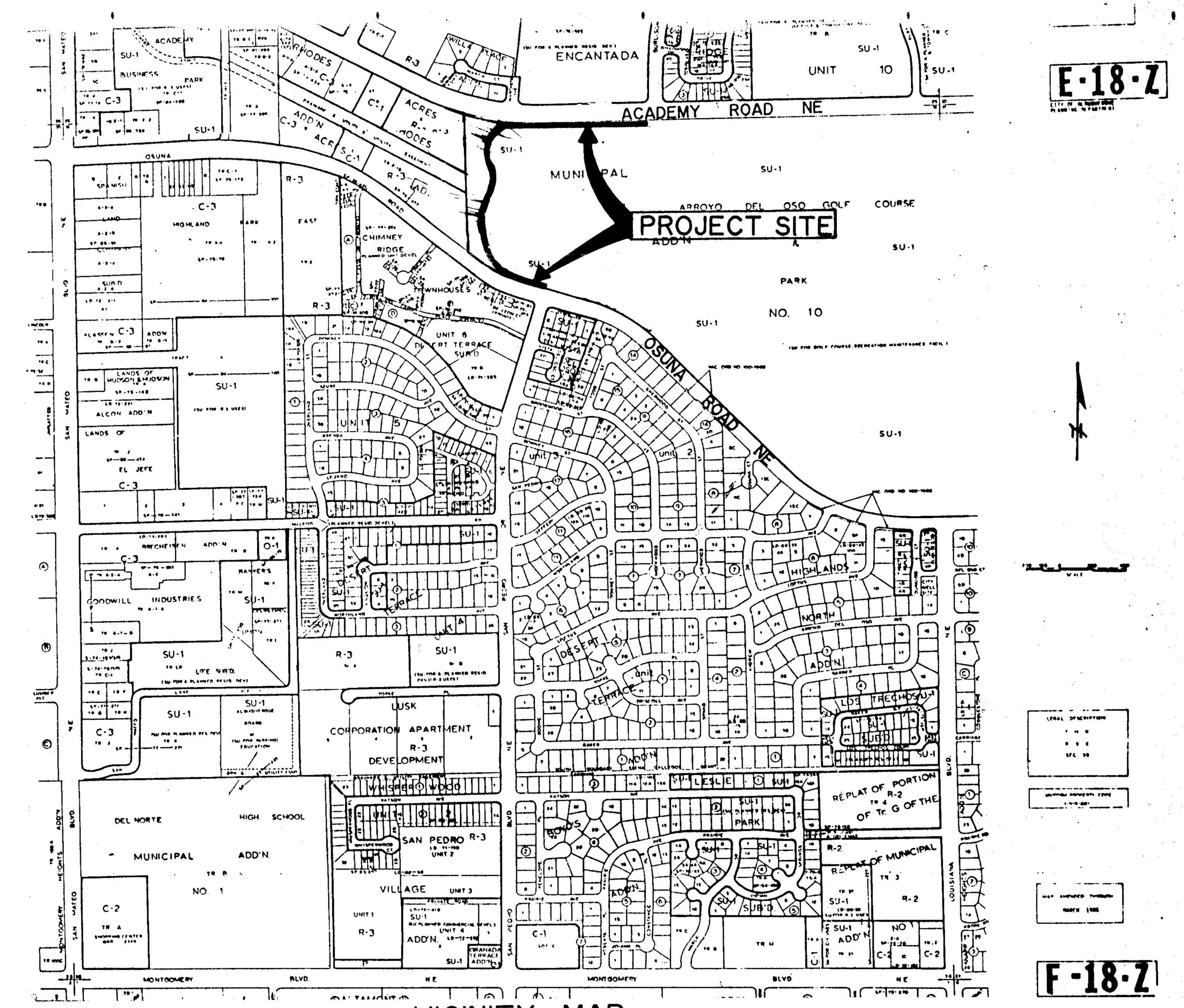
CITY OF ALBUQUERQUE

CONSTRUCTION PLANS FOR

ARROYO DEL OSO BIKE TRAIL



VICINITY MAP

CLASS I

CONTRACTOR SHALL BE RESPONSIBLE FOR ASPHALT WORK, SUBBASE PREPARATION

CLASS II

CITY WILL PERFORM EARTHWORK, ROUGH GRADING, SUBGRADE PREPARATION,CURB AND GUTTER, SIDEWALK, CUTOFF WALL, CULVERT, BOLLARDS, BRIDGE FOOTINGS, BRIDGE INSTALLATION, LANDSCAPING, BALL BARRIER NETTING, AND IRRIGATION

INDEX TO DRAWINGS

GENERAL NOTES

1. All work detailed on these drawings to be performed under contract shall, except otherwise stated or provided for hereon, be constructed in accordance with the "City of Albuquerque Standard Specifications for Public Works Construction, 1986.
2. Two working days prior to any excavation, Contractor must contact Line Locating Service, 260-1990, for the location of existing utilities.
3. 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.
4. 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.
5. Unless otherwise provided by OWNER as part of the construction documents, a complete signing and barricading detour plan shall be prepared by the CONTRACTOR when any portion of the work is in the public rights-of-way. The plan shall be submitted to the CONSTRUCTION COORDINATOR for approval three working days in advance of construction to receive a barricading permit.
6. Where removal of existing curb and gutter, sidewalk or pavement is required, the Contractor shall sawcut and/or remove to the nearest joint. Curb and gutter shown as existing and not to be removed under this contract which is damaged or displaced by the Contractor shall be removed and replaced by the Contractor at the Contractor's expense.
7. If curb is depressed for a drivepad or a handicap ramp, the drivepad or ramp shall be constructed prior to acceptance of the curb and gutter.

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
DATE 12/13/91

C of A PWD Maps & Records

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

RICHARD B. CATANACH NEW MEXICO 4457 REGISTERED PROFESSIONAL ENGINEER

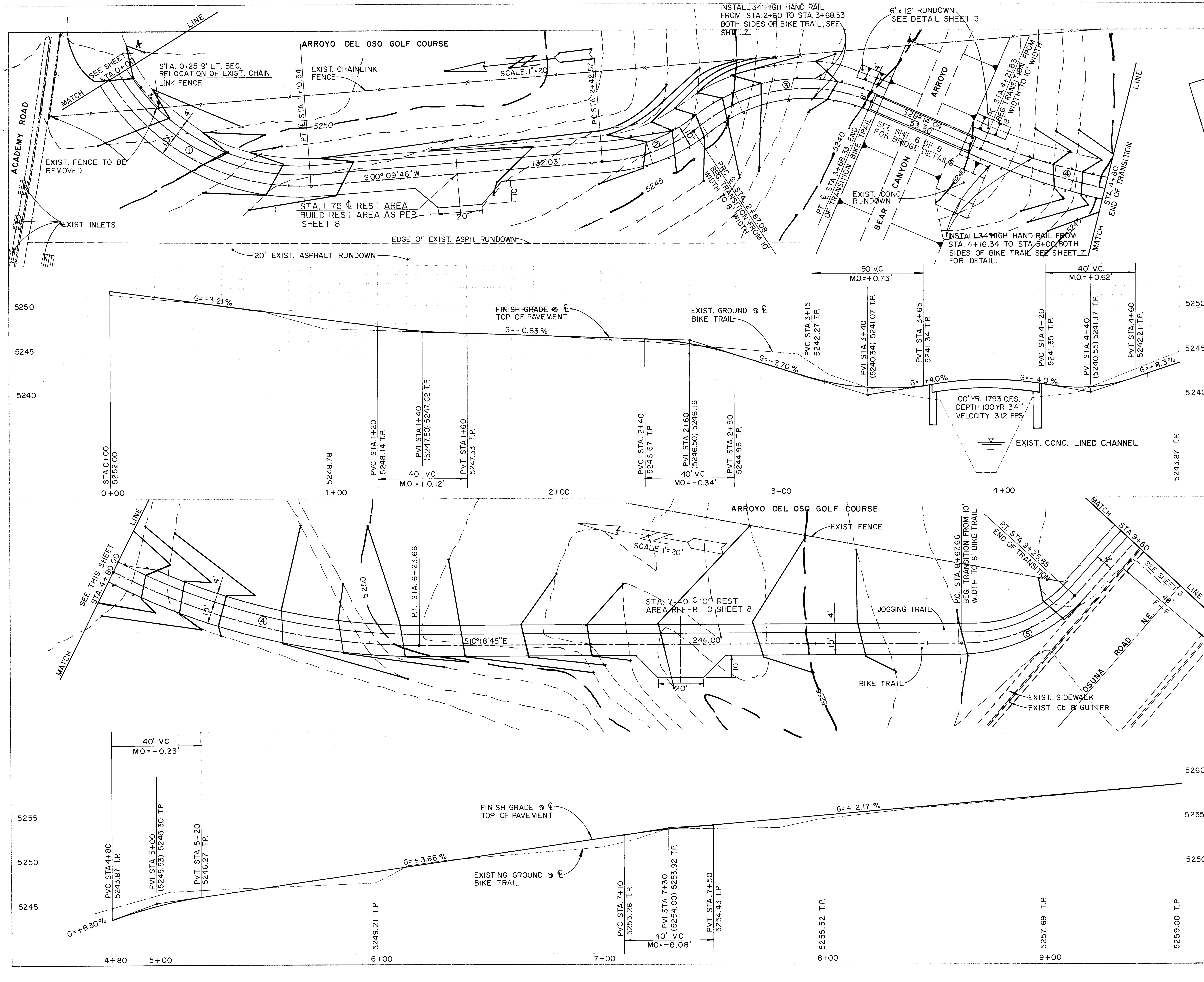
6-10-90

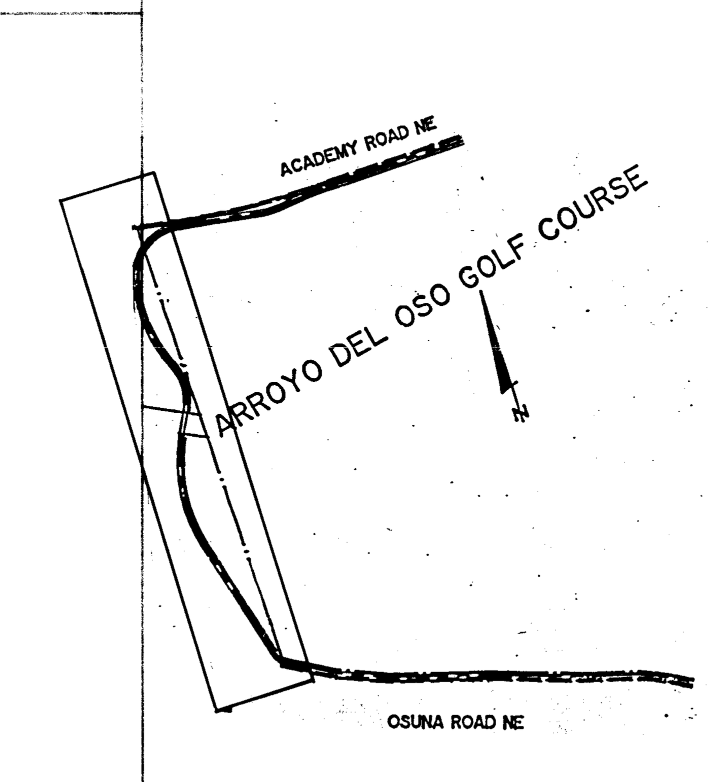
TEC TIERRA ENGINEERING CONSULTANTS INC.
SANTA FE & ALBUQUERQUE N.M.

9-29-90

PROJECT NO. 3980

SHEET 1 OF 8





AS BUILT INFORMATION

MICRO-FILM INFORMATION

BENCH MARKS

ACS BRASS TABLET STAMPED "4-F18A 1981" SET IN THE GROUND FLUSH WITH THE BACK OF CURB, ELEVATION 5277.58

℄ CURVE DATA

Nº	DELTA	RADIUS	ARC	TAN.
1	63°20'10"	100.00'	110.54'	61.68'
2	34°00'02"	75.00'	44.51'	22.93'
3	62°04'20"	75.00'	81.25'	45.13
4	38°32'49"	300.00'	201.83'	104.90'
5	48°13'49"	69.14'	58.19'	30.94'

SURVEY INFORMATION

FIELD NOTES

ENGINEER'S SEAL

6-10-90

REVISIONS

DESIGN 4-17-90 C.C.; 4-25-90 A.M.; 5-4-90 R.C.

C of A PWD Maps & Records 26 39802911

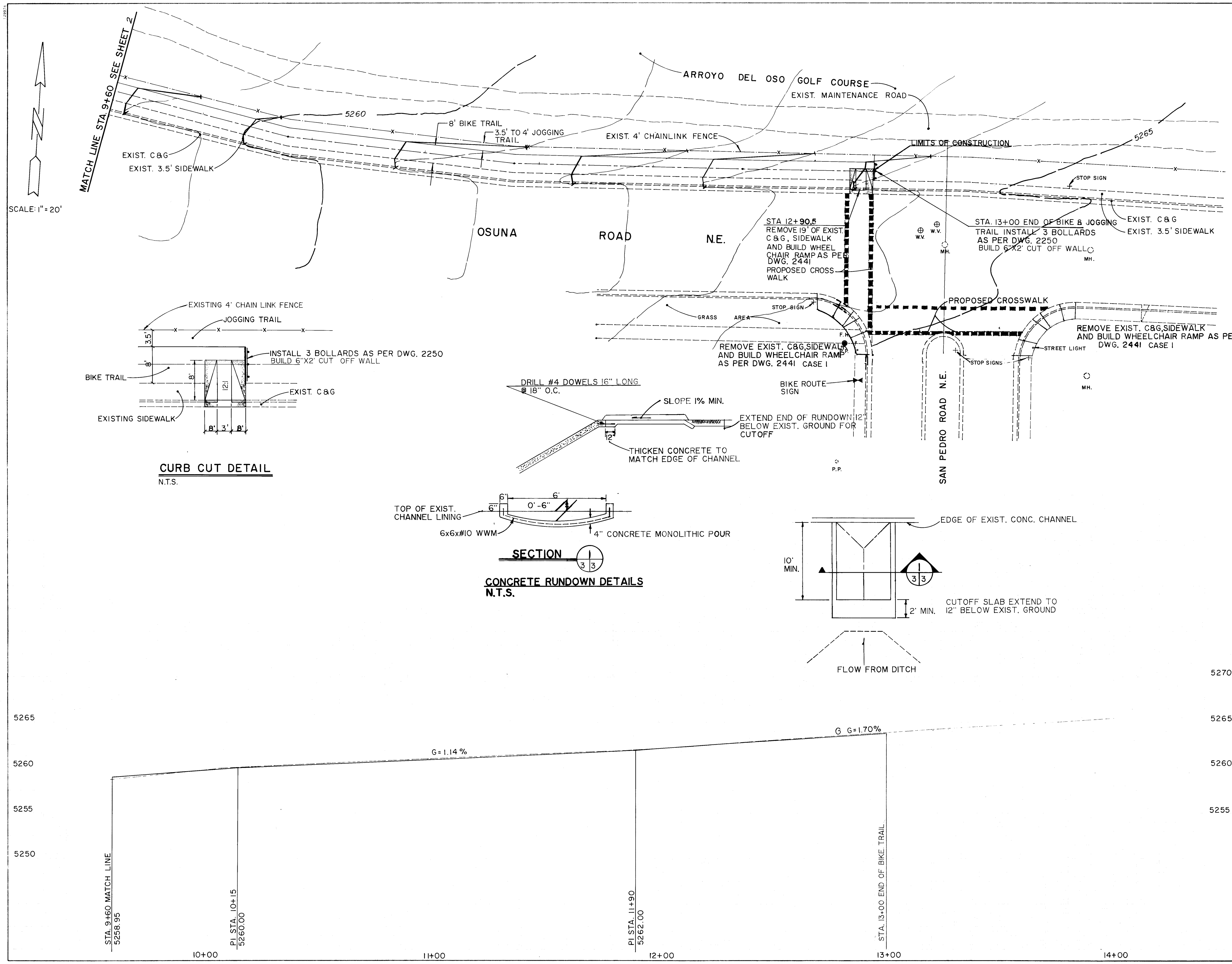
CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

TITLE

ARROYO DEL OSO BIKE TRAIL
STA. 0+00 TO STA. 9+60

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	R.W. Kane	8-21-90
A.C.E.-Design			Traffic		5-09-90
A.C.E.-Hydrology			Water	R.W. Kane	8-21-90
Parks	D. Sena	8/20/90			

DRAWING NO 3980 | MAP NO. E-18-2, F-18-2 | SHEET 2 OF 8



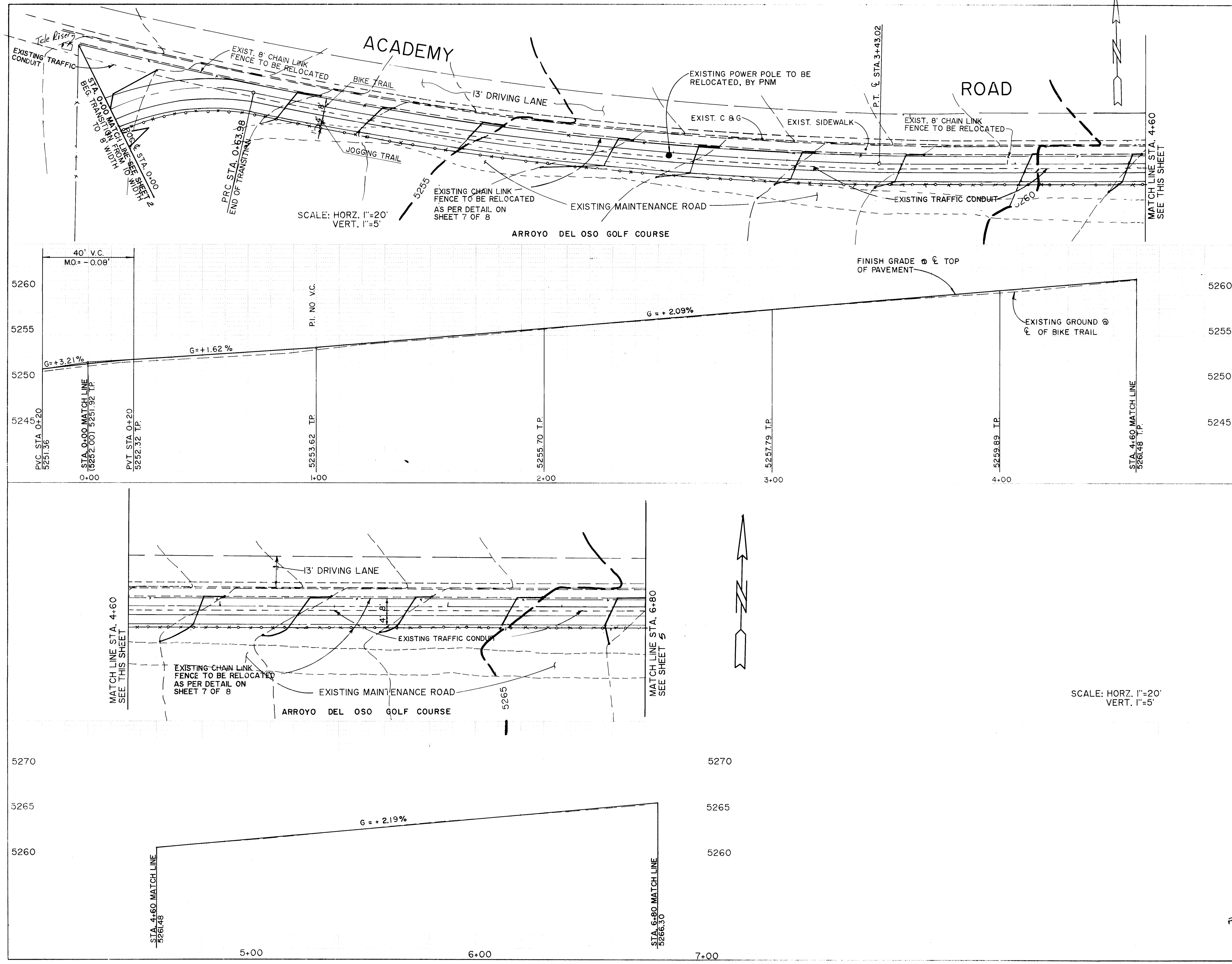
CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

TITLE

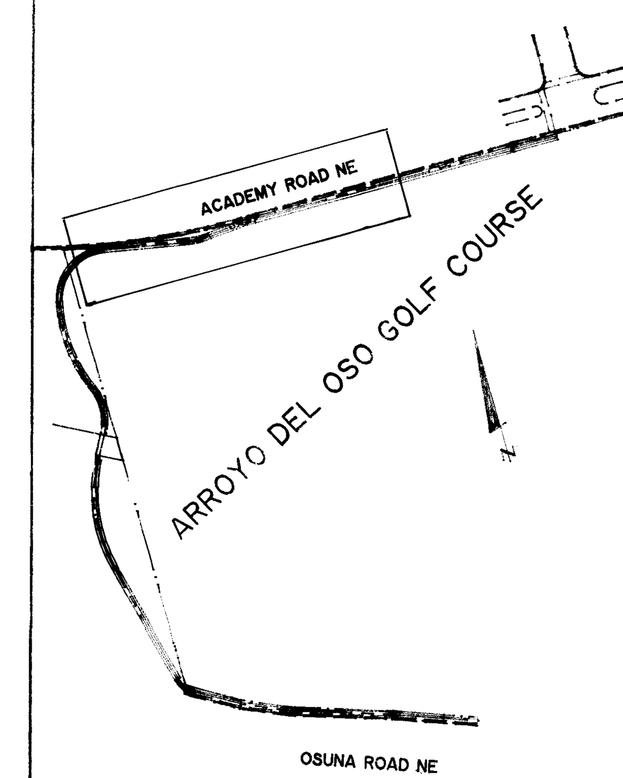
ARROYO DEL OSO BIKE TRAIL
STA. 9+60 TO STA. 13+00

APPROVALS	ENGINEER	DATE
D.R.C. Chair		
Trans. Dev.		5-25-90
Utility Dev.	R.W. Kane	8-21-90
Parks	D. Stena	8/20/90

DRAWING NO. 3980 | MAP NO. E-18-Z F-18-Z | SHEET 3 OF 8



NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR THE TRAFFIC CONDUIT IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL BE FROM EXIST. J.B. 100' WEST OF THE N.W. CORNER OF THE GOLF COURSE TO BURLISON AVE.



AS BUILT INFORMATION
CONTRACTOR
WORK STARTED
WORK COMPLETED
FIELD VERIFICATION BY
DRAWINGS CORRECTED BY
DATE
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

BENCH MARKS
ACS BRASS TABLET STAMPED "4-F18A 1981" SET IN THE GROUND FLUSH WITH THE BACK OF CURB. ELEVATION 5277.58

SURVEY INFORMATION
FIELD NOTES
NO | BY | DATE

REGISTERED PROFESSIONAL ENGINEER 4457 NEW MEXICO
6-10-90

NO	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
DESIGNED BY	C.C.	DATE	4-17-90
DRAWN BY	C.C.	DATE	4-25-90
CHECKED BY	R.C.	DATE	5-4-90

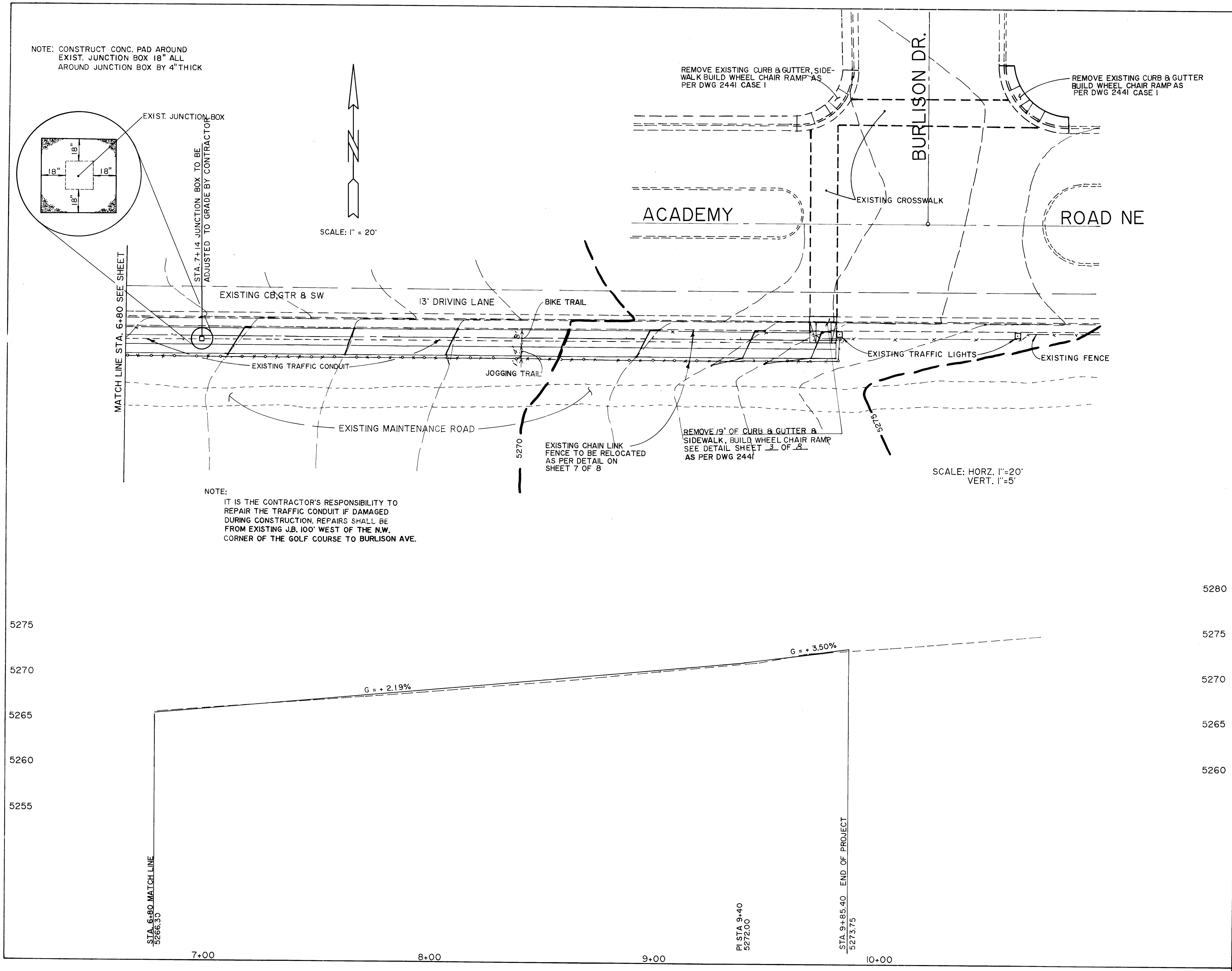
City Maps & Records
301 2-3600071

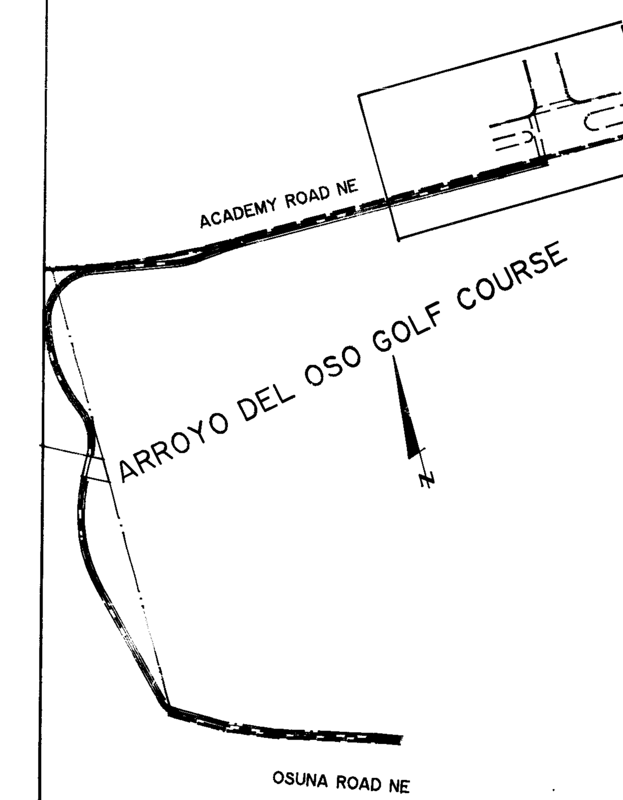
CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

TITLE
ARROYO DEL OSO BIKE TRAIL
STA. 0+00 TO STA. 6+80

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[illegible]	8/21/90	Liquid Waste	R.W. Kane	8-21-90
A.C.E.- Design	"	"	Traffic	[illegible]	5-29-90
A.C.E.- Hydrology	"	"	Water	R.W. Kane	8-21-90
Parks	D. Serna	8/20/90			

DRAWING NO 3980 | MAP NO. E-18-Z F-18-Z | SHEET 4 OF 8





AS BUILT INFORMATION
CONTRACTOR / WORK STARTED / INSPECTOR'S ACCEPTANCE BY / FIELD VERIFICATION BY / DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE — NO

BENCH MARKS
ACS BRASS TABLET STAMPED "4-F18A 1981"
SET IN THE GROUND FLUSH WITH THE BACK
OF CURB. ELEVATION 5277.58

SURVEY INFORMATION
FIELD NOTES
NO.	BY	DATE

ENGINEER'S SEAL
1457
6-10-90

C of A PWD Maps & Records
26 3 9 8 0 0 5 11

NO	DATE	REMARKS	BY

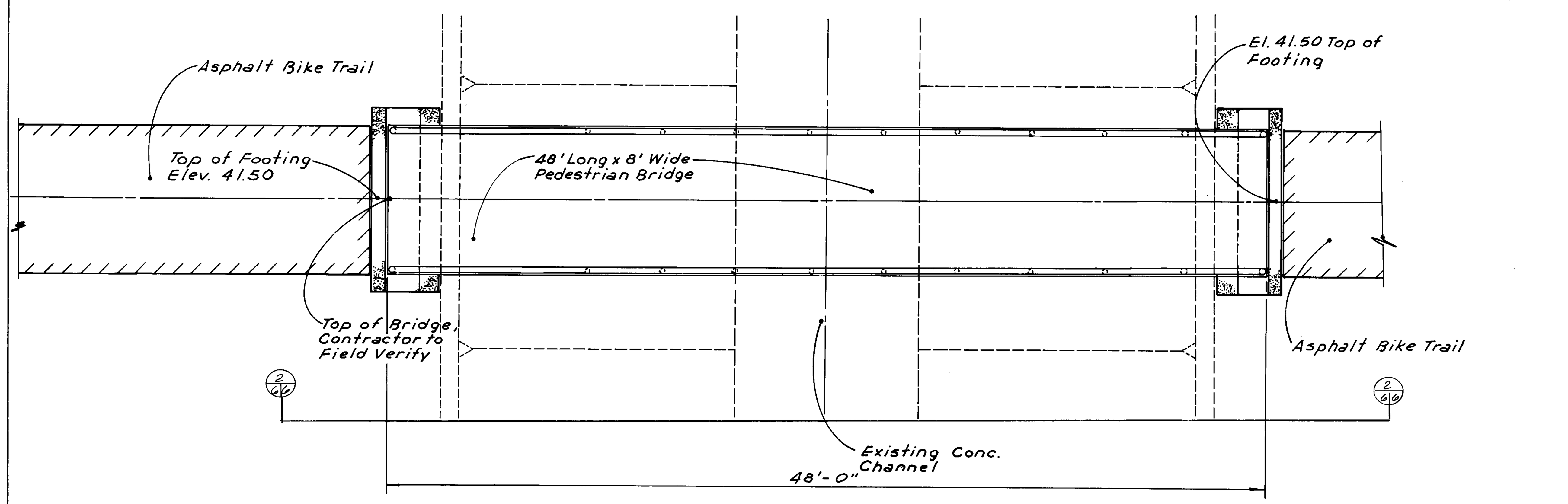
REVISIONS		
DESIGN		
DESIGNED BY	C.C.	DATE 4-23-90
DRAWN BY	C.C.	DATE 4-24-90
CHECKED BY	R.C.	DATE 5-4-90

CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

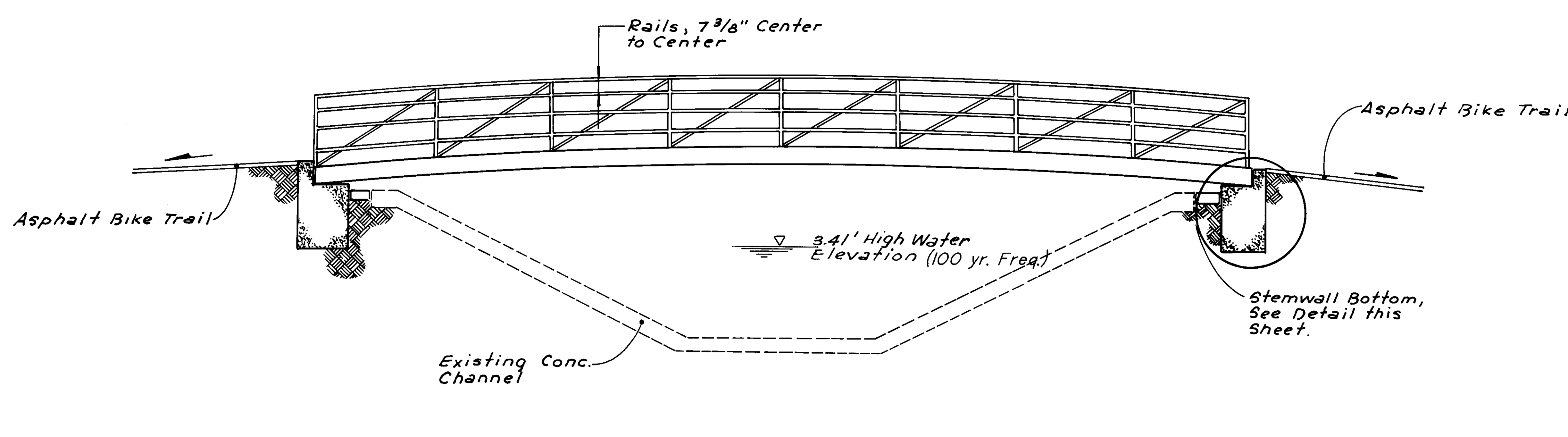
TITLE
ARROYO DEL OSO BIKE TRAIL
STA. 6+80 TO STA. 9+85.40

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	[illegible]	8.9.90	Hydrology	[illegible]	5.9.90
Trans. Dev.	[illegible]	5-29-90			
Utility Dev.	R.W. Kane	8-21-90			
Parks	D. Sena	8/20/90			

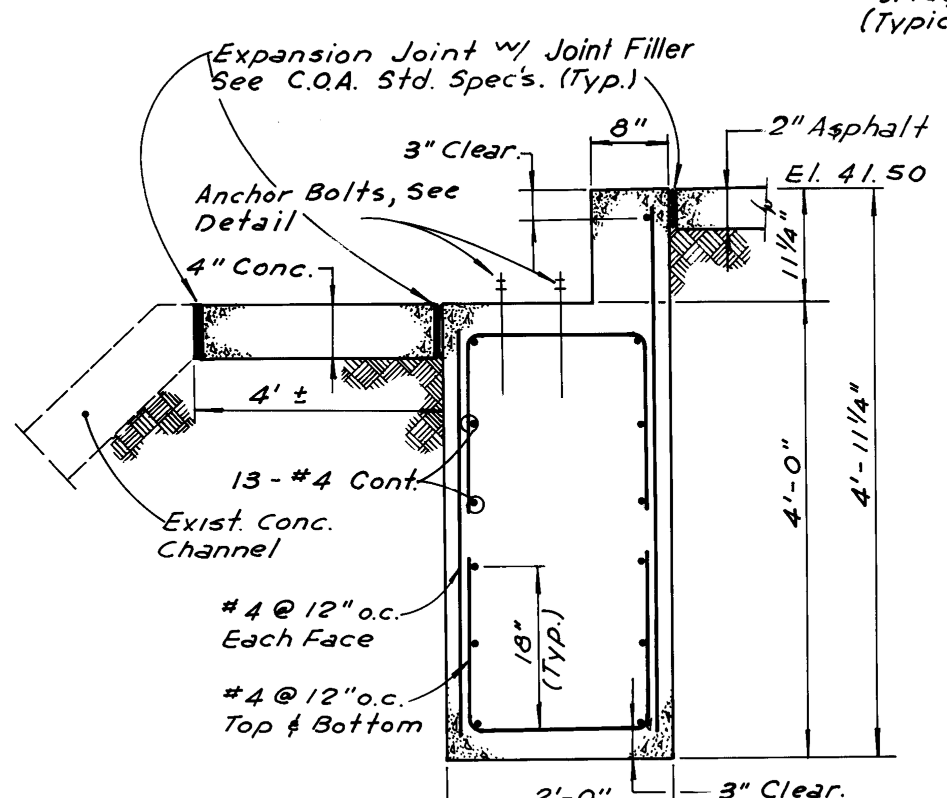
DRAWING NO 3980 | MAP NO. E-18-Z F-18-Z | SHEET 5 OF 8



PLAN

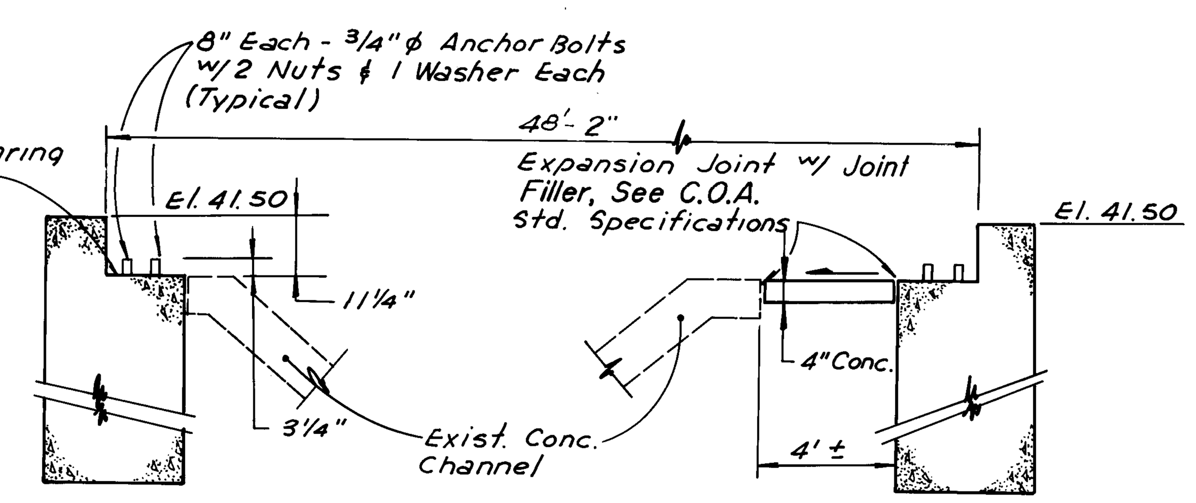


SECTION 2/6



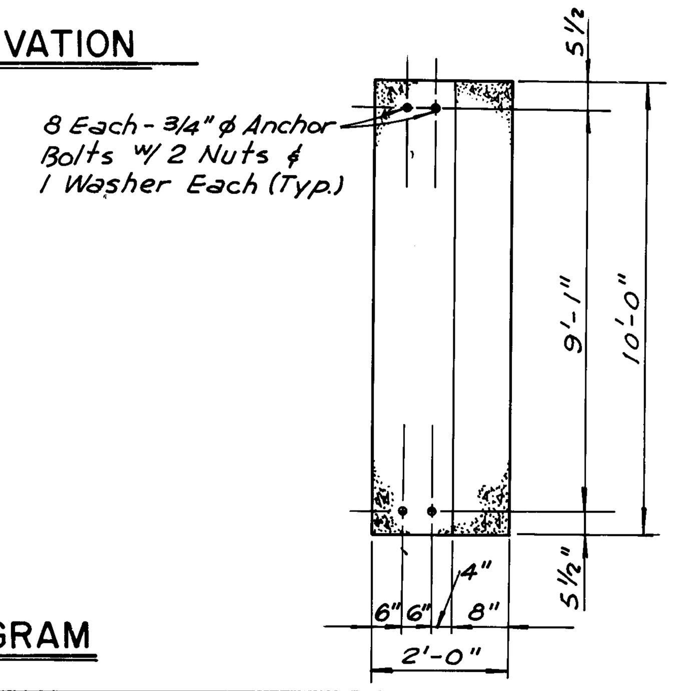
FOOTING DETAIL

N.T.S.



ANCHOR BOLT ELEVATION

N.T.S.



ANCHOR BOLT DIAGRAM

N.T.S.

BRIDGE SPECIFICATIONS

GENERAL

These specifications are for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction.

The Bridge shall be designed and manufactured by Continental Custom Bridge Company, Route 5, Box 178, Alexandria, Minnesota 56308 - Inside Minnesota 1-800-572-7002; Outside Minnesota 1-800-328-2047.

SPAN AND WIDTH

Clear span length (straight line dimension) shall be 48 feet 0 inches.
Bridge inside deck width shall be 8 feet 0 inches.

ENGINEERING

The Bridge shall be designed for light recreation use (parks, bicycle crossing, trails, etc.). The bridges shall be designed for a minimum live load of 100 pounds per square foot.

Allowable Design Stresses:

All bridge applications shall be designed in accordance with the "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings by the American Institute of Steel Construction" (AISC)-latest edition.

Welded tubular structure design shall be in accordance with the Structural Welding Code (ANSI/ANSDI.-8)- Chapter 10.

GEOMETRY

Low Profile Design.

Railing Height: Railing height (top of truss top chord) to be 42 inches above deck.

Diagonals: One diagonal per panel.

Camber: Bridge camber at center of bridge span shall be 2-1/2% of the total bridge span. This produces localized deck slopes that are approximately equal to the maximum handicap access slope of 8.33%.

MATERIALS

Bridges which are not to be painted shall be fabricated from high strength, self-weathering, low alloy, atmospheric corrosion-resistant ASTM A847 cold-formed welded square and rectangular tubing, and ASTM A588, ASTM A606, or ASTM A242 plate and structural shapes (Fy=50,000 psi).

Anchor bolts & nuts to be provided by bridge manufacturer.

Grease: Multi-Lube Lithium base.

All welding shall utilize E80 series electrodes which have the same weathering characteristics as corrosion-resistant steel.

Deckings: Wood decking shall be west coast region douglas fir select structural planks graded according to WCLB standard grading decking to be treated to AWPA standard P-5 preservative utilized shall be either ammoniacal copper arsenate (chemonite or ACA) or citromate copper arsenate (CCA). Decking shall be treated to a total absorption of 0.40 pounds per cubic foot of wood.

FABRICATION

Workmanship, fabrication and shop connections shall be in accordance with American Association of State Highway and Transportation Officials Specifications (AASHTO).

Welding operations shall be done by properly accredited experienced operators, each of whom shall submit satisfactory evidence of experience and skill in welding structural steel with the kind of welding to be used in the work and who has demonstrated the ability to make uniform good welds of the type required.

FINISHING

Self Weathering Bridges: All exposed surfaces of self-weathering steel shall be cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 6 Commercial Blast Cleaning, SSPC-SP 6-63.

DELIVERY AND ERECTION

Delivery of the bridge (bridges) will be made to a location nearest the site which is accessible to over-the-road trucks, unless otherwise specified.

The Contractor will be responsible for unloading the bridge from the truck at the time of arrival. Continental Custom Bridge Company will notify the Contractor in advance of the expected time of arrival at the site. Contractor is responsible for storing the bridge during construction.

The Manufacturer or his representative will instruct the Contractor or his representative in the proper lifting procedure for the unloading of the bridge. Care must be taken to prevent damage to the finish of the bridge.

The unloading, splicing (if required), and placement of the bridge will be the responsibility of the Contractor. The procedure for bolting field splices will be given to the Contractor by the manufacturer.

1' x 1' bearing plates with slotted holes will be included with the delivery of the bridge and are to be placed at the anchor bolt locations with grease between the plate and footing.

Install nuts on anchor bolts to bridge manufacturer's specifications.

AS BUILT INFORMATION

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

MICRO-FILM INFORMATION

RECORDED BY — DATE — NO.

BENCH MARKS

ACS BRASS TABLET STAMPED "4-F18A 1981" SET IN THE GROUND FLUSH WITH THE BACK OF CURB. ELEVATION 5277.58

SURVEY INFORMATION

FIELD NOTES — NO. — BY — DATE

ENGINEER'S SEAL

RICHARD D. CAVANAGH — NEW MEXICO — 4457 — REGISTERED PROFESSIONAL ENGINEER

6-10-90

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

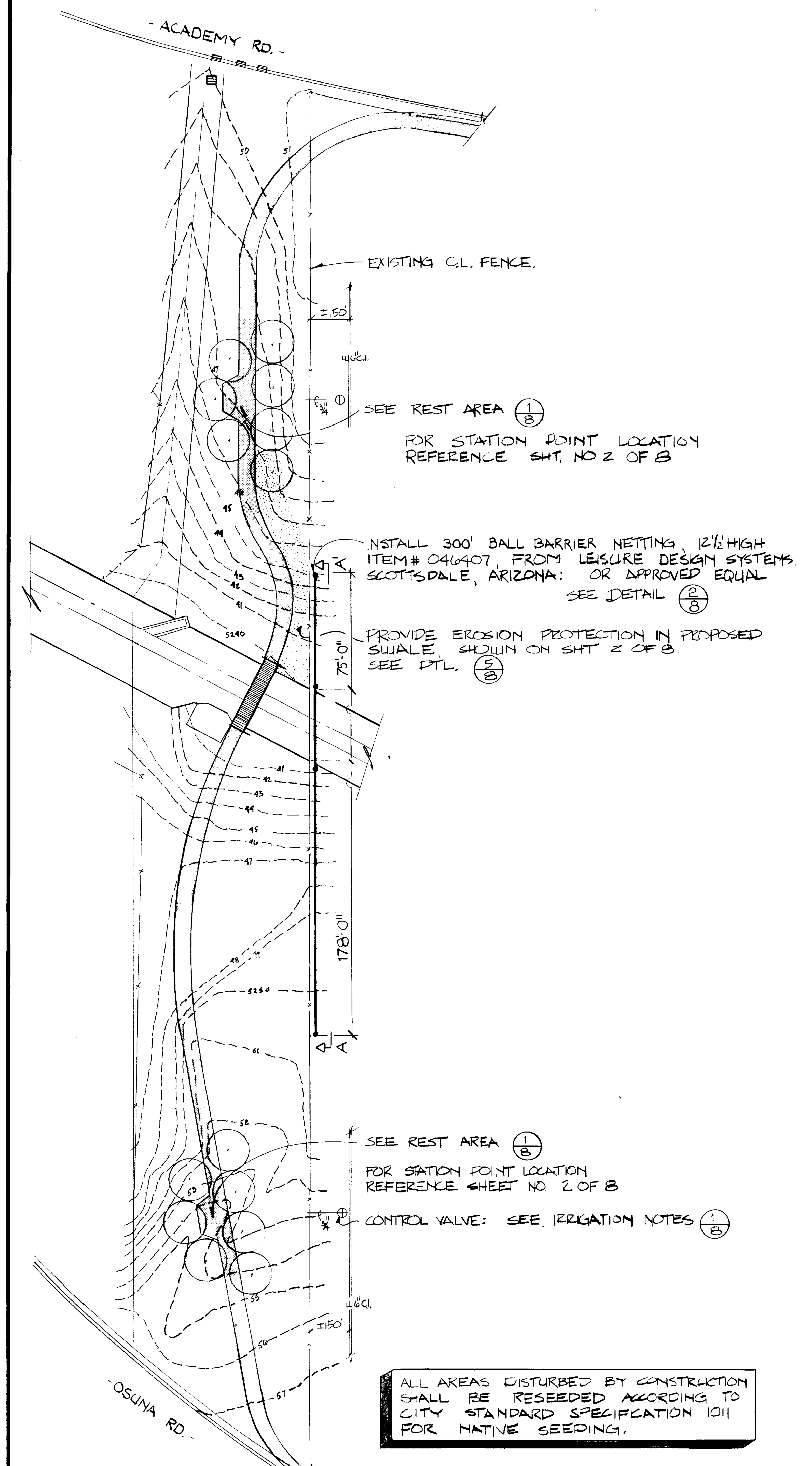
DESIGNED BY C.C.	DATE 4-24-90	
DRAWN BY A.M.	DATE 4-25-90	
CHECKED BY R.C.	DATE 5-4-90	

CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

TITLE: BRIDGE DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Trans Dev	[illegible]	5-29-90			
Utility Dev	R.W. Kane	8-21-90			
Parks	[illegible]	8/20/90			

DRAWING NO. 3980 — MAP NO. Z-E-18 Z-E-18 — SHEET 6 OF 8

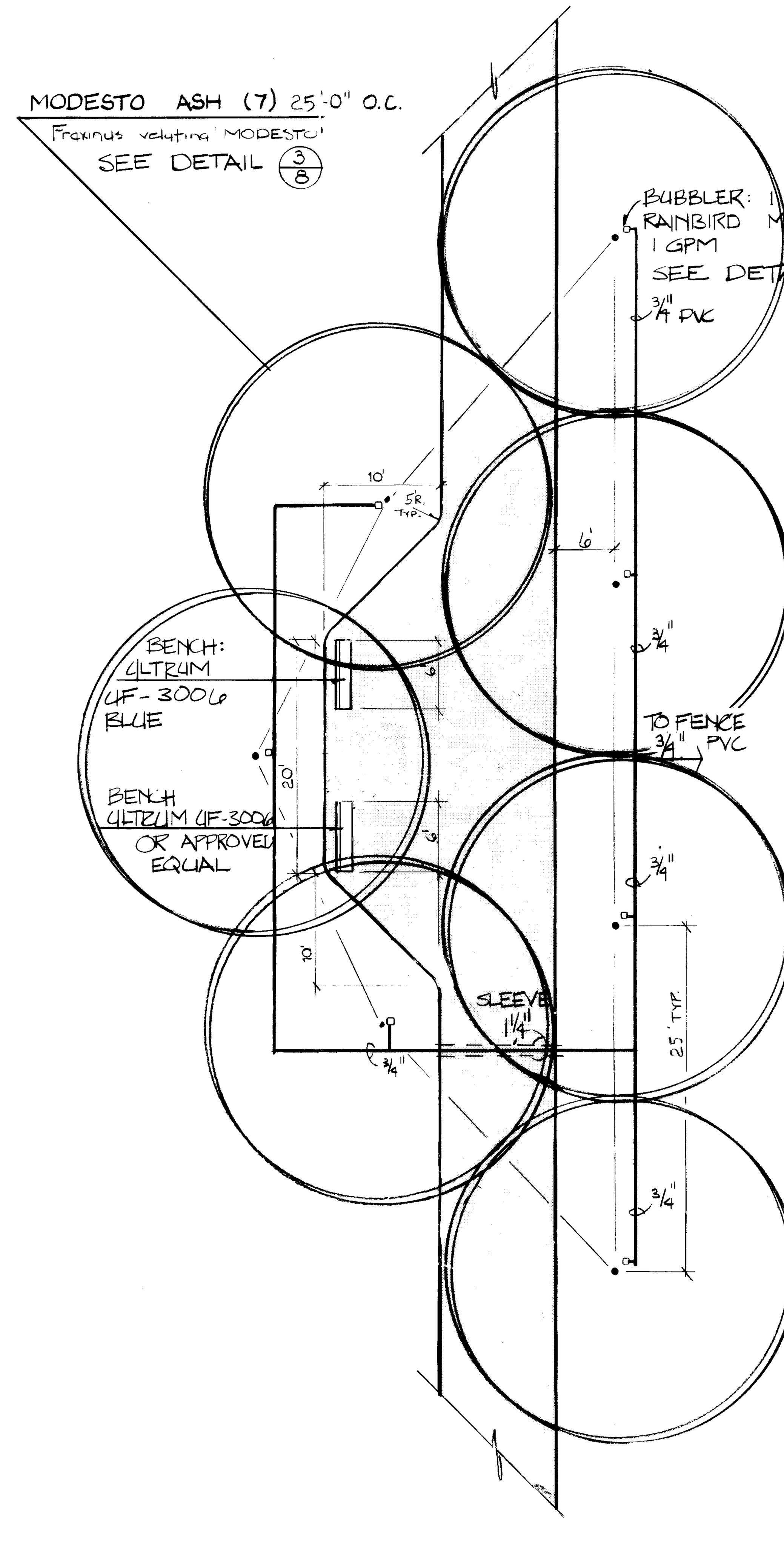


ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESEEDED ACCORDING TO CITY STANDARD SPECIFICATION 1011 FOR NATIVE SEEDING.

NORTH

SCALE: 1" = 50'

SITE PLAN



IRRIGATION NOTES:

1. Prior to start of construction, the location of all existing utility lines shall be marked. Verify locations with the City of Albuquerque and all public utilities.

2. Control wires shall be identifiedwith E-Z Coder WDR series tape at valve and controller.

3. This system is designed for 14 GPM and will operate between 20 and 90 PSI at the head. Pressure at the point of connection is estimated to be 58 PSI.

4. When locating heads in the field, care shall be taken to space heads as shown on the plan. However, minor adjustments in the head layout may be required to meet minor variations between plan dimensions and site dimensions.

5. All piping installed under sidewalks, roads, etc...shall be sleeved in Sch. 40 PVC two sizes larger than the pipe to be sleeved.

6. All products shall be as specified or approved substitution.

7. Golf Management to tap existing 6" cast iron main, provide 1" gate valve, 1" control valve and 3/4" PVC stub to golf course fence.

8. Golf Management shall wire control valves to existing control vault located within golf course fence. Watering schedule for trees shall be the responsibility of Golf Management.

9. CIPcrews to coordinate location of stub out with Golf Management in the field.

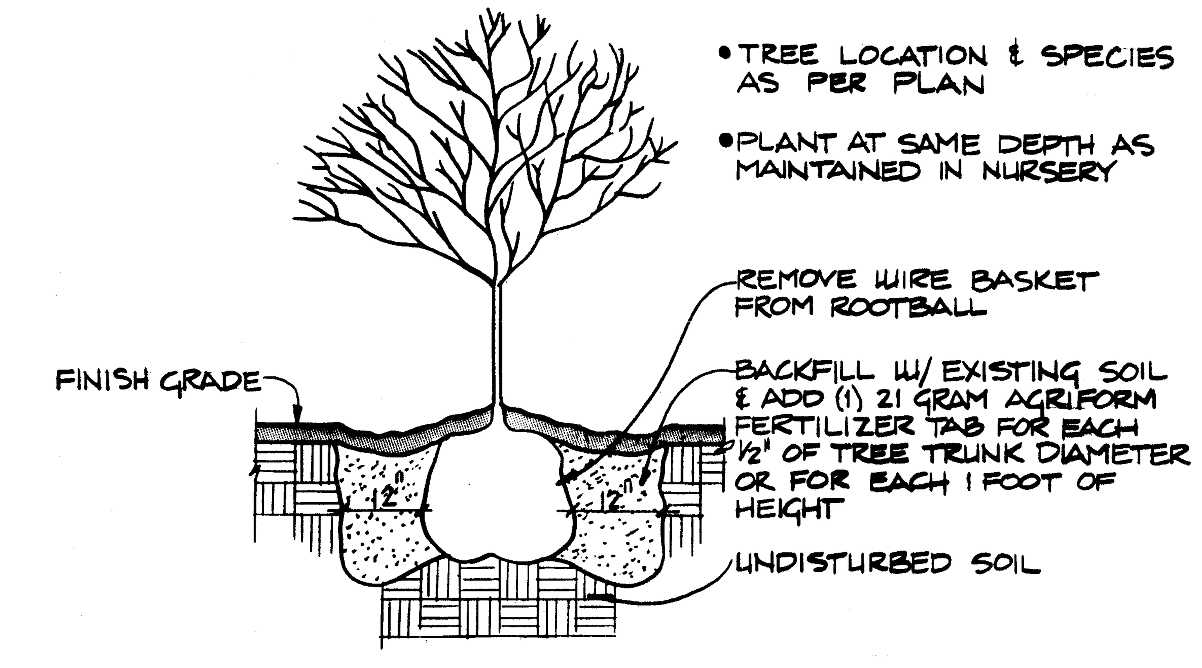
10. CIP crews shall install irrigation from 3/4" stub at fence to proposed trees along bike trail according to plan.

11. Backflow prevention is provided for at golf course connection to city main. CIPcrews to coordinate location of 3/4" stub out with Golf Management in the field.

12. Place bubblers on uphill side of tree.

1/8 **REST AREA** (TYPICAL)

SCALE: 1" = 10'

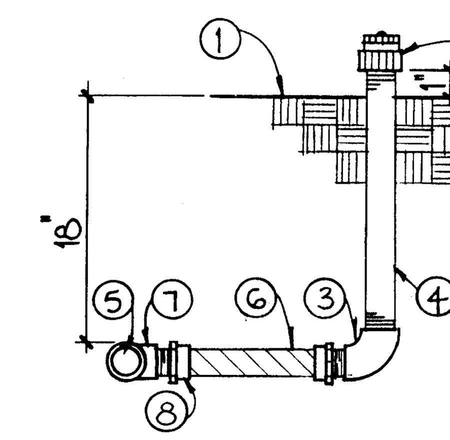


3/8 **TREE PLANTING DETAIL**

N.T.S.

PLANT LIST

QTY.	COMMON NAME	BOTANICAL NAME	CONTAINER	COMMENTS
14	Modesto Ash	Fraxinus velutina 'Modesto'	2 1/2"	

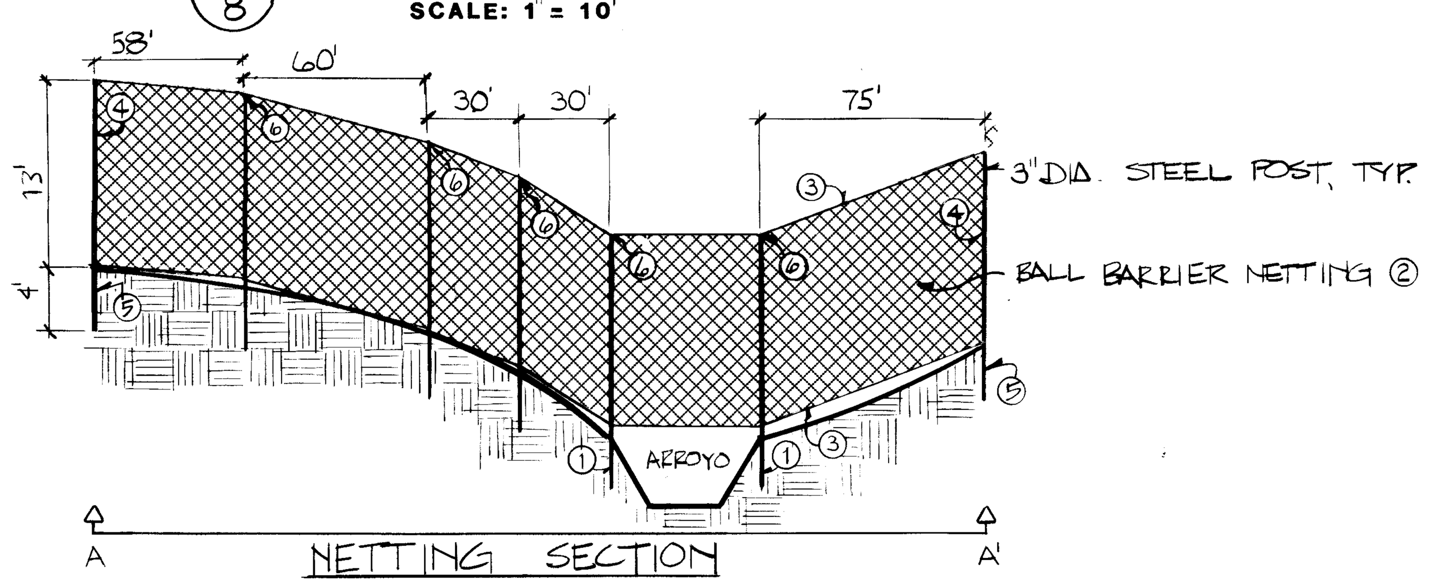


KEYED NOTES:

1. FINISH GRADE
2. BUBBLER 1" ABOVE GRADE OR BARK MULCH
3. SCH 40 PVC SxT ELL
4. SCH. 80 PVC RISER
5. PVC LATERAL PIPING
6. PVC FLEXIBLE VINYL PIPE, STD. IPS FROM: AGRICULTURAL PRODUCTS INC. 1-818-768-3303
7. SCH. 40 PVC SxSxT TEE OR SxT ELL 2" AND SMALLER (GxGxT OR GxT 2 1/2" & LARGER)
8. SCH. 40 PVC MIP ADAPTER

4/8 **BUBBLER DETAIL**

N.T.S.



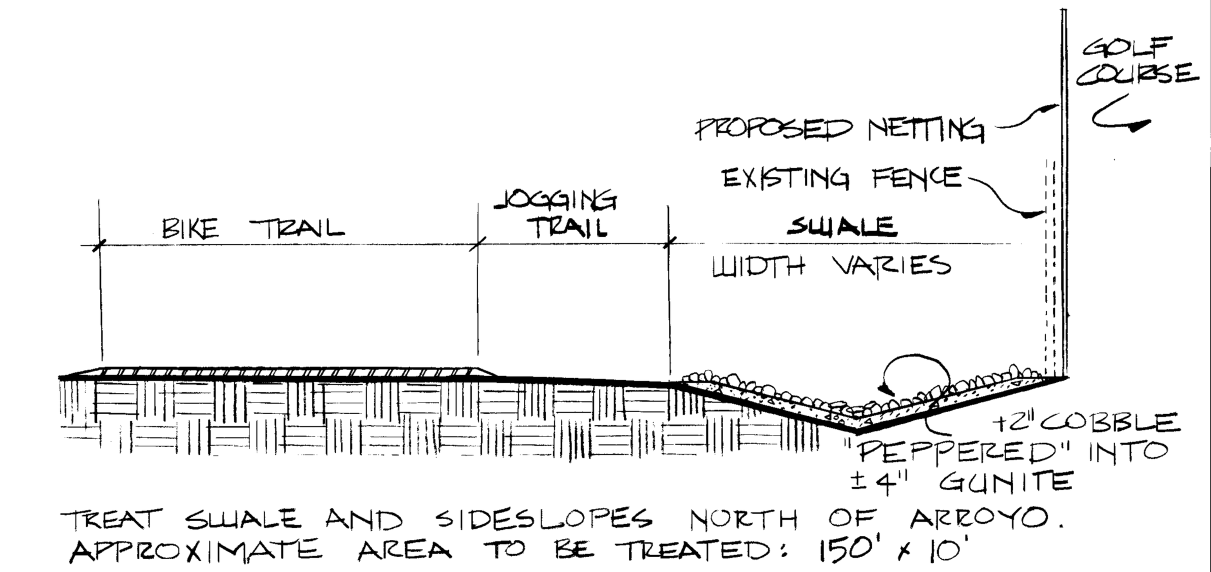
NETTING SECTION

KEYED NOTES:

1. ALLOW 6" CLEARANCE BETWEEN CHANNEL LINING AND FOOTING OF POST.
2. ALLOW 6" CLEARANCE BETWEEN EXISTING CHAINLINK FENCE AND BALL BARRIER NETTING WITH NETTING ON GOLF COURSE SIDE OF FENCE.
3. 3/8" STEEL CABLE, WEEVED THROUGH TOP AND BOTTOM OF NET SO THAT NET IS STRETCHED TIGHTLY AND WILL NOT SAG. CLAMP AT ENDPOST.
4. ATTACH NETTING TO END POST WITH PLASTIC TIES, 8" LONG, 50 lb. TEST, AVAILABLE FROM LEISURE DESIGN; VICTORY SPORTS PRODUCTS, ITEM # 2523
5. SUPPORT POST SHALL BE PLACED IN CONCRETE FOOTING, 8" DIA. x 4' DEEP CONCRETE SHALL BE 3000 PSI.
6. WELD EYE BOLT TO POST. USE "S" HOOK TO ATTACH CABLE TO EYE BOLT. CRIMP S HOOK CLOSED.

2/8 **BALL BARRIER NETTING DTL.**

N.T.S.



TREAT SWALE AND SIDESLOPES NORTH OF ARROYO. APPROXIMATE AREA TO BE TREATED: 150' x 10'

5/8 **EROSION PROTECTION DTL.**

N.T.S.

AS BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	DATE:
INSPECTORS APPROVAL	DATE:
FIELD VERIFICATION BY	DATE:
DRAWING CORRECTED BY	DATE:

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARK

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REVISIONS / REMARKS	BY

DESIGNED BY:	DATE:
DRAWN BY:	DATE:
CHECKED BY:	DATE:

CITY OF ALBUQUERQUE
PARKS & RECREATION
DESIGN & DEVELOPMENT

TITLE: ARROYO DEL OSO BIKE TRAIL LANDSCAPING AND SITE FURNISHINGS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		8-21-90	WATER	R.W. Kane	8-21-90
TRANSPORTATION		8-29-90	WASTE WATER	R.W. Kane	8-21-90
HYDROLOGY		8-21-90			
PARKS		8-20-90			

PROJECT NO. ~~3800~~ | MAP NO. | SHEET 8 OF 8

City PWD Maps & Records
26 39 8 00 89.1

3980