Modification or Addition to Improvement Standards and Details

Modification Number: 4-002
Effective Date of Change: October 15, 2010

**Modification:**

1. Add clarifying language to Section 4-14.
2. Revise Standard Drawing ST-26 (renumbered to ST-26.2) to reduce visibility control areas for residential driveways from a 15'x10' triangle to a 10'x10' triangle.
3. Add Standard Drawing ST-26.1 to clarify minimum sight distance requirements at intersections and non-residential for streets 48' or wider measured back of curb to back of curb.

Section 4-14 of the City Improvement Standards is revised to read in its entirety as reflected in the attached. This modification shall apply to all projects for which a tentative map and/or development application has not been made of the Effective Date, but may be applied to any project if the applicant so elects.

**Effect of Modification:**

1. Clarifies and modifies application of sight distance at intersections and driveways.

Request for Modification Initiated By:

[Signature]  Engineering Services Manager  10/26/10

ModificationReviewed for Conformity and Consistency to Standards:

[Signature]  City Engineer  10/27/10

Modification to Improvement Standards Approved:

[Signature]  Director of Public Works  10/27/10
All streets shall intersect at a 90°±5° angle to one another. This angle shall be maintained for a minimum distance equivalent to the right-of-way width measured from the curb return.

Streets shall not be designed to intersect on the inside of a horizontal curve nor on the opposite side of a crest vertical curve if the sight distance will be inadequate for drivers to enter the traffic flow or cross the street safely. All minimum vertical sight distances shall be based on Chapter 200 of the Caltrans Highway Design Manual.

For streets having, or intersecting with a street having, an ultimate width of 48 feet or greater (measured from back of curb to back of curb), the minimum sight distance at intersections and non-residential driveways for establishing visibility control areas shall be as follows (also see Standard Drawing ST-26.1):

<table>
<thead>
<tr>
<th>Design Speed</th>
<th>Minimum Sight Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 MPH</td>
<td>150 feet</td>
</tr>
<tr>
<td>30 MPH</td>
<td>200 feet</td>
</tr>
<tr>
<td>35 MPH</td>
<td>250 feet</td>
</tr>
<tr>
<td>40 MPH</td>
<td>300 feet</td>
</tr>
<tr>
<td>45 MPH</td>
<td>360 feet</td>
</tr>
<tr>
<td>50 MPH</td>
<td>430 feet</td>
</tr>
<tr>
<td>55 MPH</td>
<td>500 feet</td>
</tr>
</tbody>
</table>

1The design speed shall apply to the approaching cross street. For existing streets, the posted speed limit + 5 MPH or, if the speed limit is not posted, the prima facie speed limit, as defined in the California code, shall serve as the recommended design speed unless otherwise approved by the Director.

2Distance measured from an entering driver's eye position to the position of the closest approaching vehicle's far front corner (see Standard Drawing ST-26.1).

For other cases, the following visibility control standards shall apply:

1. Streets with an ultimate width of less than 48 feet (measured from back of curb to back of curb) shall be consistent with Standard Drawing ST-26.2.

2. 90-degree intersection elbows shall be consistent with Standard Drawing ST-25.

3. Residential driveways shall be consistent with Standard Drawing ST-26.2. Residential driveways off of collectors, arterials or thoroughfares may be subject to the minimum sight distance requirements set forth above, as determined by the Director.
Regardless of the street width, driveways serving significant traffic volumes, as determined by the Director, shall be subject to the minimum sight distance requirements for major street intersections.

All existing streets that do not intersect at a 90°±5° angle to one another shall be subject to the minimum sight distance requirements for major street intersections when enforcing the visibility control area.

No signs, plantings, structures, natural growth, fences, walls or any other type of obstruction to a clear view, higher than 3 feet above the nearest pavement surface (or traveled area where no pavement exists) shall be installed or maintained or shall be permitted to be installed or maintained within the visibility control area. Exceptions include tree canopies, signs that provide a minimum clearance of 7 feet measured from the existing grade, or permanent structures existing as of the effective date of these provisions.

The Director may, using his/her professional judgment, allow exceptions to specific requirements under Section 4-14 where he/she determines that the circumstances of a particular situation make it impractical to meet such requirements. Additionally, an exception may require warning signage and/or other supplemental safety measures to be implemented as necessary to maintain public safety.

Dedication of visibility easements may be required over the visibility control areas to ensure that the required sight distances can be enforced and maintained. Visibility easements for residential driveways are not required unless the Director determines that the dedication is necessary to satisfy special safety considerations. Visibility easements may be recorded on final maps or by separate instrument if a map is not required.
NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.

DATE: 02/17/2007 Not To Scale

City of Elk Grove - Public Works

City Engineer

Approved by

Clearance Required

Clearance Required

Visibility Control Area (Typ.)

NOT TO SCALE

City of Elk Grove - Public Works

CITY OF ELK GROVE

VISIBILITY REQUIREMENTS

NOTES:

1. FOR STREETS LESS THAN 48 FEET MeASURED FROM BACK OF CURB TO BACK OF CURB.

2. VISIBLEITY CONTROL AREAS MAY BE REDUCED TO A 20' X 20' TRANGLE AT STOP OR SIGNAL CONTROLLED INTERSECTIONS.