

8 *Typical Waterway Detail*
Not to Scale

6 *Cleanout Detail*
Not to Scale

3 *Typical Sidewalk Detail*
Not to Scale

2 *Standard Asphalt Section*
Not to Scale

1. **REINFORCEMENT:** ASTM A 615, grade 60, galvanized or epoxy coated deformed steel rebar or smooth steel dowels with diameter and length as indicated.
 - A. Space rebar and dowels at 12 to 15 inches on center.
 - B. Graze dowels to provide movement in expansion joints.
 - C. Keep tie bars in the vertical center of the concrete slab and perpendicular to the joint during concrete placement.
2. **SAWING:** Keep at least 3 working power saws on-site when concrete is being placed. Saw crack control joints (contraction joints) before shrinkage cracking takes place. Do not fear or ravel concrete during sawing. In cool weather, the joint sawing may be delayed only for the time required to prevent tearing and raveling the concrete. Cut joints to dimensions recommend by sealant manufacturer and approved by ENGINEER.
3. **JOINTS:** Lay out joints to aid construction and control random cracking.
 - A. Joint Spacing shall be 12 feet maximum on center in both directions.
 - B. Extend transverse contraction joints continuously across the full width of the concrete. Make the joints coincide with curb and gutter joints.
 - C. Make adjustments in joint locations to meet inlet or manhole locations.
 - D. Expansion Joints shall be placed where concrete abuts a building wall, sidewalk, curb, gutter or any immovable structure.
4. **JOINT FILLER:** Bituminous (Asphalt or tar) mastic, ASTM D994. Formed and encased between 2 layers of bituminous saturated felt or 2 layers of glass-fiber felt extending to the bottom of the concrete slab.
5. **BACKER ROD:** Round Rods. It must be oversized approximately 25 percent to fit tightly into each joint and compatible with hot poured sealant.
6. **JOINT SEALANT:** Hot applied, Asphalt base type, ASTM D 3405. Remove dirt, oil, and curing compounds from joint reservoir. Seal joints immediately after cleaning.

7 Concrete Joint Detail
Not to Scale

5 **12" Concrete Collar**
Not to Scale

4 *2" Vent Riser for Oil/Water Separator & Tank Vent Riser*
Not to Scale

1. *Contraction Joints*
 - A. Spacing = 10' o.c., see joint detail
 - B. 1/8" wide by 2" deep from top of curb at 15'-0" intervals
2. *Expansion Joints*
 - A. Make expansion joints full depth, see joint detail
 - B. Place expansion joint at all cold joints
 - C. Expansion joints are required at ends of all radii.
 - D. Required 5'-0" on each side of drainage structures
 - E. Required at 90'-0" maximum intervals in straight curb and gutter
 - F. Provide #6 x 18" long smooth steel dowel bars with 1" dia. grease cap through expansion joints (3/4" thick bituminous filler material)
3. 2'-6" Long tie bar on 2'-6" centers shall be provided when curb is adjacent to P.C.C. pavement
4. Provide (2) #6 x 2'-6" long tie bars to connect existing and new curb and gutter
5. Remove forms as early as possible. Brush top and face of curbs to remove all imperfections. Typical of all form work.
6. All radii shall be true arcs
7. Medium to light broom finish on all exterior concrete

(On-Site)
18" Curb And Gutter
Not to Scale