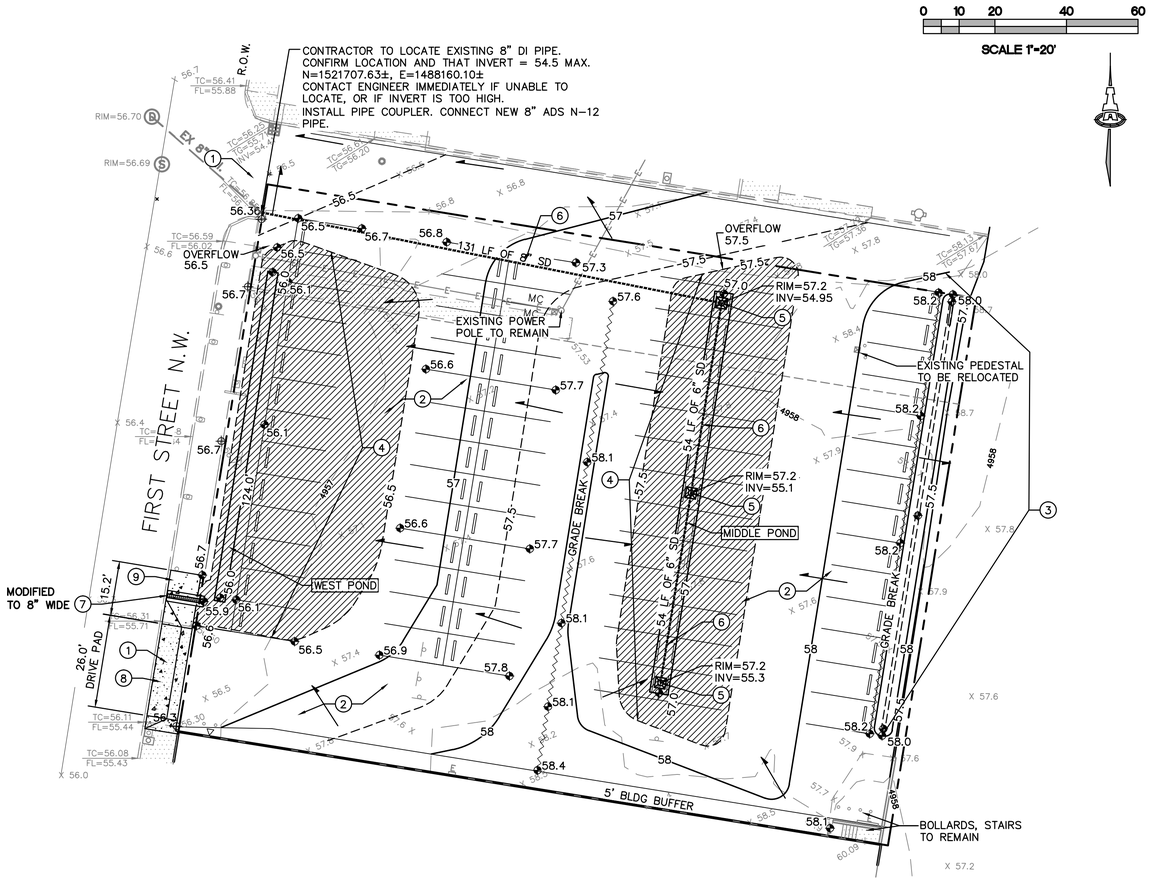
S.O.19 : NOTICE TO CONTRACTORS

1	AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2	ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8.
3	TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM ('CALL '811') 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	BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
6	MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7	WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		



GENERAL NOTES

A. COORDINATE WORK WITH SITE PLAN

B. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.

C. FINAL GRADES SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.

D. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. 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.

E. ADJUST RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES, TYPICAL.

F. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS.

G. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY AREAS OF EROSION AND INSTALL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

H. PER THE SURVEY: 'THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCED HEREON'.

VICINITY MAP

LEGEND

× 5414.18	EXISTING SPOT ELEVATION
⊕13.6±	PROPOSED SPOT ELEVATION AT TRANSITION TO EXISTING
⊕13.6	PROPOSED SPOT ELEVATION
	FLOW DIRECTION
04	PROPOSED 1' CONTOUR
04.5	PROPOSED 0.5' CONTOUR
F.F. =	FINISH FLOOR ELEVATION
	GRADE BREAK
	EXISTING STORM DRAIN INLET
	PROPOSED 6" DRAIN PIPE

KEYED NOTES

1. EXISTING ACCESS DRIVE.
2. NEW PAVED PARKING AT ELEVATIONS SHOWN. SEE GENERAL NOTE 'C'.
3. SHALLOW RETENTION PONDING AREA: DEPRESS LANDSCAPING 6" TO ELEVATIONS SHOWN. EXCESS FLOW WILL OVERFLOW TO NORTH.
4. SHALLOW DETENTION PONDING AREA: DEPRESS GRAVEL 6" TO ELEVATIONS SHOWN. EXCESS FLOW WILL OVERFLOW TO NORTH.
5. ADS 8" IN-LINE DRAIN AT RIM ELEVATION SHOWN IN PLAN. CONSTRUCT PER IN-LINE DRAIN DETAIL ON THIS SHEET.
6. EXTEND PRIVATE STORM DRAIN (6" ADS N-12 PIPE) AT INVERT ELEVATIONS SHOWN TO NEW PUBLIC STORM DRAIN INLET @ MINIMUM 0.4% SLOPE. MINIMUM COVER = 12".
7. MODIFY SIDEWALK CULVERT PER COA STD DWG #2236 TO BE 8" WIDE. EXTEND 2' EAST OF SIDEWALK. WELD ⅜" THICK, ⅝" MIN. DIAMETER OVER ALL SCREWS. COMPLETELY COVER SCREW HEADS. GRIND EDGES SMOOTH. INV(E)=55.9, INV(W)=55.7
8. CAREFULLY REMOVE AND DISPOSE OF EXISTING DRIVEPAD. REPLACE PER COA STD DWG #2425.
9. CAREFULLY REMOVE AND DISPOSE OF EXISTING SIDEWALK. REPLACE PER COA STD DWG #2460.

PROJECT DATA

PROPERTY: THE SITE IS CURRENTLY A DIRT PARKING LOT WITH PARKING BUMPERS PROVIDED TO DEFINE SPACES WITHIN CITY OF ALBUQUERQUE ZONE MAP J-14. THE SITE IS BOUND TO THE WEST BY 1ST STREET NW, TO THE NORTH AND SOUTH BY FULLY DEVELOPED COMMERCIAL BUILDINGS AND TO THE EAST THE AT&SF RAIL ROAD TRACKS.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE FINE GRADING AND GRAVEL PAVING TO DEFINE DRAINAGE AND IMPROVE THE PARKING SURFACE.

LEGAL: LOTS 1 THRU 5 AND 20 THRU 24 TOGETHER WITH A PORTION OF VACATED FRUIT AVENUE AND A PORTION OF VACATED 16' ALLEY BLOCK 16 FRANCISCO ARMIJO Y OTERO ADDITION CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

ADDRESS: 702 1ST STREET NW

AREA: 0.7140 ACRE

BENCHMARK: AGRS BRASS CAP STAMPED "17-J14" LOCATED AT LOMAS AND 8TH STREET IN THE MEDIAN ON THE WEST SIDE OF THE INTERSECTION. ELEVATION=4957.484 (NAVD88)

OFF-SITE: NO OFF-SITE FLOW IMPACTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0334G, THE SITE IS LOCATED WITHIN FLOODZONE 'X' (UNSHADED) DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN. FIRST STREET, ADJACENT TO THE PROPERTY, IS LOCATED WITHIN FLOODZONE 'AO' (DEPTH 1').

SURVEYOR: ALDRICH LAND SURVEYING
P.O. BOX 30701
ALBUQUERQUE, NEW MEXICO 87190
PHONE: 505-884-1990

DRAINAGE PLAN CONCEPT

PER A PRE-DESIGN MEETING WITH C.O.A. HYDROLOGY, THE ALLOWABLE DISCHARGE RATE FOR THIS PROPERTY IS 2.75 CFS / ACRE. AT 0.71 ACRES, THIS PROPERTY'S ALLOWABLE DISCHARGE RATE = 1.96 CFS. THE PROPERTY WILL GENERATE APPROXIMATELY 3.19 CFS DURING A 100-YEAR 6-HOUR STORM EVENT.

DISCHARGE FROM THE IMPROVED PARKING LOT WILL BE DIRECTED AWAY FROM THE DRIVE AISLES. TWO DETENTION AREAS WILL BE CREATED TO STORE THE VOLUME IN EXCESS OF ALLOWABLE. THE WEST PONDING AREA WILL DISCHARGE 0.8 CFS TO 1ST STREET THROUGH A 8"' WIDE SIDEWALK CULVERT. (SEE ADDITIONAL INFORMATION SUBMITTED WITH THIS PACKAGE FOR CULVERT AND PIPE CAPACITY CALCULATIONS.) 1.1 CFS FROM THE MIDDLE PONDING AREA WILL BE CAPTURED BY AREA DRAINS AND A 6" PIPE FOR ROUTING TO AN EXISTING 8" C.I. PUBLIC STORM DRAIN LOCATED AT THE NORTHWEST CORNER OF THE PROPERTY (S.O.19 PERMIT REQUIRED FOR PROPOSED CONNECTION). IF THIS PIPE IS UNABLE TO BE LOCATED IN THE FIELD, OR THE INVERT IS HIGHER THAN ANTICIPATED, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY AT (505) 268-8828.

THE REQUIRED PONDING VOLUMES ARE:
MIDDLE POND = 766 CF. PROVIDED PONDING = 1,254 CF
WEST POND = 1,255 CF. PROVIDED PONDING = 1,257 CF

CALCULATIONS: 614 1st. Street Parking Lot : 3/12/2014

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE

AREA OF SITE: 31102 SF = 0.71

100-year, 6-hour

DEVELOPED FLOWS:

		Treatment SF	%
Area A	=	0	0%
Area B	=	0	0%
Area C	=	1555	5%
Area D	=	29547	95%
Total Area	=	31102	100%

EXCESS PRECIP:

Precip. Zone 2

E_A = 0.53
E_B = 0.78
E_C = 1.13
E_D = 2.12

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

Weighted E = $\frac{E_AA_A + E_BA_B + E_CA_C + E_DA_D}{A_A + A_B + A_C + A_D}$

Developed E = 2.07 in.

On-Site Volume of Runoff: V360 = E*A / 12

Developed V_{360} = 5366 CF

On-Site Peak Discharge Rate: $Qp = Q_{pA}A_A + Q_{pB}A_B + Q_{pC}A_C + Q_{pD}A_D / 43{,}560$

For Precipitation Zone 2

Q_{pA} = 1.56 Q_{pC} = 3.14

Q_{pB} = 2.28 Q_{pD} = 4.70

Developed Q_p = 3.30 CFS

The overall site consists of 0.714003673094582 acre(s) located in Zone 2 which is designated as properties D. The 100-year, 6-hour historic discharge is 0 cfs. The proposed developed discharge is 3.3 cfs.

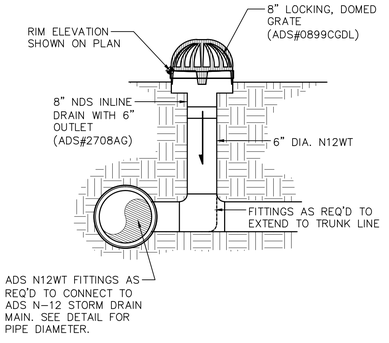
MIDDLE PONDING

Contour	Area	Volume
4957.50	4425	
4957.00	590	1254 CF
TOTAL VOL.		1254 CF

WEST PONDING

Contour	Area	Volume
4956.50	4754	
4956.00	275	1257 CF
TOTAL VOL.		1257 CF

TOTAL PONDING 2511 CF



8 **IN-LINE DRAIN: DOMED GRATE**
SEE STORM DRAIN EXHIBIT SCALE: N.T.S.

GENEVIEVE L. DONART NEW MEXICO 15088 LICENSED PROFESSIONAL ENGINEER

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com

1965 CG-101.dwg May 01,2014

614 1ST STREET PARKING LOT IMPROVEMENTS

614 1ST STREET PARTNERS

GRADING AND DRAINAGE PLAN

Date:	No.	Revision	Date	Job No.
10-21-13				1965
Drawn By: BJB				CG-101
Ckd By: FCA				SH. OF