

CITY OF ALBUQUERQUE



December 5, 2008

Jason R. Woodruff, P.E.
Wilson & Company, Inc.
4900 Lang Ave. NE
Albuquerque, NM 87109

**Re: Cibola High School Parking Lot Improvements Grading and Drainage Plan
Engineer's Stamp dated 11-12-08 (A13/D004)**

Dear Mr. Woodruff,

Based upon the information provided in your submittal received 11-14-08, the above referenced plan is approved for Grading Permit and Building Permit.

Upon completion of the project, provide an Engineer Certification for our files.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.
Senior Engineer, Planning Dept.
Development and Building Services

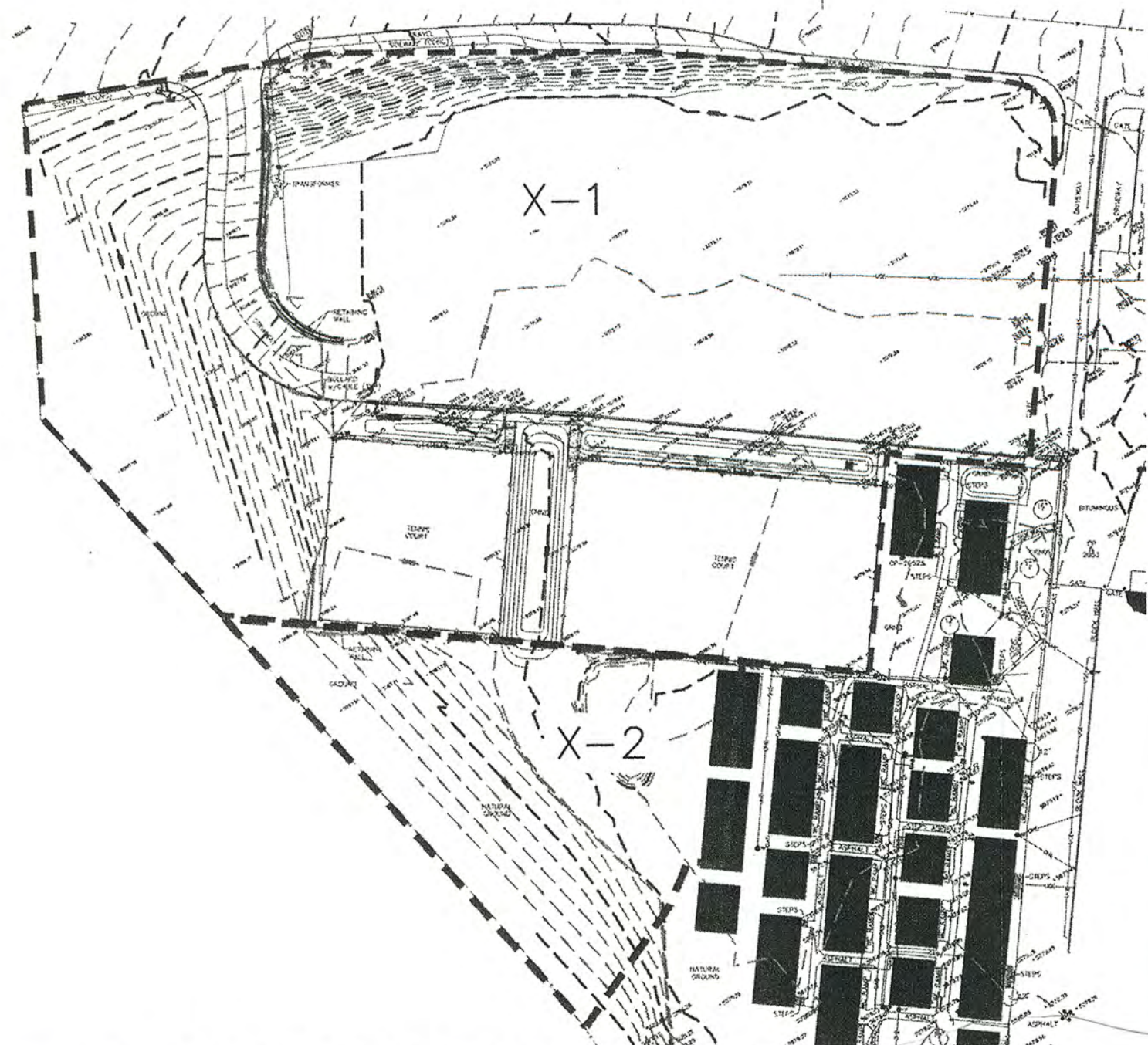
PO Box 1293

Albuquerque

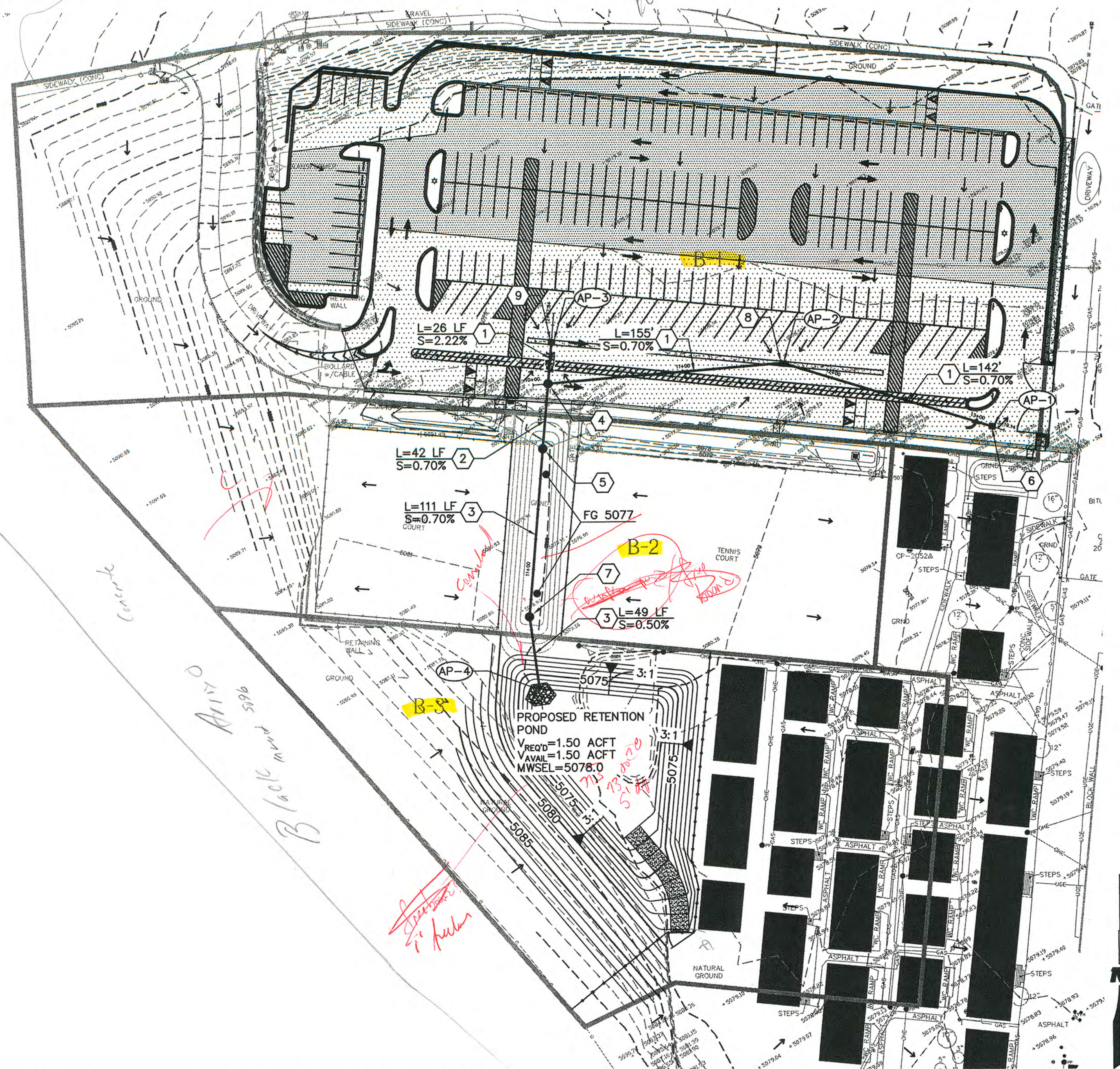
NM 87103

www.cabq.gov

C: file



C1 EXISTING BASINS MAP
SCALE: 1"=100'



A1 OVERALL GRADING AND DRAINAGE PLAN
SCALE: 1"=50'

SHEET KEY NOTES

1. INSTALL 18" ADS STORM DRAIN
2. INSTALL 24" ADS STORM DRAIN
3. INSTALL 36" ADS STORM DRAIN
4. INSTALL 6' DIA TYPE "C" MH PER COA STD DTL 2101
RIM=78.41
INV=73.31
5. INSTALL 6' DIA TYPE "C" MH PER COA STD DTL 2101
RIM=77.20
INV=73.01
6. INSTALL SINGLE TYPE "D" INLET PER COA STD DTL 2206
TOG=78.10
INV=75.40
7. INSTALL 6' DIA TYPE "C" MH PER COA STD DTL 2101
RIM=77.20
INV=72.24
8. INSTALL SINGLE TYPE "D" INLET PER COA STD DTL 2206
TOG=77.64
INV=74.39
9. INSTALL SINGLE TYPE "D" INLET PER COA STD DTL 2206
TOG=77.91
INV=73.91

EXISTING CONDITIONS

THE SITE IS PREDOMINATELY SILTY SANDS WITH NO SIGNIFICANT VEGETATION EXCEPT IN THE LANDSCAPED BUFFERS NEXT TO THE ADJACENT STREETS AND CHANNEL. THE EXISTING SOIL IS MODERATELY COMPACTED AND HAS MILD TO SEVERE SLOPES. IN THE PAST, THE AREA PLANNED FOR THE PROPOSED POND HAS BEEN USED FOR PORTABLE SCHOOL BUILDINGS. DRAINAGE FROM BASIN X-1 CURRENTLY POND IN THE PARKING LOT WITH OVERFLOW PASSING TO THE EAST. DRAINAGE FROM BASIN X-2 CURRENTLY DRAINS TO A LOW POINT WEST OF THE EXISTING PORTABLES. EXISTING DISCHARGE TO THE DEPRESSION IS APPROXIMATELY 5.10 CFS.

PROPOSED CONDITIONS

THE PROPOSED SITE WILL INCLUDE AN SLIGHT EXPANSION OF THE PARKING LOT, STORM DRAIN IMPROVEMENTS, AND THE ADDITION OF AN ONSITE RETENTION POND. THE SITE WILL CONTINUE TO DISCHARGE IN HISTORIC PATTERNS EXCEPT FOR FLOWS IN THE PARKING LOT. PARKING LOT FLOWS WILL NOW BE CAPTURED BY THE PROPOSED STORM DRAIN AND ROUTED TO THE PROPOSED POND. DEVELOPED FLOWS ENTERING THE POND FROM THE SITE WILL BE APPROXIMATELY 21.68 CFS IN THE DESIGN STORM. THE POND WILL CAPTURE AND RETAIN THE 100-YR/10 DAY STORM (1.50 ACFT).

HYDROLOGIC DATA -- EXISTING

AREA (acres)	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE	YIELD (cfs/ac)	Q ₁₀ (cfs)	Q ₅₀ (cfs)	V ₁₀₀ - ₂₄ (acft)
X-1	5.47	A 5 B 20 C 75 D	3.95	13.68	21.26	0.91
X-2	1.80	15 20 35 30	2.66	2.50	5.10	0.16

HYDROLOGIC DATA -- PROPOSED

AREA (acres)	AREA (acres)	LAND TREATMENT PERCENTAGES BY TYPE	YIELD (cfs/ac)	Q ₁₀ (cfs)	Q ₅₀ (cfs)	V ₁₀₀ - ₂₄ (acft)
B-1	3.80	0 0 20 80	4.08	9.94	15.49	0.66
B-2	1.67	10 5 15 70	3.71	3.81	6.19	0.26
B-3	1.90	20 30 20 30	2.48	2.23	4.76	0.15

RETENTION POND VOLUME

$$V_{100yr-24hr} = V_{100} + A_p(P_{100yr} - P_{24hr})/12IN/FT$$
$$V_{100yr-24hr} = 0.92 + 4.78(3.67 - 2.20)/12IN/FT$$
$$V_{100yr-24hr} = 1.50 AC FT (REQUIRED)$$

HYDRAULIC SUMMARY

DESCRIPTION	Q ₁₀ (CFS)
AP-1 GRATE INLET	0.50
AP-2 GRATE INLET	6.20
AP-3 GRATE INLET	9.29
AP-4 OUTFALL	21.68

LEGAL DESCRIPTION

TR ONE ANNEXATION & DEDICATION PLAT OF CIBOLA H S PORT OF THE LDS OF ALB BOARD OF EDUCATION SITUATE WITHIN TOWN OF ALAMEDA GRANT

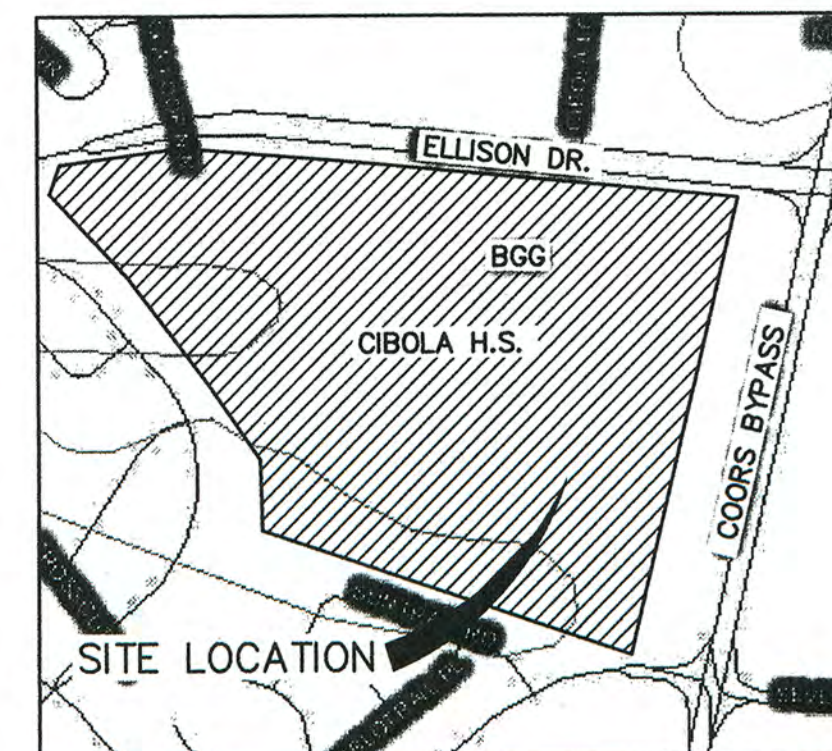
BENCH MARK

BENCHMARK USED IS AN ACS ALUMINUM DISK STAMPED "ACS BM, 2-A13", EPOXY TO TOP OF CONCRETE CURB AT THE SOUTH-SOUTHEAST QUADRANT OF VISTA DEL SOL DR. & VISTA DEL SOL COURT, N.W. ELEVATION = 5121.119



FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY
MAP NUMBER 35001C0108G, PANEL 108, FLOOD ZONE TYPE A



SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY



LOCATION MAP

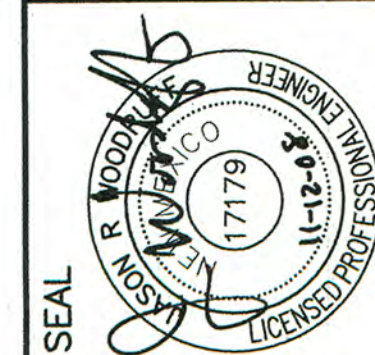
ZONE ATLAS NUMBER: A-13

LEGEND

- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING SPRINKLER CONTROL BOX
- EXISTING SPRINKLER HEAD
- EXISTING CLEANOUT
- EXISTING TREE OR BUSH
- LIGHT POLE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING ROOF DRAIN
- EXISTING CHAIN LINK FENCE
- CONTROL POINT
- EXISTING BASIN
- PROPOSED BASIN
- MEDIAN C&G
- CHAIN LINK FENCE
- RETAINING WALL
- NEW ASPHALT PAVING
- NEW 4" PCC
- NEW SLURRY SEAL
- FLOW ARROW

WILSON & COMPANY
4900 Lang Avenue NE
Albuquerque, NM 87109
Phone: (505) 348-4000

CONSULTANTS



PROJECT NAME
CIBOLA HIGH SCHOOL
PARKING LOT IMPROVEMENTS
PHASE II

MARK	DATE	DESCRIPTION

PROJECT NO:
07-600-072-00
DRAWN BY: JEM
CHECKED BY: JRW
SHEET TITLE
OVERALL
GRADING
AND
DRAINAGE
PLAN

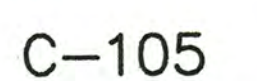
SHEET
C-104

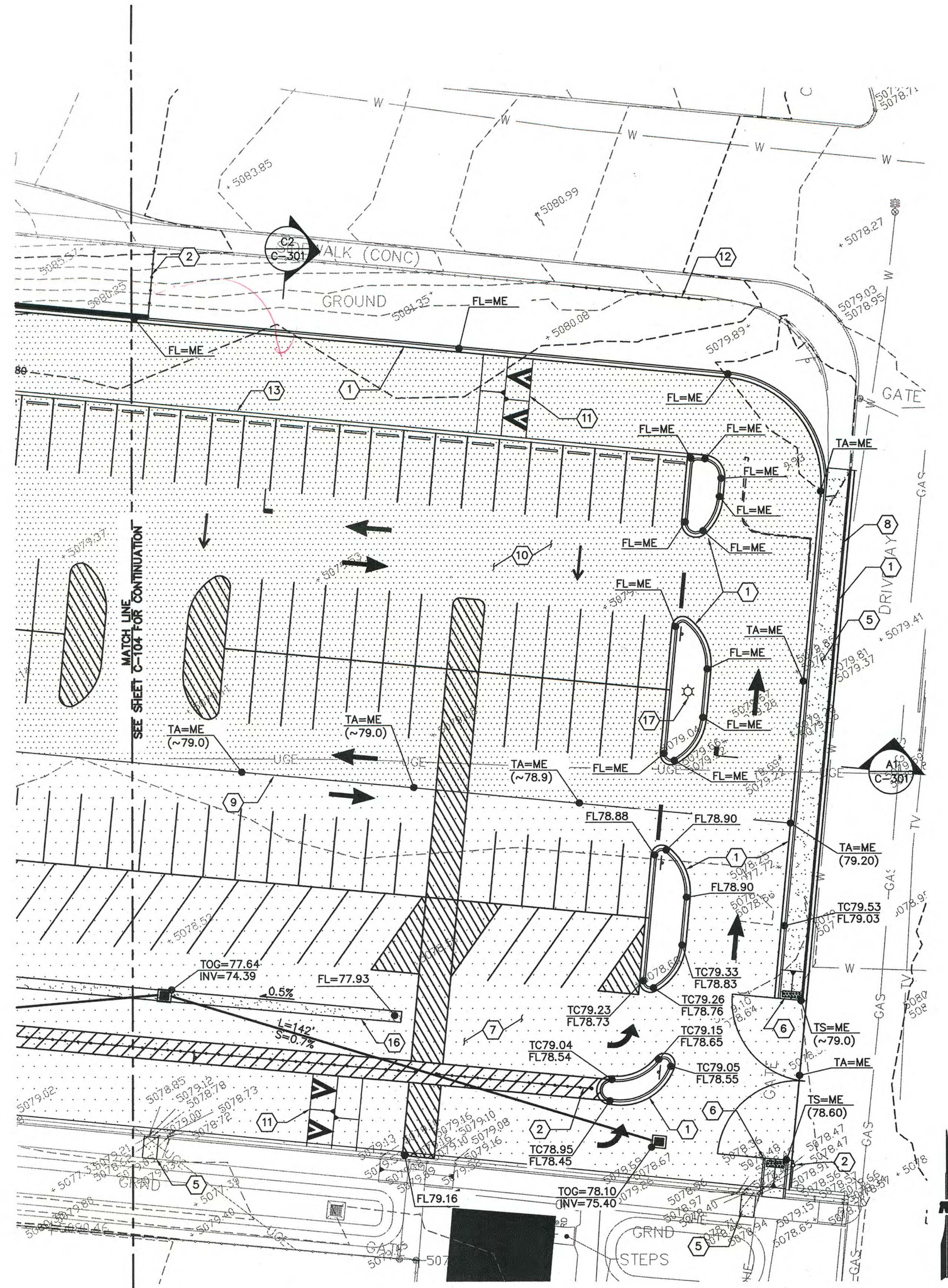
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 MATCH LINE
SEE SHEET C-107 FOR CONTINUATION



BENCHMARK USED IS AN ACS ALUMINUM DISK STAMPED "ACS BM, 2-A13",
EPOXYED TO TOP OF CONCRETE CURB AT THE SOUTH-SOUTHEAST QUADRANT
OF VISTA DEL SOL DR. & VISTA DEL SOL COURT, N.W. ELEVATION =
5121.119





GENERAL NOTES

1. ALL SHEET KEY NOTES DO NOT APPLY TO THIS SHEET.

SHEET KEY NOTES

1. INSTALL MEDIUM CURB & GUTTER. SEE DETAIL A1/C-501.
2. INSTALL 4"-0"H CHAINLINK FENCE. SEE DETAIL A3/C-501.
3. RELOCATED LIGHT POLE.
4. INSTALL RETAINING WALL. SEE SHEET C-401.
5. INSTALL 4" PCC SIDEWALK. SEE DETAIL B1/C-501.
6. INSTALL ADA UNI-DIRECTIONAL RAMP. SEE DETAIL C2/C-501.
7. INSTALL 3" ASPHALT PAVEMENT. SEE DETAIL A2/C-501.
8. REINSTALL SALVAGED FENCE AND GATE.
9. SAWCUT NEAT LINE FOR INSTALLATION OF NEW 3" ASPHALT.
10. INSTALL SLURRY SEAL.
11. INSTALL SPEED HUMP. SEE DETAIL A4/C-502.
12. INSTALL CHAIN LINK FENCE TO MATCH EXISTING.
13. INSTALL 12" MOW CURB. SEE DETAIL C4/C-502.
14. INSTALL 12" CURB CUT.
15. INSTALL ADA RAMP. SEE DETAIL D2/C-501.
16. INSTALL 3'-0"W VALLEY GUTTER. SEE DETAIL D4/C-502.
17. INSTALL LIGHT POLE, INCLUDING ALL CONDUIT, CONDUCTORS AND APPURTENANCES.

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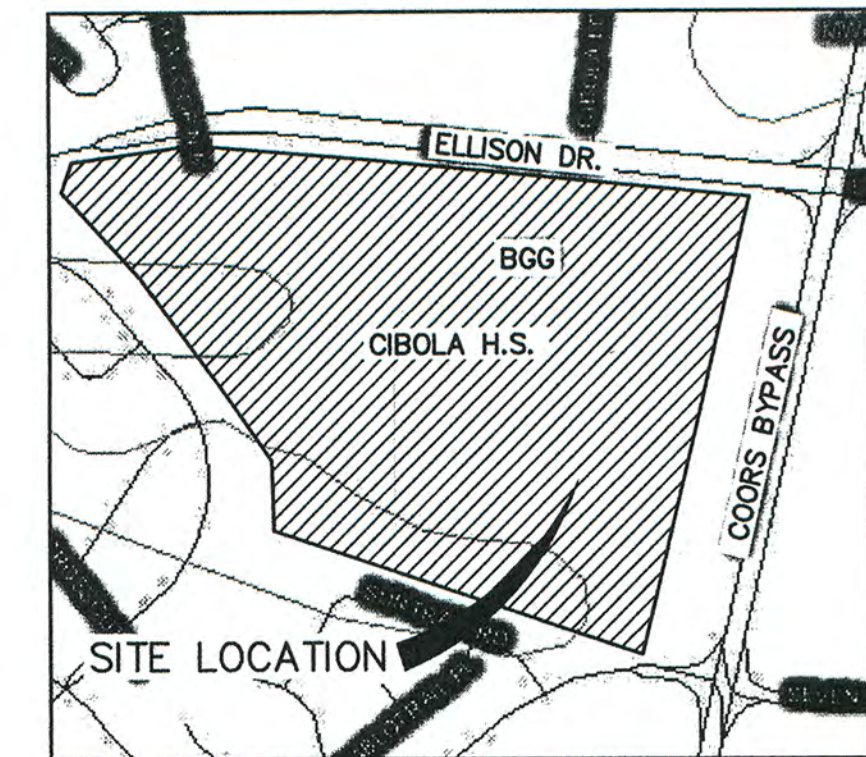
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FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY
MAP NUMBER 35001C0108G, PANEL 108, FLOOD ZONE TYPE A



SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY



LOCATION MAP

ZONE ATLAS NUMBER: A-13

LEGEND

-- 5505 --	EXISTING INDEX CONTOUR
-----	EXISTING INTERMEDIATE CONTOUR
+ 5592.10	EXISTING SPOT ELEVATION
EW	EXISTING SPRINKLER CONTROL BOX
* SP	EXISTING SPRINKLER HEAD
☼	EXISTING CLEANOUT
🌳	EXISTING TREE OR BUSH
☼	LIGHT POLE
🔧	EXISTING WATER VALVE
🔥	EXISTING FIRE HYDRANT
⚙️	EXISTING ROOF DRAIN
—○—	EXISTING CHAIN LINK FENCE
△	CONTROL POINT
TA	TOP OF ASPHALT ELEVATION
TS	TOP OF SIDEWALK ELEVATION
FL	FLOWLINE ELEVATION
TW	TOP OF WALL ELEVATION
BW	BOTTOM OF WALL ELEVATION
TOG	TOP OF GRATE
INV	INVERT
=====	MEDIAN C&G
—○—	CHAIN LINK FENCE
=====	RETAINING WALL
➡	FLOW ARROW
.....	NEW ASPHALT PAVING
🔧	NEW 4" PCC
🔧	NEW SLURRY SEAL

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PROJECT NAME
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PHASE II

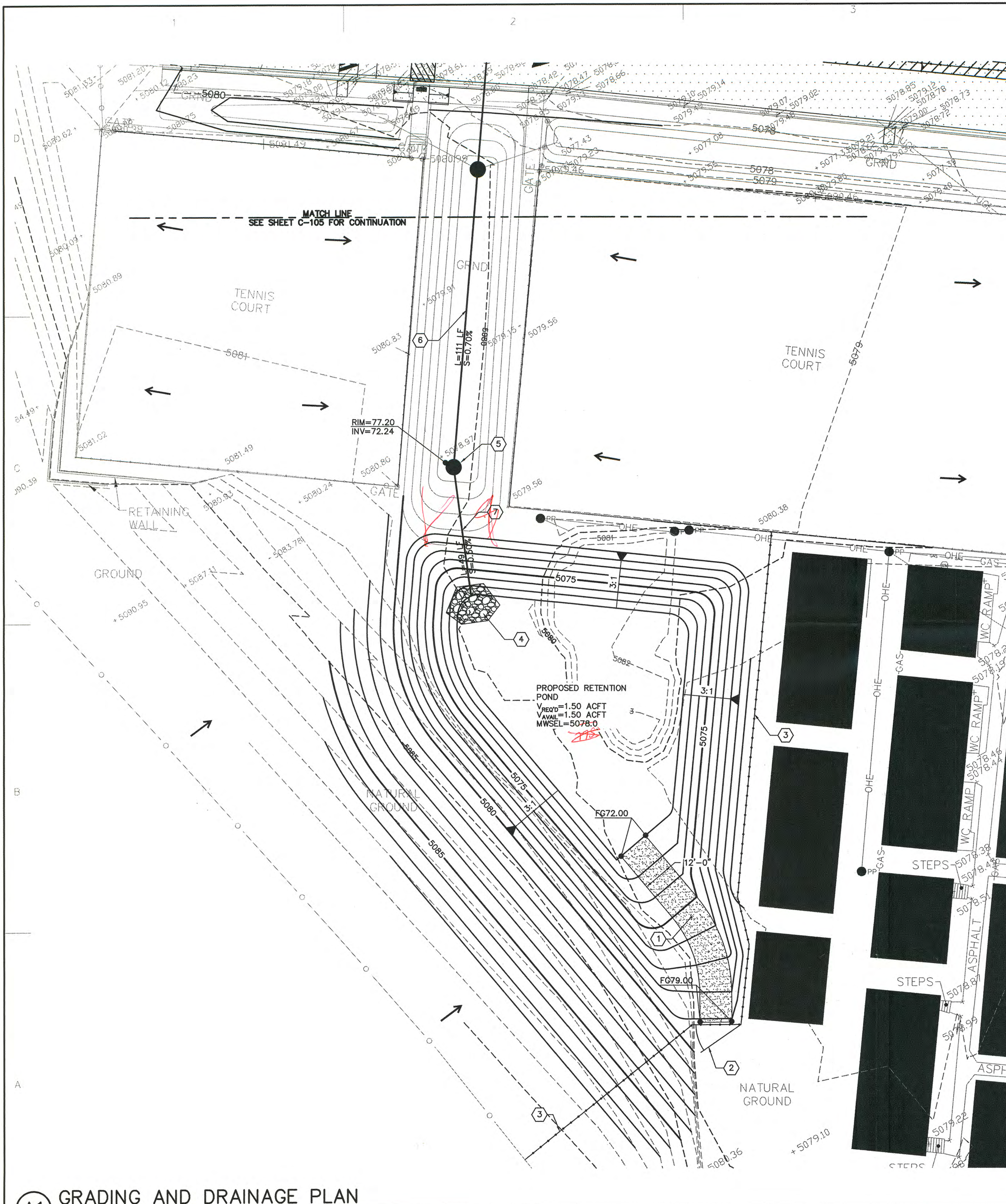
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PROJECT NO:	07-600-072-00
DRAWN BY:	JEM
CHECKED BY:	JRW
SHEET TITLE	

GRADING
AND
DRAINAGE
PLAN

SHEET

C-106



A1 GRADING AND DRAINAGE PLAN
SCALE: 1"=20'

GENERAL NOTES

1. ALL SHEET KEYNOTES DO NOT APPLY TO THIS SHEET.

SHEET KEY NOTES

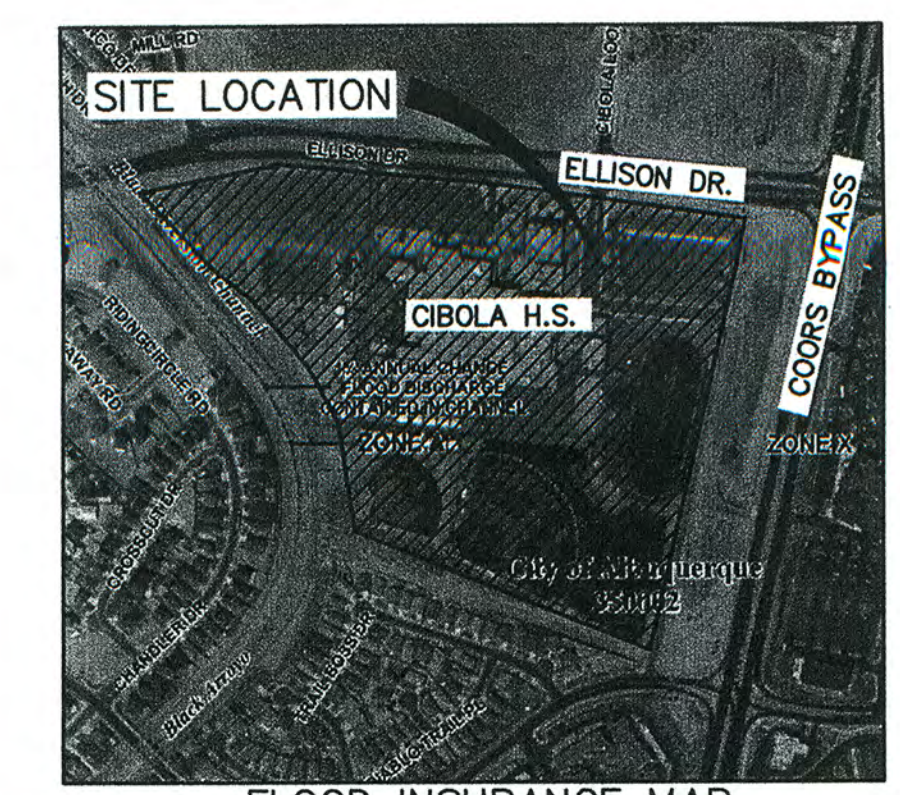
1. INSTALL ACCESS ROAD. SEE DETAIL A3/C-502.
2. INSTALL 12'-0"W PIPE GATE. SEE DETAIL D3/C-502.
3. INSTALL 5'-0"H CHAIN LINK FENCE. SEE DETAIL A3/C-501.
4. INSTALL RIPRAP. SEE DETAIL B3/C-502.
5. INSTALL 6' DIA TYPE "C" MH. SEE COA STD DWG 2101 W/SLOTTED MH COVER.
6. INSTALL 36" SAS PIPE. SEE SHEET C-403.
7. INSTALL 36" SAS PIPE. SEE SHEET C-403.

LEGAL DESCRIPTION

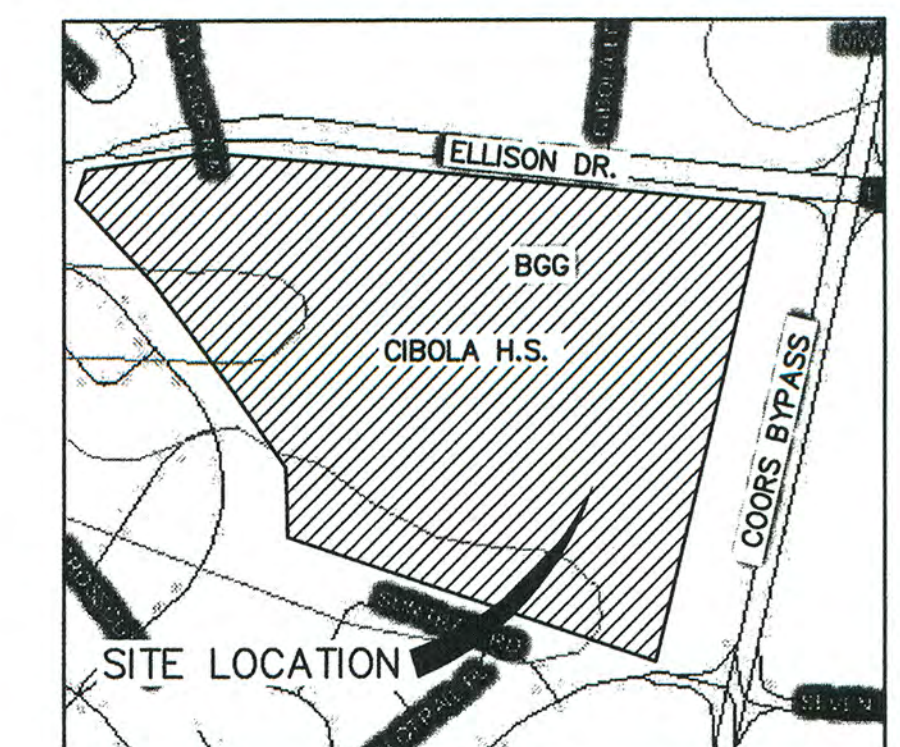
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LOCATION MAP
ZONE ATLAS NUMBER: A-13

LEGEND

---	EXISTING INDEX CONTOUR
---	EXISTING INTERMEDIATE CONTOUR
+5592.10	EXISTING SPOT ELEVATION
⊠	EXISTING SPRINKLER CONTROL BOX
⊙	EXISTING SPRINKLER HEAD
⊙	EXISTING CLEANOUT
⊙	EXISTING TREE OR BUSH
⊙	LIGHT POLE
⊙	EXISTING WATER VALVE
⊙	EXISTING FIRE HYDRANT
⊙	EXISTING ROOF DRAIN
⊙	EXISTING CHAIN LINK FENCE
△	CONTROL POINT
FG	FINISHED GRADE ELEVATION
INV	INVERT
→	FLOW ARROW
—	CHAIN LINK FENCE
●	TYPE 'C' MH
—	NEW ASPHALT PAVING
—	NEW 4" PCC
—	PROPOSED RIPRAP
—	PROPOSED INDEX CONTOUR
—	PROPOSED INTERMEDIATE CONTOUR

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PHASE II**

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PROJECT NO:
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**GRADING
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SHEET
C-107