STUDIO SW ARCHITECTS

STUDIO SOUTHWEST ARCHITECTS, INC.
2101 Mountain Rd. NW, Albuquerque, NM 87104
505.843.9639 fax 505.843.9683
Web Site: www.studioswarch.com
E-Mail: mail@studioswarch.com

CONSULTANTS

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

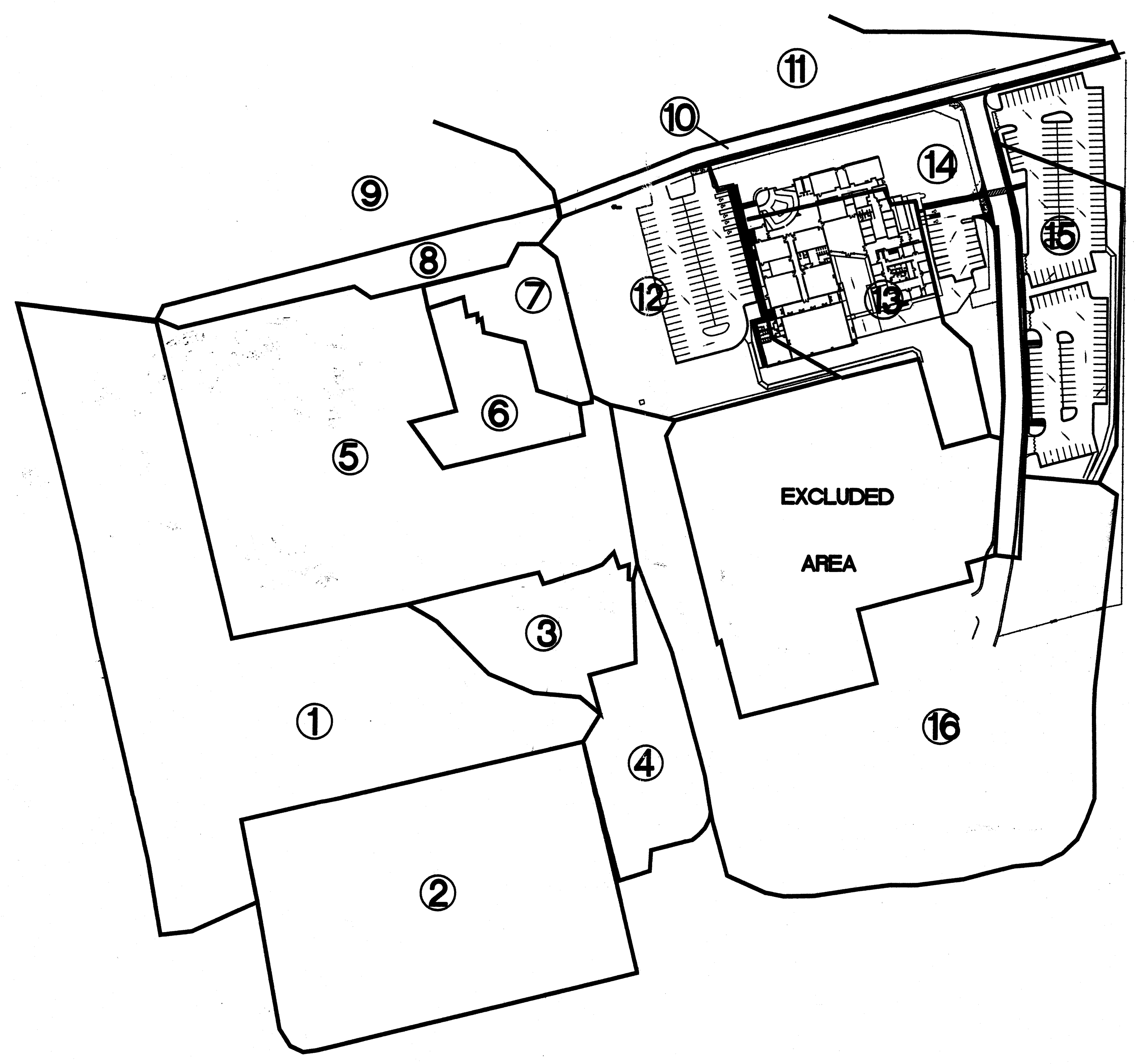
Architect | Engineer

SCOTT A. EDDINGS — NEW MEXICO — 12856 — REGISTERED PROFESSIONAL ENGINEER

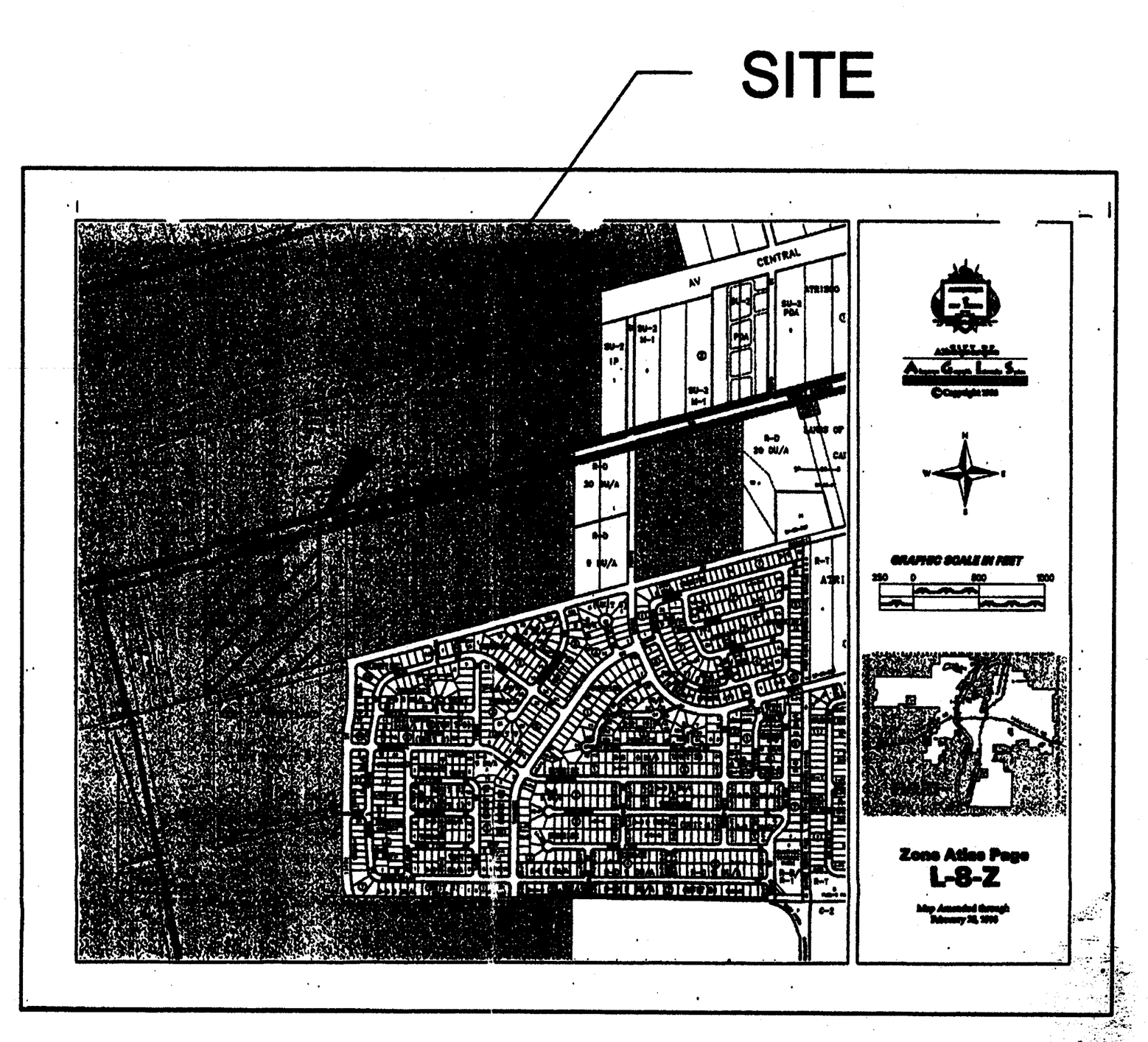
CITY OF ALBUQUERQUE FIRE TRAINING ACADEMY

ALBUQUERQUE FIRE DEPARTMENT

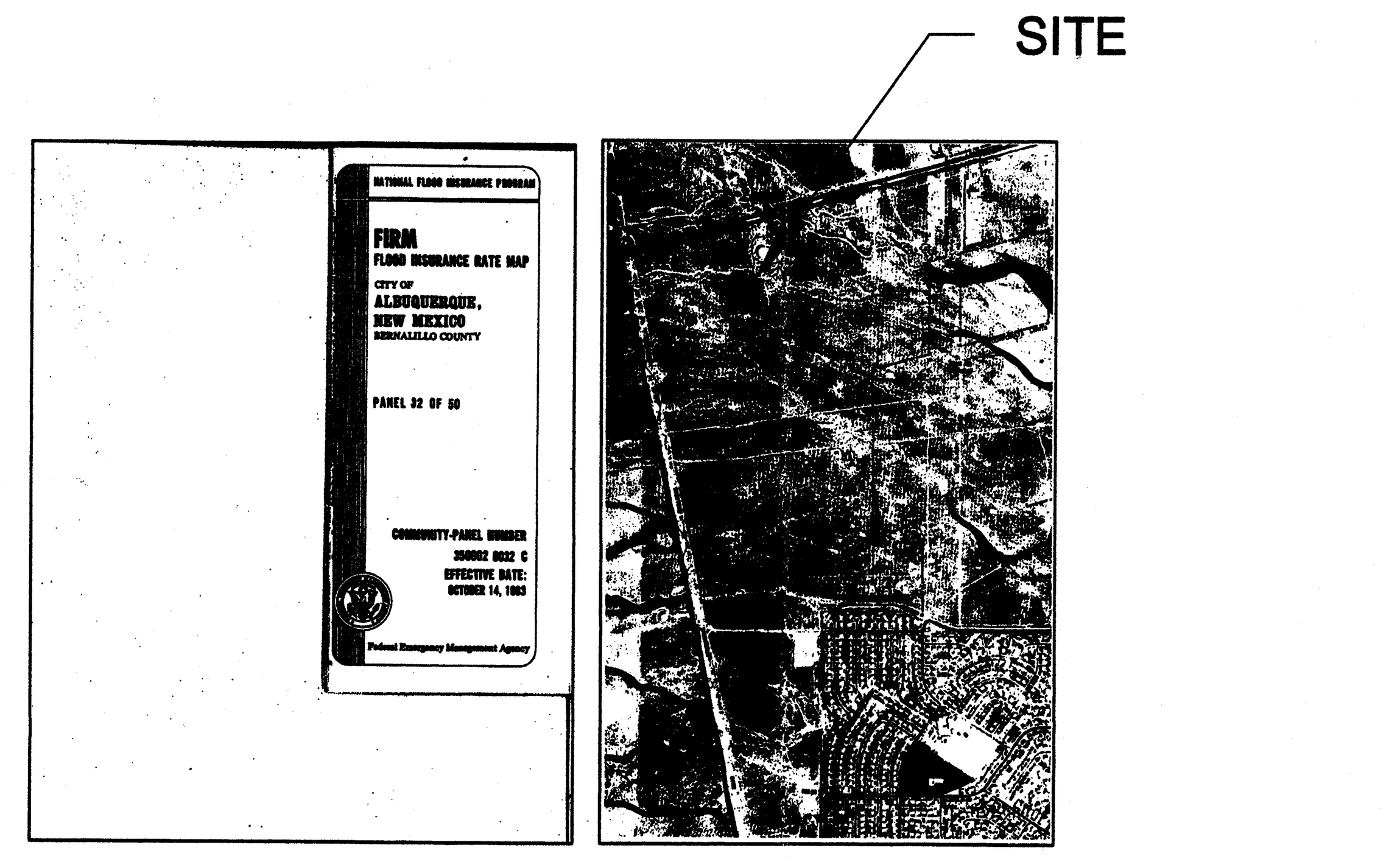
ALBUQUERQUE, NM



DRAINAGE BASIN MAP



ZONE ATLAS

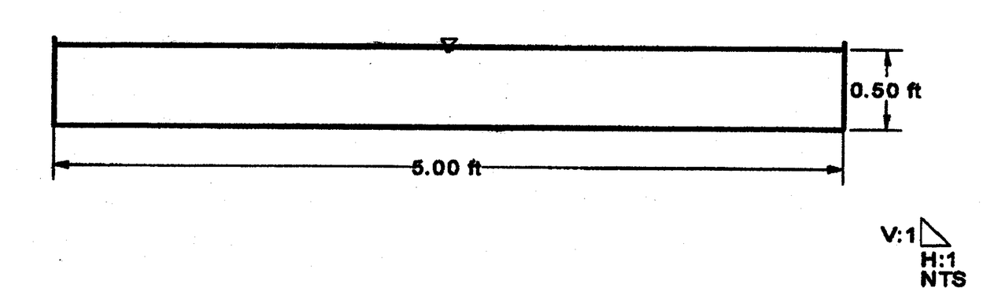


F.E.M.A.

Cross Section
Cross Section for Rectangular Channel

Project Description	
Worksheet	Rectangular Chann
Flow Element	Rectangular Chann
Method	Manning's Formula
Solve For	Discharge

Section Data		
Mannings Coeffic	0.013	
Channel Slope	010000	ft/ft
Depth	0.50	ft
Bottom Width	5.00	ft
Discharge	15.94	cfs



ZONE ATLAS

DRAINAGE AREA 12	AREA =	1.77	ac.		
DRAINAGE ZONE 1					
PRECIPITATION:	360 =	2.20	in.		
	1440 =	2.66	in.		
	10day =	3.67	in.		
	EXCESS PRECIPITATION:			PEAK DISCHARGE:	
TREATMENT A	0.44	in.		1.29	cfs/ac.
TREATMENT B	0.67	in.		2.03	cfs/ac.
TREATMENT C	0.99	in.		2.87	cfs/ac.
TREATMENT D	1.97	in.		4.37	cfs/ac.
EXISTING CONDITIONS:			PROPOSED CONDITIONS:		
	AREA		AREA		
TREATMENT A	1.12	ac.	0.64	ac.	
TREATMENT B	0	ac.	0.00	ac.	
TREATMENT C	0	ac.	0	ac.	
TREATMENT D	0.65	ac.	1.13	ac.	
EXISTING EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(1.12)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(0.65)/ 1.77 ac.				
=	1.00	in.			
V100-360 =	(1.00)x(1.77)/ 12 = 0.147775 ac-ft = 6437 cf				
EXISTING PEAK DISCHARGE:					
Q100 =	(1.29)x(1.12)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(0.65)= 4.29 cfs				
PROPOSED EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(0.64)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(1.13)/ 1.77 ac.				
=	1.42	in.			
V100-360 =	(1.42)x(1.77)/ 12.0 = 0.208975 ac-ft = 9103 cf				
V100-1440 =	(0.21)+(1.13)x(2.66 - 2.20)/ 12 = 0.252292 ac-ft = 10990 cf				
V100-10day =	(0.21)+(1.13)x(3.67 - 2.20)/ 12 = 0.347400 ac-ft = 15133 cf				
PROPOSED PEAK DISCHARGE:					
Q100 =	(1.29)x(0.64)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(1.13)= 5.76 cfs				

DRAINAGE AREA 13	AREA =	1.38	ac.		
DRAINAGE ZONE 1					
PRECIPITATION:	360 =	2.20	in.		
	1440 =	2.66	in.		
	10day =	3.67	in.		
	EXCESS PRECIPITATION:			PEAK DISCHARGE:	
TREATMENT A	0.44	in.		1.29	cfs/ac.
TREATMENT B	0.67	in.		2.03	cfs/ac.
TREATMENT C	0.99	in.		2.87	cfs/ac.
TREATMENT D	1.97	in.		4.37	cfs/ac.
EXISTING CONDITIONS:			PROPOSED CONDITIONS:		
	AREA		AREA		
TREATMENT A	0.21	ac.	0.21	ac.	
TREATMENT B	0.8	ac.	0.28	ac.	
TREATMENT C	0	ac.	0	ac.	
TREATMENT D	0.37	ac.	0.89	ac.	
EXISTING EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(0.21)+(0.67)x(0.80)+(0.99)x(0.00)+(1.97)x(0.37)/ 1.38 ac.				
=	0.98	in.			
V100-360 =	(0.98)x(1.38)/ 12 = 0.113108 ac-ft = 4927 cf				
EXISTING PEAK DISCHARGE:					
Q100 =	(1.29)x(0.21)+(2.03)x(0.80)+(2.87)x(0.00)+(4.37)x(0.37)= 3.51 cfs				
PROPOSED EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(0.21)+(0.67)x(0.28)+(0.99)x(0.00)+(1.97)x(0.89)/ 1.38 ac.				
=	1.47	in.			
V100-360 =	(1.47)x(1.38)/ 12.0 = 0.169442 ac-ft = 7381 cf				
V100-1440 =	(0.17)+(0.89)x(2.66 - 2.20)/ 12 = 0.203558 ac-ft = 8867 cf				
V100-10day =	(0.17)+(0.89)x(3.67 - 2.20)/ 12 = 0.278467 ac-ft = 12130 cf				
PROPOSED PEAK DISCHARGE:					
Q100 =	(1.29)x(0.21)+(2.03)x(0.28)+(2.87)x(0.00)+(4.37)x(0.89)= 4.73 cfs				

DRAINAGE AREA 15	AREA =	1.24	ac.		
DRAINAGE ZONE 1					
PRECIPITATION:	360 =	2.20	in.		
	1440 =	2.66	in.		
	10day =	3.67	in.		
	EXCESS PRECIPITATION:			PEAK DISCHARGE:	
TREATMENT A	0.44	in.		1.29	cfs/ac.
TREATMENT B	0.67	in.		2.03	cfs/ac.
TREATMENT C	0.99	in.		2.87	cfs/ac.
TREATMENT D	1.97	in.		4.37	cfs/ac.
EXISTING CONDITIONS:			PROPOSED CONDITIONS:		
	AREA		AREA		
TREATMENT A	1.24	ac.	0	ac.	
TREATMENT B	0	ac.	0.00	ac.	
TREATMENT C	0	ac.	0	ac.	
TREATMENT D	0	ac.	1.24	ac.	
EXISTING EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(1.24)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(0.00)/ 1.24 ac.				
=	0.44	in.			
V100-360 =	(0.44)x(1.24)/ 12 = 0.045467 ac-ft = 1981 cf				
EXISTING PEAK DISCHARGE:					
Q100 =	(1.29)x(1.24)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(0.00)= 1.60 cfs				
PROPOSED EXCESS PRECIPITATION:					
Weighted E =	(0.44)x(0.00)+(0.67)x(0.00)+(0.99)x(0.00)+(1.97)x(1.24)/ 1.24 ac.				
=	1.97	in.			
V100-360 =	(1.97)x(1.24)/ 12.0 = 0.203567 ac-ft = 8867 cf				
V100-1440 =	(0.20)+(1.24)x(2.66 - 2.20)/ 12 = 0.251100 ac-ft = 10938 cf				
V100-10day =	(0.20)+(1.24)x(3.67 - 2.20)/ 12 = 0.355467 ac-ft = 15484 cf				
PROPOSED PEAK DISCHARGE:					
Q100 =	(1.29)x(0.00)+(2.03)x(0.00)+(2.87)x(0.00)+(4.37)x(1.24)= 5.42 cfs				

EXISTING CONDITIONS

THE EXISING SITE IS THE CITY OF ALBUQUERQUE FIRE TRAINING ACADEMY. SCANLON AND ASSOCIATES PREPARED THE DRAINAGE REPORT FOR THE INITIAL CONSTRUCTION OF THE COMPLEX. SITE DEVELOPMENT HAS VARIED SLIGHTLY FROM THIS REPORT, BUT DRIANGAGE BASINS AND LAND TREATMENT REMAIN IN COMPLIANCE WITH THE REPORT. THE REPORT DIVIDED THE SITE INTO FOUR BASINS: AREA 1, AREA 2, AREA 3 AND AREA 4. THE SITE DRAINS INTO TWO STORM WATER PONDS: POND 1 AND POND 2. POND 1 RECEIVES STORMWATER FROM AREA 1 AND AREA 2. POND 2 RECEIVES STORMWATER FROM BASIN 3, BASIN 4, AND POND 1.

C.L. WEISS ENGINEERING, INC. PREPARED THE DRAINAGE REPORT FOR THE WESTSIDE SATELLITE CENTER. THIS REPORT DIVIDES THE COMPLEX INTO 16 BASINS. THIS PROJECT DEVELOPS WITHIN BASINS 12, 13 AND 15 (SEE IMAGE BELOW). THE WESTSIDE SATELLITE CENTER IS DIVIDED INTO TWO BASINS. BASIN 12 IS 77,109 SF WITH THE FOLLOWING LAND TREATMENTS (A=48,858sf, B=0sF, C=0cf, D=28,251sf) BASIN 13 IS 60,130 SF WITH THE FOLLOWING LAND TREATMENTS (A=9,040sf, B=34,790sf, C=0sf, D=16,300sf). BASIN 15 53,910 SF WITH THE FOLLOWING LAND TREATMENTS (A=53,910sf, B=0sf, C=0sf, D=0sf).

BOTH BASINS 13 AND 15 DISCHARGE INTO POND 2 VIA CONCRETE RUNDOWNS.

PROPOSED CONDITIONS

THE PROPOSED IMPROVEMENTS, WHICH ARE PART OF THIS PROJECT AND ANALYZED BY THIS DRAINAGE REPORT, CONSIST OF THE FOLLOWING ADDITIONAL IMPERVIOUS IMPROVEMENTS:
BASIN 12 – INCREASE LAND TREATMENT D BY 20,920sf
BASIN 13 – INCREASE LAND TREATMENT D BY 22,600sf
BASIN 15 – INCREASE LAND TREATMENT D BY 53,910sf

THE NEW LAND TREATEMENTS ARE AS FOLLOWS:
BASIN 12 IS 77,109 SF
A=27,938sf
B=0sf
C=0sf
D=49,171sf
BASIN 13 IS 60,130 SF
A=9,040sf
B=12,190sf
C=0sf
D=38,900sf)
BASIN 15 53,910 SF
A=0sf
B=0sf
C=0sf
D=53,910sf

HYDROLOGY SUMMARY:
BASIN 12 HAS AN INCREASE RUNOFF OF 1.47 CFS AND AN INCREASE RUNOFF VOLUME OF 0.06 AC–FT

BASIN 13 HAS AN INCREASE RUNOFF OF 1.22 CFS AND AN INCREASE RUNOFF VOLUME OF 0.06 AC–FT

BASIN 15 HAS AN INCREASE RUNOFF OF 4.18 CFS AND AN INCREASE RUNOFF VOLUME OF 0.16 AC–FT

THIS PROJECT GENERATES 0.28 AC–FT OF ADDED VOLUME REQUIRED IN POND 2. FROM THE PREVIOUS DRAINAGE REPORTS POND 2 CAN ACCOMODATE THIS ADDED STORAGE REQUIREMENT WITHOUT ADDITIONAL IMPROVEMENTS.

MARK	DATE	DESCRIPTION

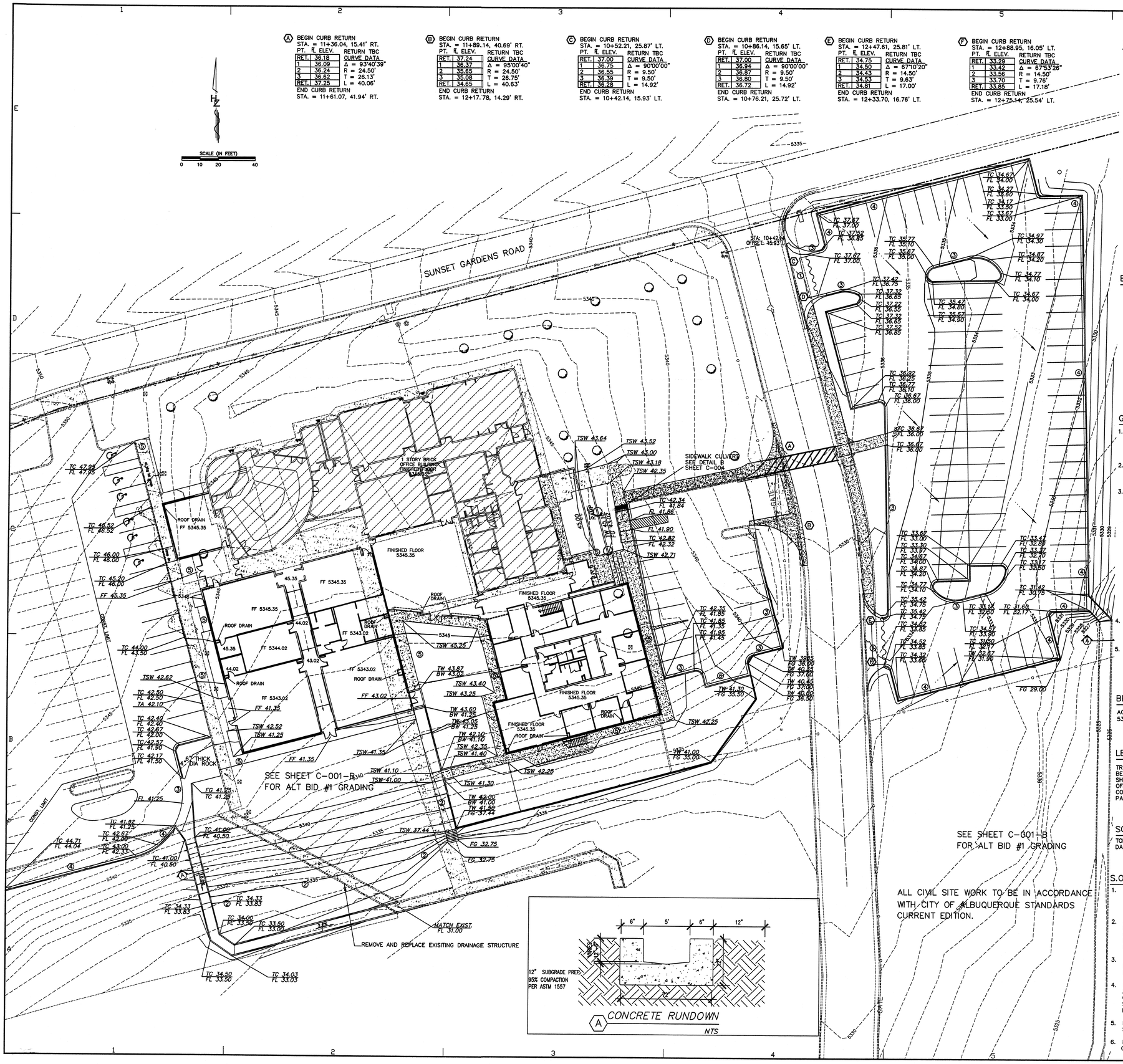
ISSUE: CONSTRUCTION DOCUMENTS
PROJECT NO: 0512
CAD DWG FILE:
DRAWN BY: FSM
CHECKED BY: SAE
DATE: 12/19/06

SHEET TITLE

DRAINAGE BASIN MAP

RECEIVED JAN 05 2007 HYDROLOGY SECTION

C-001



GENERAL LEGEND

EXISTING CONTOUR	75
PROPOSED CONTOUR	5108
PROPOSED SPOT ELEVATION	TC 01.75
UTILITY EASEMENTS	
RETAINING WALLS BY OTHERS	
WATER BLOCK	
EXISTING GROUND ELEVATION	+5101.69
FLOW DIRECTION ARROW	
TOP OF CURB ELEVATION	TC
FLOW LINE ELEVATION	FL
TOP OF CONCRETE	TOC
TOP OF ASPHALT	TA
FINISHED FLOOR	FF
INVERT	INV
TOP OF GRATE	TG
TOP OF WALL	TW
TOP OF SIDEWALK	TSW

BUILD NOTES

1. REMOVE EXISTING CURB & GUTTER AND SIDEWALK TO ACCOMMODATE ENTRANCES CONSTRUCT DRIVEPADS AND HANDICAP RAMPS PER COA STD DWG 2420.
2. CONSTRUCT RETAINING WALL SEE DTEAILS ON SHEET C-004
3. CONSTRUCT CONCRETE MEDIAN CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
4. CONSTRUCT CONCRETE STANDARD CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
5. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER ARCHITECTURAL PLANS
6. CONSTRUCT CONCRETE MOUNTABLE CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.

GENERAL NOTES

1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALB. FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

BENCHMARK

ACS MONUMENT "6-L8" HAVING AN ELEVATION OF 5383.906 FEET (SLD 1929).

LEGAL DESCRIPTION

TRACT LETTERED "A", WESTSIDE SATELLITE CENTER, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY ON AUGUST 28, 1990 IN BOOK 90C, PAGE 208.

SOURCE OF EXISTING SURVEY

TOPOGRAPHIC SURVEY PERFORMED BY CARTESIAN SURVEYS, INC. DATED DECEMBER 2005

S.O. 19 REQUIREMENTS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK IN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE SAME TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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 ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

STUDIO SW ARCHITECTS
STUDIO SOUTHWEST ARCHITECTS, INC.
2101 Mountain Rd. NW, Albuquerque, NM 87104
505.843.9639 fax 505.843.9683
Web Site: www.studioswarch.com
E-Mail: mail@studioswarch.com

CONSULTANTS

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

Architect Engineer

SCOTT A. EDWARDS 12858 REGISTERED PROFESSIONAL ENGINEER 1/4/07

CITY OF ALBUQUERQUE FIRE TRAINING ACADEMY

ALBUQUERQUE FIRE DEPARTMENT

ALBUQUERQUE, NM

MARK	DATE	DESCRIPTION

ISSUE: CONSTRUCTION DOCUMENTS
PROJECT NO: 0512
CAD DWG FILE:
DRAWN BY: FSM
CHECKED BY: SAE
DATE: 12/19/06

SHEET TITLE

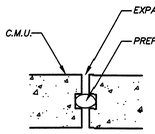
GRADING AND DRAINAGE BASE BID

RECEIVED JAN 05 2007 HYDROLOGY SECTION

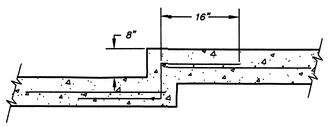
C-002

MASONRY WALL CONSTRUCTION NOTES:

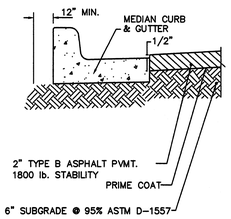
1. RETAINING WALLS ARE REQUIRED WHENEVER THE DIFFERENCE IN SURFACE ELEVATIONS EXCEED 1.50 FEET (2 EXPOSED CMU COURSES)
2. ALL MASONRY UNITS SHALL BE TYPE 1, GRADE N WITH A COMPRESSIVE STRENGTH OF 1900 PSI (NET AREA). F'M=1500 PSI
3. MORTAR SHALL BE TYPE S.
4. GROUT – F'_C=2000 PSI
5. CELLS CONTAINING REBAR SHALL BE GROUTED SOLID FROM THE BOTTOM TO THE TOP OF THE WALL IN ACCORDANCE WITH THE UNIFORM BUILDING CODE.
6. PROVIDE PILASTERS AT 12' O.C. MAXIMUM, OR IF NO PILASTERS ARE USED, PROVIDE EXPANSION JOINTS AT 20' O.C.
7. THE BACK OF WALLS BELOW GRADE SHALL BE WATERPROOFED PRIOR TO BACKFILLING.
8. ALL CELLS BELOW GRADE SHALL BE GROUTED SOLID.
9. LAP ALL REBAR 40 BAR DIAMETERS, UNLESS OTHERWISE NOTED.
10. ALL HORIZONTAL REINFORCING IN BOND BEAMS SHALL BE CONTINUOUS AROUND CORNERS OR HAVE CORNER BARS OF THE SAME SIZE AND A LAP OF 48 BAR DIAMETERS OR 24" MINIMUM. VERTICAL STEEL SHALL CONTINUE THROUGH BOND BEAMS.
11. PROVIDE STANDARD TRUSS TYPE JOINT REINFORCING AT 16" O.C. (ALTERNATE COURSES). USE PREFABRICATED CORNERS AND TEES AT ALL WALL CORNERS AND INTERSECTIONS RESPECTIVELY.
12. MIN. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3000 PSI.
13. WHERE C.M.U. RETAINING WALLS ARE INSTALLED, WEEP HOLES SHALL BE PROVIDED IN THE PORTION OF THE WALL BELOW GRADE, TO RELIEVE POTENTIAL HYDROSTATIC PRESSURE. WEEP HOLES SHALL BE 1" DIA. PIPES @ 32" O.C. WITH 1 CU. FT. OF AGGREGATE WITH FILTER FABRIC BEHIND WALL. WEEPHOLES MAY BE PROVIDED BY ELIMINATING THE MORTAR BETWEEN EVERY OTHER JOINT OF THE SECOND COURSE OF BLOCK.
14. SUBGRADE UNDER FOOTING SHALL BE COMPACTED TO 95% ASTM D-1557, AND ALL BACKFILL SHALL BE COMPACTED TO 90% ASTM D-1557 IN NON-PAVED AREAS, AND 95% ASTM D-1557 IN PAVED AREAS.
15. REINFORCING STEEL SHALL COMFORM TO ASTM A-615, GRADE 60.
16. ALL RETAINING WALLS REPRESENTED ON THIS SHEET HAVE BEEN DESIGNED TO ACCEPT A 5' TO 6' PRIVACY WALL.
17. THE TOP COURSE OF RETAINING WALL SHOULD BE A 2" THICK SOLID MASONRY CAP UNLESS A PRIVACY WALL IS TO BE CONSTRUCTED ON TOP.



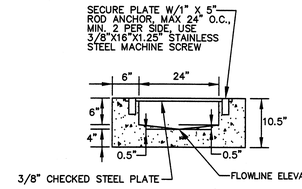
EXPANSION JOINT DETAIL
N.T.S.



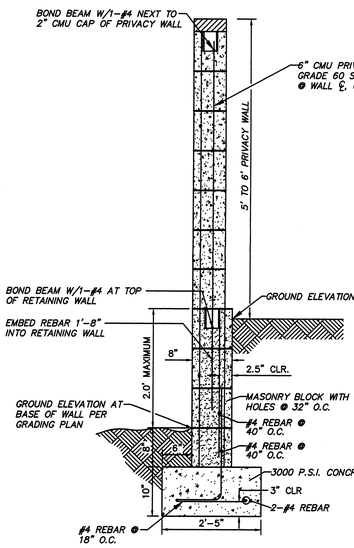
FOOTING STEP DETAIL
N.T.S.



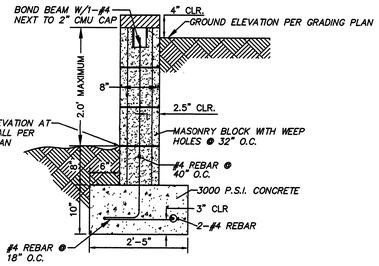
PAVEMENT SECTION (A)
N.T.S.



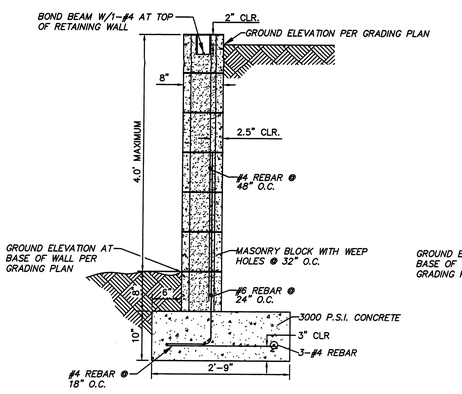
24" SIDEWALK CULVERT (B)
N.T.S.



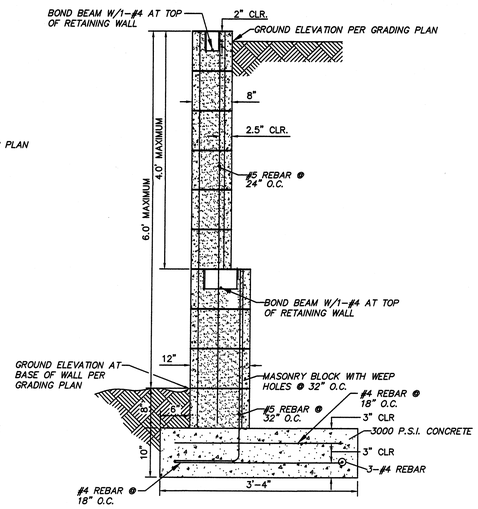
TYPE A & X RETAINING WALL W/PRIVACY WALL
UP TO 2'
TYPE X WALL – H < 1.5'
TYPE A WALL – H = 1.5' TO 2.0'



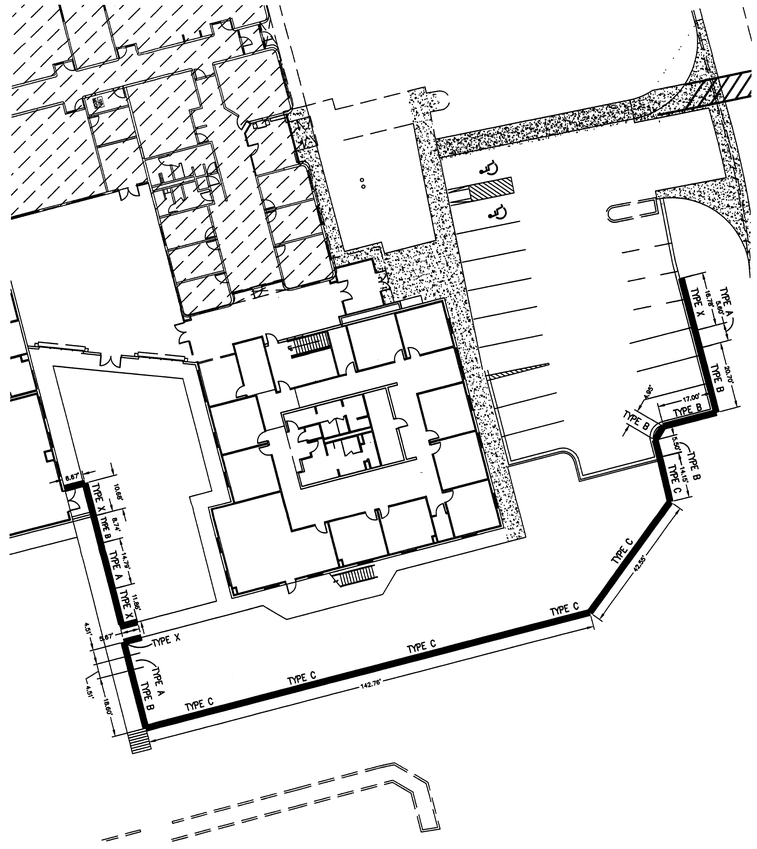
TYPE A & X RETAINING WALL
UP TO 2'
TYPE X WALL – H < 1.5'
TYPE A WALL – H = 1.5' TO 2.0'



TYPE B-RETAINING WALL
2' TO 4'



TYPE C-RETAINING WALL
4' TO 6'



STUDIO SW ARCHITECTS

STUDIO SOUTHWEST ARCHITECTS, INC.
2101 Mountain Rd. NW, Albuquerque, NM 87104
505.843.9639 fax 505.843.9683
Web Site: www.studioswarch.com
E-Mail: mail@studioswarch.com

CONSULTANTS

Designed By:
HUITT-ZOLLARS
Rio Rancho
Huitt-Zollars, Inc.
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

Architect Engineer

SCOTT A. EDWARDS — NEW MEXICO — 12856 — REGISTERED PROFESSIONAL ENGINEER — 1/10/07

CITY OF ALBUQUERQUE FIRE TRAINING ACADEMY

ALBUQUERQUE FIRE DEPARTMENT

ALBUQUERQUE, NM

MARK	DATE	DESCRIPTION

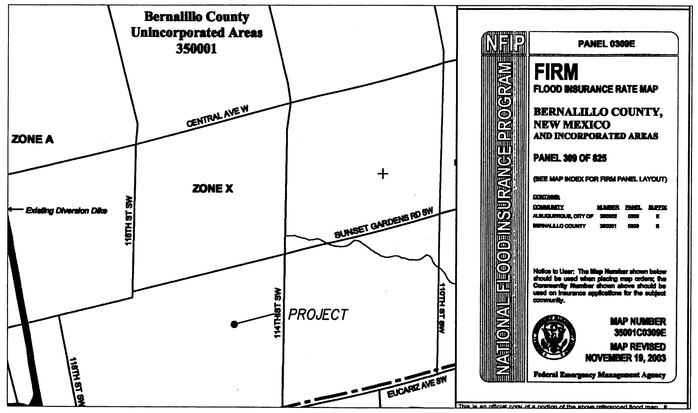
ISSUE:	DESIGN DEVELOPMENT
PROJECT NO:	0512
CAD DWG FILE:	
DRAWN BY:	FSM
CHECKED BY:	SAE
DATE:	12/19/06

SHEET TITLE

RETAINING WALL AND PAVING DETAILS

RECEIVED JAN 05 2007 HYDROLOGY SECTION

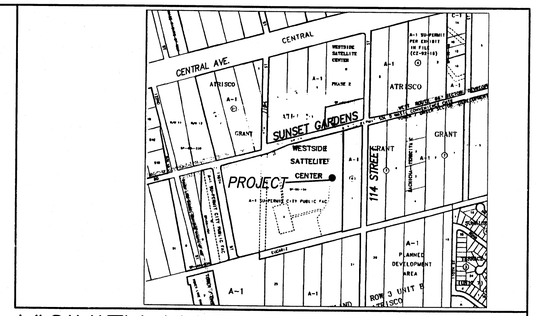
C-004



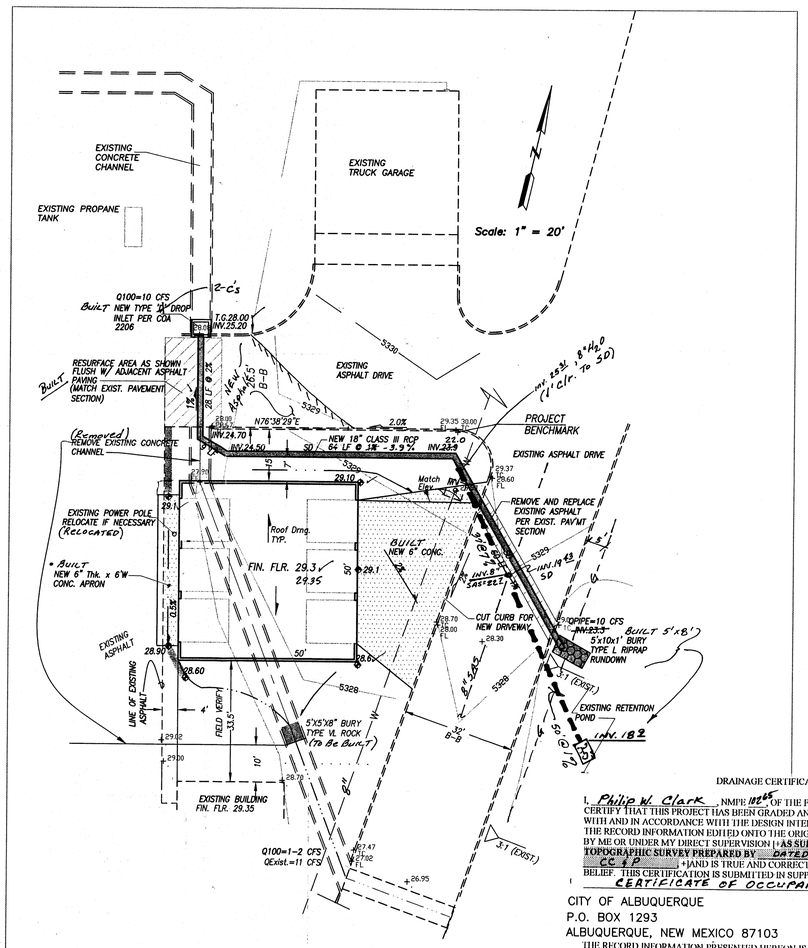
FIRM MAP PANEL # C0309E SCALE: 1" ~ 500'

NOTES

1. AN EXCAVATION/ACCESS PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
4. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
5. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1.

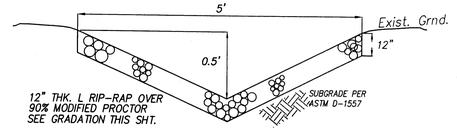


VICINITY MAP ZONE L-8 Scale: 1" ~ 750'



LEGEND

+24.0	EXIST. SPOT ELEVATION
10	EXIST. CONTOUR
24.0 24.1	NEW SPOT ELEVATION, AS BUILT
24	NEW CONTOUR
	NEW SWALE
	DRAINAGE DIRECTION, EXISTING
EA	EDGE OF ASPHALT
TW	TOP OF WALL (RETAINING PORTION)
FL	FLOWLINE
	NEW STRUCTURE
R/C	REBAR AND CAP, EXISTING
	NEW CONCRETE PAVING
	EROSION CONTROL PAD, 8" BURY 6" AVG. DIA. ROCK



RUNDOWN SECTION

N.T.S.

CLASSIFICATION AND GRADATION OF RIPRAP

RIPRAP DESIGNATION	% SMALLER THAN GIVEN SIZE BY WEIGHT	INTERMEDIATE ROCK DIMENSION(in.)	MEAN PARTICAL SIZE (IN.)
TYPE L	70-100	12	9
	50-70	9	
	35-50	6	
	2-10	2	

GRADING & DRAINAGE PLAN

THE TRUCK GARAGE PROJECT IS TO BE CONSTRUCTED WITHIN THE ALBUQUERQUE FIRE ACADEMY GOUNDS. THE PROJECT IS LOCATED IN THE WEST-CENTRAL PORTION OF BERNALILLO COUNTY IMMEDIATELY SOUTH OF INTERSTATE 40 AND CENTRAL AVE. THE GRADING AND DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND IMPROVEMENTS (EXISTING PAVED STREETS AND BUILDINGS).
2. PROPOSED IMPROVEMENTS: 2500 S.F. PRE-ENGINEERED GARAGE BUILDING, CONCRETE FLATWORK AND DRIVEWAY, REROUTED DRAINAGE CONVEYANCE USING UNDER GROUND STORM SEWER PIPE, NEW GRADE ELEVATIONS, AND EROSION CONTROL.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION OF DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS WHICH CONTRIBUTE TO THE EXISTING FLOWS.

PRESENTLY THE SITE IS A VACANT HARD PAN GRAVEL/DIRT SURFACE. THE PROPERTY IS BOUNDED BY DEVELOPED PROPERTY. THE SITE TERRAIN SLOPES GENERALLY TO THE SOUTHEAST AT APPROXIMATELY 2%.

AN EXISTING 8" DEEP CONCRETE RUNDOWN TRAVERSES THE SITE AND WILL BE PARTIALLY REMOVED FOR CONSTRUCTION OF THE BUILDING GARAGE. 11 CFS IMPACTS THE SOUTHEASTERN CORNER ACCORDING TO THE MASTER DRAINAGE PLAN FOR THE FIRE ACADEMY, DATED JUNE 1990, PREPARED BY DENNIS BRAND. THE SITE IS NOT ENCUMBERED BY A FEDERAL DESIGNATED FLOOD PLAIN.

THE RUNDOWN FLOWS WILL BE RE-ROUTED VIA AN UNDERGROUND INLET/PIPE SYSTEM TO THE EXISTING RETENTION POND. HISTORICAL OUTFALL LOCATIONS WILL REMAIN UNCHANGED WITH DEVELOPMENT.

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE, ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.20 Inches, Zone 1 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS -STUDY AREA

AREA = 0.16 ACRES, WHERE EXCESS PRECIP. 'C' =0.99 In. [0.44]
PEAK DISCHARGE, Q100 = 0.5 CFS [0.2] WHERE UNIT PEAK DISCHARGE 'C' = 2.87 CFS/AC. [1.49]
THEREFORE: VOLUME 100 = 575 CF [256]

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	---	A	1.29[0.24]	0.49[0.08]
LANDSCAPING/POND	-----	B	2.03[0.76]	0.67[0.22]
GRAVEL & COMPACTED SOIL	0.08 Ac.(50%)	C	2.87[1.49]	0.99[0.44]
ROOF - PAVEMENT	0.08 Ac.(50%)	D	4.40[2.90]	1.97[1.24]
	0.16 Ac.			

THEREFORE: $E_{Weighted}$ = 1.49 In.[0.8] &
Q100 =0.58 CFS VOLUME 100 = 865 CF
Q10 =0.33 CFS VOLUME 10 = 465 CF

DEVELOPED UNIT DISCHARGE = 3.6 CFS/ACRE

UP / DOWNSTREAM ANALYSIS

MINIMAL IMPACT DOWNSTREAM DUE TO MINIMAL INCREASE DUE TO DEVELOPMENT (0.08 CFS) AND RETENTION POND IMMEDIATELY EAST OF SITE
UPSTREAM FLOWS WILL BE COLLECTED IN STORM SEWER/INLET SYSTEM (10 CFS) AND CONVEYED TO RETENTION POND. A PORTION OF THE EXISTING 8" DEEP X 5' CONCRETE RUNDOWN CHANNEL WILL BE REMOVED TO ACCOMODATE BUILDING CONSTRUCTION.

Manning Pipe Calculator

Given Input Data:
Shape ..... Circular
Solving for ..... Flowrate
Diameter ..... 18.0000 in
Depth ..... 17.0000 in
Slope ..... 0.0100 ft/ft
Manning's n 0.0130

Computed Results:
Flowrate ..... 11.2962 cfs
Area 1.7671 ft2
Wetted Area 1.7285 ft2
Wetted Perimeter ..... 47.9828 in
Perimeter ..... 56.5487 in
Velocity ..... 6.5352 fps
Hydraulic Radius ..... 5.1874 in
Percent Full ..... 94.4444 %
Full flow Flowrate ..... 10.5043 cfs
Full flow velocity ..... 5.9442 fps

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

DRAINAGE CERTIFICATION

I, Philip W. Clark, NMPE 10265 OF THE FIRM Clark Consulting Engrs. HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 5/27/08. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION) AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY DATED ____ BY ____ (MAPS ____ OF THE FIRM CC # P ____) AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY

CITY OF ALBUQUERQUE
P.O. BOX 1293
ALBUQUERQUE, NEW MEXICO 87103

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Philip W. Clark, NMPE 10265

DATE 10/10/08

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 5/27/08

PROJECT DATA

LEGAL DESCRIPTION

TR A, PLAT OF WESTSIDE SATELLITE CENTER
28.8182 ACRES, CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF CURB AT THE PROPERTY NE RETURN, SEE PLAN
MEAN SEA LEVEL ELEVATION = 5330.00, 1929 DATUM.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CLARK CONSULTING ENGINEERS FROM AS-BUILT INFORMATION PREPARED BY CHAMBER, CAMPBELL & PARTNERS, DATED NOVEMBER 1990, NGVD 29 (FIELD CONFIRMED 5/08)

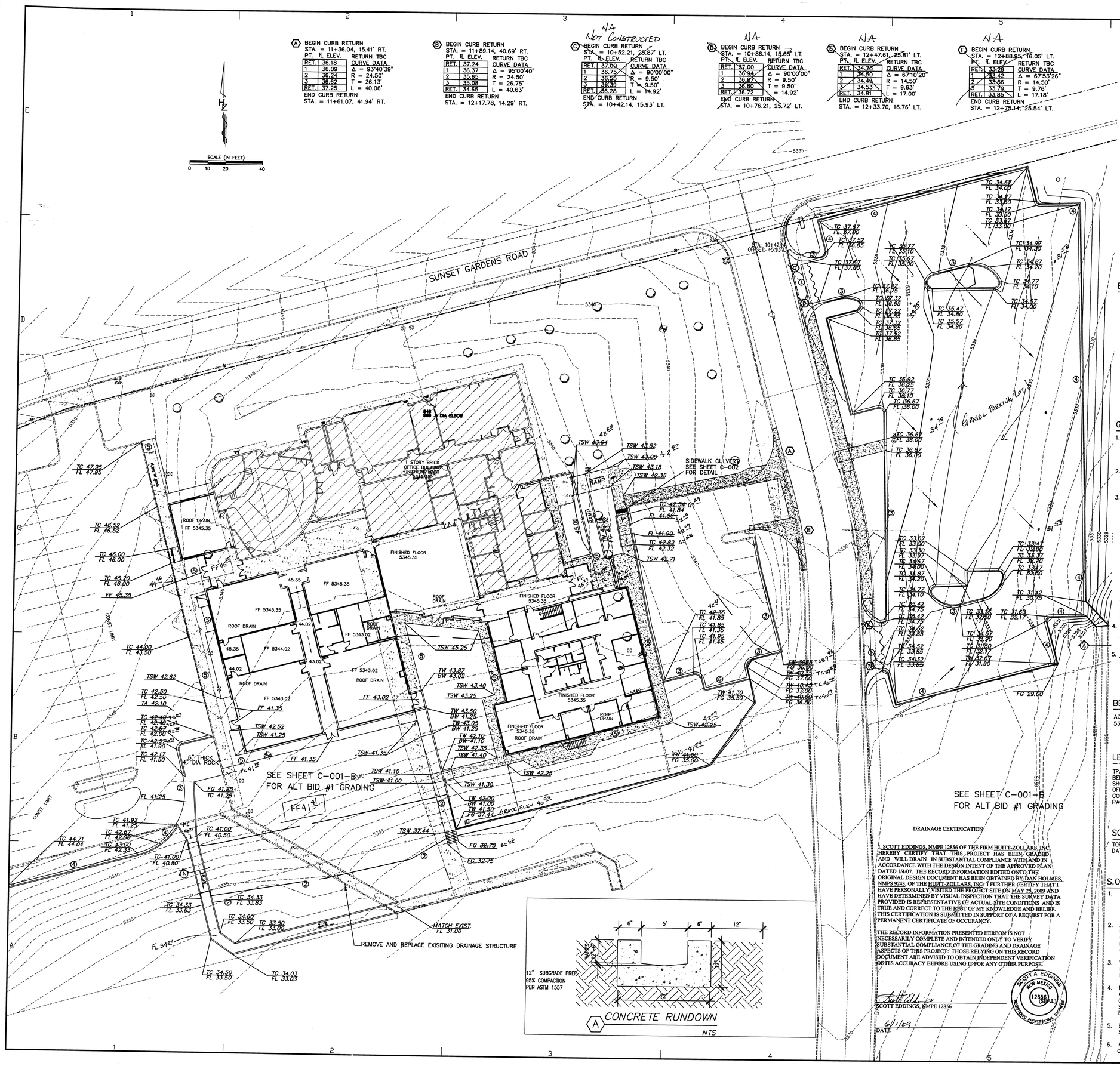
RECEIVED OCT 15 2008 HYDROLOGY SECTION

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION

TRACT A, WESTSIDE SATELLITE CENTER
11500 SUNSET GARDENS ROAD, SW, 87105
FIRE ACADEMY TRUCK GARAGE
Grading & Drainage Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #:BAKER_FIRE	1 OF 1
CHECKED BY: PWC	DATE: MAY 2008	FILE #: G/D	



GENERAL LEGEND

EXISTING CONTOUR	75
PROPOSED CONTOUR	5108
PROPOSED SPOT ELEVATION	TC 01.75
UTILITY EASEMENTS	
RETAINING WALLS BY OTHERS	
WATER BLOCK	
EXISTING GROUND ELEVATION	+5101.69
FLOW DIRECTION ARROW	
TOP OF CURB ELEVATION	TC
FLOW LINE ELEVATION	FL
TOP OF CONCRETE	TOC
TOP OF ASPHALT	TA
FINISHED FLOOR	FF
INVERT	INV
TOP OF GRATE	TG
TOP OF WALL	TW
TOP OF SIDEWALK	TSW

BUILD NOTES

1. REMOVE EXISTING CURB & GUTTER AND SIDEWALK TO ACCOMMODATE ENTRANCES CONSTRUCT DRIVEPADS AND HANDICAP RAMPS PER COA STD DWG 2420.
2. CONSTRUCT RETAINING WALL SEE DTEAILS ON SHEET C-002
3. CONSTRUCT CONCRETE MEDIAN CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
4. CONSTRUCT CONCRETE STANDARD CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
5. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER ARCHITECTURAL PLANS
6. CONSTRUCT CONCRETE MOUNTABLE CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.

GENERAL NOTES

1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALB. FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

BENCHMARK

ACS MONUMENT "6-L8" HAVING AN ELEVATION OF 5383.906 FEET (SLD 1929).

LEGAL DESCRIPTION

TRACT LETTERED "A", WESTSIDE SATELLITE CENTER, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY ON AUGUST 28, 1990 IN BOOK 90C, PAGE 208.

SOURCE OF EXISTING SURVEY

TOPOGRAPHIC SURVEY PERFORMED BY CARTESIAN SURVEYS, INC. DATED DECEMBER 2005

S.O. 19 REQUIREMENTS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK IN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE SAME TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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 ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

DRAINAGE CERTIFICATION

I, SCOTT EDDINGS, NMPE 12856 OF THE FIRM HUITT-ZOLLARS, INC. HEREBY CERTIFY THAT THIS PROJECT HAS BEEN, GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 1/4/07. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY DAN HOLMES, NMPS 9243, OF THE HUITT-ZOLLARS, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON MAY 24, 2009 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

SCOTT EDDINGS, NMPE 12856

6/1/09
DATE

SCOTT A. EDDINGS NEW MEXICO 12856 (SEAL) REGISTERED PROFESSIONAL ENGINEER

RECEIVED
JUN 01 2009
HYDROLOGY SECTION

STUDIO SW ARCHITECTS

STUDIO SOUTHWEST ARCHITECTS, INC.
2101 Mountain Rd. NW, Albuquerque, NM 87104
505.843.9639 fax 505.843.9683
Web Site: www.studioswarch.com
E-Mail: mail@studioswarch.com

CONSULTANTS

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

Architect Engineer

SCOTT A. EDDINGS NEW MEXICO 12856 1/4/07 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE FIRE TRAINING ACADEMY

ALBUQUERQUE FIRE DEPARTMENT

ALBUQUERQUE, NM

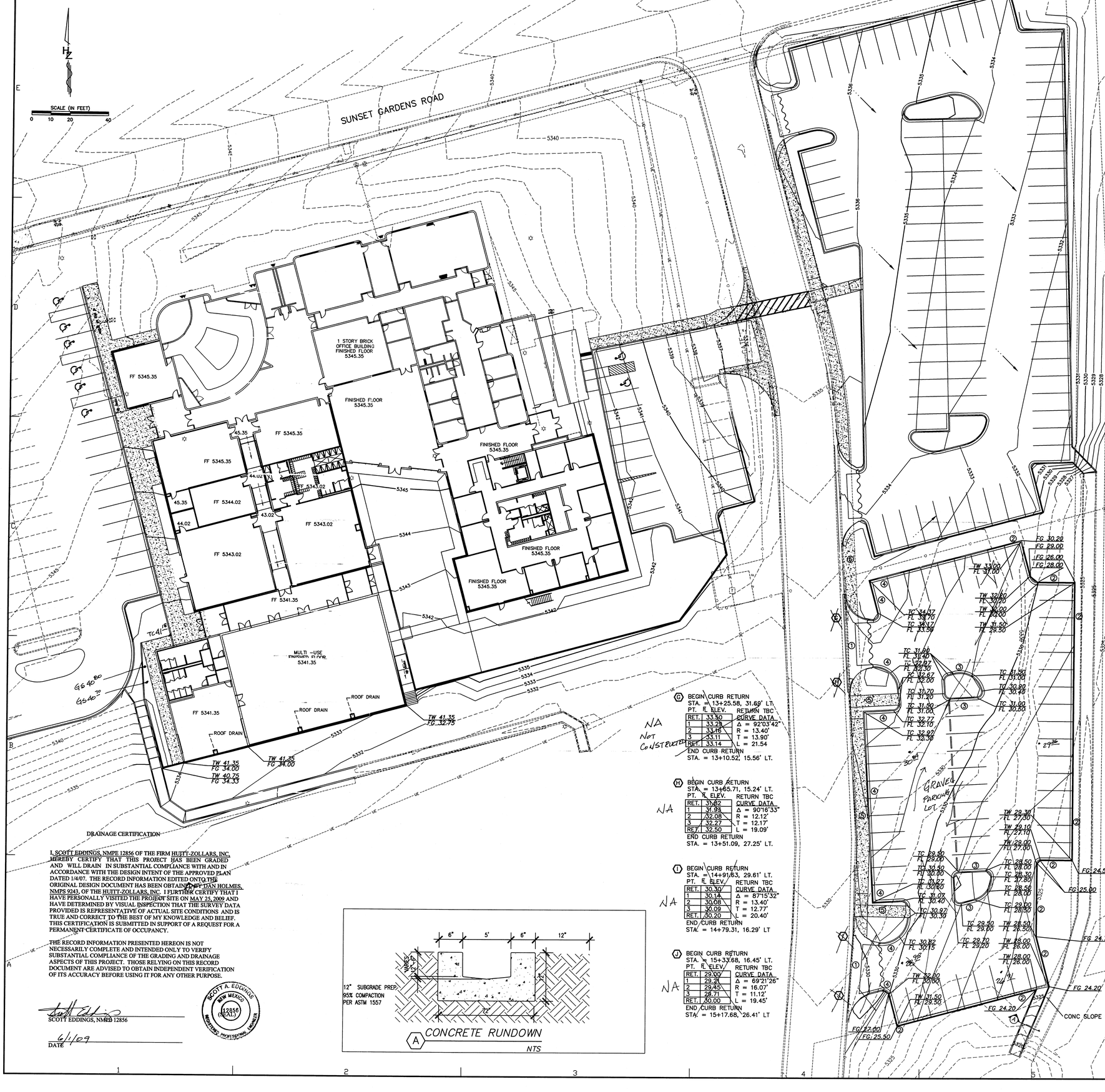
MARK	DATE	DESCRIPTION

ISSUE: CONSTRUCTION DOCUMENTS
PROJECT NO: 0512
CAD DWG FILE:
DRAWN BY: FSM
CHECKED BY: SAE
DATE: 12/19/06

SHEET TITLE

GRADING AND DRAINAGE BASE BID

C-001-A



DRAINAGE CERTIFICATION

I, SCOTT EDDINGS, NMPE 12856 OF THE FIRM HUITT-ZOLLARS, INC. HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 1/4/07. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY DAN HOLMES, NMPS 9243, OF THE HUITT-ZOLLARS, INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON MAY 25, 2009 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

SCOTT A. EDDINGS NEW MEXICO 12856 REGISTERED PROFESSIONAL ENGINEER

SCOTT EDDINGS, NMPE 12856

6/1/09
DATE

(G) BEGIN CURB RETURN
STA. = 13+25.58, 31.69' LT.

PT.	FL ELEV.	RETURN TBC CURVE DATA
RET.	33.50	
1	33.28	Δ = 92°03'42"
2	33.16	R = 13.40'
3	33.11	T = 13.90'
RET.	33.14	L = 21.54

END CURB RETURN
STA. = 13+10.52, 15.56' LT.

NA
NOT CONSTRUCTED

(H) BEGIN CURB RETURN
STA. = 13+65.71, 15.24' LT.

PT.	FL ELEV.	RETURN TBC CURVE DATA
RET.	31.82	
1	31.93	Δ = 90°16'33"
2	32.08	R = 12.12'
3	32.27	T = 12.17'
RET.	32.50	L = 19.09'

END CURB RETURN
STA. = 13+51.09, 27.25' LT.

NA

(I) BEGIN CURB RETURN
STA. = 14+91.63, 29.61' LT.

PT.	FL ELEV.	RETURN TBC CURVE DATA
RET.	30.30	
1	30.14	Δ = 87°15'32"
2	30.08	R = 13.40'
3	30.09	T = 12.77'
RET.	30.20	L = 20.40'

END CURB RETURN
STA. = 14+79.31, 16.29' LT.

NA

(J) BEGIN CURB RETURN
STA. = 15+33.68, 16.45' LT.

PT.	FL ELEV.	RETURN TBC CURVE DATA
RET.	29.07	
1	29.21	Δ = 69°21'26"
2	29.45	R = 16.07'
3	28.71	T = 11.12'
RET.	30.00	L = 19.45'

END CURB RETURN
STA. = 15+17.68, 26.41' LT.

NA

A CONCRETE RUNDOWN
NTS

GENERAL LEGEND

EXISTING CONTOUR	75
PROPOSED CONTOUR	5108
PROPOSED SPOT ELEVATION	TC 01.75
UTILITY EASEMENTS	
RETAINING WALLS BY OTHERS	
WATER BLOCK	
EXISTING GROUND ELEVATION	+5101.69
FLOW DIRECTION ARROW	
TOP OF CURB ELEVATION	TC
FLOW LINE ELEVATION	FL
TOP OF CONCRETE	TOC
TOP OF ASPHALT	TA
FINISHED FLOOR	FF
INVERT	INV
TOP OF GRATE	TG
TOP OF WALL	TW
TOP OF SIDEWALK	TSW

BUILD NOTES

1. REMOVE EXISTING CURB & GUTTER AND SIDEWALK TO ACCOMMODATE ENTRANCES CONSTRUCT DRIVEPADS AND HANDICAP RAMPS PER COA STD DWG 2420.
2. CONSTRUCT RETAINING WALL SEE DETAILS ON SHEET C-002
3. CONSTRUCT CONCRETE MEDIAN CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
4. CONSTRUCT CONCRETE STANDARD CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.
5. CONSTRUCT 4" THICK CONCRETE SIDEWALK PER ARCHITECTURAL PLANS
6. CONSTRUCT CONCRETE MOUNTABLE CURB & GUTTER PER CITY OF ALBUQUERQUE STD. DWG. 2415.

GENERAL NOTES

1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
2. ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
4. THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALB. FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

BENCHMARK

ACS MONUMENT "6-L8" HAVING AN ELEVATION OF 5383.906 FEET (SLD 1929).

LEGAL DESCRIPTION

TRACT LETTERED "A", WESTSIDE SATELLITE CENTER, BERNALILLO COUNTY, NEW MEXICO AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY ON AUGUST 28, 1990 IN BOOK 90C, PAGE 208.

SOURCE OF EXISTING SURVEY

TOPOGRAPHIC SURVEY PERFORMED BY CARTESIAN SURVEYS, INC. DATED DECEMBER 2005

S.O. 19 REQUIREMENTS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK IN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE SAME TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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 ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

STUDIO SW ARCHITECTS

STUDIO SOUTHWEST ARCHITECTS, INC.
2101 Mountain Rd. NW, Albuquerque, NM 87104
505.843.9639 fax 505.843.9683
Web Site: www.studioswarch.com
E-Mail: mail@studioswarch.com

CONSULTANTS

Designed By:
HUITT-ZOLLARS
Huitt-Zollars, Inc. Rio Rancho
333 Rio Rancho Drive NE, Suite 101
Rio Rancho, New Mexico 87124
Phone (505) 892-5141 Fax (505) 892-3259

Architect Engineer

SCOTT A. EDDINGS NEW MEXICO 12856 REGISTERED PROFESSIONAL ENGINEER 1/4/07

MARK	DATE	DESCRIPTION

ISSUE: CONSTRUCTION DOCUMENTS
PROJECT NO: 0512
CAD DWG FILE:
DRAWN BY: FSM
CHECKED BY: SAE
DATE: 12/19/06

SHEET TITLE

GRADING AND DRAINAGE
ADD ALT #1

RECEIVED
JUN 01 2009
HYDROLOGY SECTION

C-001-B