PLANS FOR CONSTRUCTION OF

# HANOVER / GLENRIO

## ALBUQUERQUE, NEW MEXICO

JULY, 2000

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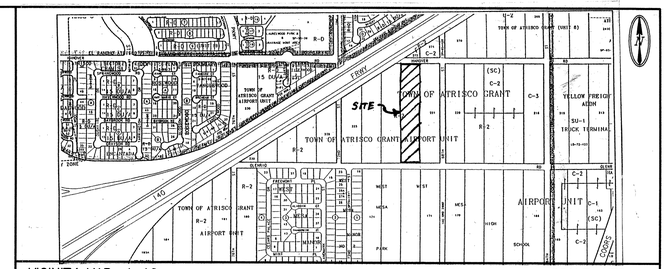


VICINITY MAP: J-10 SCALE: NTS

GENERAL NOTES:

1. CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMENDED THROUGH UPDATE 6, WILL BE REFERRED TO HEREIN AS THE "STANDARD SPECIFICATIONS." ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

2. THREE WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) AND DETERMINE LOCATION OF EXISTING UTILITIES.

3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR THE SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITHOUT DELAY.

4. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.

5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) WORKING DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MARKER IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.

6. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE STANDARD SPECIFICATIONS.

7. ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES 24 HOUR CONSTRUCTION.

8. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.

9. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED BY THE CONTRACTOR WITH HOT THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING. ALL NEW STRIPING SHALL BE HOT THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING.

10. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, PAVEMENT MARKINGS, CURB AND GUTTER, DRIVEPADS, WHEELCHAIR RAMPS AND SIDEWALKS DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE PER THE STANDARD SPECIFICATIONS AT HIS OWN EXPENSE.

11. EXISTING UTILITY LINES AND PIPELINES SHOWN ON THESE DRAWINGS ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. UTILITIES MAY EXIST WHERE NONE ARE SHOWN. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES AND PIPELINES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR DAMAGE CAUSED BY FAILURE TO LOCATE AND PRESERVE EXISTING UTILITY LINES AND PIPELINES.

12. THE CONTRACTOR SHALL SECURE A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

13. THE CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE OWNERS FOR THE PREPARATION OF "RECORD DRAWINGS." THE CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.

14. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY OR EASEMENTS MUST BE DONE FROM APPROVED WORK ORDER DOCUMENTS FROM THE CITY AND PREPARED BY BRASHER AND LORENZ, INC.

15. THE CONTRACTOR SHALL DETERMINE IN ADVANCE OF HIS CONSTRUCTION IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

16. THE CONTRACTOR IS TO SUPPORT AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST THE OWNER. CABLE IS TO BE SUPPORTED EVERY 15 FEET (MINIMUM). CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.

17. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED. CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS. CONDITIONS OF THE STANDARD SPECIFICATIONS.

APPROVAL OF RECORD DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Etta Chang
DATE 6/29/04

| REV. | SHEETS | CITY ENGINEER | DATE | USER DEPARTMENT | DATE | USER DEPARTMENT | DATE |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

ENGINEERS STAMP & SIGNATURE

PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER

| APPROVALS | ENGINEER | DATE |
|---|---|---|
| DRC Chairman | | 9/19/00 |
| Transportation | | 9/01/00 |
| Water/Wastewater | | 8/14/00 |
| Hydrology | | 8/24/00 |
| CIP | | |
| Constr. Mngmt. | | |
| Constr. Coord. | | 6/24/00 |

APPROVED FOR CONSTRUCTION

City Engineer Date 7/12/00

CITY PROJECT NO. 642381

SHEET 1 OF 8

26 6423.81 01 04

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE, Building 1, Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188


THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR THE CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

ALL IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THIS INSTRUMENT ARE OWNED BY AND THE PROPERTY OF BRASHER & LORENZ, INC., AND WERE CREATED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER.

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SCANNED BY MESA REPRO


99543-T 7/25/00 1=20

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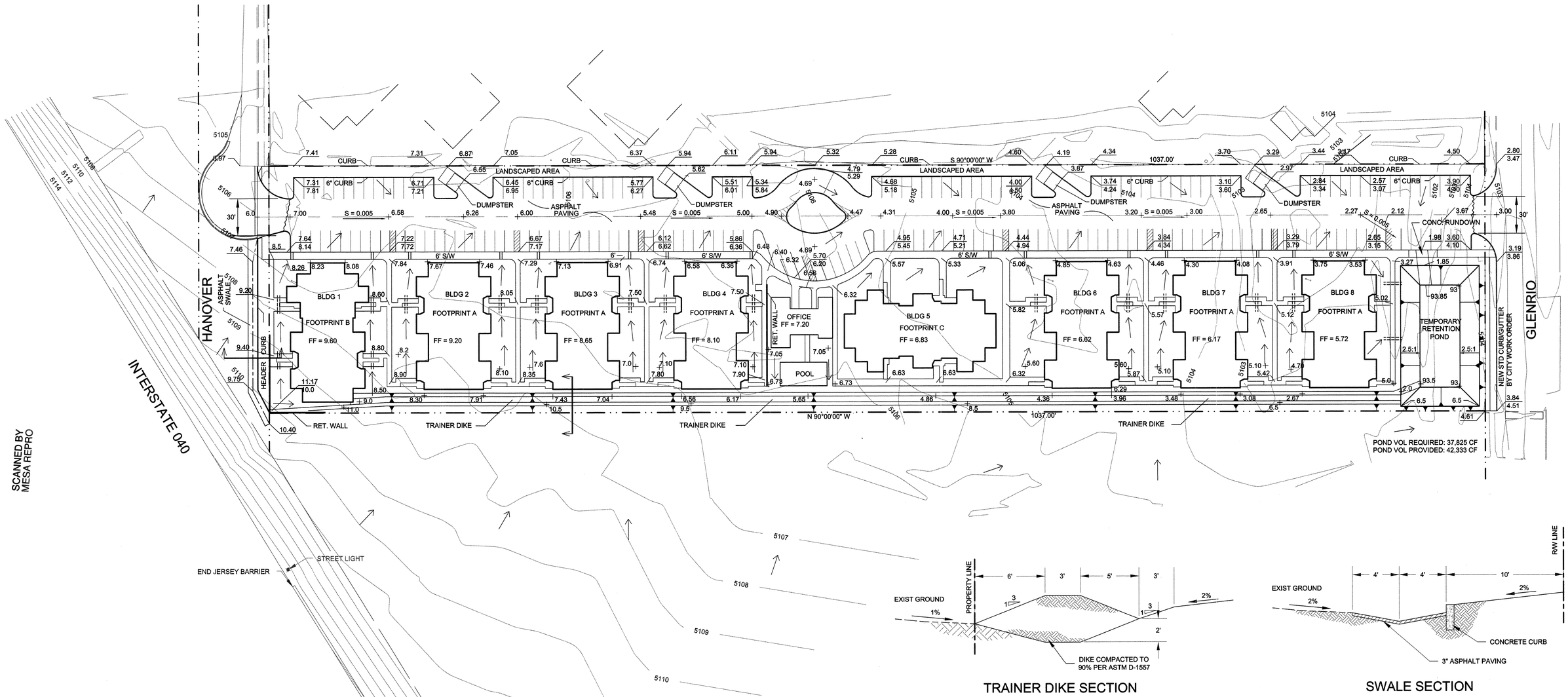
MESA REPRO







TRAINER DIKE SECTION




SWALE SECTION

**LEGAL DESCRIPTION**
Tract 222, Airport Unit
Town of Atrisco Grant

**PROPERTY ADDRESS**
6801 Glenrio NW

**PROJECT BENCHMARK**
Rebar at SW Property Corner, Tract 222
Elevation = 5104.61' MSL

**SURVEY**
Topographic and Field Measurements by
BRASHER & LORENZ, INC.
Dated June , 1999

LEGEND

| | |
|---|---|
| 6001 | EXISTING CONTOUR ELEVATION |
| 02.5 × | EXISTING SPOT ELEVATION |
| 01 | PROPOSED CONTOUR ELEVATION |
| | PROPERTY LINE |
| 01.5 + | PROPOSED SPOT ELEVATION |
| | DIRECTION OF FLOW |
| | DRAINAGE SWALE |
| | DRAINAGE BASIN DIVIDE |
| ② | HEC 2 SECTION I.D. |

26 6423.81 0204

1 inch = 40 ft.

# RIVERGLEN APARTMENTS

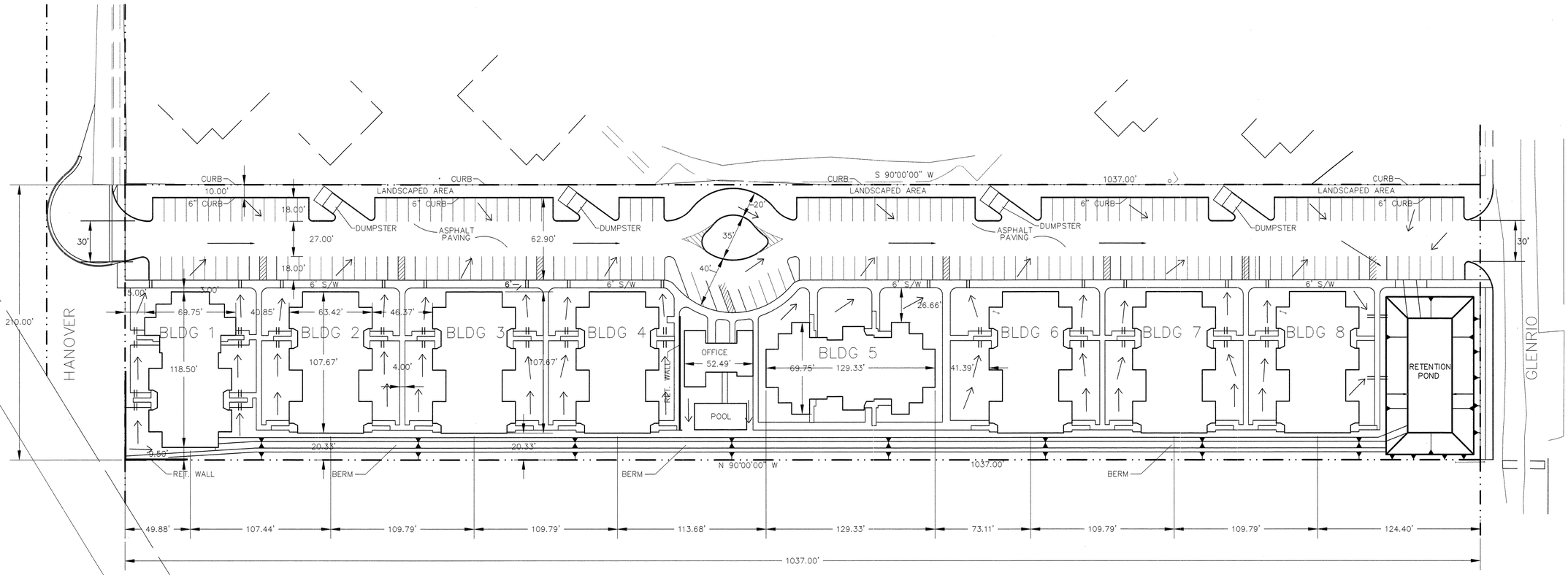
## GRADING AND DRAINAGE PLAN

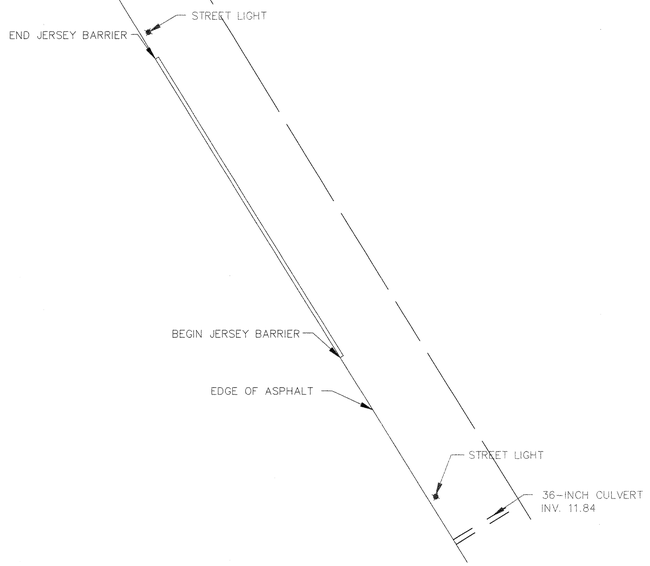
PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

| | |
|---|---|
| DRAWN BY: R.M. | DATE: AUGUST, 2000 |
| CHECKED BY: P.T.B | SHEET 2 OF 8 |
| FILE: GDPLAN.DWG | |

SCANNED BY
MESA REPRO




## LEGEND

| | |
|---|---|
| - - 6001 — | EXISTING CONTOUR ELEVATION |
| 02.5 × | EXISTING SPOT ELEVATION |
| — 01 — | PROPOSED CONTOUR ELEVATION |
| — · · — | PROPERTY LINE |
| 01.5 | PROPOSED SPOT ELEVATION |
| ← | DIRECTION OF FLOW |
| ← | DRAINAGE SWALE |
| — - - - — | DRAINAGE BASIN DIVIDE |
| ② | HEC 2 SECTION I.D. |

40 0 20 40

1 inch = 40 ft.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 64123.871 0304

# *RIVERGLEN APARTMENTS*

*SITE PLAN*

PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER 5.31.00

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

| | |
|---|---|
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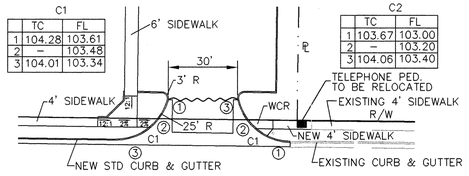
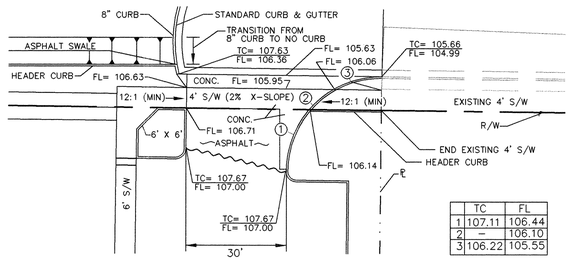
| CHECKED BY: P.T.B | SHEET 3 OF 8 |
| FILE: GDPLAN.DWG | |



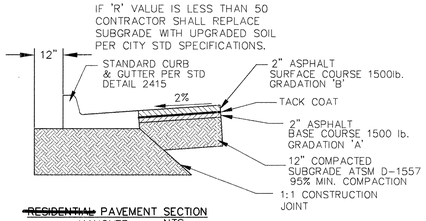

## WHEELCHAIR RAMP DETAIL

GLENRIO NTS



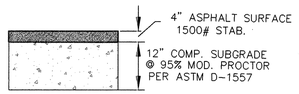

## WHEELCHAIR RAMP DETAIL

HANOVER NTS



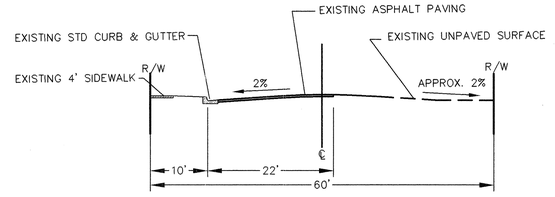

~~RESIDENTIAL~~ PAVEMENT SECTION

HANOVER NTS



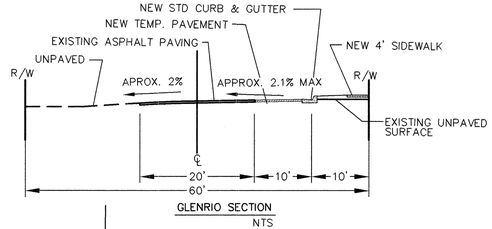

TEMP. PAVEMENT SECTION

GLENRIO



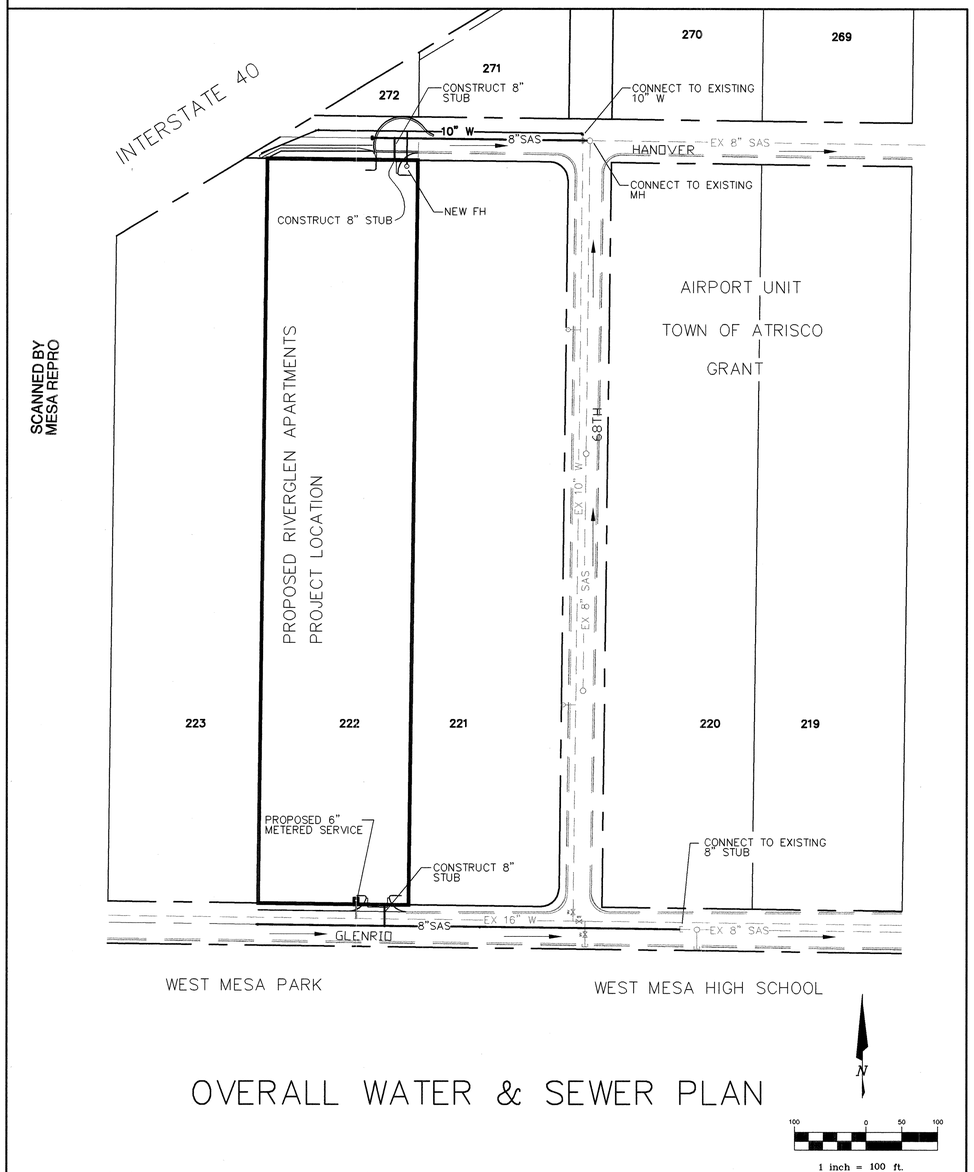

HANOVER SECTION

NTS

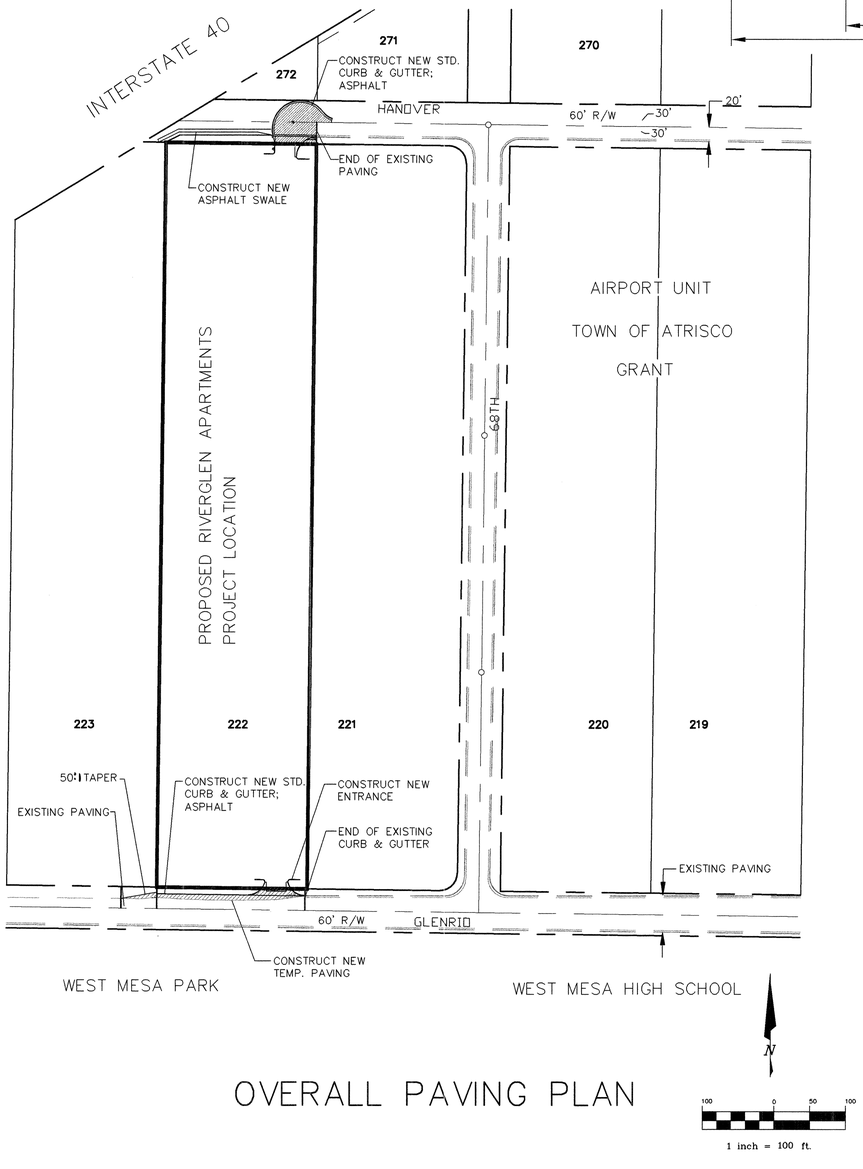



GLENRIO SECTION

NTS




## OVERALL WATER & SEWER PLAN




## OVERALL PAVING PLAN

## LEGEND

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| WATERLINE | 6" W | 6" W |
| SANITARY SEWER | 8" SAS | 8" SAS |
| STORM SEWER | 36" SD | 24" SD |
| FIRE HYDRANT | | |
| VALVE | | |
| WATER SERVICE (SINGLE) | | |
| WATER SERVICE (DOUBLE) | | |
| MANHOLE | | |
| MOUNTABLE CURB | | |
| STD CURB & GUTTER | | |
| DROP INLET | | |
| OVERHEAD ELEC | OHE | |
| UNDERGROUND ELEC, GAS,TEL,TV | UGT | |
| FLOWLINE ELEV. | FL 0.14 | FL 0.14 |
| TOP OF CURB ELEV. | 99.3 | 99.31 |
| SPOT ELEV. | ×16.7 | 16.7 |
| SEWER SERVICE | | |
| RIGHT OF WAY | | |
| POWER POLE (GUYED) | PP | |
| CHAIN LINK FENCE | x | |
| CENTERLINE | | |
| RETAINING WALL | | |
| TOP OF ASPHALT ELEV. | TA 16.2 | TA 16.2 |
| TEMP. PAVEMENT | | |
| STREET LIGHT | | |

26 6423.81 0404

AS BUILT INFORMATION
CONTRACTOR Alter Excavation DATE
WORK COMPLETED BY N/A DATE 2003
INSPECTORS ACCEPTANCE BY B. McCall DATE 2003
REVISED VERIFICATION BY B. McCall DATE 2003
DRAWINGS CORRECTED BY N/A DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS 10-K10 ACS 3 1/4" ALUM CAP 54' EAST CENTERLINE OF UNSER BLVD. AND 20.4' SOUTH OF NORTH END OF BACK OF CURB OF TRAFFIC ISLAND ON LOS VOLCANES RD. THE STATION IS SET FLUSH IN THE TOP OF CURB AND IS STAMPED "10-K10, 1989." ELEVATION = 5142.79 FEET

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER
8-17-00

REVISIONS
NO. DATE BY REMARKS
DESIGN DESIGNED BY P.T.B. DATE 4/00
DRAWN BY M.D.B.II DATE 4/00
CHECKED BY P.T.B. DATE 4/00

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1, Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: RIVERGLEN APARTMENTS
OVERALL PAVING AND UTILITIES LAYOUT PLAN

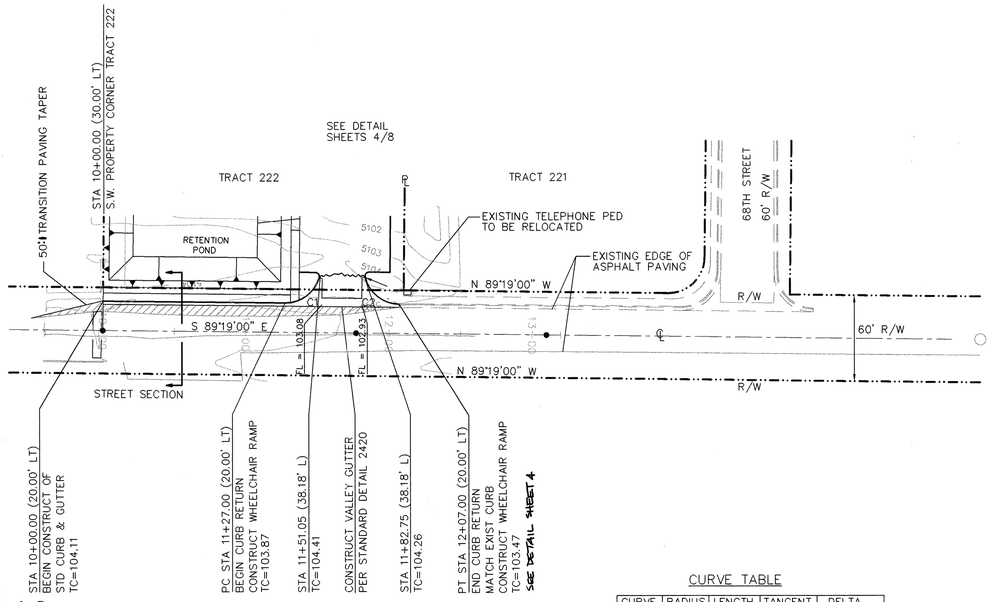
Design Review Committee: APPROVED SEP 18 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED JUL 12 2001 CITY ENGINEER
Last Design Update: Mo./Day/Yr. | Mo./Day/Yr.

City Project No. 6423.81 | Zone Map No. J-10 | Sheet 4 Of 8

SCANNED BY MESA REPRO

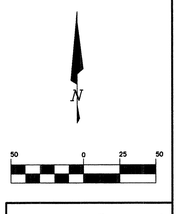
99543.DWG 7/25/00 1=100

SCANNED BY
MESA REPRO



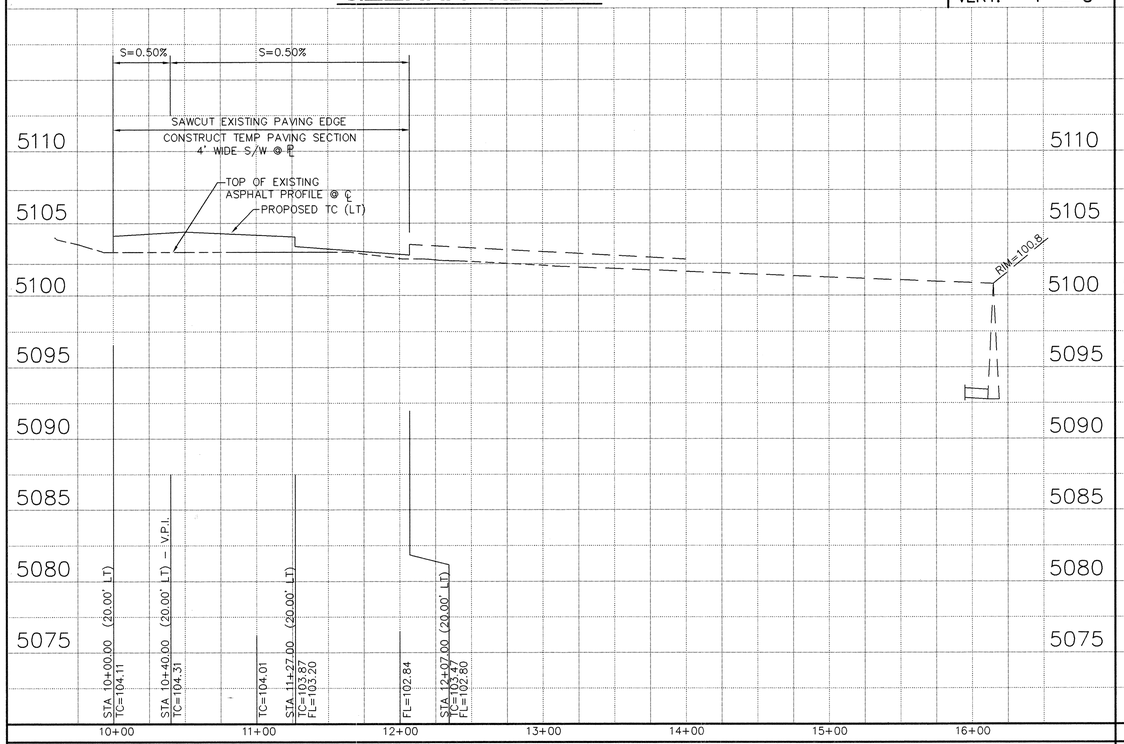

CURVE TABLE

| CURVE | RADIUS | LENGTH | TANGENT | DELTA |
|---|---|---|---|---|
| C1 | 25.00' | 32.36' | 18.90' | 74°10'24" |
| C2 | 25.00' | 33.12' | 19.50' | 75°54'01" |

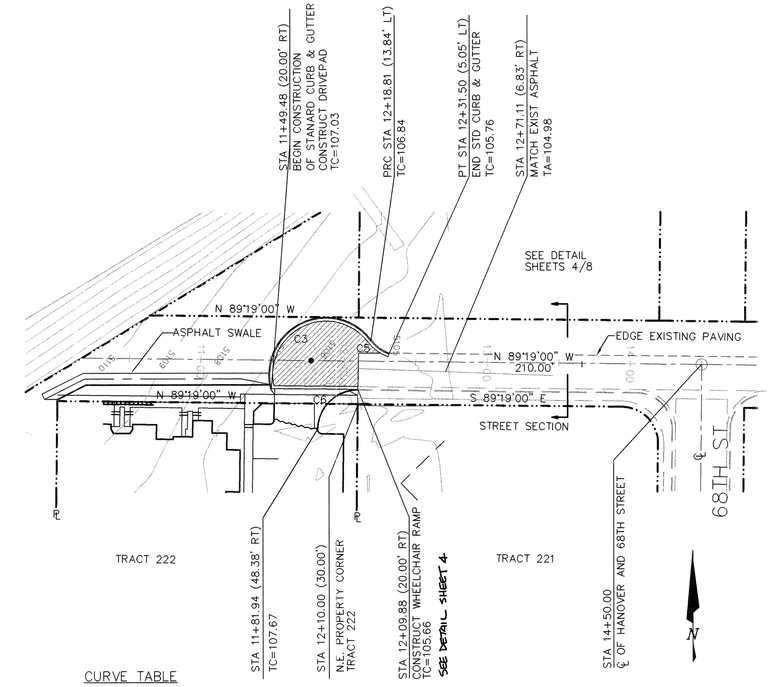



HORIZ: 1" = 50'
VERT: 1" = 5'

## GLENRIO RD NW

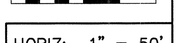



HANOVER.DWG 7/25/00 1=50



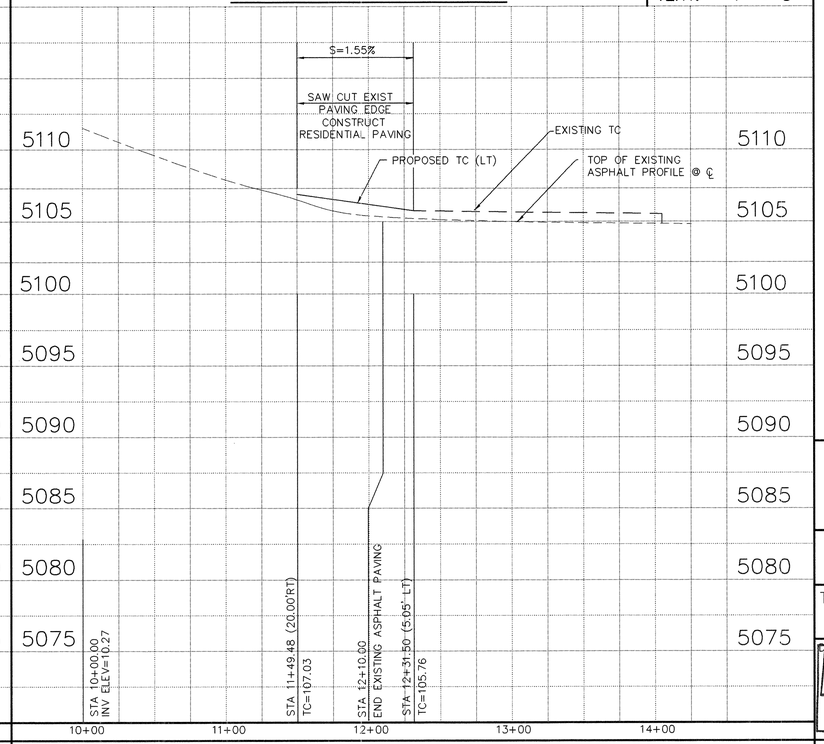

CURVE TABLE

| CURVE | RADIUS | LENGTH | TANGENT | DELTA |
|---|---|---|---|---|
| C3 | 39.33' | 108.06' | 196.95' | 157°24'43" |
| C5 | 25.00' | 15.70' | 8.12' | 35°59'03" |
| C6 | 28.18' | 44.34' | 28.26' | 90°09'42" |




HORIZ: 1" = 50'
VERT: 1" = 5'

## HANOVER RD NW




## LEGEND

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| WATERLINE | 6" W | 6" W |
| SANITARY SEWER | 8" SAS | 8" SAS |
| STORM SEWER | 36" SD | 24" SD |
| FIRE HYDRANT | | |
| VALVE | | |
| WATER SERVICE (SINGLE) | | |
| WATER SERVICE (DOUBLE) | | |
| MANHOLE | | |
| MOUNTABLE CURB | | |
| STD CURB & GUTTER | | |
| DROP INLET | | |
| OVERHEAD ELEC | OHE | |
| UNDERGROUND ELEC, GAS,TEL,TV | UGT | |
| FLOWLINE ELEV. | FL 0.14 | FL 0.14 |
| TOP OF CURB ELEV. | 99.3 | 99.31 |
| SPOT ELEV. | ×16.7 | ×16.7 |
| SEWER SERVICE | | |
| RIGHT OF WAY | | |
| POWER POLE (GUYED) | PP | |
| CHAIN LINK FENCE | | |
| CENTERLINE | | |
| RETAINING WALL | | |
| TOP OF ASPHALT ELEV. | TA 16.2 | TA 16.2 |
| TEMP. PAVEMENT | | |
| STREET LIGHT | | ☼ |
| NEW PAVEMENT | | |

STATIONING IS BASED ON CENTERLINE OF RIGHT OF WAY UNLESS NOTED OTHERWISE.

## AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY — DATE
INSPECTED BY
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
NO.

## BENCH MARKS

ACS 10-K10 ACS 3 1/4" ALUM CAP 54' EAST
CENTERLINE OF UNSER BLVD. AND 20.4' SOUTH
OF NORTH END OF BACK OF CURB OF TRAFFIC
ISLAND ON LOS VOLCANES RD. THE STATION
IS SET FLUSH IN THE TOP OF CURB AND IS
STAMPED "10-K10, 1989."
ELEVATION = 5142.79 FEET

## SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

ENGINEER'S SEAL

PAUL T. BRASHER — NEW MEXICO — 7282 — REGISTERED PROFESSIONAL ENGINEER — 8.2.99

| NO. | DATE | REMARKS |
|---|---|---|
| | | REVISIONS |
| | | DESIGN |

DESIGNED BY P.B. — DATE 7/00
DRAWN BY M.D.B.II — DATE 7/00
CHECKED BY P.B. — DATE 7/00

1 2 3 4 5 6 7 8 9 10 11 12 13
26 6A23.81 10504

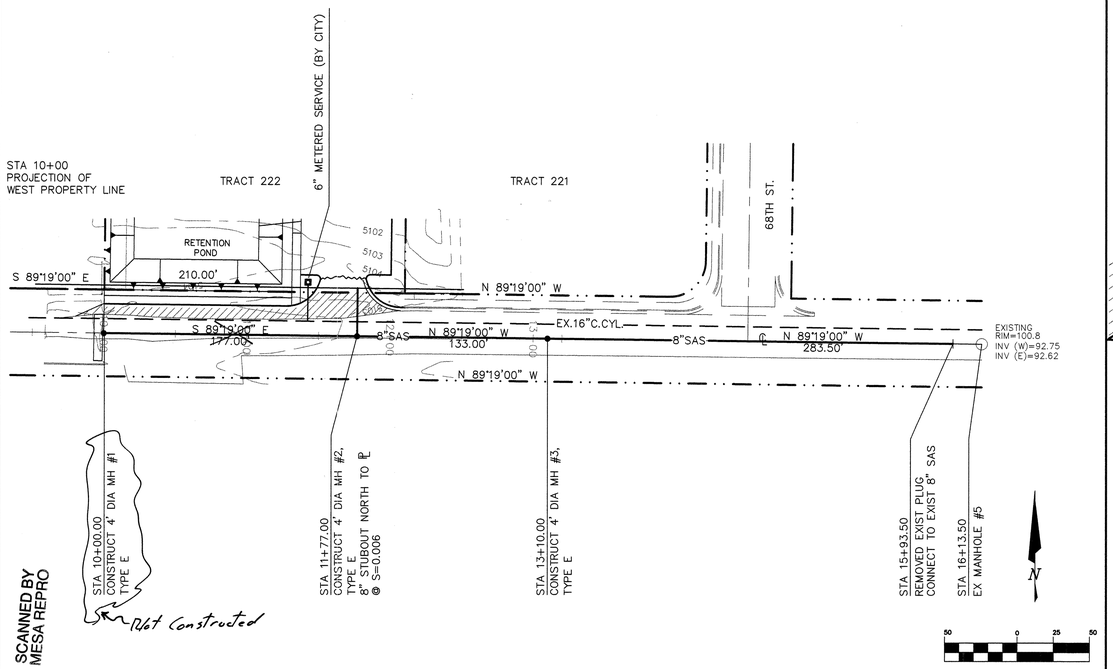
BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

**CITY OF ALBUQUERQUE**
**PUBLIC WORKS DEPARTMENT**
**ENGINEERING DEVELOPMENT GROUP**

TITLE: HANOVER / GLENRIO
GLENRIO RD NW AND HANOVER RD NW
STREET PLAN & PROFILE

Design Review Committee — SEP 18 2000 — DESIGN REVIEW COMMITTEE
City Engineer Approval — DEC 12 2000 — CITY ENGINEER
Last Design Update — Mo./Day/Yr.

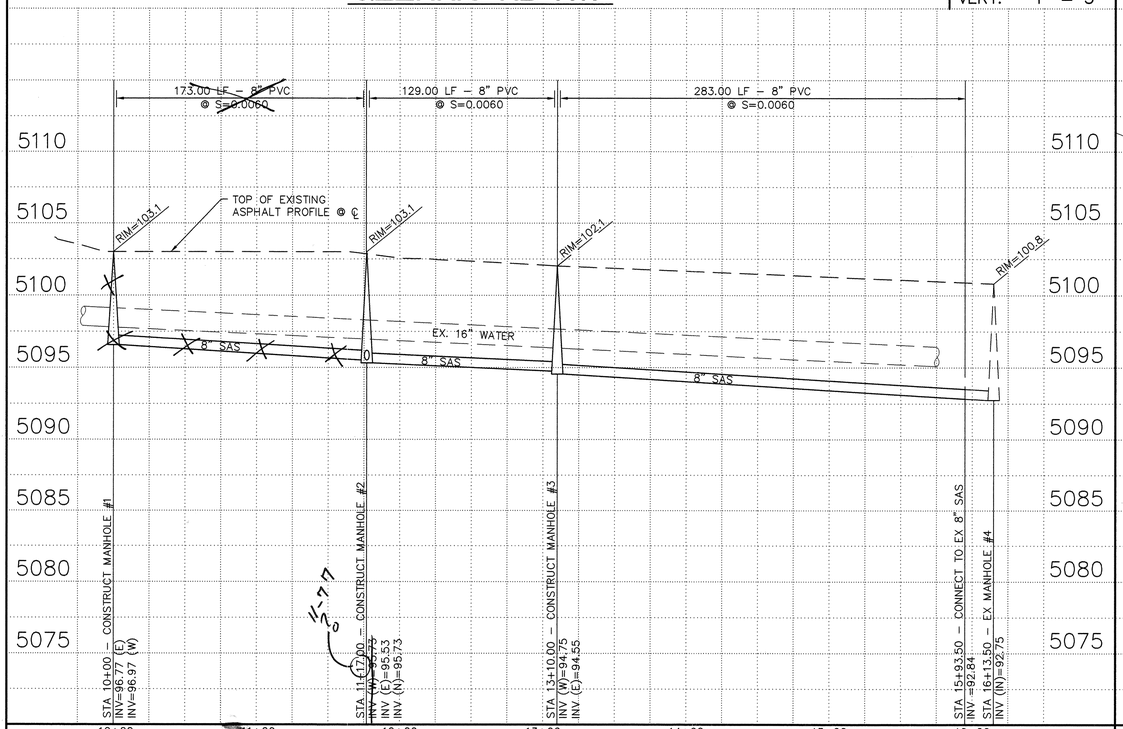
| City Project No. | Zone Map No. | Sheet | Of |
|---|---|---|---|
| 6423.81 | J-10 | 5 | 8 |



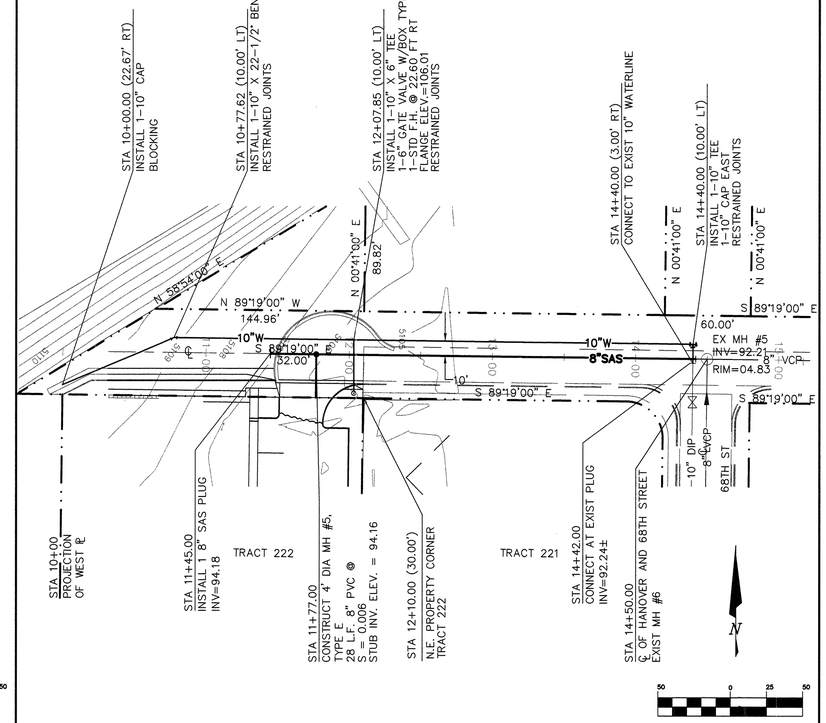

SCANNED BY
MESA REPRO

# GLENRIO RD NW

HORIZ: 1" = 50'
VERT: 1" = 5'




99543-PP.DWG 7/26/00 1=50




# HANOVER RD NW

HORIZ: 1" = 50'
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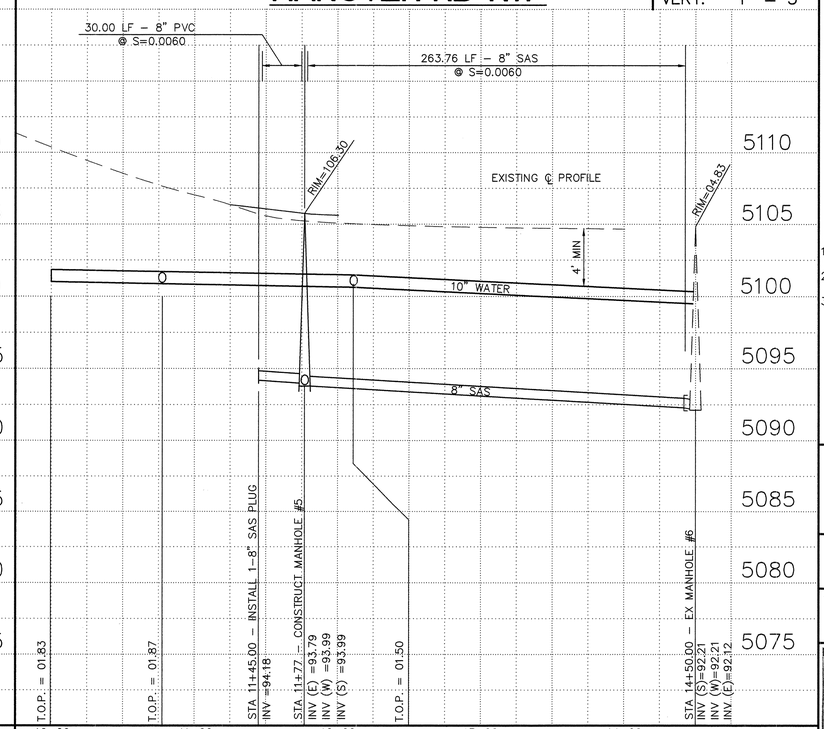



## LEGEND

| ITEM | EXISTING | PROPOSED |
|---|---|---|
| WATERLINE | 6" W | 6" W |
| SANITARY SEWER | 8" SAS | 8" SAS |
| STORM SEWER | 36" SD | 24" SD |
| FIRE HYDRANT | | |
| VALVE | | |
| WATER SERVICE (SINGLE) | | |
| WATER SERVICE (DOUBLE) | | |
| MANHOLE | | |
| MOUNTABLE CURB | | |
| STD CURB & GUTTER | | |
| DROP INLET | | |
| OVERHEAD ELEC | OHE | |
| UNDERGROUND ELEC, GAS,TEL,TV | UGT | |
| FLOWLINE ELEV. | FL 0.14 | FL 0.14 |
| TOP OF CURB ELEV. | 99.3 | 99.31 |
| SPOT ELEV. | ×16.7 | 16.7 |
| SEWER SERVICE | | |
| RIGHT OF WAY | | |
| POWER POLE (GUYED) | PP | |
| CHAIN LINK FENCE | x | |
| CENTERLINE | | |
| RETAINING WALL | | |
| TOP OF ASPHALT ELEV. | TA 16.2 | TA 16.2 |
| TEMP. PAVEMENT | | |
| STREET LIGHT | | |

STATIONING IS BASED ON CENTERLINE OF RIGHT OF WAY UNLESS NOTED OTHERWISE.

RESTRAINED JOINTS LENGTH

1. Tee branch–each run pipe shall be minimum 10' w/o joints
2. Distance shown is in each direction for valves and bends
3. All dead end caps shall be blocked

| SIZE | 90° | 45° | 22–1/2° | 11–1/4° | Tee | Valve |
|---|---|---|---|---|---|---|
| 4" | 21' | 9' | 5' | 3' | 21' | 52' |
| 6" | 26' | 11' | 6' | 3' | 37' | 74' |
| 8" | 31' | 13' | 7' | 4' | 54' | 97' |
| 10" | 34' | 15' | 7' | 4' | 69' | 107' |
| 12" | 54' | 23' | 11' | 6' | 85' | 120' |

1 2 3 4 5 6 7 8 9 10 11 12 13 14

26 6423.811 0604

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

BENCH MARKS

ACS 10–K10 ACS 3 1/4" ALUM CAP 54' EAST OF NORTH END OF BACK OF CURB OF TRAFFIC ISLAND ON LOS VOLCANES RD. THE STATION IS SET FLUSH IN THE TOP OF CURB AND IS STAMPED "10–K10, 1989."

ELEVATION = 5142.79 FEET

AS BUILT INFORMATION

CONTRACTOR
WORK STARTED BY — DATE
WORK COMPLETED — DATE
ACCEPTANCE BY
NOTICE OF ACCEPTANCE — DATE
FIELD VERIFICATION BY
DRAWINGS CORRECTED BY — DATE
MICRO–FILM INFORMATION
RECORDED BY — DATE
NO.

ENGINEER'S SEAL

PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER

| NO. | DATE | REMARKS | BY |
|---|---|---|---|
| | | REVISIONS | |
| | | DESIGN | |

DESIGNED BY P.B. DATE 7/00
DRAWN BY M.D.B.II DATE 7/00
CHECKED BY P.B. DATE 7/00

BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 220
Albuquerque, New Mexico 87110
Ph: 505–888–6088 Fax: 505–888–6188

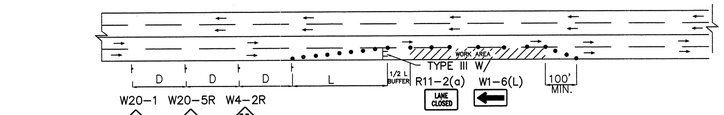
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: HANOVER / GLENRIO
GLENRIO RD NW AND HANOVER RD NW
WATER & SANITARY SEWER PLAN & PROFILE

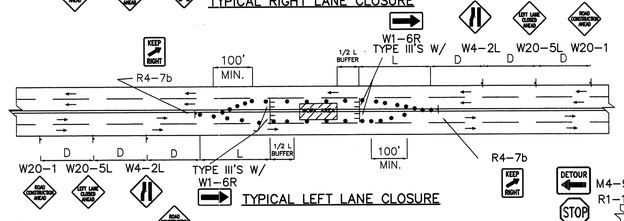
Design Review Committee: SEP 18 2000 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED JUN 12 2000
Last Design Update: Mo./Day/Yr. | Mo./Day/Yr.

City Project No. 642381
Zone Map No. J–10
Sheet 6 Of 8

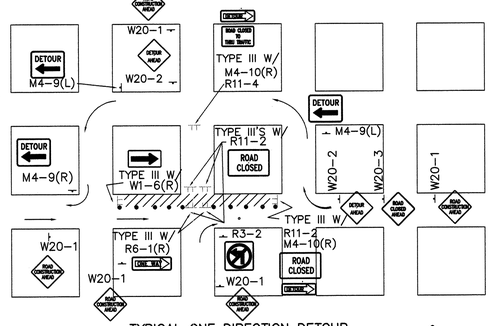
SCANNED BY
MESA REPRO



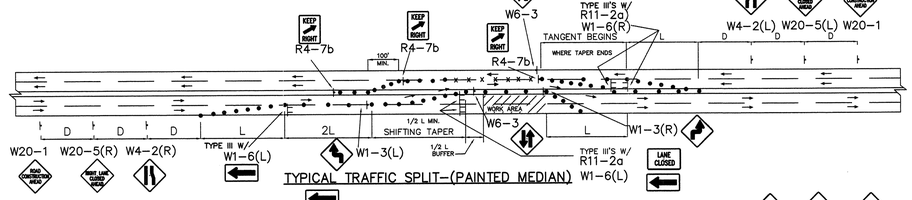

TYPICAL RIGHT LANE CLOSURE



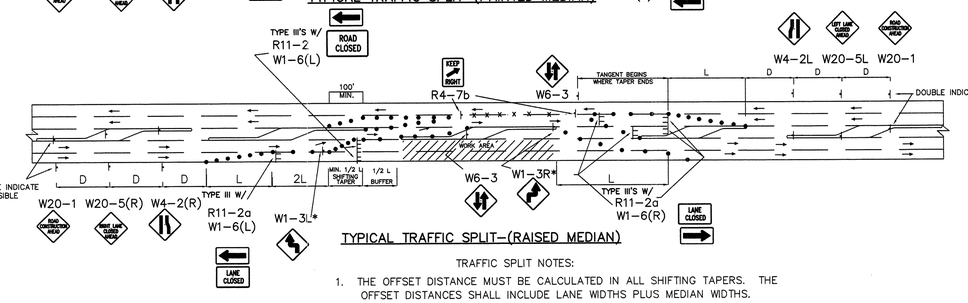

TYPICAL LEFT LANE CLOSURE




TYPICAL ONE DIRECTION DETOUR



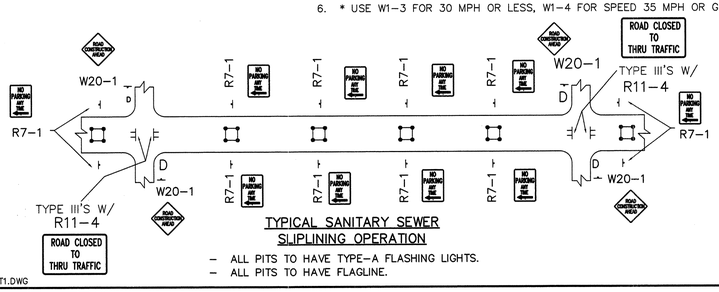

TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)




TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)

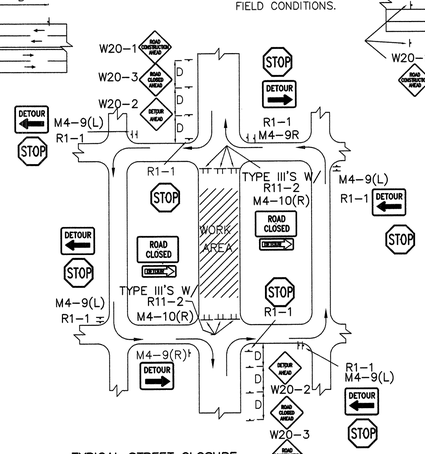
TRAFFIC SPLIT NOTES:

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. 1/2 L IS MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



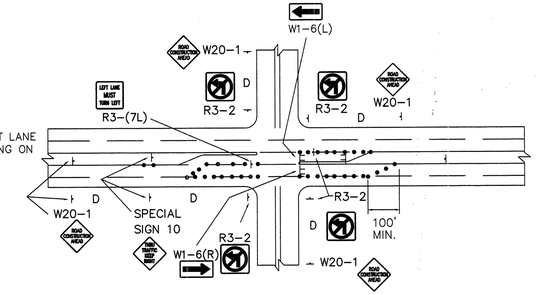

TYPICAL SANITARY SEWER SLIPLINING OPERATION

- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS.
- ALL PITS TO HAVE FLAGLINE.




TYPICAL STREET CLOSURE

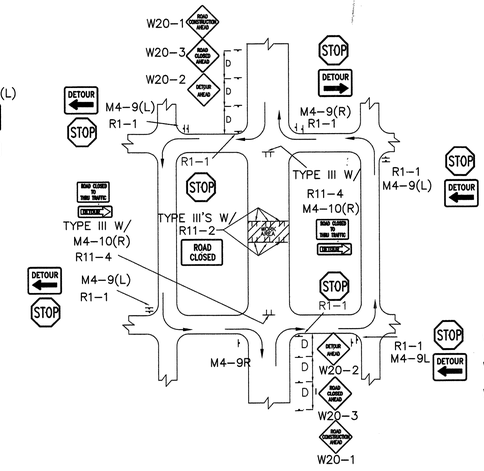
NOTE: (R1-1) BASED ON FIELD CONDITIONS.




NOTE:
MAY REQUIRE LEFT LANE CLOSURE DEPENDING ON FIELD CONDITIONS.

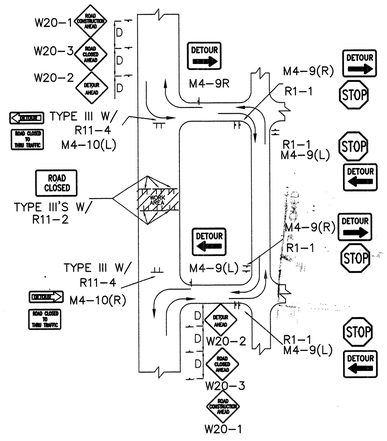
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION



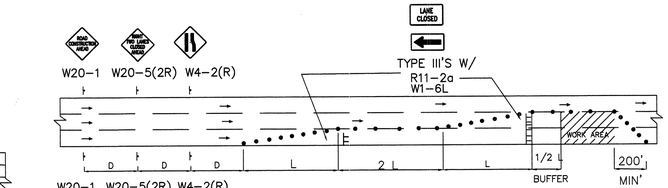

TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

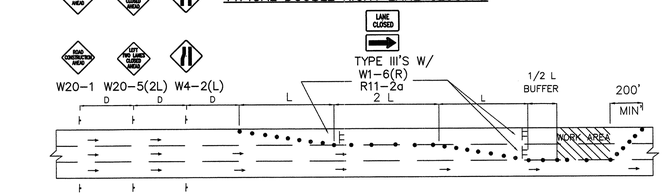



TYPICAL STREET CLOSURE

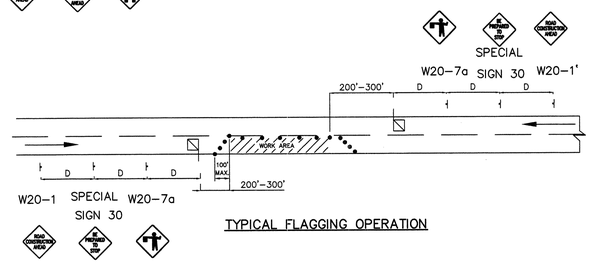
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



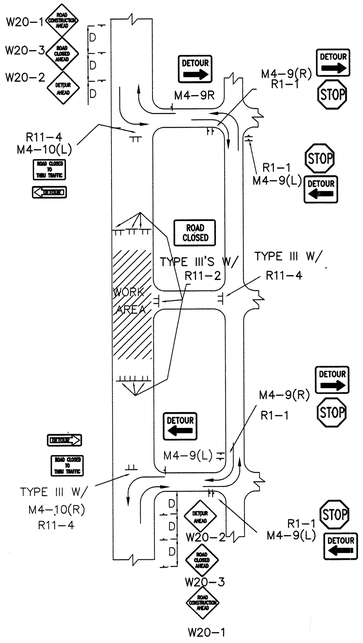

TYPICAL DOUBLE RIGHT LANE CLOSURE




TYPICAL DOUBLE LEFT LANE CLOSURE

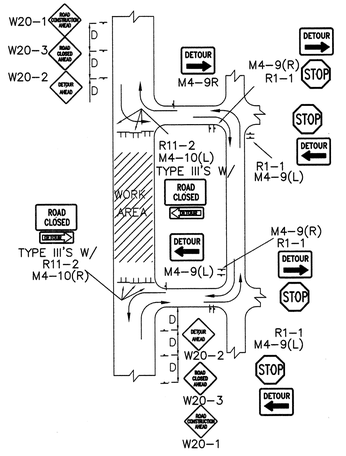



TYPICAL FLAGGING OPERATION




TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.




TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

GENERAL NOTE:

ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

AS BUILT INFORMATION

BENCH MARKS

ACS 10-K10 ACS 3 1/4" ALUM CAP 54' EAST CENTERLINE OF UNSER BLVD. AND 20.4' SOUTH OF NORTH END OF BACK OF CURB OF TRAFFIC ISLAND ON LOS VOLCANES RD. THE STATION IS SET FLUSH IN THE TOP OF CURB AND IS STAMPED "10-K10, 1989."
ELEVATION = 5142.79 FEET

CONTRACTOR DATE
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE DATE
VERIFICATION BY DATE
AS BUILT LINES CORRECTED BY DATE
RECORDED BY DATE
NO.

SURVEY INFORMATION

FIELD NOTES

| NO. | BY | DATE |
|---|---|---|
| | | |

ENGINEER'S SEAL

NEAL T. BRASHER
NEW MEXICO
7282
REGISTERED PROFESSIONAL ENGINEER

REMARKS

REVISIONS

| NO. | BY | DATE |
|---|---|---|
| DESIGN | | DATE 7/00 |
| DESIGNED BY | STAFF | |
| DRAWN BY | STAFF | DATE 7/00 |
| CHECKED BY | P.B. | DATE 7/00 |

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6423.81 0704

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: HANOVER / GLENRIO
TRAFFIC CONTROL DETAILS

| DESIGN REVIEW COMMITEE | CITY ENGINEER APPROVAL | LAST UPDATE | MO./DAY/YR. | MO./DAY/YR. |
|---|---|---|---|---|
| COP | STP | | | |

PROJECT NO. 642381
MAP NO. J-10
SHEET 7 OF 8

99543-T1.DWG

# CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. CONTRACTOR SHALL MAINTAIN A GRAFFITI FREE SITE

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

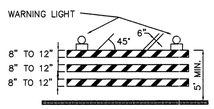
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

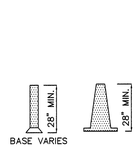
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING GRADE SHEETING OR BETTER.

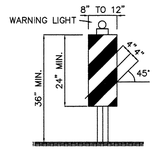
NOTE:
REQUESTS FOR BARRICADING PERMITS MAY BE DELAYED OR DENIED DUE TO OTHER ONGOING PERMITS IN THE AREA



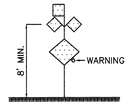
TYPE III BARRICADE



CONES



VERTICAL PANEL

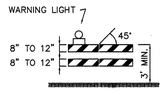


HIGH LEVEL WARNING DEVICE

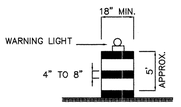
## LEGEND

| | |
|---|---|
| | WORK AREA |
| • | BARRICADE – TYPE I, TYPE II, OR BARREL |
| ⊥ | BARRICADE – TYPE III |
| X | VERTICAL PANEL |
| ⊣ | WARNING SIGN |
| D | DISTANCE BETWEEN SIGNS – A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET |
| | FLAGMAN POSITION |
| S | SPACING BETWEEN BARRICADES– A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET |
| L | TAPER LENGTH – SEE CHART BELOW |

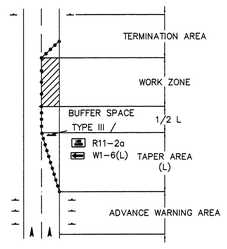
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.



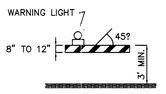
TYPE II BARRICADE
COLLAPSIBLE



BARREL



TRAFFIC CONTROL ELEMENTS



TYPE I BARRICADE
COLLAPSIBLE

## TAPER REQUIREMENTS

| SPEED LIMIT (MPH) | TAPER LENGTH (L) (FEET) 10' LANE | 11' LANE | 12' LANE | MINIMUM NUMBER OF DEVICES FOR TAPER | MAXIMUM DEVICE SPACING IN FEET ALONG TAPER | AFTER TAPER |
|---|---|---|---|---|---|---|
| 20 | 70 | 75 | 80 | 5 | 20 | 20 |
| 25 | 105 | 115 | 125 | 6 | 25 | 25 |
| 30 | 150 | 165 | 180 | 7 | 30 | 30 |
| 35 | 205 | 225 | 245 | 8 | 35 | 35 |
| 40 | 270 | 295 | 320 | 9 | 40 | 40 |
| 45 | 450 | 495 | 540 | 13 | 45 | 45 |
| 50 | 500 | 550 | 600 | 13 | 50 | 50 |
| 55 | 550 | 605 | 660 | 13 | 55 | 55 |

## RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

| SPEED MILES PER HOUR | MINIMUM DISTANCE IN FEET BETWEEN SIGNS | FROM LAST SIGN TO TAPER |
|---|---|---|
| 0-20 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 25-30 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 30-35 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 40-45 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |
| 50-60 | 10 X SPEED LIMIT | 10 X SPEED LIMIT |

### TAPER CRITERIA

| TYPE OF TAPER | TAPER LENGTH |
|---|---|
| UPSTREAM TAPER: | |
| MERGING TAPER | L MINIMUM |
| SHIFTING TAPER | 1/2 L MINIMUM |
| SHOULDER TAPER | 1/2 L MINIMUM |
| TWO-WAY TRAFFIC TAPER | 100 FEET MAXIMUM |
| DOWNSTREAM TAPERS | 100 FEET PER LANE |

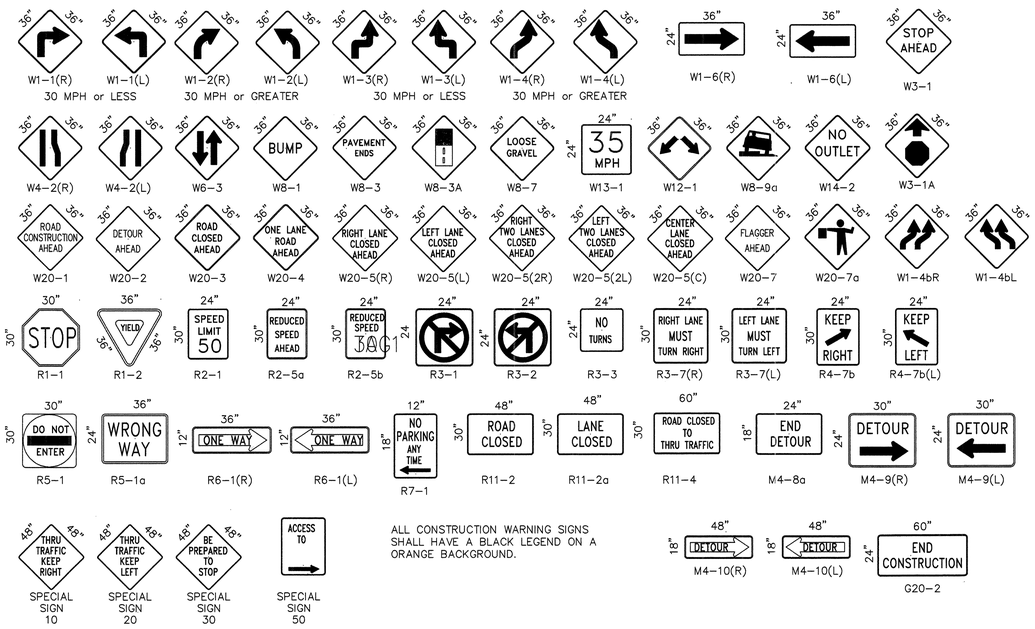
### TAPER LENGTH COMPUTATION

| SPEED LIMIT | |
|---|---|
| 40 MPH OR LESS | $L = \frac{WS^2}{60}$ |
| 45 MPH OR GREATER | $L = W \times S$ |

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6423.81 0804

## SIGN FACE DETAILS




ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

SCANNED BY MESA REPRO

99543-T2.DWG

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

AS BUILT INFORMATION
BENCH MARKS
ACS 10-K10 ACS 3 1/4" ALUM CAP 54' EAST OF NORTH END OF BACK OF CURB OF TRAFFIC ISLAND ON LOS VOLCANES RD. THE STATION IS SET FLUSH IN THE TOP OF CURB AND IS STAMPED "10-K10, 1989."
ELEVATION = 5142.79 FEET
CONTRACTOR | DATE
WORK STAKED BY | DATE
INSPECTOR'S ACCEPTANCE BY | DATE
FIELD VERIFICATION BY | DATE
DRAWING CORRECTED BY | DATE
MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

ENGINEER'S SEAL
PAUL T. BRASHER NEW MEXICO 7282 REGISTERED PROFESSIONAL ENGINEER
8-1-00

REMARKS
REVISIONS
NO. | DATE | BY
DESIGNED BY STAFF DATE 4/00
DRAWN BY STAFF DATE 4/00
CHECKED BY P.B. DATE 4/00

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: HANOVER / GLENRIO
TRAFFIC CONTROL DETAILS

| DESIGN REVIEW COMMITEE | CITY ENGINEER APPROVAL | LAST UPDATE | MO./DAY/YR. | MO./DAY/YR. |
|---|---|---|---|---|
| COA | STD | | | |

PROJECT NO. 642381 | MAP NO. J-10 | SHEET 8 OF 8