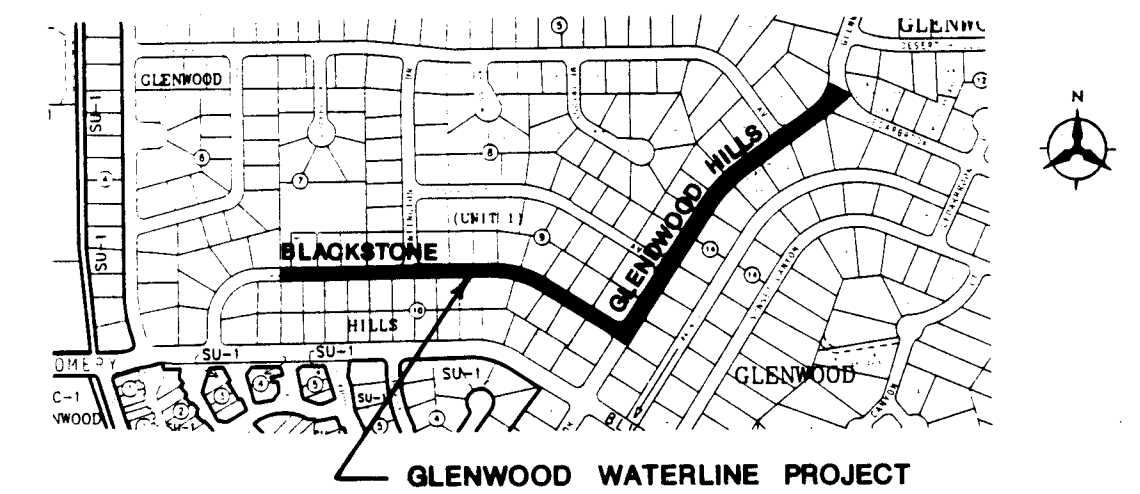


CONSTRUCTION PLANS
FOR
GLENWOOD HILLS PUMP
STATION DISCHARGE LINE
ALBUQUERQUE, NEW MEXICO
(AS BUILT)



VICINITY MAP
NOT TO SCALE
F-23

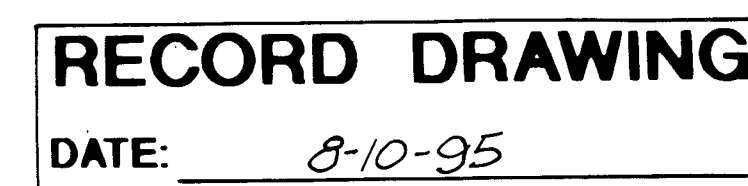
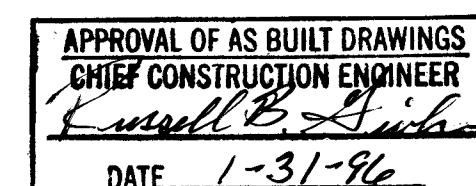
NOTICE TO CONTRACTORS

- 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.4 REVISIONS, DELETIONS, AND ADDITIONS DATED JAN. 28, 1993.
- FIVE (5) 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 OBSTRUCTIONS. 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 BARRICADING PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND 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 SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY 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.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

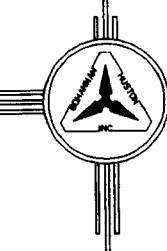
- ☒ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☐ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☒ IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- ☐ THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

INDEX	
SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES
3	KEY MAP AND WATER SHUT-OFF PLAN
4	WATERLINE PLAN AND PROFILE STA.1+00 TO STA.9+00
5	STA.9+00 TO STA.19+00
6	STA.19+00 TO STA.29+00
7	MISCELLANEOUS DETAILS
8	TRAFFIC CONTRLLO PLAN PHASE I
9	TRAFFIC CONTRLLO PLAN PHASE II
10	TRAFFIC CONTRLLO PLAN PHASES III AND IV
11	TRAFFIC CONTRLLO PLAN PHASE V
12	TRAFFIC CONTRLLO PLAN PHASE V
13	TRAFFIC CONTRLLO PLAN PHASES VI AND VII
14	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
15	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES (REF. M.U.T.C.D.)



REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

 BOHANNAN HUSTON INC. ALBUQUERQUE, NEW MEXICO ENGINEERS PLANNERS PHOTOGRAMMETRISTS	APPROVED FOR CONSTRUCTION C.E.
	PROJECT NUMBER 5004.92
SCANNED BY BY LASON	SHEET 1 OF 15

GENERAL NOTES

1. WHEN CONFLICTS EXIST BETWEEN THE "STANDARD SPECIFICATIONS" AND THE "PLANS" ("PLANS" SHALL MEAN THE SHEETS NUMBERED 1 OF 7 THROUGH 7 OF 7 ENTITLED "CONSTRUCTION PLANS FOR GLENWOOD HILLS PUMP STATION DISCHARGE LINE), THE CONSTRUCTION OBSERVER SHALL BE NOTIFIED IMMEDIATELY FOR RESOLUTION. IN GENERAL, THE PLANS SHALL GOVERN.
2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS GOVERNING CONSTRUCTION SAFETY AND HEALTH.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. ALL ELECTRICAL, TELEPHONE, CABLE TV, AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS.
6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE, ALL EXISTING UTILITIES.
7. THE CONTRACTOR SHALL BE REQUIRED TO CONFINE ITS WORK WITHIN THE CONSTRUCTION LIMITS AND/OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY.
8. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADING, TOPSOIL DISTURBANCE AND EXCAVATION PERMITS, ETC.)
9. ALL TRENCHES AND EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED ACCORDING TO OSHA CONSTRUCTION SAFETY AND HEALTH STANDARDS. JOB SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. BLASTING USING EXPLOSIVES SHALL NOT BE PERMITTED. THE USE OF OTHER TECHNIQUES SHALL BE DONE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE CONSTRUCTION OBSERVER.
11. ALL STATIONING IS BASED ON STREET CENTERLINE, UNLESS OTHERWISE NOTED.
12. ALL UTILITIES AND UTILITY SERVICE LINES OR SLEEVES SHALL BE INSTALLED PRIOR TO PAVING.
13. TEMPORARY ACCESS TO ALL IMPACTED DRIVEWAYS SHALL BE PROVIDED BY THE CONTRACTOR. COST OF TEMPORARY ACCESS SHALL BE INCIDENTAL TO THE PROJECT.

WATERLINES AND WATERSERVICE REQUIREMENTS

1. DISRUPTION OF WATER SERVICE TO EXISTING HOMES IN GLENWOOD HILLS SHALL BE LIMITED TO A MAXIMUM OF 4 HOURS.
2. TEMPORARY WATER SERVICES SHALL BE CONSTRUCTED AS NECESSARY TO SATISFY THE WATER SERVICE REQUIREMENTS OF NOTE 1. COST IS INCIDENTAL TO PROJECT.
3. TEMPORARY WATERLINE CONNECTIONS FOR CONSTRUCTION PURPOSES SHALL BE INCIDENTAL TO THE PROJECT.
4. THE CONTRACTOR SHALL KEEP OR DISPOSE OF ALL REMOVED WATERINES AND FITTINGS. COST IS INCIDENTAL TO THE PROJECT.
5. ALL FITTINGS SHALL HAVE RESTRAINED JOINTS. RESTRAINED JOINTS SHALL ALSO BE PROVIDED AS SPECIFIED IN THE PLANS AND IN TABLE 1 THIS SHEET.

EXISTING UTILITIES

1. THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH LOCAL UTILITIES, ENGINEERING OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS PROVIDED TO OR OBTAINED BY THE ENGINEER. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES IN THE IMMEDIATE VICINITY OF THE PROJECT MAY BE SLIGHTLY DIFFERENT FROM THE LOCATION SHOWN ON THIS DRAWING. IF ADDITIONAL LINES ARE ENCOUNTERED, THEY SHALL BE EXPOSED AND IDENTIFIED BY THIS CONTRACTOR. WHERE ADDITIONAL LINES AND/OR DIFFERING LOCATIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL REQUEST THAT THE ENGINEER MAKE A RULING AS TO ANY NECESSARY CHANGE OF MATERIALS, RE-ROUTING, ABANDONING OR RELOCATING OF SUCH LINES.
2. ALL BIDDERS ARE CAUTIONED TO INVESTIGATE SITE CONDITIONS BEFORE SUBMITTING THEIR BIDS.
3. CONTRACTOR SHALL PAY FOR ANY AND ALL COSTS OF PERMITS, LINE EXTENSIONS, FIRELINES, METER INSTALLATION, ETC., AS REQUIRED BY LOCAL GOVERNING UTILITIES ENGINEERING OFFICIALS.

CONSTRUCTION SIGNING: UNLESS GOVERNED BY A SPECIFIC PLAN, THE FOLLOWING NOTES APPLY:

1. ALL BARRICADES AND SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), U.S. DEPARTMENT OF TRANSPORTATION, LATEST DIVISION EDITION.
2. CONTRACTOR SHALL PREPARE A CONSTRUCTION SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC DIVISION, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
3. CONTRACTOR SHALL MAINTAIN ALL BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADES AT THE END AND BEGINNING OF EACH DAY.

POTHOLING

1. THE CONTRACTOR SHALL POTHOLE AT THE INTERSECTION OF BLACKSTONE ROAD AND THE GLENWOOD HILLS PUMP STATION ACCESS ROAD PRIOR TO ORDERING ANY PIPE TO VERIFY FEASIBILITY OF PROPOSED CONNECTION AT THIS LOCATION. THE ENGINEER SHALL BE NOTIFIED FIVE (5) DAYS PRIOR TO POTHOLING.

GLENWOOD HILL PUMP STATION DISCHARGE LINE

TABLE 1 - RESTRAINED JOINT LENGTH

LOCATION	STATION	FITTING	LENGTH	COMMENT
BLACKSTONE RD.	2+10	18" x 18" x 18" tee	Use blocking	
BLACKSTONE RD.	2+20	24" butterfly valve	Restraint joints: from Sta. 2+20 to Sta. 3+20	
BLACKSTONE RD.	2+20	24" x 24" x 14" tee	Use blocking	
BLACKSTONE RD.	2+23.50	24" 45° bend	Restraint joints: from Sta. 2+10 to Sta. 3+20	
BLACKSTONE RD.	2+27.00	24" 45° bend	3+14	
BLACKSTONE RD.	6+28	24" x 24" wye	Restraint joints: from Sta. 5+60 to Sta. 6+70	
BLACKSTONE RD.	6+46	24" 45° bend		
BLACKSTONE RD.	10+76	24" 11.25° bend	5'	
BLACKSTONE RD.	11+28	24" 11.25° bend	5'	
BLACKSTONE RD.	13+05.90	24" 22.5° bend	10'	
BLACKSTONE RD.	13+30	24" 22.5° bend	10'	
GLENWOOD HILLS	15+40	24" 90° bend	40'	
GLENWOOD HILLS	22+23	24" 11.25° bend	5'	

NOTE: RESTRAINED JOINTS ON ALL FITTING.
RESTRAINED JOINTS LENGTHS EACH SIDE
OF FITTING UNLESS OTHERWISE NOTED.

202509



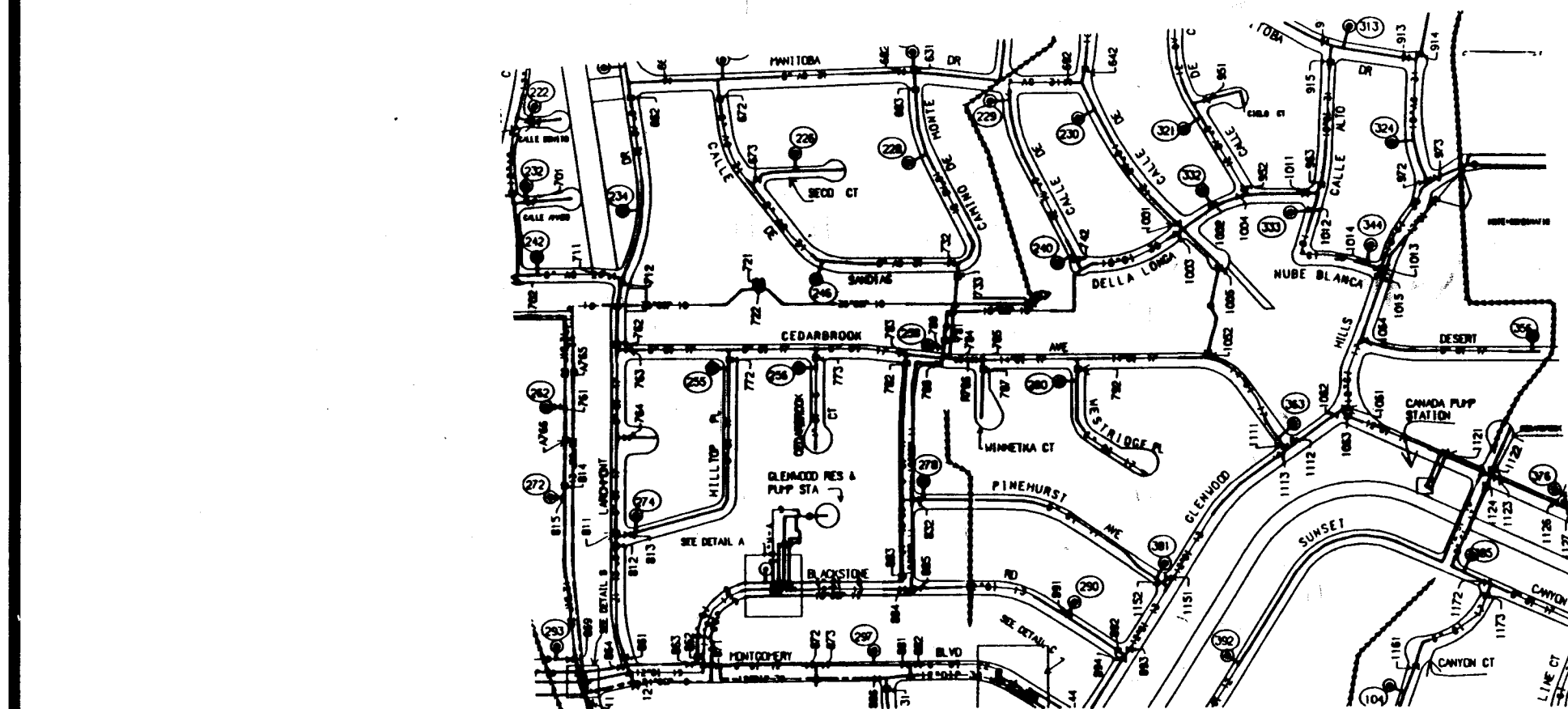
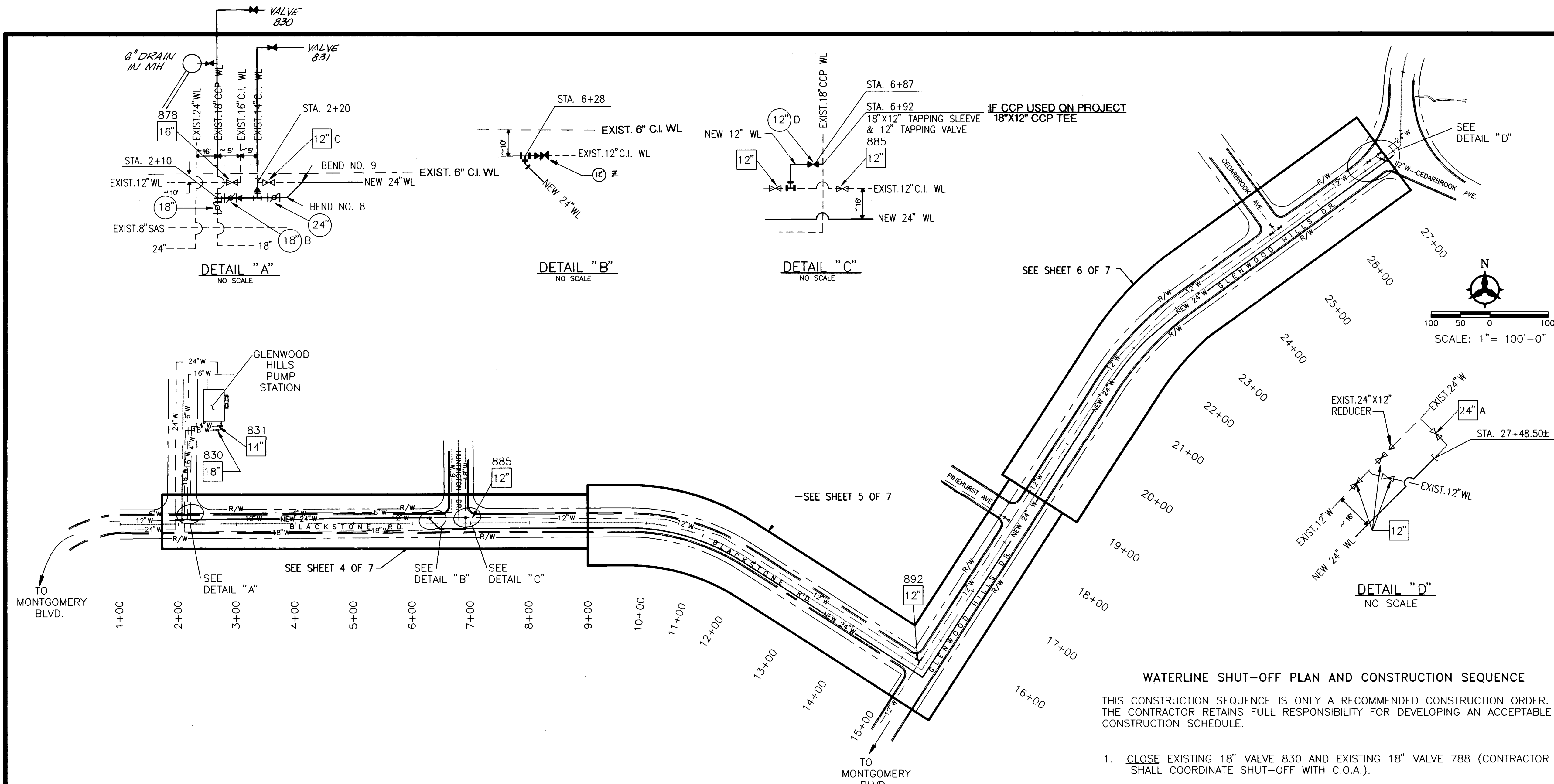
RECORD DRAWING

DATE: 8-10-95

		CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
GLENWOOD HILLS PUMP STATION DISCHARGE LINE GENERAL NOTES					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION	N/A	10-28-94	WASTE WATER		
HYDROLOGY	N/A	10-31-94			
DRAWING NO. 5004.92		MAP NO. F-23		SHEET 2 OF 15	

BHI JOB NO. 94163.21

SCANNED BY
BY LASON



WATER VALVE SHUT-OFF PLAN
NO SCALE F-23

WATER VALVE SHUT-OFF REQUIREMENTS:

CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUNCTION WITH THE COMPLETION OF THE PROJECT.

AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT PWD/WATER SYSTEMS DIVISION (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN.

NOTE
SEE SHEETS 4, 5 AND 6 FOR LIMITS OF EXISTING PAVEMENT REMOVAL AND REPLACEMENT.

- WATERLINE SHUT-OFF PLAN AND CONSTRUCTION SEQUENCE**
- THIS CONSTRUCTION SEQUENCE IS ONLY A RECOMMENDED CONSTRUCTION ORDER. THE CONTRACTOR RETAINS FULL RESPONSIBILITY FOR DEVELOPING AN ACCEPTABLE CONSTRUCTION SCHEDULE.
- CLOSE EXISTING 18" VALVE 830 AND EXISTING 18" VALVE 788 (CONTRACTOR SHALL COORDINATE SHUT-OFF WITH C.O.A.).
 - CONSTRUCT THE PROPOSED CONNECTION AT PUMP STATION ACCESS ROAD PER DETAIL "A" BY CUTTING INTO THE 18" CCP WATERLINE. NON PRESSURE CONNECTION.
 - CLOSE PROPOSED 18" VALVE B. OPEN EXISTING 18" VALVE 830 & 788. (STEPS 1, 2, & 3 MUST BE COMPLETED IN EIGHT HOURS).
 - CONSTRUCT THE PROPOSED 24" WATERLINE FROM STA 6+33 (4' LT) TO STA 27+48.5 (6.5' RT).
 - CLOSE THE EXISTING 24" VALVE A.
 - TIE TO EXISTING 24" STUB-OUT AT STA 27+48.50 AT THE NORTH INTERSECTION OF GLENWOOD HILLS DRIVE AND CEDAR BROOK AVENUE PER DETAIL "D".
 - INSTALL 18"x12" TAPPING SLEEVE AT STA 6+92 (15' LT) AND TAPPING VALVE AT STA 6+87 PER DETAIL "C". NON-PRESSURE CONNECTION. AFTER STEP 1 IS COMPLETED.
 - OPEN EXISTING 18" VALVE 830 & 788 (STEPS 1, 3A, & 3B MUST BE COMPLETED IN EIGHT HOURS).
 - CLOSE (BETWEEN 11:00 PM AND 4:00 AM ONLY!!) THE EXISTING 12" VALVE 892, AND THE EXISTING 12" VALVE C AT STA. 2+25±.
 - COMPLETE THE PROPOSED CONNECTION AT THE INTERSECTION OF HUNTINGTON DRIVE AND BLACKSTONE ROAD PER DETAIL "C" BY INSTALLING 12"x12" TEE INTO EXISTING 12" WATERLINE AND TIE TO 12" WATERLINE CONSTRUCTED IN STEP 7.
 - OPEN THE EXISTING 12" VALVE 892, AND THE EXISTING VALVE C AT STA. 2+25±. CLOSE EXISTING 12" VALVE 885, AND PROPOSED 12" VALVE D AT STA 6+87± (STEPS 9, 10, & 11 MUST BE COMPLETED BETWEEN 11:00 PM AND 4:00 AM!!).
 - CLOSE THE EXISTING 14" VALVE 831 AT THE PUMP STATION.
 - CONSTRUCT THE PROPOSED CONNECTION JUST WEST OF THE INTERSECTION OF HUNTINGTON DRIVE AND BLACKSTONE ROAD PER DETAIL "B", AND THE PROPOSED 24" WATERLINE FROM STA 6+33 (4' LT) TO THE 18" BUTTERFLY VALVE AT STA 2+15. CLOSE PROPOSED 12" VALVE Z.
 - FLUSH, PRESSURE TEST, AND CHLORINATE WITH TAPPED CAP ON 14" BRANCH OF TEE, AS PER C.O.A. STANDARD SPECIFICATIONS, THE 24" WATERLINE FROM THE PROPOSED 18" VALVE B TO THE EXISTING 24" VALVE A. OPEN ALL VALVES.

RECORD DRAWING
DATE: 8-10-95

LEGEND

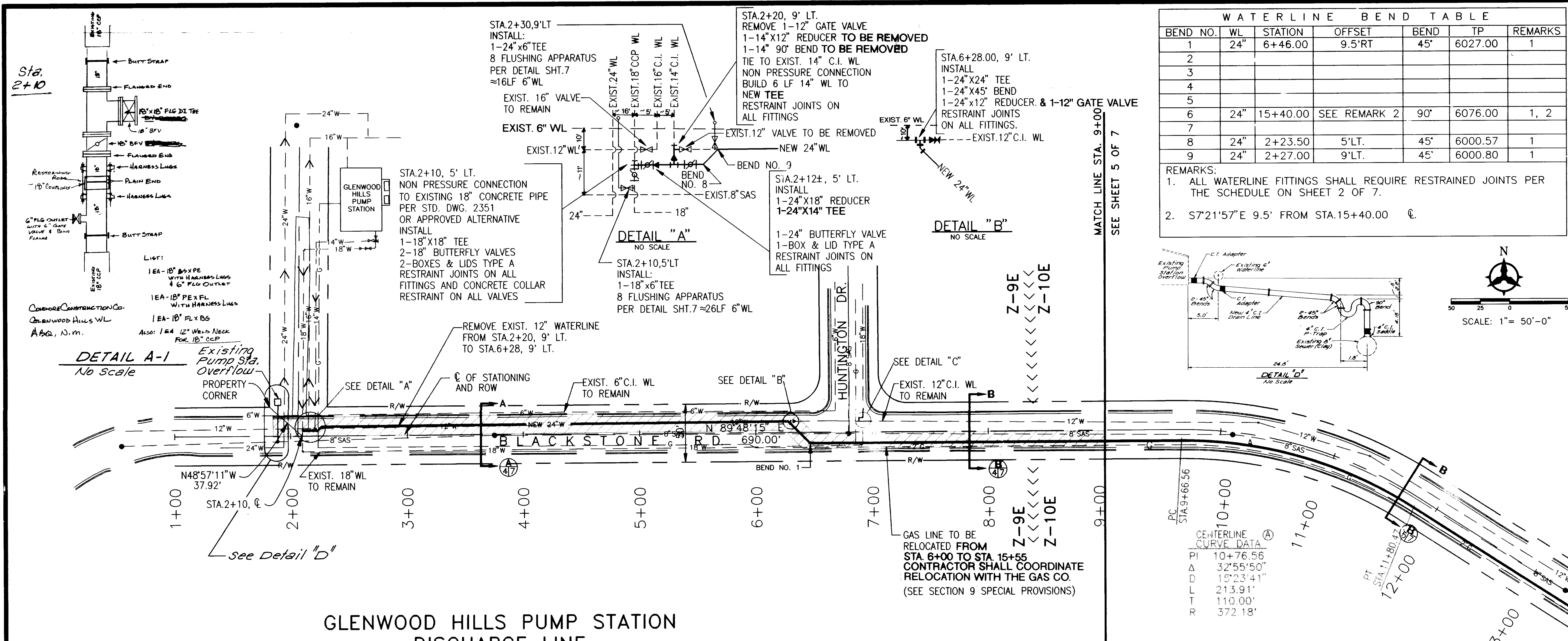
PROPOSED VALVE (24")

EXISTING VALVE (16")

26-6004.92 0396

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
GLENWOOD HILLS PUMP STATION DISCHARGE LINE KEY MAP AND WATER SHUT-OFF PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	N/A RHO	12-15-94	WATER	CSM	12-15-94
TRANSPORTATION	CSM	12-15-94	WASTE WATER		
HYDROLOGY					
PROJECT NO.	5004.92	MAP NO.	F-23	SHEET	3 OF 15

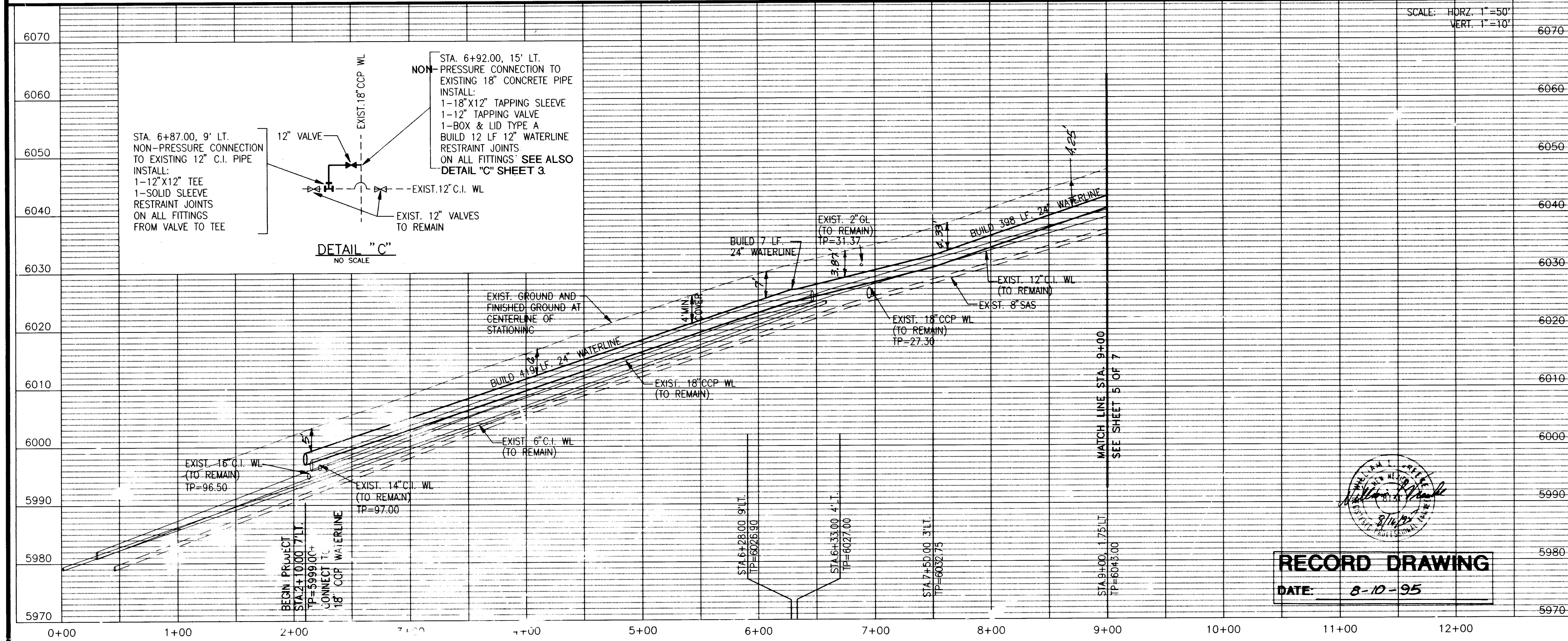
SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	FIELD NOTES	DATE	BY	CONTRACTOR	DATE
				CONCRETE	8/95
				LOCATED APPROXIMATELY 489 FEET WEST AND 35 FEET NORTH OF THE INTERSECTION OF TENNYSON STREET AND SAN ANTONIO DRIVE.	8/95
				PLANE COORDINATES: X=425 465.55 Y=1513 470.01	8/95
				GROUND-TO-GRID FACTOR 0.99961970	8/95
				ELEVATION = 6009.155 FEET	8/95



WATERLINE BEND TABLE						
BEND NO.	WL	STATION	OFFSET	BEND	TP	REMARKS
1	24"	6+46.00	9.5'RT	45'	6027.00	1
2						
3						
4						
5						
6	24"	15+40.00	SEE REMARK 2	90'	6076.00	1, 2
7						
8	24"	2+23.50	5'LT.	45'	6000.57	1
9	24"	2+27.00	9'LT.	45'	6000.80	1

REMARKS:
1. ALL WATERLINE FITTINGS SHALL REQUIRE RESTRAINED JOINTS PER THE SCHEDULE ON SHEET 2 OF 7.
2. S7°21'57"E 9.5' FROM STA.15+40.00 @.

- GENERAL NOTES**
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
 - ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
 - CONTRACTOR SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
 - 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 WITH UPDATE NO. 4.



DETAIL A-1
No Scale

DETAIL A' (Supplement)
No Scale

DETAILS 'B' & 'C' (Supplement)
No Scale

LEGEND

EXISTING WATERLINE	— 12" W —
EXISTING SANITARY SEWER	— 8" SAS —
EXISTING GASLINE	— G —
EXISTING VALVE	⊗
PROPOSED 24" WATERLINE	— 24" W —
NEW GATE VALVE	⊗
NEW BUTTERFLY VALVE	⊗
LIMITS OF PAVEMENT REMOVAL AND REPLACEMENT	▨

20-5-12-1-92-0496

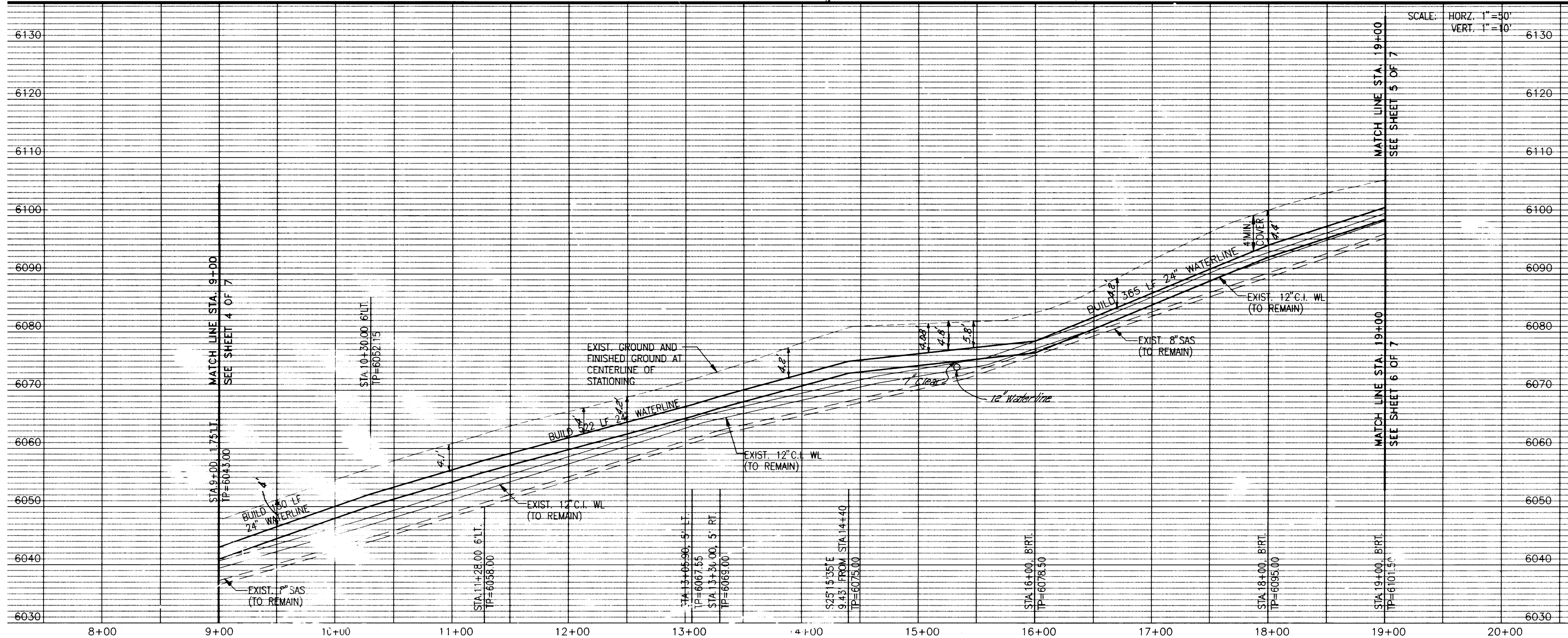
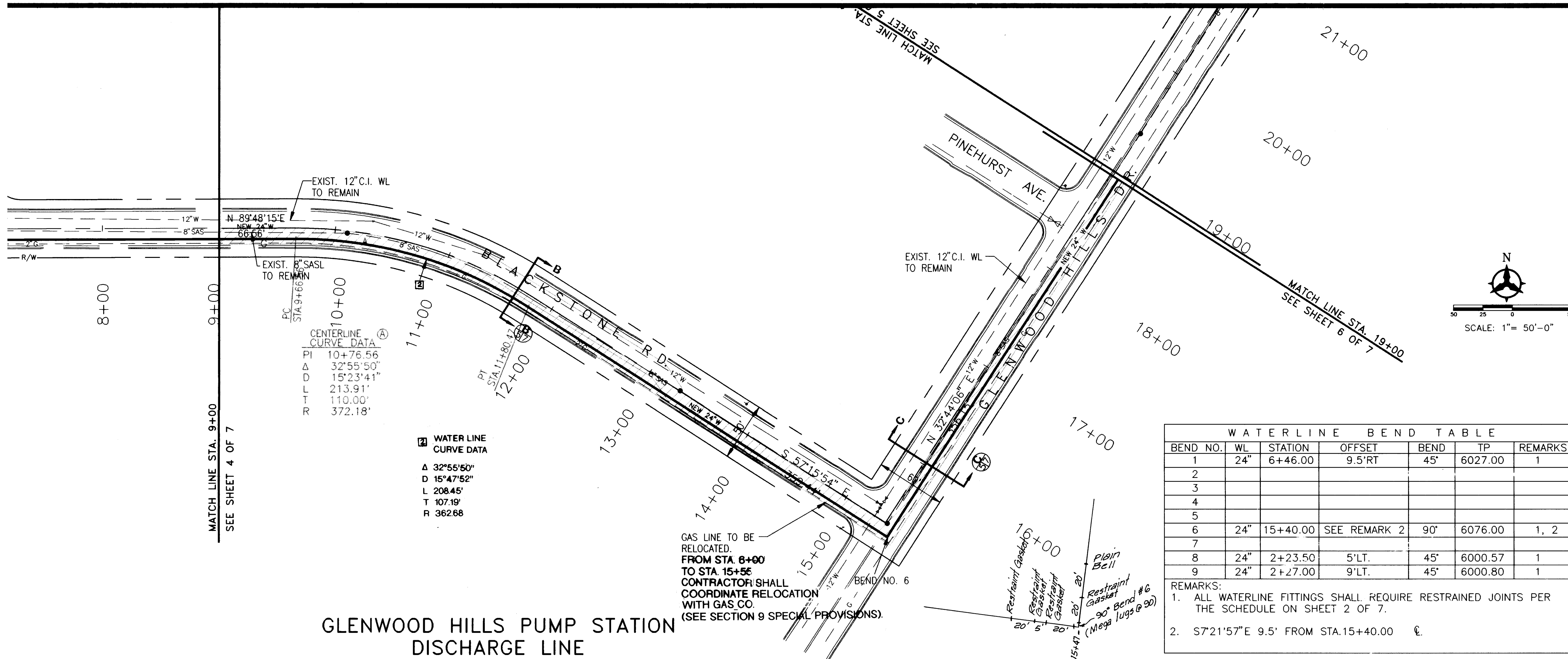
RECORD DRAWING
DATE: 8-10-95

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

**GLENWOOD HILLS PUMP
STATION DISCHARGE LINE
WATERLINE PLAN & PROFILE STA.1+00 TO STA.9+00**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION	DJR BHO	12-15-94	WASTE WATER		
HYDROLOGY	Cam	12-14-94			

PROJECT NO. 5004.92 MAP NO. F-23 SHEET 4 OF 15



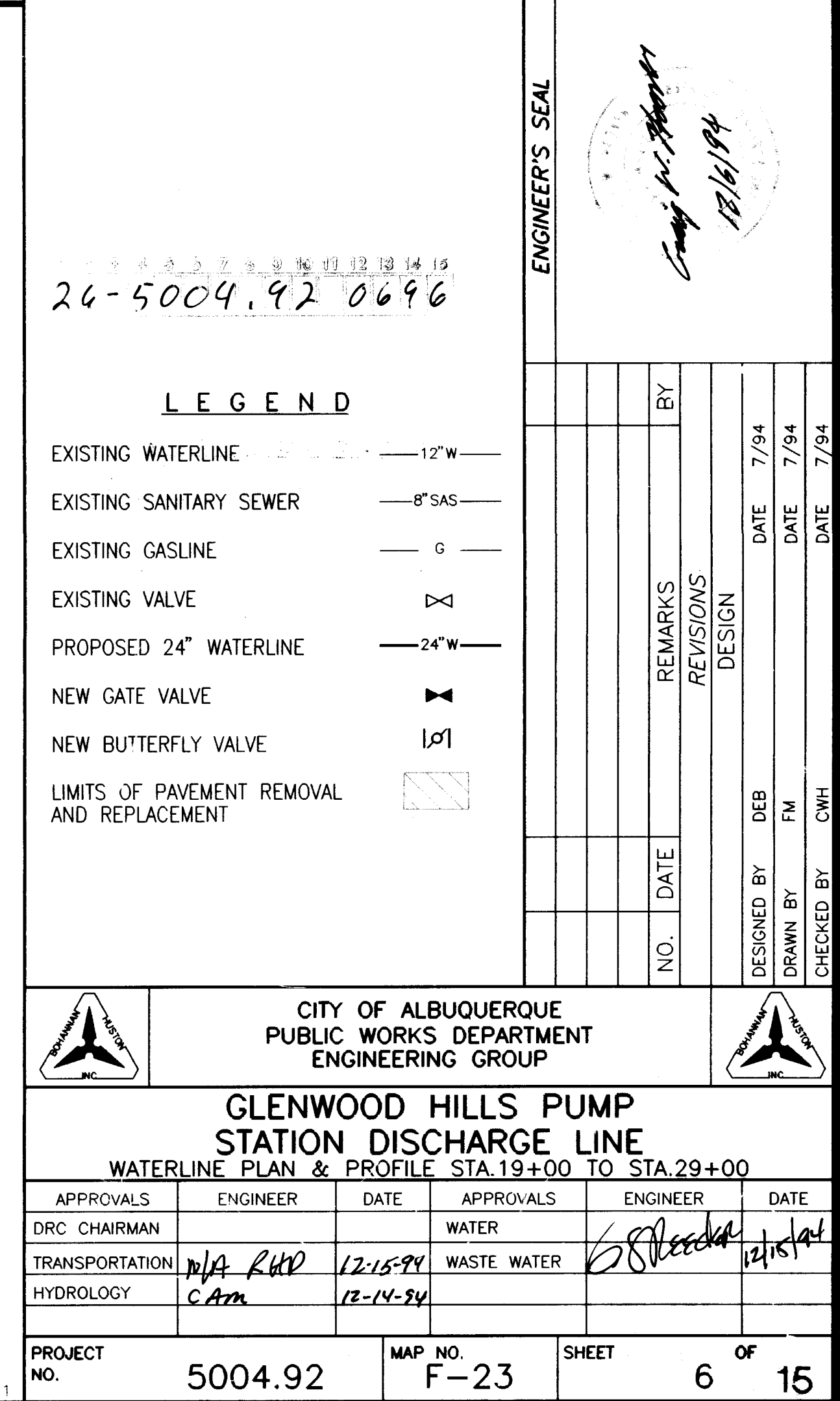
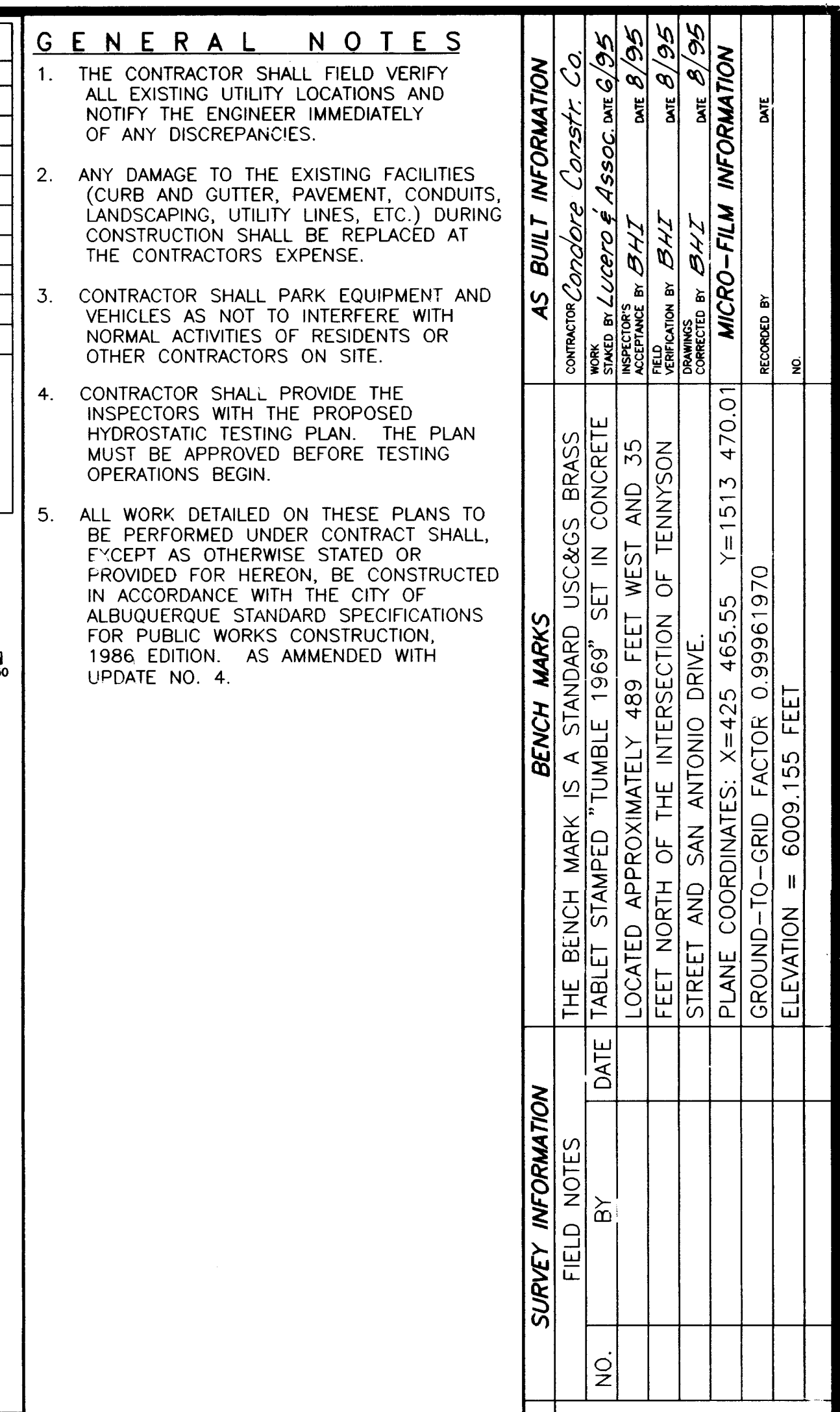
- GENERAL NOTES
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
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 - CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
 - CONTRACTOR SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
 - 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 WITH UPDATE NO. 4.

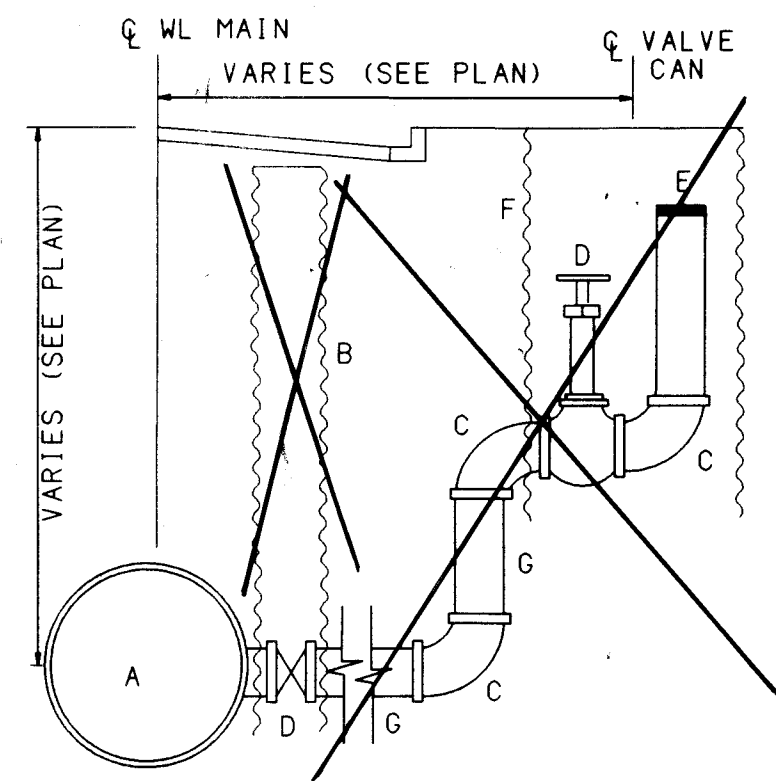
AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	Coronado Const. Co.	THE BENCH MARK IS A STANDARD US&GS BRASS	TABLET STAMPED "TUMBLE 1969" SET IN CONCRETE	DATE	8/10/95		
INSPECTOR	Lucero & Associates	LOCATED APPROXIMATELY 489 FEET WEST AND 35	FET NORTH OF THE INTERSECTION OF TENNYSON	BY			
FIELD	BH/T	STREET AND SAN ANTONIO DRIVE.	PLANE COORDINATES: X=425 465.55 Y=1513 470.01	NO.			
DATE	8/95	GROUND-TO-GRID FACTOR 0.99961970	ELEVATION = 6009.155 FEET	NO.			
MICRO-FILM INFORMATION							
RECORDED BY							
NO.							

RECORD DRAWING	
DATE:	8-10-95
LEGEND	
EXISTING WATERLINE — 12"W —	
EXISTING SANITARY SEWER — 8"SAS —	
EXISTING GASLINE — G —	
EXISTING VALVE — V —	
PROPOSED 24" WATERLINE — 24"W —	
NEW GATE VALVE — G —	
NEW BUTTERFLY VALVE — B —	
LIMITS OF PAVEMENT REMOVAL AND REPLACEMENT — [Symbol] —	
204.92 1596	

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
GLENWOOD HILLS PUMP STATION DISCHARGE LINE WATERLINE PLAN & PROFILE STA.9+00 TO STA.19+00	
APPROVALS	ENGINEER
DRC CHAIRMAN	DATE
TRANSPORTATION	DATE
HYDROLOGY	DATE
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE

PROJECT NO.		MAP NO.		SHEET	
5004.92		F-23		5 OF 15	



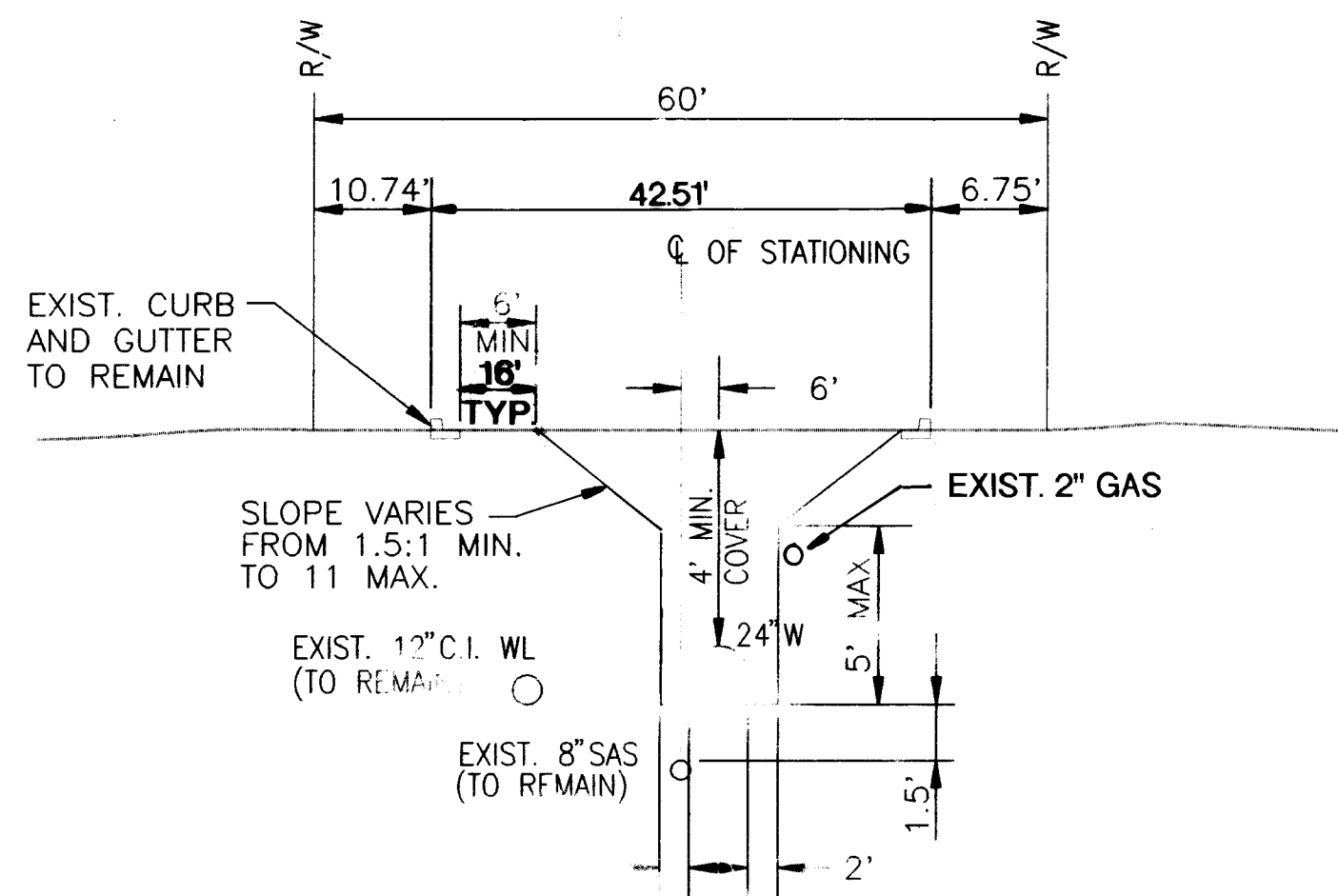


FLUSHING TEE AND APPARATUS DETAIL
N.T.S.

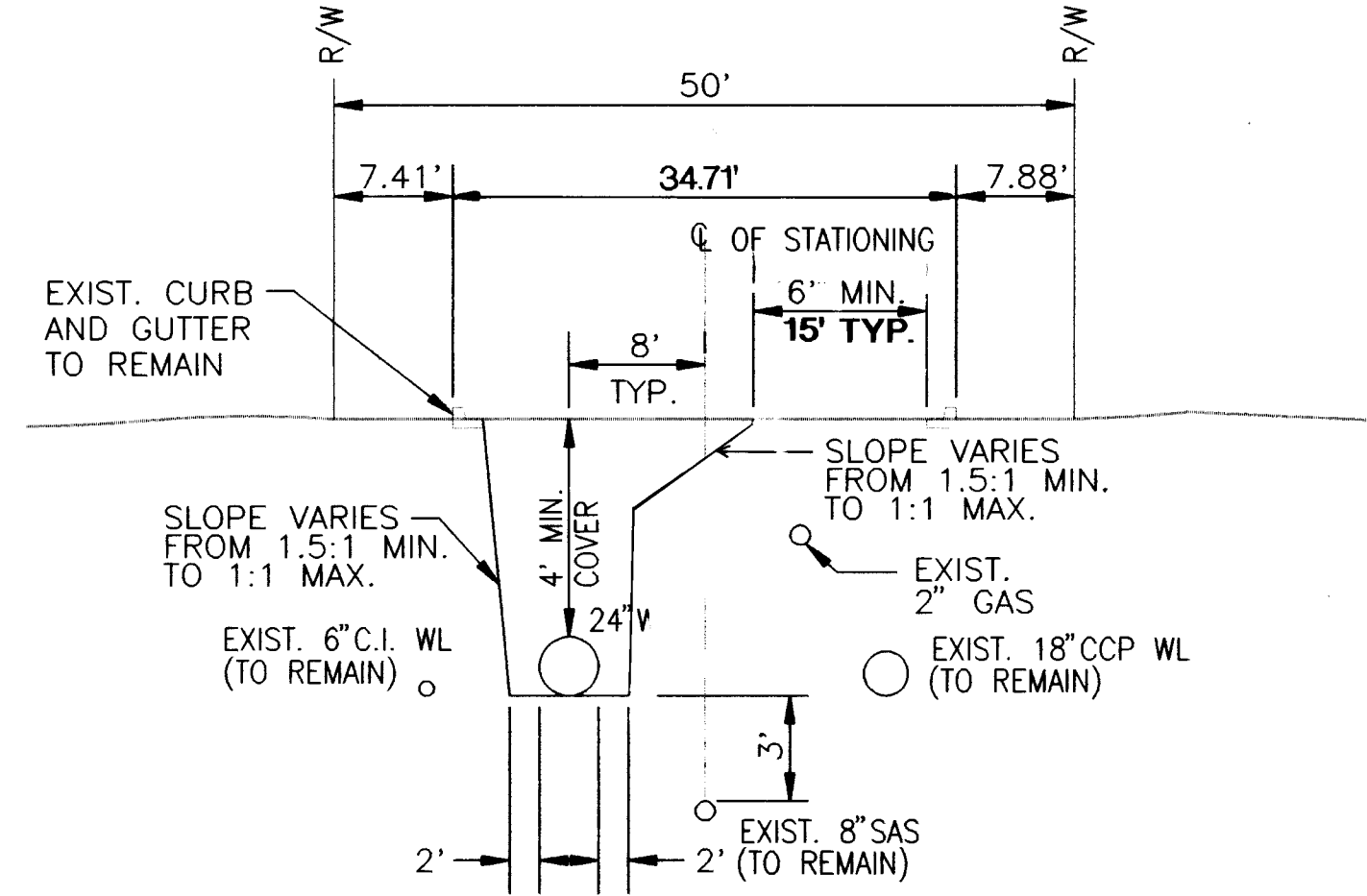
- A. FLUSHING TEE, SEE PLANS FOR SIZE.
~~B. 18" VALVE CAN PER NOTE F EXCEPT TYPE "A" BOX AND LID BURIED 6" BELOW PAVEMENT OR FINISHED GRADE. DELETED~~
~~C. 90° ELBOW DELETED~~
~~D. GATE VALVE 6" 4" BLIND FLANGE (FLANGE - FLANGE VALVE) DELETED~~
~~E. THREADED NIPPLE DELETED~~
~~F. 18" 1.0 1.4 GA. C.M.P. DIPPED IN 66AL TAR ENAMEL OR COATED WITH POLYMERIC COATING WHEELING PLASTICOTE - MANUF. BY WHEELING CORRUGATING CO. OR EQUIVALENT. DELETED~~
~~G. 3 MILS THICK MIN. MEETING REQUIREMENTS SET BY A.A.S.H.T.O. M246 W/ TYPE "A" BOX IF IN PAVEMENT OR SIDE WALK, OTHERWISE TYPE "B" BOX.~~
~~H. FLUSHING PIPE (SEE PLANS FOR SIZE) VARIABLE LENGTH. DELETED~~

LOCATIONS:
 2+30, 9' LT. BLACKSTONE 24"x6"

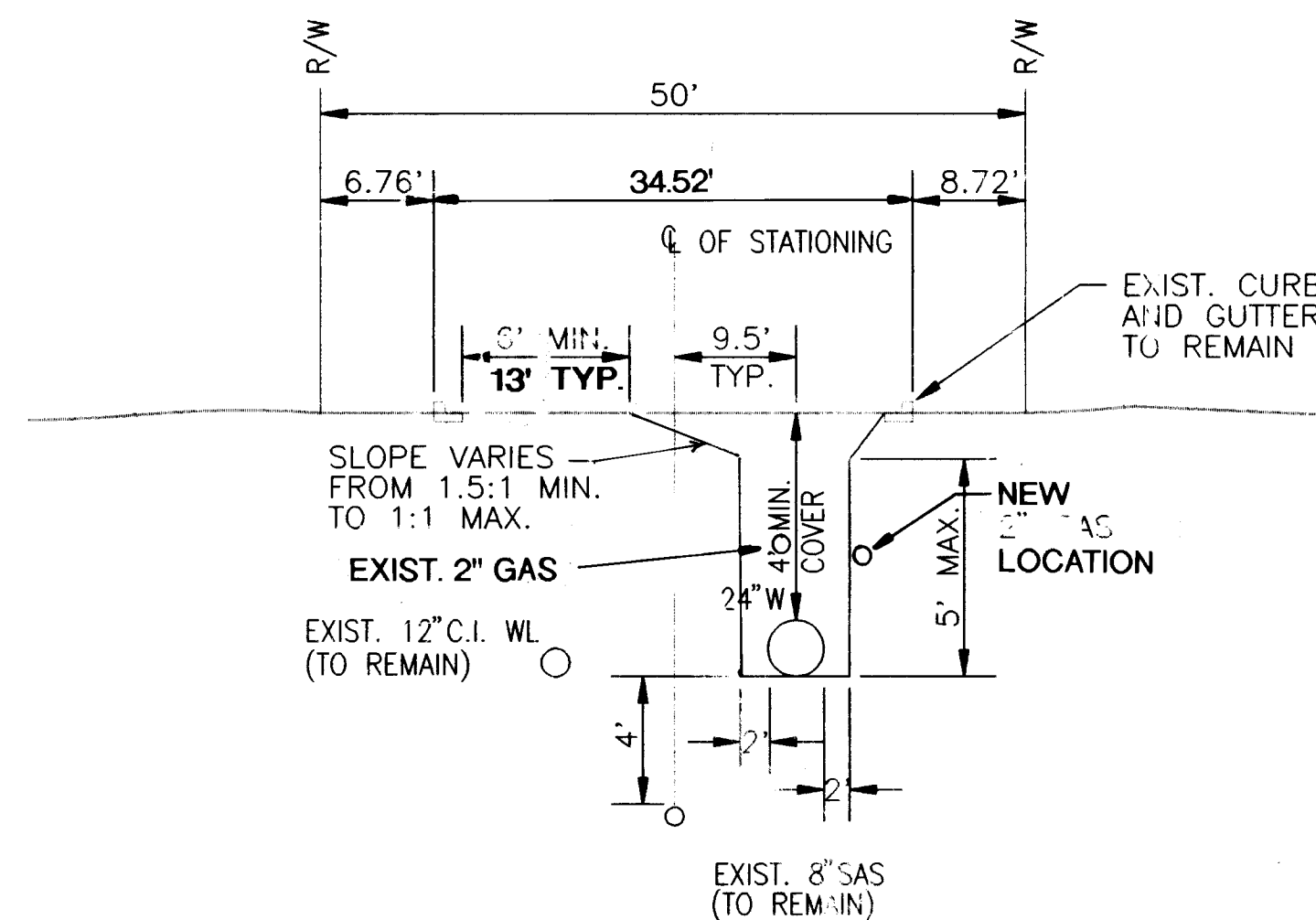
NOTE:
 FLUSHING APPARATUS AT STA. 2+10, 5' LT. (18"x6") NOT NEEDED, DELETE FROM CONTRACT PER COA WATER UTILITY DIVISION.



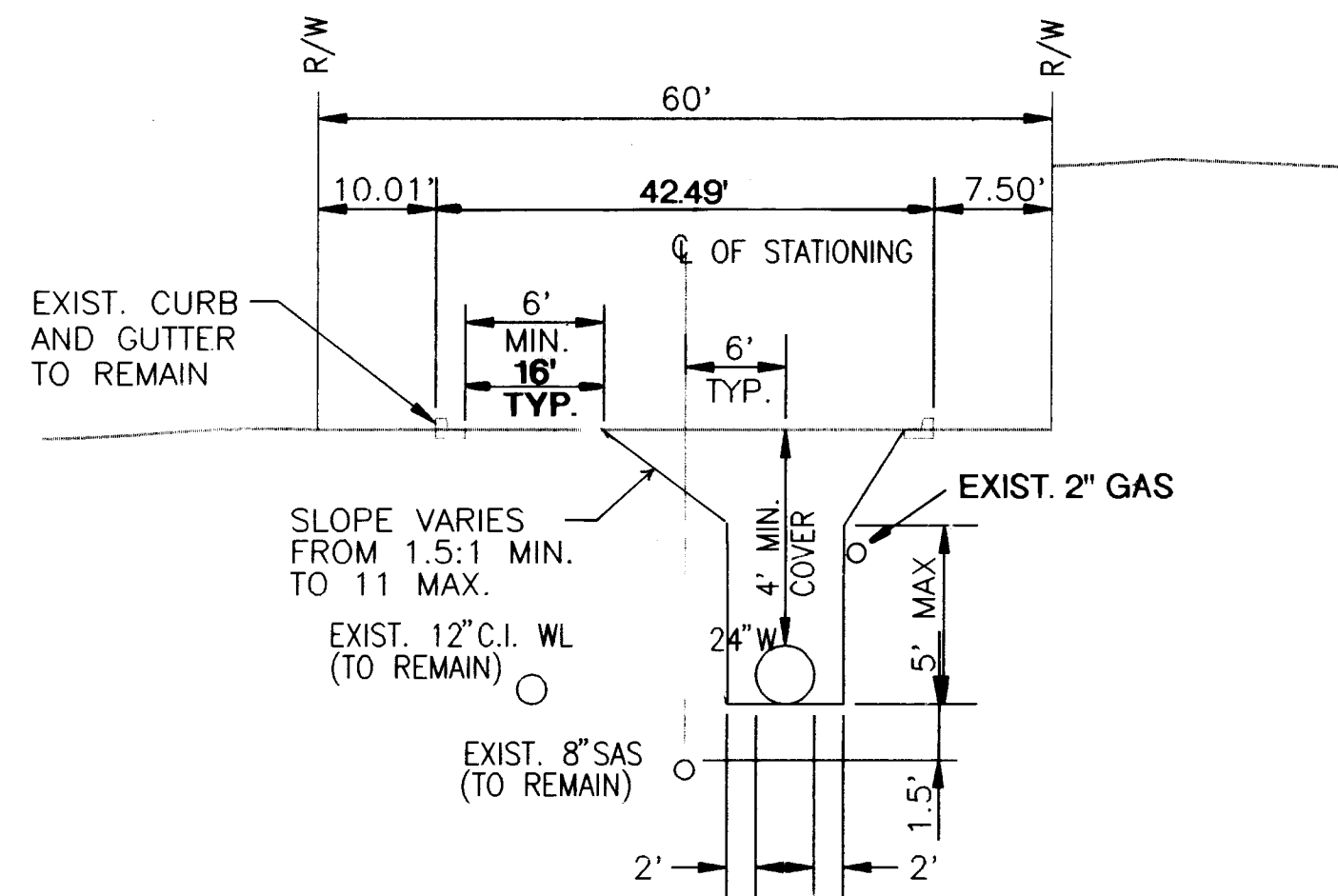
SECTION C-C
NO SCALE
SEE SHEET 5



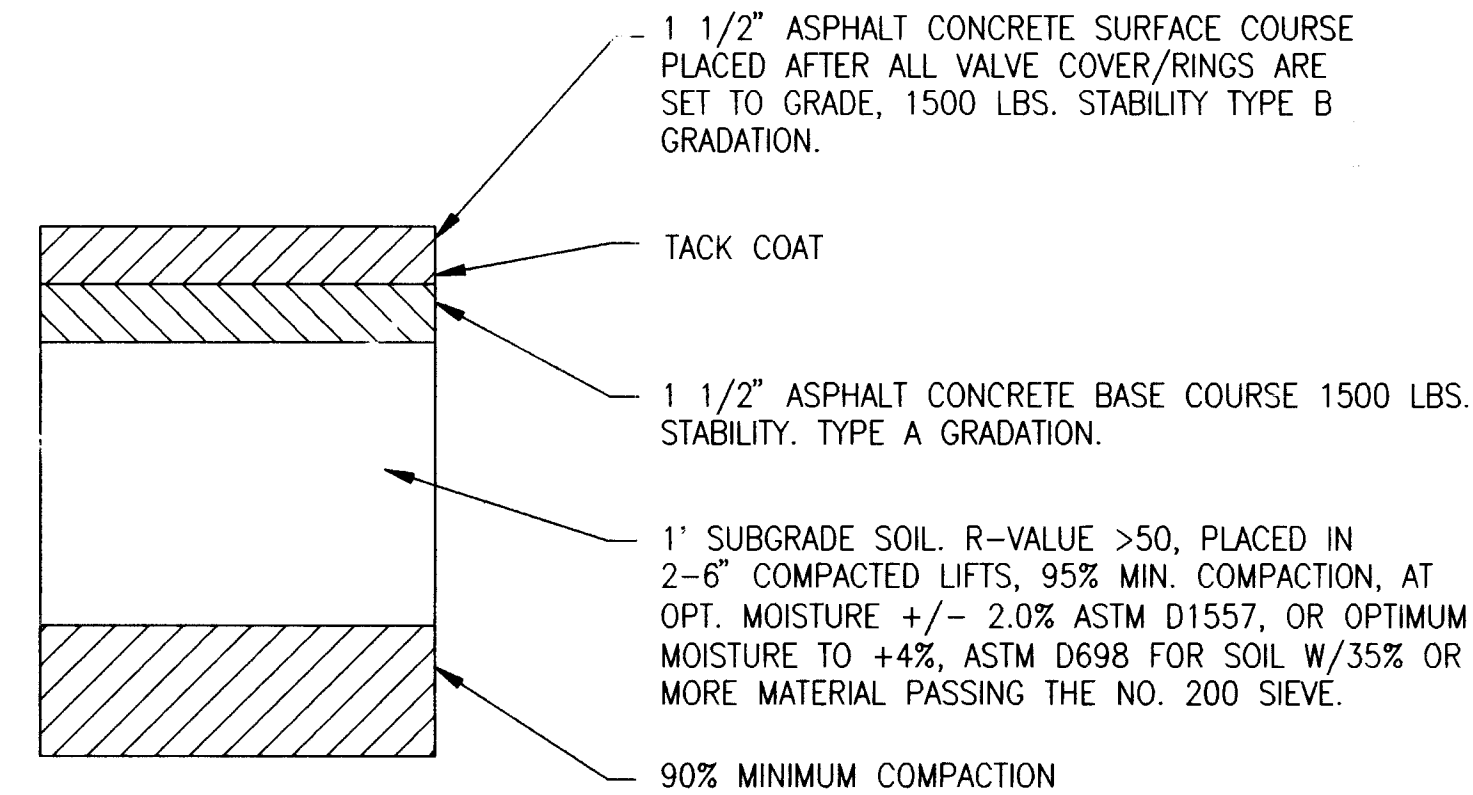
SECTION A-A
NO SCALE
SEE SHEET 4



SECTION B-B
NO SCALE
SEE SHEET 4 & 5

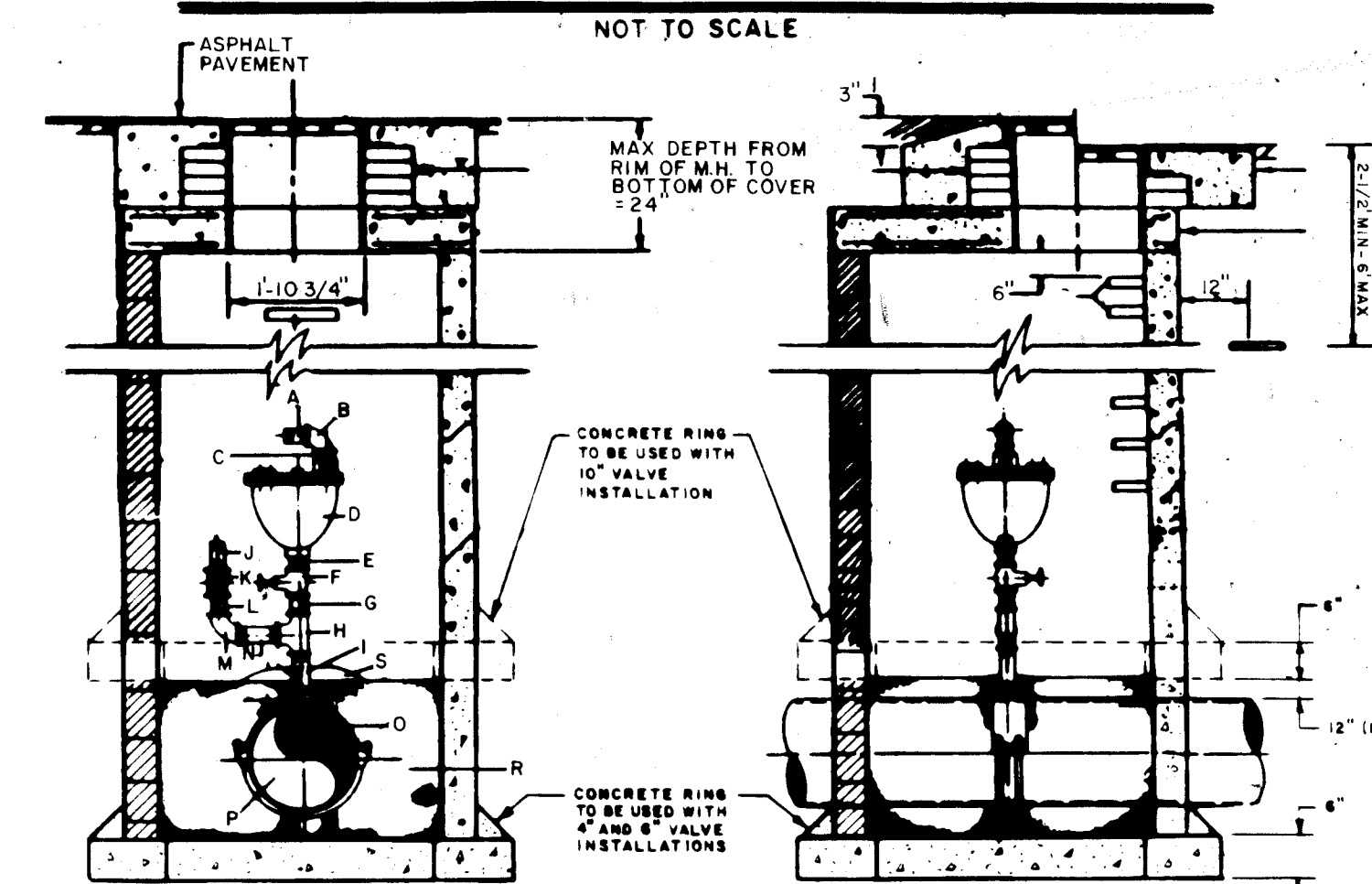


SECTION D-D
NO SCALE
SEE SHEET 6



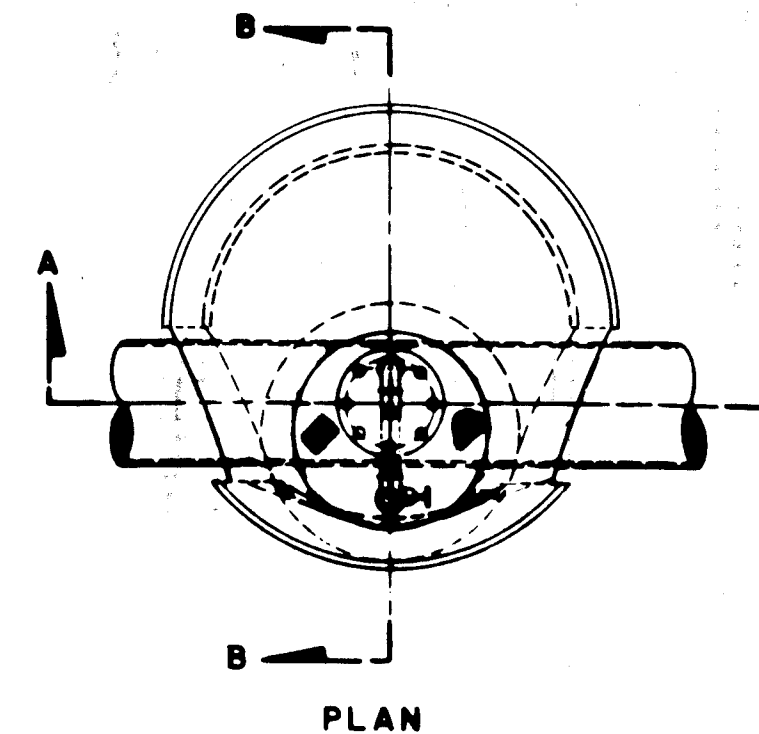
TYPICAL PAVEMENT SECTION
NO SCALE

(6" DIA.) AIR AND VACUUM VALVE DETAIL



SIDE VIEW
SECTION B-B

FRONT VIEW
SECTION A-A



PLAN

CONSTRUCTION NOTES:

- ALL PIPING AND FITTINGS SHALL BE SCH 40, THREADED GALV. IRON
- USE STANDARD C.I. MIN. RING AND COVER SEE COA STD. 2ND COVER MARKED "WATER"
- FOR FUTURE ADJUSTMENT OF MIN. FRAME TO PAVEMENT GRADE AND ADJUSTMENT RINGS OR GRADE AS BRICK SEE COA STD. 2ND STD. 2ND AND 2ND

MATERIALS LIST *

- 1/2" THREADED NIPPLE
 - 90° ELBOW
 - 6" THREADED NIPPLE
 - COMBINATION AIR VALVE
 - 2" THREADED NIPPLE
 - GATE VALVE
 - 2" THREADED NIPPLE
 - 2" TEE
 - 8" THREADED NIPPLE
 - 2" THREADED NIPPLE FOR VENT AND HOSE CONNECTION
 - GATE VALVE
 - 2" THREADED NIPPLE
 - 90° ELBOW
 - 2" THREADED NIPPLE
 - TAPPING SADDLE FOR PVC OR B.I. PIPE THREADED OUTLET FOR CONC. CYL. PIPE
 - WATER MAIN
 - CONC. COLLAR USE IN ALL AREAS
 - 1 CU. YD. 1" CLEAN GRAVEL
 - CUT CONCRETE RING AND MANHOLE CURE TO PROVIDE A MINIMAL 4" CLEARANCE AROUND WATER MAIN
- * SIZES ARE DETERMINED BY SPECIFIC AIR AND VACUUM VALVE TO BE INSTALLED.

NOTE

- ADJUSTMENT OF VALVE COVER/RINGS AND MANHOLE COVER/RINGS IS INCIDENTAL TO THE COST OF PAVEMENT REMOVAL AND REPLACEMENT.
- LEAVE 6" WIDTH MINIMUM FROM CURB TO TRENCH EDGE, OR REMOVE THE ENTIRE STREET.

NOTES:

- ALL JOINTS SHALL BE EITHER THREADED OR RESTRAINED MECHANICAL JOINTS.
- LOCATE VALVE CAN AS SHOWN ON PLANS FOR LOCATIONS ADJACENT TO ROADWAYS THE VALVE CAN SHALL BE LOCATED BEHIND THE CURB.

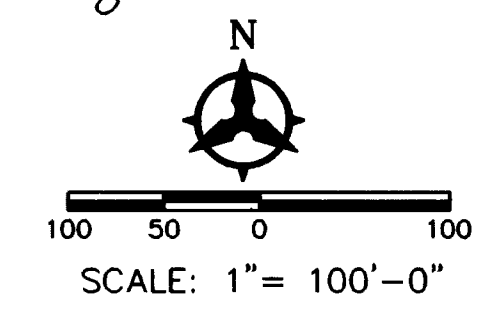
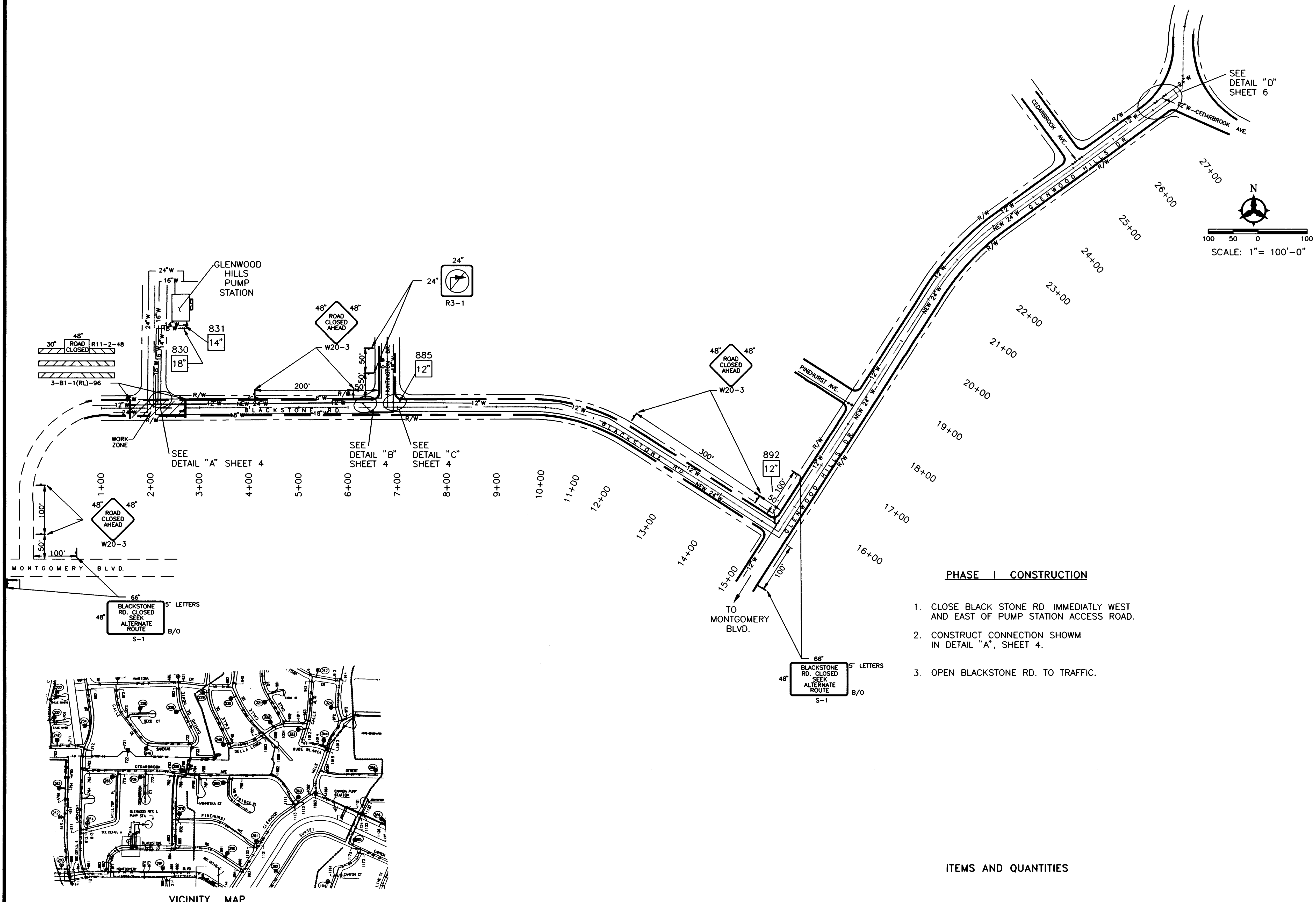
26-5004.92 10796



RECORD DRAWING

DATE: 8-10-95

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			GLENWOOD HILLS PUMP STATION DISCHARGE LINE MISCELLANEOUS DETAILS		
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION	NIA RHD	12-15-94	WASTE WATER		
HYDROLOGY	cam	12-16-94			
PROJECT NO.	5004.92	MAP NO. F-23	SHEET 7 OF 15		

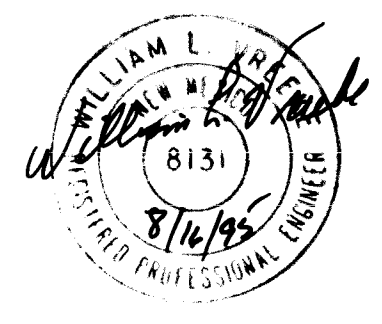


PHASE I CONSTRUCTION

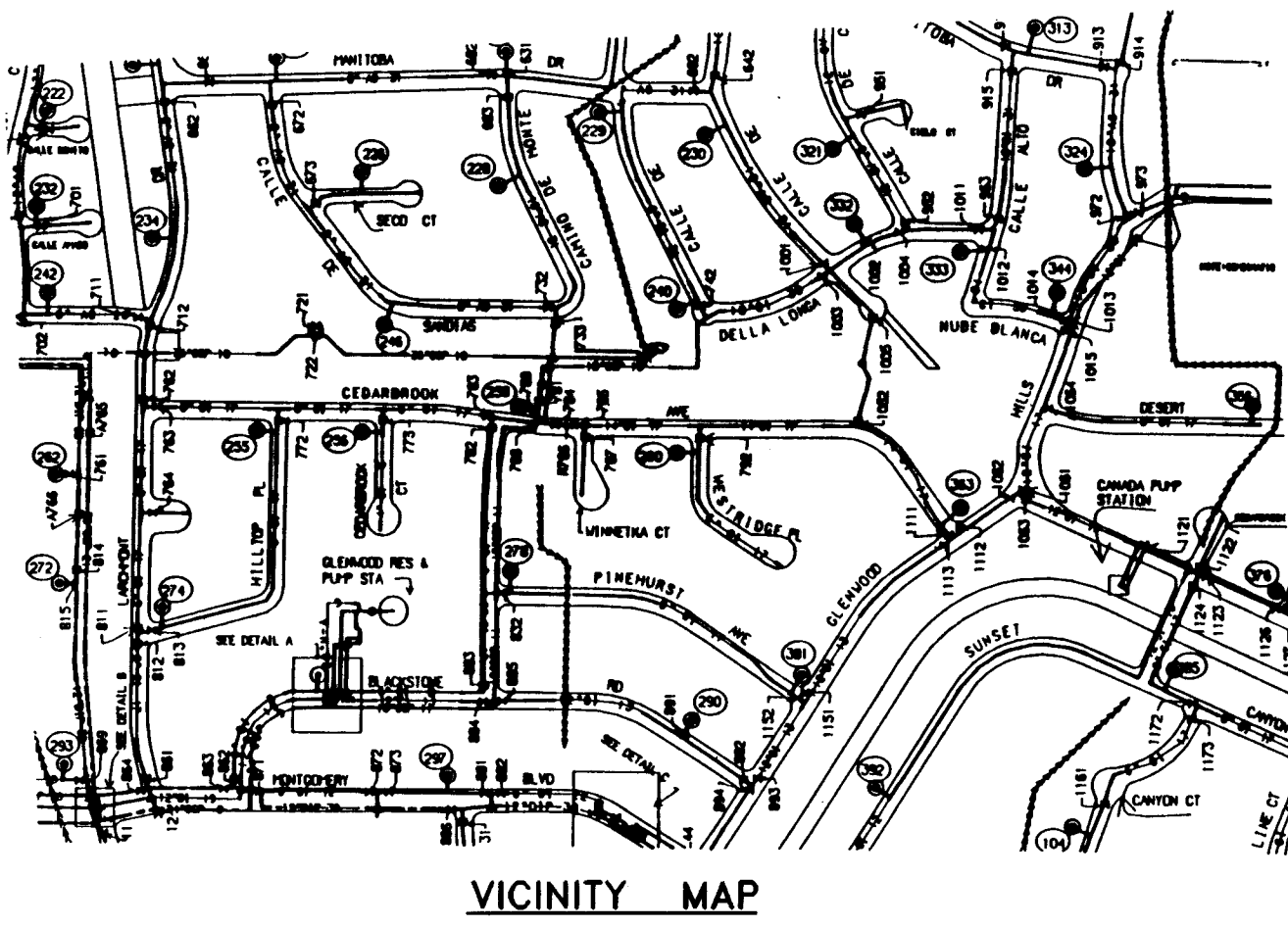
1. CLOSE BLACK STONE RD. IMMEDIATELY WEST AND EAST OF PUMP STATION ACCESS ROAD.
2. CONSTRUCT CONNECTION SHOWN IN DETAIL "A", SHEET 4.
3. OPEN BLACKSTONE RD. TO TRAFFIC.

ITEMS AND QUANTITIES

SIGNING	252	SQ. FT.
PORTABLE SIGN SUPPORTS	12	EACH
BARRICADES	6	EACH



RECORD DRAWING
DATE: 8-10-95



LEGEND

- XX CITY VALVE
- SIGN
- TT BARRICADE
- ▨ WORK ZONE

SURVEY INFORMATION			BENCH MARKS			AS-BUILT INFORMATION		
NO.	DATE	BY	TABLET	STAMPED	THE BENCH MARK IS A STANDARD USC&GS BRASS	CONTRACTOR	CONTRACT NO.	CONTRACT DATE
					LOCATED APPROXIMATELY 489 FEET WEST AND 35	WORK BY	CONTRACT NO.	CONTRACT DATE
					FEET NORTH OF THE INTERSECTION OF TENNYSON	ACCEPTANCE BY	CONTRACT NO.	CONTRACT DATE
					STREET AND SAN ANTONIO DRIVE.	VERIFICATION BY	CONTRACT NO.	CONTRACT DATE
					PLANE COORDINATES: X=425 465.55 Y=1513 470.01	COMMENTS	CONTRACT NO.	CONTRACT DATE
					GROUND-TO-GRID FACTOR 0.99961970	RECORDED BY	CONTRACT NO.	CONTRACT DATE
					ELEVATION = 6009.155 FEET	NO.	CONTRACT NO.	CONTRACT DATE

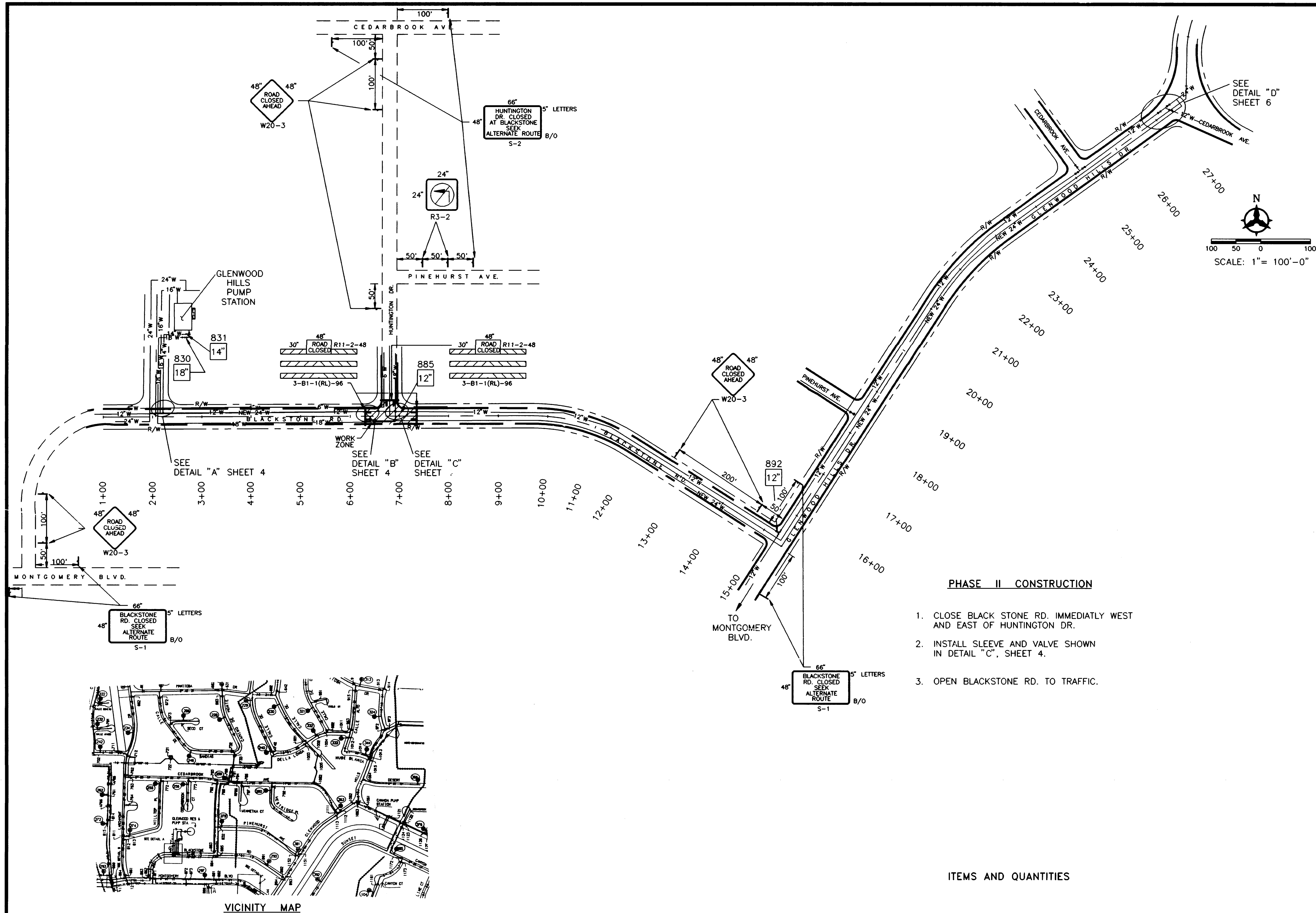
APPROVALS			APPROVALS		
ENGINEER	DATE		ENGINEER	DATE	
DRG CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

GLENWOOD HILLS PUMP
STATION DISCHARGE LINE
TRAFFIC CONTROL PLAN PHASE I

PROJECT NO.	5004.92	MAP NO.	F-23	SHEET	8	OF	15
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PHASE II CONSTRUCTION

1. CLOSE BLACK STONE RD. IMMEDIATELY WEST AND EAST OF HUNTINGTON DR.
2. INSTALL SLEEVE AND VALVE SHOWN IN DETAIL "C", SHEET 4.
3. OPEN BLACKSTONE RD. TO TRAFFIC.

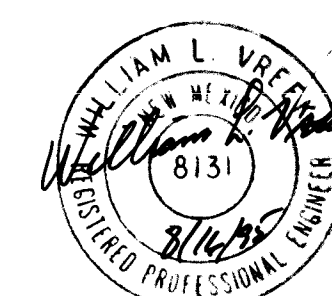
ITEMS AND QUANTITIES

SIGNING	(244)	128.4	SQ. FT.
PORTABLE SIGN SUPPORTS	(12)	4	EACH
BARRICADES	(6)	3	EACH

() DENOTES ITEMS AND/OR QUANTITIES THAT ARE AVAILABLE FROM PREVIOUS PHASES.

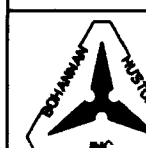
RECORD DRAWING

DATE: 8-10-95



LEGEND

XX	CITY VALVE
—	SIGN
TT	BARRICADE
▨	WORK ZONE



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

GLENWOOD HILLS PUMP
STATION DISCHARGE LINE
TRAFFIC CONTROL PLAN PHASE II

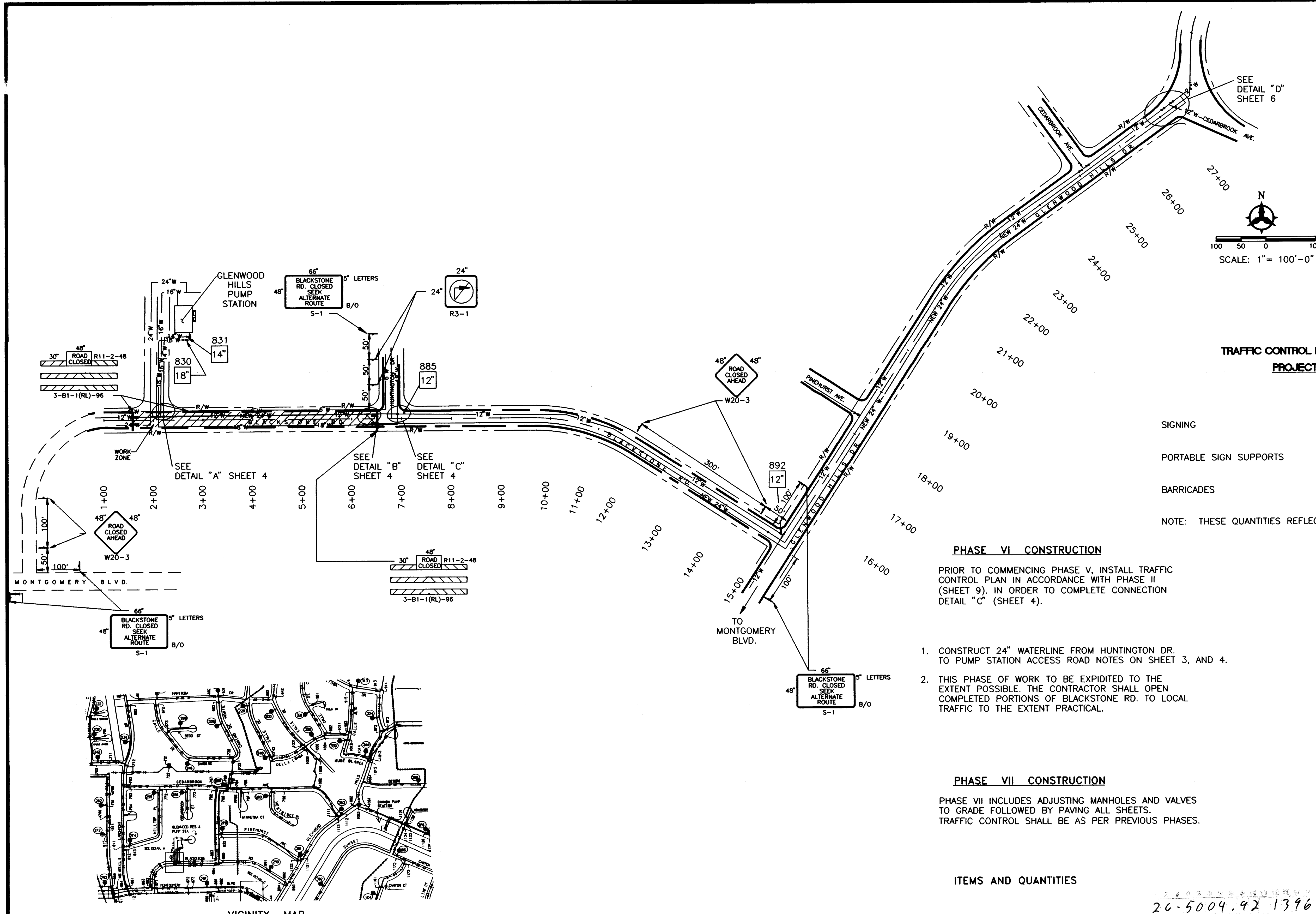
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					
PROJECT NO.	5004.92	MAP NO.	F-23	SHEET	9 OF 15

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	THE BENCH MARK IS A STANDARD USC&GS BRASS TABLET STAMPED "TUMBLE 1969" SET IN CONCRETE LOCATED APPROXIMATELY 489 FEET WEST AND 35 FEET NORTH OF THE INTERSECTION OF TENNYSON STREET AND SAN ANTONIO DRIVE.	CONTRACTOR	CONCRETE CONSULT CO.
				WORK	WORK
				ACCEPTANCE BY	ACCEPTANCE BY
				DATE	DATE
				BY	BY
				DATE	DATE
				RECORDED BY	RECORDED BY
				DATE	DATE
				NO.	NO.

26-5004.92 0996

1-10-95





TRAFFIC CONTROL ITEMS AND QUANTITIES
PROJECT TOTAL

SIGNING	859.6	SQ. FT.
PORTABLE SIGN SUPPORTS	52	EACH
BARRICADES	11	EACH

NOTE: THESE QUANTITIES REFLECT TOTALS FOR PAYMENT.

PHASE VI CONSTRUCTION

PRIOR TO COMMENCING PHASE V, INSTALL TRAFFIC CONTROL PLAN IN ACCORDANCE WITH PHASE II (SHEET 9). IN ORDER TO COMPLETE CONNECTION DETAIL "C" (SHEET 4).

1. CONSTRUCT 24" WATERLINE FROM HUNTINGTON DR. TO PUMP STATION ACCESS ROAD NOTES ON SHEET 3, AND 4.
2. THIS PHASE OF WORK TO BE EXPEDITED TO THE EXTENT POSSIBLE. THE CONTRACTOR SHALL OPEN COMPLETED PORTIONS OF BLACKSTONE RD. TO LOCAL TRAFFIC TO THE EXTENT PRACTICAL.

PHASE VII CONSTRUCTION

PHASE VII INCLUDES ADJUSTING MANHOLES AND VALVES TO GRADE FOLLOWED BY PAVING ALL SHEETS. TRAFFIC CONTROL SHALL BE AS PER PREVIOUS PHASES.

ITEMS AND QUANTITIES

SIGNING	(402.4)	SQ. FT.
PORTABLE SIGN SUPPORTS	(17)	EACH
BARRICADES	(9)	EACH

() DENOTES ITEMS AND/OR BARRICADES AVAILABLE FROM PREVIOUS PHASES.

RECORD DRAWING
DATE: 8-10-95

LEGEND

- XX CITY VALVE
- SIGN
- TT BARRICADE
- WORK ZONE

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
GLENWOOD HILLS PUMP STATION DISCHARGE LINE TRAFFIC CONTROL PLAN PHASES VI AND VII					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY			CC		
PROJECT NO.	5004.92	MAP NO.	F-23	SHEET	13 OF 15

AS BUILT INFORMATION	CONTRACTOR: <i>Concordia Const. Co.</i>
DATE: 8/95	INSPECTOR: <i>BHI</i>
DATE: 8/95	VERIFICATION: <i>BHI</i>
DATE: 8/95	COMMITTEE: <i>BHI</i>
DATE: 8/95	MICRO-FILM INFORMATION
DATE: 8/95	RECORDED BY: <i>NO</i>

SURVEY INFORMATION	FIELD NOTES
DATE: 8/95	BY: <i>NO</i>
NO.	

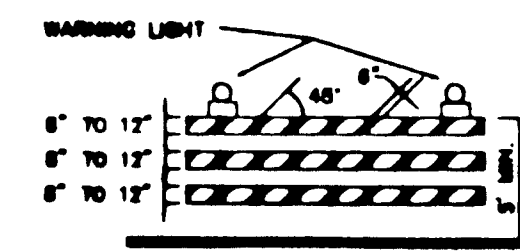
ENGINEER'S SEAL
William L. Vreeland
Professional Engineer
No. 1-10-95

REMARKS	BY
DESIGN	
DESIGNED BY	DATE: 1/95
DRAWN BY	DATE: 1/95
CHECKED BY	DATE: 1/95

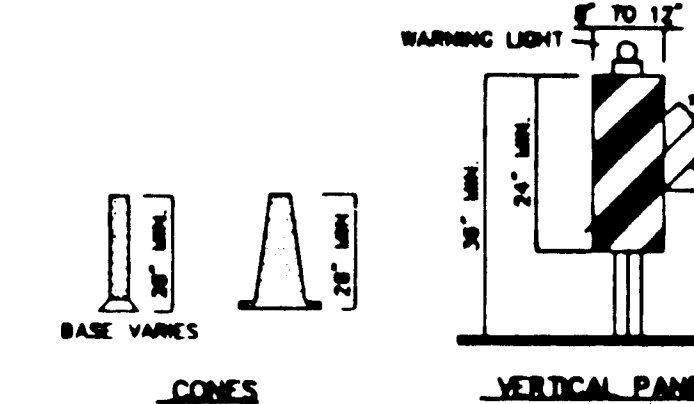
CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- 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 ALLEGES. 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 ALLEGES. 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.
- CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 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 OBSTRUCTION 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.
- 24 HOURS PRIOR TO OCCUPANCY 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.

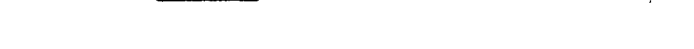
- EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
 - 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.



TYPE II BARRICADE



TYPE III BARRICADE



HIGH LEVEL WARNING DEVICE



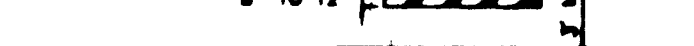
CONES



VERTICAL PANEL



BARRICADE



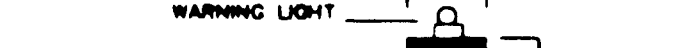
TYPE I BARRICADE



TYPE II BARRICADE



TYPE III BARRICADE



TYPE IV BARRICADE



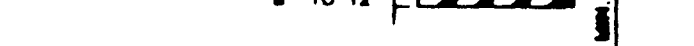
TYPE V BARRICADE



TYPE VI BARRICADE



TYPE VII BARRICADE



TYPE VIII BARRICADE



TYPE IX BARRICADE



TYPE X BARRICADE



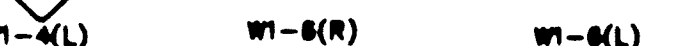
TYPE XI BARRICADE



TYPE XII BARRICADE



TYPE XIII BARRICADE



TYPE XIV BARRICADE



TYPE XV BARRICADE



TYPE XVI BARRICADE



TYPE XVII BARRICADE



TYPE XVIII BARRICADE



TYPE XIX BARRICADE



TYPE XX BARRICADE



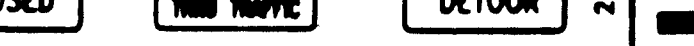
TYPE XXI BARRICADE



TYPE XXII BARRICADE



TYPE XXIII BARRICADE



TYPE XXIV BARRICADE



TYPE XXV BARRICADE



TYPE XXVI BARRICADE



TYPE XXVII BARRICADE



TYPE XXVIII BARRICADE

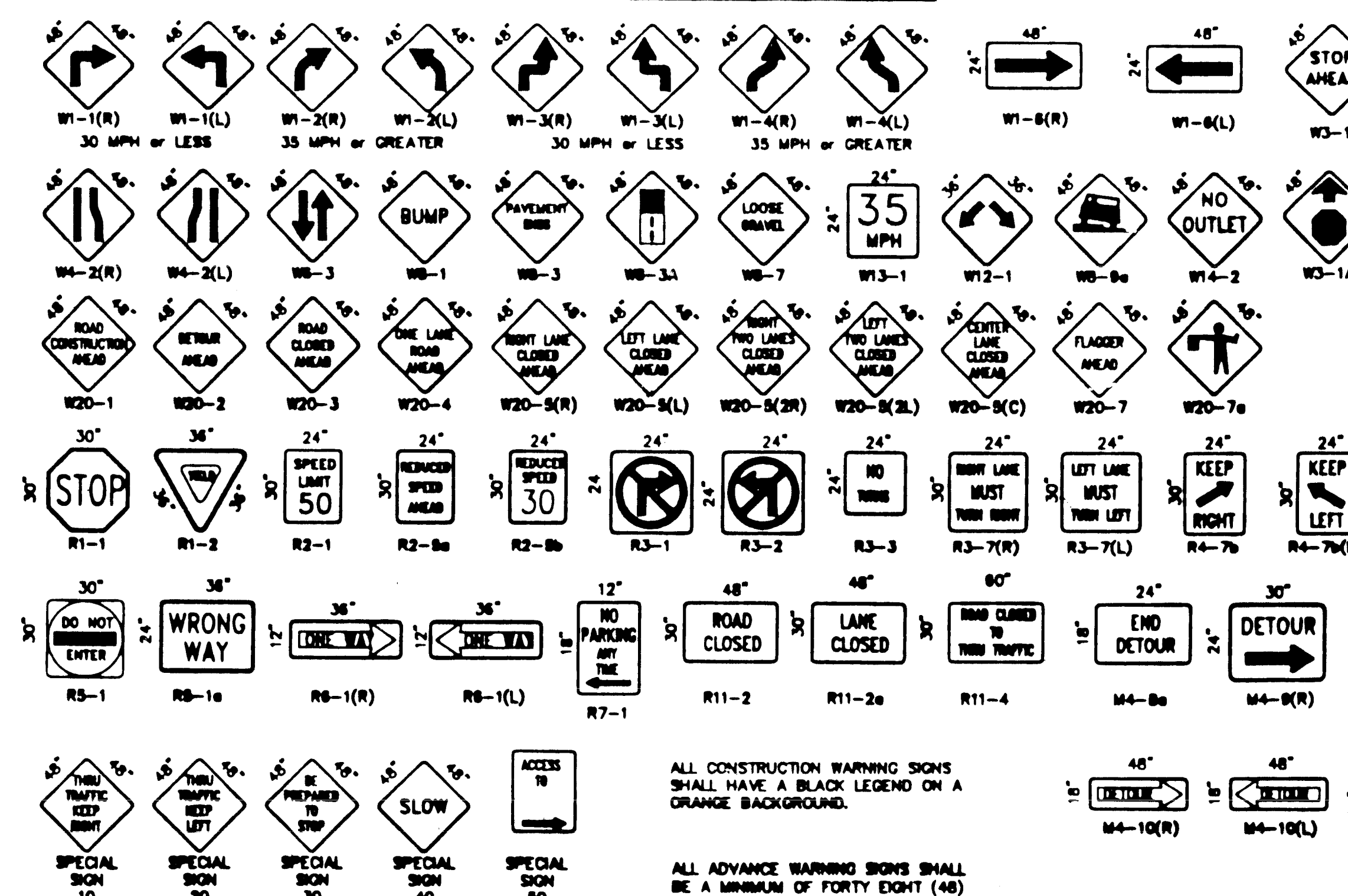


TYPE XXIX BARRICADE



TYPE XXX BARRICADE

SIGN FACE DETAILS



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.

LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARRIER
- 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
- FLASHER 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 (FEET)		MINIMUM NUMBER OF DEVICES PER TAPER	MINIMUM SPACING IN FEET
	10' LANE	12' LANE		
20	70	70	5	20
25	100	110	6	25
30	130	140	7	30
35	160	170	8	35
40	200	210	9	40
45	240	250	10	45
50	280	290	11	50
55	320	330	12	55

RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES

SPEED	MINIMUM DISTANCE IN FEET	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
35-40	10 X SPEED LIMIT	10 X SPEED LIMIT
45-50	10 X SPEED LIMIT	10 X SPEED LIMIT
55-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	1 MINIMUM
SHIFTER TAPER	1 MINIMUM
SHOULDER TAPER	1 MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET BARRIAD
DOWNSIDE TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	L =
40 MPH OR LESS	$L = \frac{W^2}{S}$
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

RECORD DRAWING

DATE: 8-10-95

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
GLENWOOD HILLS PUMP STATION DISCHARGE LINE			
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
APPROVALS	ENGINEER	DATE	APPROVALS
DRG CHAIRMAN			DATE
TRANSPORTATION			DATE
HYDROLOGY			DATE
PROJECT NO.	5004.92	MAP NO.	SHEET OF 14 15

