

DESIGN CRITERIA

1. MAX. DESIGN PERCOLATION RATE = 1"/HR.
2. MAX. DEPTH AT PEAK STORAGE = 4'.
3. MINIMUM FREE BOARD = 1.0 FOOT FROM BUILDING PAD OR FLOWLINE OF CURB FROM CLOSEST ROAD, WHICHEVER IS LOWER.
4. THERE SHALL BE 2.0' MINIMUM FROM BOTTOM OF THE EMERGENCY OVERFLOW EXIT TO THE LOWEST BUILDING PAD ELEVATION.
5. THE BASIN SHALL BE DESIGNED TO RETAIN THE RUNOFF FROM THE WORST CASE OF THE 1 HR., 3 HR., 6 HR., OR 24 HR. DURATION, 100 YEAR FREQUENCY STORM.
6. THERE SHALL BE NO STANDING WATER IN THE RETENTION BASIN AFTER 72 HOURS OF ANY STORM EVENT. MAXWELL PLUS DRYWELL SYSTEM(S) OR APPROVED EQUAL, SHALL BE USED TO ELIMINATE ANY STANDING WATER.
7. SEE STANDARD 310, SHEET 2 OF 2, FOR MINIMUM PLAN REQUIREMENTS.
8. EMERGENCY OVERFLOW REQUIRED FOR STORMS GREATER THAN 100 YEAR FREQUENCY. THIS CAN BE OVER THE SIDEWALK AND THROUGH THE WROUGHT IRON FENCE.
9. MAXIMUM SLOPE = 3:1.
10. A FILTERING DEVICE (VEGETATED SWALES, MAXWELL PLUS DRYWELL SYSTEM(S) OR APPROVED EQUAL, ETC.) IS REQUIRED PRIOR TO HAVING NUISANCE WATER OR THE "FIRST FLUSH" OF STORM WATER ENTER THE BOTTOM OF THE BASIN.
11. A 15' WIDE CONCRETE ROAD (6" THICK CLASS 560-C-3250 CONCRETE ON 4" CLASS 2 AGGREGATE BASE) AT 15% MAX. GRADE IS REQUIRED TO BOTTOM OF ALL RETENTION BASINS WITH BOTTOMS GREATER THAN 10,000 SQUARE FEET.
12. THE BOTTOM WIDTH SHALL BE A MINIMUM OF 20' WIDE.

L:\Public Works - Engineering Standards\INDIO-310 (Sheet 1 of 2) 5/19/2016 11:56 AM



Juan Raya 05/18/16
 JUAN RAYA, P.E. DATE
 CIVIL ENGINEER
 RCE 68510

REV.	DRAWN BY:	APP'D:	DATE:



**STANDARD
RETENTION BASIN**

STANDARD PLAN No.: **310**
 SHEET 1 OF 2


MAY 2016

AT A MINIMUM, RETENTION BASIN PLANS SHALL INCLUDE THE FOLLOWING INFORMATION:

1. BOUNDARY (LOT LINES) INCLUDING BEARING AND DISTANCES.
2. SLOPE SYMBOLS, OR FINISH CONTOURS, WITH SLOPE RATIOS OR PERCENTAGES.
3. ELEVATION LABELS FOR: BOTTOM OF BASIN, WATER SURFACE AT THE WORST CASE 100-YEAR STORM AND TOP (HYDROLOGY CALCULATIONS SHALL BE SUBMITTED VERIFYING BASIN AREA, DEPTH, AND VOLUME).
4. DIMENSIONS (LENGTH, WIDTH, AND DEPTH) OR SCALED DRAWING.
5. FINISHED SURFACE ELEVATIONS FOR IDENTIFYING THE FLOW PATHS, INCLUDING IDENTIFICATION OF THE EMERGENCY OVERFLOW PATH.
6. RIP-RAP OR APPROPRIATE EROSION CONTROL IS REQUIRED AT ALL DISCHARGE POINTS IN THE RETENTION BASIN.
7. ANY STRUCTURES, PIPES, HEADWALLS, RIP-RAP, MAXWELL PLUS DRYWELL SYSTEM(S) OR APPROVED EQUAL, ETC. SHOWN WITH REFERENCE TO STREET PLANS, STORM DRAIN PLANS, OR GRADING PLANS.
8. IDENTIFY FILTERING DEVICE FOR NUISANCE WATER AND "FIRST FLUSH" STORM WATER PRIOR TO ENTERING BOTTOM OF BASIN (VEGETATED SWALES, MAXWELL PLUS DRYWELL SYSTEM(S) OR APPROVED EQUAL, ETC.).
9. ANY PROPOSED SURROUNDING FENCING AND/OR BLOCK WALLS.

L:\Public Works - Engineering Standards\INDIO-310 (Sheet 2 of 2) 5/19/2016 11:55 AM



		05/18/16	
		DATE	
JUAN RAYA, P.E. CITY ENGINEER RCE 68510			
REV.	DRAWN BY:	APP'D:	DATE:



**STANDARD
RETENTION BASIN**

STANDARD PLAN No.: **310**
 SHEET 2 OF 2

MAY 2016