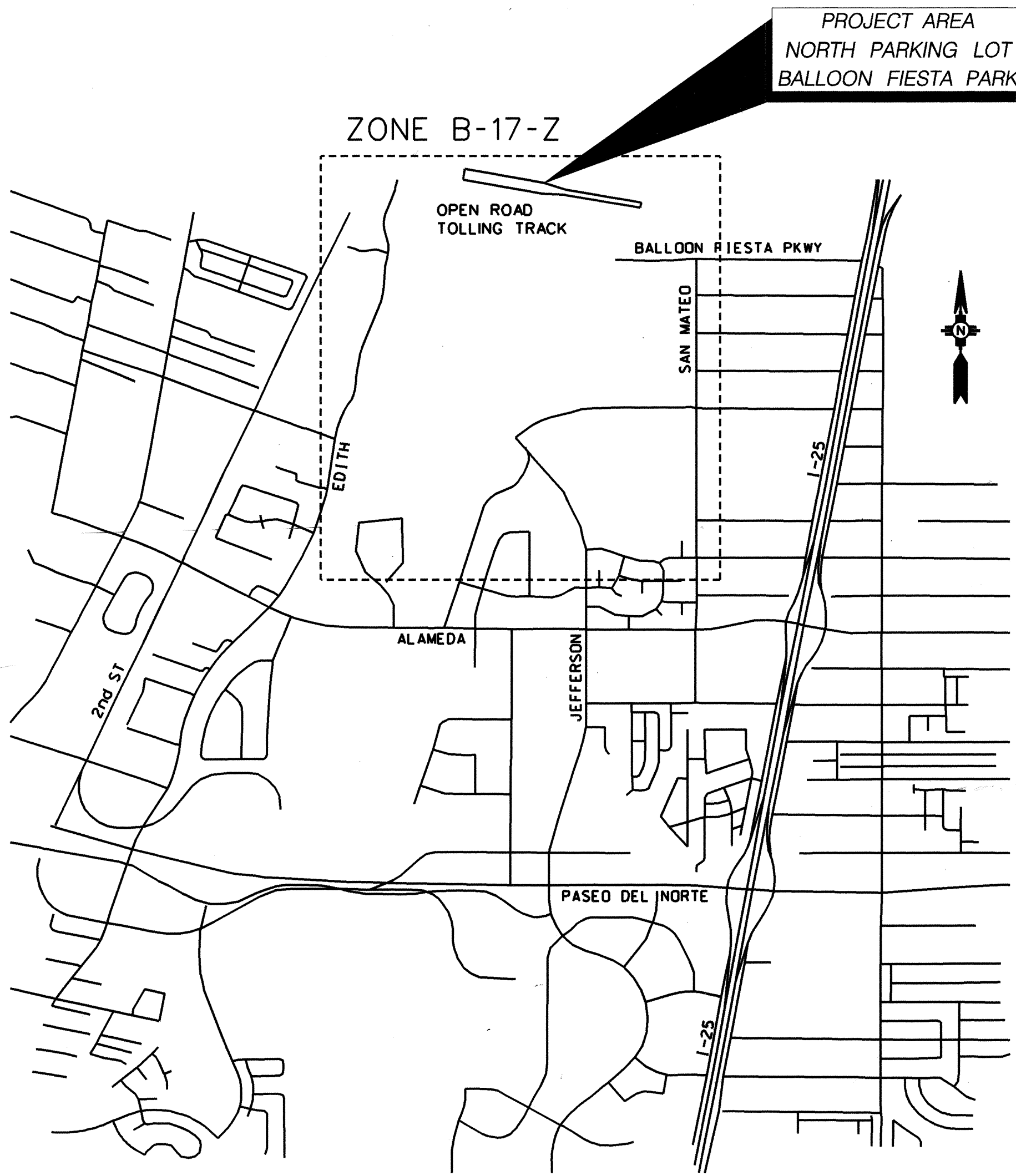


TRANSCORE / AMTECH
Albuquerque, New Mexico
CONSTRUCTION PLANS
FOR
OPEN ROAD TOLLING (ORT)
TEST TRACK



CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS
I, James E. Heimann of the firm of TransCore, ITS
A Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of
my knowledge and belief, that the infrastructure installed as part of this project has been
inspected by me or by a qualified person under my direct supervision and has been constructed
in accordance with the plans and specifications approved by the City Engineer and that the
original design intent of the approved plans has been met, except as noted by me or personnel
built construction drawings. This Certification is based on site inspections by me or personnel
under my direction and survey information provided by Stephen J. Toler
NMPS number 11599



INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	PROPOSED TYPICAL SECTIONS
5	GRADING AND DRAINAGE PLAN
6	BARRIER PLAN
7	PLAN AND PROFILE
8	STRIPING PLAN
9	CONDUIT PLAN
10	FOUNDATION DETAILS
11	SURVEY CONTROL SHEET
12	SURVEY ELEVATION PLAN
13	PULL BOX DETAILS (DWG NO. 2520)

STANDARD DRAWINGS (NOT INCLUDED)

AGENCY	DWG NO.	DESCRIPTION
NEW MEXICO DOT	CWB-75	CONCRETE WALL BARRIER
NEW MEXICO DOT	M-21-62	METAL BARRIER MATERIALS & PLACEMENT PROCEDURES



RECORD DRAWING
DATE 12-2003

REV SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE
ENGINEER STAMP AND SIGNATURE		APPROVALS	ENGINEER	DATE	APPROVED FOR CONSTRUCTION	
		DRC Chairman	<i>[Signature]</i>	10-17-03	<i>[Signature]</i> 10/17/03 City Engineer Date	
		Transportation	<i>[Signature]</i>	10/14/03		
		Water/Wastewater	N/A			
		Hydrology	<i>[Signature]</i>	10-14-03		
		Parks	<i>[Signature]</i>	10-16-03		
Const. Mgmt.	<i>[Signature]</i>	10-16-03	Project No. 720981		SHEET NO. 1 OF 13	

10/07/2003
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GENERAL NOTES:

1. CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMENDED THROUGH UPDATE 6 WILL BE REFERRED TO HEREIN AS THE "STANDARD SPECIFICATIONS". SPECIFIC REFERENCES WILL ALSO BE MADE TO THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2000 EDITION.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALLS 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. THE LOCATIONS OF ALL GAS, ELECTRIC, CABLE TV, AND TELEPHONE WERE OBTAINED FROM THEIR RESPECTIVE ORGANIZATIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL COORDINATE ALL UTILITY CROSSINGS WITH THEIR RESPECTIVE ORGANIZATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MARKERS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER 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 PAVEMENT 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.
5. THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE FIELD ENGINEER A DETAILED CONSTRUCTION SCHEDULE.

CONSTRUCTION NOTES:

1. PORTIONS OF THE SITE ARE COVERED WITH ROADWAY MILLINGS. WHERE THESE MILLINGS WILL BE DISTURBED BY CONSTRUCTION, THEY SHALL BE REMOVED AND STOCKPILED. FOLLOWING COMPLETION OF THE PROJECT GRADING, THESE MILLINGS WILL BE SPREAD ACROSS THE DISTURBED AREA. THIS SHALL BE INCIDENTAL TO ITEM 201.010 - SITE CLEANING AND GRUBBING, COMPLETE.
2. THE METAL BARRIER ANCHORAGE SHALL BE AN ET-2000 OR ET-PLUS ANCHORAGE SYSTEM.
3. THE R VALUE OF THE SOIL IS 30.
4. THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN (SWP3) WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND PAYMENT SHALL BE MADE USING ITEM # 30.020, NPDES PERMITTING.

UTILITY OWNERS

PNM (ELECTRIC) - 241-3448 - (ROSIE ROMERO)
QWEST - 245-6733 - (JACQUE MILLER)
WATER - CITY OF ALBUQUERQUE - 857-8200

INCIDENTAL ITEMS

1. LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
2. STOCKPILING OF MILLINGS.
3. METAL BARRIER ANCHORAGE CONNECTION TO BARRIER WALL.
4. WATER FILLED BARRIER PINNED CONNECTION.
5. CONDUIT AND INSTALLATION AT ENTRANCE TO BALLOON PARK.
6. REINFORCING STEEL, ANCHOR BOLTS, ANCHOR PLATES, AND OTHER IMBEDDED MATERIALS IN DRILLED SHAFT FOUNDATIONS.

RECORD DRAWING
DATE 12-2003

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: GENERAL NOTES			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
OCT 17 2003 REVIEW COMMITTEE	OCT 17 2003		
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
720981		2	13

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
		FIELD NOTES		CC 11112/EG		CONTRACTOR STAR PAVING DATE 12-03	
		BY				STAKED BY PRECISION SURVEY DATE 12-03	
		NO. DATE				INSPECTOR'S WILSON ENGINEER DATE 12-03	
		1 12-03				FIELD CHECKED BY STAN WILSON DATE 12-03	
						VERIFICATION BY PAUL F. STEFFEN DATE 12-03	
						CORRECTED BY	
						MICRO-FILM INFORMATION	
						RECORDED BY	
						NO.	
						DATE	

SUMMARY OF QUANTITIES

[illegible]

NOTES

1. BID ITEMS REFERENCE THE FOLLOWING AGENCY PUBLICATIONS:
1986 CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
2000 NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION
2. THE ASPHALT CONCRETE SURFACE (GRADE B) BID ITEM SHALL BE CONSTRUCTED PER SPECIFICATIONS IN THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION FOR TYPE B PAVEMENTS. (401 - PLANT MIX BITUMINOUS PAVEMENT)
3. THE METAL BARRIER ANCHORAGE BID ITEM SHALL BE CONSTRUCTED PER SPECIFICATIONS IN THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION FOR METAL BARRIER ANCHORAGE. (606 - METAL AND CONCRETE WALL BARRIER) [SEE CONSTRUCTION NOTE 2]
4. THE CONCRETE WALL BARRIER 32" ITEM SHALL BE CONSTRUCTED PER SPECIFICATIONS IN THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION FOR CONCRETE WALL BARRIER. (606 - METAL AND CONCRETE WALL BARRIER)
5. THE WATER FILLED BARRIER BID ITEM SHALL BE CONSTRUCTED PER SPECIFICATIONS IN THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION FOR CONCRETE WALL BARRIER. (606 - METAL AND CONCRETE WALL BARRIER)
5. THE DRILLED SHAFT FOUNDATION BID ITEM SHALL BE CONSTRUCTED PER SPECIFICATIONS IN THE NMSHTD STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION FOR DRILLED SHAFT FOUNDATION. (502 - DRILLED SHAFT CONCRETE BEARING PILES)

RECORD DRAWING
DATE 12-2003

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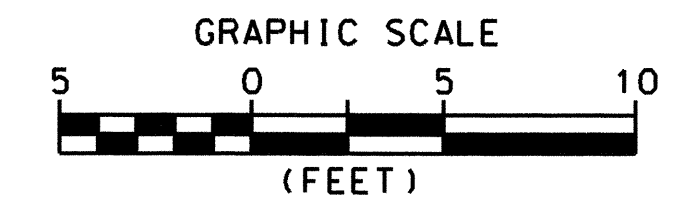
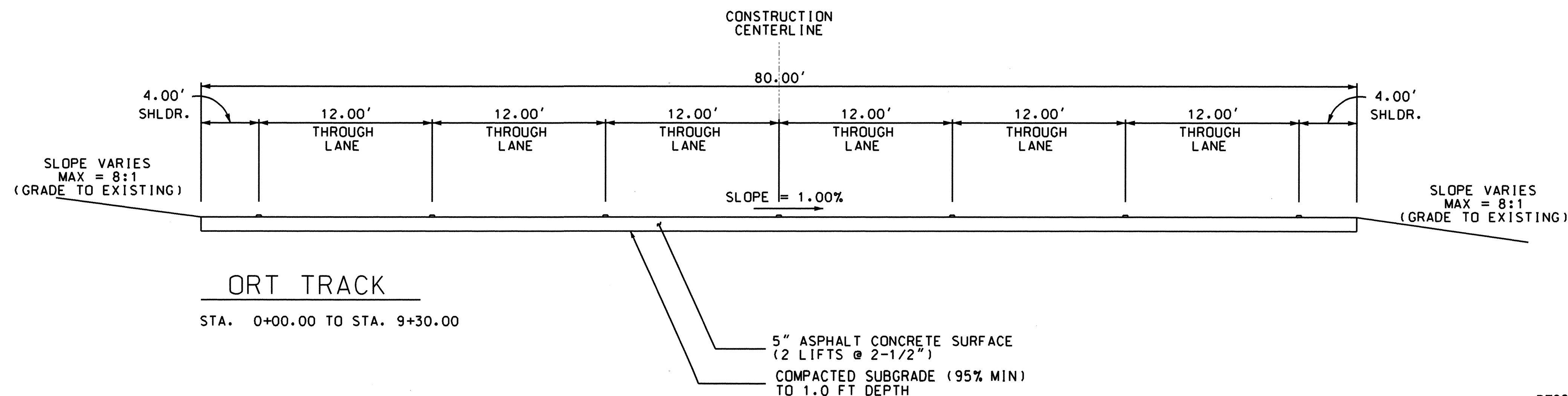
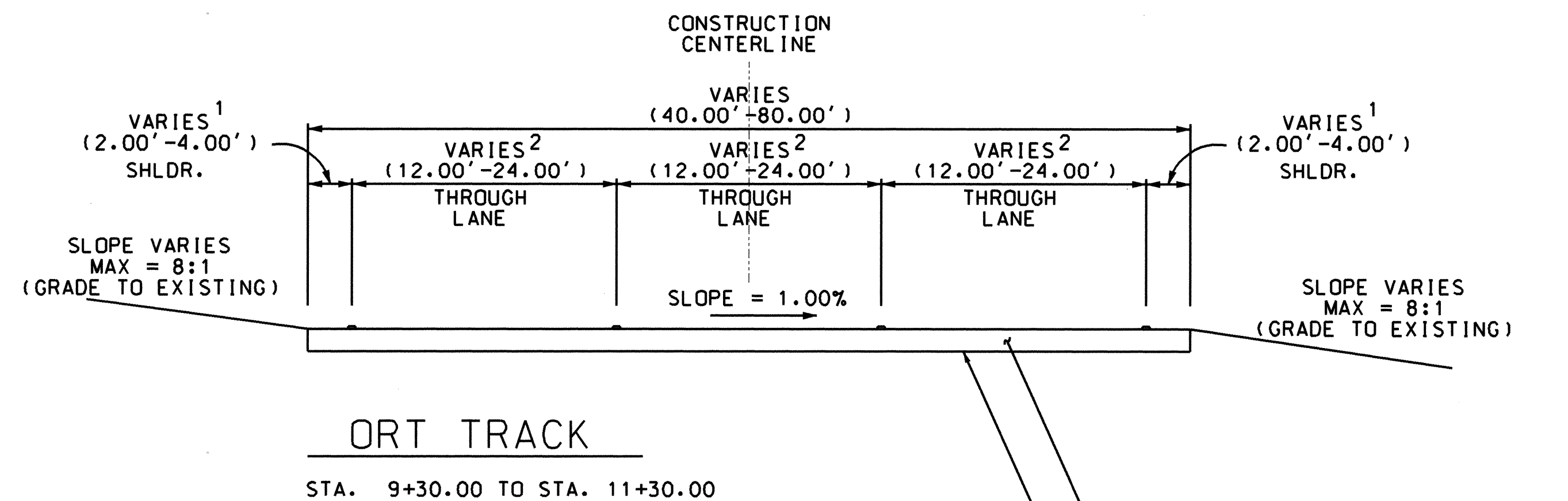
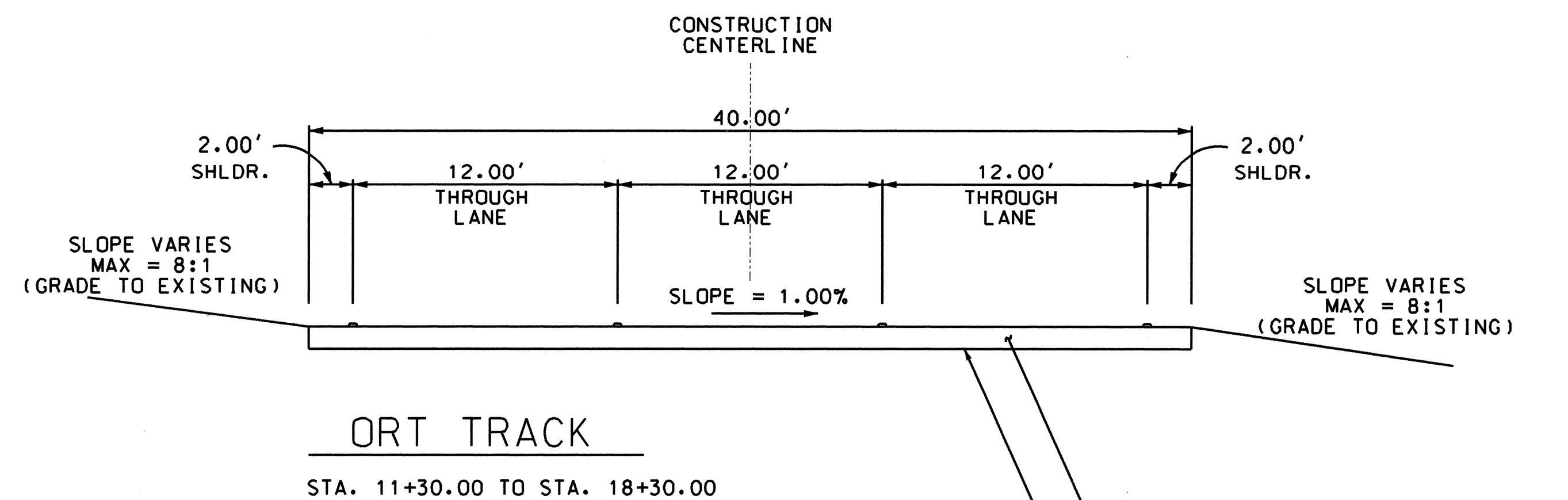
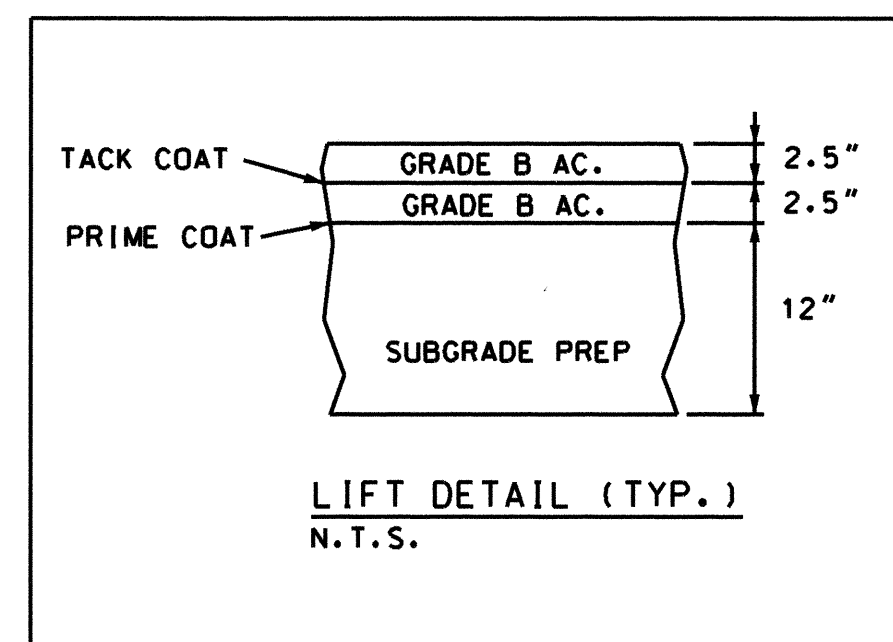
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE:	SUMMARY OF QUANTITIES
--------	-----------------------

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE	MO./DAY/YR.		MO./DAY/YR.	
OCT 17 2003		OCT 17 2003						
CITY PROJECT NO.		ZONE MAP NO.		SHEET		OF		
720981				3		13		

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NOTES:

- 1 SHOULDER WIDTH VARIES. SHOULDER WIDTH = 4.00' AT STA. 9+30.00. CONSTRUCT SHOULDER ADDITION TAPER FROM STA. 9+30.00 TO STA. 11+30.00. SHOULDER WIDTH = 2.00' AT STA. 11+30.00.
- 2 LANE WIDTH VARIES. LANE WIDTH = 24.00' AT STA. 9+30.00. CONSTRUCT LANE ADDITION TAPER FROM STA. 9+30.00 TO STA. 11+30.00. LANE WIDTH = 12.00' AT STA. 11+30.00.

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: PROPOSED TYPICAL SECTIONS

DESIGN REVIEW COMMITTEE
OCT 17 2003
REVIEW COMMITTEE

CITY ENGINEER APPROVAL
OCT 17 2003

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

CITY PROJECT NO. 720981

ZONE MAP NO.

SHEET 4 OF 13

RECORD DRAWING
DATE 12-12-03

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGNED BY		DRAWN BY		CHECKED BY	
CONTRACTOR	STAR PAVING	DATE	12-03	FIELD NOTES	BY	DATE	12-03	NO.	1	PFS	10/03	ARR	10/03	NKH	10/03
STAMPED BY	PRECISION SURVEY	DATE	12-03	PRECISION SURVEY	BY	DATE	12-03								
INSPECTOR'S	WILSON ENGINEER	DATE	12-03												
FIELD	STAR 2 WILSON	DATE	12-03												
VERIFICATION BY	PAUL F. STEFFIN	DATE	12-03												
CORRECTED BY		DATE													
MICRO-FILM INFORMATION		RECORDED BY													
		NO.													
		DATE													

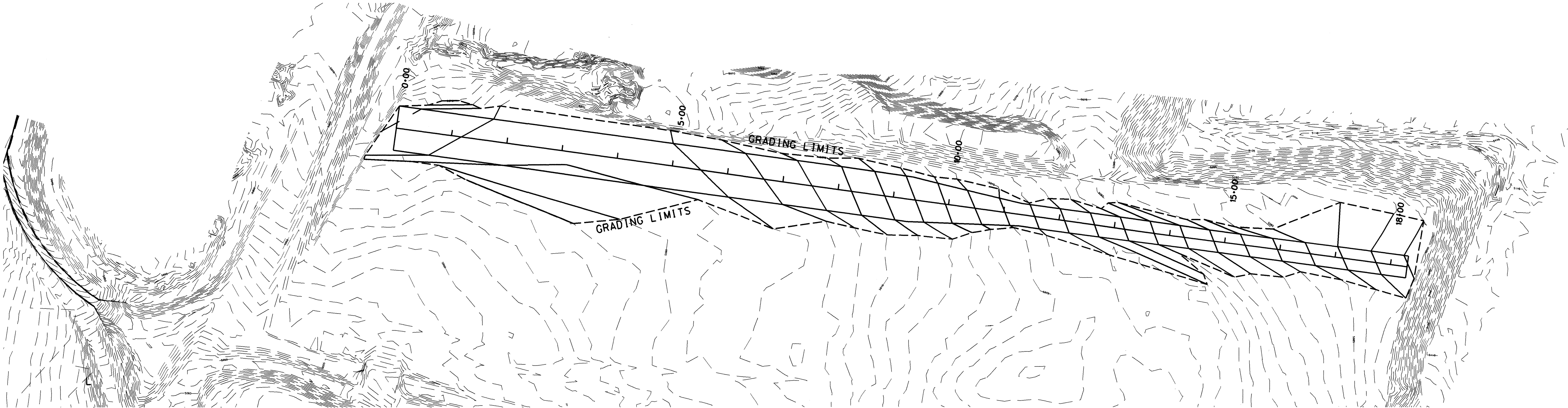
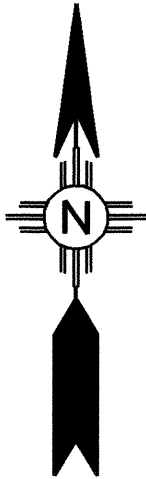
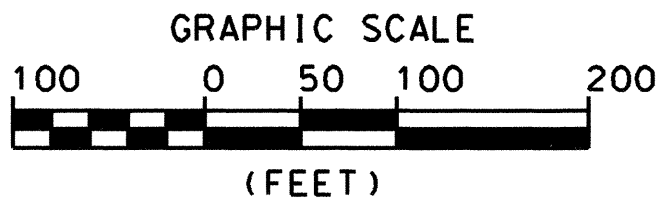


DRAINAGE PARAMETERS

PRECIPITATION ZONE	2	BETWEEN THE RIO GRANDE AND SAN MATEO
APPROXIMATE SLOPES AFTER GRADING		SEE PLAN BELOW
DESIGN STORM 100 YEAR, 6 HOUR, IN	2.35	
RETURN PERIOD FACTOR	1.000	
LAND TREATMENTS	D	IMPERVIOUS AREAS, PAVEMENT AND ROADS
PERCENT TREATMENT D (IMPERVIOUS)	80	
INITIAL ABSTRACTION, IN	0.10	
INFILTRATION LOSS RATE, IN/HR	0.04	
EXCESS PRECIPITATION, IN	2.12	
PEAK DISCHARGE, CFS/ACRE	4.70	
PEAK INTENSITY, IN/HR	5.05	

SITE DESCRIPTION AND NOI INPUTS

NATURE OF ACTIVITY	ROADWAY CONSTRUCTION
INDEX MAP	B-17
TOTAL SITE AREA	19.6 ACRES
TOTAL DISTURBED AREA	5.0 ACRES
RECEIVING WATER	NORTH DIVERSION CHANNEL



PROJECT SPECIFIC CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL SUBSURFACE UTILITIES IMPACTED BY CONSTRUCTION. POTHOLES SHALL BE REQUIRED WHERE POTENTIAL SUBSURFACE UTILITY CONFLICTS ARE ANTICIPATED, WHERE INDICATED ON THE UTILITY DRAWINGS, OR AS DIRECTED BY THE PROJECT MANAGER. ALL POTHOLES SHALL BE INCIDENTAL TO CONSTRUCTION AND NO DIRECT PAYMENT SHALL BE MADE THEREFOR.
2. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DISTURBING EXISTING UNDERGROUND UTILITIES. IT SHALL BE HIS RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION.
3. WHERE TRENCHING BENEATH EXISTING UTILITY LINES OCCURS, THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING THE LINE DURING CONSTRUCTION AND ASSURE THAT IT IS ADEQUATELY BACKFILLED AND COMPACTED.
4. ALL ROADWAY MILLING SHALL BE REMOVED FROM THE EXISTING SURFACE AND STOCKPILED. FOLLOWING COMPLETION OF THE PROJECT GRADING, THESE MILLINGS WILL BE SPREAD ACROSS THE DISTURBED AREA.
5. ALL NON-MILLING EXCAVATED MATERIAL SHALL BE STOCKPILED AT THE SITE AND USED FOR FILL MATERIAL WHERE REQUIRED.
6. IF REQUIRED, EXCAVATED MATERIAL NOT USED FOR FILL MATERIAL SHALL BE SPREAD THROUGHOUT THE PROJECT SITE AND GRADED.
7. IF REQUIRED, FILL MATERIAL SHALL BE IMPORTED FROM THE EAST SIDE OF THE SITE UNDER THE DIRECTION OF THE PROJECT MANAGER.

DRAINAGE SUMMARY

THE ORT TEST TRACK INVOLVES THE CONSTRUCTION OF A 3/8-MILE, MULTI-LANE TEST TRACK TO TEST TOLL TAGS THAT ARE USED ON AUTOMATED ELECTRONIC TOLL FACILITIES. THE PROJECT WILL BE LOCATED IN THE NORTH PARKING LOT OF THE ALBUQUERQUE BALLOON FIESTA PARK (ZONE B-17-2). THE CONSTRUCTION OF THE TRACK WILL INVOLVE THE GRADING OF THE EXISTING SITE AND PAVING OF THE TRACK SURFACE. ROADSIDE BARRIER WILL BE PLACED IN THE TESTING AREA TO PROTECT DRIVERS. FENCING WILL BE CONSTRUCTED TO RESTRICT ACCESS AND REDUCE VANDALISM TO THE EQUIPMENT. THE TOTAL PROJECT AREA THAT WILL BE DISTURBED BY CONSTRUCTION COMPRISES APPROXIMATELY FIVE ACRES.

THE TRACK HAS BEEN DESIGNED TO MINIMIZE THE IMPACTS TO THE EXISTING DRAINAGE FLOW PATTERNS OF THE 20-ACRE PARKING LOT BY GRADING THE TEST TRACK TO THE EXISTING GRADES. THE EXISTING PROJECT SITE CONSISTS OF COMPACTED MILLINGS OVER NATIVE MATERIAL, MAKING THE SURFACE RELATIVELY IMPERVIOUS. SURFACE FLOWS FROM THE SITE DRAIN FROM THE NORTHEAST TO THE SOUTHWEST AND WILL NOT BE ALTERED BY CONSTRUCTION. FLOWS ARE COLLECTED IN AN EARTH-LINED CHANNEL ALONG THE SOUTHERN EDGE OF THE PARKING LOT AND CONVEYED TO THE EL CAMINO ARROYO. THE EL CAMINO ARROYO IS AN EARTH-LINED CHANNEL THAT CONVEYS FLOWS TO THE NORTH DIVERSION CHANNEL THAT IS ADJACENT TO THE SITE. THE PROJECT IS LOCATED WITHIN A ZONE A FLOOD PLAIN (PANEL 129 OF 825). THE TEST TRACK WILL NOT IMPACT THE FLOOD PLAIN NOR WILL IT BE AFFECTED BY THE FLOOD PLAIN.

EXCAVATION

	CY	DESIGN CY
CUT	1913	2000
FILL*	1589	1950

* 20% SHRINKAGE FACTOR

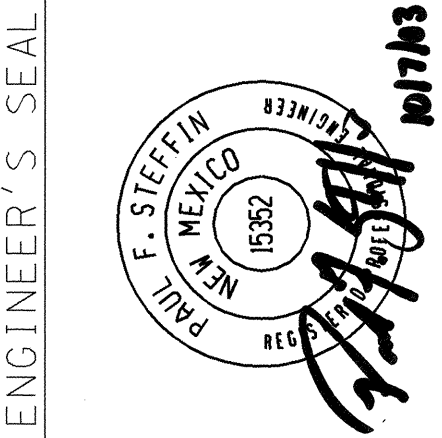
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: GRADING AND DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
DATE: OCT 17 2003	DATE: OCT 17 2003		
CITY PROJECT NO. 720981	ZONE MAP NO.	SHEET 5	OF 13

RECORD DRAWING
DATE 12-2003

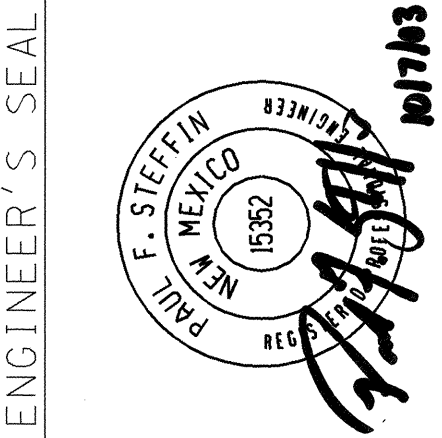


NO.	DATE	REMARKS	BY
1	12-03	PRECISION SURVEY	
		DESIGN	
DESIGNED BY	PFS	DATE	10/03
DRAWN BY	ARR	DATE	10/03
CHECKED BY	NKH	DATE	10/03

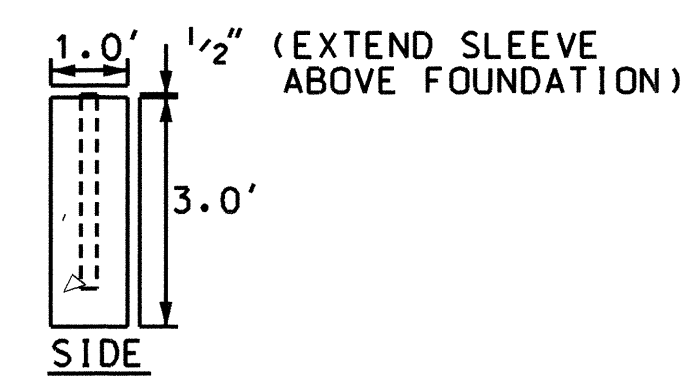
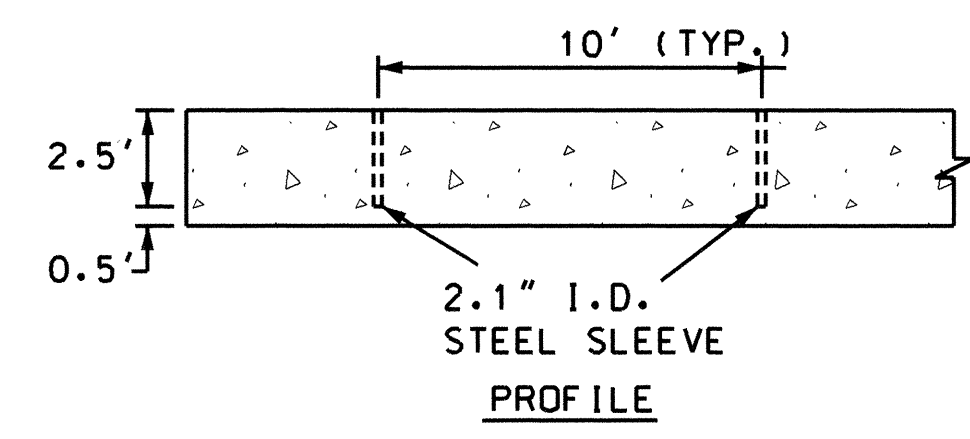
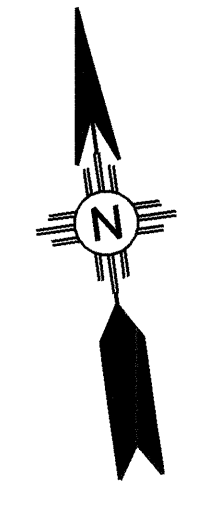
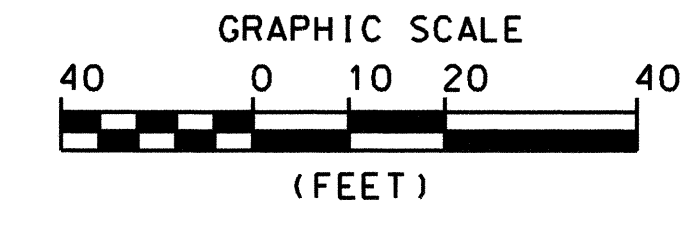
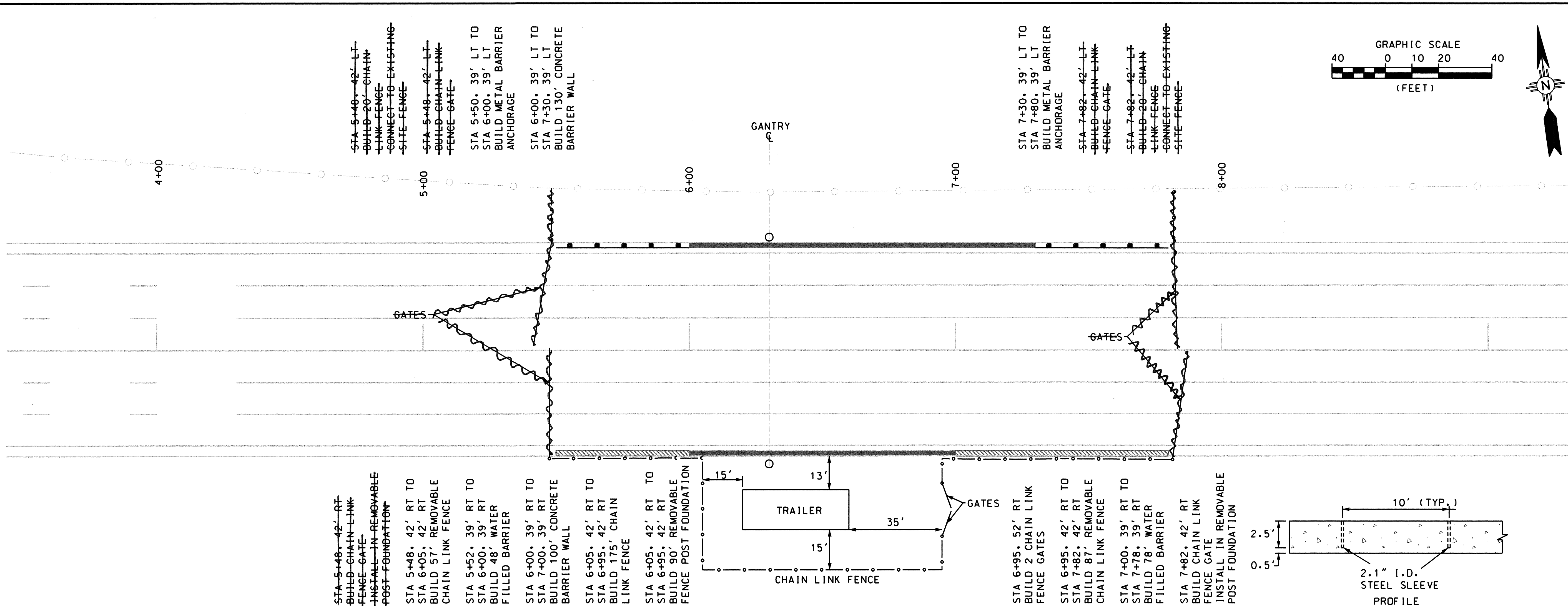
CONTRACTOR	STAR PAVING	DATE	12-03
INSPECTOR'S	PRECISION SURVEY	DATE	12-03
FIELD	WILSON ENGINEER	DATE	12-03
VERIFICATION BY	STAR P. WILSON	DATE	12-03
CORRECTED BY	PAUL F. STEFFEN	DATE	12-03
RECORDED BY		DATE	
NO.			

BENCH MARKS	CC 11112/EG
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SURVEY INFORMATION	FIELD NOTES	DATE
NO. 1	PRECISION SURVEY	12-03



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REMOVABLE FENCE POST FOUNDATION
N.T.S.

- NOTES:
1. INSTALL CHAIN LINK FENCE (COA STD. 410.010) IN THE FOUNDATION SHOWN ABOVE.
 2. CONCRETE IN FOUNDATION SHALL MEET THE MATERIAL SPECIFICATIONS IN STD. 410.010.
 3. GATE POST SLEEVE SHALL HAVE AN INSIDE DIAMETER OF 4.2".

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: BARRIER PLAN			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
REVIEW COMMITTEE		LAST DESIGN UPDATE	
CITY PROJECT NO. 720981	ZONE MAP NO.	SHEET 6	OF 13

RECORD DRAWING
DATE 12-2003

STATION TO STATION	LOCATION	EACH EG.	REMARKS
5+50 to 6+00	LT	1	SOUTH SHOULDER GANTRY LOCATION
7+30 to 7+80	LT	1	SOUTH SHOULDER GANTRY LOCATION
PROJECT TOTAL PROJECT USE		2	

NOTE:
1. METAL BARRIER ANCHORAGE SHALL BE CONNECTED TO CONCRETE BARRIER. THIS SHALL BE CONSIDERED AS INCIDENTAL TO THE METAL BARRIER ANCHORAGE.

STATION TO STATION	LOCATION	LENGTH ft	REMARKS
6+00 to 7+00	RT	100	SOUTH SHOULDER GANTRY LOCATION
6+00 to 7+30	LT	130	NORTH SHOULDER GANTRY LOCATION
PROJECT TOTAL PROJECT USE		230	

STATION TO STATION	LOCATION	LENGTH ft	REMARKS
5+52 to 6+00	RT	48	SOUTH SHOULDER GANTRY LOCATION
7+00 to 7+78	RT	78	SOUTH SHOULDER GANTRY LOCATION
PROJECT TOTAL PROJECT USE		126	

NOTE:
1. WATER FILLED BARRIER SHALL BE PINNED TOGETHER. THIS SHALL BE CONSIDERED AS INCIDENTAL TO THE WATER FILLED BARRIER.

STATION	LOCATION	LENGTH ft	HEIGHT ft	AREA sq ft	REMARKS
5+48	LT	42	0	336	NORTH SHOULDER GANTRY LOCATION
5+48	RT	42	0	336	SOUTH SHOULDER GANTRY LOCATION
7+82	LT	42	0	336	NORTH SHOULDER GANTRY LOCATION
7+82	RT	42	0	336	SOUTH SHOULDER GANTRY LOCATION
6+95	RT	10	8	80	TRAILER ACCESS
6+95	RT	10	8	80	TRAILER ACCESS
PROJECT TOTAL PROJECT USE				1504	
				160	

STATION	LOCATION	LENGTH ft	HEIGHT ft	AREA sq ft	NOTES
5+48 to 5+48	LT	20	8	160	CONNECT TO EXISTING FENCE
6+05 to 6+95	RT	175	8	1400	PLACE AROUND TRAILER AS SHOWN
7+82 to 7+82	LT	20	8	160	CONNECT TO EXISTING FENCE
PROJECT TOTAL PROJECT USE				1720	
				1400	

STATION	LOCATION	LENGTH ft	HEIGHT ft	AREA sq ft	NOTES
5+48 to 6+05	RT	57	8	456	CONNECT TO GATE
6+05 to 6+95	RT	90	-	-	FOUNDATION ONLY
6+95 to 7+82	RT	87	8	696	CONNECT TO GATE
PROJECT TOTAL PROJECT USE				1152	
				1160	

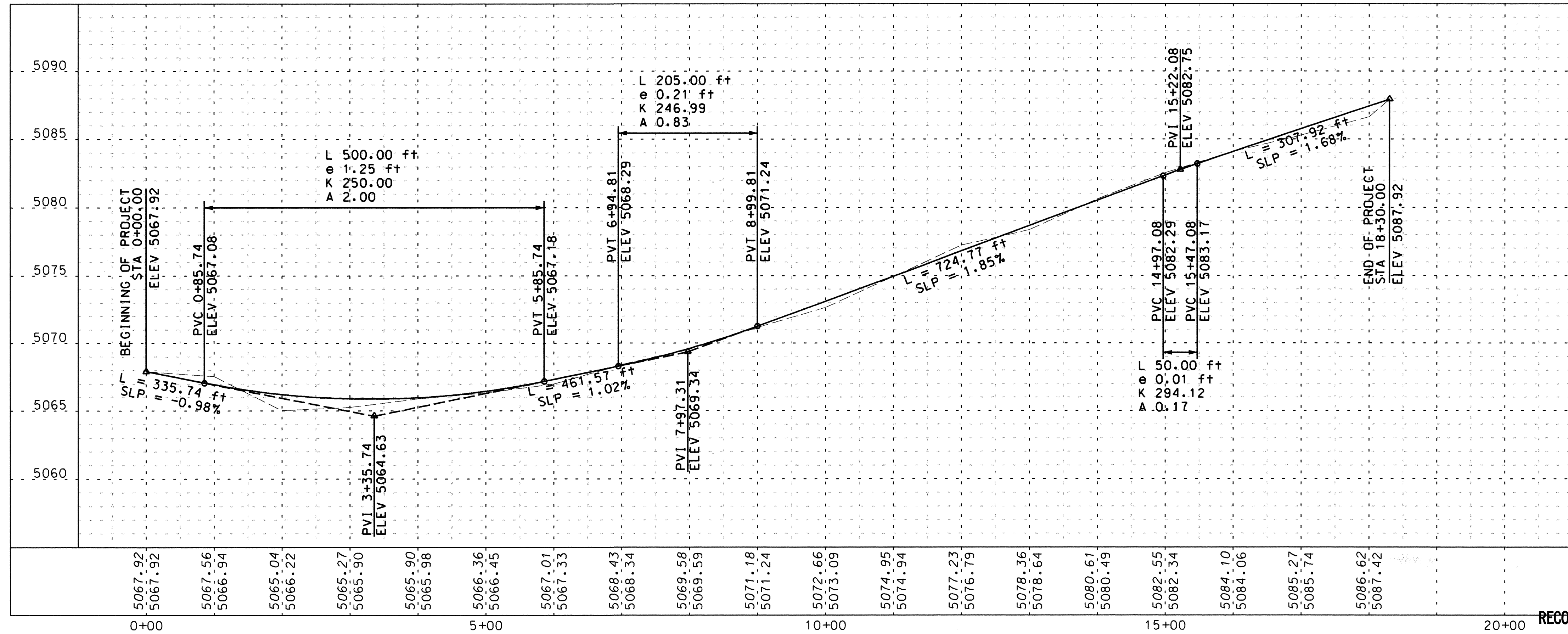
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CONTRACTOR	STAR PAVING	DATE	12-03	FIELD NOTES	BY	DATE	
INSPECTOR'S	PRECISION SURVEY	DATE	12-03				
FIELD	WILSON ENGINEER	DATE	12-03				
VERIFICATION BY	STAR 1 WILSON	DATE	12-03				
CORRECTED BY	PAUL F. STEFFIN	DATE	12-03				
RECORDED BY		DATE					
NO.							

PAUL F. STEFFIN
NEW MEXICO
15552
REGISTERED PROFESSIONAL ENGINEER

NO.	1	REMARKS	BY	DATE	10/03
		REVISIONS		DATE	10/03
		DESIGN		DATE	10/03
DESIGNED BY	PFS			DATE	10/03
DRAWN BY	ARR			DATE	10/03
CHECKED BY	NKH			DATE	10/03

10/07/2003
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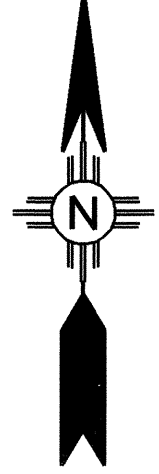
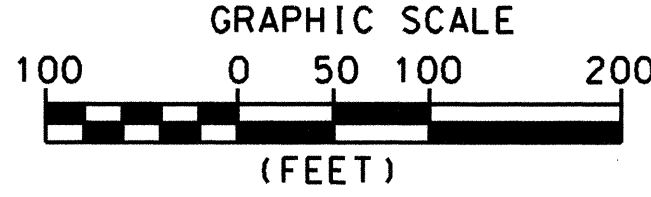
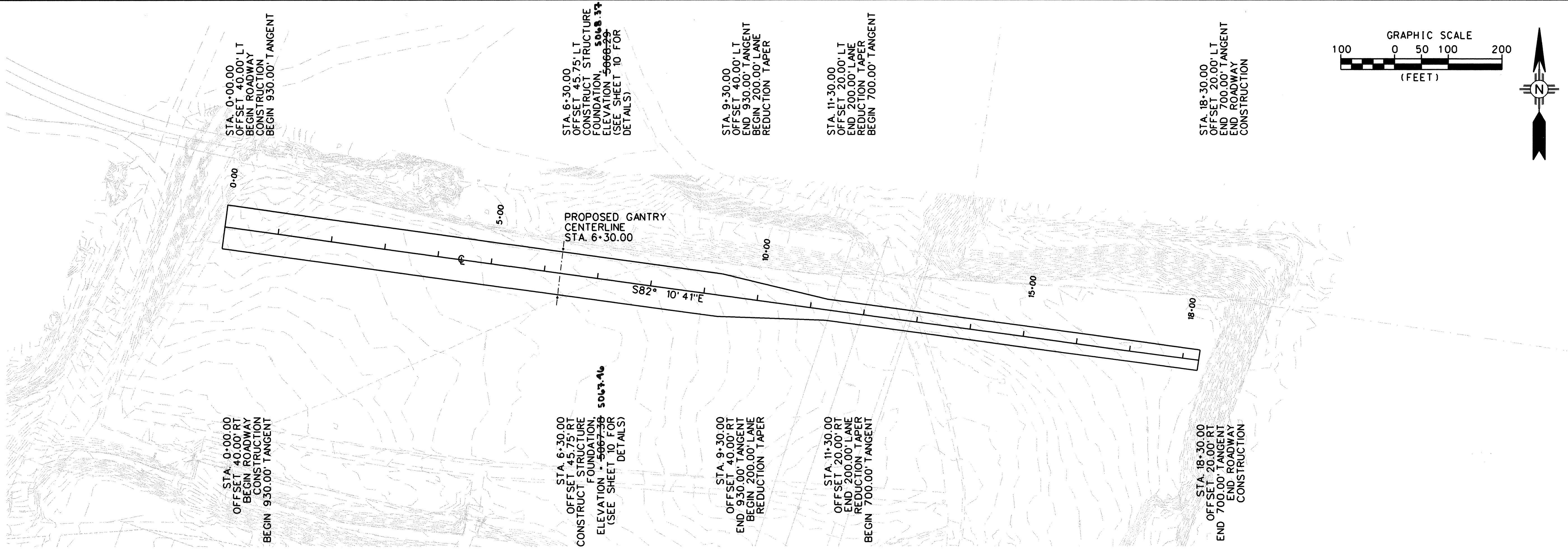
SCALE: HORIZ: 1" = 100'
VERT: 1" = 5'



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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: PLAN & PROFILE			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
LAST DESIGN UPDATE			
CITY PROJECT NO. 720981		SHEET 7 OF 13	

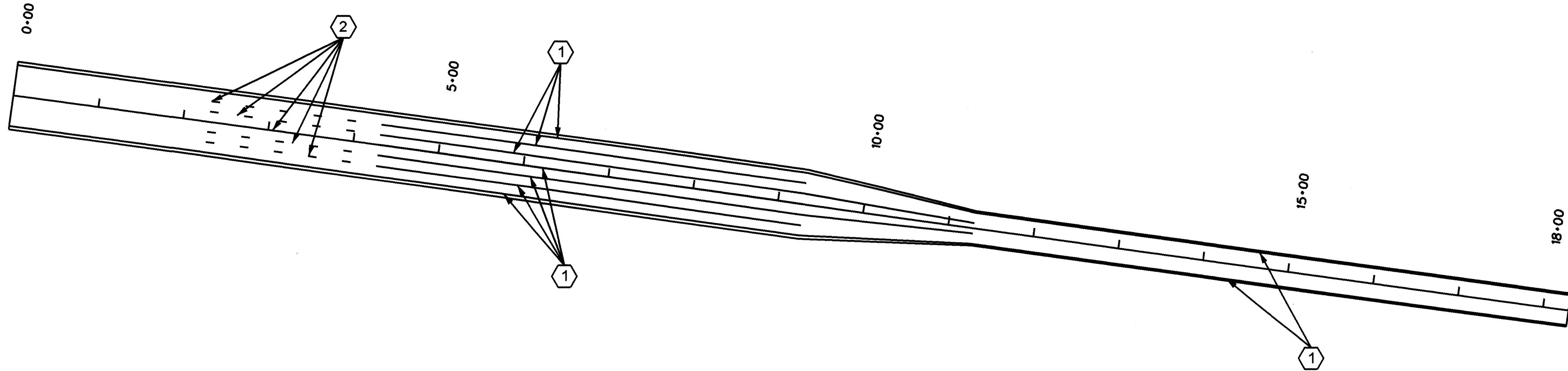
NOTE:
PROFILE GRADE SHOWN IS
CONSTRUCTION & PROFILE



ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
		FIELD NOTES NO. 1 BY DATE PRECISION SURVEY 12-03		CC 11112/EG		CONTRACTOR STAR PAVING DATE 12-03	
NO. DATE		REMARKS		NO. DATE		INSPECTOR'S WILSON ENGINEER DATE 12-03	
DESIGNED BY PFS		DATE 10/03		NO. DATE		VERIFICATION BY STAR 1 WILSON DATE 12-03	
DRAWN BY ARR		DATE 10/03		NO. DATE		CORRECTED BY PAUL F. STEPPIN DATE 12-03	
CHECKED BY NKH		DATE 10/03		NO. DATE		RECORDED BY MICRO-FILM INFORMATION DATE	

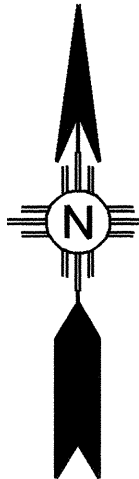
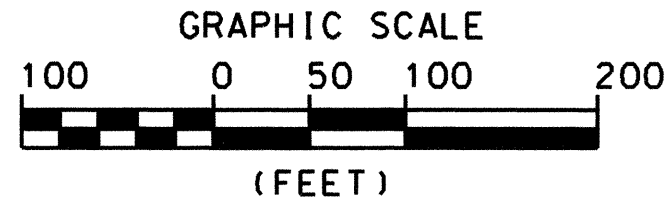
STATION	LENGTH (Feet)	4" SOLID WHITE	4" SKIP WHITE	REMARKS
0+00 TO 18+30	1830	1830		EDGE LINE STRIPE
0+00 TO 18+30	1830	1830		EDGE LINE STRIPE
2+30 TO 4+30	200		50	SKIP STRIPE
2+30 TO 4+30	200		50	SKIP STRIPE
2+30 TO 4+30	200		50	SKIP STRIPE
2+30 TO 4+30	200		50	SKIP STRIPE
2+30 TO 4+30	200		50	SKIP STRIPE
4+30 TO 11+30	700	700		LANE STRIPE
4+30 TO 11+30	700	700		LANE STRIPE
4+30 TO 9+30	500	500		LANE STRIPE
4+30 TO 9+30	500	500		LANE STRIPE
4+30 TO 9+30	500	500		LANE STRIPE

BID ITEM	UNIT	TOTAL
REFLECTORIZED PAINTED MARKINGS	LF	12700



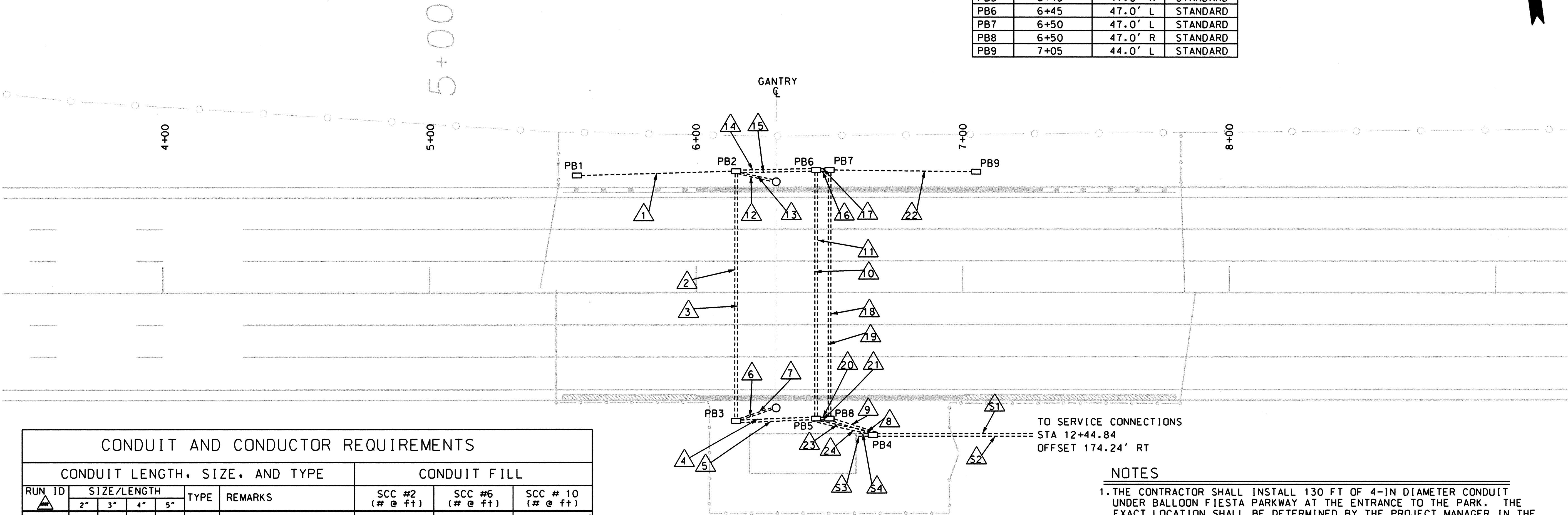
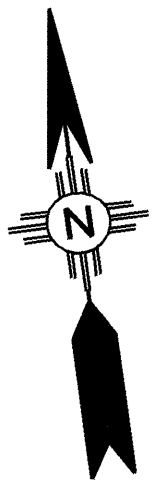
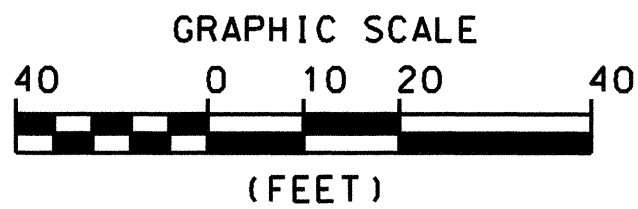
LEGEND

- ① 4" SOLID WHITE
② 4" SKIP WHITE (10' STRIPE, 30' GAP)

[illegible]

LIGHTING & CONDUIT QUANTITIES (Estimated)			
ITEM DISCRPTION	UNIT	ESTIMATE	USE
ELECTRICAL CONDUIT 3"	LF	120	130
ELECTRICAL CONDUIT 4"	LF	2150	2200
ELECTRICAL CONDUIT 5"	LF	260	280
ELECTRICAL PULL BOX (STANDARD)	EACH	2	2
ELECTRICAL PULL BOX (LARGE)	EACH	7	7

APPROXIMATE PULLBOX AND CONTROLLER CABINET LOCATIONS			
PB#	STATION	OFFSET	SIZE
PB1	5+55	44.0' L	STANDARD
PB2	6+15	47.0' L	STANDARD
PB3	6+15	47.0' R	STANDARD
PB4	6+70	55.0' R	STANDARD
PB5	6+45	47.0' R	STANDARD
PB6	6+45	47.0' L	STANDARD
PB7	6+50	47.0' L	STANDARD
PB8	6+50	47.0' R	STANDARD
PB9	7+05	44.0' L	STANDARD



CONDUIT AND CONDUCTOR REQUIREMENTS								
CONDUIT LENGTH, SIZE, AND TYPE						CONDUIT FILL		
RUN ID	SIZE/LENGTH				TYPE	REMARKS	SCC #2 (# @ ft)	SCC #6 (# @ ft)
	2"	3"	4"	5"			SCC # 10 (# @ ft)	
S1			600		REC	SERVICE TO PB4		
S2			600		REC	SERVICE TO PB4		
S3			10		REC	PB4 TO TRAILER		
S4			10		REC	PB4 TO TRAILER		
1	60				REC	PB1 TO PB2		
2		100			REC	PB2 TO PB3		
3		100			REC	PB2 TO PB3		
4			40		REC	PB3 TO PB5		
5			40		REC	PB3 TO PB5		
6			20		REC	PB3 TO FOUNDATION		
7			20		REC	PB3 TO FOUNDATION		
8		30			REC	PB4 TO PB8		
9		30			REC	PB4 TO PB8		
10		100			REC	PB5 TO PB6		
11		100			REC	PB5 TO PB6		
12			20		REC	PB2 TO FOUNDATION		
13			20		REC	PB2 TO FOUNDATION		
14		30			REC	PB2 TO PB6		
15		30			REC	PB2 TO PB6		
16		10			REC	PB6 TO PB7		
17		10			REC	PB6 TO PB7		
18		100			REC	PB7 TO PB8		
19		100			REC	PB7 TO PB8		
20		30			REC	PB5 TO PB8		
21		30			REC	PB5 TO PB8		
22	60				REC	PB7 TO PB9		
23			50		REC	PB4 TO PB5		
24			50		REC	PB4 TO PB5		
SP*			130		REC	OWEST CONNECTION		
TOTALS	120	2150	260					

- NOTES
1. THE CONTRACTOR SHALL INSTALL 130 FT OF 4-IN DIAMETER CONDUIT UNDER BALLOON FIESTA PARKWAY AT THE ENTRANCE TO THE PARK. THE EXACT LOCATION SHALL BE DETERMINED BY THE PROJECT MANAGER IN THE FIELD. THE CONDUIT SHALL BE USED BY OWEST FOR A SERVICE CONNECTION. THE CONDUIT IS INDICATED IN THE SCHEDULE AS RUN ID SP.
 2. LOCATIONS OF CONDUITS, FOUNDATIONS, AND PULL BOXES SHOWN ON THE PLANS ARE SCHEMATIC AND MAY BE ADJUSTED IN THE FIELD. THE CONTRACTOR SHALL MEET WITH THE PROJECT MANAGER IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK.
 3. ALL PULL BOXES SHALL BE CONCRETE WITH CAST IRON LIDS.
 4. THE CONTRACTOR SHALL REMOVE EXISTING CONDUITS AND PULL BOXES THROUGHOUT THE PROJECT AS DIRECTED BY THE PROJECT MANAGER.

ABBREVIATIONS	
PB	PULL BOX
REC	RIGID ELECTRIC CONDUIT
SCC	SINGLE CONDUCTOR CABLE

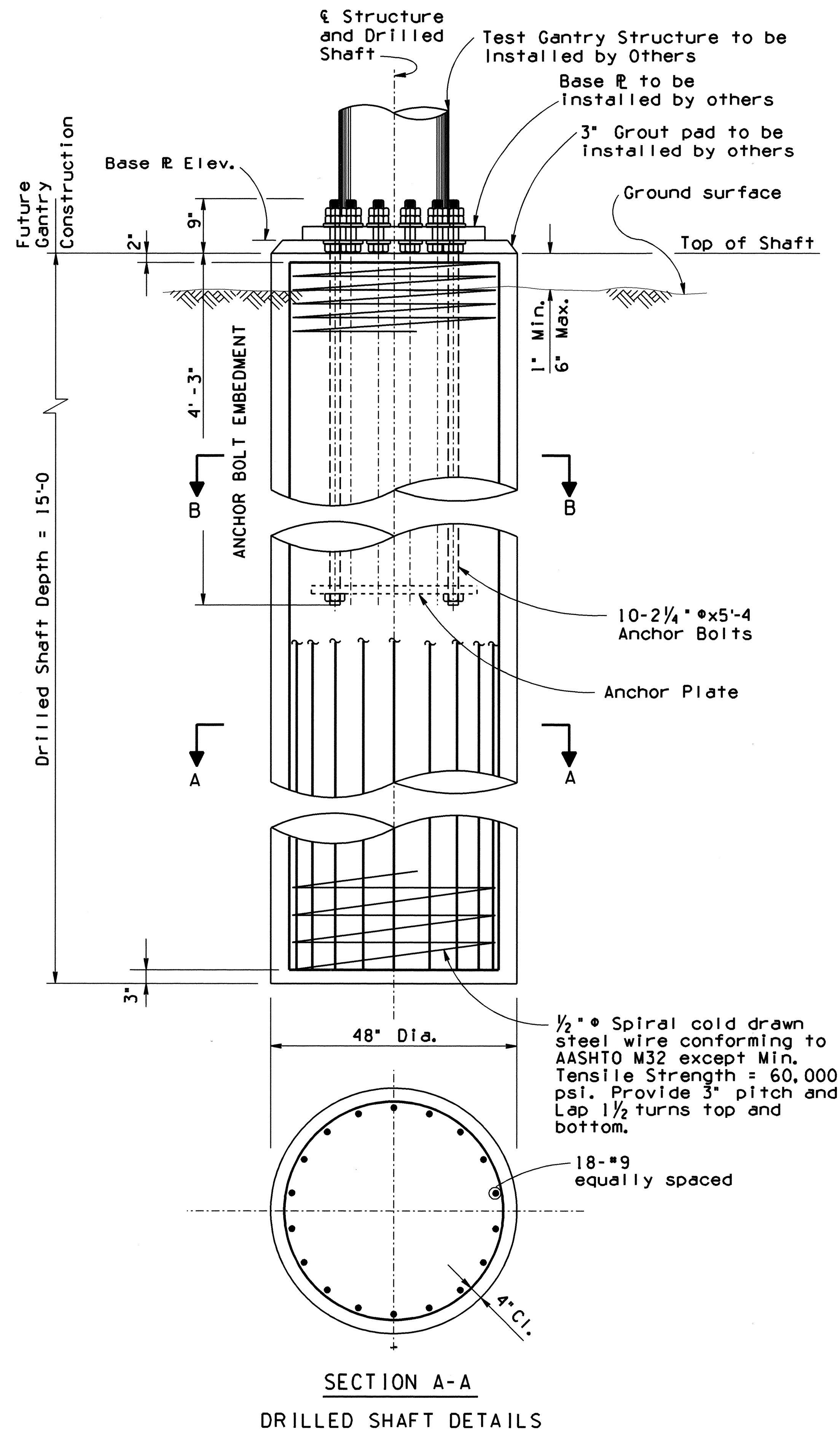
RECORD DRAWING
DATE 12-2003

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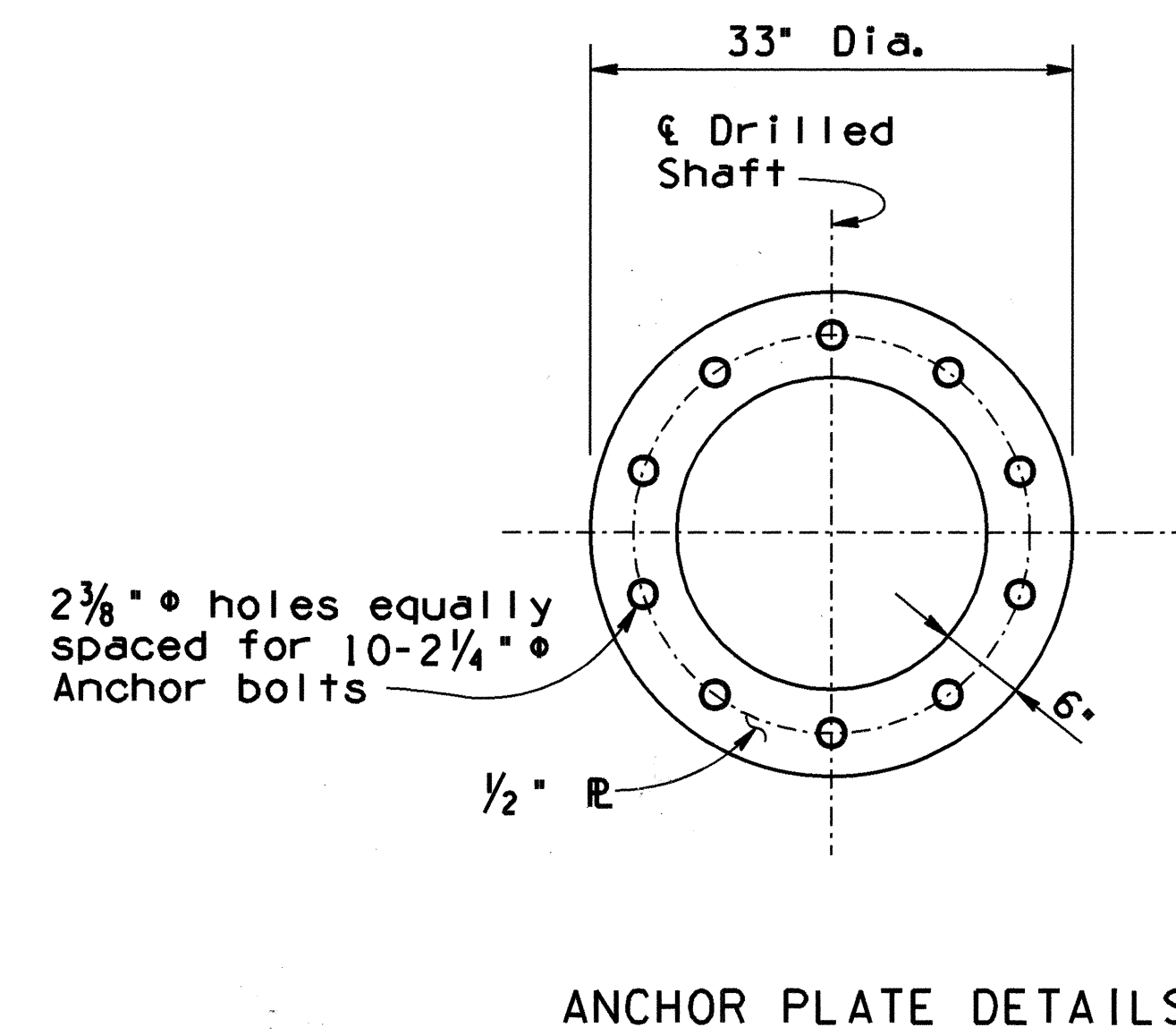
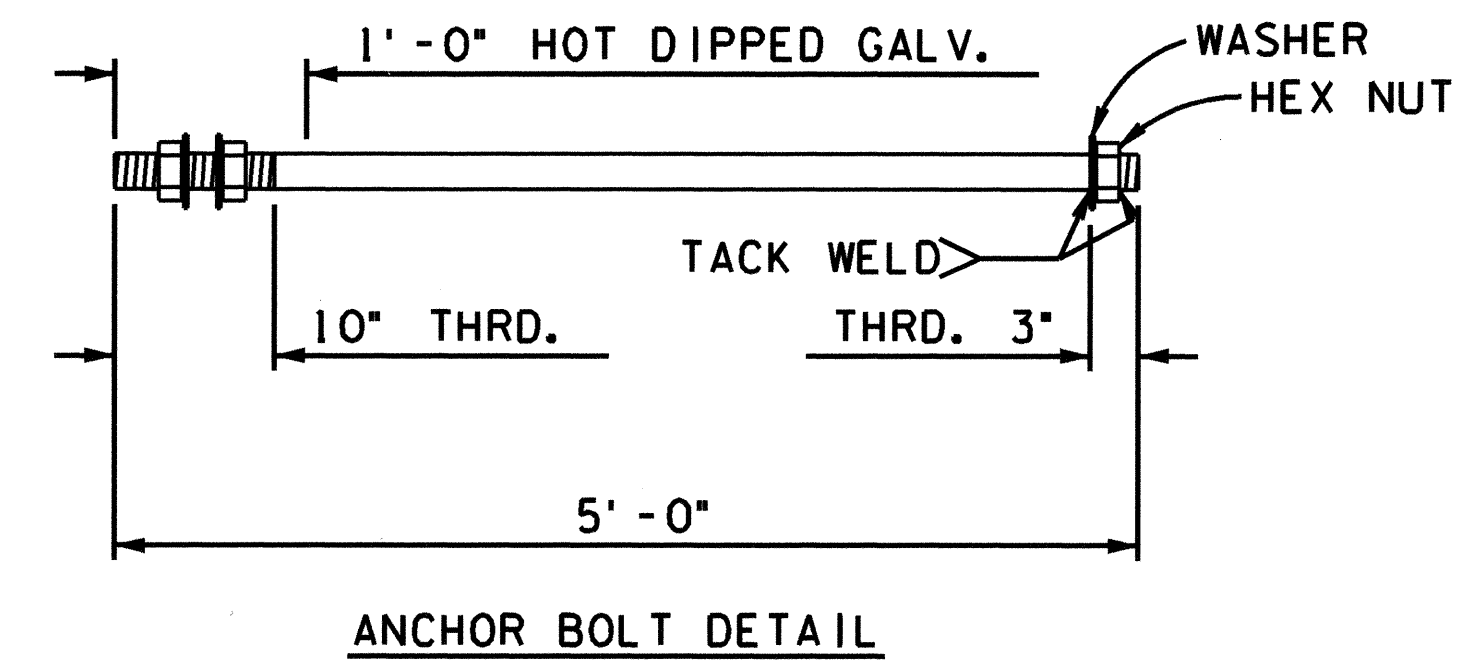
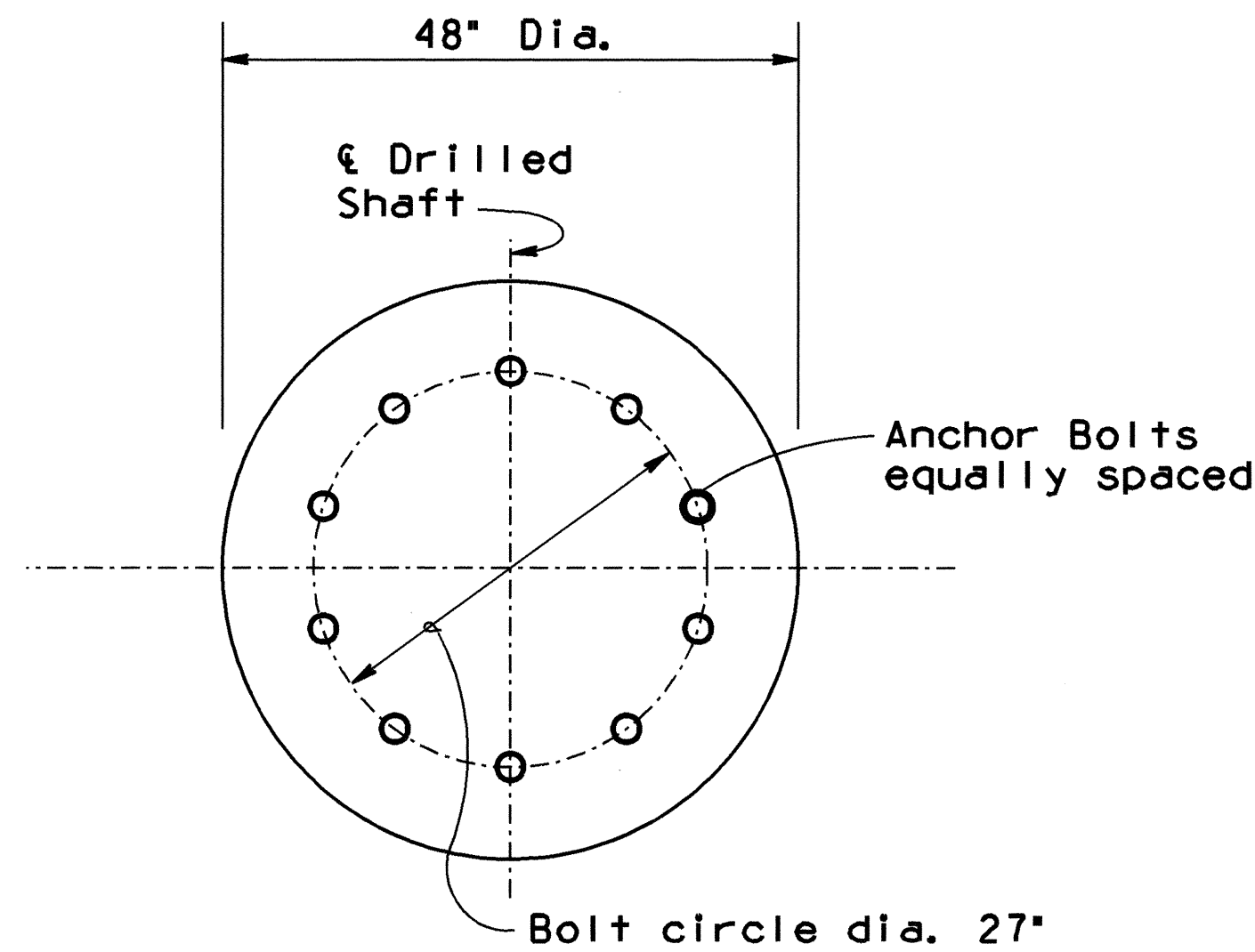
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE:		CONDUIT PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
OCT 17 2003	OCT 17 2003		
DESIGN REVIEW COMMITTEE	CITY ENGINEER	LAST DESIGN UPDATE	
CITY PROJECT NO.	720981	SHEET	OF
		9	13

10/03/2003
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FOUNDATION SCHEDULE			
Station	Offset	Top of Shaft Elevation	
Sta 6+30.00	45.75' Rt	5067.38	5067.46
Sta 6+30.00	45.75' Lt	5068.29	5068.37



NOTES:

- CONSTRUCTION SPECIFICATIONS: NEW MEXICO STATE HIGHWAY AND TRANSPORTATION DEPARTMENT, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, 2000 EDITION.
- PROVIDE CLASS "G" CONCRETE ($f'c = 3000$ PSI) FOR DRILLED SHAFT FOUNDATIONS. PLACE IN DRILLED HOLES AGAINST UNDISTURBED MATERIAL, EXCEPT THAT THE UPPER 3' OF THE SHAFT IS TO BE POURED AGAINST FORMED SURFACES.
- PROVIDE ANCHOR BOLTS AND ANCHOR PLATES CONFORMING TO ASTM A36 SPECIFICATIONS. GALVANIZE ANCHOR BOLTS IN ACCORDANCE WITH ASTM A153.
- PROVIDE BOLT TEMPLATES (ONE FOR EACH DRILLED SHAFT) FOR CAST-IN-PLACE INSTALLATION OF ANCHOR BOLTS. FABRICATE TEMPLATES FROM 1/4" THICK STEEL PLATE, AND SAME MATERIAL AS ANCHOR PLATES. PROVIDE TEMPLATES TO OWNER FOR FUTURE GANTRY FABRICATION.
- REINFORCING STEEL, ANCHOR BOLTS, ANCHOR PLATES, AND OTHER IMBEDDED ITEMS SHALL BE CONSIDERED INCIDENTAL TO DRILLED SHAFT FOUNDATION.

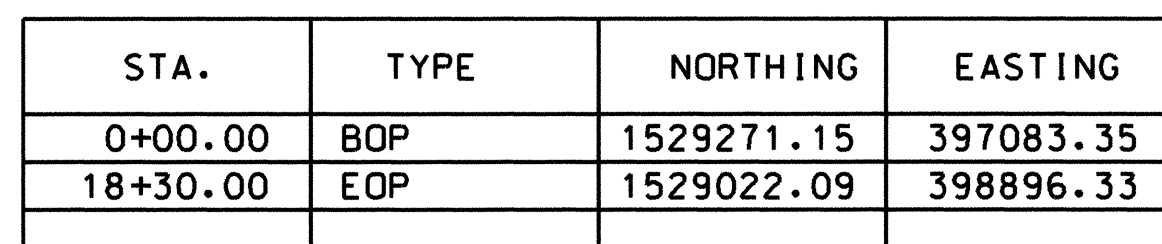
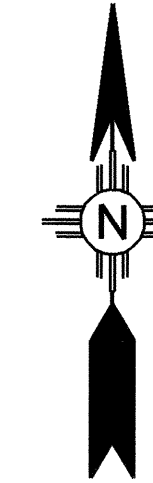
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DATE 12-2003

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: TEST GANTRY STRUCTURE FOUNDATION DETAILS			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
OCT 17 2003	OCT 17 2003		
DESIGN REVIEW COMMITTEE	CITY ENGINEER	LAST DESIGN UPDATE	
CITY PROJECT NO. 720981	ZONE MAP NO.	SHEET 10	OF 13

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR STAR PAVING	DATE 12-03	CC 11112/EG		NO.	1		
STAKED BY PRECISION SURVEY	DATE 12-03			BY			
INSPECTOR'S WILSON ENGINEER	DATE 12-03			DATE	12-03		
FIELD VERIFICATION BY STAR & WILSON	DATE 12-03						
CORRECTED BY PAUL F. STEFFIN	DATE 12-03						
MICRO-FILM INFORMATION							
RECORDED BY	DATE						
NO.							

10/10/03



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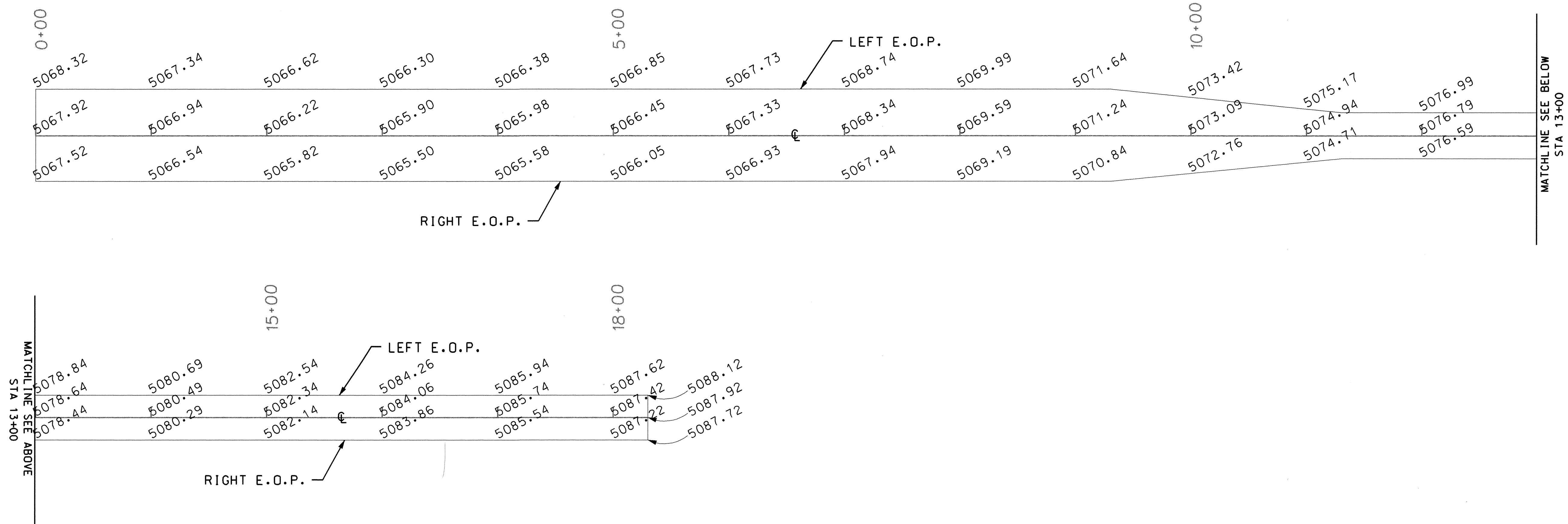
TITLE:	SURVEY CONTROL SHEET
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DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MD./DAY/YR.	MD./DAY/YR.
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF	
720981		11	13	

[illegible]

RECORD DRAWING
DATE 12-2003

10/01/2003
C:\Users\Transcore\Documents\testTrackElev.dgn



STATION	CENTER LINE	LEFT E.O.P.	RIGHT E.O.P.
0+00	5067.92	5068.32	5067.52
1+00	5066.94	5067.34	5066.54
2+00	5066.22	5066.62	5065.82
3+00	5065.90	5066.30	5065.50
4+00	5065.98	5066.38	5065.58
5+00	5066.45	5066.85	5066.05
6+00	5067.33	5067.73	5066.93
7+00	5068.34	5068.74	5067.94
8+00	5069.59	5069.99	5069.19
9+00	5071.24	5071.64	5070.84
10+00	5073.09	5073.42	5072.76
11+00	5074.94	5075.17	5074.71
12+00	5076.79	5076.99	5076.59
13+00	5078.64	5078.84	5078.44
14+00	5080.49	5080.69	5080.29
15+00	5082.34	5082.54	5082.14
16+00	5084.06	5084.26	5083.86
17+00	5085.74	5085.94	5085.54
18+00	5087.42	5087.62	5087.22
18+30	5087.92	5088.12	5087.72

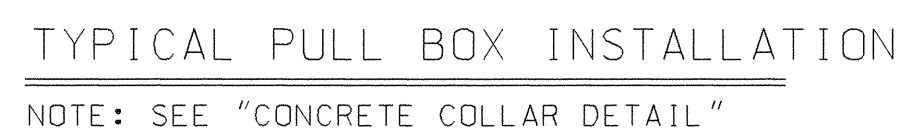
NOTES:

1. A POINTS FILE OF THE COORDINATES AND ELEVATIONS SHOULD BE OBTAINED FROM THE ENGINEER.
2. THE GEOMETRY FOR THE SURVEY CENTERLINE CAN BE FOUND ON SHEET 11.

RECORD DRAWING
DATE 12-2003

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: SURVEY ELEVATION PLAN			
DESIGN REVIEW COMMITTEE OCT 17 2003	CITY ENGINEER APPROVAL OCT 17 2003	MO./DAY/YR. 10/17/03	MO./DAY/YR. 10/17/03
LAST DESIGN UPDATE		DESIGNED BY PFS	DATE 10/03
CITY PROJECT NO. 720981		DRAWN BY ARR	DATE 10/03
ZONE MAP NO.		CHECKED BY NKH	DATE 10/03
SHEET 12		OF 13	



PULL BOX DETAILS

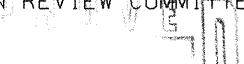
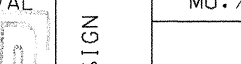
NOTES FOR CONCRETE ELECTRICAL PULL BOX AND COVERS

1. A #4 AWG BARE GROUNDING WIRE SHALL BE CLAMPED TO GROUNDING WIRE OR METAL CONDUIT AND BOLTED TO METAL COVER.

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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: PULL BOX DETAILS

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN UPDATE		MO./DAY/YR.		MO./DAY/YR.	
									
CITY PROJECT NO.		ZONE MAP NO.		SHEET		OF			
720981				13		13			

RECORD DRAWING
DATE 12 - 2003

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