



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 21, 1994

Tom Isaacson, P.E.
Isaacson & Arfman PA
128 Monroe Street NE
Albuquerque, N.M. 87108

RE: STORM DRAIN DESIGN REPORT FOR ARROYO VILLAS APTS (B-12/D2)
RECEIVED OCTOBER 6, 1994 FOR WORK ORDER APPROVAL
ENGINEER'S STAMP DATED 9-29-94

Dear Mr. Isaacson:

Based on the information included in the submittal referenced above, City Hydrology approves this project for Work Order.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia

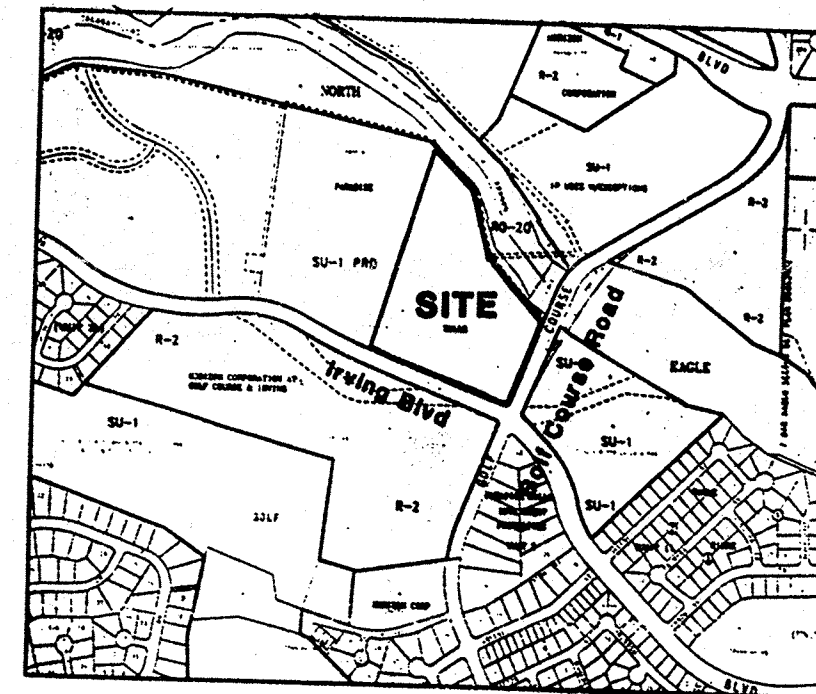
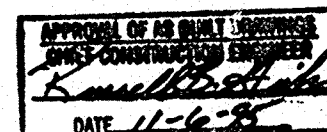
WPHYD/8104/JPC

PUBLIC IMPROVEMENT PLANS
ARROYO VILLAS
APARTMENTS
ALBUQUERQUE, NEW MEXICO
TRACT T-1A, TOWN OF ALAMEDA GRANT
SEPTEMBER 1994

GENERAL NOTES

- All work detailed on these plans to be performed under contract shall, except as otherwise stated or provided for herein, be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction 1986 Edition as amended through Update No. 4.
- Prior to construction, the Contractor shall excavate & verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the Contractor shall notify the Engineer so that the conflict can be resolved with minimum delay.
- Two (2) working days prior to any excavation, Contractor must contact Line Locating Service @ 260-1990 for location of existing utilities.
- Contractor shall support all existing, underground utility lines which become exposed during construction. Payment for supporting work shall be incidental to item under construction.
- Contractor shall conduct his operations in a manner which will minimize interference with local traffic and provide for a safe means of routing pedestrian traffic around all work areas. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property, and to protect them from damage, injury, or loss. Contractor shall erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety continuously and not limited to normal working hours, throughout the duration of the project. Contractor shall adhere to Section 19 of the General Conditions of the City of Albuquerque Standard Specifications for Public Works Construction, 1986, as amended.
- The Contractor agrees that he shall assume the sole and complete responsibility for the job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify, and hold harmless the Owner & Engineer from any and all liability real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of the Owner or Engineer.
- TRAFFIC CONTROL: Three (3) working days prior to beginning construction the Contractor shall submit to the Construction Coordination Division a detailed construction schedule. Two (2) working days prior to construction the Contractor shall obtain a barricading permit from the Construction Coordination Division. Contractor shall notify Barricade Engineer (768-2551) prior to occupying an intersection. See Section 19 of the specifications. All street striping altered or destroyed shall be replaced by the Contractor to location and in kind as existing.
- The Contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- Contractor shall assist the Engineer/Inspector in the recording of data on all utility lines and accessories as required by the City of Albuquerque for the preparation of record drawings. Contractor shall not cover utility lines and accessories until all data has been recorded.
- Existing curb and gutter, sidewalks, driveways, and walls, not to be removed under the contract which are damaged or displaced by the Contractor shall be removed and replaced by the Contractor at his expense.
- All utilities and utility service lines shall be installed prior to paving. The surface course shall be installed after full approval and acceptance of the utility lines.
- Tack coat requirements shall be determined by the City Engineer.
- The Contractor is responsible for protecting and maintaining all existing monumentation controls. In the event of inadvertent destruction or alteration, the Contractor must immediately notify the City Chief Surveyor. See Section 4.4.1 of the General Conditions.
- Contractor shall be responsible for notifying utilities for any adjustment or relocation of existing utilities during or as a result of construction. No additional monetary compensation will be allowed for delays or inconvenience caused by utility company work crews. The Contractor may be required to reschedule his activities to allow utility crews to perform their required work. Any damage to lines, valves, etc., will be repaired or replaced by the Contractor at his expense.
- All pipe bedding shall conform to Class C bedding as defined in Section 701 of the Specifications.
- There shall be a minimum clearance between utility lines of 0.5'. Where this is not possible, two layers of 1/2" expansion joint material shall be placed between utility lines. The cost of expansion joint material shall be incidental to water or sewer line construction and no separate payment shall be made therefor.
- WARNING—EXISTING UTILITY LINE LOCATIONS are shown in an approximate manner only, and such lines may exist where none are shown. The location of any such existing lines is based upon information provided by the utility company, the Owner, or by others, and the information may be incomplete or may be obsolete by the time construction commences.
The Engineer has undertaken no field verification of the location, depth, size, or type of existing underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The Contractor shall inform itself of the location of any utility line in or near the area of the work in advance of and during excavation work. The Contractor is fully responsible for any and all damage caused by its failure to locate, identify, and preserve any and all existing utilities. The Contractor shall comply with State statutes, municipal and local ordinances, rules and regulations pertaining to the location of these lines and facilities, in planning and conducting excavation, whether by calling or notifying the utilities, complying with "Blue Stakes" procedures, or otherwise.
- PNM will provide at no cost to the City or the Contractor the required personnel for inspection or observation deemed necessary by PNM while the Contractor is exposing PNM's cables. However, the Contractor shall be charged the total cost associated with repairs to any damaged cables or for any cost associated with supporting or relocating the poles and cables during construction.
- Orange Barrel Policy (BPW-021). Certain portions of the work covered by these drawings may be affected by the City Orange Barrel Policy for GIP projects as determined by the Public Works Department during the work order phase and in conjunction with securing a barricading permit for the work.

PREPARED BY:
ISAACSON & ARFMAN, P.A.
128 MONROE ST., NE
ALBUQUERQUE, NM 87108



1"=750'±
VICINITY MAP

SHEET 0A REVISED IRVING BLVD. TRANSITION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
24-512221.79 10/19/95

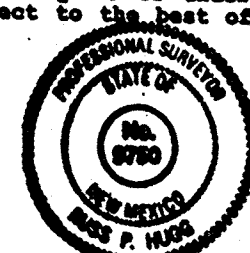
Russ P. Bugy
* Certification Survey and on Self-Governed Property Due to other work changes

NO.	TITLE
1	COVER SHEET, GENERAL NOTES
2	SUBDIVISION PLAT
3	PAVING DETAILS
4	SURVEY CONTROL AND STRIPING DETAILS
5	MASTER PAVING AND STORM DRAIN PLAN
6	IRVING BLVD. PAVING PLAN
7	IRVING BLVD. PAVING PLAN
8	GOLF COURSE ROAD PAVING PLAN
9	IRVING BLVD. STORM DRAIN
10	IRVING BLVD. STORM DRAIN
11	GOLF COURSE ROAD STORM DRAIN
12	CALABICILLAS ARROYO STORM DRAIN OUTFALL DETAILS
13	WATER AND SEWER NOTES AND DETAILS
14	MASTER UTILITY PLAN
15	LINE A - WATER & SEWER PLAN AND PROFILE
16	LINE B - WATER & SEWER PLAN AND PROFILE
17	LINE C - WATER & SEWER PLAN AND PROFILE
18	LINE C & C-1 - WATER & SEWER PLAN AND PROFILE
19	LINE D - WATER PLAN & PROFILE
20	LINE E - WATER PLAN & PROFILE

SURVEYORS CERTIFICATION

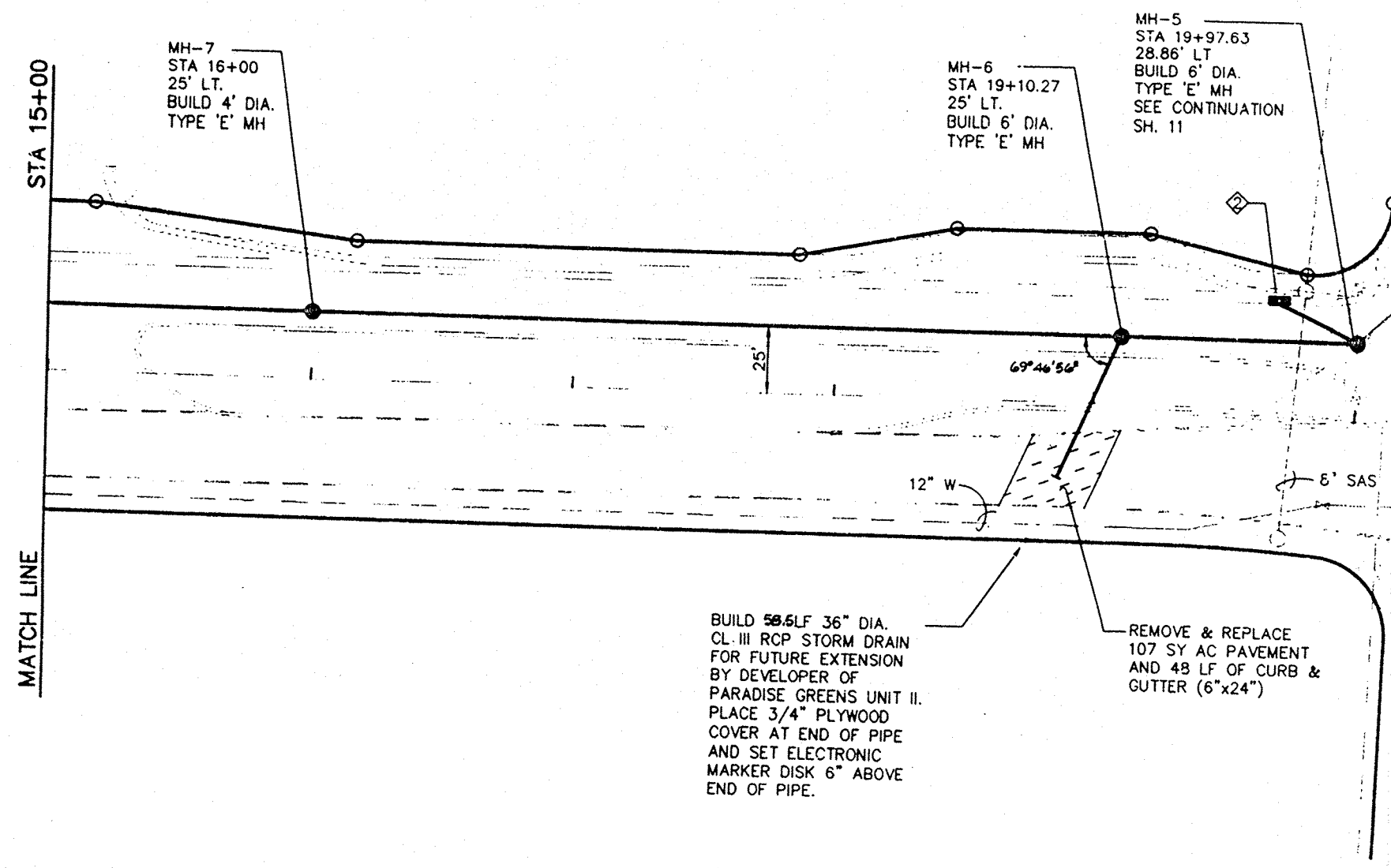
I, Russ P. Bugy, New Mexico Professional Surveyor Number 9750, hereby certify that this Submittal Survey was prepared from field notes of an actual ground survey performed by me or under my supervision; and that it is true and correct to the best of my knowledge and belief.

Russ P. Bugy
Russ P. Bugy
MSPS No. 9750
October 9, 1995



REV. SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
					APPROVED FOR CONSTRUCTION	
ISAACSON & ARFMAN, P.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque, New Mexico			PROJECT NO. 5022.90		SHEET 1 OF 20	

15+00 16+00 17+00 18+00 19+00 20+00

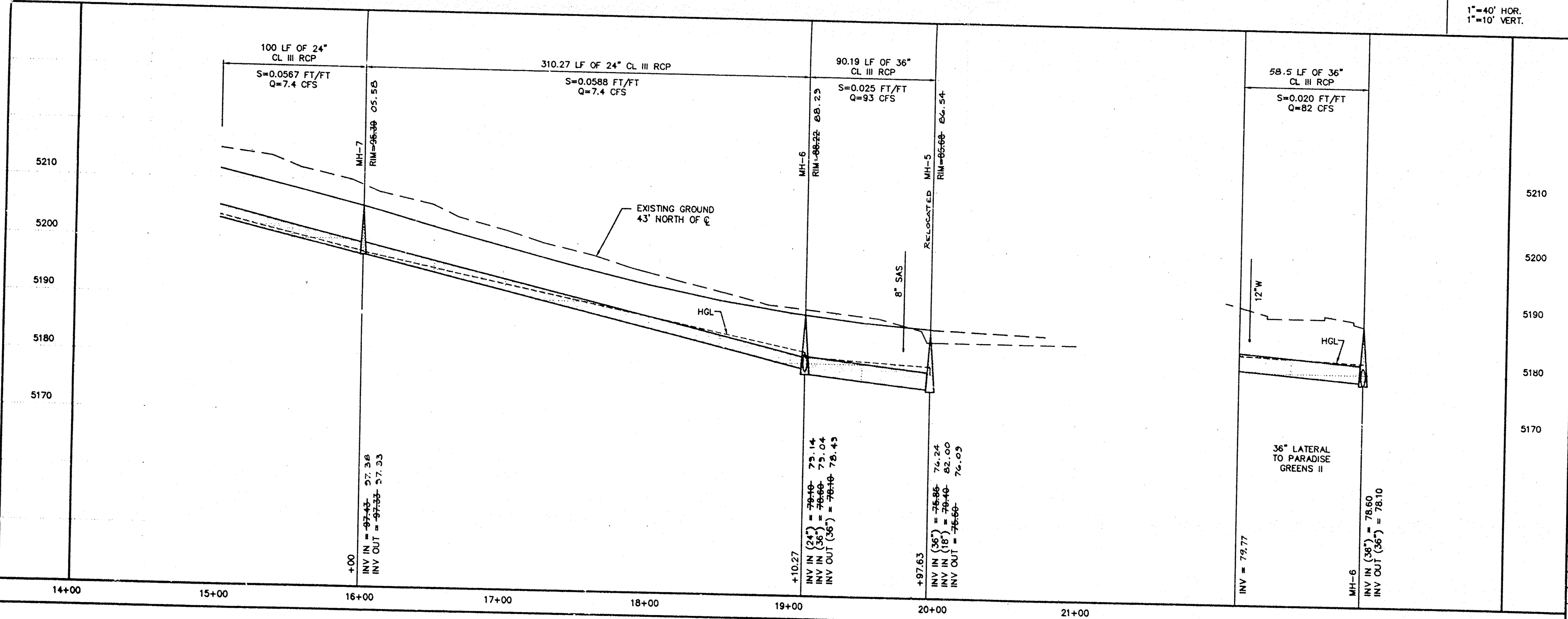


IRVING BLVD. STORM DRAIN

STORM DRAIN INLET INFORMATION						
INLET NO.	STATION	INLET TYPE	TOP CURB ELEVATION	TOP GRATE ELEVATION	INVERT IN	INVERT OUT
2	19+70	'A'	86.56	85.66	---	86.06
			86.45	85.50	82.48	

CONNECTOR PIPE INFORMATION			
FROM INLET NO.	DIA (IN)	LENGTH (FT)	SLOPE (FT/FT)
2	18	30	0.020

SCALES:
1"=40' HOR.
1"=10' VERT.



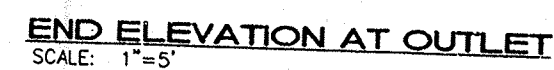
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	4	5	0	2	2	9	1	7	0	9	5			

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
158 Monroe Street N.E.
Albuquerque, New Mexico
778UTL80W00000 V02 9/22/94

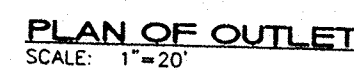
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: ARROYO VILLAS APARTMENTS IRVING BLVD. STORM DRAIN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>[Signature]</i>	11-15-94	WATER	VIA RWE	10-18-94
TRANSPORTATION	<i>[Signature]</i>	10-20-94	WASTE WATER	VIA RWE	10-18-94
HYDROLOGY	<i>[Signature]</i>	10-20-94			
PROJECT NO.	5022.90	MAP NO.	B-12	SHEET	10 OF 20

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACT NO.	5022.90	BLACK NO. 2"	ELEV. = 5213.83	FIELD NOTES	NO.	DATE	BY
DESIGNED BY	ISAACSON & ARFMAN, P.A.						
DRAWN BY	ISAACSON & ARFMAN, P.A.						
CHECKED BY	ISAACSON & ARFMAN, P.A.						
RECORDED BY	ISAACSON & ARFMAN, P.A.						
DATE	10/20/94						

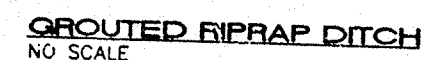





— USE BONDING GROUT LAYER ON ALL OLD SOIL-CEMENT FACES AND PIPE, BOTH HORIZONTALLY & VERTICALLY, IMMEDIATELY PRIOR TO PLACING NEW SOIL-CEMENT OR BEDDING.



1. REMOVE, STOCKPILE, AND REPLACE 35 SY LOOSE RIPRAP.
2. REMOVE & DISPOSE 150 SY GROUTED RIPRAP. RE-CONSTRUCT 150 SY GROUTED RIPRAP--SEE DETAIL THIS SHEET.
3. REMOVE 41 CY SOIL--CEMENT, CONSTRUCT 1.5 CY BEDDING CONCRETE LIFT. CONSTRUCT 36 CY SOIL--CEMENT REPLACEMENT LIFTS.
4. CONTRACTOR SHALL SUPPORT AND ANCHOR WATERLINE DURING CONSTRUCTION. NOTIFY BOB GAY, NEW MEXICO UTILITIES (898-2661) 48 HOURS PRIOR TO EXPOSING WATERLINE.



- SOIL-CEMENT CHANNEL SLOPE
- LOOSE RIPRAP
- GROUTED RIPRAP
- GUARD RAIL

 <p>ISAACSON & ARFMAN, P.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque New Mexico 77901.4.0.DWG 10/10/94</p>	NO. DATE		DESIGNED BY	DRAWN BY	DATE
<p>CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP</p> <p>TITLE: ARROYO VILLAS APARTMENTS CALABACILLA ARROYO STORM DRAIN OUTFALL DETAILS</p>					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	<i>S. A. Smith</i>	<i>11/14/94</i>	WATER	<i>N/A</i>	<i>10-10</i>
TRANSPORTATION	<i>N/A</i>	<i>10-20-91</i>	WASTE WATER	<i>N/A</i>	<i>10-10-91</i>
HYDROLOGY	<i>Lawrence</i>	<i>11-14-94</i>	AMAFCA	<i>Joe</i>	<i>11/14/94</i>
PROJECT NO.	50222.90		MAP NO.	B-12	
			SHEET	12 OF 20	