 405, Knox. Highways: construction: contracts. Existing law authorizes the Department of Transportation to make and enter into, in the manner provided by law, any contracts required for the performance of its duties.

This bill would authorize the department to conduct a pilot project to let design-sequencing contracts, as defined, for the design and construction of no more than 6 transportation projects, to be selected by the Director of Transportation. The bill would require the department to prepare a yearly status report on its contracting methods, procedures, costs, and delivery schedules and, upon completion of all design-sequencing contracts, to establish a peer review committee for preparation of a report for submittal to the Legislature that describes and evaluates the pilot project. The bill would require the design-sequencing contracts to be awarded in accordance with specified procedures.

The bill would specify that its provisions shall become inoperative on July 1, 2004, and as of January 1, 2005, would be repealed.

The bill would declare that it is to take effect immediately as an urgency statute.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) Under the traditional means of contracting for the construction of highway improvements, construction of any portion of the project cannot be commenced until the Department of Transportation has developed complete plans and specifications for the project, placed the contract out for bid, and awarded the contract.

(b) Recent construction practices have shown that there is potential for faster performance and cost savings if commencement of construction is not dependent upon completion of plans and specification for the entire project, but only completion of plans and specifications for each construction phase. This form of contracting is commonly known as design-sequencing contracting.

(c) To test whether the design-sequencing form of contracting would be beneficial to California in the administration of its highway improvement program, the Director of Transportation should be authorized to implement a pilot program of no more than six highway improvement projects using design-sequencing design to permit concurrent construction activities.

SEC. 2. Article 6.5. (commencing with Section 217) is added to Chapter 1 of Division 1 of the Streets and Highways Code, to read:

Article 6.5. Design-Sequencing Demonstration and Evaluation Program

217. For purposes of this article, the following terms have the following meanings:

(a) "Design-sequencing" is a method of contracting that enables the sequencing of design activities to permit each construction phase to commence when design for that phase is complete, instead of requiring design for the entire project to be completed before commencing construction.

(b) A "design-sequencing contract" is a contract between the department and a contractor that requires the department to prepare a design and permits construction of a project to commence upon completion of design for a construction phase.

(c) "Design" is a plan completed to a level of 30 percent.

217.2. (a) Notwithstanding Chapter 1 (commencing with Section 10100) of Part 2 of Division 2 of the Public Contract Code, except Section 10128 of that code, and Chapter 10 (commencing with Section 4525) of Division 5 of Title 1 of the Government Code, the department may conduct a pilot program to let design-sequencing contracts for the design and construction of no more than six transportation projects, to be selected by the director. For the purpose of this article, these projects shall be deemed public works.

(b) In selecting projects for the pilot program authorized under subdivision (a), the director shall attempt to balance geographical areas among test projects as well as pursue diversity in the types of projects undertaken.

(c) To the extent available, the department shall seek to incorporate existing knowledge and experience on design-sequencing contracts in carrying out its responsibilities under subdivision (a).

217.4. Not later than July 1 of each year for which the design-sequencing contracts are underway, the department shall prepare a status report on its contracting methods, procedures, costs, and delivery schedules. Upon completion of all design-sequencing contracts, notwithstanding Section 7550.5 of the Government Code, the department shall establish a peer review committee to prepare a report for submittal to the Legislature that describes and evaluates the outcome of the contracts provided for in this article, stating the positive and negative aspects of using design-sequencing as a contracting method.

217.6. Design-sequencing contracts shall be awarded in accordance with all of the following:

(a) The department shall advertise design-sequencing projects by special public notice to contractors.

(b) Contractors shall be required to provide prequalification information establishing appropriate licensure and successful past experience with the proposed work.

217.8. This article shall become inoperative on July 1, 2004, and, as of January 1, 2005, is repealed, unless a later enacted statute, that is enacted before January 1, 2005, deletes or extends the date on which it becomes inoperative and is repealed.

SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to assist in alleviating, as soon as possible, the loss of productivity caused by the continuing traffic gridlock and delay on the state's system of highways, it is necessary that this act take effect immediately.

BILL NUMBER: AB 2607 CHAPTERED
BILL TEXT

CHAPTER 340
FILED WITH SECRETARY OF STATE SEPTEMBER 8, 2000
APPROVED BY GOVERNOR SEPTEMBER 6, 2000
PASSED THE ASSEMBLY AUGUST 22, 2000
PASSED THE SENATE AUGUST 18, 2000
AMENDED IN SENATE JUNE 13, 2000
AMENDED IN ASSEMBLY MAY 15, 2000
AMENDED IN ASSEMBLY MAY 1, 2000
AMENDED IN ASSEMBLY APRIL 13, 2000

INTRODUCED BY Assembly Member Knox

FEBRUARY 25, 2000

An act to amend and repeal Sections 217, 217.2, 217.4, and 217.6 of, and to repeal Section 217.8 of, the Streets and Highways Code, relating to highways.

LEGISLATIVE COUNSEL'S DIGEST

AB 2607, Knox. Highways: pilot project: contracts.

Existing law authorizes the Department of Transportation to conduct a pilot project to let design-sequencing contracts, as defined, for the design and construction of no more than 6 transportation projects, to be selected by the Director of Transportation.

This bill would increase the number of permissible transportation projects to 12.

Existing law provides that these provisions shall become inoperative on July 1, 2004, and as of January 1, 2005, are repealed.

This bill would delete the July 1, 2004, inoperative date of these provisions and would continue the January 1, 2005, repeal date.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 217 of the Streets and Highways Code is amended to read:

217. For purposes of this article, the following terms have the following meanings:

(a) "Design-sequencing" is a method of contracting that enables the sequencing of design activities to permit each construction phase to commence when design for that

phase is complete, instead of requiring design for the entire project to be completed before commencing construction.

(b) A "design-sequencing contract" is a contract between the department and a contractor that requires the department to prepare a design and permits construction of a project to commence upon completion of design for a construction phase.

(c) "Design" is a plan completed to a level of 30 percent.

(d) This section shall remain in effect only until January 1, 2005, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2005, deletes or extends that date.

SEC. 2. Section 217.2 of the Streets and Highways Code is amended to read:

217.2. (a) Notwithstanding Chapter 1 (commencing with Section 10100) of Part 2 of Division 2 of the Public Contract Code, except Section 10128 of that code, and Chapter 10 (commencing with Section 4525) of Division 5 of Title 1 of the Government Code, the department may conduct a pilot program to let design-sequencing contracts for the design and construction of no more than 12 transportation projects, to be selected by the director. For the purpose of this article, these projects shall be deemed public works.

(b) In selecting projects for the pilot program authorized under subdivision (a), the director shall attempt to balance geographical areas among test projects as well as pursue diversity in the types of projects undertaken.

(c) To the extent available, the department shall seek to incorporate existing knowledge and experience on design-sequencing contracts in carrying out its responsibilities under subdivision (a).

(d) This section shall remain in effect only until January 1, 2005, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2005, deletes or extends that date.

SEC. 3. Section 217.4 of the Streets and Highways Code is amended to read:

217.4. (a) Not later than July 1 of each year for which the design-sequencing contracts are underway, the department shall prepare a status report on its contracting methods, procedures, costs, and delivery schedules. Upon completion of all design-sequencing contracts, notwithstanding Section 7550.5 of the Government Code, the department shall establish a peer review committee to prepare a report for submittal to the Legislature that describes and evaluates the outcome of the contracts provided for in this article, stating the positive and negative aspects of using design-sequencing as a contracting method.

(b) This section shall remain in effect only until January 1, 2005, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2005, deletes or extends that date.

SEC. 4. Section 217.6 of the Streets and Highways Code is amended to read:

217.6. Design-sequencing contracts shall be awarded in accordance with all of the following:

(a) The department shall advertise design-sequencing projects by special public notice to contractors.

(b) Contractors shall be required to provide prequalification information establishing appropriate licensure and successful past experience with the proposed work.

(c) This section shall remain in effect only until January 1, 2005, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2005, deletes or extends that date.

SEC. 5. Section 217.8 of the Streets and Highways Code is repealed.

DRAFT

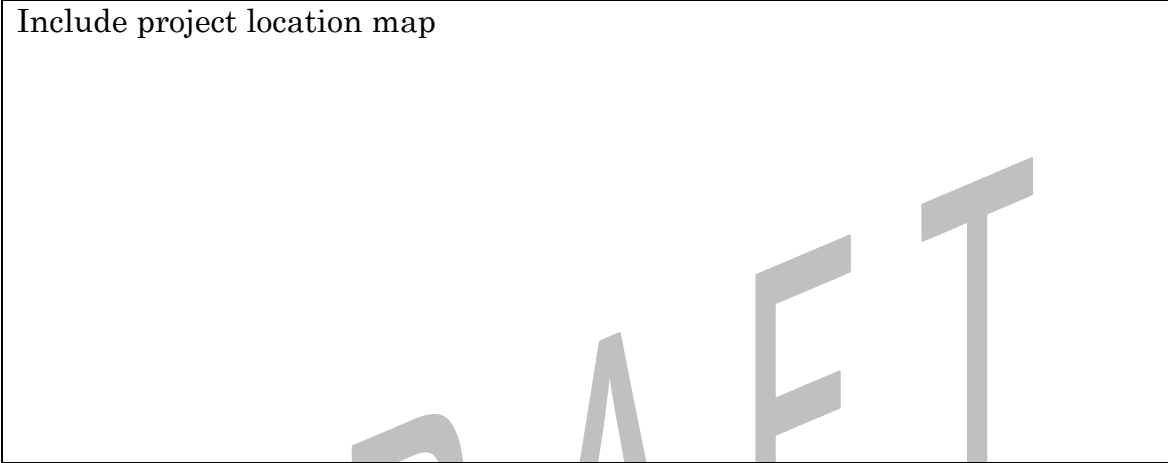
Appendix 9.2. Nomination Fact Sheet

DESIGN SEQUENCING NOMINATION FACT SHEET Dist-Co-Rte-KP / EA

Project Description

Include project features, purpose and need. Multiple EAs under a single environmental document or corridor study can be considered as one project under the Design Sequencing Pilot Program.

Include project location map



Project Proposal

Include information on the status of the overall project, environmental document and right of way. Any potential issues should be identified with a discussion of the risks involved.

Schedule

Compare current project schedule with the proposed Design Sequenced schedule.

Cost/Funding

Discuss project cost and funding sources.

Permits/Agreements

Discuss anticipated permits and agreements (Railroad Agreements, Cooperative Agreements, etc.).

Utilities

Transportation Benefit

List potential benefit(s) of using Design Sequencing for the project.

Public/Political Support of Project

Appendix 9.3. Selection Criteria Sheet

**Design Sequencing
Project Selection Criteria**

The information requested by the following Selection Criteria will be required for each project submittal in order to be considered.

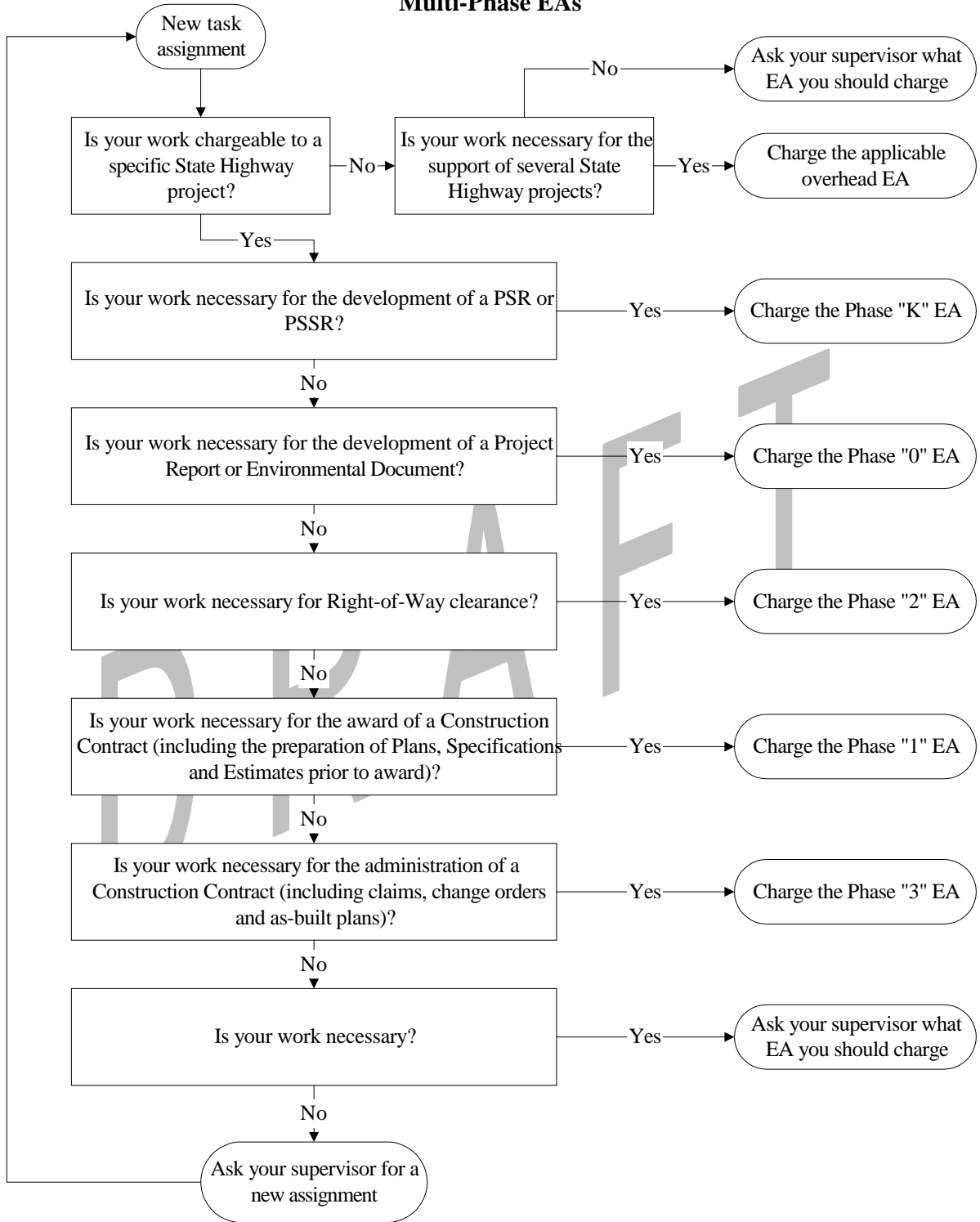
In applying the following criteria, some items will require a simple yes or no answer, in those cases mark 1 (Yes) or 5 (No). Other criteria will need to be evaluated using a more subjective range. In those cases mark between 1 and 5. A narrative explanation may be attached to help explain.

Date: _____

SELECTION CRITERIA	YES 1	2	3	4	NO 5
<ul style="list-style-type: none"> • Minimal public/environmental controversy 					
<ul style="list-style-type: none"> • Project approval obtained prior to advertising (PA&ED) <ul style="list-style-type: none"> • Environmental document approved (for entire project) • All major decisions made 					
<ul style="list-style-type: none"> • Project footprint established <ul style="list-style-type: none"> • Right of Way parcels have been identified • No condemnations expected 					
<ul style="list-style-type: none"> • Utility conflicts identified <ul style="list-style-type: none"> • Relocations have been identified and responsibility and time frame for relocation has been agreed upon 					
<ul style="list-style-type: none"> • Environmental permits identified and readily obtainable <ul style="list-style-type: none"> • List of permits provided • Schedule for obtaining permits included • No Endangered species 					
<ul style="list-style-type: none"> • Hazardous material Site Assessment completed 					
<ul style="list-style-type: none"> • Railroad involvement? <ul style="list-style-type: none"> • General agreement with railroad reached • Type of agreements needed have been identified 					
<ul style="list-style-type: none"> • Bridge Site Data complete and submitted <ul style="list-style-type: none"> • Permits to enter for foundation investigation have been obtained 					
<ul style="list-style-type: none"> • Cooperative Agreement <ul style="list-style-type: none"> • Funding commitments obtained 					
<ul style="list-style-type: none"> • Project lends itself to concurrent design and construction <ul style="list-style-type: none"> • Minimum 30% design to commence construction activities 					
<ul style="list-style-type: none"> • Significant time savings anticipated by using Design Sequencing 					

Appendix 9.4. Caltrans Standard Charging Rules

**Capital Outlay Support
Multi-Phase EAs**



CHARGING PRACTICES FOR DESIGN SEQUENCING PROJECTS

For the Design Sequencing pilot, all projects will have at least the following sequences:

<u>Special Designation</u>	<u>Description</u>
Phase 1 EA (no special designation)	Bid Package
SEQ1	Sequence 1
SEQ2	Sequence 2

Projects may have more sequences than what is shown above, but will proceed along with the same designation with increasing sequence number.

For charging purposes, use of the proper expense authorization (E.A.) with the correct phase for the work being done is essential. It is also necessary to use the special designation field on timesheets, Travel Expense Claims, Local Requests, and other charging forms to identify the particular sequence to which charges will be made.

Charging to Proper Expense Authorization (EA) Phase

Design Sequencing allows construction of the project to begin before completing the design for the entire project. This will happen only by opening multiple phases of an EA and simultaneously opening phases that, in the past, were not open at the same time. This will facilitate completing the Project Report while the work on the Bid Package is beginning and subsequently allowing for construction of certain sequences while other sequences are still being designed.

It is important to stress that for a given EA, the 0 phase must be closed prior to opening the 3 or 4 phase.

These charging practices shall be applied in accordance with DD-41 “Department Charging Practices”, for the duration of the Design Sequencing pilot program.

Examples of TOPSS entries using the Design Sequencing Special Designation are illustrated below. It is important to use proper WBS activities when charging to a particular sequence.

Example 1:

A Project Manager splitting 15 of his hours between two different sequences of this pilot project, the bid package and elements of sequence one prior to construction.

D O T STAFF COST DISTRIBUTION Page 1 of 1 012E
CAL TRANS Employee ID E0001

Reporting Charge Information for week of
March 24 - 30

Hours	----Codes----		Chg.	Sub	Spec	Desg	FA	AO	MSA	EZ
Chargeable	Lev	Rel	EZ CC Dist	EA	Job					Save
5.00	—	—	04 259011			2	100			—
10.00	—	—	04 259013		SEQ1		2	100		—

Example 2:

This Project Engineer, reporting down to level 7, has split his time between preparing summary of quantities sheets and perform roadway and misc. design. Both activities can be charged to either the preparation of the Bid Package or Sequence1 depending on the immediate need for the work being performed.

DOT STAFF COST DISTRIBUTION Page 1 of 1 012E
 CAL TRANS Employee ID E0002

Reporting Charge Information for week of
 March 24 - 30

Hours	---Codes---		Chg.	Sub		Spec	Desg	FA	AO	MSA	EZ
Chargeable	Lev	Rel	EZ	CC	Dist	EA	Job				Save
5.00			—	—	04	259011		1	230	P0540	—
10.00			—	—	04	259013	SEQ1	1	285	P050101	—

Example 3:

In this example, the Project Engineer is splitting his time between Construction Support for Sequence 1 and the design effort for Sequence 2.

DOT STAFF COST DISTRIBUTION Page 1 of 1 012E
 CAL TRANS Employee ID E0003

Reporting Charge Information for week of
 August 20 - 27

Hours	---Codes---		Chg.	Sub		Spec	Desg	FA	AO	MSA	EZ
Chargeable	Lev	Rel	EZ	CC	Dist	EA	Job				Save
5.00			—	—	04	259013	SEQ1	1	285	P100195	—
20.00			—	—	04	259013	SEQ2	1	285	P050101	—