CITY OF ALBUQUERQUE

November 24, 2014

Ms. Genevieve Donart, PE
Isaacson & Arfman, PA
1287 Monroe Street NE
Albuquerque, NM 87108

Re: Innova Plaza
Grading and Drainage Plan
Engineer's Date 11-13-14 (L20D067)

Dear Ms.Donart,

Based upon the information provided in your submittal received 11-14-14, the above referenced plan is approved for Grading Permit and Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3994.

Sincerely,

Amy L. D. Niese, P.E.
Senior Engineer, Hydrology
Planning Department

C: e-mail
file

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Innova Plaza Building Permit #: _____ City Drainage #: L20/D067

DRB#: _____ EPC#: _____ Work Order#: 638282

Legal Description: Lot 1A, Block 48, Skyline Heights,

City Address: _____

Engineering Firm: Isaacson & Arfman, P.A. Contact: Genny Donart

Address: 128 Monroe Street NE - Albuquerque, NM 87108

Phone#: (505) 268-8828 Fax#: _____ E-mail: gennyd@iacivil.com

Owner: Glad, LLC Contact: Doug Adams

Address: 39 Canyon Ridge Dr, Sandia Park, NM 87047

Phone#: (505) 379-5341 Fax#: _____ E-mail: dadamsclan@msn.com

Architect: Rick Bennett Architect, Inc. Contact: Rick Bennett

Address: 1104 Park Ave. SW, Albuquerque, NM 87102

Phone#: 505-242-1859 ext 185 Fax#: _____ E-mail: rick@rba81.com

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL
- X DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- X 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:

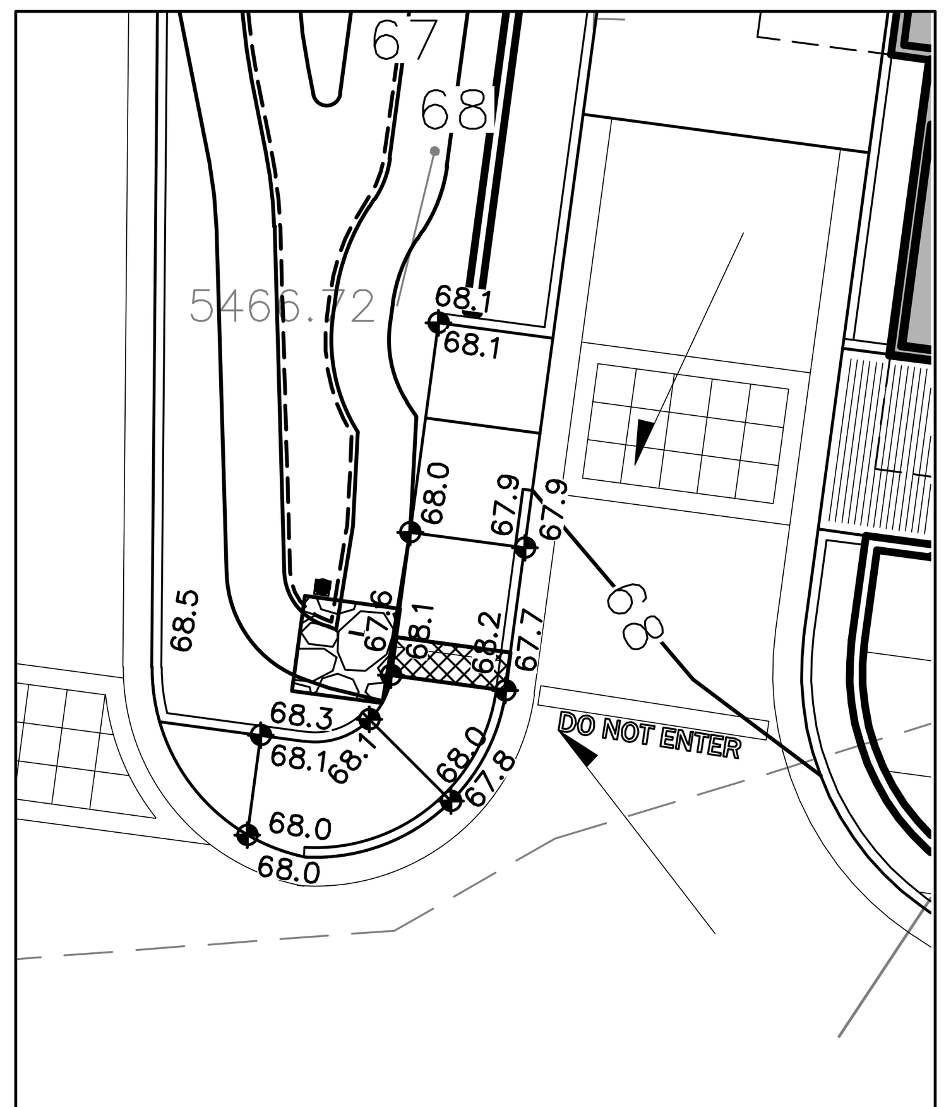
- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- X GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- X 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

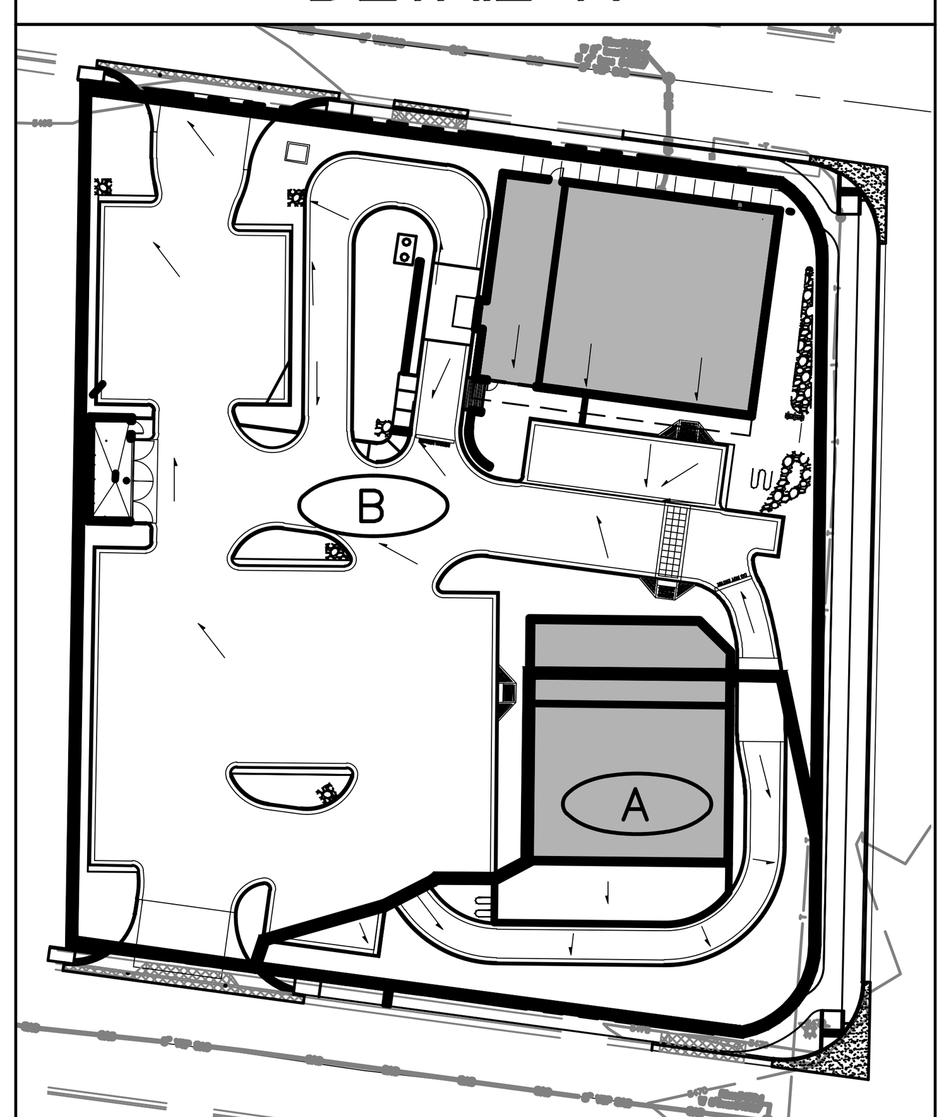
DATE SUBMITTED: November 13, 2014 By: Genny Donart
Isaacson & Afrman, P.A.

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

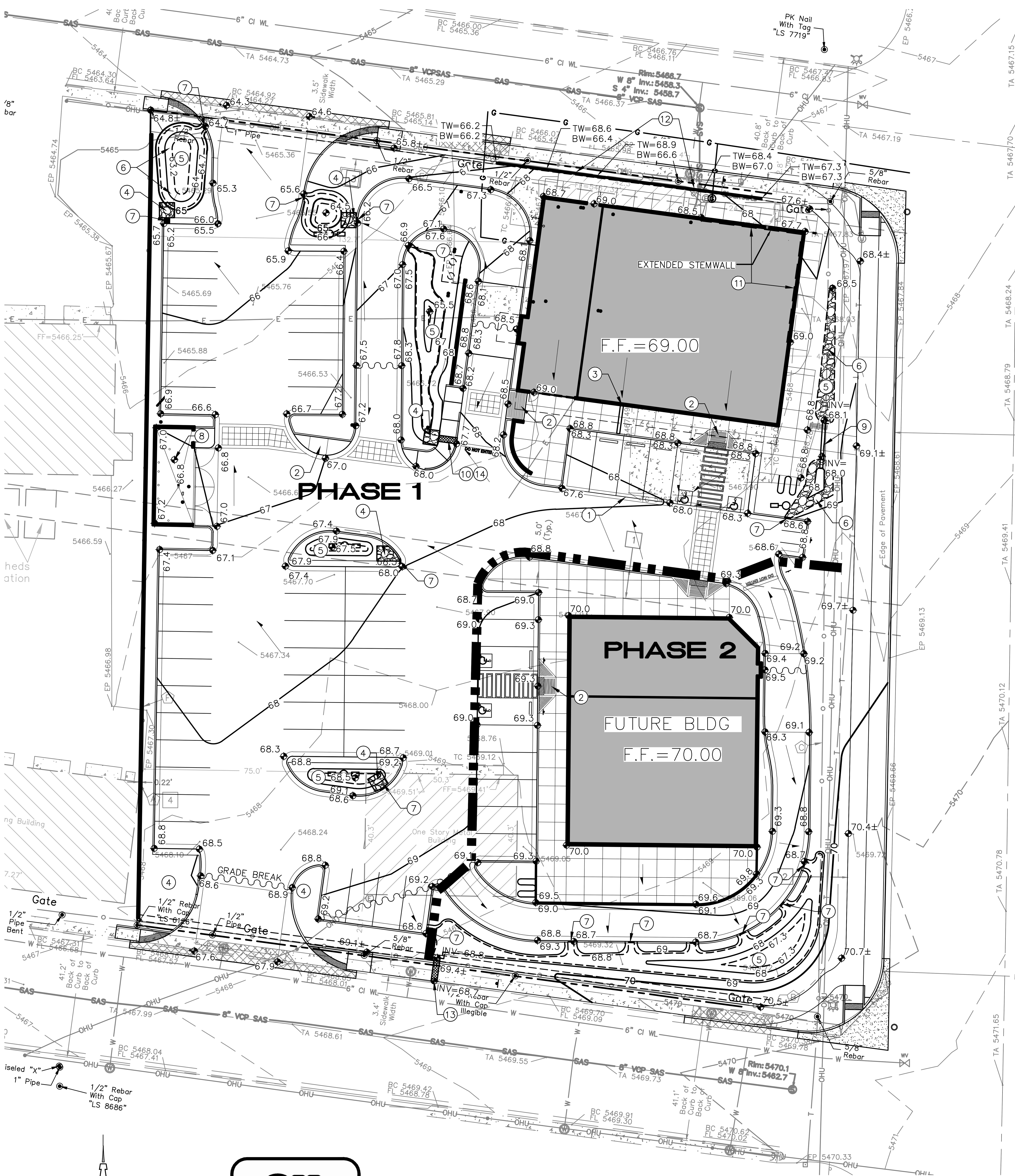
1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for 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



DETAIL "A"



BASIN MAP SCALE: 1"=60'



SCALE 1"=20'

Know what's below. Call before you dig.

KEYED NOTES

1. CONCRETE ALLEY GUTTER PER DETAIL ON SHEET CG–501.
2. HANDICAP RAMP PER ARCHITECTURAL SITE PLAN.
3. TRENCH DRAIN THROUGH SIDEWALK PER DETAIL ON SHEET CG–501. ADJUST LOCATION AS NECESSARY TO MATCH ROOF DRAIN.
4. 5'X5'X12" THICK FRACTURED FACE ROCK, AT DOWNSTREAM SIDE OF CURB CUT/SIDEWALK CULVERT. INSTALL OVER GEOTEX 501 NON–WOVEN GEO–TEXTILE. VARY ROCK SIZE FROM 4" TO 8" DIA. (6" MEDIAN.) TOP OF ROCK ELEVATIONS MUST MATCH PROPOSED GRADE TO CONVEY WATER AT DISCHARGE POINTS.
5. WATER HARVESTING AREA TO TREAT "FIRST FLUSH". INSTALL PER GRADES SHOWN.
6. 12" THICK FRACTURED FACE ROCK, ON SIDE SLOPES OF WATER HARVESTING POND OVER GEOTEX 501 NON–WOVEN GEO–TEXTILE. VARY ROCK SIZE FROM 4" TO 8" DIA. (6" MEDIAN.) TOP OF ROCK ELEVATIONS MUST MATCH PROPOSED GRADE TO CONVEY WATER AT DISCHARGE POINTS.
7. 2' WIDE CURB OPENING PER DETAIL ON SHEET CG–501.
8. GRADE CONCRETE DUMPSTER PAD TOWARDS DRAIN.
9. 2–4" PVC PIPES THROUGH SIDEWALK PER DETAIL ON SHEET CG–501.
10. 2' WIDE SIDEWALK CULVERT PER COA STD DWG #2236.
11. EXTENDED STEMWALL.
12. RETAINING WALL.
13. 2' WIDE SIDEWALK CULVERT IN RIGHT–OF–WAY TO BE INSTALLED AND INSPECTED AS PART OF WORK ORDER PERMIT.
14. SEE DETAIL "A" ON THIS SHEET.

CALCULATIONS

CALCULATIONS: Innova Plaza :

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

ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM

AREA OF SITE: 62108.63 SF = 1.4 AC.

HISTORIC FLOWS:

		Treatment	%
Area A	=	0	0%
Area B	=	0	0%
Area C	=	46581.473	75%
Area D	=	15527.158	25%
TOTAL	=	62108.63	100%

DEVELOPED FLOWS:

		Treatment	%	**EXCESS PRECIP:**
				Precip. Zon 3
Area A	=	0	0%	$E_A = 0.66$
Area B	=	3105	5%	$E_B = 0.92$
Area C	=	6211	10%	$E_C = 1.29$
Area D	=	52792	85%	$E_D = 2.36$
TOTAL	=	62108.63	100%	

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

$$\text{Weighted } E = \frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$$

Historic	=	1.56 in.	Developed E	=	2.18 in.

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

Historic	=	8061 CF	Developed V	=	11288 CF

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

For Precipitation Zone 3

Q_{pA} = 1.87 Q_{pC} = 3.45

Q_{pB} = 2.60 Q_{pD} = 5.02

Historic Q	=	5.5 CFS	Developed Q	=	6.8 CFS

BASIN NO.	A			DESCRIPTION	Discharges to Trumbull thru sdwk culvert		
Area of basin flows =		11498	SF	=	0.3	Ac.	
The following calculations are based on Treatment areas as shown in table to the right						LAND TREATMENT	
		Sub-basin Weighted Excess Precipitation (see formula above)				A =	0%
		Weighted E	=	2.18	in.	B =	5%
		Sub-basin Volume of Runoff (see formula above)				C =	10%
		V_{360}	=	2090	CF	D =	85%
		Sub-basin Peak Discharge Rate: (see formula above)					
		Q_P	=	1.3	cfs		

BASIN NO.	B			DESCRIPTION	Discharges to Bell Ave		
Area of basin flows =		50611	SF	=	1.2	Ac.	
The following calculations are based on Treatment areas as shown in table to the right						LAND TREATMENT	
		Sub-basin Weighted Excess Precipitation (see formula above)				A =	0%
		Weighted E	=	2.18	in.	B =	5%
		Sub-basin Volume of Runoff (see formula above)				C =	10%
		V_{360}	=	9198	CF	D =	85%
		Sub-basin Peak Discharge Rate: (see formula above)					
		Q_P	=	5.5	cfs		

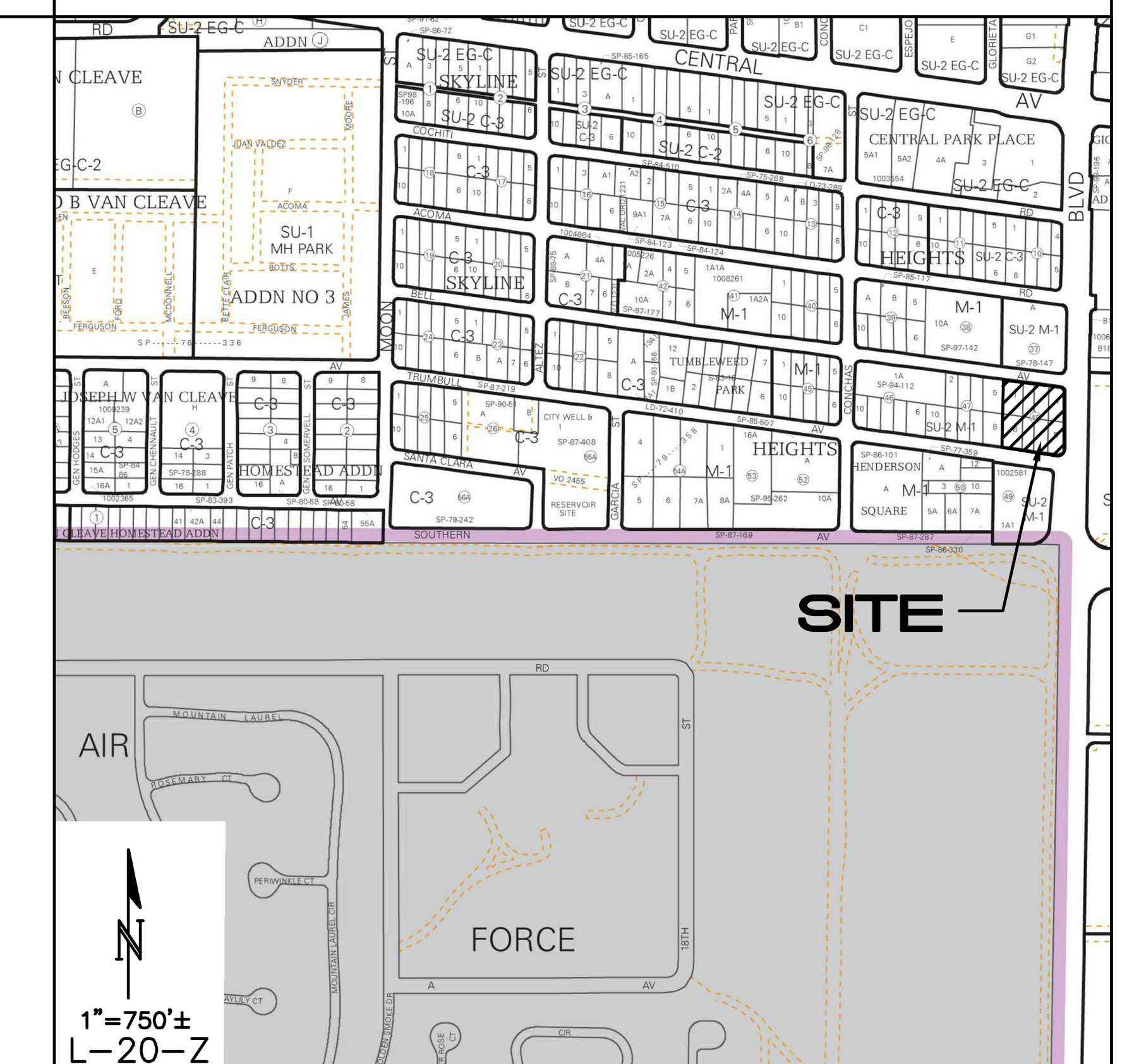
90% STORM "FIRST FLUSH" RETENTION:

V_{FF} = AREA OF %D X 0.34"/12

V_{FF} = 52,792 SF X 0.34"/12 = 1,496 CF

TOTAL PONDING PROVIDED = 1,520 CF > REQUIRED.

VICINITY MAP



PROJECT DATA

LEGAL DESCRIPTION: LOT 1A, BLOCK 48, SKYLINE HEIGHTS SUBDIVISION

SITE AREA: 1.43 ACRES

FLOOD ZONE: THIS SITE IS OUTSIDE THE 100–YEAR FLOODPLAIN PER FEMA FIRM PANEL NO. 35001C00358H DATED 08/16/2012.

ENGINEER: GENEVIEVE DONART
ISAACSON & ARFMAN, P.A.
128 MONROE ST NE, ABQ. NM 87108
PHONE: (505) 268–8828

SURVEYOR: CARTESIAN SURVEYS, INC.
P.O. BOX 44414
RIO RANCHO, NM 87174
PHONE: (505) 896–3050

BENCHMARK: ACS MONUMENT "4–L22"
ELEV=5586.425 (NAVD 1988)

EXISTING CONDITIONS: THE EXISTING SITE WAS FORMERLY A SCHOOL BUS YARD. THERE IS SOME CONCRETE REMAINING FROM OLD BUILDING FOUNDATIONS. THE SITE SLOPES FROM THE SOUTHEAST TO THE NORTHWEST AT APPROXIMATELY 1.5%. ONSITE STORM WATER OF 5.5 CFS DISCHARGES TO BELL AVE OVER THE SIDEWALK. THE ADJACENT HALF OF EUBANK BLVD DRAINS ONTO THE PROPERTY.

PROPOSED CONDITIONS: THE PROPOSED SITE WILL HAVE ONE 5,700 SF BLDG, (NORTH) AND A SECOND PAD FOR A FUTURE BUILDING (SOUTH). CURB IS ADDED ALONG THE ADJOINING EDGE OF EUBANK, WHICH WILL REDIRECT OFFSITE FLOW TO THE NORTH. THE SITE DISCHARGES 5.5 CFS TO BELL AVE FROM THE NORTHWEST DRIVEPAD AND 1.3 CSF TO TRUMBULL AVE FROM A 2' WIDE SIDEWALK CULVERT.

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- 78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- FF = 6881.0 FINISH FLOOR ELEVATION
- TW=99.0 / BW=95.0 GROUND AT TOP OF RETAINING WALL / GROUND AT BASE OF RETAINING WALL ELEVATION
- INV=72.5 INVERT ELEVATION

INNOVA PLAZA - SITE DEVELOPMENT
GRADING & DRAINAGE PLAN
401 EUBANK SE, ALBUQUERQUE, NM 87123
PROJECT #1459

REVISION DATE

GENEVIEVE L. DONART, NEW MEXICO, 15088, LICENSED PROFESSIONAL ENGINEER
11/13/14

RBA ARCHITECTURE PLANNING DESIGN

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

2055 CG-101.dwg Nov 13,2014

DATE
NOVEMBER 13, 2014

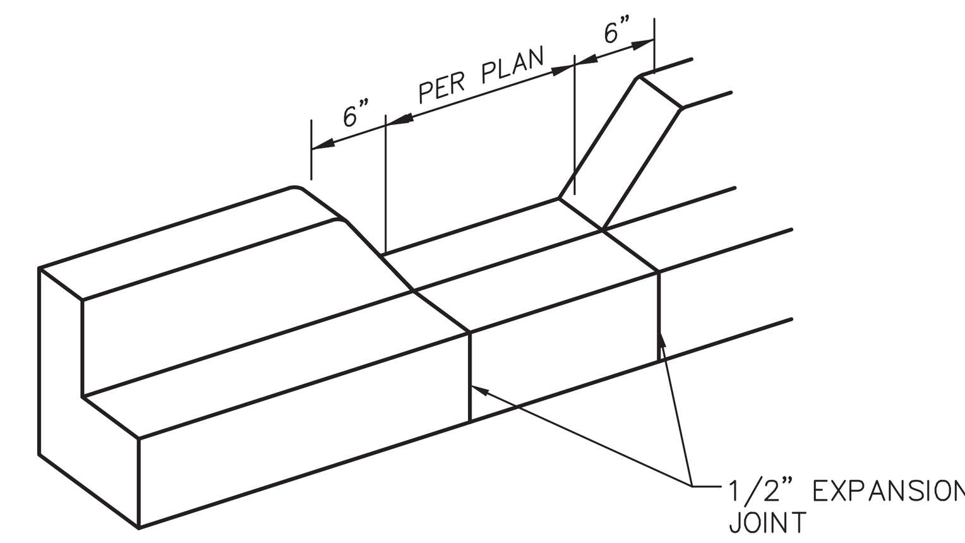
SHEET NUMBER
CG-101

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE AND NMDOT STANDARDS APPLY
2. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.
3. ALL SUBGRADE, OVEREXCAVATION, BACKFILL, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.
4. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION, OR PRIOR TO OCCUPANCY, AS APPROPRIATE. IF PERMITS ARE DELAYED OR ISSUED WITH CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IMMEDIATELY.
5. COORDINATE WORK WITH SITE PLAN, UTILITY PLAN, DEMOLITION PLAN, AND LANDSCAPE PLAN.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT / ENGINEER AND VERIFY THE ARCHITECT / ENGINEER'S INTENT BEFORE PROCEEDING.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SAFETY.
8. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS ON SITE AT ALL TIMES. THE CONTRACTOR SHALL NOT SCALE DRAWINGS. ONLY WRITTEN DIMENSIONS OR KEYED NOTES SHALL BE USED.
9. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONTRACTOR SHALL REGULARLY UPDATE OWNER AND ARCHITECT REGARDING THE STATUS OF THE INSPECTIONS.
10. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
11. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL IN THE RIGHT-OF-WAY.
12. THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
13. THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
14. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.
15. SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS ARE REQUIRED. CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED SUBGRADES, BACKFILL, AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHOULD COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
16. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED LAND SURVEYOR.
17. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS.
18. A CURRENT STORMWATER CONTROL PERMIT, INCLUDING AN EROSION SEDIMENT CONTROL PLAN (E.S.C.)FOR EROSION AND SEDIMENT CONTROL IS REQUIRED FOR ALL CONSTRUCTION, DEMOLITION CLEARING, AND GRADING OPERATIONS THAT DISTURB THE SOIL ON ONE ACRE OR MORE OF LAND. OWNER WILL COORDINATE.
19. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBLITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER.
20. ALL SITE PREPARATION, GRADING OPERATIONS, FOUNDATION CONSTRUCTION, AND PAVEMENT INSTALLATION WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, WHICH WILL BE PROVIDED BY THE OWNER OR ARCHITECT. ALL OTHER WORK SHALL, UNLESS OTHERWISE NOTED IN THE PLANS, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATION (FIRST PRIORITY), AND/OR NMDOT STANDARD SPECIFICATIONS FOR PUBLIC WORK (SECOND PRIORITY.)

GRADING GENERAL NOTES

1. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. FOR ALL ACCESSIBLE ROUTES, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.
2. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
3. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, 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.
4. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER.
5. MINIMUM SLOPES SHALL BE 1% UNLESS OTHERWISE NOTED.
6. STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.44" OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).
7. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.
8. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
9. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE ±0.1' FROM PLAN ELEVATIONS. BUILDING PAD ELEVATION SHALL BE ±0.05' FROM PLAN ELEVATION.
10. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.
11. ALL FRACTURED FACE ROCK (F.F. ROCK) TO BE 6" AVG. DIA. ANGULAR FACED ROCK PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.). NOTE: PERMANENT TURF REINFORCEMENT MATERIAL (LANDLOK TRM 450 O.E.) MAY BE SUBSTITUTED AT ALL AREAS REFERENCING F.F. ROCK EROSION PROTECTION.
12. ENGINEER RECOMMENDS THAT OWNER MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
13. GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

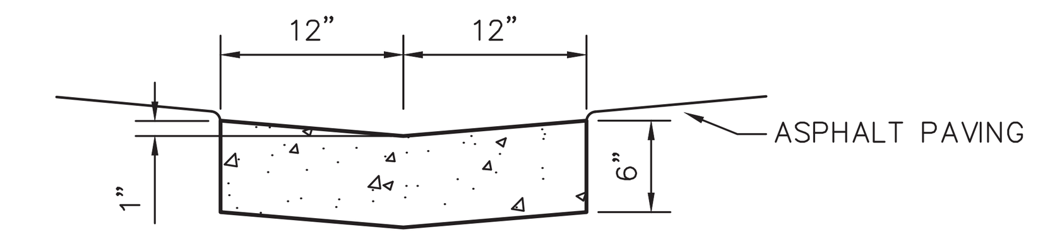


GENERAL NOTES

1. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

4 CURB OPENING

SCALE: N.T.S.

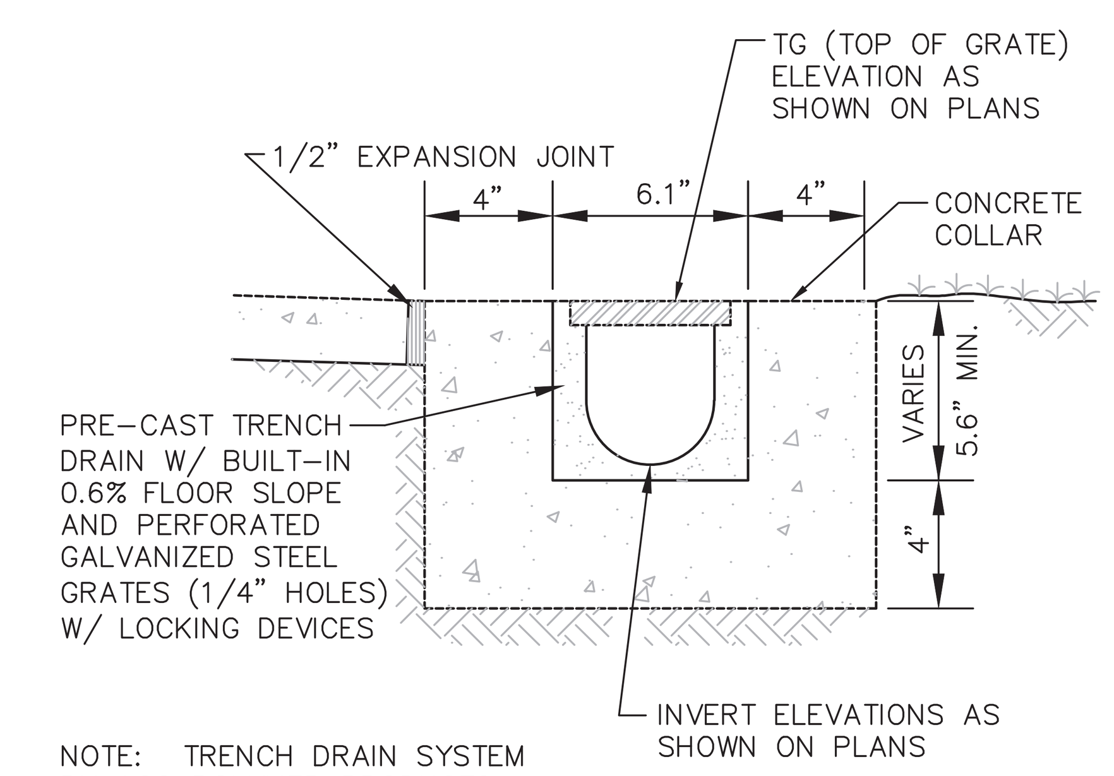


GENERAL NOTES

1. EDGES SHALL BE SHAPED WITH A 3/8" EDGING TOOL.
2. CONSTRUCTION CONTROL JOINTS AT 6' O.C. MAX.
3. 1/2" EXPANSION JOINTS 48' O.C., CURB RETURNS AND EACH SIDE OF DRIVES. SEAL WITH ______
4. EDGE OF ASPHALT PAVING TO BE ½" ABOVE EDGE OF CONCRETE (TYP).

1 CONCRETE ALLEY GUTTER

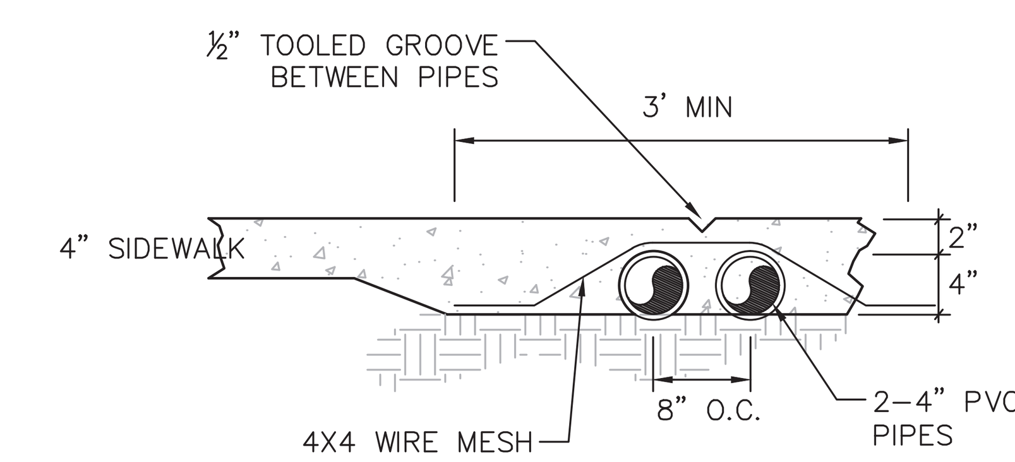
SCALE: N.T.S.



NOTE: TRENCH DRAIN SYSTEM BY ACO POLYMER PRODUCTS, OR APPROVED EQUAL.

2 TRENCH DRAIN THROUGH SIDEWALK

SCALE: N.T.S.



3 4" PIPES THROUGH WALK

SCALE: N.T.S.

INNOVA PLAZA - SITE DEVELOPMENT
GRADING DETAILS
401 EUBANK SE, ALBUQUERQUE, NM 87123
PROJECT #1459

REVISION DATE

GENEVIEVE L. DONART
NEW MEXICO
15088
LICENSED PROFESSIONAL ENGINEER
11/13/14

RBA
ARCHITECTURE PLANNING DESIGN

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

2055 CG-501.dwg Aug 26,2014

DATE
NOVEMBER 13, 2014

SHEET NUMBER
CG-501

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