

CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

January 19, 2018

G. Roberts Adams, P.E.
Adams Engineering
8951 Cypress Waters Blvd., Suite 150
Dallas, TX 75019

RE: McDonald's – 5001 Gibson SE
Grading and Drainage Plan
Engineer Stamp Date: 1/9/18
Hydrology File: L18D053

Dear Mr. Adams:

PO Box 1293 Based upon the information provided in your resubmittal received 01/16/2018, the Grading Plan is approved for Building Permit.

Albuquerque Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required

NM 87103 If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

www.cabq.gov

Renée C. Brissette

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 11/2016)

FASTRAX REVIEW PERMIT

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

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)

☐ OTHER (SPECIFY) _____

☐ PRE-DESIGN MEETING?

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

☐ OTHER (SPECIFY) _____

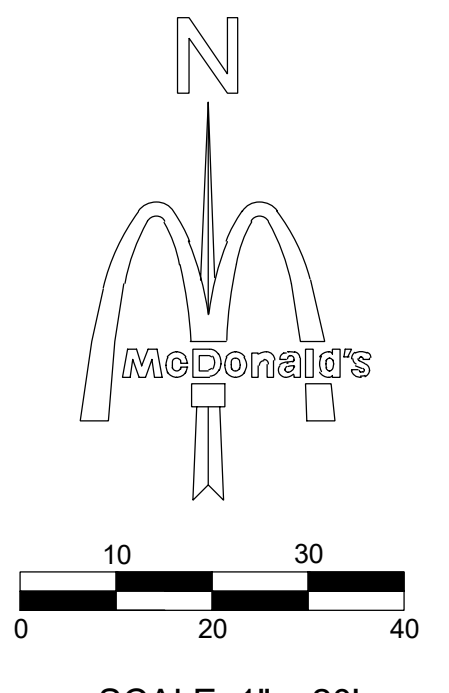
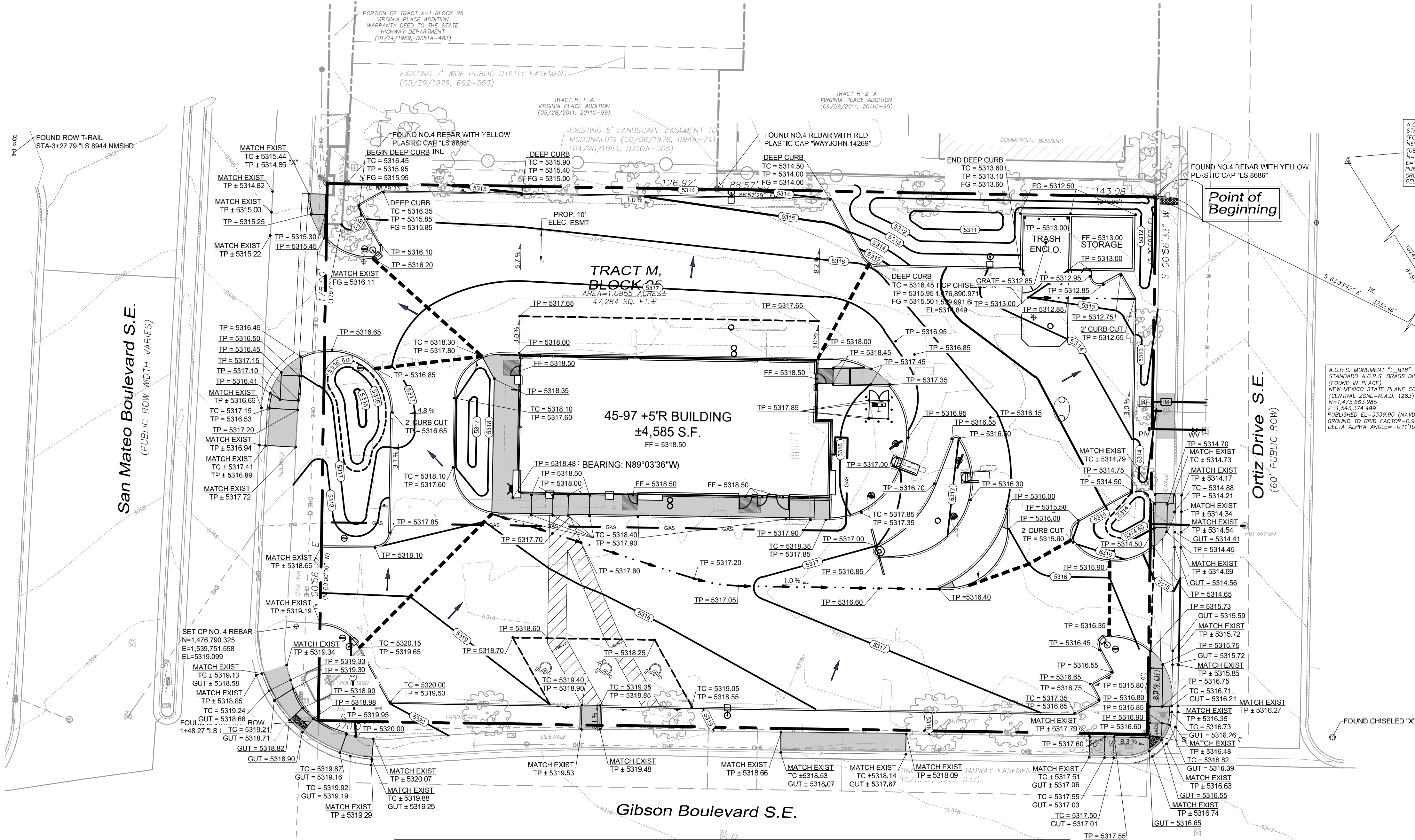
IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ By: _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



THESE PLANS ARE SUBJECT TO REVIEW & APPROVAL BY JURISDICTIONAL ENTITIES.

OWNER INFORMATION

MCDONALD'S USA, LLC
MOUNTAIN SOUTHWEST
FIELD EXECUTION TEAM
511 E. JOHN CARPENTER FRWY, STE. 375
IRVING, TX 75062
(214) 533-7382
CONTACT: LEE MORRIS

LEGEND

TC = PROPOSED TOP OF CURB
TP = PROPOSED TOP OF PAVEMENT
FG = PROPOSED FINISHED GRADE
FF = PROPOSED FINISHED FLOOR
TW = PROPOSED TOP OF WALL
BW = PROPOSED FINISHED GRADE @BASE OF WALL (NOT INCLUDING FOOTING)

--- SWALE

--- GRADE BREAK

--- RIDGE LINE

--- XXX --- EXISTING CONTOUR

--- XXX --- PROPOSED CONTOUR

--- LEVEL LANDING @ 2% MAX SLOPE IN ANY DIRECTION

BENCHMARK

- A.G.R.S. MONUMENT "1_M18" STANDARD A.G.R.S. BRASS DISC (FOUND IN PLACE) NM STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,475,663.285 E=1,543,374.499
PUBLISHED EL=5339.90 (NAVD 1988)
GROUND TO GRID FACTOR=0.999862355
DELTA ALPHA ANGLE=0°11'10.47"
- A.G.R.S. MONUMENT "14_L17" STANDARD A.G.R.S. BRASS DISC (FOUND IN PLACE) NM STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,480,200.281 E=1,534,391.165
PUBLISHED EL=5319.339 (NAVD 1988)
GROUND TO GRID FACTOR=0.999862355
DELTA ALPHA ANGLE=0°12'12.90"
- TEMPORARY ON-SITE BENCHMARK - SET CP NO. 4 REBAR ON SOUTH SIDE OF SW DRIVEWAY
N=1,476,790.325 E=1,539,751.558
EL=5319.099
- TEMPORARY ON-SITE BENCHMARK - SET CP CHISELED "X" ON CURB OF OUTSIDE DRIVE-THRU ISLAND NEAR NE CORNER OF THE SITE
N=1,476,890.971 E=1,539,991.682
EL=5314.849



811

Know what's below.
Call before you dig.

STANDARD ACCESSIBILITY REQUIREMENTS

PARKING:

ACCESSIBLE PARKING SPACES SHALL BE AS NOTED TO A MIN. 96" WIDE OR A MIN. 132" WIDE FOR VAN DESIGNATED SPACES WITH A MAXIMUM SLOPE OF 2% (IN ALL DIRECTIONS). ALL BUILDINGS SHALL HAVE AT LEAST ONE VAN ACCESSIBLE SPACE.

EACH ACCESSIBLE PARKING SPACE SHALL HAVE A VERTICALLY MOUNTED (OR SUSPENDED) SIGN SHOWING THE SYMBOL OF ACCESSIBILITY. AT LEAST ONE SPACE MUST INCORPORATE "VAN-ACCESSIBLE" BELOW THE SYMBOL OF ACCESSIBILITY. SIGN SHALL BE LOCATED AS NOTED TO 60" (MIN.) ABOVE THE ADJACENT PAVED SURFACE TO BOTTOM OF TEXT.

ALL ACCESS AISLES SERVING ACCESSIBLE PARKING SPACES SHALL BE AS NOTED TO A 60" WIDE MINIMUM.

RAMPS:

RAMPS EXCEEDING 6" IN RISE (EXCLUDING CURB RAMPS) SHALL HAVE APPROPRIATE EDGE PROTECTION WITH HANDRAILS ON EACH SIDE AT BETWEEN 34" AND 38" AND EXTEND 12" BEYOND THE TOP AND BOTTOM OF RAMP. HANDRAIL SHALL NOT DIMINISH THE CLEAR AREA REQUIRED FOR TOP AND BOTTOM LANDINGS SERVING THE RAMPS.

IF REQUIRED BY LOCAL OR STATE JURISDICTION, RAMPS SHALL CONTAIN A TRUNCATED DOME SURFACE ARRANGED SO THAT WATER WILL NOT ACCUMULATE. COLOR OF RAMP FINISH MATERIAL (INCLUDING CONCRETE) SHALL HAVE A LIGHT AND REFLECTIVE VALUE AND MUST CONTRAST SIGNIFICANTLY TO DISTINGUISH IT FROM ADJACENT SURFACES - (OR PAINT STRIPE).

LANDINGS FOR RAMPS SHALL BE AS WIDE AS THE RAMP AND 60" LONG MINIMUM (36" MINIMUM FOR CURB RAMPS).

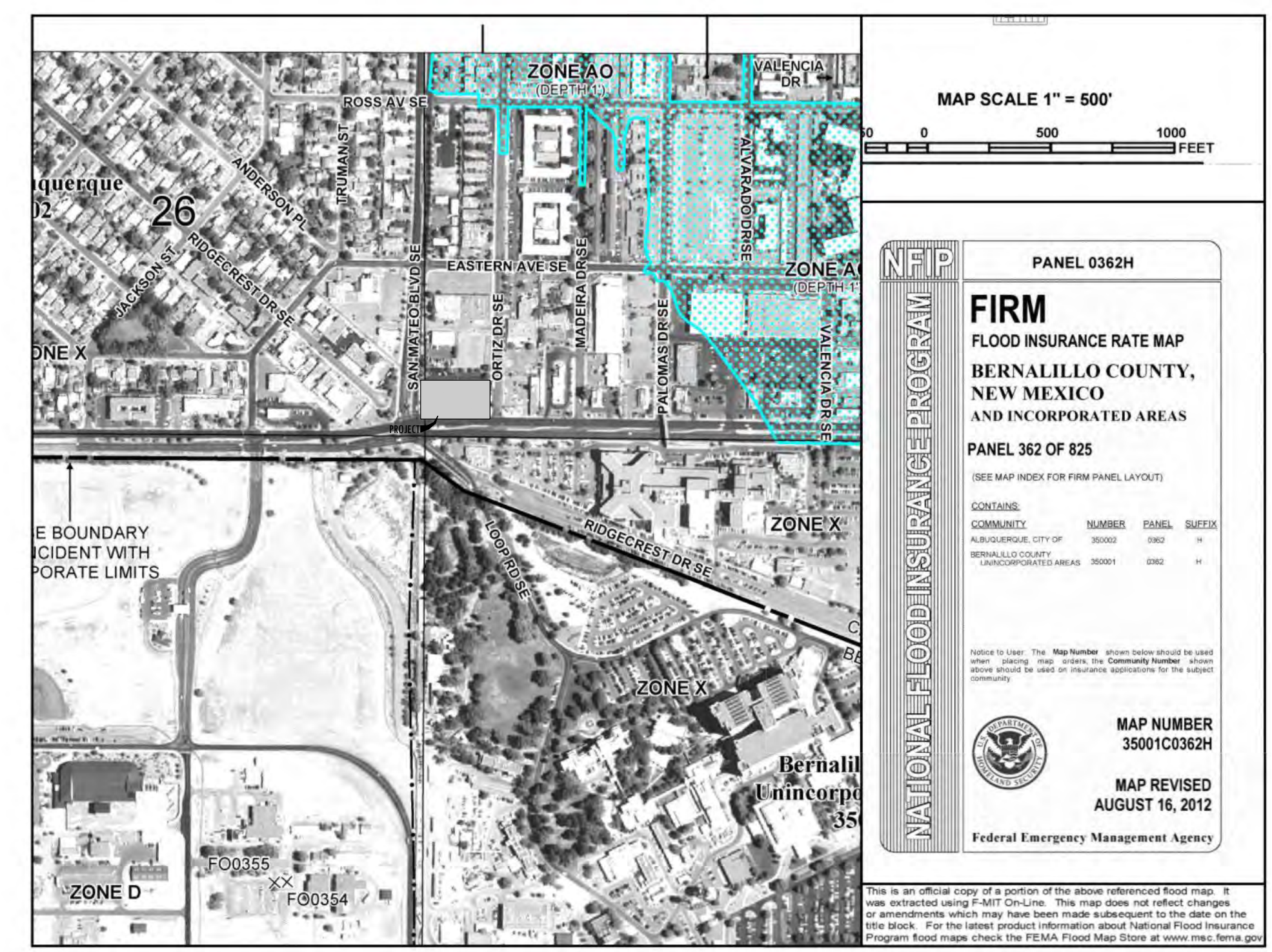
RAMPS SHALL NOT EXCEED A 1:12 RUNNING SLOPE OR 30" VERTICAL RISE.

RAMPS AND LANDING SHALL NOT EXCEED 1:48 (2% CROSS SLOPE).

SIDEWALKS AND ACCESSIBLE ROUTES:

SIDEWALKS MUST BE AT LEAST 36" WIDE WITH A CROSS SLOPE THAT SHALL NOT EXCEED 1:48 (2%).

LONGITUDINAL SLOPE OF ANY SIDEWALK (ACCESSIBLE ROUTE) SHALL NOT EXCEED 1:20 (5%).



FLOOD STATEMENT

According to Map No. 35001C0362H, Dated AUGUST 16, 2012, of the Federal Emergency Management Agency, National Flood Insurance Program Map, this property is within flood zone "X", areas determined to be outside the 0.2% annual chance floodplain. If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. On rare occasions, greater floods can and will occur and flood heights may be increased by man-made or natural causes. This statement shall not create liability on the part of Adams Engineering.

BY	DESCRIPTION	DATE	REV
HJM	ISSUE FOR PERMIT	11/2/17	1
HJM	PER CITY & OWNER COMMENTS	10/18	2
ADAMS	ADAMS JOB NO.:	2017.135	

Adams

9951 Cypress Valley Blvd, Suite 150 ■ Dallas, Texas 75019 ■ (817) 332-3700

McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall remain the property of McDonald's USA, LLC. No part of these drawings and specifications shall be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of McDonald's USA, LLC. Use of these drawings for reference or example on another project requires the services of properly licensed architects and engineers. Reproduction of the contract documents for use on another project is not authorized.

PLAN APPROVALS

REGIONAL MGR.	CONST. MGR.	OPERATIONS DEPT.	REAL ESTATE DEPT.	DATE	BY	
				DESIGNED	NOV. 2017	HJM
				DRAWN	NOV. 2017	HJM
				CHECKED	11/20/17	DWL
				AS-BUILT		

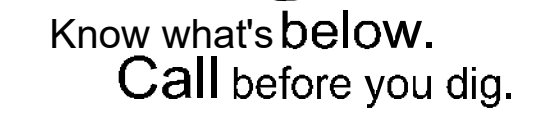
CO-SIGN SIGNATURES

CONTRACTOR	OWNER	DATE	BY

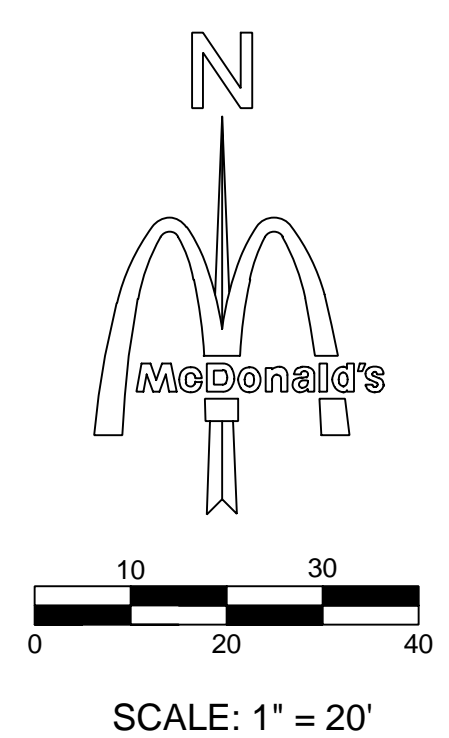
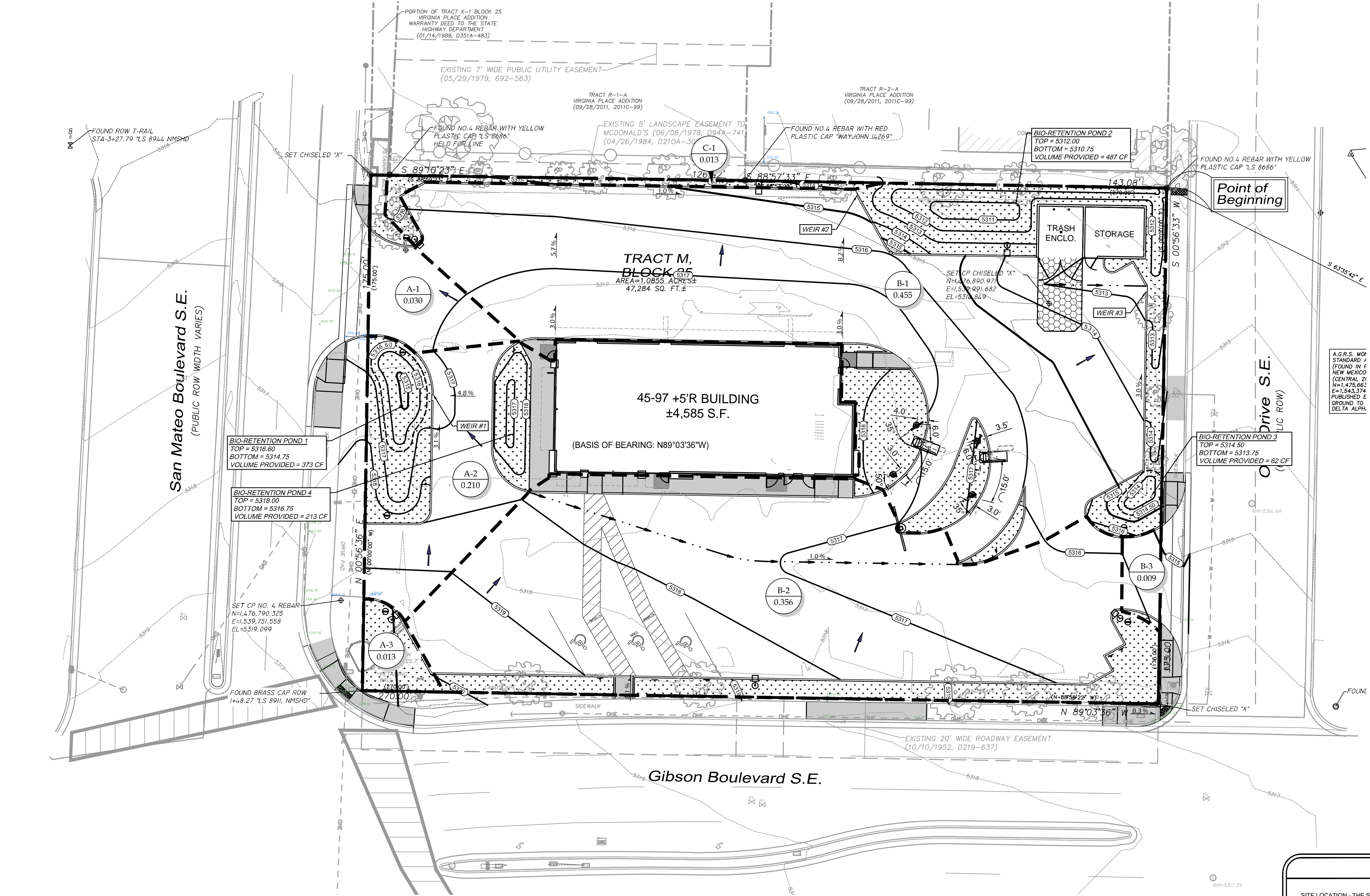
GRADING PLAN

C7.0

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	DATE	BY
DESIGNED	NOV. 2017	HJM
DRAWN	NOV. 2017	HJM
CHECKED	NOV 2017	MDK
AS-BUILT		
PRE-DEVELOPED DRAINAGE PLAN		
C8.0		



THESE PLANS ARE SUBJECT TO REVIEW & APPROVAL BY JURISDICTIONAL ENTITIES.

OWNER INFORMATION
MCDONALD'S USA, LLC
MOUNTAIN SOUTHWEST
FIELD EXECUTION TEAM
511 E. JOHN CARPENTER FRWY, STE. 375
IRVING, TX 75062
(214) 533-7882
CONTACT: LEE MORRIS

LEGEND
--- DRAINAGE AREA LINE
--- XXX --- EXISTING CONTOUR
--- XXX --- PROPOSED CONTOUR
X XXX DRAINAGE AREA NUMBER
XXX DRAINAGE AREA (ACRES)
--- PROPOSED DRAINAGE DIRECTION

BENCHMARK
1. A.G.R.S. MONUMENT "1.18" STANDARD A.G.R.S. BRASS DISC (FOUND IN PLACE) NM STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,475,663.285 E=1,543,374.499
PUBLISHED EL=5339.90 (NAVD 1988)
GROUND TO GRID FACTOR=0.999659251
DELTA ALPHA ANGLE=0°11'10.47"
2. A.G.R.S. MONUMENT "14.117" STANDARD A.G.R.S. BRASS DISC (FOUND IN PLACE) NM STATE PLANE COORDINATES (CENTRAL ZONE-N.A.D. 1983)
N=1,480,200.281 E=1,534,391.165
PUBLISHED EL=5319.339 (NAVD 1988)
GROUND TO GRID FACTOR=0.999662355
DELTA ALPHA ANGLE=0°12'12.90"
3. TEMPORARY ON-SITE BENCHMARK - SET CP NO. 4 REBAR ON SOUTH SIDE OF SW DRIVEWAY
N=1,476,790.325 E=1,539,751.558
EL=5319.099
4. TEMPORARY ON-SITE BENCHMARK - SET CP CHISELED "X" ON CURB OF OUTSIDE DRIVE-THRU ISLAND NEAR NE CORNER OF THE SITE
N=1,476,890.971 E=1,539,991.682
EL=5314.849

BIO-RETENTION POND 1 STAGE-STORAGE VOLUME					
Elevation	Area (sq. ft.)	Avg. Area (sq. ft.)	Inc. Depth (ft.)	Inc. Volume (cu. ft.)	Total Volume (cu. ft.)
5314.75	0				0
5315	30	15	0.25	3.75	3.75
5316	269	149.5	1	149.5	153.25
5316.6	465	367	0.6	220.2	373.45
Required Volume = between Pond 1 & 4					

BIO-RETENTION POND 2 STAGE-STORAGE VOLUME					
Elevation	Area (sq. ft.)	Avg. Area (sq. ft.)	Inc. Depth (ft.)	Inc. Volume (cu. ft.)	Total Volume (cu. ft.)
5310.75	0				0
5311	167	83.5	0.25	20.875	20.875
5312	766	466.5	1	466.5	487.375
Required Volume = 445					

BIO-RETENTION POND 3 STAGE-STORAGE VOLUME					
Elevation	Area (sq. ft.)	Avg. Area (sq. ft.)	Inc. Depth (ft.)	Inc. Volume (cu. ft.)	Total Volume (cu. ft.)
5313.75	0				0
5314	67	33.5	0.25	8.375	8.375
5314.5	147	107	0.5	53.5	61.875
Required Volume = 388					

DETENTION AREA 4 STAGE-STORAGE VOLUME					
Elevation	Area (sq. ft.)	Avg. Area (sq. ft.)	Inc. Depth (ft.)	Inc. Volume (cu. ft.)	Total Volume (cu. ft.)
5317	58				0
5318	368	213	1	213	213
5318	0	184	0	0	213
Required Volume = 206					

POST-DEVELOPMENT 100-YEAR, 6-HOUR RUNOFF CALCULATIONS									
Drainage Area Number	Area (ac)	Land Treatment Condition				Excess Precipitation (in)	Volume (acft)	Peak Discharge (cfs)	Remarks
		A	B	C	D				
A-1	0.030	0.000	0.000	0.003	0.027	2.24	0.01	0.15	SHEET FLOW TO SAN MATEO BLVD.
A-2	0.210	0.000	0.000	0.042	0.167	2.14	0.04	0.99	SHEET FLOW TO BIO-RETENTION POND 1 & 4
A-3	0.013	0.000	0.000	0.013	0.000	1.29	0.00	0.05	SHEET FLOW TO SAN MATEO BLVD.
B-1	0.455	0.000	0.000	0.094	0.361	2.14	0.08	2.14	SHEET FLOW TO BIO-RETENTION POND 2
B-2	0.356	0.000	0.000	0.042	0.315	2.23	0.07	1.72	SHEET FLOW TO BIO-RETENTION POND 3
B-3	0.009	0.000	0.000	0.000	0.009	2.36	0.00	0.04	SHEET FLOW TO ORTIZ DR.
C-1	0.012	0.000	0.000	0.012	0.000	1.29	0.00	0.04	SHEET FLOW OFF-SITE TO NORTH
Total	1.085	0.000	0.000	0.207	0.878	13.69	0.19	5.12	
Note: Calculations in accordance with the City of Albuquerque Development Process Manual. The site is in Precipitation Zone 3.									

BIORETENTION VOLUME CALCULATIONS			
	SF	ac	
Total Impervious Area =	38259.85	0.878	
Req'd Retention Volume (0.34"/acre) =	1084	cf	
Retention Volume Provided =	1136	cf	

FIRST FLUSH VOLUME CALCULATIONS				
Pond #	Drainage Areas	Impervious Area (Ac)	FF Required Volume (cf)	FF Provided Volume (cf)
1	A-2	0.167	206	586
2	B-1	0.361	445	487
3	B-2	0.315	388	62
Off-Site	A-1, A-3, B-3, C-1	0.036	44	-
Total	All	0.878	1084	1136

DRAINAGE SUMMARY REPORT
SITE LOCATION - THE SITE IS LOCATED ON AN APPROXIMATELY 1.085 ACRES AT THE NORTHEAST CORNER OF GIBSON BLVD. S.E. AND SAN MATEO BLVD. S.E. THE SITE IS BORDERED TO THE NORTH BY "A-PLUS AUTOMOTIVE" AND TO THE EAST BY ORTIZ DRIVE S.E. PROPOSED CONSTRUCTION WILL INCLUDE A MCDONALD'S RESTAURANT AND ASSOCIATED PAVING, GRADING, LANDSCAPING, UTILITY, AND STORM WATER MANAGEMENT INFRASTRUCTURE.
METHODOLOGY - THE PROPOSED STORM WATER MANAGEMENT SYSTEM WAS EVALUATED IN ACCORDANCE WITH CHAPTER 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL. THE SITE IS LOCATED IN PRECIPITATION ZONE 3. THE 100-YEAR, 6-HOUR FREQUENCY RAINFALL EVENT WAS USED TO CALCULATE PEAK DISCHARGE RATES AND RUNOFF VOLUMES UNDER EXISTING AND PROPOSED CONDITIONS.
EXISTING CONDITIONS - REFER TO SHEET C8.0 FOR THE PRE-DEVELOPED DRAINAGE PLAN FOR THIS SITE. STORM WATER RUNOFF GENERALLY DRAINS FROM THE SOUTHWEST TO THE NORTHEAST ACROSS THE SITE UNDER EXISTING CONDITIONS. SHEET C8.0 IDENTIFIES THREE DRAINAGE DIVIDES FOR THIS SITE. AREA X-1 CONSISTS OF 0.132 ACRES FLOWING OFFSITE TO THE NORTHWEST. AREA X-2 CONTAINS 0.841 ACRES IN THE MIDDLE OF THE SITE. AND DRAINS TO THE NORTHWEST ONTO ORTIZ DRIVE S.E. AREA X-3 CONSISTS OF 0.012 ACRES, AND DRAINS TO THE WEST ONTO ORTIZ DRIVE S.E. PEAK DISCHARGE RATE AND RUNOFF VOLUME CALCULATIONS FOR EXISTING CONDITIONS ARE PROVIDED ON SHEET C8.0.
PROPOSED CONDITIONS - REFER TO SHEET C8.1 FOR THE POST-DEVELOPED DRAINAGE PLAN. SEVEN DRAINAGE BASINS ARE IDENTIFIED FOR THE SITE UNDER PROPOSED CONDITIONS. AREA A-1 IS 0.030 ACRES AND DRAINS OFFSITE TO SAN MATEO BLVD S.E. AREA A-2 (0.210 ACRES) WHICH DRAINS INTO BIO-RETENTION POND 4 WITH AN OVERFLOW TO BIO-RETENTION POND 1. AFTER THE FIRST 0.34" RUNOFF IS CAPTURED, ADDITIONAL OVERFLOW DISCHARGES TO SAN MATEO BLVD S.E. MINOR NUISANCE WATER FROM AREAS A-1 (0.030 ACRES) AND A-3 (0.012 ACRES) DRAIN DIRECTLY OFFSITE TO SAN MATEO BLVD S.E. AREA B-1 (0.455 ACRES) FLOWS NORTHEAST TO BIO-RETENTION POND 2, OVERFLOWING TO ORTIZ DRIVE S.E. AFTER CONTAINING FIRST FLUSH. AREA B-2 (0.356 ACRES) FLOWS NORTHEAST TO BIO-RETENTION POND 3. WATER FROM BIO-RETENTION POND 3 OVERFLOWS TO BIO-RETENTION POND 2 AND THEN DISCHARGES TO ORTIZ DRIVE S.E. AREAS B-3 (0.009 ACRES) AND C-1 (0.013 ACRES) BOTH FLOW OFFSITE TO ORTIZ DRIVE S.E. AND TO THE NORTH PROPERTY "A-PLUS AUTOMOTIVE", RESPECTIVELY. THE TOTAL FLOW OFF-SITE AT THE 100-YEAR STORM EVENT IS LESS THAN THE EXISTING FLOW OF 5.22 CFS TOTAL. TOTAL REQUIRED BIO-RETENTION (0.34") IS 1084 CUBIC FEET WITH AN OVERALL TOTAL PROPOSED STORAGE OF 1136 CUBIC FEET.
CONCLUSIONS - THE OVERALL AMOUNT OF IMPERVIOUS AREA AT THIS SITE WILL BE SIMILAR UNDER THE PROPOSED CONDITIONS AS THE EXISTING SITE; HOWEVER, RATHER THAN A LARGE PORTION OF FLOW DRAINING DIRECTLY INTO THE R.O.W., 1.021 ACRES DRAIN TO BIO-RETENTION PONDS BEFORE EXITING THE SITE. FURTHER, UNDER SMALLER STORM EVENTS, NEARLY ALL FLOW IS RETAINED AND INFILTRATED ON-SITE WHILE EVEN THE 100-YEAR STORM FLOWS OFF THE SITE ARE KEPT BELOW EXISTING VOLUMETRIC FLOW RATE. AS A RESULT OF THE IMPROVEMENTS, QUALITY AND QUANTITY OF FLOW SHOULD BE IMPROVED WHEN COMPARED TO THE EXISTING SITE.

WEIR CALCULATIONS									
CURB CUT #	D.A.	Peak Q (cfs)	HEAD H (ft)	90% eff. L (ft)	% FULL L / L (ft)	CAPACITY 90 % eff. H (ft)	ACTUAL H (ft)	90 % eff. H (ft)	ACTUAL H (ft)
1	100% A-2	0.88	0.5	0.83	2.00	42%	2.12	0.26	0.26
2	31% B-1	0.87	0.5	0.82	2.00	41%	2.12	0.26	0.26
3	37% B-1	1.04	0.5	0.98	2.00	49%	2.12	0.29	0.29
Q = 3.35 * L ^{0.64} * H ^{1.48}									
WEIR SIZE CALCULATIONS BASED ON 100-YR. 6-HR STORM									



BY
HJM

DESCRIPTION
ISSUE FOR PERMIT

REV
DATE
11/20/17

PER CITY & OWNER COMMENTS

ADAMS JOB NO.:
2017-135

Adams
8951 Cypress Waters Blvd, Suite 150 ■ Dallas, Texas 75019 ■ (817) 334-3100

1.9.18
G. Kowalski

15142

MCDONALD'S U.S. LLC
039-0022

MTN. SOUTHWEST FIELD EXECUTION TEAM
KROC DRIVE - OAK BROOK, ILLINOIS 60521

ADDRESS
511 E. JOHN CARPENTER FRWY, STE. 375
IRVING, TX 75062
(214) 533-7882
CONTACT: LEE MORRIS

5001 GIBSON SE
ALBUQUERQUE, NM

DESIGNED
NOV. 2017
HJM

DRAWN
NOV. 2017
HJM

CHECKED
NOV 2017
MDK

AS-BUILT

POST-DEVELOPED DRAINAGE PLAN

C8.1

CONTRACTOR
OWNER

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POST-DEVELOPED DRAINAGE PLAN

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