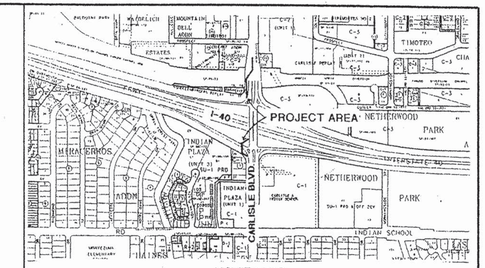
CONSTRUCTION PLANS
FOR
CARLISLE AND I-40
WATER LINE PROJECT
ALBUQUERQUE, NEW MEXICO

SCANNED BY
MESA REPRO

INDEX

SHEET NUMBER	DESCRIPTION
1	COVER SHEET
2	WATER SHUT OFF PLAN
3	PLAN AND PROFILE SHEET
4a,4b,4c,4d	PLAN AND PROFILE SHEET
5	VALVE PIT DETAILS
6	VALVE PIT DETAILS



VICINITY MAP

NOTICE TO CONTRACTORS

1. 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
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. 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.
4. 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.
5. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED W/ PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
6. 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 PERMANENT SURVEY MONUMENT LOCATED WITHIN 50' OF THE PROJECT LIMITS NOT SHOWN ON THE PLANS THAT IS DESTROYED DURING CONSTRUCTION WILL BE REPLACED AT DESIGNER'S EXPENSE.
7. ANY WORK WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
8. ALL UTILITY WORK SHALL BE DONE BY A CITY OF ALBUQUERQUE APPROVED CONTRACTOR.
9. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY..

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- [x] 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.

Approval of record drawings See SHT. 4C

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
1	2, 3	Billy J. Goodley	6-26-98	[signature]	4/26/98		

ENGINEER'S STAMP & SIGNATURE

DANIEL J. GROCHOWSKI NEW MEXICO 8766 REGISTERED PROFESSIONAL ENGINEER
4/13/98

APPROVALS	ENGINEER	DATE
DRC Chairman	Billy J. Goodley	4-17-98
Transportation	[signature]	4-14-98
Water/Wastewater	[signature]	4/17/98
Hydrology	Carl H. Martz	4-14-98
~~Parks~~ CIP		
Const. Mngmt.		
Const. Coord.	N/A	

* * * * * * * * * * * * *
APPROVED FOR CONSTRUCTION

City Engineer — Date 4/17/98

City Project No. 575891

Sheet 1 Of 6

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS SOFTWARE DEVELOPERS

\\BHI-MAIN\96202\HYDRO\DESIGN\DETAIL\COVER.DWG

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 5 7 5 8 . 9 1 | | 0 4

TPU-040-3(119)160

11-1

WATER SHUT OFF REQUIREMENTS:

ONE MONTH PRIOR TO MAKING THE SHUT-OFF REQUEST THE CONTRACTOR SHALL MAKE A TRIAL SHUT-OFF REQUEST TO ALLOW THE WATER UTILITY DIVISION TO FIND AND EXERCISE VALVES NEEDED FOR THE ACTUAL SHUT-OFF.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF THE WATER SHUTOFF. AT LEAST TEN (10) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION, 857-8200, TO INITIATE IMPLEMENTATION OF THE NON-PRESSURIZED CONNECTION PLAN. IN ORDER TO COMPLETE THIS CONNECTION, THE FOLLOWING VALVES MUST BE CLOSED BY WATER SYSTEMS PERSONNEL:

SOUTH OF I-40
1. CLOSE VALVES 1143, 1149 AND 1049 FOR BOTH CONNECTIONS OF NEW 610mm (24") WATER LINE SOUTH OF I-40 TO EXISTING 610mm (24") WATERLINE

NORTH OF I-40 (THIS WORK MUST BE DONE IN THIS SEQUENCE)
1. CLOSE VALVES 1143, 1149, 1021, 707 AND 708 FOR INSTALLATION OF VALVE PIT AND CONNECTION TO EXISTING 610mm (24") WATER LINE AND BOTH CONNECTIONS TO EXISTING 914mm (36") WATER LINE. KEEP VALVES CLOSED UNTIL CONNECTION OF NEW 610mm (24") WATER LINE IS MADE TO EXISTING 610mm (24") WATER LINE NORTH OF THE CHANNEL (NOTE 2.). THIS WORK CAN ONLY BE DONE DURING THE MONTHS AS STATED BELOW.
2. WHILE VALVES IN NOTE 1. ARE CLOSED ALSO CLOSE VALVES 654, 655 AND 656 FOR CONNECTION OF NEW 610mm (24") WATER LINE AND CAP TO THE EXISTING 610mm (24") WATER LINE NORTH OF THE CHANNEL. KEEP VALVE 707 CLOSED AFTER COMPLETION OF WORK. THIS WORK CAN ONLY BE DONE DURING THE MONTHS AS STATED BELOW.
3. CLOSE VALVES 708 AND NEW VALVE ON 914mm (36") EAST OF THE NEW CROSS IN THE VALVE PIT FOR REMOVAL OF VALVE 707 AND INSTALLATION OF BLIND FLANGE. THIS WORK CAN ONLY BE DONE DURING THE MONTHS AS STATED BELOW.
4. CLOSE NEW VALVE ON 914mm (36") EAST OF THE NEW CROSS IN THE VALVE PIT, VALVES 748, 793, 1051 AND 1037 FOR REMOVAL OF VALVE GATES IN VALVE 708. THIS WORK CAN ONLY BE DONE DURING THE MONTHS AS STATED BELOW.

WATER SHUT-OFFS INVOLVING COLLECTOR, TRANSMISSION, AND MAJOR DISTRIBUTION LINES MAY NOT BE PERMITTED DURING THE MONTHS OF MAY THROUGH SEPTEMBER DUE TO THE DEMAND ON THE SYSTEM. CONSTRUCTION SCHEDULES WILL NEED TO BE COORDINATED WITH THE WATER UTILITY DIVISION WHEN THESE TYPES OF WATER LINES ARE TO BE WORKED ON.

THE CONTRACTOR WILL BE REQUIRED TO ARRANGE HIS CONSTRUCTION PROGRAM WITH A VIEW OF MAINTAINING CONTINUOUS SERVICE TO WATER USERS, FROM EXISTING FACILITIES, TO THE FULLEST EXTENT POSSIBLE. HE SHALL, AT ALL TIMES, WITHHOLD CONSTRUCTION WORK, WHERE ANY CONFLICT IN THE SERVICE REQUIREMENTS OCCUR. WATER SHUT-OFFS WILL BE LIMITED TO THE TIME REQUIRED FOR THE ACTUAL TIE IN TO THE EXISTING LINE.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN SERVICE TO IMPACTED USERS FOR SHUT-OFFS LASTING OVER TWO HOURS. TEMPORARY SERVICE SHALL REQUIRE THE APPROVAL OF THE WATER UTILITY DIVISION.

MEASUREMENT AND PAYMENT WILL BE AS INDICATED BY THE FOLLOWING ITEMS AND SECTION 663 OF THE NMSHTD STANDARD SPECIFICATIONS. CONSTRUCTION OF THE WATERLINE ITEMS SHALL BE AS INDICATED ON SHEETS 3 THROUGH 6 OF 6.

ESTIMATED WATERLINE QUANTITIES

	ITEM	UNIT	TOTAL	USE	
210000	STRUCTURE EXCAVATION AND BACKFILL FOR BRIDGES	cu m	247	247	
511000	STRUCTURAL CONCRETE, CLASS A	cu m	39	39	
540065	REINFORCING BARS GRADE 420	kg	3060	3060	
663524	DUCTILE IRON PIPE – 609.6 mm *	m	283.42	284	⚠
663536	DUCTILE IRON PIPE – 914.4 mm *	m	7	7	
663550	CAST IRON OR DUCTILE IRON FITTINGS	kg	7389	7389	⚠
663747	BUTTERFLY VALVE – 609.6 mm	EACH	3	3	
663749	BUTTERFLY VALVE – 914.4 mm	EACH	2	2	
663781	TIE TO EXISTING 609.6 mm WATERLINE	EACH	4	4	
663782	TIE TO EXISTING 914.4 mm WATERLINE	EACH	2	2	
663870	BORING & JACKING	m	76.5	77	
663885	CONCRETE BLOCKING	cu m	10.96	11	⚠
663898	GATE VALVE – 203.2 mm	EACH	3	3	

** CONCRETE CYLINDER PIPE MAY BE SUBSTITUTED FOR DUCTILE IRON PIPE EXCEPT IN THE VALVE PIT. PAYMENT WILL STILL BE MADE UNDER THE RESPECTIVE DUCTILE IRON PIPE ITEM.*

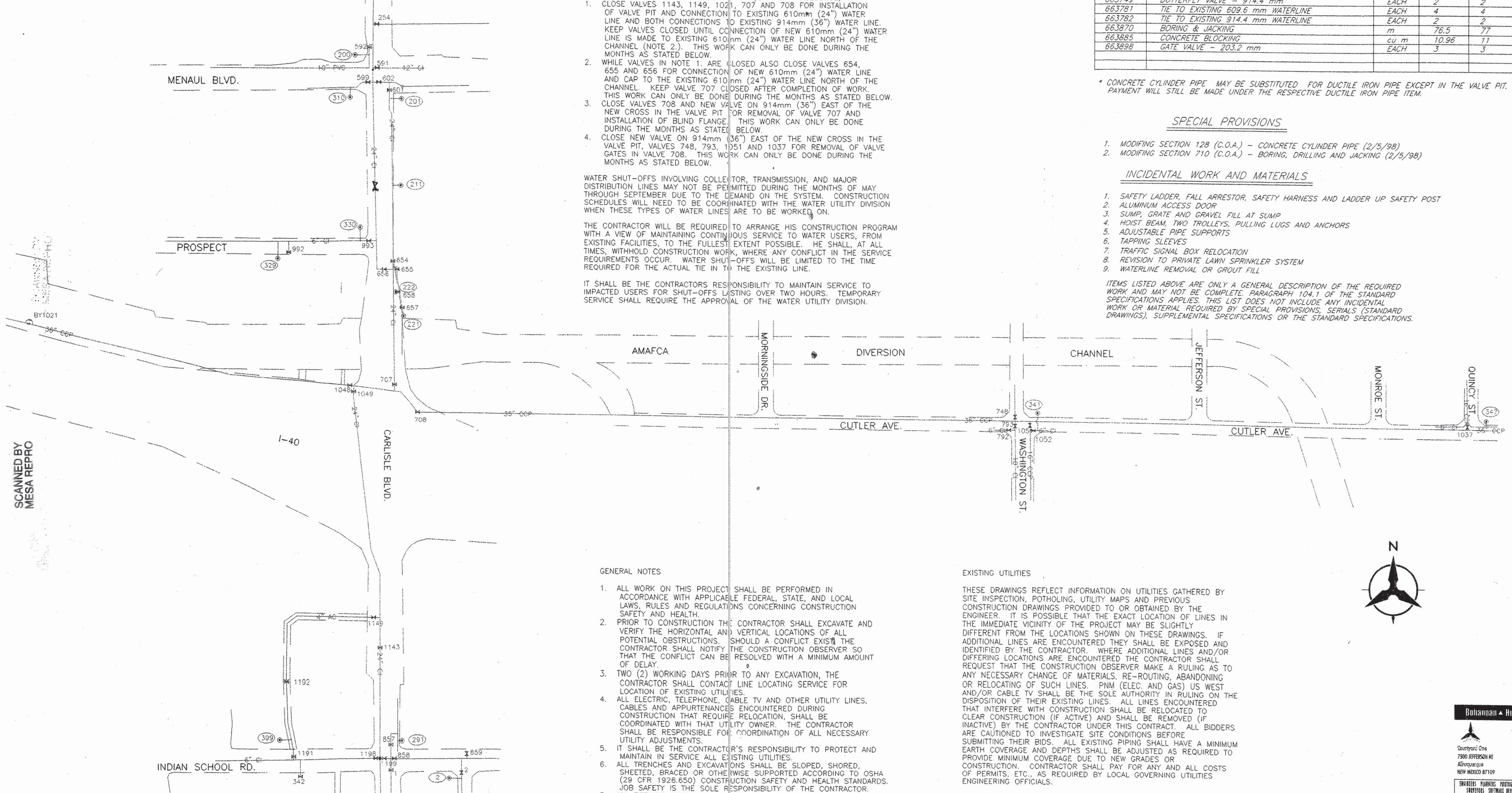
SPECIAL PROVISIONS

1. *MODIFING SECTION 128 (C.O.A.) – CONCRETE CYLINDER PIPE (2/5/98)*
2. *MODIFING SECTION 710 (C.O.A.) – BORING, DRILLING AND JACKING (2/5/98)*

INCIDENTAL WORK AND MATERIALS

1. *SAFETY LADDER, FALL ARRESTOR, SAFETY HARNESS AND LADDER UP SAFETY POST*
2. *ALUMINUM ACCESS DOOR*
3. *SUMP, GRATE AND GRAVEL FILL AT SUMP*
4. *HOIST BEAM, TWO TROLLEYS, PULLING LUGS AND ANCHORS*
5. *ADJUSTABLE PIPE SUPPORTS*
6. *TAPPING SLEEVES*
7. *TRAFFIC SIGNAL BOX RELOCATION*
8. *REVISION TO PRIVATE LAWN SPRINKLER SYSTEM*
9. *WATERLINE REMOVAL OR GROUT FILL*

ITEMS LISTED ABOVE ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MAY NOT BE COMPLETE. PARAGRAPH 104.1 OF THE STANDARD SPECIFICATIONS APPLIES. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIAL REQUIRED BY SPECIAL PROVISIONS, SERIALS (STANDARD DRAWINGS), SUPPLEMENTAL SPECIFICATIONS OR THE STANDARD SPECIFICATIONS.



WATER SHUT OFF PLAN
SCALE: 1" = 200'

GENERAL NOTES

1. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
2. 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.
3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
4. ALL ELECTRIC, 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.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES.
6. ALL TRENCHES AND EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED ACCORDING TO OSHA (29 CFR 1926.650) CONSTRUCTION SAFETY AND HEALTH STANDARDS. JOB SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
7. ALL FITTINGS SHALL HAVE RESTRAINED JOINTS. RESTRAINED JOINTS SHALL ALSO BE PROVIDED AS SPECIFIED IN THE PLANS AND IN THE TABLES ON SHEETS 3&4.
8. THE CONTRACTOR SHALL KEEP OR DISPOSE OF ALL REMOVED WATER LINES AND FITTINGS. COST IS INCIDENTAL TO THE PROJECT.
9. THE CONTRACTOR SHALL PROVIDE TEN (10) WORKING DAYS NOTICE TO COA WATER UTILITY DIVISION BEFORE WATER SHUT OFF.
10. REPLACEMENT OF ARTERIAL ASPHALT SHALL BE IN ACCORDANCE WITH DETAIL ON SHEET 2-15. THIS WORK WILL BE MEASURED AND PAID FOR USING ITEM 405000-DETOUR PAVEMENT CONSTRUCTION.

EXISTING UTILITIES

THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, POTHOLING, UTILITY MAPS 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 LOCATIONS SHOWN ON THESE DRAWINGS. IF ADDITIONAL LINES ARE ENCOUNTERED THEY SHALL BE EXPOSED AND IDENTIFIED BY THE CONTRACTOR. WHERE ADDITIONAL LINES AND/OR DIFFERING LOCATIONS ARE ENCOUNTERED THE CONTRACTOR SHALL REQUEST THAT THE CONSTRUCTION OBSERVER MAKE A RULING AS TO ANY NECESSARY CHANGE OF MATERIALS, RE-ROUTING, ABANDONING OR RELOCATING OF SUCH LINES. PNM (ELEC. AND GAS) US WEST AND/OR CABLE TV SHALL BE THE SOLE AUTHORITY IN RULING ON THE DISPOSITION OF THEIR EXISTING LINES. ALL LINES ENCOUNTERED THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED TO CLEAR CONSTRUCTION (IF ACTIVE) AND SHALL BE REMOVED (IF INACTIVE) BY THE CONTRACTOR UNDER THIS CONTRACT. ALL BIDDERS ARE CAUTIONED TO INVESTIGATE SITE CONDITIONS BEFORE SUBMITTING THEIR BIDS. ALL EXISTING PIPING SHALL HAVE A MINIMUM EARTH COVERAGE AND DEPTHS SHALL BE ADJUSTED AS REQUIRED TO PROVIDE MINIMUM COVERAGE DUE TO NEW GRADES OR CONSTRUCTION. CONTRACTOR SHALL PAY FOR ANY AND ALL COSTS OF PERMITS, ETC., AS REQUIRED BY LOCAL GOVERNING UTILITIES ENGINEERING OFFICIALS.

AS-BUILT INFORMATION

CONTRACTOR SEMA DATE
WORK STAKED BY " DATE
INSPECTOR'S ACCEPTANCE BY COA A Oskandy DATE 2/99
FIELD VERIFICATION BY " DATE "
DRAWINGS CORRECTED BY COA DATE 3/01

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
STATE PLANE COORD. X=394,232.08 Y=1,493,896.40
GROUND TO GRID FACTOR = 0.99966724
Δα -0° 12' 12"

SURVEY INFORMATION
FIELD NOTES
NO.	BY	DATE

ENGINEER'S SEAL
DANIEL J. GRONCHOWSKI, NEW MEXICO, 8766, REGISTERED PROFESSIONAL ENGINEER
4/15/98

NO.	DATE	REMARKS	BY
⚠	6/24/98	ADDITIONAL WATER LINE RELOCATION	DJG

REVISIONS
DESIGN

DESIGNED BY D.G. DATE 9-97
DRAWN BY TONYM DATE 9-97
CHECKED BY D.G. DATE 9-97

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
WATER SHUT OFF PLAN, GENERAL NOTES & QUANTITIES

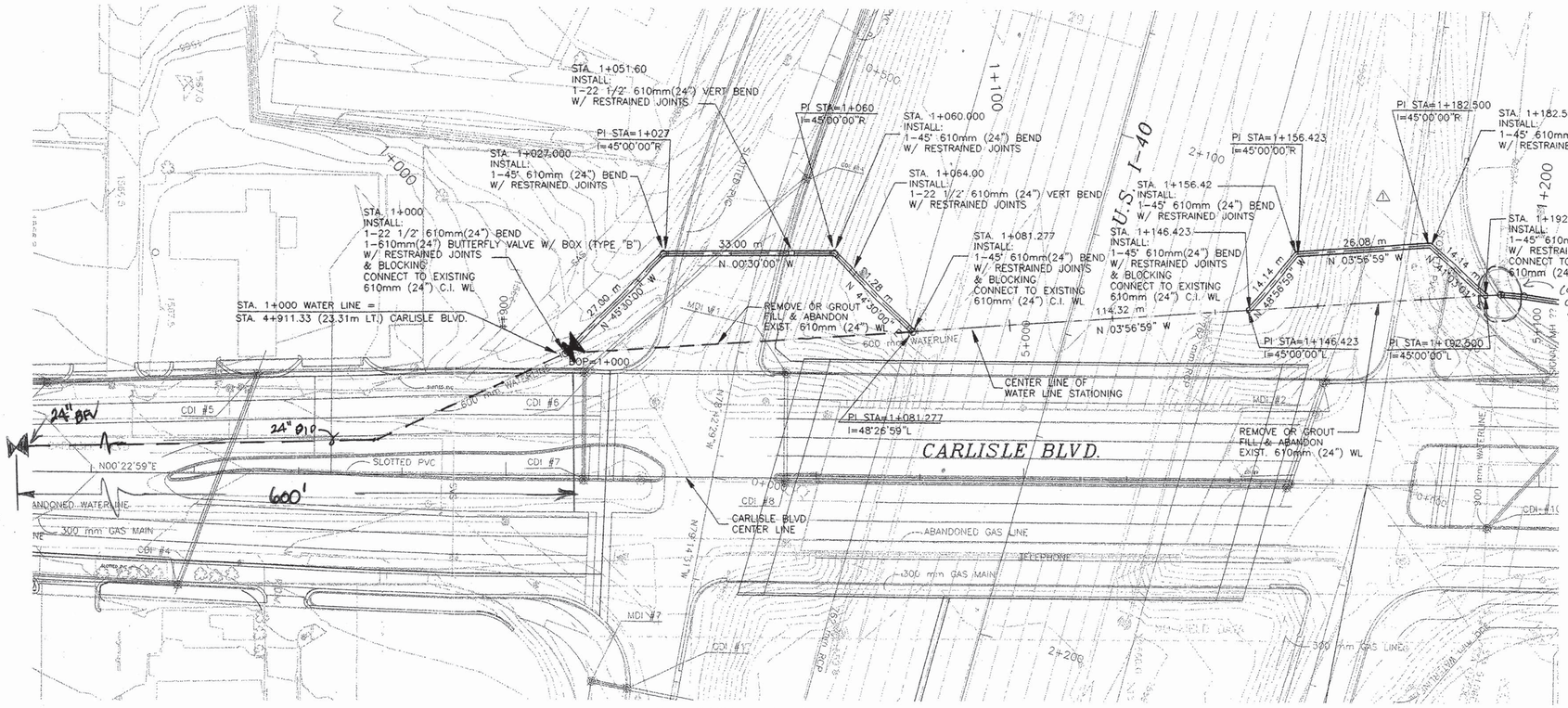
DESIGN REVIEW COMMITTEE — APPROVED — DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL — APPROVED — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO. 575891 | ZONE MAP NO. H-16 | SHEET 2 OF 6

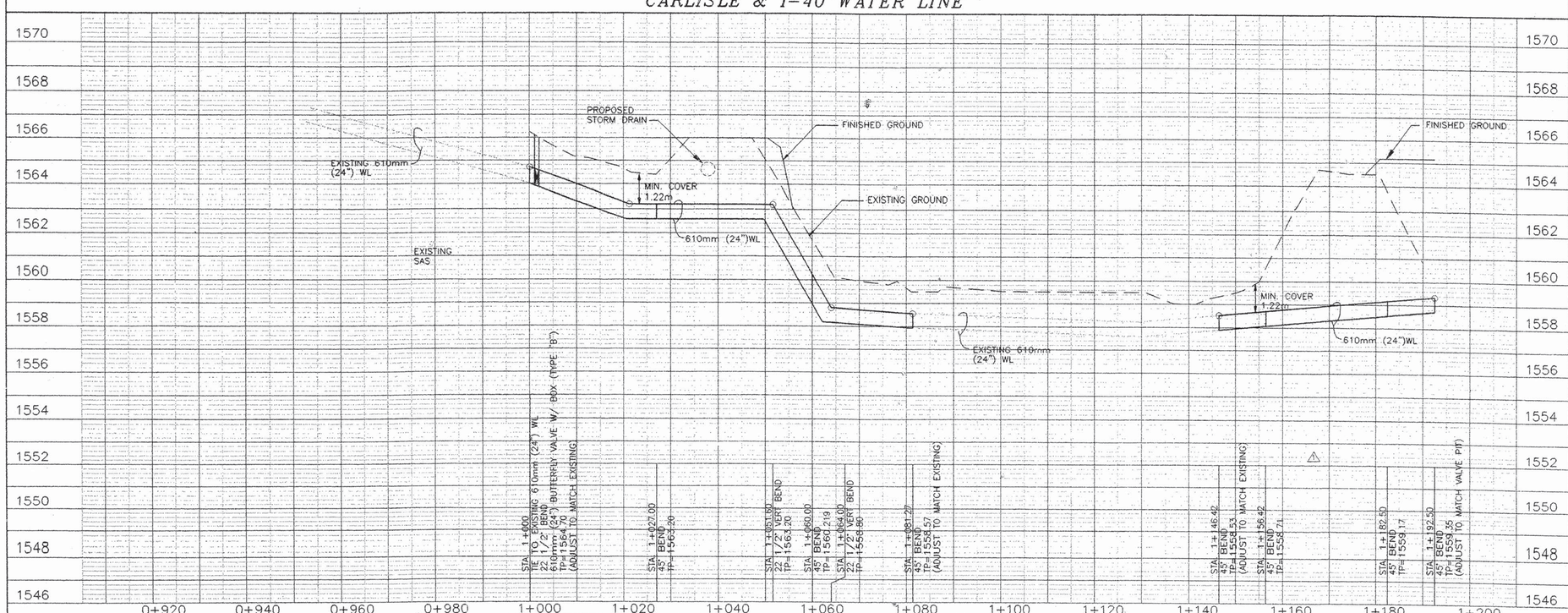
\\BHI-MAIN\96202\HYDRO\DESIGN\DETAIL\SHUTOFF.DWG

SCANNED BY MESA REPRO

COPYRIGHT BOHANNAN-HUSTON, INC.



CARLISLE & I-40 WATER LINE



SCALES: 1M =500m HOR
1M =100m VER

NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF BUSINESSES OR OTHER CONTRACTORS ON SITE.
3. CONTRACTORS SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 6.
5. ALL VALVES DESIGNATED AS BEING REMOVED BY THE PLANS SHALL BE KEPT OR DISPOSED OF BY THE CONTRACTOR.

RESTRAINED JOINT TABLE

STA.	FITTING	∠	LENGTH *
1+000.000	H BEND	22 1/2°	2.44 m
1+027.000	H BEND	45°	6.40 m
1+051.600	V BEND(DOWN)	22 1/2°	5.49 m
1+060.000	H BEND	45°	5.18 m
1+064.000	V BEND(UP)	22 1/2°	2.74 m
1+081.277	H BEND	45°	8.23 m
1+146.423	H BEND	45°	2.44 m
1+156.423 (10m LT.)	H BEND	45°	4.27 m
1+182.500 (10m LT.)	H BEND	45°	2.44 m
1+192.500	H BEND	45°	6.10 m

△1 * ALL JOINTS WITHIN THIS DISTANCE OF THE FITTING MUST BE RESTRAINED.

THRUST BLOCKING DIMENSIONS TO BE ADDED TO CITY OF ALBUQUERQUE STD. DWG. 2320

STA.	FITTING	b	h
1+000.000	22 1/2° BEND	1.19 m	2.32 m
1+081.277	45° BEND	2.01 m	3.99 m
1+146.423	45° BEND	2.01 m	3.99 m

△1

AS-BUILT INFORMATION

CONTRACTOR	Sema	DATE
WORK DONE BY	"	DATE
INSPECTOR'S ACCEPTANCE BY	Allen Costa	DATE 2/97
FIELD VERIFICATION BY	" "	"
DRAWINGS CORRECTED BY	CDR	DATE 3/01
MICRO-FILM INFORMATION		
RECORDED BY		DATE
NO.		

BENCH MARKS

STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV=1565.291m

STATE PLANE COORD. X=394,232.08 Y=1,493,896.40

GROUND TO GRID FACTOR = 0.99966724

△X -0° 12' 12"

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

4/15/98

NO.	DATE	REMARKS	BY
△1	6/24/98	ADDITIONAL WATER LINE RELOCATION	DJG

REVISIONS

DESIGN

DESIGNED BY D.J.G. DATE 9-97

DRAWN BY TONYM DATE 9-97

CHECKED BY D.J.G. DATE 9-97

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
PLAN AND PROFILE SHEET

DESIGN REVIEW COMMITTEE — CITY ENGINEER APPROVAL

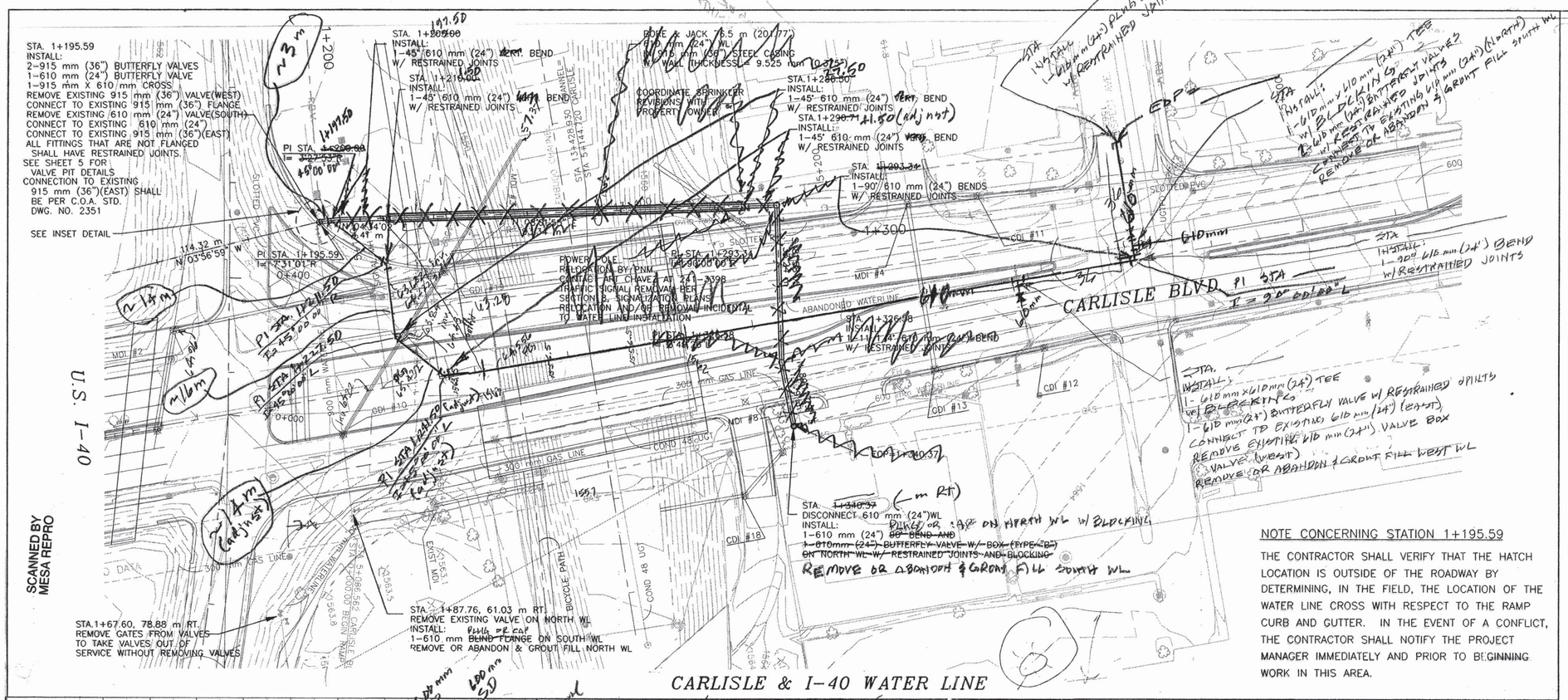
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
575891	H-16	3	6

SCANNED BY MESA REPRO

\\BHI-MAIN\96202\HYDRO\DESIGN\EP\RCP01010.DWG

COPYRIGHT BOHANNAN-HUSTON, INC.



CARLISLE & I-40 WATER LINE

NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF BUSINESSES OR OTHER CONTRACTORS ON SITE.
3. CONTRACTORS SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 6.
5. ALL VALVES DESIGNATED AS BEING REMOVED ON THE PLANS SHALL BE KEPT OR DISPOSED OF BY THE CONTRACTOR.

RESTRAINED JOINT TABLE

STA.	FITTING	∡	LENGTH *
1+205.000	V BEND(DOWN)	45°	12.50 m
1+210.000	V BEND(UP)	45°	1.52 m
1+286.500	V BEND(UP)	45°	1.21 m
1+290.710	V BEND(DOWN)	45°	13.11 m
1+293.340	H BEND	90°	14.63 m
1+326.580	H BEND	11 1/4°	1.22 m
1+340.370	H BEND	90°	13.72 m

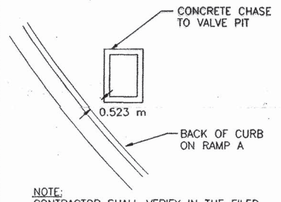
* ALL JOINTS WITHIN THIS DISTANCE OF THE FITTING MUST BE RESTRAINED.

THRUST BLOCKING DIMENSIONS TO BE ADDED TO CITY OF ALBUQUERQUE STD. DWG. 2320

STA.	FITTING	b	h
1+340.370	90° BEND BLIND FLANGE	2.38 m	4.75 m

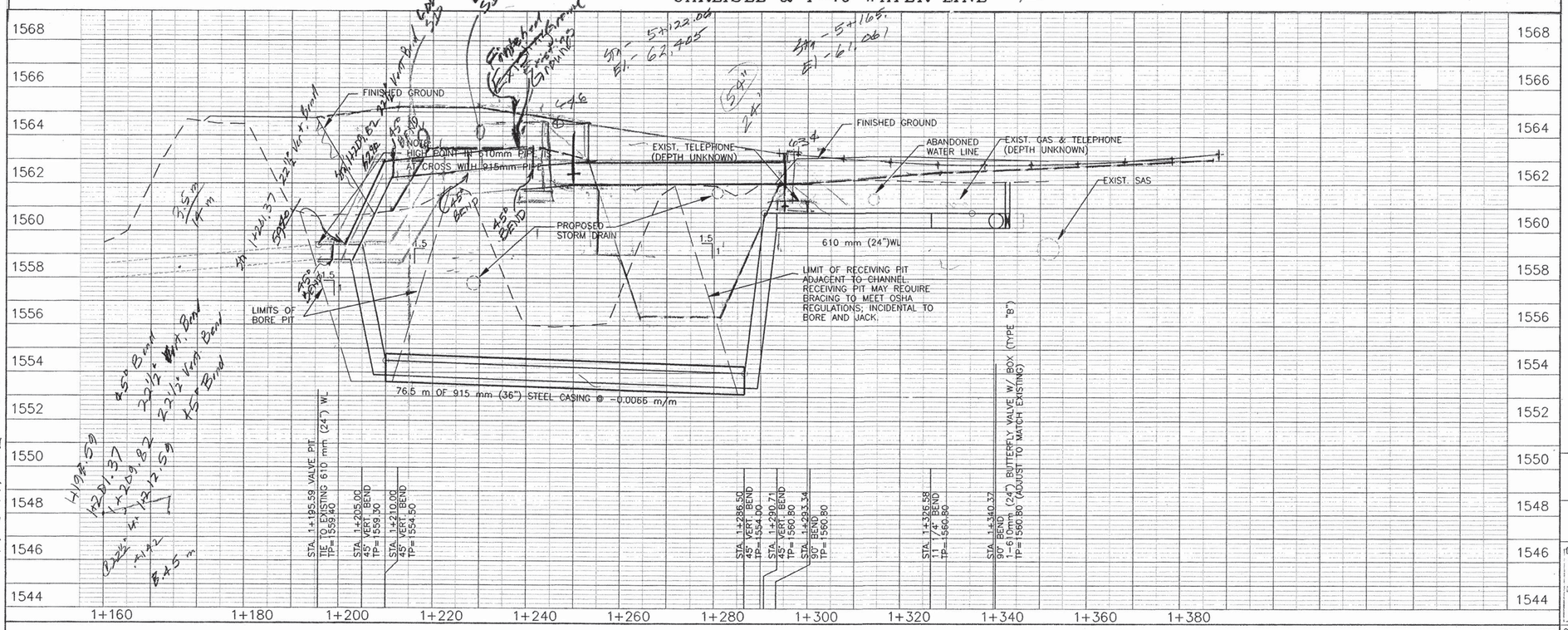
NOTE CONCERNING STATION 1+195.59

THE CONTRACTOR SHALL VERIFY THAT THE HATCH LOCATION IS OUTSIDE OF THE ROADWAY BY DETERMINING, IN THE FIELD, THE LOCATION OF THE WATER LINE CROSS WITH RESPECT TO THE RAMP CURB AND GUTTER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY AND PRIOR TO BEGINNING WORK IN THIS AREA.



NOTE:
CONTRACTOR SHALL VERIFY IN THE FILED THE DIMENSION SHOWN ABOVE (0.523 m). NOTIFY PROJECT MANAGER IF FOUND TO BE LESS THAN NOTED.

INSET DETAIL
N.T.S.



SCALES: 1M =500 m HOR
1M =100 m VER

SCANNED BY MESA REPRO

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
PLAN AND PROFILE SHEET

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
APR 7 1998	APR 17 1998			

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
575891	H-16	4A	6

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

BENCH MARKS
STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
MICRO-FILM INFORMATION
STATE PLANE COORD. X=394,232.08 Y=1,493,896.40 — RECORDED BY — DATE
GROUND TO GRID FACTOR = 0.99966724 — DATE
ΔX -0° 12' 12"

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS REVISIONS DESIGN	BY

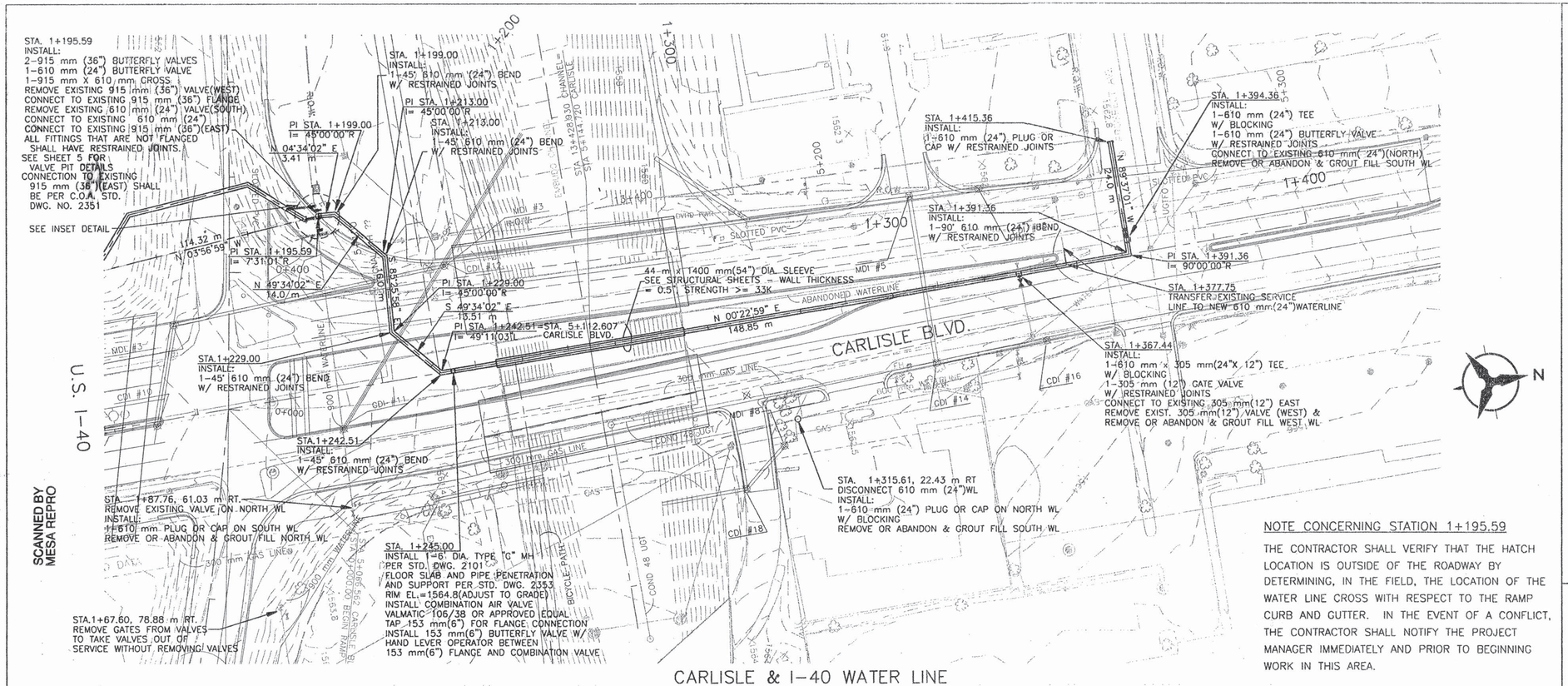
DESIGNED BY DJG — DATE 10-97
DRAWN BY TONYM — DATE 10-97
CHECKED BY DJG — DATE 10-97

TPU-040-3(119)160

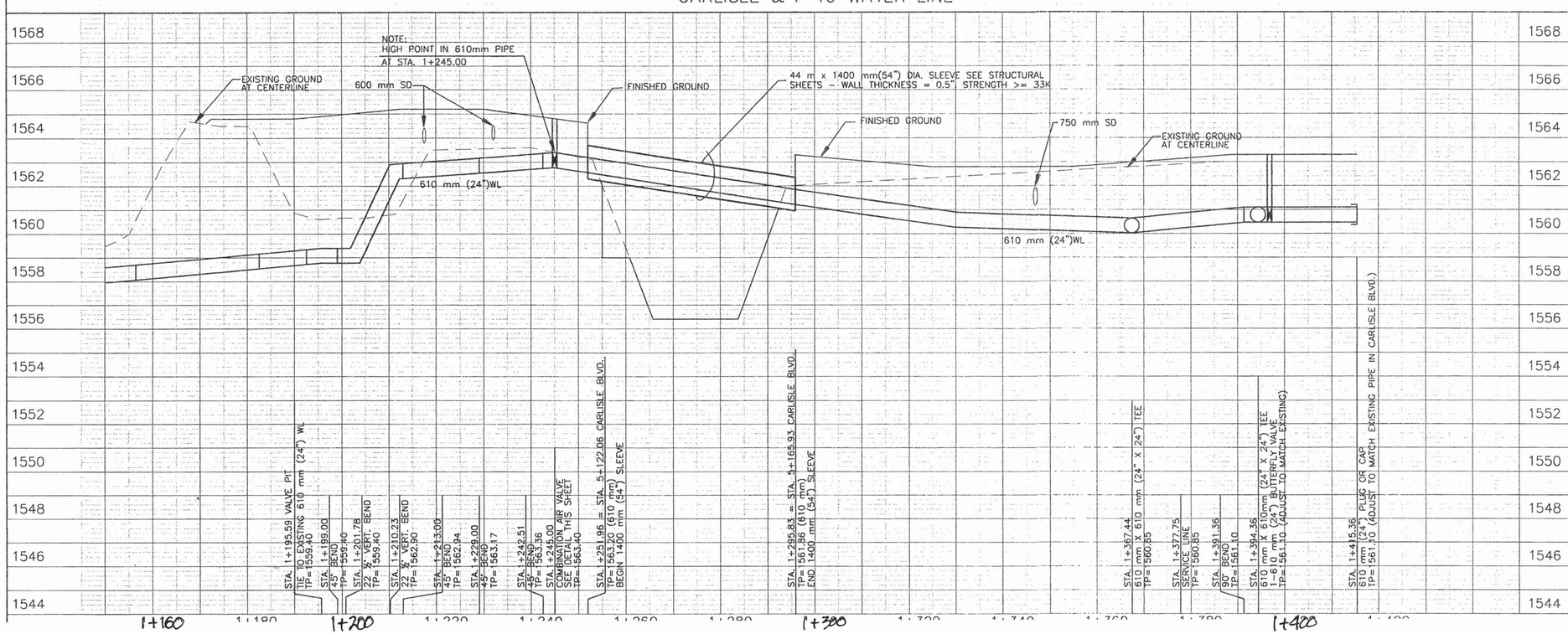
COPYRIGHT BOHANNAN-HUSTON, INC.
DATE: FEBRUARY 6, 1998

11-4

\\BHI-MAIN\96202\HYDRO\DESIGN\EP\RCP02010.DWG



CARLISLE & I-40 WATER LINE



NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF BUSINESSES OR OTHER CONTRACTORS ON SITE.
3. CONTRACTORS SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 6.
5. ALL VALVES DESIGNATED AS BEING REMOVED ON THE PLANS SHALL BE KEPT OR DISPOSED OF BY THE CONTRACTOR.

RESTRAINED JOINT TABLE

STA.	FITTING	∡	LENGTH *
1+199.00	H. BEND	45°	1.52 m
1+201.78	V. BEND	22 ½°	0.91 m
1+210.23	V. BEND	22 ½°	3.35 m
1+213.00	H BEND	45°	3.96 m
1+229.00	H BEND	45°	4.57 m
1+242.51	H BEND	45°	5.18 m
1+391.36	H BEND	90°	9.45 m
1+395.36	VALVE		17.07 m
1+415.36	PLUG		17.07 m

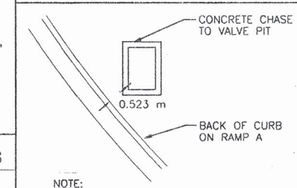
* ALL JOINTS WITHIN THIS DISTANCE OF THE FITTING MUST BE RESTRAINED.

THRUST BLOCKING DIMENSIONS TO BE ADDED TO CITY OF ALBUQUERQUE STD. DWG. 2320

STA.	FITTING	b	h
1+367.44	610mm x 305mm TEE (24" x 12")	0.75m	1.50m
1+394.36	610mm x 610mm TEE (24" x 24")	1.50m	3.00m

NOTE CONCERNING STATION 1+195.59

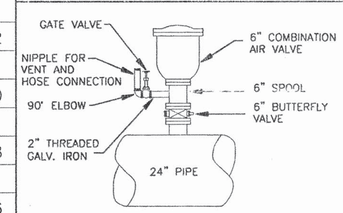
THE CONTRACTOR SHALL VERIFY THAT THE HATCH LOCATION IS OUTSIDE OF THE ROADWAY BY DETERMINING, IN THE FIELD, THE LOCATION OF THE WATER LINE CROSS WITH RESPECT TO THE RAMP CURB AND GUTTER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY AND PRIOR TO BEGINNING WORK IN THIS AREA.



NOTE:
CONTRACTOR SHALL VERIFY IN THE FIELD THE DIMENSION SHOWN ABOVE (0.523 m). NOTIFY PROJECT MANAGER IF FOUND TO BE LESS THAN NOTED.

INSET DETAIL

N.T.S.



COMBINATION AIR VALVE DETAIL

N.T.S.

AS-BUILT INFORMATION

	DATE
CONTRACTOR	
WORK STAKED by	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED by	DATE

BENCH MARKS

STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA1-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m.
STATE PLANE COORD. X=394,232.08 Y=1,493,896.49

SURVEY INFORMATION

FIELD NOTES

NO.	DATE	BY

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DATE 4-99

DESIGNED BY DJG

MICRO-FILM INFORMATION

Bohannan Huston

Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109

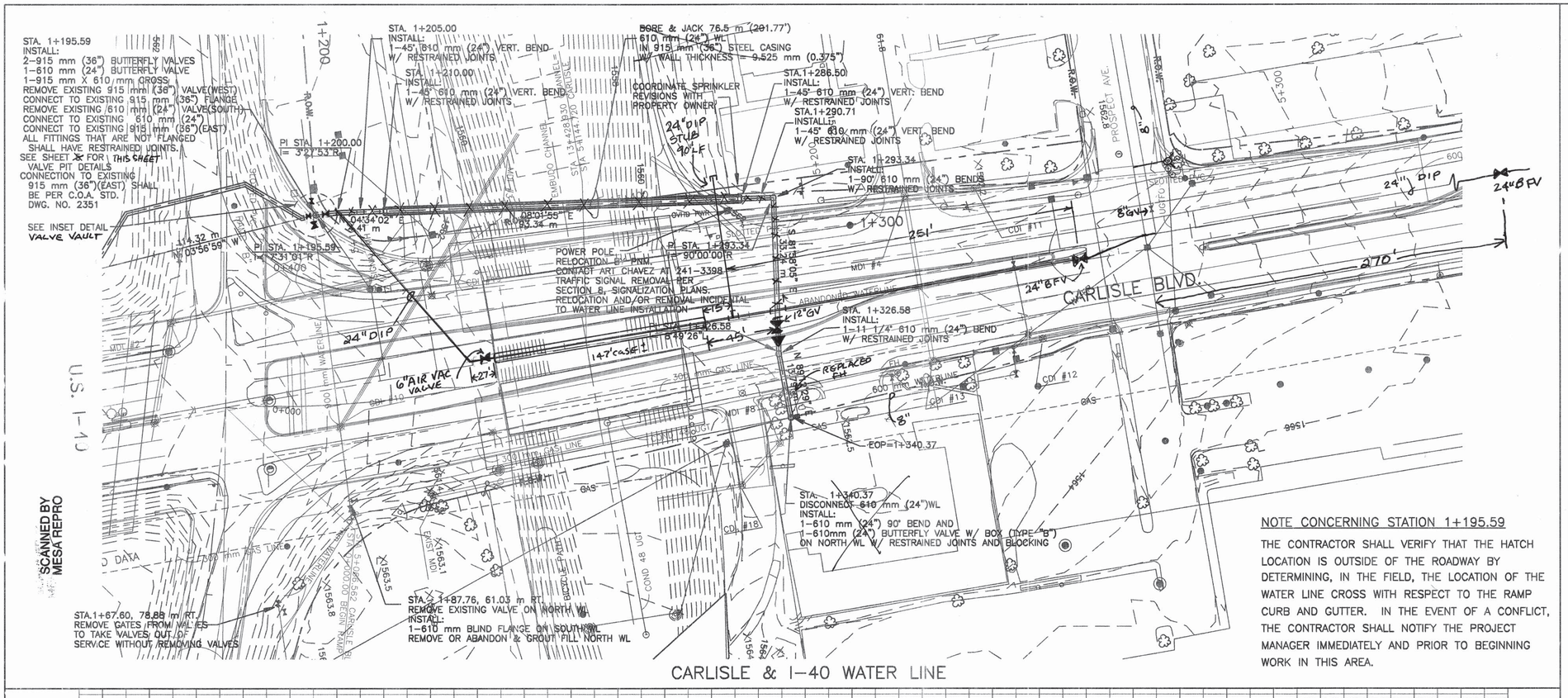
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
PLAN AND PROFILE SHEET

DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | LAST DESIGN UPDATE | MO./DAY/YR. | MO./DAY/

SCANNED BY
MESA REPRO



CARLISLE & I-40 WATER LINE

NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF BUSINESSES OR OTHER CONTRACTORS ON SITE.
3. CONTRACTORS SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 6.
5. ALL VALVES DESIGNATED AS BEING REMOVED ON THE PLANS SHALL BE KEPT OR DISPOSED OF BY THE CONTRACTOR.

RESTRAINED JOINT TABLE

STA.	FITTING	∡	LENGTH *
1+205.000	V BEND(DOWN)	45°	12.50 m
1+210.000	V BEND(UP)	45°	1.52 m
1+286.500	V BEND(UP)	45°	1.21 m
1+290.710	V BEND(DOWN)	45°	13.11 m
1+293.340	H BEND	90°	14.63 m
1+326.580	H BEND	11 1/4°	1.22 m
1+340.370	H BEND	90°	13.72 m

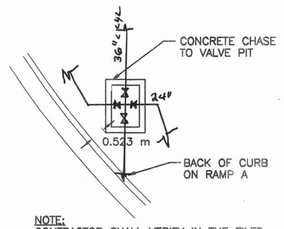
* ALL JOINTS WITHIN THIS DISTANCE OF THE FITTING MUST BE RESTRAINED.

THRUST BLOCKING DIMENSIONS TO BE ADDED TO CITY OF ALBUQUERQUE STD. DWG. 2320

STA.	FITTING	b	h
1+340.370	90° BEND	2.38 m	4.75 m

NOTE CONCERNING STATION 1+195.59

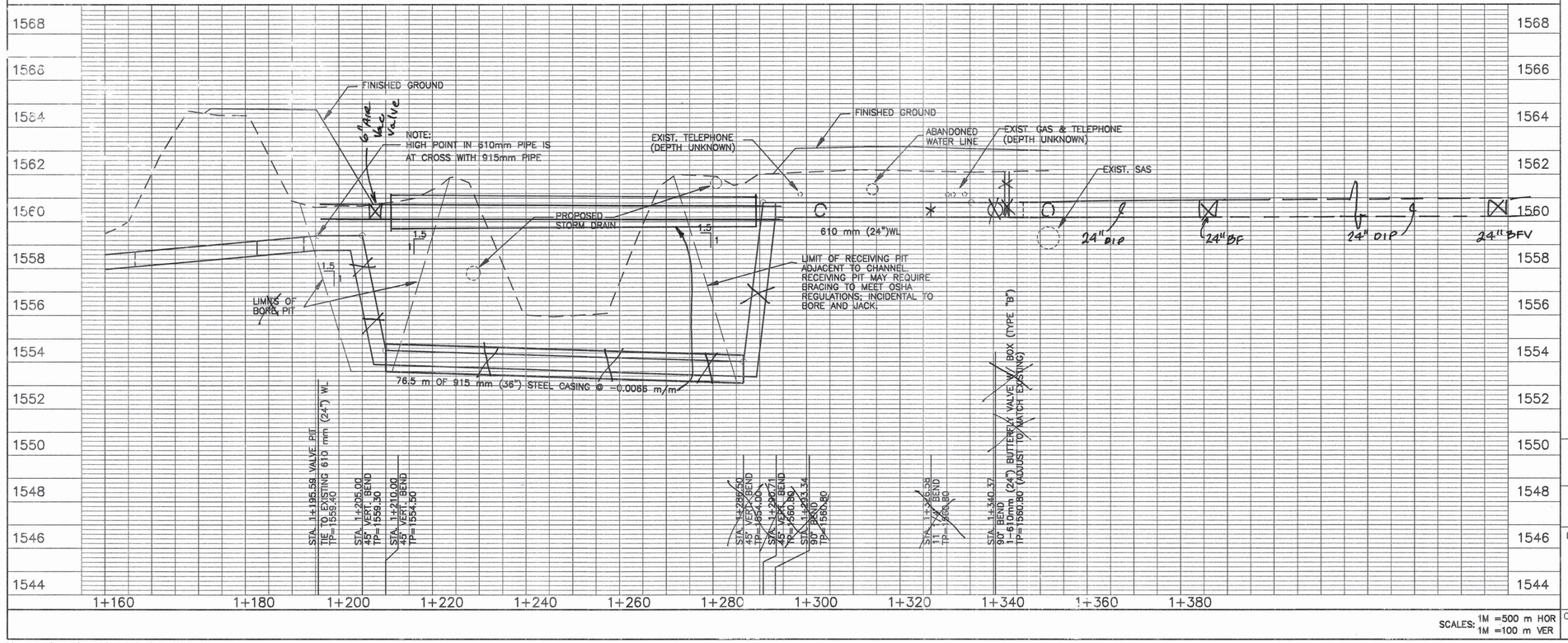
THE CONTRACTOR SHALL VERIFY THAT THE HATCH LOCATION IS OUTSIDE OF THE ROADWAY BY DETERMINING, IN THE FIELD, THE LOCATION OF THE WATER LINE CROSS WITH RESPECT TO THE RAMP CURB AND GUTTER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY AND PRIOR TO BEGINNING WORK IN THIS AREA.



NOTE:
CONTRACTOR SHALL VERIFY IN THE FILED THE DIMENSION SHOWN ABOVE (0.523 m). NOTIFY PROJECT MANAGER IF FOUND TO BE LESS THAN NOTED.

INSET DETAIL

N.T.S.



SCALES: 1M =500 m HOR
1M =100 m VER

APPROVAL OF RECORD DRAWINGS
CHIEF CONSTRUCTION ENGINEER
DATE 10/18/04

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS SOFTWARE DEVELOPERS

AS-BUILT INFORMATION

CONTRACTOR	SEMA	DATE
WORK INSPECTOR'S ACCEPTANCE BY	A. Ortabal	DATE 2/22
FIELD VERIFICATION BY	A. Ortabal	DATE 2/22
DRAWINGS CORRECTION BY	C.O.A.	DATE 3/01
MICRO-FILM INFORMATION		DATE
RECORDED BY		

BENCH MARKS

STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
STATE PLANE COORD. X=394,232.08 Y=1,493,896.40
GROUND TO GRID FACTOR = 0.999666724
ΔX -0° 12' 12"

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DJG DATE 10-97
DRAWN BY TONYM DATE 10-97
CHECKED BY DJG DATE 10-97

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

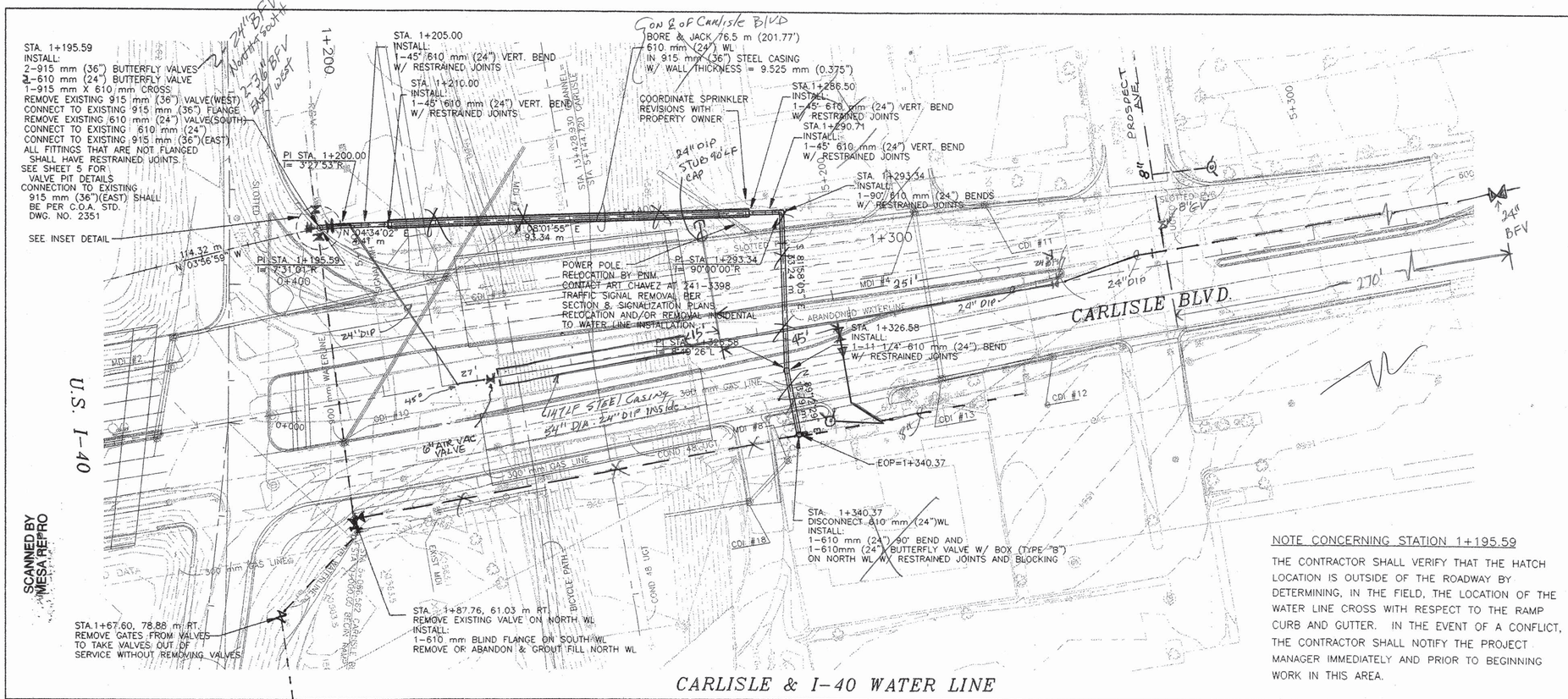
CARLISLE & I-40 WATER LINE
PLAN AND PROFILE SHEET

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

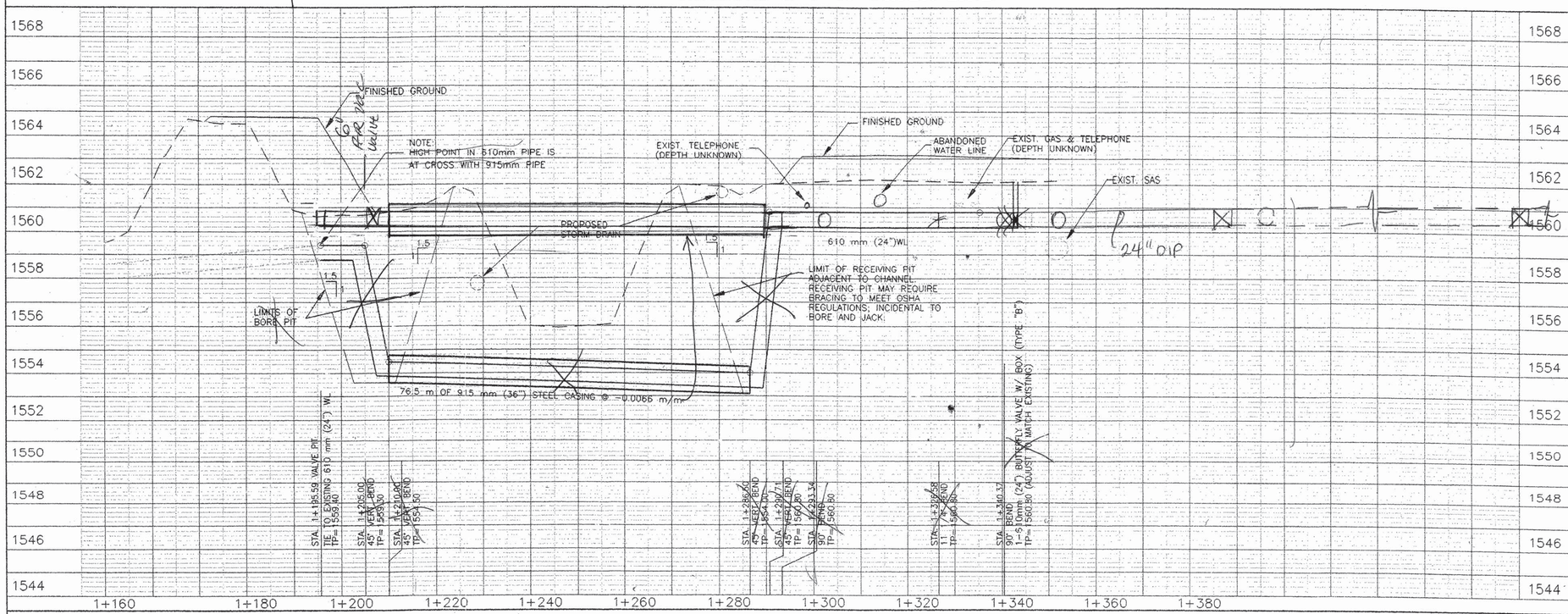
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
575891	H-16	4C	6

\\BHI-MAIN\96202\HYDRO\DESIGN\EP\RCP02010.DWG

COPYRIGHT BOHANNAN-HUSTON, INC.
DATE: FEBRUARY 6, 1998



CARLISLE & I-40 WATER LINE



SCALES: 1M =500 m HOR
1M =100 m VER

NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF BUSINESSES OR OTHER CONTRACTORS ON SITE.
3. CONTRACTORS SHALL PROVIDE THE INSPECTORS WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
4. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 6.
5. ALL VALVES DESIGNATED AS BEING REMOVED ON THE PLANS SHALL BE KEPT OR DISPOSED OF BY THE CONTRACTOR.

RESTRAINED JOINT TABLE

STA.	FITTING	∡	LENGTH *
1+205.000	V BEND(DOWN)	45°	12.50 m
1+210.000	V BEND(UP)	45°	1.52 m
1+286.500	V BEND(UP)	45°	1.21 m
1+290.710	V BEND(DOWN)	45°	13.11 m
1+293.340	H BEND	90°	14.63 m
1+326.580	H BEND	11 1/4°	1.22 m
1+340.370	H BEND	90°	13.72 m

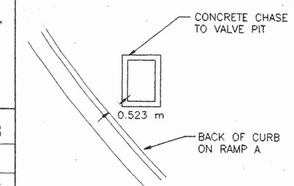
* ALL JOINTS WITHIN THIS DISTANCE OF THE FITTING MUST BE RESTRAINED.

THRUST BLOCKING DIMENSIONS TO BE ADDED TO CITY OF ALBUQUERQUE STD. DWG. 2320

STA.	FITTING	b	h
1+340.370	90° BEND	2.38 m	4.75 m

NOTE CONCERNING STATION 1+195.59

THE CONTRACTOR SHALL VERIFY THAT THE HATCH LOCATION IS OUTSIDE OF THE ROADWAY BY DETERMINING, IN THE FIELD, THE LOCATION OF THE WATER LINE CROSS WITH RESPECT TO THE RAMP CURB AND GUTTER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY AND PRIOR TO BEGINNING WORK IN THIS AREA.



NOTE:
CONTRACTOR SHALL VERIFY IN THE FILED THE DIMENSION SHOWN ABOVE (0.523 m). NOTIFY PROJECT MANAGER IF FOUND TO BE LESS THAN NOTED.

INSET DETAIL
N.T.S.

N

Bohannan ▲ Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS INFRASTRUCTURE SURVEYORS ENVIRONMENTAL SCIENTISTS SOFTWARE DEVELOPERS

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DJG DATE 10-97
DRAWN BY TONYM DATE 10-97
CHECKED BY DJG DATE 10-97

AS-BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY DATE
AS-BUILTS ACCEPTANCE BY DATE
VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
STATE PLANE COORD. X=394,232.08 Y=1,493,896.40
GROUND TO GRID FACTOR = 0.99966724
ΔX -0' 12' 12"

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
DANIEL J. MONTOYA NEW MEXICO 8766 REGISTERED PROFESSIONAL ENGINEER
4/15/03

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

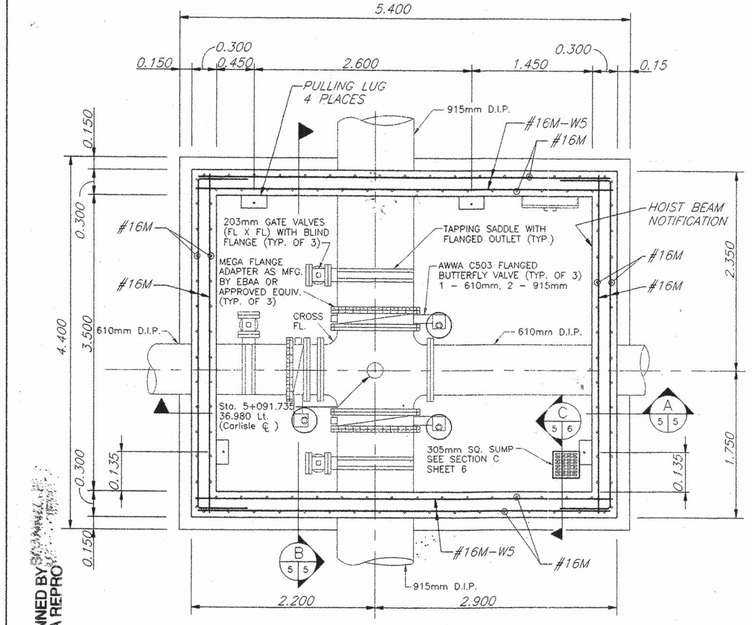
CARLISLE & I-40 WATER LINE
PLAN AND PROFILE SHEET

DESIGN REVIEW COMMITTEE — APPROVED — REVIEW REVIEW COMMITTEE
CITY ENGINEER — APPROVED — CITY ENGINEER
LAST DESIGN UPDATE MO./DAY/YR. MO./DAY/YR.

CITY PROJECT NO. 575891
ZONE MAP NO. H-16
SHEET 4 OF 6

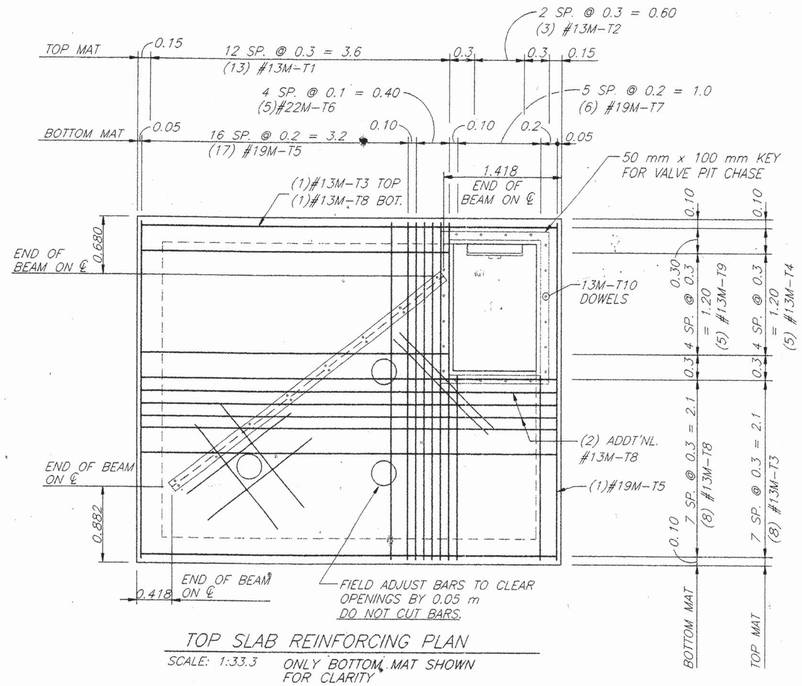
\\BHI-MAIN\96202\HYDRO\DESIGN\EP\RCP02010.DWG

TPU-040-2(110)100 COPYRIGHT BOHANNAN-HUSTON, INC.



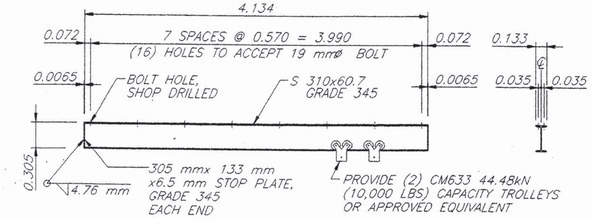
PLAN

SCALE: 1:33.3 TOP SLAB NOT SHOWN FOR CLARITY



TOP SLAB REINFORCING PLAN

SCALE: 1:33.3 ONLY BOTTOM MAT SHOWN FOR CLARITY

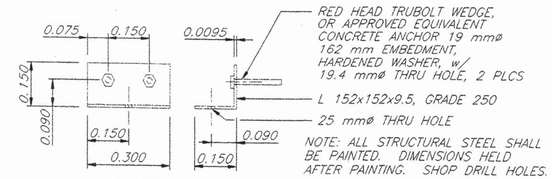


HOIST BEAM NOTIFICATION:
USING A 0.05 LETTERING STENCIL PAINT
"HOIST BEAM CAPACITY 8000 LBS. (35.58kN)"

HOIST BEAM

SCALE: 1:33.3

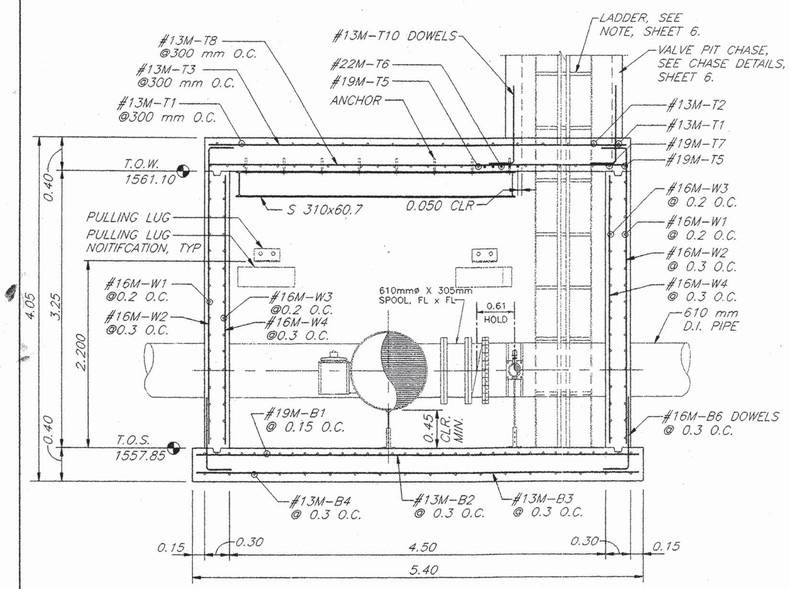
NOTE: ALL STRUCTURAL STEEL SHALL BE PAINTED. DIMENSIONS HELD AFTER PAINTING.



PULLING LUG NOTIFICATION:
USING A 0.05 LETTERING STENCIL PAINT BELOW EACH
PULLING LUG, "CAPACITY 1000 LBS. (4448 N)"

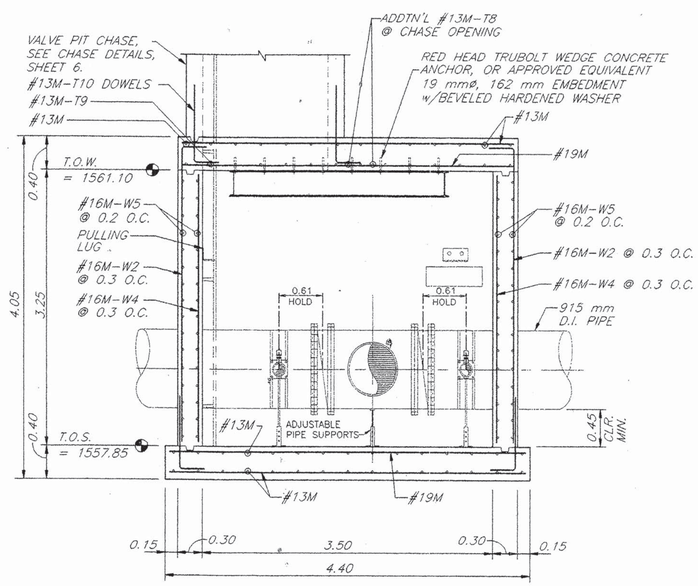
PULLING LUG DETAIL

SCALE: 1:10



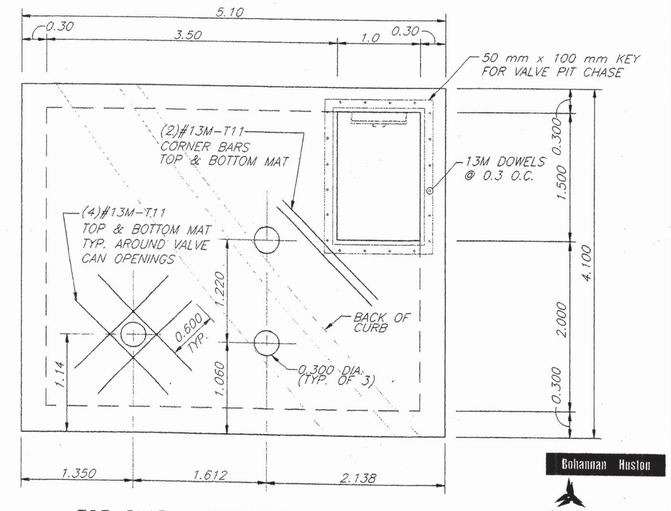
SECTION A

SCALE: 1:33.3



SECTION B

SCALE: 1:33.3



TOP SLAB PENETRATION LAYOUT PLAN

SCALE: 1:33.3

NOTES:

1 PIPELINE CENTERLINE IN THE HORIZONTAL PLANE IS FIXED. ASSOCIATED VALVE BOXES ADJUST IN LOCATION DUE TO PIPE SIZE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF VALVE RING AND COVERS BEFORE CASTING LIDS.

2 VALVE RINGS AND COVERS SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE VALVE PIT.

3 PIPELINE VERTICAL CENTERLINE IS ADJUSTABLE WITH MINIMUM OF 0.45 BELOW PIPELINE AS THE ONLY LIMIT.

4 HOLD CENTERLINE OF TAP LOCATIONS AND CENTER OF BUTTERFLY VALVE.

AS-BUILT INFORMATION

CONTRACTOR: DATE
WORK STAKED BY: DATE
INSPECTOR'S ACCEPTANCE BY: DATE
FIELD VERIFICATION BY: DATE
DRAWINGS CORRECTED BY: DATE

MICRO-FILM INFORMATION

RECORDED BY: DATE
NO.

BENCH MARKS

STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA.I-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
STATE PLANE COORD. X=394,232.08 Y=1,493,896.40
GROUND TO GRID FACTOR = 0.999966724
△CK.-0° 12' 12"

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DAVID M. BERG NEW MEXICO 10016 REGISTERED PROFESSIONAL ENGINEER 9-15-97

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DAA DATE 9-97
DRAWN BY AAG DATE 9-97
CHKD/CKFD BY DMR DATE 9-97

Bohannan Huston
Courtyard One
7500 JEFFERSON NE
Albuquerque
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS
SURVEYORS LANDSCAPE ARCHITECTS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
VALVE PIT DETAILS

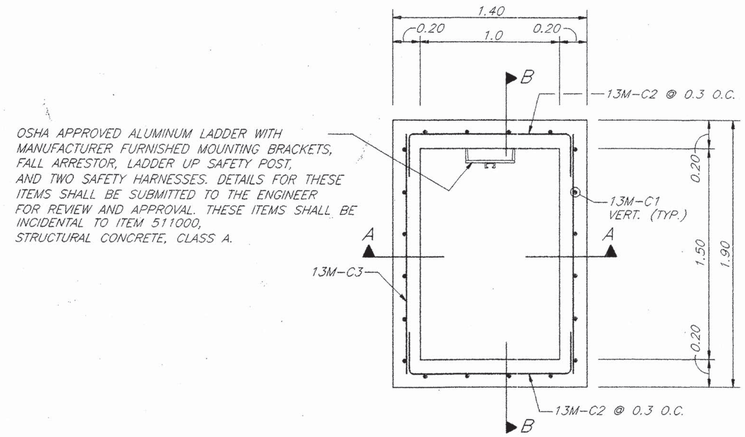
DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | LAST DESIGN UPDATE | MO./DAY/YR. | MO./DAY/YR.

APPROVED
DESIGN REVIEW COMMITTEE
APPROVED
CITY ENGINEER

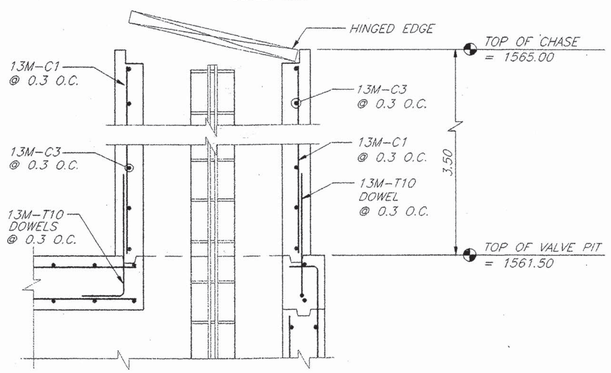
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
5758.91	H-16	5	6

BHI-MAIN\96202\STRUCT\VAULT\EVALVPIT.DWG 4/13/98

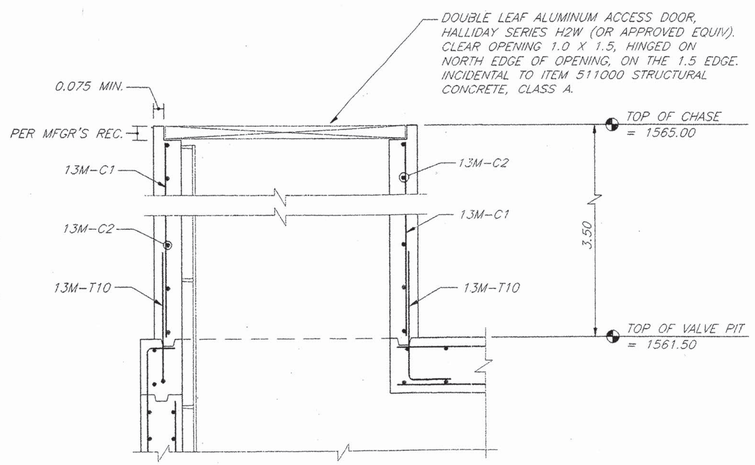
SCANNED BY MESA REPRO



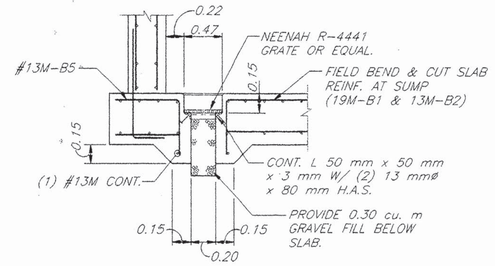
CHASE PLAN
SCALE: 1:20



SECTION A-A
SCALE: 1:20

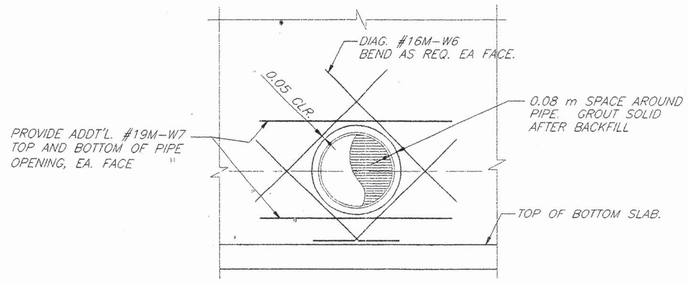


SECTION B-B
SCALE: 1:20



NOTE:
SUMP & GRATE ARE INCIDENTAL TO ITEM 511000 STRUCTURAL CONCRETE, CLASS A.

C 5 6 SECTION C
N.T.S.

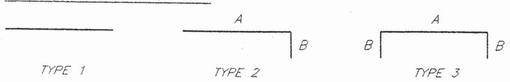


NOTE:
FIELD CUT SCHEDULED HORIZ. & VERT. BARS AS REQUIRED @ PIPE PENETRATION.

TYP. WALL PENETRATION DETAIL
N.T.S. SHOWING ADDITIONAL REINFORCING

LOC	MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS
VAULT	19M-B1	19	35	4.30	1	
	13M-B2	13	15	5.30	1	
	13M-B3	13	15	5.30	1	
	13M-B4	13	18	4.30	1	
	13M-B5	13	6	0.83	2	A=0.43, B=0.40
	16M-B6	16	62	1.35	2	A=1.00, B=0.35
	13M-T1	13	14	4.00	1	
	13M-T2	13	3	2.20	1	
	13M-T3	13	9	5.00	1	
	13M-T4	13	5	3.70	1	
	19M-T5	19	18	4.00	1	
	22M-T6	22	5	4.00	1	
	19M-T7	19	6	2.20	1	
	13M-T8	13	11	5.00	1	
	13M-T9	13	5	3.70	1	
	13M-T10	13	20	1.2	2	A=0.90, B=0.30
	13M-T11	13	28	1.6	1	
	16M-W1	16	32	5.14	3	A=3.94, B=0.60
	16M-W2	16	62	3.90	2	A=3.55, B=0.35
	16M-W3	16	32	4.00	1	
	16M-W4	16	56	3.15	1	
	16M-W5	16	64	5.00	1	
	16M-W6	16	32	1.35	1	BEND AS REQUIRED
	19M-W7	19	16	1.40	1	
CHASE	13M-C1	13	20	3.40	1	
	13M-C2	13	24	1.80	3	A=1.20, B=0.30
	13M-C3	13	24	1.70	1	

BAR BENDING DIAGRAM



TYPE 1 TYPE 2 TYPE 3

GENERAL STRUCTURAL NOTES

1. SPECIFICATIONS:
   NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 1996 EDITION.
   AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 16TH EDITION.
2. SOIL PRESSURE:
   EFP AT REST: 8.7 kN/m³
   UNIT WT.: 18.9 kN/m³
3. MATERIALS:
   CONCRETE: CLASS A f'c = 27.6 MPa (CLASS F FLY ASH)
   REINFORCING BARS: GRADE 420 REINFORCEMENT

INCIDENTAL WORK AND MATERIALS

THE FOLLOWING ITEMS ARE INCIDENTAL TO ITEM 511000, STRUCTURAL CONCRETE CLASS A:
1. SAFETY LADDER, FALL ARRESTOR, SAFETY HARNESSES, AND LADDER UP SAFETY POST.
2. ALUMINUM ACCESS DOOR
3. SUMP, GRATE AND GRAVEL FILL AT SUMP
4. HOIST BEAM, TWO TROLLEYS, PULLING LUGS, AND ANCHORS

QUANTITIES

210000	STRUCTURE EXCAVATION AND BACKFILL FOR BRIDGES	247 cu. m
511000	STRUCTURAL CONCRETE, CLASS A (f'c = 27.6 MPa)	39 cu. m
540060	REINFORCING BARS, GRADE 420	3105 kg.

AS-BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

BENCH MARKS
STATION IS LOCATED AT NORTH END OF THE CARLISLE BLVD. BRIDGE OVER U.S. HIGHWAY I-40. STATION MARK IS A STANDARD NMSHC BRASS TABLET STAMPED "STA1-40-11" AND SET IN CONCRETE MONUMENT FLUSH WITH GROUND. ELEV.=1565.291m
STATE PLANE COORD. X=394,232.08 Y=1,493,806.40
GROUND TO GRID FACTOR = 0.99966724
△X -0° 12' 12"

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
DAVID M. BEEBE NEW MEXICO 10016 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DAA — DATE 9-97
DRAWN BY AAG — DATE 9-97
CHECKED BY DMB — DATE 9-97

Bohannan Huston
Courtyard One
7500 JEFFERSON NE
ALBUQUERQUE
NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS LANDSCAPE ARCHITECTS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

CARLISLE & I-40 WATER LINE
VALVE PIT DETAILS

DESIGN REVIEW COMMITTEE — DESIGN REVIEW COMMITTEE
APPROVED — CITY ENGINEER
LAST DESIGN UPDATE — MO./DAY/YR. — MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
5758.91	H-16	6	6

SCANNED BY MESA REPRO

BHI-MAIN\96202\STRUCT\VAULT\EVALVPIT.DWG 4/13/98

TPLI-040-3(119)160

11-6