City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: TACO BELL RENOVATIONS Building Permit #: _____ City Drainage #: _____

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

Legal Description: TRACT 1-A-1 BLOCK 1 PLAT OF TRACTS 1-A-1 & 1-A-2 BLOCK 1 SANDIA PL

City Address: 4815 4TH ST. NW, ALBUQUERQUE, NM 87107

Engineering Firm: MILLER ENGINEERING CONSULTANTS, INC. Contact: KEVIN RUCKER

Address: 3500 COMANCHE NE, BLDG. F, ALBUQUERQUE, NM 87107

Phone#: 505-888-7500 Fax#: _____ E-mail: _____

Owner: ALVARADO CONCEPTS, INC. Contact: JEFF GELLER

Address: 924 W. COLFAX, DENVER, CO 80204

Phone#: 303-745-0555 Fax#: _____ E-mail: _____

Architect: GLMV ARCHITECTURE Contact: MARK DAYTON, RLA, ASLA

Address: 1525 E. DOUGLAS, WICHITA, KS 67211

Phone#: 316-265-9367 Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- X DRAINAGE PLAN 1st SUBMITTAL
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- ____ GRADING PLAN
- ____ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ____ ENGINEER'S CERT (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ ENGINEER'S CERT (ESC)
- ____ SO-19
- ____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

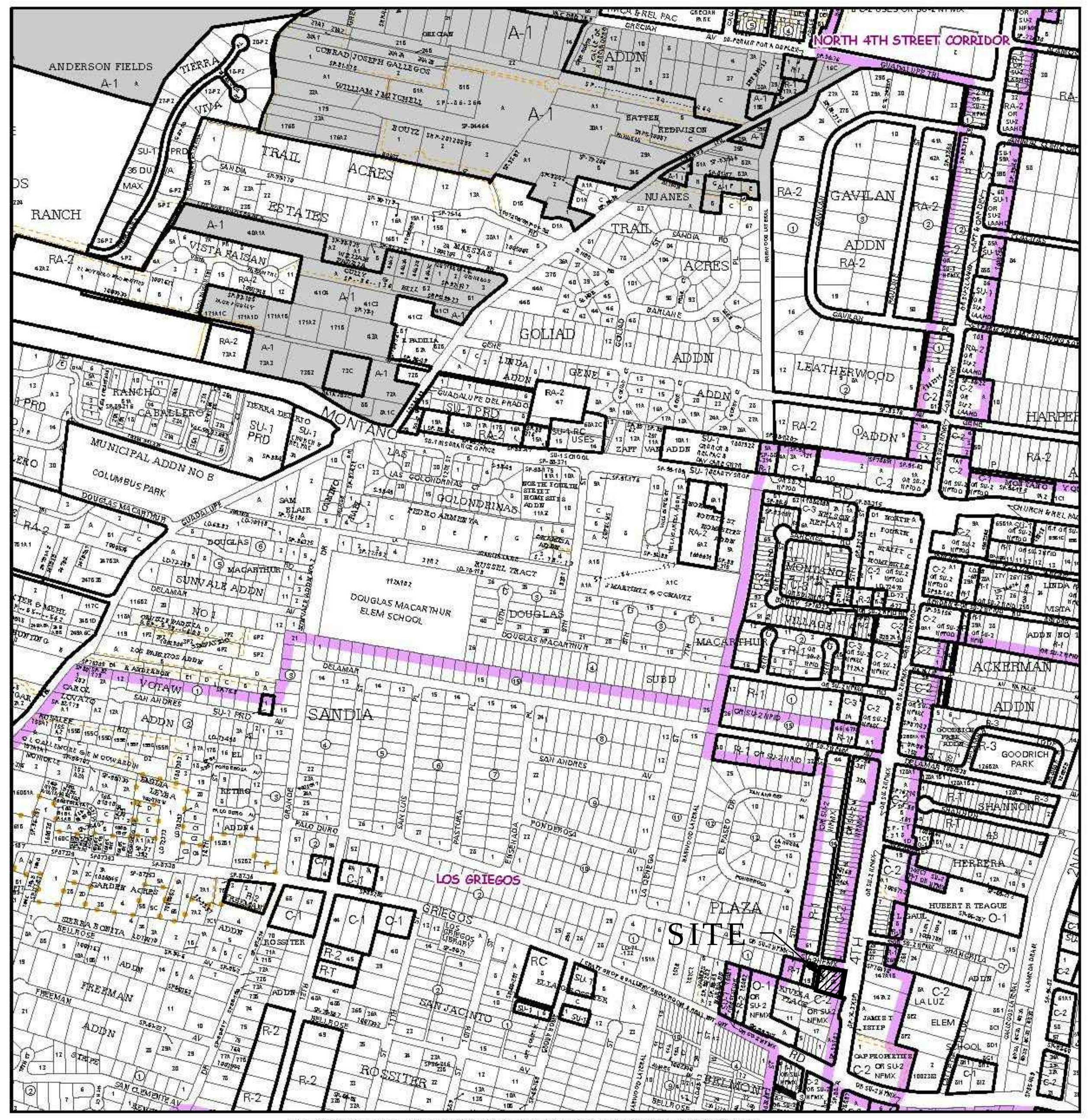
- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ GRADING CERTIFICATION
- ____ SO-19 APPROVAL
- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY)

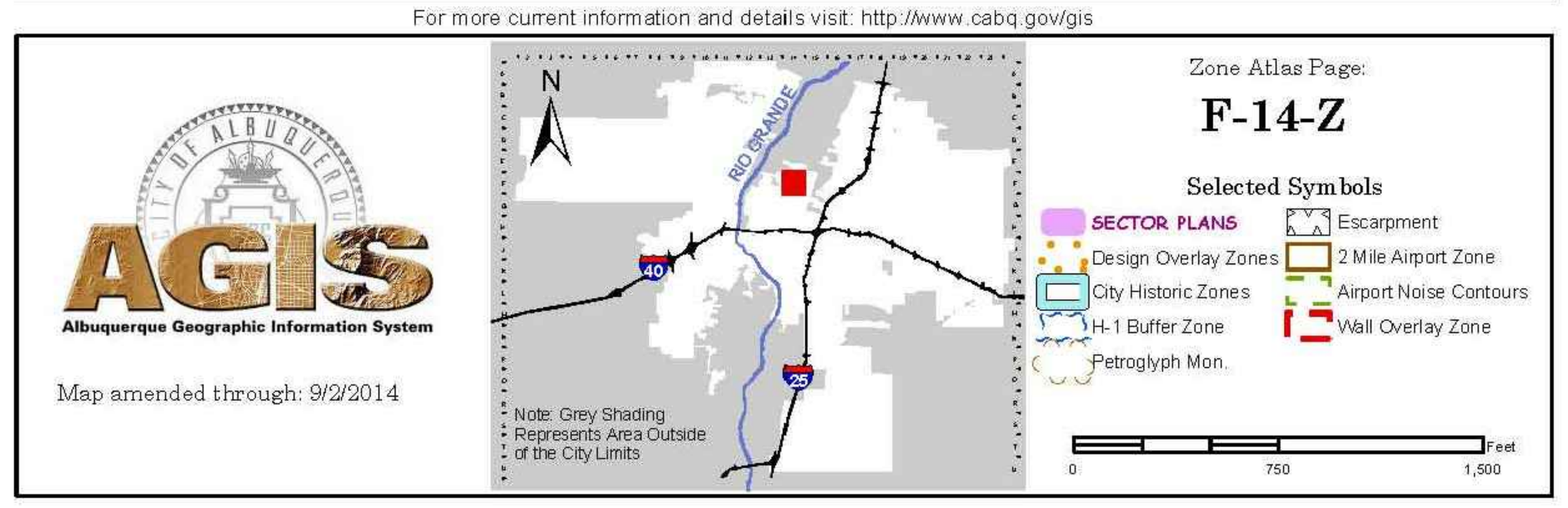
WAS A PRE-DESIGN CONFERENCE ATTENDED: ____ Yes X No ____ Copy Provided

DATE SUBMITTED: 8-18-2015 By: KEVIN RUCKER

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the followin

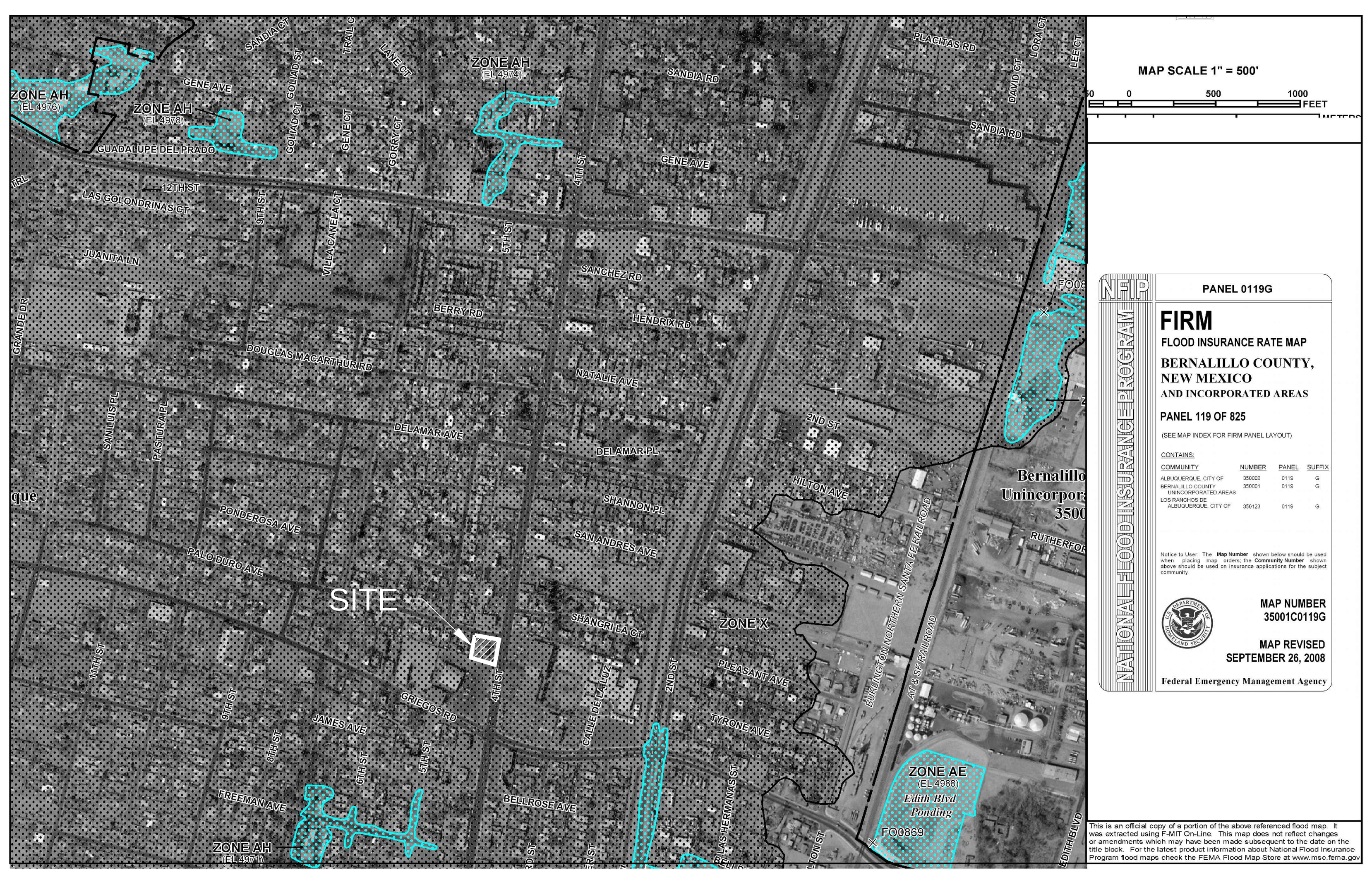
1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development





B1 VICINITY MAP

ZONE ATLAS MAP F-14-Z



A1 FLOOD ZONE MAP

FLOOD ZONE MAP: 35001C0353H

SITE LOCATION

TACO BELL IS LOCATED AT 4815 4th STREET N.W. IN ALBUQUERQUE, NM. THE BOUNDARY IS RECTANGULAR IN SHAPE AND BOUNDED BY EXISTING RESIDENCES TO THE WEST, EXISTING BUSINESS TO THE SOUTH, AN EXISTING PALO DURO STREET TO THE NORTH, AND 4TH STREET N.W. TO THE EAST.

EXISTING ON SITE CONDITIONS

THE SITE IS DEVELOPED WITH AN EXISTING ASPHALT PAVED PARKING AREA, EXISTING PIZZA HUT BUILDING. THE SITE IS ACCESSED FROM 4TH STREET N.W. ON THE EAST SIDE OF THE SITE. ALSO FROMTHE NORTHWEST CORNER ALONG PALO DURO. THE PROPERTY HAS ONE DRAINAGE BASIN, WHICH IS IDENTIFIED AS BASIN A. THIS REPORT FOCUSES ON THE PRE AND POST HYDROLOGY. BASIN A DRAINS TO NORTH INTO PALO DURO STREET N.W. VIA SURFACE FLOWS; THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE EXISTING PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN A.

PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT OF THE SITE WILL CONSIST OF A SMALL ADDITION TO THE EXISTING BUILDING, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, ASPHALT PARKING LOT, AND LANDSCAPING. THE IMPROVEMENTS ARE ALL LOCATED IN PROPOSED DRAINAGE BASIN A. BASIN A WILL FREE DISCHARGE INTO WATER HARVEST AREAS 1,2, AND 3 ALONG THE NORTH PORTION OF THE PROPERTY. THE REMAINING PORTION OF THE STORM WATER FLOW GENERATED FROM THE SITE WILL FREE DISCHARGE VIA SURFACE FLOW TO THE SOUTH INTO A NEW WATER HARVEST AREA NO. 4 AND TO THE EAST INTO FOURTH STREET. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE PROPOSED PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN A.

OFFSITE FLOWS

THERE ARE NO OFFSITE FLOWS THAT DRAIN ONTO THE SITE.

CONCLUSION

RUNOFF VOLUME AND FLOW RATE HAS DECREASED AS A RESULT OF CHANGES IN LAND TREATMENTS FOR BASINS A BY 0.007 ACRE FEET AND THE PEAK FLOW RATE HAS DECREASED BY 0.111 CFS. THE MAJORITY OF THE RUNOFF DEVELOPED FROM THE PROPOSED IMPROVEMENTS WILL DISCHARGE INTO THE PROPOSED WATER HARVEST AREAS THEN ULTIMATELY TO 4TH STREET OR PALO DURO STREET WHEN THE WATER HARVEST AREA REACHES CAPACITY. BASED ON THE CITY OF ALBUQUERQUE HYDROLOGY DEPARTMENT RULES FOR THE VALLEY, THE FIRST HALF INCH OF RAIN WILL BE RETAINED ONSITE. THAT CALCULATION WAS DETERMINED TO BE 675 CUBIC FEET OF RETENTION. THE PROPOSED WATER HARVEST AREA RETAINS 1350 CUBIC FEET WHICH EXCEEDS THE 102 CUBIC FEET CALCULATED FOR THE FIRST HALF INCH OF RAIN.

*THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE A SIDEWALK CULVERT, CURB AND GUTTERS AND CURB CUTS ALLOWING STORMWATER INTO AND OUT OF PROPOSED WATER HARVESTING AREAS. THESE WATER HARVESTING AREAS WILL BE USED TO MANAGE THE FIRST FLUSH AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. THE VOLUME OF THE FIRST FLUSH (0.44–0.1 INCHES * IMPERVIOUS AREA)= 460 cf. THE WATER HARVEST AREA VOLUME = 1350 cf > 70 cf. THEREFOR MANAGES THE FIRST FLUSH. (SEE CALCULATIONS BELOW)*

GENERAL NOTES:

1. EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC. CORRALES, NEW MEXICO JUNE 2015. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
2. PROJECT BENCHMARK IS A CITY OF ALBUQUERQUE SURVEY CONTROL 1 3/4 INCH METALLIC DISC EPOXIED TO THE TOP OF CONCRETE STORM DRAIN INLET STAMPED "ACS BM 18–G14". TO REACH THE STATION FROM THE INTERSECTION OF FOURTH STREET AND MENAUL BOULEVARD N.W. TRAVEL NORTH 1.35 MILES TO THE INTERSECTION OF GRIEGOS ROAD N.W., THE BENCHMARK IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION. ELEVATION = 4,972.953 FEET (NAVD 88 VERTICAL DATUM).
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
4. CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260–1990 FOR LOCATION OF EXISTING UTILITIES.
6. ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
7. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
8. THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
9. 100% OF THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE X (500 YEAR) FLOODPLAIN DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100–YEAR FLOOD PLANE ACCORDING TO THE FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO AND UNINCORPORATED AREAS PER MAP NO 35001C 0332G.
10. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
11. THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
12. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
13. THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
14. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
15. THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY THE NRCS FIELD OFFICE REPRESENTATIVE THAT IS APPROPRIATE FOR THE PROJECT LOCATION. ALL DISTURBED AREAS WITH SLOPES LESS THAN 3:1 SHALL RECEIVE CLASS "A" SEEDING. ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEEDING. THE STEEP SLOPE SEEDING SHALL CONSIST OF SEEDING IN CONJUNCTION WITH A 100% COCONUT FIBER BLEND EROSION BLANKET (NORTH AMERICAN GREEN C125) OR APPROVED EQUAL. ALL MATERIALS, EQUIPMENT AND LABOR ASSOCIATED WITH THE PROPER CONSTRUCTION OF THE STEEP SLOPE SEEDING WILL BE CONSIDERED INCIDENTAL AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS MATERIAL OR WORK. THE COCONUT FIBER EROSION BLANKET AND ASSOCIATED SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
17. THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
18. ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
19. THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
20. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
21. ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

SPECIAL ORDER 19

DRAINAGE FACILITIES WITHIN THE CITY RIGHT–OF–WAY NOTICE TO CONTRACTOR

1) AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT–OF–WAY.
2) ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
3) TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL 260–1990, FOR LOCATION OF EXISTING UTILITIES.
4) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5) BACK FILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6) MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
7) WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24 – HOUR BASIS.

WATER HARVEST VOLUMES

WATER HARVEST AREA 1 Proposed

Pond Rating Table				
Side Slope	1:1			
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
4971	200	0.005	0.000	0.000
4972	267	0.006	0.005	0.005
4973	343	0.008	0.012	0.018

WATER HARVEST AREA 2 Proposed

Pond Rating Table				
Side Slope	1:1			
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
4971	41	0.001	0.000	0.000
4972	77	0.002	0.001	0.001
4973	123	0.003	0.004	0.005

WATER HARVEST AREA 3 Proposed

Pond Rating Table				
Side Slope	1:1			
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
4972	88	0.002	0.000	0.000
4973	213	0.005	0.003	0.003

WATER HARVEST AREA 4 Proposed

Pond Rating Table				
Side Slope	1:1			
Depth	Area		Volume	Cum Volume
(ft)	(sq ft)	(ac)	(ac-ft)	(ac-ft)
4972	155	0.004	0.000	0.000
4973	272	0.006	0.005	0.005

DRAINAGE DATA

Precipitation Zone 2 - 100-year Storm P(360) = 2.33 in P(1440) = 2.67 in

Basin	Basin Area (Ac)	Land Treatment Factors A	B (Acres)	C	D	Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
Existing Conditions									
A	0.370	0.000	0.000	0.015	0.355	2.080	0.064	0.076	1.716
Total	**0.370**							**0.076**	**1.716**
Proposed Conditions									
1	0.360	0.000	0.000	0.056	0.304	1.97	0.059	0.069	1.605
Total	**0.360**							**0.069**	**1.605**

Precipitation Zone 2 - 10-year Storm P(360) = 1.52 in P(1440) = 1.8 in

Basin	Basin Area (Ac)	Land Treatment Factors A	B (Acres)	C	D	Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)
Existing Conditions									
A	0.300	0.000	0.000	0.000	0.300	2.120	0.053	0.063	1.410
Total	**0.300**							**0.063**	**1.410**
Proposed Conditions									
1	0.360	0.000	0.000	0.000	0.360	1.340	0.040	0.048	1.130
Total	**0.360**							**0.048**	**1.130**

MILLER ENGINEERING CONSULTANTS
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MARK D. McCLUGGAGE
1525 E. Douglas Wichita, KS 67211
Tel: (316) 265-9367 Fax: (316) 265-5646
www.gbmarc.com

VERLYN A. MILLER NEW MEXICO 14507 REGISTERED PROFESSIONAL ENGINEER 8/7/15

12134.140

CONTRACT DATE:	07.08.2015
BUILDING TYPE:	EXPLORER
PLAN VERSION:	ARRIL 2015 (N)
SITE NUMBER:	XXX-XXX
STORE NUMBER:	XXXXX

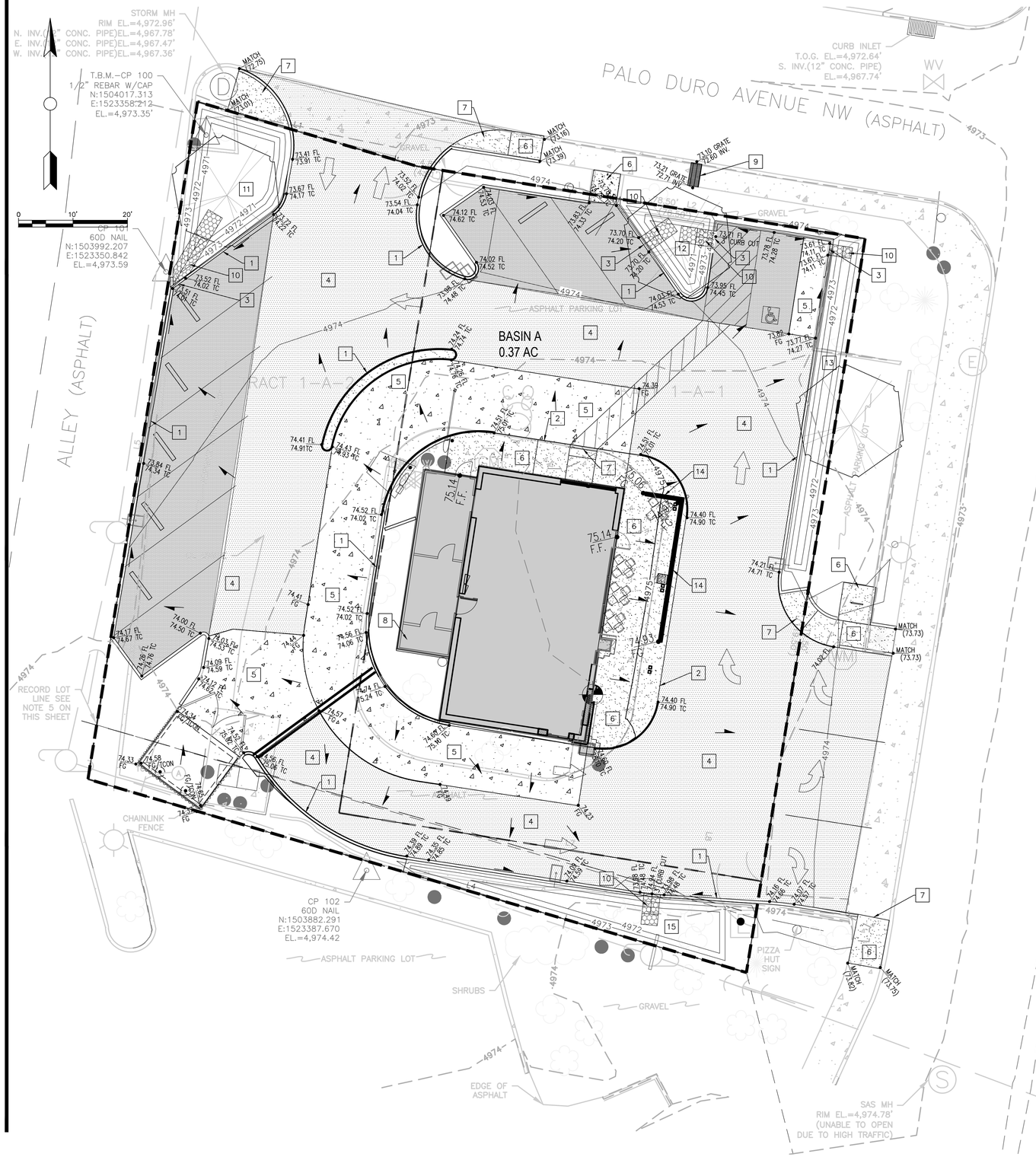
TACO BELL

4815 4TH STREET NW
ALBUQUERQUE, NM

EXPLORER
CONVERSION

DRAINAGE REPORT

C-100



LEGEND:

38.00 FG	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)
MATCH (95.19)	MATCH EXISTING ELEVATIONS
TCON	TOP OF CONCRETE
FL	FLOW LINE, CURB
INV	INVERT
FG	FINISH GRADE
TBC	TOP OF BASE COURSE
TC	TOP OF CURB
TG	TOP OF GRATE
	FLOW ARROW
	GRADE BREAK–HIGH POINT
	SWALE
SD	STORM DRAIN LINE
5895	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
5895	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	HEAVY DUTY ASPHALT PAVING
	LIGHT DUTY ASPHALT PAVING
	HEAVY DUTY CONCRETE PAVING
	PROPOSED BASIN BOUNDARY

1 KEYED NOTES:

1. NEW CURB AND GUTTER. SEE ARCHITECTURAL PLANS FOR DETAIL.
2. NEW TURN DOWN CONCRETE SIDEWALK EDGE. SEE ARCHITECTURAL PLANS FOR DETAIL.
3. NEW 3' CURB CUT.
4. NEW HEAVY DUTY ASPHALT PAVING. SEE SECTION DETAILS ON ARCHITECTURAL PLANS AND IN THE GEOTECHNICAL REPORT.
5. NEW HEAVY DUTY CONCRETE PAVING, SEE SECTION DETAILS ON ARCHITECTURAL PLANS AND IN THE GEOTECHNICAL REPORT.
6. NEW CONCRETE SIDEWALK. SEE ARCHITECTURAL PLANS FOR DETAIL.
7. NEW CONCRETE HC ACCESS RAMPS, SEE ARCHNITECTURAL PLANS FOR DETAIL.
8. NEW BUILDING ADDITION. SEE ARCHITECTURAL PLANS FOR DETAILS.
9. NEW SIDEWALK CULVERT PER C.O.A. STD. DWG. 2236, SEE SHT. C–500.
10. NEW LOOSE RIP RAP RUNDOWN. SEE SHEET C–500 FOR DETAILS.
11. NEW WATER HARVEST AREA 1. TOP=73.0, INV=71.0. SIDE SLOPE 1:1. SEE DETAIL ON SHEET C–500.
12. NEW WATER HARVEST AREA 2. TOP=73.0, INV=71.0 SIDE SLOPE 1:1. SEE DETAIL ON SHEET C–500.
13. NEW WATER HARVEST AREA 3. TOP=73.0, INV=72.0. SIDE SLOPE 1:1. SEE DETAIL ON SHEET C–500.
14. NEW WALL WITH WEEP HOLES, SEE ARCHITECTURAL DRAWINGS FOR INFO.
15. NEW WATER HARVEST AREA 4. TOP=73.0, INV=72.0. SIDE SLOPE 1:1. SEE DETAIL ON SHEET C–500.

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JERILYN A. MILLER
NEW MEXICO
14507
REGISTERED PROFESSIONAL ENGINEER
8/14/15

12134.140

CONTRACT DATE:	07.08.2015
BUILDING TYPE:	EXPLORER
PLAN VERSION:	ARRIL 2015 (N)
SITE NUMBER:	XXX-XXX
STORE NUMBER:	XXXXX

TACO BELL
4815 4TH STREET NW
ALBUQUERQUE, NM

EXPLORER
CONVERSION

GRADING AND
DRAINAGE PLAN

C-101

MILLER ENGINEERING CONSULTANTS
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3500 COMANCHE, NE
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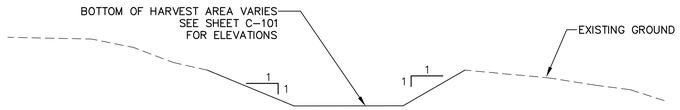
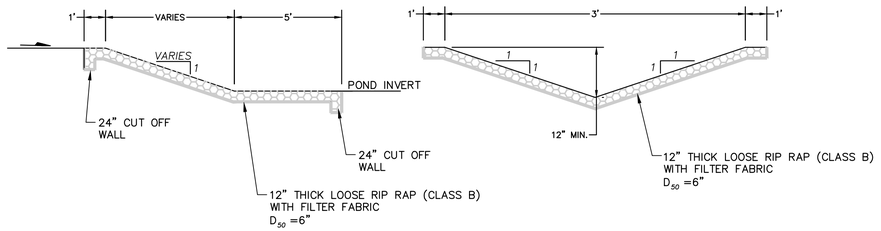
ALBUQUERQUE, NM 87107
(505)888–7500
(505)888–3900 (FAX)
WWW.MECNM.COM



D TYPICAL WATER HARVEST DETAIL

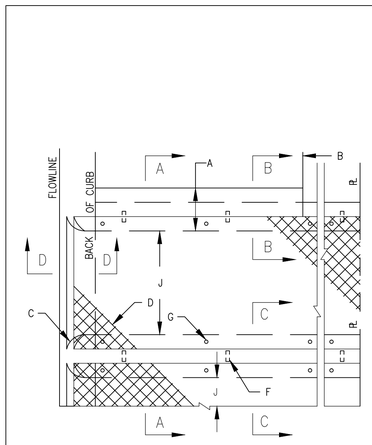
SCALE: NOT TO SCALE



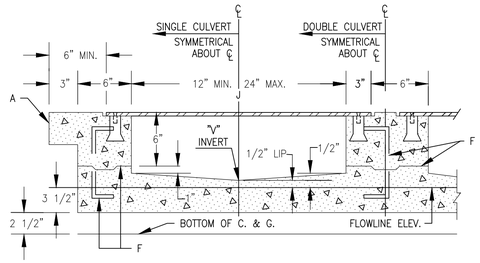
PROFILE SECTION

E RIP RAP RUNDOWN DETAIL

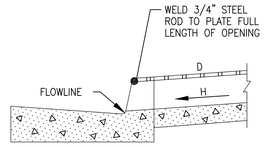
SCALE: NOT TO SCALE



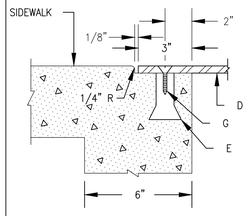
PLAN
SINGLE AND OR MULTIPLE CULVERT



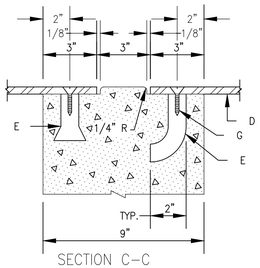
SECTION A–A



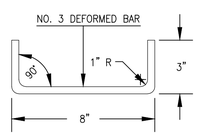
SECTION D–D



SECTION B–B



SECTION C–C



DOWEL DETAIL

GENERAL NOTES:

1. PLACING OF DRAIN THRU EXIST. SIDEWALK AND CURB & GUTTER REQUIRES THAT ENTIRE SIDEWALK AND C & G STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX. DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED TO PARALLEL FLOWLINE AT OUTLET, UNLESS OTHERWISE SHOWN.
4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE, COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK.
5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H. MACHINE SCREW. ATTACH ANCHORS TO PLATE AND SECURE PLATE IN PLACE PRIOR TO POURING OF WALLS.
7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT W/ ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
8. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.

CONSTRUCTION NOTES:

A. MATCH NEAREST CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT.
B. EDGE OF SIDEWALK OR SETBACK (VARIABLE).
C. 3" RADIUS (TYPICAL).
D. 3/8" CHECKERED STEEL PLATE (PAINT PER NOTE 7, ABOVE).
E. FOR SECURING PLATE USE 1" X 5" S.S. ROD ANCHOR, "RED HEAD MULTI-SET II SRM-38 ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTRUCTIONS AT MAX. 24" O.C., A MINIMUM OF 2 PER SIDE AND ONE WITHIN 6" OF EACH END.
F. CONSTRUCTION JOINT IS OPTIONAL. IF USED, SPACE DOWELS AT 18" O.C. MAX., 1 1/2" MINIMUM FROM FACE OF CONCRETE.
G. 3/8" – 16 X 1 1/4" COUNTERSUNK, F.H., STAINLESS STEEL, MACHINE SCREW.
H. SLOPE 1/4" PER FT. MIN.
J. DRAIN WIDTH PER PLAN (12" MIN., 24" MAX.).

CITY OF ALBUQUERQUE

REVISIONS

DRAINAGE
SIDEWALK CULVERT
WITH STEEL PLATE TOP

DWG. 2236 AUG. 1986

A1 MISCELLANEOUS DETAILS

SCALE: NOT TO SCALE

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CONTRACT DATE: 07.08.2015
BUILDING TYPE: EXPLORER
PLAN VERSION: ARRIL 2015 (N)
SITE NUMBER: XXX-XXX
STORE NUMBER: XXXXX

TACO BELL

4815 4TH STREET NW
ALBUQUERQUE, NM

TACO BELL
EXPLORER
CONVERSION

MISCELLANEOUS
DETAILS

C-500

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