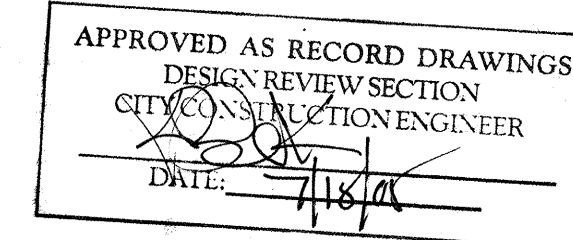


CONSTRUCTION PLANS FOR
BROMO SUBDIVISION
ALBUQUERQUE NEW MEXICO
AUGUST 2003

INDEX

1	TITLE SHEET
2	PLAT
3	GRADING AND DRAINAGE PLAN
4	DETAILED GRADING PLAN
5	OVERALL WATER AND SEWER PLAN W/ PROFILE
6	WATER VALVE SHUT-OFF PLAN
7	OVERALL PAVING PLAN W/ PROFILE
8	TYPICAL TRAFFIC CONTROL-DETOUR PLAN
9	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES
10	TRAFFIC CONTROL STANDARDS-SIGNING AND CONSTRUCTION
11	EXISTING TOPOGRAPHIC SURVEY



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

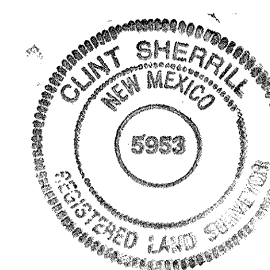
I, Lyle C. Losack PE of the firm of COCKORAW ENGINEERING, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This certificate is based on site inspections by me or personnel under my direction and survey information provided by CLINT SHERRILL NMP's number 5953.



"I, CLINT SHERRILL, A DULY QUALIFIED REGISTERED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM FIELD CONSTRUCTION AND "AS-BUILT" SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION, THAT THE "AS-BUILT" INFORMATION SHOWN ON THESE DRAWINGS WAS ADDED BY ME OR UNDER MY SUPERVISION, AND THAT THIS "AS-BUILT" INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF." CLINT SHERRILL AND ASSOCIATES IS NOT RESPONSIBLE FOR ANY OF THE DESIGN CONCEPTS, CALCULATIONS, ENGINEERING, OR INTENT OF THE RECORD DRAWINGS.

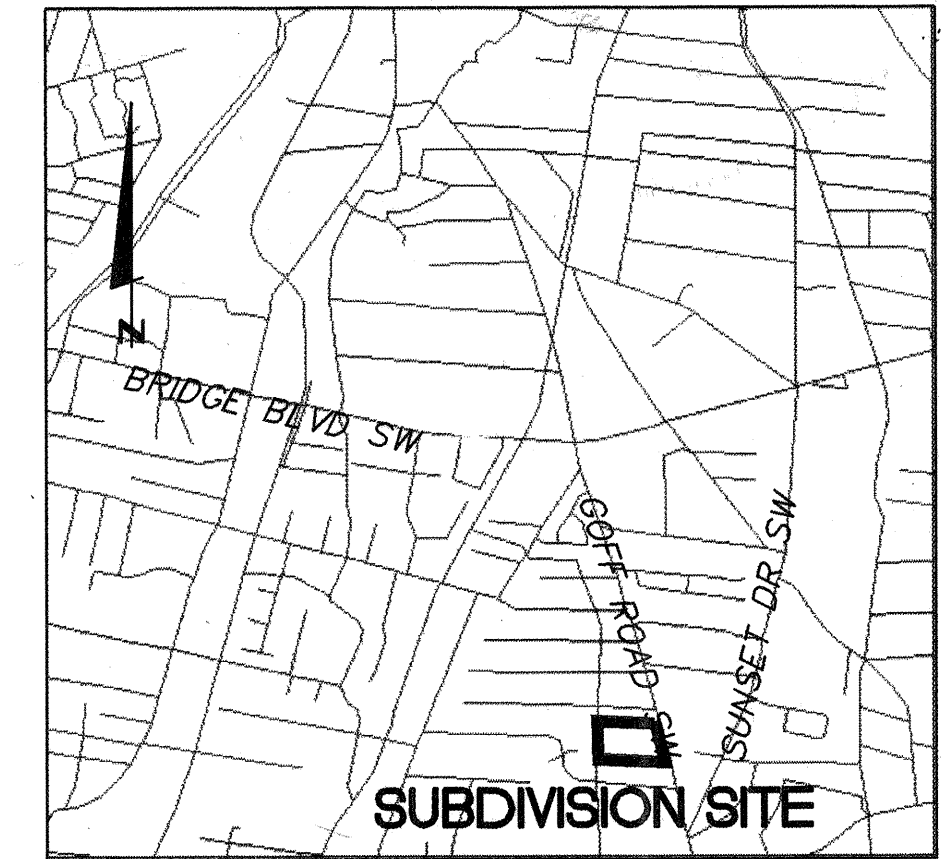
Clint Sherrill
CLINT SHERRILL, P.S. NO. 5953

9-30-04
DATE



10/15/03
DATE
BERNALILLO COUNTY
PUBLIC WORKS DIVISION

CLINT SHERRILL & ASSOC.
730 SAN MATEO S. E.
ALBUQUERQUE, NEW MEXICO 87108
(505) 256-7364 (505) 256-7600 FAX

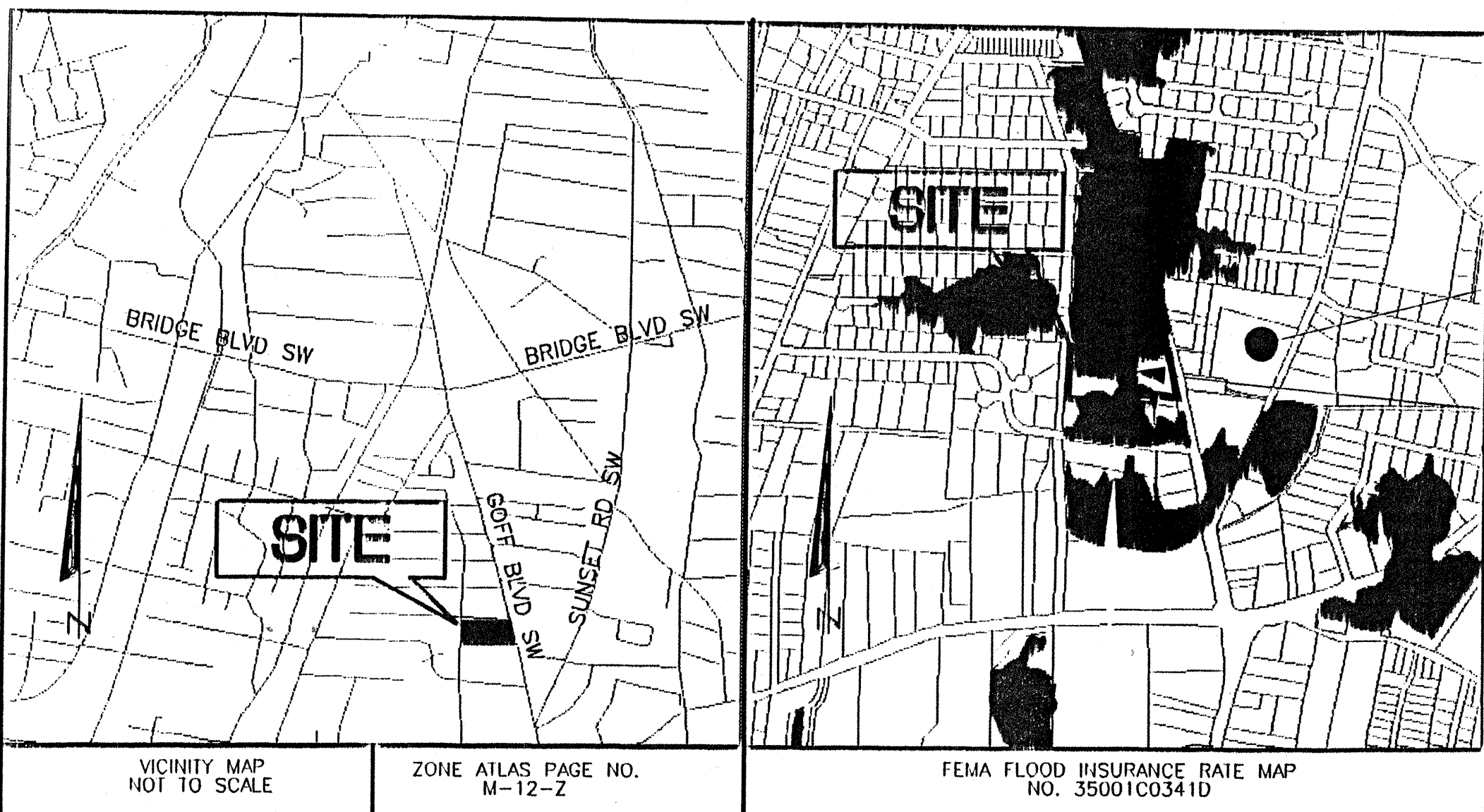


VICINITY MAP NOT TO SCALE ZONE ATLAS PAGE M12-Z

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 AND SHALL INCLUDE UPDATE NO. 6.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTION. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- ALL PERMANENT STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
- CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR 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.
- ANY WORK WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- ALL UTILITY WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW MEXICO UTILITIES, INC. SPECIFICATIONS FOR WATER AND WASTEWATER FACILITIES (MOST RECENT REVISIONS).
- THE CONTRACTOR SHALL NOTIFY NEW MEXICO UTILITIES (888-2661) THREE (3) WORKING DAYS PRIOR TO BEGINNING THE CONSTRUCTION OF THE UTILITIES.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.
- THE EARTHWORK QUANTITIES ARE BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER, BUT ARE NOT GUARANTEED. EARTHWORK COMPUTATIONS AS WELL AS QUANTITY TAKEOFFS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXCAVATION WILL OCCUR ON-SITE OR AS DESIGNATED BY THE PROJECT MANAGER. ALL EXCESS MATERIAL SHALL BE STOCK PILED ON-SITE AS DIRECTED BY THE PROJECT MANAGER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED TO COMPLETE THIS PROJECT. ADDITIONAL REMOVALS NOT SHOWN ON THE PLANS WILL BE DESIGNATED BY THE PROJECT MANAGER. THE CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR UNLISTED REMOVALS.
- ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, UNSUITABLE CONSTRUCTION MATERIAL AND DEBRIS FROM CLEARING AND GRUBBING ARE TO BE PLACED IN A DISPOSAL SITE DESIGNATED BY THE PROJECT MANAGER.
- THE OWNERS SHALL BE RESPONSIBLE FOR ALL TESTING. TESTING SHALL BE DONE BY AN INDEPENDENT TESTING COMPANY AS DIRECTED BY THE OWNERS. A MINIMUM OF ONE COMPACTION TEST PER EVERY 2" OF BACKFILL IS REQUIRED FOR FILL CONSTRUCTION. RESULTS OF TESTING SHALL BE SUBMITTED TO THE PROJECT MANAGER.
- CONSTRUCTION STAKING: CLINT SHERRILL AND ASSOCIATES, (505)256-7364.
- SURVEY CONTROL POINT: SEE SURVEY PLAT SHEET 2 OF 11.
- RESIDENTIAL CONSTRUCTION SHALL HAVE A FINISHED FLOOR ELEVATION OF 4843 OR HIGHER. A PORTION OF EACH LOT IS AT ELEVATION 4840. ELEVATION 4840 IS THE ELEVATION OF FLOOD ZONE "X". AREAS OF 100-YEAR FLOOD WITH DEPTHS OF LESS THAN ONE FOOT; OR DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100 YEAR FLOOD. FEMA MAP 35001C 0341D, DATED SEPTEMBER 1996 MAPPED A PORTION OF ALL LOTS IN FLOOD ZONE "AH" ELEVATION 4840 OR LOWER; AREAS WITHIN FLOOD ZONE "AH" HAVE FLOOD DEPTHS OF 1-3 FEET (USUALLY PONDING). A FINISHED FLOOR ELEVATION OF 4843 IS ABOVE THE 100-YEAR FLOOD BASED ON FEMA MAP 35001C 0341D.
- REFER TO CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION AND SHALL INCLUDE UPDATE NO. 6 FOR SEWER-MANHOLE CONSTRUCTION BELOW EXISTING WATER TABLE.

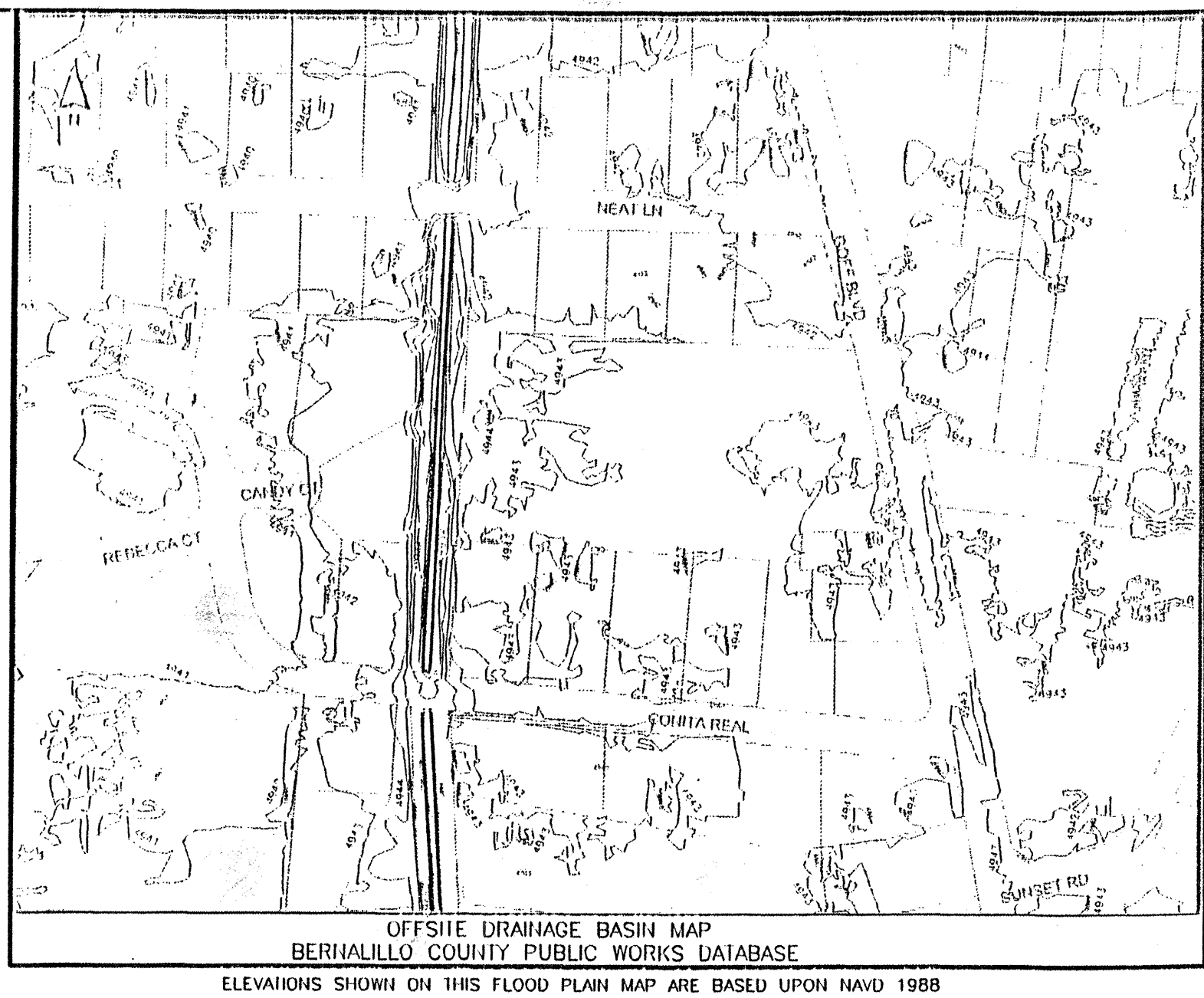
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEER'S STAMP AND SIGNATURE		APPROVALS		ENGINEER	DATE	APPROVED FOR CONSTRUCTION	
		DRC CHAIRMAN		<u>[Signature]</u>	10/15/03	<u>Richard D. Dantz</u> 2-10-04 CITY ENGINEER DATE	
		TRANSPORTATION		<u>[Signature]</u>	10/28/03		
		WATER/WASTEWATER		<u>[Signature]</u>	10/28/03		
		HYDROLOGY		<u>[Signature]</u>	10-27-03		
		CP		<u>[Signature]</u>	11-11-03		
CONST. MNGMT.		<u>[Signature]</u>	11-11-03				
CONST. COORD.		<u>[Signature]</u>	11-11-03				
DRC CASE NUMBER		CITY PROJECT NO.		SHEET		OF	
SC5-20003		719781		1		11	



FLOOD ZONE X
AREAS WITHIN 500 YEAR FLOOD; AREAS OF 100 YEAR FLOOD WITH AVERAGE DEPTHS OF 12.5 FEET OR MORE; OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100 YEAR FLOOD

FLOOD ZONE AH
AREAS WITHIN FLOOD ZONE AH FLOOD DEPTHS OF 1-3 FEET (USUALLY POONDING) BASE FLOOD ELEVATIONS DETERMINED FROM FEMA MAP 35001C0341D, DATED SEPT. 1998

FLOOD PLAIN 4940



GRADING AND DRAINAGE PLAN BROMO SUBDIVISION

GRADING/DRAINAGE PLAN

THE FOLLOWING ITEMS CONCERNING LOTS 1-8 BROMO SUBDIVISION ARE CONTAINED HEREON:

- VICINITY MAP
- DRAINAGE CALCULATIONS
- FLOOD PLANE DESIGNATIONS X & AH

BROMO LOTS 1-8

LOT	TREATMENT A	TREATMENT D	FLOOD PLANE	TREATMENT D
LOT 1	30219 SF	0.694 AC	X & AH	0.0422 AC
LOT 2	14795 SF	0.340 AC	AH	0.0614 AC
LOT 3	15167 SF	0.349 AC	AH	0.1496 AC
LOT 6	15014 SF	0.345 AC	A	0.0461 AC
LOT 7	14535 SF	0.334 AC	X	0.0569 AC
LOT 8	15266 SF	0.350 AC	X	0.0609 AC
		2.41 AC		0.4161 AC

FLOOD PLANE DEPTHS
AH = 1' - 3' DEEP
X = 0.25 DEEP

LOCATED IN ZONE 1 PER BERNALILLO COUNTY PRECIPITATION ZONES

DESIGN PRECIPITATION (INCHES) 100 YEAR 6 HOUR STORM

P60 1.87 IN.
P360 2.20 IN.
P1440 2.66 IN.
P 10 DAY 3.67 IN.

EXCESS PRECIPITATION PEAK DISCHARGE 100 YR. 6 HR.
TREATMENT A 0.44 IN. 1.29 CFS/AC
TREATMENT B 0.67 IN. 2.03 CFS/AC
TREATMENT C 0.99 IN. 2.87 CFS/AC
TREATMENT D 1.97 IN. 4.37 CFS/AC

EXISTING CONDITIONS	PROPOSED CONDITIONS
TREATMENT A 2.826 AC	TREATMENT A 0.44 AC
TREATMENT B 0.67 AC	TREATMENT B 2.169 AC
TREATMENT C 0.99 AC	TREATMENT C 0.401 AC
TREATMENT D 0.41 AC	TREATMENT D 0.241 AC

PROPOSED CONDITIONS BY LOT	AREA + PAD	STREET + PAD	LOT AREA
TREATMENT B	0.5213 AC	0.2159 AC	0.7372 AC
TREATMENT D	0.2486 AC	0.1528 AC	0.4014 AC
LOT 1	0.2558 AC	0.2418 AC	0.4972 AC
LOT 2	0.2948 AC	0.1323 AC	0.3911 AC
LOT 3	0.2633 AC	0.1436 AC	0.4069 AC
LOT 6	0.2489 AC	0.1460 AC	0.3949 AC
LOT 7	1.8327 AC	1.0324 AC	2.8287 AC

EXCESS RUNOFF (POUND STORAGE)
WEIGHED E = 0.44(2.826) + 1.97(0.2826) = 0.44 IN.
V100 - 380 = 0.44(2.826)/12 + 0.1036 AC. FT.

LOT 1 E = 0.67(0.513) + 1.97(0.2159)/0.7372 = 1.0431 IN.
V100 - 380 = 1.0431(0.7372)/12 + 0.0841 AC. FT. = 2781 CF.
2291 X 2 = 4582 + 3698 = 8280 CU. FT. REG. STORAGE

LOT 2 E = 0.67(0.2486) + 1.97(0.1528)/0.4014 = 1.1650 IN.
V100 - 380 = 1.1650(0.4014)/12 + 0.0841 AC. FT. = 1897 C. FT.
1897 X 2 = 3794 + 1302 = 4696 CU. FT. REG. STORAGE

LOT 3 E = 0.67(0.2558) + 1.97(0.2418)/0.4972 = 1.3012 IN.
V100 - 380 = 1.3012(0.4972)/12 + 0.54 AC. FT. = 1863 CU. FT.
2351 X 2 = 4702 + 1559 = 6262 CU. FT. REG. STORAGE

LOT 6 E = 0.67(0.2489) + 1.97(0.1460)/0.3949 = 1.1714 IN.
V100 - 380 = 1.1714(0.3911)/12 + 0.0382 AC. FT. = 1863 CU. FT.
1863 X 2 = 3726 + 1258 = 4584 CU. FT. REG. STORAGE

LOT 7 E = 0.67(0.2633) + 1.97(0.1436)/0.4069 = 1.1288 IN.
V100 - 380 = 1.1288(0.4069)/12 + 0.0383 AC. FT. = 1867 CU. FT.
1867 X 2 = 3734 + 1250 = 4584 CU. FT. REG. STORAGE

LOT 8 E = 0.67(0.2489) + 1.97(0.1460)/0.3949 = 1.1508 IN.
V100 - 380 = 1.1508(0.3949)/12 + 0.0379 AC. FT. = 1849 CU. FT.
1849 X 2 = 3698 + 1250 = 4548 CU. FT. REG. STORAGE

EROSION CONTROL MEASURES

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

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

EXISTING CONDITIONS

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS 2.826 ACRES AND IS LOCATED ALONG SW GOFF BLVD. THE SITE HAS BEEN GRADED TO DRAIN FROM WEST TO EAST ACCORDING TO THE FLOOD INSURANCE RATE MAP. THE SITE IS LOCATED WITHIN DESIGNATED FLOOD ZONE (X & AH).

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/DRAINAGE PLAN, THE PROJECT WILL CONSIST OF 8 LOTS WITH HOUSES AND DRIVEWAYS INCLUDING ASSOCIATED PAVED PARKING AND LANDSCAPED AREAS. DRAINAGE WILL BE RETAINED IN ON-SITE PONDS. THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE THE EXISTING AND PROPOSED CONDITIONS FOR THE 100-YEAR, 6-HOUR EVENT. THE PROCEDURE FOR 40 ACRES AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2 DIVISION OF THE DEVELOPMENT PROCESS MANUAL, VOLUME II, DESIGN CRITERIA DATED 1997.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

TITLE: GRADING AND DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
For Information Only			
CITY PROJECT NO.	719781	ZONE MAP NO.	M-12
		SHEET	3 OF 11

SCALE: 1" = 40'

LEGEND

REVISION POND BOTTOM ELEV. = 4939.00

DIRECTION OF FLOW

EXISTING CONTOUR BASED UPON NAVD 1929 ELEVATIONS

CURVE TABLE

DELTA	RADIUS	ARC	CHORD BRC	CHORD LEN
C1 66°33'29"	28.00	32.52	S 50°01'23" E	30.73
C2 46°37'53"	24.36	19.82	N 69°45'02" E	19.28
C3 40°49'53"	75.00	53.45	N 72°42'07" E	52.32
C4 44°24'57"	25.00	19.38	N 70°54'36" E	18.90
C5 82°14'53"	45.00	64.60	N 89°49'34" E	59.19
C6 104°05'07"	45.00	81.75	S 02°59'34" W	70.96
C7 82°29'51"	45.00	64.79	N 83°42'57" W	59.34
C8 44°24'54"	25.00	19.38	N 64°40'30" W	18.90
C9 46°40'56"	25.00	20.37	S 69°45'02" W	19.81
C10 46°37'53"	74.36	60.52	S 69°45'02" W	58.86
C11 46°37'53"	49.36	40.17	S 69°45'02" W	39.07
C12 46°40'56"	50.00	40.74	S 69°46'37" W	39.82
C13 05°51'03"	75.00	7.66	N 49°21'55" E	7.66

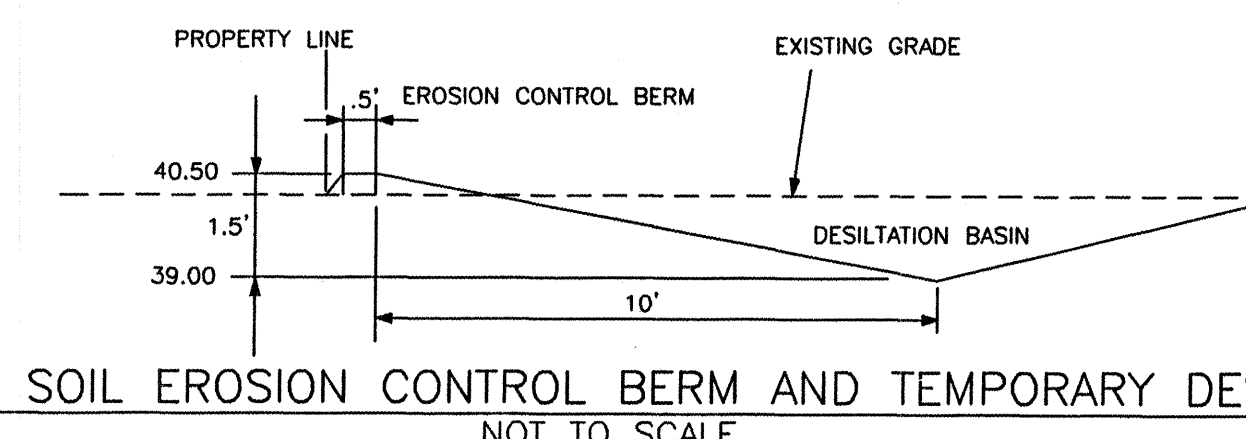
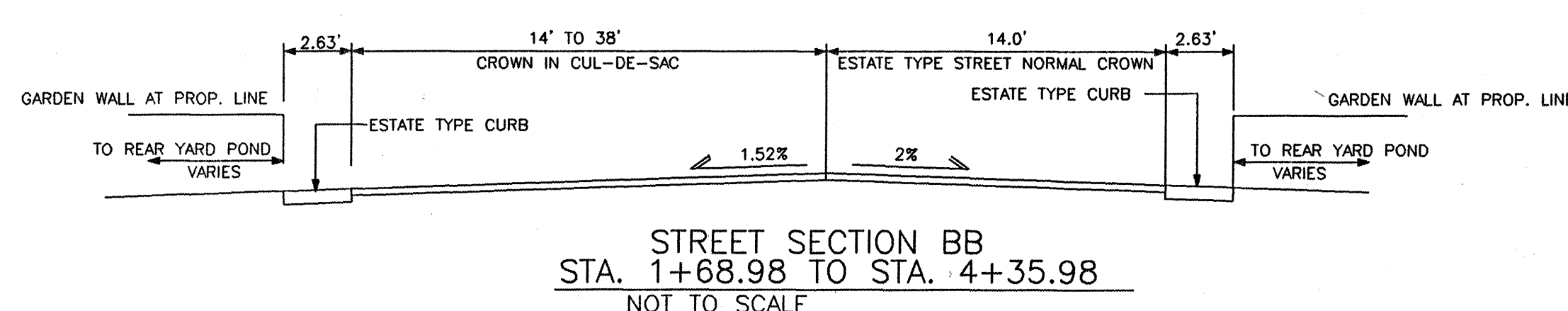
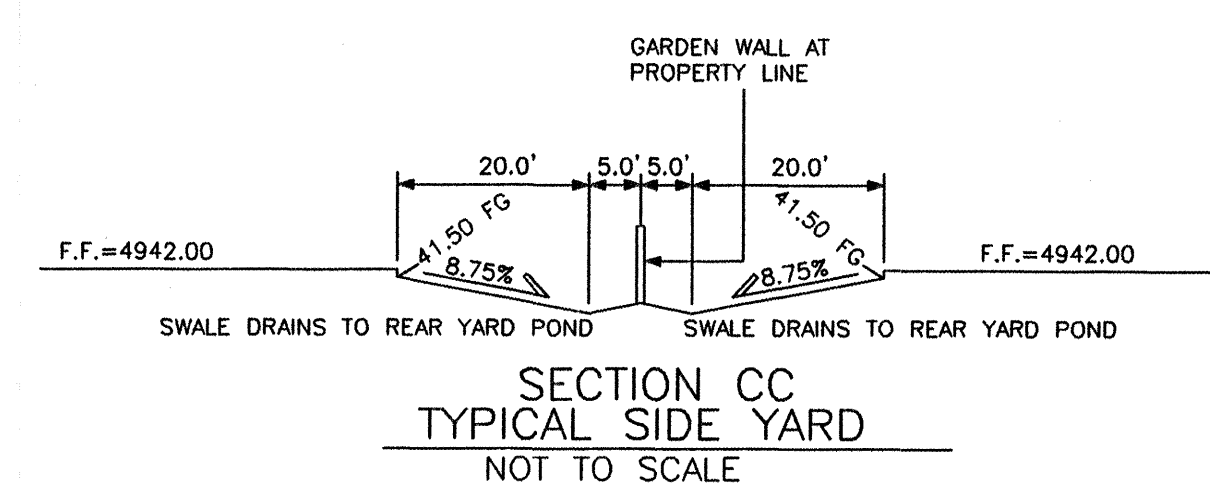
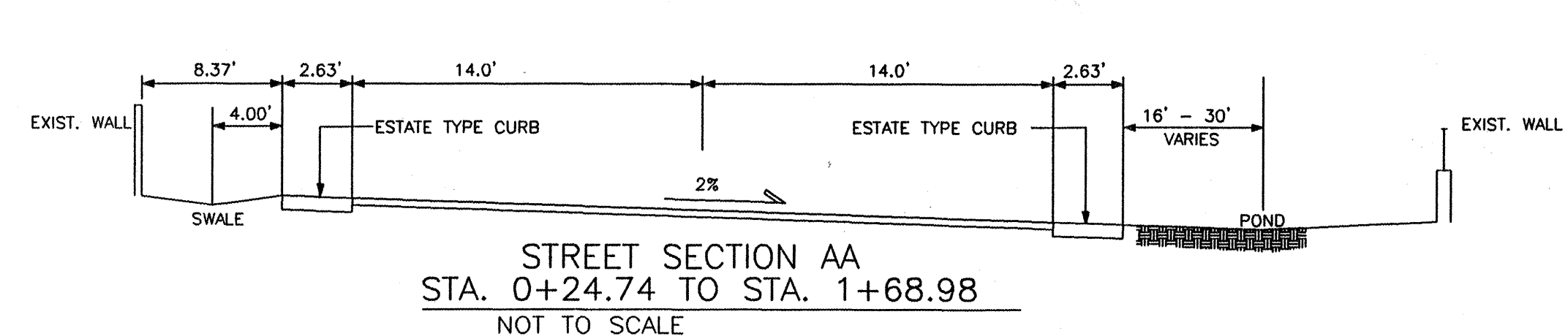
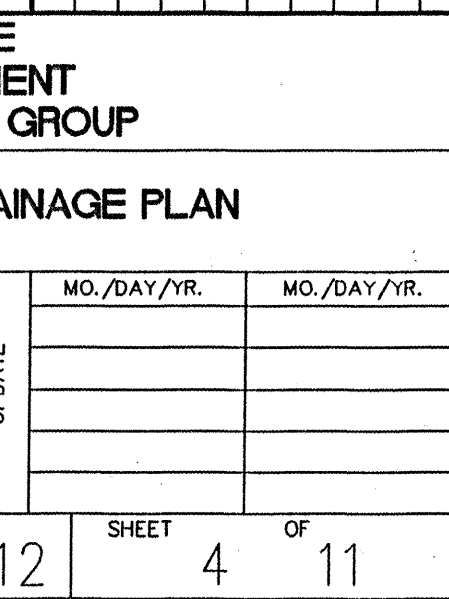
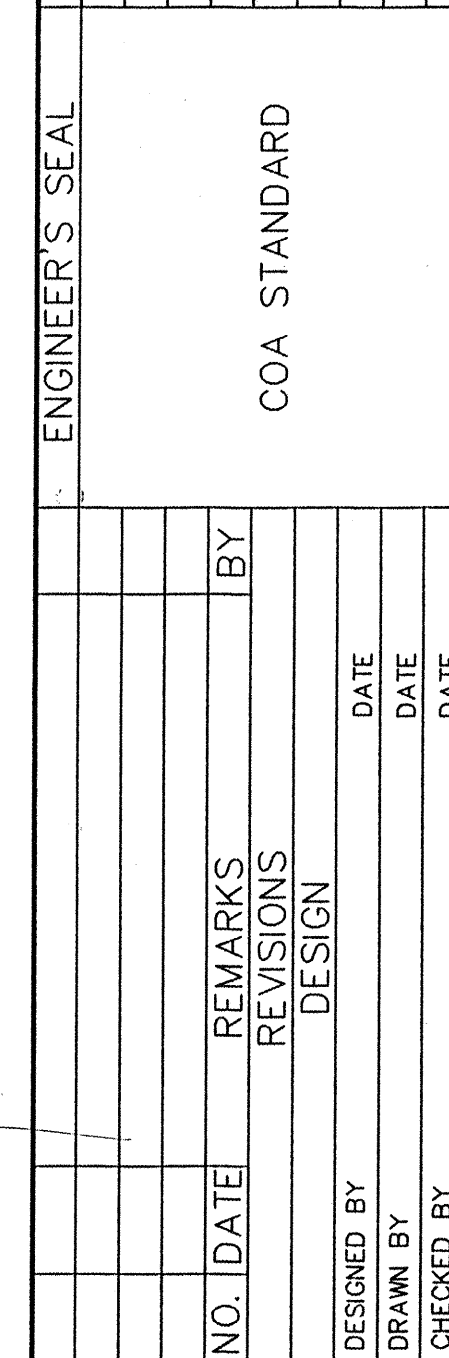
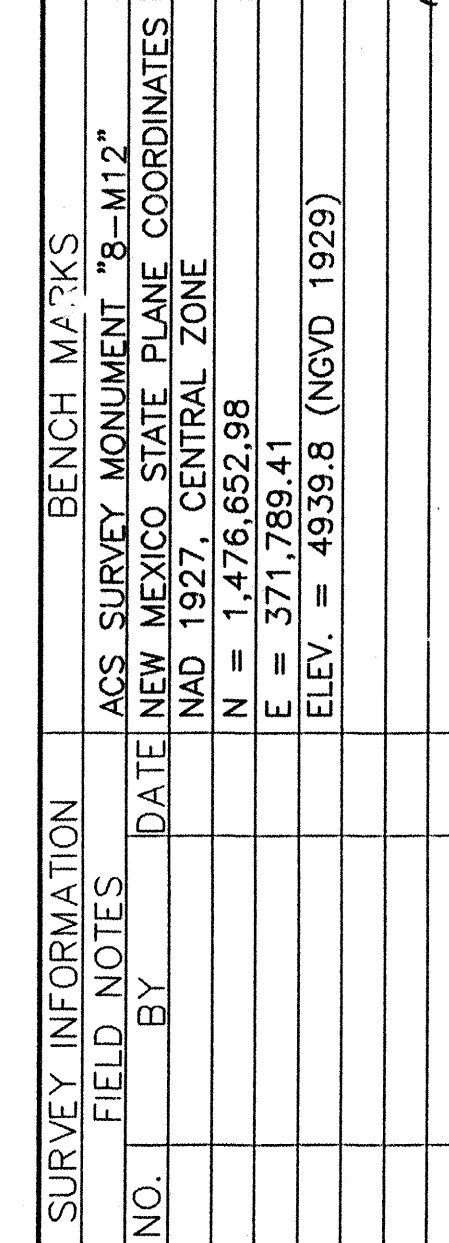
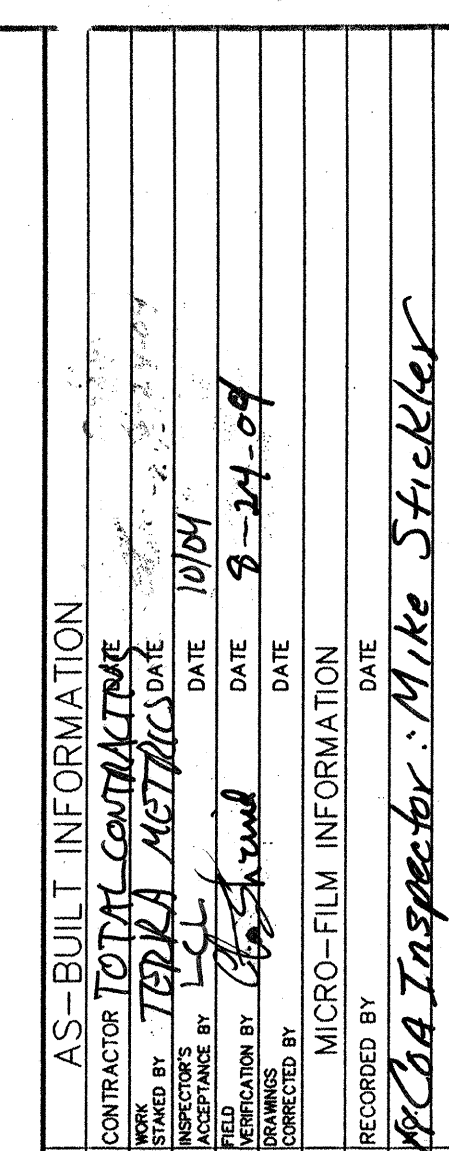
NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) EROSION CONTROL AND DESILTATION NOTES

- CONTRACTOR SHALL COMPLY WITH NATIONAL DISCHARGE ELIMINATION SYSTEM REQUIREMENTS DURING CONSTRUCTION USING APPROVED "BEST MANAGEMENT PRACTICES". A STORM WATER POLLUTION PREVENTION PLAN AND A CERTIFICATE OF INTENT BE SUBMITTED TO THE EPA AND BERNALILLO COUNTY.
- CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL EROSION CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- IT IS THE INTENT OF THESE PLANS THAT THE CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OF PUBLIC RIGHT OF WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES, AND WEETING THE SOIL TO PROTECT IT FROM WIND EROSION.
- A BERM WITH THE DIMENSIONS SHOWN SHALL BE MAINTAINED DURING CONSTRUCTION UNTIL COMPLETION OF THE INDIVIDUAL HOMES WITHIN THE PROJECT.

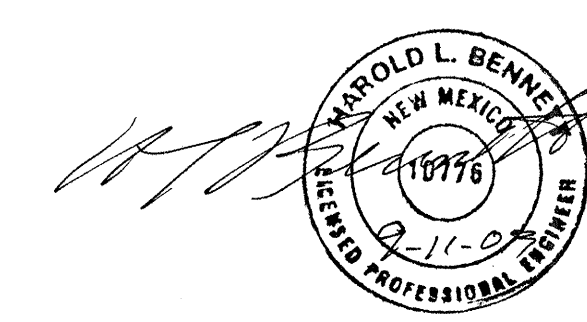
I, HAROLD L. BENNETT, A NEW MEXICO REGISTERED PROFESSIONAL ENGINEER, HEREBY CERTIFY THAT THE FOLLOWING PLANS AND DESIGNS WERE PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

HAROLD L. BENNETT, N.M.P.E. #10776

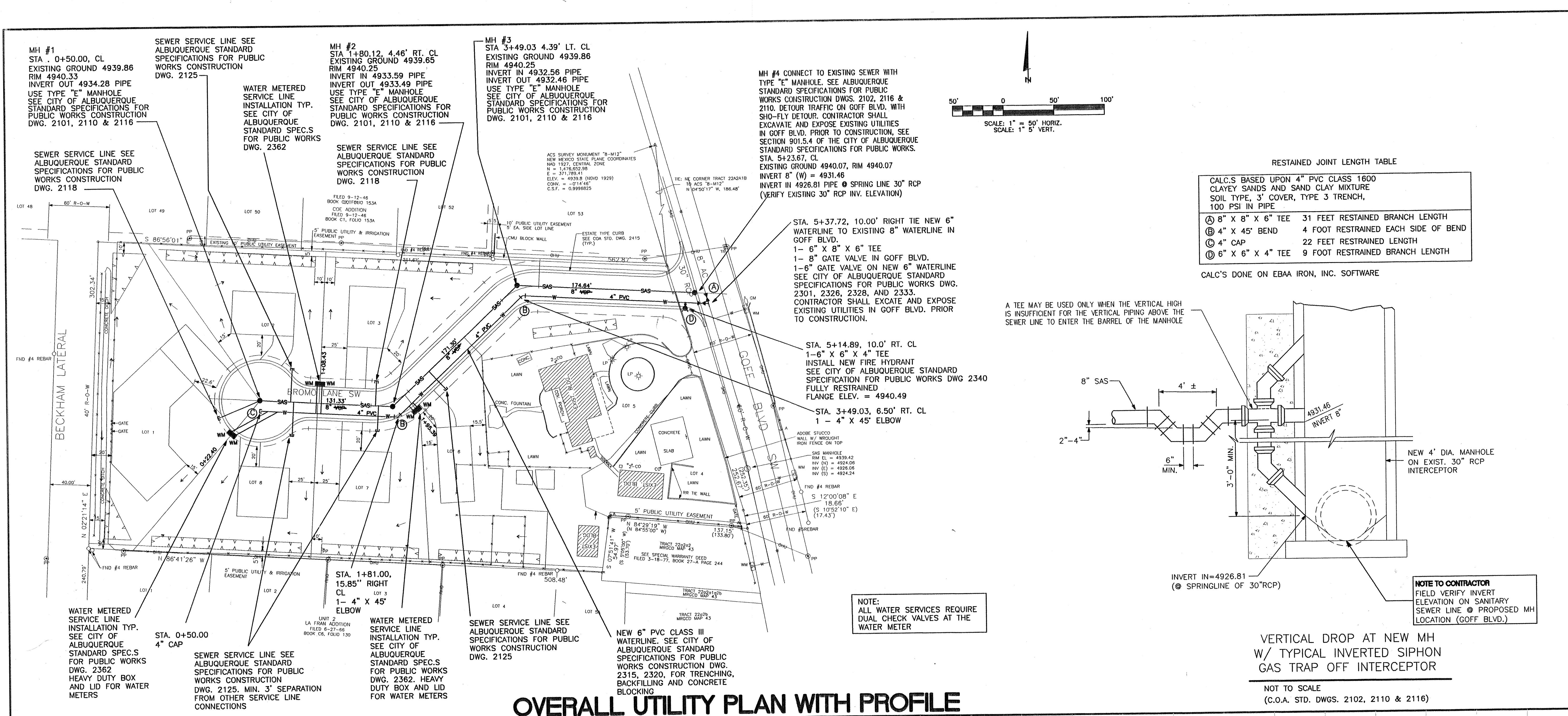
DATE 9-11-00



1. CONTRACTOR SHALL COMPLY WITH NATIONAL DISCHARGE ELIMINATION SYSTEM REQUIREMENTS DURING CONSTRUCTION USING APPROVED "BEST MANAGEMENT PRACTICES". A STORM WATER POLLUTION PREVENTION PLAN AND A CERTIFICATE OF INTENT BE SUBMITTED TO THE EPA AND BERNALILLO COUNTY.
2. CONTRACTOR SHALL OBTAIN AND ABIDE BY A TOPSOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DIVISION, PRIOR TO CONSTRUCTION, THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, FEDERAL AND OTHER APPLICABLE REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
3. IT IS THE INTENT OF THESE PLANS THAT THE CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
4. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OF PUBLIC RIGHT OF WAY, THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES, AND NETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
5. A BERM WITH THE DIMENSIONS SHOWN SHALL BE MAINTAINED DURING CONSTRUCTION UNTIL COMPLETION OF THE INDIVIDUAL HOUSES WITHIN THE PROJECT.



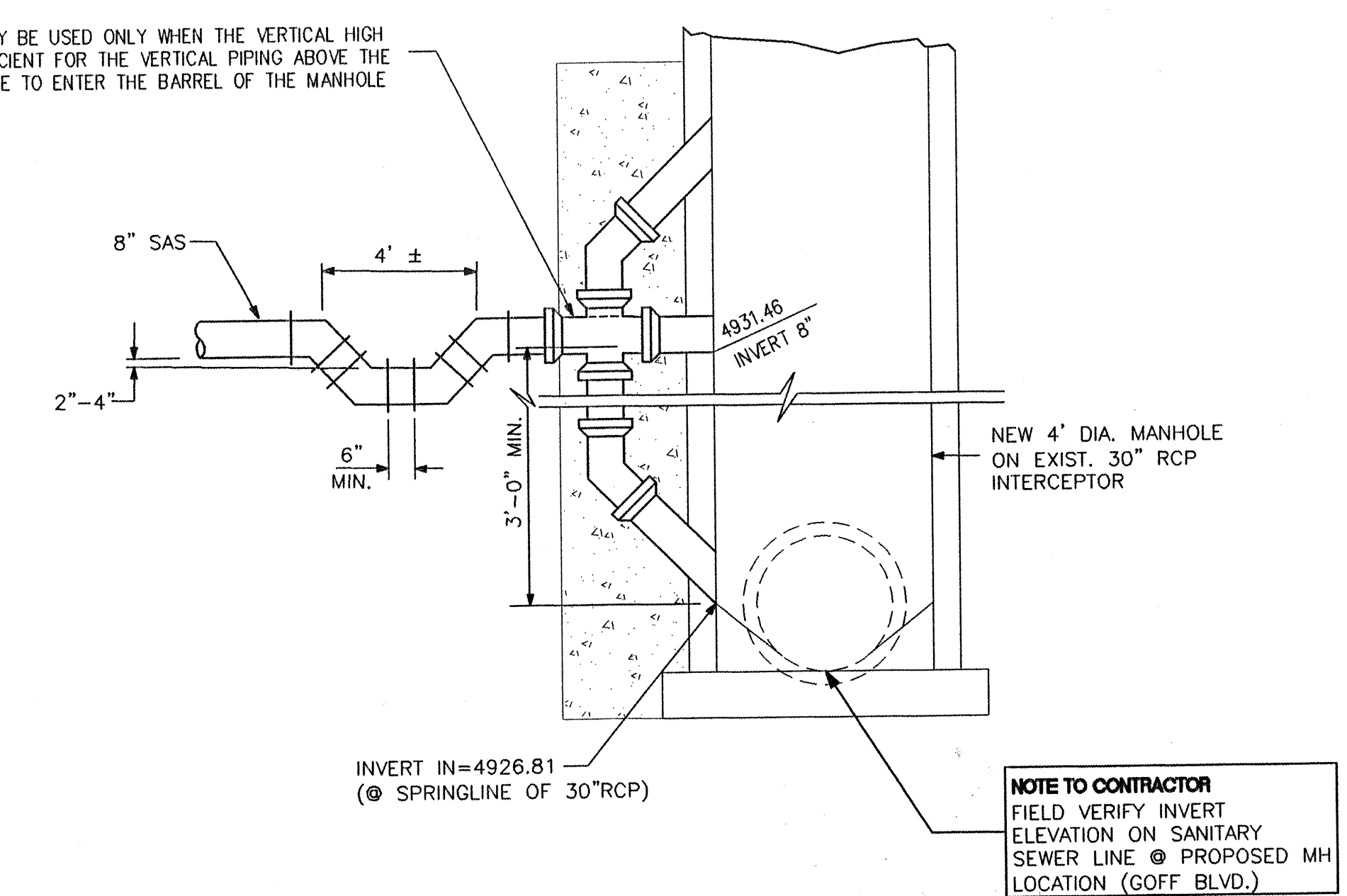
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
For Information Only		LAST DESIGN UPDATE	
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
719781	M-12	4	11



RESTAINED JOINT LENGTH TABLE

CALC.S BASED UPON 4" PVC CLASS 1600 CLAYEY SANDS AND SAND CLAY MIXTURE SOIL TYPE, 3' COVER, TYPE 3 TRENCH, 100 PSI IN PIPE	
① 8" X 8" X 6" TEE	31 FEET RESTAINED BRANCH LENGTH
② 4" X 45" BEND	4 FOOT RESTAINED EACH SIDE OF BEND
③ 4" CAP	22 FEET RESTAINED LENGTH
④ 6" X 6" X 4" TEE	9 FOOT RESTAINED BRANCH LENGTH

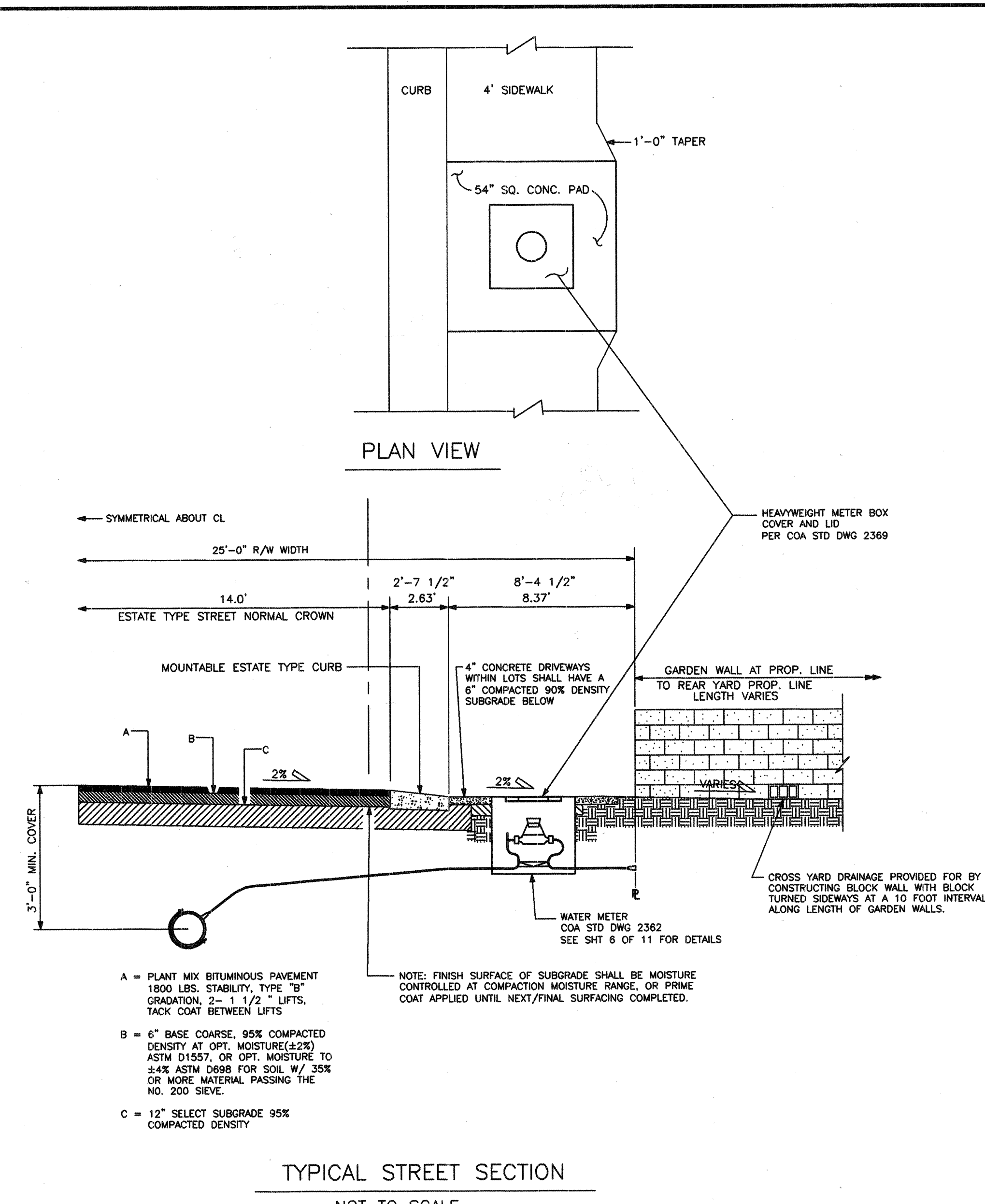
CALC.S DONE ON EBAA IRON, INC. SOFTWARE



CLINT SHERRILL & ASSOC.
730 SAN MATEO S. E.
ALBUQUERQUE, NEW MEXICO 87108
(505) 256-7384 (505) 256-7600 FAX

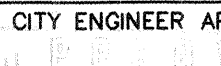
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: OVERALL UTILITY PLAN WITH PROFILE	
DESIGN REVIEW COMMITTEE APPROVED JAN 16 2004 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL APPROVED FEB 10 2004 CITY ENGINEER
NO. DATE REVISIONS DESIGN	NO. /DAY/YR. 12-02-2003
DESIGNED BY: DRAWN BY: CHECKED BY:	MO. /DAY/YR. SHEET 5 OF 11
CITY PROJECT NO. 719781 ZONE MAP NO. M-12	

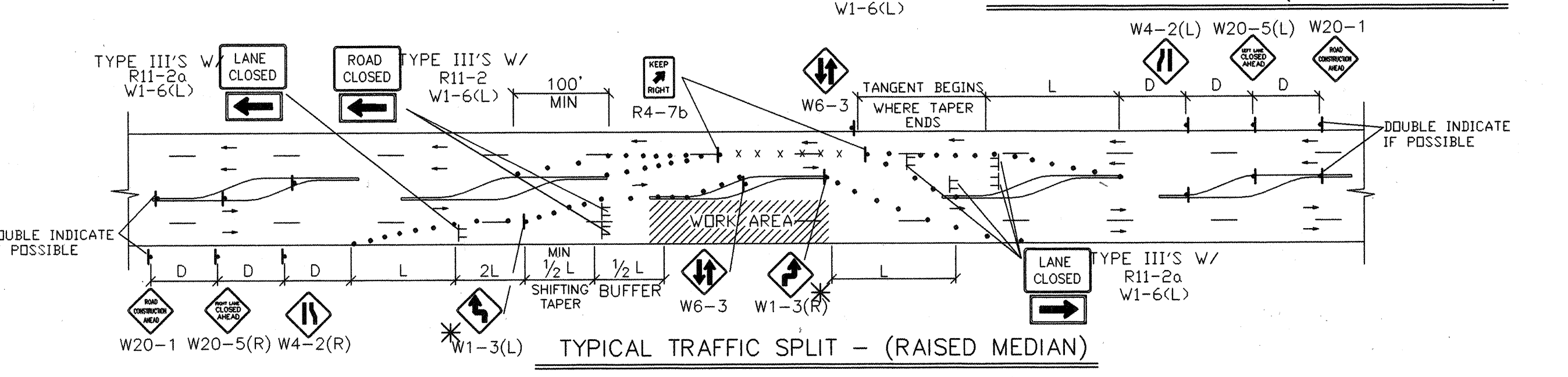
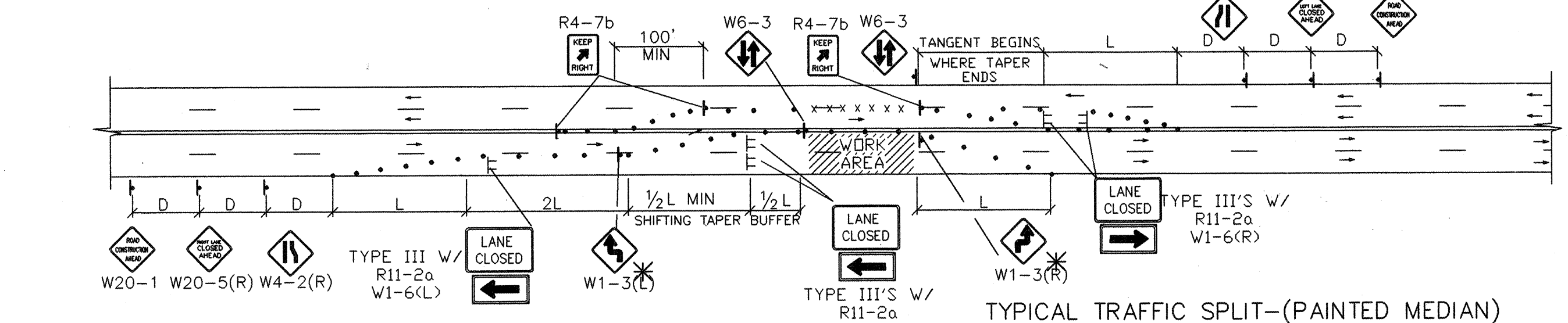
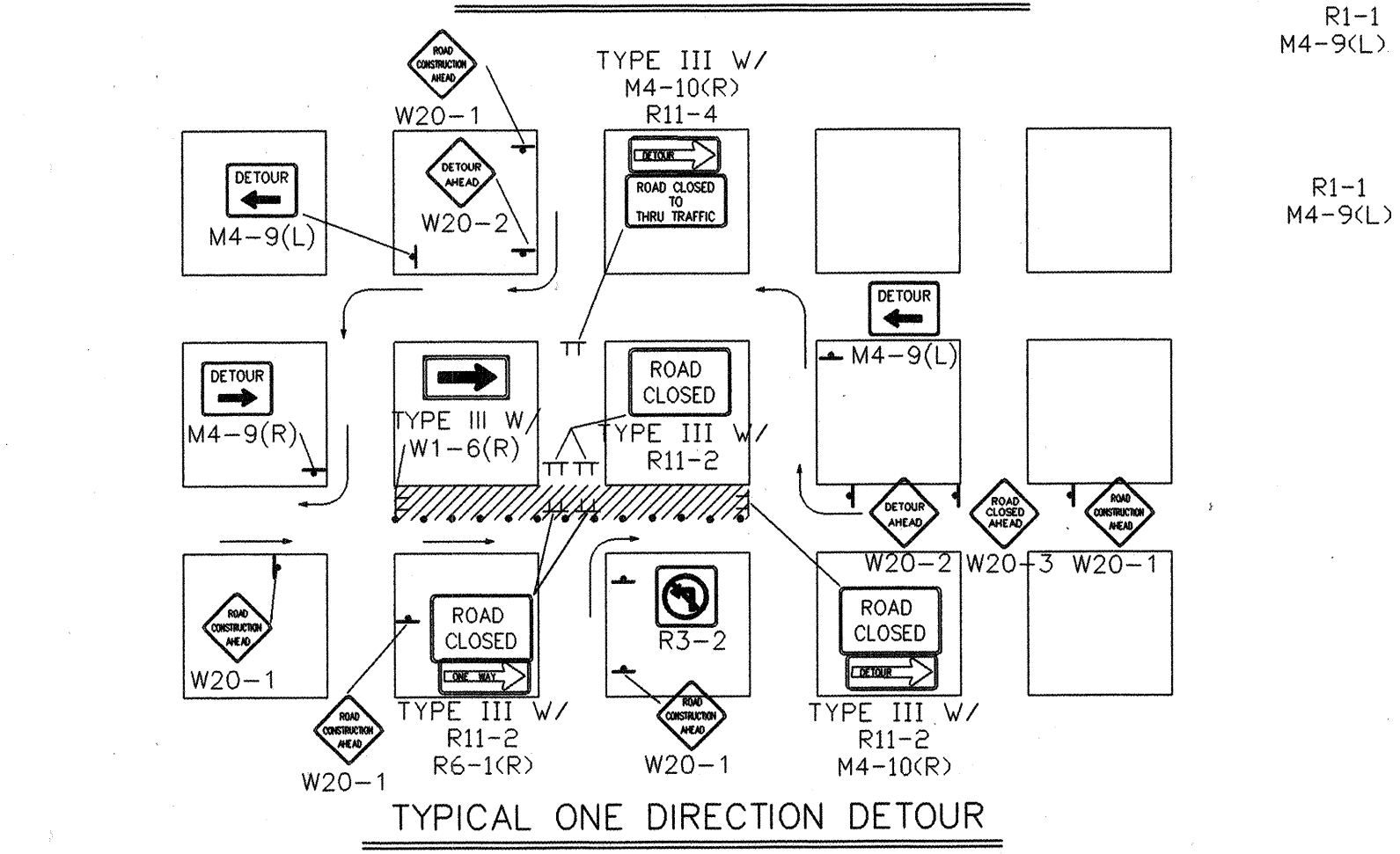
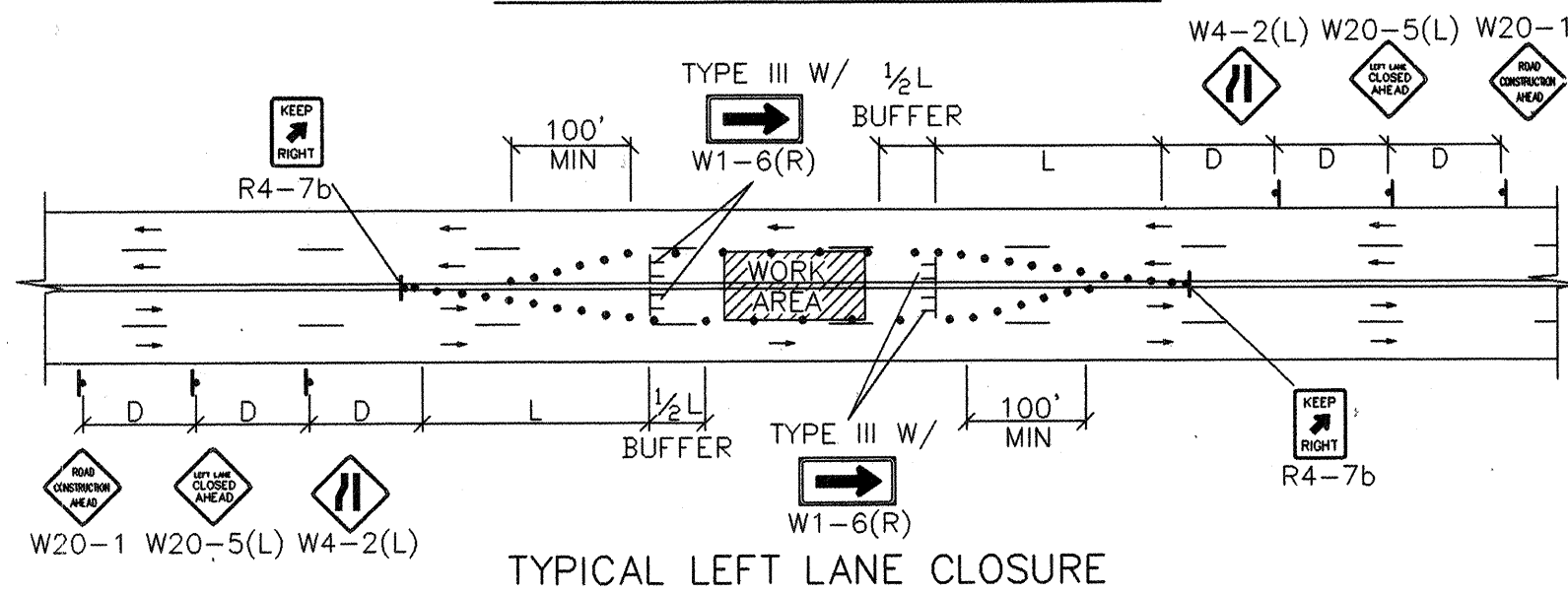
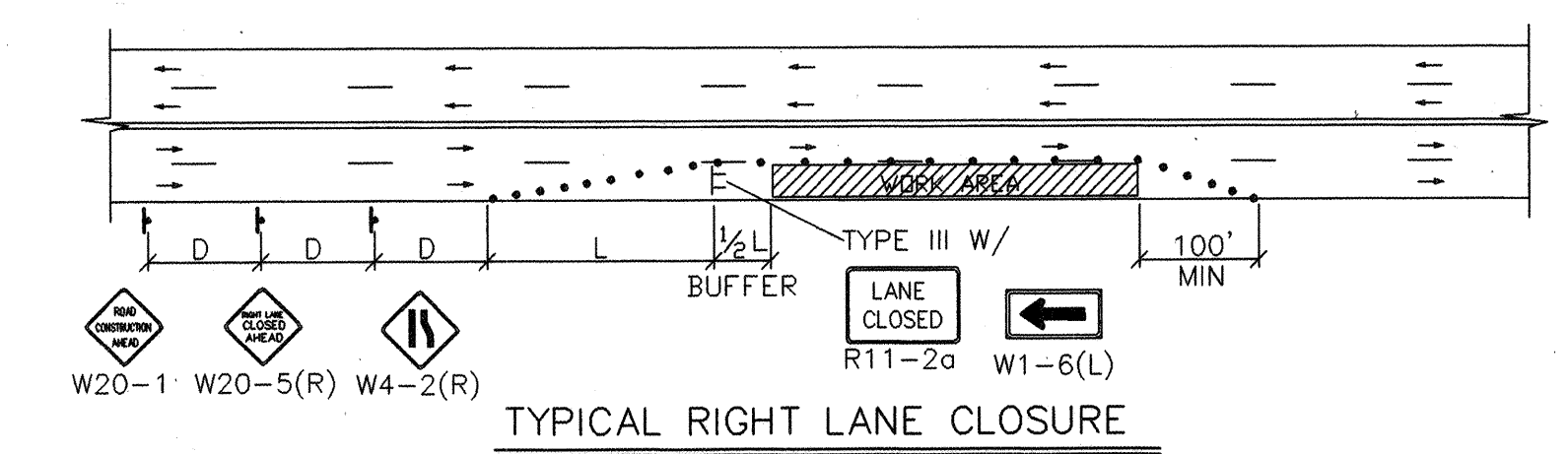
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR TOTAL CONTRACT DATE	DATE	ACCS SURVEY MONUMENT "8-M12"	DATE	FIELD NOTES	BY		NO. DATE REVISIONS DESIGN
INSPECTOR'S NAME DATE	DATE	NEW MEXICO STATE PLANE COORDINATES	DATE	NO.	BY		
FIELD BY: LCL	DATE	NAD 1927, CENTRAL ZONE	DATE				
VERIFICATION BY: LCL	DATE	N = 1,476,652.98	DATE				
CORRECTED BY:	DATE	E = 371,789.41	DATE				
	DATE	ELEV. = 4939.8 (NGVD 1929)	DATE				
	DATE		DATE				
	DATE		DATE				
	DATE		DATE				



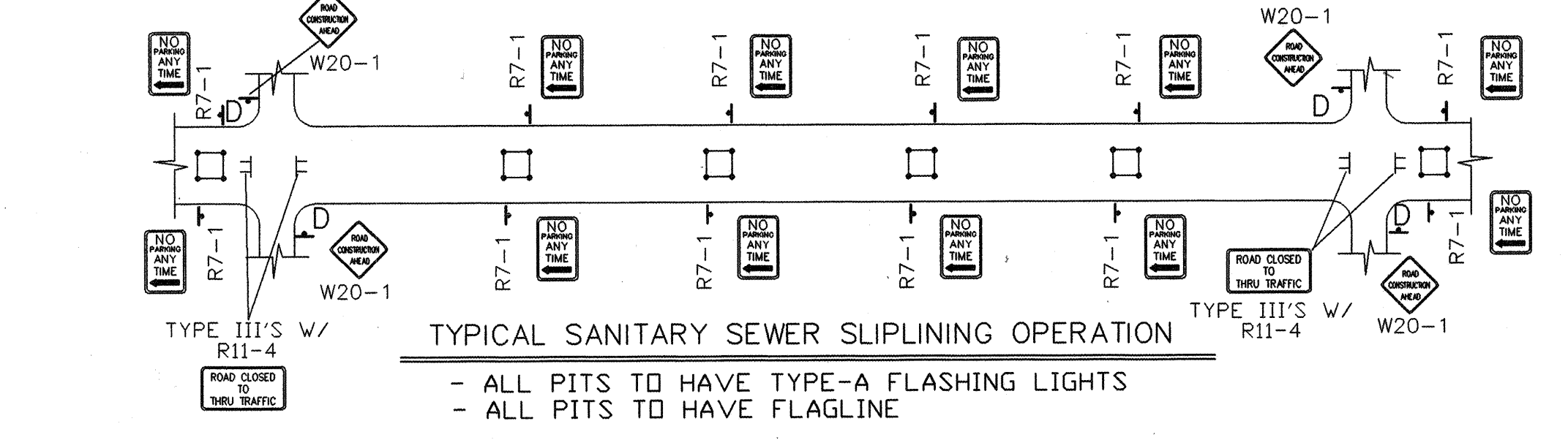
TYPICAL STREET SECTION
NOT TO SCALE



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP				
TITLE: OVERALL PAVING PLAN WITH PROFILE				
DESIGN REVIEW COMMITTEE APPROVED  JAN 16 2004 DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL APPROVED  FEB 10 2004 CITY ENGINEER		MO./DAY/YR. LAST DESIGN UPDATE
CITY PROJECT NO. 719781		ZONE MAP NO. M-12		MO./DAY/YR. SHEET OF 7 11

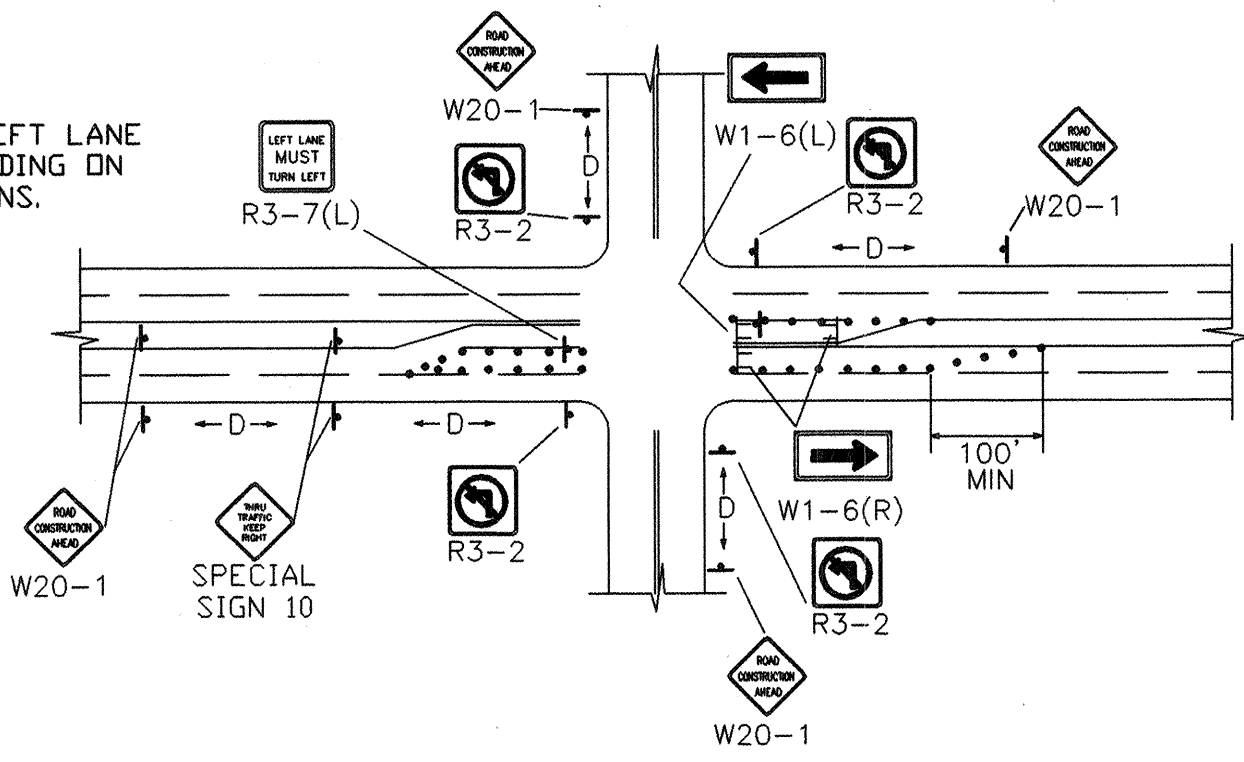


- TRAFFIC SPLIT NOTES:**
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCE SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
 2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
 3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
 4. MEDIAN REMOVAL 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.

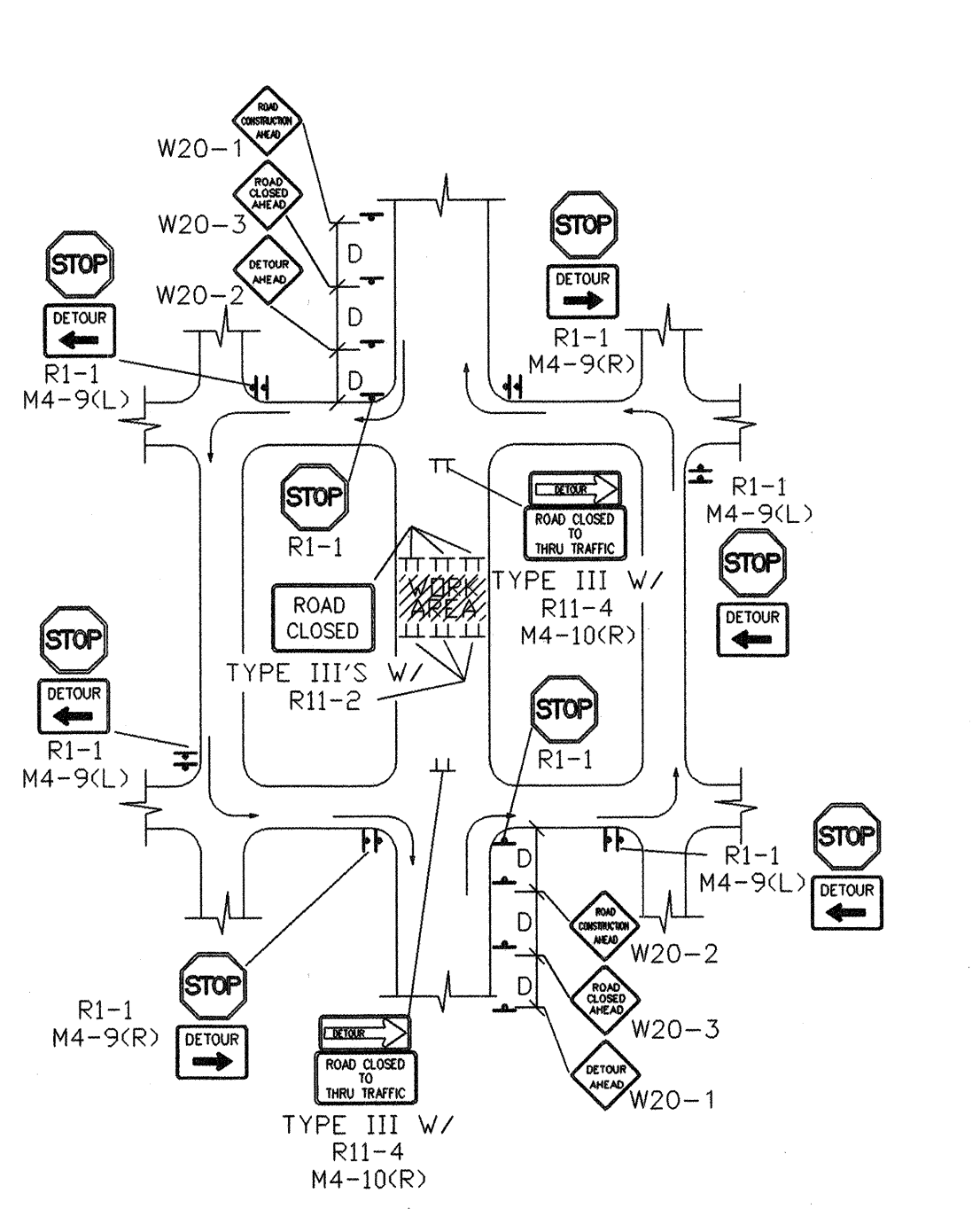


- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

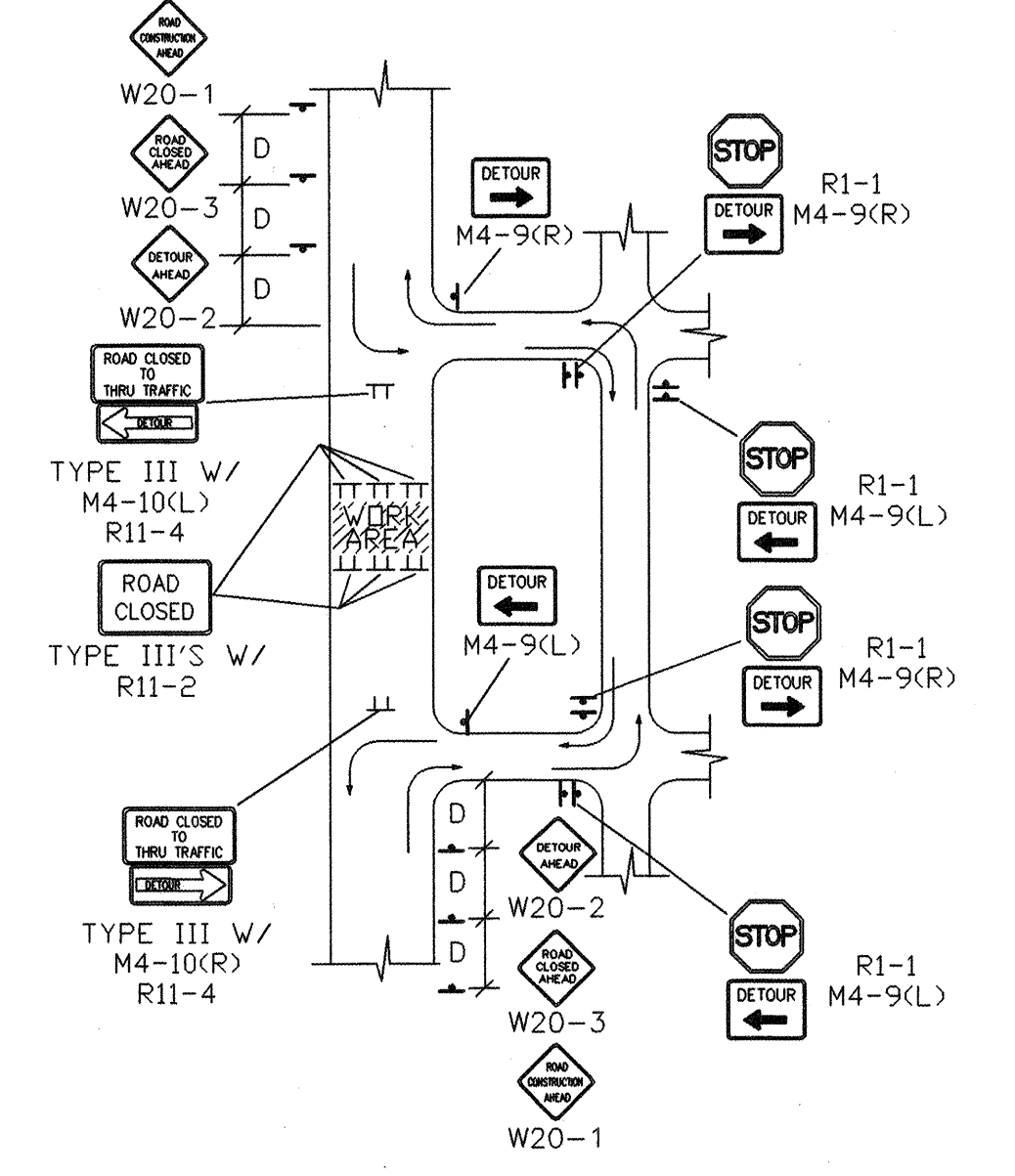
NOTE:
MAY REQUIRE LEFT LANE CLOSURE DEPENDING ON FIELD CONDITIONS.



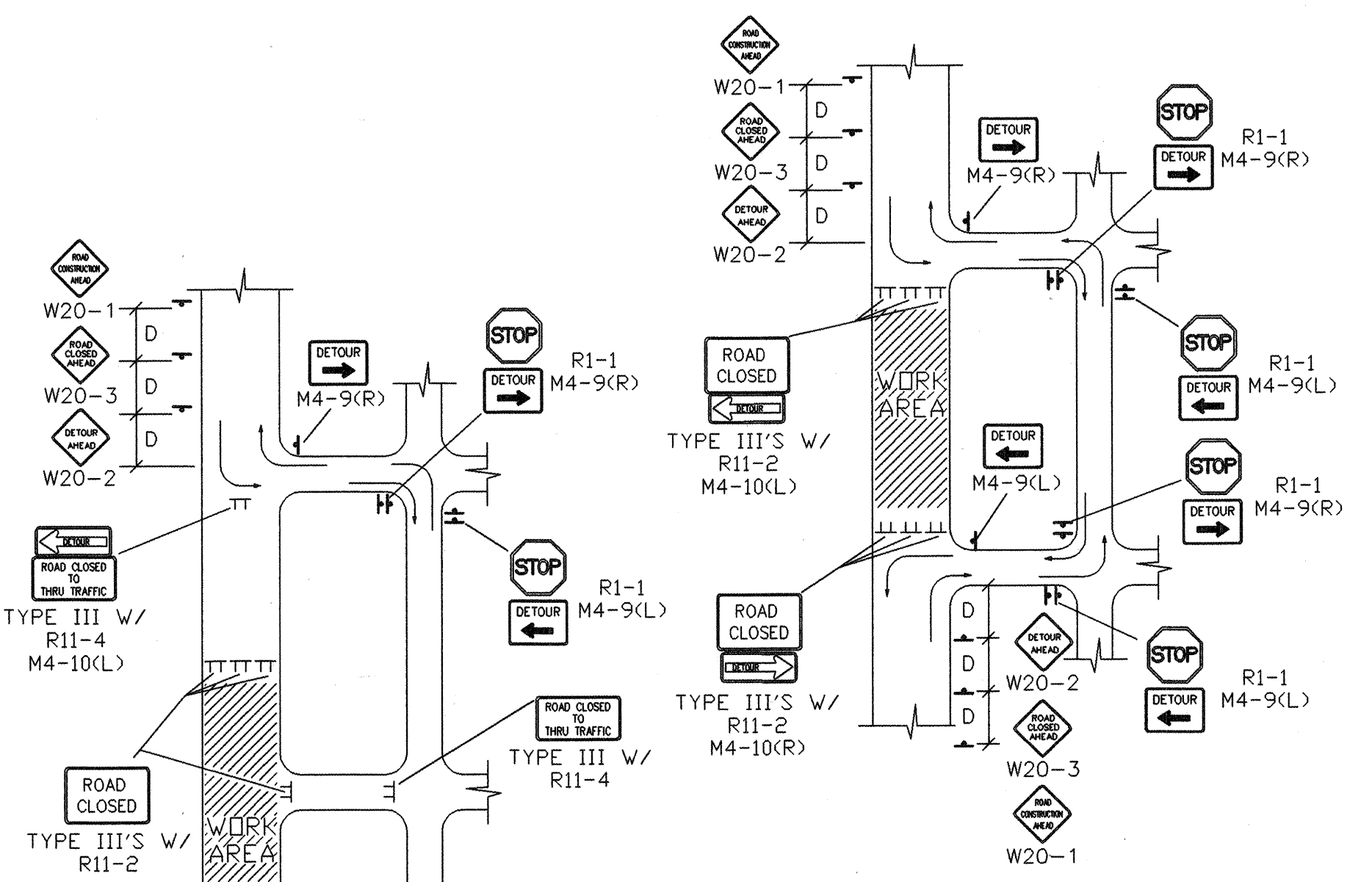
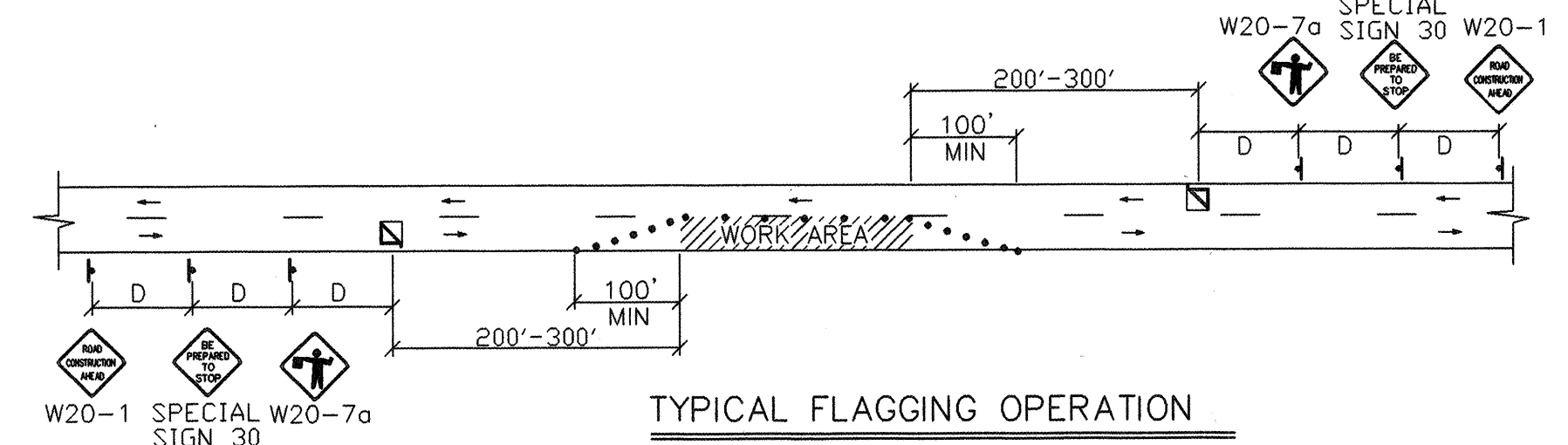
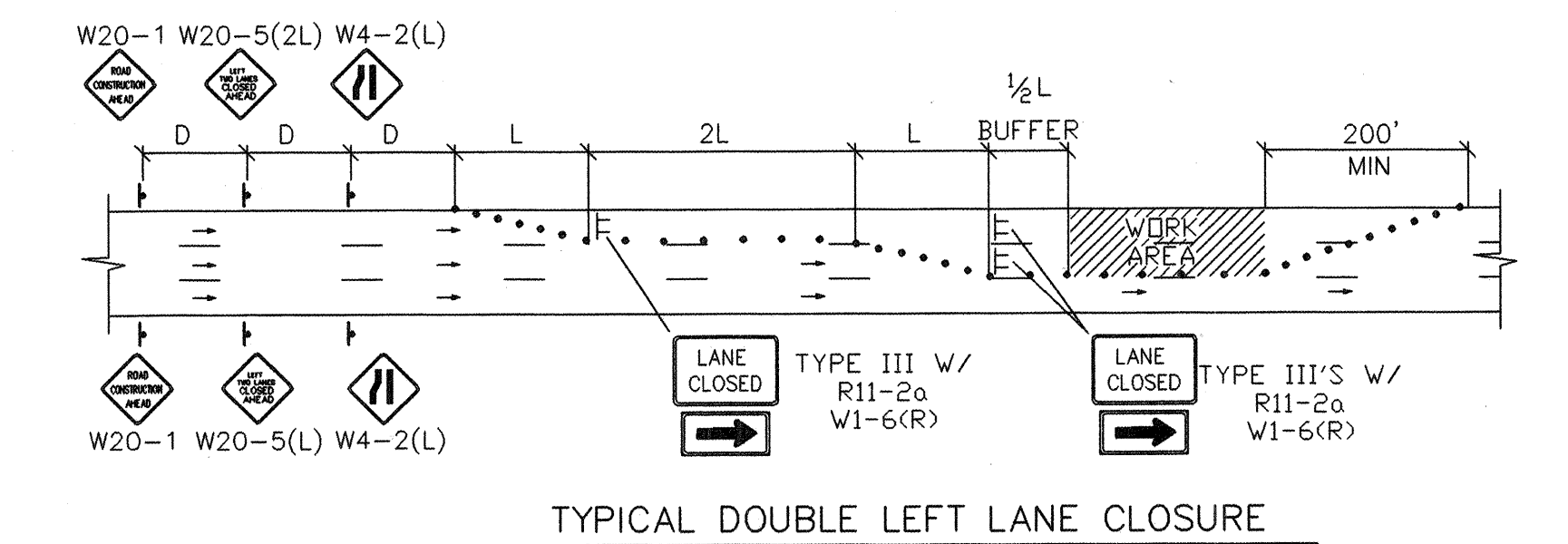
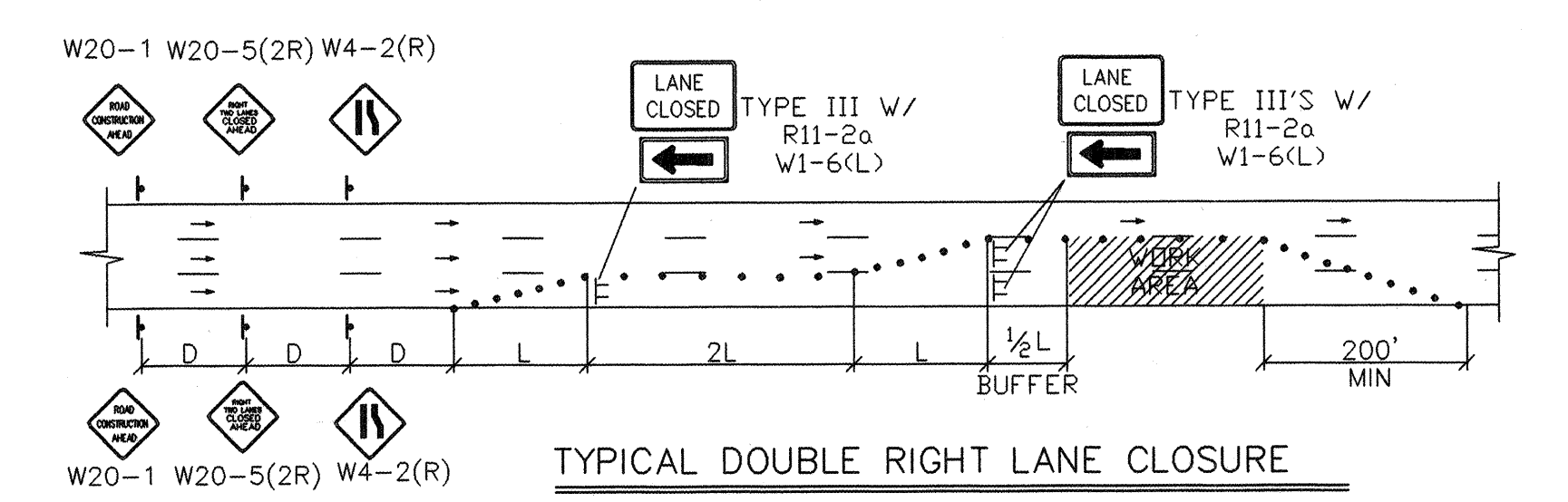
NOTE: DEPENDING ON WORK ZONE LOCATION.



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



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



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

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA STANDARD		LAST DESIGN UPDATE	
CITY PROJECT NO. 719781	ZONE MAP NO. M-12	SHEET 9	OF 11

AS-BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR TOTAL CONTRACT DATE	DATE	DATE	DATE	CONTRACTOR TOTAL CONTRACT DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
SPREAD BY	DATE	DATE	DATE	SPREAD BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
REVISIONS	DATE	DATE	DATE	REVISIONS	DATE	DATE	DATE	REVISIONS	DATE	DATE	DATE	REVISIONS	DATE	DATE	DATE
DESIGNED BY	DATE	DATE	DATE	DESIGNED BY	DATE	DATE	DATE	DESIGNED BY	DATE	DATE	DATE	DESIGNED BY	DATE	DATE	DATE
CHECKED BY	DATE	DATE	DATE	CHECKED BY	DATE	DATE	DATE	CHECKED BY	DATE	DATE	DATE	CHECKED BY	DATE	DATE	DATE
RECORDED BY	DATE	DATE	DATE	RECORDED BY	DATE	DATE	DATE	RECORDED BY	DATE	DATE	DATE	RECORDED BY	DATE	DATE	DATE
MICRO-FILM INFORMATION	DATE	DATE	DATE	MICRO-FILM INFORMATION	DATE	DATE	DATE	MICRO-FILM INFORMATION	DATE	DATE	DATE	MICRO-FILM INFORMATION	DATE	DATE	DATE

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.

2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL ADMINISTRATOR AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.

3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR.

4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER

5. THE CONTRACTOR SHALL FILE A WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL ADMINISTRATOR DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.

6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.

7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.

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

9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.

10. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH 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 THE COUNTY TRAFFIC CONTROL ADMINISTRATOR, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE 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.

12. 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.

13. 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.

14. 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 BERNALILLO COUNTY TRAFFIC ENGINEERING PER MUTCD SECTION 6A-4.

15. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.

16. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF BERNALILLO COUNTY TRAFFIC ENGINEERING.

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

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

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

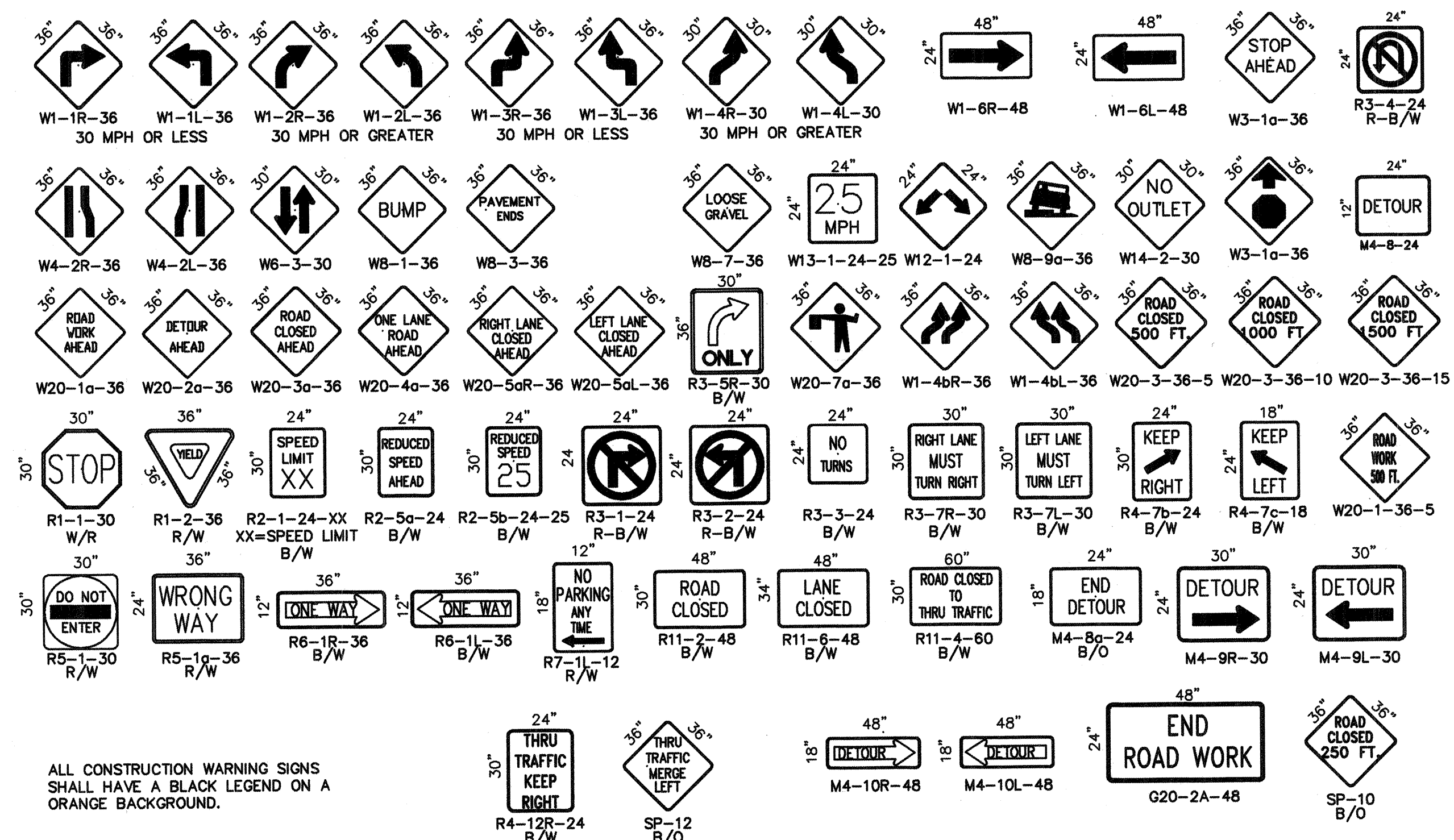
20. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF BERNALILLO COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

21. 48 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.

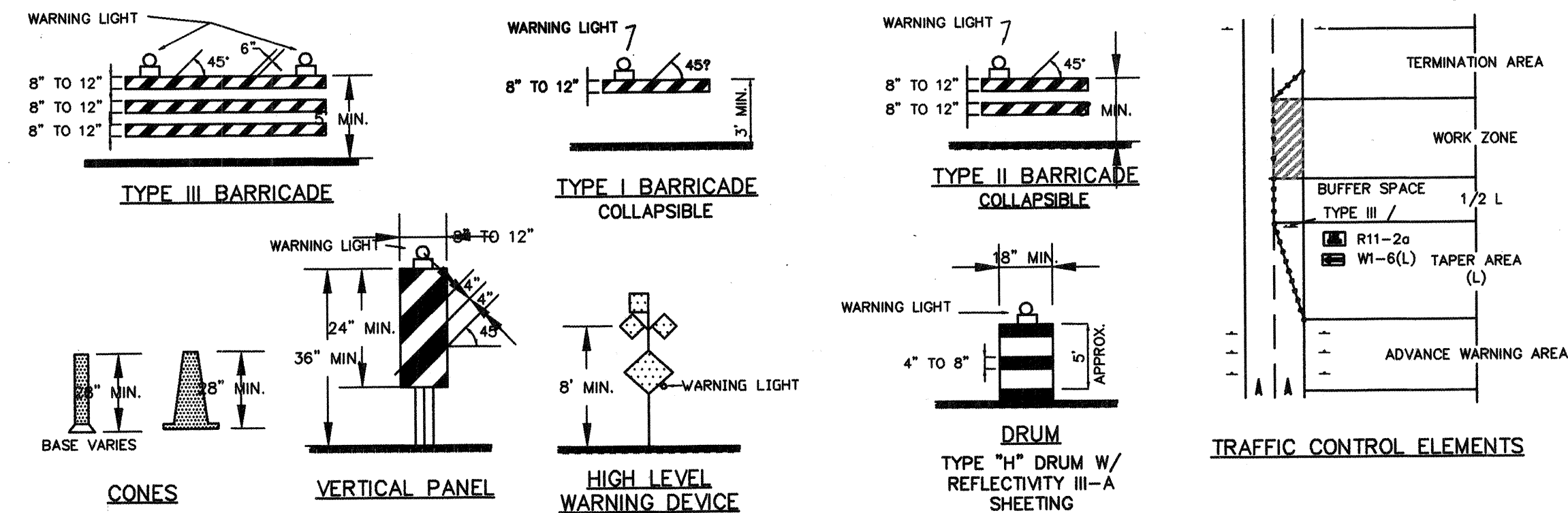
22. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.

23. 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.

SIGN FACE DETAILS



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



LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR TYPE "H" DRUM W/ REFLECTIVITY III-A SHEETING
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- TAPER LENGTH - SEE CHART BELOW

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

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY	NO.	BY
SPONSOR	DATE	DATE	DATE	DATE	DATE	DATE	DATE
DESIGNED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
DRAWN BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
CHECKED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
RECORDED BY	DATE	DATE	DATE	DATE	DATE	DATE	DATE
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: TRAFFIC CONTROL STANDARDS- SIGNING AND CONSTRUCTION			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
JAN 16 2004	FEB 10 2004		
DESIGN REVIEW COMMITTEE	CITY ENGINEER	LAST DESIGN UPDATE	
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
719781	M-12	10	11

