EXISTING CONCRETE PAVEMENT

6" DIA. (TYP.)

CORE EXISTING CONCRETE PAVEMENT AND CONSTRUCT CONCRETE FOUNDATION WHERE NECESSARY (SEE NOTE C11)

3" X 1/4" THICK STEEL CROSS BAR (SEE NOTE 12)

BICYCLE RACK PARKING ZONE AND CLEARANCE ENVELOPE

MIN. 36" TO OBSTRUCTIONS
MIN. 60" TO FIRE HYDRANTS

(BICYCLE RACK PARKING ZONE CENTERED WITHIN BICYCLE RACK PARKING ZONE (TYP)
BICYCLE RACK PARKING ZONE FREE OF ANY VAULTS AND UTILITY BOXES ACCESS COVERS, CATCH BASINS OR, SIMILAR STRUCTURES.
BICYCLE RACK PARKING ZONE SHALL HAVE A MINIMUM VERTICAL HEADROOM CLEARANCE OF 84 INCHES.

BICYCLE RACK PARKING ZONE BOUNDARY.

E Q E Q

SEE NOTE HEREON FOR EXCEPTION

FOR PARALLEL BICYCLE RACKS EITHER STAND-ALONE OR IN A SINGLE-ROW, THE BICYCLE RACKS SHALL BE SETBACK A MINIMUM OF 3'-0" MEASURED FROM THE BACK OF THE STREET CURB TO THE CENTERLINE OF THE BICYCLE RACKS AND THE BICYCLE RACK PARKING ZONE WIDTH SHALL BE 3'-0" (SEE SHEET 2).

E Q

2'-0"

SEE NOTE HEREON FOR EXCEPTION

E Q

6'-0"

PARKING ZONE LENGTH

BICYCLE RACK PARKING ZONE WIDTH

NOTE:
BICYCLE RACK PARKING ZONE LAYOUTS

ON-STREET PARKING PERMITTED

- 5FT MIN UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE (PAR)
- TYPICAL BICYCLE RACK PARKING ZONE BOUNDARY
- STAND-ALONE PARALLEL BICYCLE RACK
- STAND-ALONE PERPENDICULAR BICYCLE RACK

ON-STREET PARKING NOT PERMITTED

- 5FT MIN UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE
- TYPICAL SINGLE-ROW PERPENDICULAR BICYCLE RACKS
- DOUBLE-STACKED PARALLEL BICYCLE RACKS

NOTE:
BICYCLE RACK PARKING ZONE LAYOUTS SHALL BE ARRANGED TO ENSURE THAT THE REQUIRED CLEAR PATH PER NOTE D.5.d IS PROVIDED.

LEGEND
- 36"X72" BICYCLE PARKING ZONE
- 48"X72" BICYCLE PARKING ZONE

BUREAU OF ENGINEERING
OFFICIAL RECORD

B-4783
NOTES:

A. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPW) ADOPTED BY THE BOARD OF PUBLIC WORKS AS AMENDED BY THE LATEST CORRESPONDING CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BROWN BOOK.

B. COVENANT AND MAINTENANCE AGREEMENT: ALL BICYCLE RACKS INSTALLED UNDER WORK PERMIT SHALL BE MAINTAINED BY THE PERMITTEE. THE PERMITTEE SHALL COMPLETE THE COVENANT & AGREEMENT (C&A) FORM, AVAILABLE FROM THE DEPARTMENT OF TRANSPORTATION DEVELOPMENT REVIEW DIVISION, EXECUTE IT WITH THE CITY AND RECORD IT WITH THE LOS ANGELES COUNTY REGISTRAR-RECORDER. SUBMIT A COPY OF RECORDED C&A TO THE CITY ENGINEER BEFORE A WORK PERMIT CAN BE ISSUED.

C. GENERAL

1. UNLESS OTHERWISE SPECIFIED OR APPROVED BY THE CITY ENGINEER, THE BICYCLE RACK SHALL BE AN INVERTED-U DESIGN.

2. BICYCLE RACKS SHALL ALLOW FOR THE USE OF A CABLE AND "U" TYPE LOCKS, AND SHALL SUPPORT THE BICYCLE FRAME (NOT THE WHEEL) AT TWO POINTS, A MINIMUM OF 12 INCH APART.

3. PIPE: ASTM A53 GRADE B STANDARD WEIGHT STEEL PIPE; 2 INCH DIA. CONSTRUCTED OF 90 DEGREE BENDS WITH AN INSIDE RADIUS BEND OF 4-13/16 INCHES. SECURITY CHAIN SHALL BE ASTM A413, GRADE 30 PROOF COIL CHAIN, SIZE 3/8 INCH.

4. BASE PLATE: ASTM A36 3/8 INCH THICK PLATE WITH THREE 3/4 INCH DIA. HOLES AT 120 DEGREES SPACING.

5. BOLT: TAMPER-PROOF DRIVE TYPE PIN ANCHOR BOLT WITH A ROUND HEAD MADE OF ZINC PLATED AISI 1038 HEAT TREATED CARBON STEEL, 1/2 INCH DIA BY 3 INCHES LONG. THE ANCHOR BOLT, SHALL BE MANUFACTURED BY POWERS FASTENERS (WWW.POWERS.COM), ALLIED FASTENER AND TOOL (WWW.ALLIEDFASTENER.COM), OR AN APPROVED EQUIVALENT. NO ANCHOR BOLT SHALL CONTAIN ANY SHARP EDGES.

6. ALL METAL COMPONENTS INCLUDING ALL BOLT HOLES SHALL HAVE MINIMUM 4 MIL THICK BLACK COLORED, LONG WEARING, MILDEW AND ULTRAVIOLET RAY RESISTANT ELECTROSTATIC POLYESTER COATING MADE OF TRIGLYCIDYL (TGIC) APPLIED IN THE FACTORY PRIOR TO DELIVERY. ALTERNATE COATING SHALL BE CITY APPROVED THERMOPLASTIC (8-10 MIL THICK). BEFORE COATING APPLICATION, THE BICYCLE RACK SHALL BE SANDBLASTED AND EPOXY PRIMED.

8. ALL FINISH COATINGS SHALL BE MAINTAINED BY THE PERMITTEE. ANY DAMAGED SURFACE AREA INCLUDING THOSE RESULTED FROM THE INSTALLER'S OPERATION SHALL BE REPAIRED TO THE CITY ENGINEER'S SATISFACTION WITH APPROVED MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. ALL WASTE SHALL BE HANDLED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE EPA AND/OR CALIFORNIA STATE REQUIREMENTS.

9. ALL VENT HOLES USED DURING FABRICATION MUST BE PLUGGED AND COATED.

10. ALL BOLT HOLES IN THE CONCRETE PAVEMENT OR THE CONCRETE FOUNDATION SHALL BE PREDRILLED HOLES, 1/2 INCH DIA. BY 2 3/4 INCHES DEEP. PRIOR TO INSTALLATION, ALL BOLT HOLES SHALL BE CLEANED OF DUST OR DELETERIOUS MATERIAL. ALL ANCHOR BOLTS SHALL BE DRIVEN VERTICALLY THROUGH THE SUPPORT PLATE INTO THE BOLT HOLES UNTIL THE HEAD IS FIRMLY SEATED AGAINST THE SUPPORT PLATE. NO PROTRUDING OR NON-FLUSH ANCHOR BOLTS SHALL BE USED.

11. FOR CONCRETE PAVEMENT THAT IS LESS THAN 3 INCHES THICK, CONSTRUCT CONCRETE FOUNDATION IN ACCORDANCE WITH THE SPECIFIED DETAILS. BIKE RACKS SHALL BE INSTALLED PARALLEL WITH THE PREVAILING SIDEWALK GRADE. THE SIDEWALK GRADE SHALL BE MEASURED AND THE BIKE RACK'S LEGS SHALL BE ADJUSTED TO MATCH THE SIDEWALK GRADE BEFORE WELDING THEM TO THE BASE PLATE. FOR CONCRETE PAVEMENT WITH MINOR UNEVENNESS, USE HOT DIPPED GALVANIZED STEEL OR STAINLESS STEEL WASHERS TO LEVEL THE BIKE RACK AND THE BASE PLATES BEFORE DRIVING THE ANCHOR BOLTS. FILL ALL OPENINGS AND VOIDS WITH NON-SHRINK GROUT AFTER ERECTION OF THE BICYCLE RACK.

12. FOR PARALLEL BICYCLE RACK(S), INSTALLED BY THE LOS ANGELES DEPARTMENT OF TRANSPORTATION (LADOT), ARRANGED IN EITHER A SINGLE ROW OR AS A SINGLE STAND-ALONE RACK, LADOT WILL MAKE THE FINAL DETERMINATION OF WHETHER OR NOT A CROSSBAR IS NEEDED FOR THE BICYCLE RACKS. FOR ALL OTHER RACK LAYOUTS, REGARDLESS OF WHO INSTALLS THEM, A BICYCLE RACK CROSSBAR SHALL BE PROVIDED.

D. BICYCLE RACK CLEARANCES:

1. FOR SINGLE PARALLEL BICYCLE RACKS AND SINGLE-ROW PARALLEL BICYCLE RACKS, EACH BICYCLE RACK SHALL HAVE A PARKING ZONE OF 36 INCH WIDE BY 72 INCH LONG. FOR ALL OTHER BICYCLE RACK ARRANGEMENTS, EACH BICYCLE RACK SHALL HAVE A PARKING ZONE OF 48 INCH WIDE BY 72 INCH LONG.

2. BICYCLE RACKS SHALL BE INSTALLED WITHIN THE SIDEWALK AMENITY ZONE ADJACENT AND CLOSEST TO THE STREET CURB OUTSIDE BUS BOARDING ZONES AT LOCATIONS APPROVED BY THE CITY ENGINEER AND THE CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION.
D. BICYCLE RACKS CLEARANCES: (CONTINUED)

3. A MINIMUM FIVE FEET WIDE UNOBSCTURED PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED.

4. NO BICYCLE PARKING ZONE SHALL PROTRUDE FROM PRIVATE PROPERTY INTO THE SIDEWALK PUBLIC RIGHT-OF-WAY. AMENITY ZONE AND PEDESTRIAN ZONE ARE DEFINED IN THE COMPLETE STREET DESIGN GUIDE.

5. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER AND THE CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION (WWW.LADOT.LACITY.ORG), BICYCLE RACKS INSTALLATIONS SHALL CONFORM WITH THE FOLLOWING CLEARANCES AND ALL APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. UNLESS OTHERWISE NOTED, THE FOLLOWING BICYCLE RACKS PARKING ZONE CLEARANCE ENVELOPES ARE MEASURED FROM THE BOUNDARY OF THE BICYCLE RACK PARKING ZONE:

   a. PROVIDE 45 FEET MINIMUM CLEARANCE FROM ALL STREET CORNERS.
   c. PROVIDE 60 INCHES MINIMUM CLEARANCE TO FIRE HYDRANTS. PROVIDE 48 INCH MINIMUM CLEARANCE TO FIRE DEPARTMENT CONNECTIONS WHETHER THE CONNECTIONS ARE LOCATED IN THE PUBLIC RIGHT-OF-WAY OR ON PRIVATE PROPERTY ALONG A BUILDING FACE.
   d. EACH BICYCLE RACK PARKING ZONE SHALL HAVE AT LEAST ONE 48 INCH WIDE MINIMUM CLEARANCE PATH TO ALLOW FOR EGRESS AND INGRESS FROM EACH BICYCLE RACK PARKING ZONE TO AND FROM THE SIDEWALK AREA. THIS PATH MAY BE ADJACENT TO EITHER THE WIDTH OR THE LENGTH SIDES OF EACH PARKING ZONE.
   e. PROVIDE 36 INCHES MINIMUM CLEARANCE TO OBSTRUCTIONS SUCH AS SIDEWALK FURNITURE OR STREET IMPROVEMENTS INCLUDING BUT NOT LIMITED TO STREET TREES, TREEWELLS, PARKWAYS, PARKING METERS, STREET LIGHTING, TRAFFIC SIGNS OR POSTS, OTHER UTILITY FACILITIES/ COVERS.
   f. WHERE ON-STREET PARKING IS ALLOWED, PROVIDE 18 INCHES MINIMUM CLEARANCE (CONVENIENCE STRIP) TO THE BACK OF THE CURB.
   g. PROVIDE A 4 INCH MINIMUM CLEARANCE FROM THE BICYCLE RACK BASE PLATE EDGE TO ANY EXPANSION JOINT OR CONTROL JOINT IN THE CONCRETE SIDEWALK PAVEMENT.
   h. UNLESS THE OUTSIDE BOUNDARY OF A BICYCLE RACK PARKING ZONE IS SET 10 FEET OR MORE FROM A PARKWAY, OR 4 FEET OR MORE FROM A TREEWELL, MEASURED PARALLEL TO FACE OF CURB AND IS UNOBSCTURED FROM PEDESTRIANS VIEW, NO PART OF THE BICYCLE RACK PARKING ZONE SHALL PROTRUDE BEYOND THE ADJACENT PARKWAY/ TREEWELL ALIGNMENT. IN ADDITION, NO PART OF THE BICYCLE RACK PARKING ZONE SHALL PROTRUDE INTO THE REQUIRED PEDESTRIAN ZONE AND/OR THE PEDESTRIAN ACCESS ROUTE.
   i. BICYCLE RACK LAYOUTS - NOT WITHSTANDING THE CLEARANCES NOTED ABOVE, THE FOLLOWING LAYOUT REQUIREMENTS APPLY:

<table>
<thead>
<tr>
<th>BICYCLE RACK PARKING ZONES</th>
<th>MIN. SIDEWALK BORDER (FEET)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE</td>
<td>STREET PARKING PERMITTED</td>
</tr>
<tr>
<td>36&quot; X 72&quot;</td>
<td>PARALLEL: SINGLE ROW OR/ STAND-ALONE</td>
</tr>
<tr>
<td>48&quot; X 72&quot;</td>
<td>PERPENDICULAR: SINGLE ROW OR/STAND-ALONE</td>
</tr>
<tr>
<td></td>
<td>PARALLEL: DOUBLE-STACKED</td>
</tr>
</tbody>
</table>

* SIDEWALK BORDER IS MEASURED FROM THE CURB FACE TO THE PROPERTY LINE.
** WHERE STREET PARKING RESTRICTION IS LIFTED, PERMITTEE SHALL RELOCATE BICYCLE RACK AT THE DIRECTION OF THE CITY.