

# Cottrell Lane SW Improvements

PORTION OF M.R.G.C.D. TRACT NO. 9A1, MAP NO. 49, BERNALILLO COUNTY, NEW MEXICO

## Construction Plans for Public Infrastructure:

6" Waterline Extension

4" Vacuum Sewerline Branch

### Index of Sheets

### Sheet No.

TITLE SHEET	1 OF 6
PLAT	2 OF 6
COTTRELL LANE SW STA 10+00 TO 14+00	3 OF 6
COTTRELL LANE SW STA 14+00 TO 16+98	4 OF 6
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS	5 OF 6
TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES (REF. MUTCD)	6 OF 6

### Notice to Contractor

#### GENERAL NOTES:

- ALL WORK TO BE IN ACCORDANCE WITH THE 1986 EDITION OF CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AS AMENDED THROUGH UPDATE NO. 6.
- THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION, ETC.).
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.

- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. THE CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- THE WATER SYSTEMS DIVISION (857-8200) SHALL BE NOTIFIED FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT EXISTING PUBLIC WATER FACILITIES. THE CONTRACTOR SHALL ALSO COORDINATE FOR VALVE OPERATION FOR WATER SHUTOFF.
- THE CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL SYSTEM, PHONE: 260-1990, TO LOCATE UNDERGROUND UTILITIES TWO (2) WORK DAYS PRIOR TO BEGINNING EXCAVATION.
- ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE COORDINATED WITH THAT UTILITY COMPANY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- FOR PURPOSES OF THIS PROJECT THE TERM ENGINEER SHALL REFER TO EITHER THE OWNER'S EMPLOYEE OR THE CONSTRUCTION OBSERVER RESPONSIBLE FOR CONSTRUCTION INSPECTION OF THE PROJECT.
- ALL EXISTING IMPROVEMENTS ARE TO REMAIN, UNLESS SPECIFICALLY NOTED TO BE REMOVED. CONTRACTOR SHALL REPAIR ANY CONTRACTOR-CAUSED DAMAGE, AS DETERMINED BY THE ENGINEER TO EXISTING IMPROVEMENTS TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS, HORIZONTAL AND VERTICAL, AND SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION SO THAT CONFLICT CAN BE RESOLVED WITH THE MINIMUM AMOUNT OF DELAY.
- ALL REFERENCES TO COMPACTED BACKFILL OR COMPACTED SUBGRADE SHALL MEAN SOIL COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 UNLESS OTHERWISE NOTED.
- 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 OF ALBUQUERQUE SURVEY SECTION. WHEN A CHANGE IS MADE IN THE FINISH 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 NEW GRADE, UNLESS OTHERWISE SPECIFIED.

#### PAVING NOTES:

- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED IN THIS PLAN.
- ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR (24) HOUR CONSTRUCTION.
- ALL PAVEMENT TO BE REMOVED SHALL BE SAW CUT, HAVE A UNIFORM EDGE AND BE SPRAYED WITH TACK.

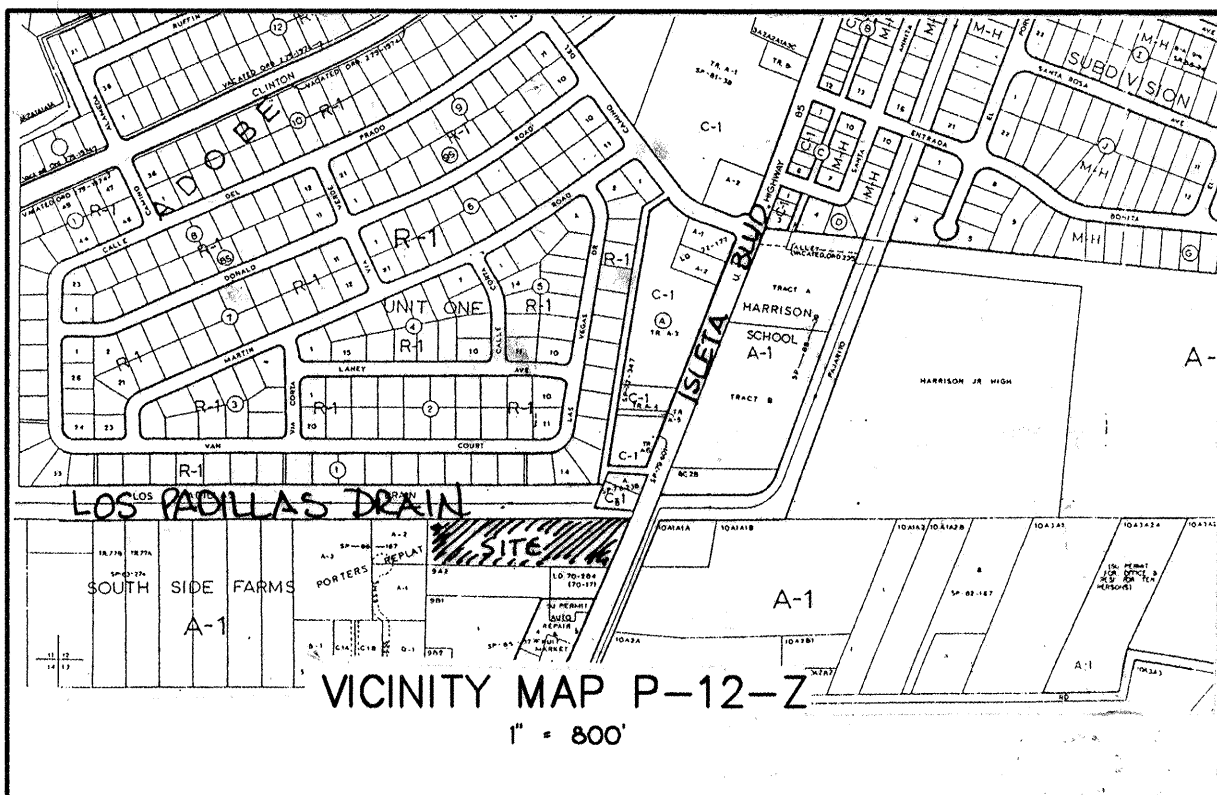
- WHEN ABUTTING NEW CURB AND GUTTER TO EXISTING PAVEMENT, A 1'-WIDE SECTION OF EXISTING PAVEMENT ADJACENT TO THE CURB AND GUTTER SHALL BE NEATLY SAW CUT, REMOVED AND REPLACED.

#### GRADING NOTES:

- THE CONTRACTOR MUST CONFORM TO ALL COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS, PERMITS AND APPROVALS. THE COST FOR REQUIRED MEASURES SHALL BE INCIDENTAL TO THE PROJECT COSTS.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO PREVENT WIND EROSION.
- A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE CONSTRUCTION OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

#### TRAFFIC CONTROL NOTE:

- THE CONTRACTOR SHALL CONTACT TRAFFIC ENGINEERING OPERATIONS AT 857-8000 FOR REMOVAL AND REPLACEMENT OF TRAFFIC SIGNS.

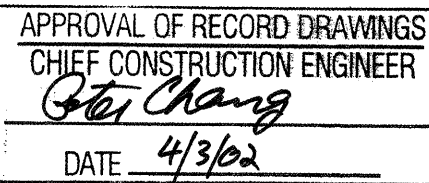


#### THE FOLLOWING NOTES APPLY WHEN CHECKED

- ☒ ALL UTILITIES AND UTILITY 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 DRIVE PAD, THE DRIVE PAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- ☐ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.



C.L. WEISS ENGINEERING, INC.  
POST OFFICE BOX 97 SANDIA PARK, N.M. 87047 - (505) 261-9000  
100 ALVARADO DR. NE ALBUQUERQUE, N.M. 87102 - (505) 266-3444



REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER		DATE	
		DRC Chairman		K. B. D. K.		8-30-99	
		Transportation		J. R. P.		8-16-99	
		Water/Wastewater		R. W. Kane		8-16-99	
		Hydrology		N. A. Sme		8-16-99	
		C.I.P.					
Constr. Mngmt.							
Constr. Coord.		N.A.				8-16-99	
City Project No.		619881					
APPROVED FOR CONSTRUCTION		5/3/00		City Engineer		Date	
Sheet		1		Of		6	





SCANNED BY  
MESA REPRO

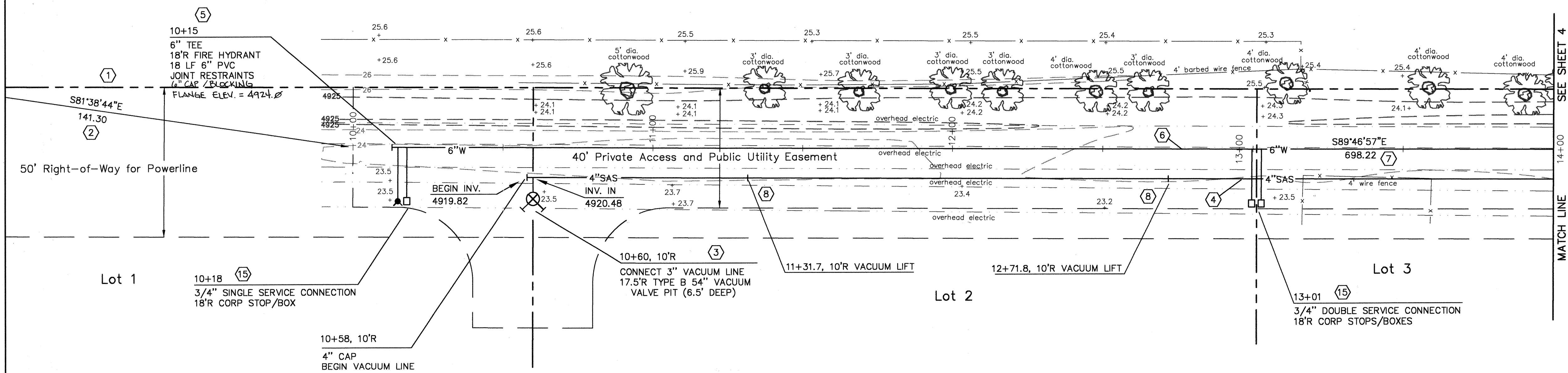
P/P-1.dwg 7-23-99 11:53:22 MDT



1" = 20'

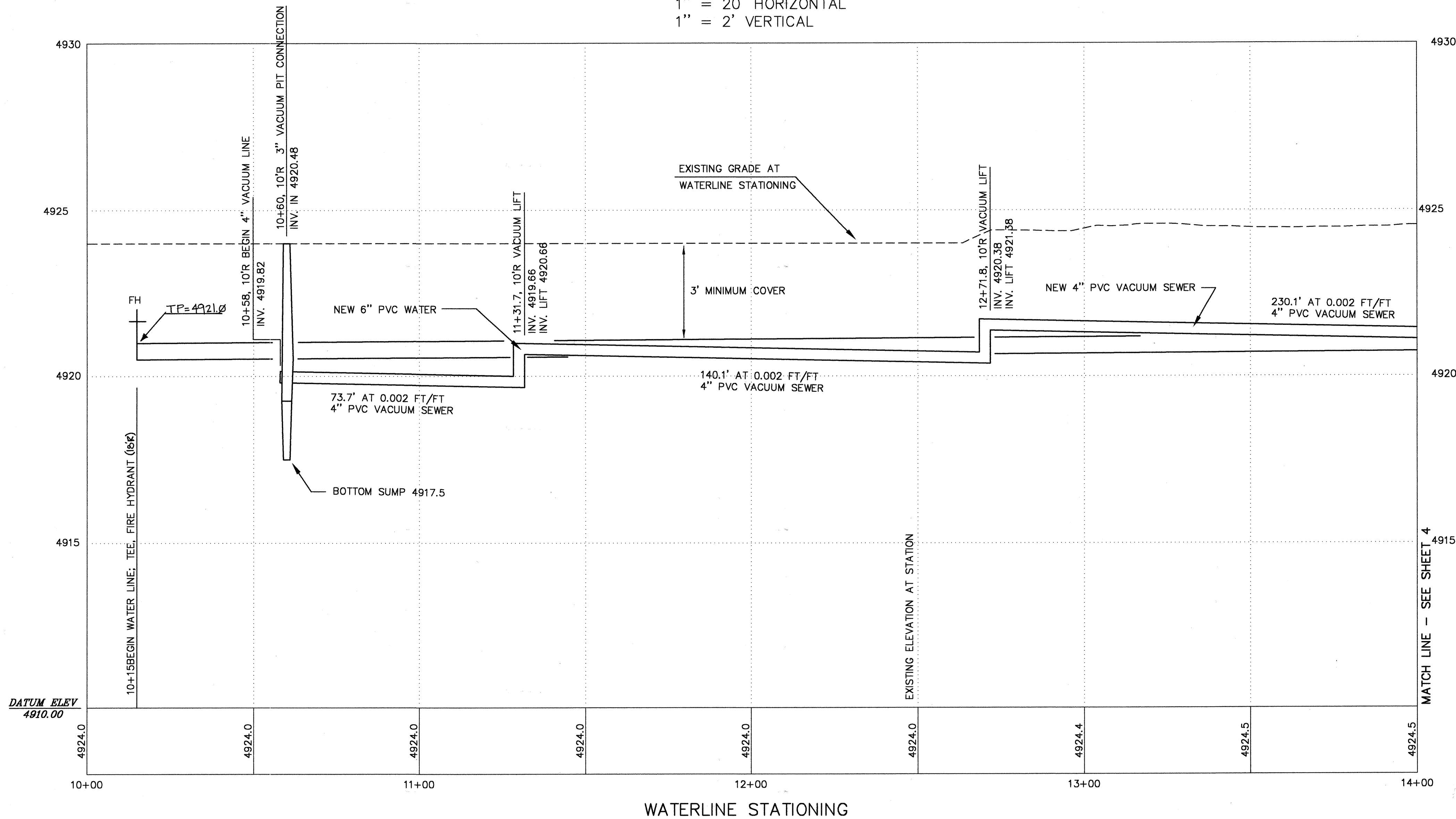
## COTTRELL LANE SW PLAN

REFER TO PLAT FOR PROPERTY DESCRIPTION



## COTTRELL LANE SW PROFILE

1" = 20' HORIZONTAL  
1" = 2' VERTICAL



### KEYED NOTES

- PROJECT BASIS OF BEARINGS IS NORTH PROPERTY LINE. REFER TO PLAT.
- PROJECT CONTROL LINE IS NEW WATERLINE STATIONING. STA 10+00 LIES S 81°38'44" E, 141.30 FT FROM NW CORNER LOT 1.
- INSTALL TYPE B 54" VACUUM PIT (6.5' DEEP) AND 3" PVC SERVICE CONNECTION TO NEW 4" VACUUM MAIN AT STA SHOWN. SEE COA STD. DWGS. 2165 AND 2172.
- INSTALL 604 LF 4" PVC SDR 21 VACUUM SANITARY SEWER LINE. SEE COA STD. DWGS. 2162 AND 2173.
- INSTALL TEE, FIRE HYDRANT AND JOINT RESTRAINTS. SEE COA STD. DWGS. 2326 AND 2340. NOTE: CAP AND BLOCK WEST LEG OF TEE.
- INSTALL 683 LF 6" PVC WATER LINE. SEE COA STD. DWG. 2315.
- WATERLINE STATIONING ALIGNMENT.

### RESTRAINED JOINT TABLE FOR NEW WATER SYSTEM

FITTING (ASSUME 8' Lr)	LENGTH OF RESTRAINED JOINT EACH SIDE OF FITTING
DEAD END	55'
6" TEE	6'
12"x6"x12" TEE	1'

- HORIZONTAL BENDS REQUIRE RESTRAINT OF ALL JOINTS WITHIN GIVEN LENGTH ON BOTH SIDES OF FITTING.
- IN-LINE VALVE REQUIRES RESTRAINT OF ALL JOINTS WITHIN GIVEN LENGTH UP TO VALVE.
- ALL FITTINGS TO BE RESTRAINED AT EACH FLANGE.
- CONTRACTOR SHALL PROVIDE MINIMUM PIPE LENGTHS OF 18' WITHIN RESTRAINED LENGTH OF FITTINGS. ALL PIPE JOINTS WITHIN 20' OF A FITTING SHALL BE RESTRAINED AT CONTRACTOR'S EXPENSE.

#### RESTRAINT TABLE ASSUMPTIONS:

ASTM SOIL CLASSIFICATION SM (SAND/SILT MIXTURE)  
AWWA TRENCH TYPE 5  
DEPTH OF BURY 3' TO TOP OF PIPE  
WORKING PRESSURE 100 PSI  
TEST PRESSURE 150 PSI  
FACTOR OF SAFETY = 1.5 TO 1

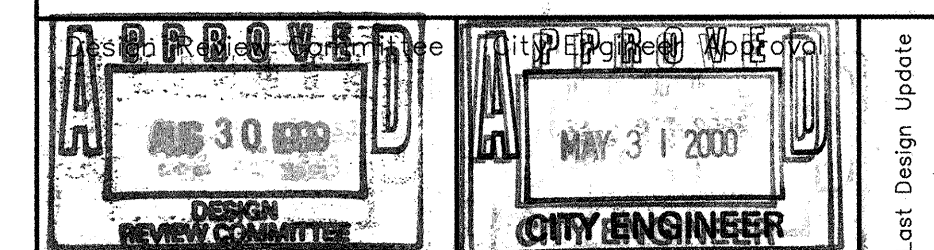


**C.L. WEISS ENGINEERING, INC.**

POST OFFICE BOX 97 SANDIA PARK, N.M. 87047 - (505) 281-1800  
100 ALVARADO DR. NE ALBUQUERQUE, N.M. 87110 - (505) 266-9444

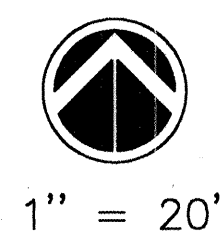
CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DEVELOPMENT GROUP

TITLE: **COTTRELL LANE SW STA 10+00 TO 14+00  
WATER AND SANITARY SEWER EXTENSIONS**



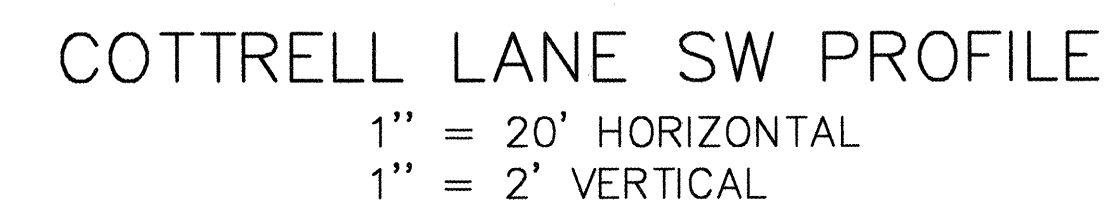
City Project No. **619881** Zone Map No. **P-12-Z** Sheet **3** Of **6**





COTTRELL LANE SW PLAN  
REFER TO PLAT FOR PROPERTY DESCRIPTION

190672000  
12" PVC C900 located on West side  
of Island BLVD S.W. 7.0 FT. West  
of CURB... Top of PIPE 6.50 FT Below  
Top of CURB.



## LEGEND

---

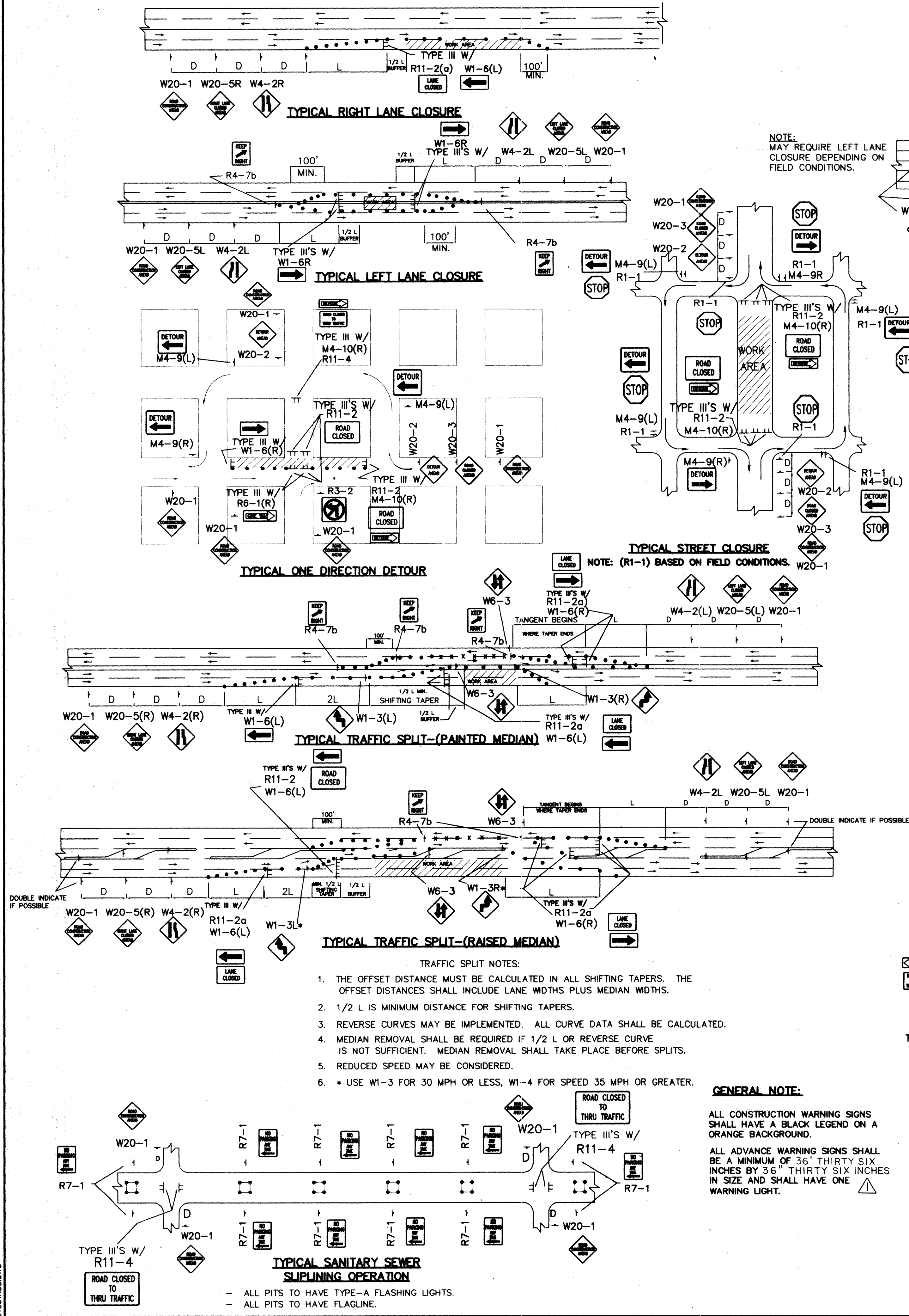
<p>TA TC FL</p>	<p>TOP OF ASPHALT TOP OF CURB FLOWLINE</p>
<p>————— - - - - - 5080</p>	<p>PROPERTY BOUNDARY EXISTING ELEVATION CONTOUR</p>
<p>water----- SOS-----</p>	<p>EXISTING PAVEMENT/CURB &amp; GUTTER EXISTING WATER LINE EXISTING SEWER LINE</p>
<p>-6"W ———▶▶▶▶▶</p>	<p>NEW WATER LINE, GATE VALVE, FIRE HYD.</p>
<p>—————□—————</p>	<p>NEW 3/4" WATER SERVICE</p>
<p>-4"SAS ———▶▶▶▶▶</p>	<p>NEW SANITARY SEWER LINE, DIVISION VALVE</p>
<p>—————⊗—————</p>	<p>NEW VACUUM VALVE SERVICE PIT</p>
<p>—————- - - - -</p>	<p>PROPOSED SAW CUT LINE</p>

## KEYED NOTES

- (8) INSTALL. 1" VACUUM LIFTS AS SHOWN. SEE COA STD. DWG. 2162.
- (9) INSTALL 4" VACUUM DIVISION VALVE AND VAULT AS SHOWN. SEE COA STD. DWGS. 2169 AND 2170.
- (10) TEMPORARY BENCHMARK IS TOP OF CURB AT SOUTH END OF DRIVEWAT CUT. ELEVATION = 4924.83.
- (11) REMOVE AND REPLACE 58 SF OF EXISTING CONCRETE DRIVE AND 44 SF OF EXISTING ARTERIAL PAVEMENT. SEE COA STD. DWG. 2465.
- (12) REMOVE AND REPLACE 18 SF OF EXISTING CONCRETE WALK, 175 SF OF EXISTING ARTERIAL PAVEMENT AND 6 LF CONCRETE CURB AND GUTTER. SEE COA STD. DWGS. 2415 AND 2465.
- (13) CONNECT NEW 6" WATERLINE TO EXISTING 12" LINE WITH PRESSURIZED TAPPING SLEEVE CONNECTION. SEE COA STD. DWGS. 2301 AND 2325.
- (14) CONNECT NEW 4" VACUUM BRANCH TO EXISTING 4" VACUUM MAIN. SEE COA STD. DWG. 2164, ALT. B.
- (15) PROVIDE 3/4" WATER SERVICE CONNECTION. SEE COA STD. DWG. 2362.

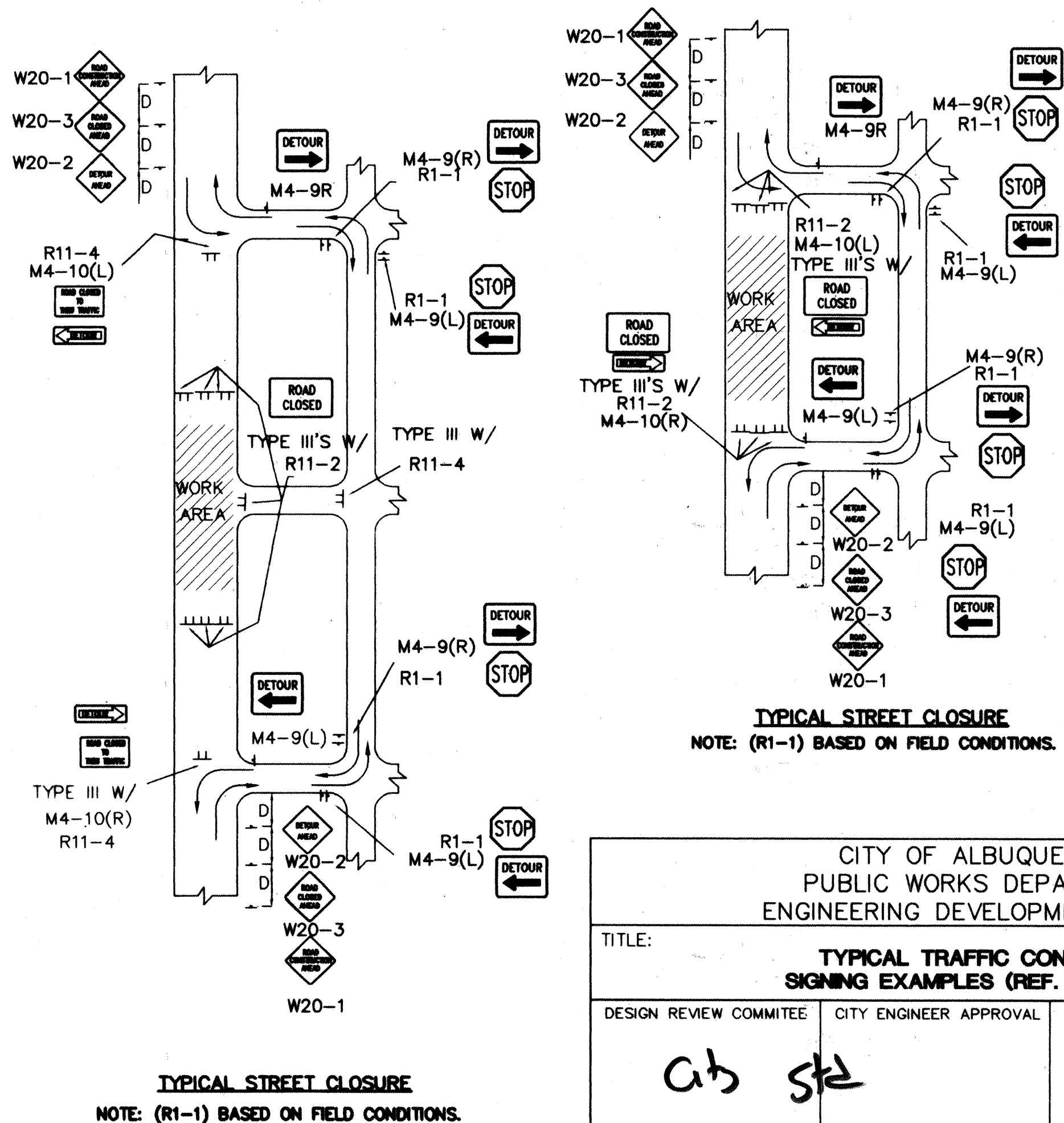
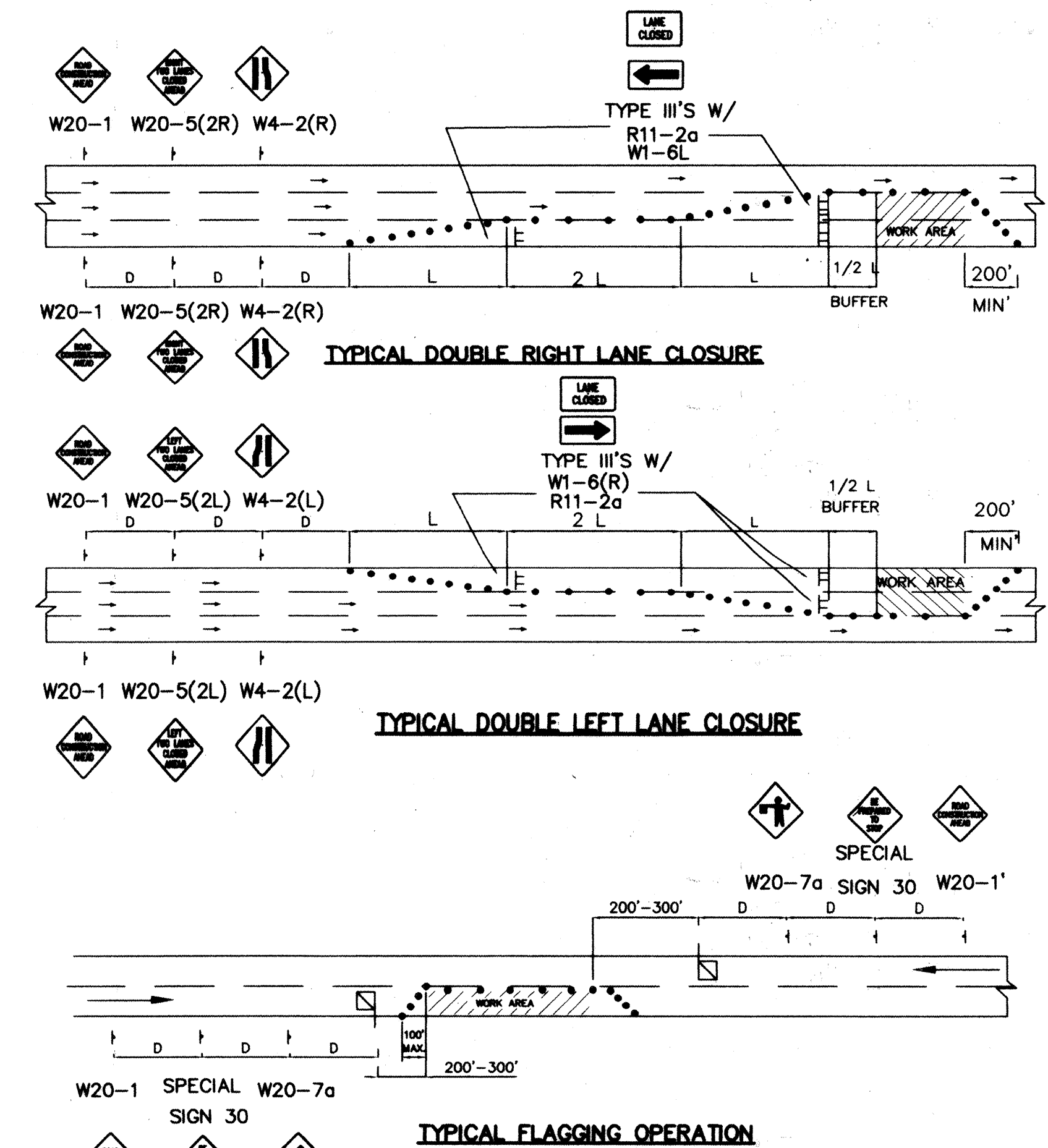
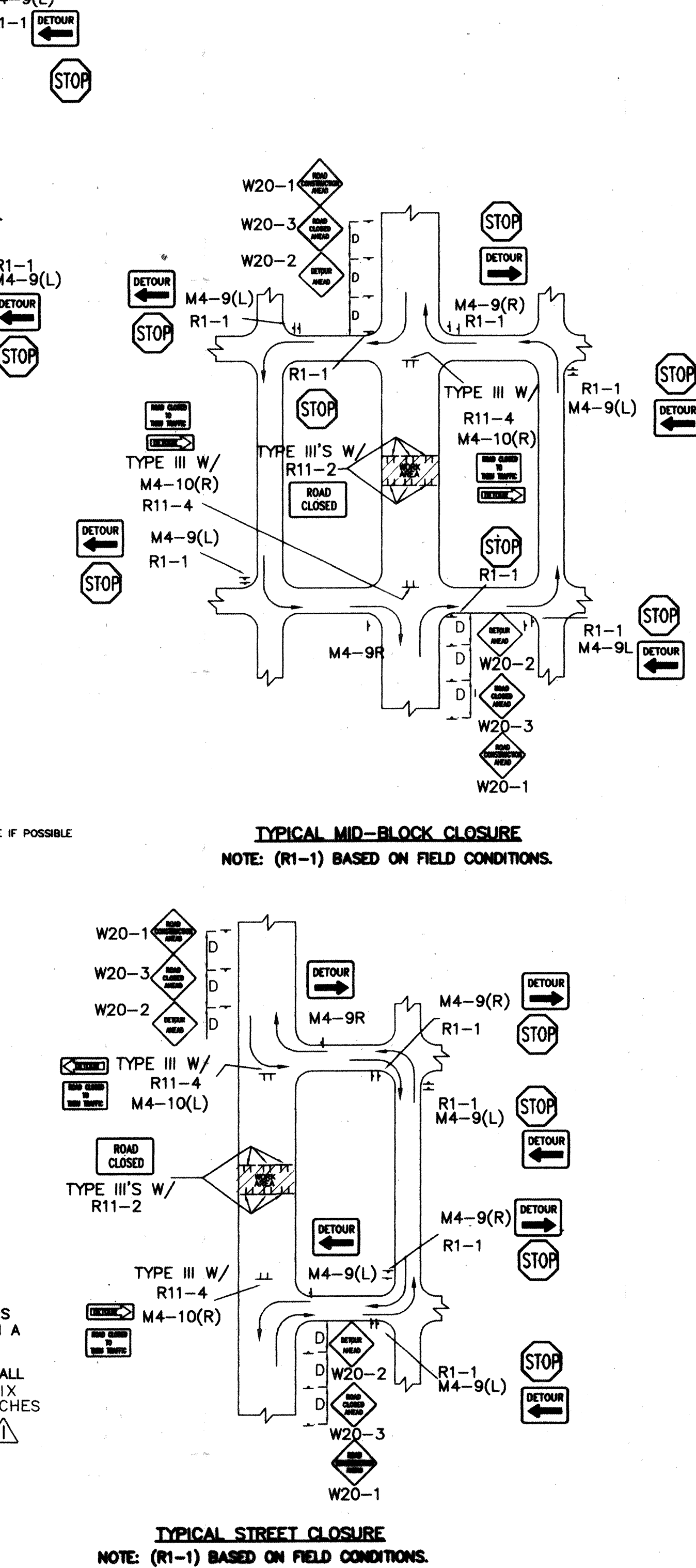
[illegible]





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

**TYPICAL LANE CLOSURE AT INTERSECTION**  
NOTE: DEPENDING ON WORK ZONE LOCATION



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: <b>TYPICAL TRAFFIC CONTROL &amp; SIGNING EXAMPLES (REF. M.U.T.C.D.)</b>			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
LAST UPDATE			
PROJECT NO. <b>619881</b>	MAP NO. <b>P-12</b>	SHEET <b>5</b>	OF <b>6</b>

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	DATE	NO.	DATE
STAKE	DATE						
FIELD	DATE						
CHECKED	DATE						
CORRECTED	DATE						
MICRO-FILM	DATE						
RECORDED BY	DATE						
NO.							

REVISIONS

NO.	DATE	REMARKS	BY	DATE
1	9/24/97	REVISED GENERAL NOTE	J.D.L.	
2		DESIGN		
3		STANDARDS		
4		DESIGNED BY		
5		DRAWN BY		
6		CHECKED BY		

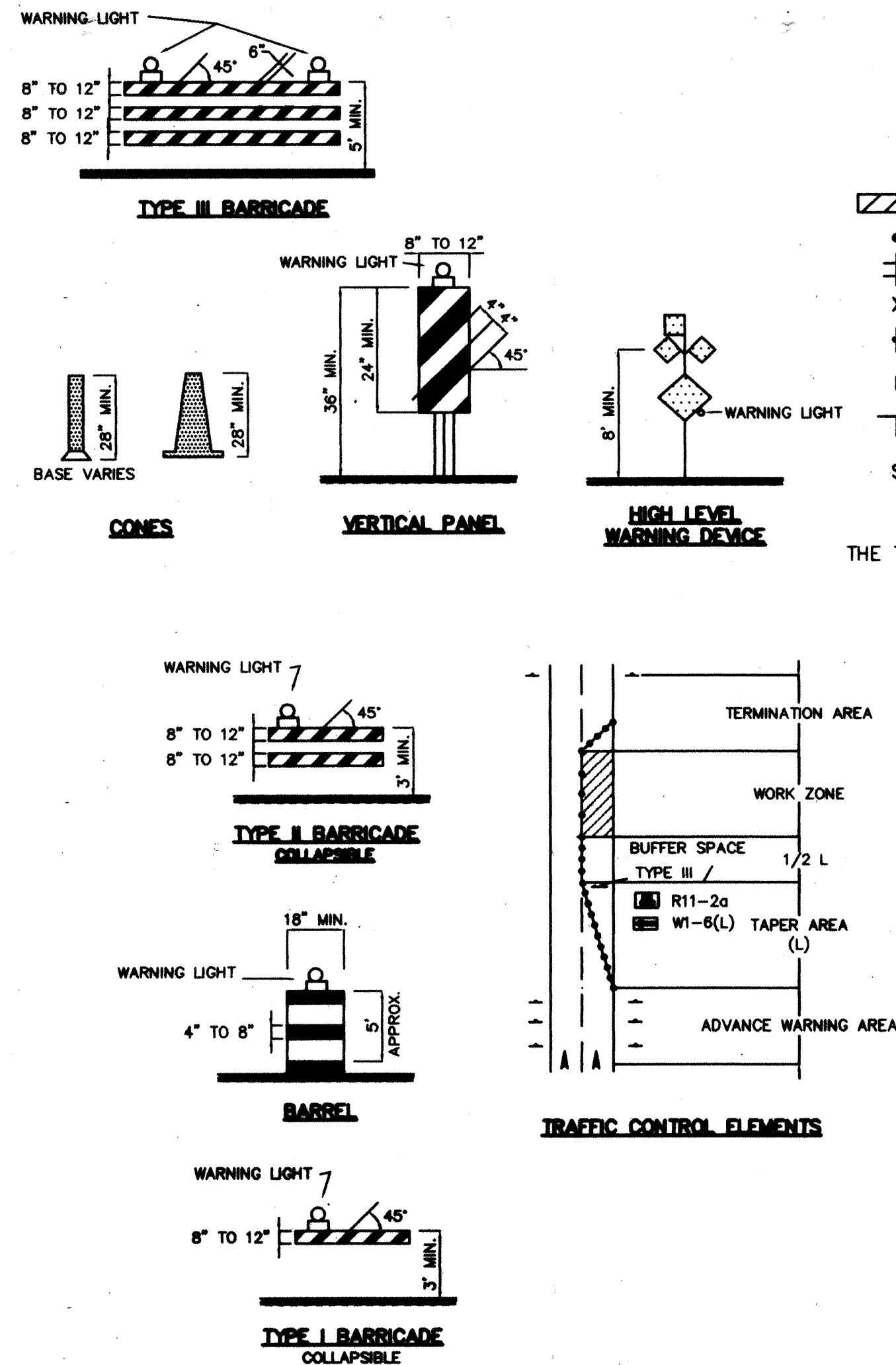


## CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- 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.
- 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 ACCESSSES. 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.
- THESE 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.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
- 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.
- 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.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 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.
- 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.
- 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.
- ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

- 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.
- CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
  - STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
  - THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
  - SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- 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.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.
- TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

- ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



## LEGEND

- WORK AREA  
BARRICADE - TYPE I, TYPE II, OR BARREL  
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.

## TAPER REQUIREMENTS

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

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

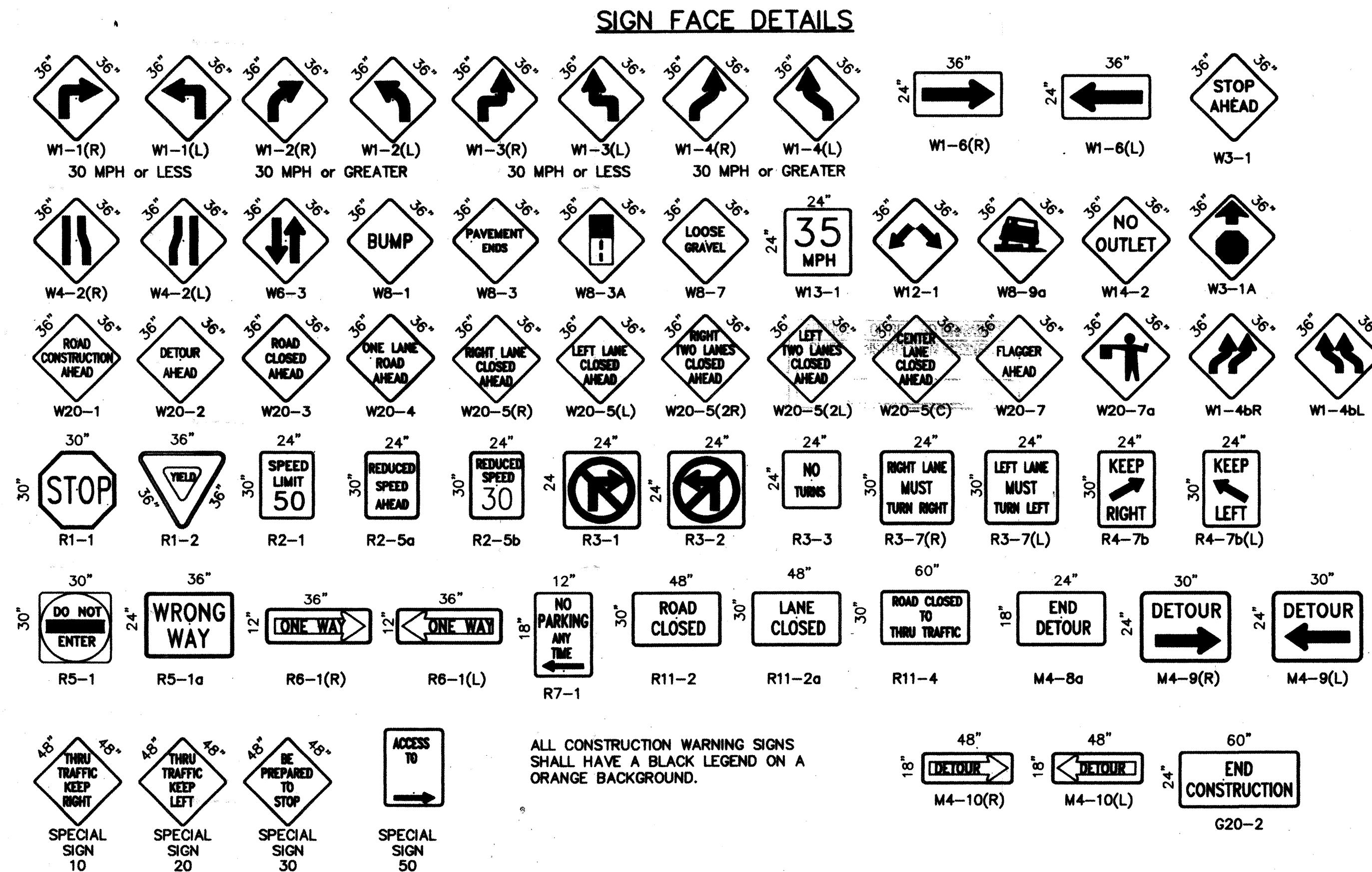
SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET	
	BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

## 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	



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

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: <b>SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS</b>			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	NO. / DAY / YR.	
LAST UPDATE		NO. / DAY / YR.	
PROJECT NO. <b>619881</b>		MAP NO. <b>P-12</b>	SHEET <b>6</b> OF <b>6</b>