# Design Stewardship Agreement

**between**

# Division of Design

**and**

# North Region
# Districts 1, 2, 3

January 2015

# Design Stewardship Agreement

## North Region - District 2

The Design Stewardship Agreement between the Division of Design and District 2, as outlined herein, further delegates responsibilities which were previously established by the following documents:

The Director has delegated authority to the Chief Engineer dated December 10, 2012.

The District 2 Director has been delegated authority dated October 1, 2008.

The Chief Engineer has delegated authority to the Chief, Division of Design dated June 18, 2013.

District 2 requests design delegation authority for the baseline delegations described in the Design Stewardship Agreement Baseline Delegations. With this approval, the District Director further sub-delegates this delegation authority to the Division Chief, North Region Engineering. The District is not seeking additional delegation authority beyond the baseline agreement at this time. The attached North Region, District 1, 2, 3 Stewardship Quality Management Plan, dated January 2015, describes how I will manage the delegated authority.

The Chief, Division of Design and the District 2 Director mutually agree in carrying out the delegated authority as prescribed in the attached Stewardship Quality Management Plan. Implementation of this approval is effective immediately upon execution of this agreement.

John Bulinski, District 2 Director — 1/20/15 Date

Timothy Craggs, Chief, Division of Design — 1/20/15 Date

# North Region - District 1, 2 and 3
# Stewardship Quality Management Plan

January 2015


Prepared by:

North Region
Division of Engineering

Joseph C. Caputo, II
Division Chief

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# North Region Stewardship Quality Management Plan

## Introduction

The North Region (District 1, 2, &3) Stewardship Quality Management Plan (SQMP) is the basis for establishing and maintaining a broad level of delegation from HQ to the districts as documented in the North Region Stewardship Agreement. The SQMP also outlines the Division of Design's (DOD) commitment to provide the support needed for the districts to be successful.

The Stewardship Agreement is a contractual document which responsibly transfers decision making authority from Caltrans HQ Division of Design (DOD) to individual districts. The SQMP, in accordance with the Design Stewardship Agreement Plan in Appendix B, provides the framework and direction to ensure successful delegation with consistency and assurance that delegated approvals are good decisions, substantiated in quality documents and risk assessments, developed, reviewed and approved by appropriate technical and management authorities with appropriate justification and defendable rationale for District accountability.

The SQMP is subdivided and presented individually in the following seven quality management principles:

1. Leadership
2. Strategic Plan
3. Customer Focus
4. Workforce
5. Detection
6. Issue Resolution
7. Results

These principles will be utilized to meet the delegation responsibilities applicable to the baseline Design Stewardship Agreement and additional delegations of authority described in Appendix A that are anticipated to be negotiated. Improvements to the management plan will be made as experience is gained, issues elevated and resolution obtained.

Documenting these processes with the SQMP provides direction and guidance for current and future staff, management and organizational leadership.

## Leadership

The North Region (NR) encompasses District 1, 2 & 3 with independent district directors who operate their respective districts within the North Region Capital Outlay Support (COS) organizational and management structure. Approval of the North Region Stewardship Agreement sub-delegates authority from the district directors to the NR Chief, Division of Engineering who will sub delegate to the NR Design Office Chiefs (Supervising Transportation Engineers). Design exceptions and other design project decisions for projects developed by others such as Maintenance, Traffic, Planning and local agencies will be approved by the authorized Design Office Chief for each District.

The district directors, as part of monthly coordination meetings will include risk management as a regular agenda item where delegations and associated project issues and risks will be discussed and managed. The district directors expect that the DOD Resource Center will develop strategies, tools and training for sharing knowledge and to foster the statewide consistent application of design standards and policies. In addition, the directors, NR Chief, Division of Engineering and Design Office Chiefs will rely on the DOD Resource Center to provide guidance on difficult issues, delegation processes and experiences in order to make improvements and also to formulate and negotiate future delegations.

The following diagram outlines the NR delegation organization leadership and delegation flow.

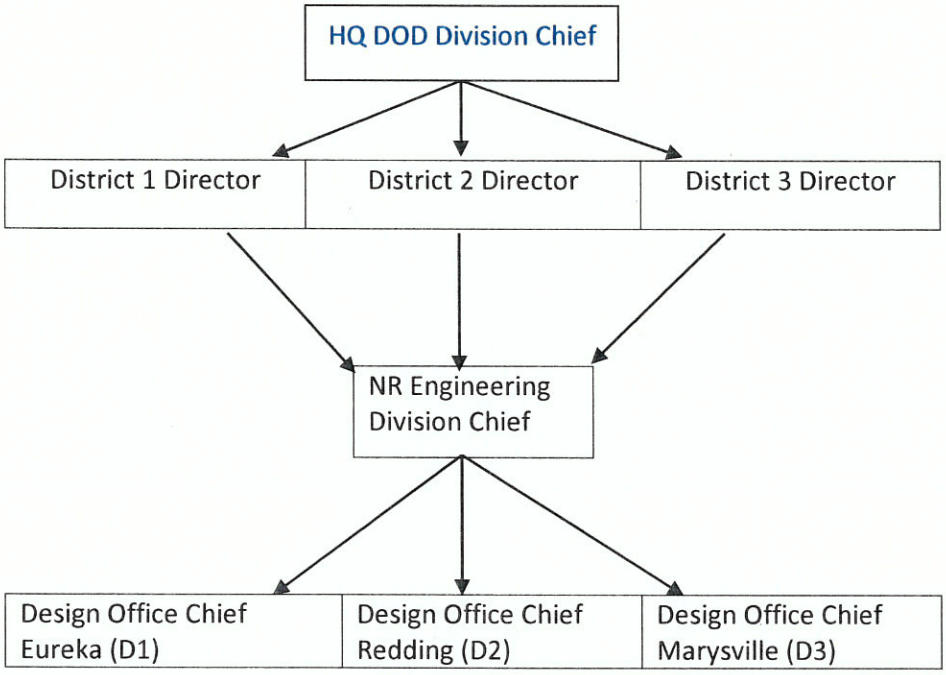


Figure 1- NR Delegation Organization Leadership

The district directors, NR Engineering Division Chief and Office Chiefs will outreach and engage district staff affected by the SQMP to ensure understanding and commitment to the delegated responsibility. Lastly, in the event of changing leaders, a set of protocols will be developed to ensure transitions are in place.

## Strategic Planning

The Stewardship Agreement is consistent with the direction of Caltrans' most current Strategic Planning effort to be more efficient, transparent and empowered at the district level. Upon approval of the delegation authority the NR districts will integrate the SQMP into the district strategic planning process with subsequent outreach and communication to all staff as deployment commences. The SQMP will be implemented in collaboration with the organizational leadership, customers, stakeholders and workforce to establish the action plans and objectives for measuring and monitoring the outcomes and results of the delegation process. Goals, desired outcomes, strategies, measures and results will be implemented. Performance measure results will be reported periodically by the NR Chief, Division of Engineering. Positive results and/or improvement actions will be the basis for sustaining approval authority in collaboration with DOD.

## Customer Focus

The Stewardship Agreement gives the districts and region a broad level of authority potentially affecting many inside and outside the organization to different degrees and in many different ways. All of these concerned entities are stakeholders and customers of this effort whose concerns must be considered and accounted for. Internally, at the lower level, engineering staff have an expectation of good guidance and direction from management. At the higher level, district directors must have confidence that the delegated authority is wisely implemented and applied with appropriate documentation.

Internal stakeholders would include all functional units who participate in the project development decision making process. Each will be coordinated with to capture their interests as they relate to delegation responsibility. Externally, local partners involved in the planning and designing of improvement projects on the state highway system are stakeholders. Their interests and concerns will be captured through the district's director and management meetings and forums. At the project level for both internal and external projects the modified procedures will be discussed in regular PDT meetings.

FHWA is a stakeholder on Interstate highway projects whose interests and concerns will be captured. They will be included, as needed, for evaluating lessons learned and making future improvements. FHWA involvement in project delivery will not change with the delegation of responsibilities.

At the broadest level, the travelling public is the ultimate customer whose safety and comfort are at stake with the decisions that are made.

## Workforce

The North Region has a large workforce of professional and committed engineering staff representing many functions who work on projects in a large and diverse geographic area. Consequently, wide ranging conditions and situations are involved with project development and the application of design standards and policies. Those involved with decision making also involve a wide range of staff within the structure of the organization. The primary focus for the delegation approval for non-standard features will be Design Office Chiefs. However, design seniors, project engineers, project managers, division chiefs and functional subject matter experts all contribute and must be engaged and educated on the delegation process and responsibilities. Additional functions including advanced planning (PID unit), permits, maintenance and traffic design, operations, electrical design, landscape architecture, storm water, hydraulics, construction and project management will need to be familiar with the delegation and responsibilities.

The NR will develop and publish written guidance and procedural requirements for implementing the delegation responsibility. Guidance for the newly delegated design exception approval changes will be added to update the previous 2013 district advisory approval process and will be posted on the NR Engineering website.

Two existing qualified staff (one for D1/D2 and one for D3) at the either Senior Transportation Engineer or Transportation Engineer, Range D level will be identified as District Design Liaisons for consultation by project engineers and seniors. The District Design Liaisons will be design subject matter experts that work closely with the Design Office Chiefs and staff on all aspects supporting the delegation approval and performance monitoring process. The District Design Liaisons will provide hands on guidance and on-the-job training as needed to clarify elements of the SQMP. The District Design Liaisons will coordinate with the DOD Project Delivery Coordinator to upload the approved design exceptions to a statewide database helping to facilitate statewide tracking and consistency. Resources for the District Design Liaisons will be project direct and resourced through the individual project work plans.

The DOD Resource Center will support the district workforce by providing the expertise of the Project Delivery Coordinator and other subject matter experts. Their guidance and support will be available when called upon for technical support and for coordinating with other functional areas outside of the DOD Resource Center, as well as to clarify policies and ensure training consistency on policies.

DOD will resource the travel for the Design Liaison to attend periodic (roughly 12 to 16) meetings with DOD Project Delivery Coordinators and other DOD Resource Center staff to ensure statewide consistency and to stay informed of policies and standards changes.

The following diagram illustrates how the individual SQMP elements are incorporated into the delegated design exception approval process.

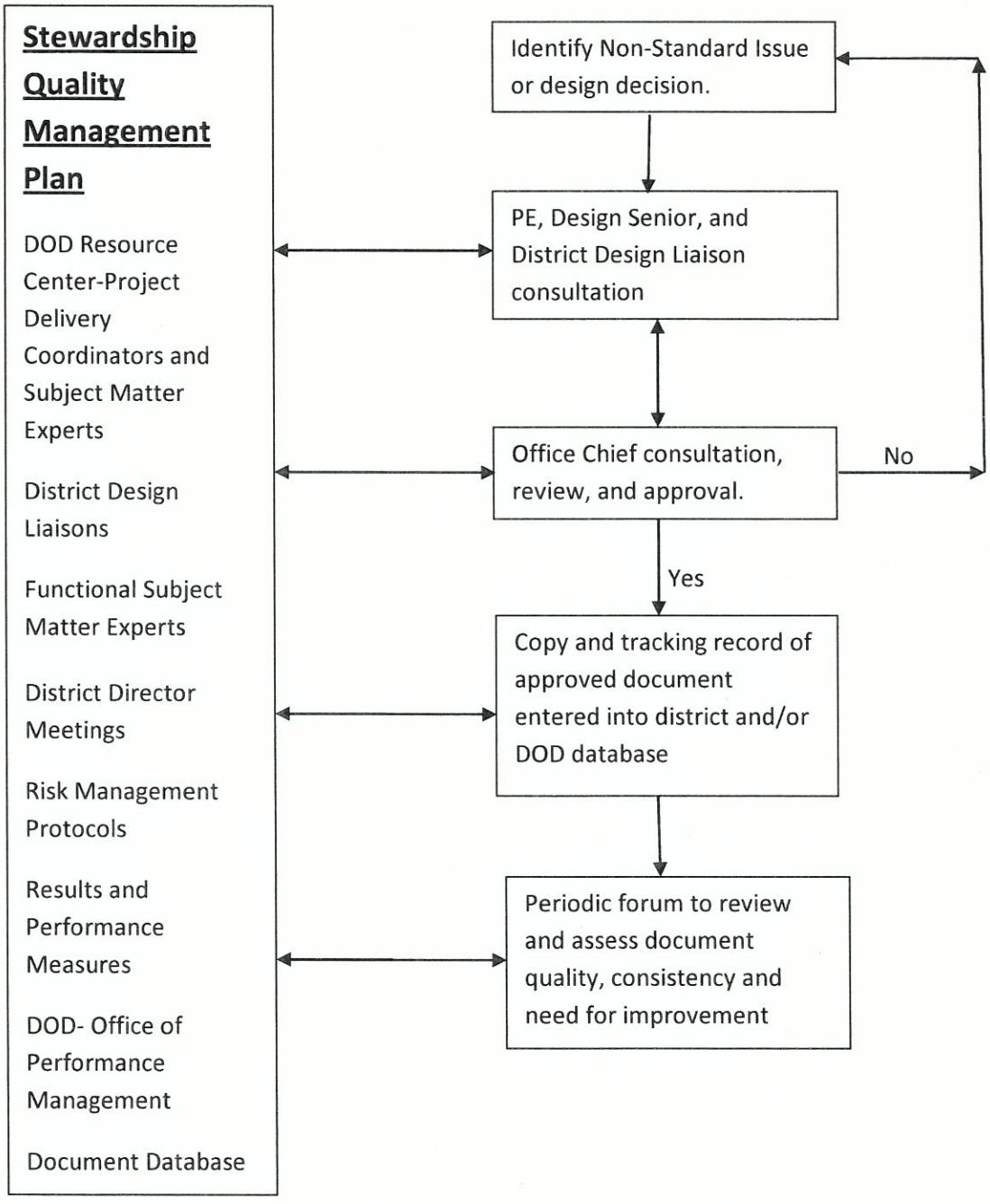


Figure 2 Typical Delegated Decision Process with SQMP

## Detection

The NR Design Office Chiefs are the delegated approval authority in North Region.

Guidance will be posted on the North Region Design Website for implementation of the delegation responsibility. Both the District Design Liaisons and the NR Design Office Chiefs will monitor quality and process requirements and ensure that the delegation responsibilities are consistently and uniformly applied for all projects.

A periodic forum will be established for the NR Design Office Chiefs and District Design Liaisons to jointly review the approved design exceptions throughout the region. At this meeting, exceptions will be assessed for proper documentation, consistency, and retention and a determination made whether corrective action may be necessary.

Design exceptions will be tracked and reported quarterly. Reporting is described under the Results section. This will serve as a management tool to monitor consistency and quality throughout the North Region as well as statewide.

The DOD Office of Performance Management will also conduct periodic reviews, measure compliance with the SQMP and assess performance measures.

## Issue Resolution

A risk management process for elevating issues to the organizational leadership will be developed during the SQMP implementation. Included will be the requirement for proper documentation to formally acknowledge the involvement of the appropriate stakeholders and decision makers of the issue and its resolution. Systematic and recurring conflict will be identified and elevated in a timely manner to the DOD Office of Performance Management. Lessons learned will be implemented as a collaborative improvement effort across the districts involving DOD and stakeholders.

Initially, if a conflict is not resolved within two weeks, the Design Senior will elevate the issue to the Office Chief for resolution. If the conflict remains unresolved, the Office Chief will elevate the issue to the NR Engineering Division Chief for resolution.

For complex or controversial project issues, Office Chiefs will consult with subject matter experts, the DOD Resource Center and, when appropriate, elevate the issue to the NR Engineering Division Chief. If the conflict remains unresolved, the Division Chief will consult with the DOD Chief for input and resolution as necessary.

## Results

Results will be assessed and categorized by the District Design Reviewers by evaluating the documentation and delegation approval process based on key performance measures and indicators. Reporting of the results and developing metrics for evaluation and auditing will be developed in coordination with DOD.

The District Design Reviewers will file all documents so they are categorized and readily available for quality evaluations and audits, legal reviews, reporting and reference by using the Document Retrieval System (DRS) and a future database developed in coordination with DOD. It is anticipated that the new searchable database will store documents and information using a filing system and categories to access copies, sort and report including the key indicators and performance measure data.

Some of the performance measures and key indicators to be reported are:

- Number of delegated mandatory approvals granted
- Number of mandatory design exceptions approved after PID/Project Report/RTL
- Number of design exceptions identified during construction
- Number of documents requiring Issue Resolution process

Upon successful implementation and performance results, the North Region intends to pursue additional delegation authority including but not limited to all design approvals on freeways, longitudinal utility encroachments, hi-low underground utility risk policy approvals and 2R Project Certification concurrence for freeway projects.

Recommended for Approval:

Joseph C. Caputo II
Chief, NR Division of Engineering

15 Jan 15
Date

Approved:

Amarjeet S. Benipal, District 3 Director

Jan 20, 2015
Date

John Bulinski, District 2 Director

1/20/15
Date

Charles C. Fielder, District 1 Director

1/5/2015
Date

# North Region, Districts 1, 2, 3

## Stewardship Agreement Baseline Delegations

## District Approval Authority

## January 2015

| Baseline Stewardship Agreement Delegation Authority to the Districts | | | | | | |
|---|---|---|---|---|---|---|
| Highway Design Manual (HDM) | | | | | | NR Districts 1, 2, 3 |
| HDM Chapter/ Topic | Description | Conven-tional Highway | Express-way | Freeway[1] | Inter-state Freeway[1] | Delegated Approval Authority[2] |
| Advisory Design Standards | Advisory standards use the word "should" and are indicated by Underlining | Y | Y | Y | Y | Design Office Chief |
| 2013 Delegated Mandatory Design Standards | Authority to approve deviations from this Mandatory Standard is delegated to the District Director as noted by (2) in the HDM | Y | Y | Y | Y | Design Office Chief |
| All Mandatory Design Standards (Except for Chapter 600) and 2013 Delegated Standards | Mandatory standards use the word "shall" and are printed in Boldface | Y | Y | NO | NO | Design Office Chief |
| Design Information Bulletins( DIB), Design Memorandum and Executive Orders | | | | | | |
| DIB 77 | Interchange Spacing | N/A | Y | NO | NO | Design Office Chief |
| DIB 79 | 2R Project certification Design guidance and Standards for Roadway Rehabilitation Projects and Certain Other Projects | Y | Y | Y[3] | Y[3] | Design Office Chief |
| DIB 82 | Pedestrian Accessibility Guidelines for Highway Projects and ADA | Y | Y | NO | NO | Design Office Chief |
| DIB 83 | Caltrans Supplement to FHWA Culvert Repair Practices Manual | Y | Y | NO | NO | Design Office Chief |

[1] If not delegated, see the article "Negotiated Design Stewardship Agreement Delegations of Authority."

[2] All mandatory Design Standards must be within the Deputy District Director chain of command.

[3] These are part of the delegation implementation plan for ADA standards.

| Project Development Procedures Manual (PDPM) | | | | | | |
|---|---|---|---|---|---|---|
| PDPM 9 | Modifications to existing access points or new access points to the Interstate System – Review & Approval required. | Y | Y | NO | NO | Design Office Chief |
| PDPM 9-Article 7 | Traffic signal projects that introduce or perpetuate nonstandard conditions - Exceptions to Mandatory Design Standards | Y | Y | NO | NO | Design Office Chief |
| HDM-PDPM 82.2(1) - 15-7 | Contract Design Changes (CCOs) - Exceptions to mandatory design standards. | Y | Y | NO | NO | Design Office Chief |
| PDPM 17 | Existing Utility Longitudinal Encroachments - Exceptions may be granted, but must be approved. | Y | Y | NO | NO | Design Office Chief |
| PDPM 17 | Utility Encroachments on Toll Bridges – All installations must have approval. | Y | Y | NO | NO | Design Office Chief |
| PDPM 17 | Reclaimed Water Systems & Encroachments - All installations must have approval | Y | Y | NO | NO | Design Office Chief |
| PDPM 23 | Approval Authority for Denominations, or Withdrawal of Denominations. | N/A | Y | Y | Y | Design Office Chief |
| PDPM 23 | Reopen Route Studies – requires written approval. | Y | Y | NO | NO | Design Office Chief |
| PDPM 2,24 | Conformance to Adopted Route - All deviations from the adopted route must be approved. | Y | Y | NO | NO | Design Office Chief |
| PDPM 2 | Route adoption maps – Approval authority and exceptions to policy | Y | Y | Y | Y | Design Office Chief |
| PDPM 2, 24 | Freeway Agreements and Controlled Access Highway– Execution authority. | N/A | Y | Y | Y | Design Office Chief |
| PDPM 24 | "Project" or "Performance" Agreement – draft document requires review and approval. | Y | Y | NO | NO | Design Office Chief |

## Introduction

The purpose of the Design Stewardship Agreement is to provide a contractual document which transfers the decision making authority from Caltrans Headquarters Division of Design (DOD) to individual districts and defines how the district and DOD will operate together with Stewardship delegation.

As related to the Design Stewardship Agreement the DOD has defined stewardship as follows:

Design Stewardship is about the co-management, co-administration, and co-responsibility of the design standards, policies and procedures the department uses to manage the state transportation system. Stewardship consists of a delegation of responsibilities and a mutual accountability of assuring that those responsibilities are executed. Stewardship is a joint responsibility for the development and implementation of the state transportation system. Delegation of responsibilities and mutual accountability are defined as follows:

> The **delegation of authority** means the transfer of approval authority from DOD to the district for specific project level decisions as defined in this agreement.
>
> DOD will retain some project level decisions and all program level corporate activities related to delivering the state transportation program, such as leadership, technology deployment, technical assistance, training, problem solving, performance management and process improvement.
>
> **Mutual accountability** refers to accountability shared by both parties and is managed by the performance measurement, risk management, technical consultation, dispute resolution, and the sharing of best practices between DOD and districts.

Stewardship, as outlined in this document, is exercised through program management and project level activities.

The baseline Design Stewardship Agreement, as well as the Negotiated Design Stewardship Agreement Delegations of Authority, delegates only DOD approvals but does not include approvals needed from other department divisions. The delegations presented in this document are consistent with but do not affect the delegations between FHWA and Caltrans.

## Design Stewardship Agreement Plan Overview

The Design Stewardship Agreement plan is based on the following criteria:

- A uniform baseline approval authority for all districts
- The allowance for additional approval authorities to individual districts when warranted and mutually agreed upon
- A consistent format for stewardship and performance measurement
- Clarity approval authority responsibility

The Design Stewardship Agreement is intended to be periodically amended and updated as the needs and goals of each individual district change over time.

## Roles and Responsibilities

The following roles and responsibilities with regards to the Design Stewardship Agreement pertain to the Caltrans DOD, except where otherwise noted. The Project Delivery Coordinators and other DOD managers will continue to provide approvals for non-delegated authorities as needed. The three main bodies to implement the Design Stewardship Agreement are the individual Districts, the Resource Center (see Figure 1), and the Office of Performance Management.

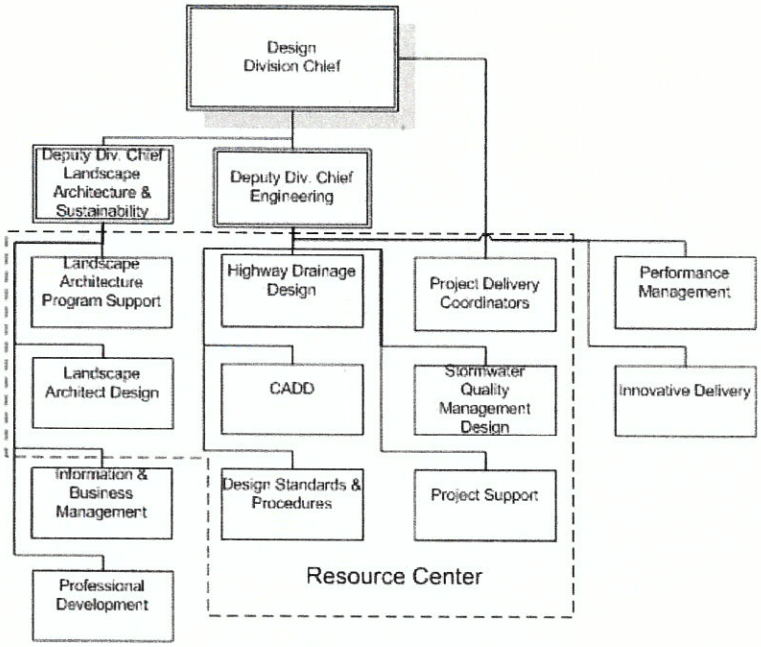


*Figure 1 DOD Organization Chart*

### *Districts*

Each district is expected to accept the baseline Design Stewardship Agreement Delegation Authority as presented below and will have the option to negotiate an increased level of authority beyond the baseline, reflecting their district needs. Each district will also be expected to provide an organizational structure to implement a Stewardship Quality Management Plan (SQMP) as part of the Design Stewardship Agreement. This SQMP will outline and define how the district will ensure adherence to the Design Stewardship Agreement.

Delegation of the Authorities through this Design Stewardship Agreement will transfer to the District Director. These delegations affect civil engineer works and are therefore subject to the Business and Professional code as defined in sections 6730-6731.1. If a District Director is not a registered Professional Engineer, further delegation is required in writing to the District/Regional manager responsible for the Design function. These delegations may further be delegated in writing within the design function, but not below the Supervising Transportation Engineer Level.

As noted before, the individual districts will have the opportunity to periodically amend the Design Stewardship Agreement, including the negotiated level of delegated authorities and the SQMP as needed in the future.

### *DOD Resource Center*

The DOD Resource Center is a term applied to the expertise provided by the Project Delivery Coordinators, and subject matter experts in the DOD offices. These individuals will provide guidance and support for the districts with regard to delegated authorities of the Design Stewardship Agreement when called upon. It should be noted that the DOD Resource Center will provide subject matter expertise on topics such as geometrics, ADA standards, utility encroachments, encroachments, route matters, CADD/GIS, hydraulics, stormwater, roadside management, and landscape design, among others. The Resource Center may call upon and coordinate other functional areas outside of the DOD to assist in providing input and guidance.

The DOD Resource Center will develop strategies, tools and events that will share knowledge and foster the statewide consistent application of design standards and policies.

### *Office of Performance Management*

The Office of Performance Management (OPM) will act to ensure that the individual Design Stewardship Agreements for each district are implemented. The OPM will conduct periodic reviews, measures compliance with each district SQMP, and specific performance measures. The OPM acts as the custodian of the Design Stewardship Agreements and will coordinate future modifications of the agreements and/or SQMPs. These reviews will serve to identify areas of improvement or best practices of either DOD or districts. The OPM will coordinate with the Project Development Coordinators to help facilitate change to the Stewardship Agreement.

### *Joint Roles and Responsibilities*

It will be the joint role and responsibility of the above entities to abide by the agreed upon delegated authorities and SQMPs. It is the joint responsibility of the districts and Project Delivery Coordinators to determine any necessary further definition of delegated authorities not covered by the initial Design Stewardship Agreement and to document the decisions made (e.g. this would apply to projects with scopes that cross multiple facility types). There is an expectation that joint roles and responsibilities are determined by consensus; however when disagreements cannot be resolved, the dispute resolution process as prescribed in the Project Development Procedures Manual Chapter 21 will be followed.

## Baseline Design Stewardship Agreement Delegation of Authority

Refer to Appendix C, the baseline Design Stewardship Agreement applies to all DOD approvals on conventional highways and expressways for all districts. In addition, the following approval authorities apply to freeways and will be delegated to the districts:

- Approval of Freeway Agreements, Controlled Access Highway Agreements, and Route Adoption maps.
- Encroachments due to recycled water systems
- Denomination of freeway declaration for facilities operating as conventional highways and expressways or unconstructed routes
- Approval of exception to accessibility design standards for all highway types that is conventional, expressway, and freeway.[4]
- Previously district delegated mandatory design exception approval authorities as shown in the Highway Design Manual (HDM) will remain unchanged (enacted in 2013).

The following approval authorities are excluded from the baseline Design Stewardship Agreement and retained by the DOD:

[4] This sentence is different from the implementation plan to clarify the span of delegation for ADA standards.

- Project of Statewide Interest (POSI) as defined in Appendix A
- High-low underground utility risk policy approvals
- Longitudinal utility encroachments on freeways or expressways
- Non-utility encroachments
- Safety Roadside Rest Areas Master Plan
- Non-Standard Special Provision (NSSP) approvals within DOD.

## Negotiated Design Stewardship Agreement Delegations of Authority

Each District has the ability to request additional delegation authorities beyond the baseline Design Stewardship Agreement outlined above. Additional Authorities as Negotiated by Districts may include, but are not limited to:

- All design approvals on freeways
- Longitudinal utility encroachments
- Hi-low underground utility risk policy approvals
- 2R Project Certification concurrence for freeway projects.
- Conditions will be included in an appropriate SQMP which demonstrates a proven ability to responsibly manage the requested additional delegations.