

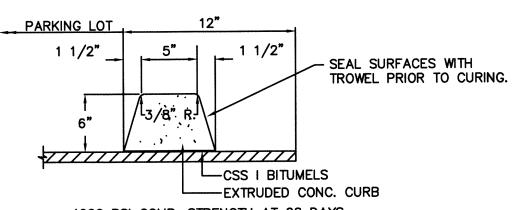
G E N E R A L N O T E S

- 1. SEE ARCHITECTURAL SITE PLAN FOR TRUE DIMENSIONS.
- 2. CITY OF ALBUQUERQUE STANDARD DETAILS SHALL BE USED WHEN APPLICABLE.

\bigcirc KEYED NOTES

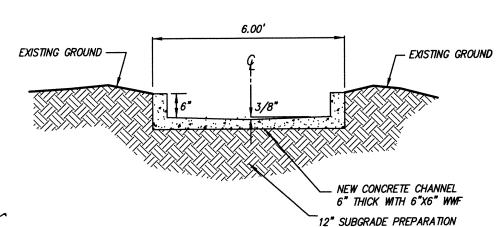
- 1. 6' SIDEWALK CULVERT PER COA STANDARD DRAWING 2236
- 2. INTENTIONALLY LEFT BLANK CONCRETE CHANNEL PER DETAIL THIS SHEET
- 4. GARDEN / RETAINING WALL. INSTALL WEEP HOLES EVERY 4'. DESIGN BY OTHERS.
- 5. GARDEN / RETAINING WALL. DESIGN BY OTHERS. 6. TRANSITION CURB FROM 6" TO NO CURB. INSTALL CURB STOPS IN
- PARKING SPACES.
- 7. EXTRUDED CURB PER DETAIL THIS SHEET.
- 8. 3' MDE SIDEWALK CULVERT PER COA STANDARD DRAWING 2236 9. REMOVE AND REPLACE SIDEWALK TO MATCH NEW GRADES

- 1) NEW TYPE DOUBLE "D" SD INLET SUMP CONDITION GRATE = 4962.00'INVERT = 4959.00'
- ② NEW 8" GRAVITY MAIN SD HDPE LENGTH = 260' SLOPE = 1.00%
- (3) NEW 4' DIA SD MH RIM = 4968.50INV(S) = 4956.40
- 4) NEW 8" GRAVITY MAIN SD HDPE LENGTH = 300' SLOPE = 1.0%

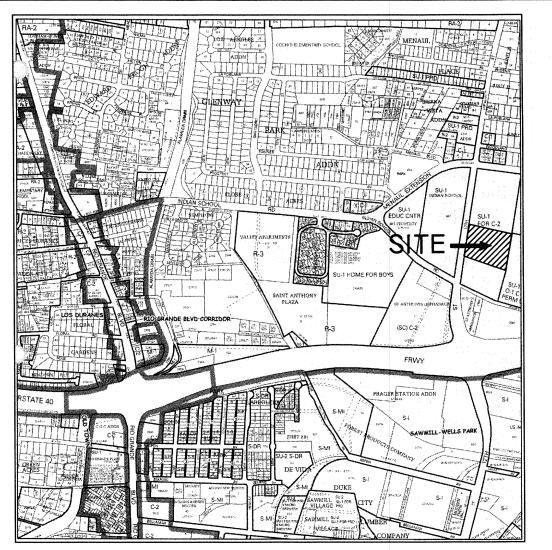


- 4000 PSI COMP. STRENGTH AT 28 DAYS 1.5 #/CY OF POLYPROPYLENE COLLATED FIBRILLATED FIBERS(FIBERMESH OR APPROVED EQUAL)
- NON-CHLORIDE RETARDER PER MANUF. RECOMM.

EXTRUDED CURB



CONCRETE DRAINAGE CHANNEL DETAIL



VICINITY MAP ZONE ATLAS H-13-Z

> RETAIL SITE PROJECTED SECTIONS 7 & 8, T.10 N., R. 3 E., N.M.P.M
> TOWN ON ALBUQUERQUE GRANT CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO

BENCHMARK

SEE PLAT FOR BASIS OF BEARINGS AND SITE BENCHMARKS

LEGAL DESCRIPTION

TRACT "A'" OF THE PLAT FOR THE UNITED STATES BUREAU OF LAD MANAGEMENT SURVEY OF TOWN OF ALBUQUERQUE GRANT, PROJECTED SECTIONS 7 AND 8 TOWNSHIP 10 NORTH, RANGE 3 EAST NEW MEXICO PRINCIPAL MERIDAN, DATED AUGUST 12, 2011,

SHEET INDEX

- C1 SITE GRADING AND DRAINAGE PLAN SITE SPECIFIC FOR PHASE 4
- C2 OVERALL HYDROLOGY AND STORM DRAIN DESIGN

C3 SITE UTILITY PLAN

LEGEND

—— – – PROPERTY LINE EXISTING CONTOUR

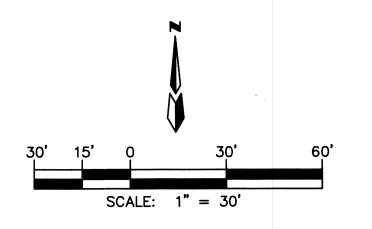
EXISTING SPOT ELEVATION

EXISTING SPOT ELEVATION

PROPOSED TOP OF CURB ELEVATION PROPOSED FLOW LINE ELEVATION PROPOSED SPOT ELEVATION

DIRECTION OF FLOW

PROPOSED SWALE PROPOSED 3:1 SLOPE



A.I.S. RETAIL

SITE GRADING & DRAINAGE

MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS

P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505)828-2200, FAX (505)797-9539

Designed: KMK Drawn: KMK Checked: DMG Scale: SEE SCALE | Date: 11/30/14 | Job: A12041

$H \ Y \ D \ R \ O \ L \ O \ G \ Y \qquad N \ O \ T \ E \ S$

THE TOTAL SITE IS BOUNDED BY 12TH STREET, INDIAN SCHOOL, MENAUL AND 9TH STREET AND CONSISTS OF 47.4 ACRES. THE PROJECT SITE IS PHASE 4 OF THE PROJECT SITE. THE FIRST 3 BEING THE BIA BUILDINGS PHASES 1 AND 2 AND IPFDC HOTEL (ALL PREPARED BY MARK GOODWIN & ASSOCIATES ON 6-11-03 AND 11-5-14 AND 10-5-06 RESPECTIVELY) THE DRAINAGE MANAGEMENT PLAN FOR ALL PHASES INCLUDES SOME DRAINAGE TO ADJACENT STREETS AND 2 LIFT STATIONS THAT PUMP THE RUNOFF TO THE EXISTING STORM DRAIN IN 9TH ST. LIFT STATION #1 WAS CONSTRUCED DURING PHASE 1. LIFT STATION #2 WILL BE CONSTRUCTED DURING PHASE 5 OR PHASE 6. THIS PLAN IS PHASE 4. A TEMPORARY RETENTION POND WILL BE CONSTRUCTED TO RETAIN 2 TIMES THE 100YR-24 STORM.

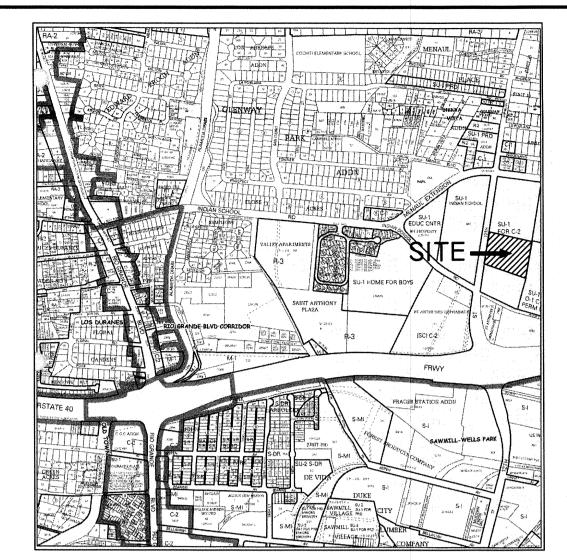
THE PROJECT SITE (PHASE 4) CONSISTS OF 3.46 ACRES. NO OFFISTE FLOWS ENTER THIS SITE. THE SITE IS NOT IN A 100YR FLOOD ZONE PER MAP 35001C00331D.

THE DEVELOPED FLOW FOR THIS ENTIRE SITE IS 14.23cfs. THE HYDROLOGY WAS CALCULATED PER COA DPM USING AHYMO. P2=2.60" FROM NOAA 14. THE RESULTS ARE SUMMARIZED IN THE HYDROLOGY TABLE ON THIS SHEET.

PARTS OF THE PROJECT SITE ARE ALREADY DEVELOPED. THE DRAINAGE BASINS FROM THESE DEVELOPED SECTIONS WILL NOT BE CHANGED (BASINS 100.1-100.4). THE REMAINING RUNOFF (BASIN 100.5) WILL BE CAPTURED BY A TYPE "D" INLET IN SUMP CONDITION AND THEN CONVEYED BY AN 8" GRAVITY LINE TO THE TEMPORARY RETENTION POND IN BASIN C. BASIN C WILL ALSO RETAIN THE VOLUMES FROM SUBBASIN 100.3. WHEN PHASE 5 IS CONSTRUCTED, EITHER THE TEMPORARY POND WILL BE REMOVED AND A LIFT STATION WILL BE INSTALLED OR THE TEMPORARY POND WILL NEED TO BE INCREASED IN VOLUME TO RETAIN THE ADDITIONAL DEVELOPED FLOWS.

THE PARKING LOT OF THE PROJECT SITE WILL ACT AS A DETENTION POND WITH TYPE "D" INLETS IN SUMP CONDITION. THE STORM WATER WILL BE RELEASED AT A RATE OF 1.60cfs TO THE TEMPORARY POND.

THE MAXIMUM WATER SURFACE ELEVATION IN TEMP POND= 4956.47'. TOTAL STORAGE IN TEMP POND= 1.14 ac-ft
SINCE THE OUTLET ELEVATION AND MWSEL IS LOWER THAN THE INVERT OF
THE SUMP INLET IN THE PROJECT SITE, NO STORMWATER WILL BACK UP
INTO THE PROJECT SITE.



VICINITY MAP ZONE ATLAS H-13-Z

BASIN DATA

				% LAND TREATMENT TYPES					
			AREA					Q	Vol
BASIN SUBBASIN BASIN OUTLET		(acres)	Α	В	С	D	(cfs)	(ac-ft)	
Onsite Basin A			3.46	0	0	12	88	14.23	0.63
	100.1	12th St.	0.12	0	0	0	100	0.53	0.02
	100.2	Existing Lift Station	0.25	0	0	14	86	1.05	0.05
	100.3	NE Corner	0.21	0	0	12	88	0.88	0.04
	100.4	12th St.	0.29	0	0	12	88	1.2	0.05
	100.5	New Sump Inlet	2.58	0	0	10	90	10.69	0.48
Basin B (Uneveloped)	existing	Basin B (No change from EX cond)	9.63	0	0	90	10	21.88	0.68
Basin B (Developed)	future	Future Lift Station	9.63	0	0	12	88	28.91	1.29
Basin C (Uneveloped)	existing	Temporary Pond	6.40	0	0	100	0	19.07	0.55
Basin (100.5+100.3) + Basin C (Undev) Temporary Pond		9.20	-	-	-	-	0	1.04	

TEMPORARY POND VOLUMES

		Surface	Surface	Incr.	Total	Total
	Elev.	Area	Area	Volume	Volume	Volume
	(feet)	(SF)	(acres)	(acre ft.)	(acre ft.)	(cubic ft.)
	60	117,130	2.69	2.50	10.69	465,832
	59	100,500	2.31	2.13	8.20	357,105
	58	85,050	1.95	1.79	6.07	264,496
	57	70,800	1.63	1.48	4.29	186,740
	56	57,750	1.33	1.19	2.81	122,487
	55	45,900	1.05	0.93	1.62	70,771
	54	35,250	0.81	0.70	0.70	30,396
ond Bottom = x	53	25,800	0.59			

TOTAL RETENTION VOLUME REQUIRED

= 2 x 1.04 ac-ft

= 2.08 ac-ft
THE POND HAS CAPACITY AT ELEV=4955.50 WHICH IS LOWER THAN THE THE INVERT AT BASIN A(100.5)=4959.00 AND THEREFORE THE STORM WATER WILL NOT "BACK UP" INTO THE PROJECT SITE PARKING LOT.





OVERALL STORM DRAIN DESIGN

MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS

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- 1. FIELD VERIFY EXISTING 8"SAS LINE PRIOR TO CONSTRUCTION. REMOVE PER PLAN. 2. FIELD VERIFY EXISTING SAS SERVICE LINE PRIOR TO CONSTRUCTION. REMOVE PER

- 2. FIELD VERIFY EXISTING SAS SERVICE LINE PRIOR TO CONSTRUCTION. REMOVE PER PLAN.

 3. REMOVE EXISTING SAS MANHOLE

 4. INSTALL NEW SAS MANHOLE

 5. INSTALL NEW SAS SERVICE.

 6. PRIVATE UTILITY EASEMENT

 7. FIELD VERIFY EXISTING WATER SERVICE LINE AND METER PRIOR TO CONSTRUCTION. EXTEND NEW WATER SERVICE LINE TO BUILDING.
- 8. RELOCATE/ABANDON EXISTING UTILITIES AS NEEDED.
 9. NEW STORM DRAIN AND EXISTING WATER LINE INTERSECTION. FIELD VERIFY WATER LINE TOP OF PIPE PRIOR TO CONSTRUCTION.



A.I.S. RETAIL

SITE UTILITY PLAN

MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS

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