

• L E G E N D •

MATERIALS

CONCRETE	
RIP-RAP	

LINES

SUBDIVISION BOUNDARY	
PROPERTY LINE (PLAN)	
PROPERTY LINE (SECTION)	
CENTERLINE	
EASEMENT LINE	
MATCH LINE	
SECTION CUT LINE	

EARTHWORK

	EXISTING	NEW
CONTOUR LINE		
SPOT ELEVATION		
PROJECT / PHASE BOUNDARY		
SWALE		
DIRECTION OF FLOW		

MISCELLANEOUS UTILITIES

GAS LINE		
UNDERGROUND TELEPHONE		
UNDERGROUND ELECTRICAL		
STORM DRAIN		
STORM DRAIN MANHOLE		
STORM DRAIN INLET		

SANITARY SEWER

SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
SAS SERVICE CONNECTIONS		
SAS CAP OR PLUG		
ENCASEMENT		

WATER

WATER LINE		
WATER SERVICE CONNECTIONS		
GATE VALVE		
FIRE HYDRANT		
BUTTERFLY VALVE		
REDUCER		
WATER PRESSURE ZONE BOUNDARY		

WATER FITTINGS

CAPS AND PLUGS		
ELBOW		
CROSS		
TEE		

MISCELLANEOUS

CHAINLINK FENCE		
FIELD FENCE		
COMMON YARD WALL		
RETAINING WALL		
POWER OR TELEPHONE POLE		

CONSTRUCTION PLANS

FOR

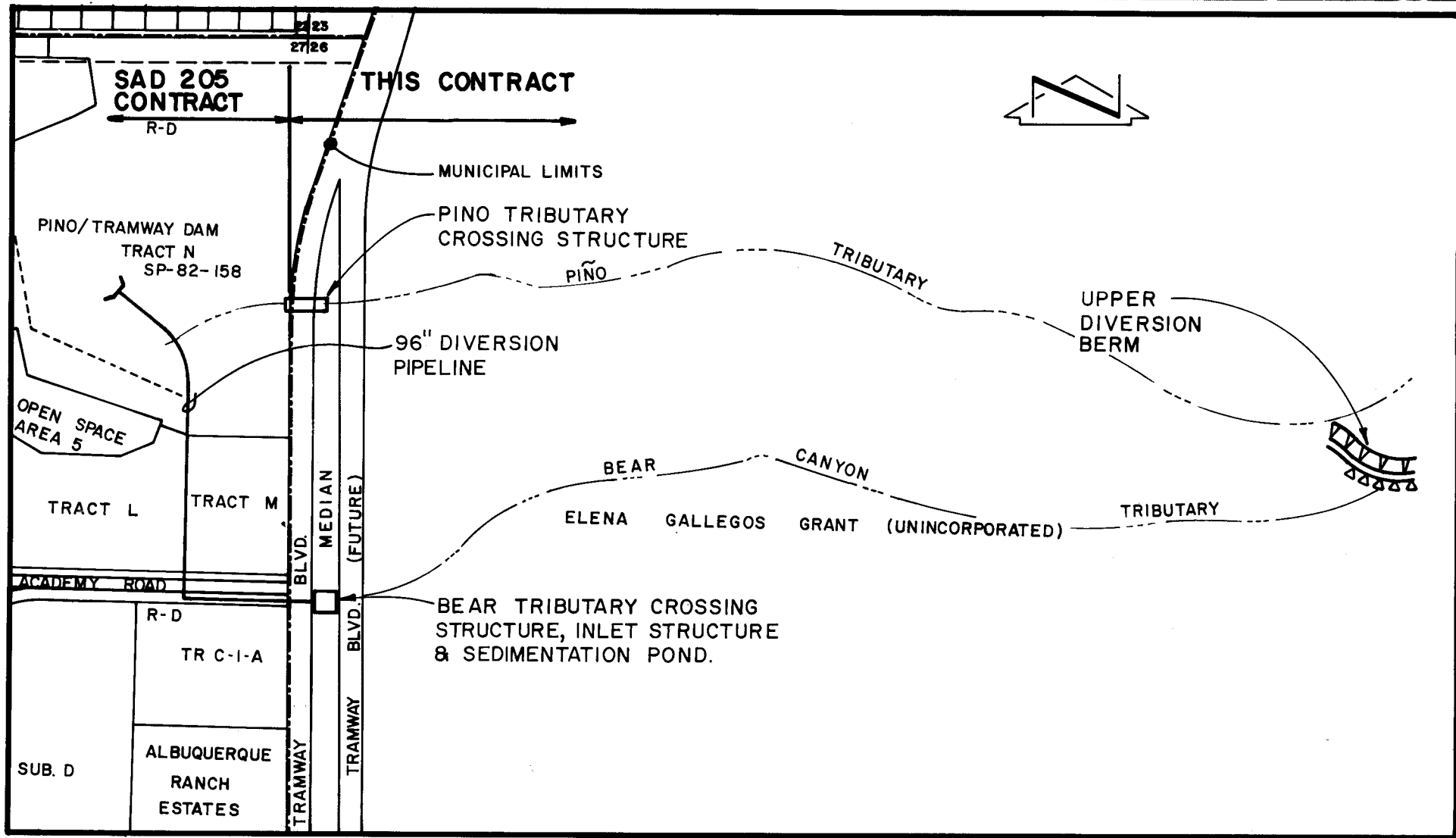
DRAINAGE STRUCTURES FOR THE
BEAR TRIBUTARY & PINO TRIBUTARY
EAST OF TRAMWAY BOULEVARD

ALBUQUERQUE, NEW MEXICO
JULY, 1984

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
1	COVER SHEET, INDEX TO DRAWINGS, GENERAL NOTES
2	CONSTRUCTION SEQUENCING
3	PINO TRIBUTARY CROSSING AT TRAMWAY
4	CROSSING STRUCTURE & DETOUR PLAN
5	HEADWALL & ENDWALL DETAILS
6	WINGWALL DETAILS
7	UPPER DIVERSION
8	PLAN & CONSTRUCTION DETAILS
9	BEAR TRIBUTARY CROSSING AT TRAMWAY
10	CROSSING STRUCTURE, INLET STRUCTURE & SEDIMENTATION POND PLAN & CONSTRUCTION DETAILS
11	HEADWALL DETAILS
12	DETOUR PLAN
13	DETOUR DETAILS

NOTE: THESE CONSTRUCTION PLANS NEED TO BE COORDINATED WITH IMPROVEMENTS SCHEDULED WITHIN SAD 205.



VICINITY MAP
SCALE: 1" = 800'

E-22,23 3P

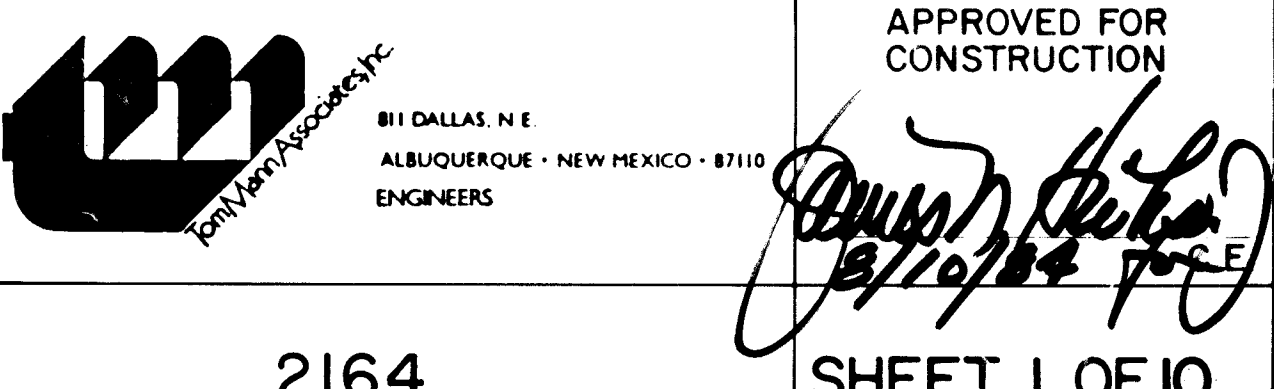
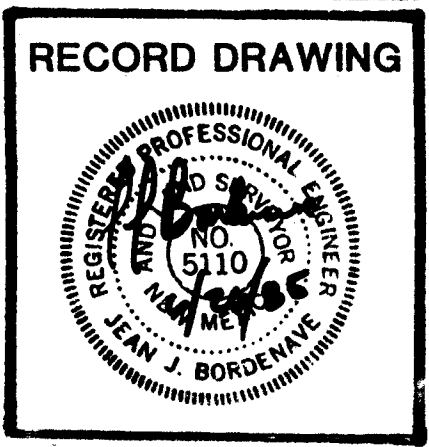
GENERAL NOTES:

- 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 New Mexico Standard Specifications for Public Works Construction - 1979 Edition (referred to herein as the Standard Specifications) and the City of Albuquerque Public Works Contract 84-2. In addition, where called out in these plans, technical work shall conform to the New Mexico State Highway Department Standard Specifications for Road and Bridge Construction - 1976 Edition.
- Two working days prior to any excavation, Contractor must contact Line Locating Service, 766-1234, for spotting locations of existing utilities.
- Prior to construction, the Contractor shall excavate and verify the horizontal and vertical locations of all existing utilities and potential obstructions. Should a conflict exist, the Contractor shall notify the Engineer so that the conflict can be resolved with a minimum amount of delay.
- 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.
- The Contractor must submit a construction signing and barricading plan to Traffic Engineering three (3) days prior to commencement of work. If the Contractor desires to change the traffic control plan already included in these plans.
- All utilities and utility service lines shall be installed prior to paving.
- Backfill compaction shall be according to specified street use.
- There will be no construction allowed during the months of July, August and September unless the contractor obtains a City Engineer's Approved Erosion Control Plan and a 10-year Storm Water Passage Plan Prior to any construction in Arroyos in accordance with Section 12.B.2 of the Drainage Ordinance.

26 21640185

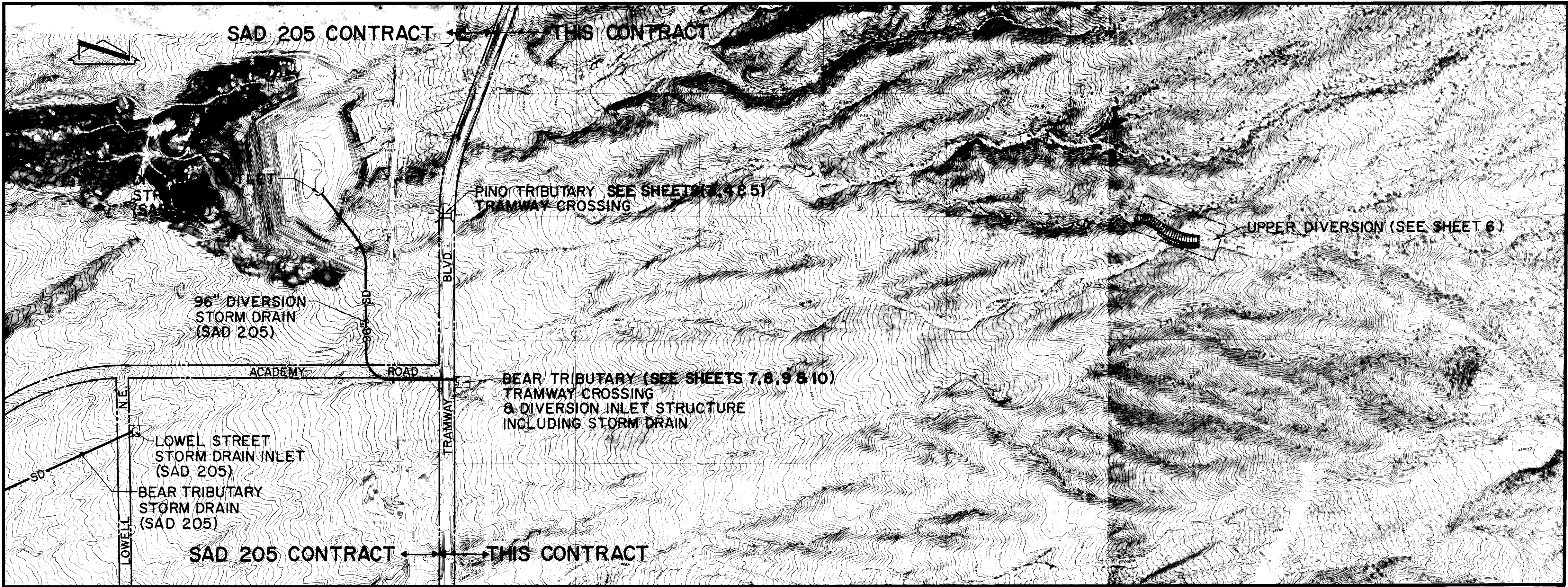
APPROVAL OF AS-BUILT DRAWINGS
W. J. McManus
DATE 7/1/85

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
		W. J. McManus	8/10/84	Albuquerque	8/10/84	Albuquerque	8/10/84
APPROVAL OF REVISIONS							



2164

APPROVED FOR
CONSTRUCTION
8/10/84
SHEET 1 OF 10

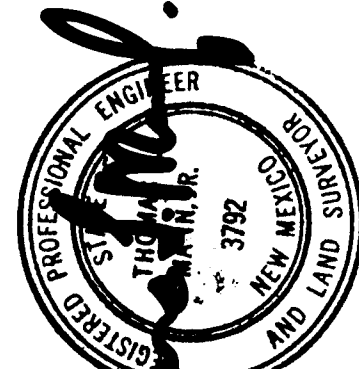


SCALE : 1" = 500'

CONSTRUCTION SEQUENCING: THE CONTRACTOR SHALL COORDINATE WORK PERFORMED UNDER THIS CONTRACT WITH IMPROVEMENTS CONTAINED WITHIN SAD 205. CONSTRUCTION OF IMPROVEMENTS MUST BE PERFORMED IN THE FOLLOWING SEQUENCE:

1. CONSTRUCT PINO TRIBUTARY CROSSING AT TRAMWAY. THIS CROSSING STRUCTURE MUST BE COMPLETED AND IN PLACE PRIOR TO CONSTRUCTION OF THE UPPER DIVERSION
2. CONSTRUCT UPPER DIVERSION. THE DIVERSION MUST BE IN PLACE PRIOR TO IMPLEMENTATION OF DOWNSTREAM FACILITIES WITHIN BEAR CANYON TRIBUTARY FLOOD PLAIN.
3. SAD 205 CONTRACTOR SHALL CONSTRUCT 96" DIVERSION STORM DRAIN STARTING AT THE OUTLET STRUCTURE AND PROCEEDING UPSTREAM TO TRAMWAY BOULEVARD.
4. CONSTRUCT THE BEAR TRIBUTARY CROSSING STRUCTURE WHEN THE SAD 205 CONTRACTOR COMPLETES THE 96" DIVERSION STORM DRAIN DOWNSTREAM FROM TRAMWAY BOULEVARD. THE CROSSING STRUCTURE, INLET STRUCE, AND SEDIMENT POND MUST BE IN PLACE PRIOR TO THE CONSTRUCTION OF THE BEAR TRIBUTARY STORM DRAIN BETWEEN EUBANK AND LOWELL.
5. SAD 205 CONTRACTOR SHALL CONSTRUCT BEAR TRIBUTARY STORM DRAIN.
6. ALL DRAINAGE FACILITIES MUST BE COMPLETE AND IN PLACE PRIOR TO CONSTRUCTION OF OTHER IMPROVEMENTS WITHIN THE BEAR TRIBUTARY FLOOD PLAIN.

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	DATE	BY	DATE	CONTRACTOR	DATE
				WORK STARTED BY	DATE
				INSPECTOR'S FIELD VERIFICATION BY	DATE
				FIELD CORRECTED BY	DATE
				RECORDED BY	DATE



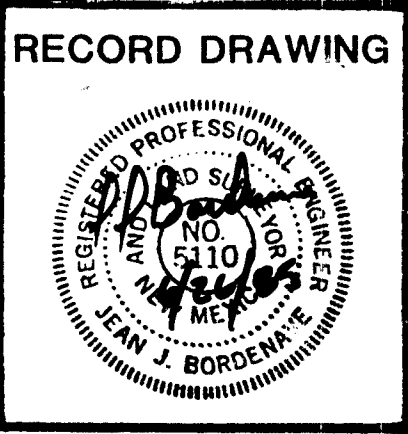
BY *Juan J. Bordenave*

REMARKS

NO. DATE

811 DALLAS N.E. - ALBUQUERQUE - NEW MEXICO - 811/C

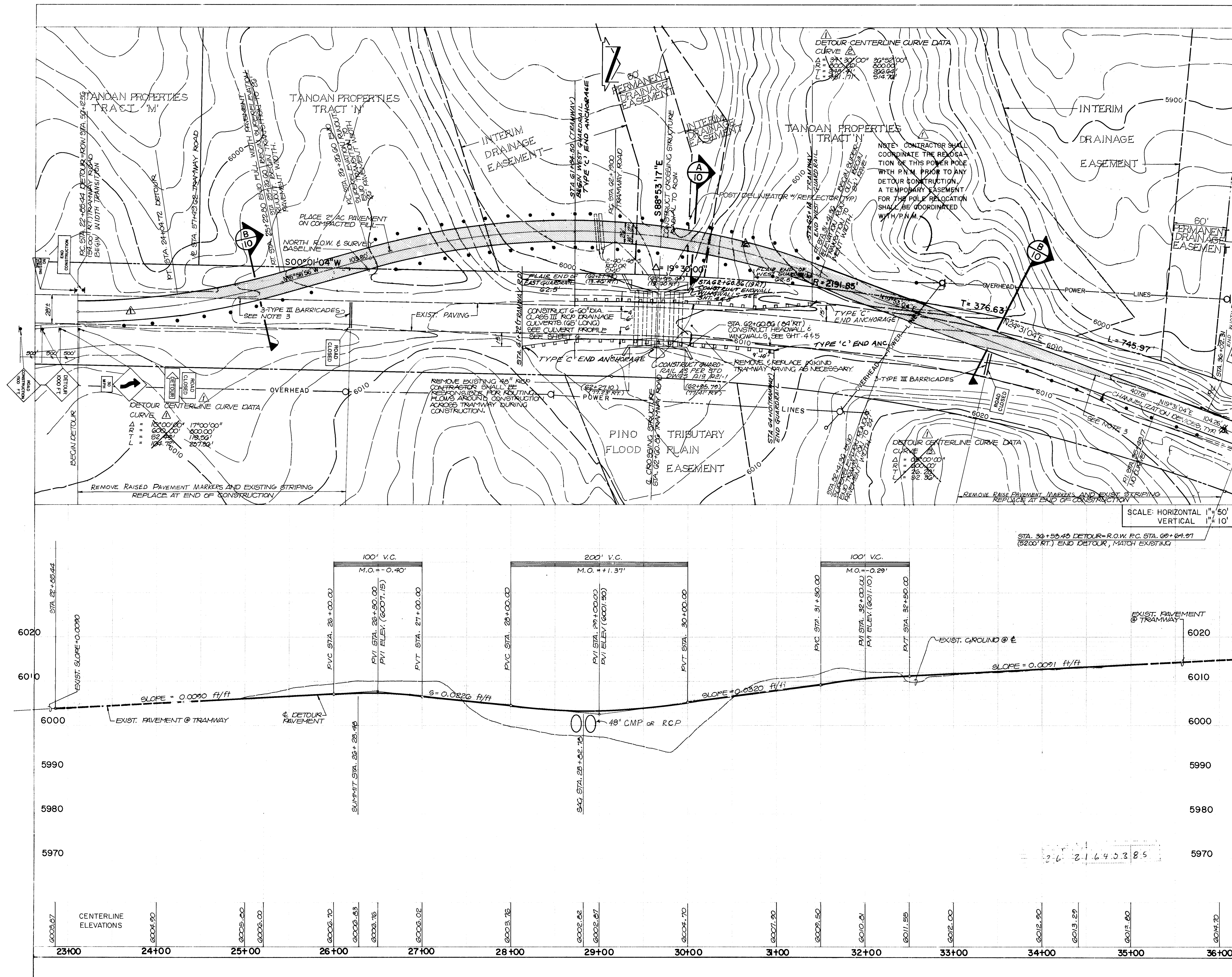
ENGINEERS



APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE

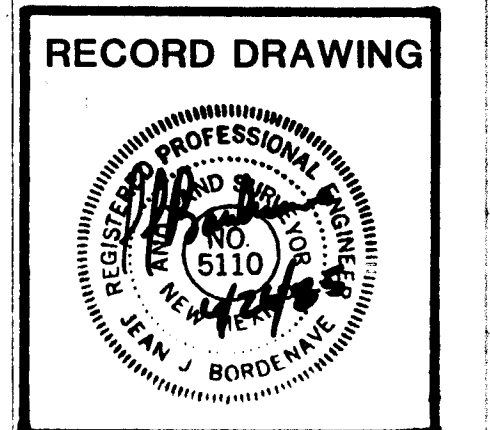
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TITLE: CONSTRUCTION SEQUENCING					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	7/25/84	Liquid Waste	<i>[Signature]</i>	7/25/84
A.C.E. - Design	<i>[Signature]</i>	7/25/84	Traffic	<i>[Signature]</i>	7/25/84
A.C.E. - Hydrology	<i>[Signature]</i>	7/25/84	Water	<i>[Signature]</i>	7/25/84
A.M.A.E.C.A. Bernalillo County					
DRAWING NO.	2164		SHEET	2	OF 10



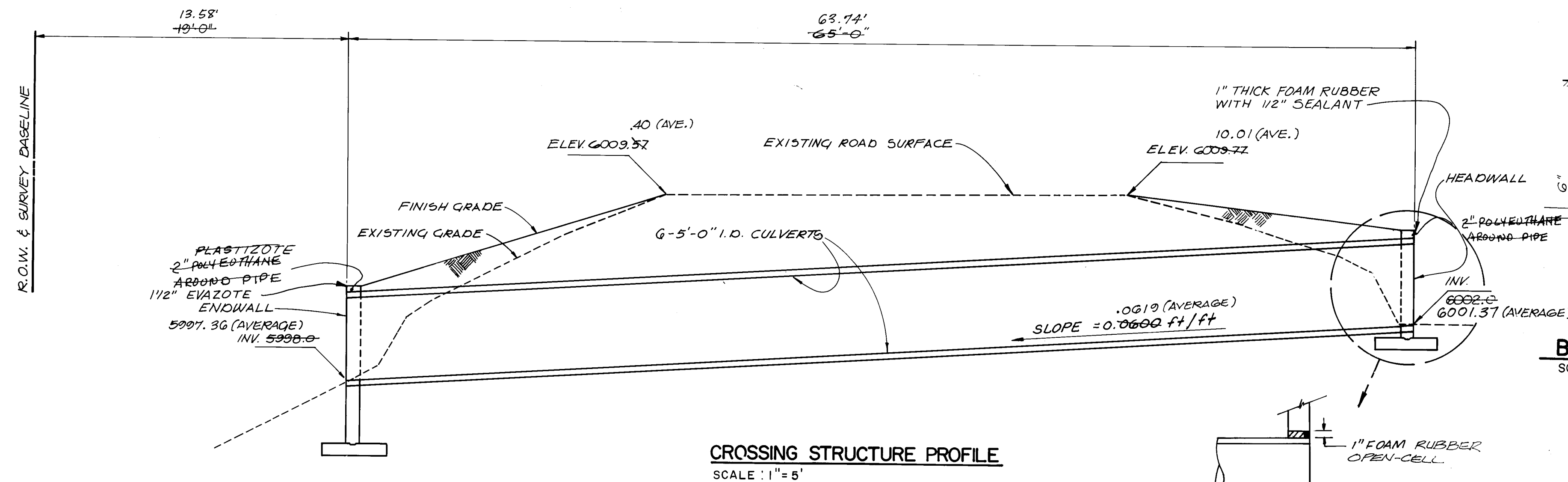
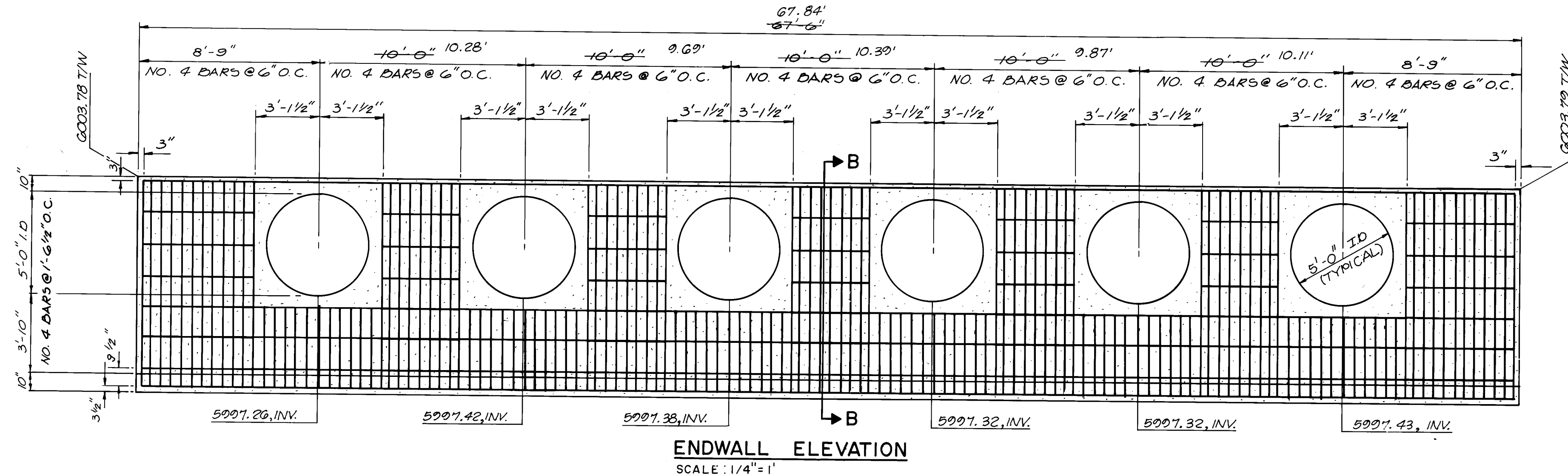
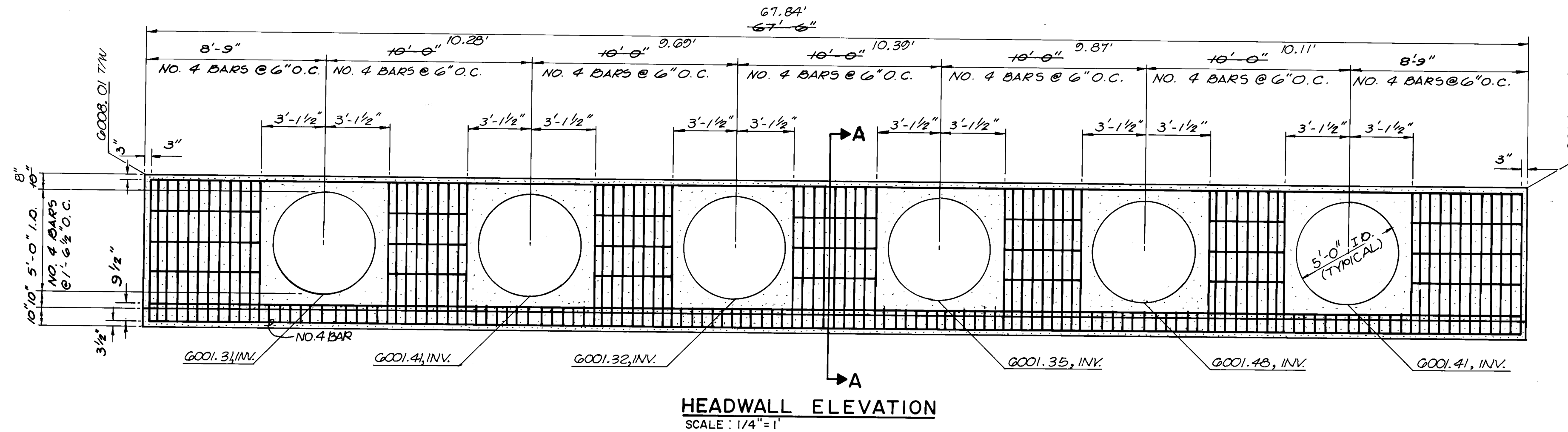
1. Provide solid double yellow centerline striping full length of detour. Remove or obliterate from tramway travel way at end of construction.
2. Join existing paving with smooth transition.
3. Contractor shall verify existing conditions, including grades and elevations shown. Significant differences shall be brought to the attention of the Engineer before beginning work.
4. Compacted fill for detour section shall be per project specifications.
5. Existing 28" asphalt mat is not centered within the Tramway Boulevard right-of-way corridor. Survey base line stationing on Tramway is along the northerly right-of-way line.
6. Stationing for the detour paving is along the centerline of paving.
7. The paved detour to be removed by the Contractor after the crossing structure is operational as a part of this contract. The detour shall be regraded to original elevations and reseeded by the Contractor.

8. Traffic control devices required after dark are to be equipped with warning lights. Type 'A' flashing warning lights shall be used on all advance warning signs and on all devices which are intended to warn motorists or pedestrians of hazards or obstructions in or near the travel path. Type 'C' steady burn lights shall be used on all devices which are intended to define the travel path.
9. Required channelizing devices are to be barrels.
10. Maximum spacing of barrels to be set at 30 feet.
11. Maximum spacing of post delineators to be set at 25 feet.
12. The detour shall be double striped with yellow point.

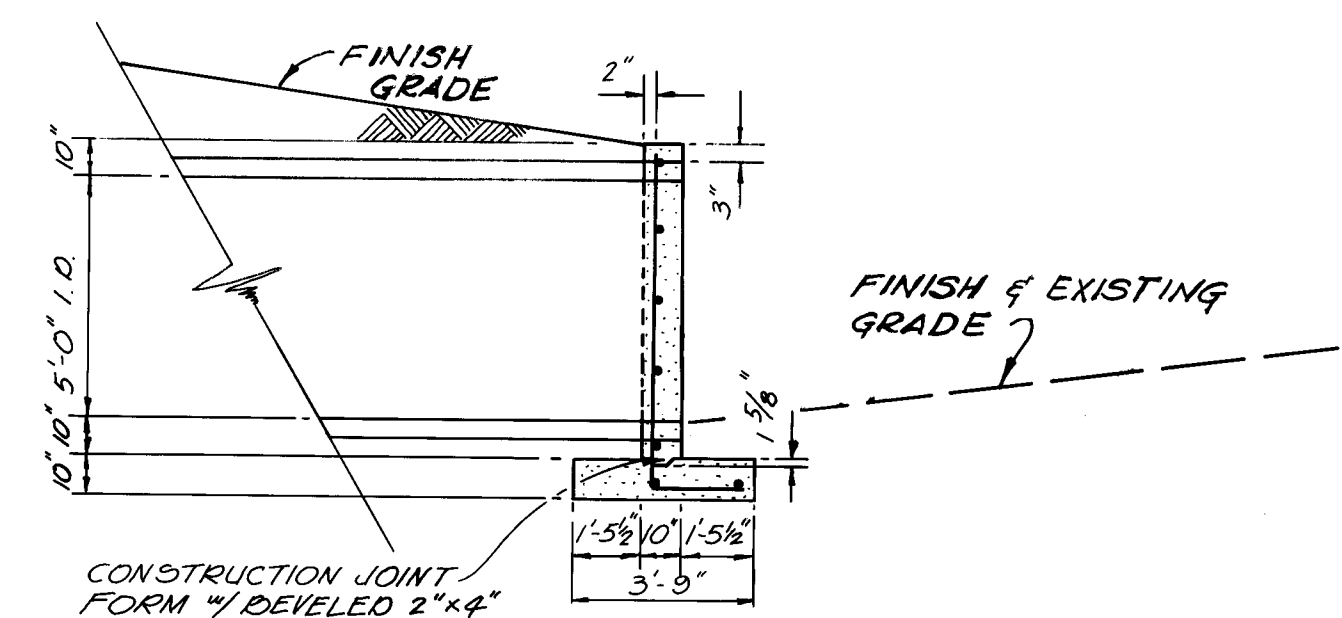
AS-BUILT DATA IS SHOWN BY PARENTHESES ().



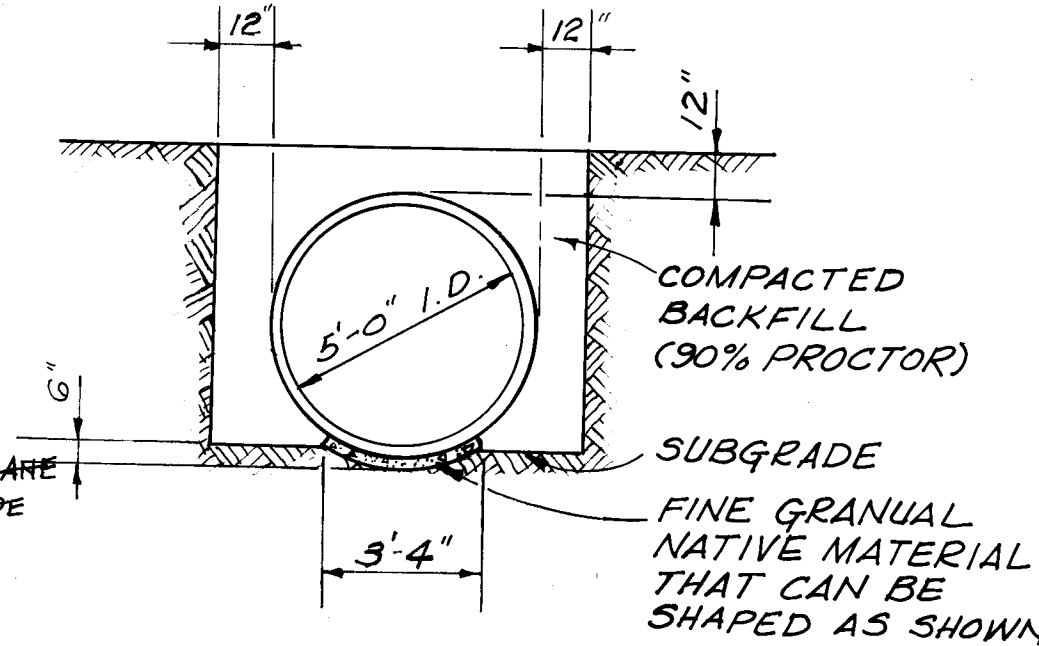
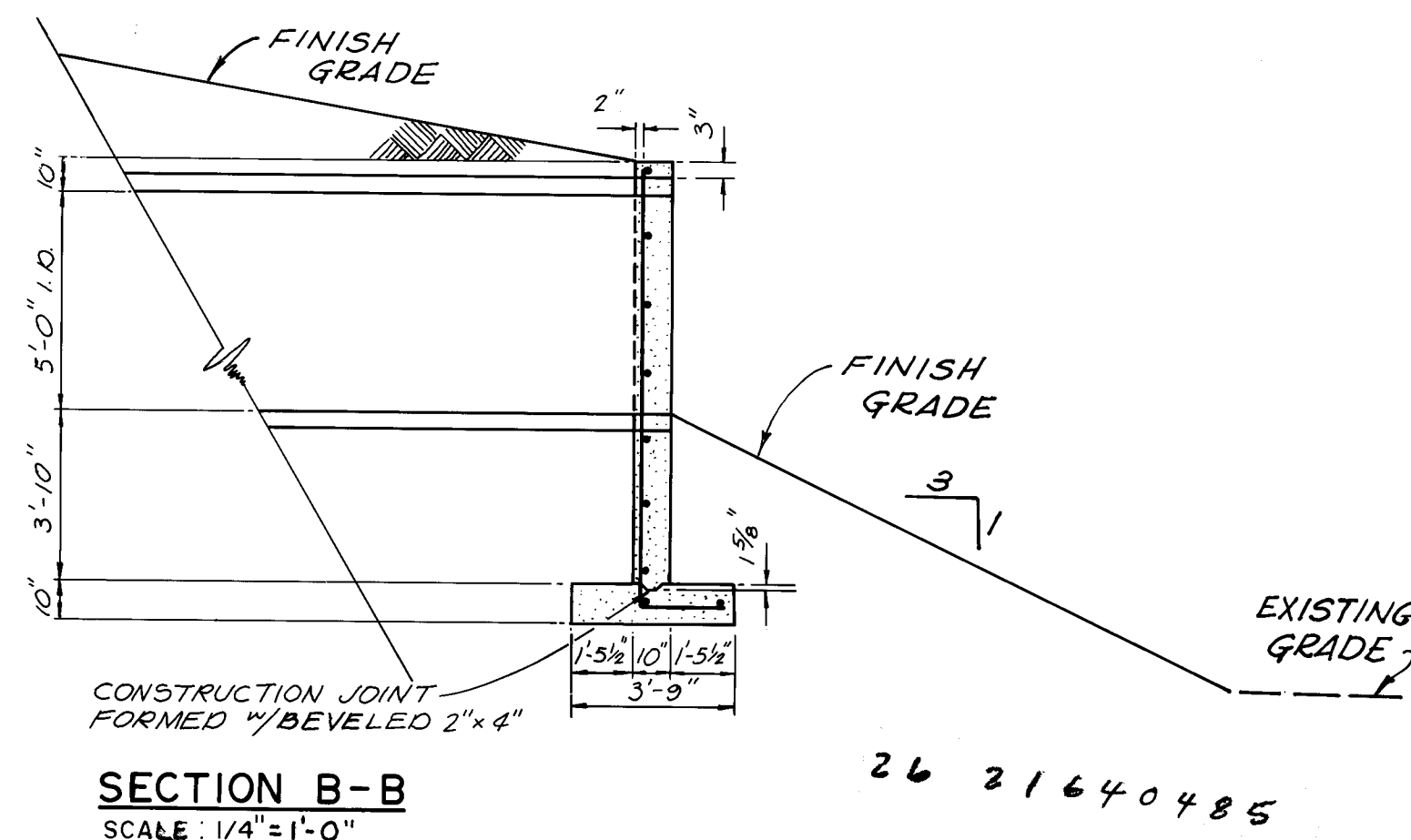
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE PINO TRIBUTARY CROSSING AT TRAMWAY CROSSING STRUCTURE & DETOUR PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	7/25/01	Liquid Waste	<i>[Signature]</i>	7/25/01
A.C.E. Design	<i>[Signature]</i>	7/25/01	Traffic	<i>[Signature]</i>	7/25/01
A.C.E. Hydrology	<i>[Signature]</i>	7/25/01	Water	<i>[Signature]</i>	7/25/01
DRAWING NO. 2164					
MAP NO. SHEET 3 OF 10					



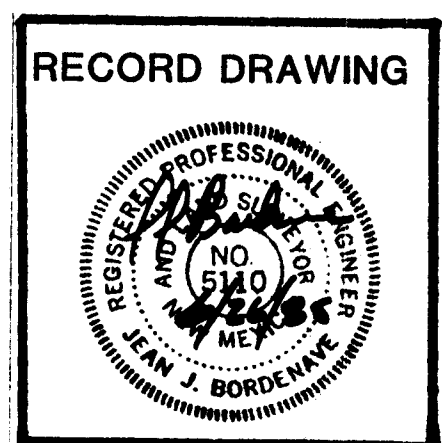
- GENERAL NOTES**
- Workmanship and materials shall conform to New Mexico State Highway Department Standard Specifications for Road and Bridge Construction, 1975 Edition.
 - Design based on a minimum concrete compressive strength of 3000 pounds per square inch at 28 days. Chamfer all exposed edges 3/4" unless otherwise noted.



BAR BENDING DETAIL
SCALE: 1-1/2" = 1'



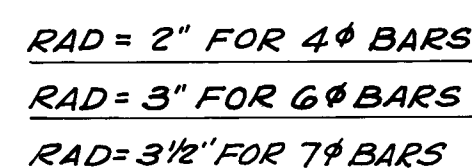
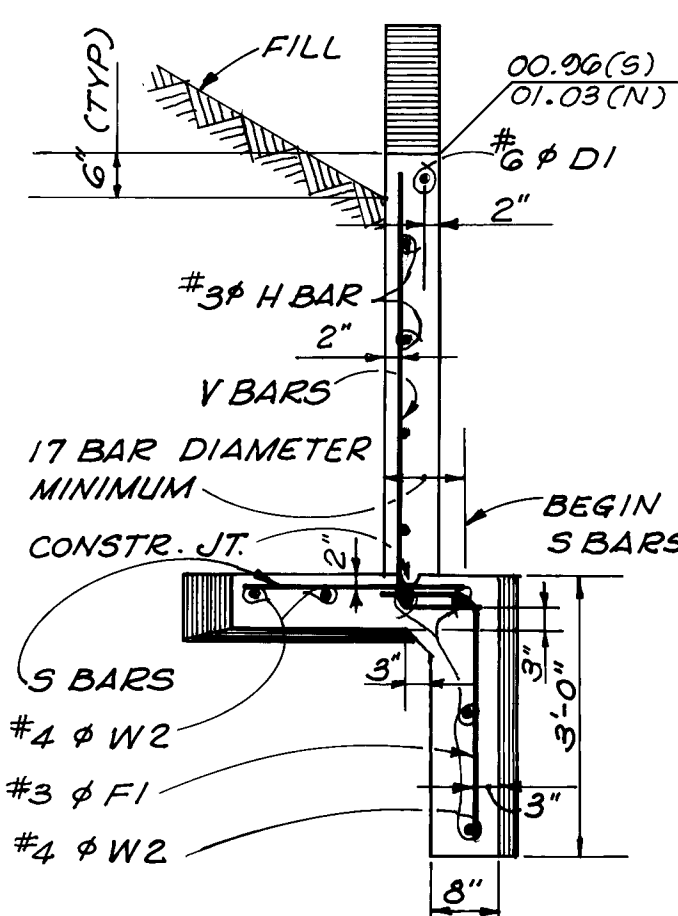
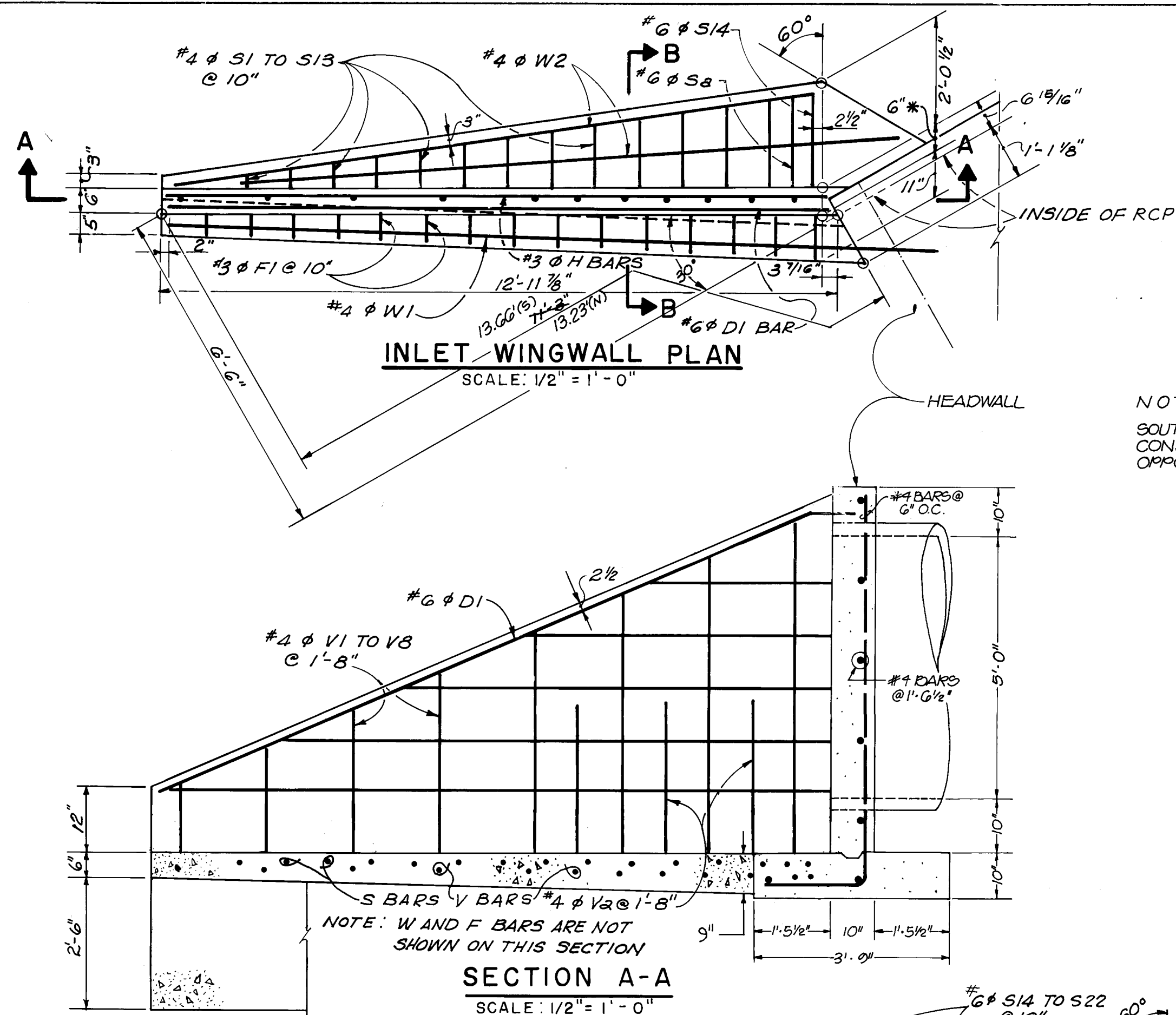
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CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: PINO TRIBUTARY CROSSING AT TRAMWAY HEADWALL & ENDWALL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>C. J. [Signature]</i>	8/1/00	Liquid Waste	<i>R. [Signature]</i>	7/25/00
A.C.E. - Design	<i>M. [Signature]</i>	6/5/00	Traffic	<i>D. [Signature]</i>	7/25/00
A.C.E. - Hydrology	<i>M. [Signature]</i>	7/25/00	Water	<i>R. [Signature]</i>	7/25/00
A.M.A.F.C.A.	<i>R. [Signature]</i>	7/25/00	Bernalillo County		
DRAWING NO.	2164		SHEET	4	OF 10

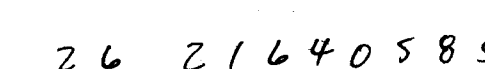
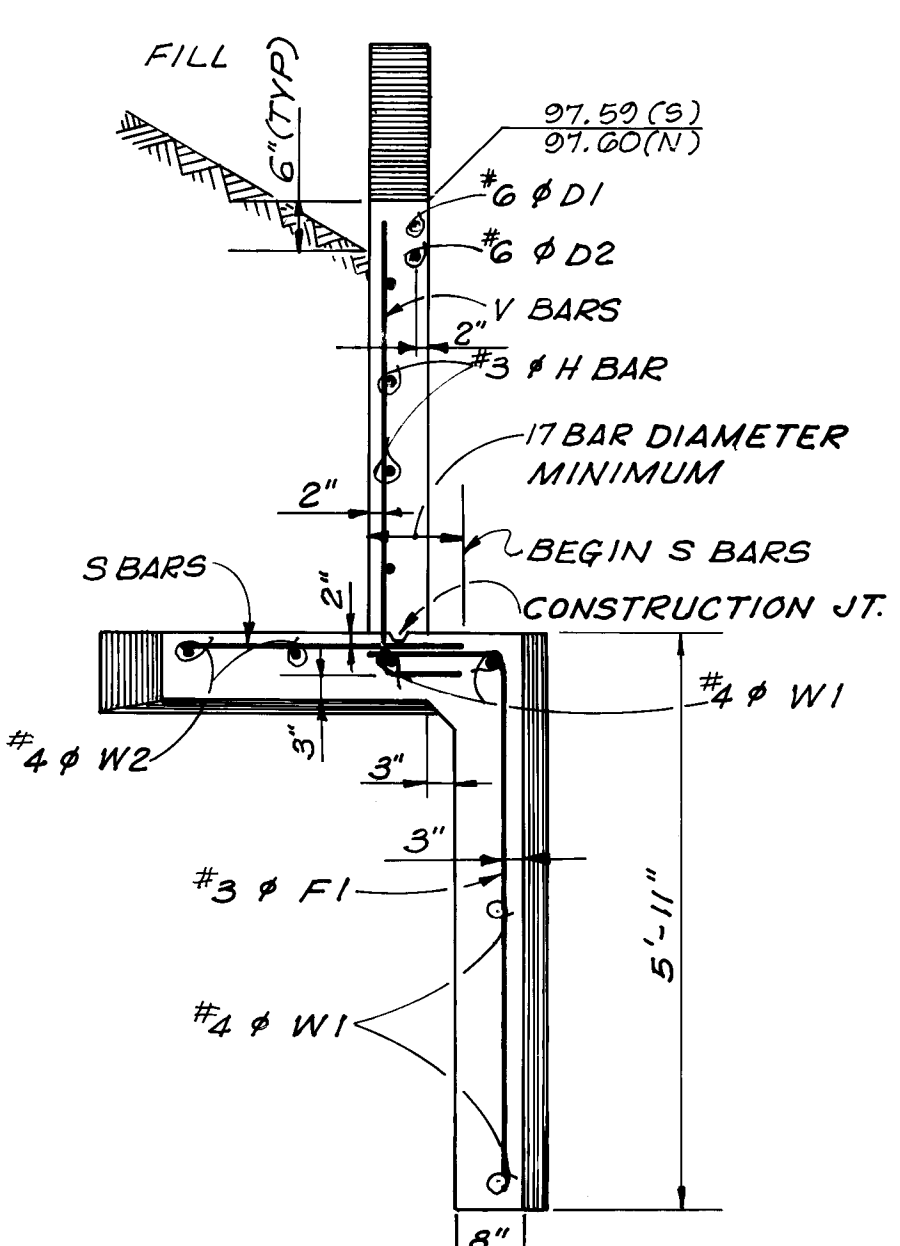
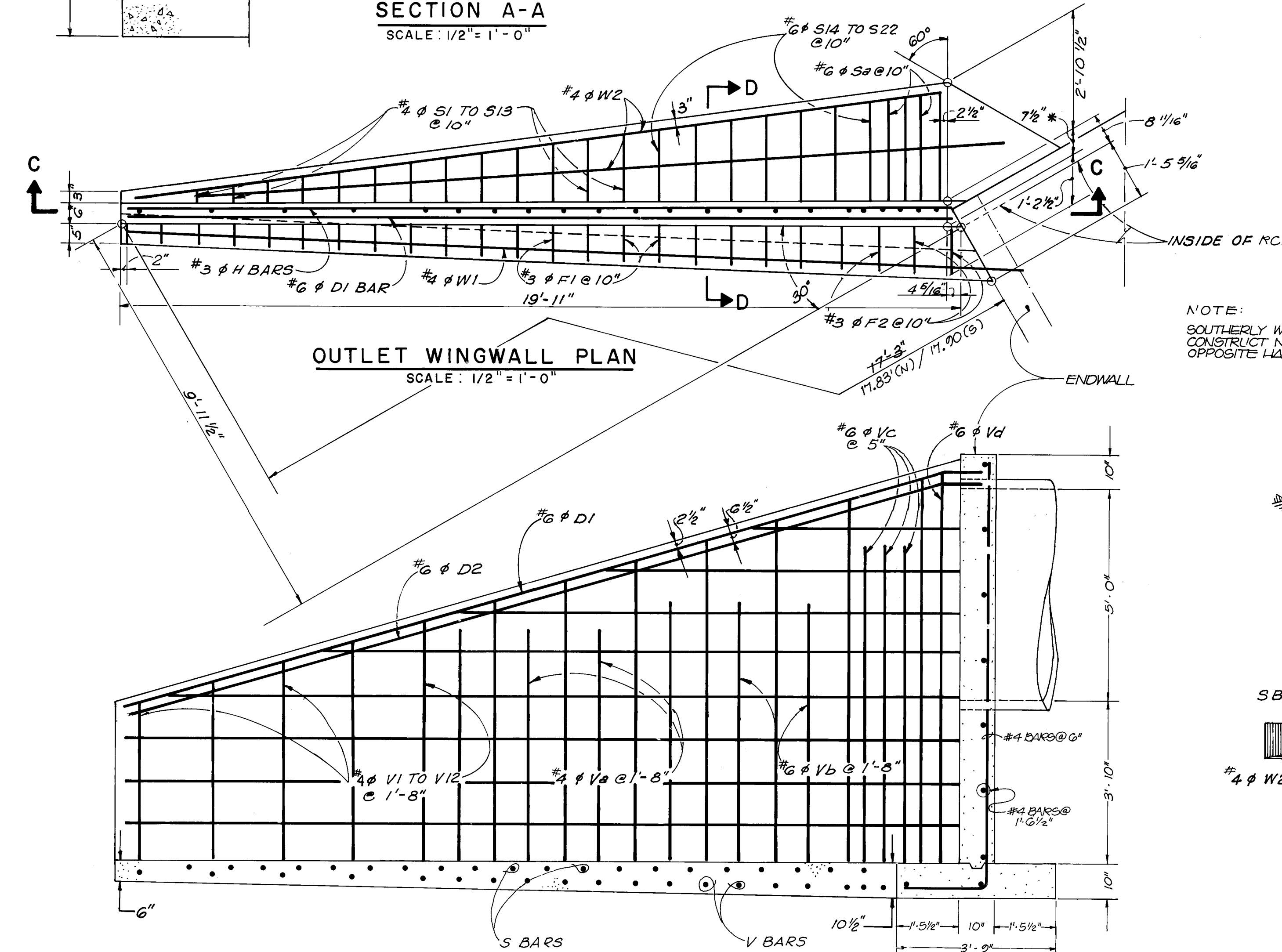
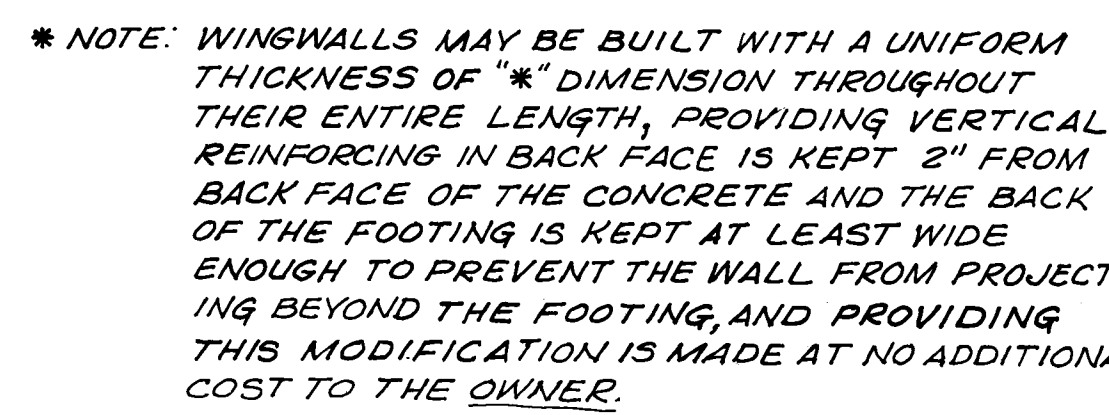
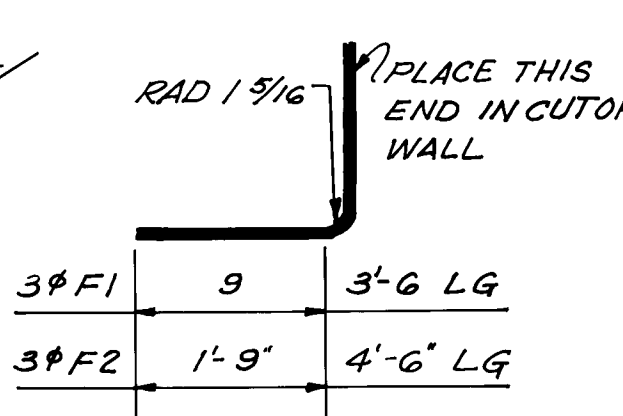
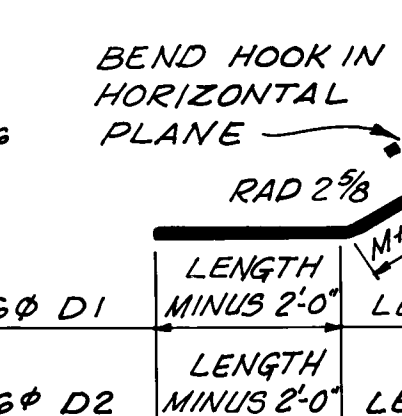
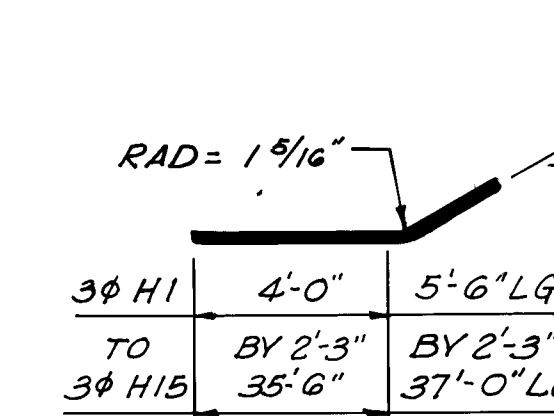
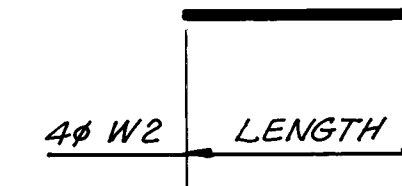
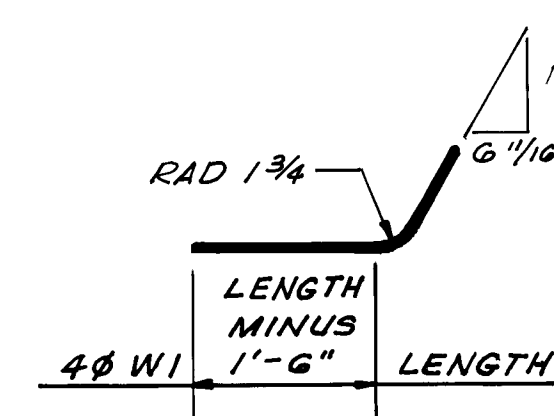
APPROVED FOR CONSTRUCTION

CITY ENGINEER DATE



4♂ V1	8"	1'-5" LG
70	8Y 9"	8Y 9"
4♂ V8	5'-11"	6'-8" Lq
6♂ V9	6'-8"	7'-10" LG
70	8Y 9"	8Y 9"
6♂ V17	12'-8"	13'-10" LG
7♂ V18	13'-6"	14'-10" LG
70	8Y 9"	8Y 9"
7♂ V21	15'-9"	17'-1" LG
4♂ Vg	2'-2"	3'-2" LG
6♂ Vb	2'-9"	3'-11" LG
6♂ Vc	4'-1"	5'-6" LG
6♂ Vd	6'-2"	7'-7" LG
7♂ Ve	4'-11"	7'-3" LG
7♂ Vf	7'-4"	9'-8" LG

4♠ 5♠	1'-4"
7♠	BY 1 3/8
4♠ 5/3	2'-8"
6♠ 5/3	2'-10"
7♠	BY 1 3/8
6♠ 5/25	4'-"
6♠ 5/26	
7♠	BY 2 3/4
6♠ 5/30	5'-3"
7♠ 5/31	5'-5"
7♠	BY 2 3/4
7♠ 5/33	5'-10"
6♠ 5♠	3'-5"
6♠ 5♠	4'-5"
7♠ 5♠	4'-2"
7♠ 5♠	5'-2"



SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	FIELD NOTES	DATE	CONTRACTOR		
			WORKS BY	INSPECTED BY	DATE
	A STANDARD C.S. BRASS TABLET STAMPED "G-E22LS4972" SET IN THE TOP OF A CONCRETE POST LOCATED 375' SOUTH OF ACADEMY ROAD AND APPROXIMATELY 1 TO 2 MILES EAST OF EUBANK BLVD. ON THE SOUTH RIM OF THE BEAR TRIBUTARY. ELEV. +5934.93 FEET (MSLD)				
			RECORDED BY		DATE
			NO		

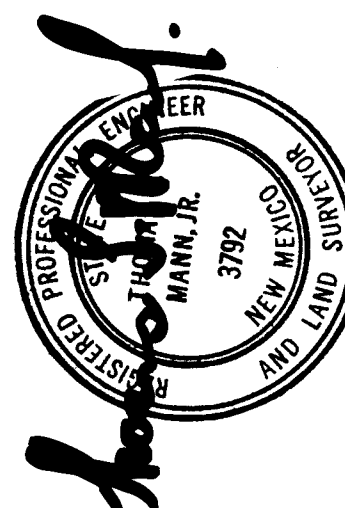
	NO.	DATE	REMARKS	BY

Professional Engineer
State of Texas
No. 3782
Robert W. Mann, Jr.
Mechanical Engineering
License Exp. 12-31-96

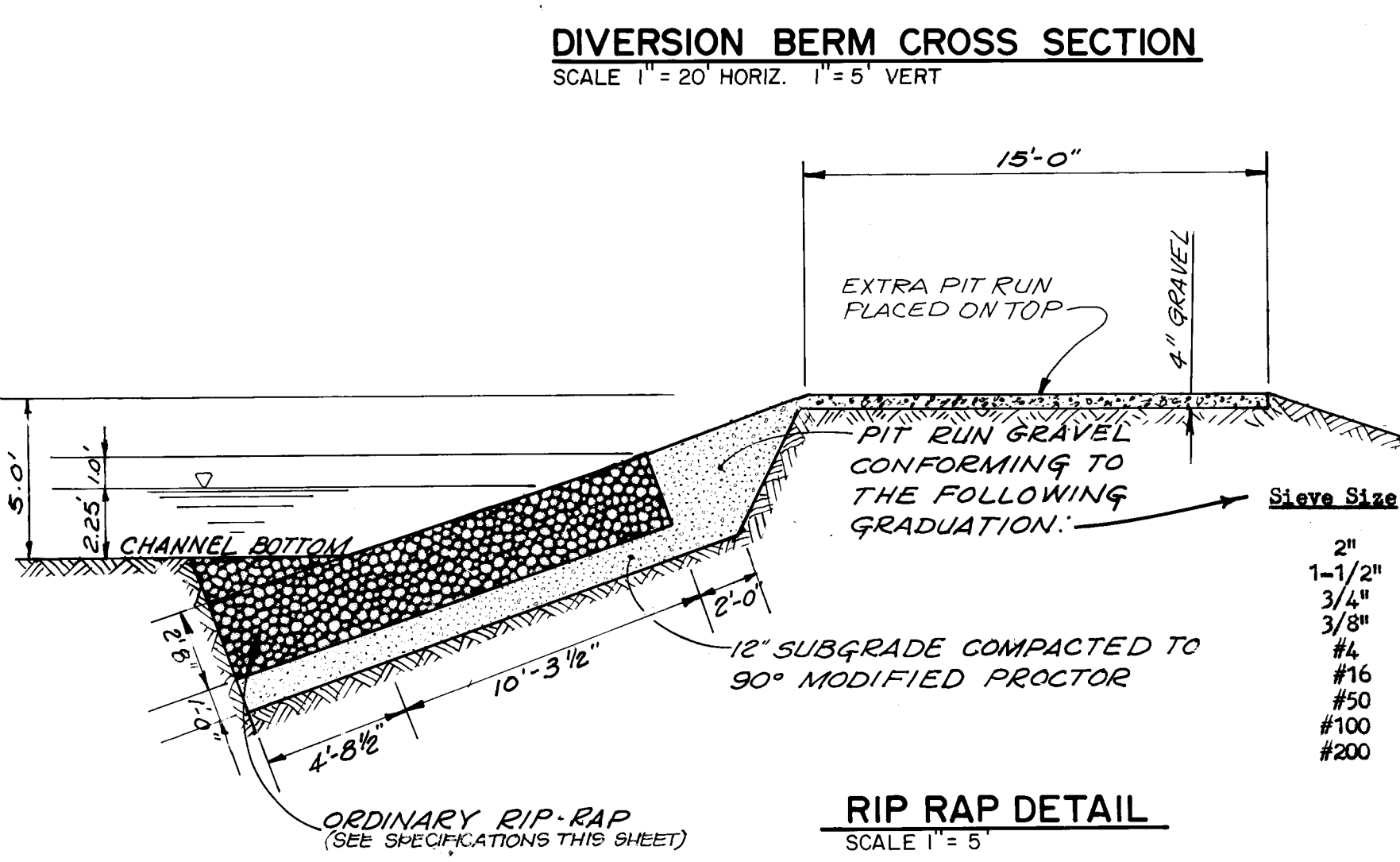
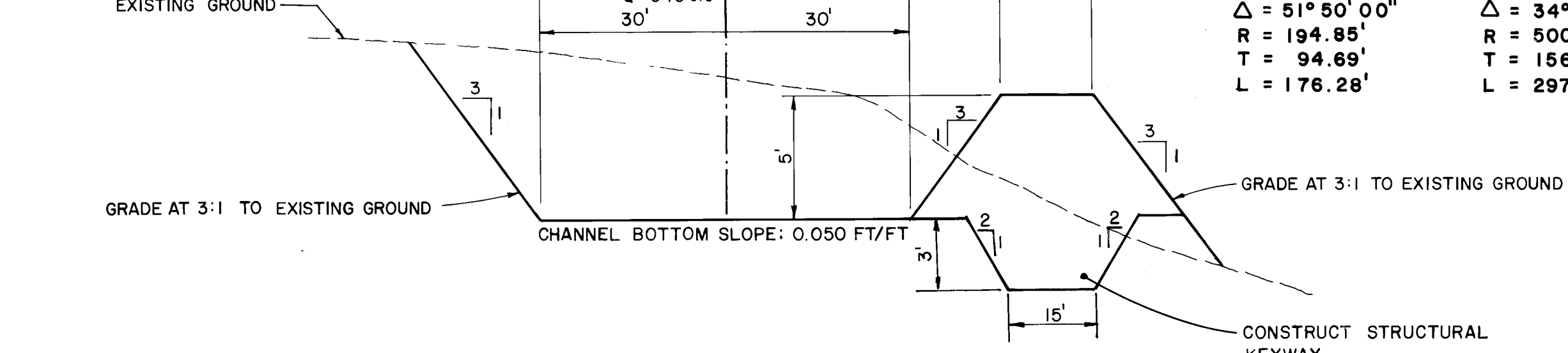
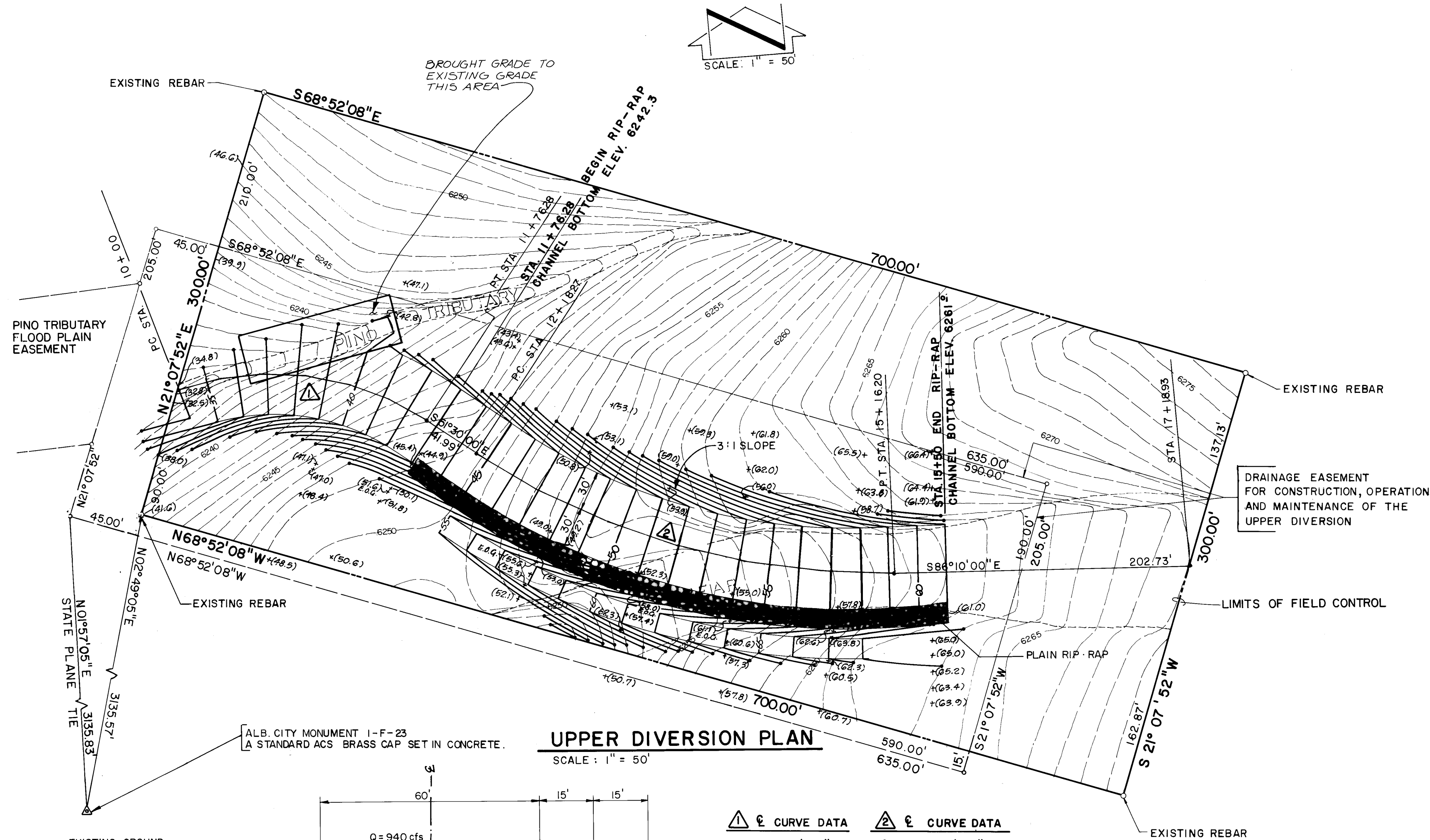
JPMorgan Associates, Inc.

811 DALLAS N.E. · ALBUQUERQUE · NEW MEXICO · 87110

ENGINEERS



NAME	ENGINEER	DATE
LAST NAME	K. Dwyer	7/25/84
FIRST NAME	N.B. Dwyer	7/25/84
CITY	L. Tampa	7/25/84
COUNTY	H. Hillsborough	FL
SHEET	5	OF 10



Riprap rock shall meet the following criteria:

- Specific gravity of 2.65 (165 pounds per cubic foot), as determined by ASTM C 127. If available rock does not meet this density, size and depth of riprap shall be increased according to the following table:

Specific Gravity	Percent increase in size and depth
2.65	1.00
2.60	1.05
2.50	1.15
2.40	1.25
- Los Angeles abrasion wear of not more than 40 percent as determined by AASHTO T96.
- Soundness loss of not more than 21 percent, as determined by AASHTO T104.
- Freeze thaw loss of not more than 10 percent after 12 cycles, per AASHTO T103, Procedure A.
- Gradation shall conform according to the following table:

% Smaller than or equal to Given Size by Weight	Minimum Dimension in inches	Mean Particle Size in inches
100	24	18
35-55	18	6
10	6	
- At least 30% of all stones by weight shall be a minimum of 24 inches.

NOTES:

- Construction access to the site is through a temporary floating easement. Access is through the park access road or through the gate south of the park access road, then proceeding in a southerly direction along the east right-of-way of Tramway Boulevard to the existing trail road on the ridge south of the Pino Tributary and proceeding along the trail road in an easterly direction to the diversion berm. This temporary easement can be shifted as required by the Albuquerque Boys Academy.
- Workmanship and materials for seeding and earthwork shall conform to New Mexico State Highway Department Standard Specifications for Road and Bridge construction, 1976 Edition unless modified by this sheet.
- Embankment shall be constructed as roadway embankment.
- Contractor shall remove and dispose of excess material in the disposal site as shown in the SAD 205 Contract.
- All areas which are denuded of vegetation during construction operations shall be seeded as follows:

All soil areas within the construction limits that are disturbed during construction shall be reseeded.

Any disturbed areas outside the construction limits will be reseeded at the contractors expense.

All embankment slopes (except those protected with wire-enclosed rip-rap) that are built prior to or during the seeding season shall be treated with permanent seeding. All such slopes built after the seeding season shall be seeded during the next season.

Immediately after the embankment is built, all embankment slopes built outside the seeding dates will be protected from erosion by application of Class "G" mulch or a soil stabilant, as directed by the engineer. If mulching or soil stabilant is required, it will be done at the contractor's expense.

PERMANENT SEED MIX

SPECIES	ORIGIN	POUND PURE LIVE SEED PER ACRE
Blue Grama	Lovington	2.0
Side Oats Grama	Vaughn	5.0
Little Bluestem	Pastura	3.0
Western Wheatgrass	Arriba	4.0
		14.0

FERTILIZER FORMULATION PER ACRE

Two Hundred Bulk Pounds 16-20-0 Ammonium Dervied Nitrogen
One Hundred Bulk Pounds 38-0-0 Urea Formaldehyde

CLASS B SEEDING

SEEDING DATE LIMITATIONS

June 1 Through July 20

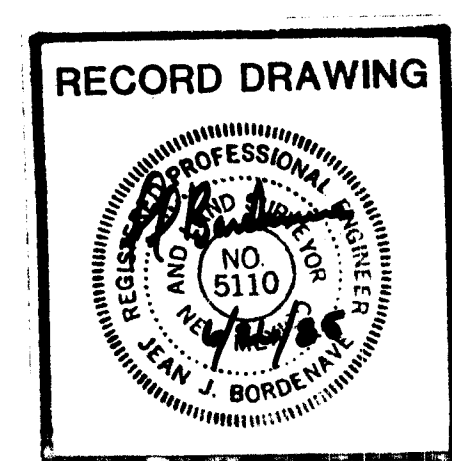
No watering shall be necessary for seeding done within the designated seeding date limitations. No seeding shall be done outside these dates.

Seeding shall conform to Section 212 R of the New Mexico State Highway Department Standard Specifications for Road and Bridge Construction, 1976 Edition, as amended below:

- Section 212.04 **Method of Measurement.** Delete the paragraph 212.042 of Watering and insert the following:

No watering shall be necessary for seeding done within the designated seeding season. No separate measurement or payment shall be made for Watering.
- Section 212.05
Add the following:

Accepted quantities of seeded area paid shall include all equipment, labor, materials for seed bed preparation, fertilizing, seeding and water as outlined for Class B Seeding.



AS BUILT DATA IS SHOWN BY PARENTHESES ().

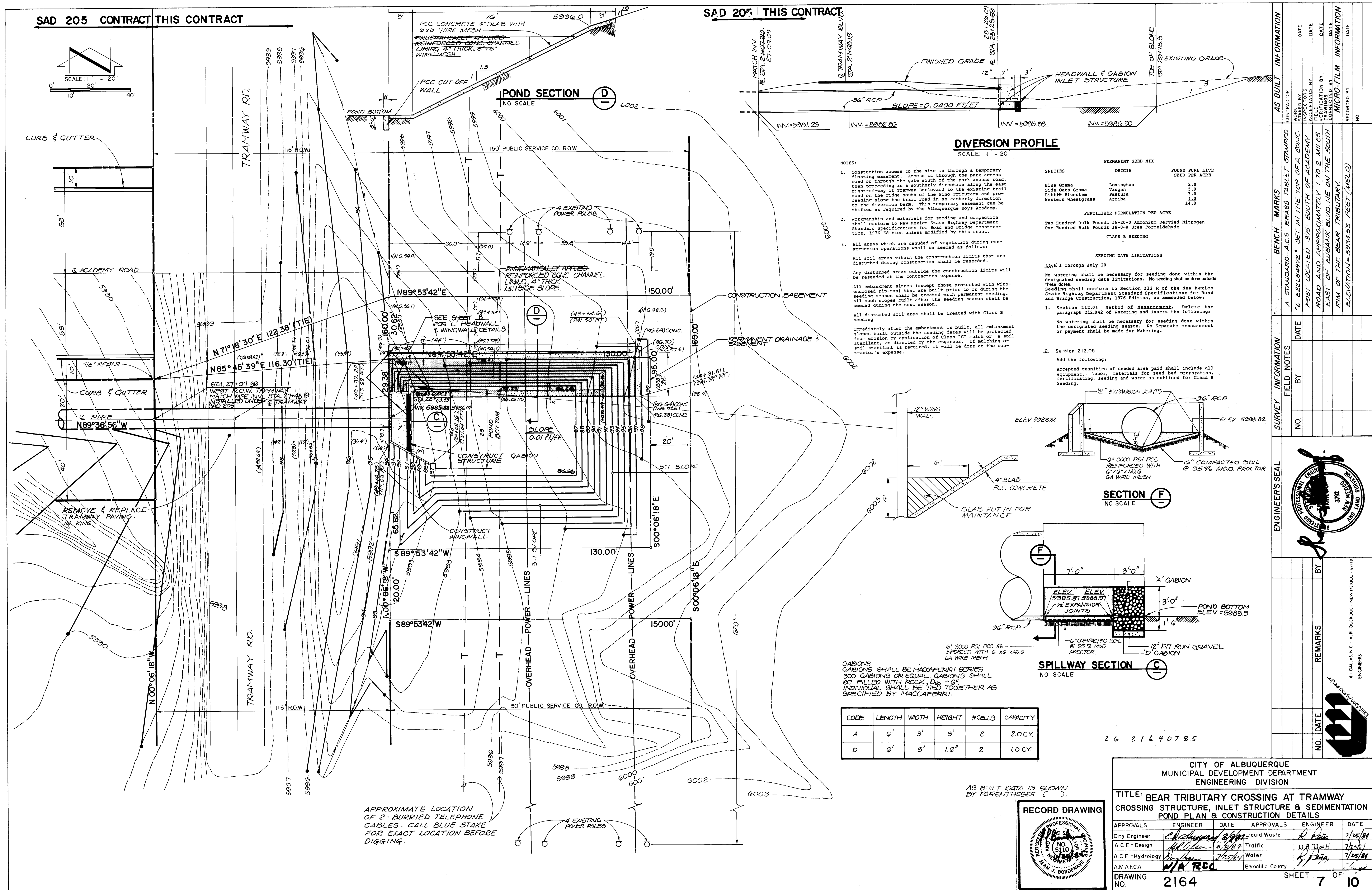
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

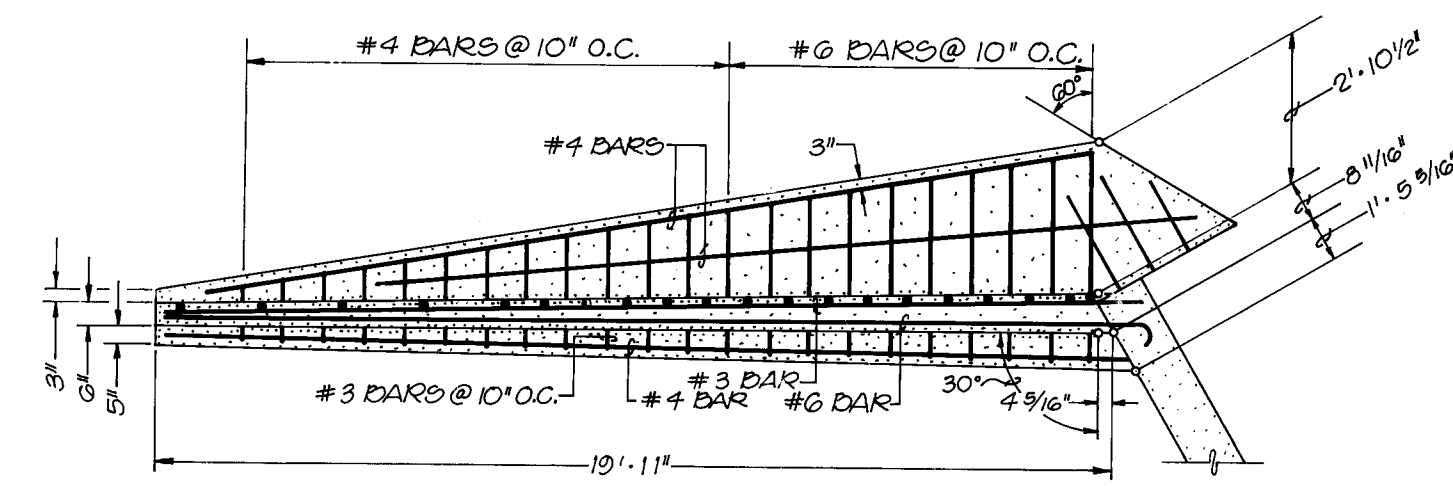
TITLE: UPPER DIVERSION (BEAR CANYON TRIBUTARY) PLAN & CONSTRUCTION DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	R. P. Peña	7/25/84	Liquid Waste	R. P. Peña	7/25/84
A.C.E. - Design	R. P. Peña	7/25/84	Traffic	R. P. Peña	7/25/84
A.C.E. - Hydrology	R. P. Peña	7/25/84	Water	R. P. Peña	7/25/84

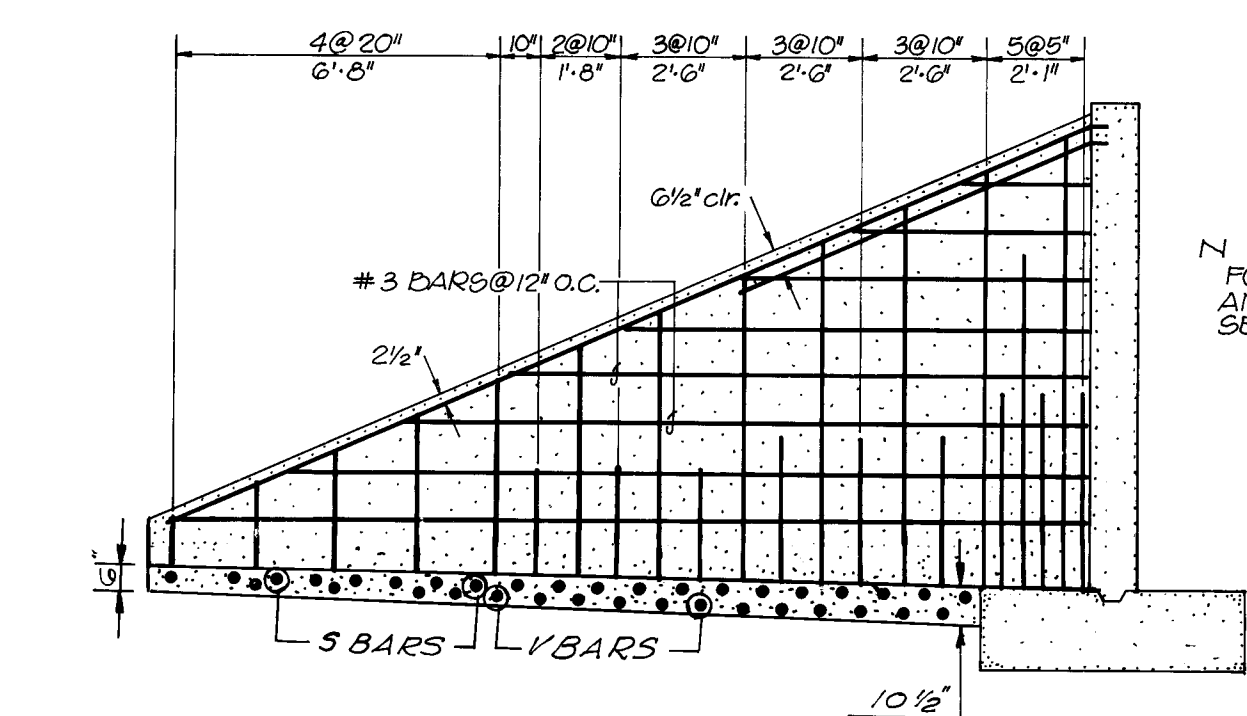
AMAFCA
DRAWING NO. 2164
MAP NO. SHEET 6 OF 10

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
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REMARKS		REMARKS		REMARKS		REMARKS	

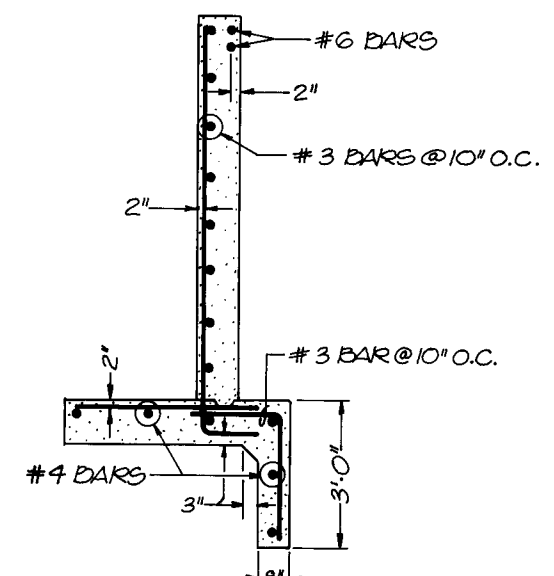




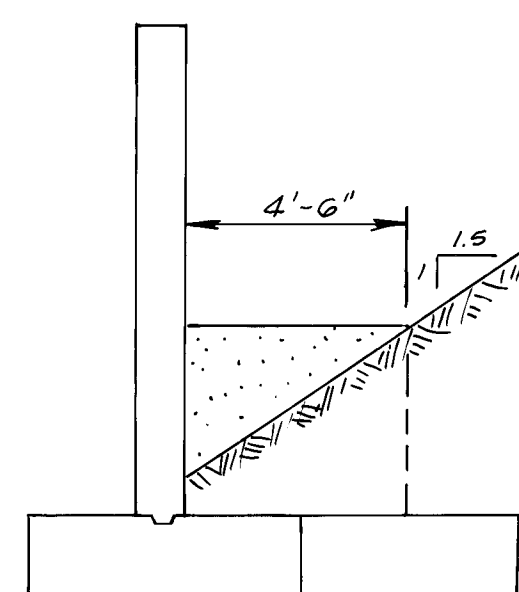
SECTION B-B
1/4" = 1'-0"



SECTION D-D



HEADWALL PLAN



SECTION D-D

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO N. M. S. H. DEPT. STD. SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 1976 EDITION.
2. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615, GRADE 40.
3. REINFORCING BARS MAY BE SPICED WHERE NECESSARY TO AVOID EXCESSIVE LENGTHS OF BARS. SPICES SHALL LAP A MINIMUM OF 20 BAR DIAMETERS, PAY WEIGHT OF REINFORCING STEEL DOES NOT INCLUDE WEIGHT OF SPICES. COST OF SPICE MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REINFORCING STEEL.

DESIGN ACCORDING TO AASHO SPECIFICATION,
1973. ACTIVE EARTH PRESSURE DETERMINED
FROM RANKIN'S FORMULA.

WEIGHT OF EARTH: 120# / FT³
FILL SLOPE 2:1
ANGLE OF INTERNAL FRICTION: 34°

} FOR RANKINS FORMULA

DESIGN STRESSES: $f_c = 3000 \text{ psi}$, $f_c = 1200 \text{ psi}$,
 $f_s = 2000 \text{ psi}$, $n = 10$.

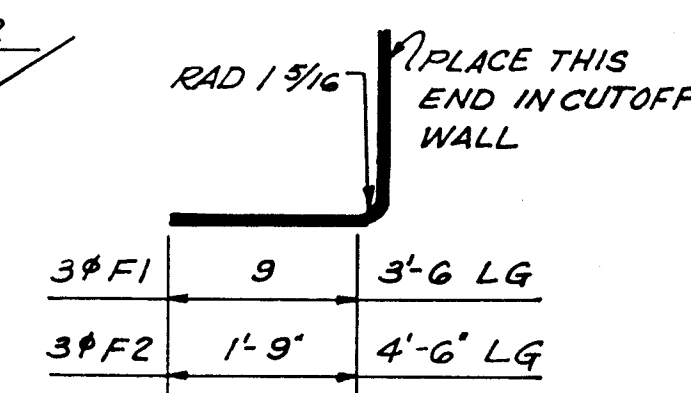
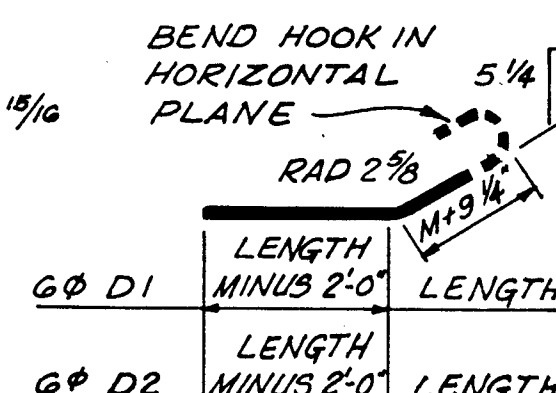
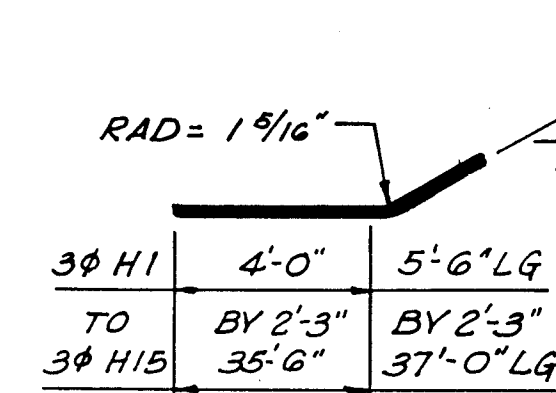
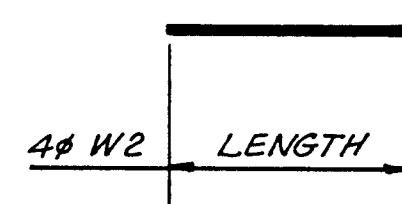
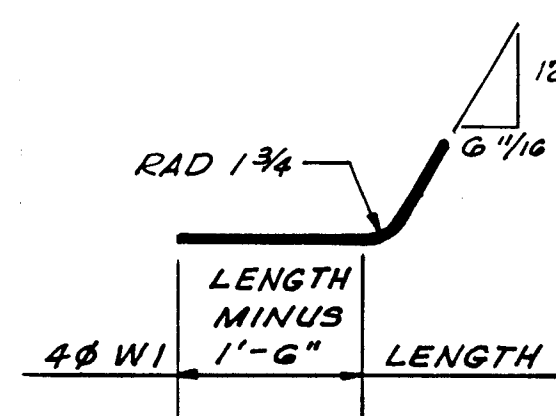
MAXIMUM COMPUTED FOOTING PRESSURE =
2 TONS PER SQ. FT.

* NOTE: WINDSWALLS MAY BE BUILT WITH A UNIFORM THICKNESS OF "X" DIMENSION THROUGHOUT THEIR ENTIRE LENGTH, PROVIDING VERTICAL REINFORCING IN BACK FACE IS KEPT 2" FROM BACK FACE OF THE CONCRETE AND THE BACK OF THE FOOTING IS KEPT AT LEAST WIDE ENOUGH TO PREVENT THE WALL FROM PROJECTING BEYOND THE FOOTING AND PROVIDING THIS MODIFICATION IS MADE AT NO ADDITIONAL COST TO THE OWNER.

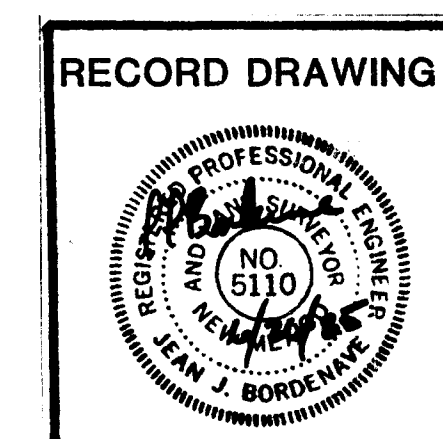
RAD = 2" FOR 4Ø BARS
RAD = 3" FOR 6Ø BARS
RAD = 3½" FOR 7Ø BARS

4♂ V1	8"	1'-5" LG
70	BY 9"	BY 9"
4♂ V8	5'-11"	6'-8" LG
6♂ V9	6'-8"	7'-10" LG
70	BY 9"	BY 9"
6♂ V17	12'-8"	13'-10" LG
7♂ V18	13'-6"	14'-10" LG
70	BY 9"	BY 9"
7♂ V21	15'-9"	17'-1" LG
4♂ V8	2'-2"	3'-2" LG
6♂ Vb	2'-9"	3'-11" LG
6♂ Vc	4'-1"	5'-6" LG
6♂ Vd	6'-2"	7'-7" LG
7♂ Ve	4'-11"	7'-3" LG
7♂ Vf	7'-4"	9'-8" LG

4# S1	1'-4"
TO	BY 1 3/8
4# S13	2'-8"
6# S13	2'-10"
TO	BY 1 3/8
6# S25	4'-
6# S26	
TO	BY 2 3/4
6# S30	5'-3"
7# S31	5'-5"
TO	BY 2 3/4
7# S33	5'-10'
6# S6	3'-5"
6# S6	4'-5"
7# S6	4'-2"
7# S6	5'-2"



AS BUILT DATA IS SHOWN
BY PARENTHESES ()



**APPROVED FOR
CONSTRUCTION**

CITY ENGINEER

26 21640885

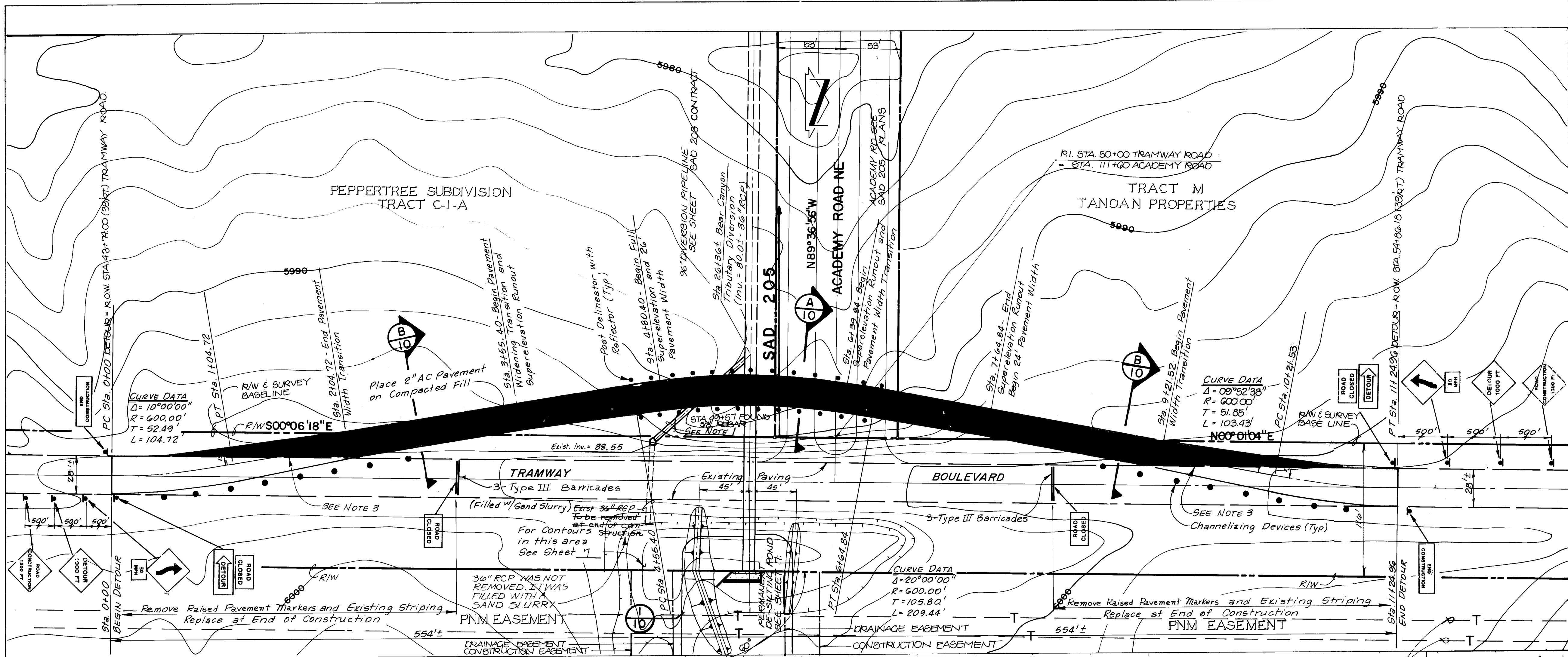
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: **BEAR TRIBUTARY CROSSING AT TRAMWAY**
HEADWALL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>C.E. Chappell</i>	<i>8/6/04</i>	Liquid Waste	<i>R. Peña</i>	<i>7/25/04</i>
A C E - Design	<i>Aff. Len</i>	<i>8/6/04</i>	Water	<i>N.A. Dahl</i>	<i>7/25/04</i>
A C E - Hydrology	<i>N.A. Dahl</i>	<i>7/25/04</i>	Traffic	<i>R. Peña</i>	<i>7/25/04</i>
A M A F C A	<i>N.A. Dahl</i>		Remediation County		

DRAWING NO.	2164	SHEET	8	OF	10
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SURVEY INFORMATION			BENCH MARKS		AS BUILT INFORMATION	
FIELD NOTES						
NO.	BY	DATE				
			A STANDARD A.C.S. BRASS TABLET STAMPED		CONTRACTOR	
			"G-422154972" SET IN THE TOP OF A CONCRETE		WORK BY	
			POST LOCATED 3.75' SOUTH OF ACADEMY ROAD		INSPECTOR'S	
			AND APPROXIMATELY 1 TO 2 MILES EAST OF		ACCEPTANCE BY	
			EUBANK BLVD. ON THE SOUTH RIM OF THE		FIELD LOCATION BY	
			DEAR TRIBUTARY.		DRAWINGS	
			ELEV. = 5934.53 FEET (MSLD)		DATE	
					MICRO-FILM INFORMATION	
					RECORDED BY	
					DATE	
					NO	



NOTES:

- Join existing 36" dia. RCP with 45" ell. Extend to stubout in new 96" dia. RCP. Remove and plug stubout at end of construction. 36" dia. RCP may be salvaged and reused on project.
- Provide solid double yellow center-line striping full length of detour. Remove or obliterate from Tramway travel way at end of construction.
- Join existing paving with smooth transition.
- Contractor shall verify existing conditions, including grades and elevations shown. Significant differences shall be brought to the attention of the Engineer before beginning work.
- Compacted fill for detour section shall be per project specifications.
- Construction Sequencing:
 - The S.A.D. Contractor shall build the 96" diversion pipeline from the west up to the westerly R.O.W. line of Tramway Boulevard.
 - The paved detour and 36" construction RCP and construction berms to be built under this contract.
 - The crossing structure, headwalls, and gabion structure to be built under this contract.
 - The construction berms to be removed and the sediment pond to be constructed under this contract.
 - The paved detour to be removed and regraded to original elevations under this contract.
- Existing 28' asphalt mat is not centered within the Tramway Boulevard right-of-way corridor. Survey base line stationing on Tramway is along the northerly right-of-way line.
- Stationing for the detour paving is along the centerline of the paving.
- Traffic control devices required after dark are to be equipped with warning lights. Type 'A' flashing warning lights shall be used on all warning signs and on all devices which are intended to warn motorists or pedestrians of hazards or obstructions in or near the travel path. Type 'C' steady burn lights shall be used on all devices which are intended to define the travel path.
- Required channelizing devices are to be barrels.
- Maximum spacing of barrels to be set at 30 feet.
- Maximum spacing of post delineators to be set at 25 feet.

26 21640985

PLAN IS FOR INFORMATION ONLY. NOT PART OF THE FINAL CONSTRUCTION.

RECORD DRAWING

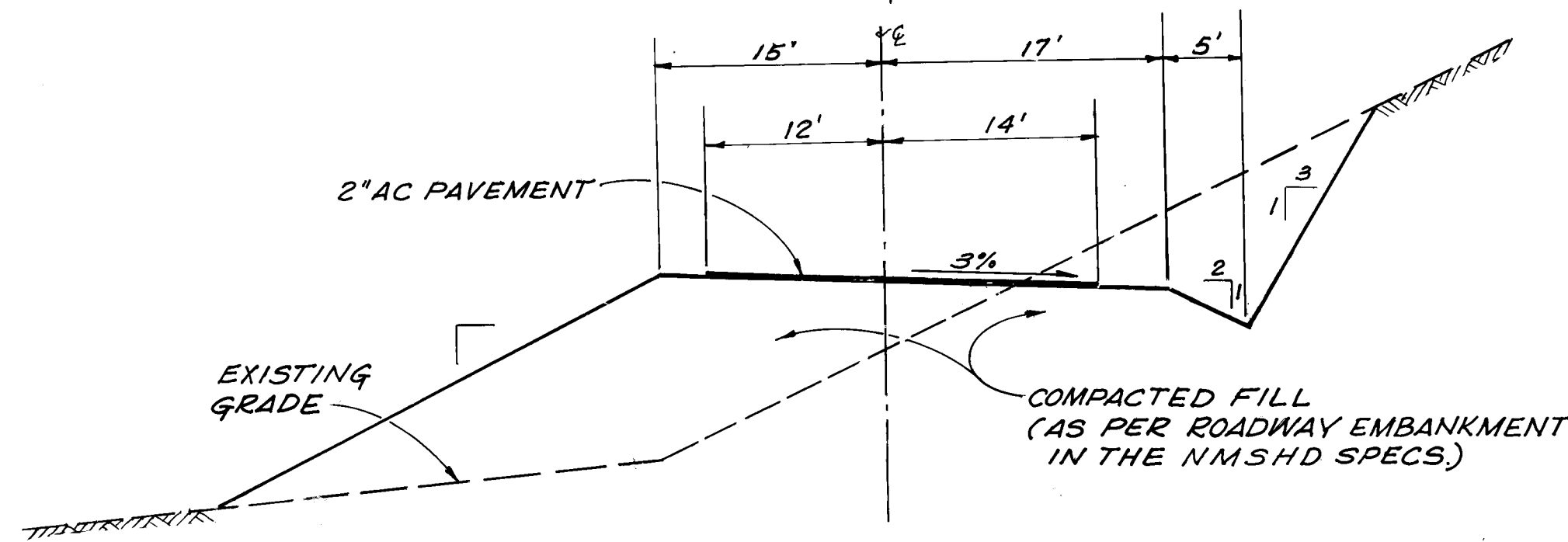
CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: BEAR TRIBUTARY CROSSING AT TRAMWAY
DETOUR PLAN

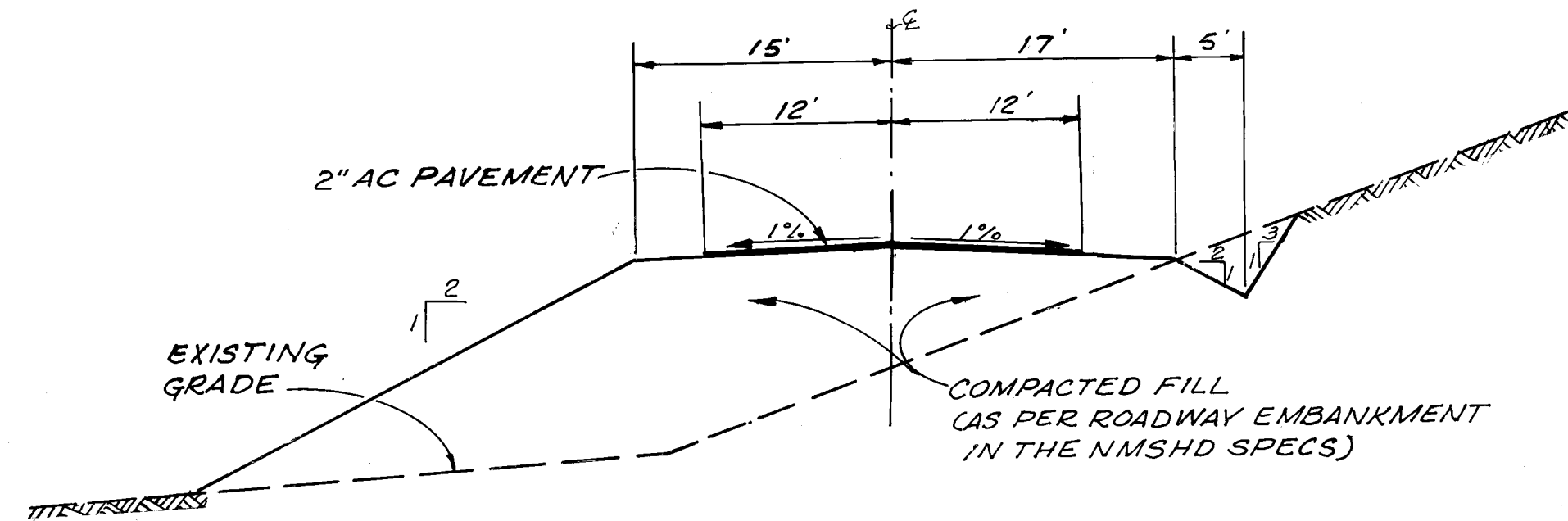
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
CITY Engineer	<i>[Signature]</i>	7/25/81	Liquid Waste	<i>R. Peña</i>	7/25/81
A.C.E. - Design	<i>[Signature]</i>	7/25/81	Traffic	<i>David Williamson</i>	7/25/81
A.C.E. - Hydrology	<i>[Signature]</i>	7/25/81	Water	<i>R. Peña</i>	7/25/81

AMAFCA. *[Signature]* Bernalillo County

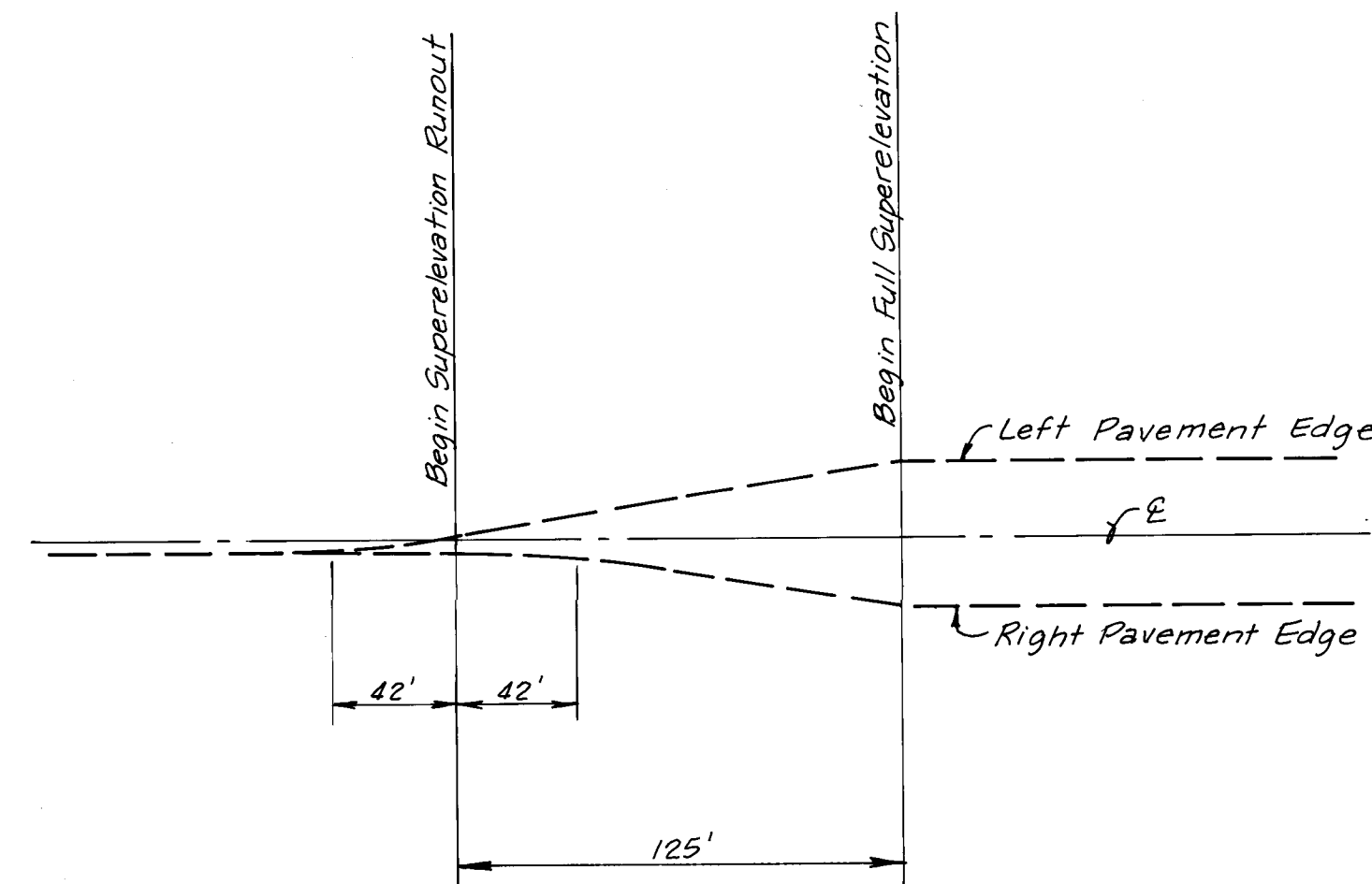
DRAWING NO. 2164 MAP NO. SHEET 9 OF 10



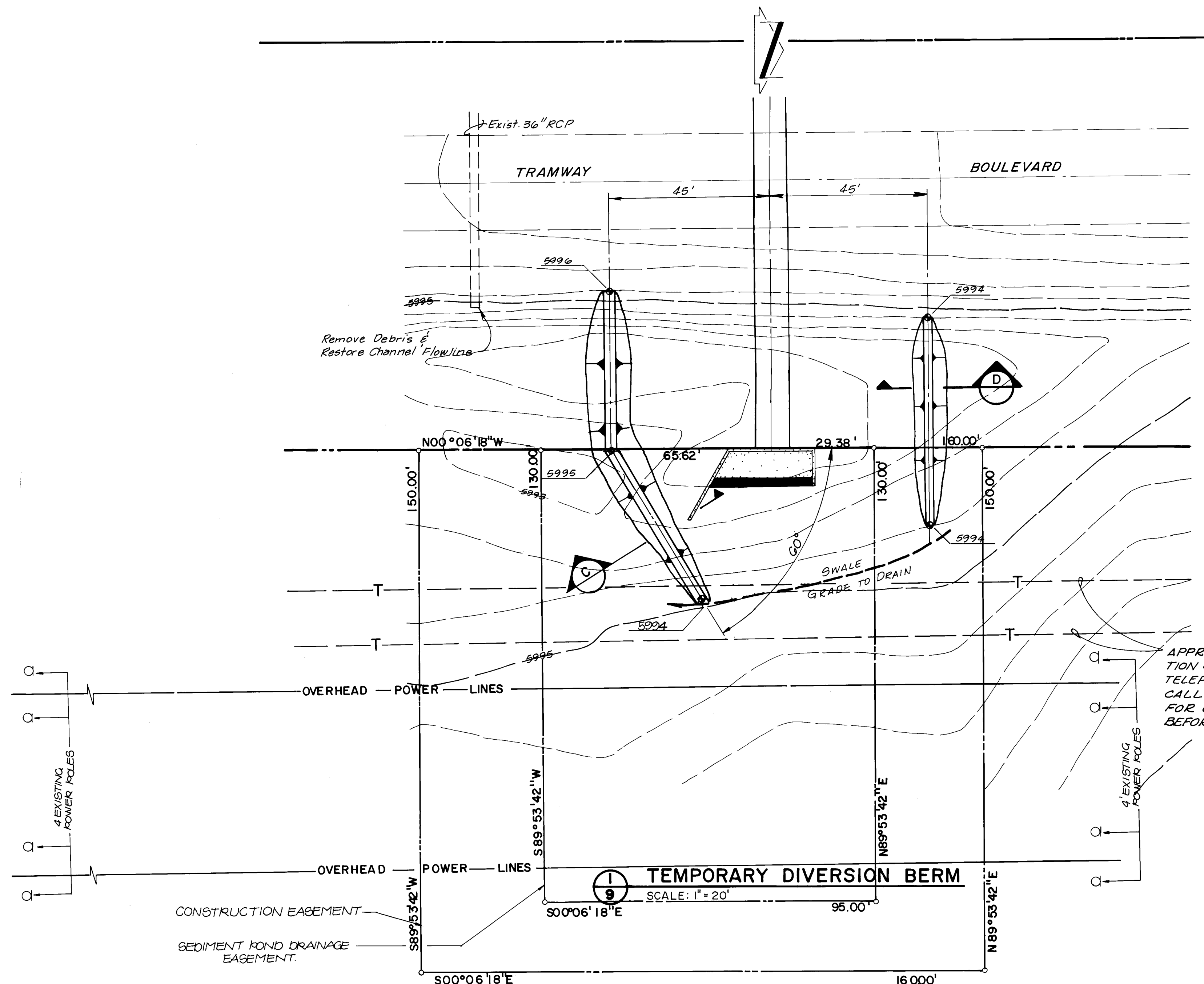
A TYPICAL SECTION
3.9



B TYPICAL SECTION
3.9

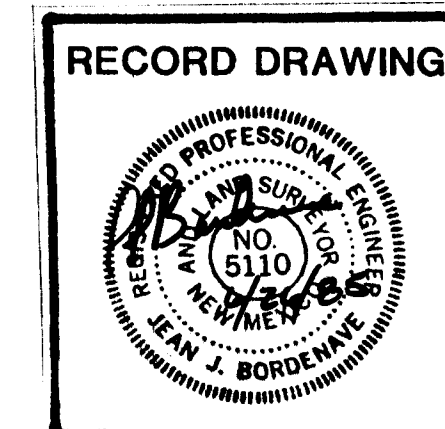


TYPICAL SUPERELEVATION TRANSITION
NO SCALE



C TYPICAL SECTION
NO SCALE

PLAN IS FOR INFORMATION ONLY.
NOT PART OF THE FINAL CONSTRUCTION.



APPROVED FOR
CONSTRUCTION

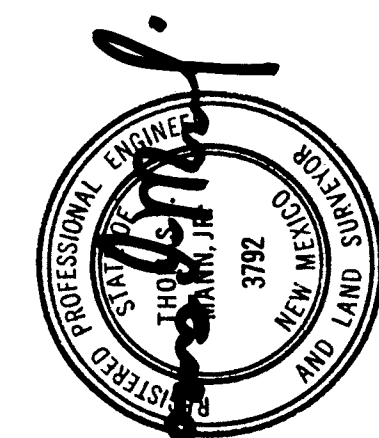
CITY ENGINEER DATE

D TYPICAL SECTION
NO SCALE

26 2164.1085

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: BEAR TRIBUTARY CROSSING AT TRAMWAY DETOUR DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	7/15/09	Liquid Waste	<i>[Signature]</i>	7/15/09
A.C.E. - Design	<i>[Signature]</i>	6/6/09	Traffic	<i>[Signature]</i>	7/15/09
A.C.E. - Hydrology	<i>[Signature]</i>	7/25/09	Water	<i>[Signature]</i>	7/25/09
A.M.A.F.C.A.	<i>[Signature]</i>		Bernalillo County	<i>[Signature]</i>	
DRAWING NO.	2164		SHEET	10	10

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR		A STANDARD A.C.S. BRASS TABLET STAMPED		FIELD NOTES	
WORKED BY		"6-E22 LS 4972" SET IN THE TOP OF A CONC.		NO.	
INSPECTED BY		POST LOCATED 375' SOUTH OF ACADEMY RD.		DATE	
ACCEPTANCE BY		AND APPROXIMATELY 1 TO 2 MILES EAST OF		BY	
DATE		ELIZABETH BLVD. NE ON THE SOUTH RIM OF			
DRAWING NO.		THE BEAR TRIBUTARY.			
DATE		ELEVATION = 5934.53 FEET (MSLD)			
RECORDED BY					
NO.					



BY
REMARKS
81 DALLAS N.E. ALBUQUERQUE - NEW MEXICO - 8110
ENGINEERS