

**WILSON
& COMPANY**

4900 LANG AVE., NE
SUITE 100
ALBUQUERQUE, NEW MEXICO 87109

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LEGEND

EXISTING	PROPOSED
SAS	SANITARY SEWER
WL	WATER LINE
G	GAS LINE
SD	STORM DRAIN
E	OVERHEAD ELECTRIC LINE
UE	UNDERGROUND ELECTRIC LINE
POWER POLE	ELECTRIC CONDUIT
CURB & GUTTER	WHEELCHAIR RAMP
DROP INLET	CROWN REDUCTION
WATER VALVE	SIDEWALK
FIRE HYDRANT	FACE OF CURB EDGE OF PAVEMENT
SAS SERVICE W/CAP	CENTERLINE
MANHOLE	MANHOLE
COMMUNICATIONS PEDESTAL	WATER VALVE
TRAFFIC SIGNAL	SINGLE WATER METER
ELECTRIC BOX	DOUBLE WATER METER
LIGHT POLE	SAS SERVICE W/CAP
TREE/SHRUB	STORM INLET
INDEX CONTOUR	FIRE HYDRANT
INTERMEDIATE CONTOUR	LIGHT POLE
SIGN	FUTURE LINE TYPE
POST	
FENCE	
GUARDRAIL	
RETAINING WALL	

ESTIMATED QUANTITIES

COA ITEM NO.	DESCRIPTION	UNIT	CONSTRUCTION ENGINEERING	BRIDGE	DRAINAGE	REIMBURSABLE ITEMS	TOTAL
6.050	CONSTRUCTION MOBILIZATION	LS	1.00				1.00
6.050	CONSTRUCTION DEMOBILIZATION	LS	1.00				1.00
6.010	CONSTRUCTION PROJECT SIGN	EA	2.00				2.00
30.020	NPDES PERMITTING	LS	1.00				1.00
19.010	TRAFFIC CONTROL & BARRICADE	LS	1.00				1.00
201.010	SITE CLEARING & GRUBBING, COMPLETE	AC	8.50				8.50
205.010	FILL, BORROW, HAUL, & COMP	CY	68,920.00				68,920.00
1902.001	VIBRATION MONITORING AND VIDEO TAPING, COMPL	LS	1.00				1.00
102.010	REINFORCING BARS, GRADE 60	LB		69,220.00			69,220.00
103.010	EPOXY COATED REINFORCING BARS, GRADE 60	LB		247,132.00			247,132.00
510.010	SUPERSTRUCTURE CONCRETE	CY		1,017.00			1,017.00
510.020	SUBSTRUCTURE CONCRETE CLASS A	CY		610.00			610.00
510.030	32" CONCRETE BARRIER	LF		489.20			489.20
510.040	CONCRETE SLOPE PAVING	SY		1,407.00			1,407.00
512.010	PRESTRESSED CONCRETE GIRDERS, BT-43	LF		2,432.00			2,432.00
520.010	STRUCTURAL STEEL FOR CONCRETE BRIDGES	LB		20,549.00			20,549.00
540.040	METAL PEDESTRIAN RAILING	LF		469.20			469.20
550.010	STRUCTURAL EXCAVATION AND BACKFILL FOR BRIDGES	EA		954.00			954.00
561.010	DRILLED SHAFTS, 30" DIAMETER	LF		1,000.00			1,000.00
562.010	DRILLED SHAFTS, 72" DIAMETER	LF		700.00			700.00
581.010	ELASTOMERIC EXPANSION JOINT SEALS	LF		228.00			228.00
585.010	SEALED EXPANSION JOINTS	LF		681.00			681.00
302.010	AGGREGATE BASE COURSE, CRUSHED, 6" AT 95% COMPACTION, CIP, SD 2408	SY			1,120.00		1,120.00
601.010	EXCAVATION & DISPOSAL OF UNCLASSIFIED EXCESS MATERIAL OR CHANNELS, COMPL	CY			17,509.00		17,509.00
602.070	SOIL CEMENT, CIP	CY			11,485.00		11,485.00
602.075	PORTLAND CEMENT USED IN SOIL CEMENT, CIP	TON			77.50		77.50
910.030	100' P.C. CLASS III	LF			250.00		250.00
920.220	MH, 6' D.A., C or S, 10'-14" DEEP	EA			1.00		1.00
920.230	MH, 6' D.A., EXTRA DEPTH, 14'-18" DEEP	VF			1.00		1.00

AMAFCA NOTES:

- AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48-HOURS PRIOR TO ANY WORK WITHIN AMAFCA R/W. TEL: 505-884-2215 (KURT WAGENER)
- NO WORK WILL BE PERFORMED WITHIN THE AMAFCA R/W BETWEEN MAY 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.
- ALL SUBGRADE, BACKFILL, AND EMBANKMENT SHALL BE COMPACTED TO 95% (MODIFIED PROCTOR) WITHIN AMAFCA R/W. TESTING REPORTS SHALL BE PROVIDED TO AMAFCA FIELD ENGINEER.
- AMAFCA FIELD ENGINEER WILL BE NOTIFIED 48-HOURS PRIOR TO FINAL INSPECTION OF FACILITIES WITHIN THE AMAFCA R/W.
- ALL DISTURBED GROUND AREA SHALL BE REVEGETATED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 1012 NATIVE GRASS SEEDING, AS CURRENTLY UPDATED.

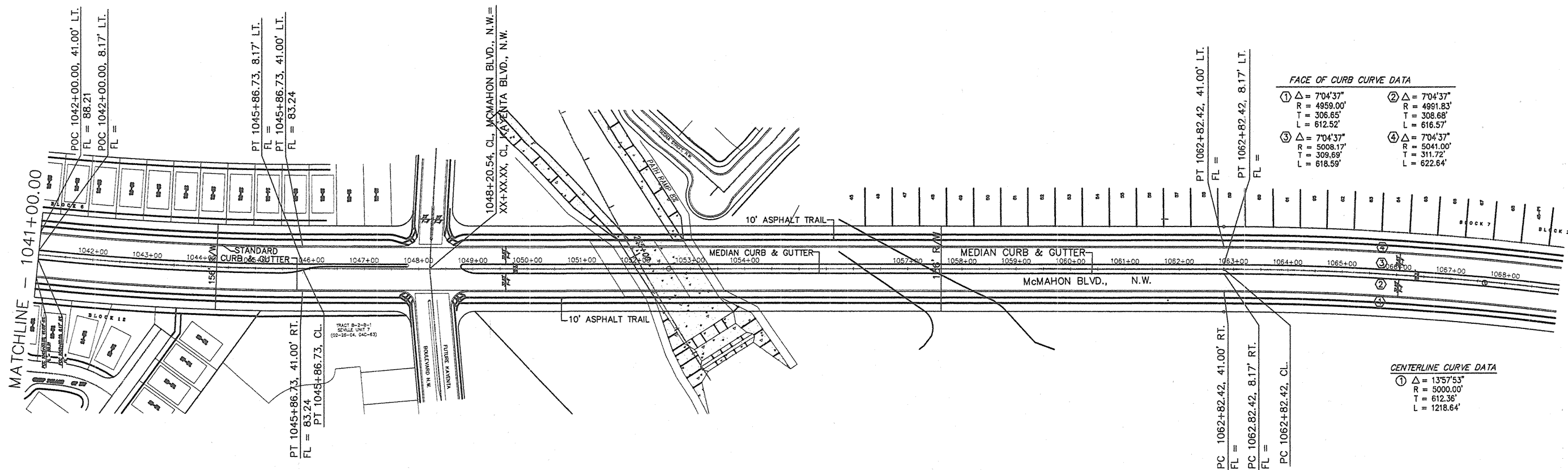
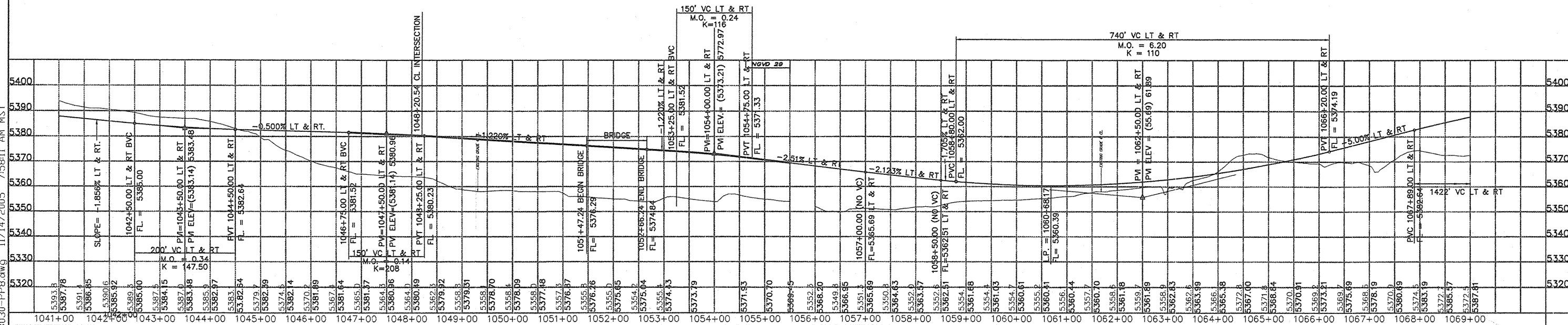
APPROVED FOR CONSTRUCTION WITHIN AMAFCA
RIGHT-OF-WAY: John Picelby 11-15-05
(FOR AMAFCA)

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE			
INDEX OF SHEETS / LEGEND & ESTIMATED QUANTITIES			
Design-Review Committee 	City Engineer Approval 	Mo./Day/Yr. 11/15/05	Mo./Day/Yr. 11/15/05
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 1-2	Of 164
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1. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION REV. 7, SHALL GOVERN CONSTRUCTION OF THIS PROJECT. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
2. THE CONTRACTOR SHALL MAINTAIN AN UP-TO-DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE SHALL BE CURRENT WITHIN TWO WEEKS AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE PROJECT ENGINEER THROUGHOUT THE PROJECT. THE FINAL AS-BUILT PLANS AND ONE COPY SHALL BE SUBMITTED TO THE PROJECT ENGINEER PRIOR TO FINAL PAYMENT.
3. ELEVATIONS ARE SHOWN IN FEET ABOVE MEAN SEA LEVEL DATUM.
4. ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION AND IS THE MEASURED HORIZONTAL DISTANCE. LEFT AND RIGHT OF CENTERLINE ARE LOOKING IN THE DIRECTION OF INCREASING STATIONS. STATIONING OF CHANNEL PROCEEDS UPSTREAM AGAINST THE DIRECTION OF FLOW.
5. REINFORCING BARS SHALL BE CONTINUOUS OR SPICED FROM SLABS AND WALLS INTO ADJACENT SLABS AND WALLS.
6. BAR SPICES SHALL BE CLASS C IN ACCORDANCE WITH ACT STANDARD 318-83, CHAPTER 12, UNLESS OTHERWISE SHOWN.
7. WHEN COORDINATES ARE SHOWN, HEREIN (N, E) THEY REFER TO A COORDINATE SYSTEM ESTABLISHED FOR THIS PROJECT, EXCEPT WHEN SPECIFICALLY REFERRED TO AS STATE GRID. COORDINATES ARE BASED ON TRUE GROUND DISTANCES AND STATE GRID BEARINGS FROM THE STATE GRID COORDINATE SYSTEM.
8. SLOPE LIMIT LINES SHOWN ON THE PLANS DEFINE "LIMITS OF WORK" FOR THIS PROJECT.
9. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFORE. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST POLLUTION ABATEMENT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED.
10. THE CONTRACTOR WILL BE RESPONSIBLE TO REPLACE AT HIS OWN EXPENSE ANY AND ALL PROPERTY CORNERS DESTROYED IN THE PROCESS OF CONSTRUCTION. ALL PROPERTY CORNERS MUST BE SET BY A NEW MEXICO REGISTERED LAND SURVEYOR IN GOOD STANDING. DOCUMENTATION SHALL BE DELIVERED TO AMAFA PRE-CONSTRUCTION MEETING.
11. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE LIMITS OF WORK FOR THE PROJECT AND WILL BE HELD RESPONSIBLE FOR ANY AGREEMENTS NECESSARY OR DAMAGE BY HIS OPERATION TO PUBLIC OR PRIVATE PROPERTY INCLUDING UTILITIES. CONTRACTOR'S YARD AND ANY OTHER DISTURBED AREAS FOR CONTRACTORS EXCLUSIVE USE SHALL BE TREATED WITH CLASS A SEEDING. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS WORK.
12. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES WHEN WORKING NEAR THEIR SYSTEMS. TWO DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
13. THE CONTRACTOR SHALL INCLUDE IN HIS CONSTRUCTION SEQUENCE, PROVISIONS WHICH WILL ALLOW FOR THE SAFE PASSAGE OF WATER FROM ARROYOS AND DITCHES THROUGH THE PROJECT SITE WITHOUT DAMAGE TO COMPLETED FACILITIES OR ADJACENT PRIVATE PROPERTY.
14. UTILITY WORK REQUIRED BY THE CONSTRUCTION OF THIS PROJECT IS TO BE COORDINATED BY THE CONTRACTOR DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
15. EXISTING UTILITIES SHOWN ON THESE PLANS ARE FOR INFORMATION ONLY. LOCATIONS ARE BASED ON AS-BUILT INFORMATION. CONTRACTOR SHALL LOCATE AND POT-HOLE ALL UTILITIES PRIOR TO CONSTRUCTION.
16. A DISPOSAL SITE FOR ALL ASPHALTIC PAVING, CONCRETE PAVING, ETC. SHALL BE OBTAINED BY THE CONTRACTOR, AND APPROVED BY THE PROJECT ENGINEER IN COMPLIANCE WITH APPLICABLE REGULATIONS. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE OTHER ITEMS.
17. WHERE TRADE NAME ITEMS ARE CALLED OUT ON THE PLANS ALTERNATE EQUAL PRODUCTS OR MATERIALS MAY BE SUBMITTED TO THE PROJECT ENGINEER FOR APPROVAL.
18. FILL MATERIALS FROM EXCAVATION, OVER EXCAVATION, OR BORROW WHICH REQUIRED MORE THAN ONE HANDLING PRIOR TO FINAL PLACEMENT, INCLUDING STOCKPILING AND BLENDING TO MEET GRADATION REQUIREMENTS, OR STOCKPILING FOR LATER DISPOSAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE FOR EXCAVATION. NO SEPARATE PAYMENT SHALL BE MADE FOR BLENDING OR MULTIPLE HANDLING AND FINAL PAYMENT SHALL BE MADE ON THE BASIS OF QUANTITIES REMOVED FROM THE ORIGINAL LOCATION.
19. PAVING AND ACCESS ROADWAY GRADES SHALL BE +0.05 FOOT FROM SHOWN PLAN ELEVATIONS.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES.
21. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DUST AND EROSION CONTROL AS OFTEN AS REQUIRED BY THE PROJECT ENGINEER. FAILURE TO COMPLY WILL RESULT IN A PENALTY OF \$100/DAY AND THE COST OF AN INDEPENDENT CONTRACTOR TO PERFORM THE DUTIES.
22. ALL SCARIFYING, EXCAVATION, COMPACTION, AND REPLATTED SOILS WORK SHALL BE DONE UNDER SUPERVISION OF THE PROJECT ENGINEER AND IN ACCORDANCE WITH THE SITE SOILS REPORT AS PROVIDED BY THE OWNER.
23. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED TO THE ELEVATIONS, AND IN ACCORDANCE WITH THE CROSS SECTIONS SHOWN IN THE PLANS.
24. ALL STORM WATER DISCHARGES INTRODUCED INTO THE ARROYO WILL MEET THE REQUIREMENTS OF THE REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AS WELL AS APPLICABLE STATE AND LOCAL REGULATIONS.
25. IF SUBSURFACE CULTURAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL CEASE UNTIL THE MATERIALS CAN BE EVALUATED BY THE STATE PRESERVATION OFFICER.
26. TO AVOID SOIL AND WATER POLLUTION IMPACTS DURING CONSTRUCTION, ANY POLLUTING MATERIALS GENERATED WILL NOT BE DUMPED IN THE PROJECT AREA BUT WILL BE DISPOSED OF IN ACCORDANCE WITH APPROPRIATE GUIDELINES.
27. MATERIAL FOR SOIL CEMENT WILL BE EXCAVATED FROM WITHIN THE JOB SITE.
28. THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR APPROVAL BY THE PROJECT ENGINEER AND SHALL BE KEPT CURRENT WITHIN TWO WEEKS.
29. ALL DIRT STAYS ONSITE. ALL EARTHWORK WILL BE PAID FOR UNDER 1 ITEM, "EXCAVATION AND FILL OR STOCKPILE FOR SOIL CEMENT OR UNCOMPACTED FILL IN ARROYO BOTTOM." THIS ITEM WILL COVER EXCAVATION TO THE NEAT LINE AS SHOWN ON THE PLANS. COMPACTED AND UNCOMPACTED BACKFILL.
30. THE SOIL CEMENT STEPS SHALL BE WELL COMPACTED UNIFORM AND CONSOLIDATED TRAVERSABLE STEPS.
31. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) WORKING DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURE TO ENSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR.
32. NO WORK IMPACTING TRAFFIC, INCLUDING WORK ON OPEN SECTIONS OF McMAHON BLVD. & ELLISON BLVD, SHALL OCCUR BETWEEN NOVEMBER 25th, 2005 TO JANUARY 03, 2006.

SECTION 1012 NATIVE GRASS SEEDING																																																															
1012.1 GENERAL: Work under this section consists of preparing all area indicated on the plans for native grass seeding, furnishing and installing all seed, fertilizer and soil amendments as specified herein and on the plans, or as authorized by the ENGINEER. 1012.2 REFERENCES: 1012.2.1 This Publication: Section 1011 Turf Grass Seeding 1012.3 WORK AREA/THING: 1012.3.1 Areas that are disturbed by the CONTRACTOR that are outside the construction limits shown on the plans or authorized by the ENGINEER shall be seeded with native grasses as specified herein at no cost to the OWNER. 1012.3.2 The seeding of disturbed areas shall commence upon completion of the other work in the area. 1012.4 MATERIALS: 1012.4.1 Native Seed: The native seed species and rate of application shall be as shown below and shall be used based on the type of soil or as specified on the plans or in the Supplemental Technical Specification. 1012.4.1.1 Sandy Soils: (mainly west side areas) Seed rate is given in pounds of pure live seed (P.L.S.) per acre. <table border="1"> <thead> <tr> <th>Varities/ Common Name</th> <th>Genus/ Species</th> <th>P.L.S./Acres</th> </tr> </thead> <tbody> <tr> <td>"Paloma" Indian rice grass</td> <td>Oryzopsis hymenoides</td> <td>5.0</td> </tr> <tr> <td>"Vivita" Galletta</td> <td>Hilaria jansoni</td> <td>1.0</td> </tr> <tr> <td>"Ninon" Side oak grass</td> <td>Bouteloua curtipendula</td> <td>3.0</td> </tr> <tr> <td>"Hatchita" Blue grama</td> <td>Bouteloua gracilis</td> <td>1.0</td> </tr> <tr> <td>Sand droseeded grama</td> <td>Sporobolus</td> <td>1.0</td> </tr> <tr> <td>Four-winged saltbush</td> <td>Atriplex canescens</td> <td>1.0</td> </tr> <tr> <td>(NM Region)</td> <td>(Go-winged)</td> <td></td> </tr> <tr> <td>Total rate</td> <td></td> <td>12.0 lbs/acre</td> </tr> </tbody> </table> 1012.4.1.2 Clay, Clay Loam, and Sandy gravelly clay loam soils: (mainly valley and east side areas). Seed rate is given in pounds of pure live seed (P.L.S.) per acre. <table border="1"> <thead> <tr> <th>Varities/ Common Name</th> <th>Genus/ Species</th> <th>P.L.S./Acres</th> </tr> </thead> <tbody> <tr> <td>"Paloma" Indian rice grass</td> <td>Oryzopsis hymenoides</td> <td>5.0</td> </tr> <tr> <td>"Vivita" Galletta</td> <td>Hilaria jansoni</td> <td>1.0</td> </tr> <tr> <td>"Ninon" Side oak grass</td> <td>Bouteloua curtipendula</td> <td>3.0</td> </tr> <tr> <td>"Hatchita" Blue grama</td> <td>Bouteloua gracilis</td> <td>1.0</td> </tr> <tr> <td>Sand droseeded grama</td> <td>Sporobolus</td> <td>1.0</td> </tr> <tr> <td>Four-winged saltbush</td> <td>Atriplex canescens</td> <td>1.0</td> </tr> <tr> <td>(NM Region)</td> <td>(Go-winged)</td> <td></td> </tr> <tr> <td>Total rate</td> <td></td> <td>12.0 lbs/acre</td> </tr> </tbody> </table> 1012.4.2 Fertilizer and Soil Amendments: Unless otherwise specified on the plans or in the Supplemental Technical Specification, no fertilizer or other soil amendments are required on areas specified for native grass seeding. If fertilizer and/or other soil amendments are required they shall be in accordance with Section 1011 of these specifications. 1012.4.3 MULCH: 1012.4.3.1 Hay Mulch: Perennial native or introduced grasses of fine-stemmed varieties shall be used unless otherwise specified on the plans. At least 65 percent of the herbage by weight of each bale of hay shall be 10 inches in length or longer. Hay with noxious seed or plants will not be acceptable. Rotted, brittle, or moldy hay not acceptable. Marsh grass or prairie hay composed of native grass species to be seeded will be acceptable. Wheat grass, intermediate wheat grass, switch grass, or orchard hay will be acceptable if cut prior to seed formation. Hay shall be composed of mid and tall native, usually tough and wiry grass and grass-like plants found in the lowland areas within the Rocky Mountain region. Hay shall be properly cured prior to use. Hay which is brittle, short fibred or improperly cured is not acceptable. 1012.4.3.2 It shall be the responsibility of the CONTRACTOR to notify the ENGINEER, in writing, 16 hours in advance of each required inspection. 1012.4.3.3 The sequence of required inspections shall not be changed from the sequence listed below. The CONTRACTOR shall not proceed with work of the next sequence without written approval of the work of the previous sequence. Payment will be approved for items which have not been inspected and approved in writing. 1012.9.3.1 Each phase of soil preparation shall be inspected in process. 1012.9.3.2 Finish grade shall be inspected. 1012.9.3.3 Seed shall be inspected prior to seeding. 1012.9.3.4 Seeded area shall be inspected after completion. 1012.9.3.5 Final inspection of the project and acceptance. 1012.10 MEASUREMENT AND PAYMENT 1012.10.1 MEASUREMENT: The measurement of native grass seeding shall be by the acre. 1012.10.2 Payment: Payment shall be made at the contract unit price per acre of native grass seeding complete in place, which shall include the seed, fertilizer, (if required) area preparation, seeding, soil amendments, (if required) and mulching.										Varities/ Common Name	Genus/ Species	P.L.S./Acres	"Paloma" Indian rice grass	Oryzopsis hymenoides	5.0	"Vivita" Galletta	Hilaria jansoni	1.0	"Ninon" Side oak grass	Bouteloua curtipendula	3.0	"Hatchita" Blue grama	Bouteloua gracilis	1.0	Sand droseeded grama	Sporobolus	1.0	Four-winged saltbush	Atriplex canescens	1.0	(NM Region)	(Go-winged)		Total rate		12.0 lbs/acre	Varities/ Common Name	Genus/ Species	P.L.S./Acres	"Paloma" Indian rice grass	Oryzopsis hymenoides	5.0	"Vivita" Galletta	Hilaria jansoni	1.0	"Ninon" Side oak grass	Bouteloua curtipendula	3.0	"Hatchita" Blue grama	Bouteloua gracilis	1.0	Sand droseeded grama	Sporobolus	1.0	Four-winged saltbush	Atriplex canescens	1.0	(NM Region)	(Go-winged)		Total rate		12.0 lbs/acre
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1012.5.2 Straw Mulch: Small grain such as wheat, barley, rye, or oats will not be allowed except by prior approval of the ENGINEER and with the concurrence of the Air Division, Environmental Health Department. Alfalfa or the stalks of corn, maize or sorghum is not acceptable. Material which is brittle, shorter than 10 inches or which breaks or fragments during the crimping operation will not be acceptable. 1012.4.3.3 Gravel Mulch: Gravel mulch shall be crushed or screened gravel 3/4" to 2" maximum size with a minimum of one angular face unless otherwise specified. 1012.4.3.4 Erosion Control Mats: Fabric or Blankets: The type of erosion control mats, fabric or blankets used shall be as specified on the plans or in the Supplemental Technical Specifications. 1012.5 SEED BED PREPARATION: 1012.5.1 General: 1012.5.1.1 Prior to the starting of any seed bed preparation the final grades of all earth work shall be inspected and approved by the ENGINEER. 1012.5.1.2 No preparation shall be performed when the surface is wet or muddy or when the soil moisture content is such that the soil is not fully loosened by the disking operation. 1012.5.1.3 The extent of seed bed preparation shall not exceed the area on which seeding, mulching and crimping operations can be completed prior to crusting or wind or water erosion of the prepared surface - If erosion, crusting or re-compaction occurs, the affected area shall be re-worked beginning with seed bed preparation. Depth of preparation must be approved by the ENGINEER prior to the seeding and mulching operations. 1012.5.2 Mechanical Preparation: The seed bed shall be loosened to a minimum depth of 6" (six inches) by means of disc or harrow. Areas of heavy or compacted soil may require additional preparation such as chiseling or ripping if disking alone does not result in preparation to the full minimum depth of 6". The soil shall be worked to a smooth surface free of clods, stones 4" and larger or any other debris or foreign material that could interfere with seeding or crimping equipment operations. 1012.5.3 Hand Preparation: Areas which cannot be prepared with mechanized equipment because of small size irregular shape or slope angle may be prepared to a minimum depth of 2" using hand tools or a rototiller. Any such areas will be specified on the plans. 1012.6 SEEDING: 1012.6.1 General: 1012.6.1.1 Seeding shall not start until the seed bed preparation has been inspected and approved by the ENGINEER. 1012.6.1.2 No more area may be seeded than can be covered with mulch and crimped, or covered with gravel mulch or erosion control mats by the end of the work day. No seeding operations may be conducted when steady wind speed exceeds 10 miles per hour. If winds exceed 10 mph while seeding is underway, seeding operations will be halted and any areas seeded to that point completed. 1012.6.2 Seed Application: 1012.6.2.1 Drill Seeding: Drill seeding is required unless otherwise specified on the plans or in the Supplemental Technical Specifications. Seed shall be applied with a "triangular" type seed drill equipped with packer wheels. Seed shall be drilled to a maximum depth of 1 1/2 inches unless otherwise specified. Direction of seeding shall be across slopes and on the contour whenever possible. 1012.6.2.2 Broadcast Seeding: Seed may be applied using the broadcast method when size, irregular shape or slope angle exceeding 3:1 prevents the use of a seed drill. Seed may be broadcast by hand or by means of a mechanical seeder provided that the seed is evenly distributed over the seeding area. Areas of broadcast seeding will be hand raked to cover seed. Areas which are broadcast seeded shall be seeded at rate which is double that used for drill seeding. 1012.6.2.3 Seeding With Gravel Mulch: Areas to receive gravel mulch will be seeded at the broadcast seed rate with 1/2 the seed applied prior to application of gravel and 1/2 the seed applied on the surface of the gravel. Water shall be applied in quantity sufficient to wash seed from the surface and into the gravel. 1012.6.2.4 Hydro Seeding: Hydro seeding will not be allowed on areas of non-irrigated native grass seeding unless specified on the plans or in the Supplemental Technical Specifications or authorized by the ENGINEER. 1012.7 MULCHING: 1012.7.1 General: 1012.7.1.1 All seeded areas shall be mulched unless otherwise specified on the plans or in the Supplemental Technical Specifications. 1012.7.1.2 On seeded areas that are level or have slopes 3:1 or less, any of the four (4) types of mulching or erosion control specified herein may be used. On seeded areas that have slopes steeper than 3:1 only gravel mulch or erosion control materials may be used as specified on the plans and in the Supplemental Technical Specifications.																																																															
1012.7.2 Hay Mulch: Hay mulch shall be applied at a minimum rate of 1.5 tons per acre of air dry hay. 1012.7.3 Straw Mulch: Straw mulch shall be applied at a minimum rate of 2.5 tons per acre of air dry straw. 1012.7.4 Crimping: Hay and/or Straw mulch shall be crimped into the soil. The mulch shall be spread uniformly over the area either by hand or with machine mulch spreader. When spread by hand, the bales of mulch shall be torn apart and fluffed before spreading. Hay or straw shall be permitted when wind velocity exceeds 15 miles per hour. The mulch shall be wetted down and allowed to soften for 15 to 20 minutes prior to crimping. A heavy disc such as a mulch-tiller, with flat serrated edges at least 1/4 inch in thickness, having dull edges and the disc spaced 6 inches to 8 inches apart shall be used to crimp (or anchor) the mulch into the soil to a minimum depth of 2 inches or as specified on the plans or the Supplemental Technical Specifications. The discs shall be of sufficient diameter to prevent the frame of the equipment from dragging the mulch. The crimping operations shall be across the slope where practical but not be parallel to prevailing westerly winds (270 degrees magnetic). Crimping shall be in a general north-south direction with slight east-west interlocking "S" curves to avoid straight east-west crisp lines. If small grain straw mulch is used it shall be crimped in two (2) directions in a cross-hatch pattern. 1012.7.5 Gravel Mulch: Gravel mulch shall be placed by hand or by mechanized equipment that provides full coverage at a uniform thickness of 2 inches in depth. 1012.7.6 Erosion Control Mats, Fabric or Blankets: The type of erosion control mats, fabric or blankets used shall be as specified on the plans or the Supplemental Technical Specifications as approved by the ENGINEER. The anchoring of the erosion control items shall be as per the																																																															
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Design By: Civil Works APPROVE NOV 17 2004 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVE NOV 17 2004 CITY ENGINEER	Last Design Update	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Mo./Day/Yr.</th> <th style="width: 50%;">Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Mo./Day/Yr.	Mo./Day/Yr.										
Mo./Day/Yr.	Mo./Day/Yr.														
City Project No.: COA 681602	Zone Map No.: A-10-Z	Sheet 1-3 Of													



SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

FACE OF CURB CURVE DATA	
① $\Delta = 70^{\circ}43'7''$ R = 4959.00' T = 306.65' L = 612.52'	② $\Delta = 70^{\circ}43'7''$ R = 4991.83' T = 308.68' L = 616.57'
③ $\Delta = 70^{\circ}43'7''$ R = 5008.17' T = 309.69' L = 618.59'	④ $\Delta = 70^{\circ}43'7''$ R = 5041.00' T = 311.72' L = 622.64'

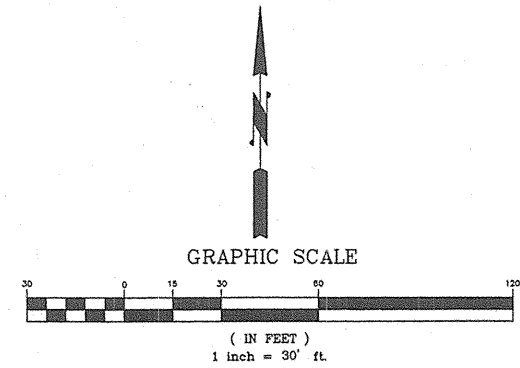
CENTERLINE CURVE DATA

① $\Delta = 13^{\circ}57'53''$
 $R = 5000.00'$
 $T = 612.36'$
 $L = 1218.64'$

SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
FIELD NOTES				CONTRACTOR David Heritage Const. Inc.	
NO.	BY	DATE		WORK STAMPED BY	DATE
			THE STA. IS A U.S. TABLET STAMPED "BLACK-2 1977 SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORPS/1-40 GO N. ON COORPS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO MCMAHON BLVD. THE STA. IS ON THE LEFT. N 1530241.52, E 372920.43 ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	FIELD ACCEPTANCE BY	DATE
				COA/N/C1	3/07
				RECORDED BY	DATE
				NO	
				MICRO-FILM INFORMATION	

NO.	DATE	REMARKS	BY
REVISIONS			
WILSON & COMPANY, ENGINEERS & ARCHITECTS			
DESIGNED BY	FEA	DATE	NOV 2005
DRAWN BY	ELO	DATE	NOV 2005
CHECKED BY	FEA	DATE	NOV 2005

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION													
McMAHON BLVD. EXTENSION—CALABACILLAS BRIDGE ROADWAY PLAN AND PROFILE SHEET													
Design Review Committee 	City Engineer Approval 	Lost Design Update	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">Mo./Day/Yr.</th> <th style="width: 50%; padding: 5px;">Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td></tr> </tbody> </table>	Mo./Day/Yr.	Mo./Day/Yr.								
Mo./Day/Yr.	Mo./Day/Yr.												
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet Of 3-1											



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
TRANSPORTATION DIVISION

**McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE
SURVEY/GEOMETRIC CONTROL SHEET
MAINTENANCE RD NO 1 & GRADE CONTROL STRUCTURE 3**

Design Review Committee

City Engineer Approval

Last Design Update

Mo./Day/Yr.

Mo./Day/Yr.

City Project No.

Zone Map No.

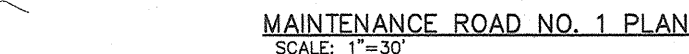
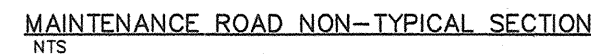
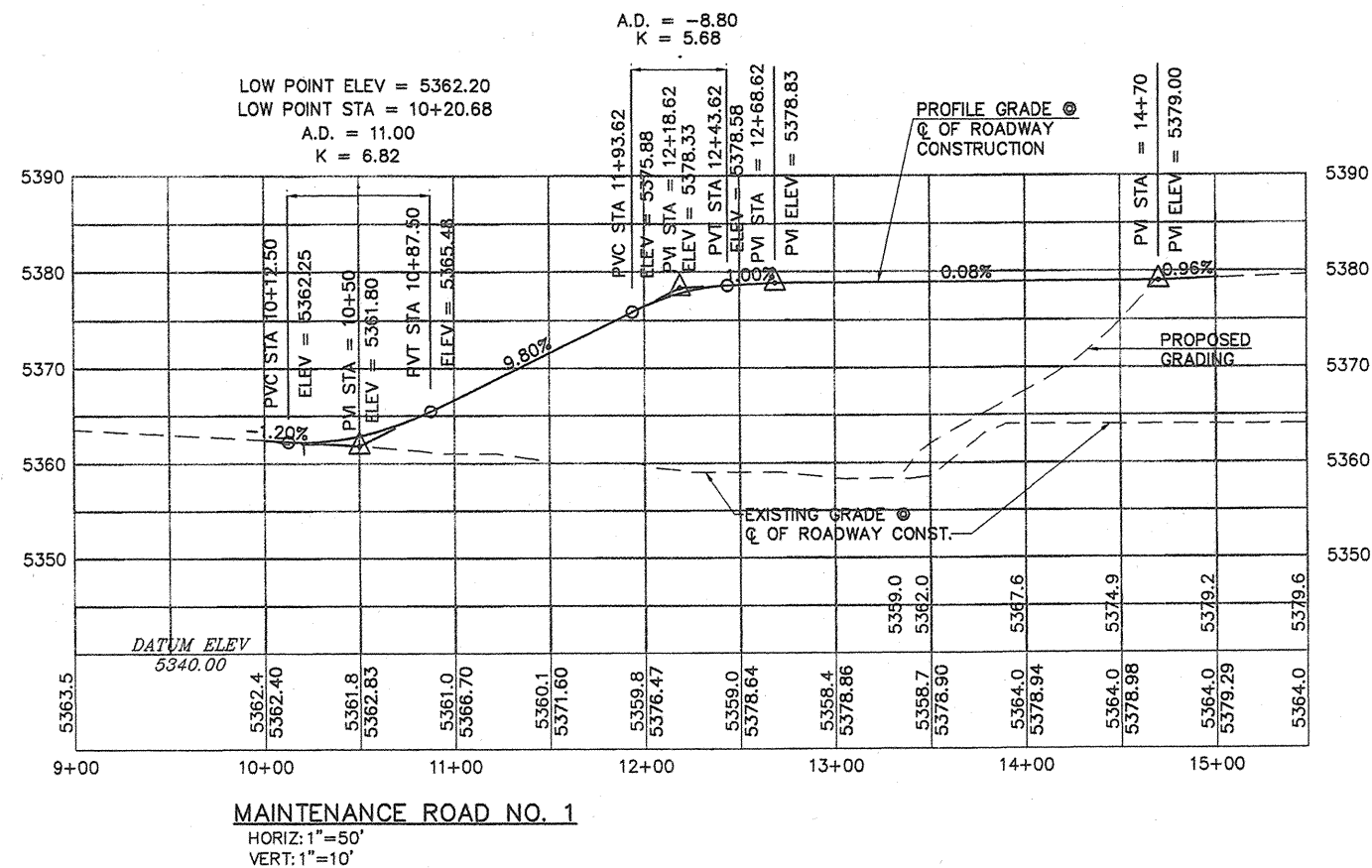
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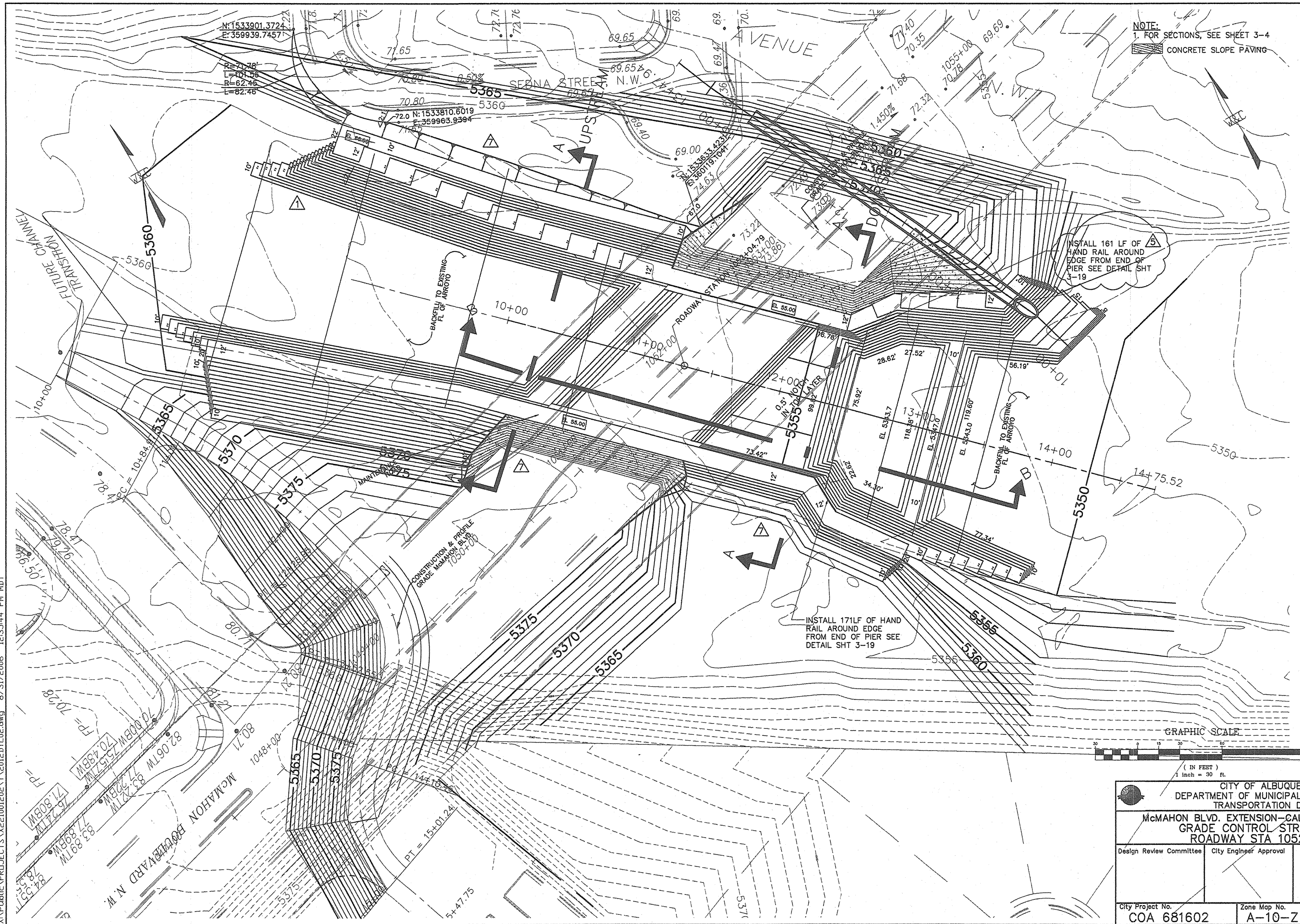
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NOTE:
1. FOR SECTIONS, SEE SHEET 3-4
CONCRETE SLOPE PAVING

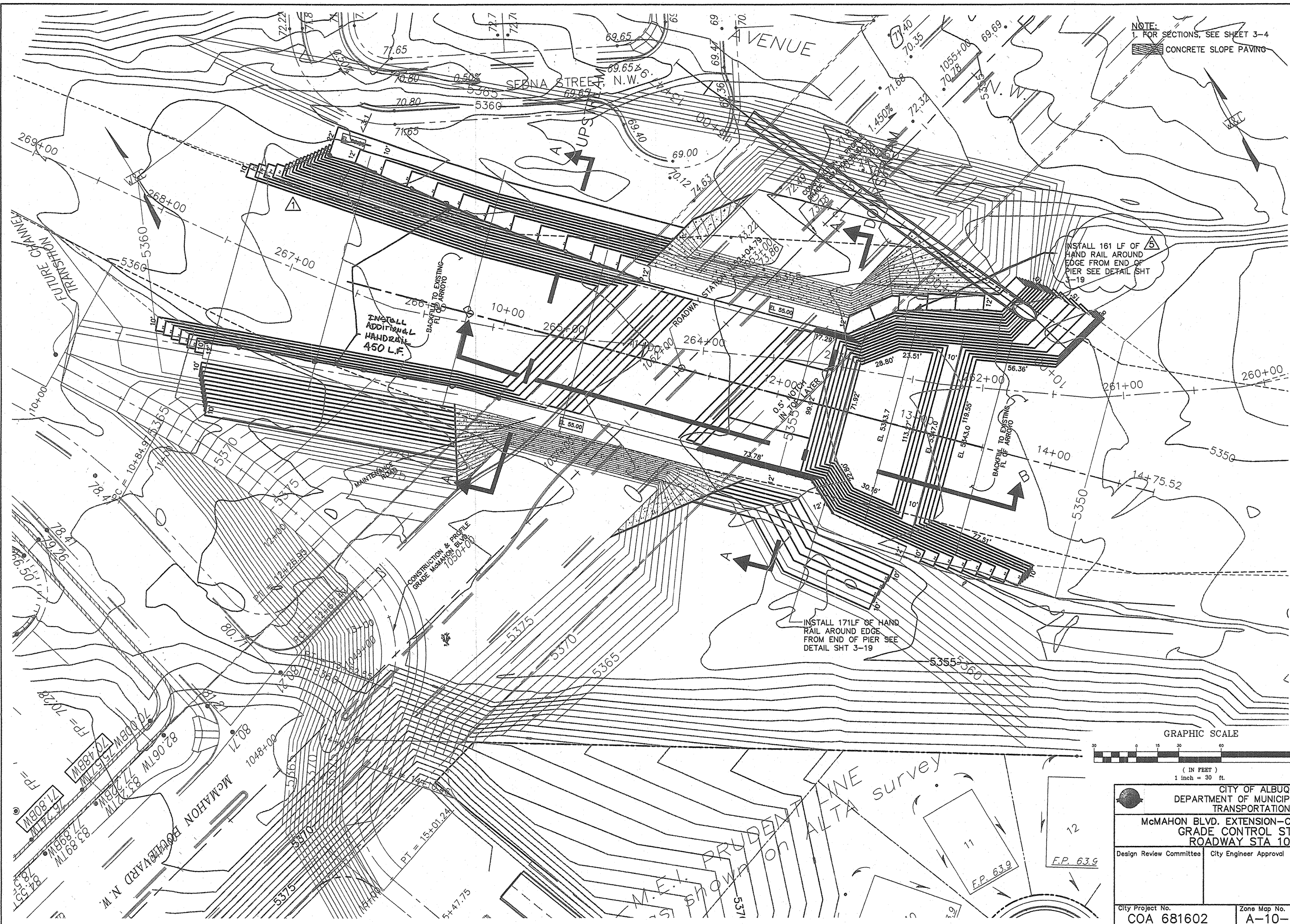
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EDGE FROM END OF
PIER SEE DETAIL SHT
3-19

INSTALL 171LF OF HAND
RAIL AROUND EDGE
FROM END OF PIER SEE
DETAIL SHT 3-19

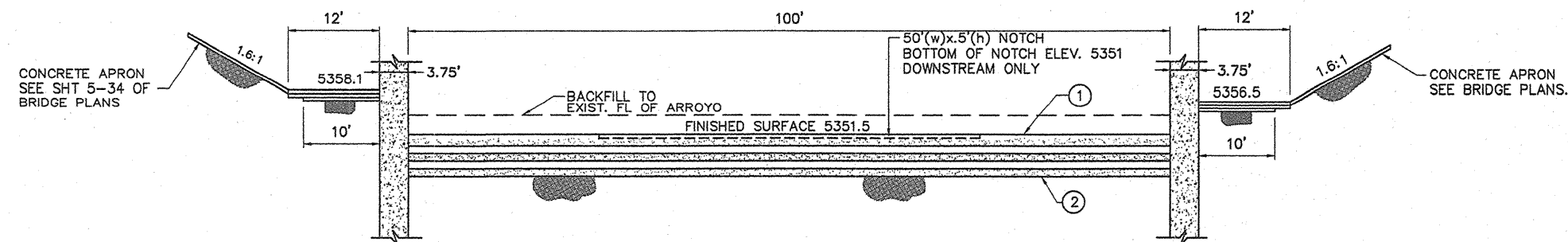
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		CITY OF ALBUQUERQUE	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBU. TO REACH THE STA. FROM THE INTX OF COORS 1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT. N 1530241.52, E 372920.43 ELEVATION = 5213.926 FT. (2ND ORDER) (NOV2005)		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				8-31-06 REVISED STRUCTURE		CITY OF ALBUQUERQUE	
CONTRACTOR: David Montoya Const. Inc.		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				5-06-06 DESIGN REVISION		DEPARTMENT OF MUNICIPAL DEVELOPMENT	
DRAWN BY: COA/WCL		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				5-30-06 REVISED STRUCTURE		TRANSPORTATION DIVISION	
CHECKED BY: WCL		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				NO. DATE		McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE	
RECORDED BY: WCL		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				REMARKS		GRADE CONTROL STRUCTURE 3	
DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				WILSON & COMPANY, ENGINEERS & ARCHITECTS		ROADWAY STA 1052+04.79	
DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				DESIGNED BY: EEA		Design Review Committee	
DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				DRAWN BY: ELO		City Engineer Approval	
DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]				CHECKED BY: EEA		Last Design Update	
DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]						City Project No. COA 681602	
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DATE: 3/07		DATE: 11/01/05 BY: [Signature]		NO. 1 DATE: 11/01/05 BY: [Signature]						Sheet 3-5 Of	

WILSON & COMPANY

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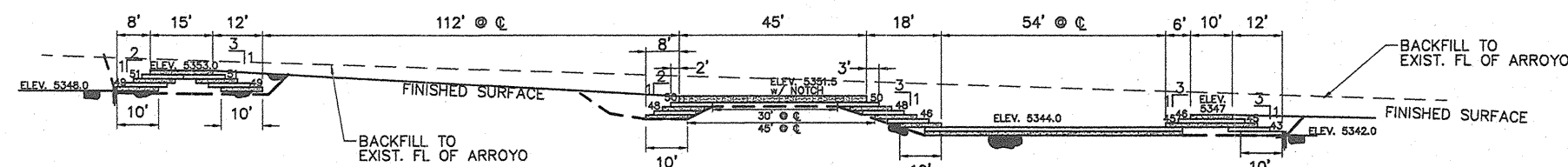


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CONTRACTOR David M. Moya Const. Inc.		CONTRACTOR David M. Moya Const. Inc.		DATE		NO. DATE		NOV 2005		DEPARTMENT OF MUNICIPAL DEVELOPMENT	
INSPECTOR'S FIELD BY COA		INSPECTOR'S FIELD BY COA		DATE		NO. DATE		NOV 2005		TRANSPORTATION DIVISION	
CORRECTION BY WC1		CORRECTION BY WC1		DATE		NO. DATE		NOV 2005		McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE	
MICRO-FILM INFORMATION		MICRO-FILM INFORMATION		DATE		NO. DATE		NOV 2005		GRADE CONTROL STRUCTURE 3	
RECORDED BY		RECORDED BY		DATE		NO. DATE		NOV 2005		ROADWAY STA 1052+04.79	
No.		No.		DATE		NO. DATE		NOV 2005		Design Review Committee	
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)		ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)		DATE		NO. DATE		NOV 2005		City Engineer Approval	
				DATE		NO. DATE		NOV 2005		Mo./Day/Yr.	
				DATE		NO. DATE		NOV 2005		Mo./Day/Yr.	
				DATE		NO. DATE		NOV 2005		Last Design Update	
				DATE		NO. DATE		NOV 2005		City Project No.	
				DATE		NO. DATE		NOV 2005		COA 681602	
				DATE		NO. DATE		NOV 2005		Zone Map No.	
				DATE		NO. DATE		NOV 2005		A-10-Z	
				DATE		NO. DATE		NOV 2005		Sheet	
				DATE		NO. DATE		NOV 2005		3-5	
				DATE		NO. DATE		NOV 2005		OF	
				DATE		NO. DATE		NOV 2005		Wilson & Company	

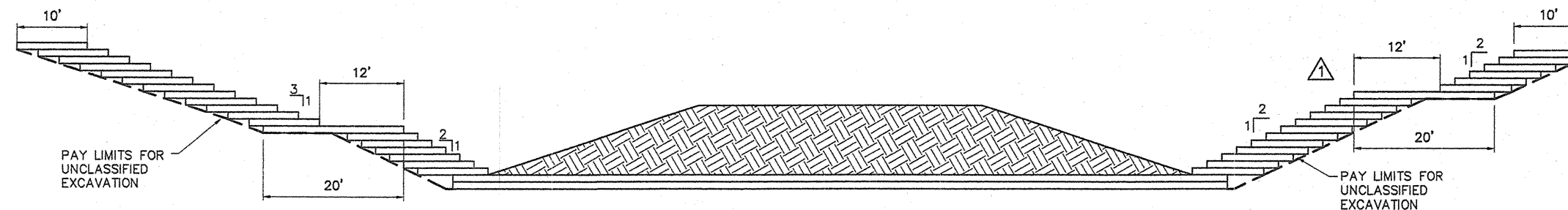


SECTION "A-A UPSTREAM" & "A-A DOWNSTREAM"
SCALE: 1"=10'

	(1)	(2)
A-A UPSTREAM	5353.0	5348
A-A DOWNSTREAM	5351.5	5346



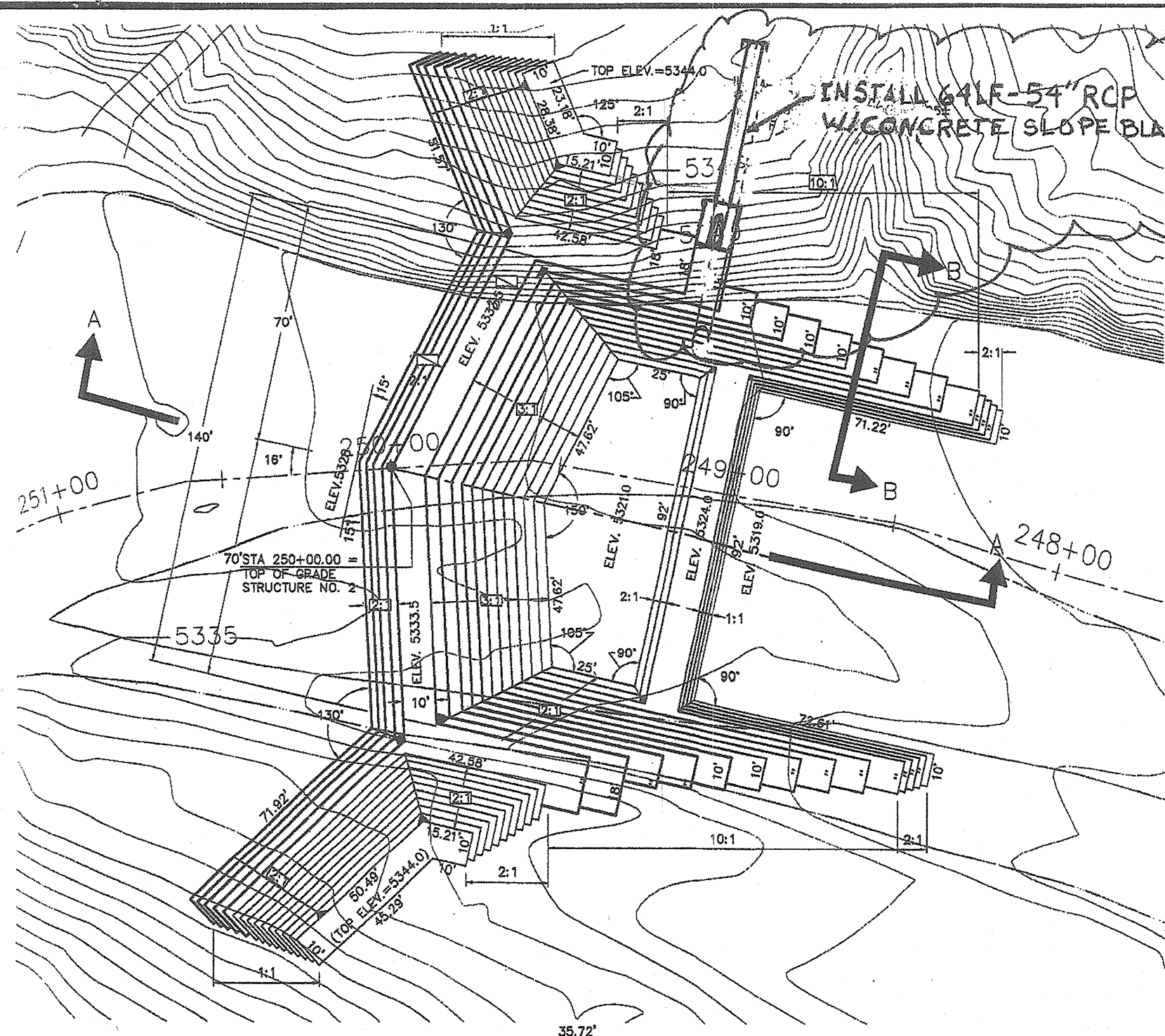
SECTION "B-B"
SCALE: 1"=20'
SHEET 3-5



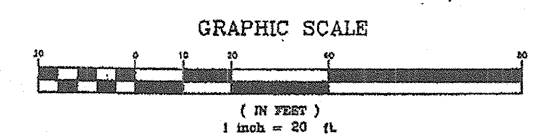
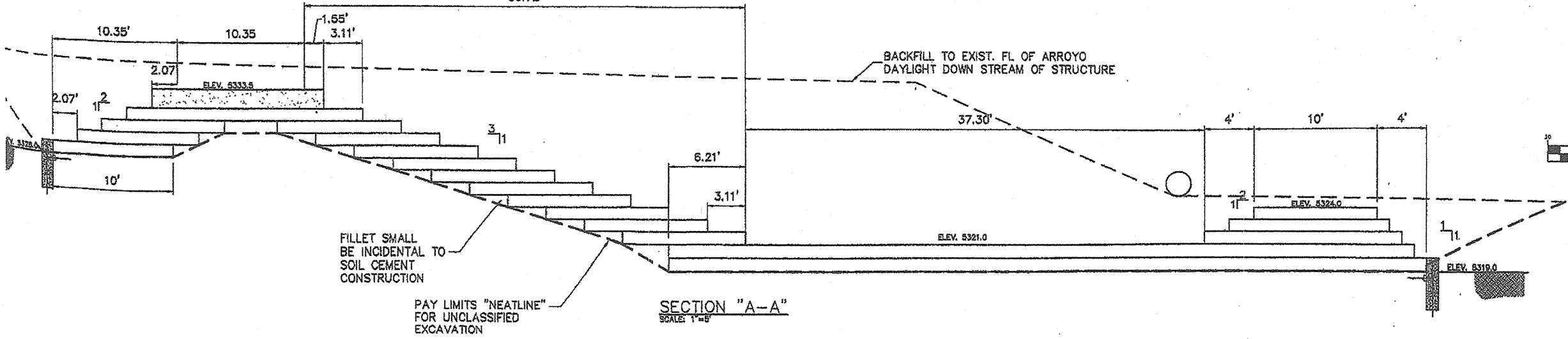
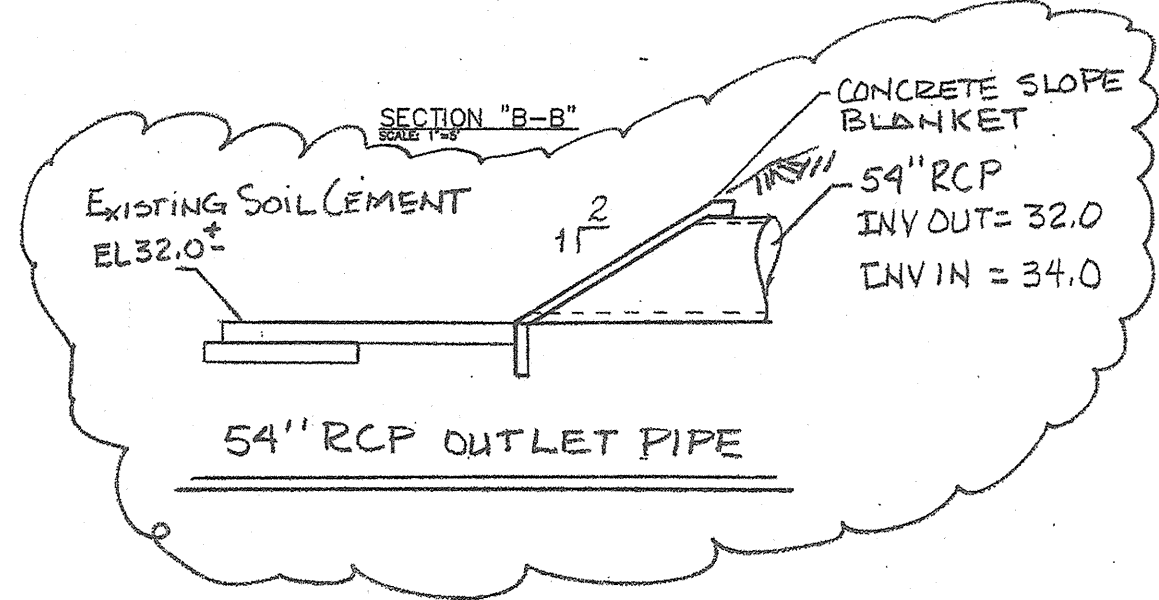
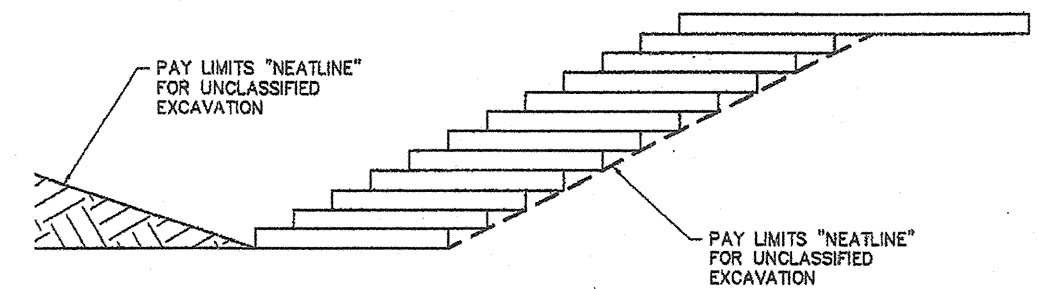
SECTION "C-C"
SCALE: 1"=10'
SHEET 3-6

[illegible]

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION				
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 DETAILS BRIDGE STA 1052+04.79				
Design Review Committee	City Engineer Approval			
		Last Design Update	Mo./Day/Yr. 	Mo./Day/Yr.
City Project No. COA 681602		Zone Map No. A-10-Z		Sheet 3-7



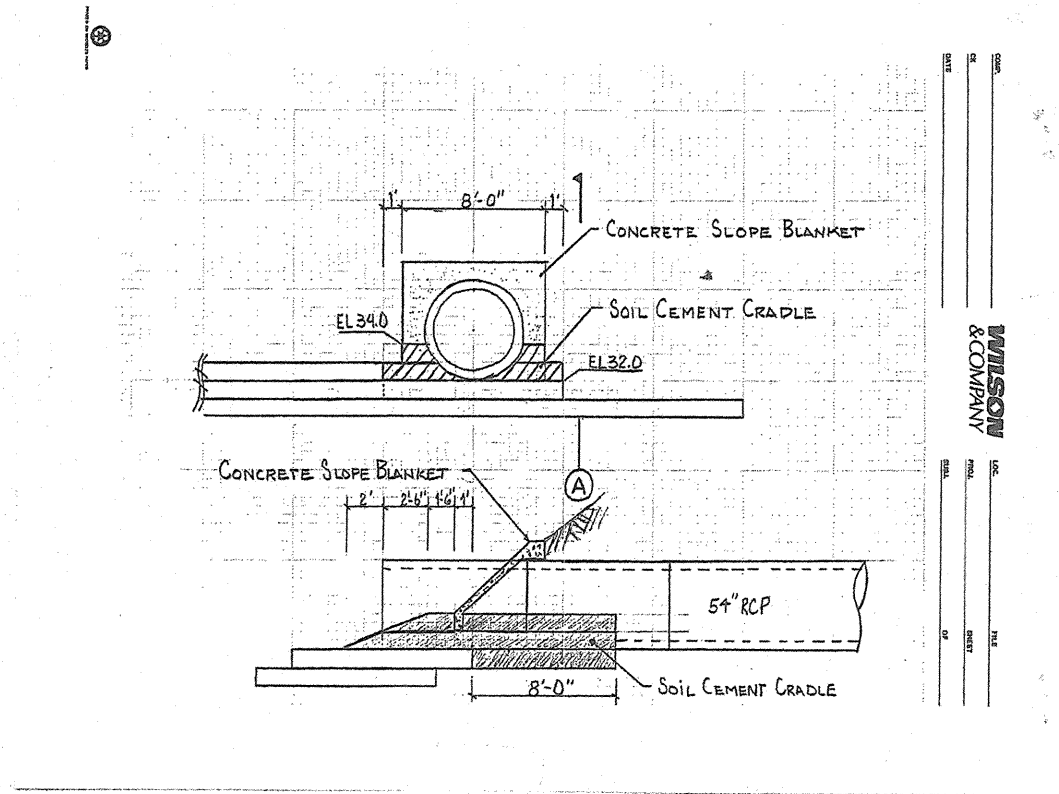
NOTE:
CONTRACTOR SHALL EXCAVATE TO NEAT LINE GRADES AS SHOWN ON DETAIL THIS SHEET. THE WORK SHALL BE PAID AS UNCLASSIFIED EXCAVATION. MATERIAL SHALL BE STOCKPILED FOR USE IN SOIL CEMENT AND CHANNEL BACKFILL. NO PAYMENT WILL BE MADE FOR MULTIPLE MOVEMENT OR HANDLING OF STOCKPILES MATERIAL.



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 2 ARROYO STA 250+00.00	
APPROVED DESIGN REVIEW COMMITTEE	APPROVED CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 3-8	of 3

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
DATE	NO.	DATE	NO.	DATE	NO.		
BY		BY		BY			
REMARKS		REMARKS		REMARKS			
DESIGNED BY		DESIGNED BY		DESIGNED BY			
DRAWN BY		DRAWN BY		DRAWN BY		15781 11/1/05 PROFESSIONAL ENGINEER	
CHECKED BY		CHECKED BY		CHECKED BY			
DATE		DATE		DATE			
DATE		DATE		DATE			

changed



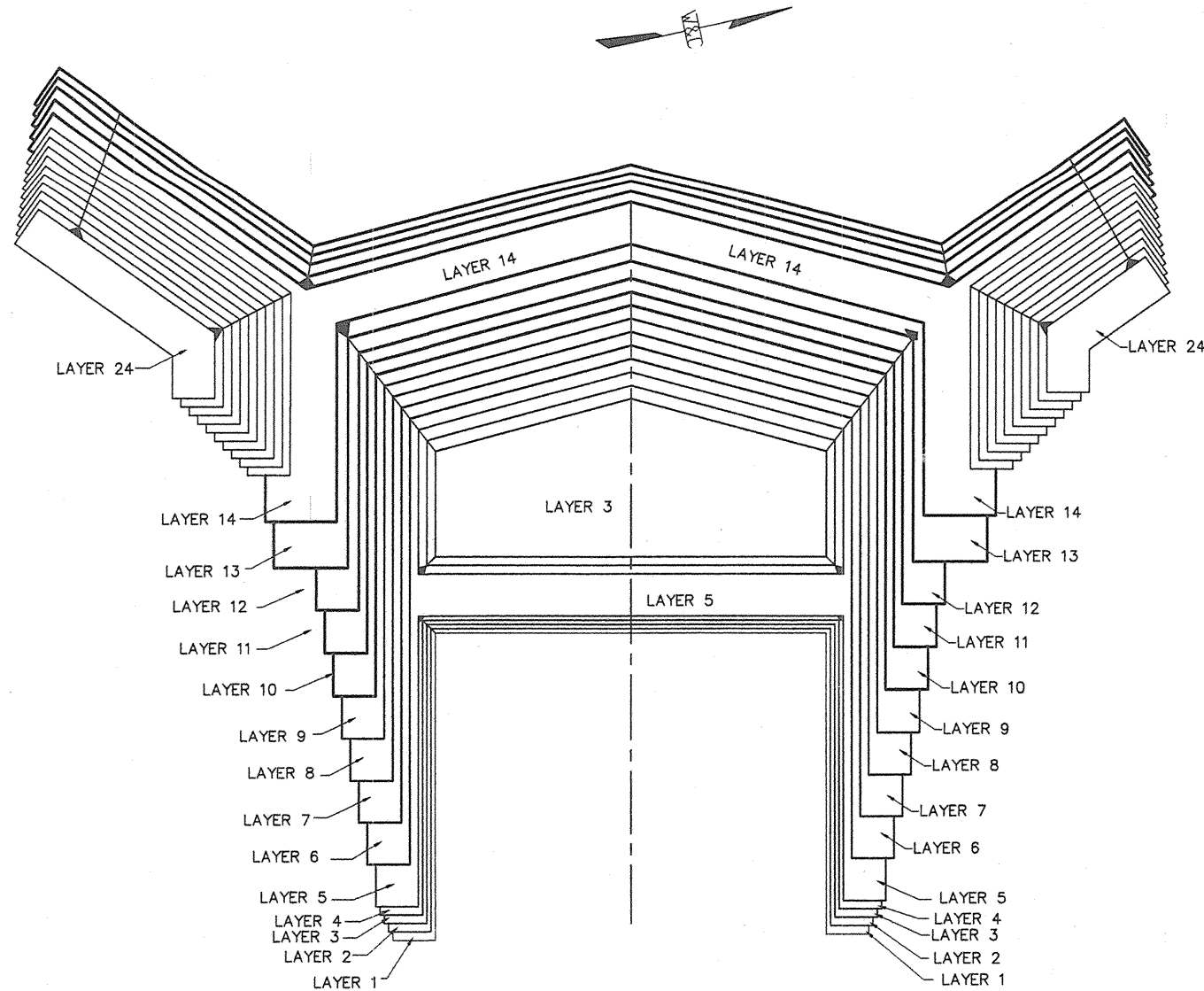
WILSON
 & COMPANY
 1530241.52, E 372920.43
 ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	3-8a	

WILSON
 & COMPANY

AS-BUILT INFORMATION THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT. N 1530241.52, E 372920.43 ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)		BENCH MARKS THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT. N 1530241.52, E 372920.43 ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	
SURVEY INFORMATION FIELD NOTES NO. BY DATE		ENGINEER'S SEAL NO. DATE REMARKS WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY DRAWN BY CHECKED BY	

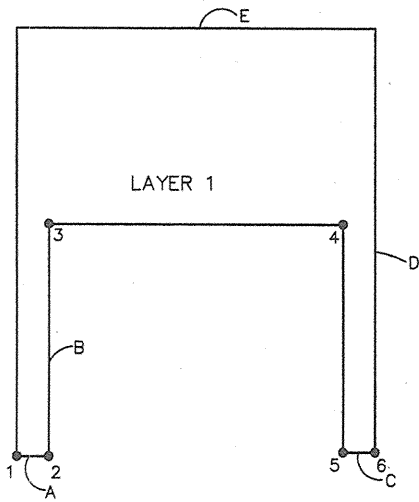
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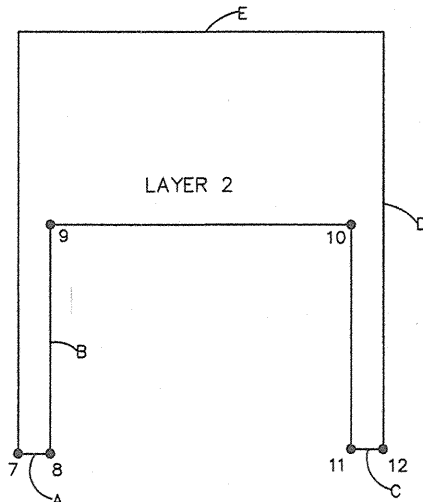
GRADE CONTROL STRUCTURE 2

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 2 LAYER DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED NOV 17 2005 DESIGN REVIEW COMMITTEE	APPROVED NOV 17 2005 CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	3-9	
WILSON & COMPANY			

LAYERS 1 & 2



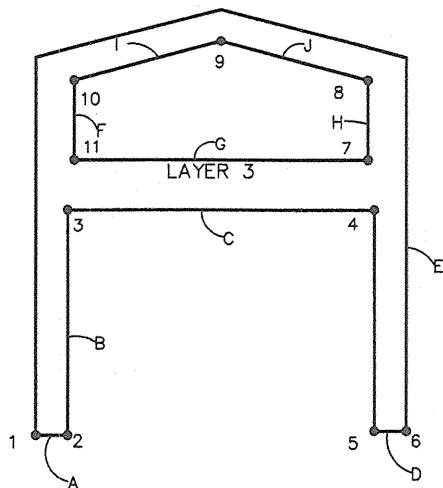
POINT TABLE LAYER 1		
POINT	NORTHING	EASTING
1	1533399.94	361530.21
2	1533409.71	361532.35
3	1533425.25	361461.42
4	1533515.12	361481.11
5	1533499.88	361550.68
6	1533509.65	361552.82



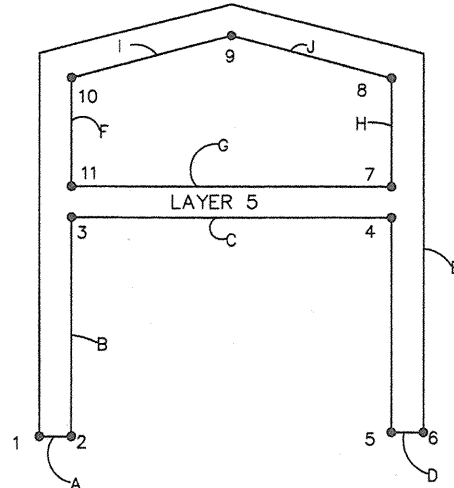
POINT TABLE LAYER 2		
POINT	NORTHING	EASTING
7	1533399.39	361528.04
8	1533409.16	361530.18
9	1533424.49	361460.23
10	1533516.31	361480.35
11	1533501.28	361548.94
12	1533511.05	361551.08

DIMENSION TABLE						
LAYER	A	B	C	D	E	ELEV
1	10'	71.22'	10'	133.41'	112'	5320
2	10'	70.22'	10'	132.80'	114'	5321

LAYERS 3 THRU 5



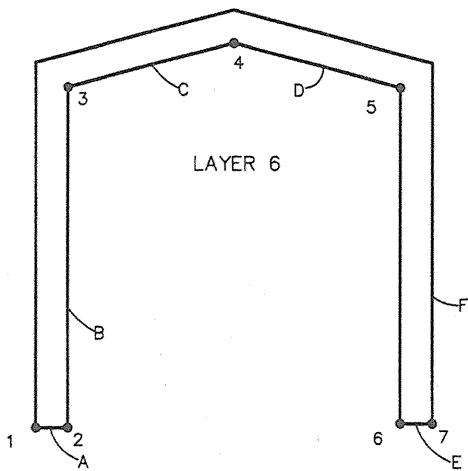
POINT TABLE LAYER 3		
POINT	NORTHING	EASTING
1	1533398.85	361525.88
2	1533407.52	361523.68
3	1533423.72	361459.04
4	1533517.50	361479.58
5	1533502.69	361547.20
6	1533512.46	361549.34
7	1533518.97	361463.53
8	1533524.31	361439.13
9	1533482.02	361417.25
10	1533434.45	361419.45
11	1533429.10	361443.84



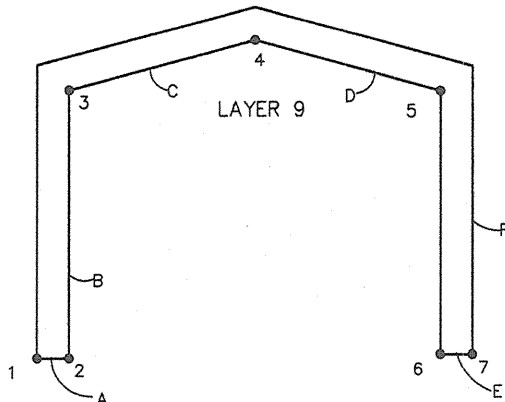
POINT TABLE LAYER 5		
POINT	NORTHING	EASTING
1	1533397.75	361521.54
2	1533407.52	361523.68
3	1533422.20	361456.66
4	1533519.88	361478.06
5	1533505.50	361543.72
6	1533515.27	361545.66
7	1533522.02	361468.29
8	1533529.32	361434.97
9	1533483.35	361411.18
10	1533431.64	361413.59
11	1533424.34	361446.89

DIMENSION TABLE											
LAYER	A	B	C	D	E	F	G	H	I	J	ELEV
3	10'	69.22'	96'	10'	117.33'	24.97'	92'	24.97'	47.62'	47.62'	5322
4	10'	69.61'	98'	10'	118.63'	29.54'	96'	29.54'	49.69'	46.69'	5323
5	10'	67.22'	100'	10'	119'	34.11'	97'	34.11'	51.76'	51.76'	5324

LAYERS 6 THRU 9



POINT TABLE LAYER 6		
POINT	NORTHING	EASTING
1	1533397.93	361511.34
2	1533407.70	361513.48
3	1533430.23	361410.63
4	1533484.01	361408.15
5	1533531.82	361432.89
6	1533509.59	361534.38
7	1533519.36	361536.52



POINT TABLE LAYER 9		
POINT	NORTHING	EASTING
1	1533398.49	361480.75
2	1533408.26	361482.90
3	1533426.02	361401.81
4	1533486.00	361399.05
5	1533539.34	361426.64
6	1533521.87	361506.36
7	1533531.64	361508.50

DIMENSION TABLE							
LAYER	A	B	C	D	E	F	ELEV
6	10'	105.29'	53.83'	53.83'	10'	111.57'	5325
7	10'	97.86'	55.91'	55.91'	10'	104.14'	5326
8	10'	90.43'	57.98'	57.98'	10'	96.71'	5327
9	10'	83'	60.05'	60.05'	10'	89.28'	5328

AS-BUILT INFORMATION
CONTRACTOR: David M. Hays, Inc.
DATE: 11/14/05
DESIGNED BY: EEA
CHECKED BY: EEA
RECORDED BY: EEA
NO. 13 OF 164

BENCH MARKS
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET
FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF
DOWNTOWN ALBUQU. TO REACH THE STA. FROM THE INTX
OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE
BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO
GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD.
1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD09)

SURVEY INFORMATION
FIELD NOTES
DATE: 11/14/05
BY: EEA
NO. 13 OF 164

ENGINEER'S SEAL
15781
11/14/05
PROFESSIONAL ENGINEER

REVISIONS
NO. DATE
1 11/14/05
2 11/14/05
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
TRANSPORTATION DIVISION
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE
GRADE CONTROL STRUCTURE 2
LAYER DETAILS

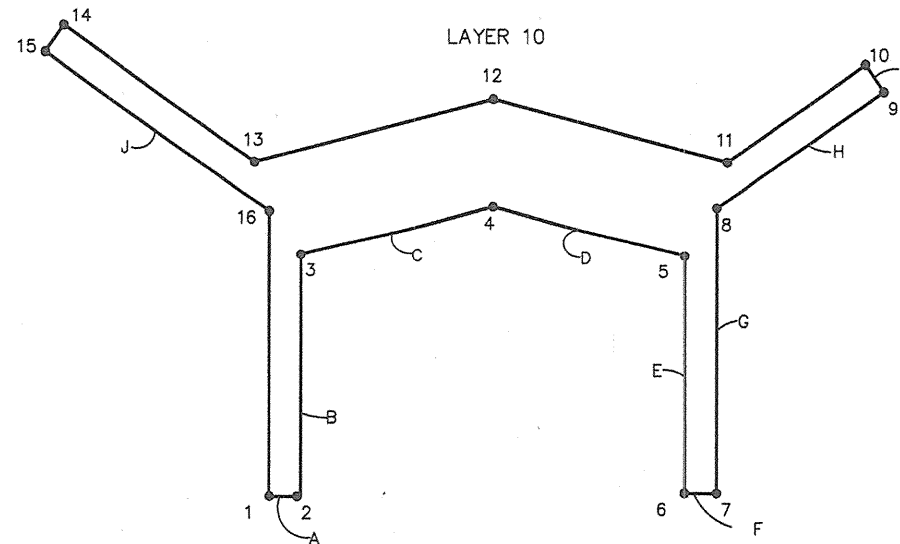
Design Review Committee: APPROVED
City Engineer Approval: APPROVED
REVIEW DESIGN: CITY ENGINEER

City Project No. COA 681602
Zone Map No. A-10-Z
Sheet 3-10
Of 13 OF 164

WILSON & COMPANY

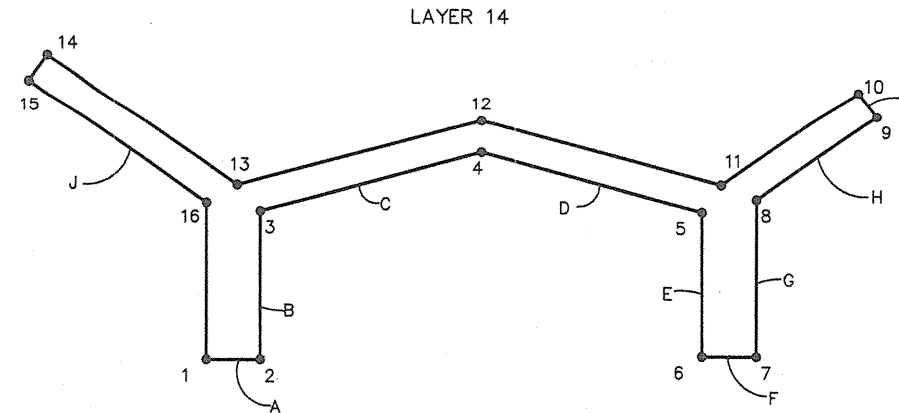
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LAYERS 10 THRU 14



POINT TABLE LAYER 10		
POINT	NORTHING	EASTING
1	1533398.68	361470.56
2	1533408.45	361472.70
3	1533424.62	361398.88
4	1533486.67	361396.01
5	1533541.84	361424.56
6	1533525.97	361497.02
7	1533535.73	361499.15
8	1533555.00	361411.22

POINT TABLE LAYER 10		
POINT	NORTHING	EASTING
9	1533613.66	361386.76
10	1533609.81	361377.53
11	1533561.23	361397.79
12	1533493.91	361362.96
13	1533416.70	361366.52
14	1533367.26	361312.84
15	1533359.91	361319.61
16	1533417.94	361382.63

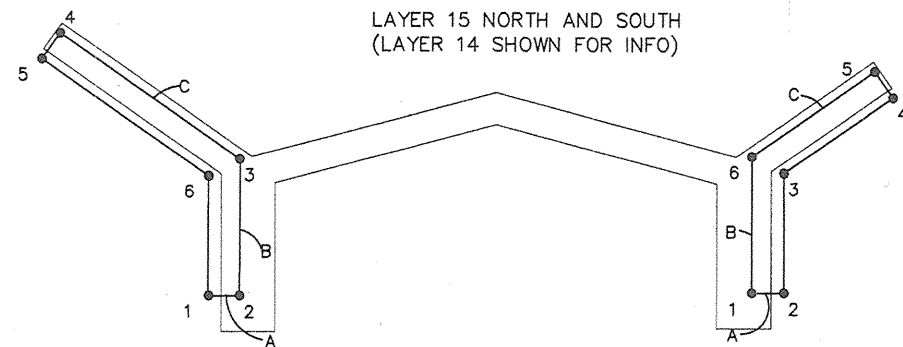


POINT TABLE LAYER 14		
POINT	NORTHING	EASTING
1	1533391.82	361427.08
2	1533408.25	361430.68
3	1533418.17	361385.38
4	1533489.72	361382.08
5	1533553.17	361414.90
6	1533543.53	361458.89
7	1533560.14	361462.53
8	1533570.62	361414.66

POINT TABLE LAYER 14		
POINT	NORTHING	EASTING
9	1533612.95	361397.00
10	1533609.10	361387.77
11	1533560.82	361407.92
12	1533491.88	361372.25
13	1533412.85	361375.90
14	1533363.62	361322.44
15	1533356.26	361329.21
16	1533402.31	361379.22

DIMENSION TABLE											
LAYER	A	B	C	D	E	F	G	H	I	J	ELEV
10	10'	75.57'	62.12'	62.12'	74.18'	10'	90.02'	63.56'	10'	85.67'	5329
11	10'	68.14'	64.19'	64.19'	66.75'	10'	78.97'	61.52'	10'	83.63'	5330
12	10'	60.71'	66.26'	66.26'	59.32'	10'	67.93'	59.48'	10'	81.59'	5331
13	17.41'	54.05'	68.94'	68.85'	52.67'	17.5'	61.77'	47.79'	10'	69.90'	5332
14	16.81'	46.38'	71.63'	71.43'	45.03'	17'	49'	45.87'	10'	67.98'	5333.5

LAYERS 15 THRU 24

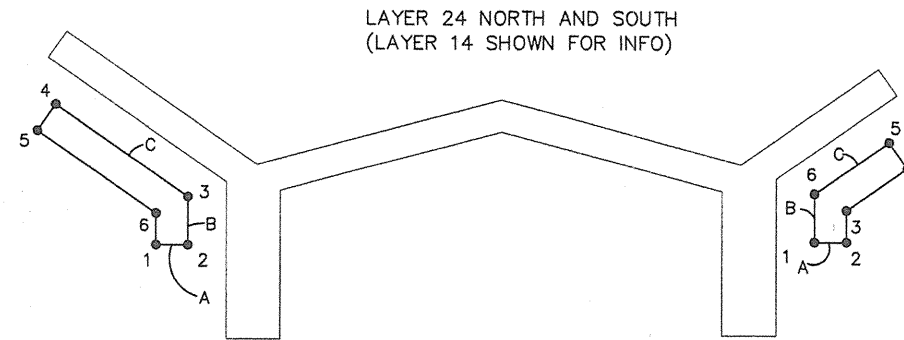


POINT TABLE LAYER 15 SOUTH		
POINT	NORTHING	EASTING
1	1533390.07	361415.48
2	1533399.84	361417.58
3	1533409.15	361376.03
4	1533362.50	361325.38
5	1533355.14	361332.16
6	1533398.27	361378.98

POINT TABLE LAYER 15 NORTH		
POINT	NORTHING	EASTING
1	1533556.63	361450.50
2	1533566.40	361452.64
3	1533574.40	361418.13
4	1533612.74	361400.14
5	1533608.89	361390.91
6	1533565.74	361408.91

DIMENSION TABLE SOUTH					
LAYER	A	B	C	ELEV	VOLUME(CY)
15	10'	42.72'	68.61'	5335	39.02
16	10'	39.62'	66.82'	5336	37.46
17	10'	36.49'	64.78'	5337	35.58
18	10'	33.45'	62.74'	5338	33.70
19	10'	30.41'	60.70'	5339	31.82
20	10'	27.37'	58.66'	5340	29.94
21	10'	24.33'	56.62'	5341	28.05
22	10'	21.29'	54.57'	5342	26.17
23	10'	18.25'	52.53'	5343	24.29
24	10'	15.21'	50.49'	5344	22.40

DIMENSION TABLE NORTH					
LAYER	A	B	C	ELEV	VOLUME(CY)
15	10'	42.58'	46.75'	5335	31.16
16	10'	39.54'	44.71'	5336	29.27
17	10'	36.49'	42.67'	5337	27.39
18	10'	33.45'	40.63'	5338	25.51
19	10'	30.41'	38.59'	5339	23.67
20	10'	27.37'	36.55'	5340	21.74
21	10'	24.33'	34.50'	5341	19.86
22	10'	21.29'	32.46'	5342	17.98
23	10'	18.25'	30.42'	5343	16.10
24	10'	15.21'	28.38'	5344	14.22



POINT TABLE LAYER 24 SOUTH		
POINT	NORTHING	EASTING
1	1533376.54	361394.05
2	1533386.31	361396.19
3	1533389.56	361381.34
4	1533355.36	361344.19
5	1533348.00	361350.97
6	1533378.68	361384.28

POINT TABLE LAYER 24 NORTH		
POINT	NORTHING	EASTING
1	1533578.07	361436.77
2	1533587.83	361438.91
3	1533589.97	361429.14
4	1533611.36	361420.22
5	1533607.51	361410.99
6	1533581.32	361421.91

AS-BUILT INFORMATION

CONTRACT: David Montoya Const. Inc.

DESIGNED BY: Billingsley Eng'g

DATE: 3/07

APPROVED BY: COA/WCL

DATE: 3/07

REVIEWED BY: WCL

DATE: 3/07

RECORDED BY: MICRO-FILM INFORMATION

DATE: 3/07

NO.

BENCH MARKS

THE STA. IS A USGS TABLET STAMPED 'BLACK-2 1977' SET

FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF

DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX

OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE

BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO

GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD

1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.

N 1530241.52, E 372920.43

ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)

ENGINEER'S SEAL

15781

11/14/05

PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	REMARKS	BY
1	NOV 2005	WILSON & COMPANY, ENGINEERS & ARCHITECTS	EEA
2	NOV 2005	DESIGNED BY	EEA
3	NOV 2005	DRAWN BY	EEA
4	NOV 2005	CHECKED BY	EEA

CITY OF ALBUQUERQUE

DEPARTMENT OF MUNICIPAL DEVELOPMENT

TRANSPORTATION DIVISION

McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE

GRADE CONTROL STRUCTURE 2

LAYER DETAILS

Design Review Committee

APPROVE

NOT A SEAL

REVIEW COMMITTEE

CITY ENGINEER

City Project No. COA 681602

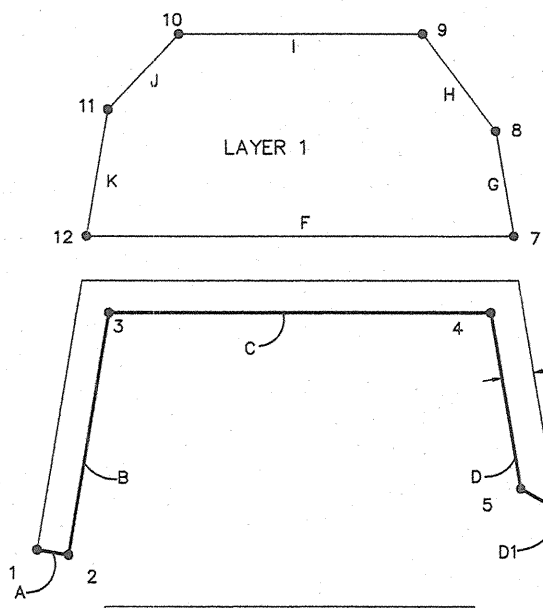
Zone Map No. A-10-Z

Sheet 3-11

Of 14 of 164

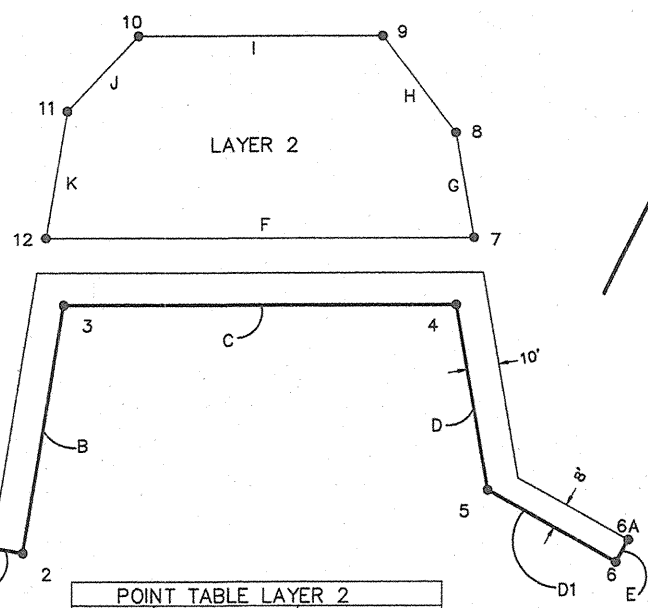
WILSON & COMPANY

LAYER 1



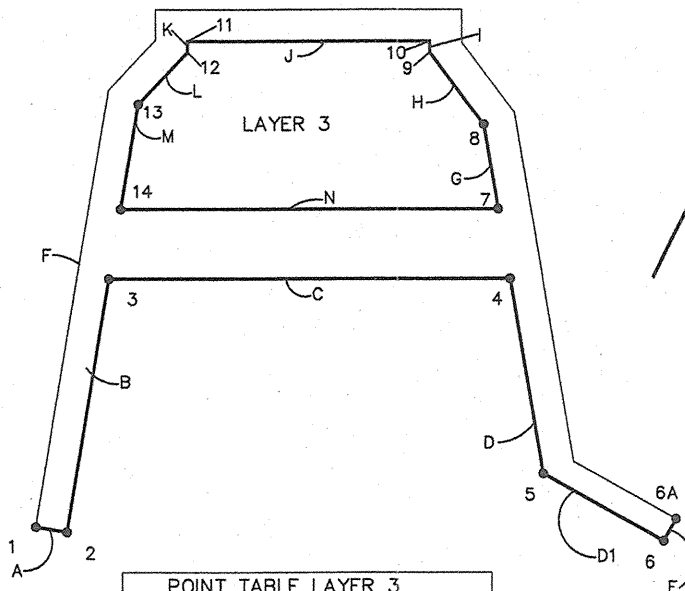
POINT	NORTHING	EASTING
1	1533300.1071	360196.2172
2	1533305.9524	360204.3271
3	1533368.7321	360159.1511
4	1533453.5951	360243.4276
5	1533421.0916	360289.2678
6	1533434.2547	360336.2380
6A	1533441.9579	360334.0792
7	1533475.6755	360231.3050
8	1533495.4771	360203.3784
9	1533501.2767	360165.3933
10	1533447.0291	360111.5206
11	1533414.3588	360112.7663
12	1533380.7007	360136.9866

LAYER 2



POINT	NORTHING	EASTING
1	1533299.7489	360194.0100
2	1533305.5947	360202.1206
3	1533369.7621	360155.9459
4	1533456.7930	360242.3754
5	1533422.5305	360290.6963
6	1533434.9477	360335.0052
6A	1533442.6510	360332.8465
7	1533475.6755	360231.3050
8	1533495.4771	360203.3784
9	1533501.2767	360165.3933
10	1533447.0291	360111.5206
11	1533414.3588	360112.7663
12	1533380.7007	360136.9866

LAYERS 3 THRU 5 SOUTH



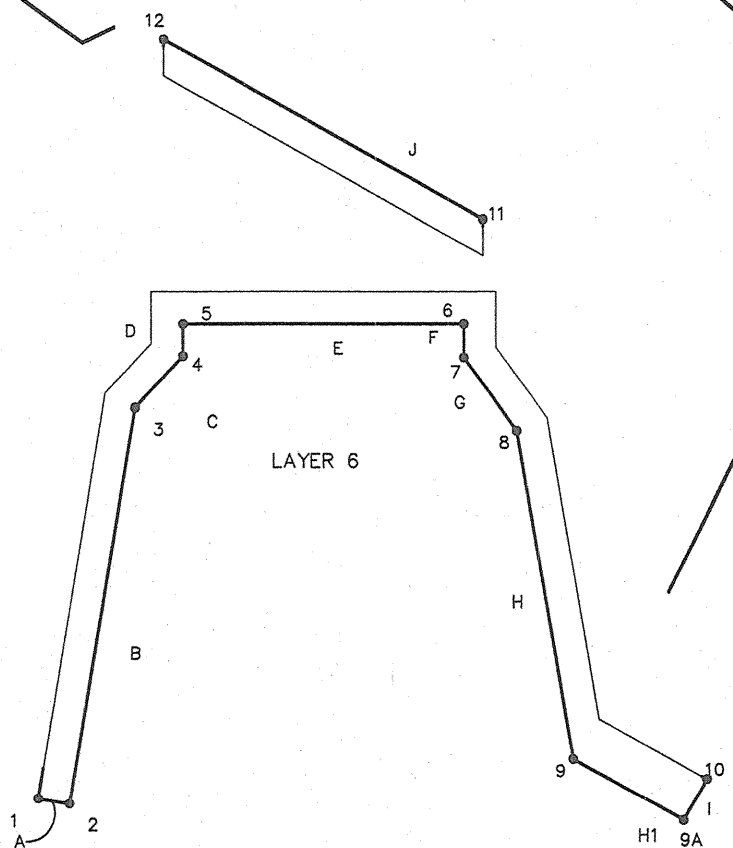
POINT	NORTHING	EASTING
1	1533299.3907	360191.8028
2	1533305.2370	360199.9140
3	1533370.7920	360152.7408
4	1533459.9908	360241.3231
5	1533423.9693	360292.1248
6	1533435.6408	360333.7725
6A	1533443.3440	360331.6137
7	1533472.8915	360223.1292
8	1533488.8076	360200.6824
9	1533493.1274	360172.3893
10	1533495.7392	360169.7594
11	1533441.8702	360116.2627
12	1533439.3313	360118.8192
13	1533416.7344	360119.6808
14	1533388.8954	360139.7137

POINT	NORTHING	EASTING
1	1533298.6744	360187.3884
2	1533304.5215	360195.5009
3	1533372.8520	360146.3305
4	1533466.3866	360239.2186
5	1533426.8470	360294.9818
6	1533437.0269	360331.3070
6A	1533451.4704	360327.2593
7	1533472.2505	360230.9487
8	1533492.6187	360202.2230
9	1533496.8848	360174.2824
10	1533502.8053	360168.3206
11	1533443.2599	360109.1867
12	1533437.6038	360114.8822
13	1533415.3769	360115.7296
14	1533381.0808	360140.4090
15	1533535.2441	360147.0092
16	1533504.2516	360036.4175

LAYER	A	B	C	D	D1	E	F	G	H	I	J	K	ELEV	VOLUME(CY)
1	10'	77.34'	119.60'	56.19'	48.78'	8'	133.85'	34.23'	38.43'	76.45'	32.69'	41.17'	5343	391.14
2	10'	79.05'	122.66'	59.23'	46.01'	8'	133.85'	34.23'	38.43'	76.45'	32.69'	41.17'	5344	392.85

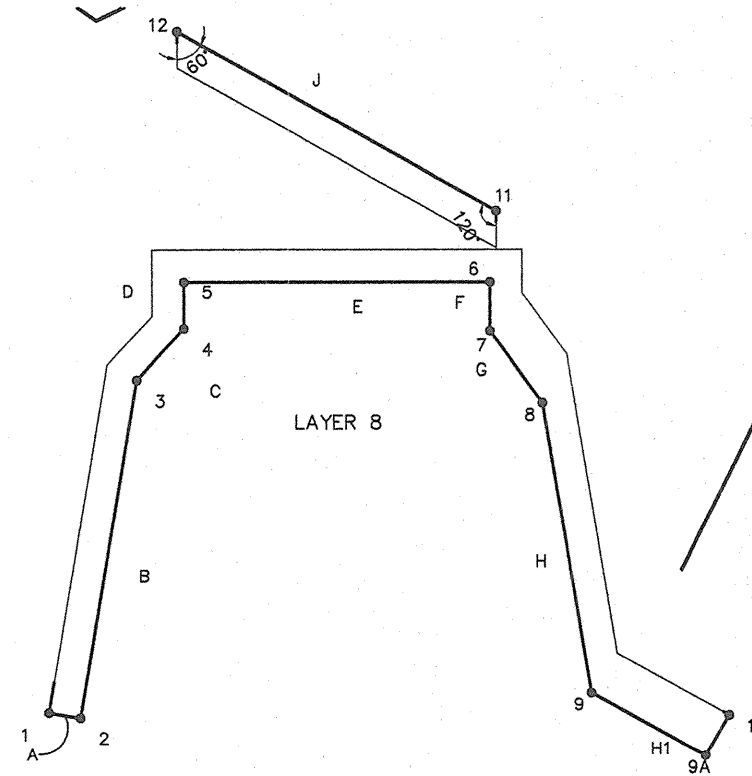
LAYER	A	B	C	D	D1	E	F	G	H	I	J	K	L	M	N	O	ELEV	VOLUME(CY)
3	10'	80.76'	125.71'	62.28'	43.25'	8'	139.39'	27.35'	28.62'	3.61'	75.92'	3.60'	22.61'	34.30'	118.38'		5345	259.68
4	10'	82.47'	128.77'	65.32'	40.49'	8'	139.99'	31.37'	28.44'	6.05'	79.92'	5.81'	22.43'	38.28'	123.43'		5346	237.30
5	10'	84.18'	131.82'	68.36'	37.72'	15'	139.60'	22.87'	26.26'	8.40'	83.92'	8.03'	22.24'	42.09'	128.49'	114.85'	5347	222.20'

LAYERS 6 THRU 8 SOUTH



POINT	NORTHING	EASTING
1	1533305.6218	360179.9251
2	1533311.4690	360188.0375
3	1533414.6982	360113.7541
4	1533436.7401	360112.9136
5	1533443.9547	360105.6488
6	1533506.3384	360167.6013
7	1533498.7634	360175.2290
8	1533494.5243	360202.9933
9	1533433.4963	360289.0620
9A	1533444.1904	360327.2224
10	1533458.6340	360323.1747
11	1533533.6242	360148.6404
12	1533502.6316	360038.0487

LAYER	A	B	C	D	E	F	G	H	H1	I	J	ELEV	VOLUME(CY)
6	10'	127.18'	22.06'	10.24'	87.92'	10.75'	28.09'	105.51'	39.63'	15'	114.85'	5348	216.18
7	10'	117.78'	21.87'	12.45'	91.92'	13.10'	27.91'	97.31'	41.54'	15'	114.85'	5349	211.68
8	10'	108.39'	21.69'	14.66'	95.92'	15.45'	27.73'	92.97'	40.01'	15'	110.59'	5350	214.08



POINT	NORTHING	EASTING
1	1533319.5168	360164.9983
2	1533325.3639	360173.1107
3	1533413.3407	360109.8029
4	1533435.0126	360108.9766
5	1533445.3444	360098.5728
6	1533513.4045	360166.1626
7	1533502.5207	360177.1221
8	1533498.3355	360204.5339
9	1533444.5617	360280.3718
9A	1533455.6288	360319.8628
10	1533470.0723	360315.8151
11	1533530.3844	360151.9028
12	1533499.3918	360041.3111

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
TRANSPORTATION DIVISION

McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE
GRADE CONTROL STRUCTURE 3
LAYER DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. COA 681602 Zone Map No. A-10-Z Sheet 3-13 Of 13

WILSON & COMPANY

AS-BUILT INFORMATION

CONTRACTOR: David Montoya Const. Inc.
WORK: GRADING AND PAVING
ACCEPTANCE BY: COA
DATE: 3/01

BENCH MARKS

THE STA. IS A USGS TABLET STAMPED "BLACK-2 1877" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT. N 1530241.52, E 372920.43
ELEVATION = 5213.926 FT. (2ND ORDER) (NOV2005)

SURVEY INFORMATION

FIELD NOTES

NO. BY DATE

ENGINEER'S SEAL

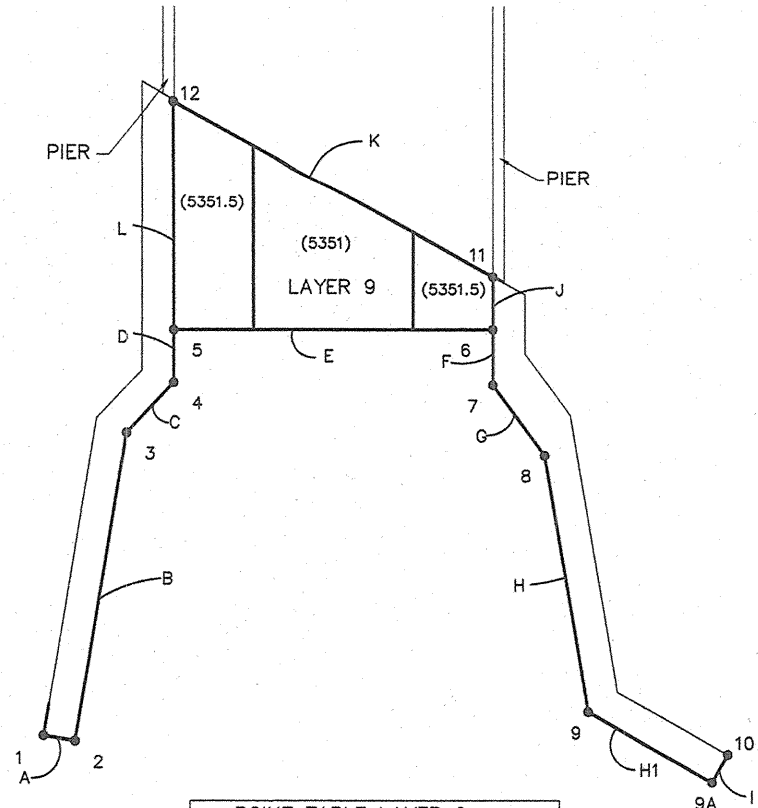
8-31-06 REVISED STRUCTURE MOD. EEA
REVISED SHEET STRUCTURE MOD. EEA
NO. DATE

REVISIONS

WILSON & COMPANY, ENGINEERS & ARCHITECTS
DESIGNED BY: EEA
DRAWN BY: STAFF
CHECKED BY: EEA
DATE: NOV 2005
DATE: NOV 2005

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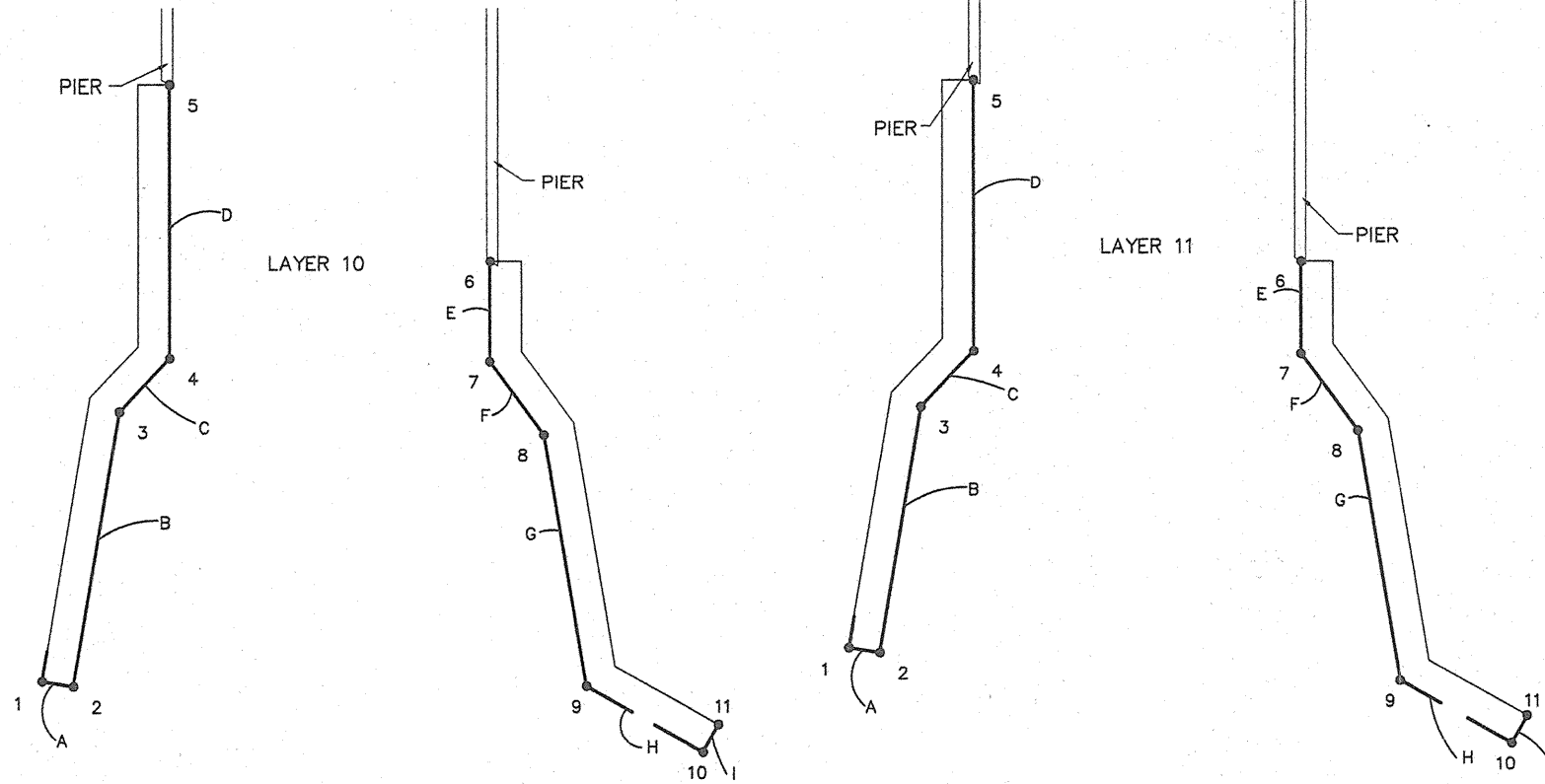
LAYER 9 SOUTH



POINT TABLE LAYER 9		
POINT	NORTHING	EASTING
1	1533326.4393	360157.4458
2	1533332.2864	360165.5582
3	1533412.5048	360107.8333
4	1533434.1488	360107.0081
5	1533446.0393	360095.0349
6	1533516.9376	360165.4432
7	1533504.3994	360178.0686
8	1533500.2652	360205.1457
9	1533452.6746	360272.2633
9A	1533464.7181	360315.2385
10	1533474.3472	360312.5400
11	1533528.7644	360153.5340
12	1533497.7719	360042.9423

DIMENSION TABLE												
LAYER	A	B	C	D	E	F	G	H	H1	I	J	ELEV
9	10'	98.83'	21.66'	16.87'	100'	17.79'	27.39'	82.28'	44.63'	10'	16.78'	5351.0
9	114.85'	73.42'										307.60

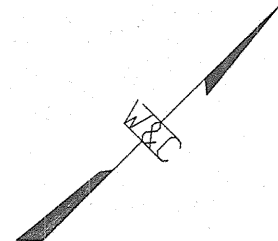
LAYERS 10 AND 11 SOUTH



POINT TABLE LAYER 10		
POINT	NORTHING	EASTING
1	1533333.4117	360150.0716
2	1533339.1824	360158.0780
3	1533411.7470	360105.8608
4	1533435.1039	360104.9702
5	1533497.8914	360041.7458
6	1533529.4293	360154.2837
7	1533506.5341	360177.3382
8	1533502.1466	360206.0744
9	1533454.8828	360272.7312
10	1533466.3741	360313.7359
11	1533476.0031	360311.0374

DIMENSION TABLE												
LAYER	A	B	C	D	E	F	G	H	I	ELEV	VOLUME(CY)	
10	9.87'	89.40'	23.37'	89.10'	32.49'	29.07'	80.21'	42.58'	10'	5352	141.17	
11	9.87'	80.00'	24.65'	87.81'	29.90'	30.59'	81.23'	40.63'	10'	5353	135.99	

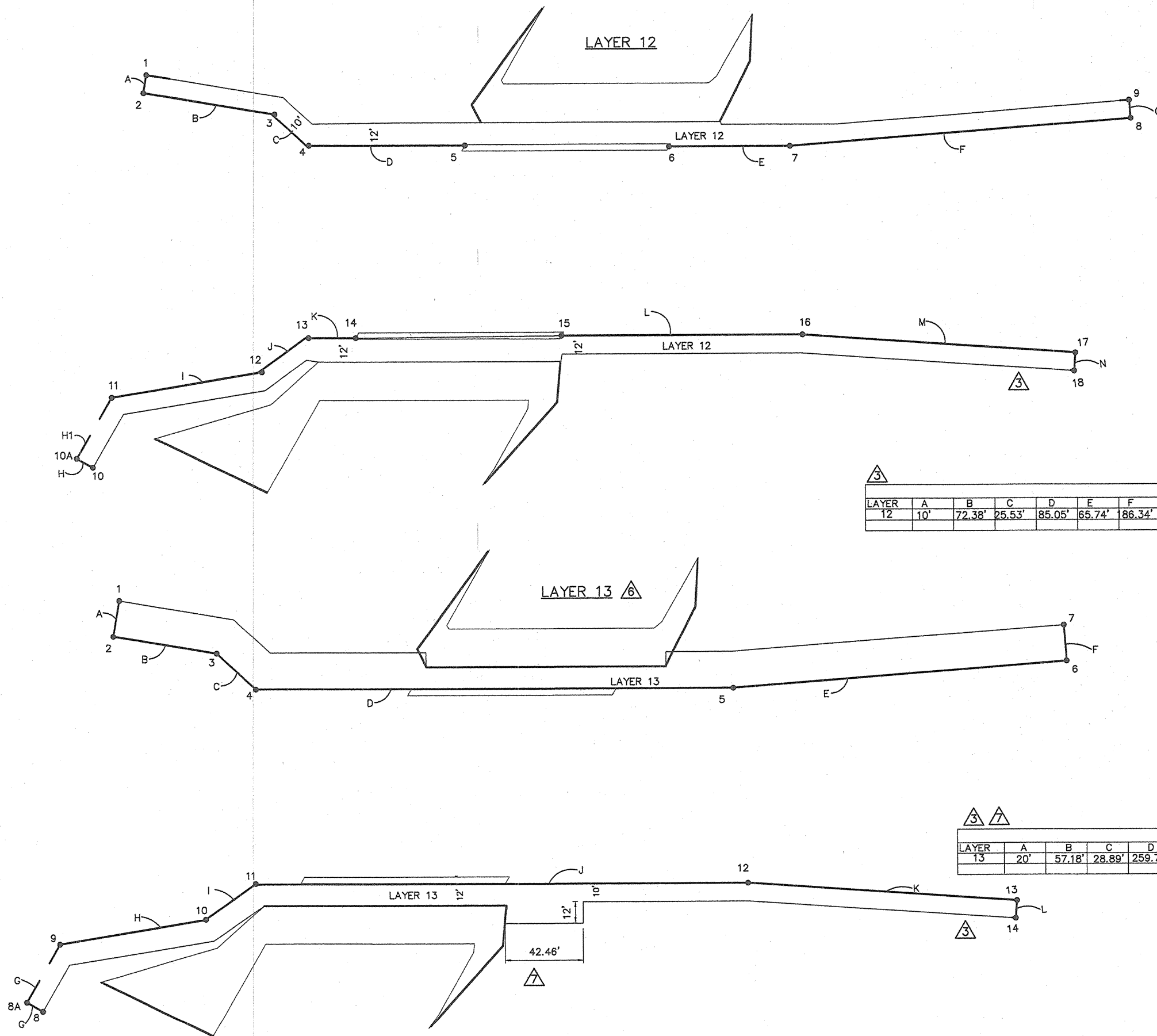
POINT TABLE LAYER 11		
POINT	NORTHING	EASTING
1	1533340.3592	360142.6082
2	1533346.1299	360150.6146
3	1533411.0682	360103.8852
4	1533435.7050	360102.9458
5	1533497.5812	360040.6390
6	1533529.7395	360155.3905
7	1533508.6688	360176.6078
8	1533504.0522	360206.8447
9	1533457.0660	360273.1100
10	1533468.0300	360312.2333
11	1533477.6591	360309.5348



AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	David Montoya Const. Inc.	THE STA. IS A USGS TABLE STAMPED "BLACK-2 1977" SET	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DATE			
WORK	Billingsley Eng.	DATE		NO.			
DESIGNED BY	COA	DATE		BY		8-31-06 REVISED STRUCTURE	
CHECKED BY	COA	DATE		NO.		REVISED SHEET STRUCTURE MOD.	
RECORDED BY	COA	DATE		DATE		REVISIONS	
DATE	3/03	DATE		DATE		WILSON & COMPANY, ENGINEERS & ARCHITECTS	
DATE		DATE		DATE		DESIGNED BY	
DATE		DATE		DATE		DRAWN BY	
DATE		DATE		DATE		CHECKED BY	

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 LAYER DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 3-14	Of 14

WILSON
& COMPANY



POINT TABLE LAYER 12		
POINT	NORTHING	EASTING
1	1533347.2303	360135.0388
2	1533353.0774	360143.1512
3	1533411.8303	360100.8728
4	1533437.3385	360099.8818
5	1533497.2710	360039.5322
6	1533576.1474	359961.5260
7	1533622.4681	359914.8829
8	1533704.4554	359813.4521
9	1533735.2869	359766.2141
10	1533479.3150	360308.0323
10A	1533469.6860	360310.7307
11	1533459.2492	360273.4887
12	1533507.2469	360205.7969
13	1533511.9988	360174.6737
14	1533530.4097	360156.4973
15	1533608.3056	360076.2775
16	1533700.6586	359983.2818
17	1533812.6995	359885.0163
18	1533819.2699	359892.5543

DIMENSION TABLE															
LAYER	A	B	C	D	E	F	G	H	H1	I	J	K	L	M	N
12	10'	72.38'	25.53'	85.05'	65.74'	86.34'	10'	10'	38.68'	82.98'	31.48'	25.62'	131.06'	149.03'	10'

POINT TABLE LAYER 12		
POINT	NORTHING	EASTING
1	1533350.4797	360117.1527
2	1533362.1740	360133.3775
3	1533408.5899	360099.9768
4	1533437.4564	360098.8761
5	1533620.4949	359914.5638
6	1533738.4562	359775.4750
7	1533723.2032	359762.5389
8	1533480.9710	360306.5297
8A	1533471.3420	360309.2281
9	1533461.4324	360273.8675
10	1533507.9373	360207.9006
11	1533513.0342	360174.5181
12	1533702.0777	359984.6911
13	1533812.5033	359887.8350
14	1533819.0822	359895.3829

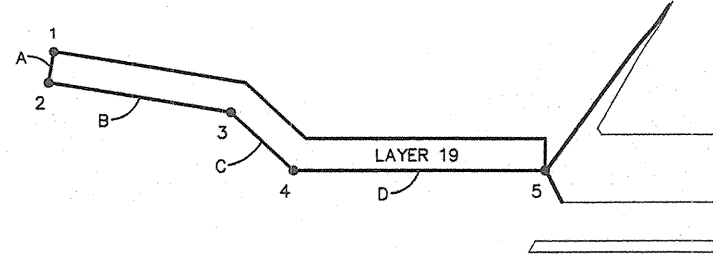
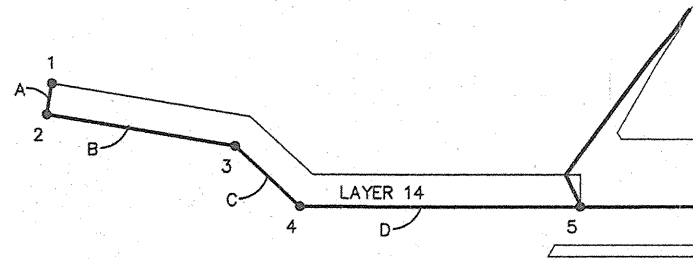
DIMENSION TABLE															
LAYER	A	B	C	D	E	F	G	G1	H	I	J	K	L	ELEV	VOLUME(CY)
13	20'	57.18'	28.89'	259.76'	182.38'	20'	10'	36.72'	80.71'	33.77'	267.90'	146.88'	10'	5355	595.25

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 LAYER DETAILS	
Design Review Committee	City Engineer Approval
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 3-15	Of 15

WILSON
& COMPANY

AS-BUILT INFORMATION	BENCH MARKS	SURVEY INFORMATION	ENGINEER'S SEAL
CONTRACTOR: David M. P. Const. Inc. STAMPED BY: Billingsley Eng. DATE: 3/07 APPROVED BY: COA DATE: 3/07 RECORDED BY: WCI DATE: 3/07 MICRO-FILM INFORMATION DATE: 3/07	THE STA. IS A USGS TABLET STAMPED 'BLACK-2 1977' SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS 7-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT. ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	FIELD NOTES DATE: 3/07 BY: [Signature] NO. 1	SA ADAPTE REGISTERED PROFESSIONAL ENGINEER NOV 2005
8-31-06 REVISED STRUCTURE 5-29-06 REVISED STRUCTURE REVISED SHEET STRUCTURE MOD. NO. DATE	ELO ELO EFA BY	REVISIONS WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY: EFA DRAWN BY: STAFF CHECKED BY: EFA	DATE: NOV 2005 DATE: NOV 2005 DATE: NOV 2005

△ LAYERS 14 THRU 19 SOUTH

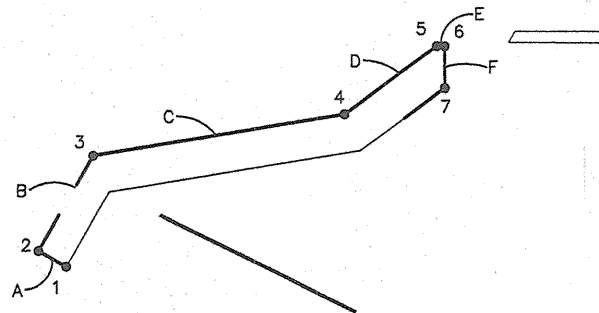


POINT TABLE LAYER 14		
POINT	NORTHING	EASTING
1	1533350.1249	360114.9450
2	1533355.9658	360123.0619
3	1533404.5188	360088.1233
4	1533432.2739	360087.0650
5	1533494.2470	360024.6518

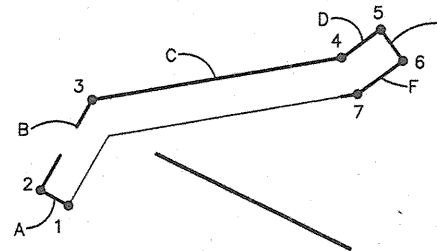
POINT TABLE LAYER 19		
POINT	NORTHING	EASTING
1	1533348.3215	360103.9180
2	1533354.1686	360112.0304
3	1533401.1182	360078.2457
4	1533427.9551	360077.2224
5	1533483.6348	360021.1553

DIMENSION TABLE						
LAYER	A	B	C	D	ELEV	VOLUME(CY)
14	10'	59.82'	27.77'	87.96'	5356	64.59
15	10'	59.42'	27.59'	86.17'	5357	63.88
16	10'	59.03'	27.41'	84.38'	5358	63.00
17	10'	58.64'	27.22'	82.59'	5359	62.12
18	10'	58.24'	27.04'	80.80'	5360	61.25
19	10'	57.84'	26.87'	79.02'	5361	60.27

LAYERS 14 NORTH



LAYERS 15 NORTH

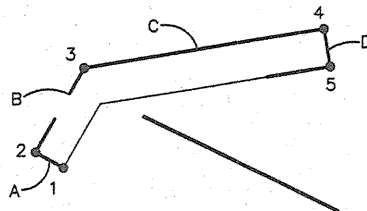


POINT TABLE LAYER 14 NORTH		
POINT	NORTHING	EASTING
1	1533482.6270	360305.0271
2	1533472.9979	360307.7255
3	1533463.6156	360274.2462
4	1533509.7689	360209.1556
5	1533515.1689	360173.7877
6	1533516.9100	360172.0345
7	1533526.1714	360181.2319

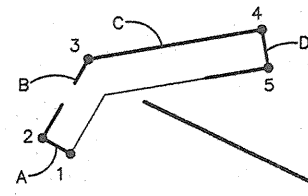
POINT TABLE LAYER 15 NORTH		
POINT	NORTHING	EASTING
1	1533336.6453	360087.6840
2	1533342.4862	360095.8009
3	1533393.5849	360059.0304
4	1533437.7182	360060.2956
5	1533464.1915	360033.6382
6	1533516.9100	360172.0345
7	1533526.1714	360181.2319

DIMENSION TABLE						
LAYER	A	B	C	D	E	F
14 N	10'	34.77'	79.79'	35.78'	2.47'	13.05'
15 N	10'	32.82'	79.31'	14.81'	12.00'	

LAYERS 16 NORTH



LAYERS 17 NORTH

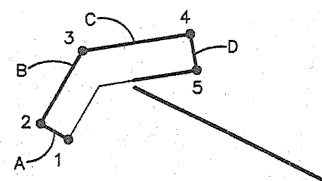


POINT TABLE LAYER 16 NORTH		
POINT	NORTHING	EASTING
1	1533485.9389	360302.0219
2	1533476.3098	360304.7203
3	1533467.9820	360275.0037
4	1533511.9476	360212.9984
5	1533521.7365	360219.9394

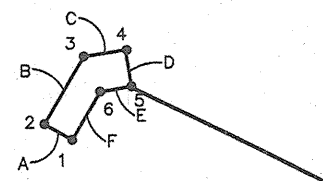
POINT TABLE LAYER 17 NORTH		
POINT	NORTHING	EASTING
1	1533487.5948	360300.5193
2	1533477.9658	360303.2177
3	1533470.1652	360275.3825
4	1533502.0108	360230.4701
5	1533511.7997	360237.4111

DIMENSION TABLE						
LAYER	A	B	C	D	E	F
16 N	10'	30.86'	76.01'	12.00'	5358	43.15
17 N	10'	28.91'	55.06'	12.00'	5359	33.12

LAYERS 18 NORTH



LAYERS 19 NORTH



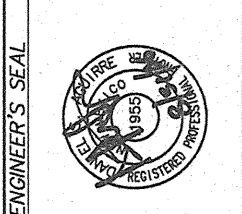
POINT TABLE LAYER 18 NORTH		
POINT	NORTHING	EASTING
1	1533489.2508	360299.0167
2	1533479.6218	360301.7151
3	1533472.3484	360275.7612
4	1533492.0740	360247.9419
5	1533501.8629	360254.8828

POINT TABLE LAYER 19 NORTH		
POINT	NORTHING	EASTING
1	1533490.9068	360297.5141
2	1533481.2777	360300.2125
3	1533474.5315	360276.1400
4	1533482.1372	360265.4136
5	1533491.9262	360272.3545
6	1533486.1420	360280.5120

DIMENSION TABLE						
LAYER	A	B	C	D	E	F
18 N	10'	26.95'	34.10'	12.00'		
19 N	10'	25.00'	13.15'	12.00'	10.00'	17.66'

AS-BUILT INFORMATION	
CONTRACTOR	David M. Ortega, Const. Inc.
DRAWN BY	Billingsley Eng'g
CHECKED BY	COA
DATE	
DESIGNED BY	COA/INC
DATE	3/07
REVISIONS	
NO.	
DATE	
BY	
REASON	
MICRO-FILM INFORMATION	
NO.	
DATE	
BY	
REASON	

BENCH MARKS	
THE STA. IS A USGS TABLE STAMPED "BLACK-2 1977 SET"	
FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. NW	
OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX	
OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE	
BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO	
GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD.	
1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	
N 1530241.52, E 372920.43	
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

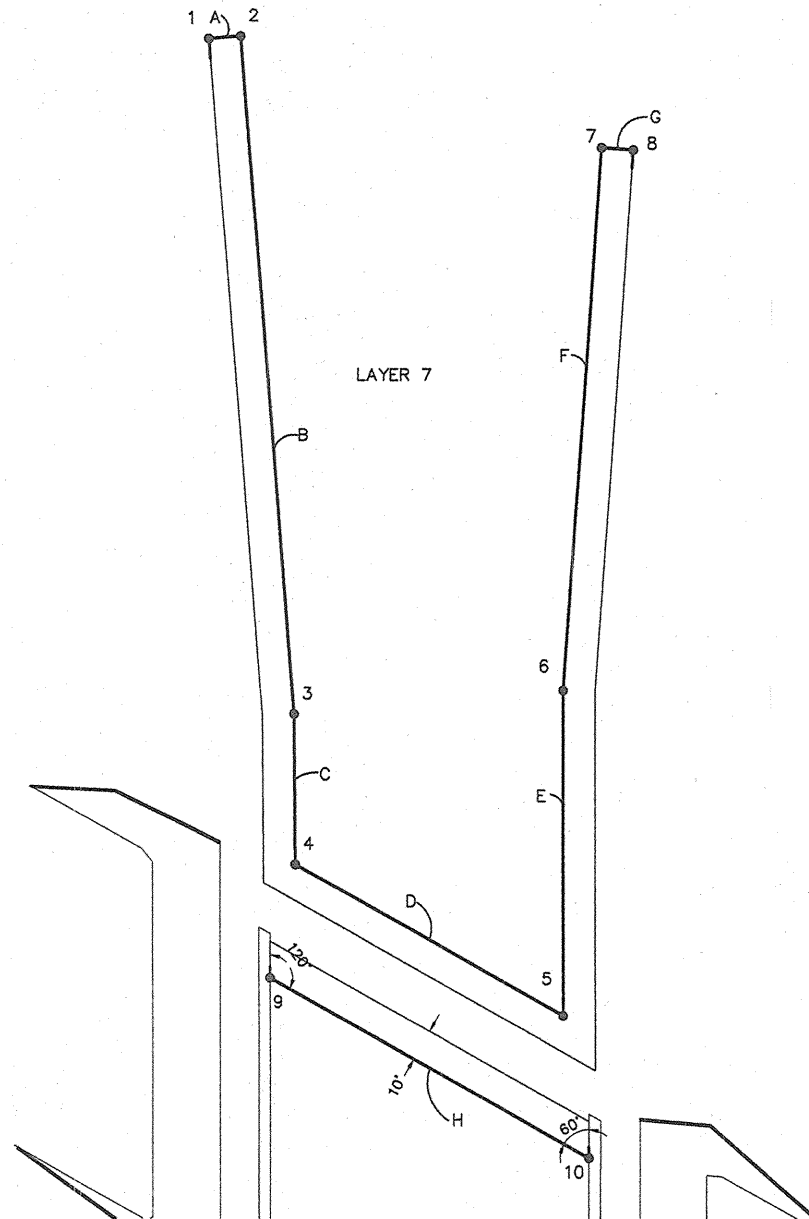


SURVEY INFORMATION	
FIELD NOTES	
NO.	
DATE	
BY	
ENGINEER'S SEAL	
ELO	
EEA	
BY	
DATE	
REVISIONS	
NO.	
DATE	
BY	
REASON	
WILSON & COMPANY, ENGINEERS & ARCHITECTS	
DESIGNED BY	EEA
DATE	NOV 2005
DRAWN BY	STAFF
DATE	NOV 2005
CHECKED BY	EEA
DATE	NOV 2005

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 LAYER DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 3-16	Of 3
WILSON & COMPANY			

X:\Public\PROJECTS\X221001202\T\2012DTL04.dwg 8/31/2006 11:10:30 AM MDT

3/7 LAYERS 7 THRU 11 NORTH

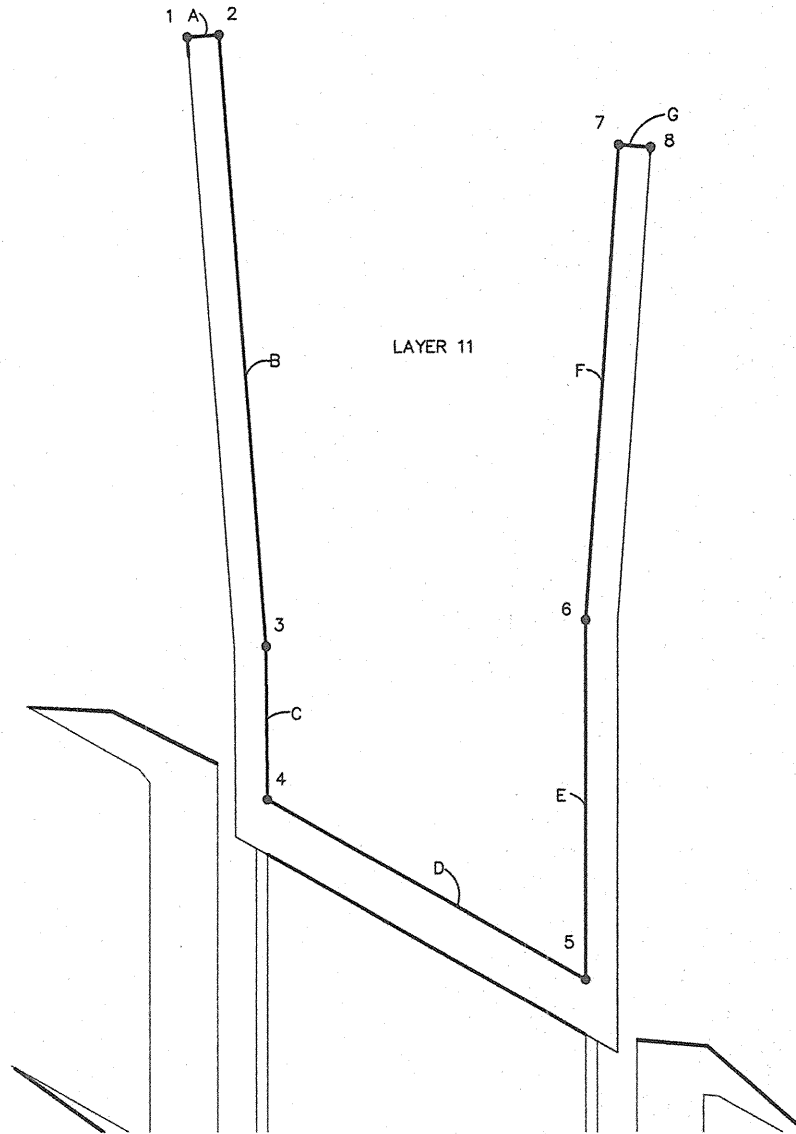


3/7

POINT TABLE LAYER 7		
POINT	NORTHING	EASTING
1	1533762.2976	359749.8025
2	1533769.9242	359756.2706
3	1533631.1854	359919.6964
4	1533597.8666	359953.7938
5	1533623.8330	360046.4507
6	1533696.3285	359973.4506
7	1533825.6846	359860.3635
8	1533832.2701	359867.8883
9	1533567.0482	359973.5268
10	1533597.9658	360083.8511

3/7

DIMENSION TABLE										
LAYER	A	B	C	D	E	F	G	H	ELEV	VOLUME(CY)
7	10'	214.37'	47.67'	96.23'	102.88'	171.82'	10'	114.57'	5349	285.10
8	10'	209.12'	47.94'	100.82'	105.52'	166.47'	10'	114.57'	5350	283.95
9	10'	203.88'	48.20'	105.40'	108.17'	161.11'	10'	114.57'	5351	282.79
10	10'	198.63'	48.46'	109.98'	110.81'	155.76'	10'	114.57'	5352	281.64
11	10'	193.38'	48.72'	114.57'	113.47'	150.39'	10'		5353	263.62

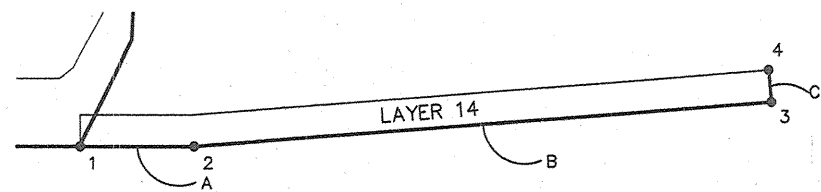


3/7

POINT TABLE LAYER 11		
POINT	NORTHING	EASTING
1	1533740.6730	359762.9318
2	1533748.2996	359769.3998
3	1533622.9664	359916.6608
4	1533588.9171	359951.5057
5	1533619.8347	360061.8299
6	1533699.7878	359981.3204
7	1533812.8887	359882.1910
8	1533819.4628	359889.7258

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 LAYER DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 3-17	Of 3
WILSON & COMPANY			

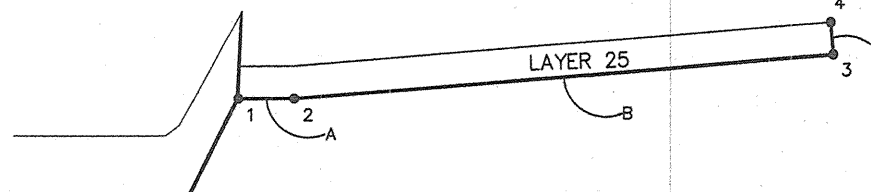
ENGINEER'S SEAL		SURVEY INFORMATION		AS-BUILT INFORMATION	
		FIELD NOTES		CONTRACTOR David Montoya, Const. Inc.	
8-31-06 REVISED STRUCTURE		NO.		THE STA. IS A USGS TABLET STAMPED 'BLACK-2 1977' SET	
5-30-06 REVISED STRUCTURE		BY		FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W.	
REVISED SHEET STRUCTURE MOD.		DATE		OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX.	
NO. DATE		DATE		OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE	
REVISIONS		DATE		BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO	
WILSON & COMPANY, ENGINEERS & ARCHITECTS		DATE		GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD.	
DESIGNED BY EEA		DATE		1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	
DRAWN BY STAFF		DATE		N 1530241.52, E 372920.43	
CHECKED BY EEA		DATE		ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	



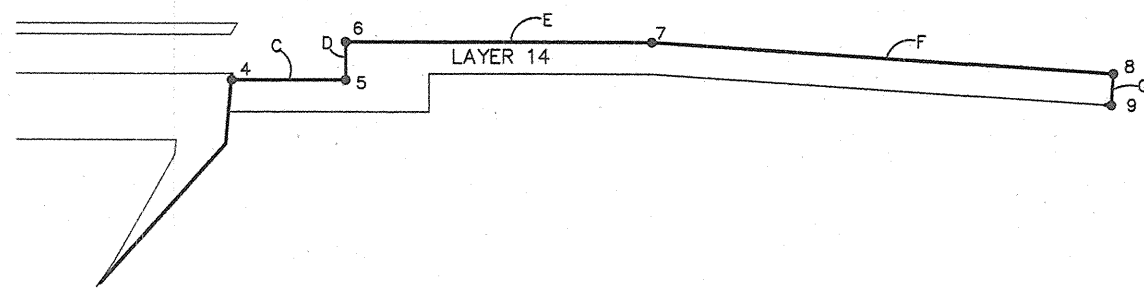
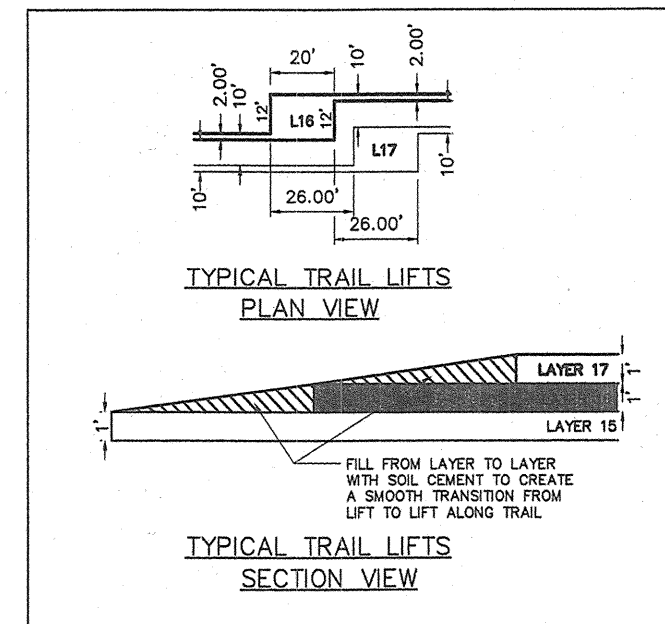
POINT	NORTHING	EASTING
1	1533586.1600	359932.0746
2	1533611.2516	359906.8017
3	1533728.6042	359768.4307
4	1533720.9777	359761.9627

LAYER	A	B	C	ELEV	VOLUME(CY)
14	35.62'	181.43'	10'	5356	80.28
15	33.65'	180.67'	10'	5357	79.31
16	32.03'	179.56'	10'	5358	78.29
17	30.41'	178.44'	10'	5359	77.28
18	28.80'	177.32'	10'	5360	76.27
19	27.18'	176.20'	10'	5361	75.26
20	25.56'	175.09'	10'	5362	74.24
21	23.94'	173.97'	10'	5363	73.23
22	22.33'	172.85'	10'	5364	72.30
23	20.71'	171.73'	10'	5365	71.34
24	19.09'	170.61'	10'	5366	70.60
25	17.47'	169.50'	10'	5367	70.02

△ LAYERS 14 THRU 23 NORTH
WESTSIDE OF ARROYO



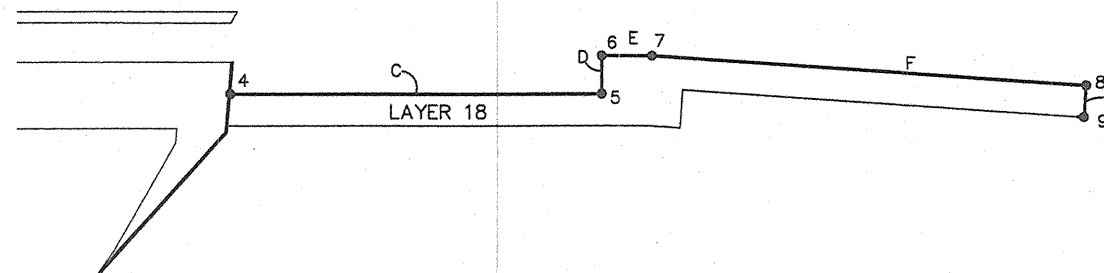
POINT	NORTHING	EASTING
1	1533574.3779	359897.1326
2	1533586.6904	359884.7421
3	1533696.3218	359755.4753
4	1533688.6952	359749.0072



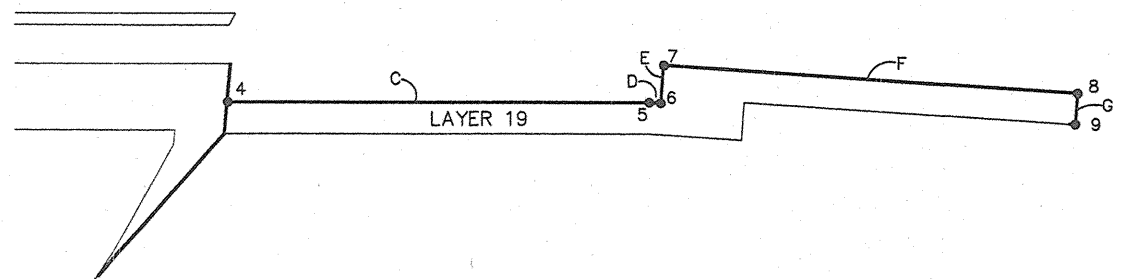
POINT	NORTHING	EASTING
4	1533619.2999	360087.9131
5	1533644.5092	360062.5283
6	1533635.9945	360054.0725
7	1533703.4592	359986.1383
8	1533812.3127	359890.6603
9	1533818.9010	359898.1832

LAYER	C	D	E	F	G	ELEV	VOLUME(CY)
14	35.76'	12'	95.74'	144.79'	10'	5356	113.92
15	55.95'	12'	75.68'	142.71'	10'	5357	113.19
16	76.12'	12'	55.76'	140.48'	10'	5358	112.46
17	96.29'	12'	35.72'	138.39'	10'	5359	111.73
18	116.46'	12'	15.66'	136.30'	10'	5360	110.51

△ LAYERS 14 THRU 18 NORTH
EASTSIDE OF ARROYO



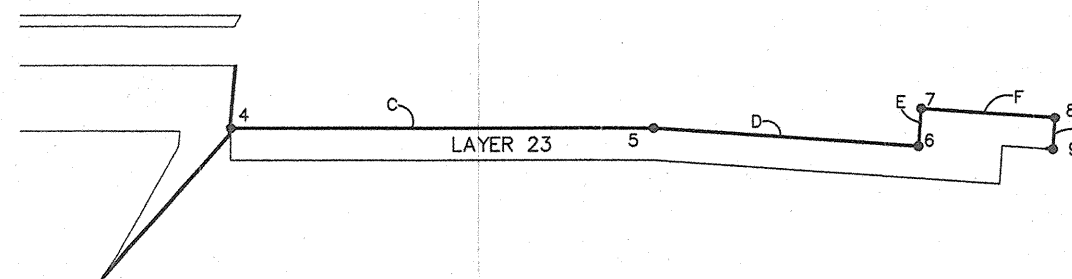
POINT	NORTHING	EASTING
4	1533624.4927	360094.0373
5	1533706.5577	360011.4011
6	1533698.0430	360002.9453
7	1533709.0788	359991.8327
8	1533811.5476	359901.9549
9	1533818.1359	359909.4778



POINT	NORTHING	EASTING
4	1533625.7909	360095.5683
5	1533718.7783	360001.9337
6	1533721.5664	359999.4882
7	1533713.6535	359990.4668
8	1533811.3514	359904.7736
9	1533817.9397	359912.2966

LAYER	C	D	E	F	G	ELEV	VOLUME(CY)
19	131.96'	3.71'	12'	129.95'	10'	5361	109.97
20	132.09'	23.62'	12'	107.95'	10'	5362	108.23'
21	132.20'	43.54'	12'	85.94'	10'	5363	108.50'
22	132.46'	63.32'	12'	53.94'	10'	5364	107.44'
23	132.58'	83.23'	12'	41.93'	10'	5365	107.04

△ LAYERS 19 THRU 23 NORTH
EASTSIDE OF ARROYO

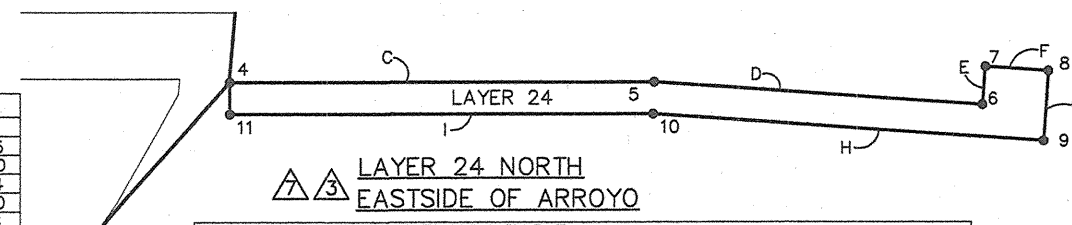


POINT	NORTHING	EASTING
4	1533630.9837	360101.6925
5	1533724.4071	360007.6189
6	1533786.9751	359952.7390
7	1533779.0622	359943.7176
8	1533810.5850	359916.0682
9	1533817.1733	359923.5912

POINT	NORTHING	EASTING
4	1533632.2819	360103.2235
5	1533725.7777	360009.0770
6	1533803.3296	359941.0544
7	1533795.4167	359932.0330
8	1533810.3991	359918.8916
9	1533824.8933	359935.4421
10	1533732.6306	360016.3679
11	1533639.3774	360110.2700

LAYER	C	D	E	F	G	H	I	ELEV	VOLUME(CY)
24	132.68'	103.16'	12'	19.93'	22.00'	122.72'	132.34'	5366	103.45

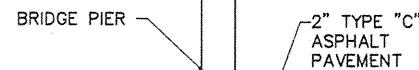
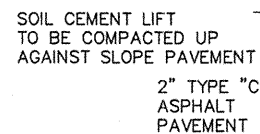
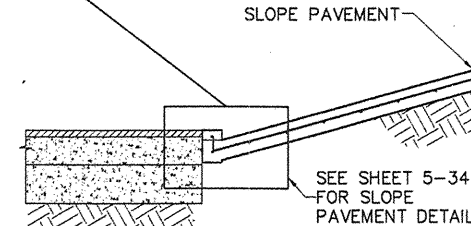
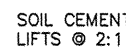
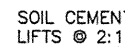
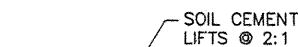
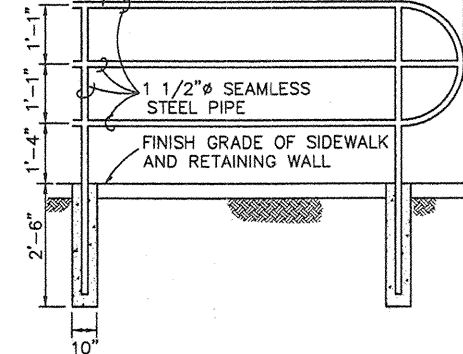
△ LAYER 24 NORTH
EASTSIDE OF ARROYO



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE 3 LAYER DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602		Zone Map No. A-10-Z	Sheet 3-18

WILSON
& COMPANY

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DAVID MONTANA Const. Inc.	THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SE"	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DATE	NO.	DATE	NO.
DESIGNED BY	DAVID MONTANA	DATE	NO.	DATE	NO.	DATE	NO.
CHECKED BY	DAVID MONTANA	DATE	NO.	DATE	NO.	DATE	NO.
RECORDED BY	DAVID MONTANA	DATE	NO.	DATE	NO.	DATE	NO.
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)							


$$Z$$
 z/ρ  N^+  $\frac{1}{N}$ 
$$\frac{1}{N}$$

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1

BENCH MARKS	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SET"	AS-BUILT INFORMATION
FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N. ON	CONTRACTOR David Mermoyea Const. Inc.
FOR F DOWN THE ALBUQU. TO REACH THE STA. FROM THE INTX	INSPECTED BY Billingsley Engr
OF COORS/-40 CO. N. ON COORS 5.8 MI. TO PARADISE.	DATE DATE
W/ND. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO	FIELD LOCATION BY COA/LWCI
W/ND. COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD	RECORDED BY WCI
3.3 MI. TO MCMAHON BLVD. THE STA. IS ON THE LEFT.	DATE 3/67
	MICRO-FILM INFORMATION
	RECORDED BY DATE
	NO.
ELEVATION = 521.3926 FT. (2ND ORDER) (NGVD29)	

[illegible]

ELIAS E. ARCHULETA
NEW MEXICO
15781
REGISTERED PROFESSIONAL ENGINEER

[illegible]

 CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION-CALABACILLAS BRIDGE GRADE CONTROL STRUCTURE DETAILS			
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.
			Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	3-19	

DRAWINGS REQUIRED

- 5-1 GENERAL NOTES & ESTIMATED QUANTITIES
- 5-2 STRUCTURE LOCATION PROFILE
- 5-3 STRUCTURE LOCATION PLAN
- 5-4 FOUNDATION DATA
- 5-5 TYPICAL SECTION
- 5-6 MEDIAN DETAILS
- 5-7 FRAMING PLAN AND LONGITUDINAL SECTION
- 5-8 DECK REINFORCEMENT PLAN
- 5-9 STEEL DIAPHRAGM DETAILS
- 5-10 SEAT ELEVATIONS
- 5-11 DECK ELEVATIONS
- 5-12 PSC GIRDER TYPE BT-63, SPANS 1 & 3
- 5-13 PSC GIRDER TYPE BT-63, SPAN 2
- 5-14 ELASTOMERIC BEARING DETAILS
- 5-15 ABUTMENT NO.1 PLAN AND ELEVATION
- 5-16 ABUTMENT NO.2 PLAN AND ELEVATION
- 5-17 ABUTMENT DETAILS
- 5-18 APPROACH SLAB
- 5-19 APPROACH SLAB SLEEPER SLAB
- 5-20 WINGWALL DETAILS
- 5-21 PIER PLAN AND ELEVATION
- 5-22 PIER DETAILS
- 5-23 PIER DETAILS
- 5-24 DRILLED SHAFT DETAILS
- 5-25 REBAR DIAGRAM AND SCHEDULE
- 5-26 ELASTOMERIC EXPANSION JOINT SEAL, GENERAL DATA
- 5-27 ELASTOMERIC EXP. JOINT SEAL, TYPE "A" INSTALLATION
- 5-28 ELASTOMERIC EXP. JOINT SEAL, TYPE "B" INSTALLATION
- 5-29 32" BARRIER RAILING GENERAL DETAILS
- 5-30 32" BARRIER RAILING STANDARD SECTION DETAILS
- 5-31 32" BARRIER RAILING TRANSITION SECTION DETAILS
- 5-32 32" BARRIER RAILING DETAILS AT JOINT SEALS
- 5-33 DOWEL ASSEMBLY DETAILS FOR EXPANSION JOINTS 32" BARRIER RAILING
- 5-34 SLOPE PAVEMENT DETAIL AT BRIDGE
- 5-35 METAL PEDESTRIAN RAILING DETAILS

GENERAL NOTES

- 1. SPECIFICATIONS FOR CONSTRUCTION: CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 WITH UPDATES, AND APPLICABLE SUPPLEMENTAL TECHNICAL SPECIFICATIONS.
- 2. DRILL-HOLE INFORMATION: THE PROJECT ENGINEER IS NOT RESPONSIBLE FOR ANY INTERPRETATION OR ASSUMPTIONS MADE BY THE CONTRACTOR BASED ON THE DRILL-HOLE INFORMATION SHOWN ON THE PLANS.
- 3. CONCRETE: PER SECTION 101. CHAMFER ALL EXPOSED EDGES OF STRUCTURES 3/4" UNLESS OTHERWISE NOTED.
- 4. FINISHING CONCRETE SURFACES: THE FOLLOWING SURFACES HAVE COLOR REQUIREMENTS:
 - A. 32" BARRIER RAILING
 - B. METAL RAILING
 - C. MEDIAN
 - D. SIDEWALKS
 - E. EXTERIOR FACE OF FASCIA GIRDERS
 - F. PIERS ABOVE GROUNDLINE
 - G. ABUTMENTS AND WINGWALLS ABOVE GROUNDLINECOORDINATE COLOR REQUIREMENTS WITH CITY PROJECT ENGINEER. SUBMIT A 1-FT. SQUARE SAMPLE PANEL FOR EACH PROPOSED COLOR FOR APPROVAL PRIOR TO USE.
- 5. REINFORCING BARS: AASHTO M 31, GRADE 60. DIMENSIONS SHOWN REFER TO THE CENTERLINE OF BARS UNLESS OTHERWISE NOTED.
- 6. STRUCTURAL STEEL:
 - COMPONENT ALL
 - GRADE AASHTO M 270, GRADE 50

- 7. PRESTRESSED CONCRETE GIRDER TYPE BT-63; SEE SHEETS 5-12 AND 5-13.
- 8. BRIDGE NUMBER PLATE: FURNISH 2 BRIDGE NUMBER PLATES CONFORMING TO THE DETAILS SHOWN. THE COST OF THE PLATES IS INCIDENTAL TO CONSTRUCTION AND WILL NOT BE PAID FOR DIRECTLY.
- 9. PERMANENT ANTI-GRAFFITI PROTECTIVE COATING: APPLY TO THE FOLLOWING SURFACES:
 - A. BRIDGE CONCRETE BARRIER RAILINGS.
 - B. EXTERIOR EDGES OF SIDEWALKS.
 - C. EXTERIOR SURFACES OF EXTERIOR BEAMS.
 - D. EXTERIOR SURFACES OF ABUTMENTS, WINGWALLS, AND PIERS ABOVE THE GRADE LINE.
- 10. STAY-IN-PLACE DECK FORMS: PERMANENT STEEL DECK FORMS MAY BE USED FOR BRIDGE DECK CONSTRUCTION. SUBMIT DESIGN CALCULATIONS AND SPECIFICATIONS FOR THE PROPOSED FORMING SYSTEM TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

DESIGN DATA

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH (2002) EDITION.

DESIGN STRESSES:
SUPERSTRUCTURE REINFORCED CONCRETE: $f'_c = 4000$ PSI (28 DAYS)
SUBSTRUCTURE REINFORCED CONCRETE: $f'_c = 3000$ PSI (28 DAYS)
REINFORCING STEEL: $f_y = 60000$ PSI

LIVE LOAD: HS25-44

WEARING SURFACE: 30 PSF ALLOWANCE FOR FUTURE WEARING SURFACE

STAY-IN-PLACE DECK FORMS: 15 PSF

WIND VELOCITY: 75 MPH

SEISMIC PERFORMANCE CATEGORY (SPC): B

HORIZONTAL EARTH PRESSURES (EQUIV. FLUID PRESSURES):
ACTIVE PRESSURE: 30 PSF/FT
AT-REST PRESSURE: 50 PSF/FT
PASSIVE PRESSURE: 60 PSF/FT

GEOTECHNICAL INVESTIGATION:
FINAL GEOTECHNICAL ENGINEERING STUDY REPORT
McMAHON BOULEVARD BRIDGE OVER CALABACILLAS ARROYO,
ALBUQUERQUE, NEW MEXICO
BY: AMEC, INC.
AMCE PROJECT NO. 4-517-000094
DATE: OCTOBER 2005

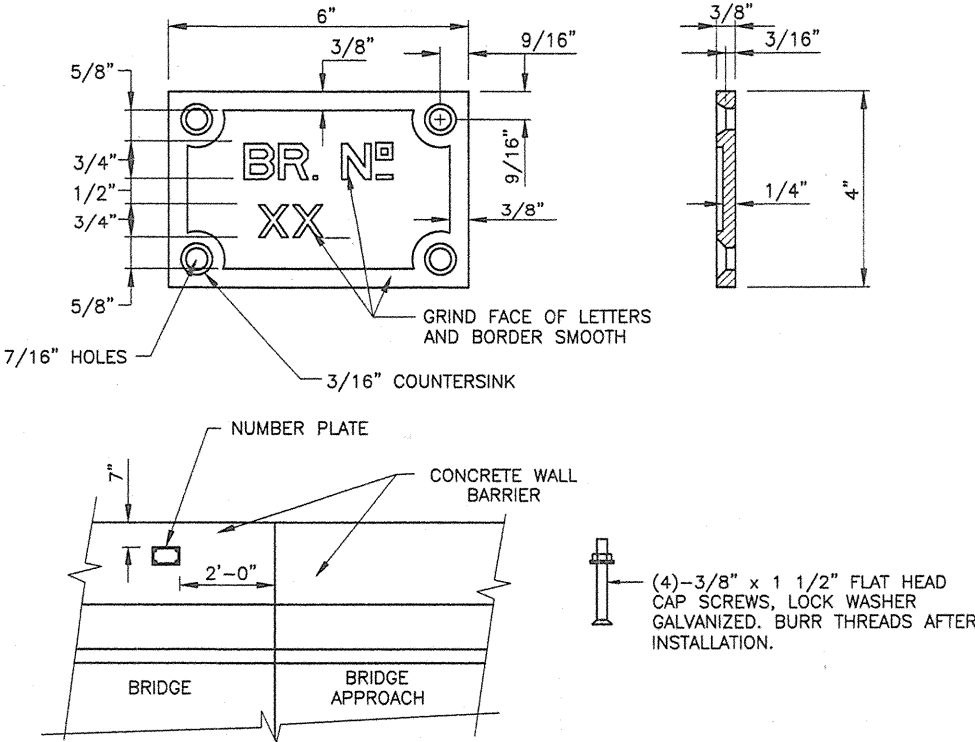
SUPPLEMENTAL SPECIFICATIONS

- SECTION 5 - STRUCTURAL CONCRETE
- SECTION 555 - STRUCTURE EXCAVATION AND BACKFILL FOR BRIDGES
- SECTION 562 - CONCRETE DRILLED SHAFTS
- SECTION 581 - ELASTOMERIC EXPANSION JOINT SEAL
- SECTION 585 - SEALED EXPANSION JOINTS
- SECTION 590 - PENETRATING WATER REPELLENT TREATMENT
- SECTION 591 - CRACK SEALING USING HIGH MOLECULAR WEIGHT METHACRYLATE
- SECTION 592 - PERMANENT ANTI-GRAFFITI PROTECTIVE COATING (SEE SUPPLEMENTAL TECHNICAL SPECIFICATIONS IN CONTRACT DOCUMENTS)

INCIDENTAL ITEMS

- 1. PERMANENT ANTI-GRAFFITI PROTECTIVE COATING
- 2. PREFORMED BITUMINOUS JOINT FILLER (M213)
- 3. BRIDGE NUMBER PLATES
- 4. ELASTOMERIC BEARING PADS
- 5. HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM)
- 6. ABUTMENT WATERPROOFING SYSTEM
- 7. PREFABRICATED COMPOSITE DRAINAGE SYSTEM
- 8. GALVANIZED SHEET METAL, 16 GA.
- 9. WATERSTOP AND ITS APPURTENANCES

NOTE:
ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE INCIDENTAL WORK OR MATERIALS REQUIRED BY STANDARD DRAWINGS, SUPPLEMENTAL TECHNICAL SPECIFICATIONS OR THE STANDARD SPECIFICATIONS.



PARTIAL ELEVATION

- NOTES:
- 1. TWO (2) PLATES WITH BOLTS REQUIRED FOR EACH BRIDGE. MATERIAL EQUALS CAST IRON. RAISED BLOCK LETTERS OF NEAT SQUARE CUT DESIGN. GRIND FACE, & HOT DIPPED GALV.
 - 2. EACH PLATE IS TO BE PLACED AT EACH END OF THE BRIDGE ON THE ROADWAY FACE OF THE CONCRETE BARRIER RAILING AT THE END OF THE DECK. LOCATE ON RIGHT SIDE AS ONE APPROACHES BRIDGE.

BRIDGE NUMBER PLATE DETAILS

ESTIMATED QUANTITIES										
ITEM NO.	ITEM	UNIT	SUPER-STRUCTURE	SUBSTRUCTURE						TOTAL
				APPR. SLAB NO. 1	ABUT. NO. 1	PIER NO. 1	PIER NO. 2	ABUT. NO 2	APPR. SLAB NO. 2	
102.010	REINFORCING BARS, GRADE 60	LB				34684	34684			69368
103.010	EPOXY COATED REINFORCING BARS, GRADE 60	LB	189888	10504	6917	2040	2040	6917	10504	228810
510.010	SUPERSTRUCTURE CONCRETE	CY	613.0	66.0	90.0	76.0	76.0	90.0	66.0	1077.0
510.020	SUBSTRUCTURE CONCRETE CLASS A	CY			58.0	247.0	247.0	58.0		610.0
510.030	32" CONCRETE BARRIER	LF	469.2							469.2
510.040	CONCRETE SLOPE PAVING	SY			741			666		1407
512.010	PRESTRESSED CONCRETE GIRDERS, BT-63	LF	2432.0							2432.0
520.010	STRUCTURAL STEEL FOR CONCRETE BRIDGES	LB	20549.0							20549.0
540.040	METAL PEDESTRIAN RAILING	LF	469.2							469.2
555.010	STRUCT. EXCAVATION AND BACKFILL FOR BRIDGES	CY		242	249			221	242	954
561.010	DRILLED SHAFTS, 42" DIAMETER	EA			1	2	2	1		6
562.010	DRILLED SHAFTS, 42" DIAMETER	LF			252.0			252.0		504.0
562.014	DRILLED SHAFTS, 72" DIAMETER	LF				280.0	280.0			560.0
581.010	ELASTOMERIC EXPANSION JOINT SEALS	LF		114.0					114.0	228.0
585.010	SEALED EXPANSION JOINTS	LF	463.0	109.0					109.0	681.0

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE			
GENERAL NOTES & ESTIMATED QUANTITIES			
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.
City Project No. COA 681602		Zone Map No. A-10-Z	Sheet 5-1 Of

WILSON & COMPANY

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APPENDIX #1
ATTACHMENT #2 SHEET 3 OF 16

DRAWINGS REQUIRED

- 5-1 GENERAL NOTES & ESTIMATED QUANTITIES
- 5-2 STRUCTURE LOCATION PROFILE
- 5-3 STRUCTURE LOCATION PLAN
- 5-4 FOUNDATION DATA
- 5-5 TYPICAL SECTION
- 5-6 MEDIAN DETAILS
- 5-7 FRAMING PLAN AND LONGITUDINAL SECTION
- 5-8 DECK REINFORCEMENT PLAN
- 5-9 STEEL DIAPHRAGM DETAILS
- 5-10 SEAT ELEVATIONS
- 5-11 DECK ELEVATIONS
- 5-12 PSC GIRDER TYPE BT-63, SPANS 1 & 3
- 5-13 PSC GIRDER TYPE BT-63, SPAN 2
- 5-14 ELASTOMERIC BEARING DETAILS
- 5-15 ABUTMENT NO.1 PLAN AND ELEVATION
- 5-16 ABUTMENT NO.2 PLAN AND ELEVATION
- 5-17 ABUTMENT DETAILS
- 5-18 APPROACH SLAB
- 5-19 APPROACH SLAB SLEEPER SLAB
- 5-20 WINGWALL DETAILS
- 5-21 PIER PLAN AND ELEVATION
- 5-22 PIER DETAILS
- 5-23 PIER DETAILS
- 5-24 DRILLED SHAFT DETAILS
- 5-25 REBAR DIAGRAM AND SCHEDULE
- 5-26 ELASTOMERIC EXPANSION JOINT SEAL, GENERAL DATA
- 5-27 ELASTOMERIC EXP. JOINT SEAL, TYPE "A" INSTALLATION
- 5-28 ELASTOMERIC EXP. JOINT SEAL, TYPE "B" INSTALLATION
- 5-29 32" BARRIER RAILING GENERAL DETAILS
- 5-30 32" BARRIER RAILING STANDARD SECTION DETAILS
- 5-31 32" BARRIER RAILING TRANSITION SECTION DETAILS
- 5-32 32" BARRIER RAILING DETAILS AT JOINT SEALS
- 5-33 DOWEL ASSEMBLY DETAILS FOR EXPANSION JOINTS 32" BARRIER RAILING
- 5-34 SLOPE PAVEMENT DETAIL AT BRIDGE
- 5-35 METAL PEDESTRIAN RAILING DETAILS

GENERAL NOTES

- 1. SPECIFICATIONS FOR CONSTRUCTION: CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 WITH UPDATES, AND APPLICABLE SUPPLEMENTAL TECHNICAL SPECIFICATIONS.
- 2. DRILL-HOLE INFORMATION: THE PROJECT ENGINEER IS NOT RESPONSIBLE FOR ANY INTERPRETATION OR ASSUMPTIONS MADE BY THE CONTRACTOR BASED ON THE DRILL-HOLE INFORMATION SHOWN ON THE PLANS.
- 3. CONCRETE: PER SECTION 101. CHAMFER ALL EXPOSED EDGES OF STRUCTURES 3/4" UNLESS OTHERWISE NOTED.
- 4. FINISHING CONCRETE SURFACES: THE FOLLOWING SURFACES HAVE COLOR REQUIREMENTS:
 - A. 32" BARRIER RAILING
 - B. METAL RAILING
 - C. MEDIAN
 - D. SIDEWALKS
 - E. EXTERIOR FACE OF FASCIA GIRDERS
 - F. PIERS ABOVE GROUNDLINE
 - G. ABUTMENTS AND WINGWALLS ABOVE GROUNDLINECOORDINATE COLOR REQUIREMENTS WITH CITY PROJECT ENGINEER. SUBMIT A 1-FT. SQUARE SAMPLE PANEL FOR EACH PROPOSED COLOR FOR APPROVAL PRIOR TO USE.
- 5. REINFORCING BARS: AASHTO M 31, GRADE 60. DIMENSIONS SHOWN REFER TO THE CENTERLINE OF BARS UNLESS OTHERWISE NOTED.

ADD NOTE ON REINFORCING SPLICE LENGTHS.
- 6. STRUCTURAL STEEL:

COMPONENT	GRADE
ALL	AASHTO M 270, GRADE 50

- 7. PRESTRESSED CONCRETE GIRDER, TYPE BT-63: SEE SHEETS 5-12 AND 5-13.
- 8. BRIDGE NUMBER PLATE: FURNISH 2 BRIDGE NUMBER PLATES CONFORMING TO THE DETAILS SHOWN. THE COST OF THE PLATES IS INCIDENTAL TO CONSTRUCTION AND WILL NOT BE PAID FOR DIRECTLY.
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SUBSTRUCTURE REINFORCED CONCRETE: $f'_c = 3000$ PSI (28 DAYS)
REINFORCING STEEL: $f_y = 60000$ PSI

LIVE LOAD: HS25-44

WEARING SURFACE: 30 PSF ALLOWANCE FOR FUTURE WEARING SURFACE

STAY-IN-PLACE DECK FORMS: 15 PSF

WIND VELOCITY: 75 MPH

SEISMIC PERFORMANCE CATEGORY (SPC): B

HORIZONTAL EARTH PRESSURES (EQUIV. FLUID PRESSURES):
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AT-REST PRESSURE: 50 PSF/FT
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GEOTECHNICAL INVESTIGATION:
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ALBUQUERQUE, NEW MEXICO
BY: AMEC, INC.
AMEC PROJECT NO. 4-517-000094
DATE: OCTOBER 2005

SUPPLEMENTAL SPECIFICATIONS

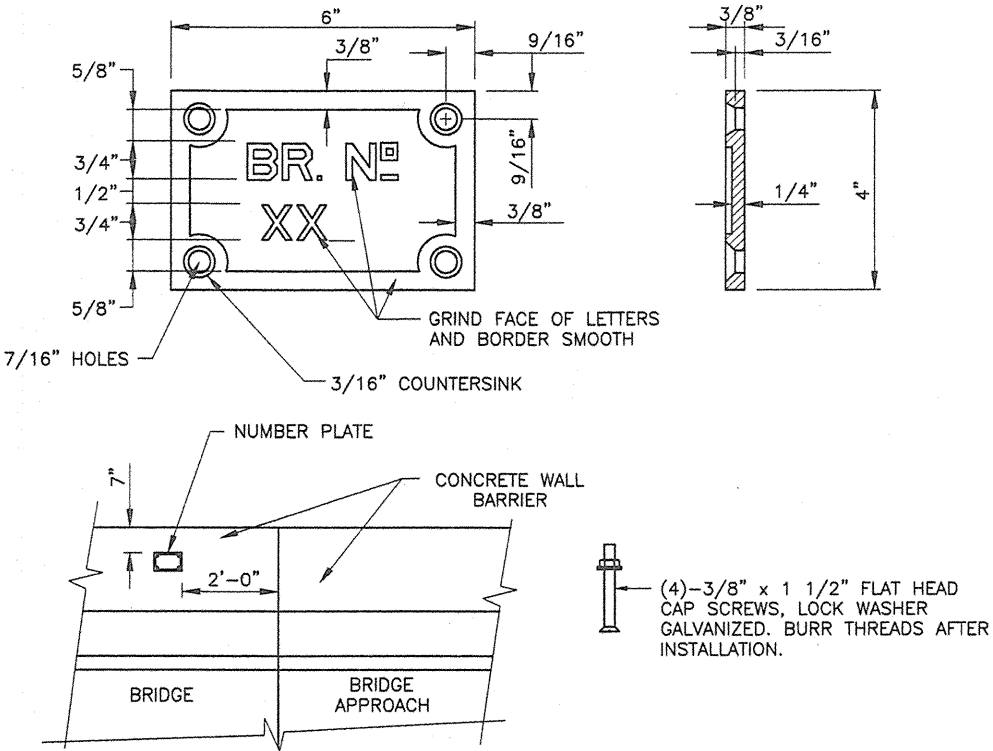
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- SECTION 590 - PENETRATING WATER REPELLENT TREATMENT
- SECTION 591 - CRACK SEALING USING HIGH MOLECULAR WEIGHT METHACRYLATE
- SECTION 592 - PERMANENT ANTI-GRAFFITI PROTECTIVE COATING (SEE SUPPLEMENTAL TECHNICAL SPECIFICATIONS IN CONTRACT DOCUMENTS)

INCIDENTAL ITEMS

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ESTIMATED QUANTITIES									
ITEM NO.	ITEM	UNIT	SUPER-STRUCTURE	SUBSTRUCTURE					TOTAL
				APPR. SLAB NO. 1	ABUT. NO. 1	PIER NO. 1	PIER NO. 2	ABUT. NO. 2	APPR. SLAB NO. 2
102.010	REINFORCING BARS, GRADE 60	LB				34684	34684		69368
103.010	EPOXY COATED REINFORCING BARS, GRADE 60	LB	189888	10504	6917	2040	2040	6917	228810
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510.040	CONCRETE SLOPE PAVING	SY			741			666	1407
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520.010	STRUCTURAL STEEL FOR CONCRETE BRIDGES	LB	20549.0						20549.0
540.040	METAL PEDESTRIAN RAILING	LF	469.2						469.2
555.010	STRUCT. EXCAVATION AND BACKFILL FOR BRIDGES	CY		242	249			221	954
561.010	DRILLED SHAFT INTEGRITY TESTING	EA			1	2	2	1	6
562.010	DRILLED SHAFTS, 48" DIAMETER	LF			252.0			252.0	504.0
562.011	DRILLED SHAFTS, 72" DIAMETER	LF				280.0	280.0		560.0
581.010	ELASTOMERIC EXPANSION JOINT SEALS	LF		114.0					228.0
585.010	SEALED EXPANSION JOINTS	LF	463.0	109.0					681.0



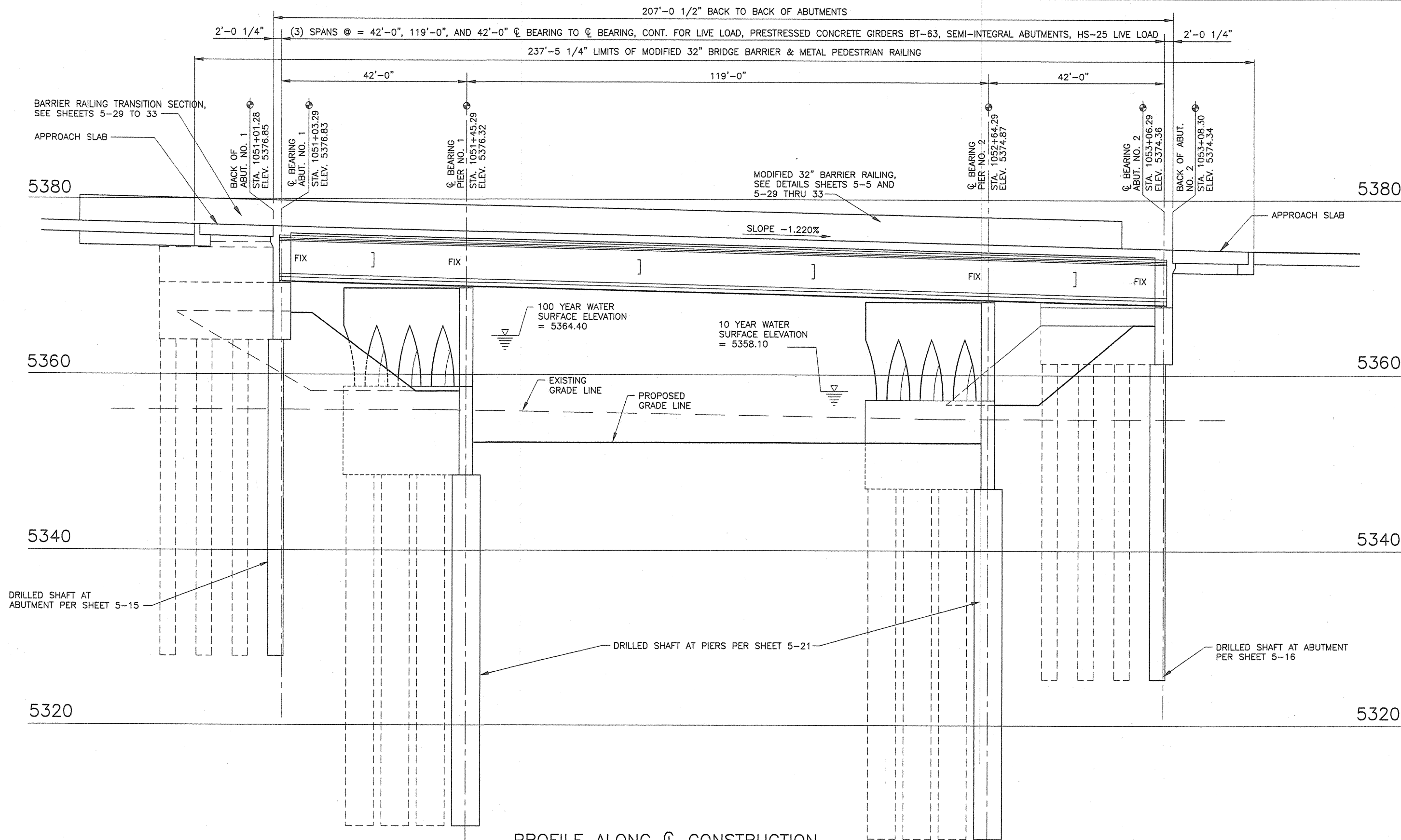
PARTIAL ELEVATION

- NOTES:
- 1. TWO (2) PLATES WITH BOLTS REQUIRED FOR EACH BRIDGE. MATERIAL EQUALS CAST IRON. RAISED BLOCK LETTERS OF NEAT SQUARE CUT DESIGN. GRIND FACE, & HOT DIPPED GALV.
 - 2. EACH PLATE IS TO BE PLACED AT EACH END OF THE BRIDGE ON THE ROADWAY FACE OF THE CONCRETE BARRIER RAILING AT THE END OF THE DECK. LOCATE ON RIGHT SIDE AS ONE APPROACHES BRIDGE.

BRIDGE NUMBER PLATE DETAILS

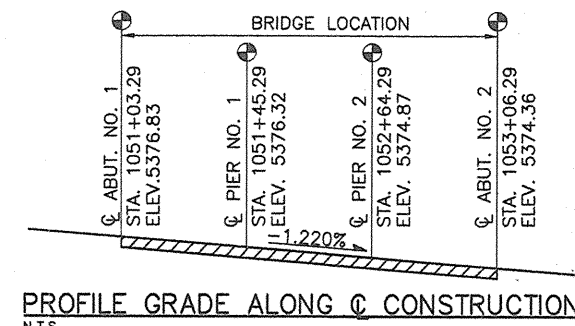
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE			
GENERAL NOTES & ESTIMATED QUANTITIES			
Design Review Committee APPROVED DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER	Mo./Day/Yr. Last Design Update	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-1	Of

WILSON
& COMPANY



PROFILE ALONG @ CONSTRUCTION
SCALE: 3/32" = 1' HORIZONTAL, 3/32" = 2' VERTICAL

WATERWAY DATA	
NAME OF WATERWAY:	ARROYO DE LAS CALABACILLAS
DRAINAGE AREA:	0000 ACRES
10 YEAR DISCHARGE:	9,060 CFS
10 YEAR VELOCITY:	10.0 FPS
10 YEAR SCOUR:	-- FT
100 YEAR DISCHARGE:	16,840 CFS
100 YEAR VELOCITY:	12.2 FPS
100 YEAR SCOUR:	-- FT

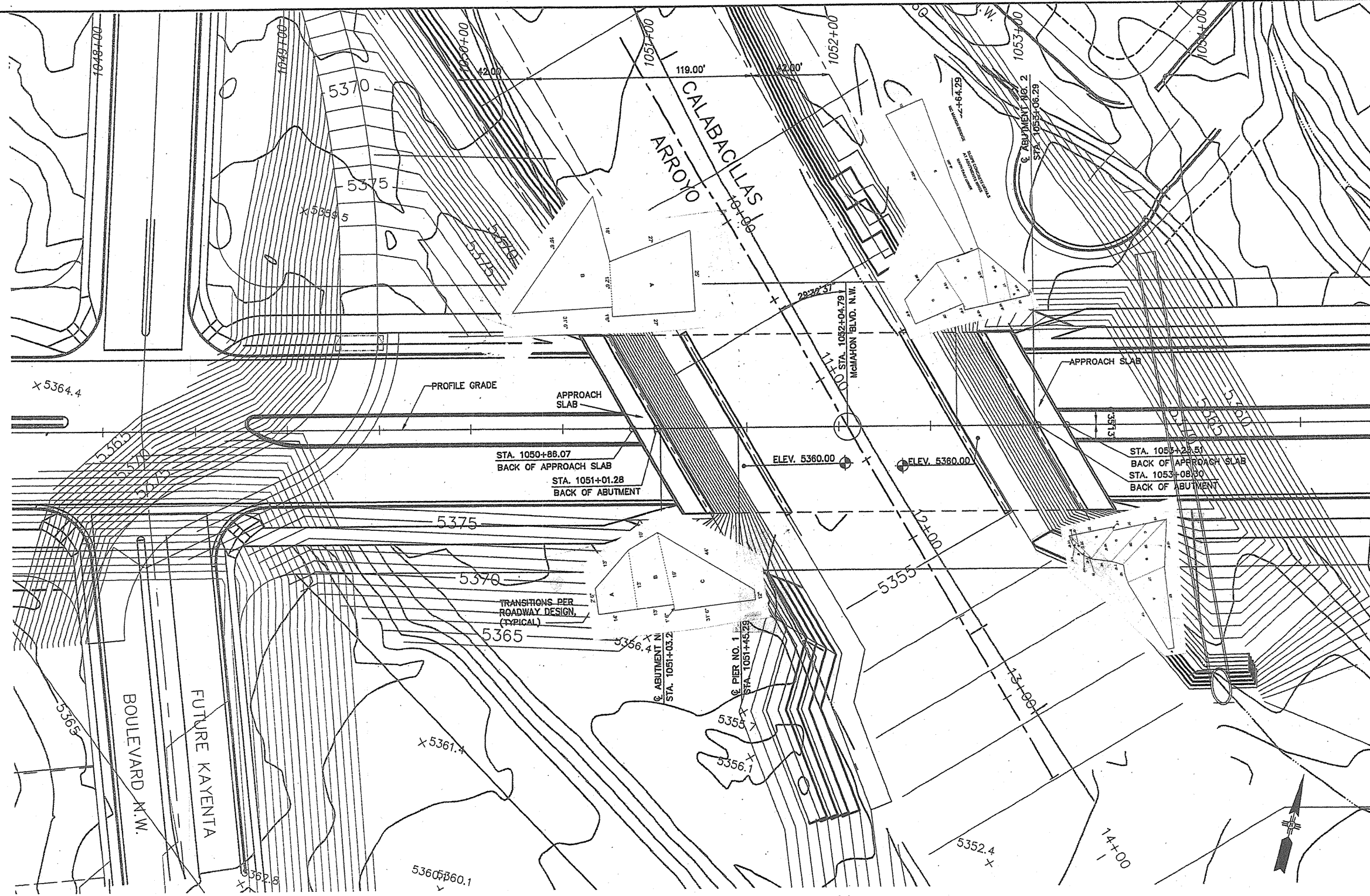


CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE	
STRUCTURAL LOCATION PROFILE	
Design Review Committee APPROVED DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-2	Of 5-2

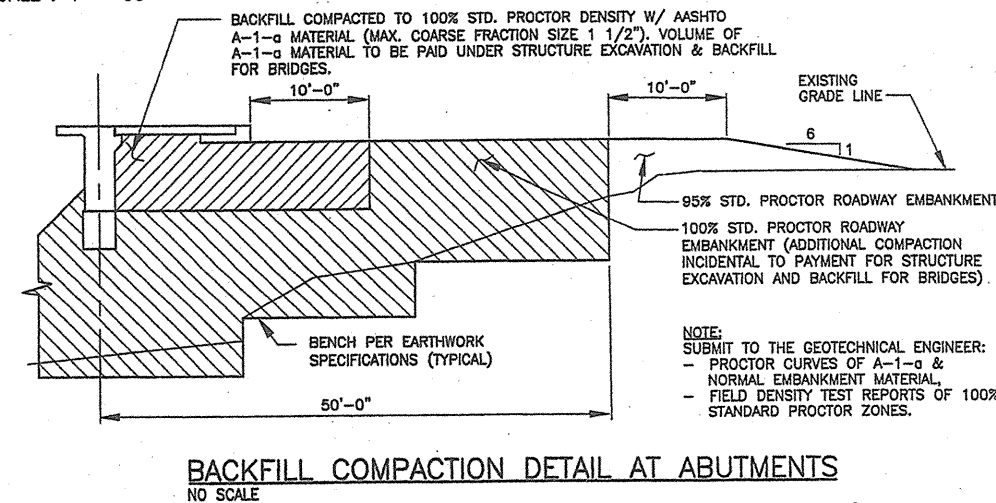
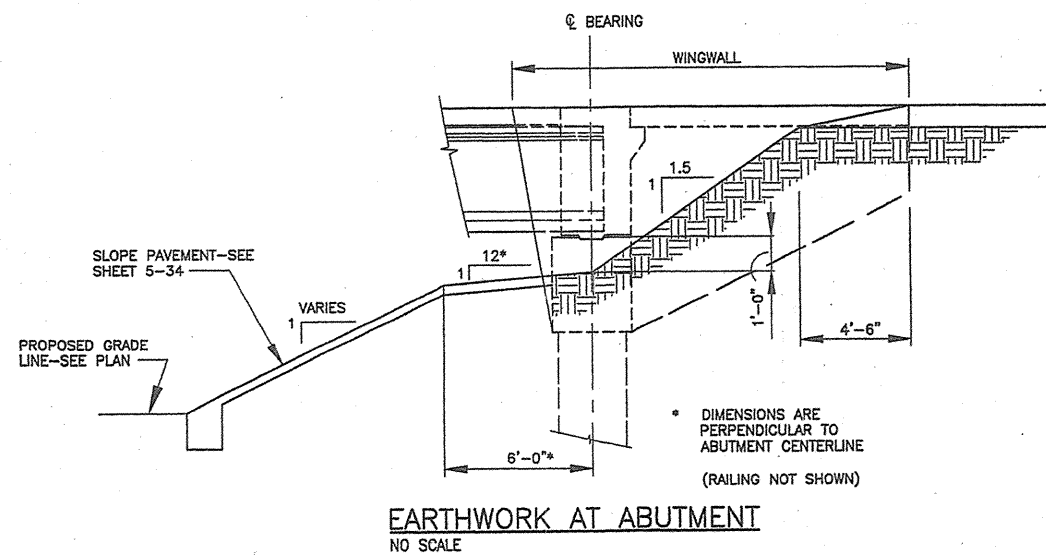
WILSON & COMPANY

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AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR: David Montoya Const. Inc.	DATE: 3/03	THE STA. IS A USGS TABLE STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBU. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	NO.	DATE	BY	NO.	DATE
APPROVED BY: COA/INC1	DATE: 3/03						
REVISIONS	NO. DATE						
DESIGNED BY: WILSON & COMPANY, ENGINEERS & ARCHITECTS	DATE: OCT 2005						
DRAWN BY: CRH	DATE: OCT 2005						
CHECKED BY: SFP	DATE: OCT 2005						



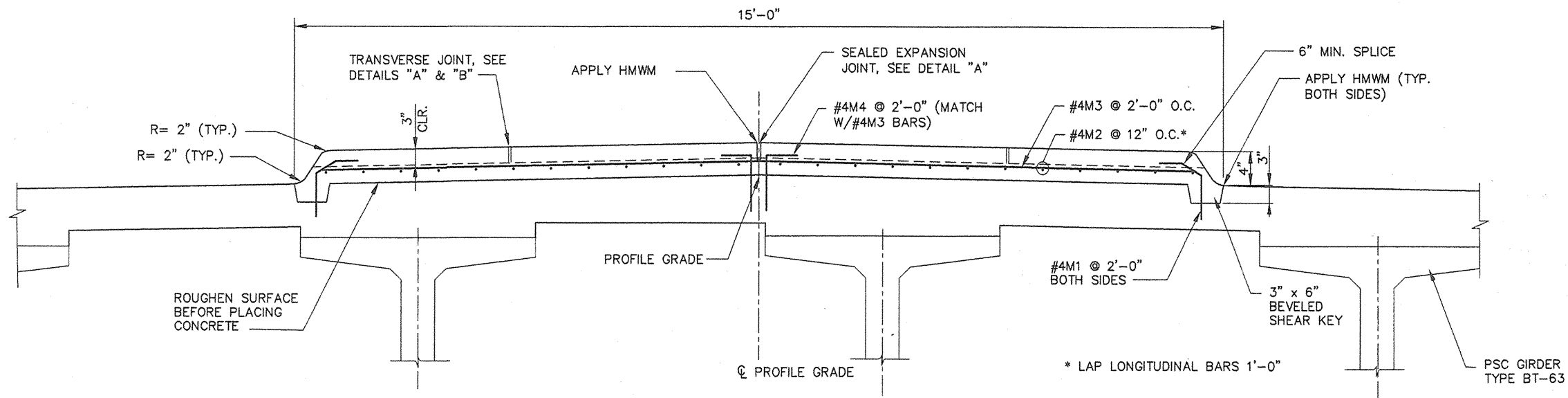
STRUCTURAL LOCATION PLAN
SCALE : 1" = 30'



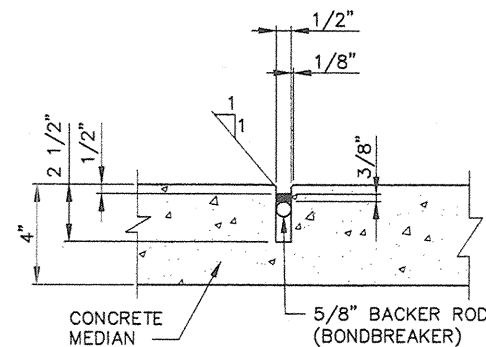
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE STRUCTURAL LOCATION PLAN			
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-3	Of

WILSON & COMPANY

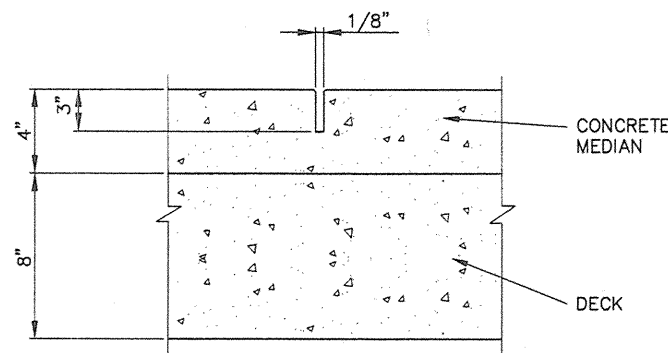
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
		NO.	DATE	THE STA. IS A USGS TABLET STAMPED 'BLACK-2 1977 SE'.	WORK	DATE	CONTRACTOR David Montoya, Const. Inc.
		BY	DATE	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE NTH. OF COORS 1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DESIGNED BY	DATE	DESIGNED BY
5-06-06 DESIGN REVISION NO. DATE WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY CRH DRAWN BY CRH CHECKED BY SFP		5-06-06 DESIGN REVISION NO. DATE WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY CRH DRAWN BY CRH CHECKED BY SFP		5-06-06 DESIGN REVISION NO. DATE WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY CRH DRAWN BY CRH CHECKED BY SFP		5-06-06 DESIGN REVISION NO. DATE WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY CRH DRAWN BY CRH CHECKED BY SFP	



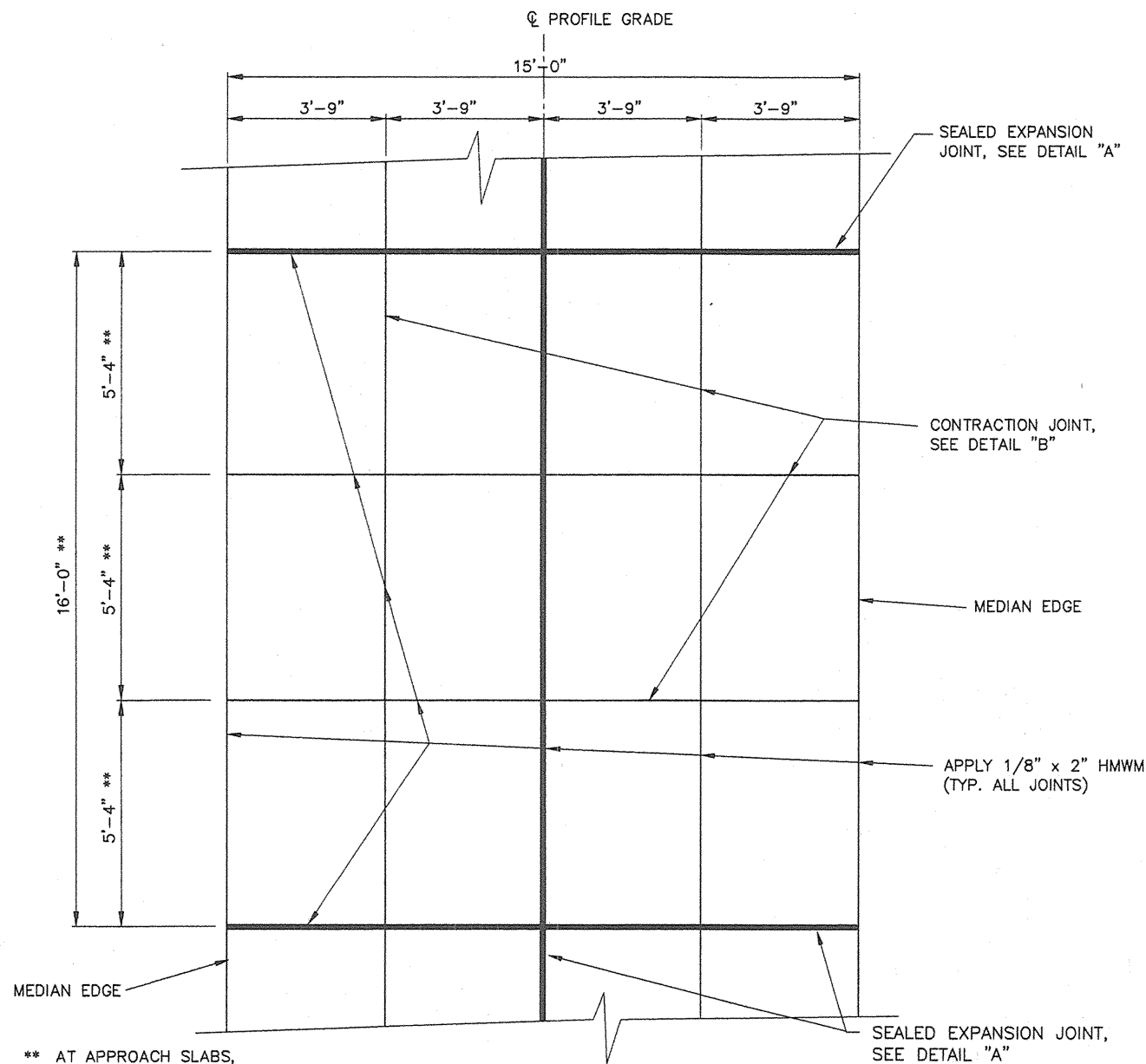
CONCRETE MEDIAN SECTION
NO SCALE
(SECTION ON APPROACH SLABS SIMILAR)



**SEALED EXPANSION JOINT
LONGITUDINAL & TRANSVERSE
DETAIL "A"**
NO SCALE



**CONTRACTION JOINT
LONGITUDINAL & TRANSVERSE
DETAIL "B"**
NO SCALE



**MEDIAN PARTIAL PLAN
SHOWING JOINT LOCATIONS**
NO SCALE

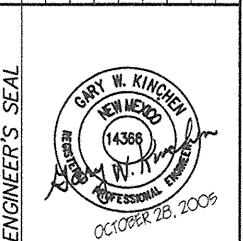
** AT APPROACH SLABS,
LOCATE TRANSVERSE
CONTRACTION JOINTS AT 1/3
POINTS (4'-8" SPACING).

CONCRETE MEDIAN NOTES

1. CONSTRUCT MEDIAN JOINTS FOR FULL LENGTH OF BRIDGE & APPROACH SLABS.
2. COORDINATE WITH PROJECT ENGINEER FOR MEDIAN SURFACE PATTERNS, TEXTURING AND COLORING.
3. AVOID INSTALLING TRANSVERSE SEALED EXPANSION JOINTS AT TRANSVERSE BAR LOCATIONS.
4. HMWM = HIGH MOLECULAR WEIGHT METHACRYLATE, SUPPLEMENTAL TECHNICAL SPECIFICATION 591.
5. SEALED EXPANSION JOINTS SEE SUPPLEMENTAL TECHNICAL SPECIFICATIONS 580.
6. THE COST OF ALL ITEMS ASSOCIATED WITH THE MEDIAN CONSTRUCTION, EXCEPT FOR SEALED EXPANSION JOINTS, IS INCLUDED IN AND INCIDENTAL TO THE BID ITEM "SUPERSTRUCTURE CONCRETE".
7. THE COST OF SEALED EXPANSION JOINTS IS INCLUDED IN THE BID ITEM "SEALED EXPANSION JOINTS", AND PAID FOR IN ACCORDANCE WITH SUPPLEMENTAL TECHNICAL SPECIFICATION 580.

BENCH MARKS		AS-BUILT INFORMATION	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977".	SET BY: David Montoya, Const. Inc.	DATE: 10/28/2005	NO.:
FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS 1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	ACCEPTANCE BY: COA/MCI	DATE: 10/28/2005	NO.:
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	RECORDED BY: MCI	DATE: 10/28/2005	NO.:

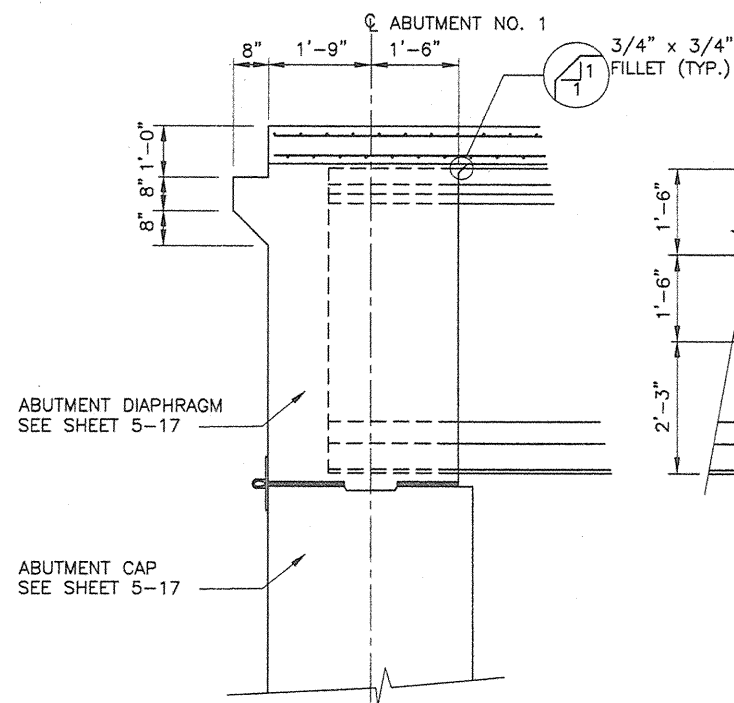
SURVEY INFORMATION	
DATE: 10/28/2005	BY: David Montoya, Const. Inc.
NO.:	



REVISIONS	
NO.	DATE
1	OCT 2005
2	OCT 2005
3	OCT 2005
4	OCT 2005
5	OCT 2005
6	OCT 2005
7	OCT 2005
8	OCT 2005
9	OCT 2005
10	OCT 2005

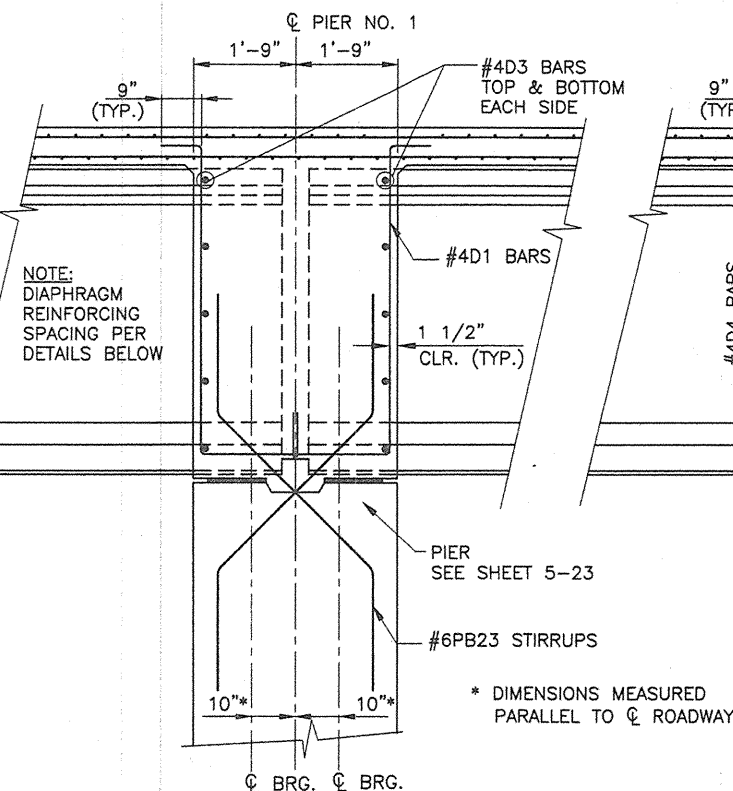
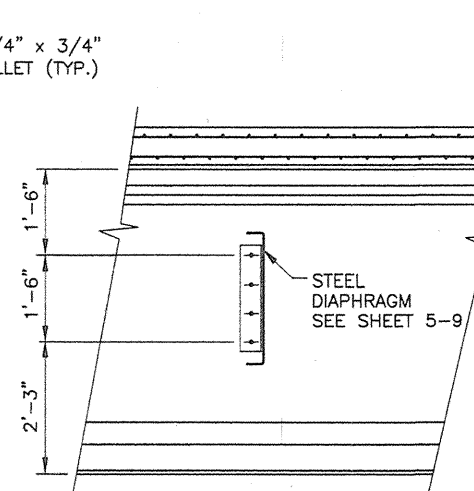
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE MEDIAN DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	5-6	

WILSON & COMPANY



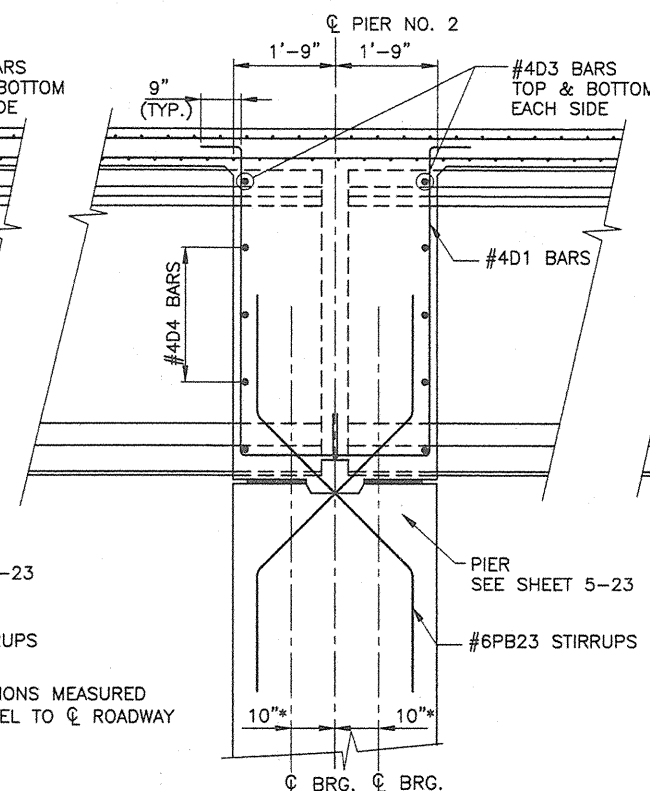
ABUTMENT NO. 1

TYPICAL INTERMEDIATE DIAPHRAGM

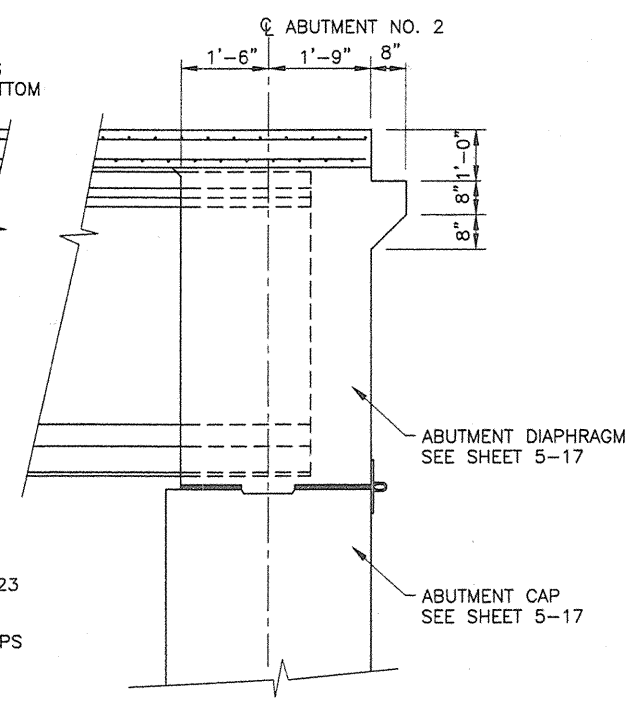


PIER NO. 1

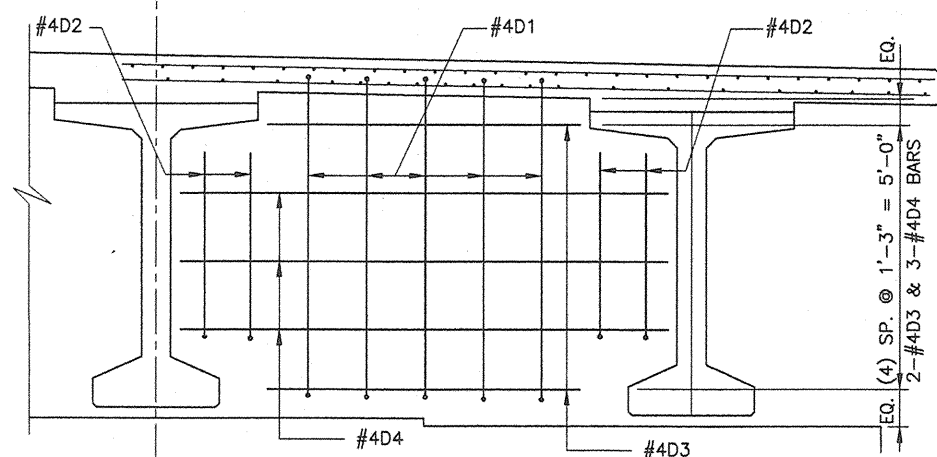
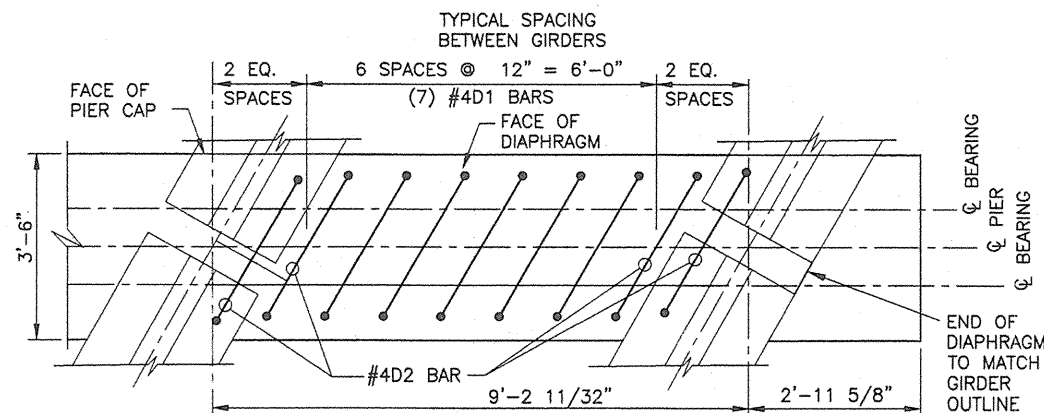
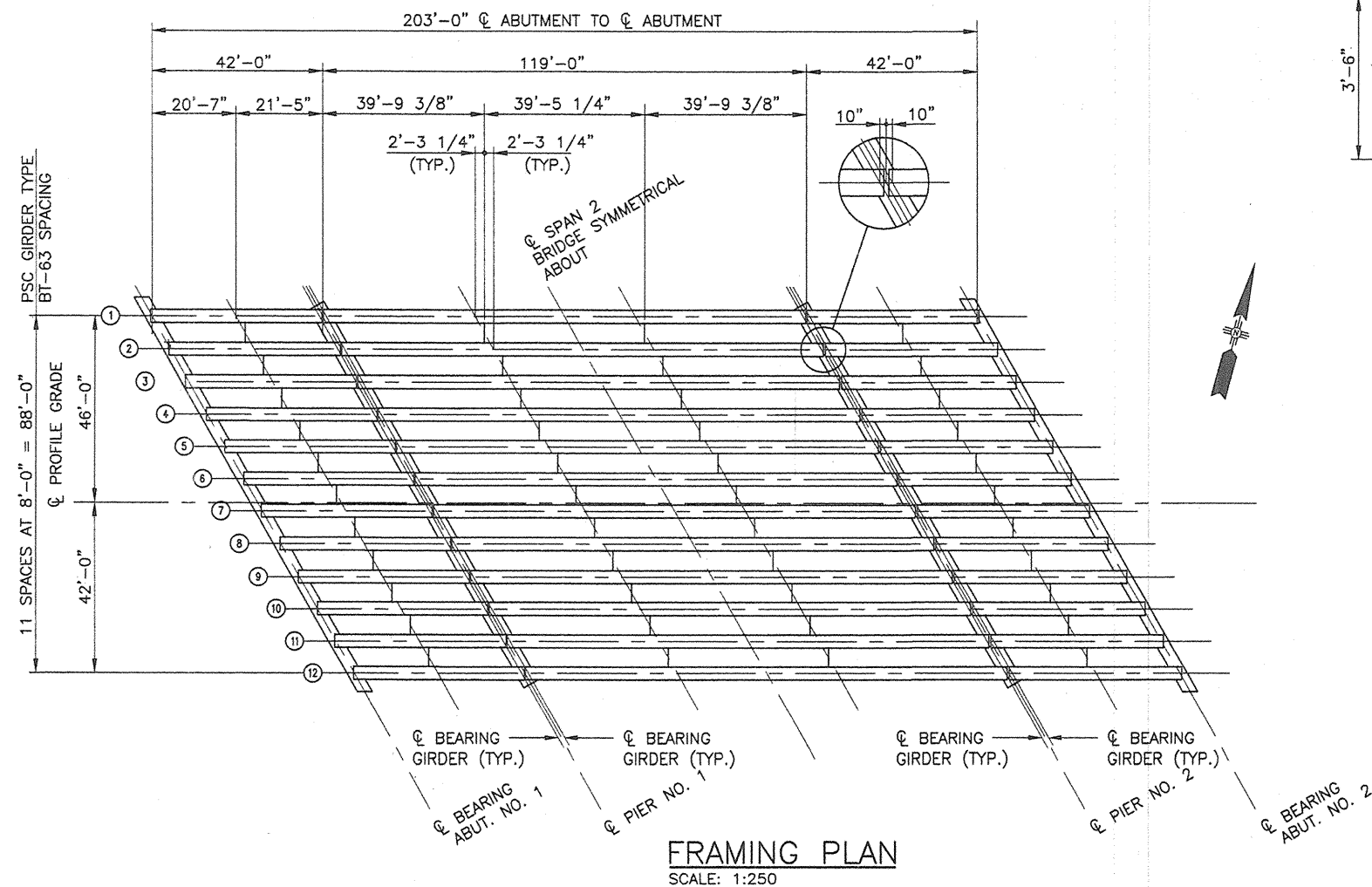
LONGITUDINAL SECTION
SCALE: 1:20



PIER NO. 2



ABUTMENT NO. 2



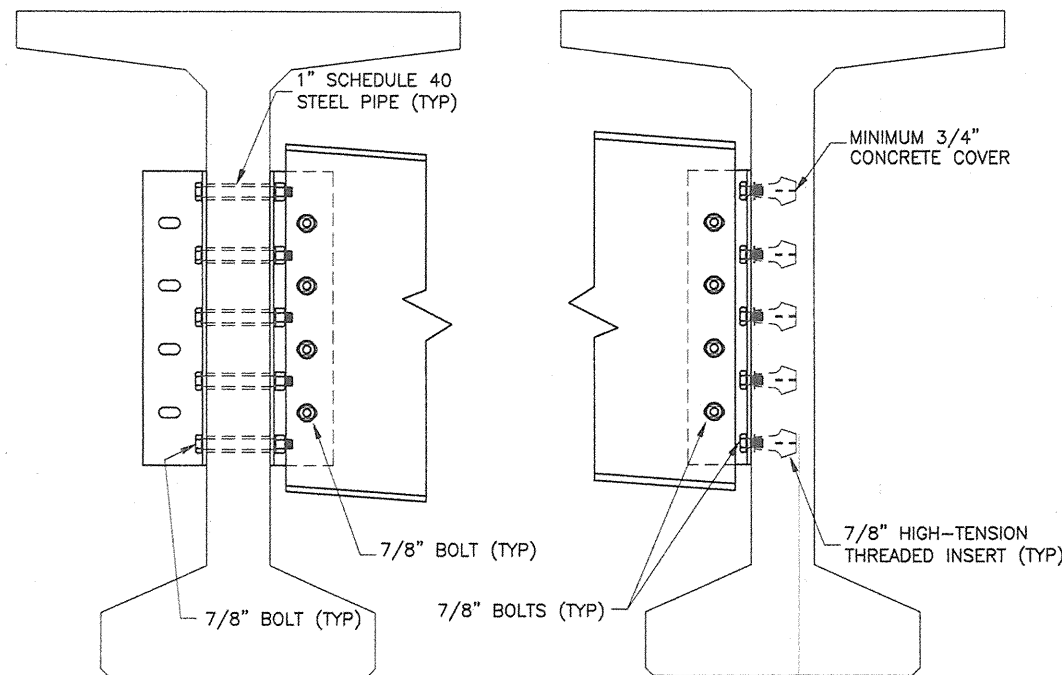
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE FRAMING PLAN AND LONGITUDINAL SECTION	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
DESIGNED BY GK	DATE OCT 2005
DRAWN BY CRH	DATE OCT 2005
CHECKED BY SFP	DATE OCT 2005
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-7	Of 164

BENCH MARKS	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	AS-BUILT INFORMATION
CONTRACTOR David Montoya Const. Inc.	DATE
DESIGNED BY Billingsley Eng.	DATE
APPROVED BY COA	DATE
RECORDED BY WCL	DATE
DATE 3/6/07	DATE
NO.	NO.
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

ENGINEER'S SEAL	
GARY W. KINCHEN 14366 OCTOBER 28, 2005	

SURVEY INFORMATION	
DATE	BY
1.1.	
REVISIONS	
NO.	DATE
1	OCT 2005
2	OCT 2005
3	OCT 2005
4	OCT 2005
5	OCT 2005
6	OCT 2005
7	OCT 2005
8	OCT 2005
9	OCT 2005
10	OCT 2005
11	OCT 2005
12	OCT 2005

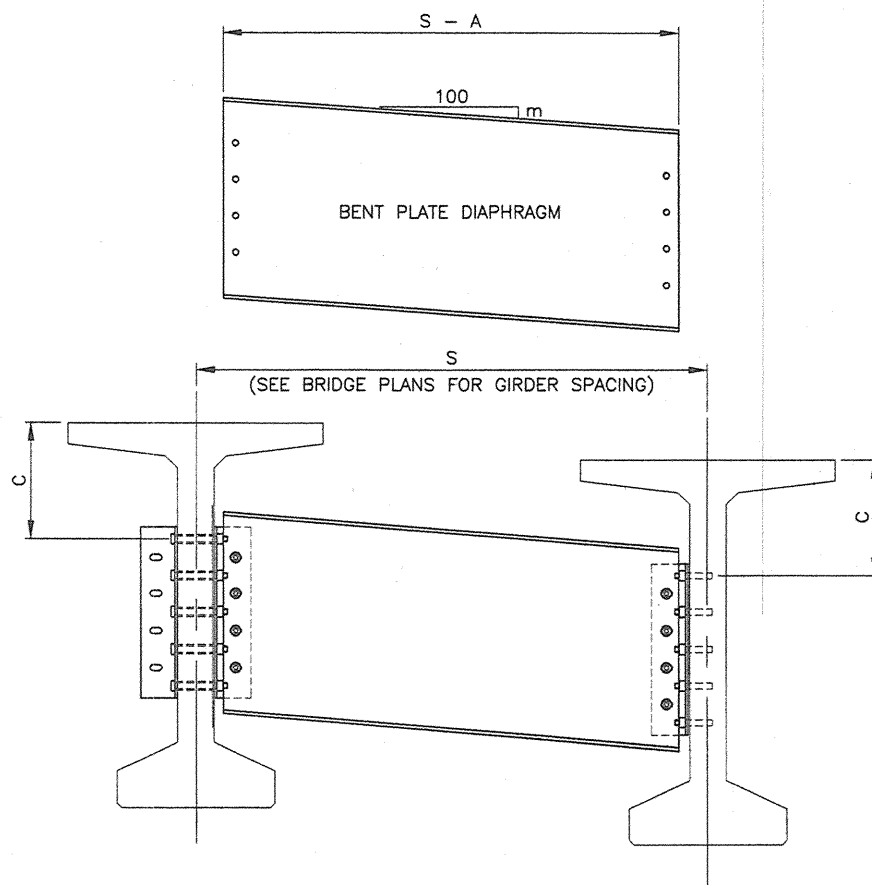
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE FRAMING PLAN AND LONGITUDINAL SECTION	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
DESIGNED BY GK	DATE OCT 2005
DRAWN BY CRH	DATE OCT 2005
CHECKED BY SFP	DATE OCT 2005
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-7	Of 164



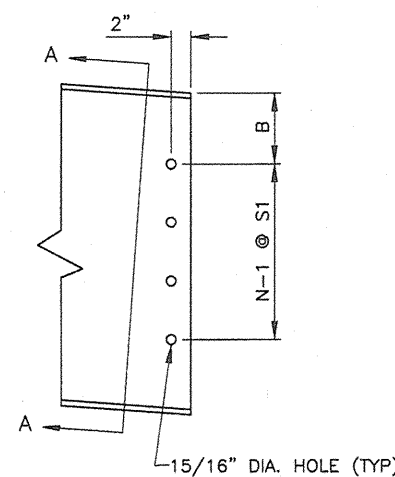
INTERIOR GIRDER CONNECTION DETAIL

EXTERIOR GIRDER CONNECTION DETAIL

m = SLOPE OF BENT PLATE DIAPHRAGM (SEE BRIDGE PLANS FOR ELEVATIONS AT CONNECTION POINTS).
A = THICKNESS OF GIRDER WEB PLUS 3" (SEE TABLE).
B = DISTANCE FROM TOP OF STEEL DIAPHRAGM TO CENTER OF FIRST HOLE.
C = DISTANCE FROM TOP OF BEAM TO C OF FIRST INSERT.
D = DISTANCE FROM CLIP ANGLE EDGE TO CENTER OF FIRST HOLE (CLIP ANGLE/DIAPHRAGM CONNECTION).
H = DEPTH OF BENT PLATE DIAPHRAGM.
L = LENGTH OF BACK PLATES AND CLIP ANGLES.
N = NUMBER OF BOLT SPACES IN GIRDER/CLIP ANGLE CONNECTION.
S1 = HOLE SPACING.



DIAPHRAGM ELEVATIONS

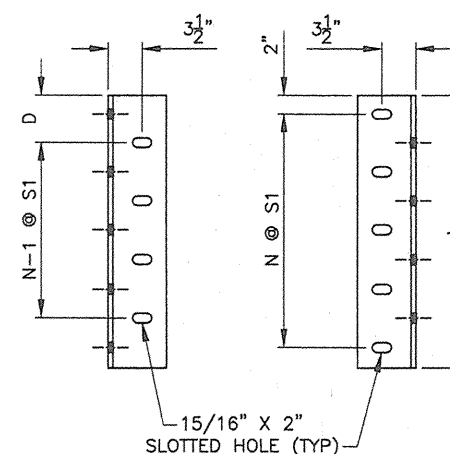


DIAPHRAGM END DETAIL

SECTION A-A

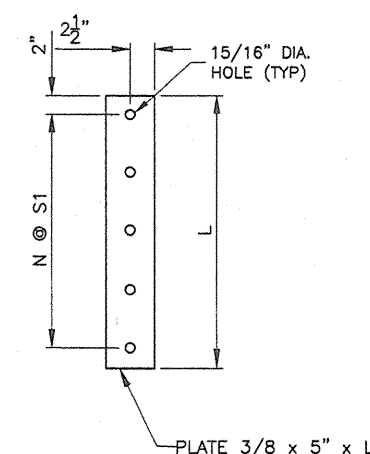
3/8" BENT PLATE DIAPHRAGM

(SEE TABLE FOR HEIGHT "H")



CLIP ANGLE DETAILS

L 6 x 6 x 3/8

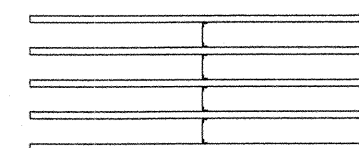


BACK PLATE DETAIL

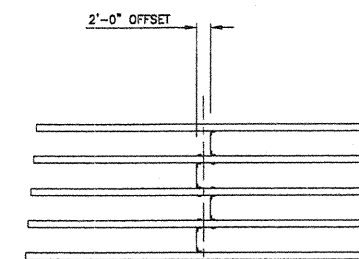
(SEE NOTE 3)

PRESTRESSED CONCRETE BEAM TYPE	H (in)	A (in)	B (in)	C (in)	D (in)	L (in)	N	S1 (in)	DIAPHRAGM UNIT WEIGHT (lb/ft)*	CLIP ANGLE WEIGHT (lb)	BACK PLATE WEIGHT (lb)
TYPE 36	15	9	4 1/2	12	3 1/2	13	3	3	28	16	7
TYPE 45	15	10	4 1/2	16 1/2	3 1/2	13	3	3	28	16	7
TYPE 54	21	11	6 1/2	19 1/2	4	16	3	4	36	20	9
TYPE 63	33	11	7 1/2	16 1/2	5	28	4	6	51	35	15
TYPE 72	33	11	7 1/2	21	5	28	4	6	51	35	15
TYPE BT-54	33	9	7 1/2	13 1/2	5	28	4	6	51	35	15
TYPE BT-63	33	9	7 1/2	18	5	28	4	6	51	35	15
TYPE BT-72	33	9	7 1/2	22 1/2	5	28	4	6	51	35	15
TYPE 63-MODIFIED	33	9	7 1/2	16 1/2	5	28	4	6	51	35	15
TYPE 72-MODIFIED	33	9	7 1/2	21	5	28	4	6	51	35	15

* MULTIPLY BY DIAPHRAGM LENGTH (S - A) TO OBTAIN TOTAL DIAPHRAGM WEIGHT.

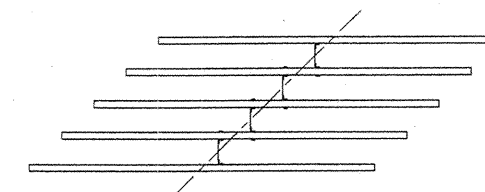


NORMAL (NO SKEW)



0° SKEW

SKEW 0° TO 8°



0° SKEW

SKEW GREATER THAN 8°

DIAPHRAGM PLACEMENT PATTERNS

NO SCALE

GENERAL NOTES

- STRUCTURAL STEEL: AASHTO M 270, GRADE 50W, OR AASHTO M 270, GRADE 36, HOT-DIPPED GALVANIZED STEEL. IF WEATHERING STEEL IS USED, SAND BLAST ALL ELEMENTS TO SSPC SP-6 AND WET PRIOR TO SHIPPING. PAINTING IS NOT REQUIRED.
- BOLTS: ASTM A 307. IF WEATHERING STEEL IS USED, USE TYPE 3 WEATHERING STEEL BOLTS; IF GALVANIZED STEEL IS USED, GALVANIZE BOLTS PER AASHTO M 298.
- FOR BRIDGES WITH NO SKEW, USE THE INTERIOR GIRDER CONNECTION DETAIL SHOWN. FOR SKEWED BRIDGES, REPLACE THE OPPOSING CLIP ANGLE WITH THE BACK PLATE SHOWN BELOW. OFFSET DIAPHRAGMS ON ALL SKEWED BRIDGES TO FACILITATE THE INSTALLATION OF THE BACK PLATES.
- TOLERANCE ON VERTICAL DISTANCE BETWEEN ANY TWO HOLES OR INSERTS: NO MORE THAN 1/16". TOLERANCE ON TOTAL LENGTH OF THE GROUP OF HOLES OR INSERTS: NO MORE THAN 1/16" FROM DESIGN LENGTH. ENSURE PROPER PLACEMENT OF INSERTS DURING GIRDER FABRICATION TO MEET TOLERANCES.
- ATTACH CLIP ANGLES AND BACK PLATES TO THE PRESTRESSED GIRDERS AT THE GIRDER FABRICATION SITE PRIOR TO TRANSPORT. COMPLETE DIAPHRAGM INSTALLATION PRIOR TO DECK PLACEMENT.
- BENT PLATE DIAPHRAGMS, CLIP ANGLES AND BACK PLATES ARE PAID FOR UNDER ITEM 520.010 - STRUCTURAL STEEL FOR CONCRETE BRIDGES. BOLTS, NUTS AND WASHERS ARE INCIDENTAL TO THIS ITEM. THREADED INSERTS AND PIPE INSERTS ARE INCIDENTAL TO PRESTRESSED CONCRETE GIRDERS.
- MAXIMUM BOLT INSTALLATION TENSION WHERE STEEL IS BEING FASTENED TO CONCRETE: 10 KIPS. PERFORM TESTS TO DETERMINE TORQUE NEEDED TO ACHIEVE THE SPECIFIED INSTALLATION TENSION.

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		CITY OF ALBUQUERQUE	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		NO. DATE BY		NO. DATE BY				NO. DATE 1. WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY GWK DATE OCT 2005 DRAWN BY CRH DATE OCT 2005 CHECKED BY SFP DATE OCT 2005		CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE STEEL DIAPHRAGM DETAILS	
CONTRACTOR: David Montoya Const. Inc.		DESIGNED BY: GWK		DESIGNED BY: GWK		DESIGN REVIEW COMMITTEE APPROVED DATE: 10/17/2009 CITY ENGINEER		DESIGN REVIEW COMMITTEE APPROVED DATE: 10/17/2009 CITY ENGINEER		City Project No. COA 681602 Zone Map No. A-10-Z Sheet 5-9 of 164	

WILSON & COMPANY

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LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
ABUT. NO. 1 SPAN NO. 1	DECK ELEV.	5376.23	5376.34	5376.44	5376.55	5376.65	5376.76	5376.78	5376.57	5376.35	5376.14	5375.92	5375.70
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	TOTAL "P" DIMEN.	6.409	6.409	6.409	6.409	6.409	6.409	6.409	6.409	6.409	6.409	6.409	6.409
	SEAT ELEVATION	5369.82	5369.93	5370.03	5370.14	5370.24	5370.35	5370.37	5370.16	5369.94	5369.73	5369.51	5369.30

LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
PIER NO. 1 SPAN NO. 1	DECK ELEV.	5375.73	5375.84	5375.94	5376.04	5376.15	5376.25	5376.28	5376.06	5375.85	5375.63	5375.42	5375.20
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	TOTAL "P" DIMEN.	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672	6.672
	SEAT ELEVATION	5369.06	5369.16	5369.27	5369.37	5369.48	5369.58	5369.61	5369.39	5369.18	5368.96	5368.75	5368.53

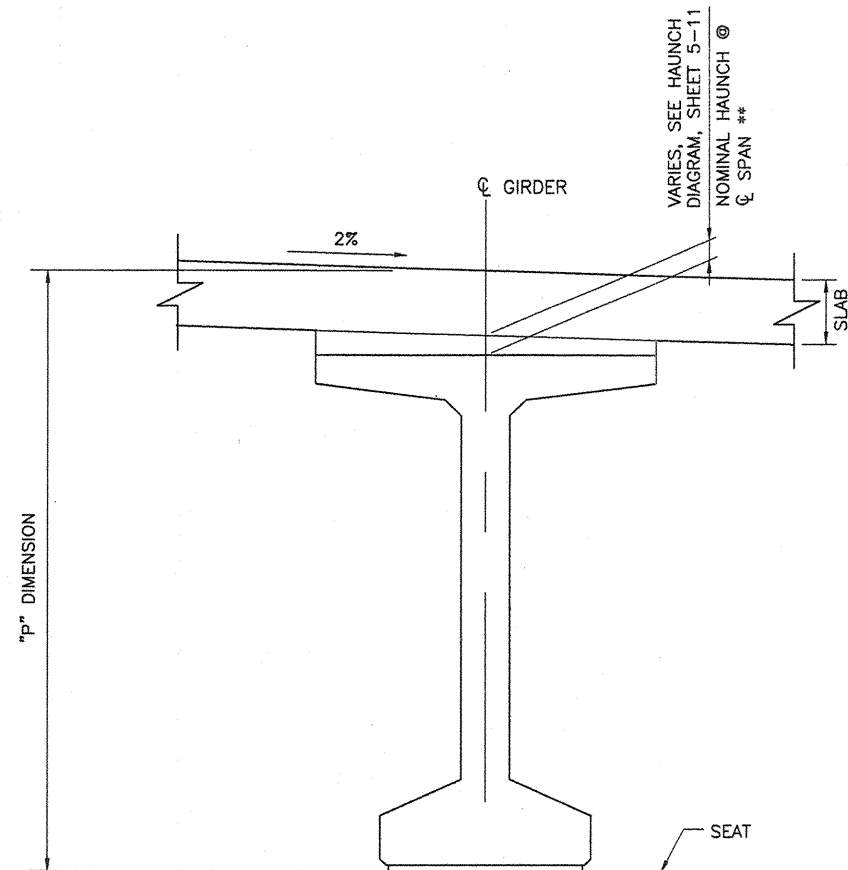
LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
PIER NO. 1 SPAN NO. 2	DECK ELEV.	5375.71	5375.82	5375.92	5376.02	5376.13	5376.23	5376.26	5376.04	5375.83	5375.61	5375.40	5375.18
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	TOTAL "P" DIMEN.	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652
	SEAT ELEVATION	5369.06	5369.16	5369.27	5369.37	5369.48	5369.58	5369.61	5369.39	5369.18	5368.96	5368.75	5368.53

LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
PIER NO. 2 SPAN NO. 2	DECK ELEV.	5374.28	5374.38	5374.49	5374.59	5374.70	5374.80	5374.83	5374.61	5374.40	5374.18	5373.97	5373.75
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	TOTAL "P" DIMEN.	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652	6.652
	SEAT ELEVATION	5367.63	5367.73	5367.84	5367.94	5368.05	5368.15	5368.18	5367.96	5367.74	5367.53	5367.31	5367.10

LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
PIER NO. 2 SPAN NO. 3	DECK ELEV.	5374.26	5374.36	5374.47	5374.57	5374.68	5374.78	5374.81	5374.59	5374.38	5374.16	5373.95	5373.73
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	TOTAL "P" DIMEN.	6.631	6.631	6.631	6.631	6.631	6.631	6.631	6.631	6.631	6.631	6.631	6.631
	SEAT ELEVATION	5367.63	5367.73	5367.84	5367.94	5368.05	5368.15	5368.18	5367.96	5367.74	5367.53	5367.31	5367.10

LOCATION		GIRDER											
		1	2	3	4	5	6	7	8	9	10	11	12
ABUT. NO. 2 SPAN NO. 3	DECK ELEV.	5373.76	5373.86	5373.97	5374.07	5374.18	5374.28	5374.30	5374.09	5373.87	5373.66	5373.44	5373.23
	DECK THICKNESS	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	HAUNCH	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
	GIRDER	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	BEARING PAD *	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	TOTAL "P" DIMEN.	6.368	6.368	6.368	6.368	6.368	6.368	6.368	6.368	6.368	6.368	6.368	6.368
	SEAT ELEVATION	5367.39	5367.49	5367.60	5367.70	5367.81	5367.91	5367.94	5367.72	5367.51	5367.29	5367.07	5366.86

* BEARING PAD HEIGHT INCLUDES TOTAL HEIGHT OF BEARING PAD + SOLE PLATE



** NOMINAL HAUNCH = 0.340 SPAN 1
= 0.202 SPAN 2
= 0.299 SPAN 3

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE SEAT ELEVATIONS			
Design Review Committee APPROVED NON FIELD DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER	Mo./Day/Yr. Mo./Day/Yr.	Mo./Day/Yr. Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-10	Of 32 OF 164

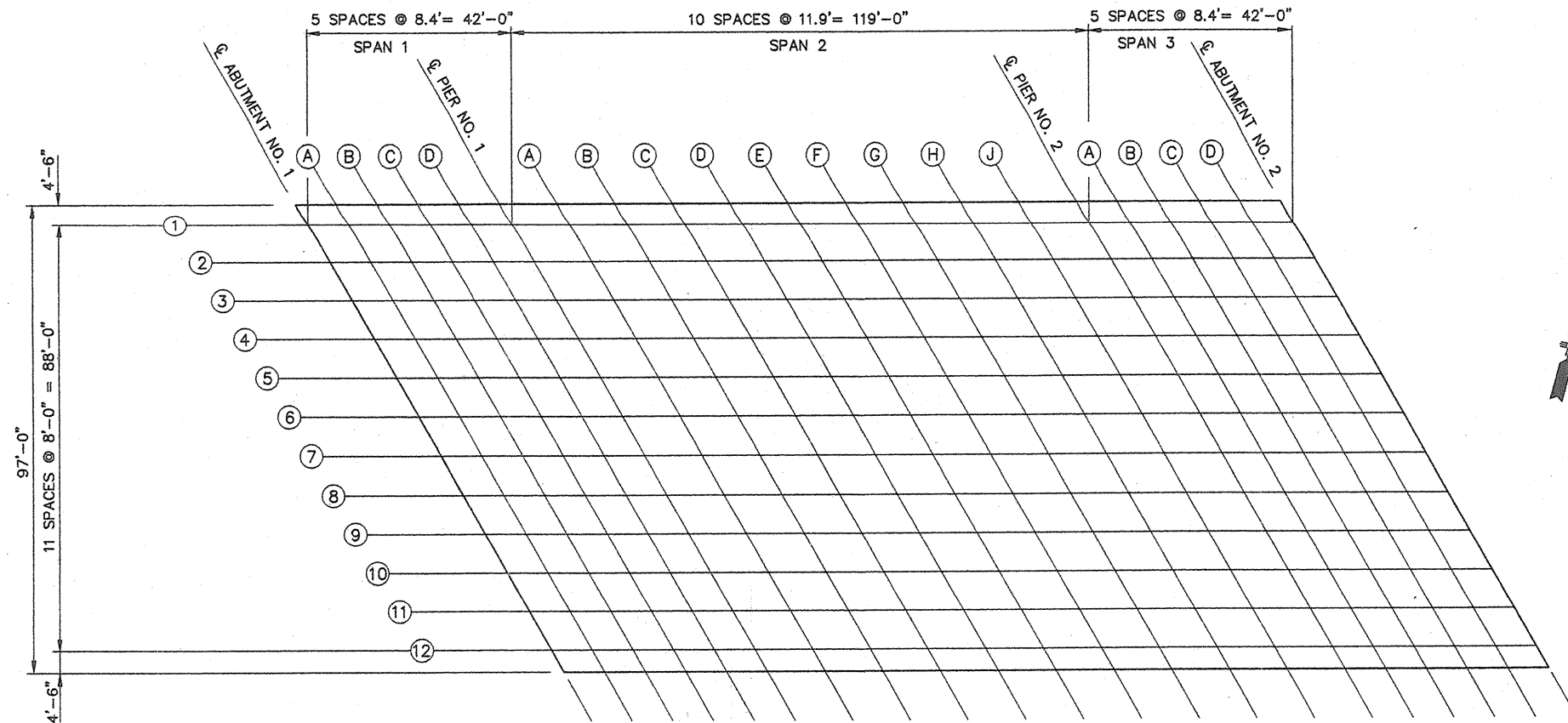
WILSON
& COMPANY

AS-BUILT INFORMATION			
CONTRACTOR David Montoya Const. Inc.	SET BLACK-2 1977	DATE 5-11	NO. 1
BENCH MARKS			
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ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)			

SURVEY INFORMATION			
FIELD NOTES	DATE	BY	NO.

ENGINEER'S SEAL			

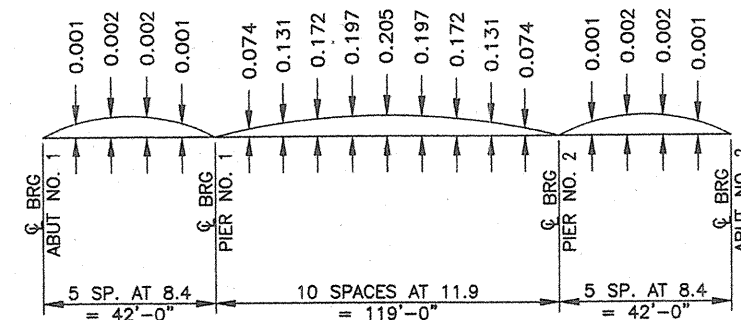
REVISIONS			
NO.	DATE	REMARKS	BY
WILSON & COMPANY, ENGINEERS & ARCHITECTS			
DESIGNED BY	DATE	CRH	DATE
DRAWN BY	DATE	SFP	DATE
CHECKED BY	DATE		DATE



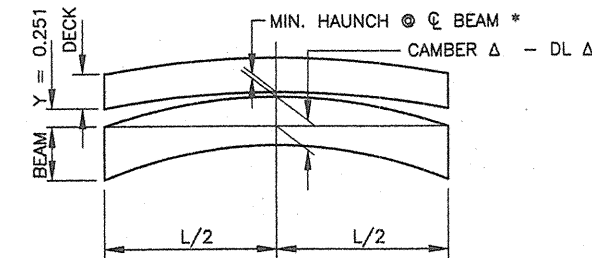
TOP OF DECK ELEVATIONS
SCALE: 1:200

	☪ BRG	SPAN 1				☪ BRG	SPAN 2									
	ABUT 1	A	B	C	D	PIER 1	A	B	C	D	E	F	G	H	J	
Left Edge	5376.19	5376.09	5375.99	5375.89	5375.78	5375.68	5375.54	5375.39	5375.25	5375.10	5374.96	5374.81	5374.67	5374.52	5374.37	
Girder 1	5376.23	5376.13	5376.03	5375.93	5375.82	5375.72	5375.58	5375.43	5375.28	5375.14	5374.99	5374.85	5374.70	5374.56	5374.41	
Girder 2	5376.34	5376.24	5376.13	5376.03	5375.93	5375.83	5375.68	5375.53	5375.39	5375.24	5375.10	5374.95	5374.81	5374.66	5374.52	
Girder 3	5376.44	5376.34	5376.24	5376.13	5376.03	5375.93	5375.78	5375.64	5375.49	5375.35	5375.20	5375.06	5374.91	5374.77	5374.62	
Girder 4	5376.55	5376.44	5376.34	5376.24	5376.14	5376.03	5375.89	5375.74	5375.60	5375.45	5375.31	5375.16	5375.02	5374.87	5374.73	
Girder 5	5376.65	5376.55	5376.45	5376.34	5376.24	5376.14	5375.99	5375.85	5375.70	5375.56	5375.41	5375.27	5375.12	5374.98	5374.83	
Girder 6	5376.76	5376.65	5376.55	5376.45	5376.35	5376.24	5376.10	5375.95	5375.81	5375.66	5375.52	5375.37	5375.23	5375.08	5374.94	
☪ Bridge	5376.83	5376.73	5376.63	5376.53	5376.42	5376.32	5376.18	5376.03	5375.89	5375.74	5375.60	5375.45	5375.31	5375.16	5375.02	
Girder 7	5376.78	5376.68	5376.58	5376.47	5376.37	5376.27	5376.12	5375.98	5375.83	5375.69	5375.54	5375.40	5375.25	5375.11	5374.96	
Girder 8	5376.57	5376.46	5376.36	5376.26	5376.16	5376.05	5375.91	5375.76	5375.62	5375.47	5375.33	5375.18	5375.04	5374.89	5374.75	
Girder 9	5376.35	5376.25	5376.15	5376.04	5375.94	5375.84	5375.69	5375.55	5375.40	5375.26	5375.11	5374.97	5374.82	5374.68	5374.53	
Girder 10	5376.14	5376.03	5375.93	5375.83	5375.73	5375.62	5375.48	5375.33	5375.19	5375.04	5374.90	5374.75	5374.61	5374.46	5374.32	
Girder 11	5375.92	5375.82	5375.71	5375.61	5375.51	5375.41	5375.26	5375.12	5374.97	5374.83	5374.68	5374.54	5374.39	5374.25	5374.10	
Girder 12	5375.70	5375.60	5375.50	5375.40	5375.29	5375.19	5375.05	5374.90	5374.76	5374.61	5374.47	5374.32	5374.18	5374.03	5373.89	
Right Edge	5375.62	5375.52	5375.42	5375.32	5375.21	5375.11	5374.97	5374.82	5374.68	5374.53	5374.39	5374.24	5374.10	5373.95	5373.80	

	C BRG PIER 2	SPAN 3				C BRG ABUT 1
		A	B	C	D	
Left Edge	5374.23	5374.13	5374.02	5373.92	5373.82	5373.72
Girder 1	5374.27	5374.17	5374.06	5373.96	5373.86	5373.76
Girder 2	5374.37	5374.27	5374.17	5374.07	5373.96	5373.86
Girder 3	5374.48	5374.38	5374.27	5374.17	5374.07	5373.97
Girder 4	5374.58	5374.48	5374.38	5374.28	5374.17	5374.07
Girder 5	5374.69	5374.58	5374.48	5374.38	5374.28	5374.18
Girder 6	5374.79	5374.69	5374.59	5374.48	5374.38	5374.28
C Bridge	5374.87	5374.77	5374.67	5374.56	5374.46	5374.36
Girder 7	5374.82	5374.71	5374.61	5374.51	5374.41	5374.30
Girder 8	5374.60	5374.50	5374.40	5374.29	5374.19	5374.09
Girder 9	5374.39	5374.28	5374.18	5374.08	5373.98	5373.87
Girder 10	5374.17	5374.07	5373.97	5373.86	5373.76	5373.66
Girder 11	5373.96	5373.85	5373.75	5373.65	5373.55	5373.44
Girder 12	5373.74	5373.64	5373.54	5373.43	5373.33	5373.23
Right Edge	5373.66	5373.56	5373.45	5373.35	5373.25	5373.15



DEAD LOAD DEFLECTION DIAGRAM
NO SCALE



TYPICAL HAUNCH DIAGRAM @ C BEAM
NO SCALE

NOTE:
THE HAUNCH DIMENSION "Y" IS BASED UPON COMPUTED CAMBER AND DEAD LOAD DEFLECTION AT CENTERLINE OF THE BEAM @ ERECTION BASED ON CAMBER GROWTH TO 90 DAYS. IF THE ACTUAL CAMBER DIFFERS FROM THE COMPUTED BEAM CAMBER ADJUST THE DIMENSIONS ACCORDINGLY.

$$Y = 0.207 + \text{CAMBER} - \text{D.L.}$$

* MIN. HAUNCH @ C BEAM VARIES. SEE SHEET 5-10.

NOTES:

- TO COMPENSATE FOR DEAD LOAD DEFLECTION DUE TO WEIGHT OF SLAB AND SUPERIMPOSED DEAD LOADS, SET SCREEDS ABOVE DECK ELEVATIONS BY DIMENSION SHOWN IN DEAD LOAD DEFLECTION DIAGRAM.
- DECK ELEVATIONS SHOWN ARE AT 10TH POINTS ALONG SPAN.
- ALL ELEVATIONS AND DEFLECTIONS ON THIS SHEET ARE IN FEET.

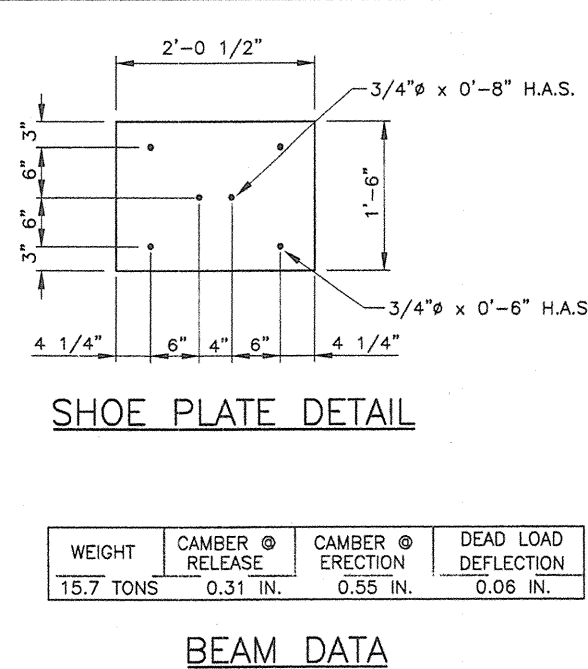
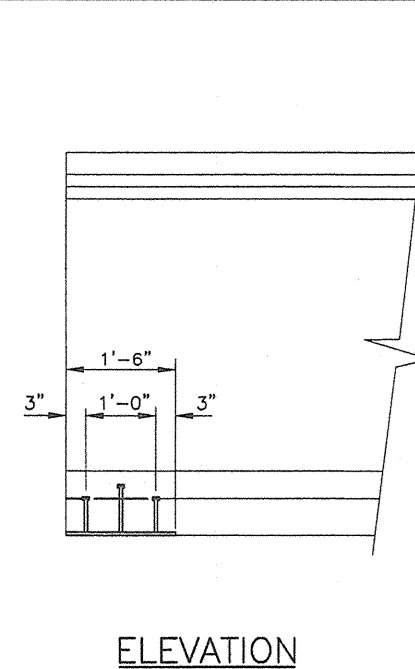
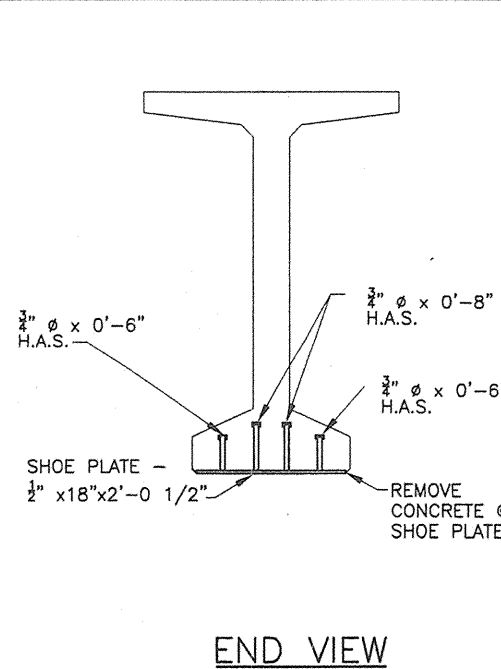
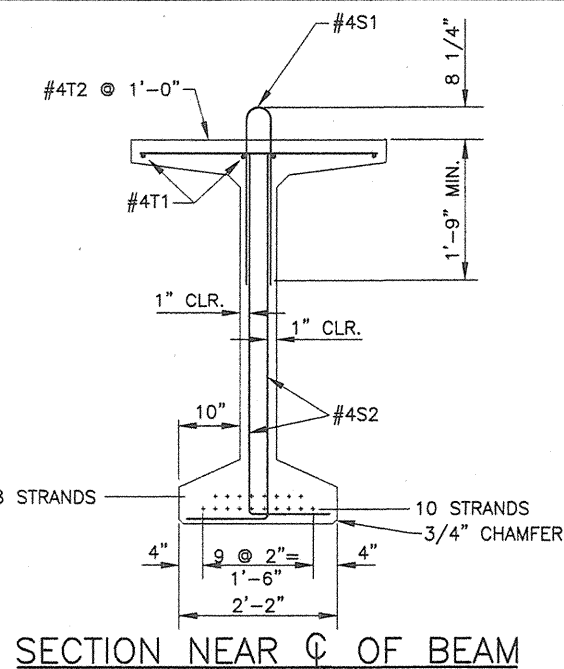
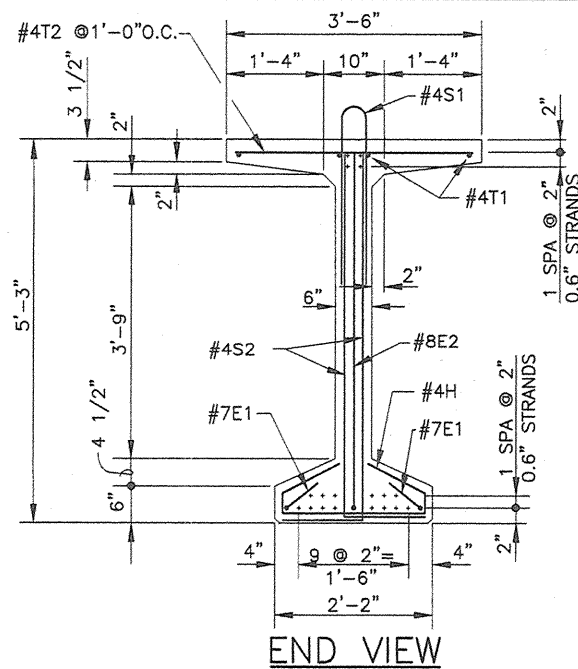
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE DECK ELEVATIONS	
Design Review Committee APPROVED DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-11	Of

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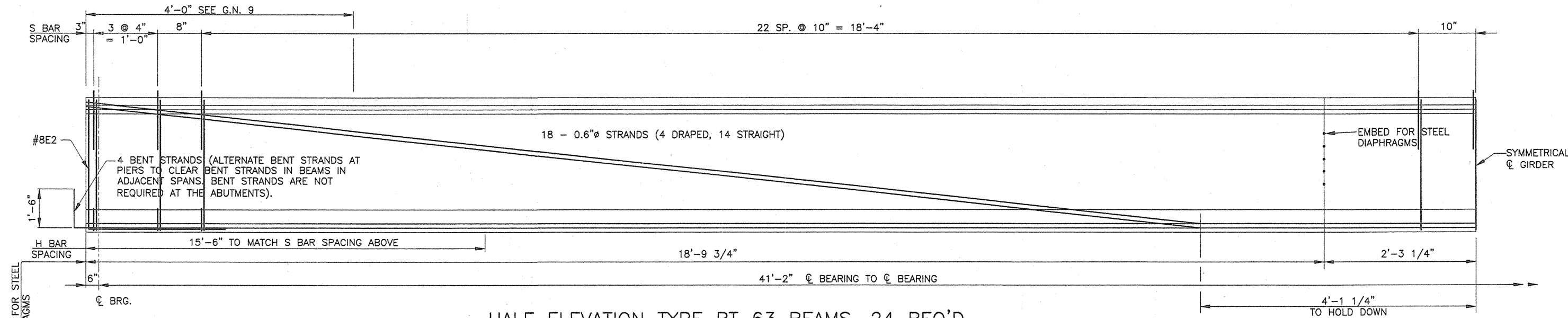
AS-BUILT INFORMATION	
CONTRACTOR: David Montoya, Coast Inc.	DATE: 10/23/2009
STAMPED BY: Billingsley Eng'g	DATE: 10/23/2009
FIELD ACCEPTANCE BY: COA/WCI	DATE: 10/23/2009
REVISIONS	DATE: 10/23/2009
NO. DATE	REMARKS
1	WILSON & COMPANY, ENGINEERS & ARCHITECTS
2	DESIGNED BY: CWK
3	DRAWN BY: CRH
4	CHECKED BY: SFP
5	DATE: OCT 2005
6	DATE: OCT 2005
7	DATE: OCT 2005
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	



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WEIGHT	CAMBER @ RELEASE	CAMBER @ ERECTION	DEAD LOAD DEFLECTION
15.7 TONS	0.31 IN.	0.55 IN.	0.06 IN.



HALF ELEVATION TYPE BT 63 BEAMS, 24 REQ'D
(fse = 31300 LBS. PER STRAND; LOSSES = 12645 LBS. PER STRAND)

GENERAL NOTES

- INCLUDE COST OF REINFORCING BARS AND STRUCTURAL STEEL EMBEDDED IN BRIDGE GIRDERS IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE BRIDGE MEMBER TYPE BT-63.
- LIFT GIRDERS BY MEANS OF DEVICES SATISFACTORY TO THE PROJECT ENGINEER. USE ONLY LIFTING DEVICES THAT HAVE BEEN PRIOR APPROVED BY THE PROJECT ENGINEER. CAST, STORE, AND HAUL BEAMS IN UPRIGHT POSITION.
- THOROUGHLY WIRE BRUSH AND SCORE TRANSVERSELY THE TOP SURFACE OF ALL GIRDERS AFTER INITIAL SET TO PROVIDE A ROUGH SURFACE (MIN. DEPTH = 1/4" ACROSS ENTIRE FLANGE WIDTH). REMOVE LAITANCE.
- THE CAMBER AT ERECTION DIMENSION LISTED IS THE CALCULATED VALUE DUE TO THE PRESTRESSING EFFECT + GIRDER WEIGHT, WITH AN ALLOWANCE FOR CAMBER GROWTH TO 90 DAYS. LIMIT THE CAMBER GROWTH TO A VALUE NOT TO EXCEED THE PREDICTED CAMBER AT ERECTION DIMENSION BY 1 INCH AT THE TIME OF DECK SLAB PLACEMENT. LIMIT CAMBER GROWTH BY WEIGHTING, FABRICATION SCHEDULING OR OTHER APPROVED MEANS.
- DEAD LOAD DEFLECTION IS THE COMPUTED DEFLECTION DUE TO WEIGHT OF SLAB, DIAPHRAGMS, AND SUPERIMPOSED DEAD LOAD.
- THE DESIGN SHOWN IS BASED ON THE USE OF 0.6" DIAMETER LOW-RELAXATION STRANDS CONFORMING TO AASHTO M-203, GRADE 270. USE AN INITIAL PRESTRESSING FORCE OF 43,940 LBS/STRAND. SLIGHT PRESTRESSING UP TO 46,870 LBS./STRAND IS ALLOWED TO OFFSET SEATING LOSSES.
IF STRAND CONFORMING TO AASHTO M-203, BUT WITH PROPERTIES OTHER THAN AS LISTED ABOVE ARE PROPOSED, SUBMIT REVISED DETAILS SHOWING NUMBER AND ARRANGEMENT OF ALTERNATE STRANDS FOR PROJECT ENGINEER'S APPROVAL.
- TYPE III CEMENT MAY BE USED AT THE FABRICATOR'S OPTION.
- STRAIGHTEN SHOE PLATES PRIOR TO CASTING INTO GIRDER.
- USE EPOXY-COATED BARS FOR ALL REINFORCING BARS PROJECTING FROM THE TOP OF THE GIRDER AND ALL BARS LOCATED WITHIN FOUR FEET OF AN EXPANSION JOINT IN THE BRIDGE DECK. CLEARLY MARK GIRDER EXPANSION ENDS WITH AN "E".

DESIGN DATA:

DESIGN IS IN ACCORDANCE WITH THE 2002 AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (17TH EDITION).

GIRDERS:
 f'_{ci} = 5500 PSI (MIN. COMPRESSIVE STRENGTH AT INITIAL PRESTRESS)
 f'_c = 6500 PSI (MIN. COMPRESSIVE STRENGTH AT 28 DAYS)

PRESTRESSING STEEL: 0.6"-DIAMETER, SEVEN-WIRE, LOW-RELAXATION STRAND.
 f'_s = 58,590 LBS/STRAND
 f^*_{sy} = 52,700 LBS/STRAND

COMPOSITE SLAB:
 CONVENTIONAL REINFORCING BARS:
 f_y = 60,000 PSI
 f'_c = 4,000 PSI

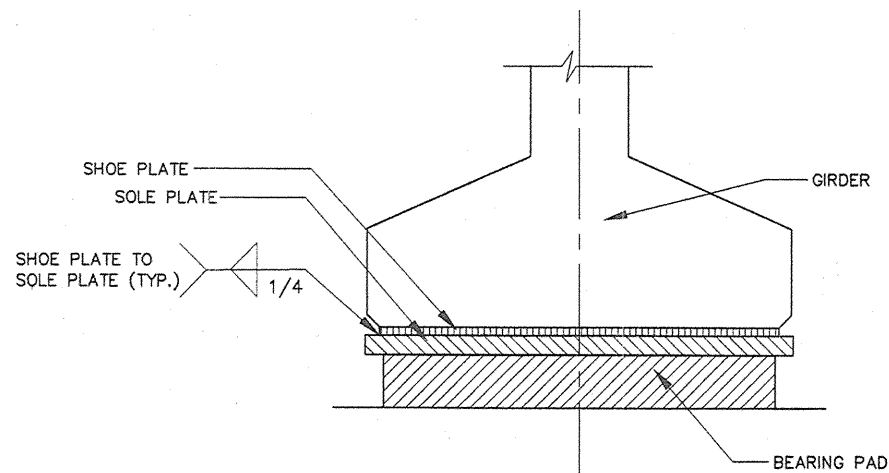
ALLOWANCE FOR FUTURE WEARING SURFACE: 30 PSF
 ALLOWANCE FOR STEEL DECK FORMS: 15 PSF
 LIVE LOAD: HS25-44

BARS REQUIRED FOR ONE BEAM						BAR BENDING DIAGRAM	
MARK	TYPE	R	X	LENGTH	NO. REQ'D	①	②
#7E1	②	3 1/8"	5'-0"	5'-8"	4	LENGTH	"X"
#8E2	②	3 1/2"	4'-11"	9'-10"	2		
#4H1	③	1 1/2"	---	4'-1 1/2"	40	NOT CLOSER 4"	"X"
#4S1	④	1 3/4"	2'-5 1/4"	5'- 1/2"	55		
#4S2	②	1 1/2"	5'-0"	5'-11"	110	10"	"X"
#4T1	①	---	---	41'-8"	2		
#4T2	①	---	---	3'-3"	43	3 3/8"	1'-11 1/2"

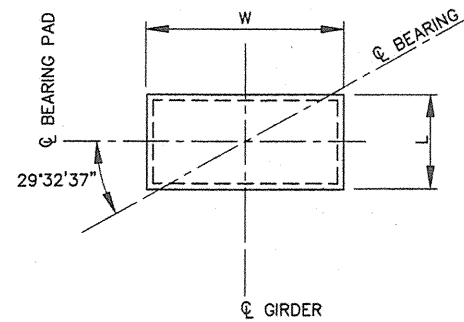
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE PSC GIRDER TYPE BT-63, SPANS 1 & 3	
Design Review Committee APPROVED DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-12	Of 34 OF 164

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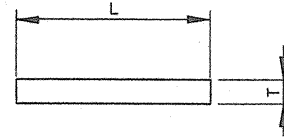
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THE STA. IS A USGS TABLE STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBU. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		DATE BY NO.		GARY W. KINCHEN 14366 OCTOBER 26, 2006	
REVISIONS		BY		DATE	
WILSON & COMPANY, ENGINEERS & ARCHITECTS		DATE		OCT 2005	
DESIGNED BY		DATE		OCT 2005	
DRAWN BY		DATE		OCT 2005	
CHECKED BY		DATE		OCT 2005	



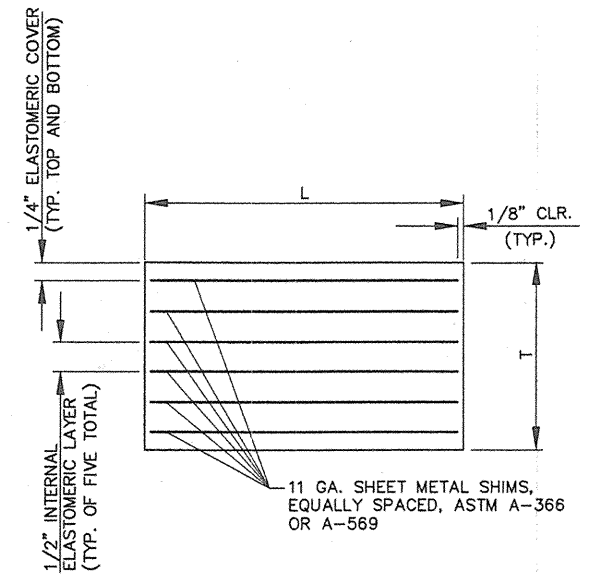
SOLE PLATE CONNECTION DETAIL
NO SCALE



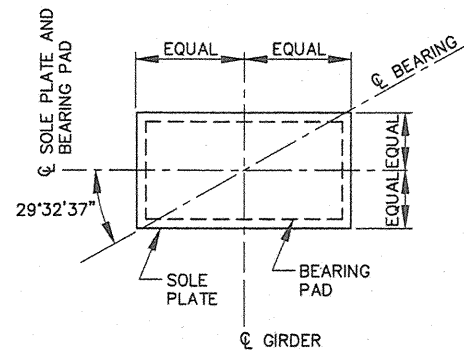
BEARING PAD PLAN
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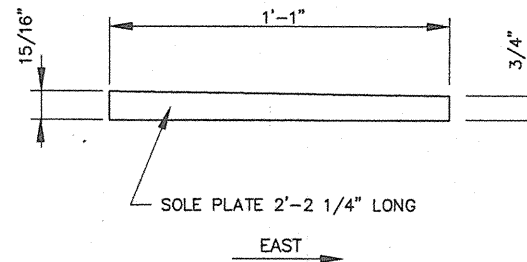
ABUT. BEARING PAD SECTION
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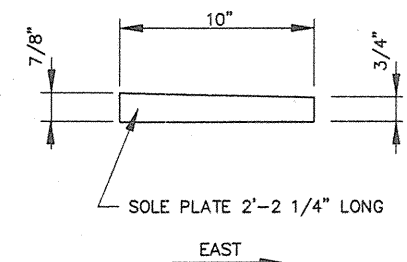
PIER BEARING PAD SECTION
NO SCALE



SOLE PLATE PLAN
NO SCALE



SIDE ELEVATION @ PIER SOLE PLATE
NO SCALE



SIDE ELEVATION @ ABUTMENT SOLE PLATE
NO SCALE

ELASTOMERIC BEARING PAD SCHEDULE													
LOCATION	NO. INTERNAL LAMS	NO. SHIMS	INTERNAL LAM THICKNESS	SHIM THICKNESS	TOTAL THICKNESS	Δ	DIMENSIONS			DESIGN LOAD (K)		NO. REQUIRED	MOVEMENT LENGTH
							FINAL T, TOTAL THICKNESS - Δ	W	L	DL	LL		
										(K)	(K)		(IN)
ABUTMENTS	1	0	1/2	-	1/2	-	1/2	1'-7"	8	51	67	24	0
PIERS	5	6	1/2	1/8	3 3/4	1/8	3 5/8	1'-7"	11	123	74	24	0

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE ELASTOMERIC BEARING DETAILS			
Design Review Committee APPROVED NOV 2 2005 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 2 2005 CITY ENGINEER	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-14	Of

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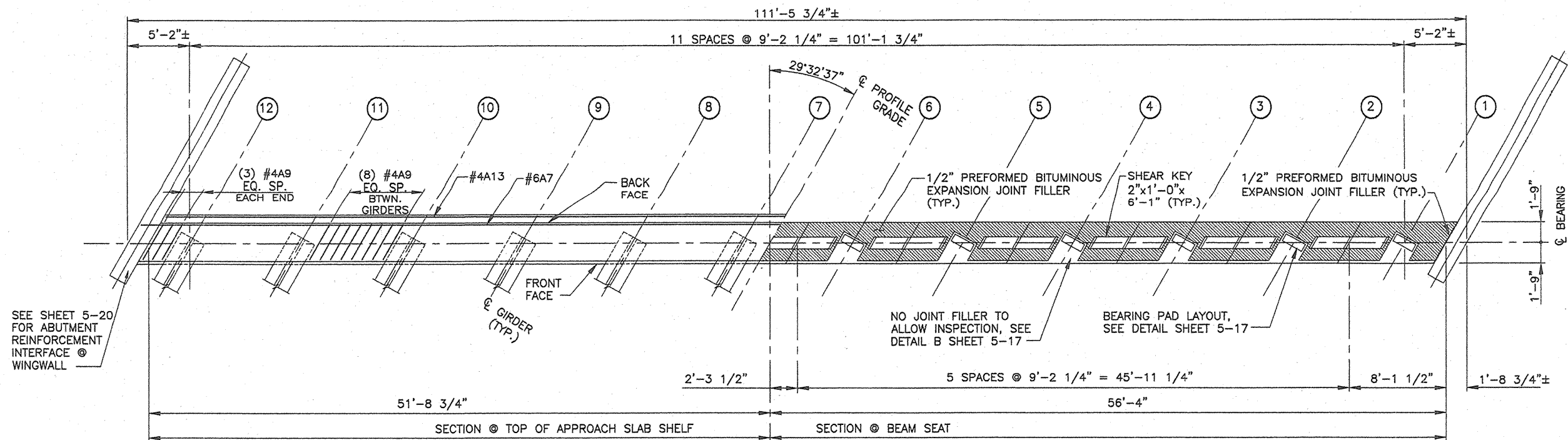
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THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/A-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		CONTRACTOR: David Montoya Const. Inc. WORK: Bilingstey Eng. DATE: COA FIELD BY: COA/INCL DATE: WCL DRAWN BY: WCL DATE: 3/01 MICRO-FILM INFORMATION RECORDED BY: NO ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

SURVEY INFORMATION	
DATE	BY
NO.	NO.

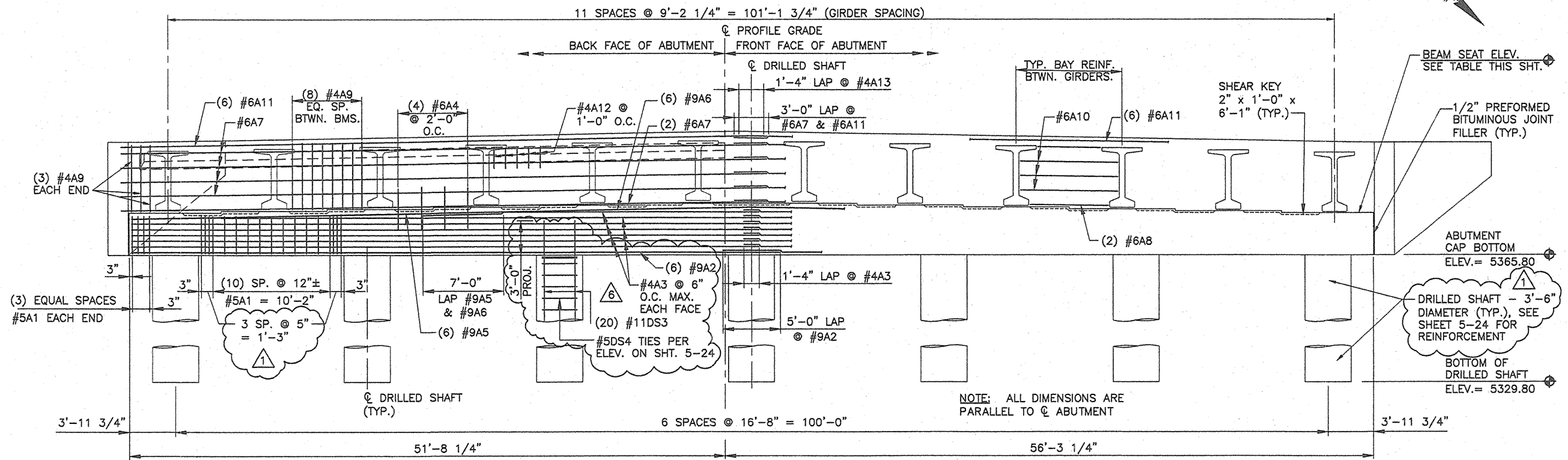
ENGINEER'S SEAL
GARY W. KINCHEN 14366 OCTOBER 28, 2005

NO.	DATE	REVISIONS	BY
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2	OCT 2005	DRAWN BY CRH	DATE OCT 2005
3	OCT 2005	CHECKED BY SFP	DATE OCT 2005

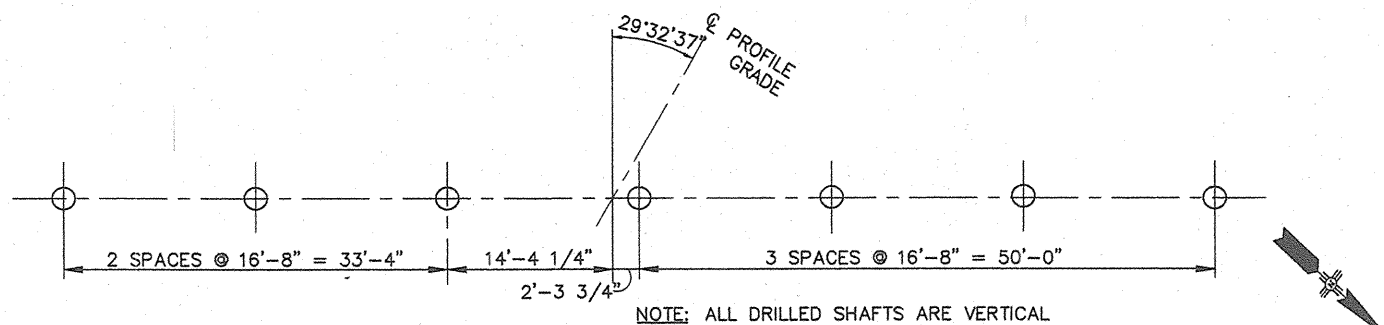
DESIGNED BY	DATE	DESIGNED BY	DATE
DRAWN BY	DATE	DRAWN BY	DATE
CHECKED BY	DATE	CHECKED BY	DATE



ABUTMENT NO. 1 - PLAN
SCALE: 1:60



ABUTMENT NO. 1 - ELEVATION
SCALE: 1:60



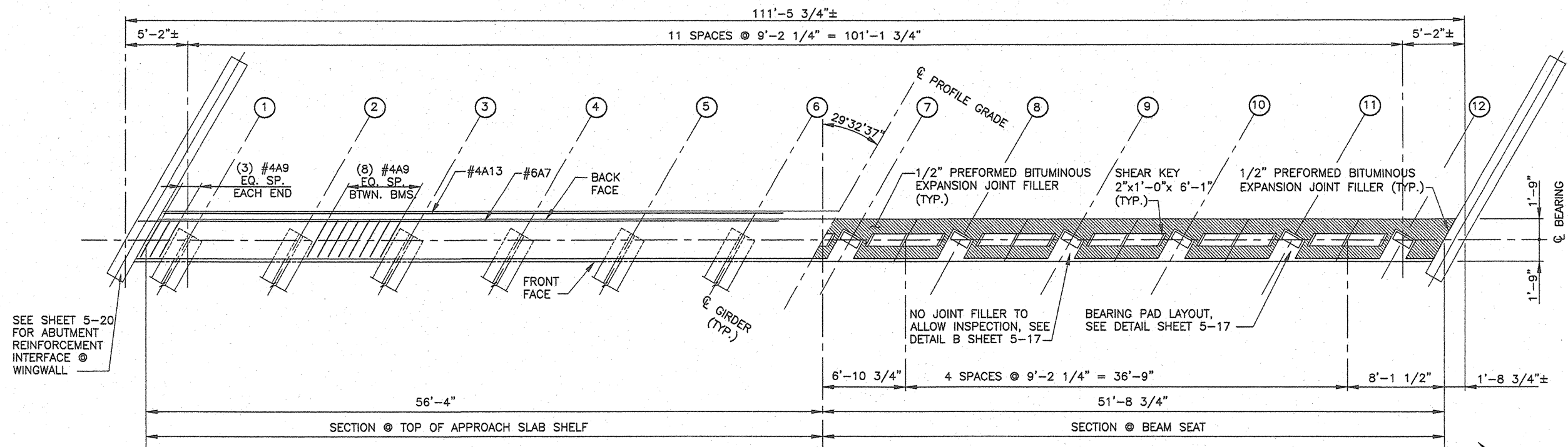
DRILLED SHAFT LAYOUT
NOT TO SCALE

GIRDER	ABUTMENT 1
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2	5369.93
3	5370.03
4	5370.14
5	5370.24
6	5370.35
7	5370.37
8	5370.16
9	5369.94
10	5369.73
11	5369.51
12	5369.30

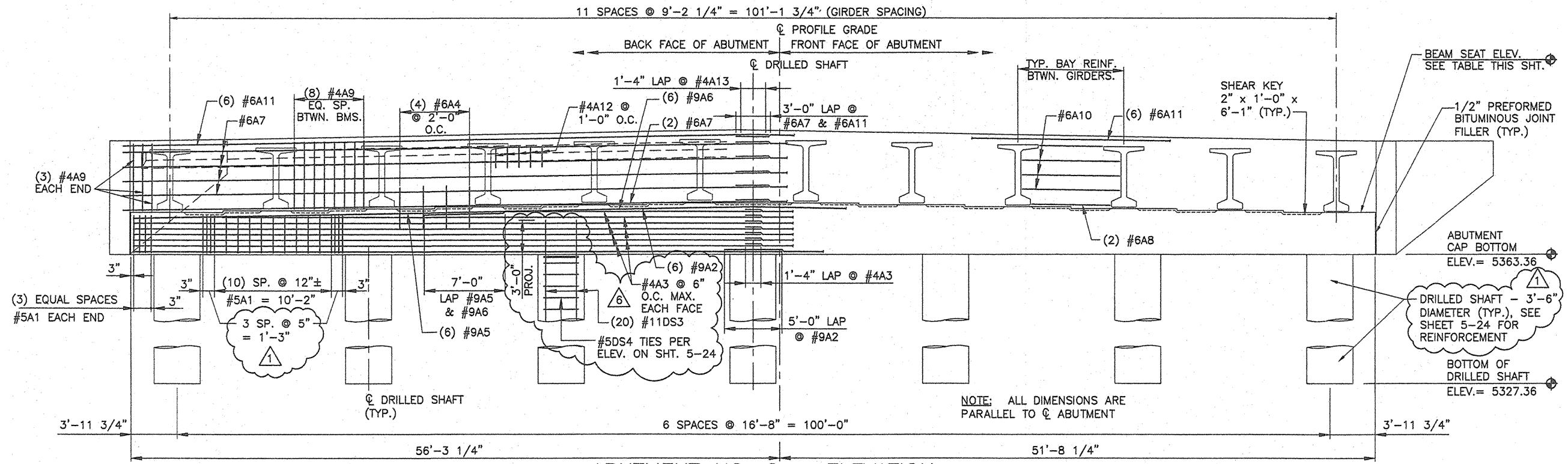
BEAM SEAT ELEVATIONS

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE ABUTMENT 1 PLAN AND ELEVATION			
Design Review Committee	City Engineer Approval	Last Design Update	
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-15 of	
WILSON & COMPANY			

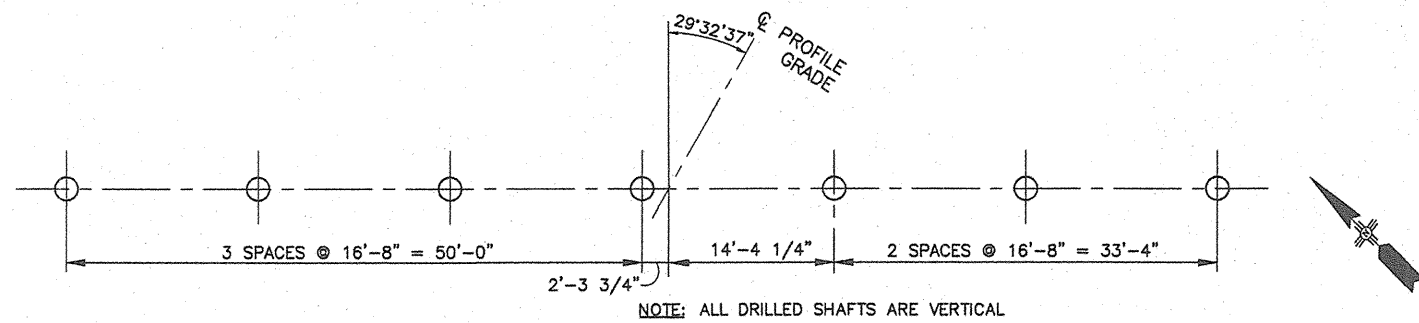
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
THE STA. IS A USGS TABLE STAMPED 'BLACK-2 1977' SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		THE STA. IS A USGS TABLE STAMPED 'BLACK-2 1977' SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		DATE BY NO.			
REVISIONS		REVISIONS		REVISIONS		REVISIONS	
NO. DATE		NO. DATE		NO. DATE		NO. DATE	
WILSON & COMPANY, ENGINEERS & ARCHITECTS		WILSON & COMPANY, ENGINEERS & ARCHITECTS		WILSON & COMPANY, ENGINEERS & ARCHITECTS		WILSON & COMPANY, ENGINEERS & ARCHITECTS	
DESIGNED BY DRAWN BY		DESIGNED BY DRAWN BY		DESIGNED BY DRAWN BY		DESIGNED BY DRAWN BY	
CHECKED BY		CHECKED BY		CHECKED BY		CHECKED BY	



ABUTMENT NO. 2 - PLAN
SCALE: 1:60



ABUTMENT NO. 2 - ELEVATION
SCALE: 1:60



DRILLED SHAFT LAYOUT
NOT TO SCALE

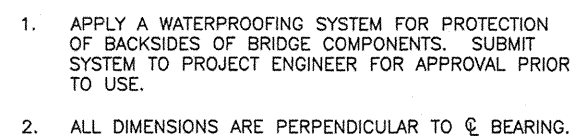
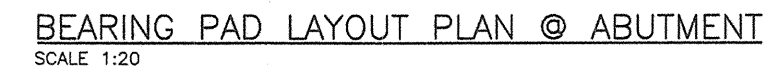
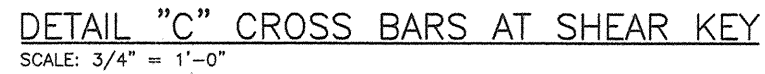
GIRDER	ABUTMENT 2
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3	5367.60
4	5367.70
5	5367.81
6	5367.91
7	5367.94
8	5367.72
9	5367.51
10	5367.29
11	5367.07
12	5366.86

BEAM SEAT ELEVATIONS

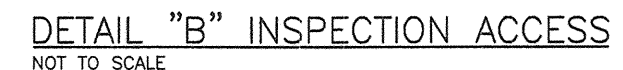
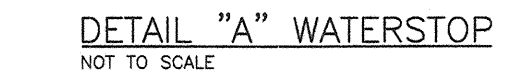
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE ABUTMENT 2 PLAN AND ELEVATION			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. COA 681602		Zone Map No. A-10-Z	Sheet 5-16 Of

WILSON & COMPANY

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DAVID MONTANA CONST. INC.	THE STA. IS A USGS TABLE STAMPED 'BLACK-2 1977' SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DATE	DATE	DATE	DATE	DATE
DESIGNED BY	WILSON & COMPANY	RECORDED BY	WILSON & COMPANY	NO.	BY	NO.	BY
CHECKED BY	WILSON & COMPANY	DATE	OCT 2005	DATE	OCT 2005	DATE	OCT 2005



TYPICAL SECTION (BETWEEN BEAMS)
SCALE: 3/4" = 1'-0"



		CITY OF ALBUQUERQUE		2		0		0	
		DEPARTMENT OF MUNICIPAL DEVELOPMENT							
		TRANSPORTATION DIVISION							
MCMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE ABUTMENT DETAILS									
Design Review Committee		City Engineer Approval		Last Design Update	Mo./Day/Yr.		Mo./Day/Yr.		
City Project No.		Zone Map No.		Sheet		Of			
COA 681602		A-10-Z		5-17					

**WILSON
& COMPANY**

39 OF 164
ADDENDUM #1
ATTACHMENT #2 SHEET 6 OF 1

AS-BUILT INFORMATION	
CONTRACTOR David Mortaya Const. Inc.	
WORK ORDER NO.	DATE
STAGED BY Williamsley Engr.	DATE
APPROVED BY COA	DATE
FIELD VERIFIED BY COA/WC1	DATE 3/07
CONTACTED BY WC1	
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS

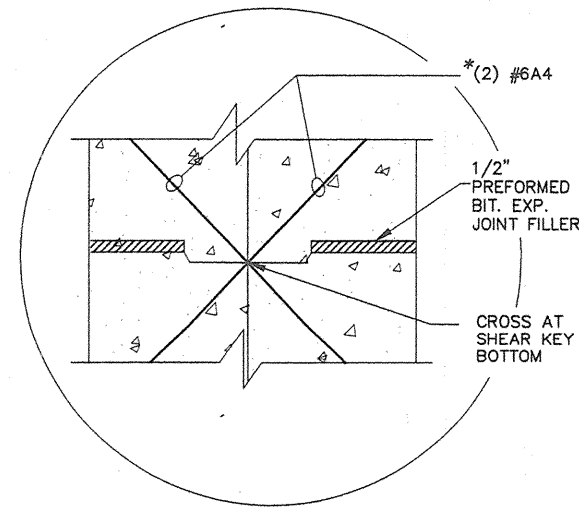
THE STA. IS A USSS TABLET STAMPED "BLACK-2 1977 SE".
FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W.
OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX.
OF COORS./-40 GO N. ON COORS 5.8 MI. TO PARADISE
BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO
GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD.
0.3 MI. TO McHARM BLVD. THE STA. IS ON THE LEFT.
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)

[illegible]

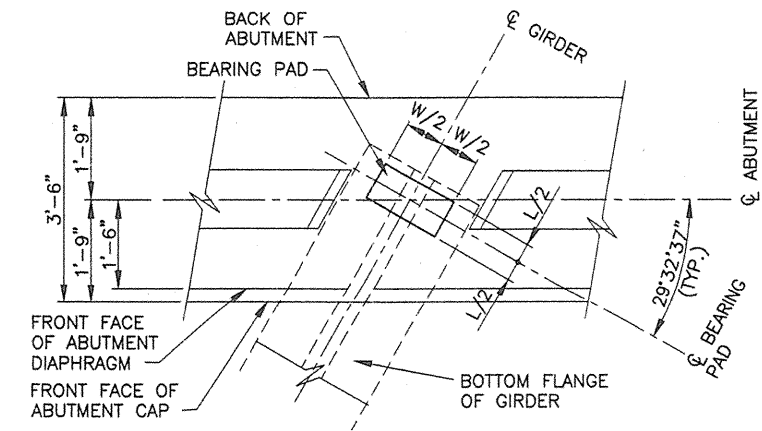
ENGINEER'S SEAL

GARY W. KINCHEN
NEW MEXICO
14386
REGISTERED
PROFESSIONAL ENGINEER
OCTOBER 28, 2005

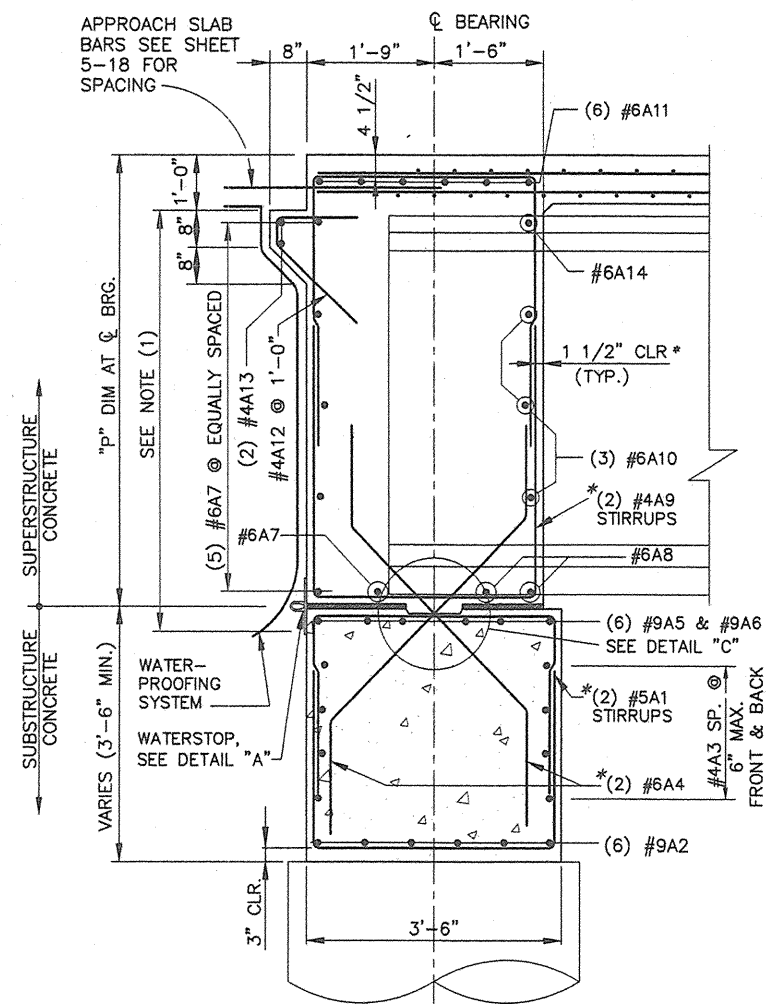
[illegible]



DETAIL "C" CROSS BARS AT SHEAR KEY
SCALE: 3/4" = 1'-0"



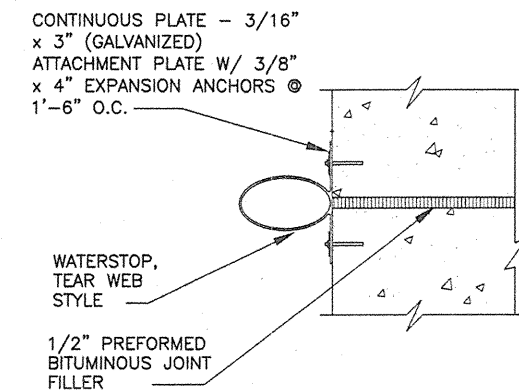
BEARING PAD LAYOUT PLAN @ ABUTMENT
SCALE 1:20



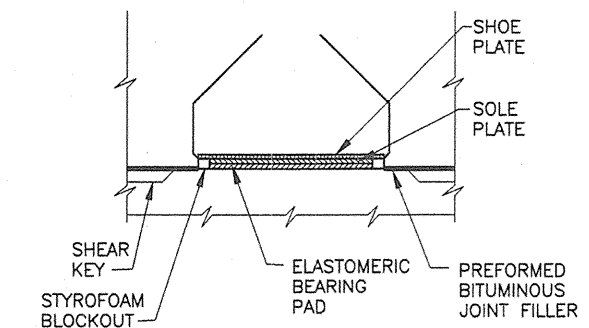
NOTES:

1. APPLY A WATERPROOFING SYSTEM FOR PROTECTION OF BACKSIDES OF BRIDGE COMPONENTS. SUBMIT SYSTEM TO PROJECT ENGINEER FOR APPROVAL PRIOR TO USE.
2. ALL DIMENSIONS ARE PERPENDICULAR TO ϕ BEARING.

TYPICAL SECTION (BETWEEN BEAMS)
SCALE: 3/4" = 1'-0"



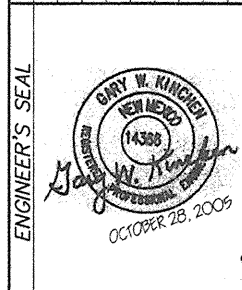
DETAIL "A" WATERSTOP
NOT TO SCALE



DETAIL "B" INSPECTION ACCESS
NOT TO SCALE

BENCH MARKS		AS-BUILT INFORMATION	
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/7-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	CONTRACTOR	David Montoya Const. Inc.	DATE
	WORK	at Billingsley Eng'g	DATE
	ACCEPTANCE BY	COA	DATE
	REVISIONS	COA/MCI	DATE
		MICRO-FILM INFORMATION	
		RECORDED BY	DATE
		NO.	DATE

SURVEY INFORMATION		FIELD NOTES	
NO.	DATE	BY	

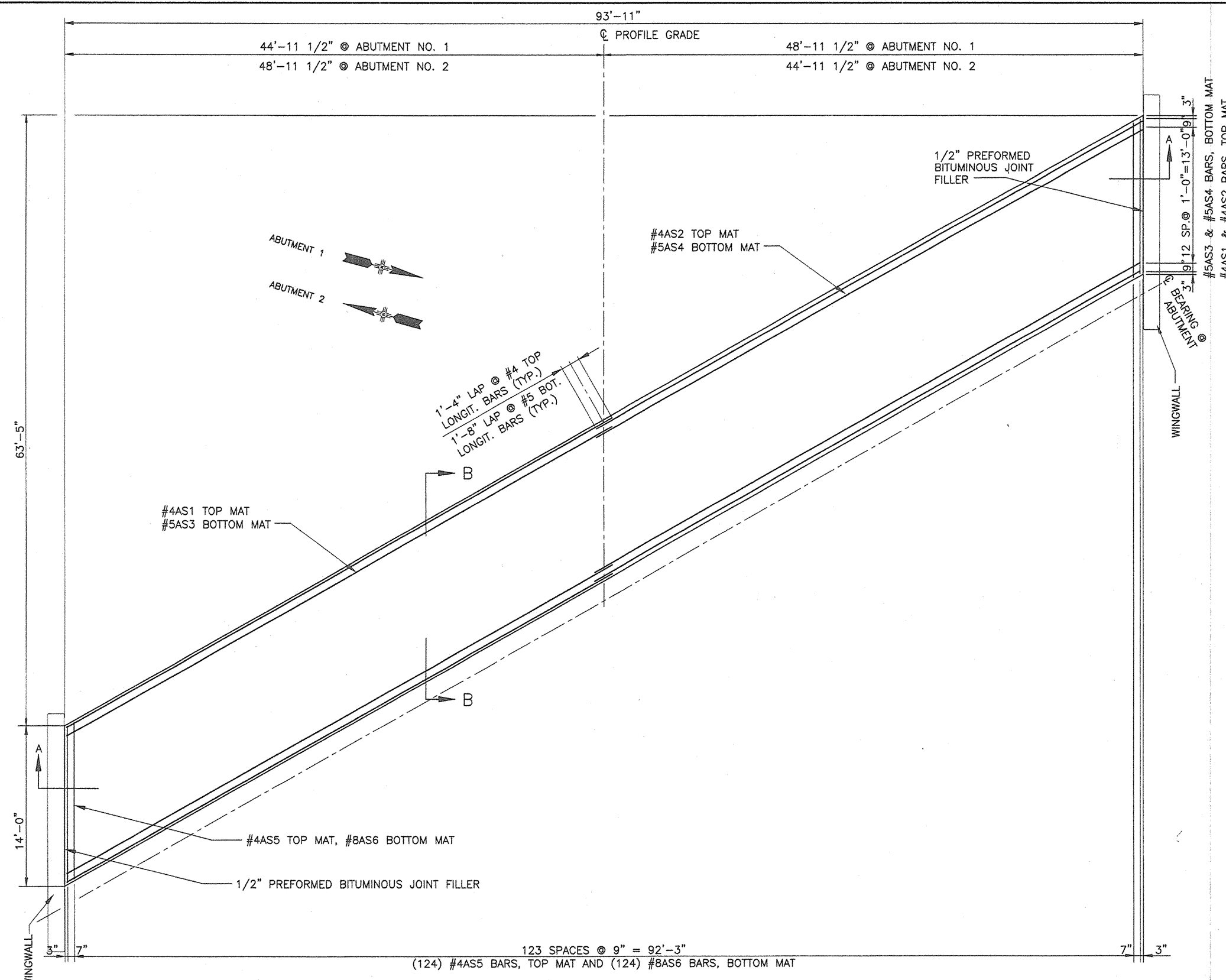


REVISIONS		REMARKS	
NO.	DATE	BY	
1			

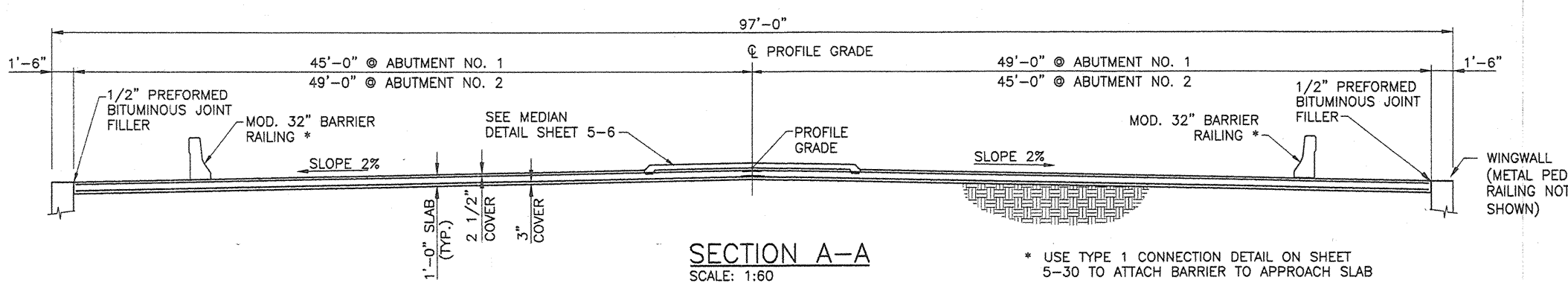
DESIGNED BY		DATE	
GWK		OCT 2005	
DRAWN BY		DATE	
CRH		OCT 2005	
CHECKED BY		DATE	
SFP		OCT 2005	

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE ABUTMENT DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVE	APPROVE		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	5-17	

WILSON
& COMPANY

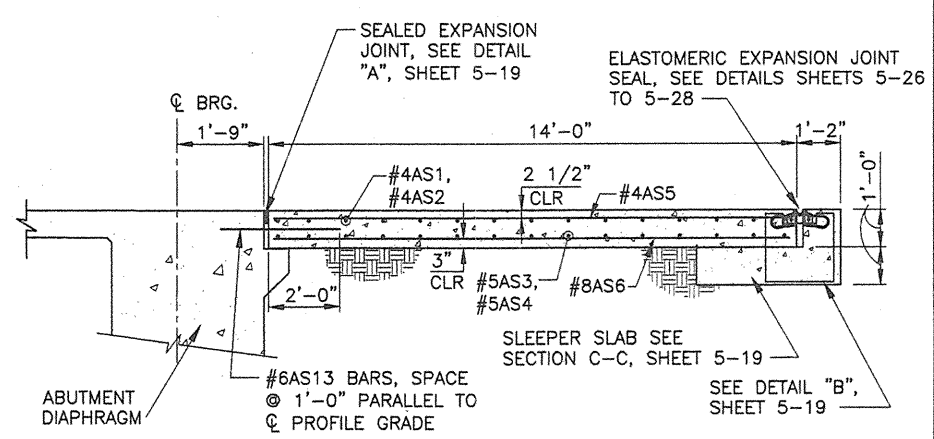


APPROACH SLAB PLAN
SCALE: 1:60



SECTION A-A
SCALE: 1:60

* USE TYPE 1 CONNECTION DETAIL ON SHEET 5-30 TO ATTACH BARRIER TO APPROACH SLAB



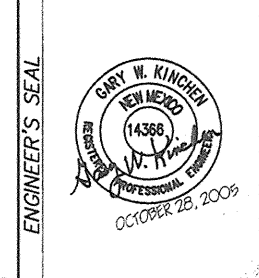
SECTION B-B
SCALE: 1:60

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE APPROACH SLAB SECTION	
Design Review Committee APPROVED REVIEW COMMITTEE	City Engineer Approval APPROVED CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-18	Of 40

WILSON & COMPANY

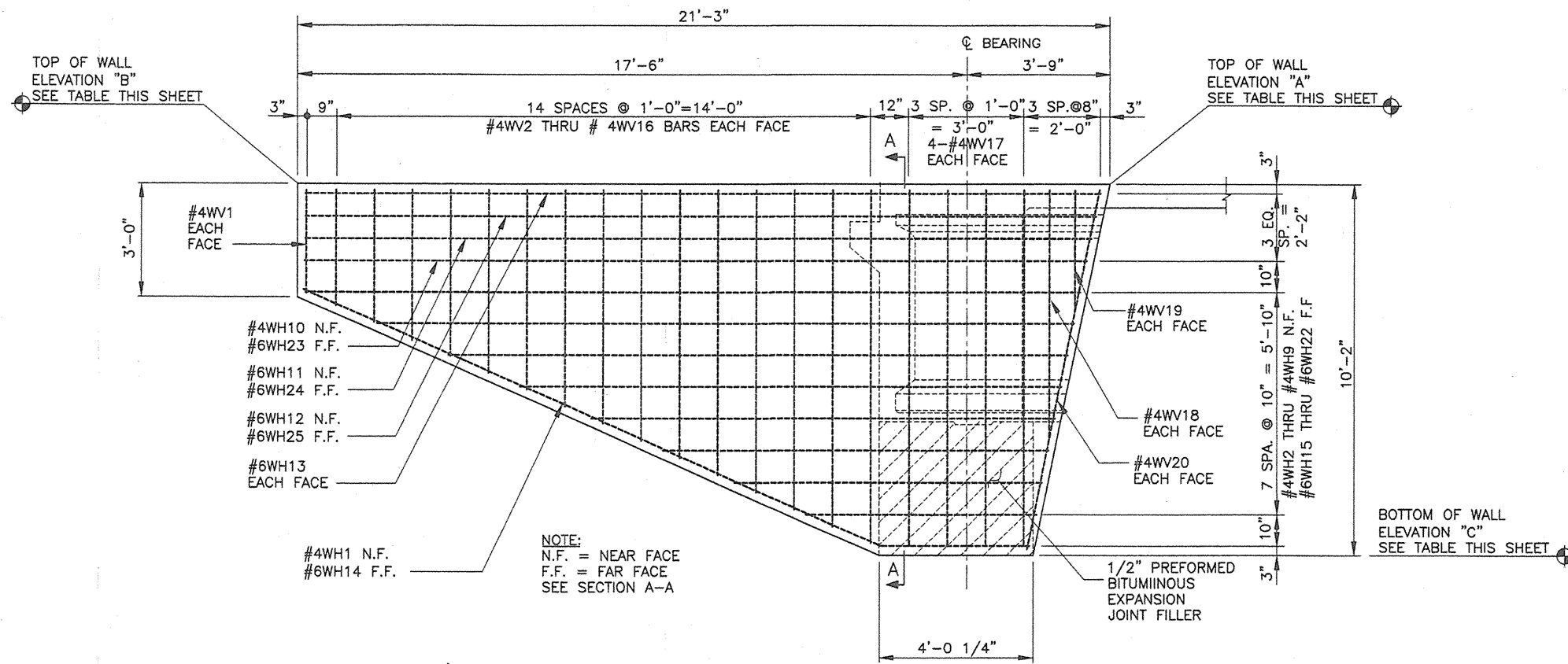
AS-BUILT INFORMATION	
CONTRACTOR	David Mortoya Const. Inc.
DESIGNED BY	Billingsley Eng'g
DATE	DATE
INSPECTED BY	COA
DATE	DATE
APPROVED BY	COA/NCI
DATE	DATE
RECORDED BY	NCI
DATE	DATE
MICRO-FILM INFORMATION	
NO.	NO.
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

SURVEY INFORMATION	
FIELD NOTES	DATE
BY	DATE
NO.	DATE

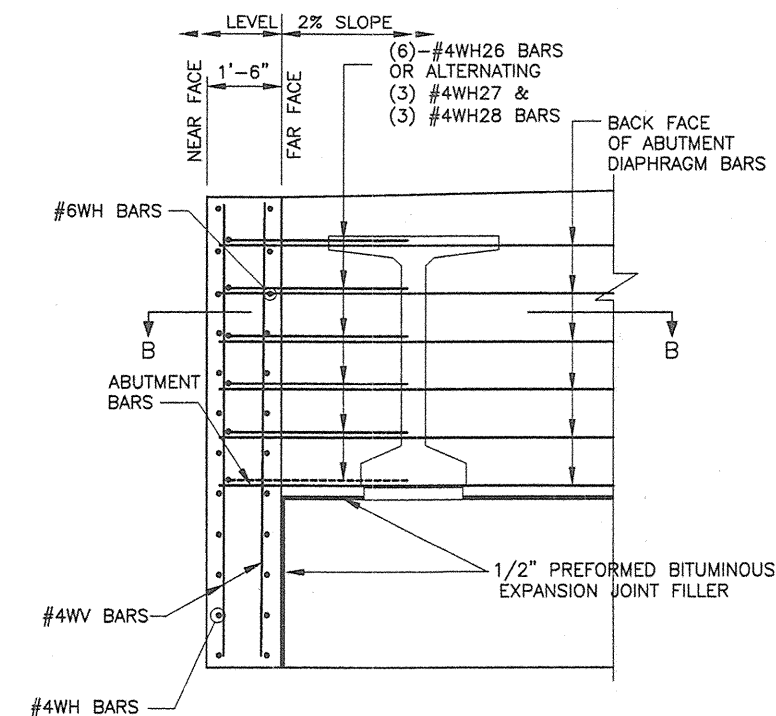


REVISIONS	
NO.	DATE
1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE
7	DATE
8	DATE
9	DATE
10	DATE

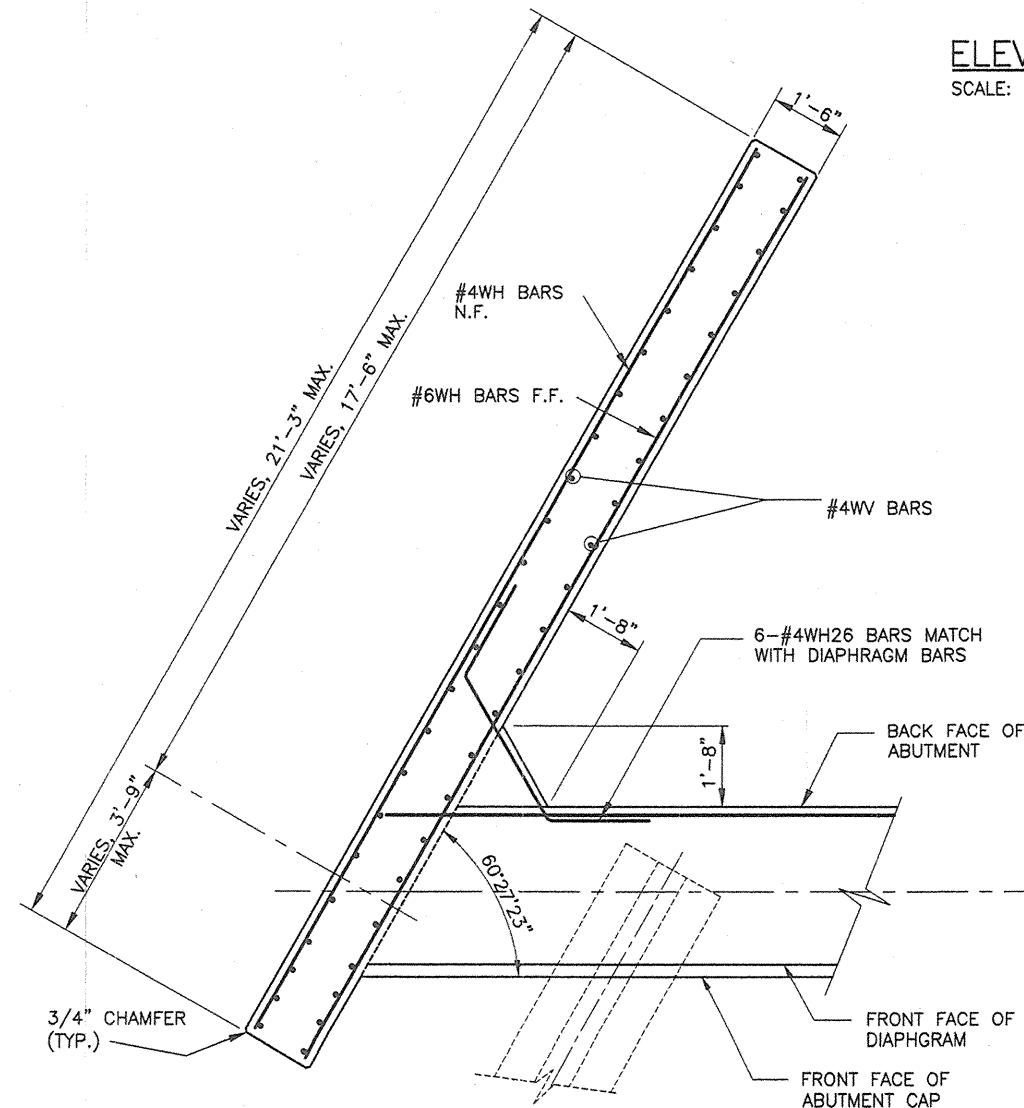
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
REVISIONS	DATE
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1	DATE
2	DATE
3	DATE
4	DATE
5	DATE
6	DATE
7	DATE
8	DATE
9	DATE
10	DATE



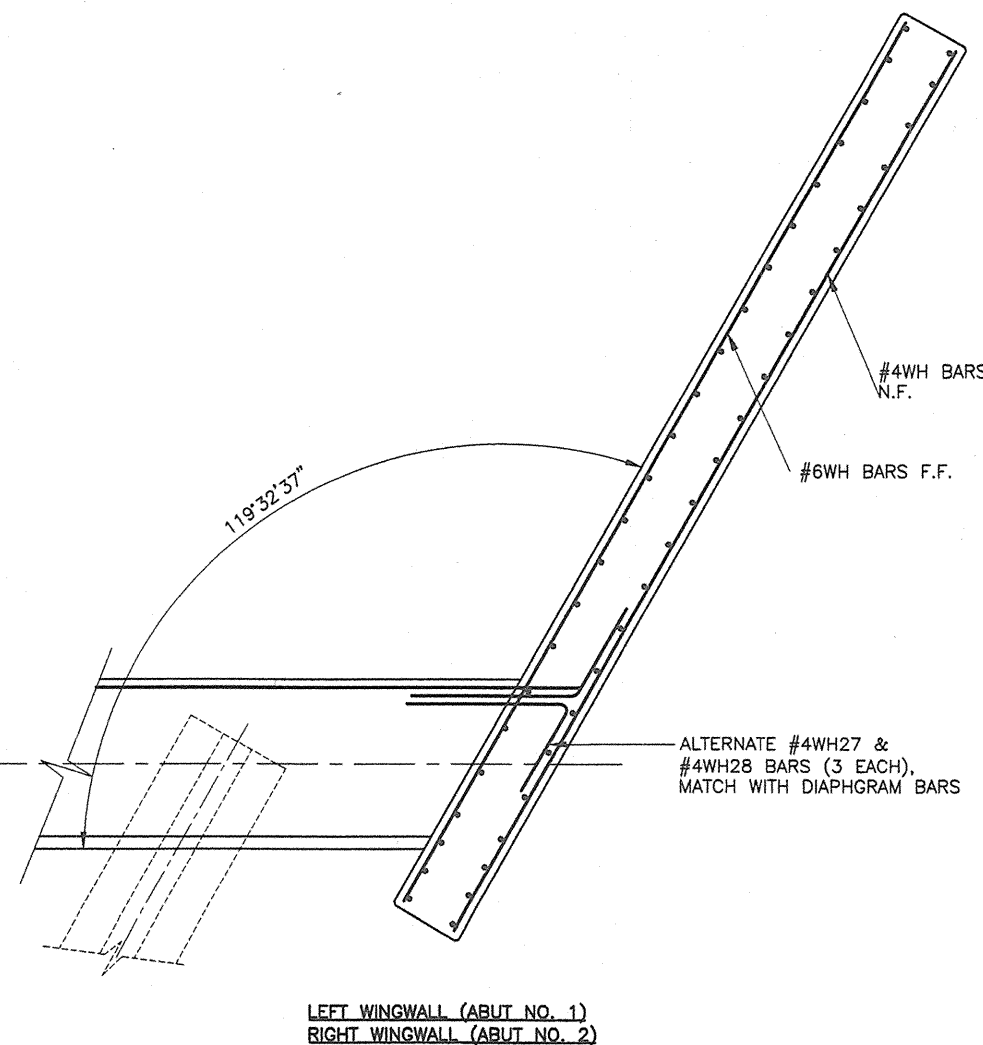
ELEVATION
SCALE: 1/2" = 1'-0"



SECTION A-A
SCALE: 1/2" = 1'-0"



SECTION B-B
SCALE: 1/2" = 1'-0"



NOTE: SEE SHEETS 5-15 THRU 5-17 FOR ABUTMENT DIAPHRAGM REINFORCING

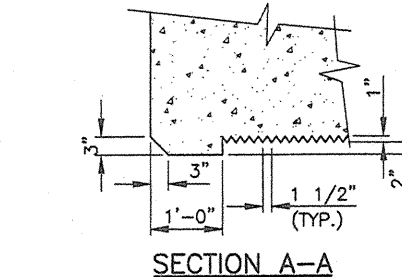
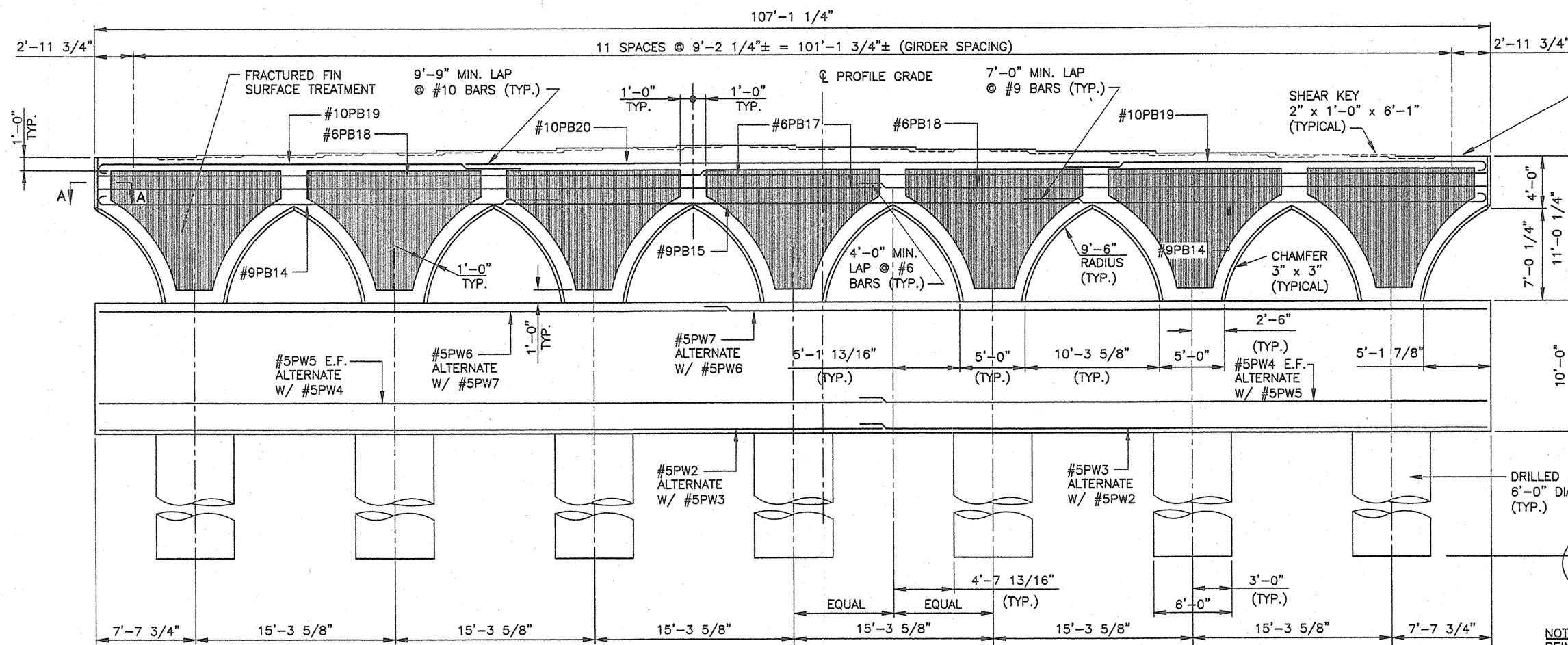
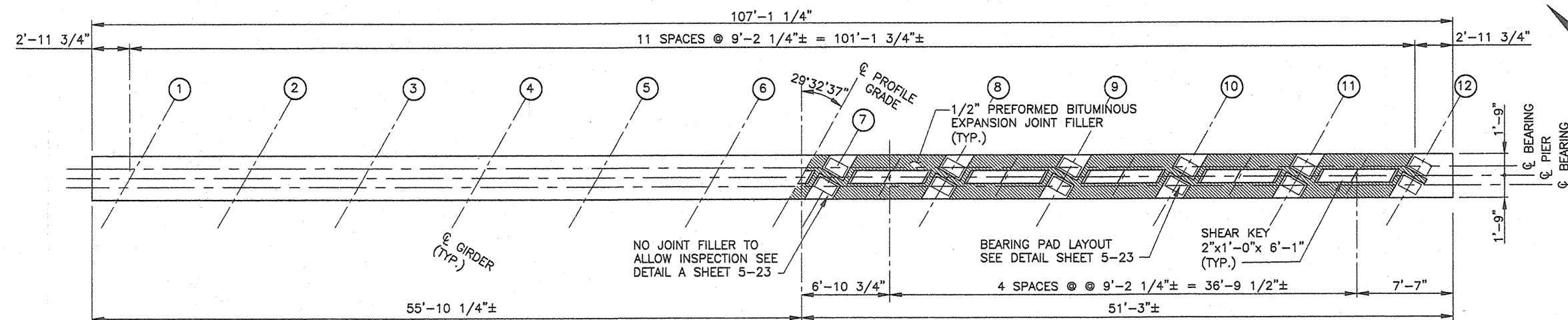
	WALL	ELEVATIONS		
		A	B	C
ABUTMENT 1	LEFT	5376.15	5376.41	5365.98
	RIGHT	5375.58	5375.84	5365.41
ABUTMENT 2	LEFT	5373.76	5373.50	5363.60
	RIGHT	5373.19	5372.93	5363.03

WALL ELEVATIONS

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE			
WINGWALL DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	5-20	

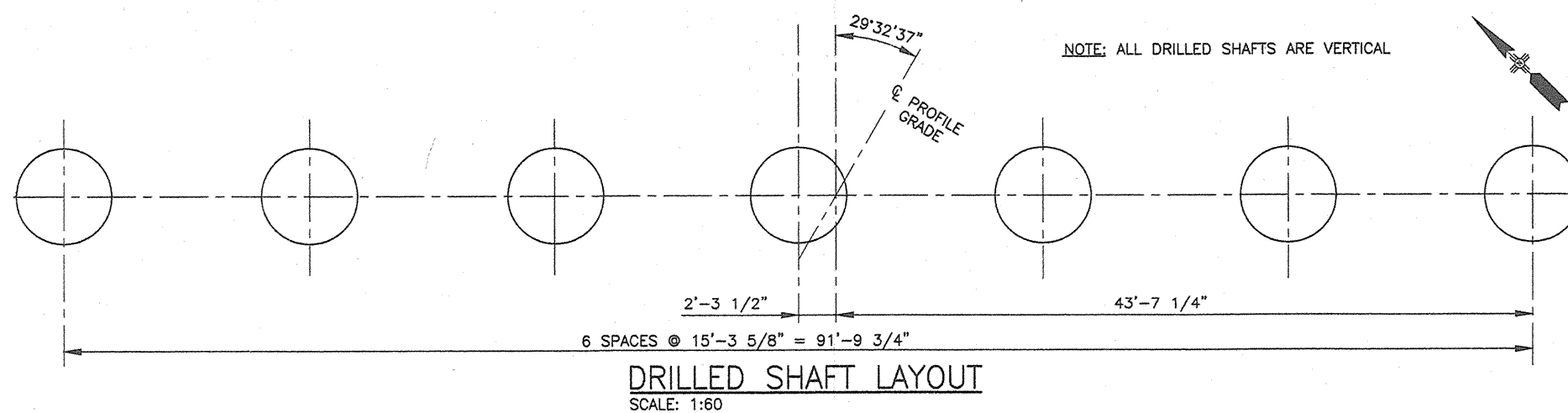
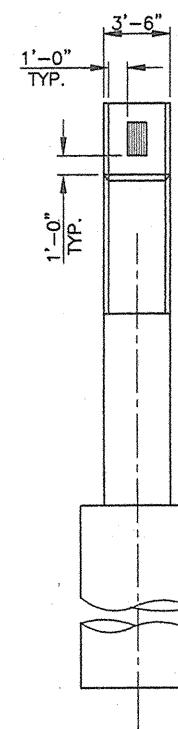
WILSON & COMPANY

AS-BUILT INFORMATION			
CONTRACTOR	DATE	REVISION	DATE
David Montoya Const. Inc.	3/1/07		
BENCH MARKS			
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET IN THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQU. TO REACH THE STA. FROM THE INTY. OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.			
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)			
SURVEY INFORMATION			
NO.	DATE	BY	FIELD NOTES
ENGINEER'S SEAL			
GARY W. KINCHEN 14368 OCTOBER 28, 2006			
NO.	DATE	REVISIONS	REMARKS
DESIGNED BY	DATE	DESIGNED BY	DATE
WILSON & COMPANY, ENGINEERS & ARCHITECTS	OCT 2005	WILSON & COMPANY, ENGINEERS & ARCHITECTS	OCT 2005
DRAWN BY	DATE	DRAWN BY	DATE
CRH	OCT 2005	CRH	OCT 2005
CHECKED BY	DATE	CHECKED BY	DATE
SFP	OCT 2005	SFP	OCT 2005



- NOTES:**
1. OBTAIN PROJECT ENGINEER'S APPROVAL OF FORM LINERS FOR THE FRACTURED FIN SURFACE TREATMENT PRIOR TO USE.
 2. THE COSTS OF ALL LABOR AND MATERIALS TO INSTALL THE FRACTURED FIN SURFACE TREATMENT ARE INCLUDED IN AND INCIDENTAL TO THE BID ITEM "SUBSTRUCTURE CONCRETE".

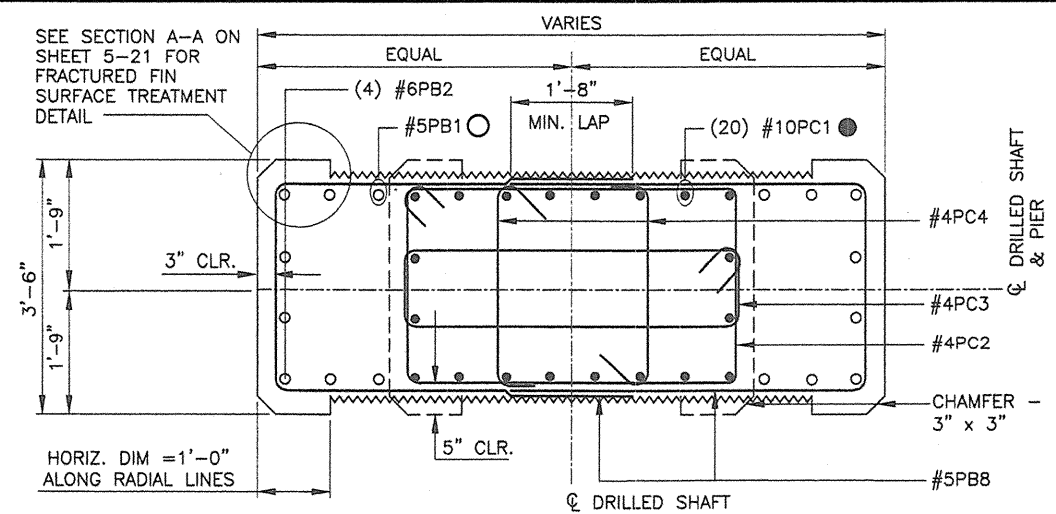
FRACTURED FIN SURFACE TREATMENT DETAIL



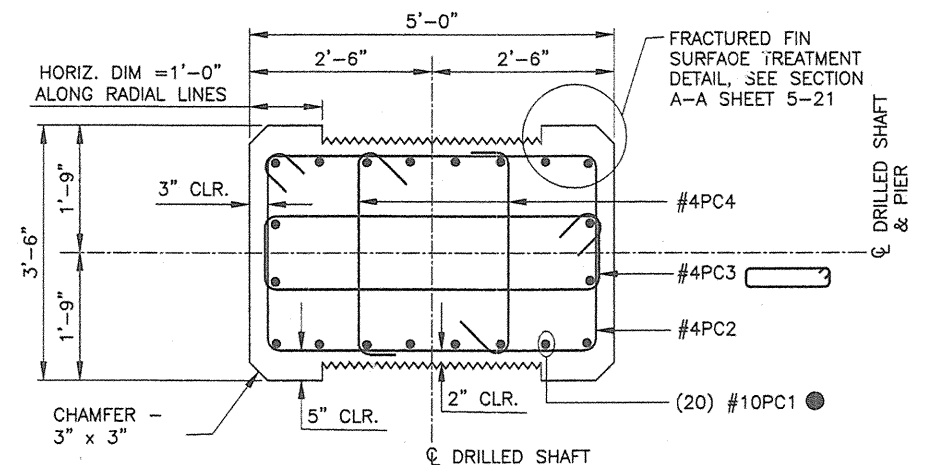
GIRDER	PIER 1	PIER 2
1	5369.06	5367.63
2	5369.16	5367.73
3	5369.27	5367.84
4	5369.37	5367.94
5	5369.48	5368.05
6	5369.58	5368.15
7	5369.61	5368.18
8	5369.39	5367.96
9	5369.18	5367.74
10	5368.96	5367.53
11	5368.75	5367.31
12	5368.53	5367.10

		CITY OF ALBUQUERQUE					
DEPARTMENT OF MUNICIPAL DEVELOPMENT							
TRANSPORTATION DIVISION							
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE							
PIER DETAILS							
Design Review Committee		City Engineer Approval					
		Last Design Update		Mo./Day/Yr.		Mo./Day/Yr.	
City Project No.		Zone Map No.		Sheet		Of	
COA 681602		A-10-Z				5-21	

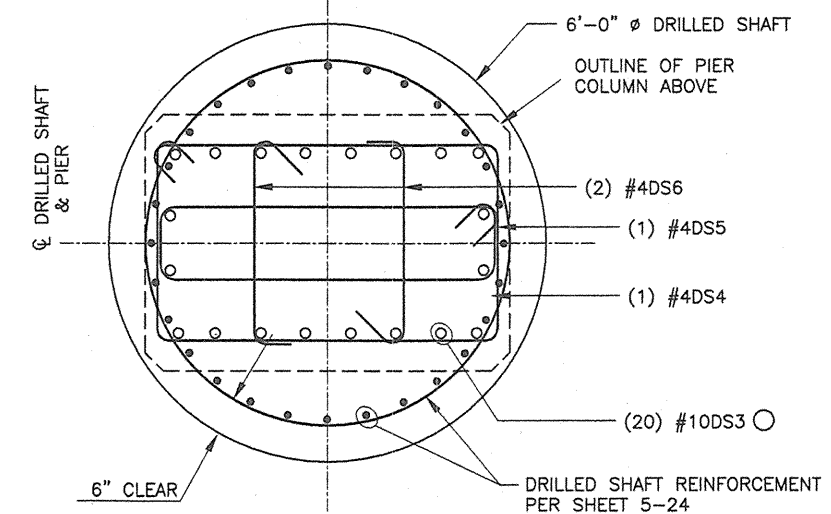
**WILSON
& COMPANY**



SECTION D-D
SCALE: $\frac{3}{4}" = 1'-0"$

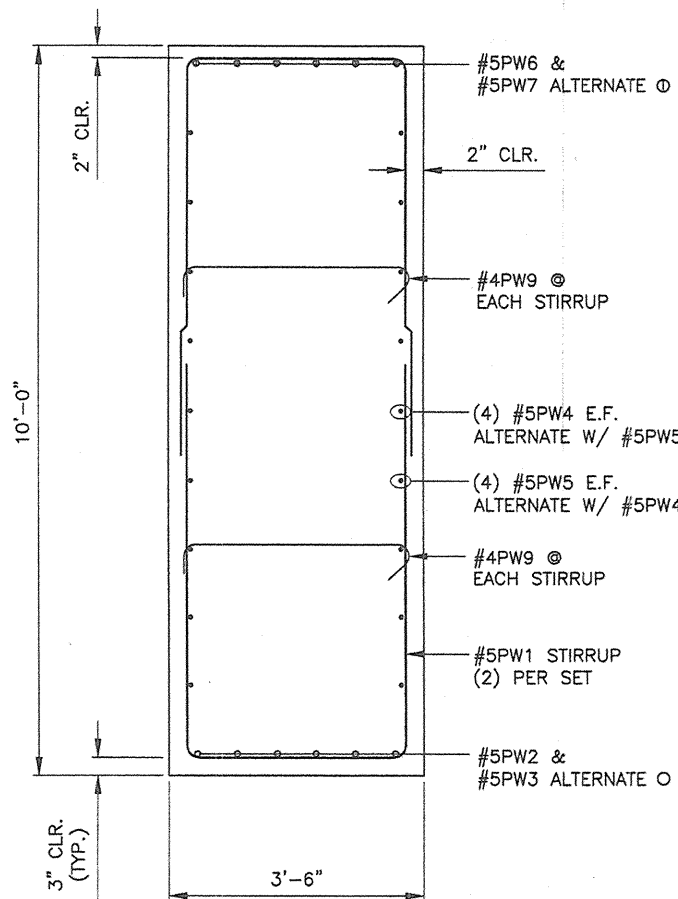


SECTION C-C
SCALE: 3/4" = 1'-0"

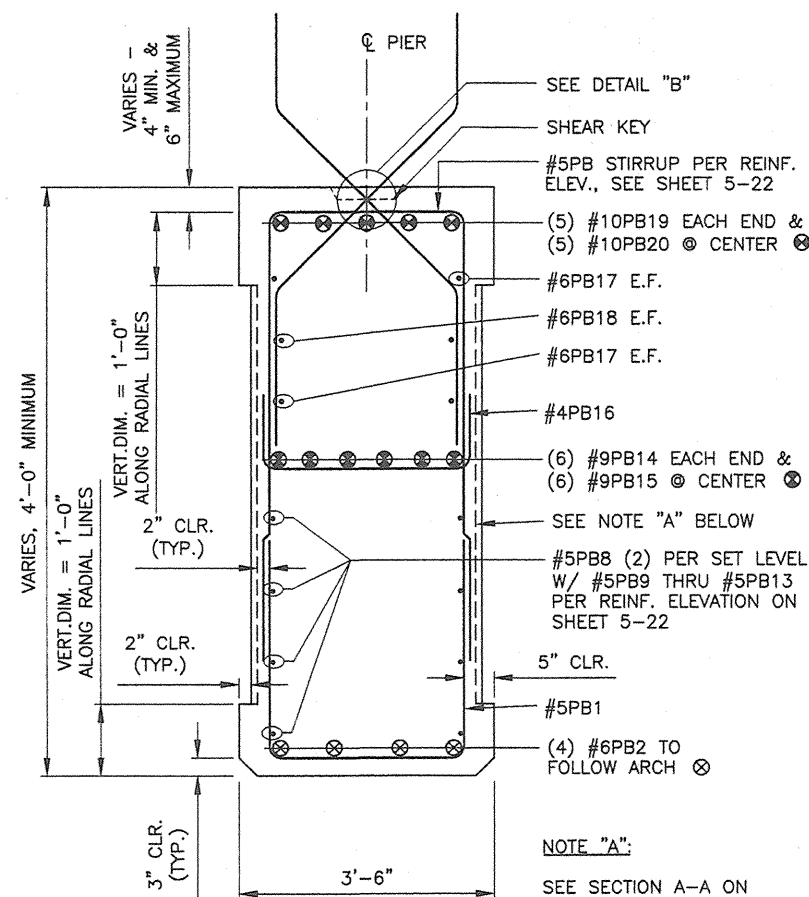


SECTION B-B
SCALE: 3/4" = 1'-0"

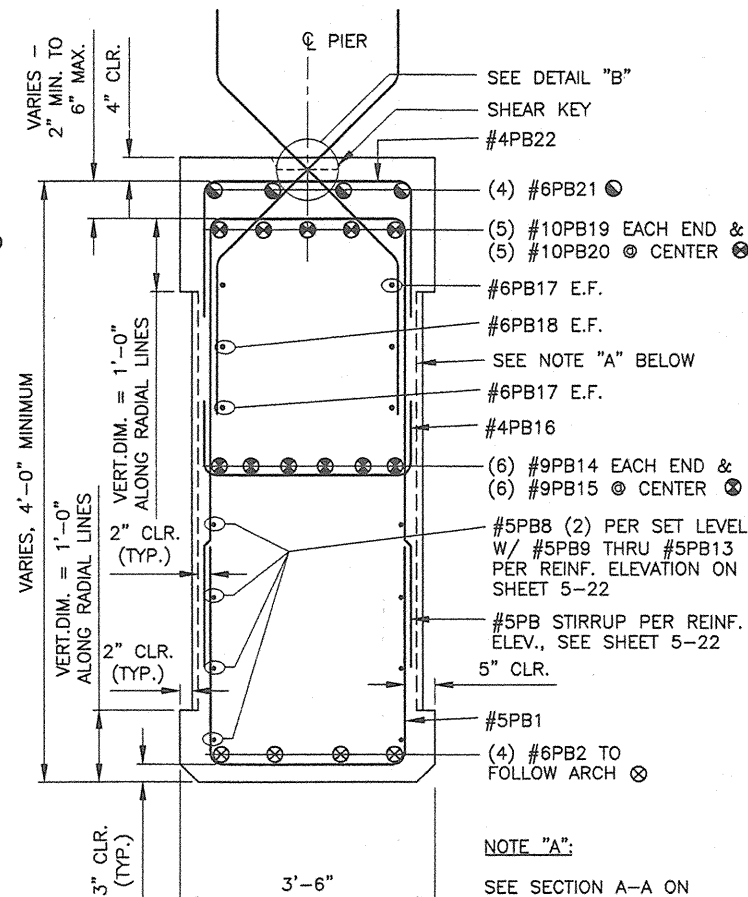
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION															
McMAHON BLVD. EXTENSION – LAS CALABACILLAS BRIDGE PIER DETAILS																
Design Review Committee APPROVED NOV 17 2009 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 17 2009 CITY ENGINEER	Last Design Update	Mo./Day/Yr. <table border="1" style="width: 100%; height: 100px;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>							Mo./Day/Yr. <table border="1" style="width: 100%; height: 100px;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>						
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet Of 5-22														



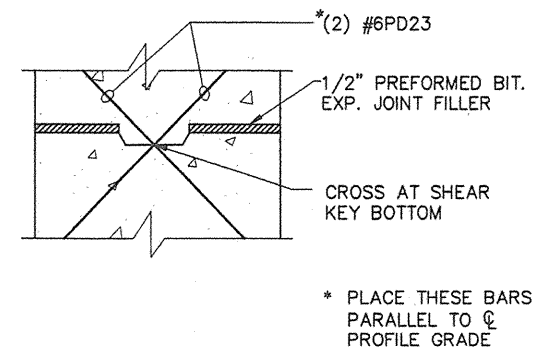
SECTION E-E
SCALE: 3/4" = 1'-0"



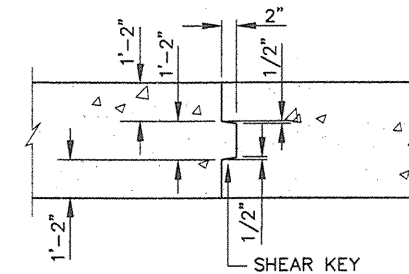
SECTION F-F
SCALE: 3/4" = 1'-0"



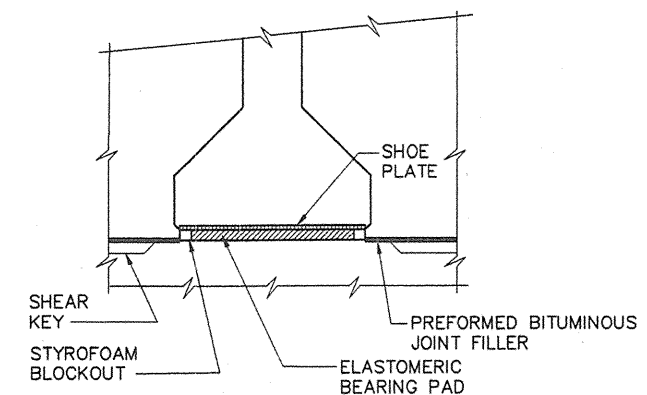
SECTION G-G
SCALE: 3/4" = 1'-0"



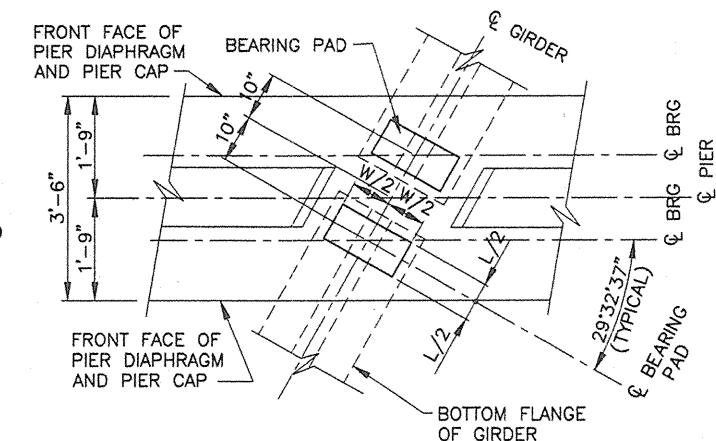
DETAIL "B" CROSS STIRRUPS
NOT TO SCALE



PIER CURTAINWALL
CONSTRUCTION JOINT
NOT TO SCALE



DETAIL "A" INSPECTION ACCESS
NOT TO SCALE

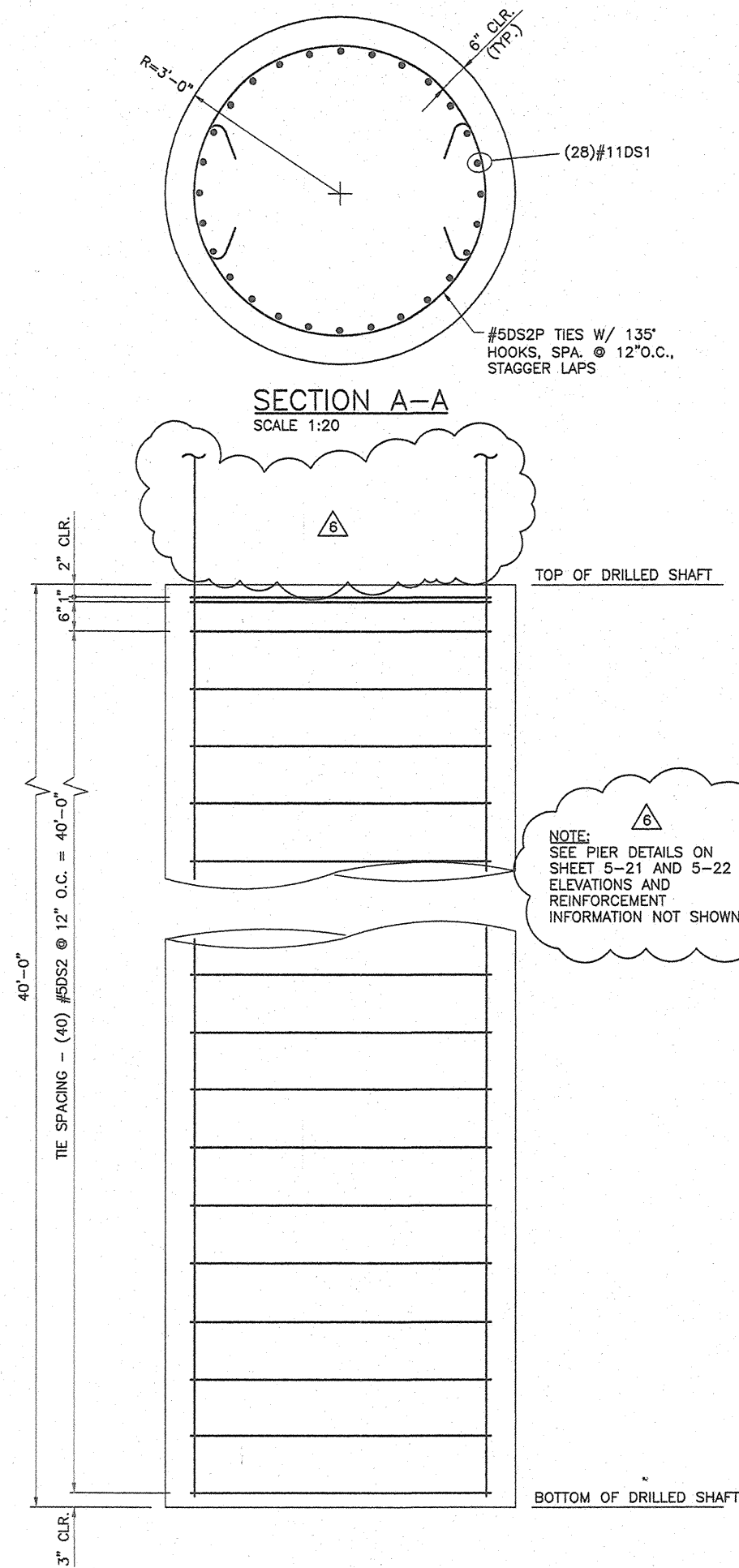


BEARING PAD LAYOUT PLAN @ PIER
SCALE 1:20

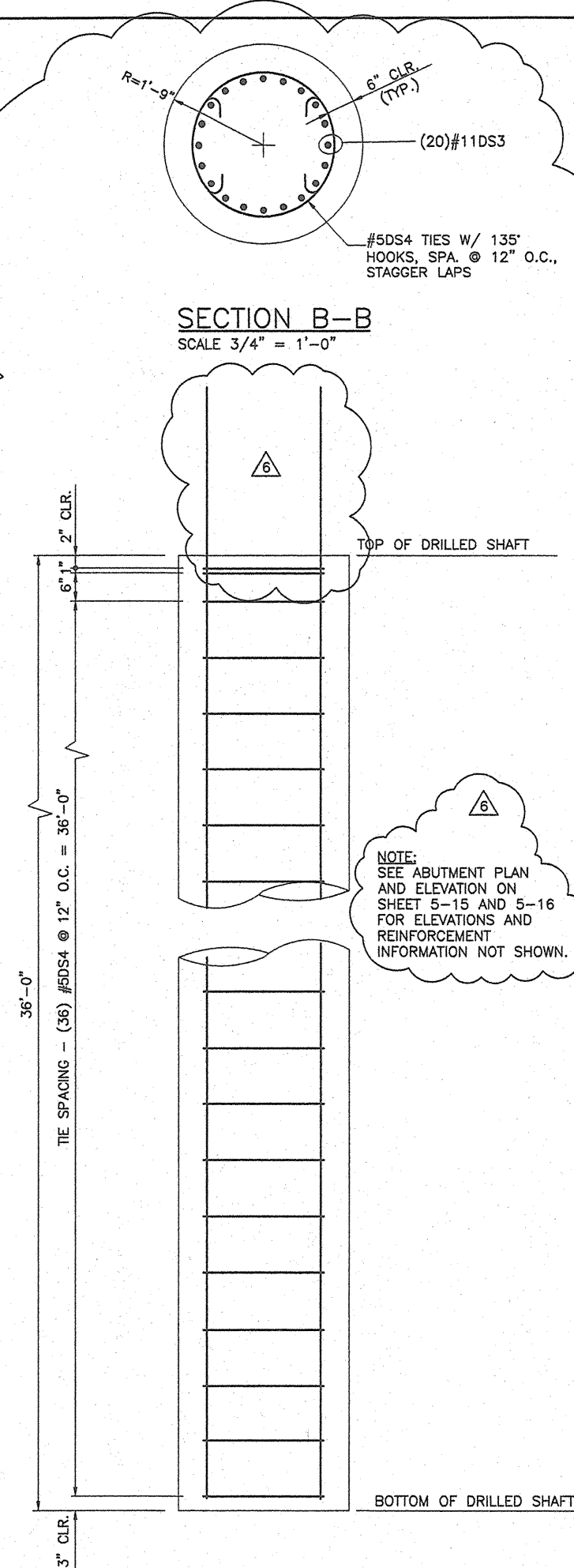
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION														
McMAHON BLVD. EXTENSION – LAS CALABACILLAS BRIDGE PIER DETAILS															
Design Review Committee APPROVED NOV 17 1999 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 17 1999 CITY ENGINEER	Last Design Update	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Mo./Day/Yr.</th> <th style="width: 50%;">Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Mo./Day/Yr.	Mo./Day/Yr.										
Mo./Day/Yr.	Mo./Day/Yr.														
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet Of 5-23													

SURVEY INFORMATION			BENCH MARKS		AS-BUILT INFORMATION			
NO.	FIELD NOTES		THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SET"	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. 1/4 OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	CONTRACTOR FOR David Monroy Const. Inc.			
	BY	DATE			WORKED BY	DATE	INSPECTOR'S	DATE
					ACCEPTED BY	DATE	WILLINGLEY Eng.	
					VERIFICATION BY	DATE	COA	
					EXAMINED	DATE	3/03	
					RECORDED BY	DATE	WCL	
					MICRO-FILM INFORMATION			
					NO.			

WILSON & COMPANY, ENGINEERS & ARCHITECTS			
DESIGNED BY	GWK	DATE	OCT 2005
DRAWN BY	GRH	DATE	OCT 2005
REVIEWED BY	SED	DATE	OCT 2005
		REMARKS	BY



DRILLED SHAFT - 6'-0" DIAMETER
SCALE 3/4" = 1'-0"



DRILLED SHAFT - 3'-6" DIAMETER
SCALE 3/4" = 1'-0"

SEE SHEET 5-4 FOR FOUNDATION NOTES

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE DRILLED SHAFT DETAILS			
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
COA 681602	A-10-Z	5-24	

WILSON
& COMPANY

ENGINEER'S SEAL		SURVEY INFORMATION		AS-BUILT INFORMATION	
		FIELD NOTES		CONTRACTOR: David M. Hargrave Const. Inc.	
		NO. BY DATE		STATIONED BY: David M. Hargrave Const. Inc.	
REVISIONS		NO. DATE		DATE	
6-16-06 REVISED DRILLED SHAFT REIN		CRH		DATE	
2-1-06 REVISED DRILLED SHAFT DIAMETER		CRH		DATE	
NO. DATE		BY		DATE	
WILSON & COMPANY, ENGINEERS & ARCHITECTS		DATE		DATE	
DESIGNED BY: GWK		OCT 2005		DATE	
DRAWN BY: CRH		OCT 2005		DATE	
CHECKED BY: SFP		OCT 2005		DATE	
				ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#5T 1	5	65	1' - 6" TO 57' - 11"	STR.	AVG LENGTH = 29' - 8 1/2" INCREMENT = 0' - 10 1/2"	2014
#5T 2	5	346	57' - 4" TO 4' - 0"	STR.		20690
#5T 3	5	44	41' - 4" TO 7' - 8"	STR.	AVG LENGTH = 22' - 8" INCREMENT = 0' - 10 1/2"	1040
#5T 4	5	348	41' - 4" TO 45' - 4"	STR.		14916
#5T 5	5	44	1' - 4" TO 57' - 11"	STR.	AVG LENGTH = 26' - 6" INCREMENT = 0' - 10 1/2"	1216
#5T 6	5	65	25' - 8" TO 42' - 6"	STR.	AVG LENGTH = 29' - 7 1/2" INCREMENT = 0' - 10 1/2"	2008
#4TL 1	4	194	44' - 9" TO 58' - 3"	STR.		3326
#4TL 2	4	388	58' - 3" TO 1' - 11"	STR.		11015
#9TL 3	9	194	58' - 3" TO 1' - 11"	STR.		29517
#9TL 4	9	194	58' - 3" TO 1' - 11"	STR.		38422
#5B 1	5	65	58' - 4" TO 4' - 5"	STR.	AVG LENGTH = 30' - 1 1/2" INCREMENT = 0' - 10 1/2"	2042
#5B 2	5	346	4' - 5" TO 41' - 4"	STR.		16360
#5B 3	5	44	41' - 4" TO 53' - 4"	STR.	AVG LENGTH = 22' - 10 1/2" INCREMENT = 0' - 10 1/4"	1050
#5B 4	5	346	53' - 4" TO 7' - 5"	STR.		19247
#5B 5	5	44	7' - 5" TO 45' - 2"	STR.	AVG LENGTH = 26' - 3 1/2" INCREMENT = 0' - 10 1/2"	1207
#5B 6	5	65	1' - 0" TO 57' - 6"	STR.	AVG LENGTH = 29' - 3" INCREMENT = 0' - 10 1/2"	1983
#4BL 1	4	122	36' - 10" TO 60' - 0"	STR.		3002
#4BL 2	4	244	60' - 0" TO 53' - 4"	STR.		9780
#4BL 3	4	122	53' - 4" TO 1' - 11"	STR.		4346
TOTAL EPOXY-COATED						183181

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#4D 1	4	110	17' - 5" TO 10' - 3"	2	a = 3'-9", b = 6'-1", c = 0'-0"	1280
#4D 2	4	88	10' - 3" TO 5' - 3"	1	a = 3'-3", b = 3'-6"	803
#4D 3	4	44	5' - 3" TO 8' - 5"	STR.		154
#4D 4	4	132	8' - 5" TO 1' - 11"	STR.		742
TOTAL EPOXY-COATED						2779

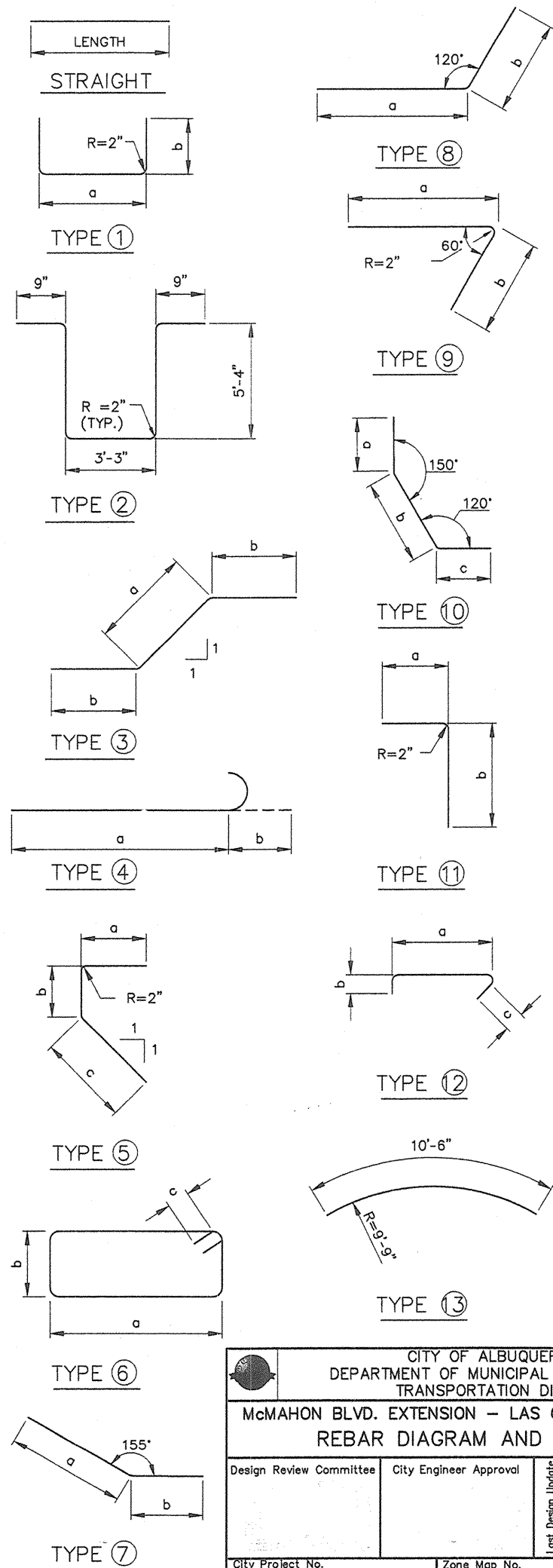
MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#4M 1	4	238	1' - 5" TO 60' - 0"	10	a = 0'-6", b = 0'-4", c = 0'-7"	225
#4M 2	4	60	60' - 0" TO 14' - 0"	STR.		2405
#4M 3	4	119	14' - 0" TO 1' - 2"	STR.		1113
#4M 4	4	238	1' - 2" TO 20' - 4"	11	a = 0'-6", b = 0'-8"	165
TOTAL EPOXY-COATED						3928

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#5A 1	5	440	8' - 9" TO 56' - 6"	1	NON-EPOXY, a = 3'-3", b = 2'-9"	4016
#5A 2	9	24	56' - 6" TO 54' - 6"	STR.	NON-EPOXY	4610
#5A 3	4	56	54' - 6" TO 7' - 1"	STR.	NON-EPOXY	2039
#5A 4	6	176	7' - 1" TO 32' - 6"	3	a = 4'-7", b = 1'-3"	1872
#5A 5	9	24	32' - 6" TO 57' - 6"	STR.	NON-EPOXY	2652
#5A 6	9	12	57' - 6" TO 6' - 9"	STR.	NON-EPOXY	2346
#5A 7	6	24	6' - 9" TO 10' - 9 1/2"	STR.		2073
#5A 8	6	44	10' - 9 1/2" TO 8' - 5"	STR.	a = 3'-5 1/2", b = 3'-8"	446
#5A 9	4	376	8' - 5" TO 57' - 6"	STR.		2711
#5A 10	6	66	57' - 6" TO 4' - 1 3/4"	STR.		834
#5A 11	6	24	4' - 1 3/4" TO 55' - 0"	STR.	a = 1'-6", b = 0'-5 3/4", c = 2'-2"	2073
#5A 12	4	218	55' - 0" TO 5' - 5"	5		604
#5A 13	4	8	5' - 5" TO 7' - 5"	STR.		294
#5A 14	6	22	7' - 5" TO 2' - 0"	STR.		179
TOTAL NON-EPOXY-COATED (TOTAL IS FOR TWO ABUTMENTS)						15683
TOTAL EPOXY-COATED (TOTAL IS FOR TWO ABUTMENTS)						11086

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#4AS 1	4	30	52' - 2" TO 3' - 0"	STR.		1045
#4AS 2	4	30	3' - 0" TO 56' - 10"	STR.		1139
#5AS 3	5	30	56' - 10" TO 52' - 4"	STR.		1638
#5AS 4	5	30	52' - 4" TO 57' - 0"	STR.		1784
#4AS 5	4	248	57' - 0" TO 13' - 7"	STR.		2250
#8AS 6	8	248	13' - 7" TO 5' - 5"	STR.		8994
#4AS 7	4	4	5' - 5" TO 56' - 10"	STR.		140
#4AS 8	4	4	56' - 10" TO 52' - 3"	STR.		152
#4AS 9	4	20	52' - 3" TO 56' - 10"	STR.		698
#4AS 10	4	20	56' - 10" TO 3' - 0"	STR.		759
#4AS 11	4	190	3' - 0" TO 7' - 7"	1	a = 0'-7", b = 1'-6 1/2"	465
#4AS 12	4	190	7' - 7" TO 3' - 0"	1	a = 0'-7", b = 3'-6"	962
#6AS 13	6	218	3' - 0" TO 1' - 11"	STR.		982
TOTAL EPOXY-COATED (TOTAL IS FOR TWO APPROACH SLABS)						21008

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#10DS 3	10	280	14' - 0" TO 14' - 10"	STR.	NON-EPOXY	16668
#4DS 4	4	98	14' - 10" TO 11' - 6"	6	NON-EPOXY, a = 4'-6", b = 2'-8", c = 0'-3"	971
#4DS 5	4	98	11' - 6" TO 3' - 6 1/2"	6	NON-EPOXY, a = 4'-6", b = 1'-0", c = 0'-3"	753
#4DS 6	4	196	3' - 6 1/2" TO 14' - 0"	12	NON-EPOXY, a = 2'-8", b = 6", c = 4 1/2"	464
#5PW 1	5	288	14' - 0" TO 60' - 0"	1	NON-EPOXY, a = 3'-3", b = 5'-8"	2805
#5PW 2	5	12	60' - 0" TO 48' - 0"	STR.	NON-EPOXY	751
#5PW 3	5	12	48' - 0" TO 60' - 0"	STR.	NON-EPOXY	601
#5PW 4	5	36	60' - 0" TO 48' - 0"	STR.	NON-EPOXY	2253
#5PW 5	5	36	48' - 0" TO 60' - 0"	STR.	NON-EPOXY	1802
#5PW 6	5	12	60' - 0" TO 48' - 0"	STR.	NON-EPOXY	751
#5PW 7	5	12	48' - 0" TO 7' - 7"	STR.	NON-EPOXY	601
#5PW 8	5	44	7' - 7" TO 4' - 3"	1	NON-EPOXY, a = 3'-3", b = 2'-2"	348
#4PW 9	4	288	4' - 3" TO 20' - 9"	12	NON-EPOXY, a = 3'-3", b = 6", c = 6"	818
#10PC 1	10	280	20' - 9" TO 14' - 10"	STR.	NON-EPOXY	25000
#4PC 2	4	266	14' - 10" TO 11' - 6"	6	NON-EPOXY, a = 4'-6", b = 2'-8", c = 0'-3"	2636
#4PC 3	4	266	11' - 6" TO 3' - 6 1/2"	6	NON-EPOXY, a = 4'-6", b = 1'-0", c = 0'-3"	2043
#4PC 4	4	532	3' - 6 1/2" TO 14' - 0"	12	NON-EPOXY, a = 2'-8", b = 6", c = 4 1/2"	1259
#5PB 1	5	224	8' - 8" TO 10' - 6"	1	NON-EPOXY, a = 2'-8", b = 3'-0"	2025
#5PB 2	5	112	10' - 6" TO 8' - 4"	13	NON-EPOXY	1766
#5PB 3	5	56	8' - 4" TO 11' - 6"	1	NON-EPOXY, a = 2'-8", b = 2'-10"	487
#5PB 4	5	84	11' - 6" TO 13' - 4"	1	NON-EPOXY, a = 2'-8", b = 4'-5"	1008
#5PB 5	5	28	13' - 4" TO 15' - 6"	1	NON-EPOXY, a = 2'-8", b = 5'-4"	389
#5PB 6	5	28	15' - 6" TO 18' - 8"	1	NON-EPOXY, a = 2'-8", b = 6'-5"	453
#5PB 7	5	28	18' - 8" TO 11' - 8"	1	NON-EPOXY, a = 2'-8", b = 8'-0"	545
#5PB 8	5	328	11' - 8" TO 4' - 4"	1	NON-EPOXY, a = 2'-8", b = 4'-6"	3991
#5PB 9	5	56	4' - 4" TO 5' - 5"	STR.	NON-EPOXY	253
#5PB 10	5	28	5' - 5" TO 6' - 9"	STR.	NON-EPOXY	158
#5PB 11	5	28	6' - 9" TO 8' - 4"	STR.	NON-EPOXY	197
#5PB 12	5	28	8' - 4" TO 10' - 6"	STR.	NON-EPOXY	243
#5PB 13	5	28	10' - 6" TO 39' - 3"	STR.	NON-EPOXY	307
#9PB 14	9	24	39' - 3" TO 45' - 0"	4	NON-EPOXY, a = 38'-0", b = 1'-3"	3203
#9PB 15	9	12	45' - 0" TO 4' - 8"	STR.	NON-EPOXY	1836
#4PB 16	4	336	4' - 8" TO 60' - 0"	1	NON-EPOXY, a = 2'-8", b = 1'-0"	1047
#6PB 17	6	16	60' - 0" TO 50' - 9"	STR.	NON-EPOXY	1442
#6PB 18	6	8	50' - 9" TO 39' - 6"	STR.	NON-EPOXY	610
#10PB 19	10	20	39' - 6" TO 50' - 0"	4	NON-EPOXY, a = 38'-3", b = 1'-3"	3399
#10PB 20	10	10	50' - 0" TO 11' - 8"	STR.	NON-EPOXY	2152
#6PB 21	6	64	11' - 8" TO 7' - 0"	STR.	NON-EPOXY	1121
#4PB 22	4	228	7' - 0" TO 8' - 1"	1	NON-EPOXY, a = 2'-8", b = 2'-2"	1066
#6PB 23	6	336	8' - 1" TO 4' - 1"	3	a = 4'-1", b = 2'-0"	4079
TOTAL NON-EPOXY-COATED (TOTAL IS FOR TWO PIERS)						69367
TOTAL EPOXY-COATED (TOTAL IS FOR TWO ABUTMENTS)						4079

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	REMARKS	QUAN.
#4WH 1	4	4	20' - 4" TO 5' - 8"	7	a = 16'-6", b = 3'-10"	54
#4WH 2	4	4	5' - 8" TO 7' - 7"	STR.		15
#4WH 3	4	4	7' - 7" TO 9' - 6"	STR.		20
#4WH 4	4	4	9' - 6" TO 11' - 6"	STR.		25
#4WH 5	4	4	11' - 6" TO 13' - 5"	STR.		31
#4WH 6	4	4	13' - 5" TO 15' - 4"	STR.		36
#4WH 7	4	4	15' - 4" TO 17' - 3"	STR.		41
#4WH 8	4	4	17' - 3" TO 19' - 2 1/2"	STR.		46
#4WH 9	4	4	19' - 2 1/2" TO 20' - 3"	STR.		51
#4WH 10	4	4	20' - 3" TO 20' - 4 3/4"	STR.		54
#4WH 11	4	4	20' - 4 3/4" TO 20' - 6 1/2"	STR.		55
#4WH 12	4	4	20' - 6 1/2" TO 20' - 8"	STR.		248
#6WH 13	6	8	20' - 8" TO 20' - 4"	7	a = 16'-6", b = 3'-10"	122
#6WH 14	6	4	20' - 4" TO 5' - 8"	STR.		34
#6WH 15	6	4	5' - 8" TO 7' - 7"	STR.		46
#6WH 16	6	4	7' - 7" TO 9' - 6"	STR.		57
#6WH 17	6	4	9' - 6" TO 11' - 6"	STR.		69
#6WH 18	6	4	11' - 6" TO 13' - 5"	STR.		81
#6WH 19	6	4	13' - 5" TO 15' - 4"	STR.		92
#6WH 20	6	4	15' - 4" TO 17' - 3"	STR.		104
#6WH 21	6	4	17' - 3" TO 19' - 2 1/2"	STR.		115
#6WH 22	6	4	19' - 2 1/2" TO 20' - 3"	STR.		122
#6WH 23	6	4	20' - 3" TO 20' - 4 3/4"	STR.		123
#6WH 24	6	4	20' - 4 3/4" TO 7' - 5"	STR.		59
#4WH 25	4	12	7' - 5" TO 5' - 8"	10	a = 2'-0", b = 3'-5", c = 2'-0"	23
#4WH 26	4	6	5' - 8" TO 5' - 8"	8	a = 3'-8", b = 2'-0"	23
#4WH 27	4	6	5' - 8" TO 5' - 8"	9	a = 3'-8", b = 2'-0"	23
#4WH 28	4	6	5' - 8" TO 2' - 7"	STR.		14
#4WV 1	4	8	2' - 7" TO 2' - 11 1/4"	STR.		16
#4WV 2	4	8	2' - 11 1/4" TO 3' - 4 3/4"	STR.		18
#4WV 3	4	8	3' - 4 3/4" TO 3' - 10 1/2"	STR.		21
#4WV 4	4	8	3' - 10 1/2" TO 4' - 4 1/4"	STR.		23
#4WV 5	4	8	4' - 4 1/4" TO 4' - 9 3/4"	STR.		26
#4WV 6	4	8	4' - 9 3/4" TO 5' - 3 1/2"	STR.		28
#4WV 7	4	8	5' - 3 1/2" TO 5' - 9"	STR.		31
#4WV 8	4	8	5' - 9" TO 6' - 2 3/4"	STR.		33
#4WV 9	4	8	6' - 2 3/4" TO 6' - 8 1/2"	STR.		36
#4WV 10	4	8	6' - 8 1/2" TO 7' - 2"	STR.		38
#4WV 11	4	8	7' - 2" TO 7' - 7 3/4"	STR.		41
#4WV 12	4	8	7' - 7 3/4" TO 8' - 1 1/2"	STR.		43
#4WV 13	4	8	8' - 1 1/2" TO 8' - 7"	STR.		46
#4WV 14	4	8	8' - 7" TO 9' - 0 3/4"	STR.		48
#4WV 15	4	8	9' - 0 3/4" TO 9' - 6 1/2"	STR.		51
#4WV 16	4	8	9' - 6 1/2" TO 9' - 8"	STR.		207
#4WV 17	4	32	9' - 8" TO 6' - 5 3/4"	STR.		35
#4WV 18	4	8	6' - 5 3/4" TO 3' - 1 1/2"	STR.		17
#4WV 19	4	8	3' - 1 1/2" TO 9' - 10 1/4"	STR.		53
#4WV 20	4	8	9' - 10 1/4" TO 1' - 11"	STR.		2748
TOTAL EPOXY-COATED						2748



NOTE: ALL BARS ARE EPOXY COATED UNLESS NOTED OTHERWISE.

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE REBAR DIAGRAM AND SCHEDULE			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./

TABLE OF ALLOWABLE MOVEMENT LENGTHS AND ACCEPTABLE JOINT SEALS										
SKEW	MOVEMENT LENGTH (FEET)				MANUFACTURER				JOINT MOVEMENT (in.)	* "A" [DIMENSION @ MID TEMP T_0] (in.)
	CONCRETE BRIDGE		STEEL BRIDGE		WATSON-BOMAN AND ACME "STRIP SEAL" MODEL NO.	D.S. BROWN CO., INC. "STEEFLEX" MODEL NO.	STRUCTURAL ACCESSORIES INC. "ONFLEX" MODEL NO.	R.J. WATSON "STRIP SEAL" MODEL NO.		
	SEVERE CLIMATE (-10° TO 120° F) $T_0 = 120° F$	MODERATE CLIMATE (20° TO 120° F) $T_0 = 70° F$	SEVERE CLIMATE (-30° TO 120° F) $T_0 = 45° F$	MODERATE CLIMATE (0 TO 120° F) $T_0 = 60° F$						
0° to 15°	0-427	0-556	0-342	0-427	SE-400	SSA2	40SEQ	RJ-400	0 TO 4	2
15° to 30°	0-442	0-575	0-354	0-442	SE-400	SSA2	40SEQ	RJ-400	0 TO 4	2
30° to 45°	0-493	0-642	0-395	0-493	SE-400	SSA2	40SEQ	RJ-400	0 TO 4	2

BRIDGE DECK

REMOVABLE COVER PLATE
(SEE BARRIER RAILING
DETAILS)

3°

8"

SECTION A-A

3°

8"

SECTION B-B

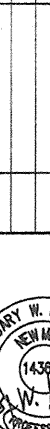
 RECESS IN BASE OF WALL BARRIER

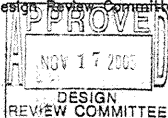
A detailed cross-sectional diagram of a skewed bridge deck joint. The diagram illustrates the intersection of two bridge deck slabs at an angle. Key components and labels include:

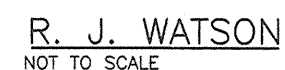
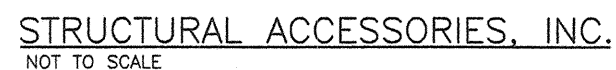
- BARRIER**: A vertical structure at the top of the deck.
- EDGE OF DECK**: The outer edge of the bridge deck.
- EXPANSION JOINT SEAL**: A seal located at the joint between the two deck slabs.
- SKEW ANGLE = θ** : The angle between the two deck slabs.
- BITUMINOUS OR CONCRETE WEARING SURFACE**: The surface layer on top of the deck slabs.
- RECESS OPENING**: A cutout in the barrier to accommodate the joint.
- JOINT**: The point where the two deck slabs meet.
- Labels A and B**: Indicate the direction of traffic flow on the adjacent deck sections.
- Dimensions and Formulas**:
 - $1'-0"$: A dimension for the recess opening.
 - $\frac{1}{2}'' = W'$: A dimension for the seal width.
 - $W' = A' \sec \theta$: A formula relating the seal width to the skew angle.

A detailed cross-sectional diagram of a skewed expansion joint. The diagram shows a concrete deck with a barrier on top. A joint seal is installed at an angle, labeled 'SKEW ANGLE = θ '. The seal is made of 'BITUMINOUS OR CONCRETE WEARING SURFACE'. The joint is labeled 'EXPANSION JOINT SEAL' and 'JOINT'. The barrier is labeled 'BARRIER'. The edge of the deck is labeled 'EDGE OF DECK'. A 'RECESS OPENING' is shown in the deck. Dimensions include '1'-0" for the barrier width, '1/2" W' for the seal width, and 'W = A' Sec θ for the seal length. Arrows A and B indicate the direction of traffic flow.

1. INSTALL JOINT SEALS PER MANUFACTURER'S RECOMMENDATIONS. SEALS WITH EQUAL PERFORMANCE CHARACTERISTICS TO THOSE SHOWN MAY BE SUBSTITUTED WITH PROJECT ENGINEER'S PRIOR APPROVAL.
2. JOINT SEAL SIZES ARE BASED ON AN INSTALLATION TEMPERATURE OF "To" (°F, MIDPOINT TEMPERATURE) AND JOINT MOVEMENTS FOR A RANGE OF TEMPERATURES AS NOTED IN THE TABLE ON THIS SHEET. FOR INSTALLATION TEMPERATURES BELOW "To", INCREASE DIMENSION "A" BY THE AMOUNT SHOWN BELOW. FOR INSTALLATION TEMPERATURES ABOVE "To", DECREASE DIMENSION "A" BY THE AMOUNT SHOWN BELOW.

DATE OF DEVELOPMENT ALABACILLAS BRIDGE AL, GENERAL DATA		ENGINEER'S SEAL 		SURVEY INFORMATION FIELD NOTES		BENCH MARKS THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977 SET" FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 G. N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO MCMAHON BLVD. THE STA. IS ON THE LEFT.		AS-BUILT INFORMATION CONTRACTOR David Montoya Const. Inc. STAINED BY Billingsley Eng'r. FIELD ACCEPTANCE BY COA DRAWINGS BY COA/WCL CORRECTED BY WCL MICRO-FILM INFORMATION RECORDED BY FILE	
NO. DATE REMARKS REVISIONS WILSON & COMPANY, ENGINEERS & ARCHITECTS DESIGNED BY GWK DATE OCT 2005 DRAWN BY CRH DATE OCT 2005 CHECKED BY SFP DATE OCT 2005		NO. BY DATE		ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)					
Mo./Day/Yr.		Mo./Day/Yr.							
Sheet 5-26		Of 06							

				CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION																									
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE																													
ELASTOMERIC EXPANSION JOINT SEAL, GENERAL DATA																													
Design Review Committee 		City Engineer Approval 		Last Design Update		<table border="1"> <thead> <tr> <th>Mo./Day/Yr.</th> <th>Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		Mo./Day/Yr.	Mo./Day/Yr.																				
Mo./Day/Yr.	Mo./Day/Yr.																												
City Project No.		Zone Map No.		Sheet		Of																							
COA 681602		A-10-7		5-26																									



1. SEE SHEET 5-26 FOR APPROPRIATE MODEL NUMBERS AND DIMENSION "A".
2. ALTER THE 1/2" PLATE SLIGHTLY FROM THE DETAIL SHOWN AS NEEDED FOR FITTING THE STEEL RETAINER.
3. SECURE THE TEMPORARY SUPPORT ANGLE IN POSITION TO PROVIDE FOR LATERAL AND VERTICAL ADJUSTMENT OF THE RETAINER BARS, AND FOR FINAL CONCRETE SURFACE FINISHING.
4. WATSON-BOWMAN & ACME SYSTEMS: NOTCH RETAINERS TO CLEAR THE BEAMS WHEN RETAINER DEPTH EXCEEDS THE BRIDGE DECK DEPTH.

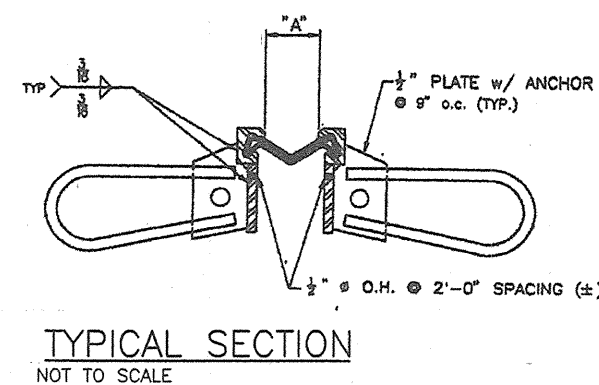
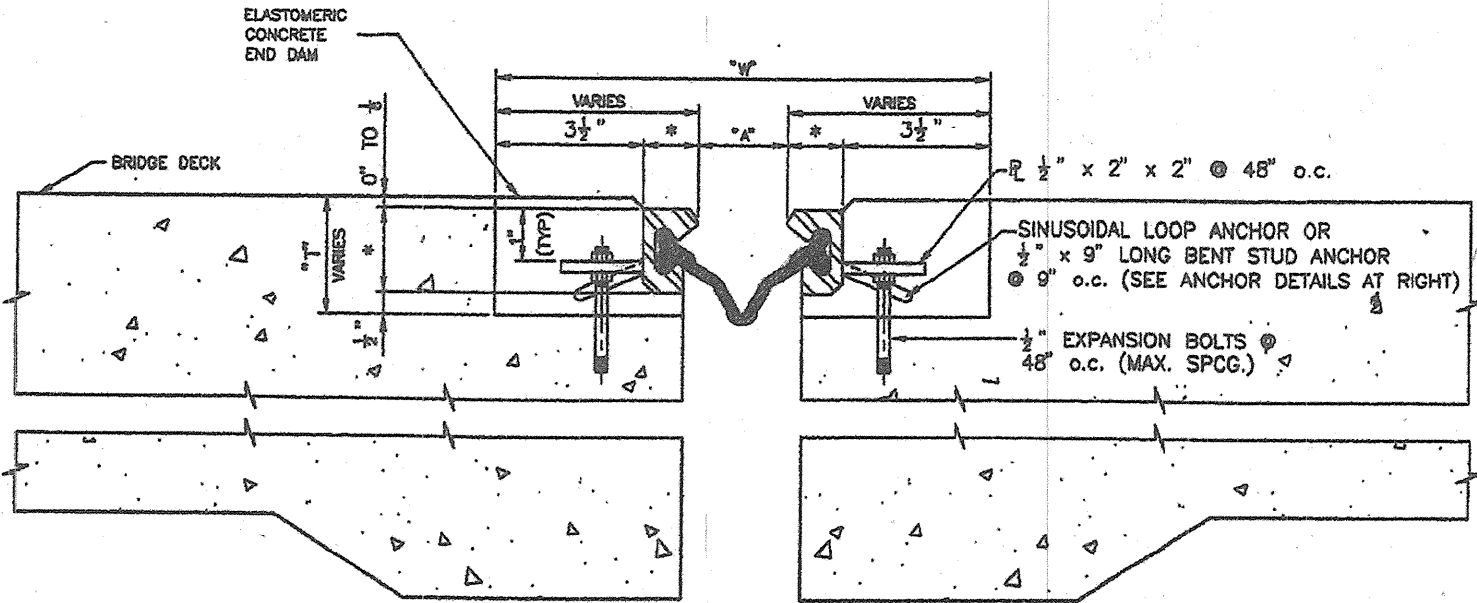
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TABLE 1 - LISTING OF JOINTS					
MANUFACTURER	TYPE OF JOINT	RETAINER BAR TYPE	DIM. "A"	DIM. "W" MIN.	DIM. "T" MIN.
WATSON-BOWMAN	STRIP SEAL	"A"	2"	12 $\frac{7}{8}$ "	2 $\frac{5}{8}$ "
D.S.BROWN	STEEL FLEX	"SSA2"	2"	13 $\frac{1}{8}$ "	2 $\frac{5}{8}$ "
STRUCTURAL ACCESS.	ONFLEX	"AM2"	2"	11 $\frac{1}{2}$ "	2 $\frac{5}{8}$ "
R.J.WATSON	STRIP SEAL	"RJA"	2"	11 $\frac{1}{2}$ "	2 $\frac{5}{8}$ "

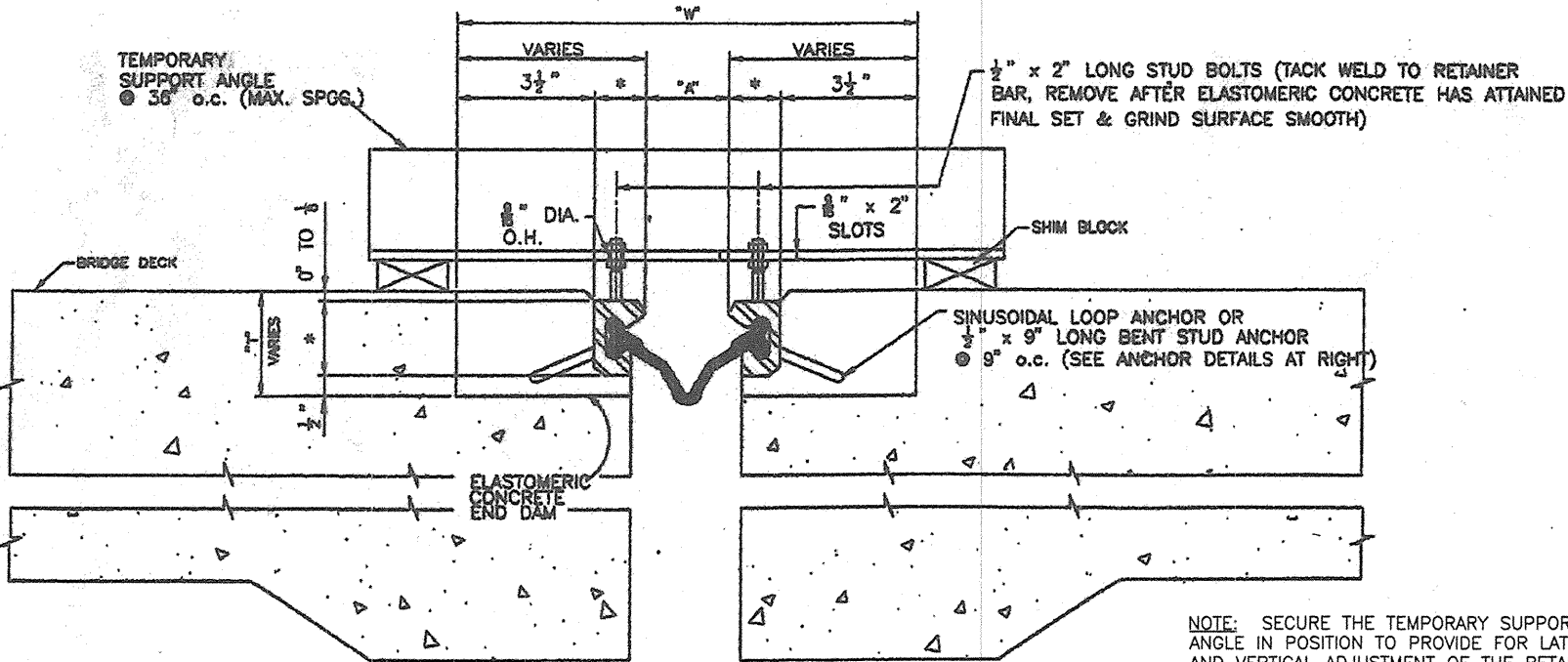
GENERAL NOTES

- TYPE B INSTALLATION CONSISTS OF A STEEL RETAINING BAR AND ANCHORAGE SYSTEM, ELASTOMERIC STRIP SEAL, AND ELASTOMETRIC CONCRETE END DAM. USE AN ANCHORAGE SYSTEM OF CONTINUOUS SINUSOIDAL TYPE, BENT STUD ANCHOR TYPE, OR APPROVED EQUAL.
 - SEE SHEETS 5-26 AND 5-27 FOR APPROPRIATE SEAL MODEL NUMBERS AND DIMENSION "A".
 - FOR NEW CONSTRUCTION, AND BRIDGE DECK REPLACEMENTS, INSTALL NOSING MATERIALS AND SEAL ELEMENTS AFTER THE ENTIRE DECK ADJACENT TO THE JOINTS HAS BEEN PLACED AND ACHIEVED THE SPECIFIED DESIGN STRENGTH.
 - WHEN REPLACING OLDER BOLT-DOWN JOINT SEALS, THE DIMENSION "W" EQUALS THE LARGER OF THE OLD JOINT BLOCKOUT DIMENSIONS, OR THE MINIMUM DIMENSIONS SHOWN; PLUS ANY ADDITIONAL AMOUNTS NEEDED TO REPLACE SPALLED OR DETERIORATED CONCRETE AT THE EDGES OR UNDERNEATH THE OLD JOINT SEAL BLOCKOUT.
- THE PLANS WILL IDENTIFY ISOLATED AREAS THAT REQUIRE EVEN GREATER WIDTHS DUE TO DETERIORATED CONCRETE.
- FOR NEW CONCRETE WHERE A NOSING MATERIAL IS REQUIRED, THE PLANS WILL IDENTIFY DIMENSIONS "A", "W" AND "T" (MINIMUM SHOWN IN TABLE 1).



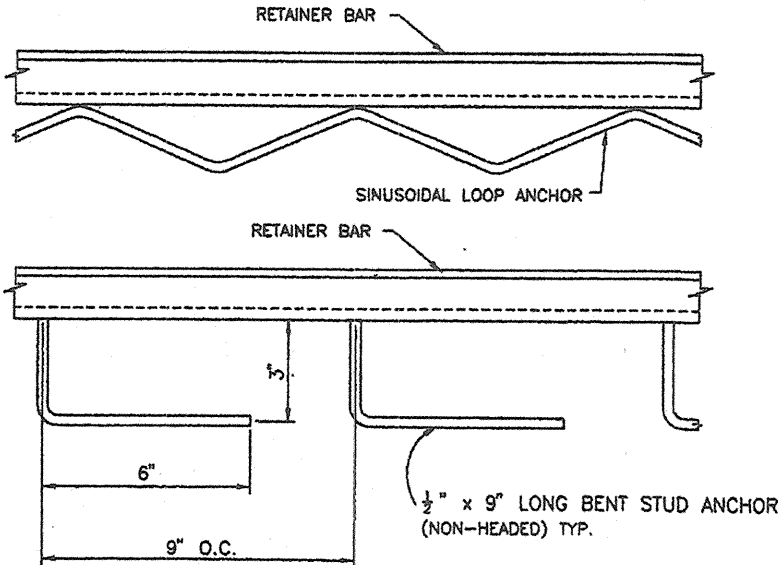
ERECTION DETAIL (ALTERNATE 1)
NOT TO SCALE

* DIMENSION OF
RETAINER BAR VARIES
WITH MANUFACTURER.



ERECTION DETAIL (ALTERNATE 1)
NOT TO SCALE

NOTE: SECURE THE TEMPORARY SUPPORT ANGLE IN POSITION TO PROVIDE FOR LATERAL AND VERTICAL ADJUSTMENT OF THE RETAINER BARS AND PERMIT FINAL FINISHING OF THE ELASTOMERIC CONCRETE SURFACE AS APPROVED BY THE PROJECT ENGINEER.



PERMISSIBLE ANCHOR DETAILS
NOT TO SCALE

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE			
ELASTOMERIC EXP. JOINT SEAL, TYPE "B" INSTALLATION			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED NOV 1 2005	APPROVED NOV 1 2005		
DESIGN REVIEW COMMITTEE	CITY ENGINEER	Mo./Day/Yr.	Mo./Day/Yr.
DESIGNED BY	GNK	DATE	OCT 2005
DRAWN BY	CRH	DATE	OCT 2005
CHECKED BY	SFP	DATE	OCT 2005
City Project No. COA 681602		Zone Map No. A-10-Z	Sheet 5-28 of 164

WILSON
& COMPANY

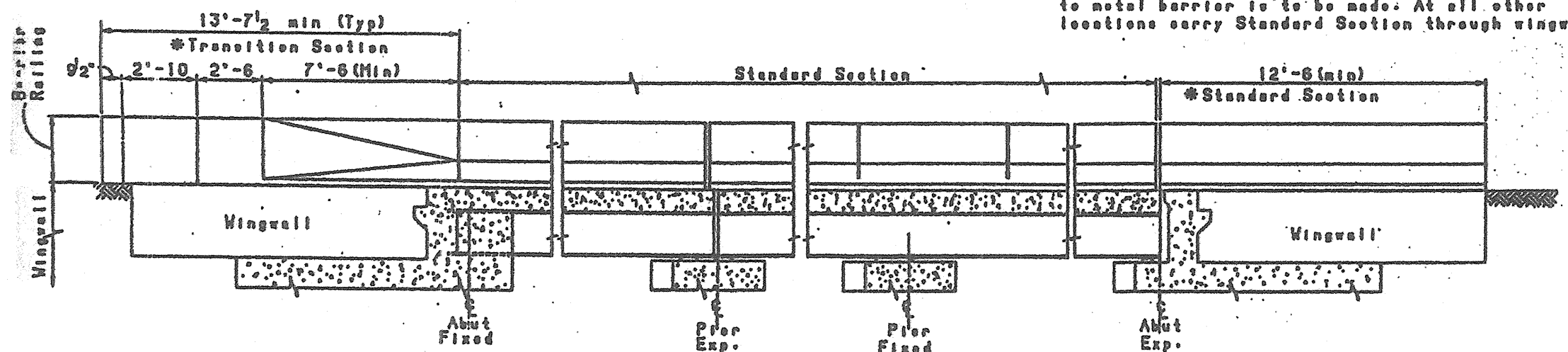
Wingwall below

- Contraction Joint
(see detail this sheet)

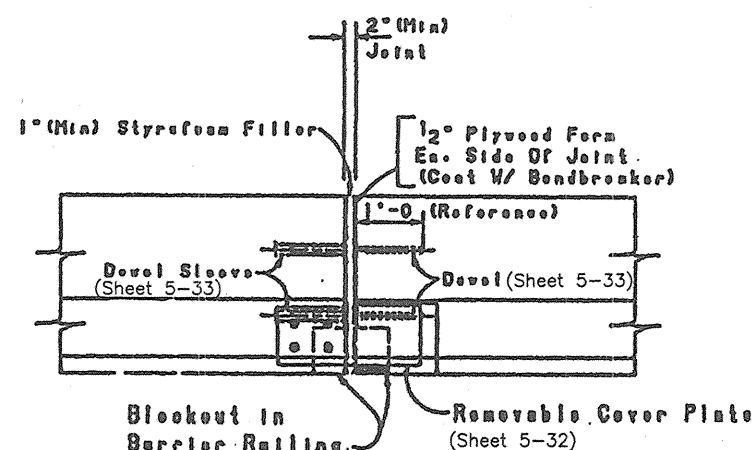
- Expansion Joint
(see detail this sheet)

GENERAL NOTES

1. BARRIER RAILING CONCRETE: SUPERSTRUCTURE CONCRETE (4000 PSI), CAST-IN-PLACE USING REMOVABLE FORMS.
2. REINFORCING STEEL: AASHTO M 31, GRADE 60, EPOXY COATED. DIMENSIONS REFER TO CENTERLINE OF BARS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
3. BARRIER RAILING INSTALLATIONS: ON DECK SLABS MAY BE TYPE 1, 2, OR 3 AT THE OPTION OF THE CONTRACTOR. DECK THICKNESS (NEW OR EXISTING) MUST BE APPROPRIATE FOR THE TYPE OF INSTALLATION SELECTED.
4. BARRIER RAILING BEYOND BRIDGE: SEE ROADWAY PLANS FOR TRANSITION AND/OR CONNECTION DETAILS. INSTALL EXPANSION JOINT (SEE DETAIL THIS SHEET) WHERE BARRIER TRANSITIONS TO CONCRETE CURB APPLY.
5. REFLECTIVE BARRIER DELINEATORS: SEE TRAFFIC PLANS FOR DETAILS FOR MOUNTING ON TOP OF THE BARRIER RAILING.
6. APPLY PENETRATING WATER REPELLANT TREATMENT: TO ALL EXPOSED SURFACES OF THE BARRIER RAILING.
7. DISCONTINUE HORIZONTAL REINFORCEMENT: AT ALL EXPANSION AND CONTRACTION JOINT OPENINGS.
8. STRUCTURAL STEEL FOR REMOVABLE COVER PLATES AT EXPANSION JOINTS: AASHTO M-183. APPLY A PROTECTIVE COATING PER SECTION 157 OF THE SPECIFICATIONS. GALVANIZE ALL BOLTS AND HARDWARE.
9. CLEAN AND ROUGHEN CONSTRUCTION JOINTS BETWEEN BARRIER RAILING AND BRIDGE DECK CONCRETE PRIOR TO BARRIER CONCRETE PLACEMENT.
10. COSTS: ALL COMPLETELY EMBEDDED REINFORCING STEEL, ANCHOR BOLTS, ANY OTHER COMPLETELY EMBEDDED OR APPURTENANT STEEL ITEMS, AND REMOVABLE COVER PLATES ARE INCIDENTAL TO THE COST OF BARRIER RAILING.



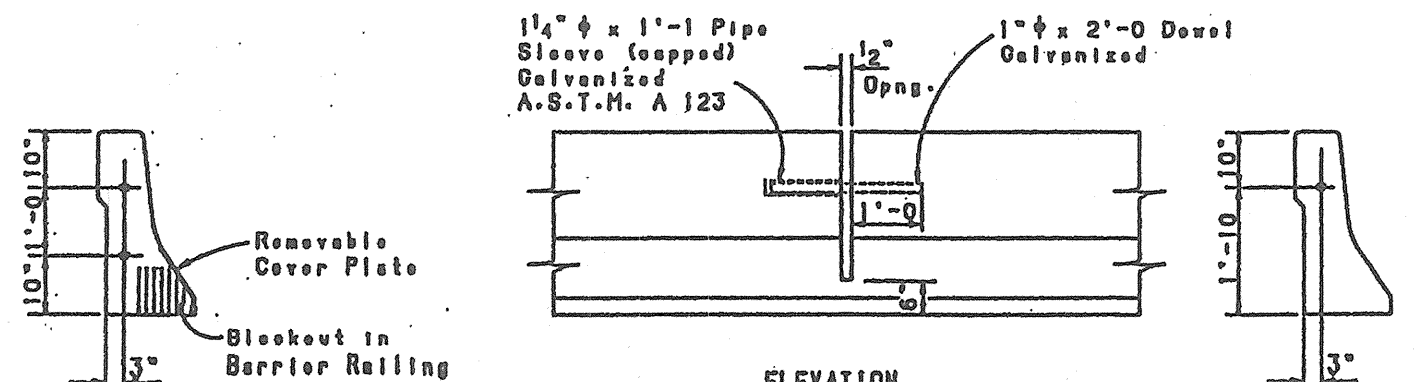
SECTION A-A



ELEVATION

△ EXPANSION JOINT DETAIL

Provide Expansion Joints at each deck slab joint. Refer to Sheet 5-33 for details of the joint, forming materials and dowels.



ELEVATION

SECTION

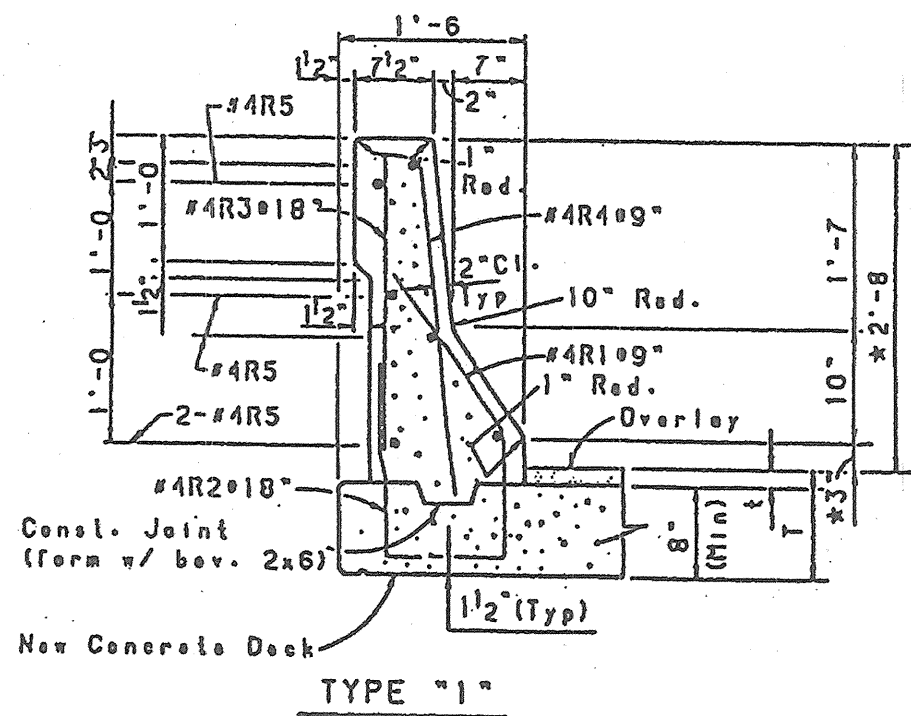
CONTRACTION JOINT DETAIL

Provide Contraction Joints at equally spaced intervals (15' min. 30' max) between Expansion Joints or, for structures with integral abutments, between contraction joints at wingwalls.

DESIGN DATA

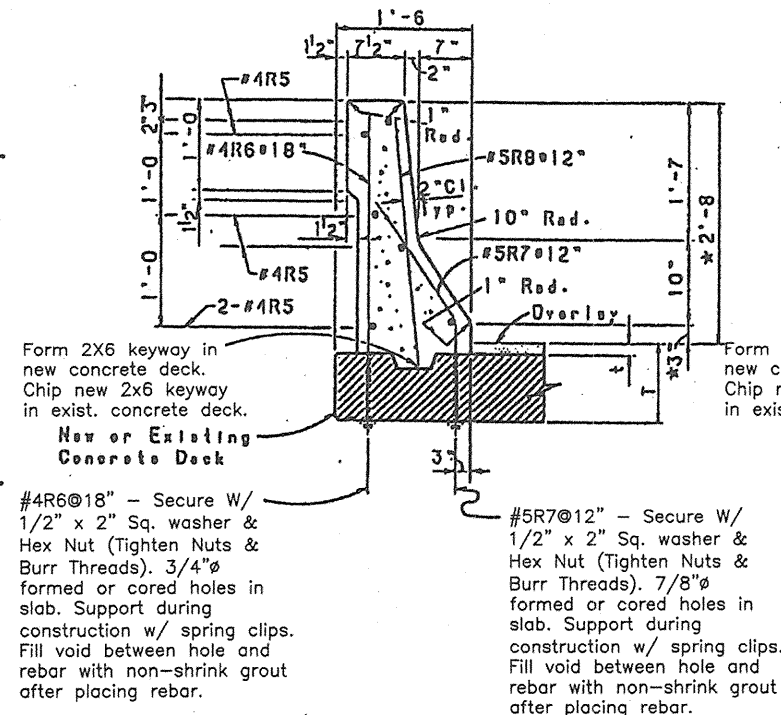
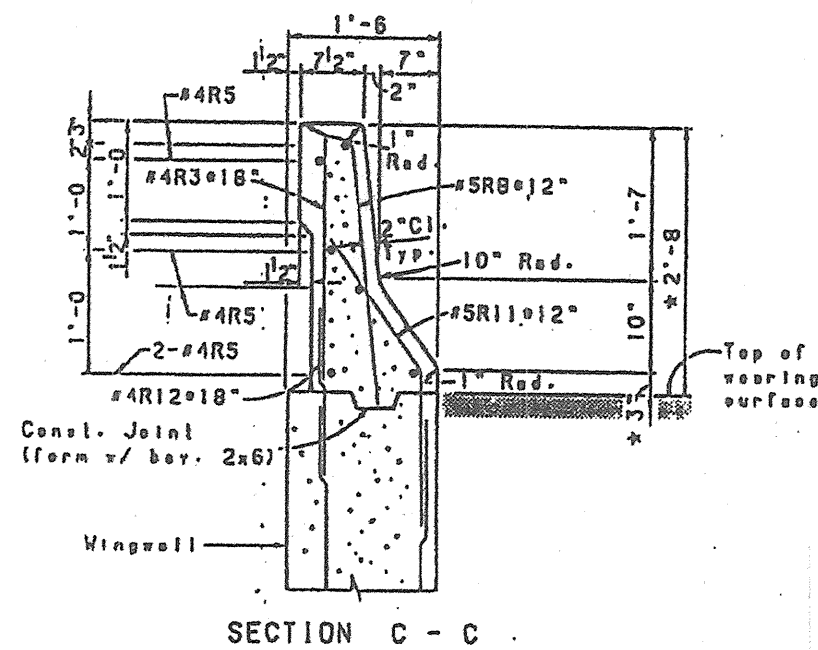
DESIGN IS IN ACCORDANCE WITH AASHTO SPECIFICATIONS DATED 1989 AND LATEST INTERIMS.

	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION											
McMAHON BLVD. EXTENSION — LAS CALABACILLAS BRIDGE 32" BARRIER RAIL GENERAL DETAILS												
Design Review Committee APPROVED NOV 17 2005 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 17 2005 CITY ENGINEER	Last Design Update <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Mo./Day/Yr.</th> <th style="width: 50%;">Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Mo./Day/Yr.	Mo./Day/Yr.								
Mo./Day/Yr.	Mo./Day/Yr.											
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet Of 5-29										

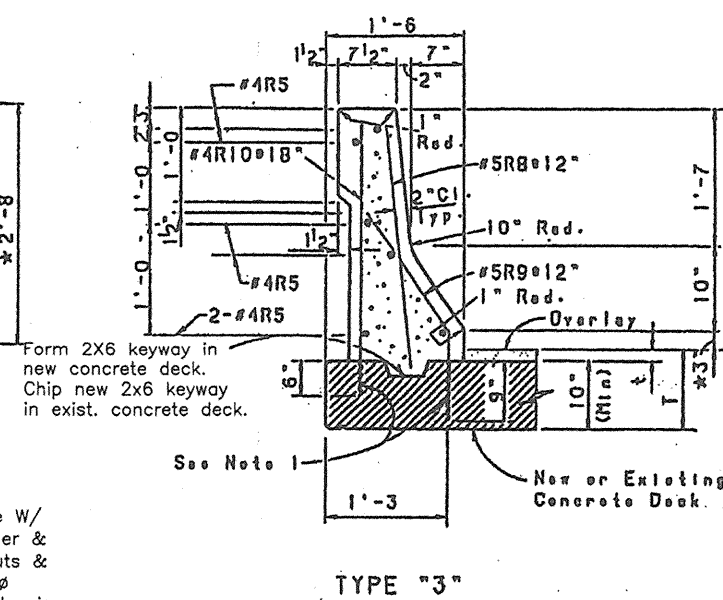


Place #4R1 and #4R2 bars with bridge deck reinforcement.

★ These dimensions shall be measured above top of wearing surface, (top of concrete deck, or top of overlay - if any). In determining dimensions of the #4R1, #4R6 or #5R7 bars, the "t" dimension used shall include the thickness ("t") of any overlay.



TYPE "2"
SECTION B - B



NOTES:

1. PLACE REINFORCING BARS IN 7/8" DIA. CORED HOLES AND GROUT INTO PLACE.
2. IMMEDIATELY PRIOR TO PLACING THE DOWELS: REMOVE DUST AND OTHER DELATERIOUS MATERIALS FROM THE HOLES, SATURATE HOLES WITH WATER, REMOVE ALL FREE WATER, AND DRY HOLES TO A SATURATED SURFACE DRY CONDITION.
3. PLACE SUFFICIENT GROUT IN THE HOLES SO NO VOIDS REMAIN AFTER DOWELS ARE INSERTED.
4. CURE GROUT FOR A PERIOD OF 3 DAYS OR UNTIL THE DOWELS ARE ENCASED IN CONCRETE, WHICHEVER OCCURS FIRST. CURE EITHER BY THE CURING COMPOUND METHOD OR BY KEEPING THE GROUT SURFACE CONTINUOUSLY DAMP.
5. REMOVED AND REPLACE ANY DOWELS OR GROUT WHICH FAIL TO BOND OR ARE DAMAGED BEFORE CONCRETE IS PLACED.
6. COST OF CURING AND GROUTING IS INCIDENTAL TO THE BARRIER RAILING.
7. GROUT: NEAT PASTE USING PORTLAND CEMENT AND WATER. MAXIMUM WATER CONTENT = 4 GALLONS/94 POUNDS OF CEMENT. DO NOT RETEMPER GROUT.

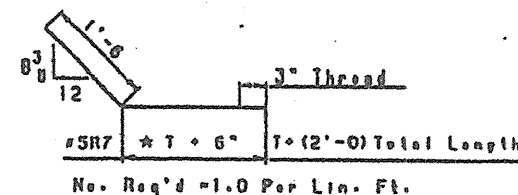
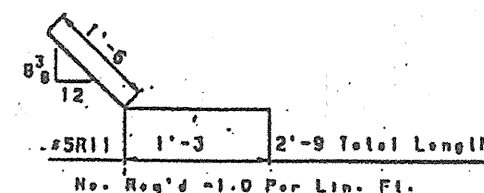
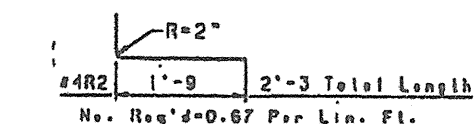
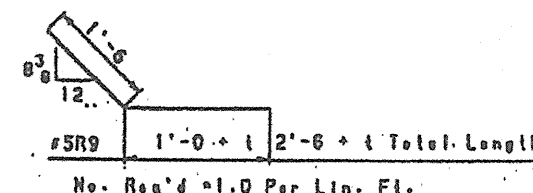
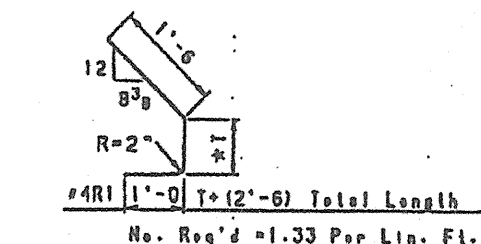
ESTIMATED QUANTITIES (FOR CONTRACTORS INFORMATION ONLY)

ITEM	UNIT	TOTAL
EPOXY COATED REINFORCING BARS, GRADE 60	LB./FT.	10.74
SUPERSTRUCTURE CONCRETE CLASS "AA"	CU. YD./FT.	0.080

The quantities shown in the above table are approximate only and may vary with the type of barrier rail selected.

MODIFIED BARRIER NOTE:

SEE SHEET 5-5 FOR MODIFICATIONS TO STANDARD BARRIER DETAILS AS REQUIRED BY FRACTURED FIN SURFACE TREATMENT.

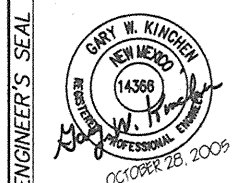


Mark	Length	No. Req'd Lin. Ft.
#4R3	2'-6" + t	0.67
#4R4	2'-8" + t	1.33
#4R5	Varies	6
#4R6	1'-0" + 2'-9"	0.67
#5R9	2'-0" + t	1.0
#4R10	3'-0" + t	0.67
#4R12	2'-0"	0.67

† Thread one end 3"
t = Thickness of overlay

AS-BUILT INFORMATION	
CONTRACTOR: David M. Kinchen, Const. Inc.	DATE: 10/28/2005
DESIGNED BY: WILSON & COMPANY, ENGINEERS & ARCHITECTS	DATE: OCT 2005
DRAWN BY: WILSON & COMPANY, ENGINEERS & ARCHITECTS	DATE: OCT 2005
CHECKED BY: WILSON & COMPANY, ENGINEERS & ARCHITECTS	DATE: OCT 2005
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	

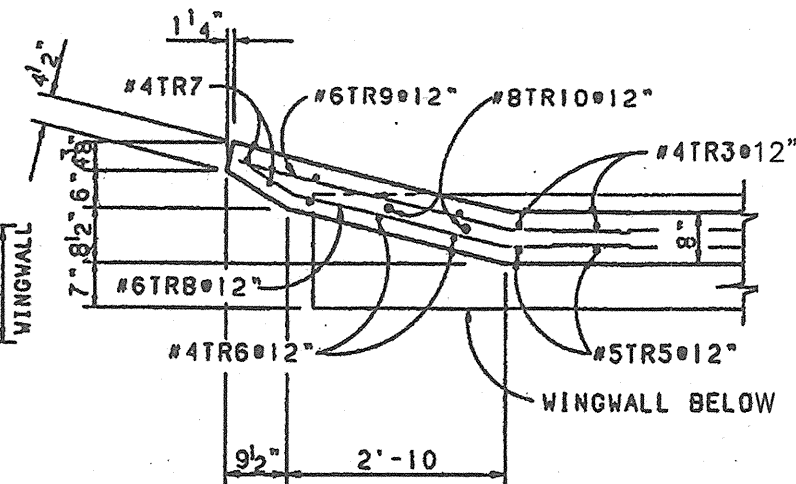
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	



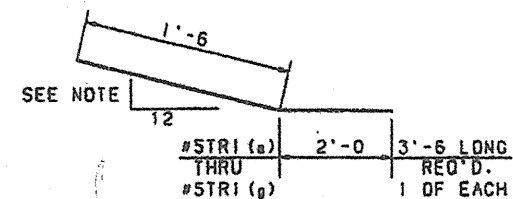
REVISIONS	
NO.	DATE
1	OCT 2005
2	OCT 2005
3	OCT 2005

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE 32" BARRIER RAILING STANDARD SECTION DETAILS	
Design Review Committee APPROVED NOV 17 2005 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED NOV 17 2005 CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-30	Of

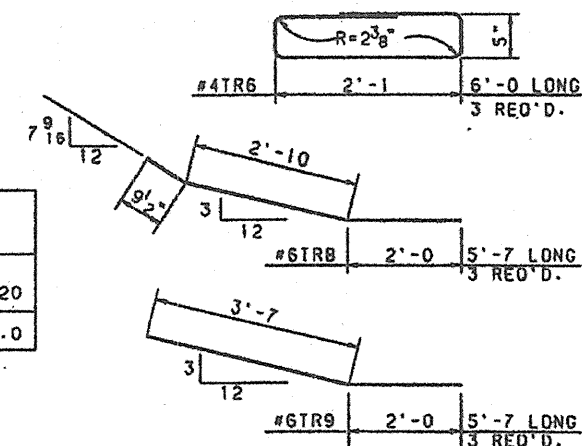
WILSON
& COMPANY



SECTION A - A



NOTE: BEVEL VARIES FROM 8° TO
0 IN 6 EQUAL INCREMENTS.



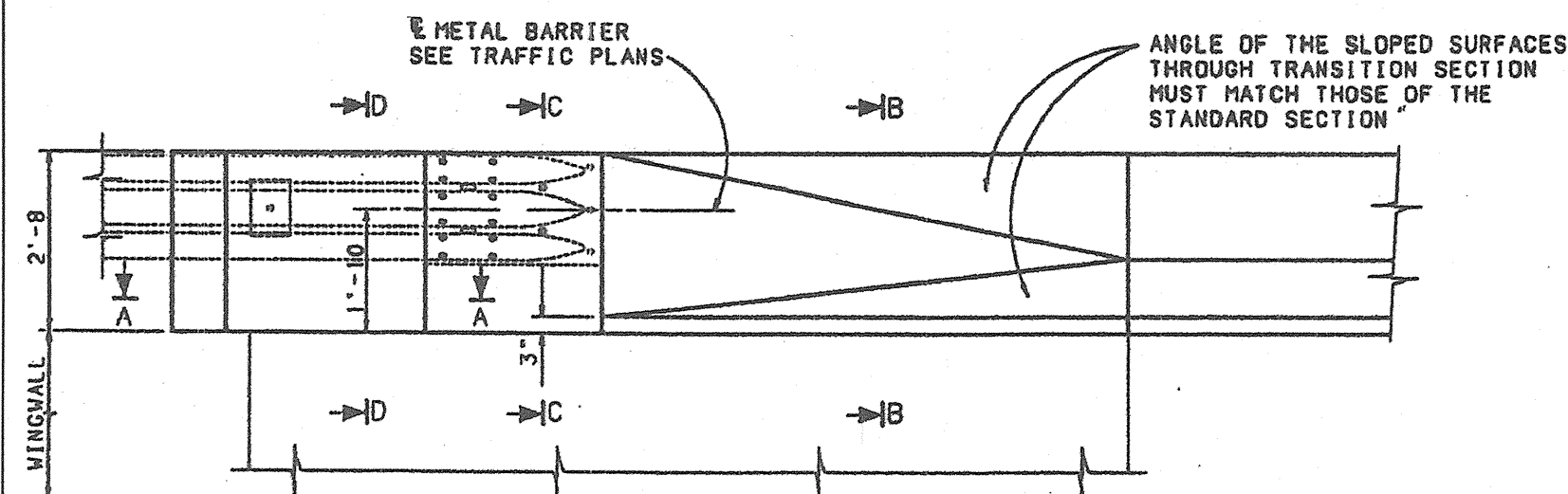
** ESTIMATED QUANTITIES (FOR ONE TRANSITION)		
EPOXY COATED REINFORCING BARS, GRADE 60	LBS.	22
SUPERSTRUCTURE CONCRETE CLASS "AA"	CU. YDS.	1.

FOR CONTRACTORS INFORMATION ONLY

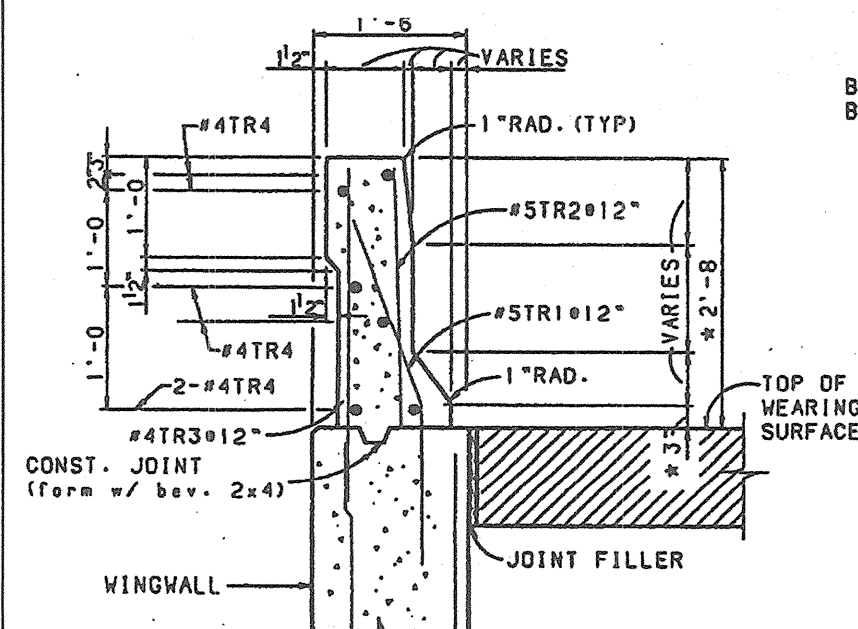
★ THESE DIMENSIONS SHALL BE MEASURED
ABOVE THE TOP OF WEARING SURFACE.
(TOP OF DECK OR TOP OF OVERLAY - IF ANY)

#5TR2	2'-6	8 REQ'D.
#4TR3	3'-8	11 REQ'D.
#4TR4	9'-10	6 REQ'D.
#5TR5	4'-0	4 REQ'D.
#4TR7	2'-3	2 REQ'D.
#8TR10	4'-0	2 REQ'D.

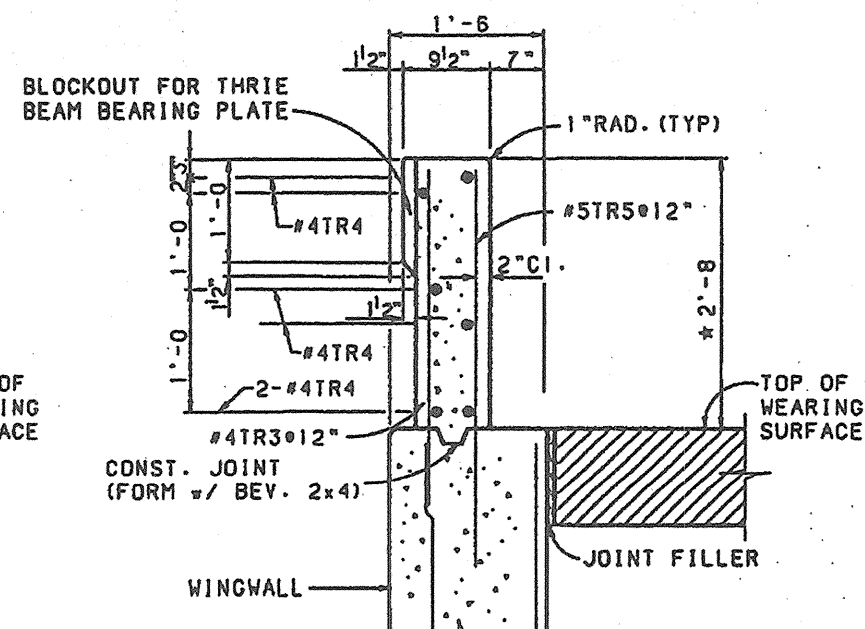
REBAR SCHEDULE
(FOR ONE TRANSITION)



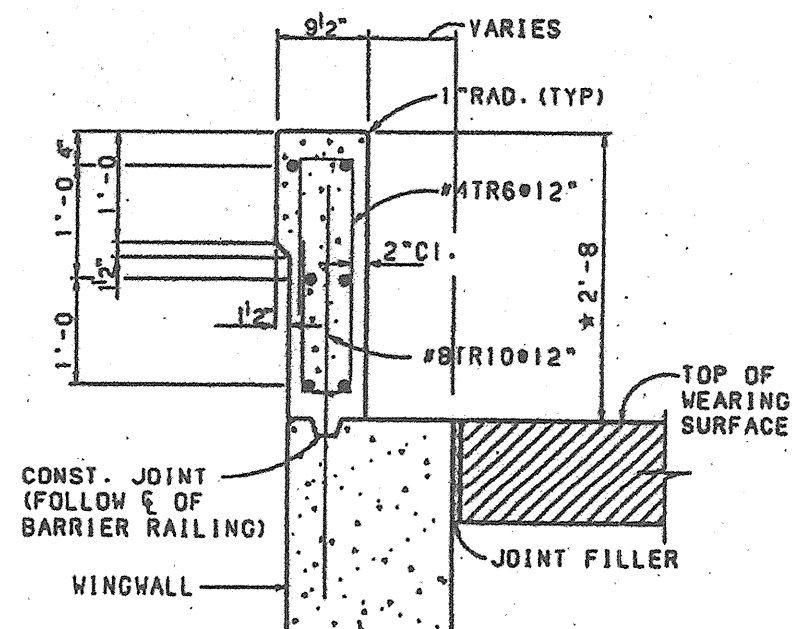
ELEVATION



SECTION B - B



SECTION C - C



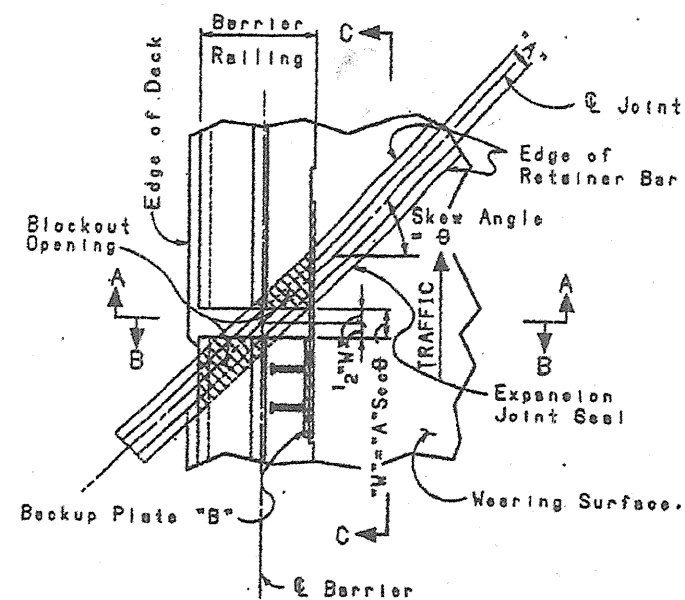
SECTION D - D

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
		FIELD NOTES		THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET		CONTRACTOR <u>David Mottola Const. Inc</u>	
		NO.	BY	DATE	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE INTX	INSPECTOR'S STAMPED BY DATE	DATE
					OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE	FIELD NAME BY <u>CDH/WCI</u>	DATE
					BLVD. TURN LEFT GO N. ON PARADISE BLVD. 1.1 MI. TO	VERIFICATION BY <u>WCI</u>	DATE
					GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD.	CORRECTED BY	DATE
					1.3 MI. TO MCMAHON BLVD. THE STA. IS ON THE LEFT.	RECORDED BY	DATE
					ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)	NO.	

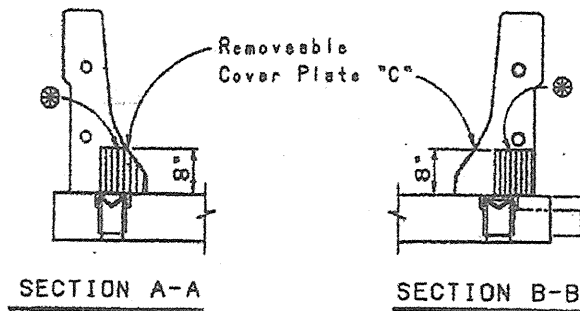
GARY W. KINCHE
NEW MEXICO
14368
OCTOBER 28, 2009
PROFESSIONAL ENGINEER

REVISIONS	
NO. DATE	REMARKS
DESIGNED BY	WILSON & COMPANY, ENGINEERS & ARCHITECTS
DRAWN BY	DATE OCT 2005
CHECKED BY	DATE OCT 2005
	DATE OCT 2005
	DATE OCT 2005

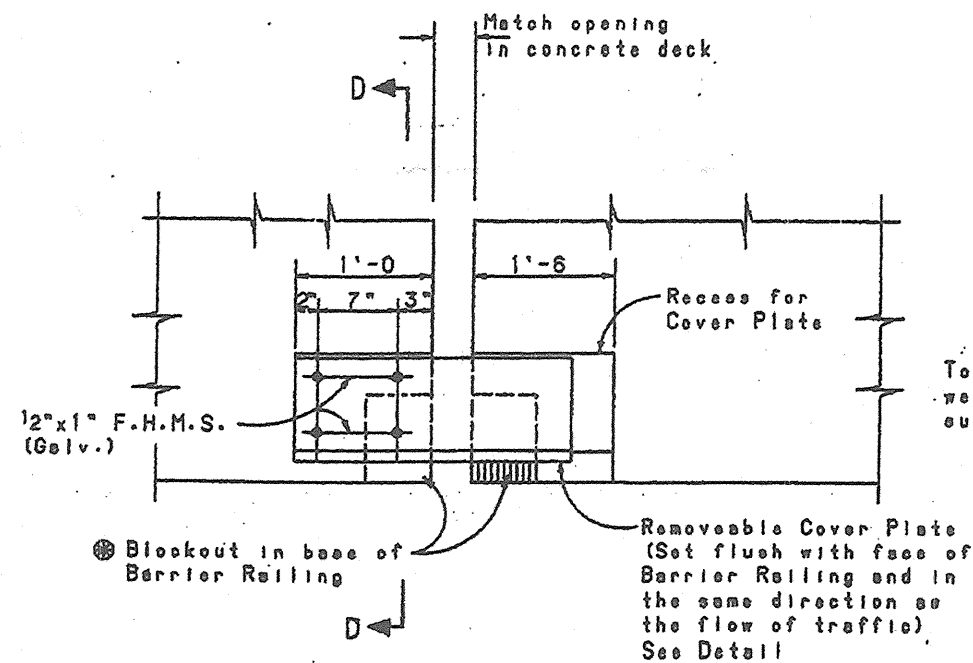
	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION																	
McMAHON BLVD. EXTENSION – LAS CALABACILLAS BRIDGE 32" BARRIER RAILING TRANSITION SECTION DETAILS																		
Design Review Committee APPROVE NOV 17 2005 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVE NOV 17 2005 CITY ENGINEER	Last Design Update	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Mo./Day/Yr.</th> <th style="width: 50%;">Mo./Day/Yr.</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Mo./Day/Yr.	Mo./Day/Yr.											City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-31 Of
Mo./Day/Yr.	Mo./Day/Yr.																	



**PART PLAN-SKEW JOINT
AT CONCRETE BARRIER RAILING**

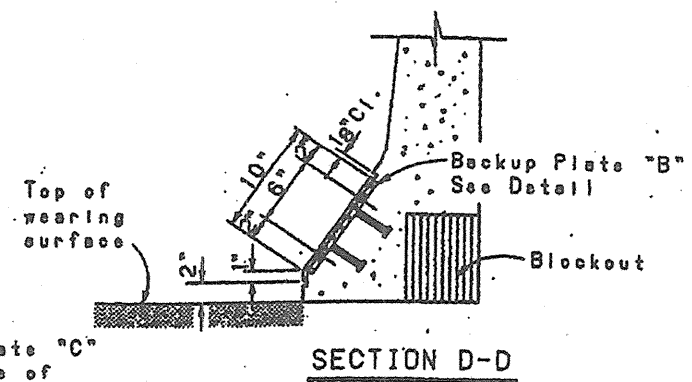


SECTION A-A
SIMILAR DETAIL FOR CURB AND SIDEWALK.
● Blockout in base of Barrier Railing.

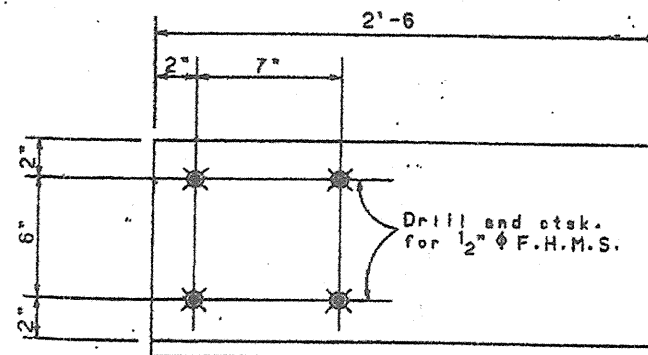


ELEVATION C-C

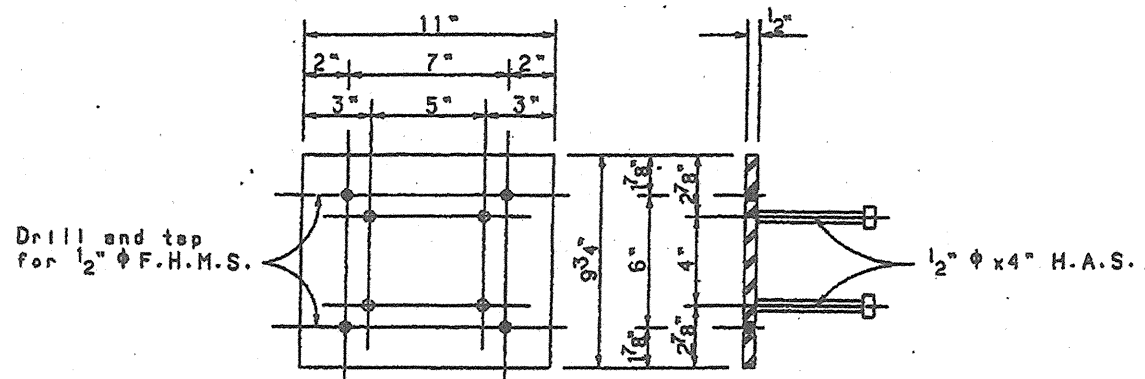
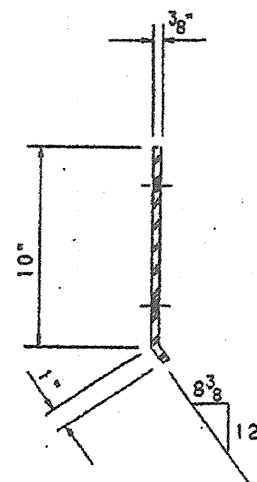
Provide Expansion Joints at each deck slab joint.



SECTION D-D



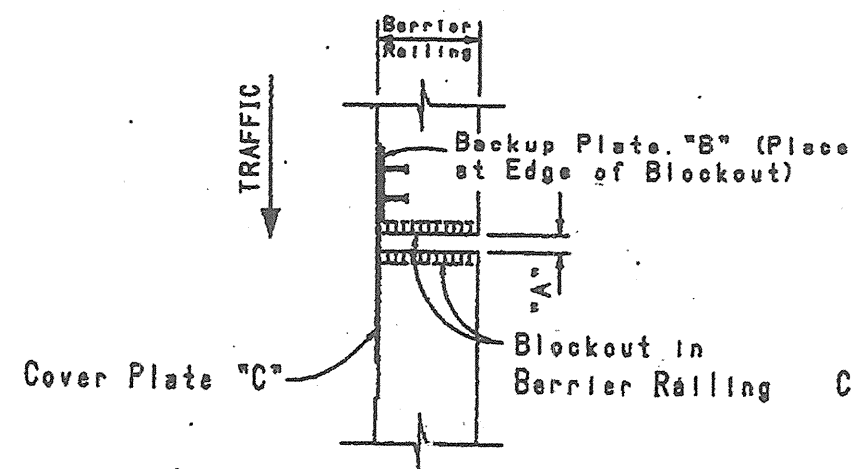
REMOVEABLE COVER PLATE "C"



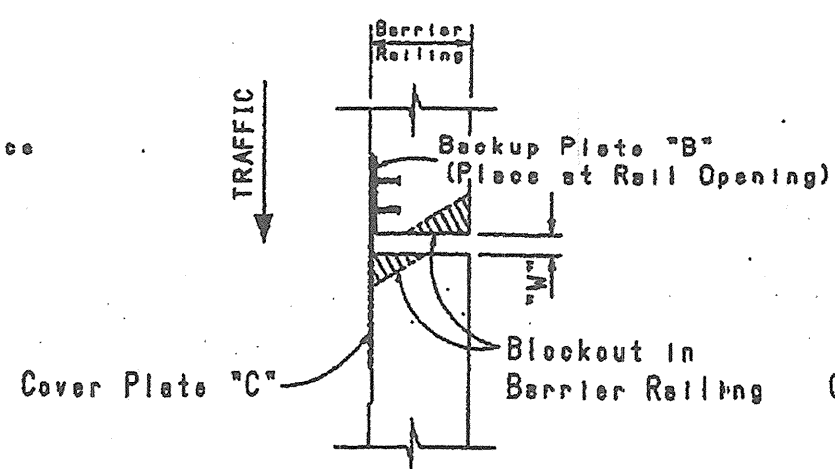
BACKUP PLATE "B"

MODIFIED BARRIER NOTE:

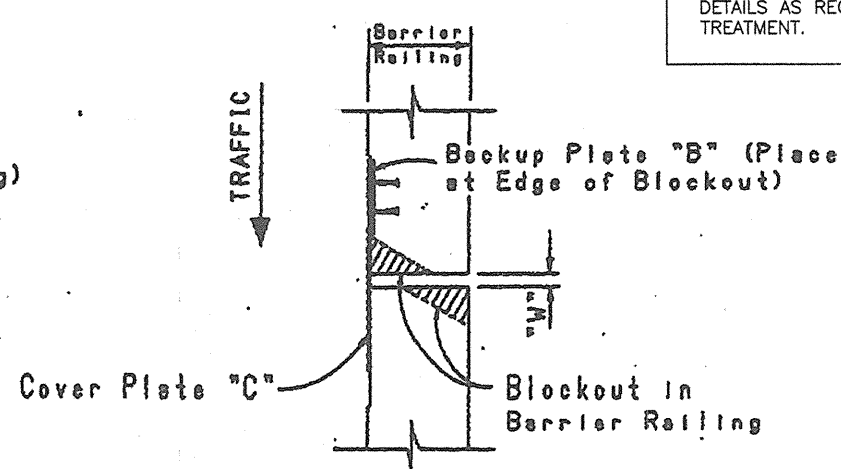
SEE SHEET 5-5 FOR MODIFICATIONS TO STANDARD BARRIER DETAILS AS REQUIRED BY FRACTURED FIN SURFACE TREATMENT.



NORMAL



RF SKEW



LF SKEW

BACKUP PLATE "B" LOCATIONS

CONTRACTOR David Monterey Const. Inc.		DATE 3/03	
INSPECTED BY Billingsley Eng.		DATE	
FIELD MADE BY COA		DATE	
REVISIONS BY COA/WCI		DATE	
CORRECTED BY WCI		DATE	
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
NO.		DATE	
ELEVATION = 5213.926 FT. (2ND ORDER) (NGVD29)			

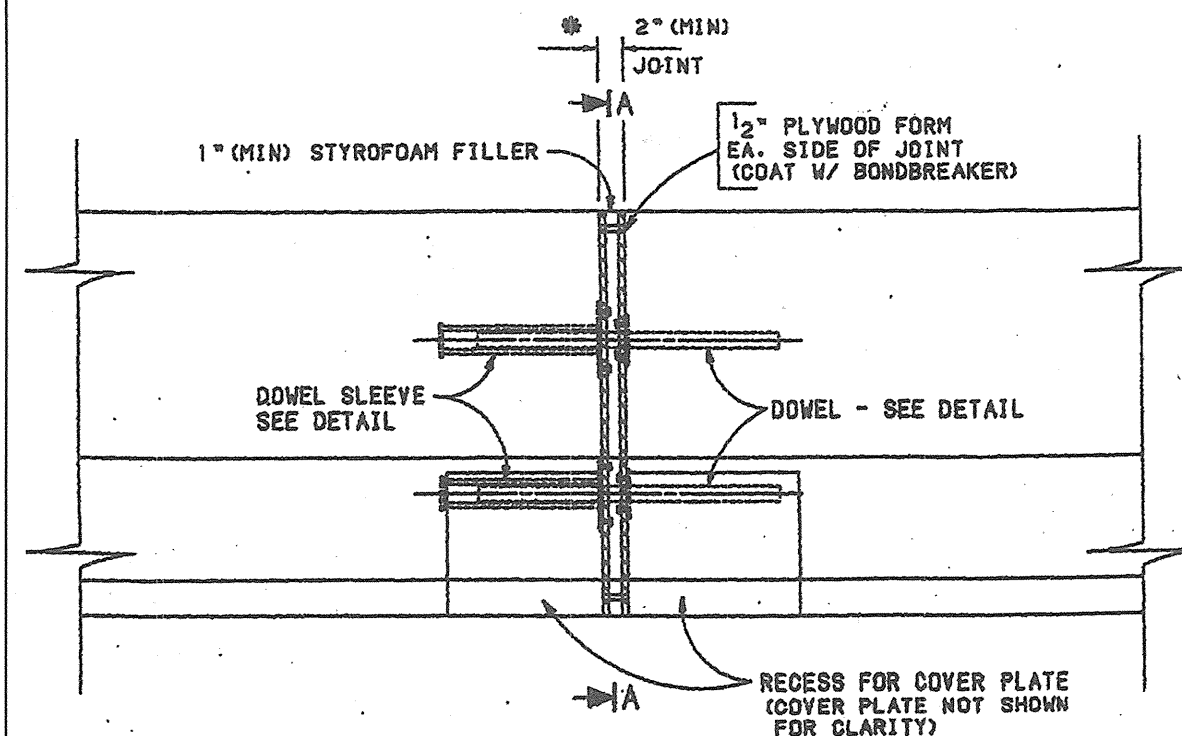
DATE	BY

NO.	DATE	BY

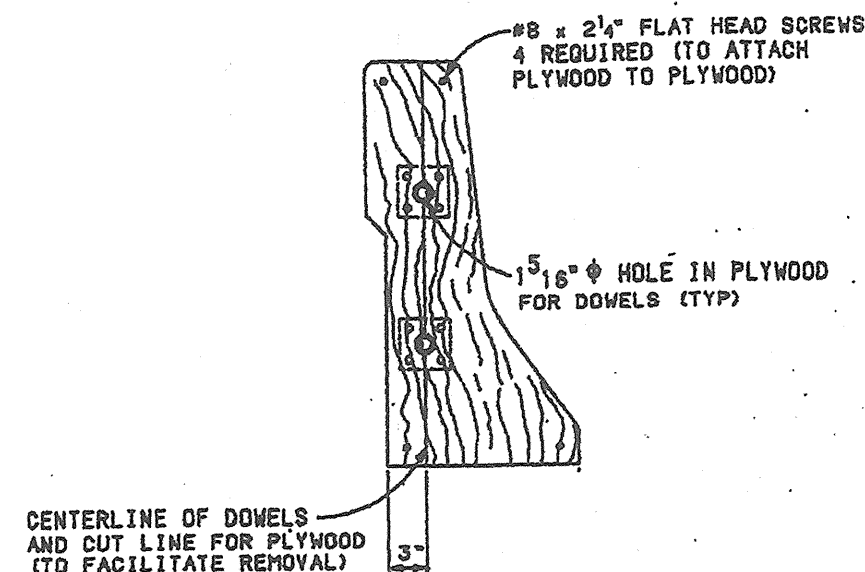
NO.	DATE	REMARKS

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE 32" BARRIER RAILING DETAILS AT JOINT SEALS	
Design Review Committee APPROVE NOV 17 2005 DESIGN REVIEW COMMITTEE	City Engineer Approved APPROVE NOV 17 2005 CITY ENGINEER
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-32	Of 54 of 164

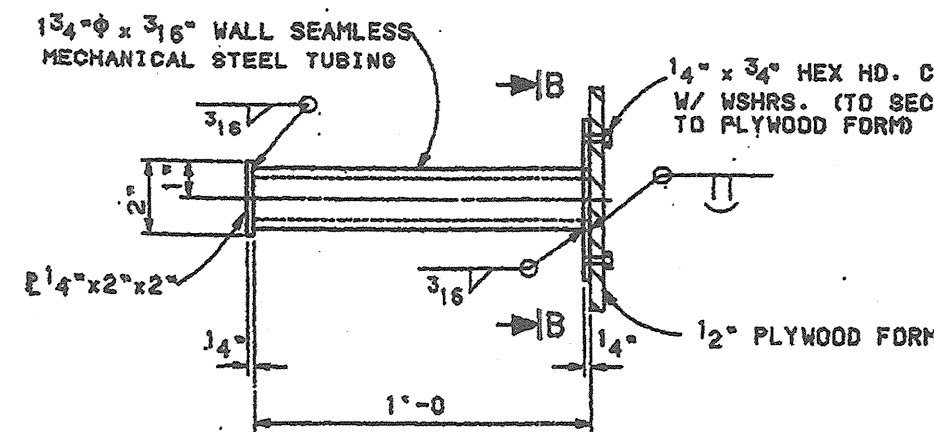
**WILSON
& COMPANY**



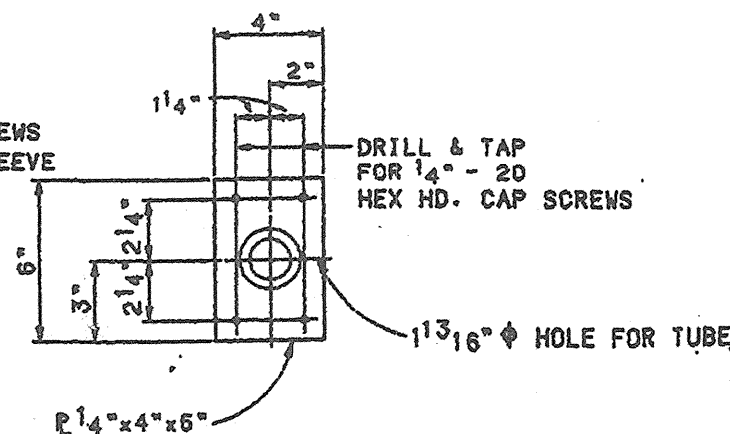
ASSEMBLY DETAIL



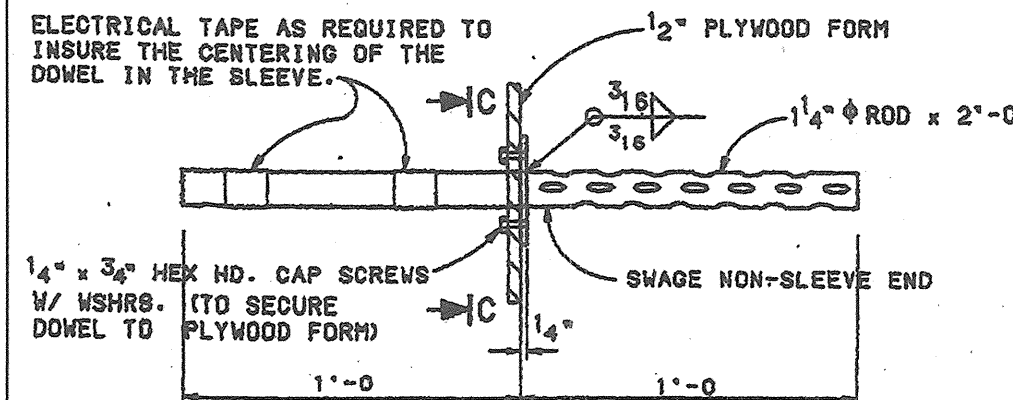
SECTION A-A



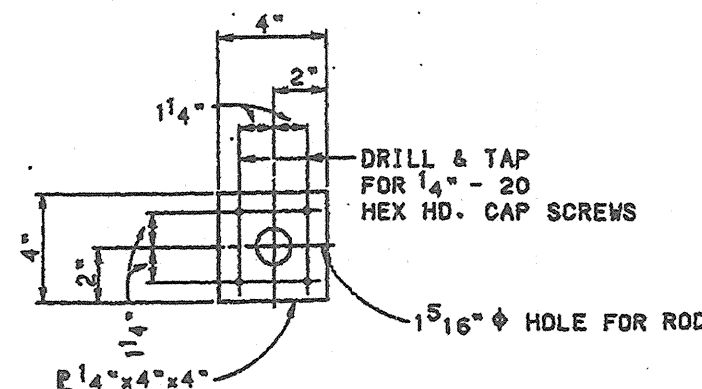
DOWEL SLEEVE DETAIL



SECTION B-B



DOWEL DETAIL



SECTION C-C

GENERAL NOTES

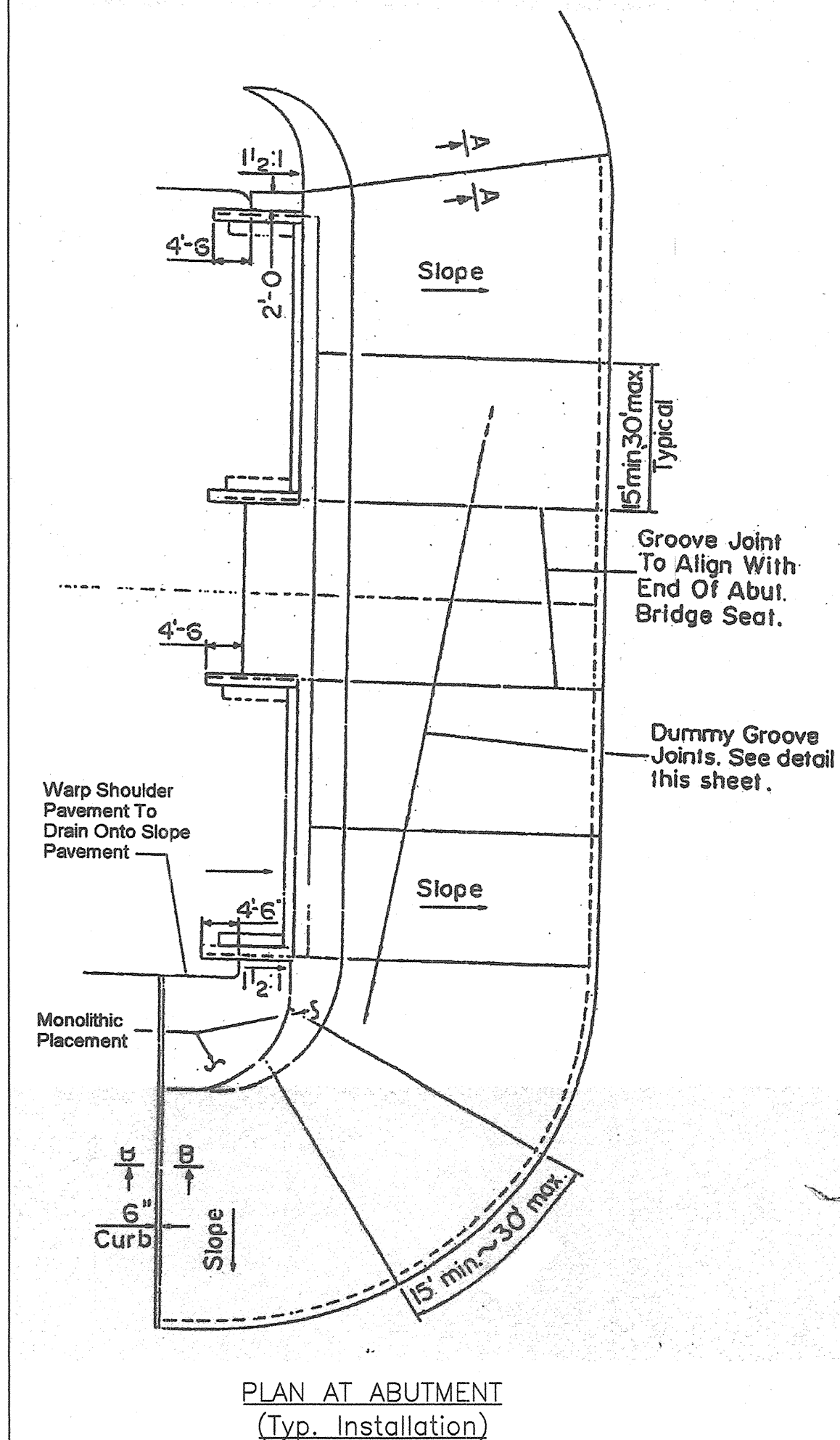
- SPECIFICATIONS FOR CONSTRUCTION: CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 WITH UPDATES, AND APPLICABLE SUPPLEMENTAL TECHNICAL SPECIFICATIONS.
- STRUCTURAL STEEL: AASHTO M-183 UNLESS OTHERWISE NOTED ON THE DETAILS. HOT-DIP GALVANIZE IN ACCORDANCE WITH AASHTO M-111.
- SLEEVE ASSEMBLY: SET PARALLEL TO THE BRIDGE DECK GRADE AND OUTSIDE FACE OF CONCRETE BARRIER RAILING.
- PLYWOOD FORMS AND STYROFOAM FILLER: CUT TO THE CROSS SECTION OF THE CONCRETE BARRIER RAILING. COAT PLYWOOD FORMS WITH AN APPROVED BOND-BREAKER.
- REMOVAL: AFTER CONCRETE HAS TAKEN INITIAL SET, REMOVE STYROFOAM FILLER, 1/4" HEX. HD. CAP SCREWS, AND 1/2" PLYWOOD FORMS FROM THE JOINT. (CUT THE #8 SCREWS TO FACILITATE THE PLYWOOD FORM REMOVAL).
- MOVEMENT LENGTHS IN EXCESS OF 250 FEET: INCREASE JOINT OPENING (*) AS REQUIRED.
- THE COST OF ALL FORMING MATERIALS FOR THE EXPANSION JOINT IS INCIDENTAL TO THE COST OF THE CONCRETE BARRIER RAILING.

MODIFIED BARRIER NOTE:

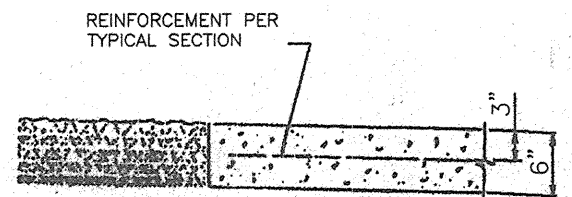
SEE SHEET 5-5 FOR MODIFICATIONS TO STANDARD BARRIER DETAILS AS REQUIRED BY FRACTURED FIN SURFACE TREATMENT.

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGNED BY		CHECKED BY		DATE		DATE		DATE		DATE	
CONTRACTOR	David Martinez Const. Inc.	SET	2 1977	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
FLUSH W/ THE GROUND	THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/1-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
ELEVATION	5213.926 FT. (2ND ORDER) (NGVD29)																				

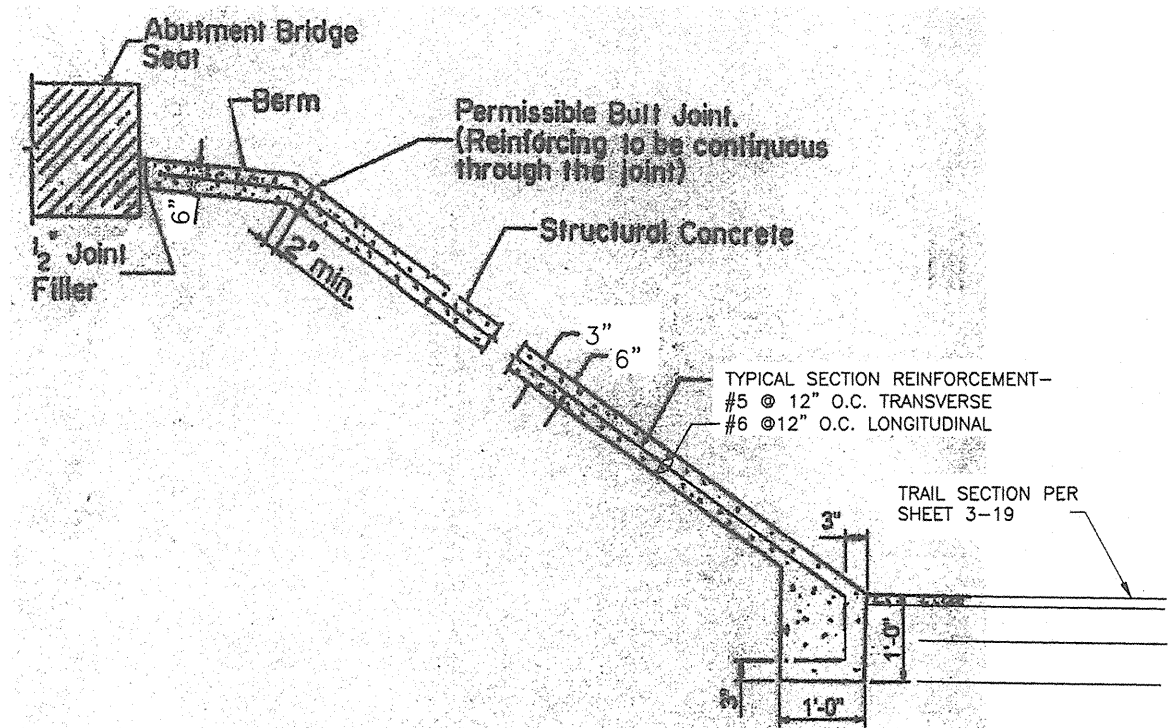
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION	
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE DOWEL ASSEMBLY FOR EXPANSION JOINTS 32" BARRIER RAILING	
DESIGN REVIEW COMMITTEE APPROVED NOV 17 2005	CITY ENGINEER APPROVED NOV 17 2005
City Project No. COA 681602	Zone Map No. A-10-Z
Sheet 5-33	Of 55 of 164



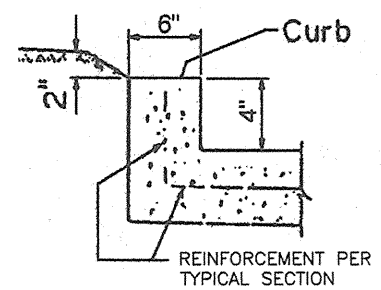
PLAN AT ABUTMENT
(Typ. Installation)



SECTION A-A



TYPICAL SECTION THROUGH
SLOPE PAVEMENT

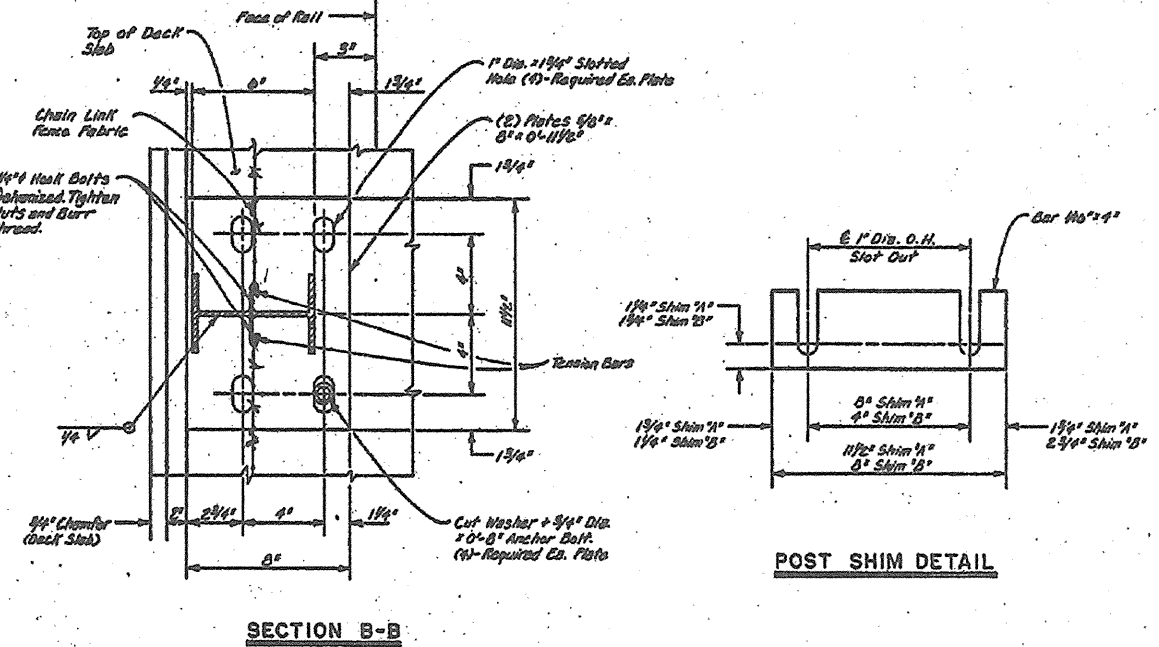
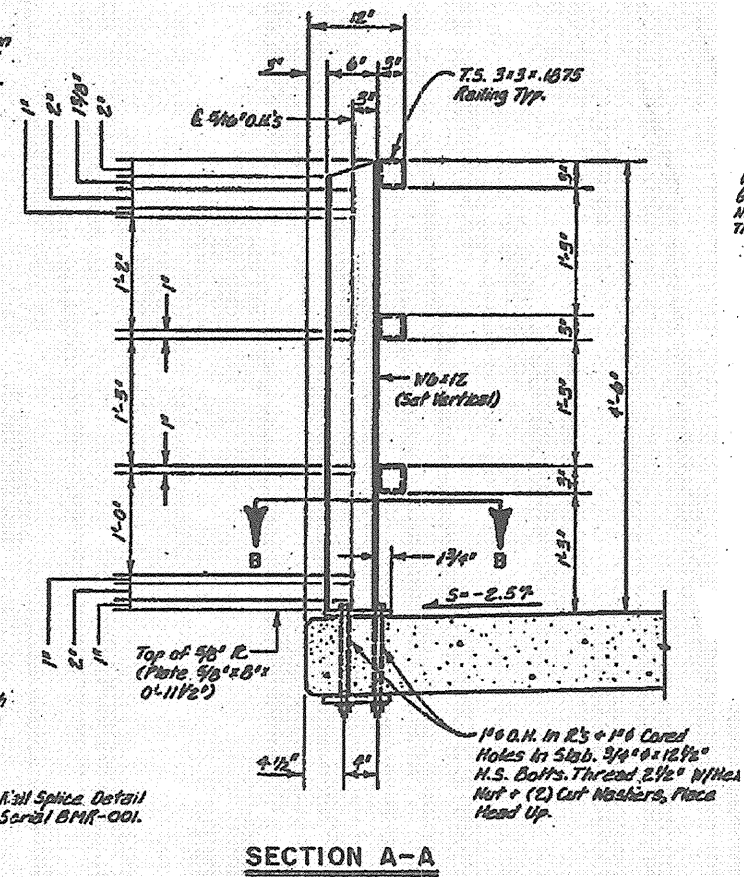
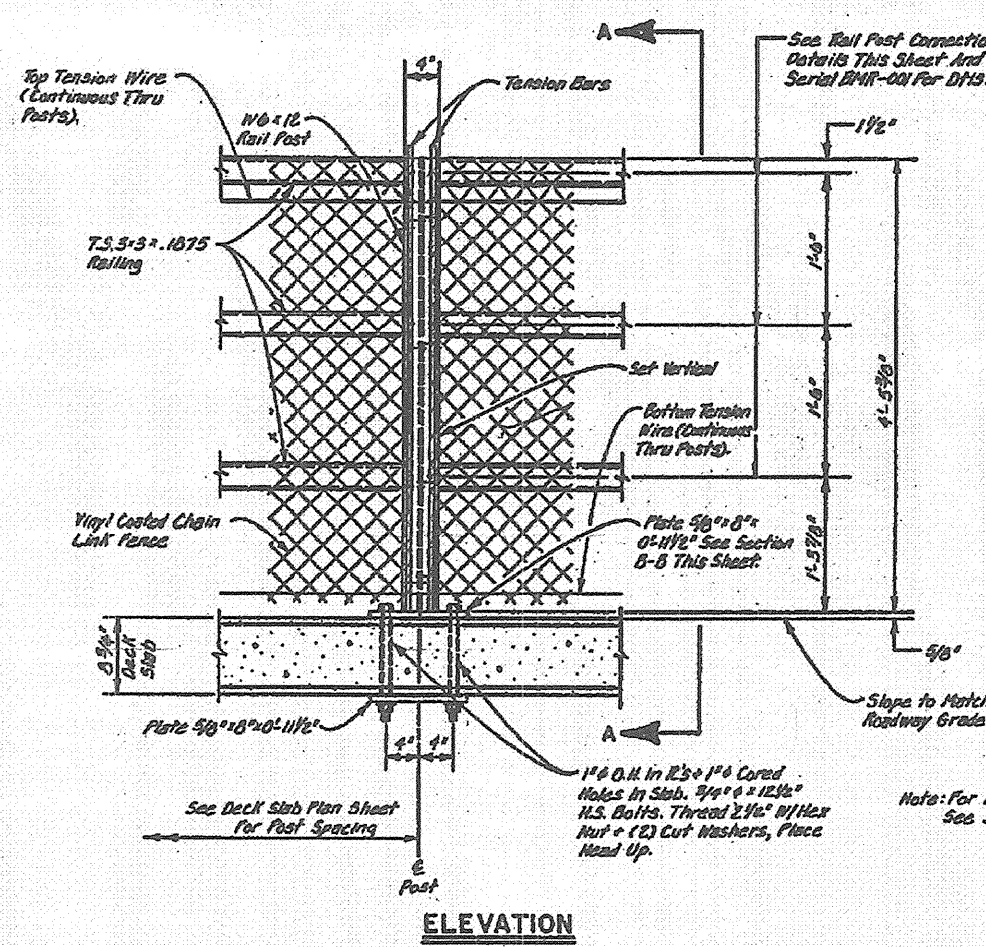


SECTION B-B

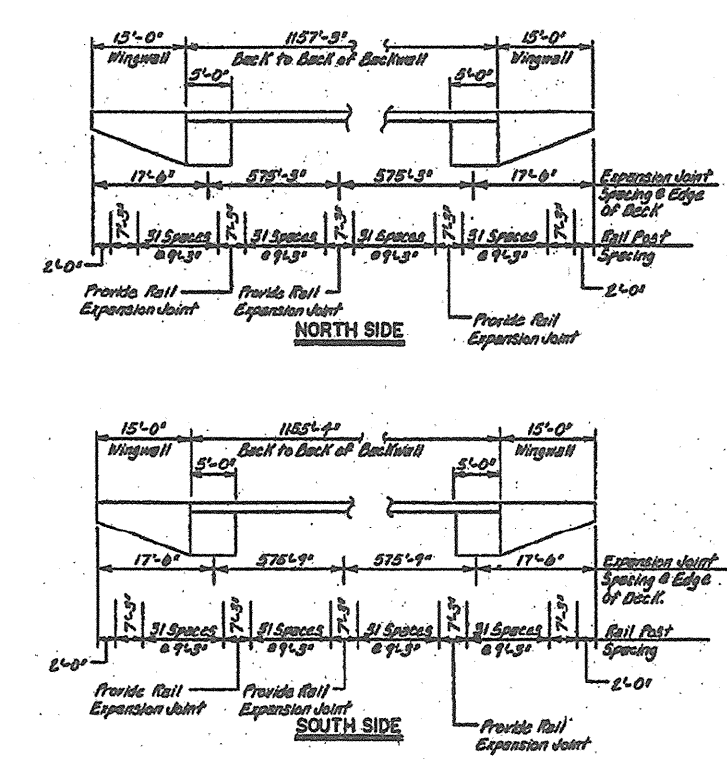
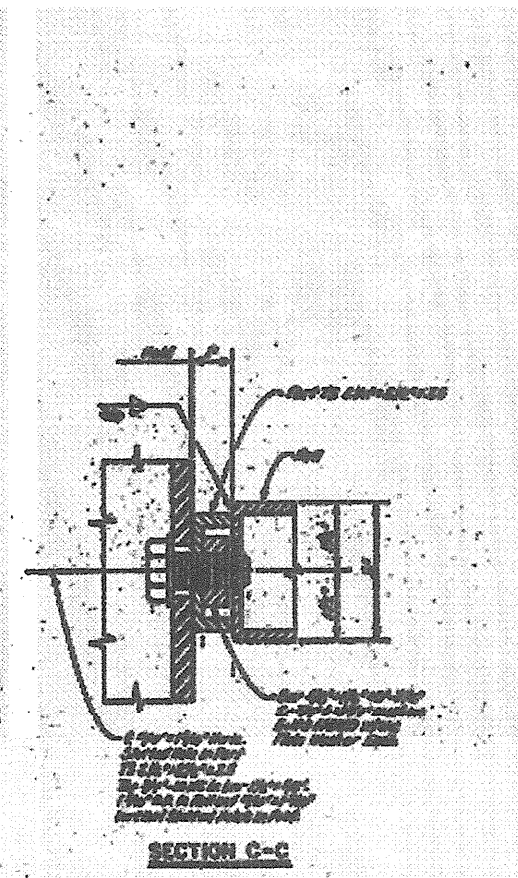
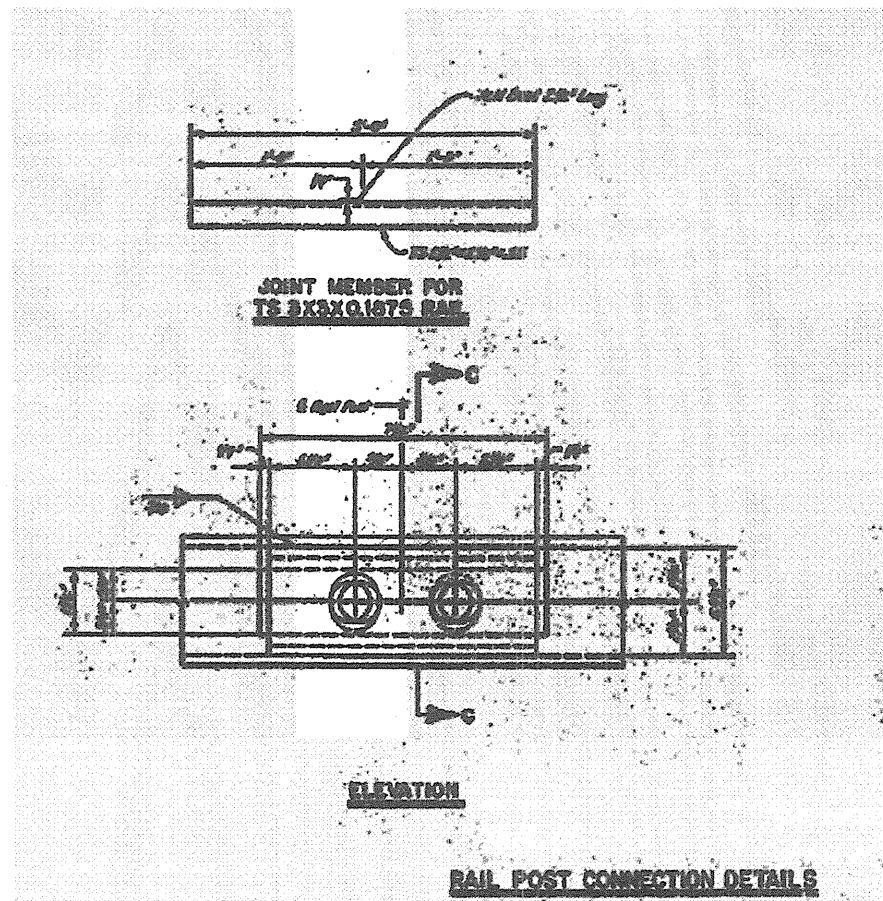
GENERAL NOTES

1. CONCRETE: 3000 PSI MINIMUM 28 DAY STRENGTH. A HIGHER CONCRETE STRENGTH IS PERMISSIBLE AT NO ADDITIONAL COST TO THE CITY. CONCRETE SHALL BE TINTED, COLOR SHALL BE DAVIS COLORS, SAN DIEGO BUFF @ 1#/SACK CEMENT.
2. JOINT FILLER: PREFORMED BITUMINOUS JOINT FILLER PER AASHTO M213. COST OF FILLER IS INCIDENTAL TO THE WORK.
3. REINFORCEMENT: ASTM A 615, GRADE 60. COST OF REINFORCEMENT IS INCIDENTAL TO THE WORK. REINFORCEMENT SHALL BE SET ON 3 INCH HIGH INDIVIDUAL SAND CHAIRS. MINIMUM SPACING SHALL BE 4 FEET ON CENTER. COST OF SAND CHAIRS SHALL BE INCIDENTAL TO THE WORK.
4. EXCAVATION FOR SLOPE PAVEMENT: COST IS INCIDENTAL TO THE WORK.
5. INSTALL CONSTRUCTION JOINTS ONLY AT THOSE LOCATIONS SHOWN ON THIS DRAWING.
6. SEE OTHER BRIDGE PLAN SHEETS FOR ESTIMATED QUANTITIES, LAYOUT AND OTHER DETAILS NOT SHOWN.
7. QUANTITY FOR STRUCTURAL CONCRETE FOR SLOPE PAVEMENT IS THE AREA OF THE EXPOSED SLOPE PAVEMENT SURFACE.

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		CITY OF ALBUQUERQUE	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
THE STA. IS A USGS TABLET STAMPED "BLACK-2 1977" SET FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTX OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.		CONTRACTOR: David Montoya, Conest Inc. DESIGNED BY: Billingsley Eng. CHECKED BY: COA DATE: 10/28/2005		FIELD NO. 14360 DATE: 10/28/2005				DESIGNED BY: GWK DATE: OCT 2005 DRAWN BY: CRH DATE: OCT 2005 CHECKED BY: SFP DATE: OCT 2005		CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE SLOPE PAVEMENT DETAIL AT BRIDGE	
City Project No. COA 681602		Zone Map No. A-10-Z		Sheet 5-34		Design Review Committee APPROVED NOV 17 2005 DESIGN REVIEW COMMITTEE		City Engineer Approval APPROVED NOV 17 2005 CITY ENGINEER		Wilson & Company 56 of 164	



POST SHIM DETAIL



GENERAL NOTES

- SEE COA DWG. 2604 FOR VINYL COATED CHAIN LINK FENCE ATTACHMENT DETAILS.
- COLOR OF CHAIN LINK FENCE AND HARDWARE - SEE PROJECT SPECIFICATIONS.
- ALL LABOR AND MATERIAL COSTS OF VINYL COATED FENCE, AND PAINT FOR FENCE AND RAILING ARE INCIDENTAL TO THE COST OF THE METAL PEDESTRIAN RAILING.

CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT TRANSPORTATION DIVISION			
McMAHON BLVD. EXTENSION - LAS CALABACILLAS BRIDGE			
METAL PEDESTRIAN RAILING DETAILS			
Design Review Committee NOV 17 2005	City Engineer Approval NOV 17 2005	Last Design Update	
City Project No. COA 681602	Zone Map No. A-10-Z	Sheet 5-35	
WILSON & COMPANY			

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL													
CONTRACTOR	DATE	SET	DATE	NO.	DATE		<table border="1"> <tr> <th>REVISIONS</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	DATE	BY									
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PROJECT	DATE	FLUSH W/ THE GROUND. THE STA. IS LOCATED 8.5 MI. N.W. OF DOWNTOWN ALBUQ. TO REACH THE STA. FROM THE INTY OF COORS/-40 GO N. ON COORS 5.8 MI. TO PARADISE BLVD. TURN LEFT GO W. ON PARADISE BLVD. 1.1 MI. TO GOLF COURSE RD. TURN RIGHT GO N. ON GOLF COURSE RD. 1.3 MI. TO McMAHON BLVD. THE STA. IS ON THE LEFT.	DATE	NO.	DATE														
DESIGNED BY	DATE	DESIGNED BY	DATE	DESIGNED BY	DATE														