

DRAINAGE CONCEPT

PER THE APPROVED MCMAHON DRAINAGE MANAGEMENT PLAN (DMP) BY BOHANNAN HUSTON INC. DATED MAY 7, 2010, THE ENTIRE 12.13 ACRE MCMAHON MARKETPLACE (PROPERTY) IS PERMITTED TOTAL DISCHARGE OF 41.55 CFS.

- BASIN B1 (4.6 ACRE):
LOTS 1, 2, 3 (4.0 ACRE)
FREE DISCHARGE @ LAND TREATMENT RATIO 0:5:10:85
DISCHARGE = 16.6 CFS.

PORTION OF LOTS 9 AND 4 (0.6 ACRE)
FREE DISCHARGE @ LAND TREATMENT RATIO 0:5:10:85
DISCHARGE = 2.5 CFS

BASIN WILL CONTINUE TO DRAIN TO THE WEST PRIVATE STORM DRAIN SYSTEM. THE DISCHARGE FROM THESE PROPERTIES = 19.1 CFS TO ENTER THE PUBLIC STORM DRAIN SYSTEM.
- BASIN B2: PORTIONS OF LOT 4 (STARBUCKS) 9 AND 5 = 1.2 AC. WILL FREE DISCHARGE 4.8 CFS TO MCMAHON BLVD. BASED ON AN APPROVED LAND TREATMENT RATIO OF 0:15:11:74.
- BASIN B3: LOT 7A (MCDONALDS) AND A PORTION OF LOT 8 (1.5 ACRES) HAVE BEEN CONSTRUCTED WITH A DETENTION POND LIMITING THE DISCHARGE TO 4.07 CFS.
- BASINS B1+B2+B3 (= 19.1 CFS + 4.8 CFS + 4.07 CFS = 28.0 CFS. THIS LEAVES 41.55-28.0 = 13.55 CFS FOR BASIN B4 ALLOWABLE DISCHARGE.
- THE REMAINDER OF THE PROPERTY, CONSISTING OF THE REMAINDER OF LOTS 5, 8 AND 9 AND ALL OF LOT 6A = 4.8 ACRES. IF THESE LOTS FOLLOW THE TYPICAL RATIO OF 0:5:10:85, DISCHARGE = 19.8 CFS.

THEREFORE, THE REQUIRED DETENTION WILL BE 19.8 - 13.55 = 6.25 CFS.

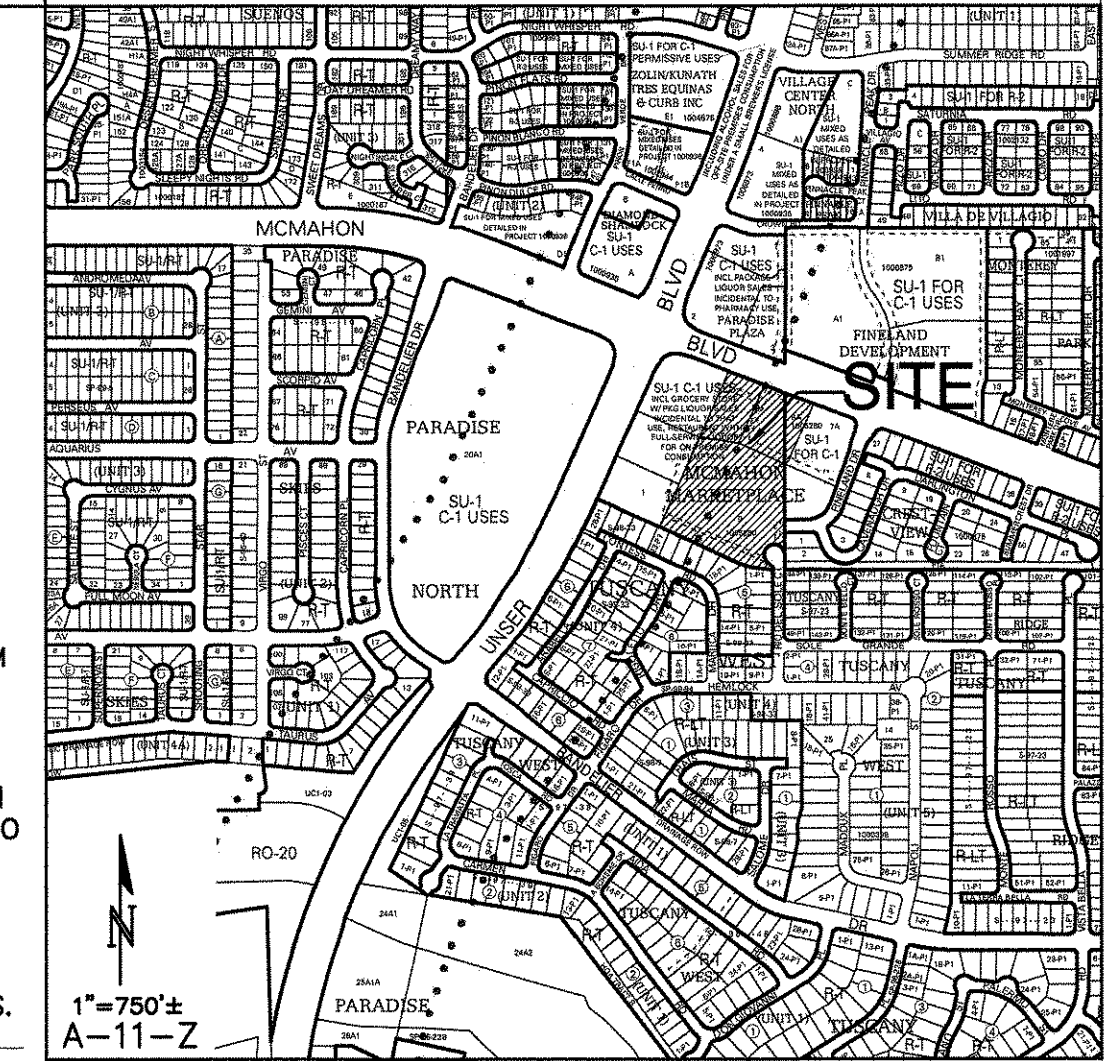
DETENTION WILL BE PROVIDED BASED ON THE PERCENTAGE OF OVERALL AREA:

LOT 5 + 6A = 1.75 AC. = 30% OF THE TOTAL. RETENTION = 6.25 CFS * 30% = 1.9 CFS.

LOT 9 = 3.98 AC = 70% OF THE TOTAL. RETENTION = 4.35 CFS.

ACTUAL LAND TREATMENTS AND DETENTION REQUIREMENTS WILL BE CALCULATED AS EACH LOT DEVELOPS.

VICINITY MAP



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PROJECT DATA

LEGAL: MCMAHON MARKETPLACE LOTS 4, 5, 6A, 7 AND 9, CITY OF ALBUQUERQUE, NEW MEXICO.

BENCHMARK: VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY MONUMENT "9-A11", ELEVATION = 5301.647 (NAVD 1988)

FLOOD HAZARD: PROPERTY IS LOCATED WITHIN ZONE X, DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLAN ACCORDING TO THE FLOOD INSURANCE RATE MAP, BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS MAP NO. 35001C0104H, MAP REVISED AUGUST 16, 2012.

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF "FIRST FLUSH" DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM.

FIRST FLUSH RETENTION PONDS WILL BE CONSTRUCTED WITHIN THE INDIVIDUAL LOTS LANDSCAPING AND WITHIN THE LANDSCAPE AREAS ALONG MCMAHON BLVD. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE PONDS.

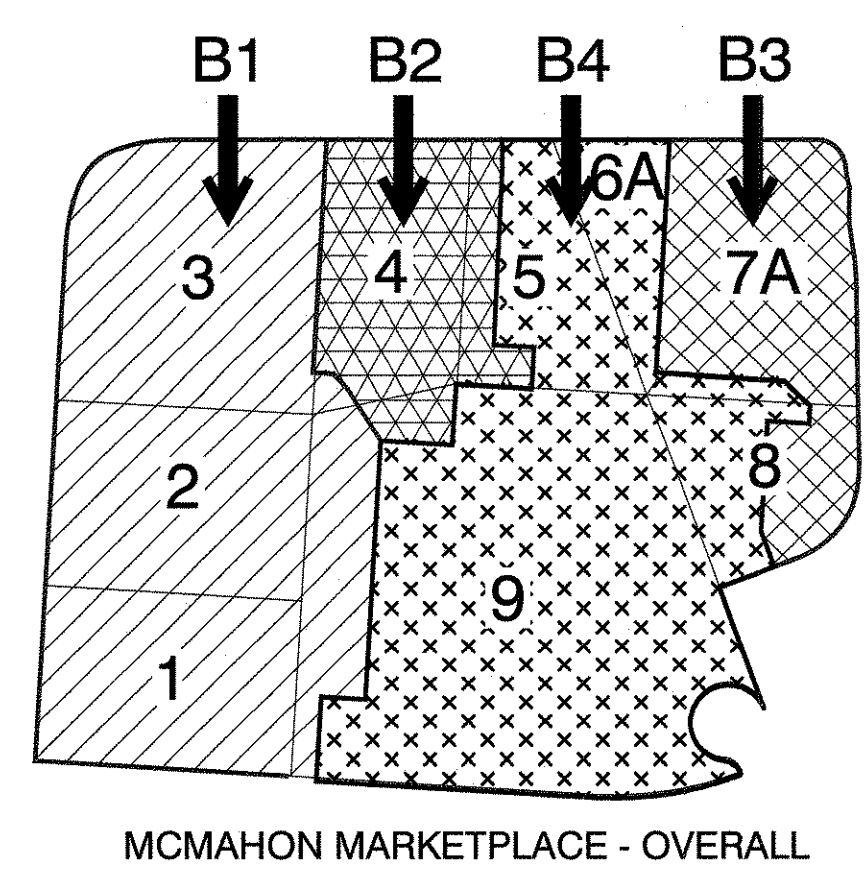
OFF-SITE: NO OFF-SITE DRAINAGE WILL IMPACT THE MCMAHON MARKETPLACE PROPERTY.

KEYED NOTES

1. NEW COVERED SIDEWALK CULVERT TO PASS FLOW IN EXCESS OF FIRST FLUSH VOLUME.
2. EXISTING WATER LINE AND ASSOCIATED EASEMENT THIS AREA TO BE RELOCATED (VERTICAL AND HORIZONTAL) TO ACCOMMODATE UPDATED GRADES & SITE LAYOUT.
3. NEW SITE RETAINING WALL TO ACHIEVE GRADE TRANSITIONS SHOWN. MAX. 8' HIGH WALL.
4. BUILDING RETAINING/EXTENDED STEMWALLS AS REQUIRED.
5. PROPOSED PRIVATE STORM DRAIN.
6. NEW CONNECTION TO EXISTING STORM DRAIN MAIN TO ACCEPT ALLOWABLE DISCHARGE.

GENERAL NOTES

- A. GRADES SHOWN REFLECT OVERALL GRADING SCHEME. ADA PARKING WILL BE COORDINATED WITH ARCHITECT TO BE ADA COMPLIANT. MAX. 2% SLOPE IN ANY DIRECTION.
- B. LANDSCAPING TO BE DEPRESSED TO HARVEST STORMWATER EXCEPT WITHIN 10' OF A BUILDING OR STRUCTURE.
- C. CURB OPENINGS WILL BE PROVIDED WHERE POSSIBLE TO ACCEPT STORMWATER INTO DEPRESSED LANDSCAPING.
- D. ROCK EROSION PROTECTION WILL BE REQUIRED AT CURB OPENINGS, ON SLOPES > 4:1 AND WITHIN SWALES CARRYING CONCENTRATED FLOW (TYPICAL).
- E. "FIRST FLUSH" RETENTION PONDING WILL BE PROVIDED WITHIN AVAILABLE LANDSCAPE AREAS THROUGHOUT.
- F. STEPS AND RAMPS AS REQUIRED TO ACHIEVE GRADE TRANSITIONS WILL BE DESIGNED AS EACH PROPERTY DEVELOPS.



FIRST FLUSH

STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF "FIRST FLUSH" (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

THE ESTIMATED PONDING VOLUME REQUIRED FOR THE UNDEVELOPED PROPERTIES (BASED ON 85% IMPERVIOUS)

LOT 4	963 CF
LOT 5	868 CF
LOT 6A	414 CF
LOT 9	4180 CF

THERE WILL BE "FIRST FLUSH" RETENTION BASIN AREAS THROUGHOUT THE SITE. STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE BASINS VIA CURB OPENINGS AND ON-SITE STORM DRAIN.

THE "FIRST FLUSH" BASIN VOLUMES SHALL BE ANALYZED AND SIZED AS PART OF THE BUILDING PERMIT PLANS SUBMITTAL. CURB OPENING LOCATIONS WILL BE LOCATED AND SIZED WITH FINAL DESIGN.

FUTURE DEVELOPMENT

THE REMAINING LOTS WILL DEVELOP IN THE FOLLOWING ORDER:

LOT 4 STARBUCKS - (APPROVED FOR CONSTRUCTION) WILL FREE DISCHARGE COMPLETING CONSTRUCTION IN BASINS B1, B2 AND B3. TOTAL DISCHARGE = 28.0 CFS (DEVELOPED) + THE UNDEVELOPED PROPERTY (4.8 ACRE) @ 11.8 CFS FOR A TOTAL DISCHARGE OF 39.8 CFS.

A 1 ACRE PORTION OF LOT 9 SOUTH PAVEMENT (APPROVED FOR CONSTRUCTION) BETWEEN TACO BELL AND FINELAND DRIVE WILL BE CONSTRUCTED TO PROVIDE ACCESS INTO PROPERTY FROM RIO DEL SOLE COURT. THE DEVELOPED DISCHARGE FROM THIS PORTION WILL BE 3.8 CFS. THE REMAINING UNDEVELOPED LOTS (5, 6A, REMAINDER OF LOT 9) WILL GENERATE 9.4 CFS FOR A TOTAL DISCHARGE OF 41.2 CFS.

LOTS 5 & 6A WILL DEVELOP AND WILL PROVIDE DETENTION WITHIN THE OPEN SPACE ADJACENT TO MCMAHON BLVD. TO LIMIT DISCHARGE TO 41.55 CFS.

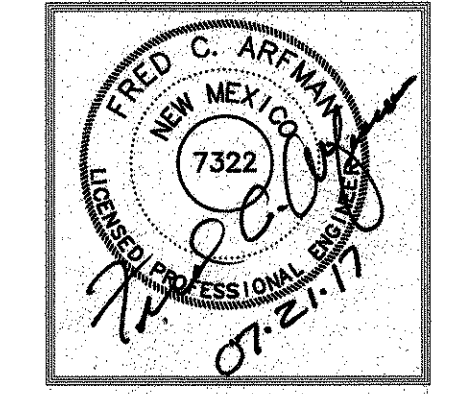
THE REMAINDER OF LOT 9 WILL BE DEVELOPED IN PHASES WITH ADDITIONAL DETENTION PROVIDED TO ENSURE TOTAL DISCHARGE DOES NOT EXCEED ALLOWABLE.

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR (1' INCREMENT)
- PROPOSED SPOT ELEVATION
- FLOW ARROW
- FINISH FLOOR ELEVATION
- PROPOSED GRADE BREAK

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2190 CG-101.dwg Jul 21, 2017

MCMAHON MARKET PLACE
5708 MCMAHON BLVD NW
ALBUQUERQUE, NM 87114
AMENDED DRAINAGE MANAGEMENT PLAN



DATE: 12 JULY 2017
DRAWN BY: BJB
CHECKED BY: FCA
VERIFIED BY:

NO.	REVISIONS

SHEET NO:
CG1
17 OF 18