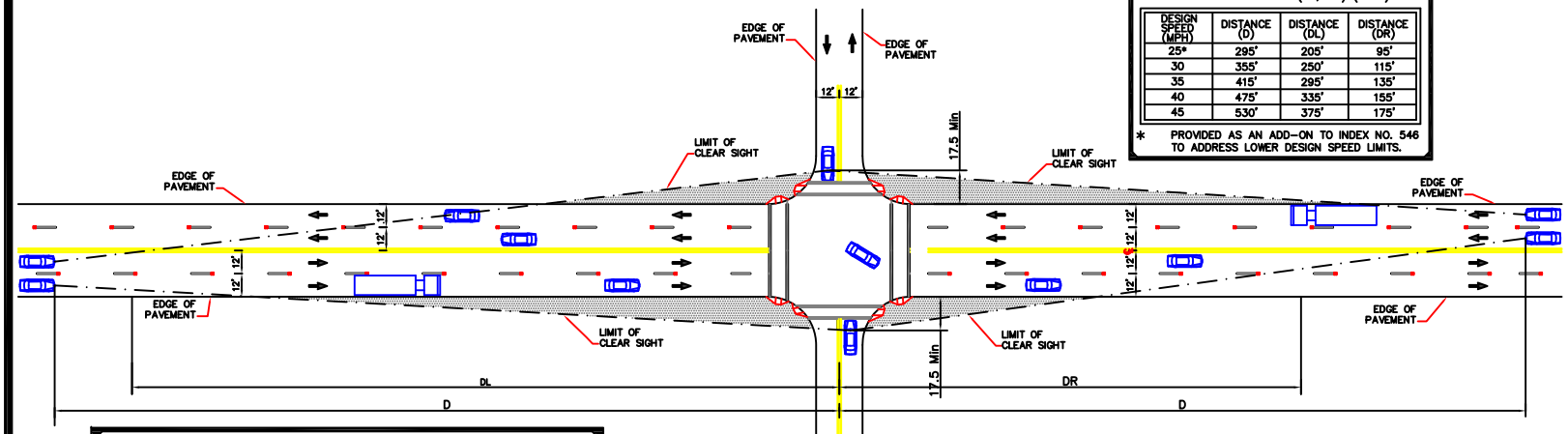


FOUR-LANE UNDIVIDED

FOUR-LANE UNDIVIDED SIGHT DISTANCE (D) AND RELATED DISTANCES (DL, DR) (FEET)			
DESIGN SPEED (MPH)	DISTANCE (D)	DISTANCE (DL)	DISTANCE (DR)
25*	295'	205'	95'
30	355'	250'	115'
35	415'	295'	135'
40	475'	335'	155'
45	530'	375'	175'

* PROVIDED AS AN ADD-ON TO INDEX NO. 546 TO ADDRESS LOWER DESIGN SPEED LIMITS.

FDOT GENERAL NOTES (INDEX NO. 546)

1. DETAILS APPLY TO BOTH RURAL AND URBAN INTERSECTIONS UNDER STOP SIGN CONTROL OR FLASHING BEACON CONTROL. FOR FULL SIGNAL CONTROLLED INTERSECTIONS SEE DESIGNNOTE NO. 4.
2. SIGHT DISTANCE (D) APPLIES TO NORMAL AND SKEWED INTERSECTIONS (INTERSECTING ANGLES BETWEEN 60° AND 120°), AND WHERE VERTICAL AND/OR HORIZONTAL CURVES ARE PRESENT. SIGHT DISTANCE (D) IS MEASURED ALONG THE MAJOR ROADWAY FROM THE CENTER OF THE INTERSECTING ROADWAY. DISTANCES (DL) AND (DR) ARE MEASURED FROM THE CENTERLINE OF THE INTERSECTING ROADWAY TO A POINT ON THE EDGE OF THE NEAR SITE OUTER TRAFFIC LANE ON THE MAJOR ROADWAY. DISTANCE (DM) IS MEASURED FROM THE CENTERLINE OF THE ENTRANCE LANE OF THE MINOR ROADWAY TO A POINT ON THE MEDIAN CLEAR ZONE LIMIT OR HORIZONTAL CLEARANCE LIMIT FOR THE FAR SIDE ROADWAY OF THE MAJOR ROADWAY.
3. a) THE LIMITS OF CLEAR SIGHT DEFINE A CORRIDOR THROUGHOUT WHICH A CLEAR SIGHT WINDOW MUST BE PRESERVED. (SEE WINDOW DETAIL)
   b) CLEAR SIGHT MUST BE PROVIDED BETWEEN VEHICLES AT INTERSECTION STOP LOCATIONS, AND VEHICLES ON THE MAJOR ROADWAY WITHIN DIMENSION (D).
   c) SINCE OBSERVATIONS ARE MADE IN BOTH DIRECTIONS ALONG THE LINE OF SIGHT, THE REFERENCE DATUM BETWEEN ROADWAYS IS 3'-6" ABOVE RESPECTIVE PAVEMENTS.
4. BARRIER SYSTEMS WITHIN INTERSECTION SIGHT CORRIDORS, WHERE PENETRATION INTO THE SIGHT WINDOW MIGHT OCCUR, SHALL BE LOCATED TO PROVIDE THE LEAST ADVERSE AFFECT PRACTICAL.
5. THE CORRIDOR DEFINED BY THE LIMITS OF CLEAR SIGHT IS A RESTRICTED PLANTING AREA. DRIVERS OF VEHICLES ON THE INTERSECTING ROADWAY AND VEHICLES ON THE MAJOR ROADWAY MUST BE ABLE TO SEE EACH OTHER CLEARLY THROUGHOUT THE LIMITS OF (D). IF, IN THE ENGINEERS' JUDGMENT LANDSCAPING INTERFERES WITH THE LINE OF SIGHT CORRIDOR PRESCRIBED BY THESE STANDARDS THE ENGINEER MAY REARRANGE, RELOCATE OR ELIMINATE PLANTING. PLANTS WITHIN THE RESTRICTED AREAS ARE LIMITED TO SELECTIONS AS FOLLOWS:

   GROUND COVER AND TRUNKED PLANTS (SEPARATE OR COMBINED):

   GROUND COVERS: PLANT SELECTION OF LOW GROWING VEGETATION WHICH AT MATURITY DOES NOT RETAIN A HEIGHT GREATER THAN 18" BELOW THE SIGHT LINE DATUM. FOR GROUND COVER IN COMBINATION WITH TREES AND PALMS, THE FOLLOWING HEIGHTS BELOW THE SITE LINE DATUM WILL APPLY: 24" FOR TREES AND PALMS LESS THAN OR EQUAL TO 11" DIAMETER; AND, 18" FOR SABAL PALMS GREATER THAN 11" OR LESS THAN OREQUAL TO 18" DIAMETER (DIAMETER WITHIN SIGHT WINDOW).

   TRUNKED PLANTS: PLANT SELECTION OF A MATURE TRUNK DIAMETER 4" OR LESS MEASURED AT 6" ABOVE THE GROUND. CANOPY OR HIGH BORNE FOLIAGE SHALL NEVER BE LOWER THAN 5' ABOVE THE SIGHT LINE DATUM. THESE SELECTIONS SHALL BE SPACED NO CLOSER THAN 20'.

   TREES CAN BE USED LAWN; PAVERS; PAVEMENT; GRAVEL, BARK OR WOOD CHIP BEDS; GROUND COVERS OR OTHER APPROVED MATERIAL AND SPACING SHALL CONFORM TO THE TABULAR VALUES LISTED ON FDOT INDEX NO.546. THE CLEAR SIGHT WINDOW MUST BE IN CONFORMANCE WITH THE WINDOW DETAIL MODIFIED TO ATTAIN THE HEIGHT REQUIREMENTS LISTED IN "GROUND COVERS" ABOVE.

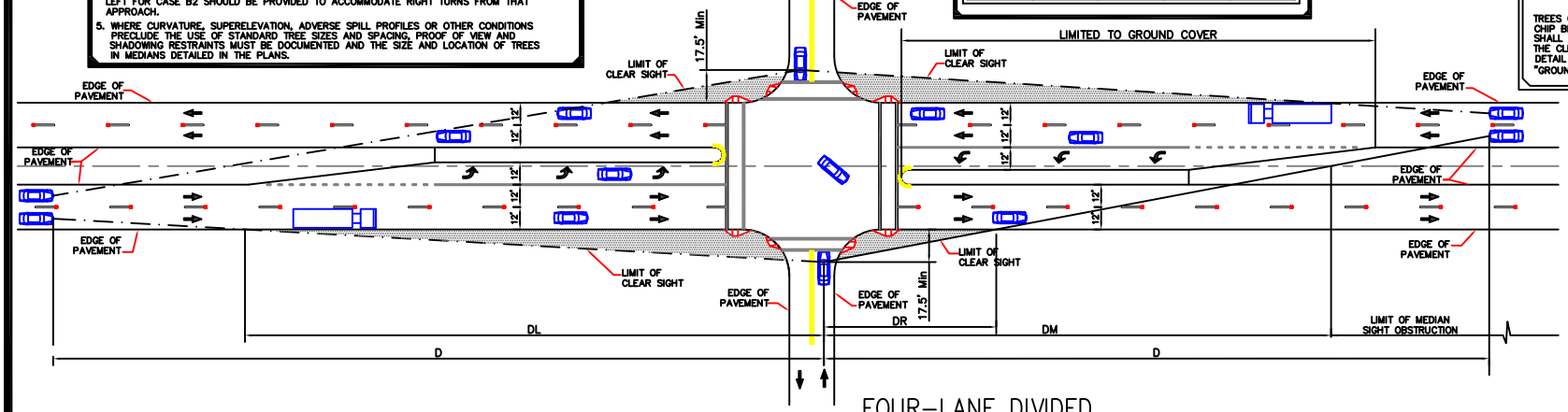
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN NOTES (INDEX NO. 546)

1. THE INFORMATION SHOWN ON FDOT INDEX NO. 546 IS INTENDED SOLELY FOR THE PURPOSES OF CLEAR SIGHT DEVELOPMENT AND MAINTENANCE AT INTERSECTING HIGHWAYS, ROADS, AND STREETS, AND IS NOT INTENDED TO BE USED TO ESTABLISH GEOMETRIC DESIGN, SPEED CONTROL, SIGNING, MARKING, LIGHTING, OR SIGNALIZATION, OR TO ESTABLISH ROADWAY AND ROADSIDE SAFETY EXCEPT AS RELATED TO CLEAR SIGHT CORRIDORS. AN ANALYSIS OF SIGHT DISTANCE SHALL BE DOCUMENTED FOR ALL INTERSECTIONS.
2. DETAILS ARE BASED ON THE AASHTO 'A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS & STREETS',CHAPTER 9,INTERSECTION SIGHT DISTANCE CASES, AND FDOT DEPARTMENTAL PRACTICES FOR CHANNELIZED MEDIAN OPENINGS (LEFT TURN FROM MAJOR ROADWAYS).
3. THE MINIMUM DRIVER EYE SETBACK OF 17.5' FROM THE EDGE OF THE TRAFFIC LANE MAY BE ADJUSTED ON ANY INTERSECTION LEG ONLY WHEN JUSTIFIED BY A DOCUMENTED, SITE SPECIFIC FIELD STUDY OF VEHICLE STOPPING POSITION AND DRIVER EYE POSITION.
4. FOR SIGNALIZED INTERSECTIONS: SIGHT DISTANCES SHOULD BE DEVELOPED BASED ON AASHTO 'CASE D- INTERSECTIONS WITH TRAFFIC SIGNAL CONTROL'. AT SIGNALIZED INTERSECTIONS, THE FIRST VEHICLE STOPPED ON ONE APPROACH SHOULD BE VISIBLE TO THE DRIVER OF THE FIRST VEHICLE STOPPED ON EACH OF THE OTHER APPROACHES. LEFT TURNING VEHICLES SHOULD HAVE SUFFICIENT SIGHT DISTANCE TO SELECT GAPS IN ONCOMING TRAFFIC AND COMPLETE LEFT TURNS. APART FROM THESE SIGHT CONDITIONS, THERE ARE GENERALLY NO OTHER APPROACH OR DEPARTURE SIGHT TRIANGLES NEEDED FOR SIGNALIZED INTERSECTIONS. HOWEVER, IF THE TRAFFIC SIGNAL IS TO BE PLACED ON TWO-WAY FLASHING OPERATING (I.E. FLASHING YELLOW ON THE MAJOR-ROAD APROACHES AND FLASHING RED ON THE MINOR ROAD APROACHES) UNDER OFF-PEAK OR NIGHTTIME CONDITIONS, THEN THE APPROPRIATE DEPARTURE SIGHT TRIANGLES FOR CASE B, BOTH TO THE LEFT AND TO THE RIGHT, SHOULD BE PROVIDED FOR THE MINOR-ROAD APPROACHES. IN ADDITION, IF RIGHT TURNS ON A RED SIGNAL ARE TO BE PERMITTED FROM ANY APPROACH, THEN THE APPROPRIATE DEPARTURE SIGHT TRIANGLE TO THE LEFT FOR CASE B2 SHOULD BE PROVIDED TO ACCOMMODATE RIGHT TURNS FROM THAT APPROACH.
5. WHERE CURVATURE, SUPERELEVATION, ADVERSE SPILL PROFILES OR OTHER CONDITIONS PRECLUDE THE USE OF STANDARD TREE SIZES AND SPACING, PROOF OF VIEW AND SHADOWING RESTRAINTS MUST BE DOCUMENTED AND THE SIZE AND LOCATION OF TREES IN MEDIANS DETAILED IN THE PLANS.

LEGEND

AREAS FREE OF SIGHT OBSTRUCTIONS

FOUR-LANE DIVIDED SIGHT DISTANCE (D) AND RELATED DISTANCES (DL, DR) (FEET)				
DESIGN SPEED (MPH)	DISTANCE (D)	DISTANCE (DL)	DISTANCE (DR)	DISTANCE (DM)
30	390'	280'	90'	320'
35	460'	330'	100'	380'
40	520'	370'	110'	430'
45	590'	420'	130'	480'



FOUR-LANE DIVIDED

REVISIONS				REVISIONS			
No.	Date	Remarks	By	No.	Date	Remarks	By

Date: 07/2009

CITY OF TAMARAC
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TAMARAC The City For Your Life

SIGHT DISTANCE AT INTERSECTIONS

CITY OF TAMARAC, BROWARD COUNTY, FLORIDA

Scale: N.T.S.

SHEET 1 OF 2

FDOT GENERAL NOTES (INDEX NO. 546)

1. DETAILS APPLY TO BOTH RURAL AND URBAN INTERSECTIONS UNDER STOP SIGN CONTROL OR FLASHING BEACON CONTROL. FOR FULL SIGNAL CONTROLLED INTERSECTIONS SEE DESIGNNOTE NO, 4.
2. SIGHT DISTANCE (D) APPLIES TO NORMAL AND SKEWED INTERSECTIONS (INTERSECTING ANGLES BETWEEN 60° AND 120°), AND WHERE VERTICAL AND/OR HORIZONTAL CURVES ARE PRESENT. SIGHT DISTANCE (D) IS MEASURED ALONG THE MAJOR ROADWAY FROM THE CENTER OF THE INTERSECTING ROADWAY. DISTANCES (DL) AND (DR) ARE MEASURED FROM THE CENTERLINE OF THE INTERSECTING ROADWAY TO A POINT ON THE EDGE OF THE NEAR SITE OUTER TRAFFIC LANE ON THE MAJOR ROADWAY. DISTANCE (DM) IS MEASURED FROM THE CENTERLINE OF THE ENTRANCE LANE OF THE MINOR ROADWAY TO A POINT ON THE MEDIAN CLEAR ZONE LIMIT OR HORIZONTAL CLEARANCE LIMIT FOR THE FAR SIDE ROADWAY OF THE MAJOR ROADWAY.
3. a) THE LIMITS OF CLEAR SIGHT DEFINE A CORRIDOR THROUGHOUT WHICH A CLEAR SIGHT WINDOW MUST BE PRESERVED. (SEE WINDOW DETAIL)
   b) CLEAR SIGHT MUST BE PROVIDED BETWEEN VEHICLES AT INTERSECTION STOP LOCATIONS, AND VEHICLES ON THE MAJOR ROADWAY WITHIN DIMENSION (D).
   c) SINCE OBSERVATIONS ARE MADE IN BOTH DIRECTIONS ALONG THE LINE OF SIGHT, THE REFERENCE DATUM BETWEEN ROADWAYS IS 3'-6" ABOVE RESPECTIVE PAVEMENTS.
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN NOTES (INDEX NO. 546)

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3. THE MINIMUM DRIVER EYE SETBACK OF 17.5' FROM THE EDGE OF THE TRAFFIC LANE MAY BE ADJUSTED ON ANY INTERSECTION LEG ONLY WHEN JUSTIFIED BY A DOCUMENTED, SITE SPECIFIC FIELD STUDY OF VEHICLE STOPPING POSITION AND DRIVER EYE POSITION.
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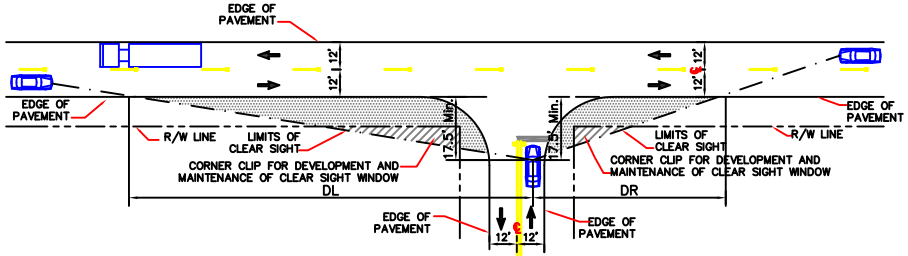
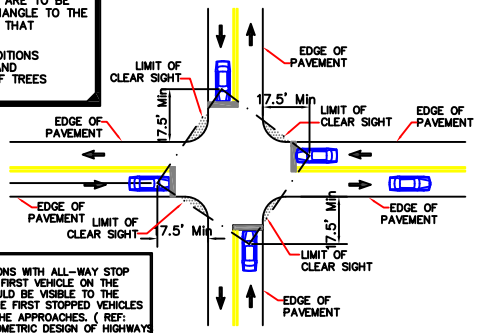
5. WHERE CURVATURE, SUPERELEVATION, ADVERSE SPILL PROFILES OR OTHER CONDITIONS PRECLUDE THE USE OF STANDARD TREE SIZES AND SPACING, PROOF OF VIEW AND SHADOWING RESTRAINTS MUST BE DOCUMENTED AND THE SIZE AND LOCATION OF TREES IN MEDIANS DETAILED IN THE PLANS.

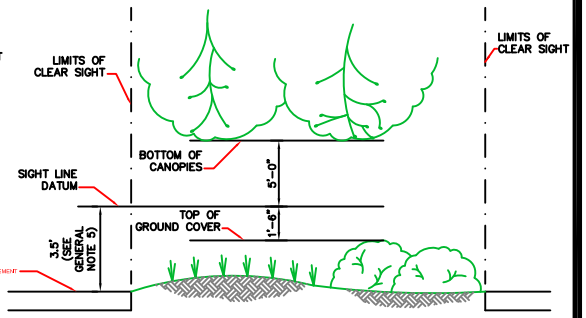


ORIGIN OF CLEAR SIGHT LINE AND PROPERTY CORNER CLIPS



ALL WAY STOP CONTROL

NOTE:
AT INTERSECTIONS WITH ALL–WAY STOP CONTROL, THE FIRST VEHICLE ON THE APROACH SHOULD BE VISIBLE TO THE DRIVERS OF THE FIRST STOPPED VEHICLES ON EACH OF THE APPROACHES. (REF: AASHTO – GEOMETRIC DESIGN OF HIGHWAYS AND STREETS – CASE E)



NOTE:
PER FDOT INDEX NO. 546, THE INTENT OF THIS STANDARD IS TO PROVIDE A WINDOW WITH VERTICAL LIMITS OF NOT LESS THAN 5' ABOVE AND 1'-6" BELOW THE SIGHT LINE DATUM, AND HORIZONTAL LIMITS AS DEFINED BY THE LIMITS OF CLEAR SIGHT.

WINDOW DETAIL

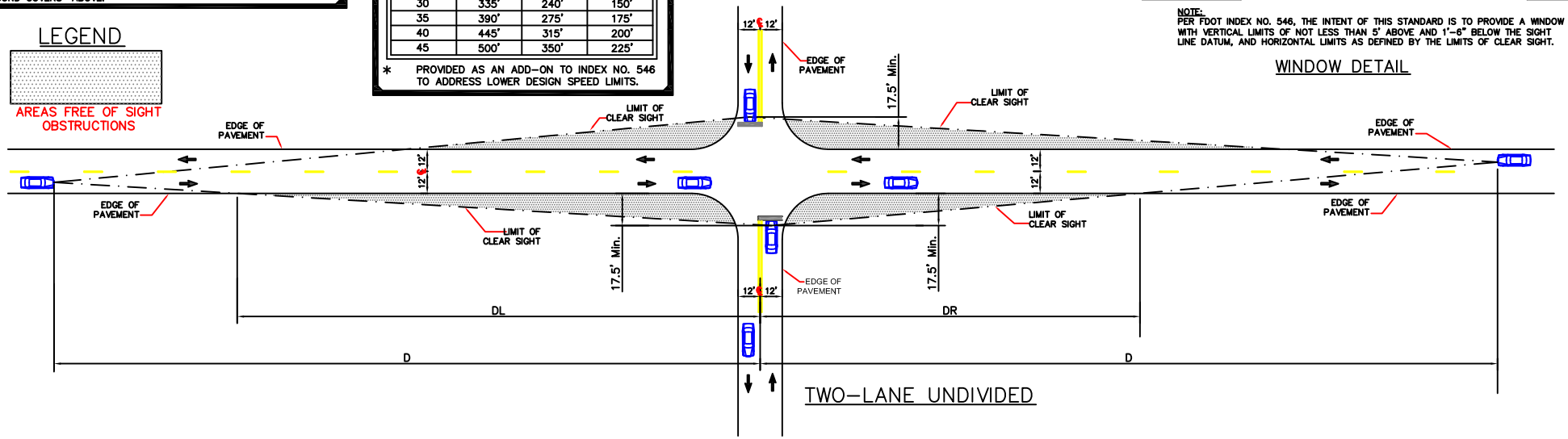
TWO–LANE UNDIVIDED SIGHT DISTANCE (D) AND RELATED DISTANCES (DL, DR) (FEET)

DESIGN SPEED (MPH)	DISTANCE (D)	DISTANCE (DL)	DISTANCE (DR)
25*	280'	205'	125'
30	335'	240'	150'
35	390'	275'	175'
40	445'	315'	200'
45	500'	350'	225'

* PROVIDED AS AN ADD–ON TO INDEX NO. 546 TO ADDRESS LOWER DESIGN SPEED LIMITS.

LEGEND

AREAS FREE OF SIGHT OBSTRUCTIONS



TWO–LANE UNDIVIDED

REVISIONS				REVISIONS			
No.	Date	Remarks	By	No.	Date	Remarks	By

Date: 07/2009

CITY OF TAMARAC
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SIGHT DISTANCE AT INTERSECTIONS

CITY OF TAMARAC, BROWARD COUNTY, FLORIDA

Scale: N.T.S.

SHEET 2 OF 2