

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 11, 2018

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

**RE: General Mills Warehouse Addition
3501 Paseo Del Norte Blvd NE
Request for Permanent C.O. - Accepted
Engineer's Certification Dated 06/06/18
Engineer's Stamp Date: 01/30/18
Hydrology File: C16D002**

Dear Mr. Means:

Based on the Certification received 06/07/18 and supplemental photographs on 06/11/18, 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.

Sincerely,

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) _____

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL

☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

PRE-DESIGN MEETING?

_____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ By: _____

**DEKKER
PERICH
SABATINI**

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG



SEAL

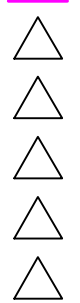
PROJECT

GENERAL MILLS
3501 PASEO DEL NORTE N.E.
ALBUQUERQUE, NEW MEXICO

**100%
CONSTRUCTION
DRAWINGS**

REVISIONS

06/18 ENGINEER'S CERTIFIC



DRAWN BY S.C.C.

REVIEWED BY GM

DATE 01/30/2018

PROJECT NO 17-0117

DRAWING NAME

**DRAINAGE PLAN,
CALCULATIONS,
VICINITY MAP,
SECTIONS AND
DETAILS**

SHEET NO

C100

DRAINAGE PLAN

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE NORTH VALLEY AREA OF THE ALBUQUERQUE METROPOLITAN AREA, REPRESENTS A MODIFICATION TO AN EXISTING INDUSTRIAL SITE WITHIN AN INFILL AREA. THE PROPOSED CONSTRUCTION CONSISTS OF A NEW BUILDING ADDITION TO AN EXISTING WAREHOUSE IN THE NORTHEAST CORNER OF THE GENERAL MILLS SITE. THE NEW BUILDING ADDITION WILL REPLACE EXISTING IMPERVIOUS PAVED AREA IMMEDIATELY NORTH OF THE EXISTING WAREHOUSE. THE DRAINAGE CONCEPT WILL BE THE CONTINUED DISCHARGE OF DEVELOPED RUNOFF FROM THE NEW BUILDING ADDITION TO AN EXISTING RETENTION POND LOCATED IMMEDIATELY NORTH OF THE PROJECT AREA. THE PROPOSED IMPROVEMENTS WILL NOT CHANGE THE RUNOFF GENERATED DUE TO REPLACING IMPERVIOUS AREA WITH BUILDING AREA. THERE WILL BE NO NET CHANGE IN RUNOFF GENERATED.

THE CITY FIRST FLUSH ORDNANCE WILL BE MET BY MAINTAINING THE EXISTING SITE CRITERIA REQUIRING ONSITE RETENTION OF ALL DEVELOPED DISCHARGE PER THE 1998 MASTER DRAINAGE STUDY (REFERENCED BELOW).

THIS SUBMITAL IS MADE IN SUPPORT OF BUILDING PERMIT TO BE ISSUED BY THE CITY OF ALBUQUERQUE.

II. PROJECT DESCRIPTION

AS SHOWN ON THE VICINITY MAP, THE PROPOSED PROJECT SITE IS SITUATED IN THE NORTHEAST PORTION OF THE GENERAL MILLS INDUSTRIAL SITE NEAR THE INTERSECTION OF EDITH BLVD NE AND PASEO DEL NORTE BLVD. AS SHOWN BY PANEL 136 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, THIS SITE DOES NOT LIE WITHIN DESIGNATED FLOOD HAZARD ZONE. HOWEVER, BASED UPON THE 1998 MASTER DRAINAGE STUDY REFERENCED BELOW, THE SITE IS REQUIRED TO RETAIN DEVELOPED RUNOFF ONSITE DUE TO THE LACK OF AN OUTFALL THIS PROJECT WILL CONTINUE TO DISCHARGE DEVELOPED RUNOFF TO THE EXISTING ONSITE RETENTION POND.

III. BACKGROUND DOCUMENTS

THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:

- GENERAL MILLS PLANT MASTER DRAINAGE STUDY PREPARED BY CHAVEZ GRIEVES, NMPE 13672, DATED 11-25-1998. THE MASTER DRAINAGE STUDY ESTABLISHED THE EXISTING DRAINAGE BASINS FOR THE GENERAL MILLS PLANT SITE, AND THE CRITERIA FOR ONSITE RETENTION OF DEVELOPED RUNOFF FROM THE MAJORITY OF THE SITE BASINS (ONLY BASINS A & G ARE PERMITTED OFFSITE DISCHARGE). THIS PROJECT LIES WITHIN BASIN C AS DEFINED BY THE MASTER DRAINAGE STUDY AND RUNOFF FROM THE PROJECT AREA DRAINS TO AN EXISTING ONSITE RETENTION POND LOCATED AT THE NORTHEAST CORNER OF BASIN C.
- PARTIAL TOPOGRAPHIC AND UTILITY SURVEY OF GENERAL MILLS PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 12-27-2017. THE SUBJECT SURVEY PROVIDES THE BASIS FOR THE EXISTING CONDITIONS OF THE PROJECT SITE AS DEPICTED BY THIS SUBMITAL.

IV. EXISTING CONDITIONS

THE PROJECT SITE IS LOCATED AT THE NORTHEAST CORNER OF THE OVERALL SITE AND IS WHOLLY CONTAINED WITHIN BASIN C AS DEFINED BY THE 1998 MASTER DRAINAGE STUDY. THE PROJECT SITE CONSISTS OF AN EXISTING WAREHOUSE BUILDING AND ASSOCIATED PAVED PARKING, DELIVERY DOCK AND DRIVEWAY. RUNOFF FROM THE PROJECT AREA DRAINS FROM SOUTH TO NORTH VIA BOTH SURFACE AND SUBSURFACE DRAINAGE (STORM DRAIN) IMPROVEMENTS INTO AN EXISTING ONSITE RETENTION POND AT THE NORTHEAST CORNER OF BASIN C. CALCULATIONS INCLUDED HEREIN DEMONSTRATE THAT THE EXISTING RETENTION POND CAPACITY (331,715 CF WITH TWO FEET OF FREEBOARD) IS MUCH GREATER THAN THE 100 YEAR, 10 DAY STORM EVENT VOLUME GENERATED BY THE CONTRIBUTING BASIN C (150,570 CF), THEREFORE THE 1998 MASTER DRAINAGE STUDY CRITERIA FOR ONSITE RETENTION IS MAINTAINED.

THERE ARE NO OFFSITE FLOWS IMPACTING THE PROJECT SITE. AN EXISTING RAILROAD EMBANKMENT ON THE NORTH AND EAST OF THE SITE BLOCK ANY FLOWS FROM THOSE DIRECTIONS, AND RUNOFF FROM ADJACENT PORTIONS OF THE SITE TO THE SOUTH AND WEST OF THE PROJECT AREA ARE DISCHARGED TO OTHER RETENTION FACILITIES ONSITE.

V. DEVELOPED CONDITIONS

THE PROPOSED PROJECT AREA IS WHOLLY CONTAINED WITHIN DRAINAGE BASIN C AS DEFINED BY THE 1998 MASTER DRAINAGE STUDY. THE PROPOSED CONSTRUCTION CONSISTS OF A NEW WAREHOUSE BUILDING LOCATED WITHIN EXISTING IMPERVIOUS PAVED PARKING, NEW PRIVATE SUBSURFACE STORM DRAIN WILL BE INSTALLED TO COLLECT RUNOFF FROM THE NEW WAREHOUSE ADDITION AND THE EXISTING DELIVERY DOCK IMMEDIATELY EAST OF THE ADDITION, AND CONVEY IT NORTH TO DISCHARGE INTO AN EXISTING ONSITE RETENTION POND WITHIN BASIN C. MAINTAINING THE 1998 MASTER DRAINAGE STUDY CRITERIA OF RETAINING RUNOFF ONSITE. THERE WILL BE NO INCREASE IN RUNOFF GENERATED BY THE SITE DUE TO REPLACING IMPERVIOUS PAVED AREA WITH IMPERVIOUS BUILDING AREA.

AS PER THE EXISTING CONDITION, THERE ARE NO OFFSITE FLOWS THAT IMPACT THE PROJECT SITE.

VI. GRADING PLAN

THE GRADING PLAN SHOWS 1) EXISTING AND PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 2) THE LIMIT AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS, AND 3) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED IMPROVEMENTS WILL MAINTAIN THE CURRENT DRAINAGE PATTERN WITH THE SITE, DISCHARGING DEVELOPED RUNOFF TO THE EXISTING ONSITE RETENTION POND VIA NEW SUBSURFACE STORM DRAIN IMPROVEMENTS.

VII. FIRST FLUSH

THE FIRST FLUSH GENERATED BY THE PROPOSED IMPROVEMENTS WILL BE DISCHARGED TO THE EXISTING ONSITE RETENTION POND AND CONTAINED THEREIN, THEREBY MEETING THE CITY FIRST FLUSH ORDNANCE REQUIREMENTS. ALL RUNOFF FROM THIS BASIN WILL BE FULLY RETAINED ON SITE.

VIII. EROSION CONTROL PLAN

THIS PROJECT WILL DISTURB LESS THAN ONE-ACRE OF LAND, THEREFORE A SEPARATE SEDIMENT EROSION CONTROL PLAN AND STORM WATER POLLUTION PREVENTION PLAN ARE NOT REQUIRED.

IX. CALCULATIONS

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6 AND 24-HOUR RAINFALL EVENTS FOR BASIN C OF THE SITE, WHICH INCLUDES THE PROJECT AREA. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY THESE CALCULATIONS, THERE WILL BE NO CHANGE TO THE RUNOFF GENERATED DUE TO REPLACING IMPERVIOUS AREA WITH IMPERVIOUS. EXISTING RETENTION POND CALCULATIONS WERE ALSO PERFORMED USING THE END-AREA METHOD; THESE CALCULATIONS DEMONSTRATE THAT THE EXISTING POND HAS MORE THAN SUFFICIENT CAPACITY (331,715 CF) TO RETAIN THE 100 YEAR, 10 DAY BASIN C STORM EVENT RUNOFF (150,570 CF).

X. CONCLUSIONS

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED AS A RESULT OF THE EVALUATIONS CONTAINED HEREIN:

- THE PROPOSED IMPROVEMENTS WILL MAINTAIN THE EXISTING DRAINAGE PATTERN FOR THE PROJECT SITE VIA DISCHARGING THE DEVELOPED RUNOFF VIA NEW SUBSURFACE PRIVATE STORM DRAIN SYSTEM TO THE ONSITE RETENTION POND.
- THE PROPOSED IMPROVEMENTS WILL RESULT IN NO CHANGE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE.
- PER THE 1998 MASTER DRAINAGE PLAN FOR THE SITE, 100% OF THE RUNOFF FROM BASIN C MUST BE RETAINED IN ONSITE RETENTION FACILITIES. CALCULATIONS INCLUDED HEREIN DEMONSTRATE THAT THE EXISTING RETENTION POND HAS MORE THAN SUFFICIENT CAPACITY (331,715 CF) TO RETAIN THE 100 YEAR, 10 DAY DEVELOPED RUNOFF FROM BASIN C (150,570 CF) WITHIN WHICH THE PROJECT AREA IS WHOLLY CONTAINED.
- FIRST FLUSH ORDNANCE REQUIREMENTS ARE MET DUE TO FULL RETENTION OF DEVELOPED RUNOFF ONSITE.
- THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS.
- THIS PROJECT IS LESS THAN 1 ACRE AND THEREFORE IS NOT SUBJECT TO AN EPA NPDES PERMIT
- THIS PROJECT DOES NOT REQUIRE A SEPARATE EROSION AND SEDIMENT CONTROL PLAN.

CALCULATIONS

I. SITE CHARACTERISTICS

A. PRECIPITATION ZONE #	2	2.35	IN
B. $P_{100, 6 HR} = P_{300}$		2.35	
C. TOTAL PROJECT AREA (A_T) (BASIN C)		620.730	SF
		14.25	AC

D. LAND TREATMENTS

EXISTING LAND TREATMENT		
LAND TREATMENT	AREA (SF/AC)	%
A		
B		
C	193,668 SF	31
D	427,062 SF	69
	8.80 AC	

DEVELOPED LAND TREATMENT		
LAND TREATMENT	AREA (SF/AC)	%
A		
B		
C	193,668 SF	31
D	427,062 SF	69
	8.80 AC	

II. HYDROLOGY (BASIN C)

A. EXISTING CONDITION 100 YEAR

1. 100-YR STORM

a. VOLUME 100-YR, 6-HR

$$E_W = (E_1 A_1 + E_2 A_2 + E_3 A_3 + E_4 A_4 + E_5 A_5) / A_T$$

$$E_W = (0.53 \times 0.00) + (0.78 \times 0.00) + (1.13 \times 4.45) + (2.12 \times 9.80) / 14.25 =$$

$$V_{100, 6 HR} = (E_W / 12) A_T = (1.81 / 12) 14.25 = 2.1494 =$$

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DEKKER
PERICH
SABATINI

7601 JEFFERSON NE, SUITE 100
ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG



SEAL

PROJECT

GENERAL MILLS
3501 PASEO DEL NORTE N.E.
ALBUQUERQUE, NEW MEXICO

100%
CONSTRUCTION
DRAWINGS

REVISIONS

06/18 ENGINEER'S CERTIFIC

△
△
△
△
△

DRAWN BY S.C.C.

REVIEWED BY GM

DATE 01/30/2018

PROJECT NO 17-0117

DRAWING NAME

GRADING PLAN

SHEET NO

C101

RECORD DRAWING LEGEND

- CONSTRUCT RECORD INFORMATION (VERIFIED BY ENGINEER)
✓ AS-CONSTRUCTED = AS-DESIGNED
(VERIFIED BY AS-BUILT SURVEY)
36" 42" RECORD INFORMATION FROM AS-BUILT SURVEY
25.2 RECORD INFORMATION FROM AS-BUILT SURVEY
28.95 42 RECORD INFORMATION FROM AS-BUILT SURVEY

PROJECT BENCHMARK

AGRS 3 1/4" ALUMINUM DISC STAMPED "13-D16 1991", SET
FLUSH IN THE SOUTHWEST CORNER OF THE CONCRETE BRIDGE
ABUTMENT OF PASEO DEL NORTE BLVD. BRIDGE OVER THE NORTH
DIVERSION CHANNEL:
NORTHING 1,518,996.001 (GRID) 1,518,996.001 (GROUND)
EASTING 1,534,181.325 (GRID) 1,534,181.325 (GROUND)
ELEVATION = 5073.471 FEET (NAVD 1988)

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

A #5 REBAR WITH CAP STAMPED "HMC CONTROL NMPS 11184"
EAST LIMIT OF THE SITE SURVEY, AS SHOWN ON THIS SHEET.
NORTHING 1520262.509 (GROUND)
EASTING 1533984.767 (GROUND)
ELEVATION = 5041.14 FEET (NAVD 1988)

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

A #5 REBAR WITH CAP STAMPED "HMC CONTROL NMPS 11184"
JUST SOUTH OF THE RETAINING POND, AS SHOWN ON THIS SHEET.
NORTHING 1520275.635 (GROUND)
EASTING 1533579.936 (GROUND)
ELEVATION = 5042.52 FEET (NAVD 1988)

TEMPORARY BENCHMARK (T.B.M.) #3

A #5 REBAR WITH CAP STAMPED "HMC CONTROL NMPS 11184"
NORTHWEST OF THE RETAINING POND, AS SHOWN ON THIS SHEET.
NORTHING 1520498.676 (GROUND)
EASTING 1533326.343 (GROUND)
ELEVATION = 5040.51 FEET (NAVD 1988)

LEGEND

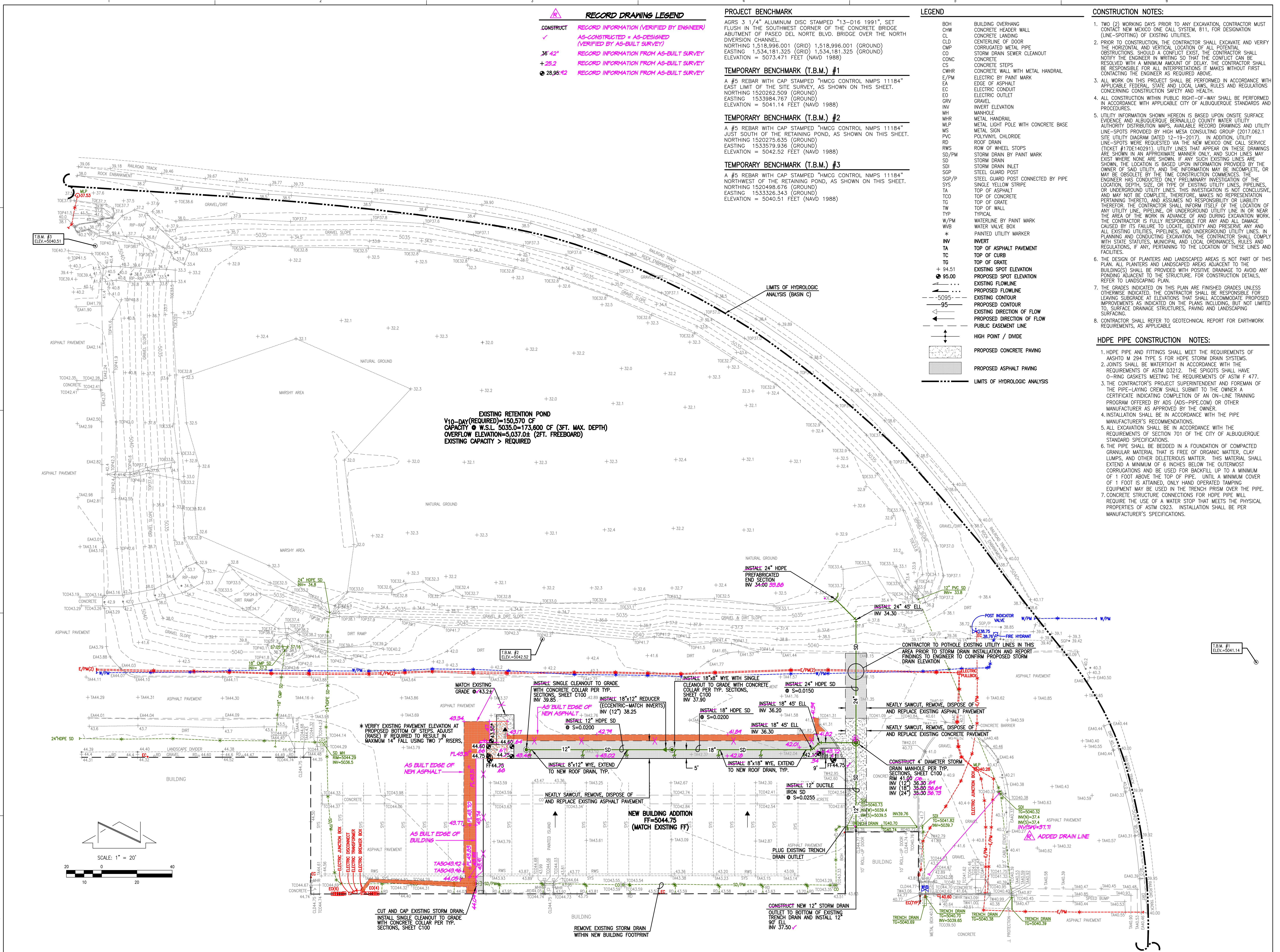
- BOH BUILDING OVERHANG
CWH CONCRETE HEADER WALL
CL CONCRETE LANDING
CLD CENTERLINE OF DOOR
CMP CORRUGATED METAL PIPE
CO STORM DRAIN SEWER CLEANOUT
CONC CONCRETE
CS CONCRETE STEPS
CWHR CONCRETE WALL WITH METAL HANDRAIL
E/PM ELECTRIC BY PAINT MARK
EA EDGE OF ASPHALT
EC ELECTRIC CONDUIT
EO ELECTRIC OUTLET
GRV GRAVEL
INV INVERT ELEVATION
MHR METAL HANDRAIL
MLP METAL LIGHT POLE WITH CONCRETE BASE
MS METAL SIGN
PVC POLYVINYL CHLORIDE
RD ROOF DRAIN
RWS ROW OF WHEEL STOPS
SD/PM STORM DRAIN BY PAINT MARK
SD STORM DRAIN
SDI STORM DRAIN INLET
SGP STEEL GUARD POST
SGP/P STEEL GUARD POST CONNECTED BY PIPE
SYS SINGLE YELLOW STRIPE
TA TOP OF ASPHALT
TCO TOP OF CONCRETE
TW TOP OF WALL
TYP TYPICAL
W/PM WATERLINE BY PAINT MARK
WVB WATER VALVE BOX
PAINTED UTILITY MARKER
INVERT
TA TOP OF ASPHALT PAVEMENT
TC TOP OF CURB
TG TOP OF GRADE
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
EXISTING FLOWLINE
PROPOSED FLOWLINE
EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING DIRECTION OF FLOW
PROPOSED DIRECTION OF FLOW
PUBLIC EASEMENT LINE
HIGH POINT / DIVIDE
PROPOSED CONCRETE PAVING
PROPOSED ASPHALT PAVING
LIMITS OF HYDROLOGIC ANALYSIS

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 811, FOR DESIGNATION (LINE-SPOTTING) OF EXISTING UTILITIES.
2. 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.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. UTILITY INFORMATION SHOWN HEREON IS BASED UPON ONSITE SURFACE EVIDENCE AND ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY DISTRIBUTION MAPS. AVAILABLE RECORD DRAWINGS AND UTILITY LINE-SPOTS PROVIDED BY HIGH MESA CONSULTING GROUP (2017.06.1 SITE UTILITY DIAGRAM DATED 12-19-2017). IN ADDITION, UTILITY LINE-SPOTS WERE REQUESTED VIA THE NEW MEXICO ONE CALL SERVICE (TICKET #170E140291). UTILITY LINES THAT APPEAR ON THESE DRAWINGS 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 ENGINEER 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 NOT BE COMPLETE. THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE 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 AND DURING EXCAVATION WORK. THE 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.
6. 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.
7. THE GRADES INDICATED ON THIS PLAN ARE FINISHED GRADES UNLESS OTHERWISE INDICATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEAVING SUBGRADE AT ELEVATIONS THAT SHALL ACCOMMODATE PROPOSED IMPROVEMENTS AS INDICATED ON THE PLANS INCLUDING, BUT NOT LIMITED TO, SURFACE DRAINAGE STRUCTURES, PAVING AND LANDSCAPING SURFACING.
8. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR EARTHWORK REQUIREMENTS, AS APPLICABLE.

HDPE PIPE CONSTRUCTION NOTES:

1. HDPE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M 294 TYPE S FOR HDPE STORM DRAIN SYSTEMS.
2. JOINTS SHALL BE WATERTIGHT IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D3212. THE SPOGITS SHALL HAVE O-RING GASKETS MEETING THE REQUIREMENTS OF ASTM F 477.
3. THE CONTRACTOR'S PROJECT SUPERINTENDENT AND FOREMAN OF THE PIPE-LAYING CREW SHALL SUBMIT TO THE OWNER A CERTIFICATE INDICATING COMPLETION OF AN ON-LINE TRAINING PROGRAM OFFERED BY ADS (ADS-PIPE.COM) OR OTHER MANUFACTURER AS APPROVED BY THE OWNER.
4. INSTALLATION SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS.
5. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 701 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS.
6. THE PIPE SHALL BE BEDDED IN A FOUNDATION OF COMPACTED GRANULAR MATERIAL THAT IS FREE OF ORGANIC MATTER, CLAY LUMPS, AND OTHER DELTERIOUS MATTER. THIS MATERIAL SHALL EXTEND A MINIMUM OF 6 INCHES BELOW THE OUTERMOST CORRUGATIONS AND BE USED FOR BACKFILL UP TO A MINIMUM OF 1 FOOT ABOVE THE TOP OF PIPE. UNTIL A MINIMUM COVER OF 1 FOOT IS ATTAINED, ONLY HAND OPERATED TAMPING EQUIPMENT MAY BE USED IN THE TRENCH PRIOR OVER THE PIPE.
7. CONCRETE STRUCTURE CONNECTIONS FOR HDPE PIPE WILL REQUIRE THE USE OF A WATER STOP THAT MEETS THE PHYSICAL PROPERTIES OF ASTM C923. INSTALLATION SHALL BE PER MANUFACTURER'S SPECIFICATIONS.



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NOTE:
THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON THE
"PARTIAL TOPOGRAPHIC AND UTILITY SURVEY" PREPARED BY HIGH MESA
CONSULTING GROUP, NMPS 11184, DATED 12/27/2017 (2017.063.2).

RECORD DRAWING
FOR CERTIFICATION, SEE SHEET C101

2017.063.3 4