

NOTE:

GENERAL OVERVIEW: CONCRETE PARKING LOTS ARE AN ACCEPTABLE ALTERNATIVE TO ASPHALT PARKING LOTS FOR BOTH NEW AND RECONSTRUCTED LOTS. IT IS REQUIRED TO HAVE A REGISTERED ENGINEER SIGN ALL PROPOSED PARKING LOT PLANS. HERE ARE SOME OF THE ENGINEERING-RELATED ITEMS THE CITY WILL BE LOOKING FOR RELATED TO CONCRETE PARKING LOTS:

STRUCTURAL SECTION: IN GENERAL THIS WILL NEED TO BE DESIGNED BY A REGISTERED ENGINEER BASED UPON THE USE OF THE PARKING AREA AND THE STRENGTH OF THE EXISTING SOIL. FOR A STANDARD COMMERCIAL PARKING LOT (WITHOUT SUBSTANTIAL TRUCK TRAFFIC), THE CITY WILL ALLOW THE FOLLOWING MINIMUM STRUCTURAL SECTION WITHOUT DESIGN:

- 1. 6.0" THICK 560-C-3250 CONCRETE (NON-REINFORCED) ON
- 2. 4.0" THICK CLASS 2 AGGREGATE BASE (AB) ON
- 3. TOP 12" OF SUBGRADE, COMPACTED TO 95% RELATIVE COMPACTION. THE SUBGRADE SHALL ALSO BE BROUGHT TO JUST OVER-OPTIMUM ON THE MOISTURE CONTENT DURING COMPACTION.

FOR A STRUCTURAL SECTION DESIGNED BY A REGISTERED ENGINEER, THE 4.0" OF CLASS 2 AGGREGATE BASE MAY BE DELETED IF THE ENGINEER CAN SHOW THAT IT IS NOT NEEDED.

JOINTING PLAN: A JOINTING PLAN IS CONSIDERED PART OF THE STRUCTURAL DESIGN OF THE CONCRETE PARKING LOT AND WILL NEED TO BE DESIGNED BY A REGISTERED ENGINEER. FOR A STANDARD COMMERCIAL PARKING LOT, THE CITY WILL ALLOW THE FOLLOWING WITHOUT DESIGN:

- 1. MAXIMUM JOINT SPACING IS 12 FEET. LAY-OUT OF JOINTS SHOULD BE SQUARE; HOWEVER, IF THAT IS NOT POSSIBLE, RECTANGULAR PANELS CAN BE USED IF THE LONG DIMENSION IS NO MORE THAN 1.5 TIMES THE SHORT DIMENSION.
- 2. WEAKENED PLANE JOINTS SHALL HAVE A DEPTH OF AT LEAST ONE-FOURTH THE SLAB THICKNESS (WITH A MINIMUM DEPTH OF 1.5"). EXPANSION JOINTS SHALL EXTEND THROUGH THE ENTIRE SLAB THICKNESS AND SHALL BE USED TO ISOLATE FIXED OBJECTS ABUTTING OR WITHIN THE CONCRETE AREA, AND SHALL BE SPACED AT A MINIMUM OF 62' ON-CENTER (WIDTH OF 24' AISLE AND TWO 19' STALLS) WITHIN THE CONCRETE AREA. JOINTS TO BE CONSTRUCTED PER STD. 126.
- 3. WHEN SAWING JOINTS, BEGIN AS SOON AS POSSIBLE WITHOUT RAVELING THE NEW CONCRETE.
- 4. WHEN THE POSSIBILITY OF CRACKING IS SUSPECTED DUE TO A PORTION OF THE SLAB BEING SMALL AND/OR ODDLY SHAPED, REBAR SHALL BE CONSIDERED.

MINIMUM GRADE AND FINISH: THE MINIMUM SLAB GRADE SHALL BE 0.50% (AS OPPOSED TO 1.0% MINIMUM FOR A.C.). WHEN THE FLOWS ARE CONCENTRATED IN A VALLEY GUTTER OR IN THE GUTTER ALONG A CURB, THE MINIMUM GRADE SHALL BE 0.50%. A MEDIUM BROOM FINISH SHALL BE USED FOR ALL CONCRETE.

OVERALL LAY-OUT, PLANTERS, ETC: CONTACT THE COMMUNITY DEVELOPMENT DEPARTMENT FOR SUCH THINGS AS THE OVERALL LAY-OUT OF THE PARKING LOT (INCLUDING PLANTERS, ADA ACCESSIBILITY, STALL LAY-OUT, ETC) JUST AS IF IT WAS AN ASPHALT PARKING LOT.

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CITY ENGINEER			
RCE 68510			
REV.	DRAWN BY:	APP'D:	DATE:



**CONCRETE
PARKING LOT**

STANDARD PLAN No.: **540**

MAY 2016