City of Rohnert Park

Traffic
Detail Drawings

TRAFFIC DETAIL DRAWINGS

Standard Number	Title	Date Approved
700 Series		
701	Traffic Signs Lateral Offset Minimum in Urban Area	2014
702	Reserved	2014
703A	Street Name Signs – Mast-Arm Mounted	2014
703B	Street Name Signs – Mast-Arm Mounted – Brace Detail	2014
704A	Advance Street Name Signs	2014
704B	Traffic Signs & Advance Street Name Signs: Mounting Details	2014
704C	Traffic Signs & Advance Street Name Signs – Typical Installations	2014
705A	Traffic Street Name Signs Design Specifications	2014
705B	Street Name Sign	2014
705C	Traffic Street Name Signs Signalized Intersections	2014
705D	Traffic Street Name Signs Non-Signalized Intersections	2014
706	Reserved	2014
Pavement Markings		
720A	Reserved	2014
720B	Reserved	2014
720C	Reserved	2014
720D	Reserved	2014
721	Traffic Markings Median Island Treatment	2014
Traffic Signals		
730	Traffic Signals Pull Box Installation	2014
731	Traffic Signals Service Wiring Diagram	2014
732	Traffic Signals Detection	2014
733A	Traffic Signals Underground Electric Service	2014
Work Area Traffic Control		
740A	Left Lane Closure	2006
740B	Middle Lane Closure	2006
740C	Right Lane Closure	2006
740D	Half-Roadway Closure	2006
740E	Work Area in Center of Street	2006
740F	Manhole Access in Center of Street	2006
740G	Local Street Closure	2006
740H	Work Area in Parking Lane or Shoulder	2006
740I	Work Within Intersection	2006
740J	Work Beyond Intersection – Left Lane Closed	2006
740K	Work Beyond Intersection – Right Lane Closed	2006
740L	Pedestrian Control	2006
741	Delineation and Sign Placement	2006
742	Project Sign	2014

ENGINEER'S LIST OF APPROVED ITEMS

for use with Traffic Signal Design Standards

Approved _____ **Date** 7/22/14

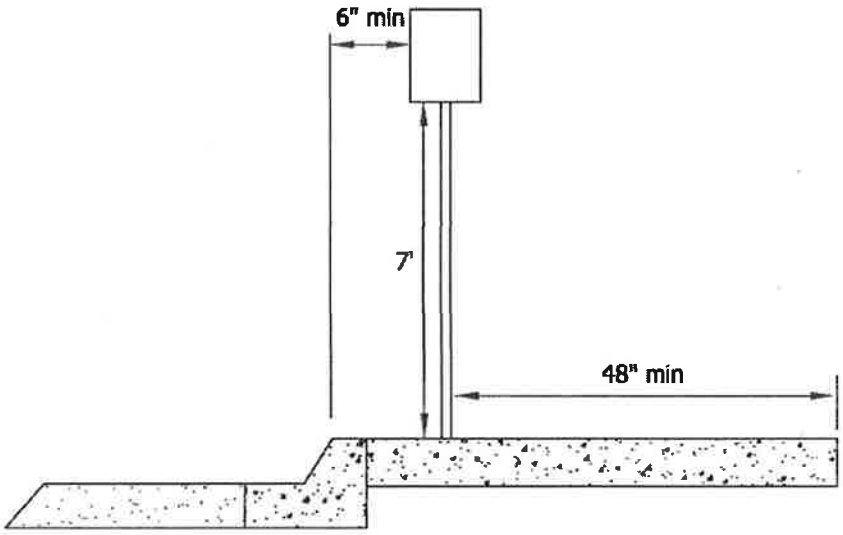
1. Traffic Signals – C. Traffic Signal Controller, 170E or 2070E
   Products listed on the Caltrans Qualified Products List (QPL)
   http://www.dot.ca.gov/hq/traffops/elecsys/TEES.htm

2. Traffic Signals – D. Traffic Signal Controller Cabinet, Model 332L
   Products listed on the Caltrans Qualified Product List (QPL)
   http://www.dot.ca.gov/hq/traffops/elecsys/TEES.htm

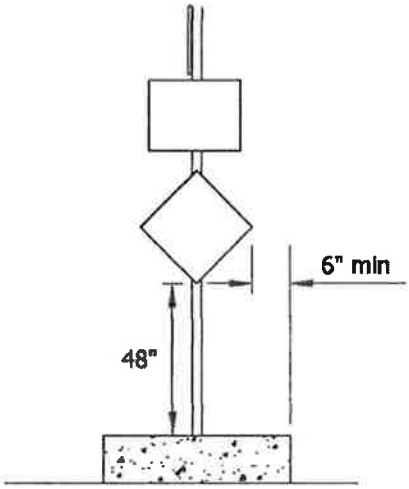
3. Traffic Signals – E. Traffic Signal Service Cabinet
   Tesco type III-BF service cabinet

4. Traffic Signals – J. Detection
   Econolite, Autoscope Video Detector System,
   http://www.econolite.com/products/detection.aspx
   ITERIS, http://www.iteris.com/solutions/detection
   MS SEDCO, http://mssedco.com/intersector_sensor.htm
   Aldis, GridSmart, http://www.aldiscorp.com/gridsmart/ on certain applications with City Engineer approval.

5. Emergency Vehicle Pre-emption
   EMTRAC Systems, http://emtracsystems.com/



In Urban Areas with Curb



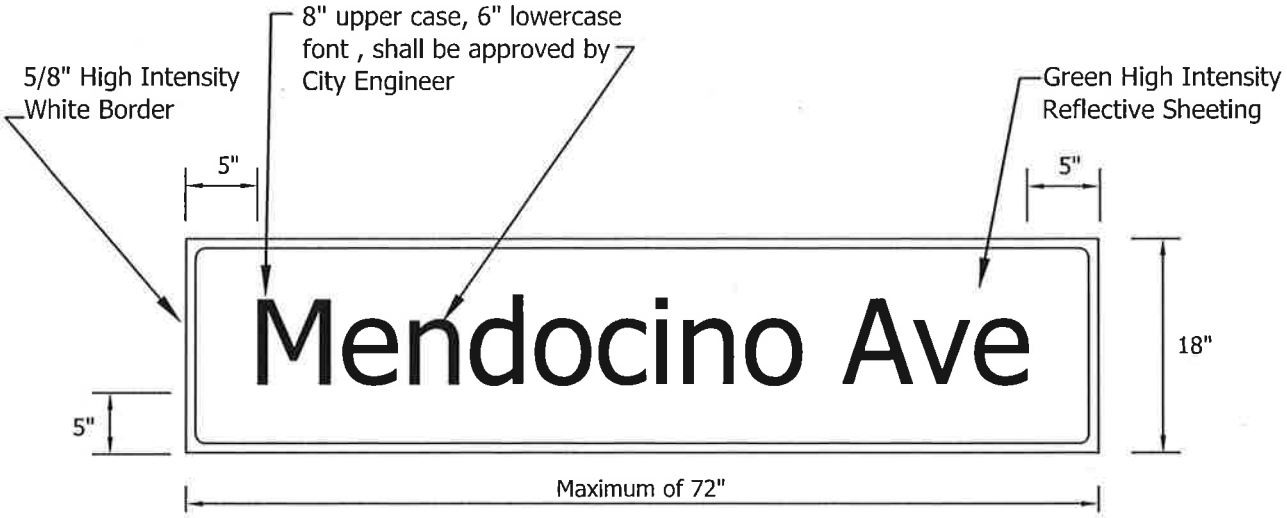
In Medians

All other typical applications can be found in chapter 2A of the California MUTCD.

CITY OF ROHNERT PARK

TRAFFIC SIGNS LATERAL OFFSET
MINIMUM IN URBAN AREA

SCALE: NONE	DATE: JANUARY 2014
Approved:	STD. - 701



Detail A
Typical Street Name Sign
Mast-Arm Mounted

Detail B
Street Name Change at Intersection
Mast-Arm Mounted

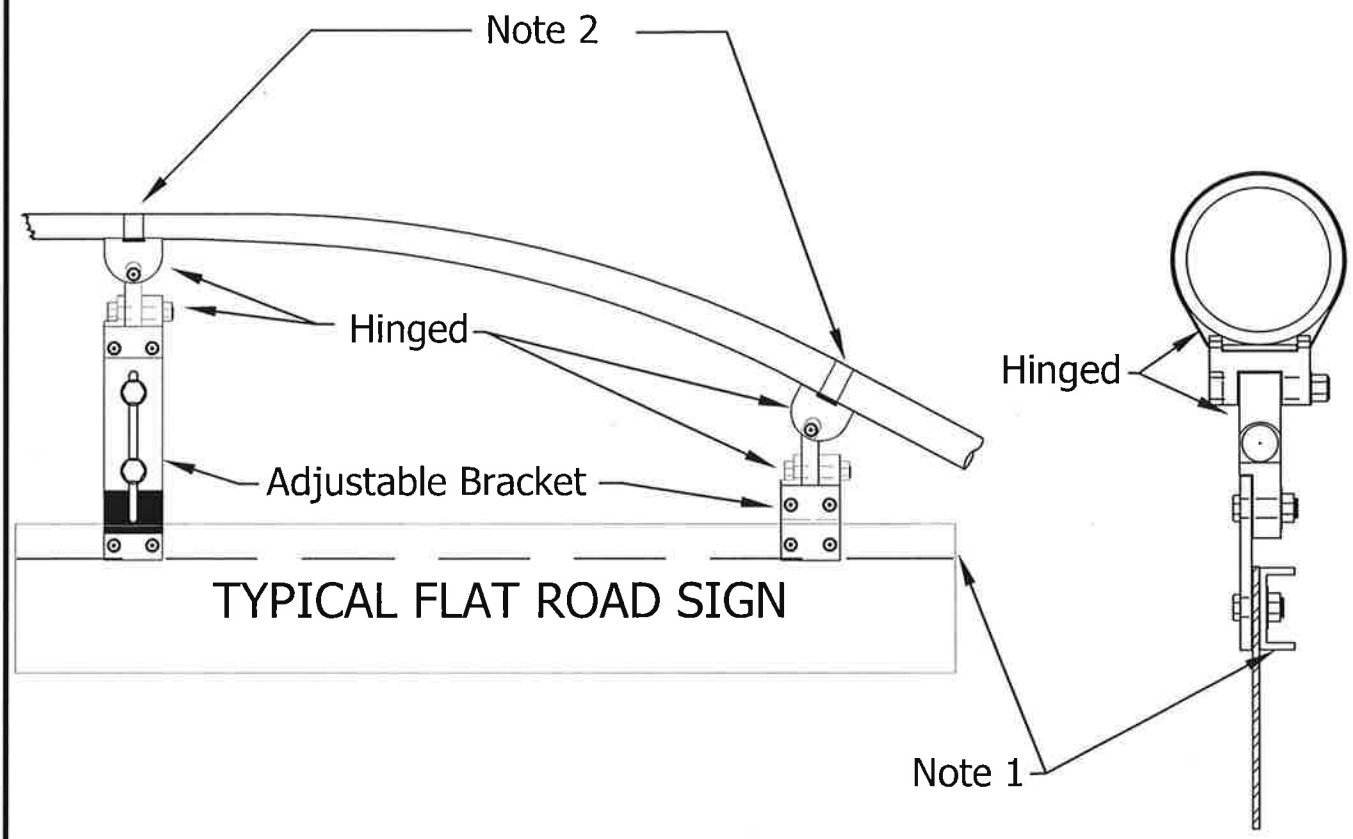
NOTES:

1. Blanks are 0.125" aluminum per Caltrans Specifications.

2. Font, dimensions and spacing of letters shall be per the latest edition of the FHWA Standard Alphabets for Traffic Control Devices.

3. All Overhead Street Name Signs shall be double sided, and shall be mounted at all signalized intersections where mast arms exist, One double-sided sign shall be installed on each mast-arm. When street names change at the intersection, the overhead street name signs shall be double sided, with one side acting as the "near-side" sign and the other side acting as the "far-side". The "far-side" sign shall display the name of the street to the right and shall have an arrow facing away from the street name and towards the right. The "near-side" sign shall display the name of the street to the left and shall have an arrow facing away from the street name and towards the left.

CITY OF ROHNERT PARK	
STREET NAME SIGNS MAST-ARM MOUNTED	
SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 703A



Notes:

1. All signs shall be reinforced by mounting on a 1"x2" aluminum 3/16" channel back brace.

2. a. Mounting bolts shall be 5/16"x1" stainless steel.
   b. Banding shall be 0.030" x 0.55" double wrap.

3. Location of sign mounting on mast arm shall be determined by the City Traffic Engineer during the plan check process.

4. Adjustable brackets shall be used as necessary to horizontally level the sign.

CITY OF ROHNERT PARK	
STREET NAME SIGNS MAST-ARM MOUNTED	
SCALE: NONE	DATE: APRIL 2014
Approved:	STD. - 703B

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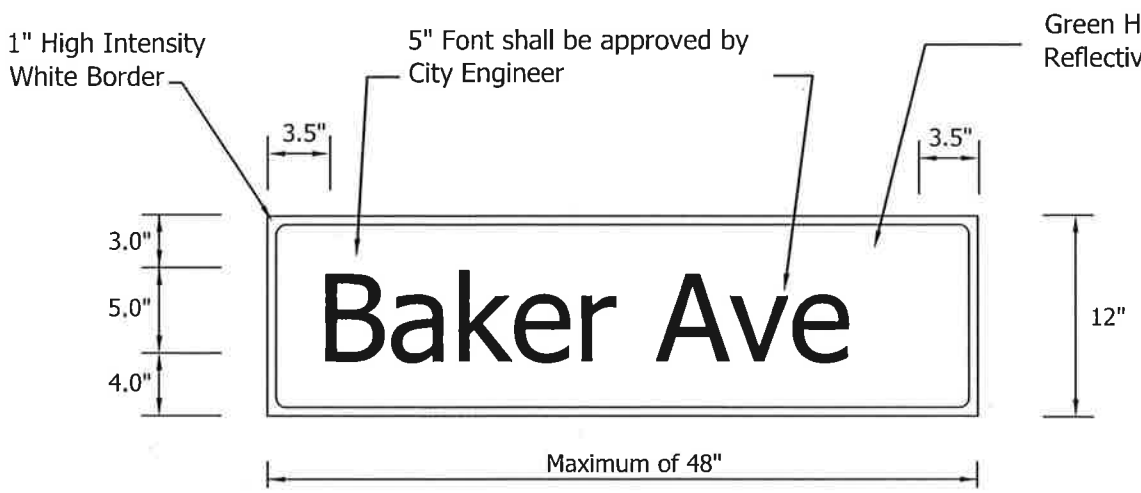
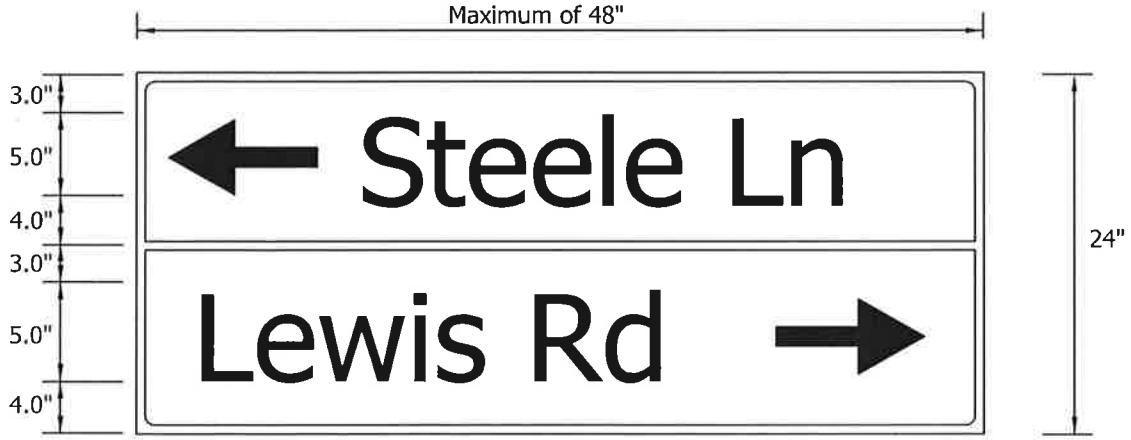


Detail A - Typical Advance Street Name Sign



Detail B - Street Name Change

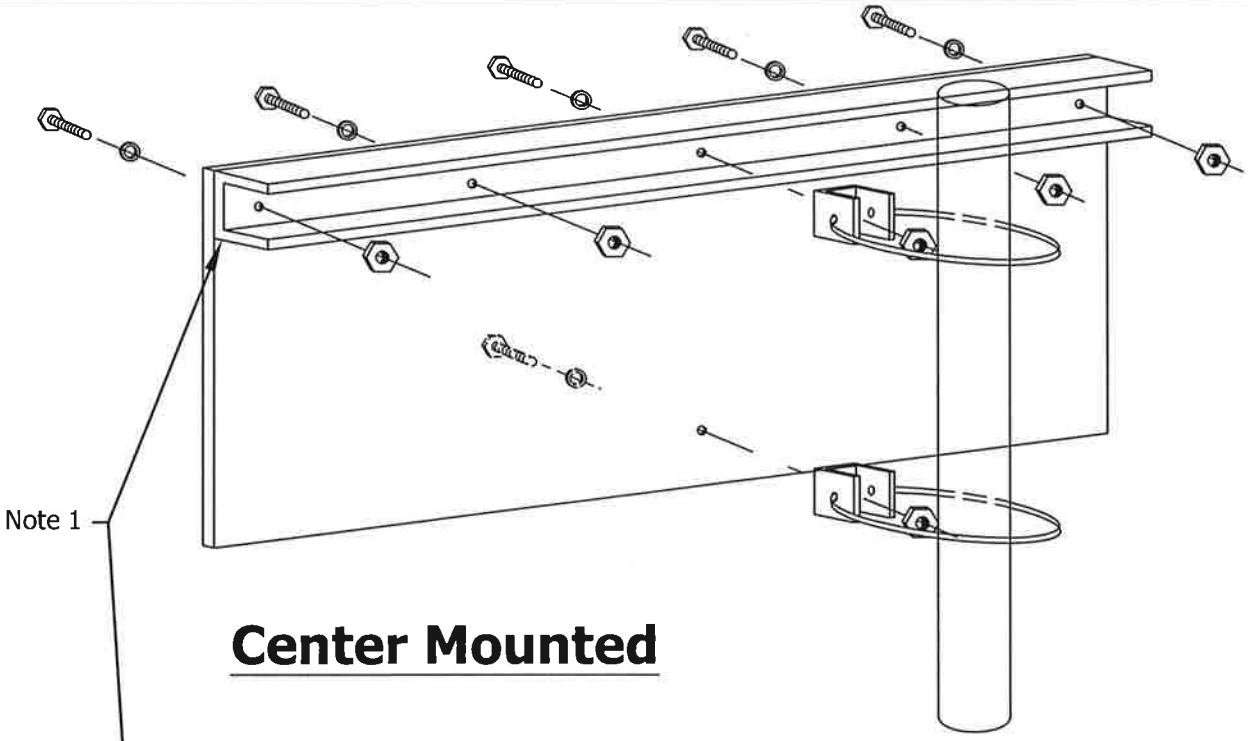
NOTES:

1. Blanks are 0.080" aluminum.

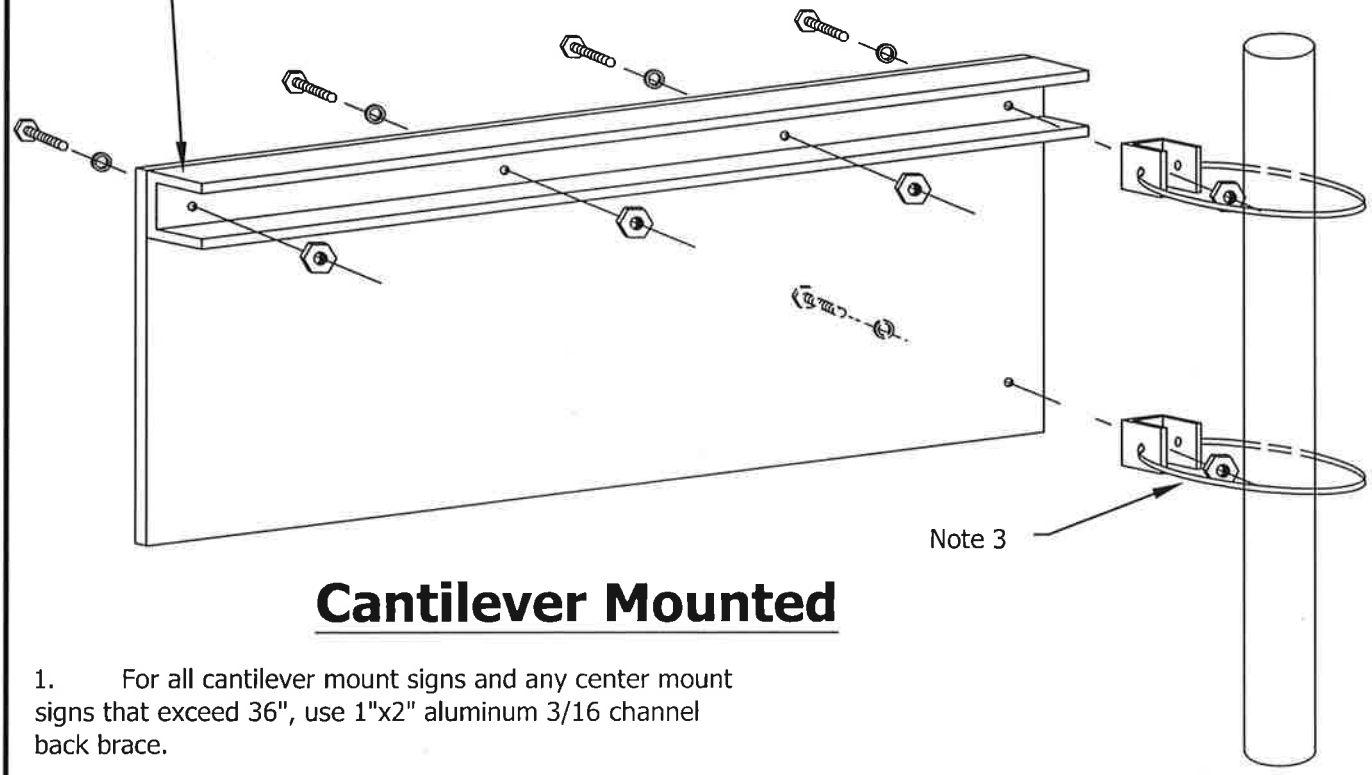
2. Font, dimensions and spacing of letters shall be per the latest edition of the FHWA Standard Alphabets for Traffic Control Devices. Any variation in font size shall be approved by City Engineer.

3. When street name changes from one side of the intersection to the other the sign design shall conform to Detail B - Street Name Change.

CITY OF ROHNERT PARK	
ADVANCE STREET NAME SIGN	
SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 704A



Center Mounted



Cantilever Mounted

1. For all cantilever mount signs and any center mount signs that exceed 36", use 1"x2" aluminum 3/16 channel back brace.

2. For center mount signs 36" or less in length, use 1/4 14x3/4 hex washer self drilling screw and mount directly to 2" pole.

3. Use 3/4" heavy duty 0.032" stainless steel mounting banding with 3/4" heavy duty banding buckle, for street light applications.

CITY OF ROHNERT PARK

TRAFFIC SIGNS & ADVANCE STREET NAME SIGNS: MOUNTING DETAILS

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 704B

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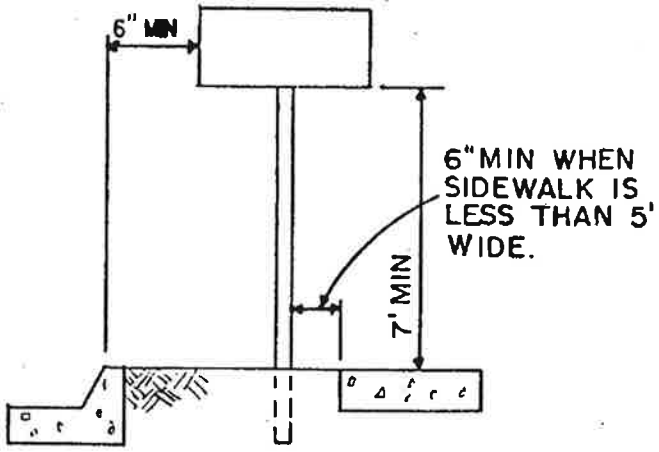
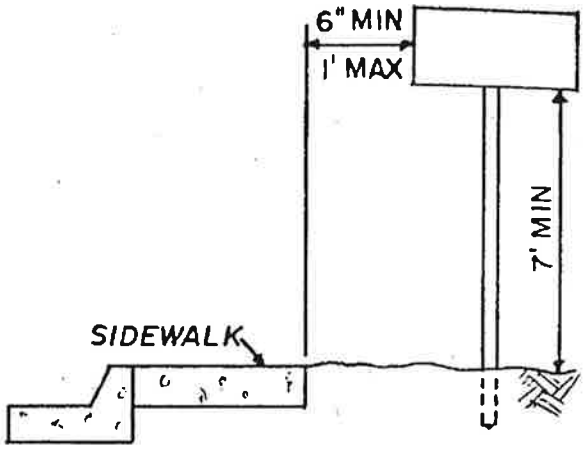
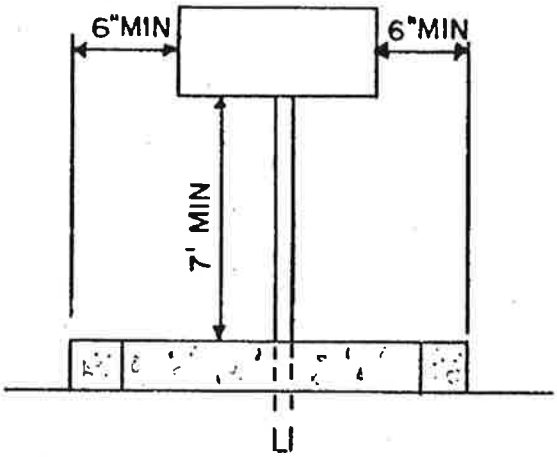


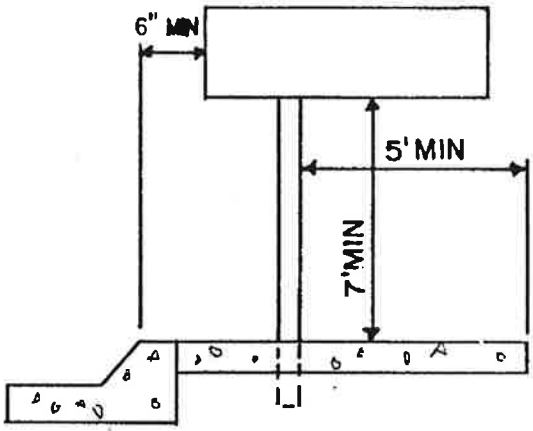
PLANTER STRIP



BEHIND SIDEWALK



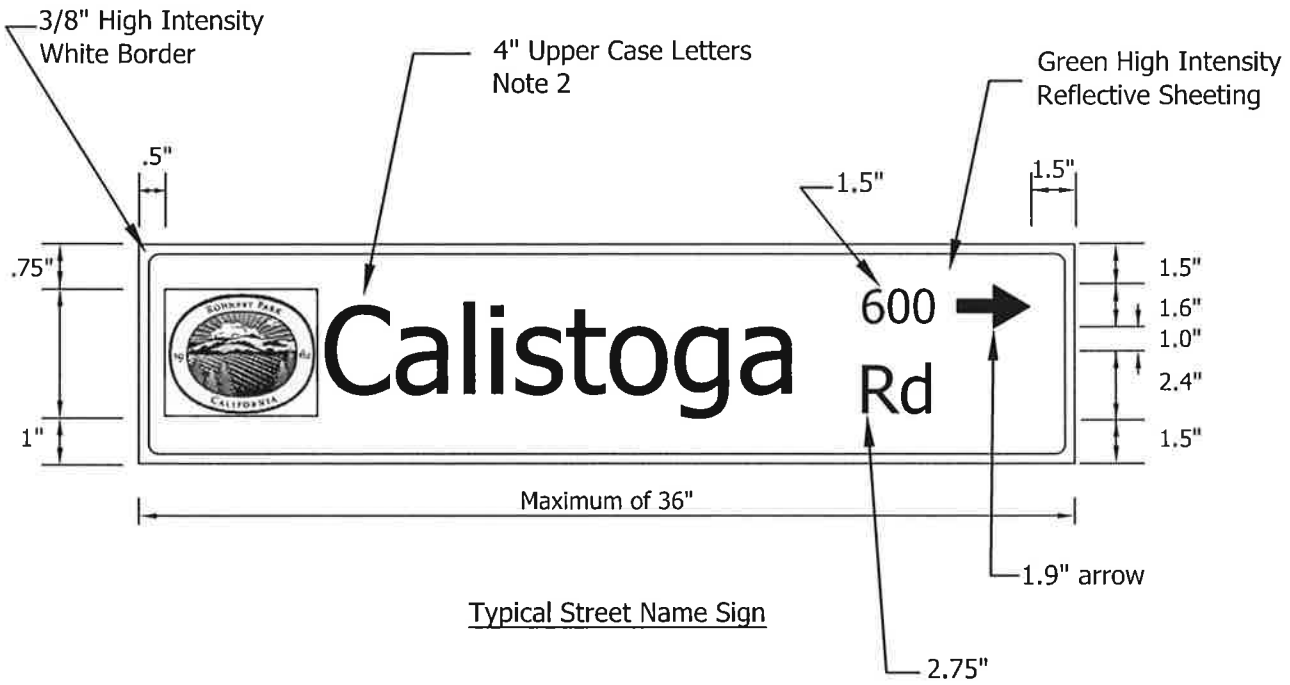
MEDIAN



ON SIDEWALK

TYPICAL INSTALLATIONS

CITY OF ROHNERT PARK	
TRAFFIC SIGN & ADVANCE STREET NAME SIGNS TYPICAL INSTALLATION	
SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 704C



Typical Street Name Sign

NOTES:

1. Blanks are 0.080" aluminum per latest Caltrans Specifications.
2. Font, dimensions and spacing of letters shall be per the latest edition of the FHWA Standard Alphabets for Traffic Control Devices.
3. Arrows shall point away from block number, indicating the ascending direction for addresses.
4. Signs are to be single sided and riveted together (see STD 705B).

CITY OF ROHNERT PARK

TRAFFIC STREET NAME SIGNS DESIGN SPECIFICATIONS

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 705A

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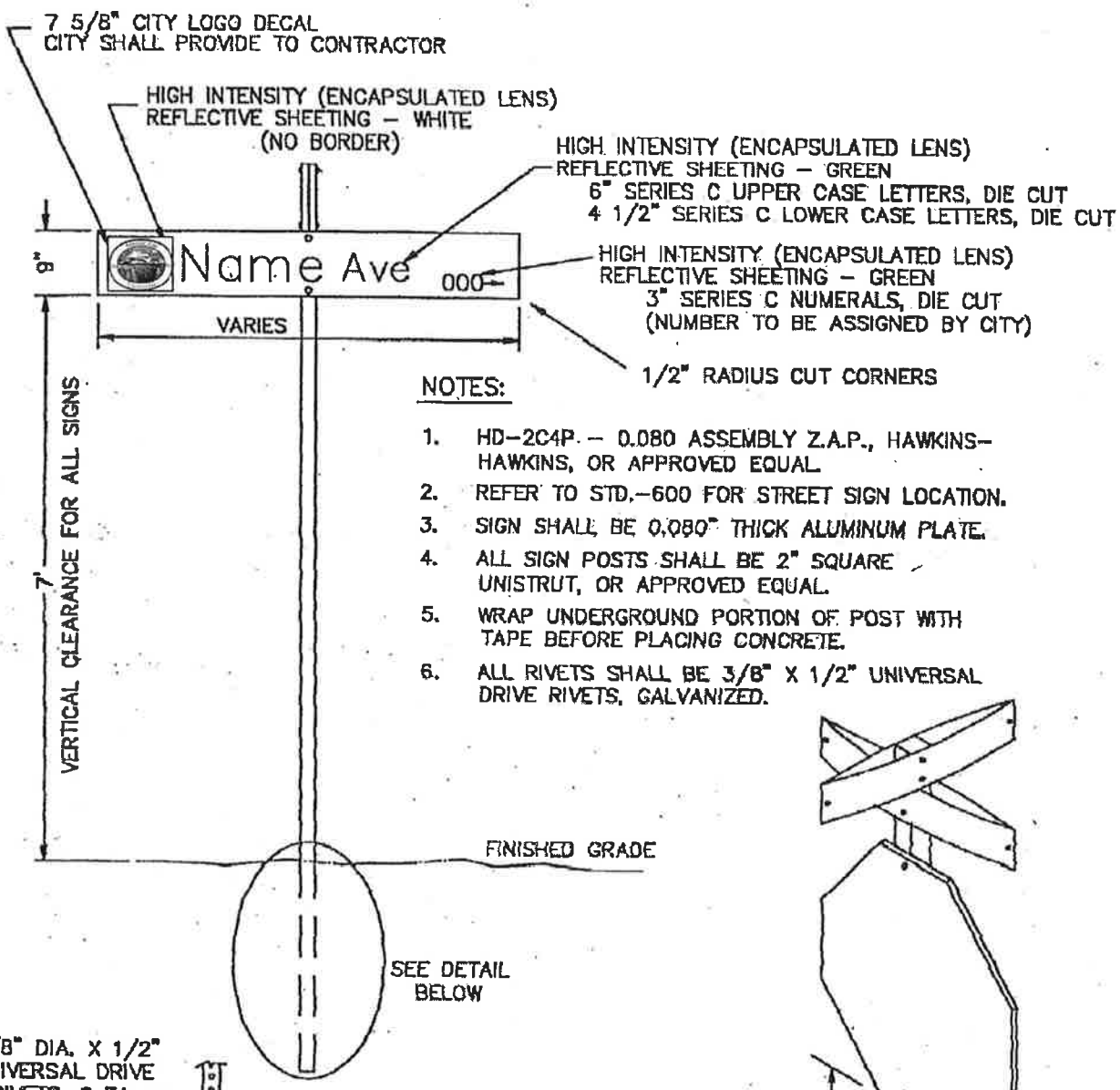
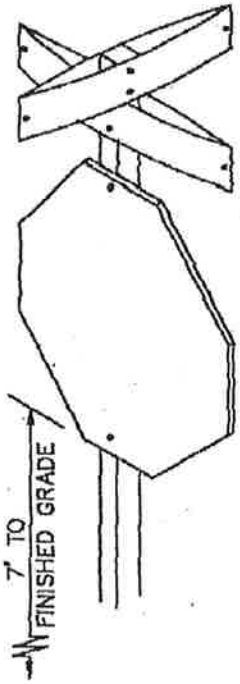
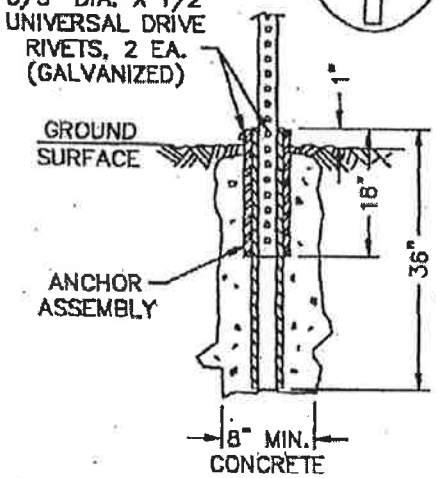


NOTES:

1. HD–2C4P. – 0.080 ASSEMBLY Z.A.P., HAWKINS–HAWKINS, OR APPROVED EQUAL.
2. REFER TO STD.–600 FOR STREET SIGN LOCATION.
3. SIGN SHALL BE 0.080" THICK ALUMINUM PLATE.
4. ALL SIGN POSTS SHALL BE 2" SQUARE UNISTRUT, OR APPROVED EQUAL.
5. WRAP UNDERGROUND PORTION OF POST WITH TAPE BEFORE PLACING CONCRETE.
6. ALL RIVETS SHALL BE 3/8" X 1/2" UNIVERSAL DRIVE RIVETS, GALVANIZED.





SIGN BASE DETAIL

CITY OF ROHNERT PARK

STREET NAME SIGN

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 705B

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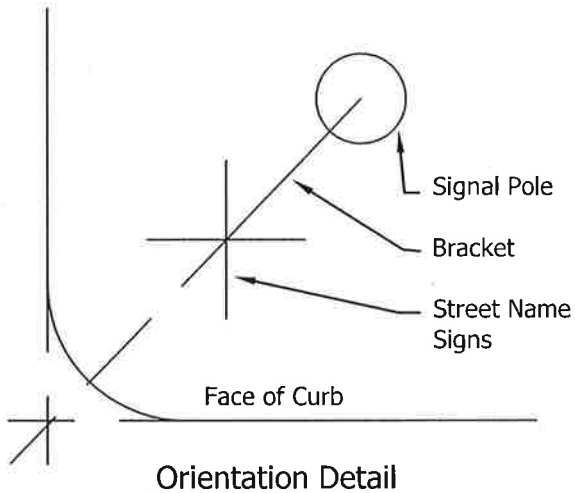
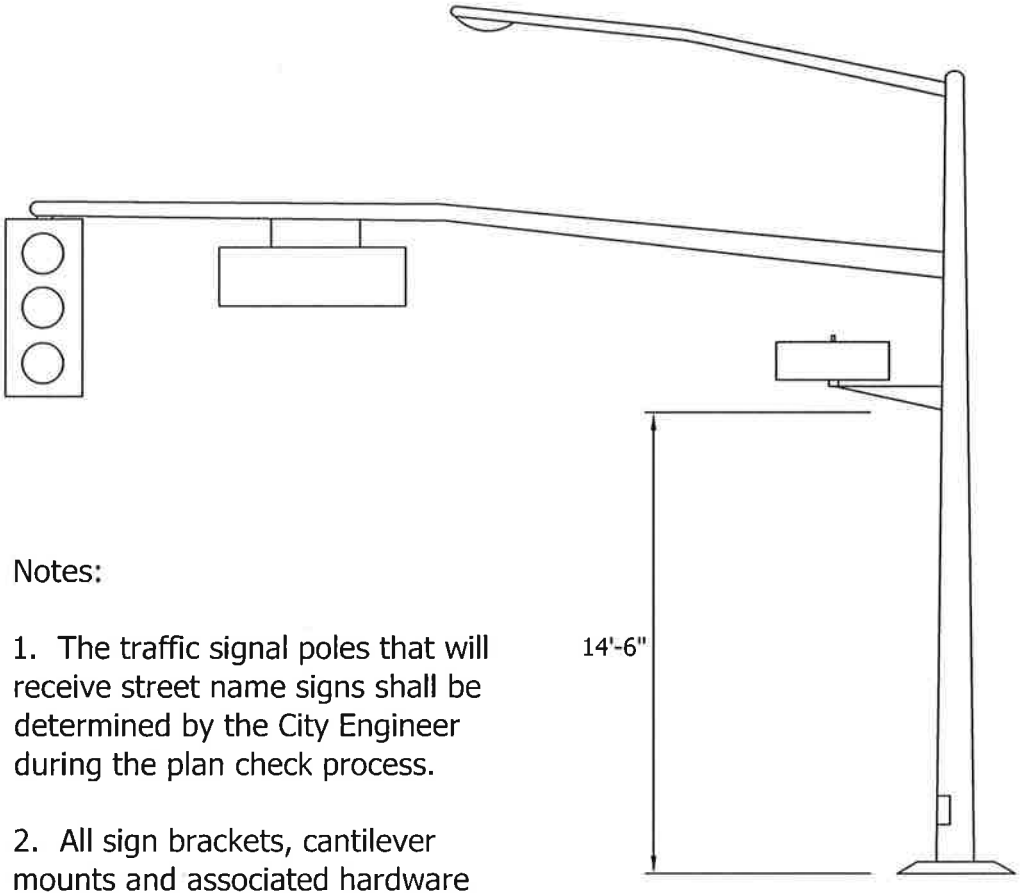


Orientation Detail



Notes:

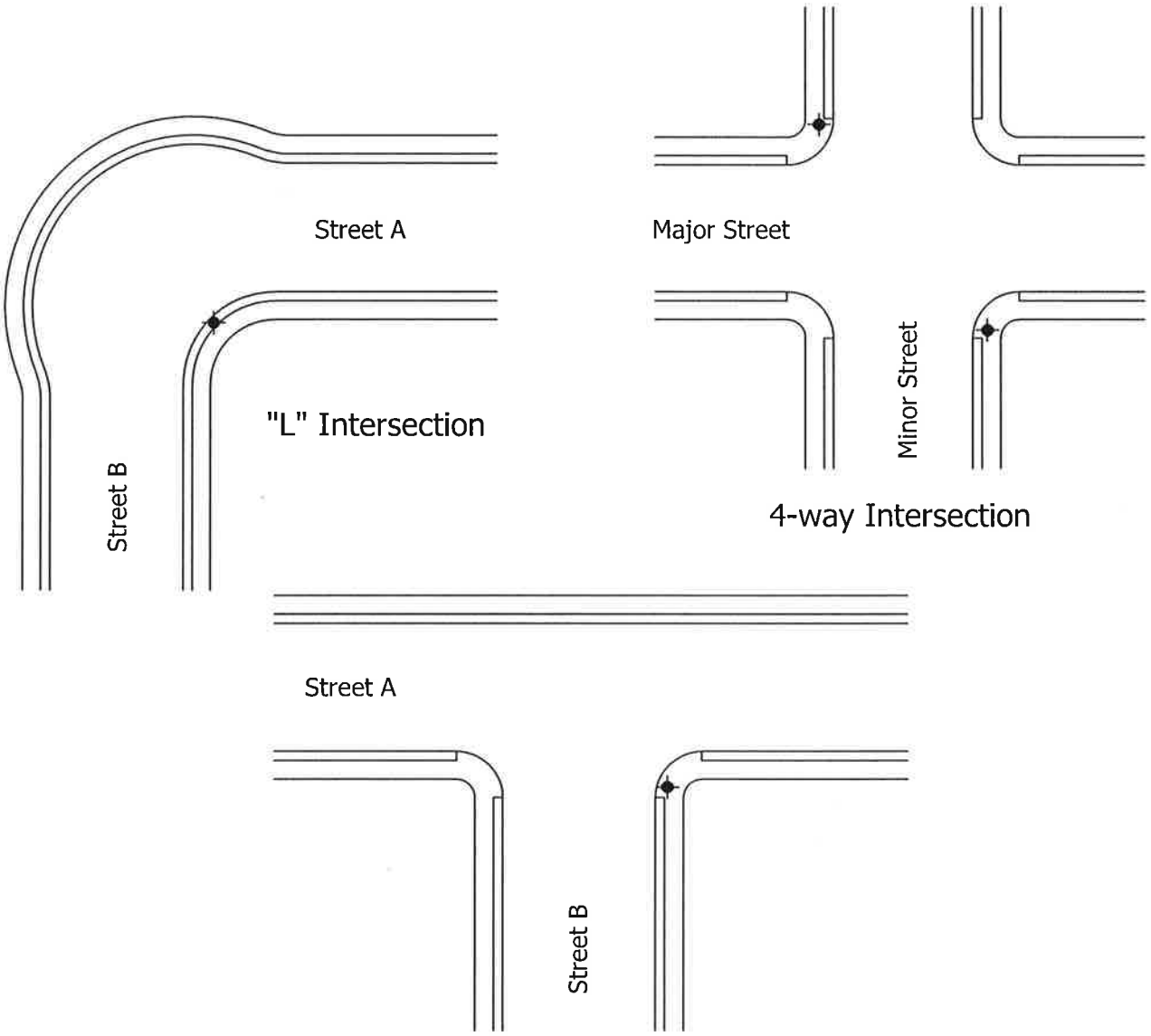
1. The traffic signal poles that will receive street name signs shall be determined by the City Engineer during the plan check process.

2. All sign brackets, cantilever mounts and associated hardware must be designed specifically for the installation of traffic signs, and specifications for this hardware must be submitted for approval by the City Engineer prior to construction.

CITY OF ROHNERT PARK

TRAFFIC STREET NAME SIGNS
SIGNALIZED INTERSECTIONS

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 705C



Legend

✦ Street Name Sign

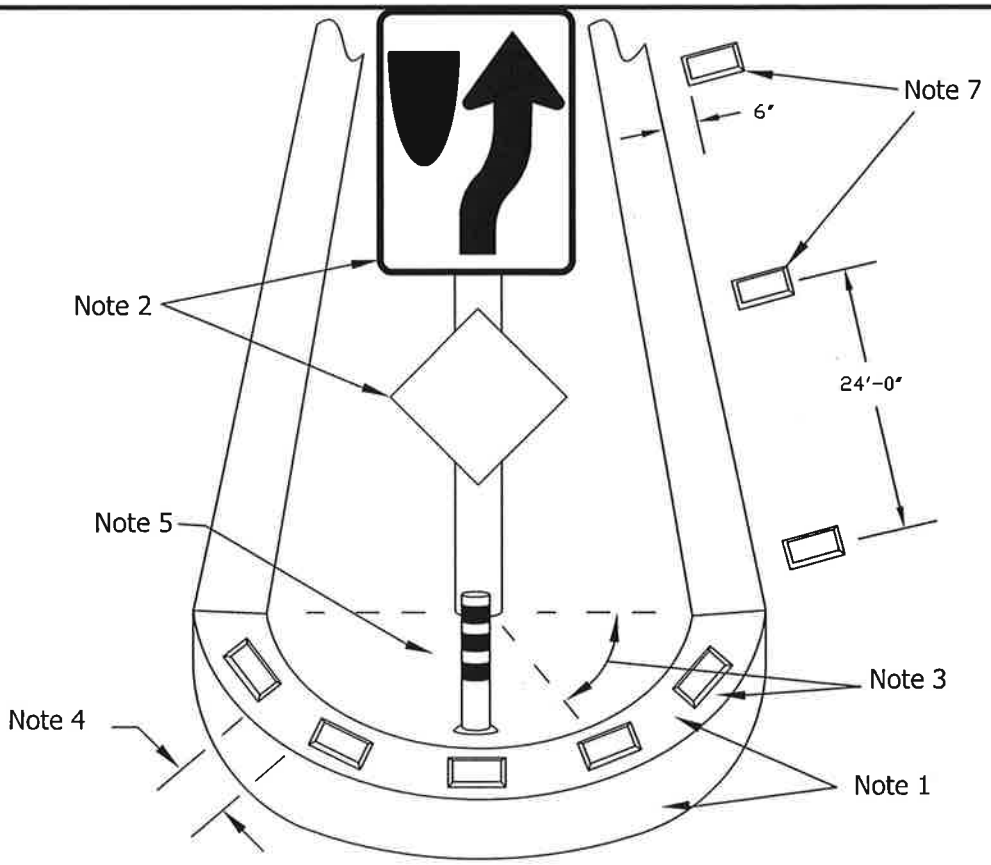
Notes

1. Where Stop Signs are present, the Street Name Signs shall be installed above the Stop Sign, per 705B.

CITY OF ROHNERT PARK

TRAFFIC STREET NAME SIGNS
NON-SIGNALIZED INTERSECTIONS

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 705D



Notes:

1. The top and face of the curb at the island nose shall be painted white, with reflective glass beads.

2. When the width of a median island is 3 feet or greater and the island separates traffic of opposite directions, a R4-7 'Keep Right' symbol sign and Type 1 (OM1-3) object marker (per CA MUTCD figure 2C-13) shall be installed at the midpoint of the island nose defined by the radius.

3. Two-way reflective markers shall be installed on top of the curb at the island nose, along radial lines as illustrated in the drawing. The color of these markers shall be in conformance with California MUTCD section 3A, white markers shall be used if the island separates traffic of the same direction and yellow markers shall be used if the island separates traffic of opposite directions.

4. The minimum number of two-way reflective markers on the island nose, shall be five, with one at each beginning of curve and one at the mid point. The maximum distance between markers shall be 2 feet. Additional markers shall be installed to maintain this maximum allowable spacing. Additional markers shall be installed in such a way that the spacing between all markers is equal.

5. A Type Q marker per CA MUTCD fig. 2C-13 shall be installed at the midpoint of the island nose, surface mounted and just behind the island curb, as shown.

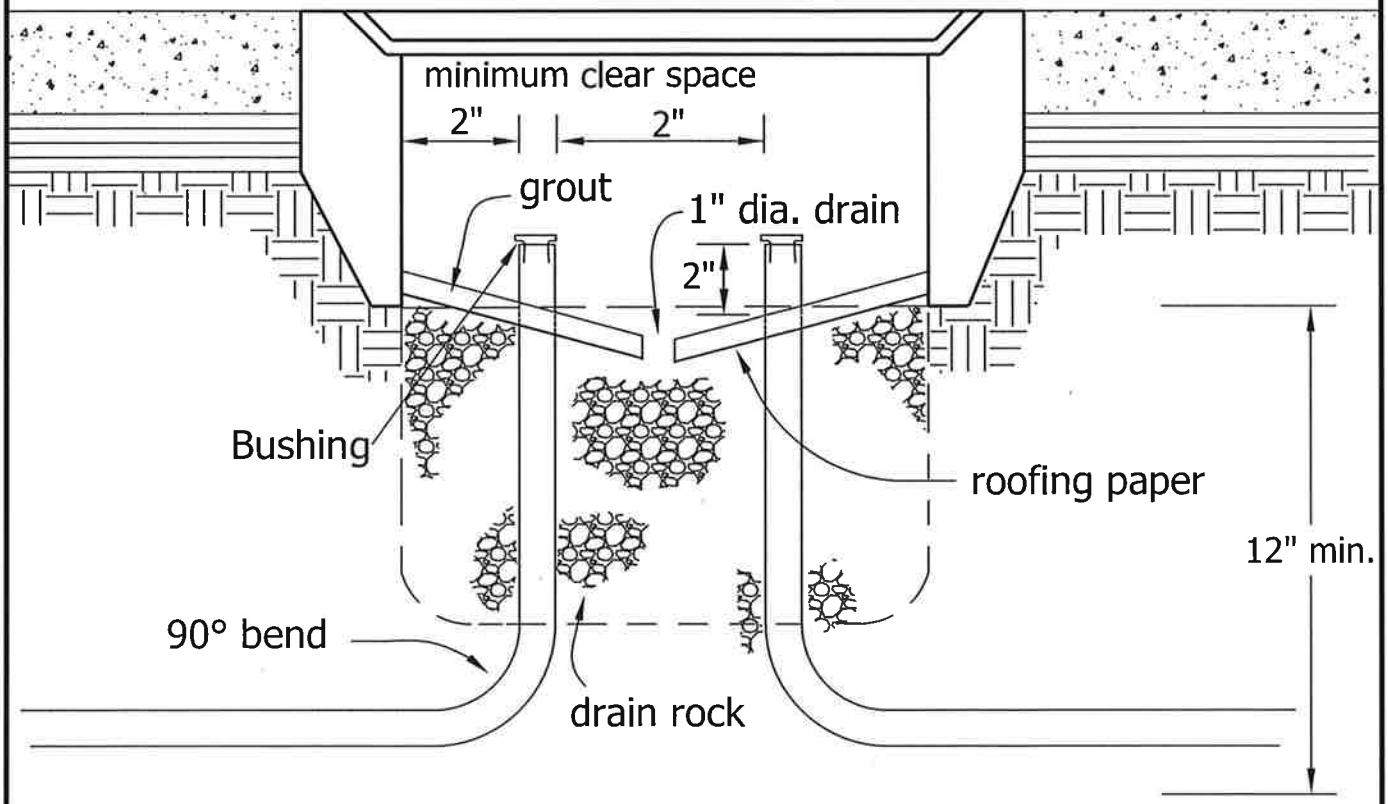
6. On median islands which separate traffic of the same direction, a W12-1 Double Arrow Sign shall be used in place of the R4-7.

7. Left Edge Line raised pavement markers shall be placed 6" from the median's face of curb, and shall be spaced 24' on center as shown above.

CITY OF ROHNERT PARK

TRAFFIC MARKINGS
MEDIAN ISLAND TREATMENT

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 721

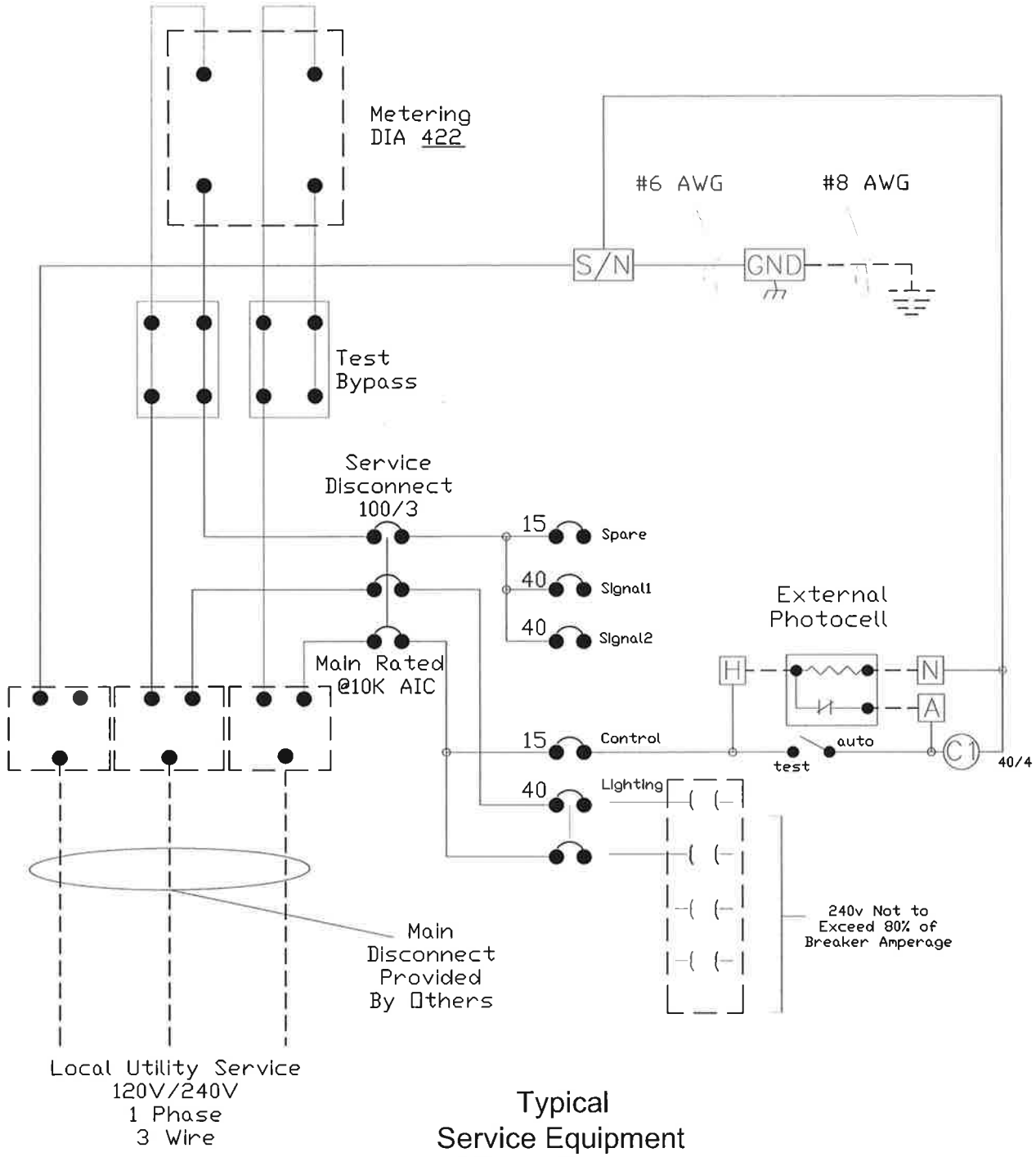


NO. 5 CONCRETE PULLBOX

NOTES

1. This design is supplemental to the most current Caltrans plans and specifications.

CITY OF ROHNERT PARK	
TRAFFIC SIGNALS PULL BOX INSTALLATION	
SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 730



Typical
Service Equipment
Wiring Diagram

NOTES

1 Spare to be used only when specified

2 Provide sufficient conductor length to connect to Serving Utility connection point either on pole or in U.G. vault. Check with Serving Utility for exact length

CITY OF ROHNERT PARK

TRAFFIC SIGNALS
SERVICE WIRING DIAGRAM

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 731

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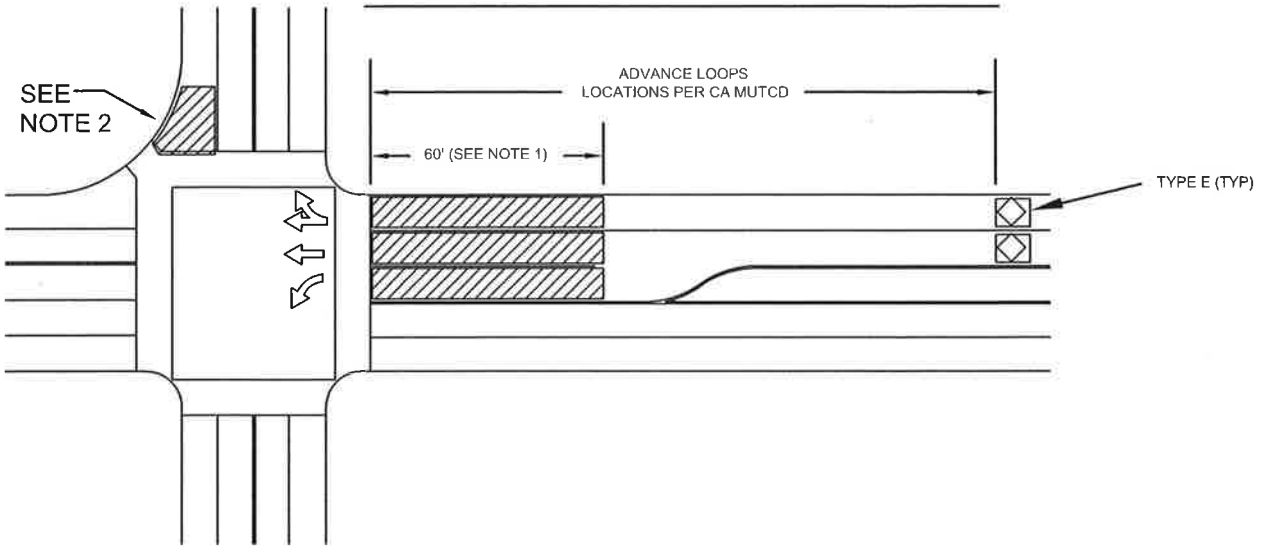
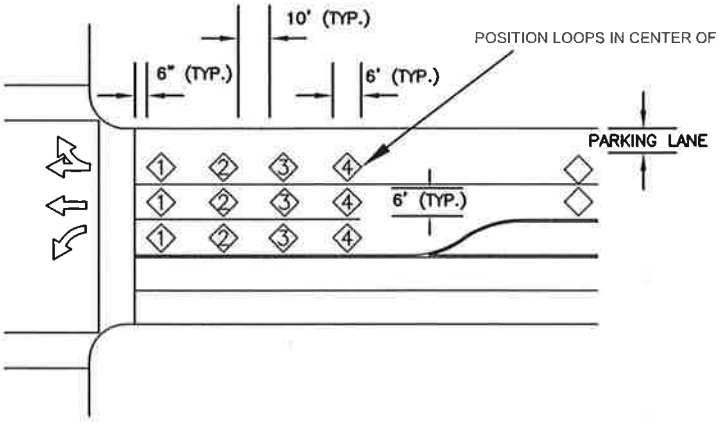
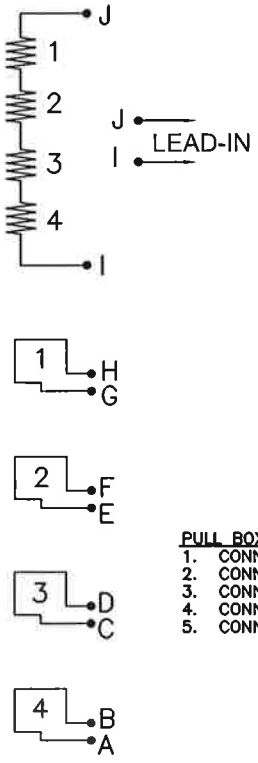
VIDEO DETECTION WITH ADVANCE LOOPS



LOOP DETECTORS



LOOP DETECTOR WIRING



PULL BOX CONNECTIONS

1. CONNECT J TO H
2. CONNECT G TO E
3. CONNECT F TO D
4. CONNECT C TO A
5. CONNECT B TO I

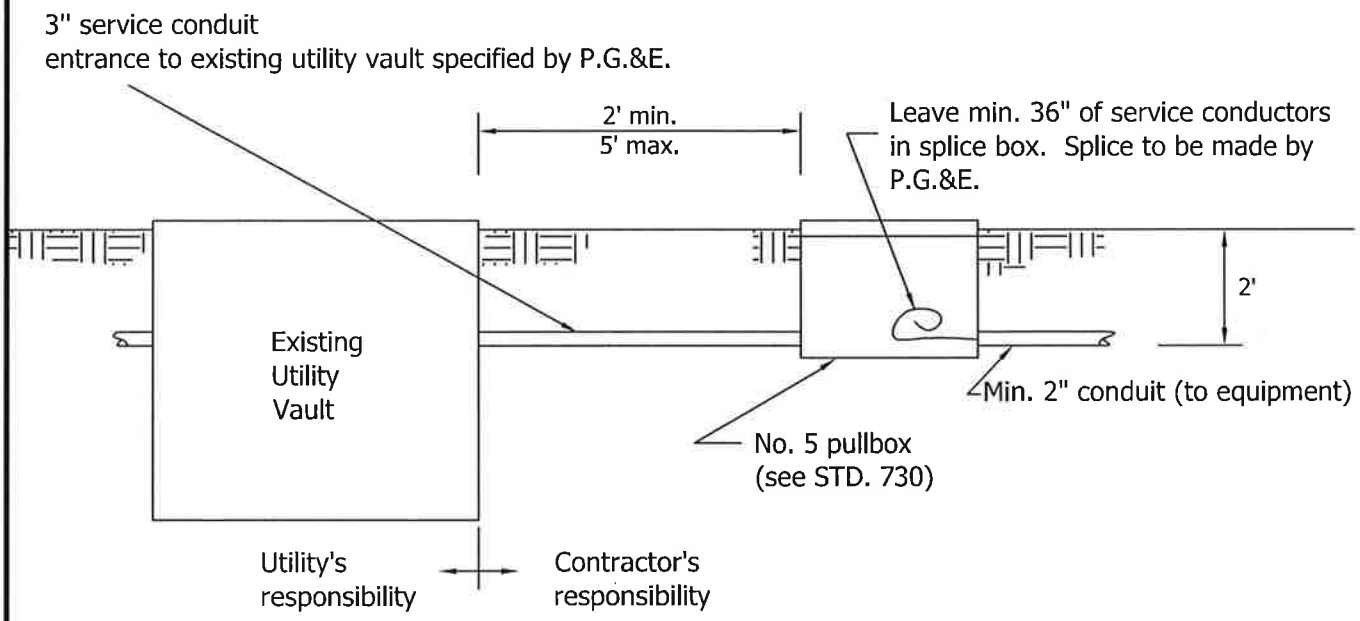
NOTES:

1. THE DETECTION ZONE SHOULD EXTEND TO THE FULL WIDTH OF THE TRAVEL LANE AND EXTEND 60 FEET FROM THE LIMIT LINE OR CROSSWALK, AS SHOWN IN THE DIAGRAM, UNLESS CONDITIONS AND/OR ENGINEERING JUDGEMENT SUGGEST OTHERWISE.
2. TYPICAL APPLICATION FOR LARGE RADIUS RIGHT TURN.
3. ADVANCE LOOPS SHALL BE INGROUND TYPE E LOOPS, INSTALLED PER STATE STANDARD SPECIFICATIONS AND PLANS.
4. LOOPS SHALL BE CENTERED IN TRAVEL LANE. PARKING LANE IS NOT TO BE CONSIDERED IN DETERMINING TRAVEL LANE WIDTH.
5. ADJACENT LOOPS ON THE SAME SENSOR UNIT CHANNEL SHALL BE WOUND IN OPPOSITE DIRECTIONS.
6. LOOPS IN ADJACENT LANES SHALL BE WOUND IN OPPOSITE CONFIGURATION.

CITY OF ROHNERT PARK

TRAFFIC SIGNALS DETECTION

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 732



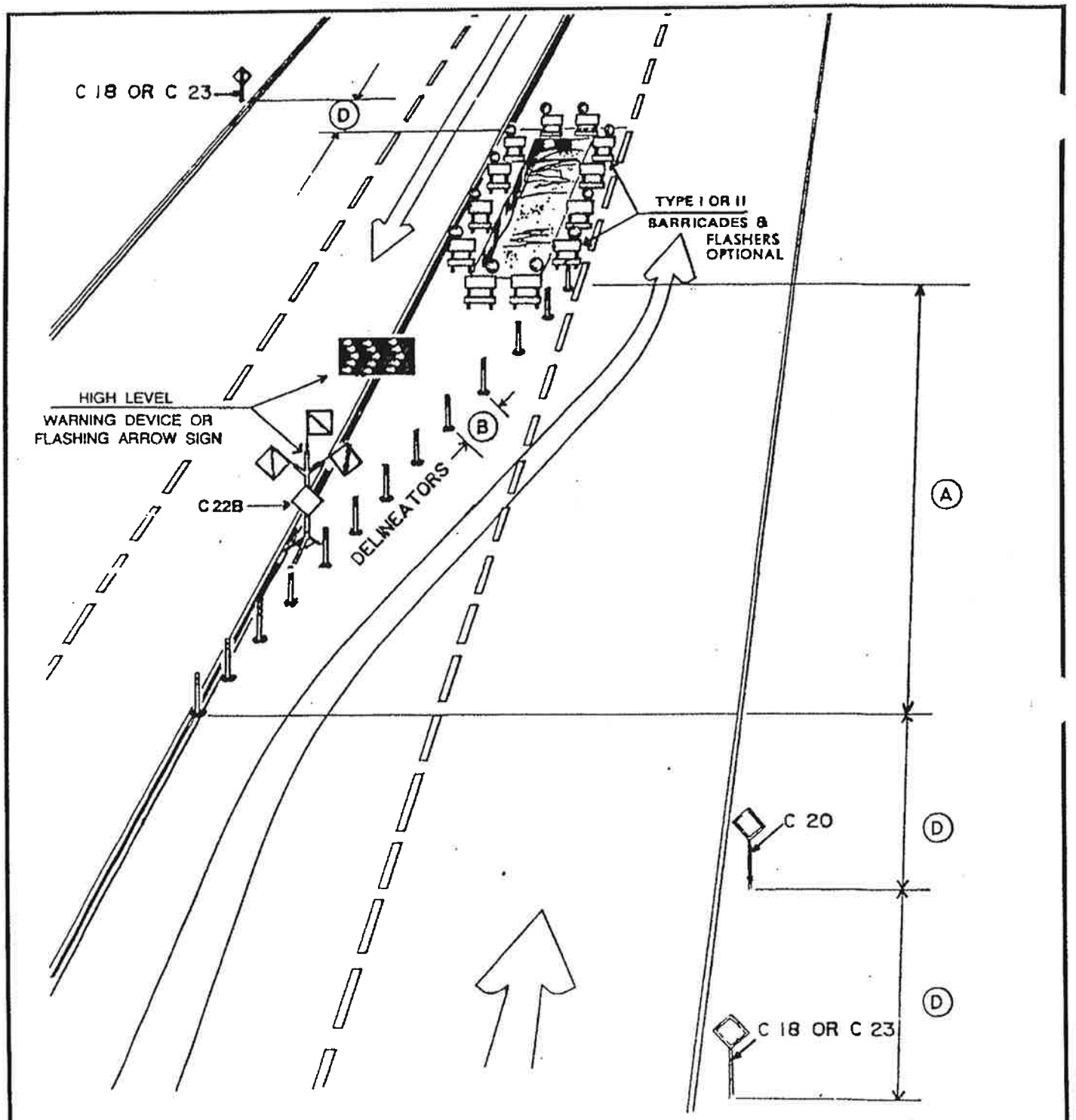
UNDERGROUND SERVICE

NOTES:

1. Contractor to install conduit into utility company vault with utility company representative in attendance.

2. Contractor to install #5 pull box, 3" service conduit (when nonexistent), and 2" conduit with conductors from equipment to pull box.

CITY OF ROHNERT PARK	
TRAFFIC SIGNAL UNDERGROUND ELECTRIC SERVICE	
SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 733A



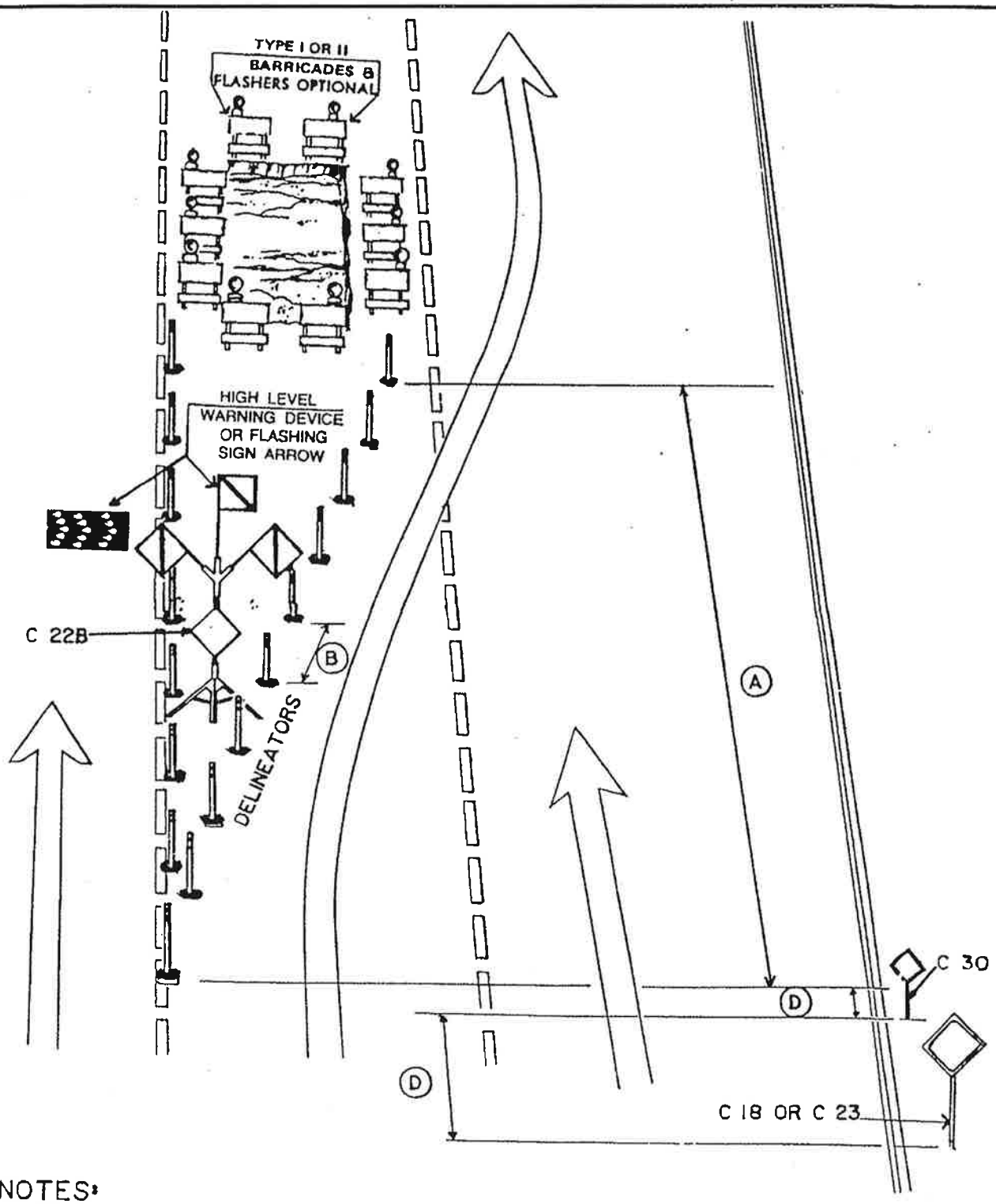
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
LEFT LANE CLOSURE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740A



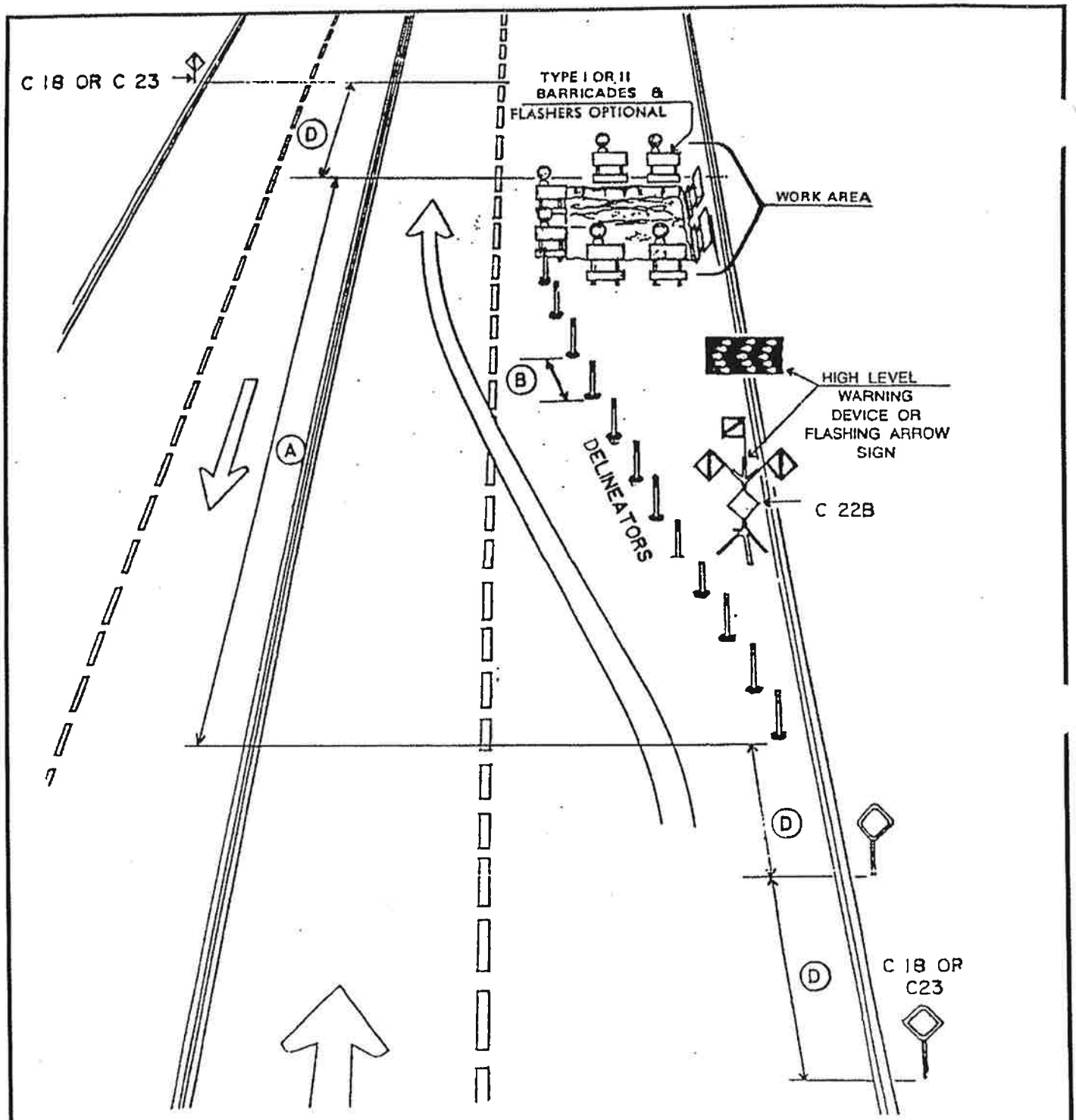
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
MIDDLE LANE CLOSURE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740B



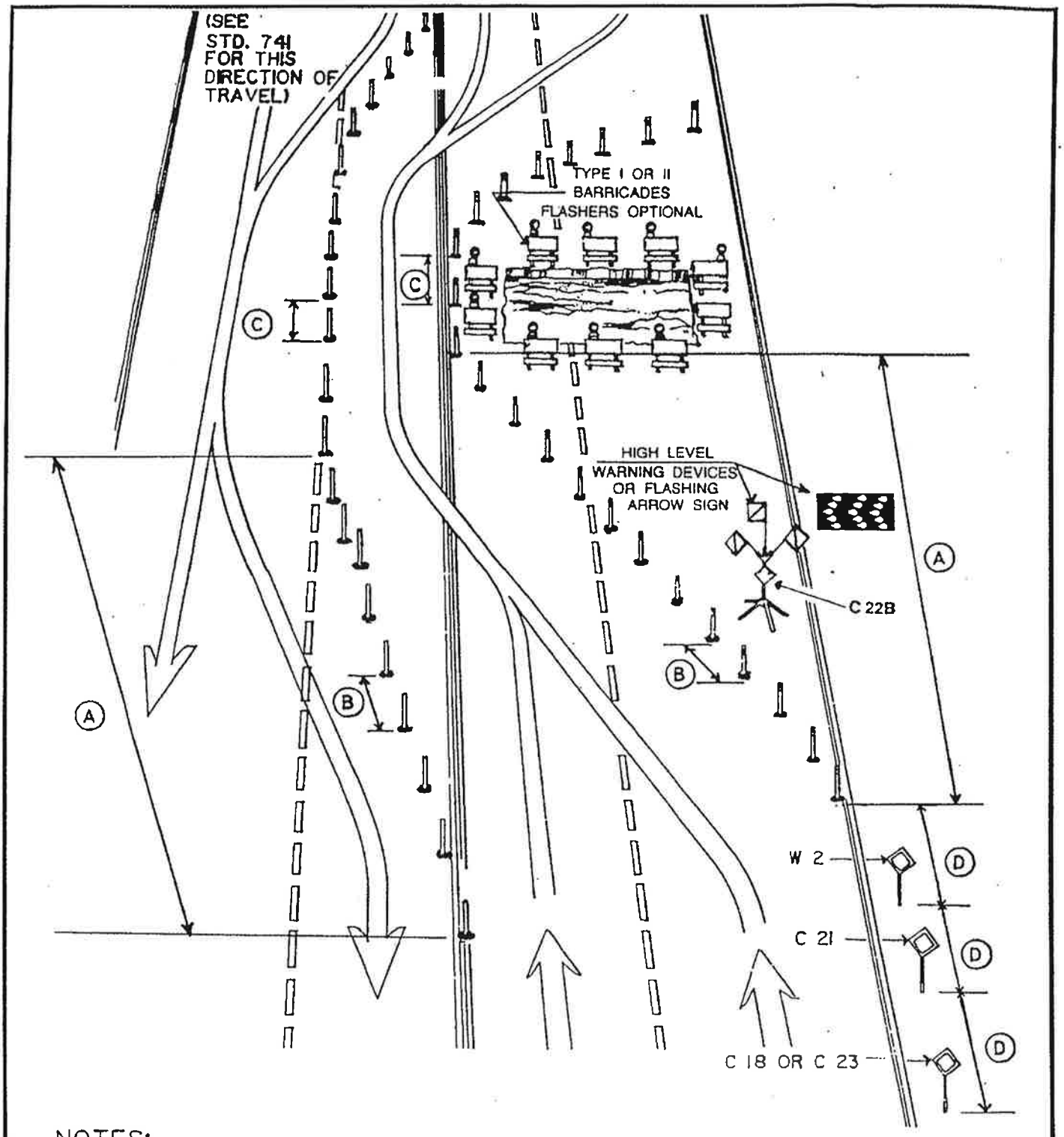
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL RIGHT LANE CLOSURE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740C



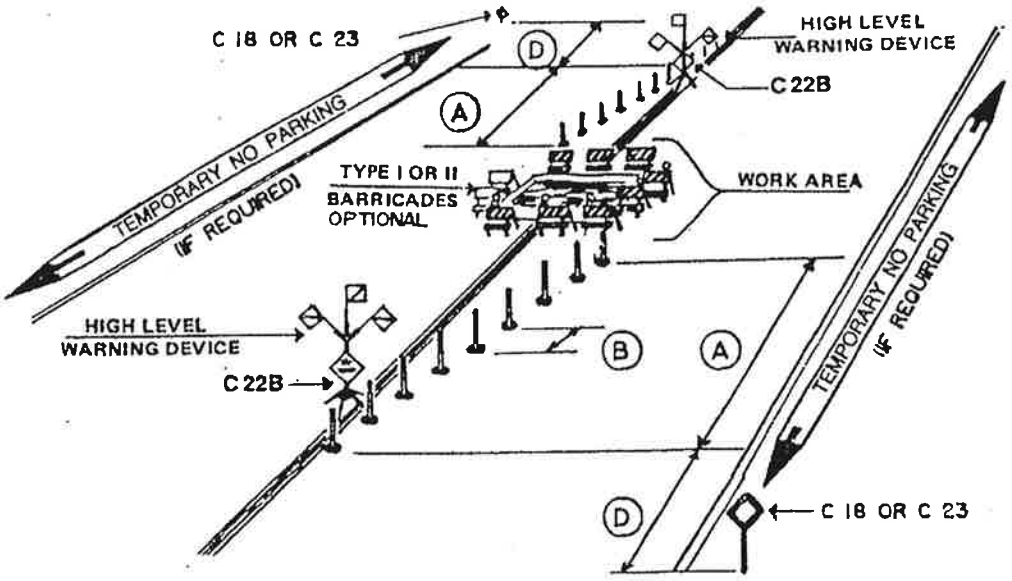
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITION
   - (C) DELINEATOR SPACING-TANGENTS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL HALF-ROAD CLOSURE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740D



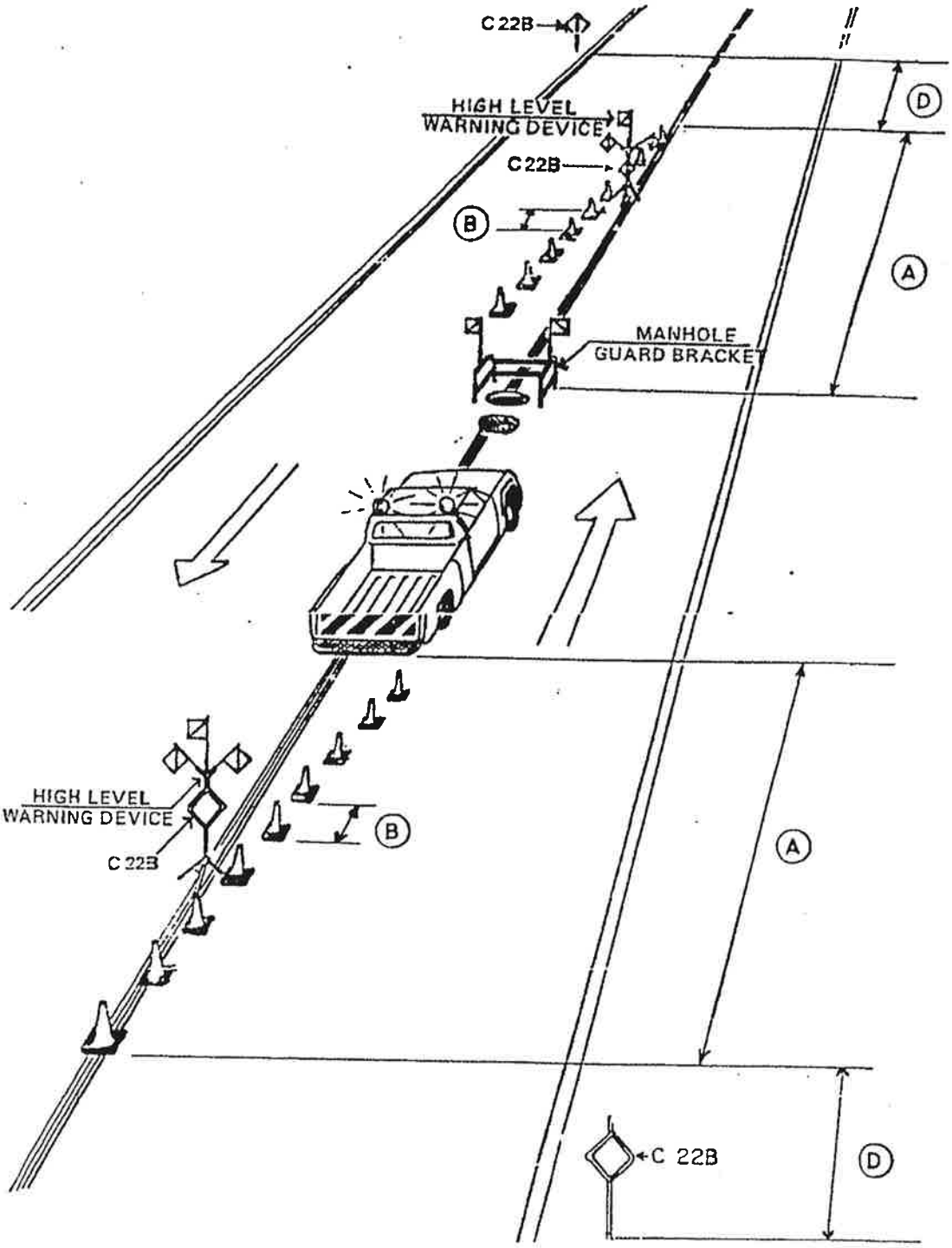
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
WORK AREA CENTER OF STREET

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740E



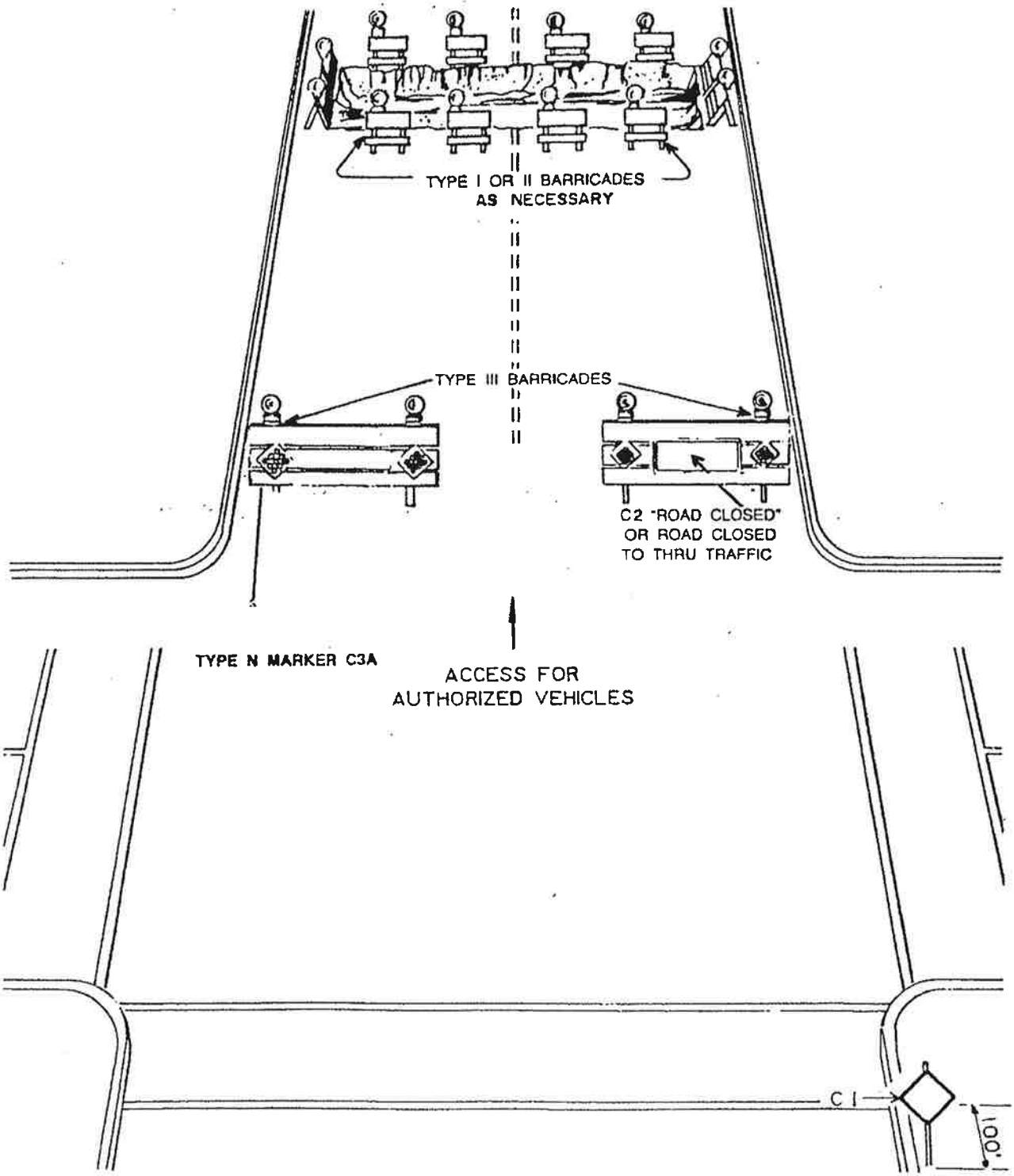
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
MANHOLE ACCESS IN CENTER OF STREET

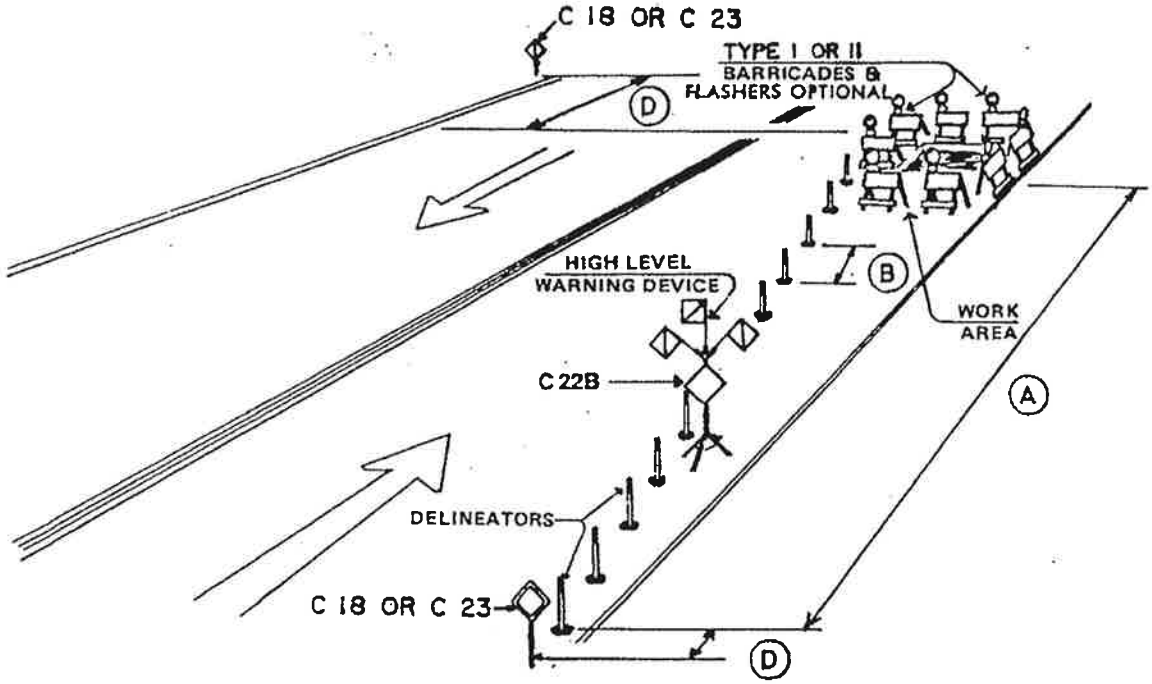
SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740F



CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
LOCAL STREET CLOSURE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740G



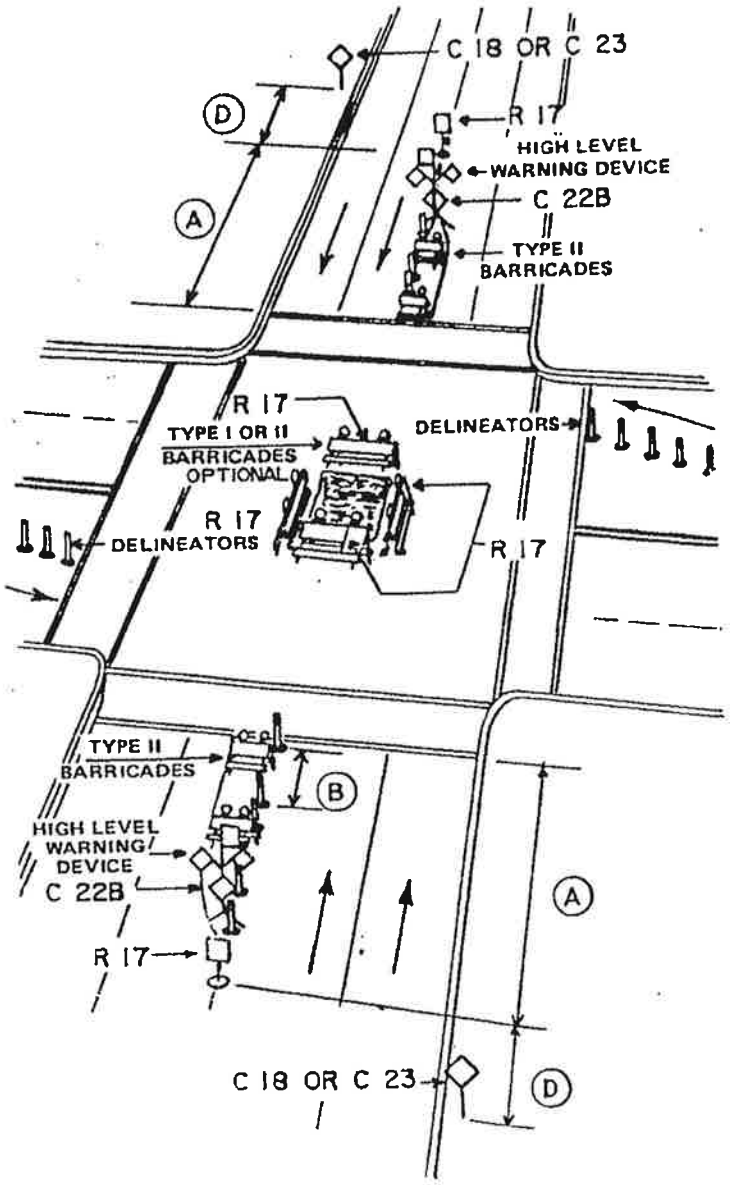
NOTES:

1. SEE STD. 741 FOR.
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITION.
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
WORK IN PARKING LANE OR SHOULDER

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740H



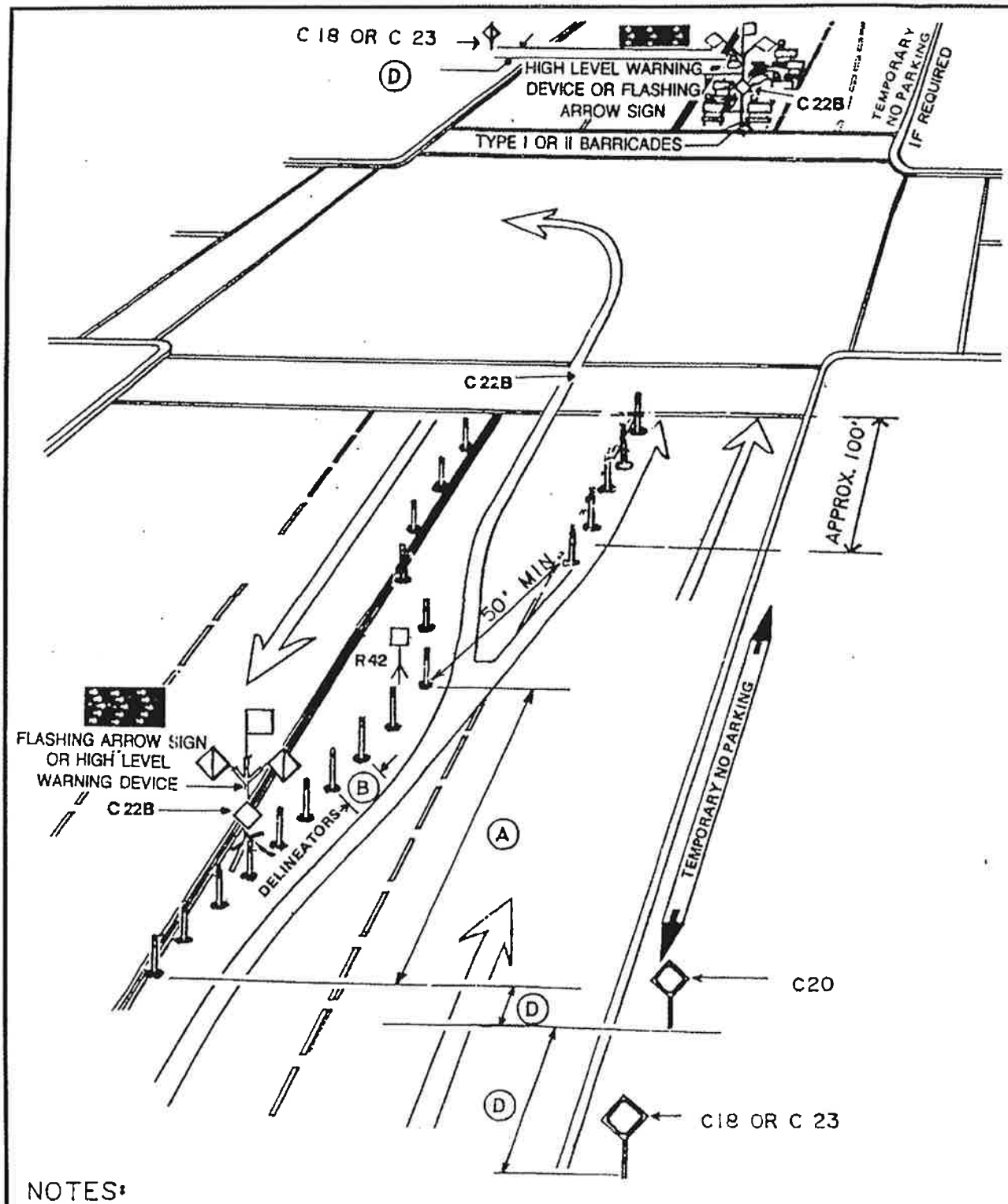
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
WORK WITHIN INTERSECTION

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 7401



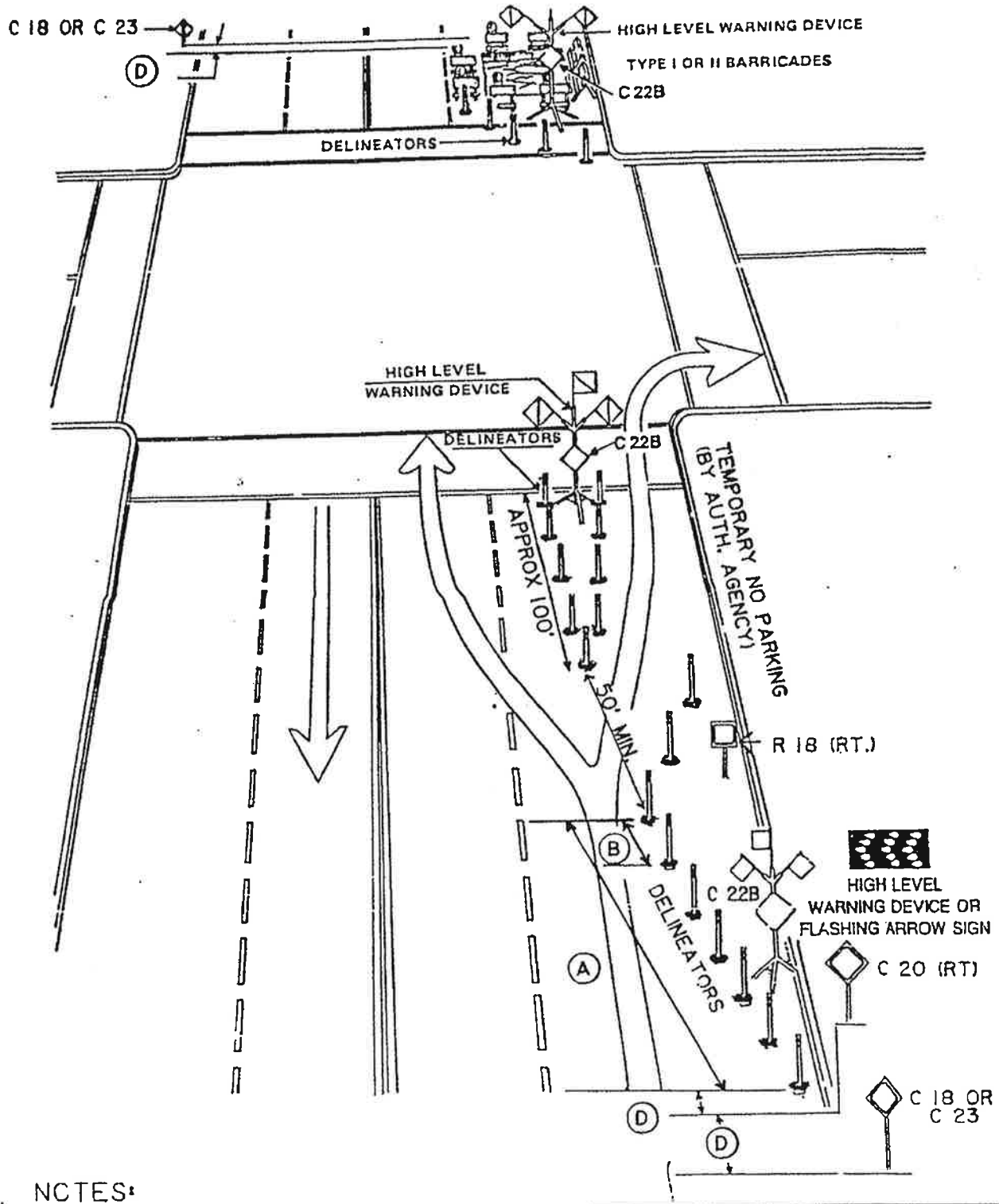
NOTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL WORK
BEYOND INTERSECTION LEFT LANE CLOSED

SCALE: NONE	DATE: JANUARY 2006
Approved: Pam Jabin	STD. - 740J



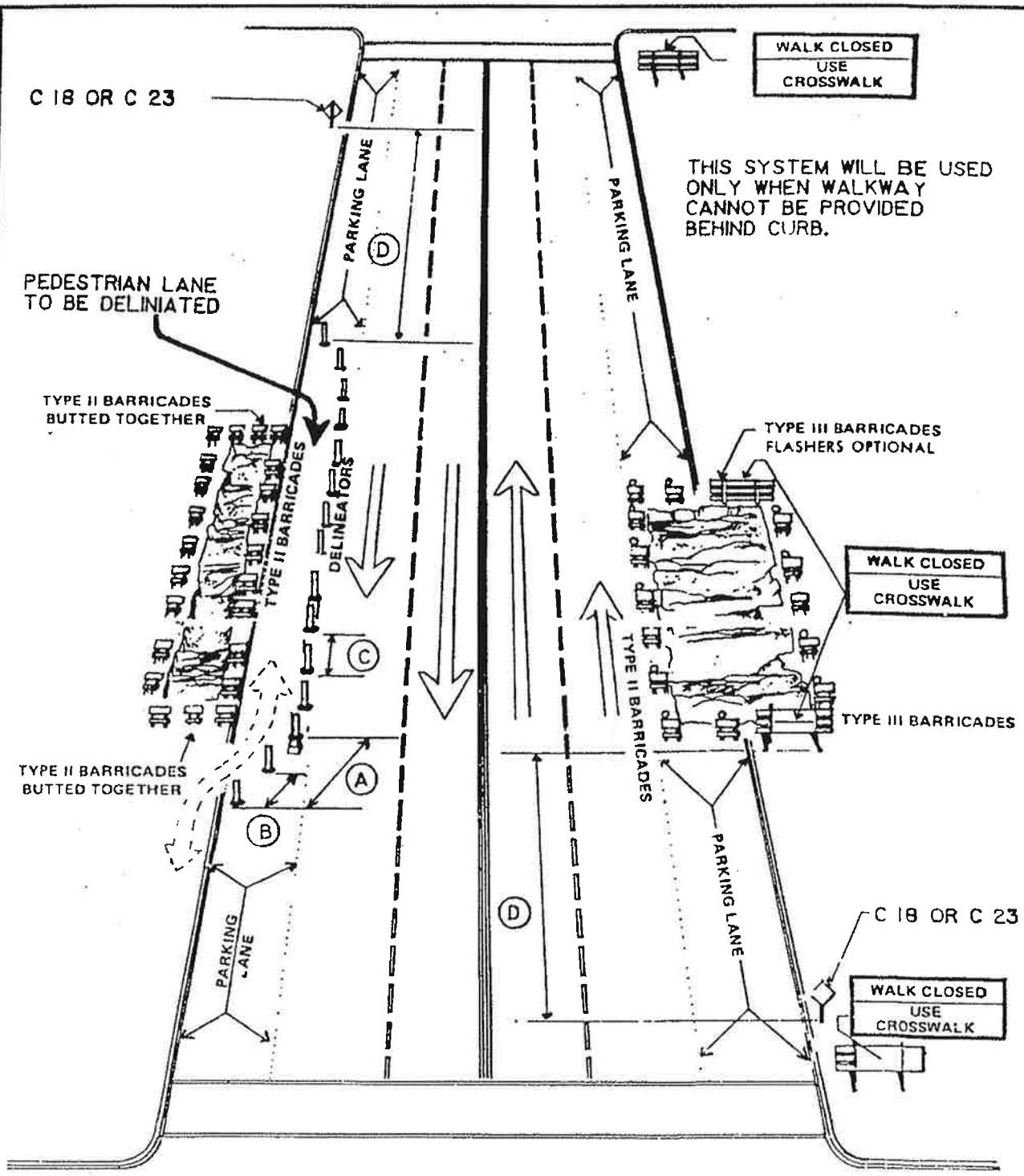
NCTES:

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL WORK
BEYOND INTERSECTION RIGHT LANE CLOSE

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740K



NOTES

1. SEE STD. 741 FOR:
   - (A) TAPER LENGTH
   - (B) DELINEATOR SPACING-TRANSITIONS
   - (C) DELINEATOR SPACING-TANGENTS
   - (D) SIGN SPACING

CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
PEDESTRIAN CONTROL

SCALE: NONE	DATE: JANUARY 2006
Approved:	STD. - 740L

TRAFFIC SPEED	TAPER LENGTH (EACH LANE)	DELINEATOR SPACING		SIGN SPACING (ADVANCE OF TAPER AND BETWEEN SIGNS)
	(A)	(B) (TRANSITION)	(C) (TAPER)	(D)
25 MPH	150 FT	25 FT	50 FT	150 FT
30 MPH	200 FT	30 FT	60 FT	200 FT
35 MPH	250 FT	35 FT	70 FT	250 FT
40 MPH	350 FT	40 FT	80 FT	350 FT
45 MPH	550 FT	45 FT	90 FT	550 FT
50 MPH	600 FT	50 FT	100 FT	600 FT
55 MPH	700 FT	50 FT	100 FT	700 FT

MINIMUM DELINEATOR AND SIGN SPACING

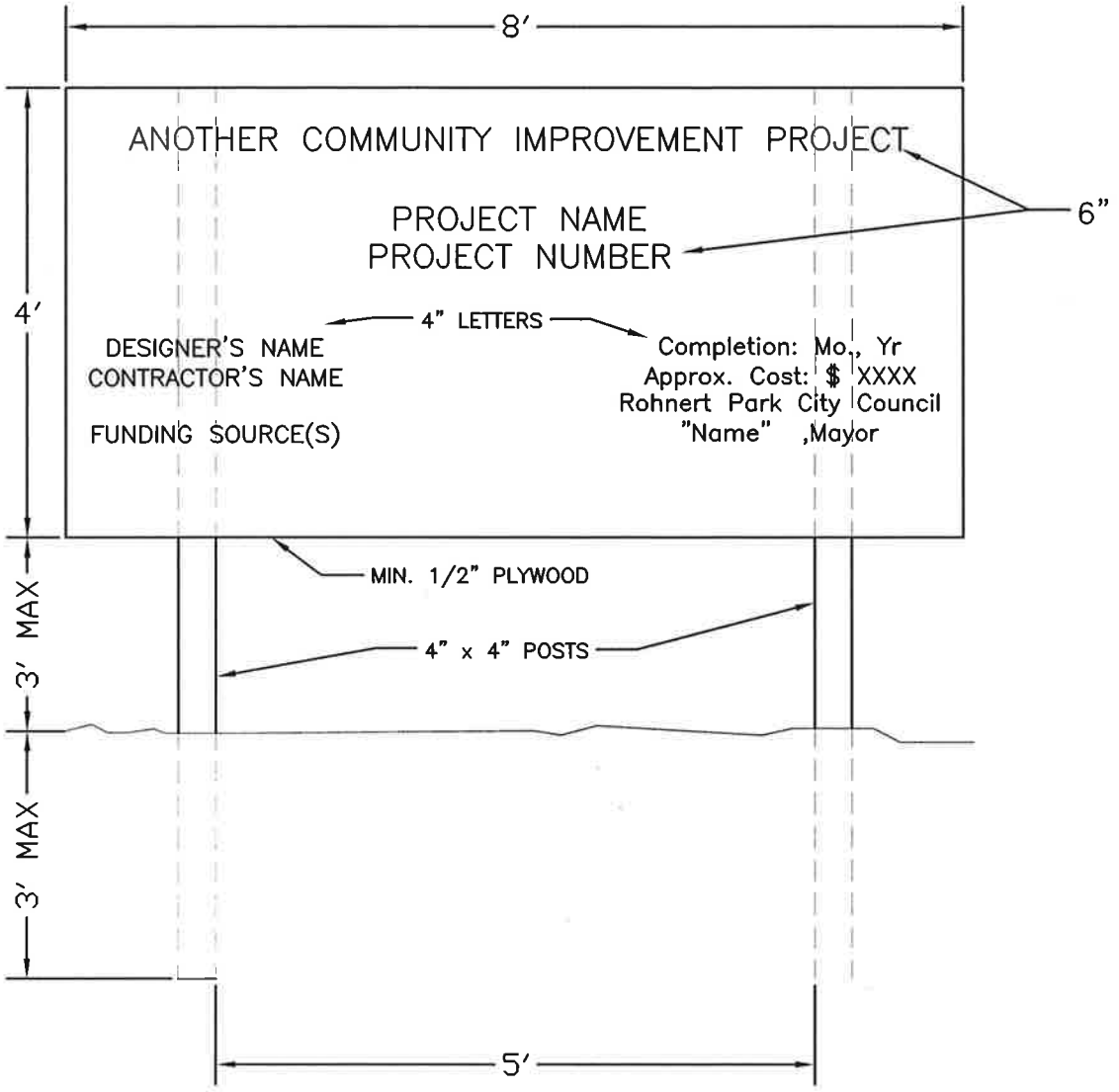
CITY OF ROHNERT PARK

WORK AREA TRAFFIC CONTROL
DELINEATION AND SIGN PLACEMENT

SCALE: NONE | DATE: JANUARY 2006

Approved:

STD. - 741



1. USE APPROPRIATE LETTER THICKNESS.
2. WORDING AND SIGN LOCATION SHALL BE APPROVED BY THE CITY ENGINEER
3. BLUE LETTERS ON YELLOW SIGN

CITY OF ROHNERT PARK

PROJECT SIGN

SCALE: NONE	DATE: MARCH 2014
Approved:	STD. - 742

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