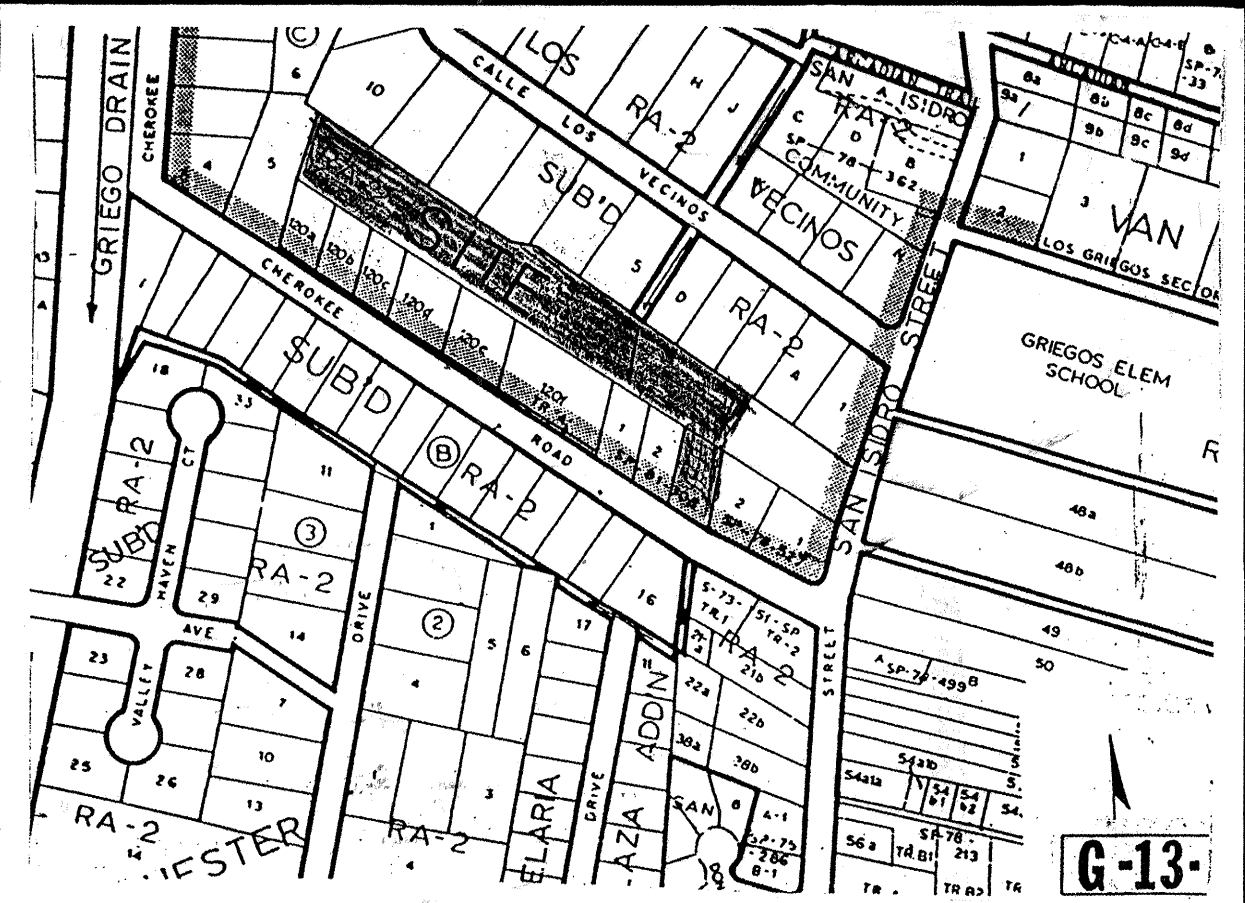


JARDINES ESCONDIDOS
(SECRET GARDENS)
STREET, WATER AND SEWER
INFRASTRUCTURE

SCANNED BY
MESA REP

1	TITLE
2	PLAT
3	GRADING AND DRAINAGE PLAN, LOTS 1-8
4	GRADING AND DRAINAGE PLAN, LOTS 9-12
5	STREET PLAN & PROFILE, STA 0 — 5+00
6	STREET PLAN & PROFILE, STA 5+00 — 9+51
7	TRANSITION & CULVERT DETAILS
8	ENTRANCE DETAILS
9	SAS & WATER PLAN & PROFILE, STA 0 — 5+00
10	SAS & WATER PLAN & PROFILE, STA 5+00 — 9+65
11	TRAFFIC CONTROL STANDARDS
12	TRAFFIC CONTROL SIGNS AND EXAMPLES

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Ken Chang
DATE 8/25/99



NOTICE TO CONTRACTORS

- 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 CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, AS AMENDED THROUGH AMENDMENT 6.
 - TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE-CALL SYSTEMS, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
 - PRIOR TO 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 SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
 - 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 SURVEY SECTION. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION 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 GENERAL CONDITIONS OF STANDARD SPECIFICATIONS.
 - FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATING DIVISION, A DETAILED CONSTRUCTION SCHEDULE. TWO (2) DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATING DIVISION. CONTRACTOR SHALL NOTIFY THE BARRICADING ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATION.
 - ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTED OR INDICATED BY THIS PLAN SET.
- ☒ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
 - ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
 - ☒ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER
 - ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
 - ☒ IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
 - ☐ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

AS-BUILT RECORD SET
JULY 7, 1999
ELEVATIONS
AS NOTED
BASED ON CITY INSPECTION
FIELD NOTES
MWR 12/16/99

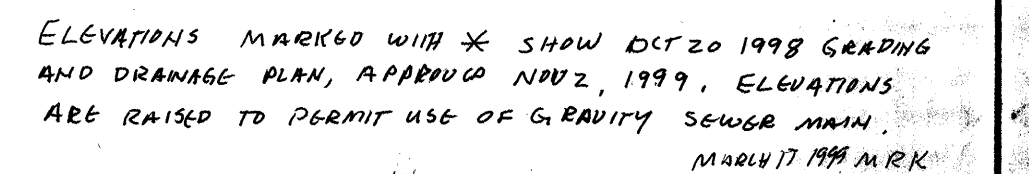
MARVIN R. KORTUM, P.E.
Civil Engineering
NM PE 651.
1605 Speakman Drive, S.E.
Albuquerque, New Mexico 87123
(505) 299-0774

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP, SIGNATURE		APPROVALS		ENGINEER	DATE 8/18/99	APPROVED FOR CONSTRUCTION	
		DRC Chairman		<i>Silly G. Jaramila</i>	1/23/99	<i>Ken Chang</i> 3-23-99 City Engineer Date	
		Transportation		<i>R.W. Kane</i>	12-16-98		
		Water/Wastewater		<i>R.W. Kane</i>	12-10-98		
		Hydrology		<i>g. Jaramila</i>	12/16/98		
		CIP		<i>g. Jaramila</i>	12/16/98		
		Constr. Mngmnt.		<i>g. Jaramila</i>	9-25-98		
		CONST. COORD.		<i>g. Jaramila</i>	9-25-98		
		City Project No.		594381		Sheet	Of
						1	12

DRB 97-276



EXISTING ELEVATIONS TOP OF PL BERM
ALONG FIELD DITCH CHANNEL INV
SEE TYPICAL TOP OF FIELD BERM
SECTION A-A FIELD SURFACE



- SECTION B - B



SECTION F-F

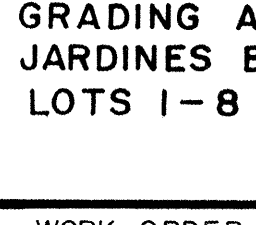
SECTION G- G

SECTION H-H
H-H IS REVERSE OF G-G

- (D) Top of lot surface elevation. Designated elevation shall be within plus or minus 3" for 90% of the lot area which is not occupied by street or house structures. 10% of the of the lot area may be at a different elevation for landscaping, patio, or other uses. No obstructions will be placed which will prevent flow from front lot to rear lot, or from any lot to the Public Commons Areas within that basin.
- (E) Slope away from house structure. There shall be a minimum of 3' "dry ground" between the house foundation and the 100 year 10 day storm to surface elevation. 5' "dry ground" shall be used if space around the house structure permits. The surface of the "dry ground" shall be sloped at a slope (minimum) of 5% away from the house.

- F There shall be 8" minimum between the top of the earth material and the structural house material (sill plate, etc.) unless materials are used which meet building code requirements for direct contact with the earth are used.
- G Subdivision boundary barrier wall or curb. The wall or curb shall be a minimum of 6" wide by 24" high if made of cast portland cement concrete, and 8" wide by 24" high if constructed of concrete masonry units (CMU). CMU blocks shall be filled with 3000 psi portland cement concrete. Alternative materials may be used for the wall or curb if they provide the same waterproof barrier that is provided by the cast concrete or filled block wall. Alternative footer will be required if the wall or curb is to support a fence or garden wall. The footer shown is satisfactory for a fence or garden wall up to 6' high. The footer shall have #4 x'bar continuous horizontally and at 32" vertically. Watertight expansion joints shall be placed at 20' (minimum) intervals.

Added notes, basins B-1, B-2, B-3 Street profiles added Topograph corrected,		MRK May 30, 1998
Changed to flat scheme		Marvin R Kortum April 22, 1998
Preliminary APPROVALS, REVISIONS	Marvin R Kortum December 17, 1997 BY DATE	



DEC 17 1997
MRK
EXPI 12/19/97
MRK
APR 22 1998
MRK

MAY 30 1998
MRK
APR 22 1998
MRK

MARVIN R. KORTUM, P.E.
 Civil Engineering
 NM PE 6519

 1605 Speakman Drive, S.E.
 Albuquerque, New Mexico 87123
 (505) 299-0774

JARDINES ESCONDIDOS PLAN JARDINES ESCONDIDOS LOTS 1-8	
WORK ORDER PROJECT NO.	SHEET OF
594381	3 / 12
PROJECT NO.	MAP NO: SHEET / OF
G-13/D19	G-13 2/7

I certify that I have personally inspected the Jardines Escondidos site and the surrounding terrain. The representation of the land and the contours are as presented on these drawings and the accompanying text as of December 1997.

Marvin R Kortum
Dec 12 1997

Topography by Marvin R Kortum, April 1998

68.21 TOP RL BERM
67.28 CHANNEL INV
68.04 FIELD SIDE BERM
67.62 FIELD SURFACE

68.50

67.26

68.22

67.21

68.51

67.32

68.33

67.86

BASIN B-2

STORM TOP SURFACE
100YR 10 DAY 66.88

SEE SHEET 3 FOR STREET
PLAN & PROFILE

ASPHALT
SHOULDER

BASIN B-3

BDI 6542

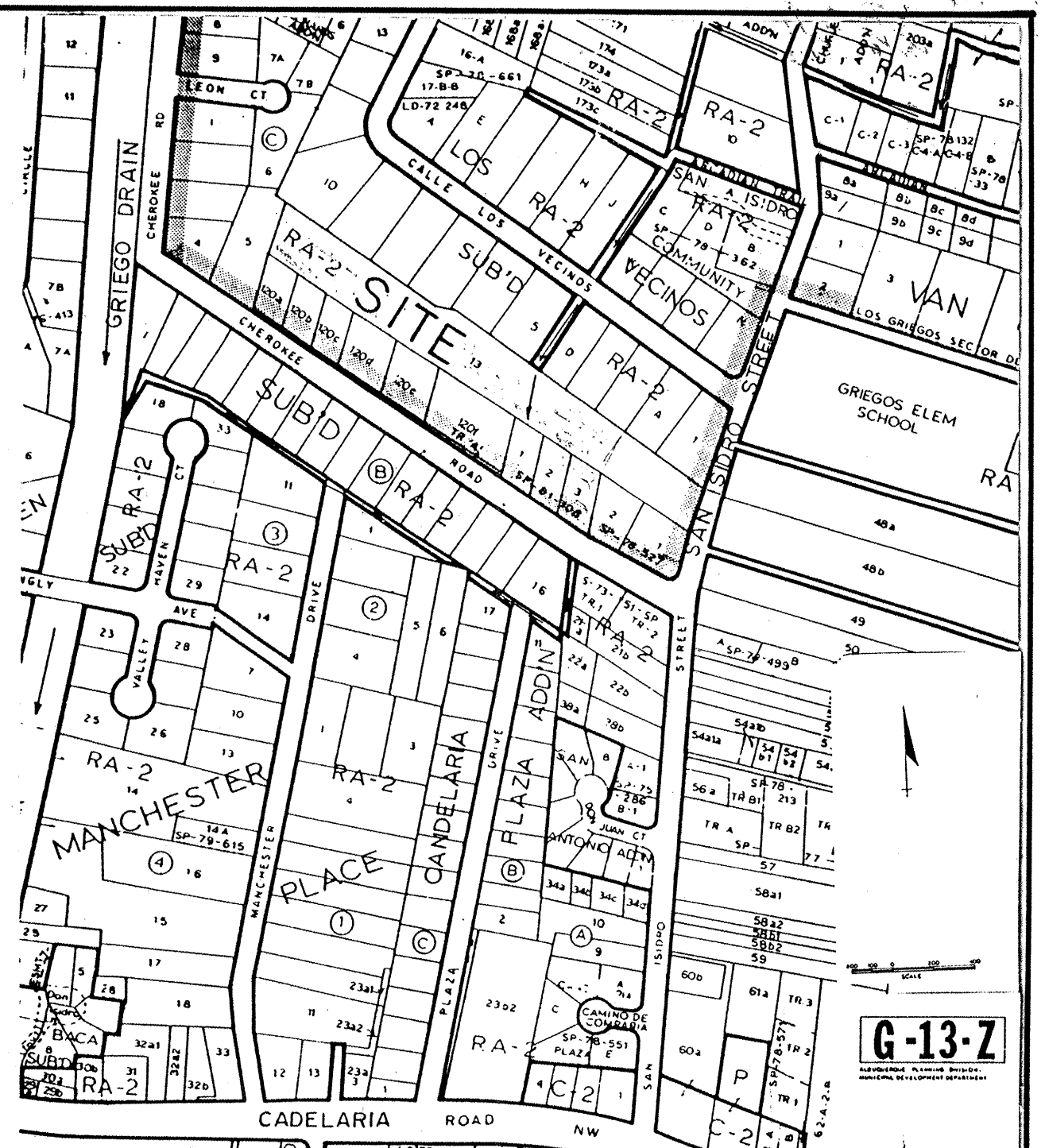
BASIN A-1 ELEVATIONS BASIN A-2 ELEVATION

HOUSE FFE	68.21
HOUSE PAD (EARTH)	67.88
STREET CENTER LINE	68.00
10 DAY 100 YEAR STORM	67.12
LOT SURFACE	66.50

68.09	67.93	67.92
67.22	67.17	67.32
68.04	68.01	68.15
67.53	67.42	67.35

TYPICAL EXISTING FIELD DITCH & BERMS
SEE ELEVATION AS TABULATED ON PLAN
SECTION A-A

LEGEND	Existing	Proposed
Spot Elevation	68.71	64.25
Top of Curb	68.71	64.25
Flow Line Invert	68.71	64.25
Finished Floor Elevation	FFE	FFE
Contour Line	68.71	64.25
Property Line	68.71	64.25
Lot Number	68.71	64.25
Structure	68.71	64.25
Curb and Gutter	68.71	64.25
Driveway	68.71	64.25
DRAINAGE BASIN BOUNDARY	68.71	64.25
ROOF DRAIN	68.71	64.25
TOP OF BERM	68.71	64.25
TOP OF WALL	68.71	64.25
BORROW DITCH INVERT	68.71	64.25



LEGAL DESCRIPTION
JARDINES ESCONDIDOS SUBDIVISION, T. 10 N., R. 4 E., NMPM
BERNALILLO COUNTY, NEW MEXICO

BENCHMARK: ACS 6A-G13, located at the southeast corner of the intersection of Candelaria Road with San Isidro, north side of Candelaria Road, 306' west of San Isidro center line (+/-).
Elevation: 4965.72

NOTES

- South entrance according to drawings 2426, private entrance details, and 2441, wheel chair ramp, City of Albuquerque Standard Specifications for Public Works.
- Street section according to drawing 2406, City of Albuquerque Standard Specifications for Public Works, with standard curb and gutter, drawing 2415.
- Street section according to drawing 2406, City of Albuquerque Standard Specifications for Public Works, with estate type mountable curb, drawing 2415.
- Street crossings over the MRGCD ditch will be in accordance with MRGCD and the City of Albuquerque requirements.
- Driveways and garage aprons may be surfaced with gravel or other pervious surface. Runoff estimates are based on pervious surfaces.
- House dimensions and locations as shown are general. Locations shown on lot lines are zero setback for each side of lot line. See Architectural Plans for details.
- Elevations of building pads are based on slab on grade housing. Building pad elevations as constructed (Finished Floor Elevations) may be higher than shown. Auxiliary impervious areas, such as patios, garden paths, gazebos, etc. may be placed at elevations which will be flooded during heavy precipitation, thus not decreasing the runoff storage capacity.
- The overall drainage concept for the subdivision is that all precipitation which falls on the subdivision shall be retained within the subdivision. Accordingly, the subdivision is to be enclosed within a barrier which consists of low walls or curbs, or the berms of established irrigation ditches.
- Privacy fences or walls may be constructed on top of the barrier on the subdivision property lines. Fences or walls placed on lot lines interior to the subdivision shall not prevent cross flow runoff from the adjacent property.
- All cut and fill slopes and constructed drainage swales are to be provided with an erosion control surface by developer/owner. Coverings may be turf, rock, terraced with garden walls or timbers or similar according to the landscape plan. Erosion control may be provided by seeding with a native grass mixture as follows:

Common name	Genus-species	Pounds/Acre
"Palma"	Oryzopsis	
Indian rice grass	Hymenoides	2.0
"Viva"	Gallista grass	2.0
"Niner"	Sidacates Gramma	2.0
"Hatchita"	Blue Gramma	3.0
Sand dropseed (NM Region)	Sporobolus Cryptandrus	1.0
Four-wing Saltbrush	Atriplex Canesoens	1.0

The seed will be spread on loose surface soil, raked or worked into the soil about one-half inch, and a straw mulch or a mulch mat placed over the seed to prevent erosion. The seeded area is to be watered daily until a turf is established.

I Landscaped, garden or orchard area.

M Additional fill may be placed around the perimeter foundation wall up to a height of 8 inches below the sill plate. All fill so placed shall have a minimum slope of 5% away from the building, and a maximum slope of 1 vertical to 3 horizontal (1:3). Berms may be placed higher on walls if walls are designed with appropriate water proofing and as retaining walls. All foundation footings will be designed to permit ponding adjacent to foundations as may occur during heavy precipitation.

N All cut and fill slopes shall be 3 horizontal to 1 vertical, except that slopes no more than 3 feet in elevation difference may be 2 horizontal to 1 vertical if the surface is covered with 2" to 6" angular cobbles or other erosion protection. Quantitative earthwork estimates should be based on more detailed topographic cross sections of the work area.

P Each lot shall grant an easement for the collection and passage of runoff flows (see plat).

R Minor nuisance flows from the adjacent driveway will be accepted into the Public Commons Area #5. Small drain holes will be placed in the separation wall at an elevation which will permit drainage from the driveway to flow into the PCA, but at an elevation higher than the estimated 100 year water elevation in the PCA.

S Roof drains shall be placed around the perimeter of the house in order to avoid concentration of flows. A splash block or other erosion control shall be used at the drain locations.

T The finished lot surface may be adjusted up or down 4" from the elevation shown to balancing the cut and fill within the subdivision. Additional fill material may be required for the support of structures if on-site materials do not meet strength requirements.

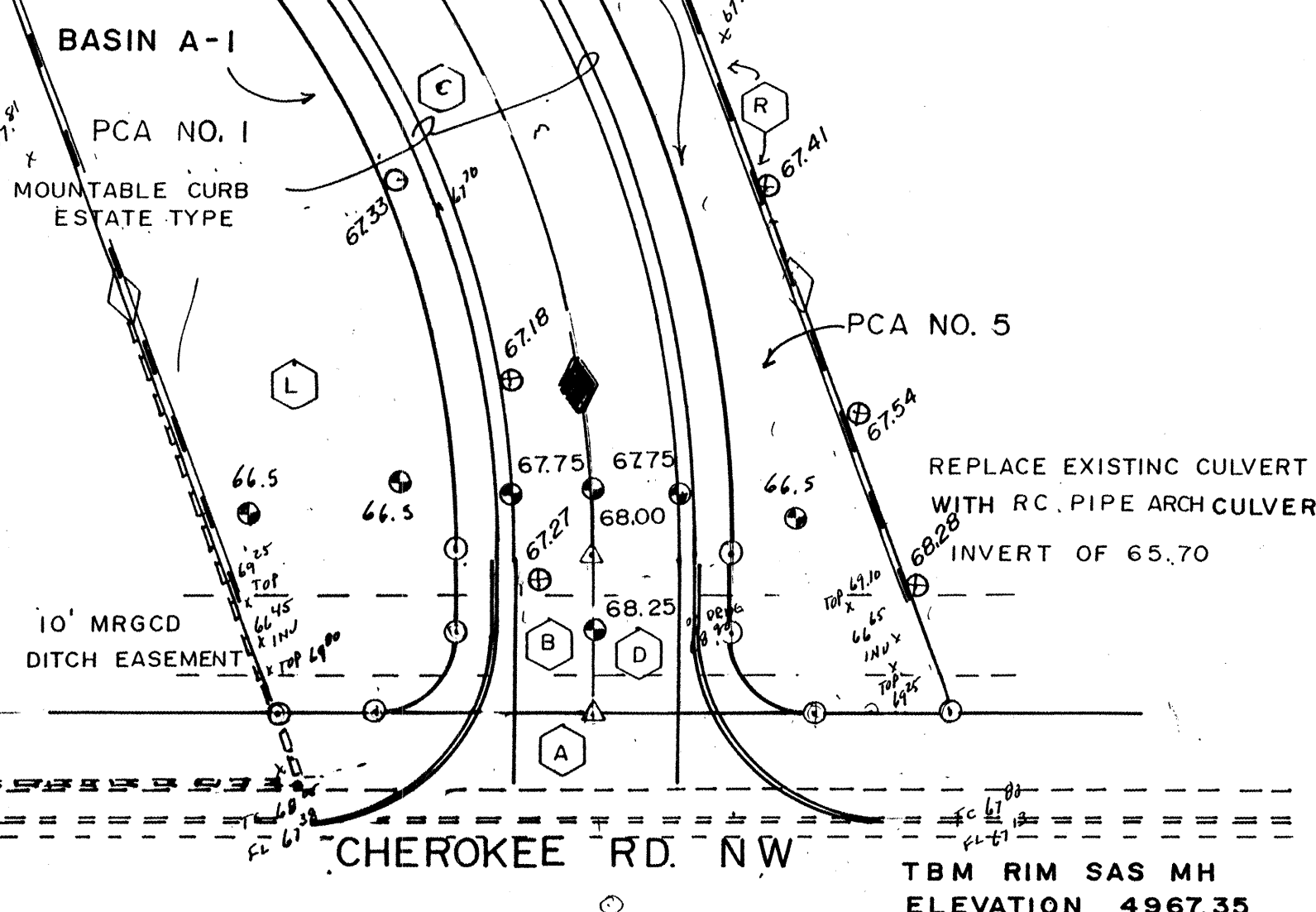
U The street on the slope leading up to the box culvert shall be tipped (side slope) away from the private lots.

V The borrow ditch along the south side of the street on the south side of Basin B will have sufficient capacity to contain the 10 year and 100 year-6 hour storm runoff from the south side of the street. The 10 day 100-year storm will cover about 6.5 feet of the asphalt surface and curb on the south side of the centerline of the street if no percolation occurs during the storm period.

W Care must be taken when borrowing house pad materials so that noxious bindweed (wild morning glory) is not spread to other locations from the existing location adjacent to the Kooglear Lateral, and other locations within the subdivision.

X After compaction of house pads, streets and driveways, the vacant portion of the lots away from the houses, and the Public Commons Areas shall be deep plowed to at least 12 inches below the finished lot surface to break the existing hardpan in order to enhance the future percolation of surface runoff.

Y The double berm with an irrigation ditch shall be constructed to dimensions shown on cross sections G-G and H-H. The berms may be to dimensions greater than shown in areas where the existing berm is larger.



FLAT CL 67.26

NGV SAS MH
INV 60.10

TBM RIM SAS MH
ELEVATION 4967.35

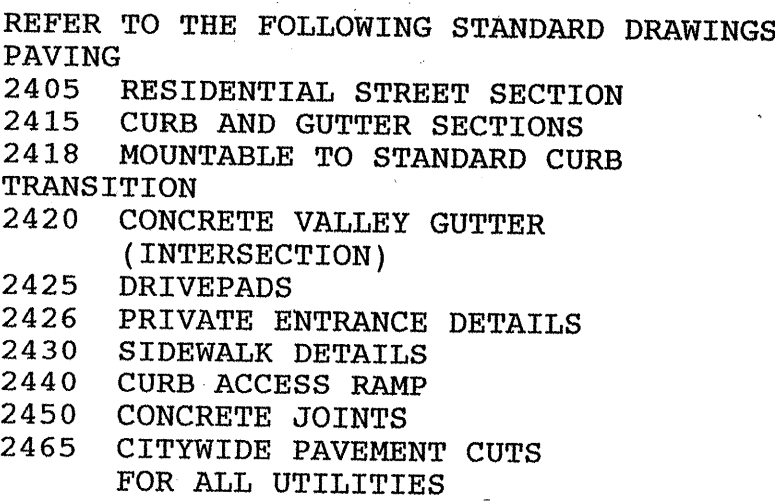
Added notes, basins B-1, B-2, B-3 MRK May 30, 1998
Street profiles added
Topograph corrected, Marvin R Kortum April 22, 1998
Changed to flat scheme Marvin R Kortum February 16, 1998
Preliminary Marvin R Kortum December 17, 1997
APPROVALS, REVISIONS BY DATE

MARVIN R. KORTUM, P.E.
Civil Engineering
NM PE 6519
1605 Speakman Drive, S.E.
Albuquerque, New Mexico 87123
(505) 299-0774

GRADING AND DRAINAGE PLAN
JARDINES ESCONDIDOS
LOTS 9-12

WORK ORDER PROJECT NO. 594381 SHEET OF 4 / 12

PROJECT NO. G-13 / D 19 MAP NO. SHEET/OF G-13 1 / 7



SCANNED BY
MESA REPRO



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

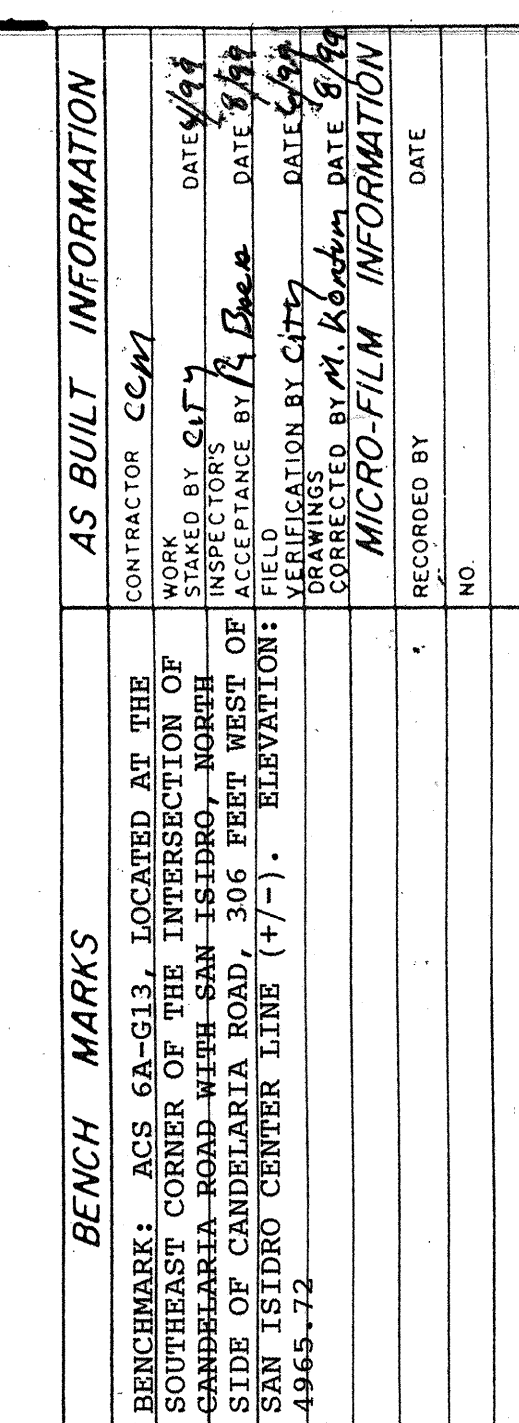
TITLE: JARDINES ESCONDIDOS (SECRET GARDENS)
STREET PLAN & PROFILE
STA 0+00 TO 5+00

Positive Review Committee APPROVED JAN 23 1999 DESIGN REVIEW COMMITTEE	City Engineer Approval	Last Design Update	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Mo. / Day / Yr.</th> <th style="width: 50%;">Mo. / Day / Yr.</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Mo. / Day / Yr.	Mo. / Day / Yr.														
Mo. / Day / Yr.	Mo. / Day / Yr.																		
City Project No. 594381	Zone Map No. G-13	Sheet 5	Of 12																

G 13/D 19, 5 HGR-3 / 7 G & D

1. Any work to be performed within the Middle Rio Grande Conservancy District (M.R.G.C.D.) Right-of-Way shall be closely coordinated with the M.R.G.C.D. Engineering Department and appropriate field office. Phone: (505) 247-0234.

2. No work is to be done on facilities or structures belonging to, or operated by, the M.R.G.C.D. between March 1 and October 31 inclusive. However, work may be permitted by the M.R.G.C.D. if it can be shown that the work will not interfere with operations of the M.R.G.C.D. facility. All Work to be done within the M.R.G.C.D. facilities must be approved by the M.R.G.C.D. Engineer prior to commencing work.



SEE GRADING PLAN FOR WALL
DETAILS

SEE SHEET 6
FOR VERTICAL DESIGN

CULVERT AND IRRIGATION DITCH DETAILS

1 CULVERT PIPES SHALL BE REINFORCED CONCRETE PIPE CONFORMING TO ASTM DESIGNATION 076-72, CLASS IV, WALL B, USING "O" RING GASKETED JOINTS. PIPE SIZE SHALL BE 36" INSIDE DIAMETER CIRCULAR PIPE. ALTERNATIVE JOINT DESIGN IS A TONGUE AND GROOVE, WITH SILICON SEALANT APPLIED PRIOR TO JOINING THE PIPE TO PROVIDE PERMANENT WATERPROOF JOINT.

2 CULVERT PIPE 1 SHALL BE LOCATED AT STREET STATION 6+21.17,
AND PIPE 2 SHALL BE LOCATED AT STREET STATION 9+30.

3 A PORTLAND CONCRETE HEADWALL SHALL BE CONSTRUCTED AT BOTH
ENDS OF THE PIPE TO DIMENSIONS AS SHOWN. THE IRRIGATION
DITCH SHALL THEN BE LINED WITH PORTLAND CEMENT TO PROVIDE A
TRANSITION FROM THE EARTH LINED CHANNEL TO THE CULVERT. THE
LENGTH OF THE LINING WILL BE FROM THE PROPERTY LINES TO THE
PIPE, EXCEPT THAT THE LINING WILL BE FROM THE EXISTING TIMBER
GATE STRUCTURE ON THE NORTH PROPERTY LINE.

4. PCC FOR DITCH LINING SHALL BE PLACED TO THE DIMENSIONS SHOWN ON THE DRAWINGS. PRIOR TO PLACING THE CONCRETE, THE DITCH BERMS SHALL BE FILLED AND COMPACTED TO 95% MAXIMUM DRY DENSITY. THEN THE DITCH CURB SHALL BE PLACED TO THE DIMENSION FOR PLACING THE CONCRETE. THE CONCRETE SHALL BE A 100% ES1 CONCRETE AND SHALL BE COATED WITH CURING COMPOUND OR COVERED WITH A WATERPROOF COVER OR DAMP COVER FOR A PERIOD OF AT LEAST 7 DAYS.

MRGCD NOTES (CONT.)

3. The Contractor shall not store equipment, new materials or debris within District right-of-way which may interfere with operations and maintenance of the M.R.G.C.D. facility.

4. The Contractor shall not service vehicles or equipment within M.R.G.C.D. right-of-way.

5. Seeding of disturbed areas within M.R.G.C.D. Right-of-Ways is required per the M.R.G.C.D. seeding specifications.

6. The Contractor must maintain a minimum cover of 3' over all culvert crossings used for access to the project site.

7. The Contractor is responsible for repairing and or replacement of any structures removed and or damaged due to the Contractors activities within the Districts right-of-way. Should any turnouts, culvert pipes and or structures require replacement due to leakage and or damage by the Contractor, new turnouts, and new culvert pipes and or new structures shall replace the damaged item. Repairs and or replacements within the Districts right-of-way must comply with the Districts specifications.

8. All damaged culvert crossings and culvert crossings removed and or disturbed must be restored and/or replaced to the satisfaction of the M.R.G.C.D. and comply with M.R.G.C.D. specifications.

9. All salvageable culverts, irrigation gates, etc. must be returned to the M R G C D.

10. The Contractor is responsible for executing a "Special Use License Agreement" with the M.R.G.C.D. prior to construction.

UNDER NO CIRCUMSTANCES SHALL FENCES/STRUCTURES OF ANY KIND BE
CONSTRUCTED/INSTALLED ON OF WITHIN THE MIDDLE RIO GRANDE
CONSERVANCY DISTRICT RIGHT-OF-WAY/EASEMENT OR ON ANY DITCH
EMBANKMENT, EXCEPT FOR THOSE CROSSING STRUCTURES FOR WHICH A
LICENSE HAS BEEN ISSUED BY THE MRGCD.

STREET CL
 $\Delta = 52^{\circ} 10' 59''$
 $R = 75.00'$
 $L = 68.31$

LEFT FL
Δ = 52° 56' 03"
R = 87.50'
L = 80.84'

RIGHT FL
 $\Delta = 52^{\circ} 56' 03''$
 $R = 62.50'$
 $L = 57.74'$

ROW CL (C-13)
 $\Delta = 58^{\circ} 06' 26''$
 $R = 75.00'$
 $L = 76.06$

AS-BUILT RECORD SET
JULY 7, 1999

NO NOTATIONS, make

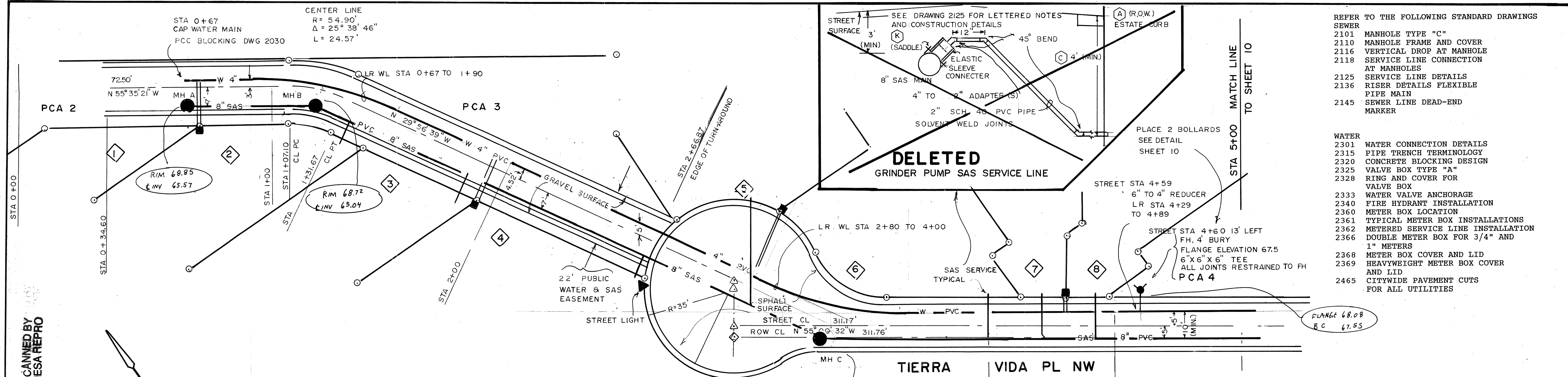
MARVIN R. KORTUM, P.E.
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: JARDINES ESCONDIDOS (SECRET GARDENS)
STREET TRANSITION
STA 6+11.17 - 7+06.18

Design Review Committee APPROVE JAN 27 1999 DESIGN REVIEW COMMITTEE		City Engineer Approval		Last Design Update 	Mo./ Day / Yr. 		Mo./ Day / Yr. 	
City Project No. 594381		Zone Map No. G-23			Sheet 7		Of 12	



- REFER TO THE FOLLOWING STANDARD DRAWINGS
- SEWER
 - 2101 MANHOLE TYPE "C"
 - 2110 MANHOLE FRAME AND COVER
 - 2116 VERTICAL DROP AT MANHOLE
 - 2118 SERVICE LINE CONNECTION AT MANHOLES
 - 2125 SERVICE LINE DETAILS
 - 2136 RISER DETAILS FLEXIBLE PIPE MAIN
 - 2145 SEWER LINE DEAD-END MARKER
- WATER
- 2301 WATER CONNECTION DETAILS
 - 2315 PIPE TRENCH TERMINOLOGY
 - 2320 CONCRETE BLOCKING DESIGN
 - 2325 VALVE BOX TYPE "A"
 - 2328 RING AND COVER FOR VALVE BOX
 - 2333 WATER VALVE ANCHORAGE
 - 2340 FIRE HYDRANT INSTALLATION
 - 2360 METER BOX LOCATION
 - 2361 TYPICAL METER BOX INSTALLATIONS
 - 2362 METERED SERVICE LINE INSTALLATION
 - 2366 DOUBLE METER BOX FOR 3/4" AND 1" METERS
 - 2368 METER BOX COVER AND LID
 - 2369 HEAVYWEIGHT METER BOX COVER AND LID
 - 2465 CITYWIDE PAVEMENT CUTS FOR ALL UTILITIES

STREET	LOT	STATION	OFF SET	TYPE	HEAVY DUTY COVER
	1, 2	0+70	11' R	DOUBLE	YES
	3, 4	1+94	11' R	DOUBLE	
	5, 6	3+19	45' L	DOUBLE	
	7, 8	4+31	13' L	DOUBLE	YES
	9, 10	6+98	16' L	DOUBLE	YES
	11, 12	7+30	16' L	DOUBLE	YES

4 INCH. GRAVITY SANITARY SEWER SERVICES INTO 8 INCH. GRAVITY SEWER MAIN

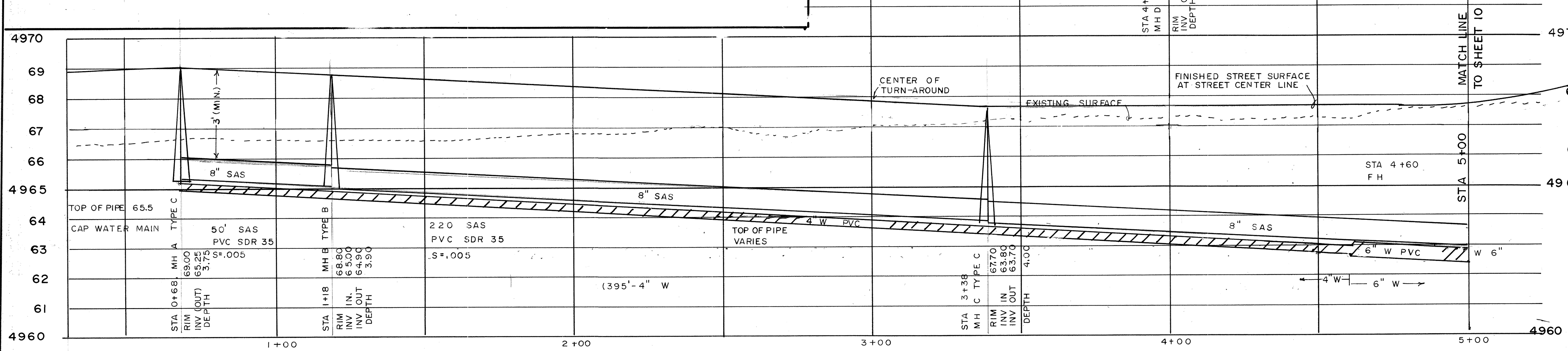
LOT	STREET STATION	SVC TAP OFF-SET FEET	SERVICE DIRECTION	SAS MAIN INVERT ELEV.	SAS SVC INVERT ELEV.	LENGTH FEET	TO PL TOP OF CURB	SERVICE INVERT AT PL	ELEV. DIFF. TC TO INVERT	DISTANCE TO BACK OF HOUSE	SAS SVS INVERT AT BACK OF HOUSE	HOUSE FFE	FFE TO INVERT
1	0+67	7 R	RIGHT	65.25	65.95	7	68.90	66.09	2.81	80	67.69	69.32	1.63
2	1+25	7 R	RIGHT	64.83	65.53	7	68.60	65.67	2.93	80	67.27	68.82	1.55
3	1+87	7 R	RIGHT	64.58	65.28	7	68.30	65.42	2.88	80	67.02	68.02	1.00
4	2+63	7 R	RIGHT	64.20	64.90	7	68.00	65.04	2.96	55	66.14	68.82	2.68
5	3+10	7 R	LEFT	63.97	64.67	40	67.75	65.47	2.28	50	66.47	68.33	1.86
6	4+00	5 R	LEFT	63.38	64.08	17	67.56	64.42	3.14	80	66.02	67.83	1.81
7	4+21	5 R	LEFT	63.28	63.98	17	67.56	64.32	3.24	80	65.92	67.83	1.91
8	4+42	5 R	LEFT	63.17	63.87	17	67.56	64.21	3.35	80	65.81	67.83	2.02

SAS SERVICE LINE SHALL BE ACCORDING TO STD DWG 2125, EXCEPT FOR NOTE C, DEPTH, TC TO INVERT, SHALL BE AS SHOWN ON THIS TABLE. (NOT 4' AS STATED BY NOTE C)

DELETED
HOUSES ON LOTS 1 THROUGH 8 WILL REQUIRE A WASTE WATER DISCHARGE PUMP (GRINDER PUMP). GRINDER PUMPS AND THEIR INSTALLATION WILL BE THE RESPONSIBILITY OF THE HOUSE BUILDER, AND MUST MEET REQUIREMENTS OF THE BUILDING AND PLUMBING CODES.

LENGTH	STA	TO	STA	DIRECTION	EVENT
26.08	0+67.00	0+93.08	SE	55° 35'	21" PLACE PIPE
60.42	0+93.08	1+53.50			CURVE PIPE TO RIGHT
					Δ 25° 38' 42"
					R 135.00'
					ARC 60.42'
					TANGENT 30.73'
					CORD 59.92'
157.94	1+53.50	3+11.44	SE	42° 46'	32" PLACE PIPE
59.06	3+11.44	3+70.50			CURVE PIPE TO LEFT
					Δ 25° 03' 53"
					R 135.00'
					ARC 59.06'
					TANGENT 30.00'
					CORD 58.59'
131.50	3+70.50	5+02.00	SE	55° 0'	32" PLACE PIPE

STA 5+02 ON SHEET 9 WATER MAIN IS STA 5+00 ON SHEET 10 WATER MAIN
WHEN STAKED IN THE FIELD THE CONTRACTOR WILL VERIFY THAT THE WATER MAIN IS 10 FEET OR MORE FROM THE SANITARY SEWER MAIN AND NO CLOSER THAN 1.5 FEET TO THE EDGE OF THE CURB.



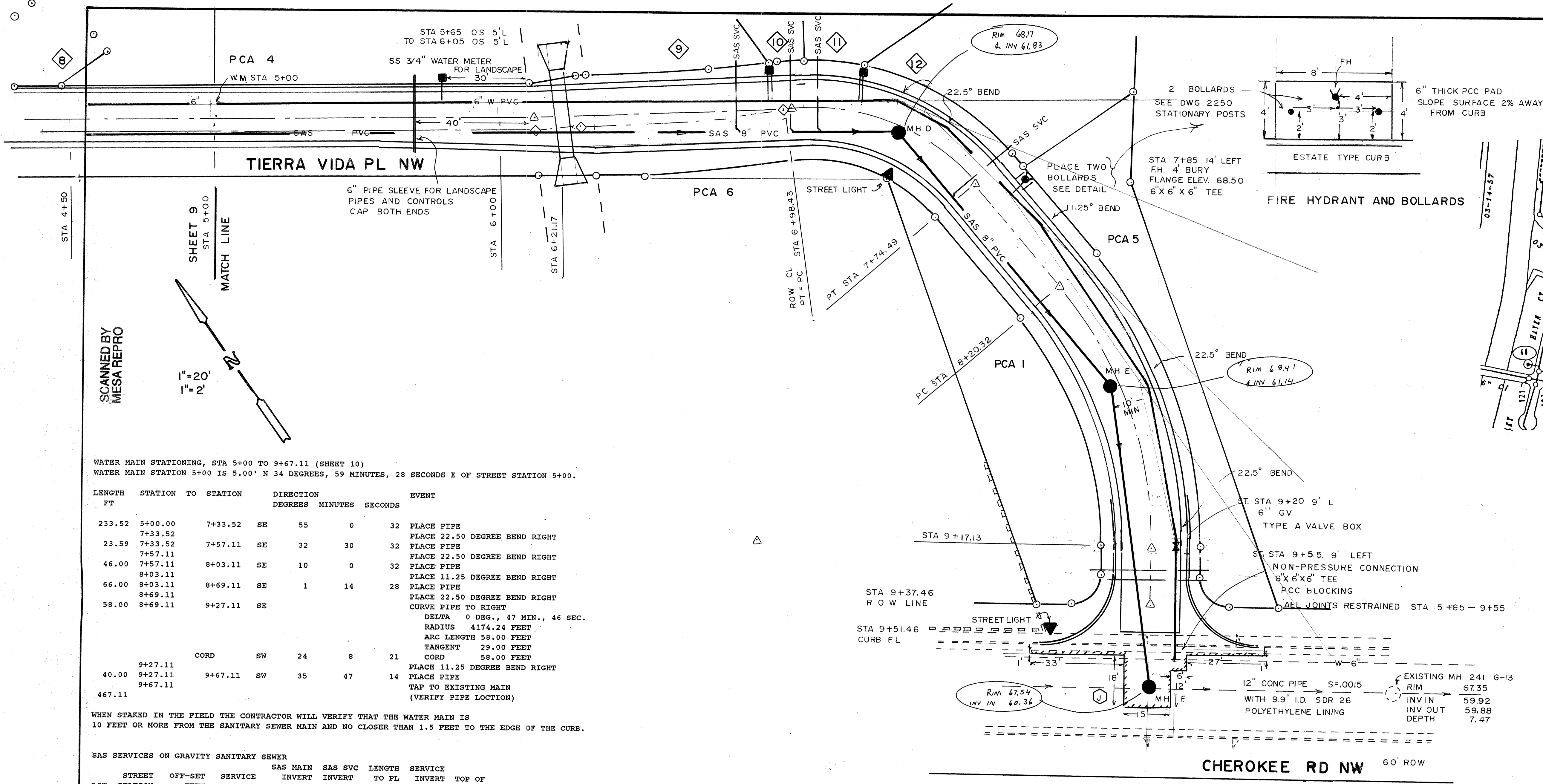
AS-BUILT RECORD SET
JULY 7, 1999
AS NOTED

MARVIN R. KORTUM, P.E.
Civil Engineering
NM PE 6519
1605 Speakman Drive, S.E.
Albuquerque, New Mexico 87123
(505) 299-0774

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: JARDINES ESCONDIDOS (SECRET GARDENS) SAS AND WATER PLAN & PROFILE STA 0+00 TO 5+00	
Design Review Committee APPROVED JAN 23 1999 DESIGN REVIEW COMMITTEE	City Engineer Approval _____ Last Design Update _____ City Project No. 594381 Zone Map No. G-13 Sheet 9 Of 12

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN	
CONTRACTOR	DATE	CONTRACTOR	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
WORK	DATE	WORK	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
STAKED BY	DATE	STAKED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
ACCEPTANCE BY	DATE	ACCEPTANCE BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
FIELD	DATE	FIELD	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
DRAWINGS	DATE	DRAWINGS	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
CORRECTED BY	DATE	CORRECTED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
RECORDED BY	DATE	RECORDED BY	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
NO.		NO.		NO.		NO.		NO.		NO.	

ENGINEER'S SEAL
MARVIN R. KORTUM
P.E.
1999
1605 Speakman Drive, S.E.
Albuquerque, New Mexico 87123
(505) 299-0774



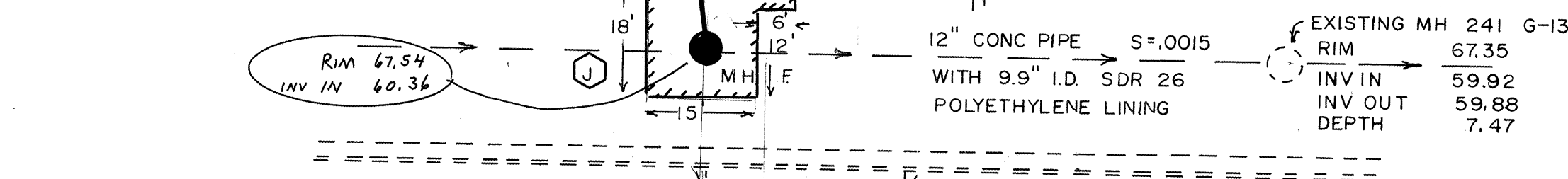
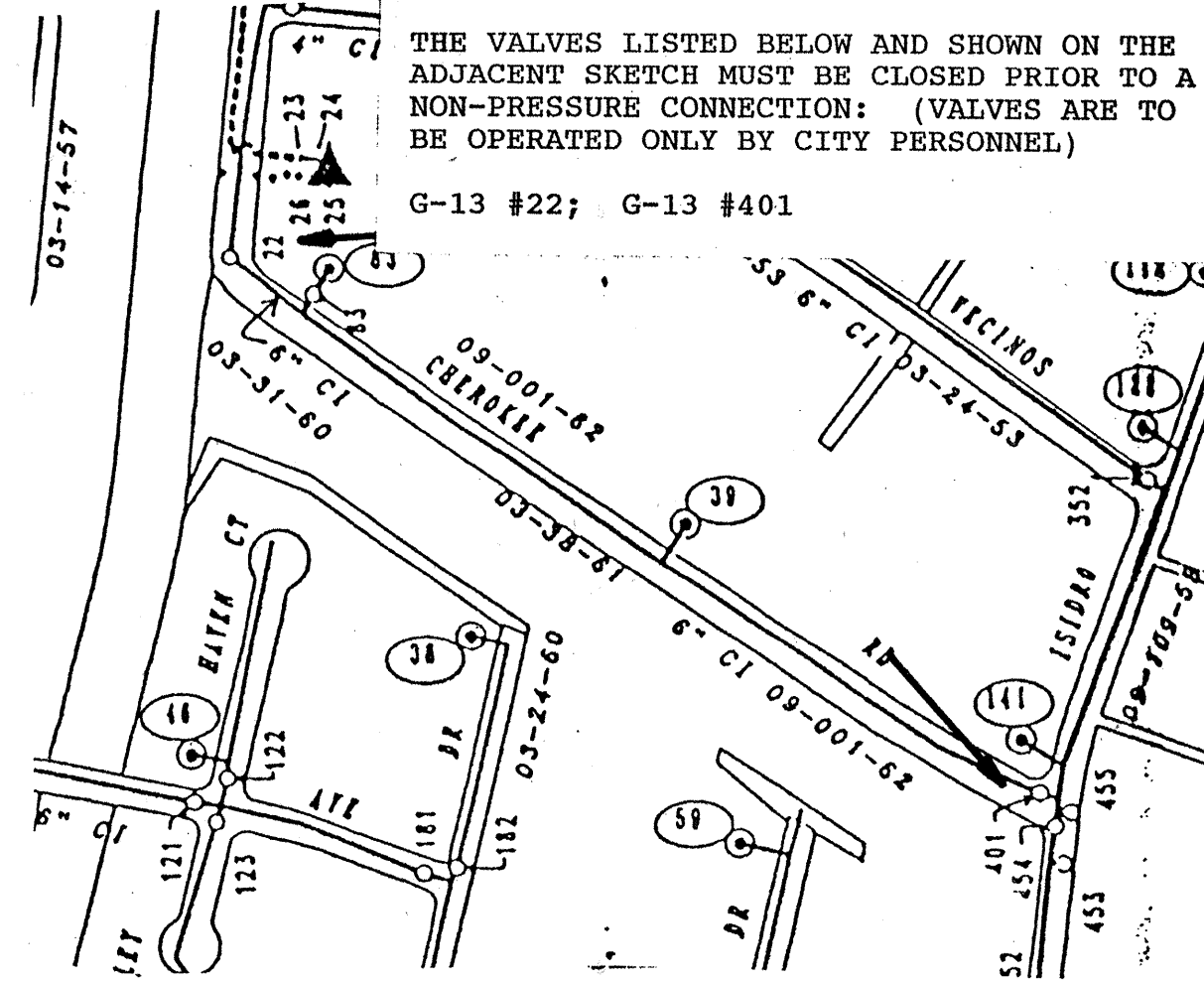
WATER MAIN SHUT-OFF REQUIREMENTS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF THE WATER MAIN SHUT-OFF REQUIREMENTS TO CONSTRUCT THIS PROJECT.

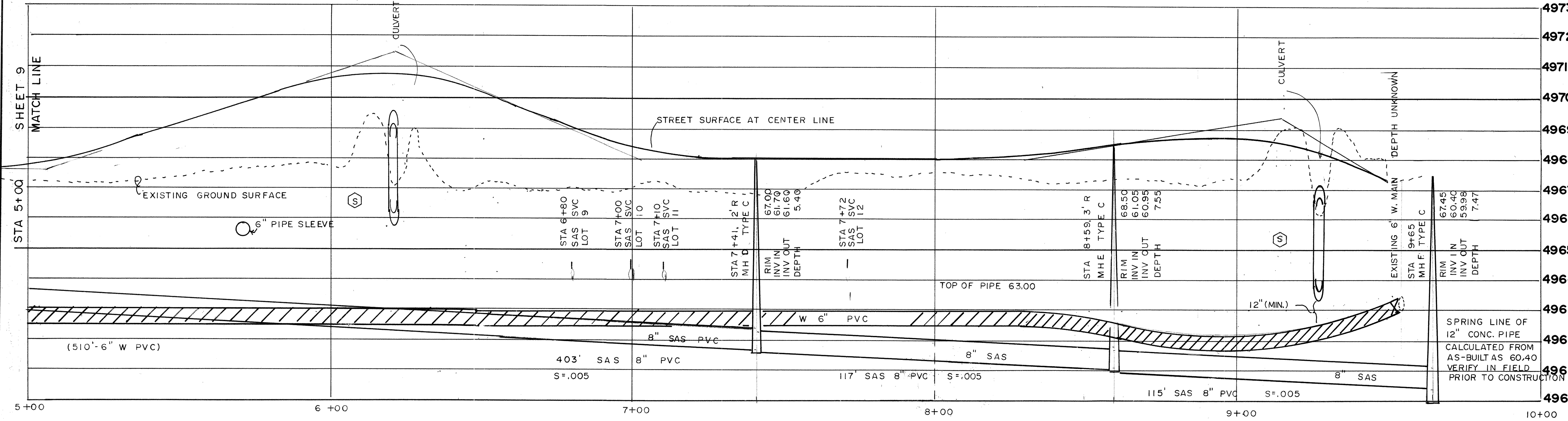
AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE PWD/WATER SYSTEMS DIVISION (857-8200) TO START THIS SHUT-OFF PLAN.

THE VALVES LISTED BELOW AND SHOWN ON THE ADJACENT SKETCH MUST BE CLOSED PRIOR TO A NON-PRESSURE CONNECTION: (VALVES ARE TO BE OPERATED ONLY BY CITY PERSONNEL)

G-13 #22; G-13 #401



CHEROKEE RD NW 60' ROW



AS-BUILT RECORD SET
 JULY 7, 1998
 AS NOTED M.R.K.

MARVIN R. KORTUM, P.E.
 Civil Engineering
 NM PE 6519
 1605 Speakman Drive, S.E.
 Albuquerque, New Mexico 87123
 (505) 299-0774

CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DEVELOPMENT GROUP

TITLE: JARDINES ESCONDIDOS (SECRET GARDENS)
 SAS AND WATER PLAN & PROFILE
 STA 5+00 TO 9+65 (END OF SAS)

DESIGNED BY: MARVIN R. KORTUM
 DRAWN BY: M.R.K.
 CHECKED BY: M.R.K.

DATE: SEP 17, 1998
 DATE: SEP 17, 1998
 DATE: SEP 17, 1998

City Project No. 594381 Zone Map No. G-13 Sheet 10 of 12

AS BUILT INFORMATION

CONTRACTOR: []
 WORK: []
 DATE: []
 FIELD: []
 DATE: []
 MICRO-FILM INFORMATION: []

SURVEY INFORMATION

FIELD NOTES: []
 BY: []
 NO.: []
 DATE: []

ENGINEER'S SEAL

SEP 17 1998
 MARVIN R. KORTUM
 P.E.
 NM PE 6519

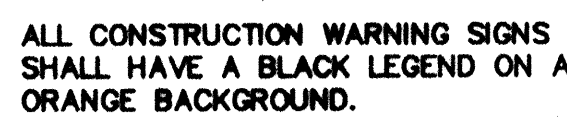
REVISIONS

NO.	DATE	REMARKS

CTCSTND1.DWG

- SCANNED BY
MESA REPRO

- ### SIGN FACE DETAILS



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

SPEED LIMIT (MPH)	TAPER LENGTH (L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		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

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

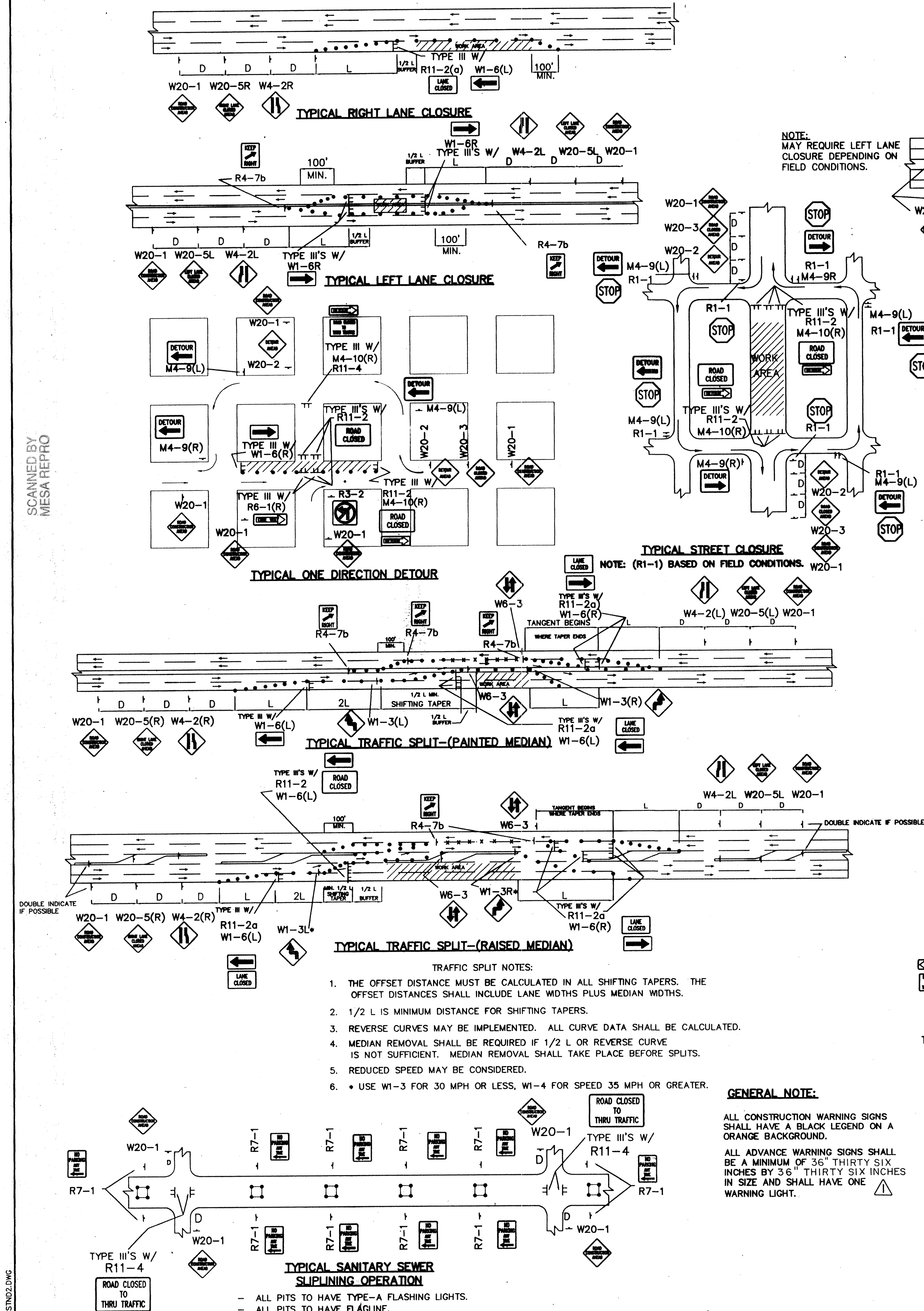
<u>TYPE OF TAPER</u>	<u>TAPER LENGTH</u>
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

<u>SPEED LIMIT</u>	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$
<u> </u>	
L = TAPER LENGTH	
W = WIDTH OF OFFSET IN FEET	
S = POSTED SPEED OR OFF-PEAK	
85-PERCENTILE SPEED IN MPH	

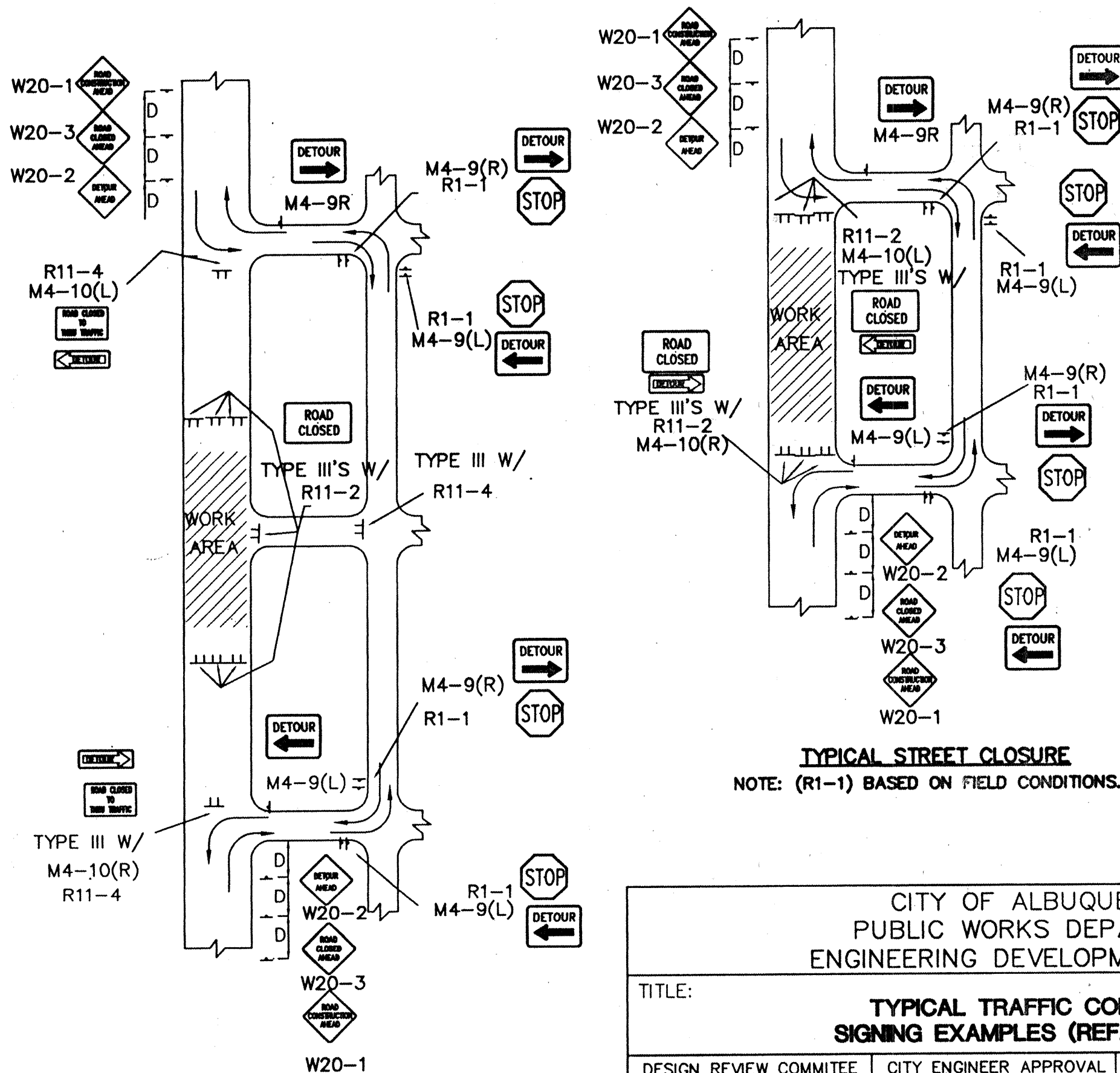
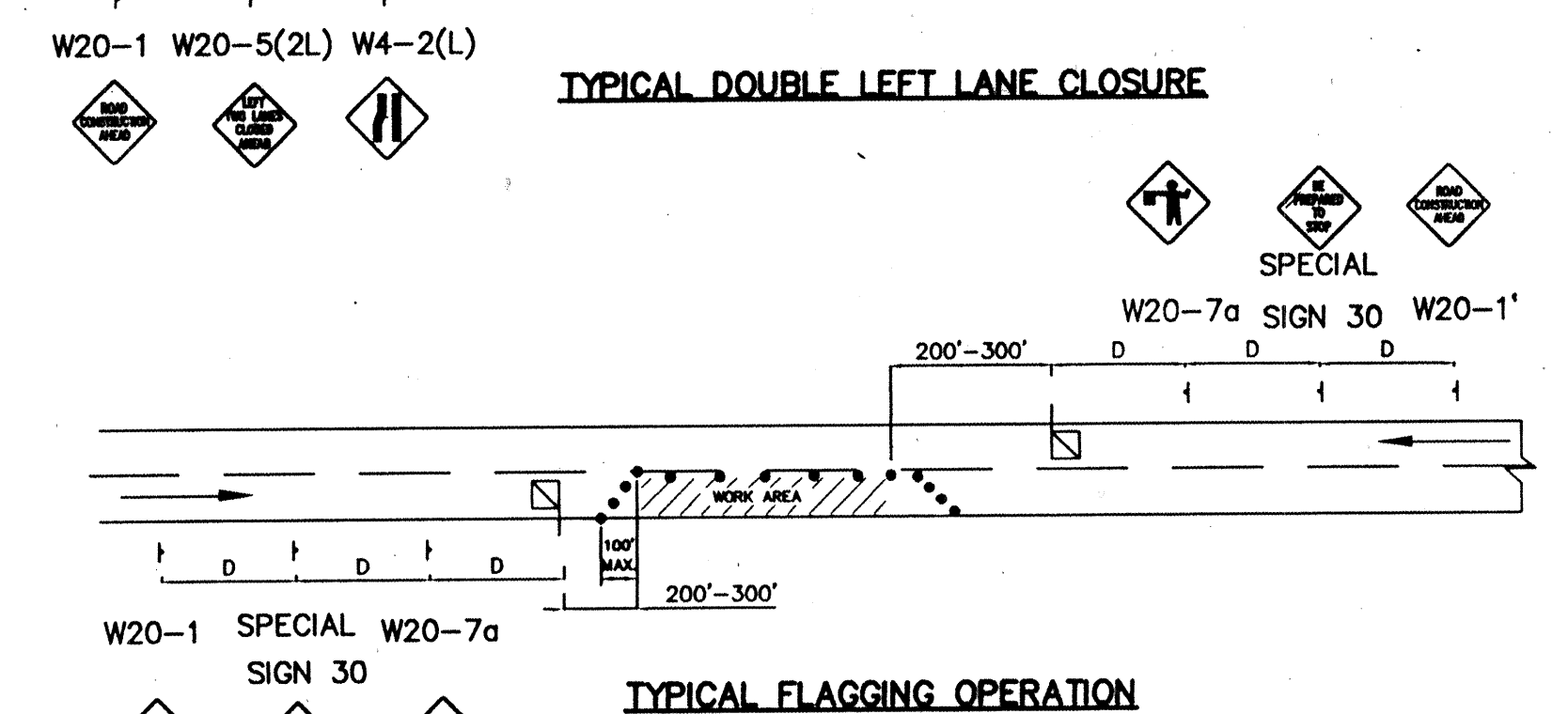
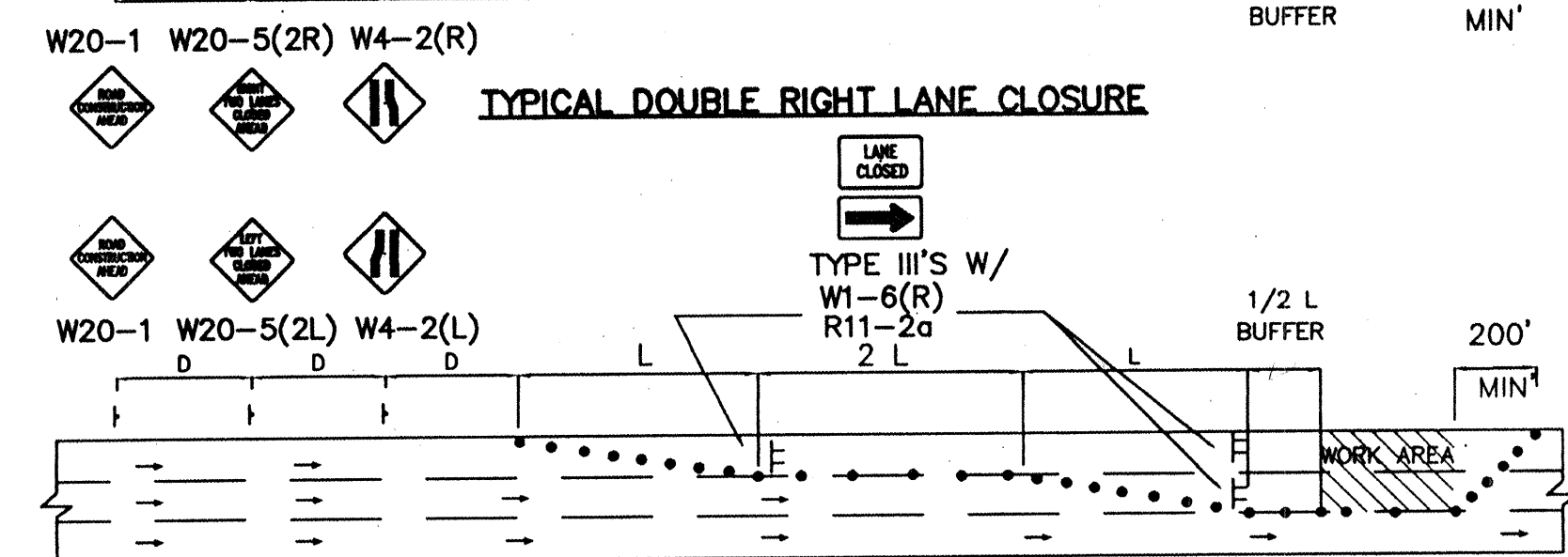
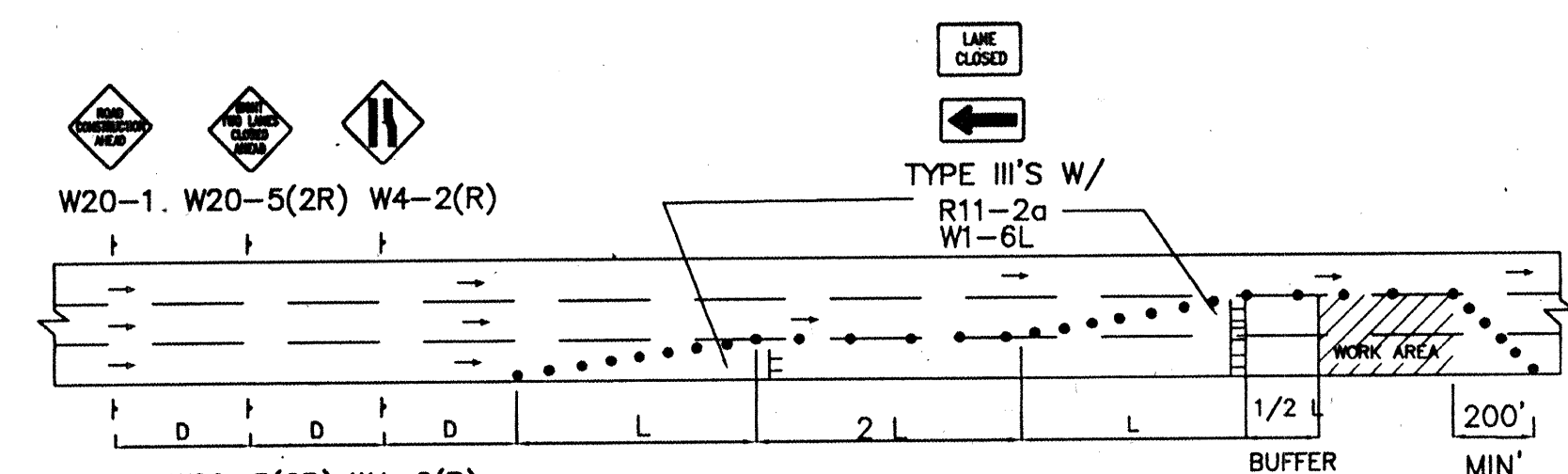
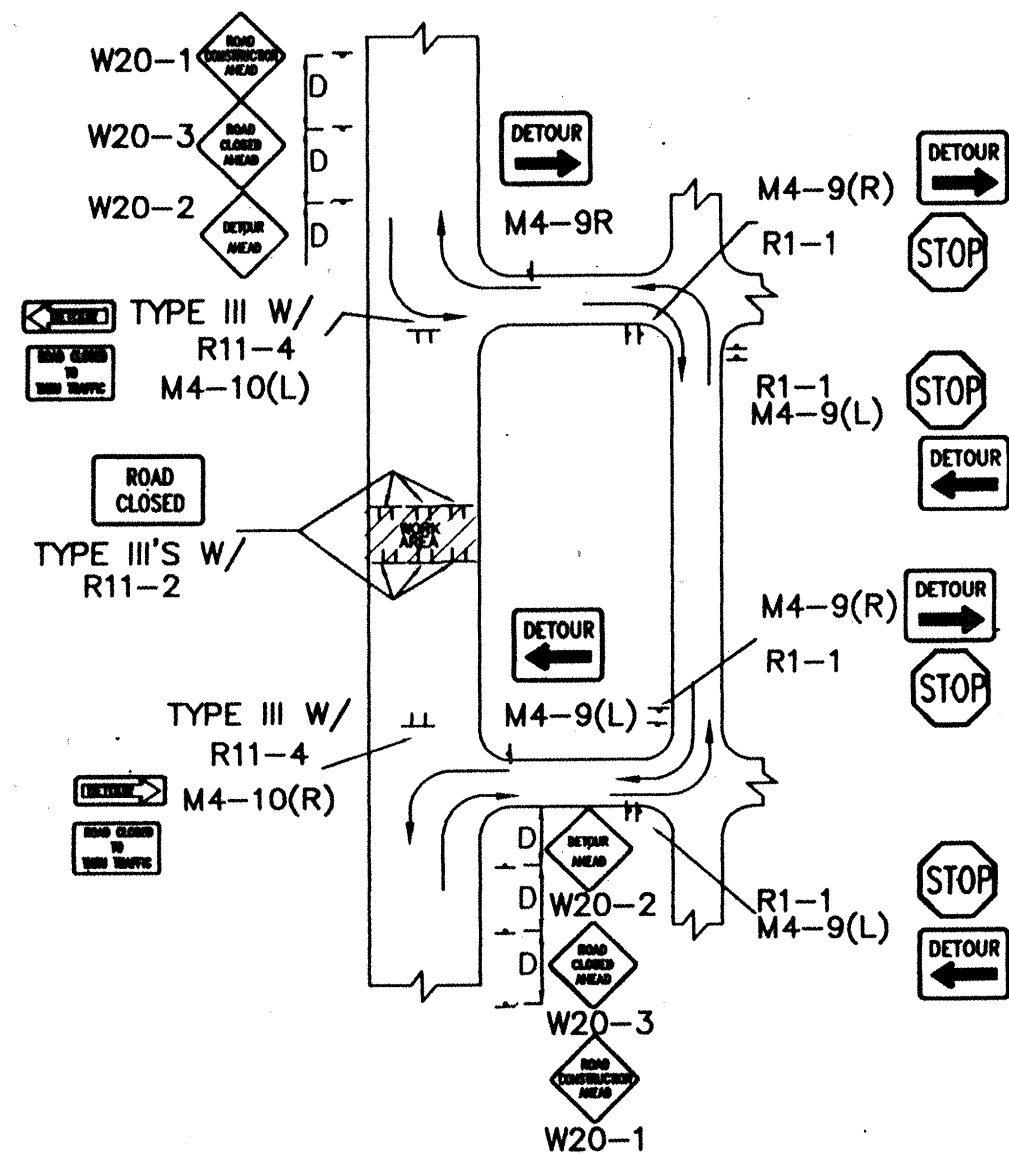
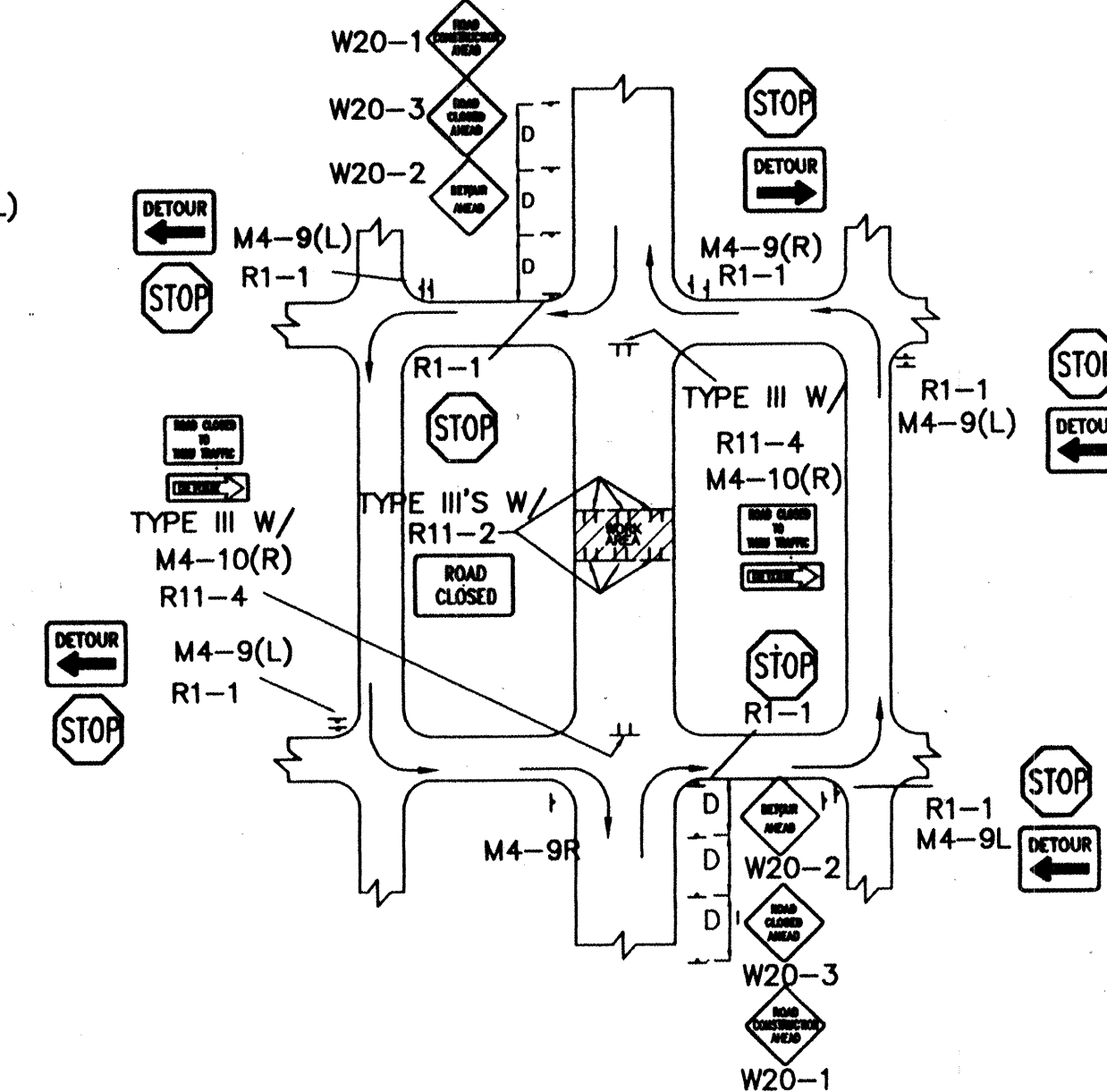
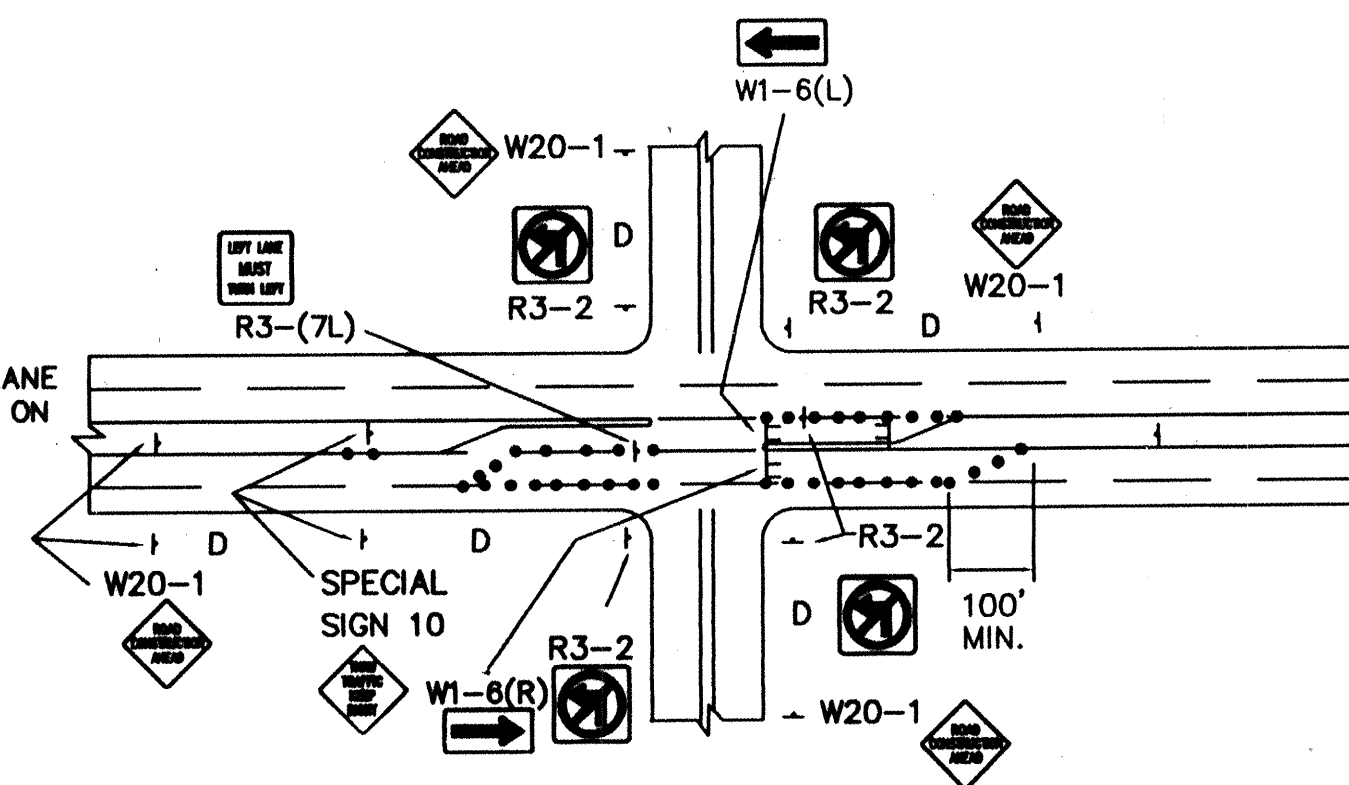
L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK
85-PERCENTILE SPEED IN MPH

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST UPDATE	MO./DAY/YR.
COA Standard			
PROJECT NO. 594381	MAP NO. G-13	SHEET 11	OF 12

SCANNED BY
MESA REPRO



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



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

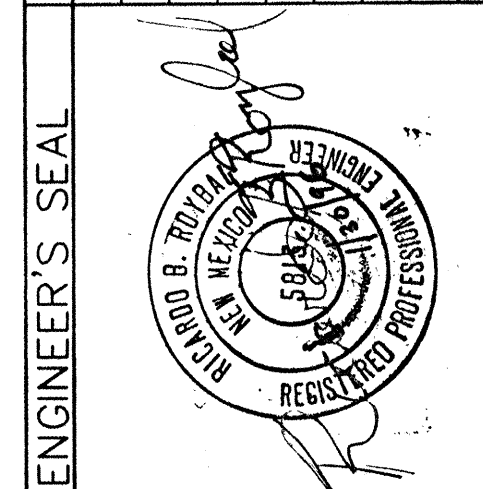
TITLE:
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL
PROJECT NO. 594381 MAP NO. G-13 SHEET 12 OF 12

AS BUILT INFORMATION	
CONTRACTOR	DATE
INSPECTOR'S	DATE
STANDARD BY	DATE
FIELD	DATE
VERIFICATION BY	DATE
CORRECTED BY	DATE
MICRO-FILM INFORMATION	DATE
RECORDED BY	DATE

BENCH MARKS	
NO.	DATE

SURVEY INFORMATION	
FIELD NOTES	DATE
NO.	DATE



ENGINEER'S SEAL	
J.D.L.	BY
REVISIONS	DATE
DESIGN	DATE
C.O.A. STANDARDS	DATE
CHECKED BY	DATE