



Construction Policy Bulletin

CPB 14-1 Americans With Disabilities Act Facilities Construction Inspection Guidance

References:	Design Information Bulletin	DIB 82, "Pedestrian Accessibility Guidelines for Highway Projects"
	2010 revised <i>Standard Plans</i>	RSP A87A, "Curbs and Driveways" RSP A88A, "Curb Ramp Details" RSP A88B, "Curb Ramp and Island Passageway Details" RSP A90A, "Accessible Parking Off-Street" RSP A90B, "Accessible Parking On-Street"
	2010 Standard Special Provisions	73-3.01C, "Submittals" 73-3.01D, "Quality Control and Assurance" 73-3.03, "Construction"
	<i>Construction Manual</i>	Section 4-73, "Concrete Curbs and Sidewalks"

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Approved:

MARK LEJA, Chief
Division of Construction

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Background

A memorandum, signed on October 5, 2012 by the acting deputy director of Project Delivery, requires that district directors establish procedures to ensure their projects are constructed in conformance with Design Information Bulletin (DIB) 82, "Pedestrian Accessibility Guidelines for Highway Projects." The bulletin provides Americans with Disabilities Act (ADA) design guidance and standards to comply with various federal and state laws and regulations on pedestrian accessibility. As part of the district director's procedures, Design and Construction are required to certify that the project as-built complies with the ADA standards in DIB 82, which are reflected in a contract's project plans and applicable *Standard Plans*.

Recent reviews of newly constructed facilities with ADA features have shown instances where required dimensioning and slopes were not obtained pursuant to contract and DIB 82 requirements. These noncompliant facilities will require some measure of correction and, in certain cases, complete removal and replacement through a subsequent contract when significant deficiencies were identified after construction contract acceptance.

In an effort to ensure completed facilities meet DIB 82 requirements, modifications to *Standard Plans*, standard special provisions (SSP), and *Construction Manual* procedures have been developed. Changes to the *Standard Plans* include modification of dimensioning and slopes to more conservative values than those required by federal and state laws and regulations for pedestrian accessibility (refer to the attached revised *Standard Plans*). Changes to the specifications concerning both contractor and Caltrans contractual responsibilities are shown on the attached SSP. These plan and specification changes were implemented in projects advertised after August 16, 2013. Revised

Construction Manual procedures concerning inspection guidance and contract administration are identified in the new procedure section below.

Existing Procedure

Section 4-73, “Concrete Curbs and Sidewalks,” of the *Construction Manual* provides existing policy and procedures for these facilities. Existing guidance on inspection of these facilities does not specifically describe measurement tools, procedures for determining if these facilities meet contract requirements, or related contract administration issues.

New Procedure

Supplement the existing procedures with these additional procedures when constructing and inspecting facilities that contain particular dimensioning and slopes to ensure pedestrian access to those with disabilities. Examples of these facilities include those identified on revised *Standard Plans* A87A, “Curbs and Driveways”; A88A, “Curb Ramp Details”; A88B, “Curb Ramp and Island Passageway Details”; A90A, “Accessible Parking Off-Street”; and A90B, “Accessible Parking On-Street.” Other examples include those project plan sheets with pedestrian access construction details for similar facilities.

Before Work Begins

Resident engineers and assistant resident engineers must do the following to prepare for construction and inspection of facilities with accessibility features:

- Review the contract and identify facilities that contain pedestrian accessibility features.
- During the preconstruction conference discuss dimensioning and slope requirements of the completed facilities as constructed. Also discuss the preconstruction and post-construction survey requirements for such facilities if identified in the contract through a survey bid item.
- *Standard Plan* details
 - Ensure field conditions will accommodate *Standard Plan* details.
 - Where field conditions will not accommodate the *Standard Plan* details, contact the designer to obtain a revised design for locations in question. The district ADA engineer may be consulted where DIB 82 dimensioning, slopes, or features are in question.
 - When necessary, process a change order to implement any design changes.
- Project plan construction details
 - Ensure the contractor performs preconstruction surveys as required by the contract.
 - Review submitted surveys.
 - When field conditions will not accommodate the plan details, contact the designer to obtain a revised design for locations in question. The district ADA engineer may be consulted where DIB 82 dimensioning, slopes, or features are in question.
 - When necessary, process a change order to implement any design changes.

During the Course of Work

Consider the following inspection and administration guidelines:

- *Standard Plan* details
 - Encourage the contractor to check and correct dimensions and slopes by using form lines immediately prior to concrete placement.

- Prior to making payment for these facilities, verify that dimensioning, slopes, and feature requirements have been met. Field measure dimensions and slopes using the attached compliance inspection reports. For measuring slopes on elements with dimensions 4 feet or less, a 2-foot smart level is recommended. For measuring slopes on elements with dimensions greater than 4 feet, a smart level with minimum length of 4 feet is recommended. Use smart levels with a minimum sensor accuracy of 0.1 degree. Ensure that the smart level is calibrated in accordance with the manufacturer's recommendation prior to taking measurements. Record all slope measurements to the nearest 0.1 percent. For dimension measurements, use a standard measuring tape and record results to the nearest 1/8 inch. For slope and dimension checks, take representative measurements equally dispersed across the surface in question. Do not average the results. Record the individual measurements in the appropriate location on the compliance inspection reports.
- When required contract dimensions, slopes, or feature requirements are not met, notify the contractor of the noncompliant work and require the contractor to submit a work plan for the corrective or removal and replacement work. Immediately notify the designer and provide the compliance inspection reports that identify the deficiencies. Evaluate the acceptability of the contractor's submitted work plan in consultation with the designer and, when appropriate, the district ADA engineer.
- CASE 1—dimension, slope, or feature does not meet contract and DIB 82 requirements: reject noncompliant work and require the contractor to correct or remove and replace.
- CASE 2—dimension, slope, or feature does not meet contract requirements, but meets DIB 82 requirements: either reject noncompliant work and require the contractor to correct or remove and replace; or issue a contractor-agreed change order.
- Project plan construction details
 - Encourage the contractor to check and correct critical dimensions and slopes by measurement of form lines immediately prior to concrete placement.
 - Ensure the required post-construction survey has been performed and submitted by the contractor.
 - Spot-check critical dimensions, slopes, and features of the constructed facility and compare with contract requirements and contractor's post-construction survey. Use the equipment previously described for measuring slopes and dimensions. Resolve any noted discrepancies prior to making payment on the item.
 - When required contract dimensions, slopes, or feature requirements are not met, notify the contractor of the noncompliant work and require the contractor to submit a work plan for the corrective or removal and replacement work. Immediately notify the designer and provide a compliance inspection report or survey that identifies the deficiencies. Evaluate the acceptability of the contractor's submitted work plan in consultation with the designer, and when appropriate, the district ADA engineer.
 - CASE 1—dimension, slope, or feature does not meet contract and DIB 82 requirements: reject noncompliant work and require the contractor to correct or remove and replace.
 - CASE 2—dimension, slope, or feature does not meet contract requirements, but meets DIB 82 requirements: either reject noncompliant work and require the contractor to correct or remove and replace; or issue a contractor-agreed change order.

Note that for contracts with the new revised *Standard Plan* details (RSP A87A, RSP A88A, RSP A88B, RSP A90A, or RSP A90B), conservative allowances have been considered in establishing the dimensioning and slopes shown. When measuring the ADA facility's dimensions and slopes on these contracts, consider the required dimension or slope to have been met if the recorded individual measurements comply with the following:

- Dimensional measurement does not exceed 1/2 inch from the dimension shown.
- Slope measurement does not exceed 0.2 percent from the slope shown.

Note that for contracts not having the new revised *Standard Plan* details, conservative values were not used for required dimensions and slopes. Therefore, when measuring the ADA facility's dimensions and slopes, consider the required dimension or slope to have been met if the recorded individual measurements comply with the following:

- Dimensional measurement does not exceed 1/4 inch from the dimension shown.
- Slope measurement does not exceed 0.2 percent from the slope shown.

Ensure compliance inspection reports are transmitted to ADA.ComplianceOffice@dot.ca.gov once ADA compliance certification is completed.

Special Considerations

Detectable warning surface widths at curb ramp locations are to extend "full width." Due to the dimensional construction allowances of the curb ramp and standard commercially available widths of detectable warning surfaces, a gap of up to 1½ inches on either side of the detectable warning surface is acceptable.

Contract requirements should not be modified by a change order for ongoing projects. However, revised procedures concerning Caltrans' inspection of these facilities should be considered regardless of contract requirements. For all projects, ensure as-built plans of these facilities capture constructed slopes and dimensions that were altered from the *Standard Plans* or project plan construction details.

Use procedures established by your region or district for certifying that facilities meet contract and DIB 82 requirements prior to construction contract acceptance.

If you have any questions or comments regarding this bulletin, please contact Ken Darby, Division of Construction, at ken_darby@dot.ca.gov or (916) 227-5705.

- Attachments:
1. 2010 Revised Standard Plan RSP A87A, "Curbs and Driveways"
 2. 2010 Revised Standard Plan RSP A88A, "Curb Ramp Details"
 3. 2010 Revised Standard Plan RSP A88B, "Curb Ramp and Island Passageway Details"
 4. 2010 Revised Standard Plan RSP A90A, "Accessible Parking Off-Street"
 5. 2010 Revised Standard Plan RSP A90B, "Accessible Parking On-Street"
 6. Form CEM-3673A, "Americans With Disabilities Act (ADA) Compliance Inspection Report, Sidewalk"
 7. Form CEM-3673B, "Americans With Disabilities Act (ADA) Compliance Inspection Report, Sidewalk at Driveway"
 8. Form CEM-3673C, "Curb Ramp (Case A) Americans With Disabilities Act (ADA) Compliance Inspection Report"
 9. Form CEM-3673D, "Curb Ramp (Case B) Americans With Disabilities Act (ADA) Compliance Inspection Report"