



VICINITY MAP J-14  
FIRM PANEL 0332D

GRADING/DRAINAGE PLAN  
THE FOLLOWING ITEMS CONCERNING TRACT A OF LANDS OF ESQUELA DEL SOL (MONTESSORI ESQUELA DEL SOL 1114 7TH ST. NW) ARE CONTAINED HEREON:

1. VICINITY MAP
2. FIRM FLOOD MAP
3. DRAINAGE CALCULATIONS

EXISTING CONDITIONS  
AS SHOWN BY THE VICINITY MAP, THE SITE WHICH IS BEING IMPROVED CONTAINS .6104 ACRES AND IS LOCATED AT THE NORTHEAST QUADRANT OF THE INTERSECTION OF 7TH STREET NW AND GRANITE AVENUE NW. THE SITE IS COMPLETELY DEVELOPED WITH BUILDINGS, PARKING, AND PLAYGROUNDS. A 6,746 SQUARE FOOT PARCEL (1549 ACRES) LOCATED EAST OF THE SCHOOL HAS BEEN INCLUDED ON THE REPLAT. AN EXISTING SINGLE FAMILY DWELLING ON THE ABOVE REFERENCED PARCEL HAS BEEN DEMOLISHED AND WILL BE DEVELOPED AS CLASSROOMS. ACCORDING TO THE FLOOD INSURANCE RATE MAP PANEL 0332D, DATED SEPTEMBER 20, 1996, THE SITE IS LOCATED WITHIN A DESIGNATED 500-YEAR FLOOD ZONE.

#### PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROJECT WILL CONSIST OF CLASSROOM ADDITIONS ON THE PARCEL INCLUDED ON THE REPLAT AND ADDITIONAL PAVED PARKING ON THE SOUTHSIDE OF THE EXISTING LARGER BUILDING. ON-SITE DEVELOPED FLOWS FROM THE PROPOSED PAVED PARKING WILL BE ROUTED THROUGH THE PROPOSED SIDEWALK CULVERT INTO GRANITE NW. THERE IS AN EXISTING STORM DRAIN INLET LOCATED ON THE EAST NORTHEAST CURB RETURN OF GRANITE AVENUE NW AND 7TH STREET NW. DEVELOPED FLOWS FROM THE CLASSROOM ADDITION WILL BE ROUTED TO A PROPOSED PONDING AREA LOCATED WITHIN AN EXISTING PLAYGROUND AREA LOCATED WEST OF THE PROPOSED CLASSROOMS. DEVELOPED FLOW VOLUME FROM THE CLASSROOM AREA IS 2092 CF. THE PLAYGROUND PONDING AREA WILL PROVIDE 2150 CF. A RETENTION POND IS PROPOSED WITHIN THE PLAYGROUND AREA BECAUSE THE EXISTING GRADES WILL NOT ALLOW FOR THE DEVELOPED FLOWS TO BE ROUTED TO GRANITE AVENUE NW. CONCERN FOR THE CHILDRENS WELFARE DOES NOT ALLOW FOR THE FINISH FLOOR TO BE ELEVATED SO AS TO OBTAIN SUFFICIENT SLOPE TO DRAIN TO GRANITE AVENUE NW. NO OFF-SITE FLOWS ENTER THE SITE. THE PROCEDURE FOR 40 ACRES AND SMALLER BASINS AS SET FORTH IN THE MANUAL VOLUME II, DESIGN CRITERIA DATED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUN-OFF GENERATED.

ESQUELA DEL SOL AREA = 0.61ac.

ZONE 2  
PRECIPITATION: 360 = 2.35in.  
1440 = 2.75in.  
10day = 3.95in.

EXCESS PRECIPITATION: PEAK DISCHARGE:

TREATMENT A	0.53in.	1.56 cfs/ac.
TREATMENT B	0.78in.	2.28 cfs/ac.
TREATMENT C	1.13in.	3.14 cfs/ac.
TREATMENT D	2.12in.	4.70 cfs/ac.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:	
TREATMENT A	0.0ac.	0.0ac.
TREATMENT B	0.0ac.	0.0ac.
TREATMENT C	0.51ac.	0.115ac.
TREATMENT D	0.10ac.	0.495ac.

EXISTING EXCESS PRECIPITATION:

Weighted E =  $0.53 \times 0.00 + 0.78 \times 0.00 + 1.13 \times 0.51 + 2.12 \times 0.10 = 0.61ac.$   
= 1.30  
V100-360 =  $1.30 \times 0.61 / 12 = 0.0660ac = 2877 cf$

EXISTING PEAK DISCHARGE:

Q100 =  $1.56 \times 0.00 + 2.28 \times 0.00 + 3.14 \times 0.51 + 4.70 \times 0.10 = 2.07cfs$

PROPOSED EXCESS PRECIPITATION:

Weighted E =  $0.53 \times 0.00 + 0.78 \times 0.00 + 1.13 \times 0.12 + 2.12 \times 0.49 = 0.61ac.$   
= 1.93  
V100-360 =  $1.93 \times 0.61 / 12.0 = 0.0983ac = 4282 cf$

V100-1440 =  $0.10 \times 0.49 \times 2.75 - 2.35 / 12 = 0.1148ac = 5001 cf$

V100-10day =  $0.10 \times 0.49 \times 3.95 - 2.35 / 12 = 0.1642ac = 7157 cf$

PROPOSED PEAK DISCHARGE:

Q100 =  $1.56 \times 0.00 + 2.28 \times 0.00 + 3.14 \times 0.12 + 4.70 \times 0.49 = 2.68cfs$

#### NOTE TO CONTRACTOR:

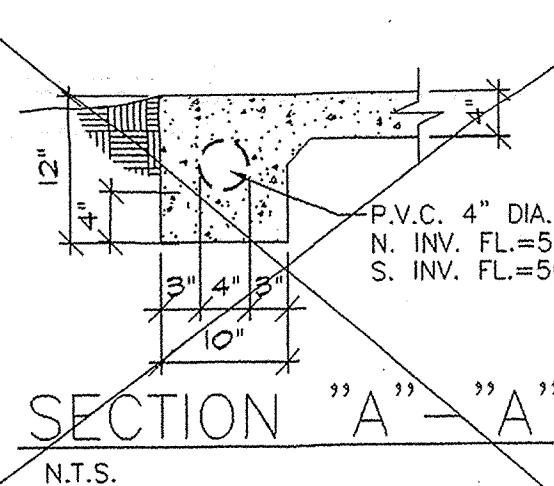
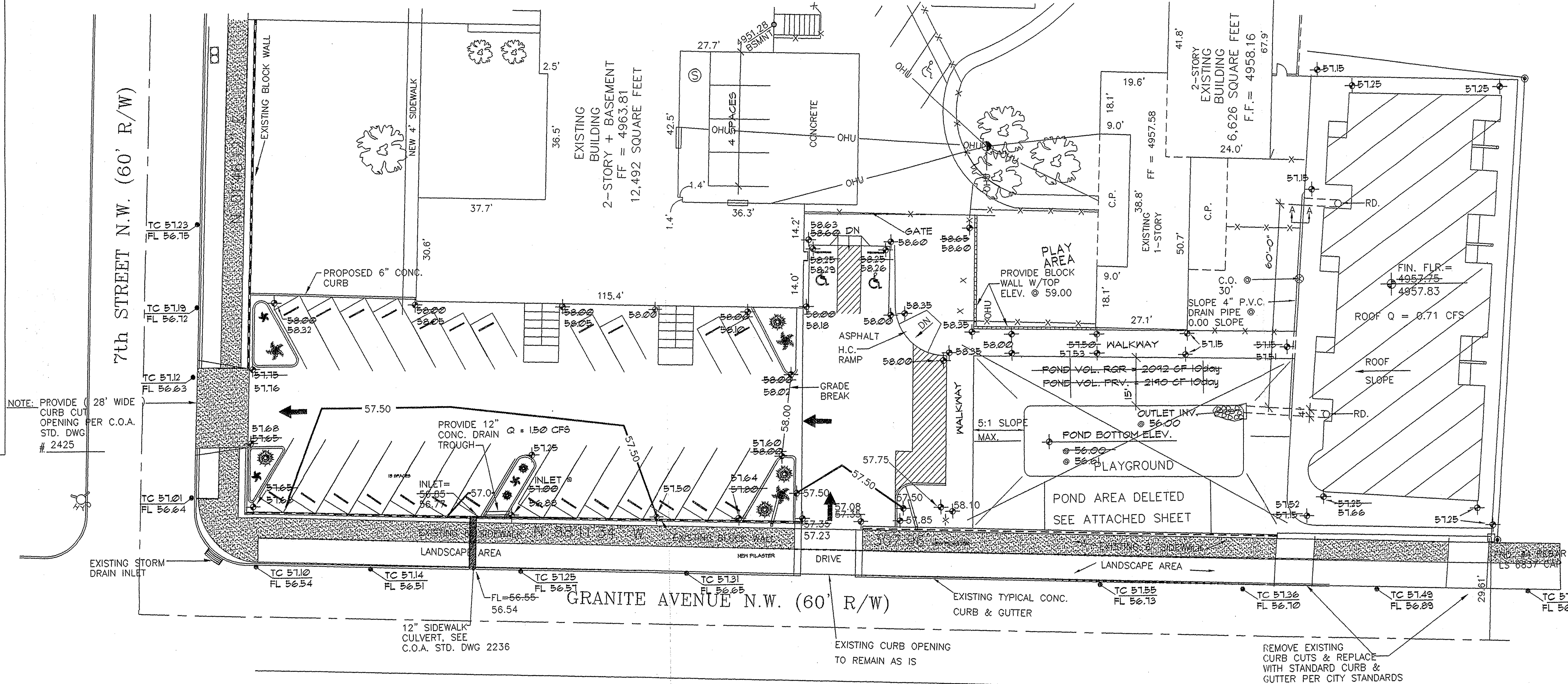
1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services (760-1990) for locating existing sub-surface utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential constructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay to the subject project.
5. Backfill compaction shall be according to commercial use or soils report(s) recommendations.
6. 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.
7. Maintenance of this facilities shall be the responsibility of the owner of the property it serves

#### EROSION CONTROL MEASURES:

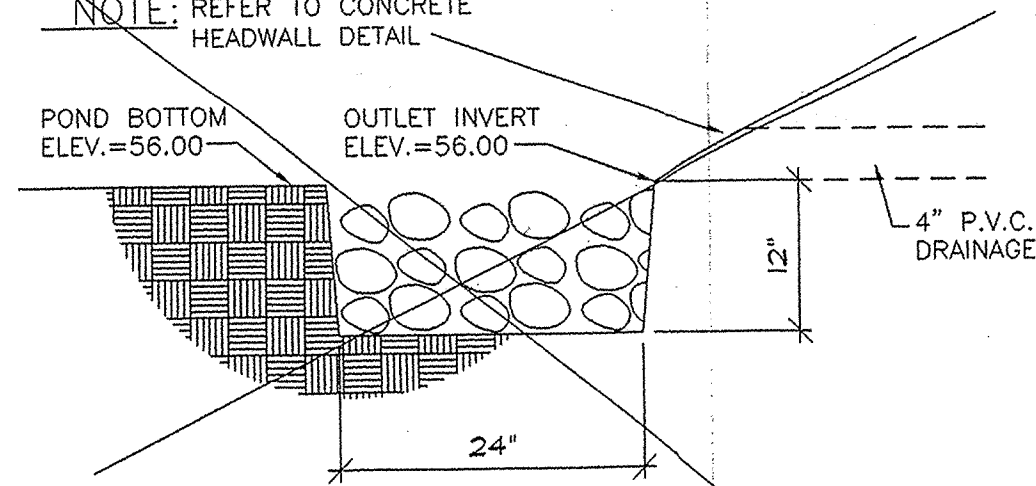
1. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUN-OFF DURING CONSTRUCTION, HE SHALL ASSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- A. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY TEMPORARY BERMS, DIKES, SWALES, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUN-OFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- B. ADJACENT PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUN-OFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER THE PUBLIC STREETS.

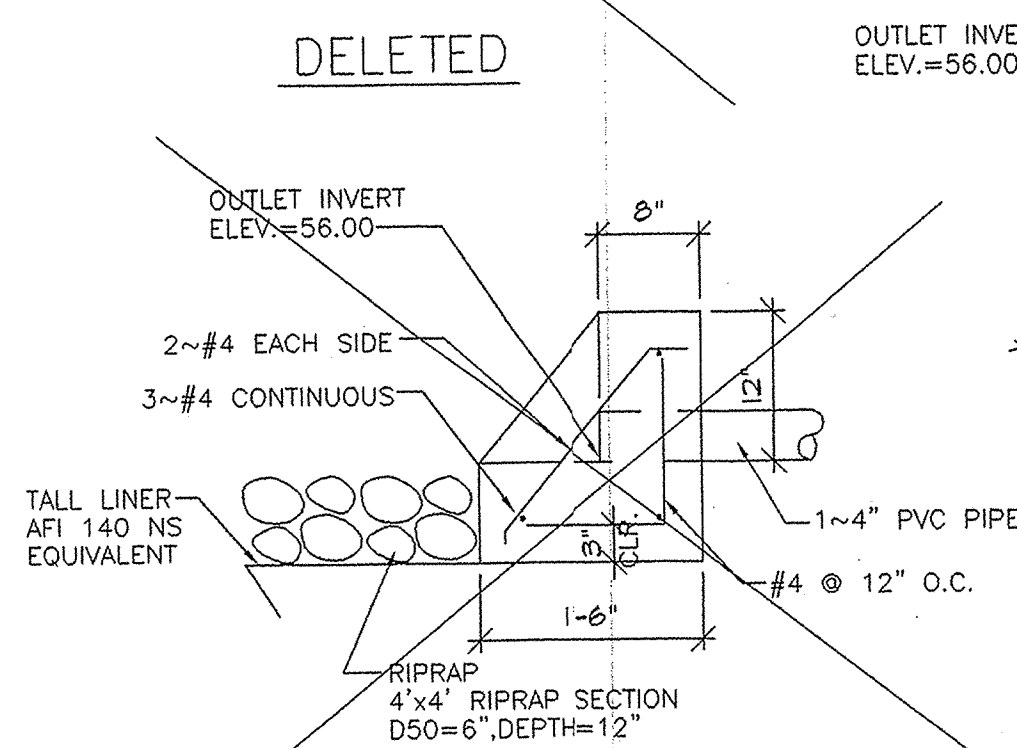
2. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY OR ALL SEDIMENT WITHIN THE PUBLIC STREETS THAT HAVE BEEN ERODED FROM THE SITE AND DEPOSITED THEREON.



SECTION "A-A"  
N.T.S.



DELETED



ONE PIPE HEADWALL DETAIL  
N.T.S.

(DELETED)

NOTE: PROPOSED GRADE STAKING IS CRITICAL FOR PROPER DRAINAGE CONCEPT TO FUNCTION

#### SIDEWALK CULVERT CAPACITY

Q =  $C_a (2gh)^{1/2}$  h=5 C=.67 g=32.2 a=.5'

Q =  $(.67)(.5)(5.6745)$

Q = 1.90 cfs > 1.53 cfs

#### SYMBOL LEGEND

PROPOSED CONTOUR — 58.00 —  
PROPOSED SPOT ELEVATION — 57.50 —

EXISTING BLOCK WALL —

#### ABBREVIATION LEGEND

TOP OF CURB — TC = 57.25  
FLOWLINE — FL = 56.57  
TOP OF WALL — TW = 59.00  
EXISTING OR PROPOSED CONCRETE SURFACE

AS-BUILT SPOT ELEVATIONS — 57.50 —

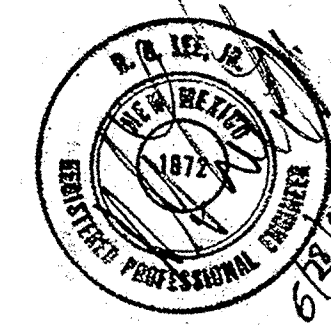
AS-BUILT DRAINAGE/GRADING PLAN FOR MONTESSORI ESQUELA DEL SOL @ 1114 7TH STREET N.W.

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE MONTESSORI ESQUELA DEL SOL @ 1114 7TH STREET N.W. HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN DATED 5/8/2000 WITH THE FOLLOWING DEVIATION:

1. THE PROPOSED PONDING AREA WITHIN THE PLAYGROUND AREA WAS CHANGED TO AN UNDERGROUND FRENCH DRAIN TYPE SYSTEM SHOWN ON SHEET 2 OF 2. CONVERSATION WITH MR. BRAD BINGHAM FROM CITY HYDROLOGY DEPARTMENT ALLOWED THE CHANGE

THIS DEVIATION DOES NOT IMPACT THE DRAINAGE CONCEPT IN ANY WAY. THE SITE DRAINAGE WILL FUNCTION IN ACCORDANCE WITH THE PATTERN ESTABLISHED BY THE APPROVED PLAN. THEREFORE A PERMANENT CERTIFICATE OF OCCUPANCY IS HIGHLY RECOMMENDED. THE AS-BUILT INFORMATION SHOWN HEREON WAS OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

R.G. LEE JR. NMPE # 1872



#### DRAINAGE FACILITIES WITHIN CITY RIGHT OF WAY

HYDROLOGY APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_

INSPECTION APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_

ACCEPTANCE \_\_\_\_\_ DATE \_\_\_\_\_

#### LEGAL DESCRIPTION

PLAT OF TRACT A OF LANDS OF ESQUELA DEL SOL, BERNALILLO COUNTY, ALBUQUERQUE NEW MEXICO.

#### BENCHMARK:

TOP OF EXISTING MANHOLE JUST EAST OF SITE ON GRANITE AVE. NW; ELEVATION: 4957.31 (M.S.L.), PER CITY OF ALBUQUERQUE ENGINEERING DEPARTMENT INFORMATION.

Sheet Title

AS-BUILT GRADING AND DRAINAGE PLAN

Drawn By: BJM

Checked By:

BJM DEVELOPMENT CONSULTANT

DESIGN - PLANNER

Albuquerque, New Mexico

Project Name  
MONTESSORI ESQUELA DEL SOL  
1114 7TH STREET, N.W.

ALBUQUERQUE, NEW MEXICO

SHEET NO.

GD-1