DIVISION 3 CONCRETE

3.1 CONCRETE SIDWALK/SLAB REMOVAL

A. All existing sidewalks or concrete pads to be removed shall be removed from existing joint to existing joint. No partial removal shall be allowed without prior written approval. Existing concrete shall be cut along existing control joint, never between joints. When new concrete is placed adjacent to existing concrete, the existing concrete shall have dowels drilled into the edge of the concrete to firmly secure the new concrete to the existing to prevent any differential settlement between the concrete slabs.

3.2 SIDEWALKS

A. Concrete shall be 6” thick concrete slab with broom finish perpendicular to traffic. Provide cross slope for positive drainage. Maximum cross slope shall be 2%. Tool all edges with ¼” radius. Sidewalk shall be over 4” coarse aggregate base compacted to 95% standard proctor density. Compact top 6” of subgrade to 95% of maximum proctor density.

B. Contraction Joint shall be tooled control joint with ¼” radius each side. Space at 6'-0” on center maximum or as indicated on plan.

C. Construction Joint shall receive #4 dowels at 18” on center. Grease dowel one end, to allow movement. In cases where a new slab joins an existing slab, drill the existing slab to receive dowels. Tool edge with ¼” radius. Provide continuous caulk joint.

D. Sidewalks to be 6'-0” wide unless otherwise noted.

E. Use of fibermesh is allowed, but not mandated.

3.3 BIKEWAYS

A. Bikeways shall be 6” Portland cement concrete with integral mineral oxide coloring agent.

Concrete Mix:

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
<td>414 lbs.</td>
</tr>
<tr>
<td>Fly Ash</td>
<td>103 lbs.</td>
</tr>
<tr>
<td>Adobe Tan Coloring</td>
<td>21 lbs.</td>
</tr>
<tr>
<td>Fine Aggregate</td>
<td>1380 lbs.</td>
</tr>
<tr>
<td>Coarse Aggregate</td>
<td>1750 lbs.</td>
</tr>
<tr>
<td>Water</td>
<td>32.0 gal.</td>
</tr>
<tr>
<td>Total Air</td>
<td>5.0 pct.</td>
</tr>
<tr>
<td>AEA</td>
<td>4.9 oz.</td>
</tr>
<tr>
<td>Slump</td>
<td>2” – 4”</td>
</tr>
</tbody>
</table>
B. Light broom finish perpendicular to traffic. Tooled joints at 8'-0” intervals. Expansion joint every 40'-0”. Depth ¼” thickness.

C. Concrete to be over 4” coarse granular base (dense graded aggregate). Compact to 95% of maximum proctor density.

D. Compact top 6” of sub-grade to 95% of maximum proctor density.

E. Bricks at ends of lanes indicating a warning with cross traffic are to be a single line 4” x 8” x 2 ³⁄₈” Hanover Stone Concrete Paver, traditional style, yellow (B91517) Natural Finish.

F. Bricks at sides of bikeways are to be single line 4” x 8” x 2 ³⁄₈” Hanover Stone Concrete Paver, traditional style, red (R-15) Natural Finish.

G. Attach pavers to concrete substrate with pavetech type 1 flexible adhesive surebond S8-10 or approved equal. Apply adhesive to bottom and one end of paver.

H. Concrete to be stamped with rubber stamp provided by owner.

I. See bikeway detail standard 02751-1

3.4 BIKE RACK PAD

A. Bike rack pad to be 6” concrete slab with integral mineral oxide coloring agent. Concrete mix same as used on bikeways. Compact base and sub-grade same as above.

B. Tooled control joints spaced as needed.

C. Expansion joints every 30'-0”.

D. Bricks at all sides are single line 4” x 8” x 2 ³⁄₈” Hanover stone concrete paver, traditional style, red (R-15) natural finish.

E. Bike rack to be placed to allow the loading of bikes onto the rack from each side.

F. See bike rack detail standard 02870-1

3.5 CURB AND GUTTER

A. Use spill curb where grading indicates drainage away from curb.

B. Use standard curb where grading indicates drainage toward curb.

C. Contraction joints at 20'-0” maximum intervals ½” expansion joints at all points of beginning curvature and tangency.

D. Provide minimum 6” aggregate base below curb and gutter.