## CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

October 24, 2017

J. Graeme Means, P.E. High Mesa Consulting Group 6010 B Midway Park Blvd NE Albuquerque, NM, 87109

RE: Good 2 Go: Coors

1535 Coors Blvd NW

**Grading and Drainage Plan** 

Request for Permanent C.O. - Accepted Engineer's Certification Dated 10/18/17

Hydrology File: H11D071

PO Box 1293 Dear Mr. Means:

Based on the Certification received 10/18/17 and site visit on 10/24/17, the site is

acceptable for a Permanent Certificate of Occupancy by Hydrology.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

NM 87103

Albuquerque

Sincerely,

www.cabq.gov

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology

Renée C Brissette

Planning Department



## City of Albuquerque

# Planning Department Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title:	Building Pe	ermit #: Hydrology File #:
		Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Other Contact:		Contact:
Address:		
		E-mail:
Check all that Apply:		
DEPARTMENT: HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CO	ONTROL	TYPE OF APPROVAL/ACCEPTANCE SOUGHT: BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY
TYPE OF SUBMITTAL:ENGINEER/ARCHITECT CERTIFICONCEPTUAL G & D PLAN	ICATION	PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT APPROVAL
GRADING PLANDRAINAGE MASTER PLANDRAINAGE REPORTCLOMR/LOMR		SIA/ RELEASE OF FINANCIAL GUARANTEE FOUNDATION PERMIT APPROVAL GRADING PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN (ESC)		SO-19 APPROVALPAVING PERMIT APPROVALGRADING/ PAD CERTIFICATIONWORK ORDER APPROVALCLOMR/LOMR
OTHER (SPECIFY)		PRE-DESIGN MEETING?
IS THIS A RESUBMITTAL?: Yes	No	OTHER (SPECIFY)
DATE SUBMITTED:		

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_

### <u>CONSTRUCTION NOTES:</u>

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1987, PUBLISHED BY THE NEW MEXICO CHAPTER AMERICAN PUBLIC WORKS ASSOCIATION. (REVISED 12/06)
- . TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811, FOR DESIGNATION (LINE-SPOTTING) OF EXISTING UTILITIES.
- . PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
- . ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAI STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- . ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- 3. UTILITY INFORMATION SHOWN HEREON IS BASED UPON ONSITE SURFACE EVIDENCE AND UTILITY LINE-SPOTS PROVIDED BY HIGH MESA CONSULTING GROUP. IN ADDITION, UTILITY LINE-SPOTS WERE REQUESTED VIA THE NEW MEXICO ONE CALL SERVICE (TICKET NO. 16AP190380). UTILITY LINES SHOWN ON THIS DRAWING ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE SURVEYOR HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY . THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- . THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

FI 96 88

\CSW -

ECND-

VENT PIPES FROM

UNDERGROUND -

TC99\_67(EXISTING)

FL99\_17(MATCH)D-

FL99.33

T.B.M. #2 ELEV.=5098.92

PROPOSED WATER

T.B.M. #3 ELEV.=5098.88

QUALITY BASIN V=130 CF

5' STUCCO WALL TRASH ENCLOSURE-

ILIFF RD. NW

#### **EROSION & SEDIMENT CONTROL MEASURES:**

- 1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- 2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- 3. SPOILS FROM THE PROJECT SHALL NOT BE DEPOSITED OR STORED IN THE STREET OR ROADWAY
- 4. SPOILS SHALL BE STAGED ON THE UPSTREAM SIDE OF TRENCHES WHEN TRENCHING IS REQUIRED
- 5. THE CONTRACTOR SHALL CLEAN AND REMOVE ALL FUGITIVE DUST, SOIL AND DEBRIS RESULTING FROM THIS PROJECT FROM THE STREET AT THE END OF
- CONTRACTOR SHALL LEAVE THE AREA IMMEDIATELY BEHIND THE CURB DEPRESSED TO CONTAIN NUISANCE FLOWS AND SEDIMENT.
- 7. CONCRETE TRUCKS SHALL BE SENT BACK TO THE PLANT FOR WASHING; THI WASHING OF CONCRETE TRUCKS SHALL NOT BE PERMITTED WITHIN THE PUBLIC RIGHT-OF-WAY
- WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.
- 9. UNLESS FINAL STABILIZATION IS OTHERWISE PROVIDED FOR, ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEEDED ACCORDING TO CITY OF ALBUQUERQUE SPECIFICATION 1012 "MISCELLANEOUS SEEDING". THIS WILL BE CONSIDERE INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE

TC98.12

FL97.53

¥ PROPOSED WATER

QUALITY BASIN

HIGHWAY DEPARTMENT T-RAIL-

PROPOSED WATER

QUALITY BASIN

V=500 CF

FL97.79

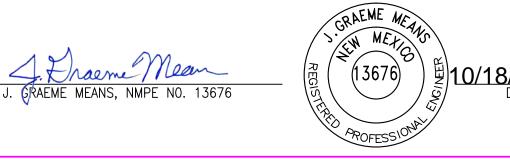
ELECTRIC PULL BOX

TRAFFIC PULL BOX

∕-TRAFFIC SIGNAL

10.PROTECT EXISTING STORM DRAIN FACILITIES FROM SEDIMENT AS REQUIRED.

#### 2.2 IN B. $P_{100, 6 HR} = P_{360} =$ 30,969 SF TOTAL PROJECT AREA (A+) = 0.71 AC D. LAND TREATMENTS EXISTING LAND TREATMENT TREATMENT AREA (SF/AC) 0.18 AC 23,202 SF 2. DEVELOPED LAND TREATMENT TREATMENT AREA (SE/AC) 0.18 AC II. <u>HYDROLOGY</u> A. EXISTING CONDITION 100 YEAR 1. 100-YR STORM a. VOLUME 100-YR, 6- HR $E_{W} = (E_{A}A_{A} + E_{B}A_{B} + E_{C}A_{C} + E_{D}A_{D})/A_{T}$ $E_W = (0.44*0.00) + (0.67*0.00) + (0.99*0.18) + (1.97*0.53)/0.71 =$ $V_{100,6 \text{ HR}} = (E_W/12)A_T = (1.72/12)0.71 = 0.1019 \text{ AC-FT} = 4,440 \text{ CF}$ b. PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$ $Q_P = (1.29 * 0.00) + (2.03 * 0.00) + (2.87 * 0.18) + (4.37 * 0.53) =$ 2.8 CFS B. DEVELOPED CONDITION 1. 100-YR STORM a. VOLUME $E_{W} = (E_{A}A_{A} + E_{B}A_{B} + E_{C}A_{C} + E_{D}A_{D})/A_{1}$ $E_W = (0.44*0.00) + (0.67*0.00) + (0.99*0.18) + (1.97*0.53)/0.71 =$ $V_{100,6 \text{ HR}} = (E_W/12)A_T = (1.73/12)0.71 =$ 0.1025 AC-FT = 4,460 CF b. PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$ $Q_P = (1.29 * 0.00) + (2.03 * 0.00) + (2.87 * 0.18) + (4.37 * 0.53) =$ C. COMPARISON 100 YEAR . 100-YR STORM a. VOLUME 100-YR, 6-HF $\Delta V_{100, 6 HR} = 4460 - 4440 =$ (INCREASE) 20 CF PROPOSED VOLUME WILL BE REDUCED TO 3705 CF BY PONDING, RESULTING IN A 735 CF (DECREASE) CFS (NO CHANGE D. FIRST FLUSH CALCULATIONS 1. RETENTION REQUIREMENT <u>a. VOLUME</u> PEDESTRIAN CROSSING SIGNAL $V_{RQ} = ((P_{FF}-IA_D)/12)A_D$ $V_{RQ} = ((0.44-0.10)/12)(23278.39) =$ 660 CF 2. <u>WATER QUALITY PONDING PROVIDED ONSITE</u> (BASED ON AVERAGE END AREA METHOD) 755 CF $V_{CAP} = 130 + 500 + 125 =$ ENGINEER'S CERTIFICATION I, J. GRAEME MEANS, NMPE 13676, OF THE FIRM HIGH MESA CONSULTING GROUP HEREBY CERTIFY THAT THIS PROJECT HAS BEEN CONSTRUCTED, GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 11/18/2016. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT WAS OBTAINED 10/16/2017 BY HIGH MESA CONSULTING GROUP UNDER THE DIRECTION OF JOSEPH M. SOLOMON, JR., NMPS 15075, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE SITE AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE INFORMATION CONTAINED HEREIN APPEARS TO BE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. P.B.M. ELEV.=5098.37 THIS CERTIFICATION IS SUBMITTED TO SUPPORT A REQUEST FOR CERTIFICATE OF OCCUPANCY. THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THIS CERTIFICATION DOES NOT ADDRESS ADA COMPLIANCE WHICH IS BEYOND THE SCOPE OF GRADING AND DRAINAGE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



#### DRAINAGE PLAN

INTRODUCTION AND EXECUTIVE SUMMARY THIS PROJECT, LOCATED IN THE COORS AREA OF ALBUQUERQUE, REPRESENTS NEW CONSTRUCTION ON A DEVELOPED SITE THAT CONTAINS TWO EXISTING BUILDINGS. PAVEMENT. A CANOPY. AND LANDSCAPED AREAS SURROUNDING THE MAJORITY OF THE SITE. THE PROPOSED DEVELOPMENT IS COMPRISED OF NEW BUILDING CONSTRUCTION, PAVING IMPROVEMENTS, LANDSCAPING, AND

UTILITY IMPROVEMENTS. THE DRAINAGE PLAN FOR THIS PROJECT WILL CONTINUE TO FOLLOW EXISTING DRAINAGE PATTERNS AND MATCH EXISTING DISCHARGE RATES OF FREE DISCHARGE INTO THE ADJACENT COORS BLVD NW AND ILIFF RD NW. THERE ARE NO OFF SITE FLOWS THAT DRAIN INTO THE

II. PROJECT DESCRIPTION AS SHOWN BY THE VICINITY MAP ON SHEET C1.1, THE SITE IS LOCATED A

THE SOUTHWEST CORNER OF THE INTERSECTION OF COORS BLVD. NW AND ILIFF RD. NW. THE CURRENT LEGAL DESCRIPTION IS PARCELS A & COMPRISING A REPLAT OF PORTION OF TRACTS 259&260, UNIT 8, TOWN OF ATRISCO GRANT. AS SHOWN BY PANEL 327 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, REVISED AUGUST 16, 2012, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE. III. BACKGROUND DOCUMENTS

THE FOLLOWING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THIS LIST MAY NOT BE ALL INCLUSIVE, HOWEVER REPRESENTS A SUMMARY OF THE RELEVANT PLANS AND DOCUMENTS WHICH ARE KNOWN TO THE ENGINEER AT THE TIME OF THE PLAN PREPARATION. A. TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (HMCG), DATED 08/27/2016 (NMPS 15075). SURVEY DOCUMENTS THE EXISTING CONDITIONS FOR THE SITE.

II. EXISTING CONDITIONS THE EXISTING SITE CONSISTS OF A GAS STATION BUILDING, CANOPY AND SMALL TIRE REPAIR SHOP LOCATED WITHIN AN INFILL AREA. THE SITE ALSO CONTAINS EXISTING ASPHALT AND CONCRETE PAVING, CURB AND LANDSCAPING SURROUNDING THE EDGES OF THE SITE. THE SITE IS DIVIDED IN HALF BY THE EXISTING GAS STATION LOCATED IN THE MIDDLE OF THE SITE. THE AREA TO THE NORTH OF THE BUILDING DRAINS FROM SOUTH TO NORTH AND THE AREA TO THE SOUTH OF THE BUILDING DRAINS FROM NORTH TO SOUTHEAST A PORTION OF BOTH HALVES OF THE SITE DRAINS TO EXISTING DEPRESSED LANDSCAPED AREAS BEFORE LEAVING THE SITE AND THE OTHER FREELY DISCHARGES OFF SITE THROUGH THE EXISTING DRIVE PAD ENTRANCES FROM ILIFF RD. NW AND COORS BLVD. NW. THE EXISTING TOTAL DISCHARGE THAT

LEAVES THE SITE IS 2.8 CFS. THERE ARE NO OFFSITE FLOWS INTO THE SITE III. DEVELOPED CONDITIONS AS PART OF THE NEW DEVELOPMENT THE TWO EXISTING BUILDINGS WILL BE

DEMOLISHED, A PORTION OF THE EXISTING CANOPY AND EXISTING PAVEMENT WILL REMAIN. THE NEW SITE WILL CONTAIN A NEW BUILDING, PAVEMENT, SIDEWALKS AND DEPRESSED LANDSCAPED AREAS FOR WATER QUALITY RETENTION. THE SITE WILL CONTINUE TO SPLIT RUNOFF WITH A PORTION OF THE SITE DRAINING FROM SOUTH TO NORTH INTO ILIFF RD NW. AND THE OTHER PORTION DRAINING FROM NORTH TO SOUTHWEST INTO COORS BLVD NW. THE PROPOSED TOTAL DISCHARGE THAT LEAVES THE SITE WILL MATCH THE EXISTING DISCHARGE OF 2.8 CFS. AS IN THE EXISTING CONDITION, THERE WILL CONTINUE TO BE NO OFFSITE FLOWS IMPACTING THE PROJECT

THE PROPOSED LANDSCAPED WATER HARVESTING AREAS WITHIN AND AT THE PERIMETER OF THE DEVELOPED SITE WILL CAPTURE AND TREAT THE FIRST FLUSH RUNOFF GENERATED BY THE PROPOSED IMPROVEMENTS TO THE MAXIMUM EXTENT PRACTICABLE. THE FIRST FLUSH RETENTION REQUIREMENT FOR THIS SITE IS EQUAL TO 660 CF. THE RETENTION PROVIDED ONSITE WIL EQUAL 755 CF WHICH IS GREATER THAN WHAT IS REQUIRED. THESE VOLUMES OF RETENTION WERE CALCULATED BY THE AVERAGE END AREA METHOD. IV. GRADING PLAN

THE GRADING PLAN ON SHEET C1.1 SHOWS 1) THE EXISTING GRADES INDICATED BY THE CONTOURS AT 1 FOOT INTERVALS AND SPOT ELEVATIONS FROM THE TOPOGRAPHIC SURVEY REFERENCED ABOVE BY THIS OFFICE; 2) THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS AS SHOWN BY THE AFOREMENTIONED SURVEY; 3) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS; 4) PROPOSED GRADES INDICATED BY CONTOURS AT 1 FOOT INTERVALS AND SPOT ELEVATIONS; AND 5) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES.

V. CALCULATIONS

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT, THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISIONS OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993 AND REVISED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THE CALCULATIONS, THERE WILL BE A DECREASE IN THE 100-YEAR PEAK DISCHARGE AND VOLUME OF RUNOFF ATTRIBUTABLE TO THIS PROJECT DUE TO PONDING.

VI. CONCLUSIONS THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED FROM THE **EVALUATIONS CONTAINED HEREIN:** 

THE PROPOSED IMPROVEMENTS REPRESENT NEW CONSTRUCTION TO AN EXISTING DEVELOPED SITE

THE PROPOSED IMPROVEMENTS WILL NOT SIGNIFICANTLY ALTER THE EXISTING DRAINAGE PATTERNS ON SITE THE PROPOSED IMPROVEMENTS WILL RESULT IN A VERY MINOR INCREASE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE BUT PONDING WILL RESULT IN A DECREASE RUNOFF THAT LEAVES THE SITE

UNDERGROUND FUEL TANK LID

4. THE PROPOSED DISCHARGE RATE EQUALS THE EXISTING DISCHARGE RATE 5. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS.



VICINITY MAP

### PROJECT BENCHMARK

AGRS 3 1/4" BRASS DISC STAMPED "2-H11", SET IN CONCRETE WITHIN A MONUMENT BOX MARKED WITH THE LETTER "M", IN THE SOUTH MEDIAN OF THE INTERSECTION OF COORS RD NE AND ILIFF RD. NORTHING 1,493,127.762 (GRID) EASTING 1,504,048.077 (GRID)

PANEL 327 OF 825

DATED 8/16/2012

### TEMPORARY BENCHMARK #1 (T.B.M.

ELEVATION = 5098.37 FEET (NAVD 1988)

A #5 REBAR WITH CAP STAMPED "HMCG CONTROL NMPS 11184" SET IN GRAVEL LANDSCAPE AREA ALONG COORS BLVD. AT THE EAST SIDE OF THE SITE, AS SHOWN ON THIS SHEET. ELEVATION = 5099.04 FEET (NAVD 1988)

### TEMPORARY BENCHMARK #2 (T.B.M.)

A #5 REBAR WITH CAP STAMPED "HMCG CONTROL NMPS 11184" SET IN RIVER ROCK LANSCAPE AREA NEAR THE UNDERGROUND FUEL TANKS AT THE WEST SIDE OF THE SITE, AS SHOWN ON THIS SHEET. ELEVATION = 5098.92 FEET (NAVD 1988)

INVERT

TOP OF CURB

TOP OF GRATE

TOP OF ASPHALT PAVEMENT

**EXISTING SPOT ELEVATION** 

PROPOSED SPOT ELEVATION

PROPOSED RETAINING WALL

EXISTING DIRECTION OF FLOW

PROPOSED DIRECTION OF FLOW

**EXISTING FLOWLINE** 

PROPOSED FLOWLINE

PROPOSED CONTOUR

RIGHT OF WAY LINE

PUBLIC EASEMENT LINE

**EXISTING CONTOUR** 

### 「EMPORARY BENCHMARK #3 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE HEADER CURB AT THE SOUTHWEST CORNER OF THE SITE, AS SHOWN ON THIS SHEET. ELEVATION = 5098.88 FEET (NAVD 1988)

### **GRADING KEYED NOTES**

- CONSTRUCT SIDEWALK CULVERT PER TYPICAL DETAIL, SHEET C3.1 CONSTRUCT CURB CUT PER TYPICAL DETAIL, SHEET C3.1
- DEPRESSED LANDSCAPING FOR WATER QUALITY RETENTION
- NEW ASPHALT PAVEMENT, SEE SHEET C1.2 5 EXISTING CURB CUT TO REMAIN

CALCULATIONS

I. SITE CHARACTERISTICS

A. PRECIPITATION ZONE

- CONSTRUCT NEW RETAINING WALL. REFER TO STRUCTURAL
- PLANS FOR DETAIL. INSTALL CONCRETE SPLASH PAD AT ROOF DRAIN DOWNSPOUT AND OVERFLOW DRAIN LOCATIONS.

### RECORD DRAWING LEGEND RECORD INFORMATION (VERIFIED BY ENGINEER)

AS-CONSTRUCTED = AS-DESIGNED VERIFIED BY AS-BUILT SURVEY) RECORD INFORMATION FROM AS-BUILT SURVEY

RECORD INFORMATION FROM AS-BUILT SURVEY RECORD INFORMATION FROM AS-BUILT SURVEY

RECORD DRAWING

### **LEGEND**

C/PM

CAM

CCND

CLDD

CONC

COP

CMR

CSW

DCO

E/PM

ECND

OHC(2)

OHE(2)

PAINTED ISLAND

PARKING STRIPE

RIVER ROCK

CMH

CURB AND GUTTER ROLL-UP DOOR COMMUNICATION BY PAINT MARK RW ROCK WALL SAS SANITARY SEWER CAMERA SGP STEEL GUARD POST COMMUNICATION CONDUIT STORM DRAIN INLET CONCRETE HEADER CURB TOP OF ASPHALT CENTERLINE OF DOOR TOP OF CURB CENTERLINE OF DOUBLE DOOR TCO TOP OF CONCRETE COMMUNICATIONS MANHOLE TYP **TYPICAL** SANITARY SEWER CLEANOUT VALLEY GUTTER CONCRETE **WCR** WHEELCHAIR RAMP CURB OPENING WATERLINE HOTBOX WHB COMMUNICATIONS RISER WATERLINE BY PAINT MARK CONCRETE SIDEWALK W/PM DOUBLE SANITARY SEWER CLEANOUT WATER VALVE BOX ELECTRIC BY PAINT MARK PAINTED UTILITY MARKER ELECTRIC CONDUIT DIAMETER OF TREE ELECTRIC DISTRIBUTION PANEL ELECTRIC METER FIRE HYDRANT DECIDUOUS TREE FLOWLINE GAS BY PAINT MARK GRAVEL SMALL DECIDUOUS TREE GUY WIRE IRRIGATION VALVE BOX 1'X1' METAL BUILDING COLUMN SHRUB METAL COLUMN METER CAN WITH BIB VALVE YUCCA METAL LIGHT POLE MONITORING WELL OVERHEAD COMMUNICATION (# OF LINES) GROUP OF SHRUBS OVERHEAD ELECTRIC (# OF LINES)

+ 99.35 **99.40** <del>\_\_\_\_</del>... **—** · · · --5100--<del>----99----</del>  $\triangleleft$ **←** \_---

\_\_ \_\_ \_\_

HIGH POINT / DIVIDE PROPOSED CONCRETE

2016.041/1

# HIGH\ MESA Consulting Group

6010-B MIDWAY PARK BLVD. NE

• ALBUQUERQUE, NEW MEXICO 87109 PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

REVISIONS PROJECT NO. 16031 NOVEMBER 2016 DRAWN BY: J.Y.R./S.C.C. CHECKED BY:

-18-2016

**Q**L=

Ø

 $\exists$ 

H-11

R.J.C.

DRAWING NO.

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE TOPOGRAPHIC AND UTILITY INFORMATION DEPICTED HEREON IS BASED JPON THE TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 15075, DATED 04/27/2016 (2016.024.1).

ADDED DRY STACK WALL

₩/water meter box