



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 4, 1994

Suzi Balogh
Chavez-Grievess Cons.
5639 Jefferson NE
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR AN ADDITION TO HIGHLAND SENIOR CENTER
(K17-D6) ENGINEER'S STAMP DATED 3/21/94.

Dear Ms. Balogh:

Based on the information provided on your April 26, 1994 submittal, the above referenced site is approved for Foundation and Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8503

c: Andrew Garcia
File

DRAINAGE INFORMATION

PROJECT TITLE HIGHLAND SENIOR CENTER ZONE ATLAS/DRNG. FILE #: K-17/2-6
DRB#: _____ EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: NORTHERNMOST TRACT A OF BLOCK 22, VALLEY VIEW ADDITION
CITY ADDRESS: 131 MONROE NE, ALBUQUERQUE, NEW MEXICO
ENGINEERING FIRM: CHAVEZ-GRIEVES CONS. CONTACT: SUZI BALOGH
ADDRESS: 5639 JEFFERSON NE, ALB. PHONE: 344-4080
OWNER: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
ARCHITECT: JON ANDERSON ARCHITECT CONTACT: JON ANDERSON
ADDRESS: 912 ROMA AVE NW, ALB. PHONE: 764-8306
SURVEYOR: N/A CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: N/A CONTACT: _____
ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT
☒ DRAINAGE PLAN
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☒ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER

PRE-DESIGN MEETING:

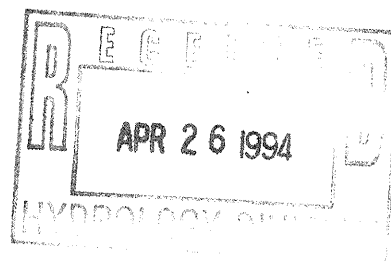
☐ YES
☒ NO
☐ COPY PROVIDED

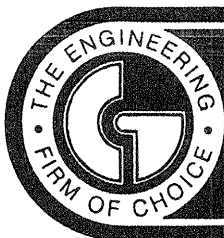
CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV. PLAN FOR BLDG. PRMT. APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☒ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☒ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: MARCH 21, 1994

BY: Suzi Balogh





CHAVEZ • GRIEVES
CONSULTING ENGINEERS, INC.

5639 JEFFERSON STREET NE • ALBUQUERQUE, NEW MEXICO 87109 • PHONE (505) 344-4080 • FAX (505) 343-8759

DRAINAGE REPORT

FOR

HIGHLAND SENIOR CENTER IMPROVEMENTS

CITY OF ALBUQUERQUE, NEW MEXICO

MARCH 21, 1994

**DRAINAGE REPORT
FOR
HIGHLAND SENIOR CENTER IMPROVEMENTS**

LOCATION

This site is located on the south side of Copper Avenue, between Monroe Street and Madison Street.

LEGAL DESCRIPTION

The northernmost Tract A of Block 22, Valley View Addition.

DEVELOPMENT HISTORY AND SURROUNDING DEVELOPMENT

The site is currently developed as the Highland Senior Center, and this project will add approximately 1,350 square feet to the existing building. The site is bounded on three sides by streets and is bounded on the south side by two fast-food restaurants. The site is higher than all of the adjoining streets and slightly lower than the restaurants to the south.

FLOOD HAZARD ZONE

As shown on panel 29 on the Flood Insurance Rate Map for the City of Albuquerque, the site is classified as Zone C which designates areas of minimal flooding. However, Copper Avenue which bounds the site on the north is classified as Zone AO, Depth 1. This classification is used to designate areas of 100-year shallow flooding where the depth of flooding is one foot.

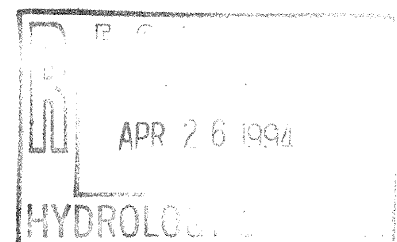
EXISTING SITE CONDITIONS AND DRAINAGE PATTERNS

As originally designed in 1979, there were two on-site detention ponds. The volume of the ponds totaled 6,320 cubic feet and exceeded the 100-year storm runoff from the site. The majority of the site was graded to the south and west and to a detention pond southwest of the building. A three inch pipe allowed discharge from this pond to Madison Street. The ponds function as designed today, and the site discharges to Madison Street. Retaining walls and curbs at the south property line prevent any offsite flows from the south.

The existing conditions 100-year peak discharge is 6.55 cfs and the existing conditions volume of runoff is 0.24 ac-ft (see attached calculations).

PROPOSED SITE CONDITIONS AND DRAINAGE PATTERNS

The proposed addition will replace pervious landscaped area with impervious surfaces. As a result, peak discharge will increase to 6.63 cfs. The volume of runoff will remain the same at 0.24 ac-ft, since the additional impervious area is too small to impact total runoff.

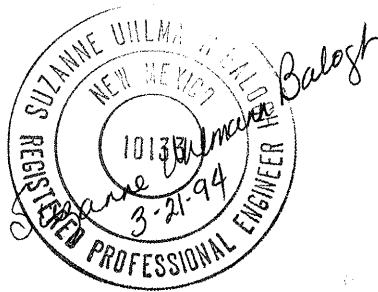


The attached Grading and Drainage Plan shows the proposed contours surrounding the new addition. As shown on this Plan, the existing drainage pattern has been maintained.

CONCLUSIONS

The proposed addition will increase peak discharge by 0.08 cfs (only 1.2 percent above existing peak discharge) and will have no measurable effect on the volume of runoff. Existing drainage patterns will not be modified by the proposed addition.

Because the addition will result in only minimal changes to existing conditions, it is acceptable to maintain the current pattern of pond discharge to Madison Street.



CALCULATIONS

Job Highland Senior Center
Subject Hydrology Calculations
Client Jon Anderson

Sheet No. 1 of 2
Job. No. _____
By SUB Date 3.19.94



CHAVEZ - GRIEVES / CONSULTING ENGINEERS, Inc.

Albuquerque, NM

Hydrology:

Use COA DPM Methodology

- Site is in precipitation zone 2 per Figure A.
- 100-yr rainfall = 2.35" in Zone 2 per Table 2.
- Use Land Treatments per Table 4:

B = Irrigated lawns, parks with 0-10% slopes

D = Impervious areas, pavements, roofs

- Excess precipitation from Table 8:

Treatment B = 0.78"

Treatment D = 2.12"

- Peak Discharge from Table 9:

Treatment B = 2.28 cfs/ac

Treatment D = 4.70 cfs/ac

- Total site area = 68,750 ft² = 1.58 ac.

EXISTING CONDITIONS

Area in Treatment B = 0.36 ac

Area in Treatment D = 1.58 ac - 0.36 ac = 1.22 ac

Peak Discharge = $(0.36 \text{ ac}) \left(\frac{2.28 \text{ cfs}}{\text{ac}} \right) + (1.22 \text{ ac}) \left(\frac{4.70 \text{ cfs}}{\text{ac}} \right) = 6.55 \text{ cfs}$

Volume of Runoff = $\frac{(.78") (0.36 \text{ ac}) + (2.12") (1.22 \text{ ac})}{12"/\text{ft}} = 0.24 \text{ ac} \cdot \text{ft}$

DEVELOPED CONDITIONS

Area in Treatment B = 0.36 ac - .03 ac = 0.33 ac

Area in Treatment D = 1.22 ac + 0.03 ac = 1.25 ac

Peak Discharge = $(0.33 \text{ ac}) \left(\frac{2.28 \text{ cfs}}{\text{ac}} \right) + (1.25 \text{ ac}) \left(\frac{4.70 \text{ cfs}}{\text{ac}} \right) = 6.63 \text{ cfs}$

Volume of Runoff = $\frac{(.78") (0.33 \text{ ac}) + (2.12") (1.25 \text{ ac})}{12"} = 0.24 \text{ ac} \cdot \text{ft}$

Job Highland Senior Center
Subject Hydrology Calculations
Client Jon Anderson

Sheet No. 2 of 2
Job. No. _____
By BWB Date 3.19.94



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Albuquerque, NM

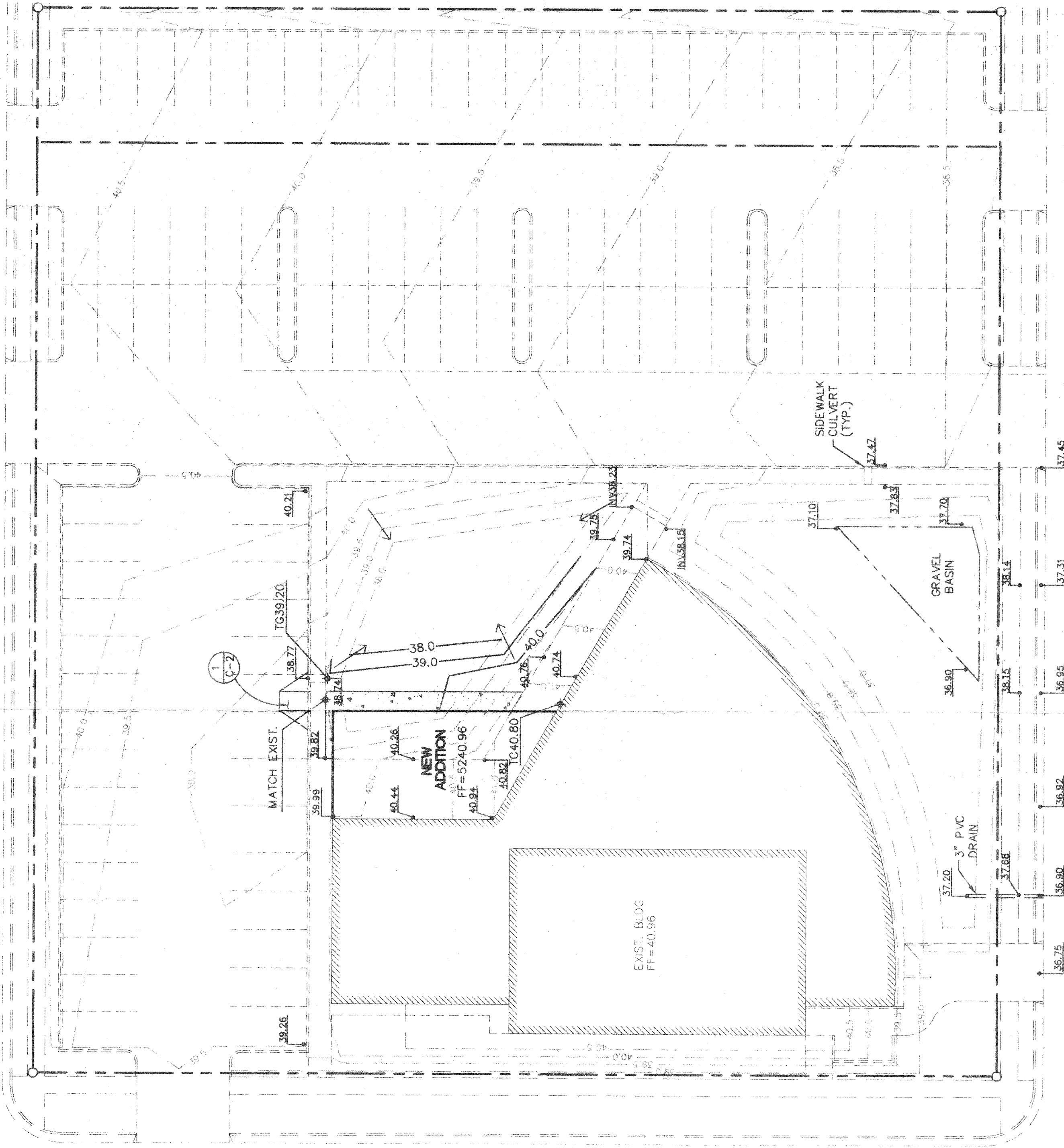
Comparison of Existing vs Developed

	<u>EXISTING</u>	<u>DEVELOPED</u>	<u>DEVELOPED - EXISTING</u>
Peak Discharge	6.55 cfs	6.63 cfs	0.08 cfs
Runoff Volume	0.24 Ac-Ft	0.24 Ac-Ft	0 Ac-Ft

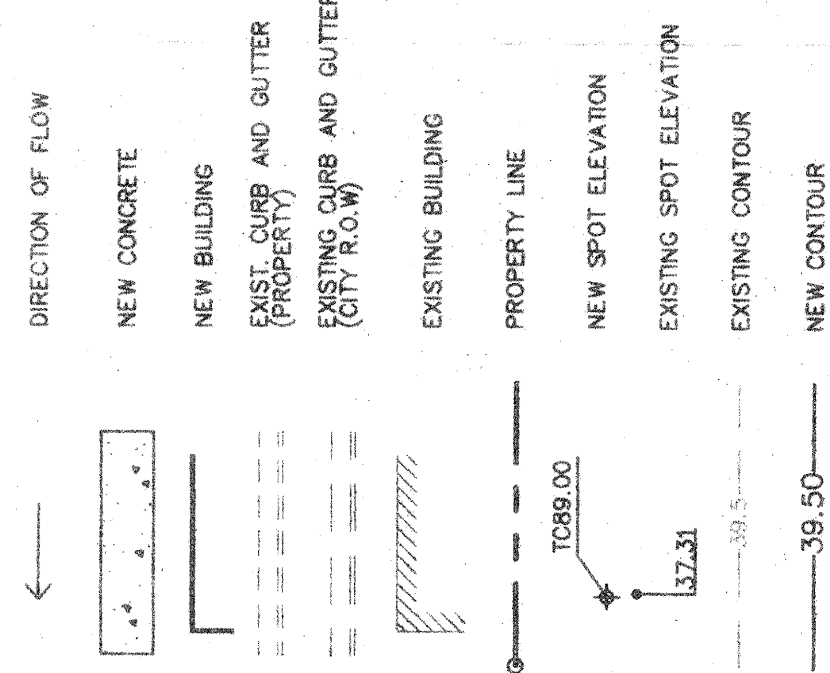
Conclusions

- (1) Development increases peak discharge by 0.08 cfs or 1.2% above existing.
- (2) Development does not impact the volume of runoff.

GRADING AND DRAINAGE PLAN



LEGEND



MADISON ST. NE

MONROW ST. NE

LEGAL DESCRIPTION

NORTHERN MOST TRACT A OF BLOCK 22, VALLEY VIEW ADDITION.

EROSION CONTROL PLAN

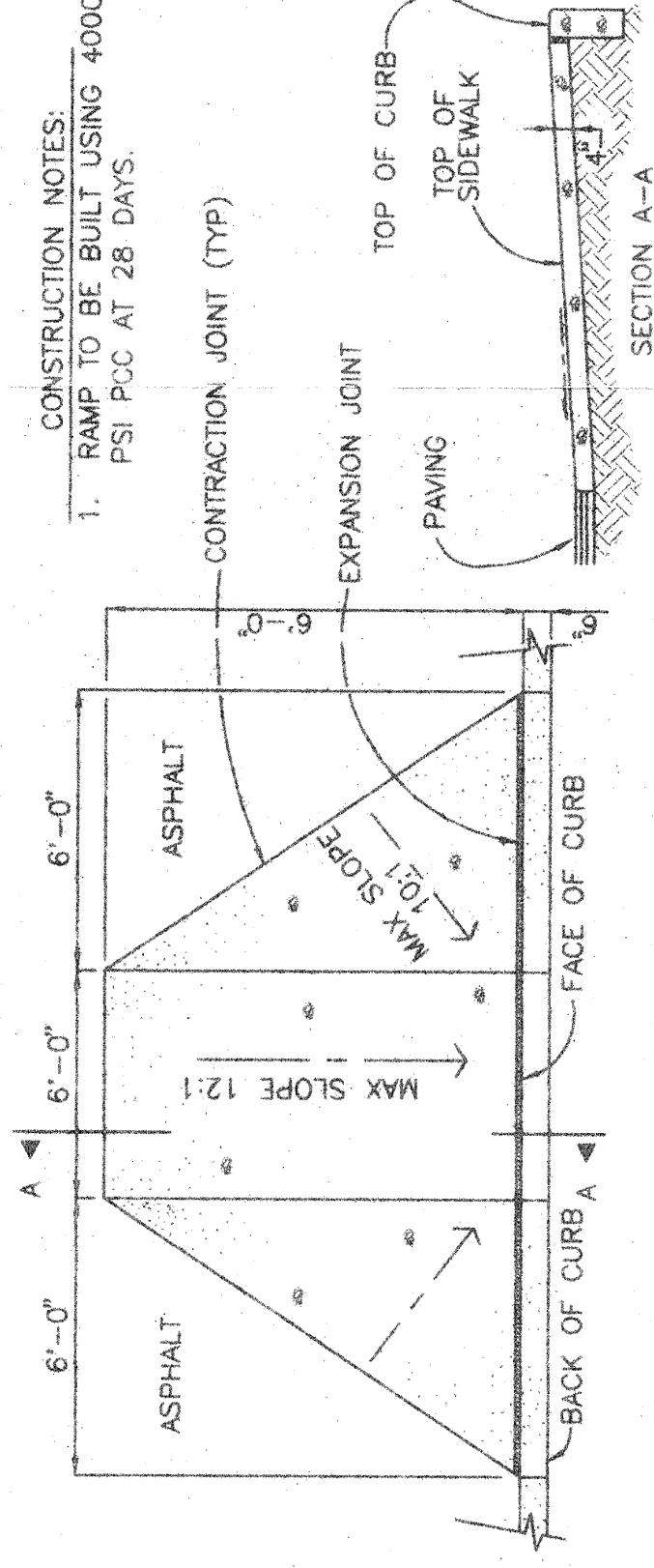
1. COMPLY WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS, INCLUDING DUST AND EROSION CONTROL REGULATIONS.
2. PREPARE AND OBTAIN ALL REQUIRED PERMITS FROM REGULATORY AGENCIES
3. DURING ROUGH GRADING, ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO OTHER PROPERTY. DURING FINISH GRADING, TEMPORARILY TO KEEP DUST FROM SITE PERIMETER AND BY WETTING THE SOIL PERIODICALLY TO KEEP DUST FROM BLOWING.
4. LOCATE AND SUPPLY ALL WATER REQUIRED FOR WATERING CONSTRUCTION AREAS.

GENERAL NOTES

1. ALL SURFACES ALONG ACCESSIBLE ROUTES AND FOR HANDICAP RAMPS SHALL BE STABLE, FIRM, SLIDE-RESISTANT, AND SHALL COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS, PARAGRAPH 4.5.
2. LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS, EXCEPT AT HANDICAP RAMPS, SHALL NOT BE STEEPER THAN 1:20 GROSS. LONGITUDINAL SLOPES ALONG ACCESSIBLE ROUTE SIDEWALKS EXCEPT AT HANDICAP RAMPS SHALL NOT BE STEEPER THAN 1:48. SLOPES IN ACCESSIBLE PARKING SPACES, ACCESS AISLES AND PASSENGER LOADING ZONES SHALL NOT BE STEEPER THAN 1:48 IN ALL DIRECTIONS.
3. PERFORM ALL WORK ON THE PROJECT IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. EXISTING UTILITIES ARE NOT SHOWN ON THIS PLAN. LOCATE AND EXCAVATE ALL UTILITIES IN THE CONSTRUCTION AREA PRIOR TO CONSTRUCTION TO VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES.
5. EXISTING EASEMENTS ARE NOT SHOWN ON THIS PLAN.
6. EXISTING CONTOURS PER 1979 GRADING AND DRAINAGE PLAN.

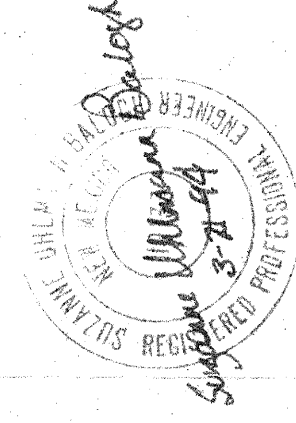
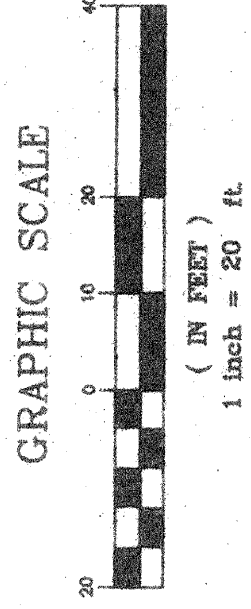
ABBREVIATED NOTES

- TA TOP OF ASPHALT
- TC TOP OF CONCRETE
- TG TOP OF GRADE
- TCC TOP OF CONCRETE CURB
- FL FLOWLINE
- S SLOPE
- FF FINISHED FLOOR
- FG FINISHED GRADE

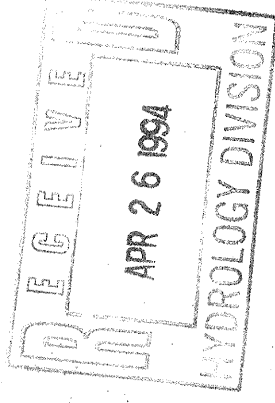


CONCRETE HANDICAP RAMP DETAIL

N.T.S.



3639 JEFFERSON STREET N.E. • ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 344-0880 • FAX (505) 343-8759



GRADING AND DRAINAGE PLAN

C-2

MARCH 21, 1994
DRAWN BY: SUB/BKB

HIGHLAND SENIOR CENTER IMPROVEMENTS
131 MONROE AVENUE NE
OFFICE OF SENIOR AFFAIRS, CITY OF ALBUQUERQUE
JON ANDERSON ARCHITECT AIA
912 ROMA AVENUE NW, ALB. NM 87102 505-764-8306

