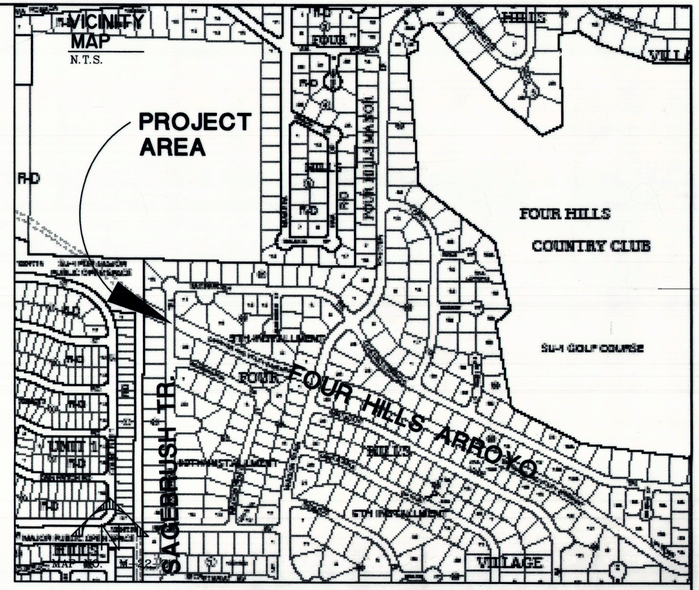

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
PLANS FOR CONSTRUCTION

FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL

CITY OF ALBUQUERQUE PROJECT NO. 756391

RECORD DRAWING INFO	
CITY INSPECTOR	PAUL GALLEGOS
CITY PROJECT MANAGER	JAME EISENBERG
CONTRACTOR	STAR PAVING CO.
SURVEYOR	TERRA LAND SURVEYS, LLC.
CITY URBAN PROJECT SUPERVISOR	N/A
LETTER OF ACCEPTANCE DATE	NOVEMBER 01, 2012
CONSTRUCTION ENGINEER	PAULA DODGE - KWAN

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RECORD DRAWINGS

APPROVED AS RECORD DRAWINGS
DMD/CSD
CITY CONSTRUCTION ENGINEER
DATE: 3-11-14

APPROVAL OF RECORD DRAWINGS

3-12-14
ABCWUA ENGINEER — DATE

CALL BEFORE YOU DIG!
STATEWIDE 1-800-321-ALERT
ALBUQUERQUE 260-1990

SEC JOB # 1091041
Smith Engineering Company
A Full Service Engineering Company

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEERS STAMP & SIGNATURE
DOUGLAS L. ANDREWS — NEW MEXICO — 11771 — REGISTERED PROFESSIONAL ENGINEER
08-25-2011

APPROVED	ENGINEER	DATE
DRC Chairman		11/8/11
Transportation		10-21-11
Water/Wastewater		9-7-11
Hydrology		11-7-11
C I P		
Constr. Mngmt.		
Constr. Coord.		

APPROVED FOR CONSTRUCTION
CITY ENGINEER — DATE 11-8-11

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	1	22

LEGEND (CONTINUED)

- NEW STORM DRAIN DROP INLET
- EXTENT OF NEW ASPHALT
- NEW STORM DRAIN MANHOLE
- NEW REINFORCED CONCRETE PIPE (RCP)
- WATERLINE RELOCATION
- NEW OR RELOCATED TRAFFIC SIGN
- NEW CONCRETE CURB AND GUTTER
- NEW CONCRETE

LEGEND

- EXISTING STORM MANHOLE
- EXISTING COMMUNICATION MANHOLE
- EXISTING COMMUNICATION RISER
- EXISTING CATV RISER
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING PRESSURE INDICATOR POST
- EXISTING SANITARY MANHOLE
- EXISTING POWER POLE
- EXISTING ELECTRIC BOX
- EXISTING PULL BOX
- EXISTING LIGHT
- EXISTING CAMERA
- EXISTING SIGN
- EXISTING MAILBOX
- EXISTING TREE
- EXISTING TREE
- EXISTING SHRUB
- 91.8 EXISTING SPOT ELEVATION
- EXISTING FENCE
- EXISTING BLOCK WALL
- EXISTING CONTOUR (INDEX)
- EXISTING CHAIN LINK FENCE
- EXISTING STRUCTURE OUTLINE
- ROW EXISTING RIGHT OF WAY LINE
- PL EXISTING PROPERTY LINE
- EXISTING ASPHALT
- EXISTING CONCRETE

SHEET INDEX:

RECORD DRAWINGS

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.	
WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
INSPECTION ACCEPTANCE BY	COA	DATE 7-12
FIELD VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

C.O.A. CONTROL STATION "TJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DOUGLAS L. ANDREWS
NEW MEXICO
(11771)
REGISTERED PROFESSIONAL ENGINEER
10-05-2011

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

SEC JOB # 1091041

Smith Engineering Company
A Full Service Engineering Company
5301 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION
REPLACEMENT AT SAGEBRUSH TRAIL
INDEX OF SHEETS & LEGEND

Design Review Committee	City Engineer Approval	Last Design Update	Mo. / Day / Yr.	Mo. / Day / Yr.
APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE	APPROVED NOV 08 2011 CITY ENGINEER			

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	2	22

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GENERAL NOTES:

1 SEVEN (7) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A DETAILED CONSTRUCTION SCHEDULE TO THE CITY CONSTRUCTION COORDINATION DIVISION. TWO (2) DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF SPECIFICATIONS.

2 THE CONTRACTOR WILL NOTIFY THE FIELD ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK, IN ORDER THAT THE COA SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. THE CONTRACTOR WILL NOTIFY THE COA SURVEYOR IF A MONUMENT IS DISTURBED. REPLACEMENT WILL BE DONE ONLY BY THE CITY OF ALBUQUERQUE SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR WILL, AT HIS OWN EXPENSE, HAVE THE COA SURVEYOR SECTION ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4 OF SPECIFICATIONS.

3 THE SPECIFICATIONS USED FOR THIS PROJECT ARE THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION THROUGH UPDATE NO. 8 INCLUDING ALL SUBSEQUENT UPDATES AND AMENDMENTS.

4 ALL NEW MANHOLES SHALL BE TYPE "C" PER CITY OF ALBUQUERQUE STANDARD DRAWINGS 2101 UNLESS OTHERWISE NOTED ON THE PLANS. ALL MANHOLES SHALL INCLUDE PLACEMENT OF EMD'S.

5 THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING, BUT NOT LIMITED TO HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.

6 ALL EXISTING WATER VALVE BOXES AND MANHOLES IN THE STREET CONSTRUCTION ARE TO BE ADJUSTED TO FINISH GRADE AND WILL BE MEASURED AND PAID PER EACH. ADJUSTMENT WORK SHALL INCLUDE EMD, NEW CONCRETE COLLAR, NEW RING AND COVER.

7 SUBGRADE PREPARATION UNDER SIDEWALKS AND DRIVE PADS, AND SUBGRADE AND SUBBASE PREPARATION UNDER CURB AND GUTTER IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF SUCH, AND NO DIRECT PAYMENT SHALL BE MADE FOR THOSE ITEMS OF WORK.

8 ALL EXCAVATION WILL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

9 ALL SIGNS AND CODING WILL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.

10 THE CONTRACTOR IS TO EXERCISE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES. IT WILL BE HIS RESPONSIBILITY TO COORDINATE WITH THE UTILITY COMPANIES IN ORDER TO PREVENT ANY SERVICE DISRUPTION. SEE SECTION 18 "UTILITIES", CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS.

11 WHEN ABUTTING NEW PAVEMENT TO EXISTING PAVEMENT, SAW CUT EXISTING PAVEMENT TO A STRAIGHT LINE AND AT RIGHT ANGLES AND REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO DIRECT PAYMENT WILL BE MADE FOR SAW CUTTING.

12 ALL GAS VALVES, GAS MANHOLES, ELECTRICAL MANHOLES, TELEPHONE MANHOLES, AND UTILITY POLES WILL BE ADJUSTED TO GRADE BY EACH UTILITY COMPANY. CONTRACTOR WILL COORDINATE THROUGH CITY UTILITY COORDINATOR.

13 WHEN REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK IS REQUIRED, REMOVE BACK TO NEAREST SUITABLE JOINT UNLESS OTHERWISE DIRECTED BY THE CONSTRUCTION ENGINEER.

14 THE CONTRACTOR WILL NOTIFY NEW MEXICO ONE CALL SYSTEM 260-1900 TWO (2) WORKING DAYS PRIOR TO COMMENCING WORK IN NEW AREAS. IN NEW AREAS.

15 CONTRACTOR WILL PLACE BITUMINOUS MATERIAL WITH THE USE OF A LAYDOWN MACHINE WHERE PAVEMENT IS 8 FEET IN WIDTH OR WIDER.

16 CONTRACTOR WILL NOT PAVE OVER ANY SURFACE FEATURE, I.E., GAS VALVE, MANHOLE COVER, ETC.

17 CONTRACTOR WILL CONFINE HIS WORK WITHIN THE CONSTRUCTION EASEMENT LIMITS AND/OR RIGHT-OF-WAY, OR PROVIDE COPIES OF AGREEMENTS WITH ADJACENT LANDOWNERS TO THE CITY OF ALBUQUERQUE.

18 MINIMUM BOTTOM WIDTH OF TRENCHES FOR RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 24 INCHES. BEDDING MATERIAL SHALL BE CLASS II, III, OR IV UNLESS OTHERWISE SPECIFICALLY NOTED ON THE PLANS.

19 MINIMUM BOTTOM WIDTH OF TRENCHES FOR NON-RIGID PIPE SHALL BE EQUAL TO THE OUTSIDE DIAMETER PLUS 18 INCHES. BEDDING MATERIAL SHALL BE CLASS I, II, OR III.

20 THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.

21 THE CONTRACTOR SHALL CONSTRUCT CITY OF ALBUQUERQUE STANDARD WHEELCHAIR RAMPS THAT CONFORM TO CURRENT ADA REQUIREMENTS.

22 PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL CONFLICTING UTILITIES. SHOULD A CONFLICT EXIST BETWEEN THE FIELD INFORMATION AND THE PLANS, THE CONTRACTOR WILL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.

23 THE REPLACEMENT OF THE EXISTING UTILITIES AND THE INSTALLATION OF NEW UTILITY LINES WILL BE COMPLETED IN ADVANCE OF STARTING THE PAVEMENT WORK. TEMPORARY PAVEMENT WILL BE PLACED IN ALL TRENCHES REQUIRED FOR THE UTILITY REPLACEMENTS IN THOSE AREAS THAT MUST MAINTAIN TRAFFIC UNTIL THE FINAL PAVEMENT WORK STARTS IN EACH AREA. TEMPORARY STRIPING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. MAINTENANCE OF THE TEMPORARY PAVING AND STRIPING WILL BE AT THE CONTRACTOR'S EXPENSE.

24 TACK COAT FOR SURFACE COURSE REQUIREMENTS WILL BE DETERMINED BY THE CONSTRUCTION ENGINEER.

25 BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.

26 ALL NEW STREET PAVING, DRIVEWAYS, SIDEWALKS, AND CURB AND GUTTERS, ABUTTING EXISTING AREAS SHALL MATCH THE ELEVATION OF THOSE AREAS.

27 PERMANENT PAVEMENT STRIPING AND MARKINGS WILL BE PLACED BY THE CONTRACTOR. ROAD SHALL NOT BE OPENED TO TRAFFIC UNTIL IT IS STRIPED. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, ARROWS AND LINE MARKINGS ARE TO BE CONSTRUCTED OF HOT PLASTIC OR COLD (PREFORM THERMO) PLASTIC IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

28 ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR DAYS OF EXCAVATION. SPOIL PILES WILL BE ALLOWED ONLY AS DIRECTED BY THE ENGINEER.

29 THE CONTRACTOR WILL COORDINATE THE CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND UTILITY COMPANIES WORKING IN THE SAME AREA. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE THEIR ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY COMPANY WORK CREWS. A CONTRACT EXTENSION MAY BE ALLOWED AS DELINEATED IN CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS.

30 EXISTING CURB AND GUTTER, NOT DISTURBED BY CONTRACTOR, BUT OUT OF ALIGNMENT, DISPLACED VERTICALLY, BADLY BROKEN AND/OR DETERIORATED, WILL BE REPLACED AS DIRECTED BY THE CONSTRUCTION ENGINEER AND PAID FOR AT CONTRACT UNIT PRICES.

31 ALL TRAFFIC CONTROL DEVICES REQUIRED FOR DRIVEWAY CLOSURES, UTILITY CONSTRUCTION OR FOR OTHER REASONS AND NOT SHOWN ON THE SIGNING PLANS WILL BE FURNISHED BY THE CONTRACTOR. PRIOR TO PLACING THE TRAFFIC CONTROL DEVICES, THE CONTRACTOR WILL NOTIFY THE AFFECTED OWNERS IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR MUST MAKE PROVISIONS TO PROVIDE ACCESS TO PROPERTIES. REFER TO SECTION 19 OF THE SPECIFICATIONS.

32 ALL UTILITY LINES WHICH ARE NOT SPECIFICALLY DESIGNATED TO BE REMOVED AND REPLACED ON THE PLANS, WILL BE MAINTAINED IN SERVICE. SHORING, SHEETING AND OTHER MEANS OF SUPPORT SHALL BE EMPLOYED BY THE CONTRACTOR TO PREVENT DAMAGE OR LOSS OF THESE EXISTING UTILITIES. BEAM AND CABLE OR OTHER ADEQUATE SUPPORTS WILL BE USED FOR TEMPORARY SUPPORT OF ALL UTILITY LINES WHICH CROSS THE TRENCH. ANY DAMAGE TO EXISTING UTILITIES WILL PROMPTLY BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR WILL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SIGNIFICANT DEVIATION OF EXPOSED UTILITIES FROM THE LOCATIONS SHOWN ON THE PLANS SO THAT CONFLICTS CAN BE RESOLVED IN A TIMELY MANNER.

33 THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING COA INFRASTRUCTURE (C & G, PAVING, ETC.) DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND WILL REPAIR OR REPLACE SAME AT HIS OWN EXPENSE. HE WILL SUITABLY PROTECT THE CURB AND GUTTER FROM INCIDENTAL SPLASHING DURING THE TACK COAT APPLICATION AND WILL BE RESPONSIBLE FOR CLEANING SAME AT HIS OWN COST SHOULD SPLASHING OCCUR.

34 ALL INTERFERING PORTIONS OF ABANDONED UTILITY LINES WHICH ARE EXPOSED AS A RESULT OF CONSTRUCTION WILL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

35 SHORING COSTS WILL BE CONSIDERED INCIDENTAL TO THE TRENCH AND BACKFILL COSTS.

36 THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING NPDES PERMITS REQUIRED BY APPLICABLE CITY, STATE, AND FEDERAL REGULATIONS.

37 THE TERM "REMOVE" USED IN THIS PLAN SET INCLUDES THE DISPOSAL OF SAID MATERIAL IN ACCORDANCE WITH CITY OF ALBUQUERQUE SPECIFICATIONS, LATEST EDITION.

38 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY THE CITY OF ALBUQUERQUE.

39 ALL REINFORCING STEEL TO BE GRADE 60 UNLESS OTHERWISE NOTED ON PLANS.

40 STATIONS OF STORM DRAIN INLETS ARE TO THE CENTER OF GRATE.

41 ALL STORM DRAIN AND CONNECTOR PIPE WILL BE CLASS IV REINFORCED CONCRETE PIPE UNLESS OTHERWISE NOTED ON THE PLANS.

42 EXCESS EXCAVATION REQUIRED TO CONSTRUCT THE PROJECT THAT DOES NOT HAVE A CORRESPONDING BID ITEM (ie: EXCAVATION OF SUBGRADE OR DIRT) SHALL BE REMOVED AND DISPOSED OF AT NO ADDITIONAL COST TO THE OWNER AND WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

43 EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650, SUBPART P.

44 CONTRACTOR IS ADVISED TO VISIT THE PROJECT SITE PRIOR TO BIDDING AND FAMILIARIZE THEMSELVES WITH FIELD CONDITIONS INCLUDING THE LOCATION OF UTILITIES SHOWN ON THE PLANS AND OTHER UTILITIES/ OBSTACLES CLEARLY VISIBLE IN THE FIELD.

45 FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

46 ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 1012 NATIVE GRASS SEEDING, AS CURRENTLY UPDATED.

47 REMOVAL AND DISPOSAL OF EXISTING ASBESTOS PIPE MATERIAL SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL GOVERNMENTAL LAWS AND REGULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL ASBESTOS PIPE MATERIAL AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIAL.

48 ALL NEW STORM INLETS SHALL BE TYPE "A" PER CITY OF ALBUQUERQUE STANDARD DRAWINGS 2201 AND 2202 UNLESS OTHERWISE NOTED ON THE PLANS. ALL STORM INLET GRATES SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARD DRAWING 2220.

49 IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE MEASURES TO PREVENT ABRUPT DROP-OFFS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

50 CONSTRUCTION ACTIVITY IN THE CHANNEL SHALL PROVIDE FOR SAFE PASSAGE OF THE 10-YEAR STORM DURING THE MONTH'S OF JULY, AUGUST AND SEPTEMBER.

51 THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT http://abcwua.org/content/view/463/729/.

52 ELECTRONIC MARKER DEVICES (EMD) WILL BE PLACED ACCORDING TO SECTION 170 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8. PROVIDING AND INSTALLATION OF EMD'S SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR EMD'S.

53 NO STEPS SHALL BE INSTALLED ON ANY NEW SAS MANHOLES.

54 THE CONTRACTOR MUST MAINTAIN ALL TRASH PICK-UP AND MAIL DELIVERY TO ALL IMPACTED RESIDENTS DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

RECORD DRAWINGS

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
ASBUILTS CHECKED BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TIJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS NEW MEXICO 11771 REGISTERED PROFESSIONAL ENGINEER
08-25-2011

NO.	DATE	REMARKS	BY

REVISIONS

		DESIGN	DATE
DESIGNED BY	D.A.		08/2011
DRAWN BY	SEC		08/2011
CHECKED BY	D.A.		08/2011

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
5501 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
GENERAL NOTES

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No. 756391 | Zone Map No. M-22-Z | Sheet 3 Of 22

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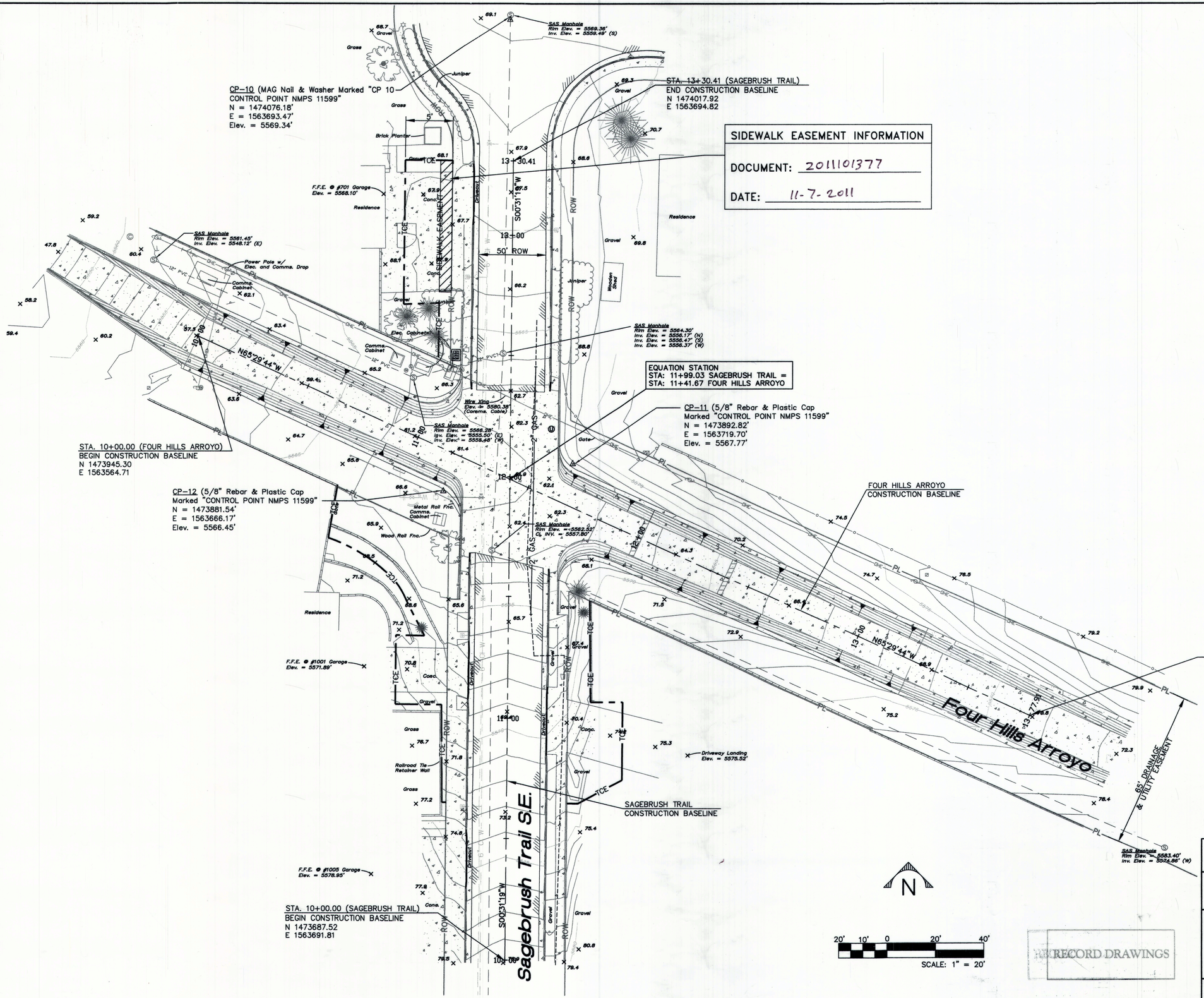
NOTE:
THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF LOCAL SURVEY CONTROL POINTS. RELOCATION OF LOCAL SURVEY CONTROL POINTS OR THE ESTABLISHMENT OF SURVEY CONTROL REFERENCE POINTS WILL BE THE CONTRACTOR'S RESPONSIBILITY.



AS BUILT INFORMATION	
CONTRACTOR	STAR PAVING CO.
WORK STAKED BY	SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY	COA DATE 7-12
FIELD VERIFICATION BY	COA DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO. DATE 1-13
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SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
11-07-2011

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

SEC JOB # 1091041

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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE:
FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
LOCAL SURVEY CONTROL INFORMATION

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE

City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER

Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	4	22

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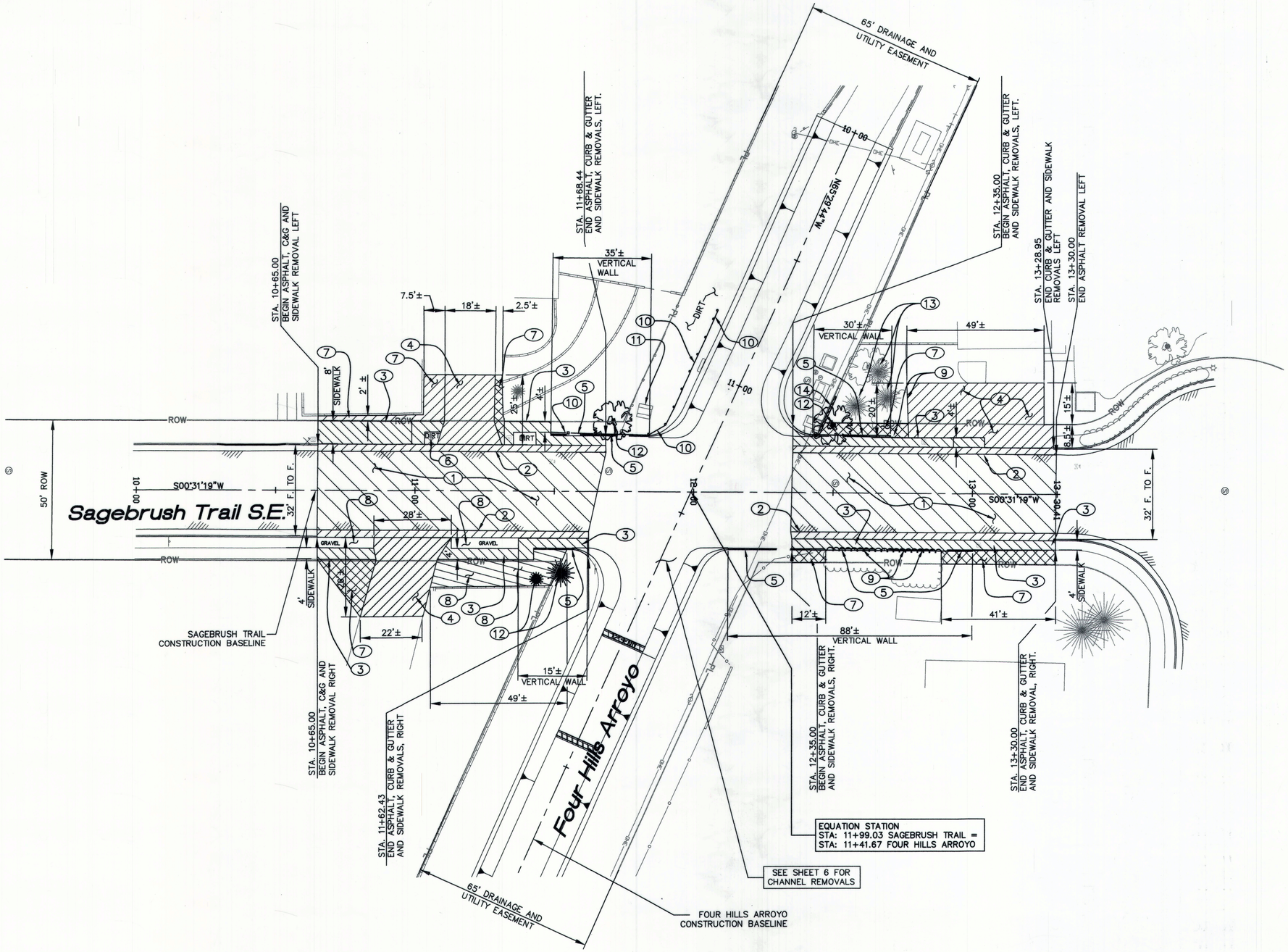

SAGEBRUSH TRAIL

KEYED NOTES:

1. REMOVE & DISPOSE EXISTING ASPHALT PAVEMENT TO LIMITS SHOWN.
2. REMOVE & DISPOSE EXISTING CURB & GUTTER TO LIMITS SHOWN.
3. REMOVE & DISPOSE EXISTING SIDEWALK TO LIMITS SHOWN.
4. REMOVE & DISPOSE EXISTING DRIVE PAD TO LIMITS SHOWN.
5. REMOVE & DISPOSE EXISTING CONCRETE (VERTICAL) RETAINING WALL.
6. REMOVE, STORE & REINSTALL EXISTING MAIL BOX. CONTRACTOR SHALL PROVIDE TEMPORARY MAIL BOX FOR IMPACTED RESIDENTS DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WITH USPS.
7. REMOVE, STORE EXISTING LANDSCAPE ROCK. RE-INSTALL WHEN CONCRETE HAS BEEN PLACED.
8. REMOVE & DISPOSE EXISTING LANDSCAPE ROCK.
9. TRIM EXISTING SHRUB TO CONSTRUCT NEW 4' WIDE SIDEWALK.
10. REMOVE & DISPOSE EXISTING WOOD FENCE.
11. COMMUNICATIONS BOX TO BE REMOVED & RELOCATED BY OTHERS PRIOR TO CONSTRUCTION..
12. REMOVE & DISPOSE EXISTING TREE.
13. EXISTING TREE TO REMAIN. CONTRACTOR TO PROTECT TREES DURING CONSTRUCTION. PROTECTION OF EXISTING TREES, SHRUBS AND PLANT LIFE NOT TO BE REMOVED AS PART OF THIS PROJECT WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO ADDITIONAL PAYMENT WILL BE MADE.
14. REMOVE & STORE 15 LF. OF EXISTING CMU BLOCK. REINSTALL WHEN CONSTRUCTION IN AREA IS COMPLETE. BUILD NEW WALL FOUNDATION TO MATCH EXISTING. SEE SHEET 10 FOR CONSTRUCTION INFORMATION.

N

20' 10' 0 20' 40'
SCALE: 1" = 20'

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
5501 San Pedro Boulevard N.E. Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

RECORD DRAWINGS

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.
WORK STAKED BY	SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTION ACCEPTANCE BY	COA DATE 7-12
FIELD VERIFICATION BY	COA DATE 7-12
DRAWINGS CORRECTED BY ENGINEERING CO.	SMITH DATE 1-13
RECORDED BY	DATE
NO.	

MICRO-FILM INFORMATION

BENCH MARKS
C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
01-13-2011

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
SAGEBRUSH TRAIL REMOVAL PLAN

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	5	22

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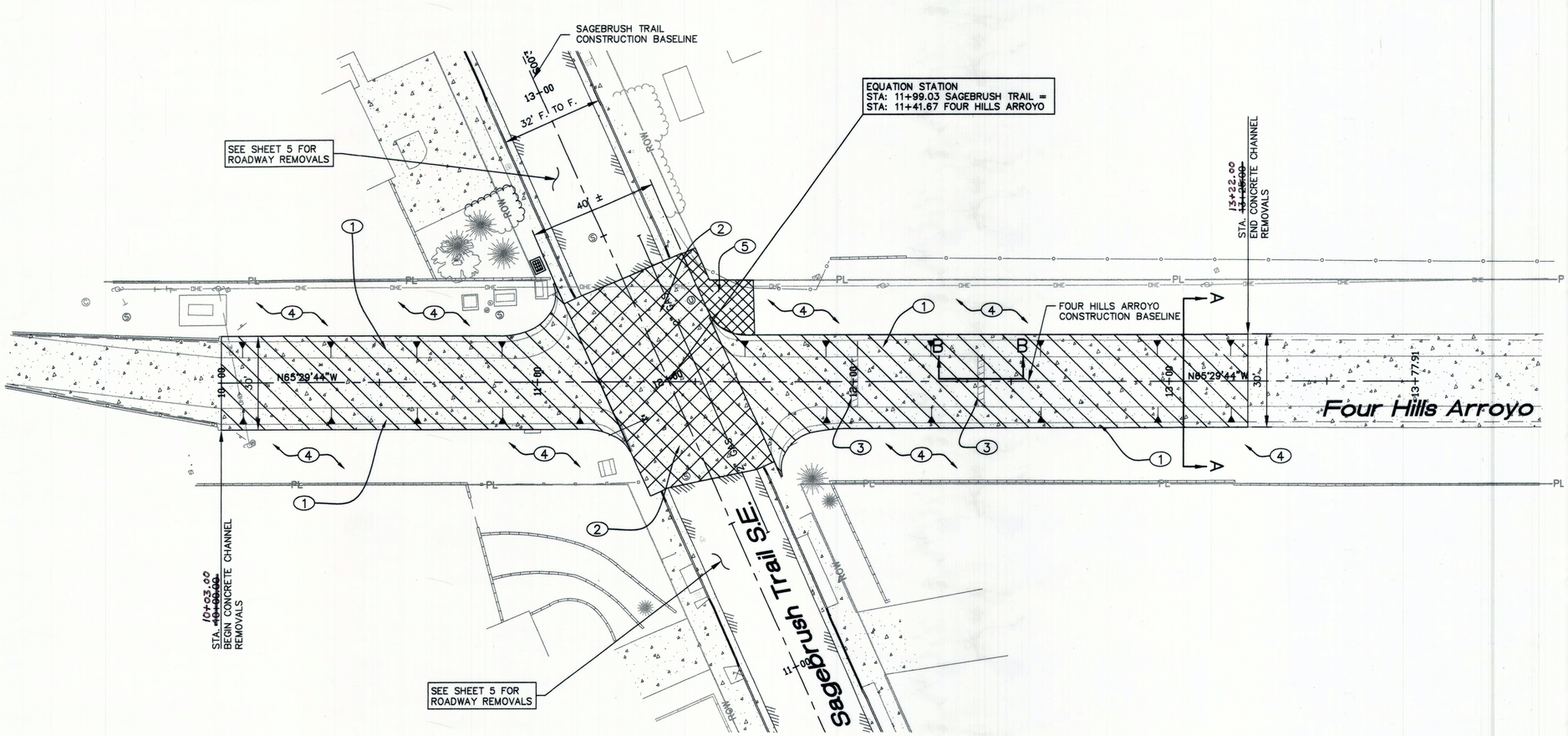
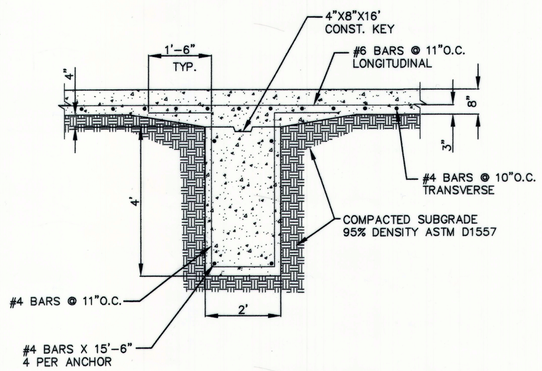


FOUR HILLS ARROYO

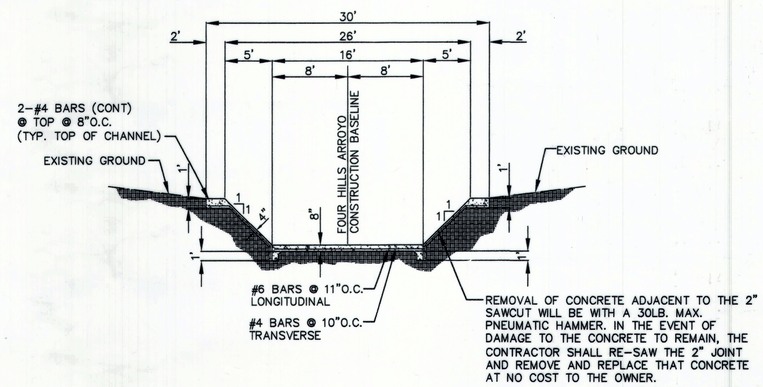
KEYED NOTES:

1. REMOVE & DISPOSE EXISTING CONCRETE CHANNEL.
2. REMOVE & DISPOSE EXISTING CONCRETE PAVEMENT. EXISTING CONCRETE PAVEMENT IS 8" THICK.
3. REMOVE & DISPOSE EXISTING LUG TYPE TERMINAL.
4. CONTRACTOR SHALL REMOVE AND DISPOSE EXISTING VEGETATION AS REQUIRED TO CONSTRUCT THE NEW CHANNEL. SEE SHEET 8 FOR RE-SEEDING INFORMATION.
5. REMOVE, STORE EXISTING LANDSCAPE ROCK. RE-INSTALL WHEN SIDEWALK HAS BEEN PLACED.



EXISTING LUG TYPE TERMINAL DETAIL – BB

1/2"=1'-0"



EXISTING CHANNEL SECTION – AA

1/4"=1'-0"

RECORD DRAWINGS

N

SCALE: 1" = 20'

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company

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		REVISIONS	
		DESIGN	

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.	
WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
INSPECTOR'S ACCEPTANCE BY	COA	DATE 7-12
VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

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DATE	
NO.	

BENCH MARKS

C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
08-26-2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE:
FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
FOUR HILLS ARROYO REMOVAL PLAN

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	6	22

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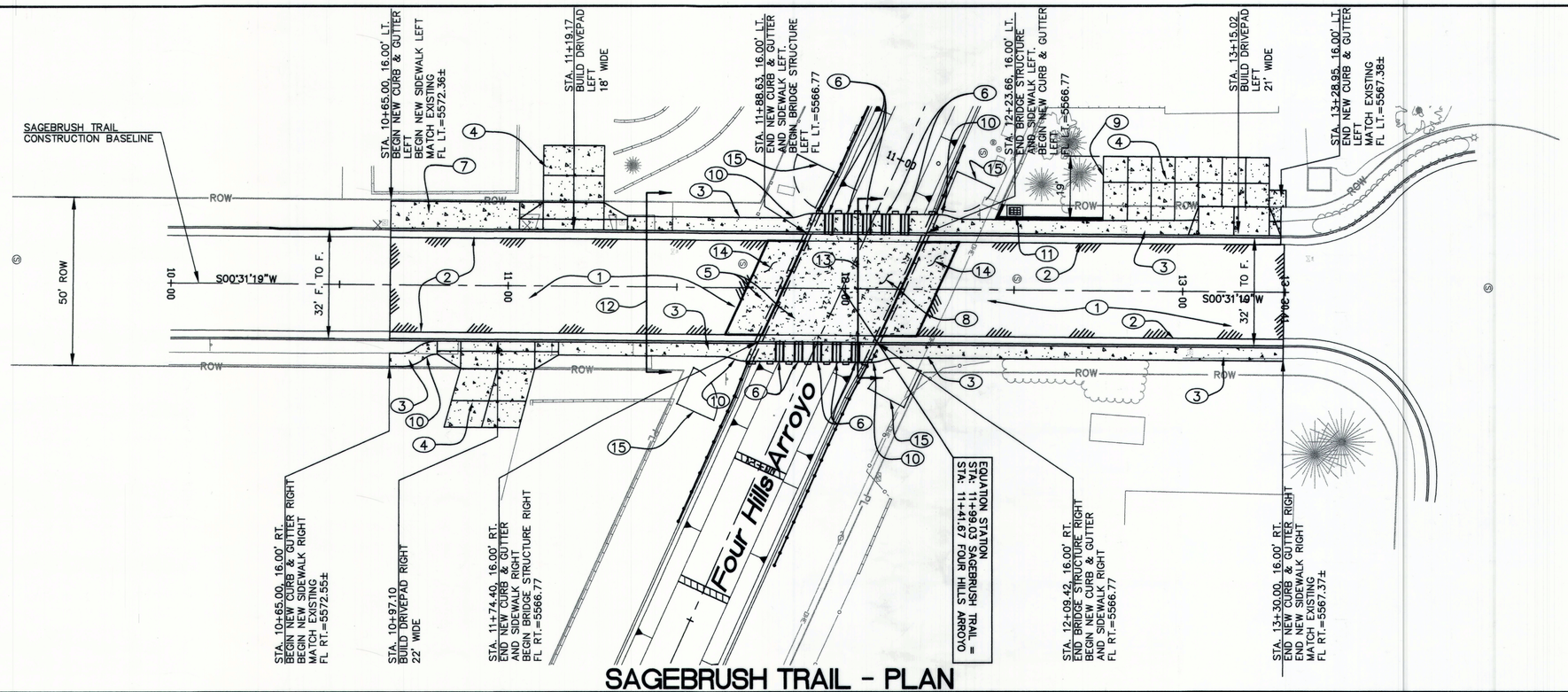
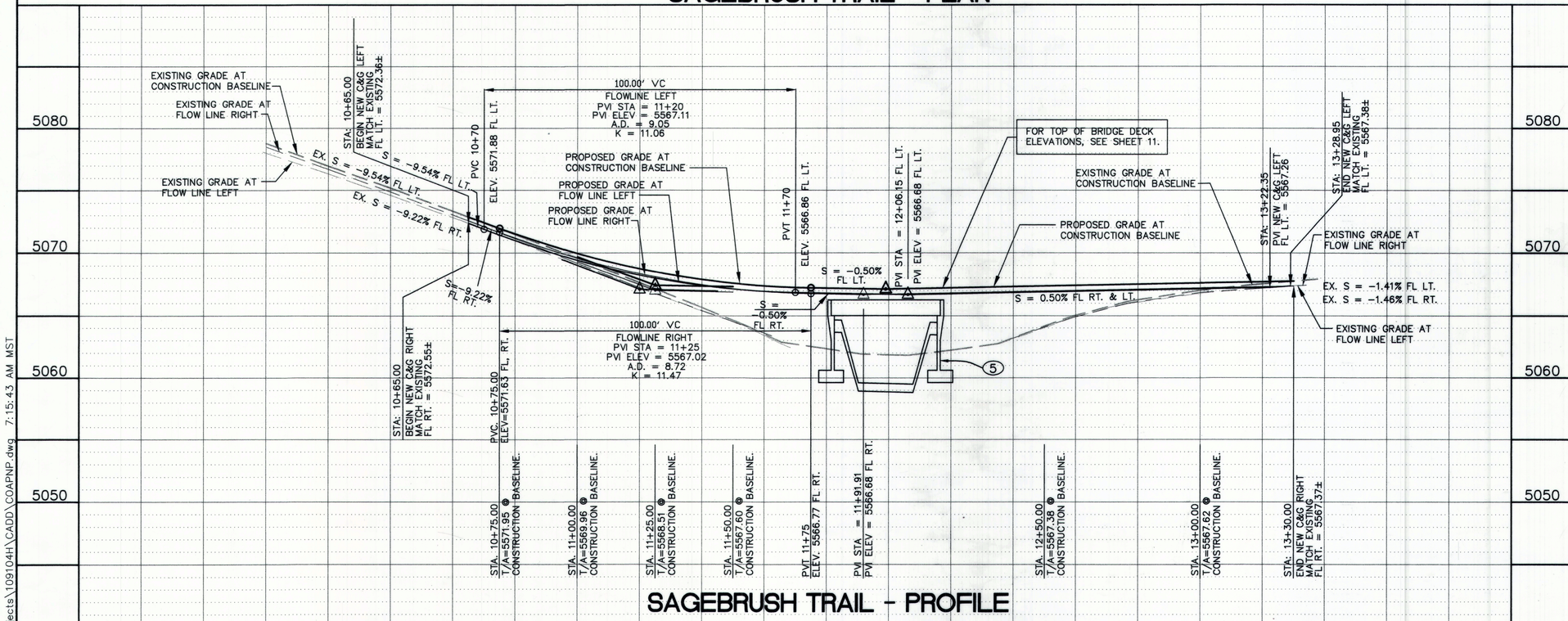


SAGEBRUSH TRAIL - PLAN



SAGEBRUSH TRAIL - PROFILE

KEYED NOTES:

1. BUILD NEW ASPHALT CONCRETE PAVEMENT PER DETAIL SHEET 13.
2. BUILD NEW STANDARD CURB AND GUTTER PER COA STD. DWG. 2415A.
3. BUILD NEW 4' WIDE SIDEWALK PER COA STD. DWG. 2430.
4. BUILD NEW DRIVE PAD. SEE SHEET 10 FOR DETAILS.
5. SEE SHEETS 16 THRU 20 FOR BRIDGE INFORMATION.
6. BUILD SIDEWALK CULVERT (24" WIDE) SEE SHEET 20 FOR DETAILS.
7. BUILD NEW 8' WIDE SIDEWALK PER COA STD DWG. 2430.
8. REINFORCED CONCRETE BRIDGE DECK. SEE SHEET 11 FOR BRIDGE DECK GRADING INFORMATION. SEE SHEET 13 FOR BRIDGE DECK CONSTRUCTION INFORMATION.
9. BUILD NEW 6" THK. CONCRETE DRIVEPAD WITH TURN DOWN EDGE. SEE SHEET 10 FOR TURN DOWN EDGE DETAIL.
10. BUILD SIDEWALK TRANSITION PER COA STD. DWG. 2432.
11. BUILD TYPE "D" STORM INLET (SINGLE GRATE). PER COA STD. DWG. 2206. SEE SHEET 10 FOR ADDITIONAL INFORMATION.
12. SEE SHEET 13 FOR TYPICAL ROADWAY SECTION.
13. SEE SHEET 13 FOR TYPICAL BRIDGE SECTION.
14. BUILD REINFORCED CONCRETE APPROACH SLAB PER DETAIL SHEET 19 OF 22.
15. INSTALL 12' WIDE PIPE GATE PER COA STD. DWG. 2251. SEE SHEET 11 FOR APPROXIMATE LOCATIONS.

N

RECORD DRAWINGS

SCALE: 1" = 20'

SCALE: 1" = 5'

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5971 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION	
CONTRACTOR	STAR PAVING CO.
WORK STAKED BY	SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY	COA DATE 7-12
FIELD VERIFICATION BY	COA DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

SURVEY INFORMATION		
FIELD NOTES		
NO.	BY	DATE

BENCH MARKS
C.O.A. CONTROL STATION "TJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

ENGINEER'S SEAL

DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER

10-22-2011

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
SAGEBRUSH TRAIL PAVING PLAN & PROFILE

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	7	22

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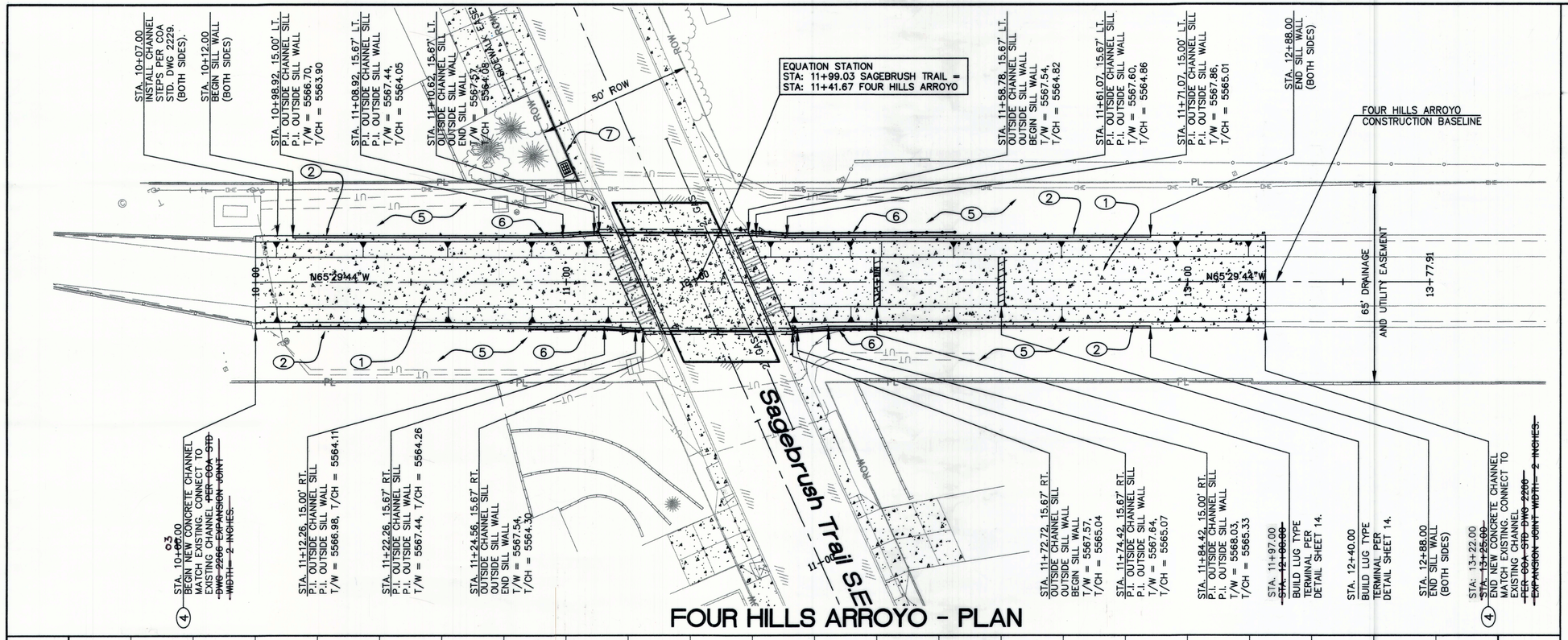
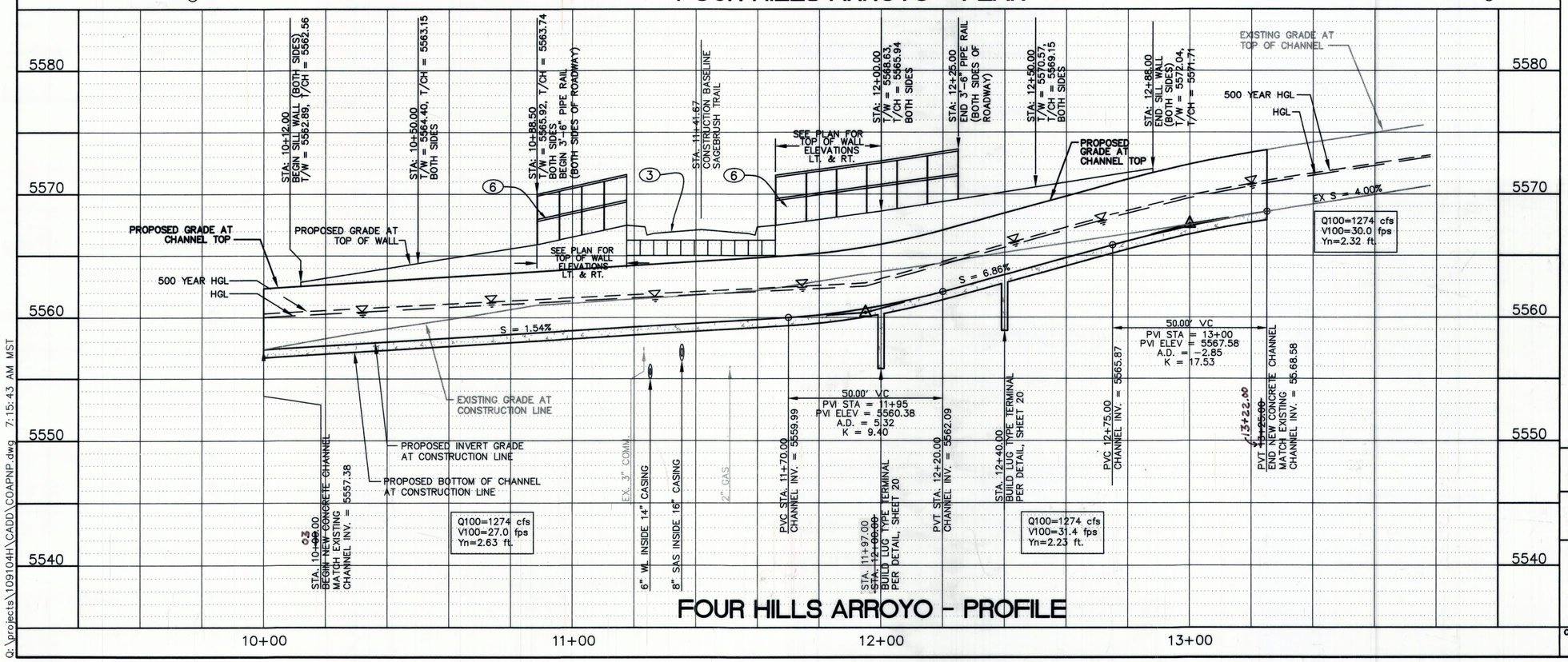


FOUR HILLS ARROYO - PLAN



FOUR HILLS ARROYO - PROFILE

KEYED NOTES:

1. BUILD NEW REINFORCED CONCRETE CHANNEL PER DETAIL SHEET 14.
2. BUILD SILL WALL PER DETAIL SHEET 14.
3. SEE SHEETS 16 THRU 20 FOR BRIDGE INFORMATION.
4. ~~INSTALL STEP JOINT PROTECTION PLATE OVER EXPANSION JOINT PER COA STD. DWG 2268.~~
5. CONTRACTOR SHALL INSTALL NATIVE SEED TO ALL AREAS DISTURBED BY CONSTRUCTION PER SECTION 1012 OF COA SPECS.
6. BUILD 3'-6" TALL PIPE RAIL FENCE PER DETAILS SHOWN ON SHEET 13.
7. BUILD 3'-6" TALL PIPE RAIL FENCE BEHIND SIDEWALK PER DETAIL SHEET 10.

4 Construct New To Existing Channel Lining Construction Joint Per Detail, See Sht. 20.

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.	
WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
WORK STAKES ACCEPTANCE BY	COA	DATE 7-12
FIELD VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEERS SEAL

DOUGLAS L. ANDREWS NEW MEXICO 11771 REGISTERED PROFESSIONAL ENGINEER
08/22/11

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN

DESIGNED BY	D.A.	DATE	08/2011
DRAWN BY	SEC	DATE	08/2011
CHECKED BY	D.A.	DATE	08/2011

N

RECORD DRAWINGS

20' 10' 0 20' 40'
SCALE: 1" = 20'

10' 5' 0 2.5' 5'
SCALE: 1" = 5'

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5501 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE:
FOUR HILLS ARROYO DIP SECTION
REPLACEMENT AT SAGEBRUSH TRAIL
FOUR HILLS ARROYO PLAN & PROFILE

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE

City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER

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City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	8	22

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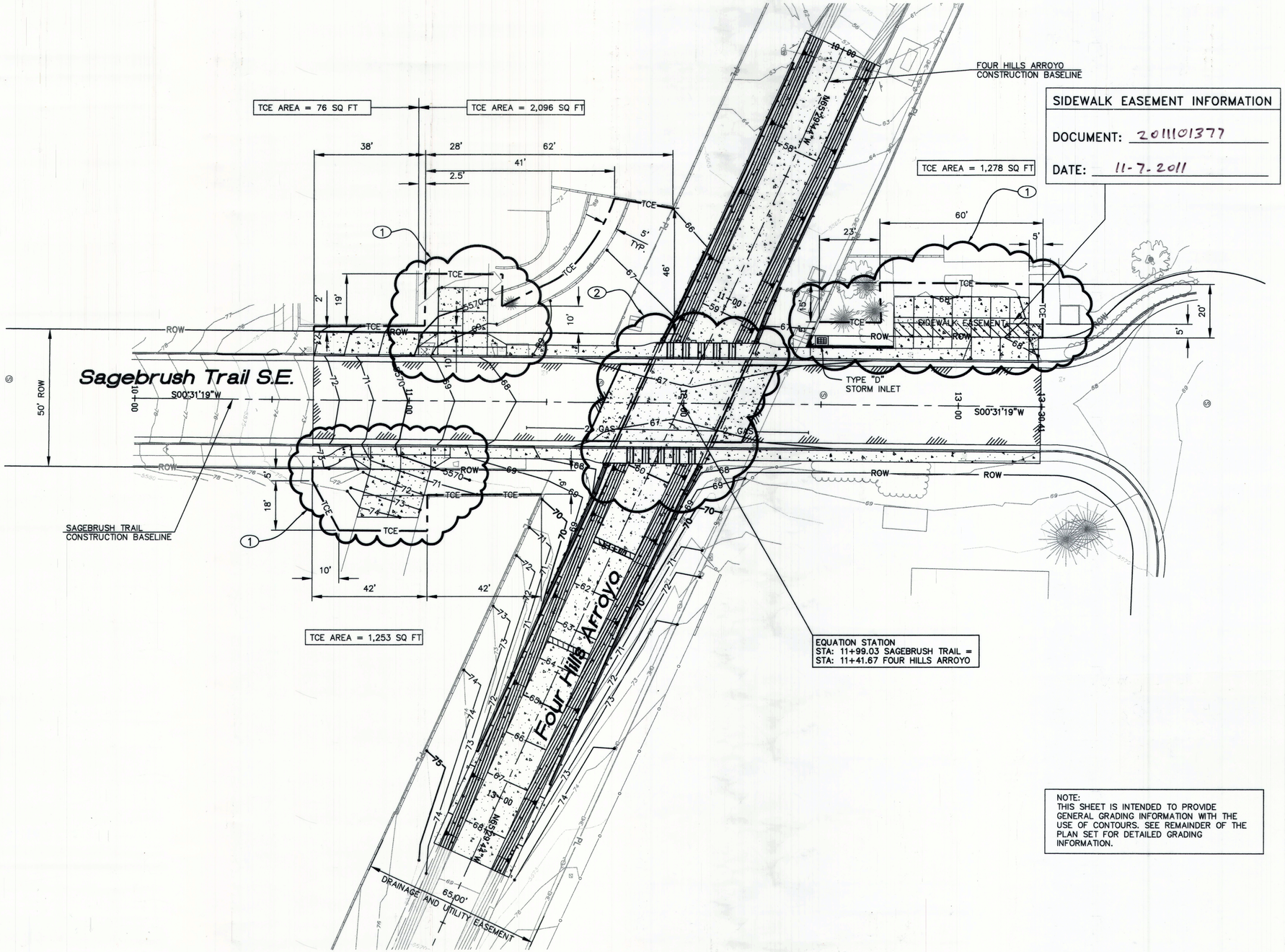

NOTE:
THIS SHEET IS INTENDED TO PROVIDE GENERAL GRADING INFORMATION WITH THE USE OF CONTOURS. SEE REMAINDER OF THE PLAN SET FOR DETAILED GRADING INFORMATION.

KEYED NOTES:

1. SEE SHEET 10 FOR DETAILED GRADING INFORMATION.
2. SEE SHEET 11 FOR DETAILED GRADING INFORMATION.

N

RECORD DRAWINGS

20' 10' 0 20' 40'

SCALE: 1" = 20'

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5301 San Pedro Boulevard N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEERS SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-26-11

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
SITE GRADING PLAN

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
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City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	9	22

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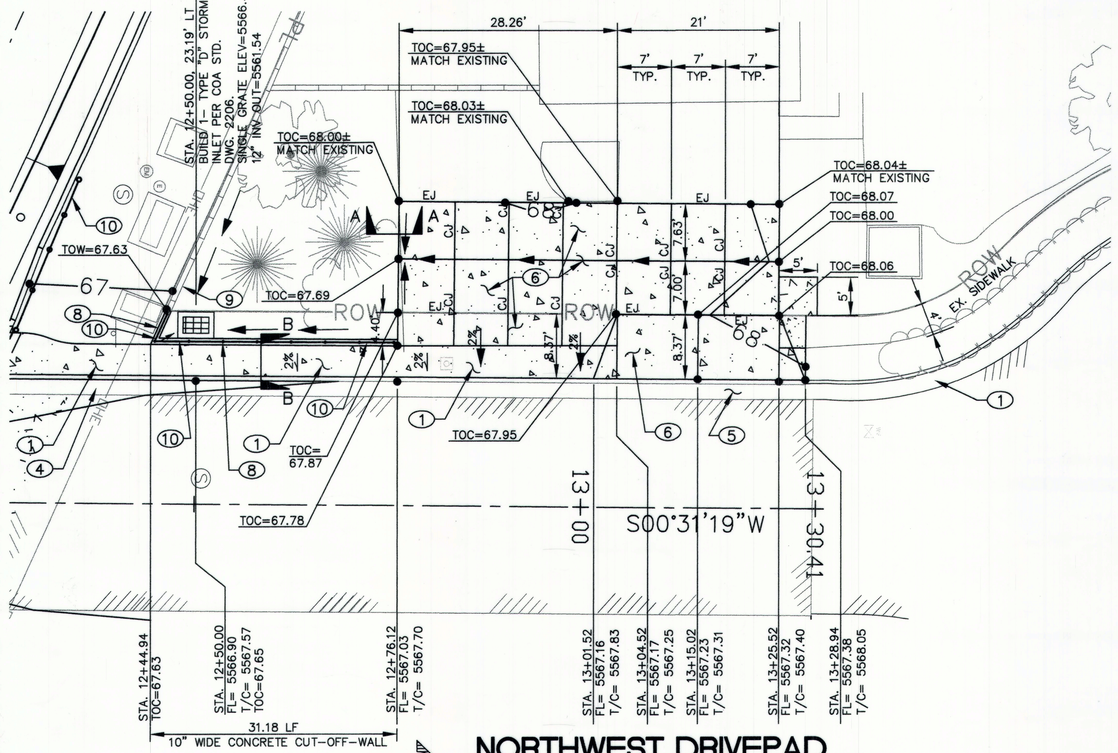
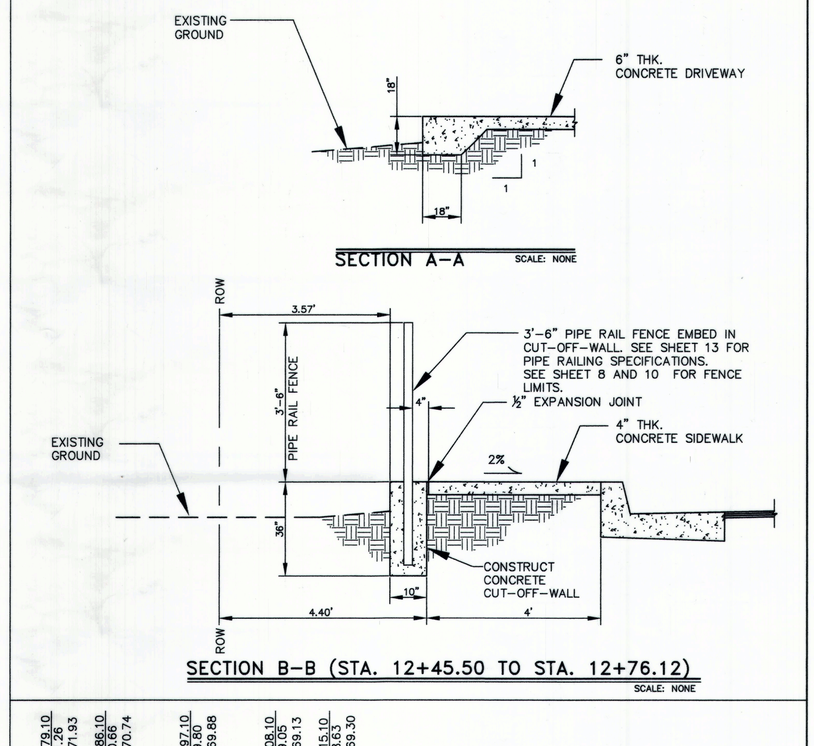


NORTHWEST DRIVEPAD
STA. 13+15.02 (WEST) SAGEBRUSH TRAIL.

N

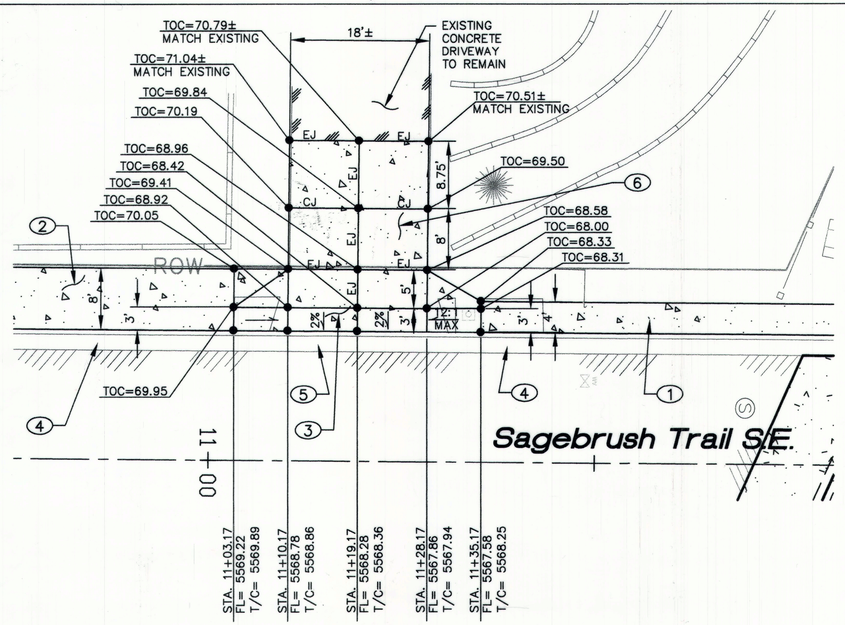
SCALE: 1" =10'



STA. 10+79.10 FL= 5571.26 T/C= 5571.93
STA. 10+86.10 FL= 5570.66 T/C= 5570.74
STA. 10+97.10 FL= 5568.80 T/C= 5569.88
STA. 11+08.10 FL= 5569.05 T/C= 5569.13
STA. 11+15.10 FL= 5568.63 T/C= 5569.30

○ KEYED NOTES:

1. 4' WIDE PCC SIDEWALK PER COA STD. DWG. 2430.
2. 8' WIDE PCC SIDEWALK PER COA STD. DWG. 2430.
3. PCC DRIVE PAD PER COA STD. DWG. 2425.
4. PCC STANDARD CURD AND GUTTER PER COA STD. DWG. 2415A.
5. PCC GUTTER AT DRIVE PAD PER COA STD. DWG. 2415A.
6. 6" THICK PCC.
7. SIDEWALK TRANSITION PER COA STD. DWG. 2432.
8. BUILD 10" WIDE CONCRETE CUT-OFF-WALL PER SECTION B-B THIS SHEET.
9. CONTRACTOR TO REMOVE 15LF AND REPLACE 10LF EXISTING CMU BLOCK WALL AS REQUIRED FOR CONSTRUCTION OF STORM INLET STORM PIPE.
10. 3'-6" TALL PIPE RAIL FENCE SEE SHEET 13.



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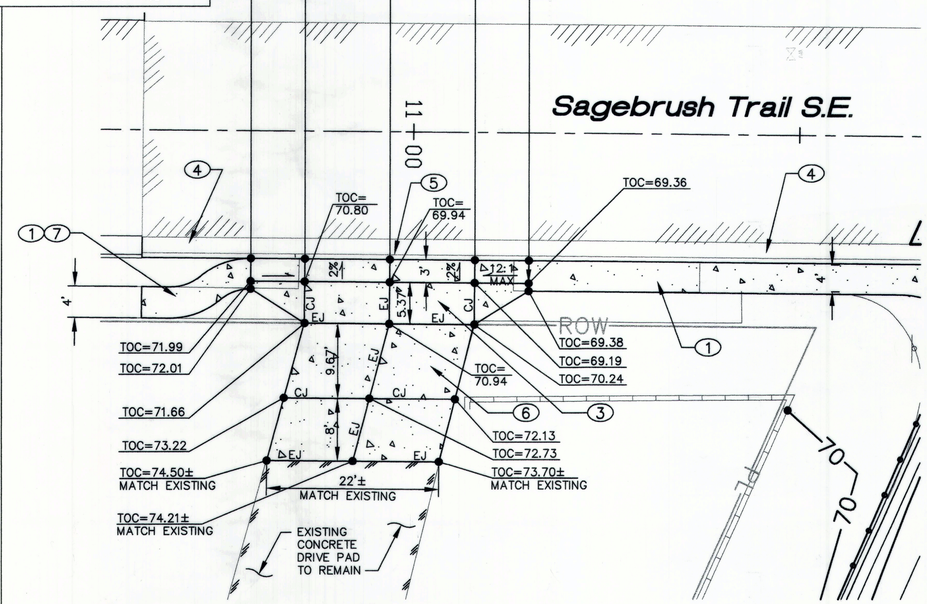
DRIVE PAD DETAIL
STA. 11+19.17 (WEST) SAGEBRUSH TRAIL

SCALE: 1"=10'



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DRIVE PAD DETAIL
STA. 10+97.10 (EAST) SAGEBRUSH TRAIL

SCALE: 1"=10'

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.	
WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
ACCEPTANCE BY	COA	DATE 7-12
FIELD VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13
MICRO-FILM INFORMATION		
RECORDED BY		DATE
NO.		

BENCH MARKS

C.O.A. CONTROL STATION "TJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-20-2011

NO.	DATE	REMARKS	BY
		REVISIONS	

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

RECORD DRAWINGS

10' 5' 0 10' 20'
SCALE: 1" = 10'

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
8601 San Pedro Boulevard, N.E., Bldg. #4, Suite 100 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
ENLARGED DRIVEPAD DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	10	22

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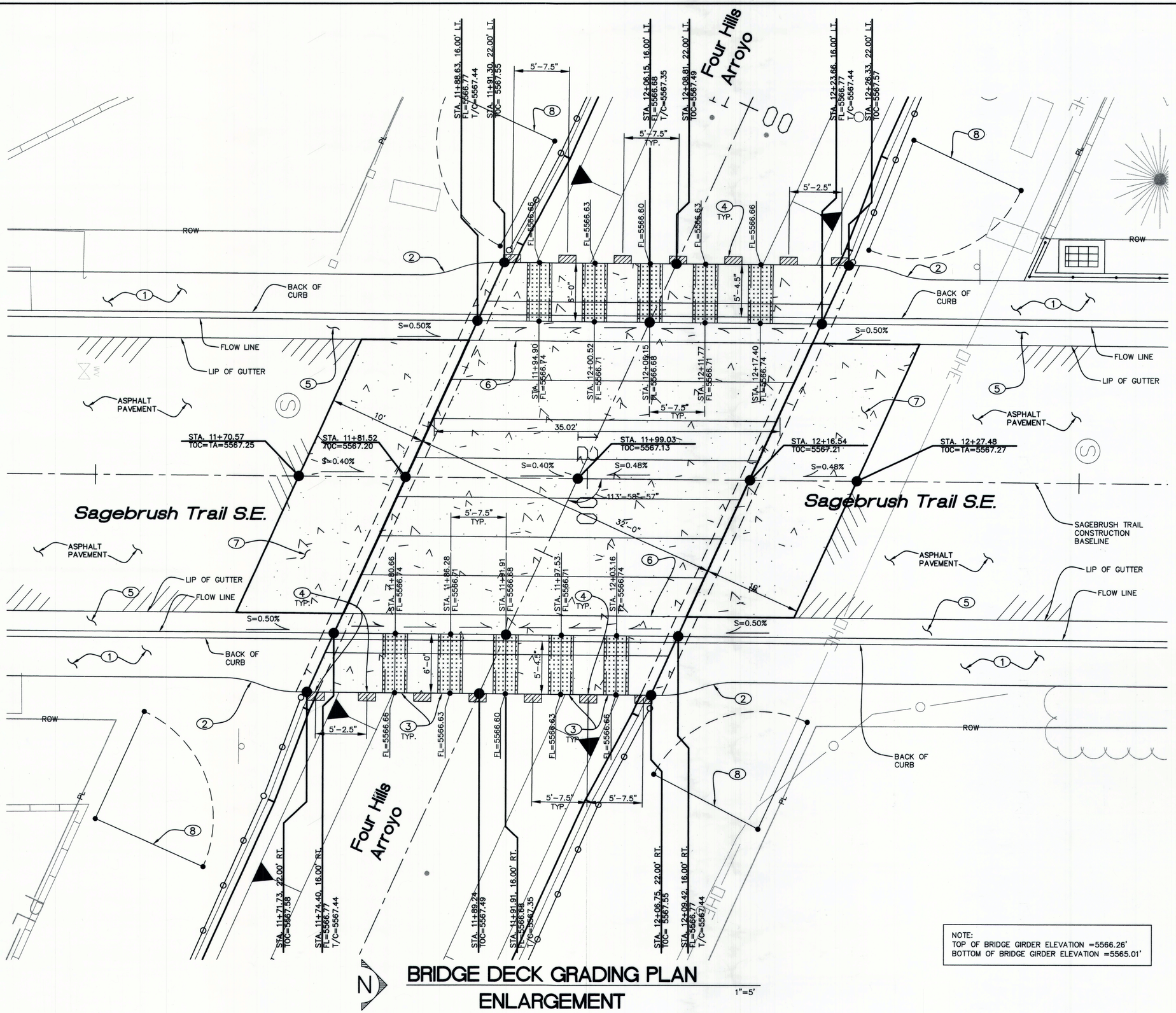

BRIDGE DECK GRADING PLAN ENLARGEMENT

1"=5'

NOTE:
TOP OF BRIDGE GIRDER ELEVATION =5566.26'
BOTTOM OF BRIDGE GIRDER ELEVATION =5565.01'

KEYED NOTES:

1. 4' WIDE PCC SIDEWALK PER COA DWG. 2430.
2. SIDEWALK TRANSITION PER COA STD DWG. 2432.
3. BUILD SIDEWALK CULVERT (24" WIDE) PER DETAIL SHOWN ON SHEET 20.
4. BRIDGE RAILING POSTS FOR TYPE C METAL BRIDGE RAILING. PER COA STD DWG. 2603.
5. PCC STD CURB & GUTTER PER COA STD. DWG. 2415A.
6. PROJECTED LIP OF GUTTER.
7. BUILD REINFORCED CONCRETE APPROACH SLAB PER SHEET 19 OF 22. SEE GENERAL NOTE 4 (SHEET 16 OF 22) FOR SURFACE TREATMENT OF APPROACH SLAB.
8. INSTALL 12' WIDE PIPE GATE PER COA STD. DWG. 2251.

LEGEND

FL = FLOW LINE
T/C = TOP OF CURB
TOC = TOP OF CONCRETE
TA = TOP OF ASPHALT

RECORD DRAWINGS

5' 2.5' 0 5' 10'
SCALE: 1" = 5'

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
5801 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
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FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
8-26-11

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY D.A.	DATE 08/2011	
DRAWN BY SEC	DATE 08/2011	
CHECKED BY D.A.	DATE 08/2011	

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
BRIDGE DECK GRADING PLAN ENLARGEMENT

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
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City Project No. 756391 | Zone Map No. M-22-Z | Sheet 11 Of 22

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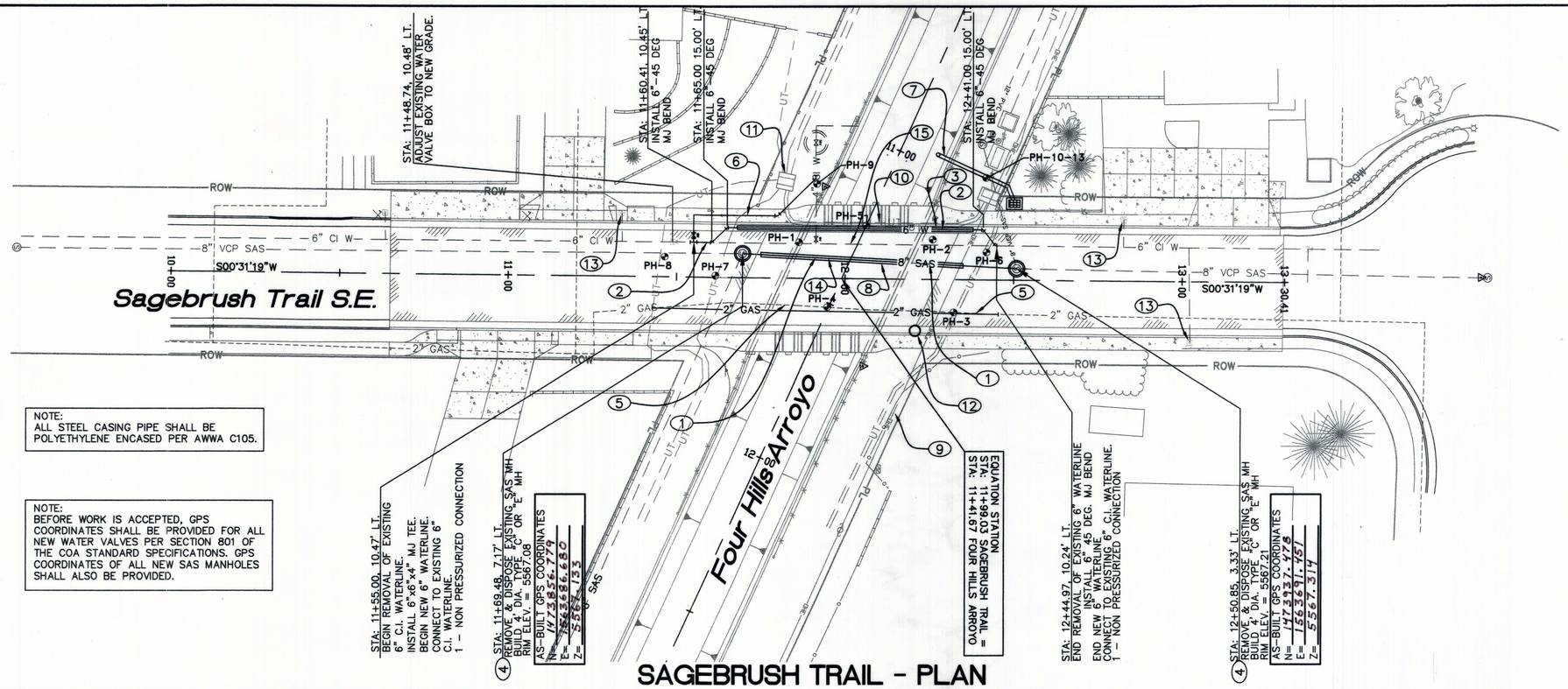
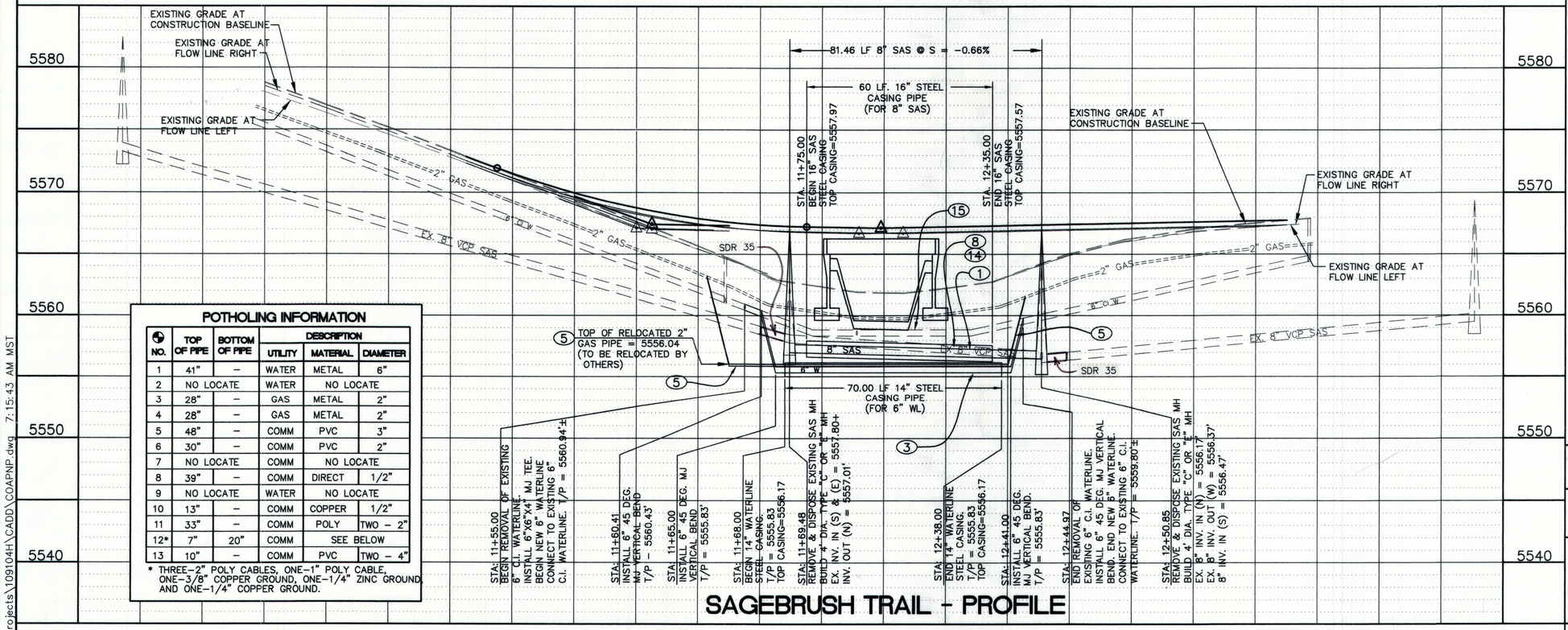


NOTE:
ALL STEEL CASING PIPE SHALL BE POLYETHYLENE ENCASED PER AWWA C105.

NOTE:
BEFORE WORK IS ACCEPTED, GPS COORDINATES SHALL BE PROVIDED FOR ALL NEW WATER VALVES PER SECTION 801 OF THE COA STANDARD SPECIFICATIONS. GPS COORDINATES OF ALL NEW SAS MANHOLES SHALL ALSO BE PROVIDED.

SAGEBRUSH TRAIL - PLAN



POTHOLING INFORMATION

NO.	TOP OF PIPE	BOTTOM OF PIPE	DESCRIPTION		
			UTILITY	MATERIAL	DIAMETER
1	41"	–	WATER	METAL	6"
2	NO LOCATE		WATER	NO LOCATE	
3	28"	–	GAS	METAL	2"
4	28"	–	GAS	METAL	2"
5	48"	–	COMM	PVC	3"
6	30"	–	COMM	PVC	2"
7	NO LOCATE		COMM	NO LOCATE	
8	39"	–	COMM	DIRECT	1/2"
9	NO LOCATE		WATER	NO LOCATE	
10	13"	–	COMM	COPPER	1/2"
11	33"	–	COMM	POLY	TWO – 2"
12*	7"	20"	COMM	SEE BELOW	
13	10"	–	COMM	PVC	TWO – 4"

* THREE–2" POLY CABLES, ONE–1" POLY CABLE, ONE–3/8" COPPER GROUND, ONE–1/4" ZINC GROUND, AND ONE–1/4" COPPER GROUND.

SAGEBRUSH TRAIL - PROFILE

KEYED NOTES:

1. INSTALL NEW 8" SAS PVC (SDR–35) 109 LF. PIPE.
2. INSTALL NEW 6" PVC C–900 WATERLINE (FULLY RESTRAINED). 100 LF.
3. INSTALL 70 LF OF 14" STEEL CASING FOR 6" WATERLINE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR HANDLING OF ALL SEWAGE DURING THE SANITARY SEWER WORK SHOWN. THIS WORK SHALL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO SEPARATE OR ADDITIONAL PAYMENT WILL BE MADE FOR HANDLING OF SEWAGE.
5. 2" GAS LINE TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
6. NEW 4" WATERLINE. SEE SHEET 15 FOR DETAILS.
7. NEW 12" STORM DRAIN. SEE SHEET 15 FOR DETAILS.
8. INSTALL 60.00 LF OF 16" STEEL CASING FOR 8" SAS.
9. OVERHEAD POWER LINES TO BE RAISED BY OTHERS, PRIOR TO CONSTRUCTION.
10. QWEST LINES TO BE ABANDONED BY OTHERS, PRIOR TO CONSTRUCTION.
11. QWEST CABINET TO BE REMOVED BY OTHERS, PRIOR TO CONSTRUCTION.
12. REMOVE AND DISPOSE EXISTING ABANDONED SAS LIFT STATION.
13. REMOVE AND DISPOSE EXISTING WATER SERVICE INCLUDING ALL PIPING, METER BOX AND ALL APPURTANCES WITH THE EXCEPTION OF THE METER. INSTALL NEW WATER SERVICE PER COA STD. DWG. 2362. THE EXISTING METER SHALL BE REINSTALLED AFTER THE NEW WATER SERVICE HAS BEEN INSTALLED. THIS INCLUDES ANY WORK (AND MATERIALS) REQUIRED ON THE PRIVATE SIDE OF THE METER TO ADJUST TO THE NEW ELEVATION OF THE METER BOX.
14. REMOVE & DISPOSE OF EXISTING 8" SAS BETWEEN MANHOLES.
15. REMOVE & DISPOSE OF EXISTING 6" WATERLINE.

SCALE: 1" = 20'

SCALE: 1" = 5'

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5301 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.
WORK STAKED BY	SANDIA LAND SURVEYING, LLC DATE 3–12
INSPECTOR'S ACCEPTANCE BY	COA DATE 7–12
FIELD VERIFICATION BY	COA DATE 7–12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO. DATE 1–13

MICRO–FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

C.O.A. CONTROL STATION "TJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-03-2011

NO.	DATE	REMARKS	BY

REVISIONS

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL

SAGEBRUSH TRAIL UTILITY PLAN & PROFILE

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE

City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER

Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	12	22

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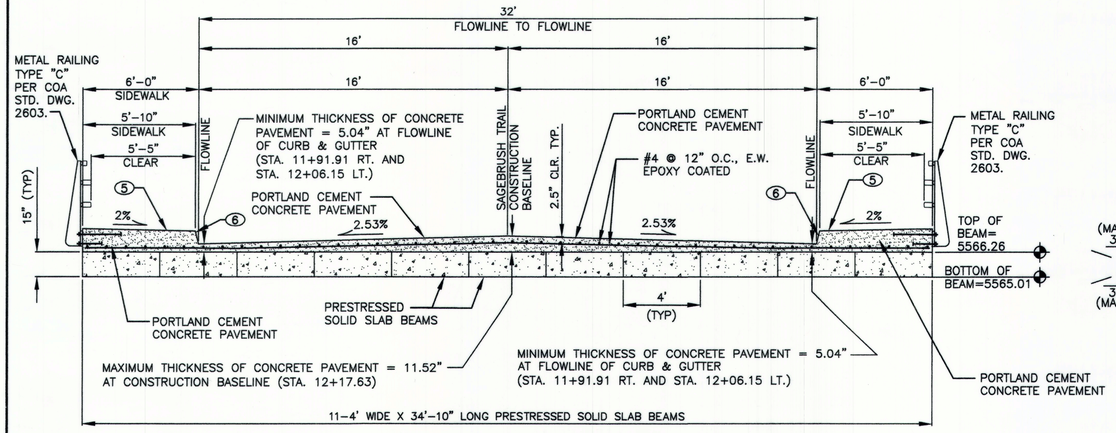
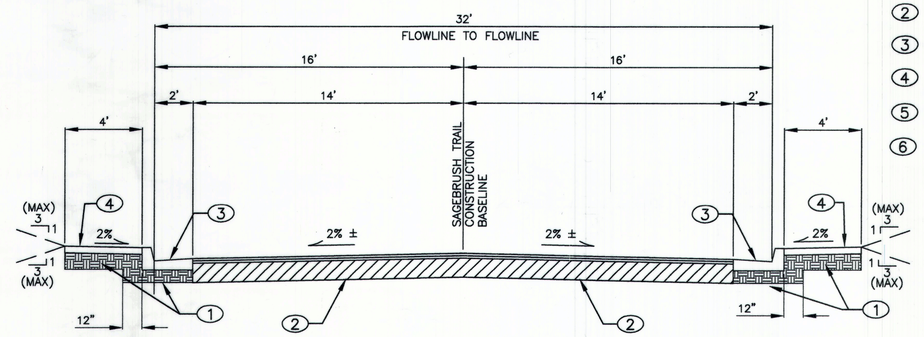


LATERAL BRIDGE SECTION PERPENDICULAR TO SAGEBRUSH TRAIL CONSTRUCTION BASELINE

1/4"=1'-0"

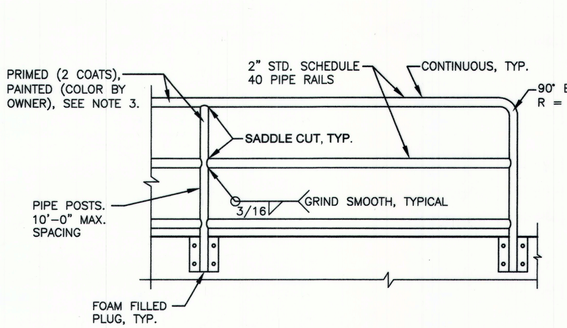


TYPICAL ASPHALT ROADWAY SECTION SAGEBRUSH TRAIL

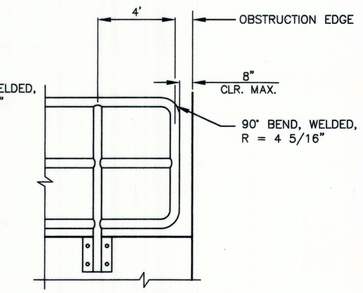
1/4"=1'-0"

KEYED NOTES:

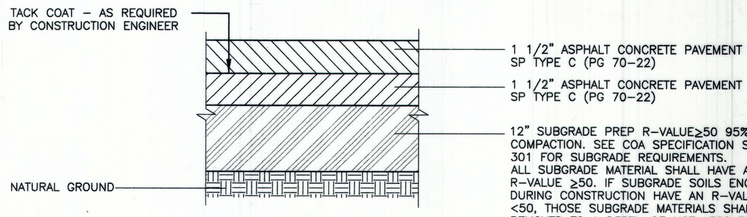
1. 12" SUBGRADE PREP @ 95% COMPACTION ASTM D-1557. (R VALUE ≥ 50)
2. ASPHALT PAVEMENT SECTION PER DETAIL, THIS SHEET.
3. STANDARD CURB & GUTTER PER COA STANDARD DWG. 2415A.
4. SIDEWALK PER COA STD. DWG. 2430.
5. SEE SHEET 20 FOR SIDEWALK DETAIL ON BRIDGE.
6. FACE OF CURB ON BRIDGE SECTION SHALL MATCH FACE OF CURB DIMENSIONS FOR STANDARD CURB & GUTTER PER COA STANDARD DRAWING 2415A.



TYPICAL FRAME ELEVATION

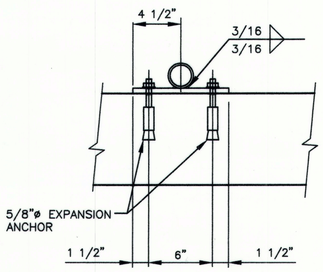


TYPICAL END FRAME AT OBSTRUCTION



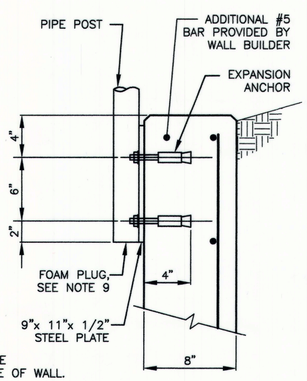
SAGEBRUSH TRAIL ASPHALT PAVEMENT SECTION (COA STD. DWG. 2405A)

N.T.S.

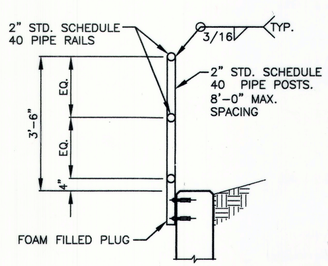


NOTE: PIPE RAIL FENCE IS TO BE INSTALLED ON THE OUTSIDE FACE OF WALL.

MOUNT - PLAN



MOUNT - ELEVATION



TYPICAL SECTION

TYPICAL PIPE RAIL MOUNTED ON CONCRETE SILL WALL

N.T.S.

NOTES FOR PIPE RAIL FENCE

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS, 2007 EDITION.
2. ALL PIPE SHALL BE 2" SCHEDULE 40 STEEL PIPE AND CONFORM WITH ASTM A53 GRADE B. THE TOP RAIL SHALL BE CONTINUOUS, WITH POSTS, MIDDLE RAIL AND BOTTOM RAILS SADDLE CUT, WELDED ALL AROUND AND GRIND BEFORE PAINTING.
3. ALL RAILS, PIPES, PLATES AND TUBING TO BE COLOR COATED. COLOR COATING SHALL BE DUNN-EDWARDS SYN-LUSTRO RUST PREVENTION ALKYD SEMI-GLOSS ENAMEL 9V SERIES OR PITTSBURG PAINT AND GLASS PITTHANE ULTRA URETHANE ENAMEL COATINGS OR APPROVED EQUAL. PRIOR TO COLOR COATING, RAIL IS TO BE PRIMED WITH 2 COATS OF PRIMER BY THE RESPECTIVE MANUFACTURER. COLOR OF FINAL COATING TO BE SELECTED BY THE OWNER.
4. NEW MATERIAL SHALL BE USED THROUGHOUT.
5. ALL ANCHOR BOLTS SHALL BE 5/8" DIAMETER EXPANSION ANCHOR WITH A MINIMUM OF 4" EMBEDMENT. PROVIDE HILTI KWIK BOLT II EXPANSION ANCHOR (KB II) OR ENGINEER APPROVED EQUAL. PROVIDE FLAT WASHERS BETWEEN ALL NUTS AND BASE PLATES.
6. BOLTS SHALL CONFORM TO ASTM A325, WASHERS SHALL BE INSTALLED UNDER NUTS OF FASTENERS.
7. BASE PLATES SHALL CONFORM TO ASTM A36. TUBE STEEL SHALL CONFORM TO ASTM A500 GRADE B.
8. ALL WELDING OR GAS CUTTING SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN WELDING SOCIETY D1.1-2000. ALL WELDING SHALL USE E70XX ELECTRODES.
9. PROVIDE EXPANDING POLYSTYRENE FOAM PLUG (2" MIN.) AT THE BASE OF ALL POSTS ON THE WALL MOUNTED PIPE RAIL.

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-20-2011

REVISIONS
NO. DATE REMARKS BY

DESIGN
DESIGNED BY D.A. DATE 08/2011
DRAWN BY SEC DATE 08/2011
CHECKED BY D.A. DATE 08/2011

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
5971 San Pedro Boulevard N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
ROADWAY DETAILS & PIPE RAIL DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No. 756391 | Zone Map No. M-22-Z | Sheet 13 Of 22

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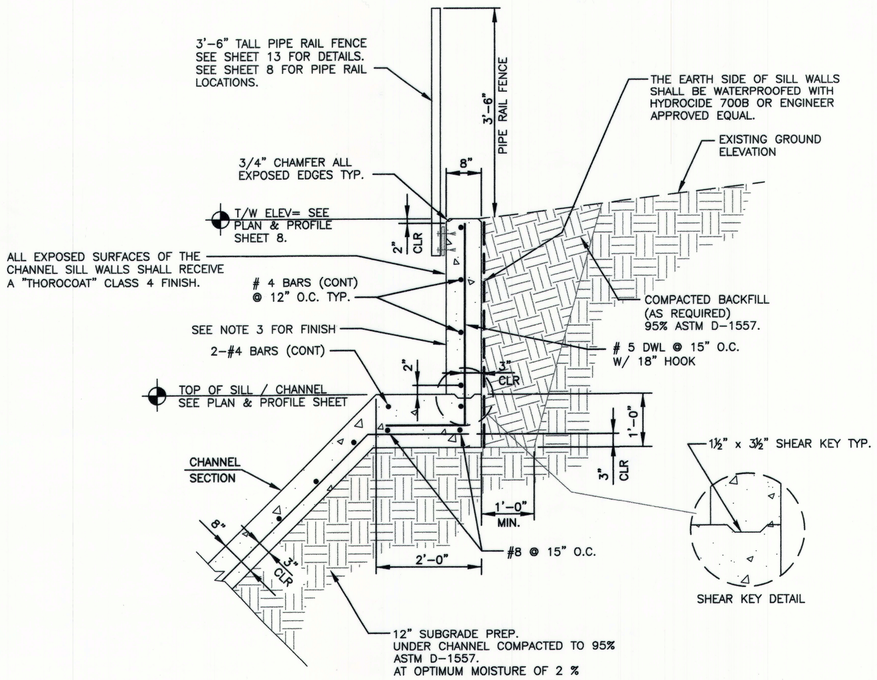
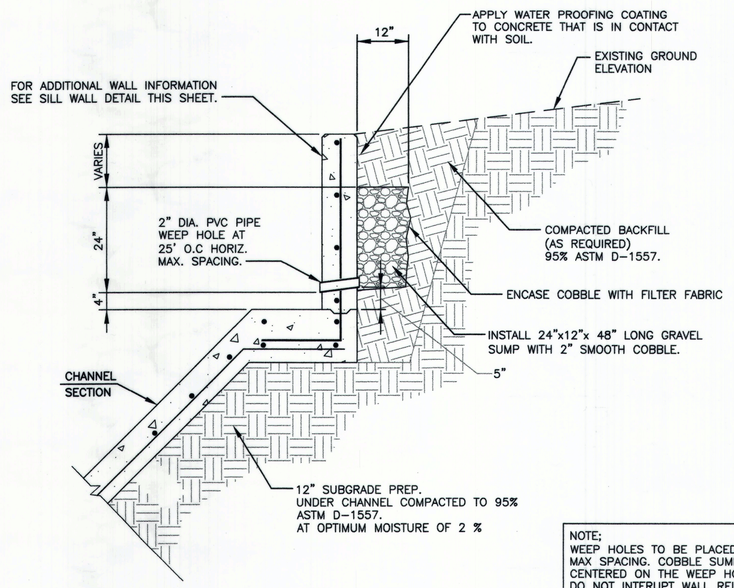


SILL WALL DETAIL

NONE

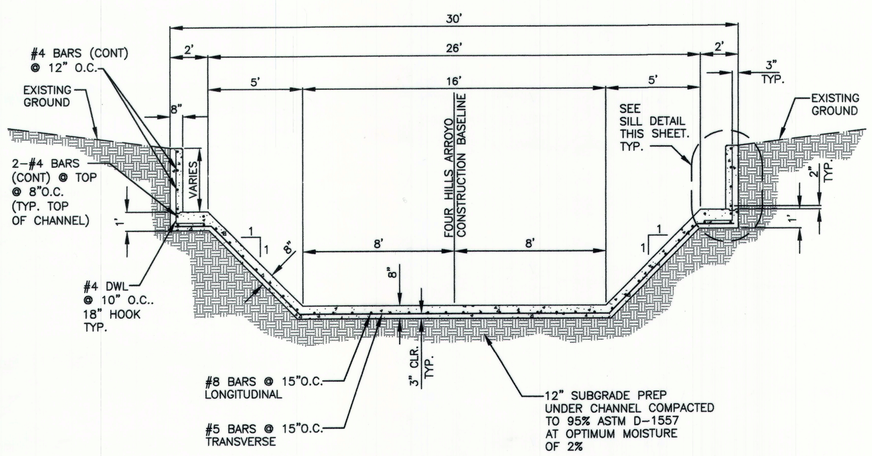
NOTE:
GRAVEL SUMP & 2" DIA. PVC PIPE SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF SILL WALL.
NO SEPERATE PAYMENT WILL BE MADE FOR 2" PVC PIPE OR GRAVEL.



NOTE;
WEEP HOLES TO BE PLACED AT 25' O.C. MAX SPACING. COBBLE SUMPS TO BE CENTERED ON THE WEEP HOLE LOCATIONS. DO NOT INTERUPT WALL REINFORCEMENT WITH 2" DIA. PVC PIPE.

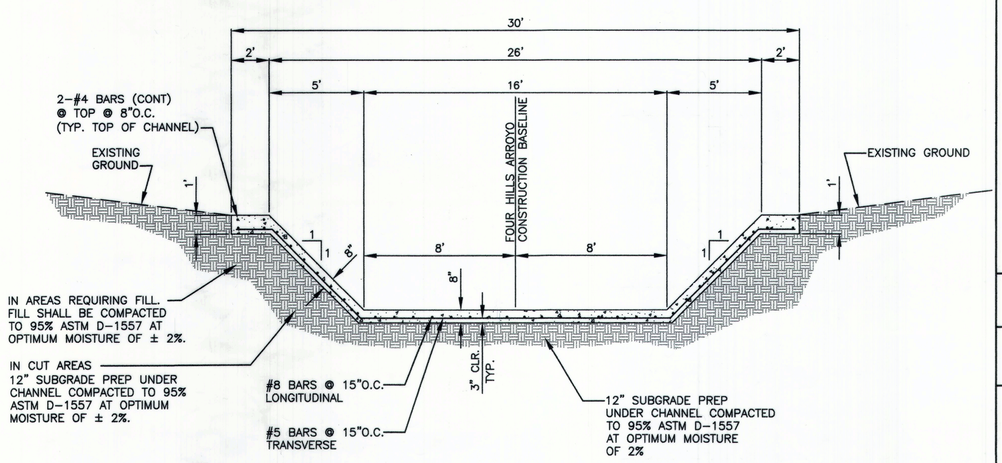
WEEP HOLE DETAIL

NONE



CHANNEL SECTION WITH SILL WALL

1/4"=1'-0"



CHANNEL SECTION

1/4"=1'-0"

GENERAL NOTES:

1. ALL CAST-IN-PLACE CONCRETE AND REINFORCING STEEL SHALL CONFORM TO COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION THROUGH UPDATE NO. 8.
2. MINIMUM REBAR LAP LENGTH (CLASS B LAPS)
   #5 = 22"
   #7 = 43"
   #8 = 54"
3. ALL EXPOSED SURFACES OF THE CHANNEL SILL WALLS SHALL RECEIVE A "THOROCOAT" CLASS 4 FINISH. "THOROCOAT" SHALL BE APPLIED TO THE BACK OF WALLS TO 6" BELOW GRADE.
4. #8 AND #6 CONTINUOUS REBAR SHALL BE SET ON INDIVIDUAL 3" SAND CHAIRS. SAND CHAIRS SHALL BE SET ON 5'-0" MAXIMUM SPACING GRID. COST OF ALL SAND CHAIRS IS INCIDENTAL TO THE COST OF THE CHANNEL.

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWING CORRECTED BY ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TLIERA52"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-26-11

NO.	DATE	REMARKS	BY
		REVISIONS	

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
8601 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
ARROYO/CHANNEL DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No. 756391 | Zone Map No. M-22-Z | Sheet 14 Of 22

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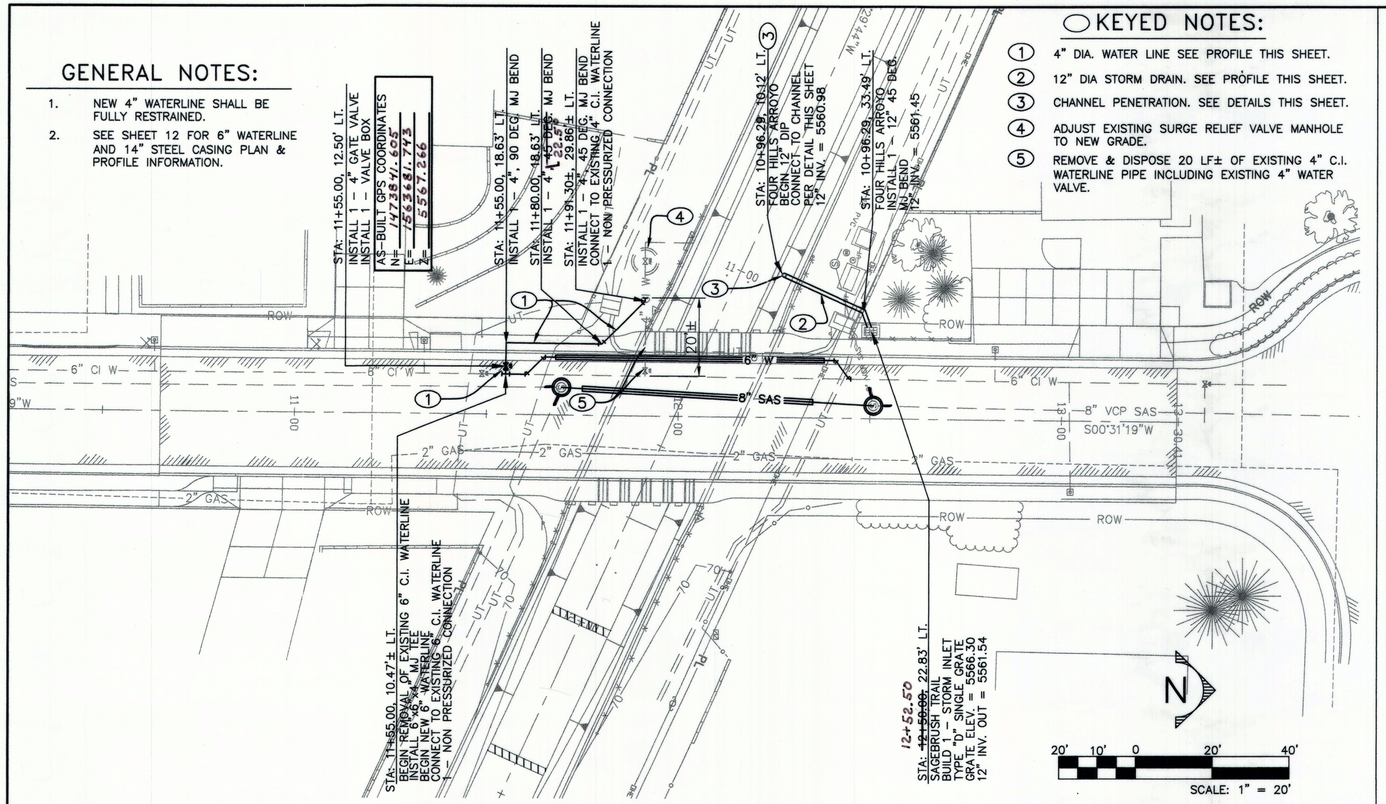
GENERAL NOTES:

1. NEW 4" WATERLINE SHALL BE FULLY RESTRAINED.
2. SEE SHEET 12 FOR 6" WATERLINE AND 14" STEEL CASING PLAN & PROFILE INFORMATION.

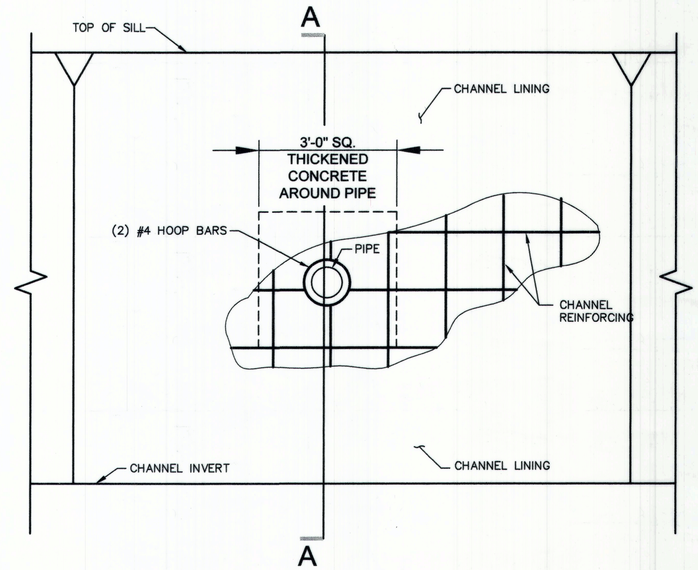
KEYED NOTES:

1. 4" DIA. WATER LINE SEE PROFILE THIS SHEET.
2. 12" DIA STORM DRAIN. SEE PROFILE THIS SHEET.
3. CHANNEL PENETRATION. SEE DETAILS THIS SHEET.
4. ADJUST EXISTING SURGE RELIEF VALVE MANHOLE TO NEW GRADE.
5. REMOVE & DISPOSE 20 LF± OF EXISTING 4" C.I. WATERLINE PIPE INCLUDING EXISTING 4" WATER VALVE.



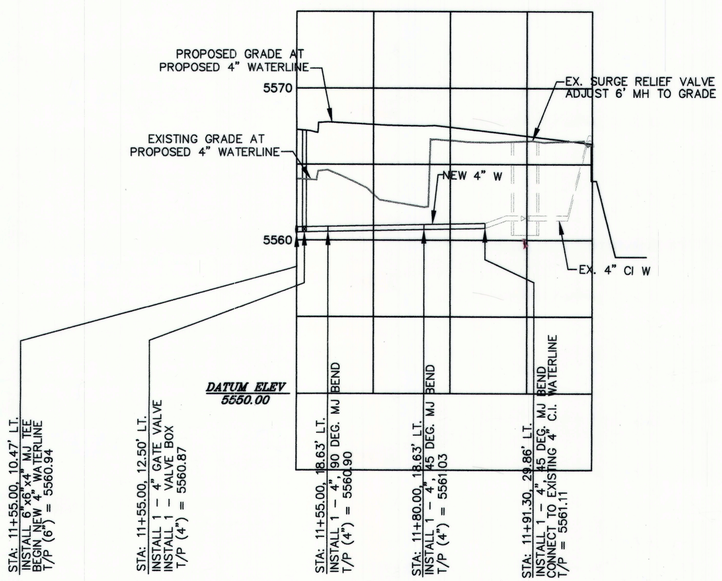
4" DIA. WATER LINE & 12" DIA. STORM DRAIN PLAN

1"-20- HORIZ



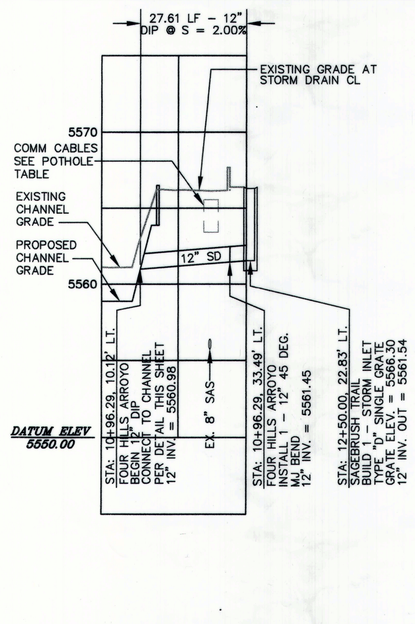
CHANNEL PENETRATION ELEVATION

NO SCALE



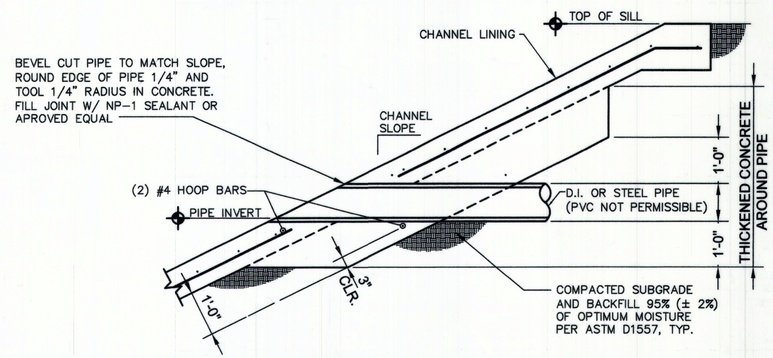
4" DIA. WATER LINE PROFILE

1"-20- HORIZ
1"=5' VERT



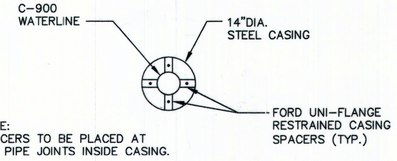
12" DIA. STORM DRAIN PROFILE

1"-20- HORIZ
1"=5' VERT



CHANNEL PENETRATION SECTION A-A

NO SCALE



NOTE:
SPACERS TO BE PLACED AT
ALL PIPE JOINTS INSIDE CASING.

14" STEEL CASING FOR 6" WATERLINE DETAIL

NO SCALE

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
2895 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
UTILITY DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	15	22

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S REMARKS BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TIJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL: DOUGLAS L. ANDREWS, NEW MEXICO, 11771, REGISTERED PROFESSIONAL ENGINEER, 10-05-2011

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

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GENERAL NOTES

1. WORKMANSHIP AND MATERIAL SHALL CONFORM TO THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR HIGHWAY AND BRIDGE CONSTRUCTION, LATEST EDITION AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

2. GEOTECHNICAL BORINGS. THE CITY OF ALBUQUERQUE IS NOT RESPONSIBLE FOR ANY INTERPRETATION OR ASSUMPTIONS MADE BY THE CONTRACTOR BASED ON THE GEOTECHNICAL BORINGS. BORING INFORMATION IS AVAILABLE AT THE CITY OF ALBUQUERQUE STORM DRAIN DESIGN SECTION.

3. CONCRETE. STRUCTURAL CAST-IN-PLACE CONCRETE SHALL BE CLASS A. CHAMFER ALL EXPOSED EDGES OF STRUCTURE 3/4 INCH UNLESS OTHERWISE NOTED.

4. DECK SLAB. THE SURFACE OF THE TOPPING SLAB SHALL BE MACHINE GROOVED (SAWCUT TRANSVERSE) IN ACCORDANCE WITH THE NEW MEXICO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATION REQUIREMENTS FOR GROOVING DECK SLAB CONCRETE (SECTION 512). GROOVING OF DECK SLAB SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. NO DIRECT PAYMENT SHALL BE PROVIDED FOR GROOVING.

5. REINFORCING BARS. REINFORCING BARS SHALL BE GRADE 60 UNLESS NOTED OTHERWISE. DIMENSIONS SHOWN REFER TO THE CENTERLINE OF BARS UNLESS NOTED OTHERWISE. REINFORCEMENT IN TOPPING SHALL BE EPOXY COATED.

6. STRUCTURAL STEEL. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF THE GRADES LISTED BELOW.

COMPONENT	GRADE
ALL	M-183

7. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AS REQUIRED TO PROTECT EXISTING ELEMENTS DURING CONSTRUCTION.

8. ABUTMENT WALLS. THE ABUTMENT WALLS SHALL NOT BE BACKFILLED UNTIL AFTER THE BRIDGE GIRDERS HAVE BEEN SET AND THE ANCHORS HAVE BEEN GROUTED.

9. OVEREXCAVATION: PROVIDE A MINIMUM OF 3.0 FEET BELOW FINISHED GRADE OR TO THE BOTTOM OF NEW FILL, UNDERNEATH ABUTMENT WALLS. OVEREXCAVATION SHOULD ALSO EXTEND A MINIMUM OF TWO FEET NORTH AND SOUTH OF ABUTMENT FOOTINGS (SEE SHEET 19). RESPECTIVELY BACKFILL WITH NATIVE SOIL AND COMPACT TO 95% ASTM D-1557.

11. QUANTITIES: STRUCTURAL CONCRETE QUANTITIES INCLUDE QUANTITIES FOR ABUTMENT WALLS,

12. ABUTMENTS SHALL BE BACKFILLED ON EACH SIDE TO SUCH AN EXTENT AS TO ALLOW FOR CONSTRUCTION OF THE CHANNEL. THE DIFFERENCE IN ELEVATION OF BACKFILL ON EACH SIDE OF THE ABUTMENTS SHALL NOT EXCEED ONE FOOT UNTIL THE BRIDGE BEAMS HAVE BEEN SET. ALL CONCRETE SHALL BE ALLOWED TO OBTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI PRIOR TO ANY BACKFILLING.

13. INCLUDE COST OF REINFORCING BARS AND STRUCTURAL STEEL EMBEDMENT IN BRIDGE BEAMS IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE MEMBER TYPE 15" SLAB BEAMS.

14. LIFT BEAMS USING DEVICES SATISFACTORY TO THE ENGINEER. USE ONLY LIFTING DEVICES THAT HAVE BEEN PRIOR APPROVED BY THE ENGINEER. CAST, STORE, AND HAUL BEAMS IN UPRIGHT POSITION.

15. PROVIDE A HEAVY BROOM FINISH TO THE TOP SURFACE OF ALL BEAMS AFTER INITAL SET TO PROVIDE A ROUGH SURFACE AND REMOVE LAITANCE.

16. THE CAMBER AT ERECTION DIMENSION LISTED IS THE CALCULATED VALUE DUE TO PRESTRESSING + BEAM WEIGHT. IT ALSO INCLUDES AN ALLOWANCE FOR CAMBER GROWTH TO 90 DAYS.

17. DEAD LOAD DEFLECTION IS THE COMPUTED DEFLECTION DUE TO THE WEIGHT OF THE SUPERIMPOSED DEAD LOAD.

18. THE DESIGN SHOWN IS BASED ON THE USE OF ½" DIAMETER LOW-RELAXATION STRANDS CONFORMING TO AASHTO M-203. GRADE 270. USE AN INITIAL PRESTRESSING FORCE OF 30,975 LBS/STRAND. SLIGHT PRESTRESSING UP TP 33,000 LBS/STRAND IS ALLOWED TO OFFSET SEATING LOSSES.

19. TYPE III CEMENT MAY BE USED AT THE FABRICATOR'S OPTION.

20. USE EPOXY-COATED BARS FOR ALL REINFORCING BARS PROJECTING FROM THE TOP OF THE BEAM, AND ALL BARS LOCATED WITHIN FOUR FEET OF THE BEAM ENDS.

21. ELASTOMERIC BEARING PADS. FURNISH ½"x8"x3'-11" PLAIN, UNREINFORCED PADS. (22 TOTAL PADS). COST OF PADS IS INCIDENTAL TO THE BEAMS.

INCIDENTAL ITEMS

1. EXPANSION JOINTS, TYPE "A"
2. ELASTOMERIC BEARING PADS
3. EPOXY ANCHORS
4. TIE RODS
5. DECK SLAB MACHINE GROOVED FINISH
6. PENETRATING WATER REPELLENT TREATMENT

DESIGN DATA

DESIGN IS IN ACCORDANCE WITH AASHTO LRFD SPECIFICATIONS 4TH EDITION.

DESIGN DATA: STRUCTURAL STEEL-AASHTO M-183,
FS=20,000 PSI

REINFORCED CONCRETE:

SUPERSTRUCTURE: F'c=4,000. PSI AT 28 DAYS (TOPPING SLAB)
Fy=60,000 PSI FS=24,000 PSI

SUBSTRUCTURE: F'c=4,000. PSI AT 28 DAYS
Fy=60,000 PSI FS=24,000 PSI,

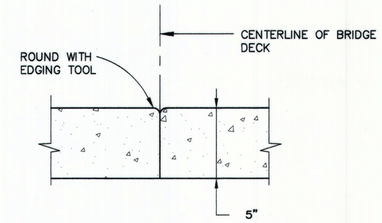
PRESTRESSED BRIDGE SLAB: F'c=7,500. PSI AT 28 DAYS
F'ci=4,500 PSI AT RELEASE

LIVE LOAD: HL-93
SIDEWALK LIVE LOAD = 75 PSF

WEARING SURFACE: 30 PSF ALLOWANCE FOR FUTURE WEARING SURFACE AND 1/4" MONOLITHIC CONCRETE.

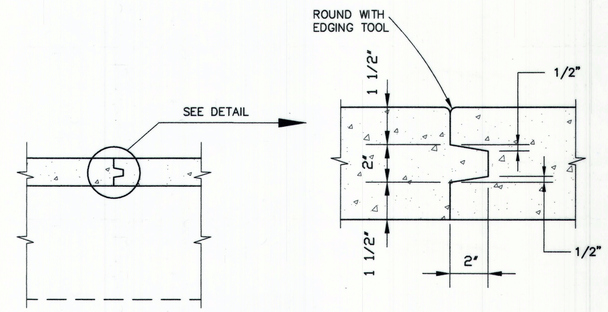
HORIZONTAL EARTH PRESSURE: 36 LBS/CU. FT. EQUIVALENT FLUID PRESSURE AND 2 FT. SURCHARGE.

ACTIVE PRESSURE: 36 PCF
AT REST: 55 PCF
PASSIVE PRESSURE: 400 PCF
WIND VELOCITY: 80 MPH



PERMISSIBLE LONGITUDINAL CONSTRUCTION JOINT

SCALE: NONE



PERMISSIBLE TRANSVERSE CONSTRUCTION JOINT

SCALE: NONE

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5971 San Pedro Boulevard, N.E., Bldg. 54, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TUERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO (11771) REGISTERED PROFESSIONAL ENGINEER
10-22-11

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION
REPLACEMENT AT SAGEBRUSH TRAIL
BRIDGE GENERAL NOTES AND DESIGN DATA

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	16	22

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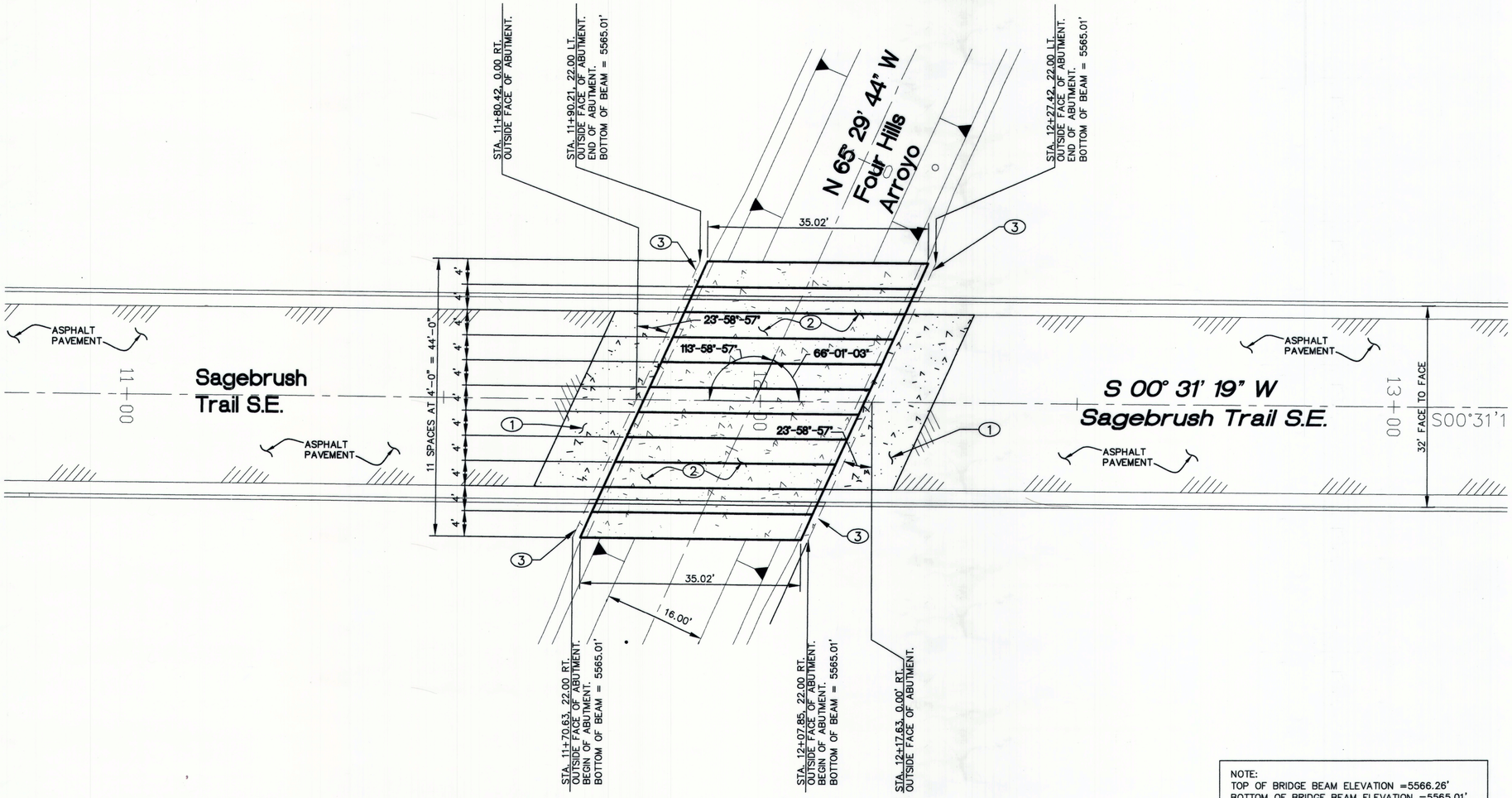
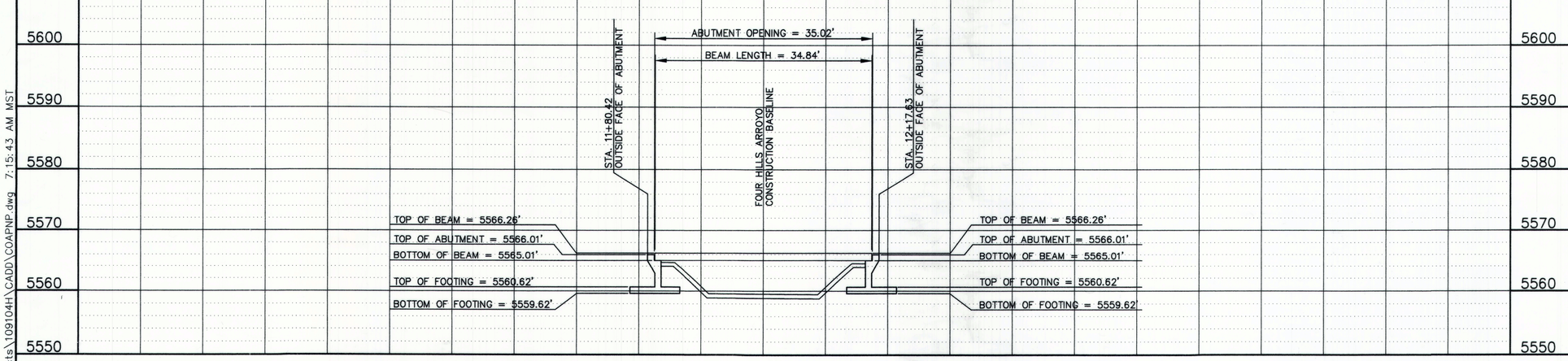


BRIDGE BEAM PLAN

1"=10'

NOTE:
TOP OF BRIDGE BEAM ELEVATION =5566.26'
BOTTOM OF BRIDGE BEAM ELEVATION =5565.01'



BRIDGE BEAM PROFILE

1"=10'

KEYED NOTES:

1. BUILD REINFORCED CONCRETE APPROACH SLAB PER DETAIL SHEET 19.
2. PRECAST REINFORCED CONCRETE BEAMS SEE DETAIL SHEET 18.
3. REINFORCED CONCRETE ABUTMENTS. SEE DETAIL SHEET 19.

LEGEND

T/AS = TOP OF APPROACH SLAB.

N

10' 5' 0 10' 20'
SCALE: 1" = 10'

SEC JOB # 109104i
Smith Engineering Company
A Full Service Engineering Company
5501 San Pedro Boulevard. N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

AS BUILT INFORMATION

CONTRACTOR STAR PAVING CO.	
WORK STAKED BY SANDIA LAND SURVEYING, LLC	DATE 3-12
INSPECTOR ACCEPTANCE BY COA	DATE 7-12
FIELD VERIFICATION BY COA	DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

C.O.A. CONTROL STATION "TIJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
10-05-2011

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
BRIDGE BEAM PLAN & PROFILE

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	17	22

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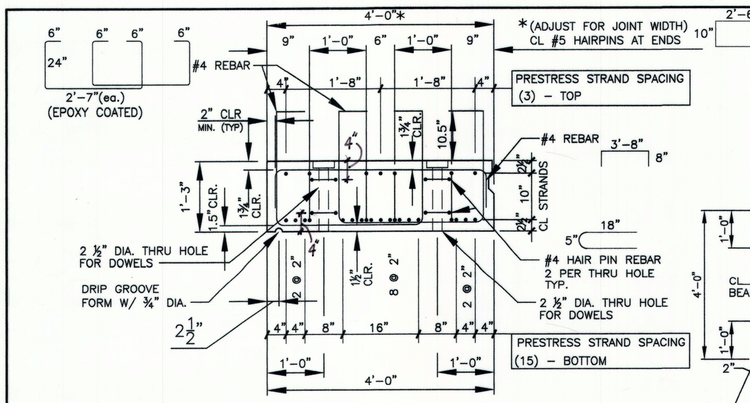
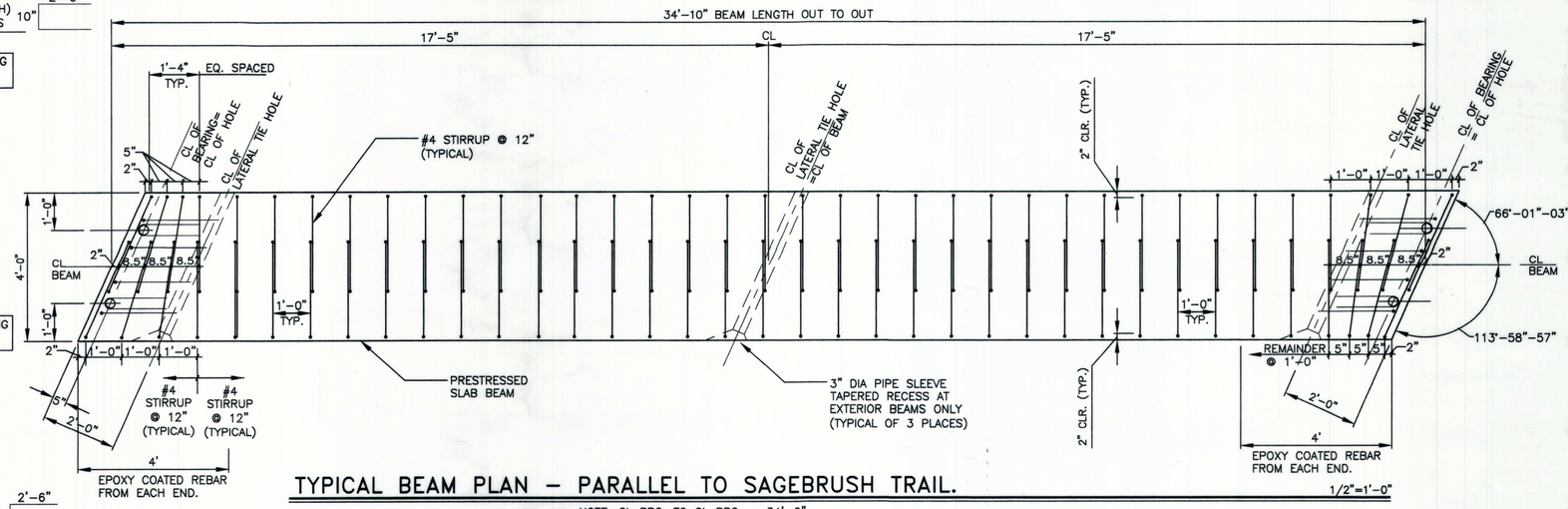


TYPICAL EXTERIOR BEAM REINFORCEMENT

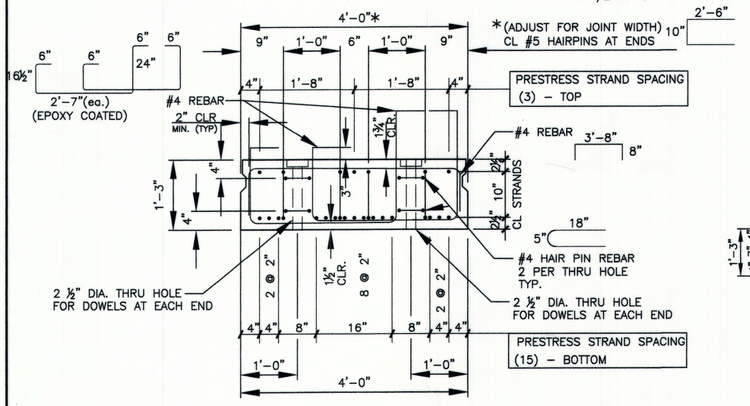
1/2"=1'-0"



TYPICAL BEAM PLAN – PARALLEL TO SAGEBRUSH TRAIL.

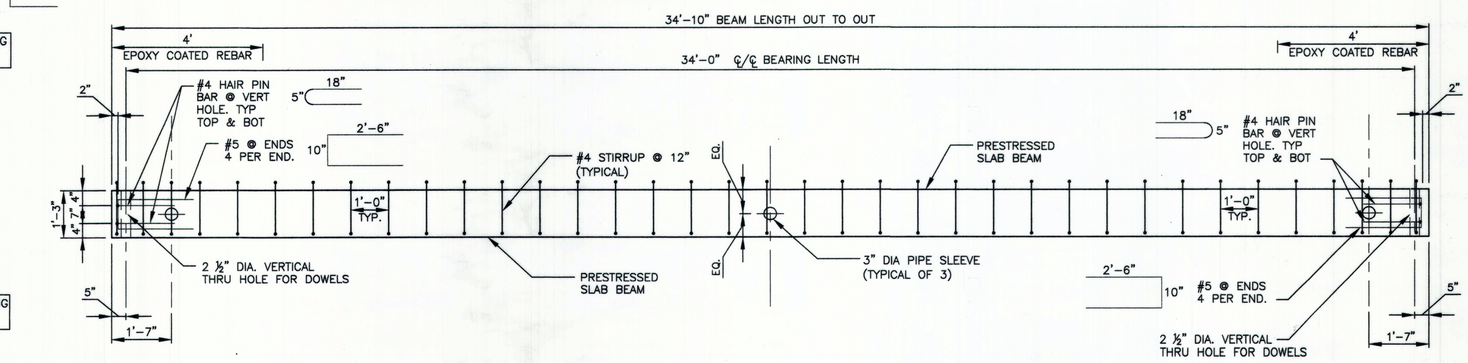
1/2"=1'-0"

NOTE: CL BRG. TO CL BRG. = 34'-0"



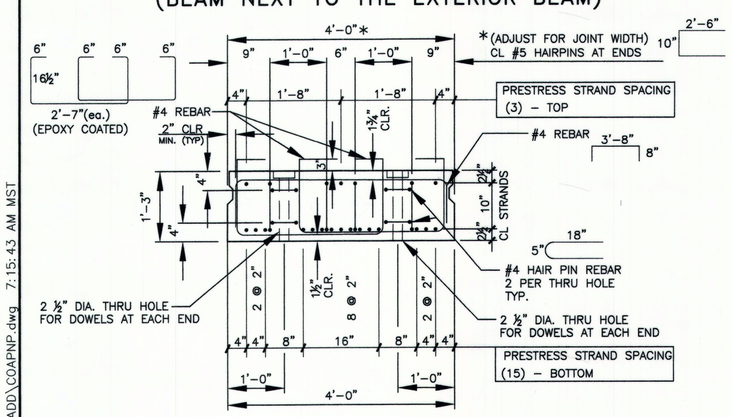
2nd INTERIOR BEAM REINFORCEMENT (BEAM NEXT TO THE EXTERIOR BEAM)

1/2"=1'-0"



TYPICAL LONGITUDINAL SECTION – PARALLEL TO SAGEBRUSH TRAIL.

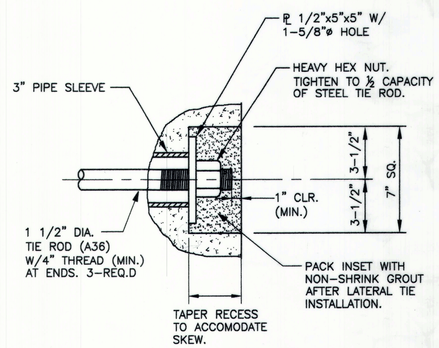
1/2"=1'-0"



TYPICAL INTERIOR BEAM REINFORCEMENT

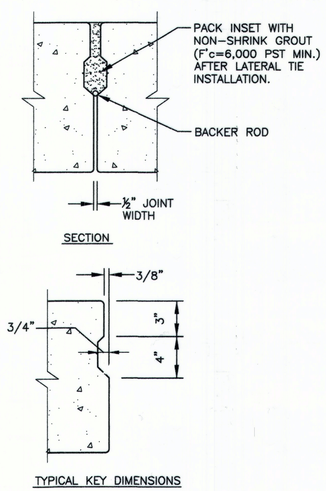
1/2"=1'-0"

NOTE:
ALL REINFORCING STEEL SHALL BE A MIN OF 2" CLR. TO THE OUTSIDE EDGE OF CONCRETE. UNLESS OTHERWISE NOTED.



LATERAL TIE AND INSET

SCALE: NONE



SHEAR KEY DETAIL

SCALE: NONE

BEAM DESIGN DATA

CONCRETE:

F'ci = MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT TIME OF INITIAL PRESTRESS = 4,500 PSI

F'c = 7,500 PSI

PRESTRESSING STEEL:

1/2" DIAMETER, SEVEN WIRE, LOW RELAXATION STRANDS MEETING AASHTO M-203 STANDARDS.

Fpu = 270,00 PSI

Pi = 31,000 LBS/STRAND

INITIAL CAMBER @ MIDSPAN = 1/4"

CAMBER AT ERECTION @ MIDSPAN = 7/16"

DEFLECTION FROM TOPPING SLAB @ MIDSPAN = 1/4"

CONVENTIONAL REINFORCING:

Fy = 60,000 PSI (GRADE 60)

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
5801 San Pedro Boulevard N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

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CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
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NO.

BENCH MARKS
C.O.A. CONTROL STATION "TIJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEERS SEAL
JAMES P. ANDAZOLA
NEW MEXICO
10575
LICENSED PROFESSIONAL ENGINEER
8/25/11

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

		DATE
DESIGNED BY	D.A.	08/2011
DRAWN BY	SEC	08/2011
CHECKED BY	D.A.	08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
BRIDGE BEAM DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	18	22

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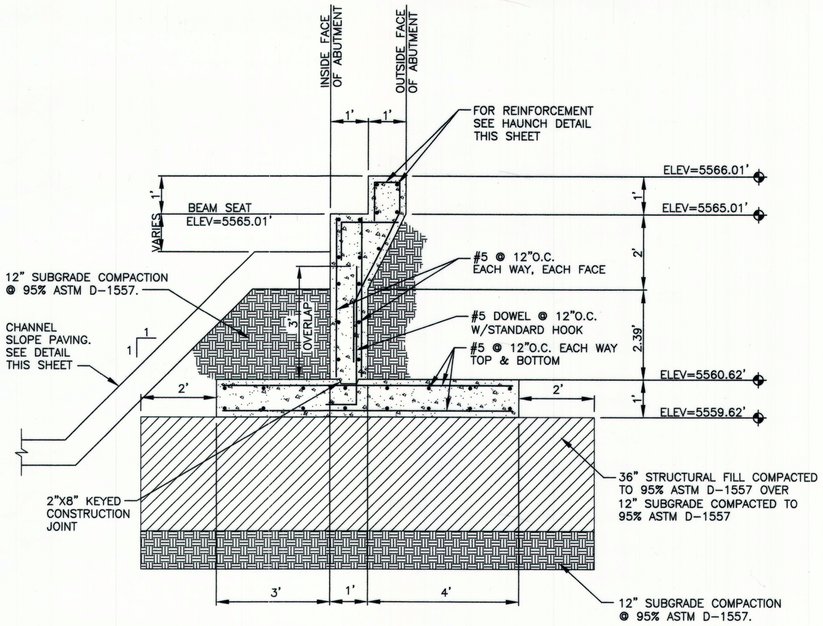
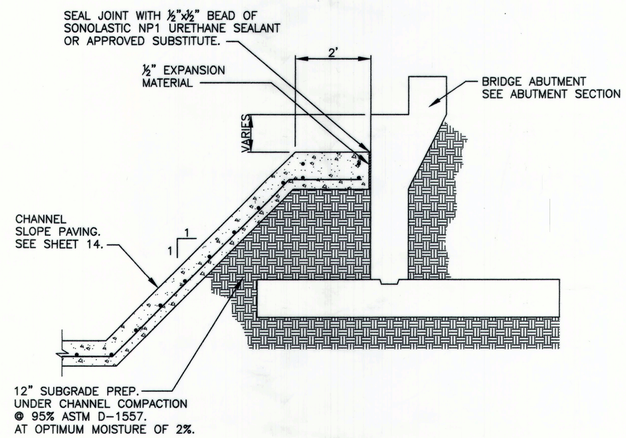


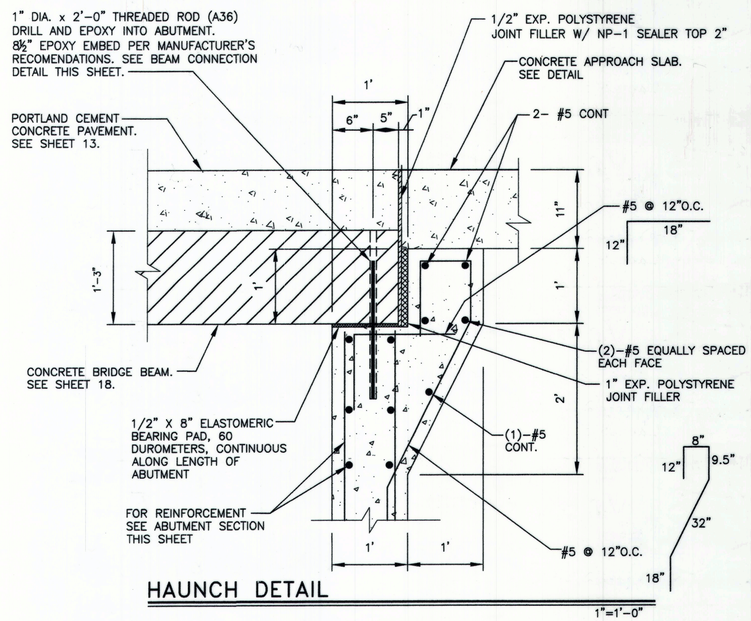
ABUTMENT SECTION

1/2"=1'-0"



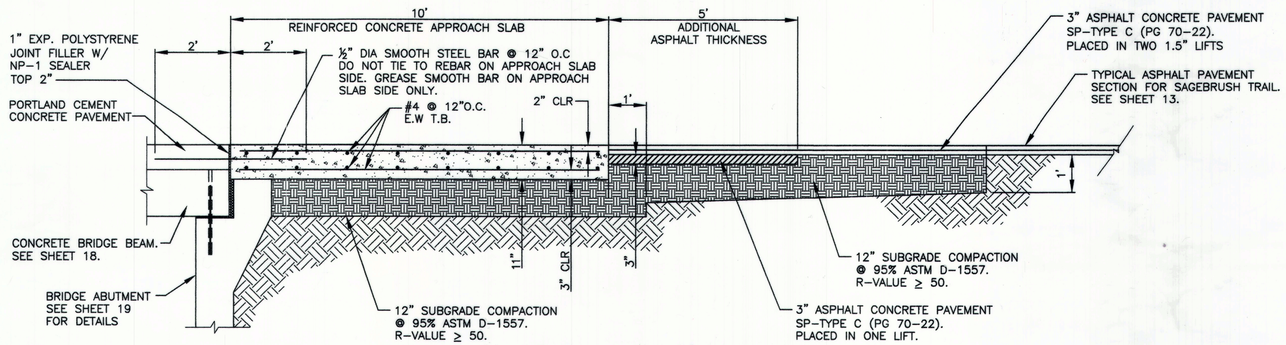
CONCRETE SLOPE PAVING SECTION

1/2"=1'-0"



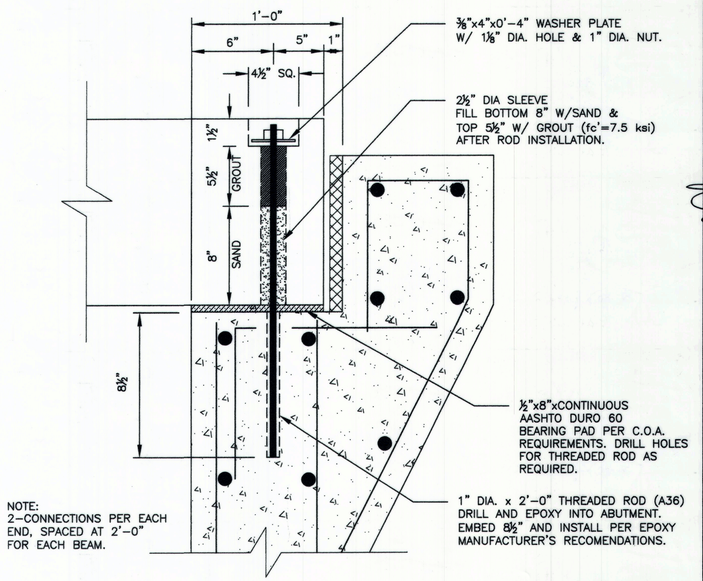
HAUNCH DETAIL

1"=1'-0"



APPROACH SLAB DETAIL

1/2"=1'-0"



NOTE:
2-CONNECTIONS PER EACH END, SPACED AT 2'-0" FOR EACH BEAM.

BEAM CONNECTION DETAIL

NONE

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
8601 San Pedro Boulevard N.E., Bldg. #4, Suite 800 Albuquerque, New Mexico 87110

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
INSPECTOR'S ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
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NO.

BENCH MARKS
C.O.A. CONTROL STATION "TLERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
ABUTMENT DETAILS

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update | Mo. / Day / Yr. | Mo. / Day / Yr.

City Project No. 756391 | Zone Map No. M-22-Z | Sheet 19 Of 22

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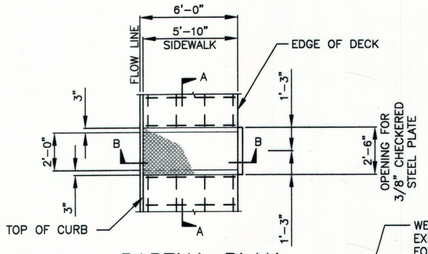
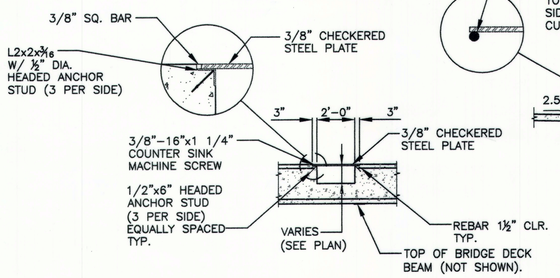
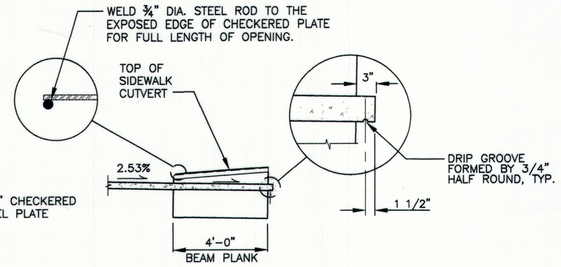


PARTIAL PLAN



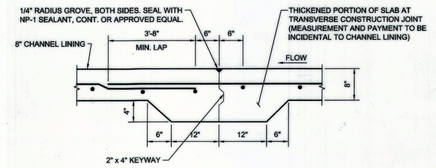
SECTION A-A



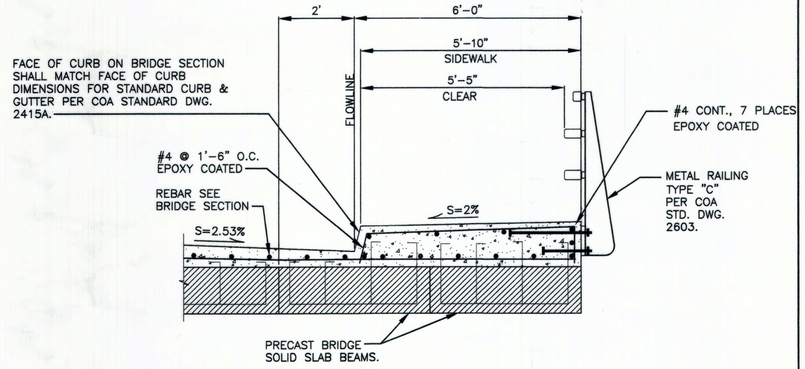
SECTION B-B

24" WIDE SIDEWALK CULVERT

NTS

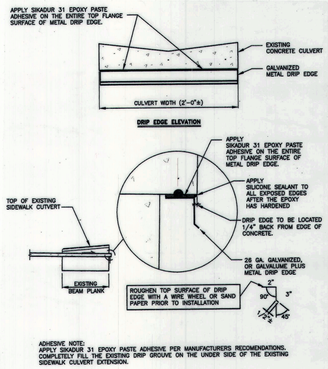


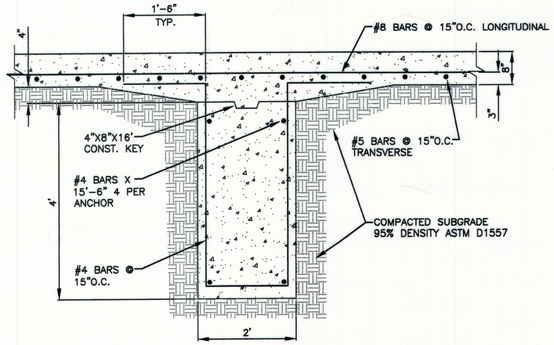
TYPICAL TRANSVERSE CONSTRUCTION JOINT DETAIL



TYPICAL BRIDGE SIDEWALK DETAIL

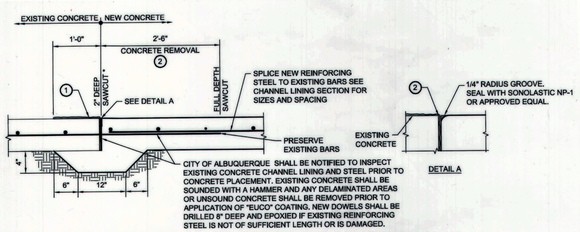
NONE





LUG TYPE TERMINAL DETAIL

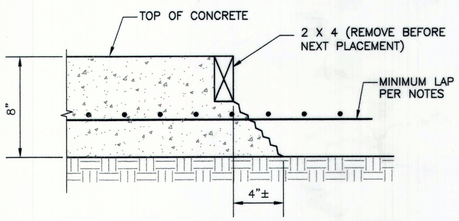
3/4"=1'-0"



NEW TO EXISTING CHANNEL LINING CONSTRUCTION JOINT DETAILS

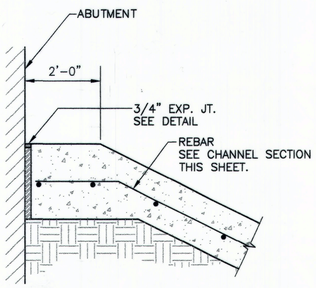
KEYED NOTES

1. EUCO ARC LITHIUM NITRATE COATING OR APPROVED EQUAL APPLIED TO VERTICAL SURFACE AND 12" OF TOP SURFACE OF EXISTING CONCRETE TO REMAIN.
2. REMOVAL OF CONCRETE ADJACENT TO THE 2" SAWCUT WILL BE WITH A 30 LB., MAX. PNEUMATIC HAMMER, IN THE EVENT OF DAMAGE TO THE CONCRETE TO REMAIN, THE CONTRACTOR SHALL RE SAW THE 2" JOINT AND REMOVE AND REPLACE THAT CONCRETE AT NO COST TO THE CITY OF ALBUQUERQUE.



8" TYPICAL CONSTRUCTION JOINT

N.T.S.



CHANNEL ABUTMENT DETAIL

N.T.S.

AS BUILT INFORMATION

CONTRACTOR STAR PAVING CO.

WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
ACCEPTANCE BY	COA	DATE 7-12
FIELD VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

RECORDED BY DATE

NO.

BENCH MARKS

C.O.A. CONTROL STATION "TUERAS2"

(PUBLISHED ELEV. = 5589.72') NAVD 88.

COORDINATES ARE MODIFIED (SURFACE)

NM STATE PLANE COORDINATES

CENTRAL ZONE, NAD 83.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
08-25-2011

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

SEC JOB # 109104i

Smith Engineering Company
A Full Service Engineering Company
8001 San Pedro Boulevard, N.E., Bldg. #4, Suite 200 Albuquerque, New Mexico 87110

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL

MISCELLANEOUS BRIDGE & CHANNEL DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo. / Day / Yr.	Mo. / Day / Yr.
APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE	APPROVED NOV 08 2011 CITY ENGINEER			

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	20	22

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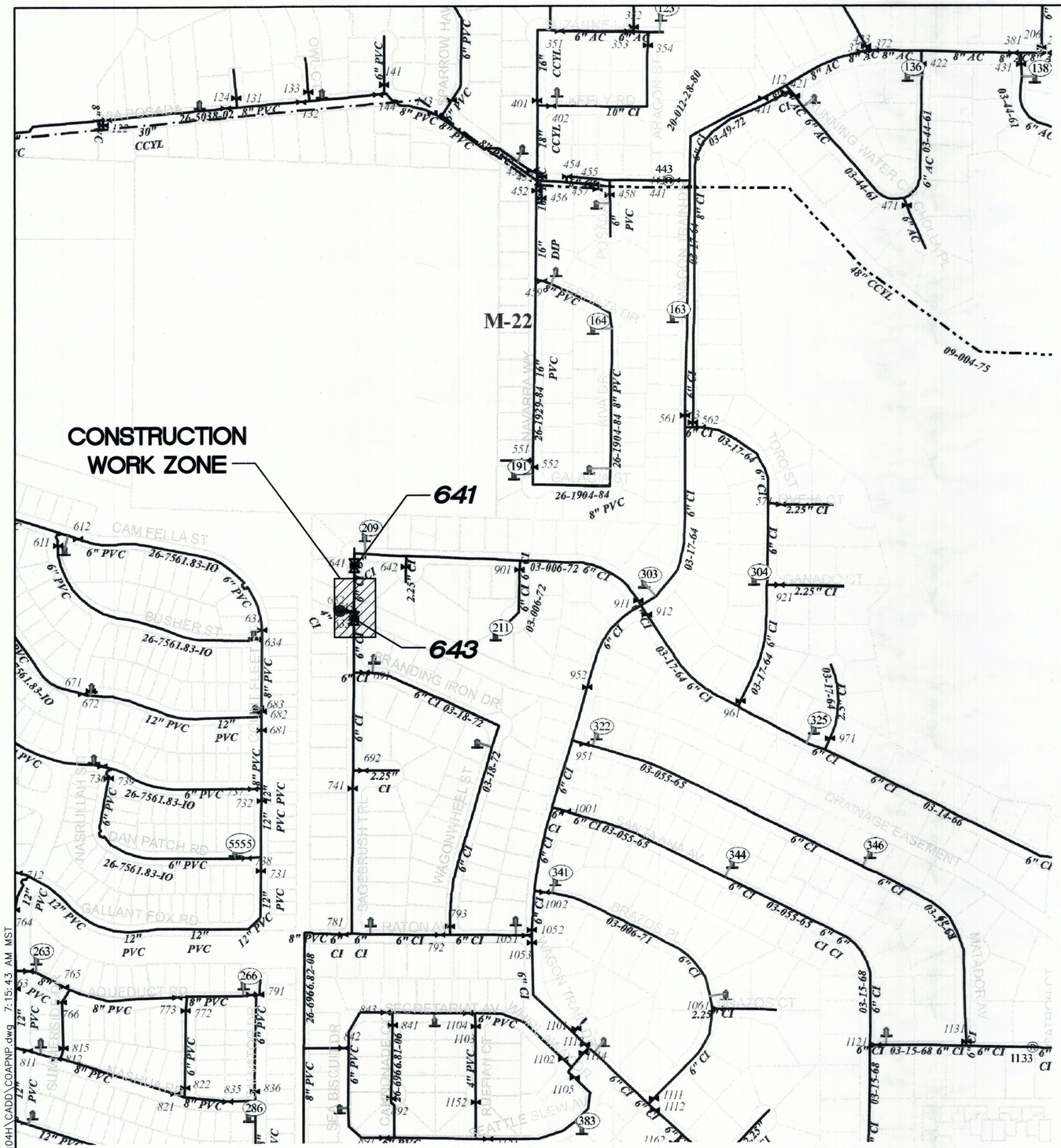

NOTE:
CITY OF ALBUQUERQUE MAPS
M-22

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SUGGESTED WATER SHUT OFF PLAN

NOT TO SCALE

GENERAL NOTES:

1. DISINFECTION AND FILLING OF WATER LINES SHALL CONFORM TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS 801.17 EXCEPT AS MODIFIED HEREIN. THIS WORK IS INCIDENTAL TO THE WATERLINE CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE.
2. ALL NECESSARY MEASURES SHALL BE TAKEN TO PREVENT CONTAMINATED MATERIALS FROM ENTERING THE WATER LINE DURING STORAGE, CONSTRUCTION, OR REPAIR INCLUDING CAPPING THE WATER LINE AT NIGHT AND DURING ALL BREAKS IN PIPE LAYING.
3. REMOVE ANY MATERIALS, DIRT OR DEBRIS THAT MAY HAVE ENTERED THE WATER LINE PRIOR TO DISINFECTION.
4. ADD A FLUSHING/DRAINING PORT TO ALL DEAD END LINES DISCHARGE POINTS AND FILLING POINTS WHICH ARE NOT FIRE HYDRANTS. PORT SHALL BE 2" MIN. UNLESS SHOWN OTHERWISE. PORT SHALL ALLOW PIPE TO FULLY DRAIN.
5. FILL THE WATER LINE PER THE PLAN SHOWN ON THIS SHEET THROUGH AN APPROVED BACK FLOW PREVENTION DEVICE. CONTRACTOR SHALL USE NECESSARY METHODS TO ALLOW ALL AIR IN THE WATER LINE TO RELEASE WITHOUT CONTAMINATING ANY EXISTING WATER LINES OR FIELD TAPPING CONCRETE CYLINDER PIPE.
6. PRESSURE TEST IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATION 801.16. DISINFECT THE WATER LINE PER CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS 801.17 AND AWWA C651 (LATEST EDITION). SODIUM OR CALCIUM HYPOCHLORITE ARE THE ONLY PERMISSIBLE FORMS OF CHLORINE TO BE USED. GRANULES OR TABLETS SHALL NOT BE PLACED IN THE WATER LINE, HOWEVER THEY MAY BE USED TO PREMIX A HIGHLY CHLORINATED SOLUTION. CONTRACTOR SHALL ENSURE THAT GRANULES OR TABLETS NOT DISSOLVED ARE NOT INTRODUCED INTO THE WATER LINE FROM THE HIGHLY CHLORINATED WATER BY SCREENING THE DISCHARGE FROM THE PRE-MIXING VESSEL OR BY OTHER PROVEN MEANS.
7. THE SLUG OR CONTINUOUS-FEED METHOD SHALL BE USED (WITH PRELIMINARY FLUSHING ON LINES LESS THAN 24" IN DIAMETER AND BROOM SWEEPING ON LINES 24" AND LARGER).
8. AFTER THE REQUIRED RETENTION PERIOD, HEAVILY CHLORINATED WATER SHALL BE FLUSHED FROM THE WATER LINE PER THIS PLAN. INTRODUCE FLUSH WATER THROUGH AN APPROVED BACK FLOW DEVICE. DECHLORINATION IS REQUIRED WHEN NOTED ON THIS PLAN.
9. FLUSH THE WATER LINE BY CAREFULLY THROTTLING THE VALVE AT THE DISHCARGE END TO PREVENT A VACUUM IN THE WATER LINE AND TO PREVENT INUNDATING THE DISCHARGE STRUCTURE.
10. IF FLUSHING INTO A SANITARY SEWER NOTIFY THE WASTEWATER UTILITY DIVISION AT 873-7015 PRIOR TO FLUSHING. IF FLUSHING TO A CITY OF ALBUQUERQUE STORM SEWER OR DRAINAGE CHANNEL NOTIFY THE HYDROLOGY DIVISION AT 768-3654. IF FLUSHING TO AN AMAFCA STRUCTURE NOTIFY AMAFCA AT 884-2215 PRIOR TO FLUSHING. FLUSHING LINE SHALL BE SUPPORTED BY A STAND TO MAINTAIN AN 18" SEPARATION BETWEEN THE FLUSHING LINE AND THE DISCHARGE POINT OR MANHOLE RIM.
11. WHEN THE FLUSH WATER RESIDUAL CHLORINE IS LESS THAN 2.0 mg/L, THE WATER AUTHORITY WILL TAKE A POTABILITY TEST. UPON PASSING THE CONTRACTOR SHALL REMOVE THE METER AND BACK FLOW PREVENTION DEVICE. IF LINE DOES NOT PASS, CONTRACTOR SHALL REPEAT DISINFECTION AND/OR FLUSHING UNTIL LINE PASSES.
12. PROVIDE ABCWUA WITH A RECORD OF THE WATER VOLUME USED TO FILL AND FLUSH THE WATER LINE BASED ON WATER METER READINGS.
13. CONTRACTOR MAY SUBMIT AN ALTERNATE FILLING, DISINFECTING, AND FLUSHING PLAN FOR REVIEW AND APPROVAL AT LEAST 5 WORKING DAYS PRIOR TO FILLING.
14. THROTTLING SHALL BE PERFORMED USING VALVES NOT FIRE HYDRANTS.
15. THE CONTRACTOR SHALL BE GRANTED FREE WATER FOR TESTING AND FLUSHING. IF THE WATER LINE FAILS THE HYDROSTATIC OR POTABILITY TEST, THE CONTRACTOR SHALL PAY FOR THE ADDITIONAL WATER REQUIRED FOR RETESTING.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUNCTION WITH THE COMPLETION OF THIS PROJECT.
17. AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE ABCWUA (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN. ONLY ABCWUA PERSONNEL SHALL OPERATE WATER VALVES.
18. ALL AFFECTED PROPERTY OWNERS OF A WATER-SHUT OFF SHALL BE NOTIFIED ONE WEEK PRIOR TO WATER-SHUT OFF.
19. ALL WATERLINE WORK INVOLVING PUBLIC WATERLINE SHUT-OFFS SHALL BE PERFORMED ON WEEKENDS OR AT NIGHT. BUSINESS AND RESIDENTIAL ADDRESSES THAT EXPERIENCE WATER SHUT-OFF AS A RESULT OF THIS WORK SHALL BE NOTIFIED IN WRITING AT LEAST SEVEN (7) DAYS PRIOR TO INSTALLATION.
20. CONTRACTOR SHALL CONTACT THE CITY OF ALBUQUERQUE FIRE DEPARTMENT (833-7391) A MINIMUM OF SEVEN (7) WORKING DAYS PRIOR TO ANY OF THE WATER SHUT-OFFS. THE CONTRACTOR MUST INFORM THE FIRE DEPARTMENT OF THE FIRE HYDRANTS TO BE OUT OF SERVICE DURING THE WATER SHUT-OFFS.
21. FIRE HYDRANTS NOT IN SERVICE DURING ANY WATER SHUT-OFF ARE TO BE BAGGED.

SAGEBRUSH	
WORK ON 6" DIA WATER LINE	
VALVES USED	FIRE HYDRANTS AFFECTED
641 643	NONE

AS BUILT INFORMATION
CONTRACTOR STAR PAVING CO.
WORK STAKED BY SANDIA LAND SURVEYING, LLC DATE 3-12
ACCEPTANCE BY COA DATE 7-12
FIELD VERIFICATION BY COA DATE 7-12
DRAWINGS CORRECTED BY SMITH ENGINEERING CO. DATE 1-13
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
C.O.A. CONTROL STATION "TIJERAS2"
(PUBLISHED ELEV. = 5589.72') NAVD 88.
COORDINATES ARE MODIFIED (SURFACE)
NM STATE PLANE COORDINATES
CENTRAL ZONE, NAD 83.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
DOUGLAS L. ANDREWS
NEW MEXICO
11771
REGISTERED PROFESSIONAL ENGINEER
08-25-2011

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	D.A.	DATE 08/2011
DRAWN BY	SEC	DATE 08/2011
CHECKED BY	D.A.	DATE 08/2011

SEC JOB # 109104i
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION
REPLACEMENT AT SAGEBRUSH TRAIL
SUGGESTED WATER SHUT-OFF PLAN

Design Review Committee: APPROVED NOV 08 2011 DESIGN REVIEW COMMITTEE
City Engineer Approval: APPROVED NOV 08 2011 CITY ENGINEER
Last Design Update — Mo. / Day / Yr. — Mo. / Day / Yr.

City Project No.	Zone Map No.	Sheet	Of
756391	M-22-Z	21	22

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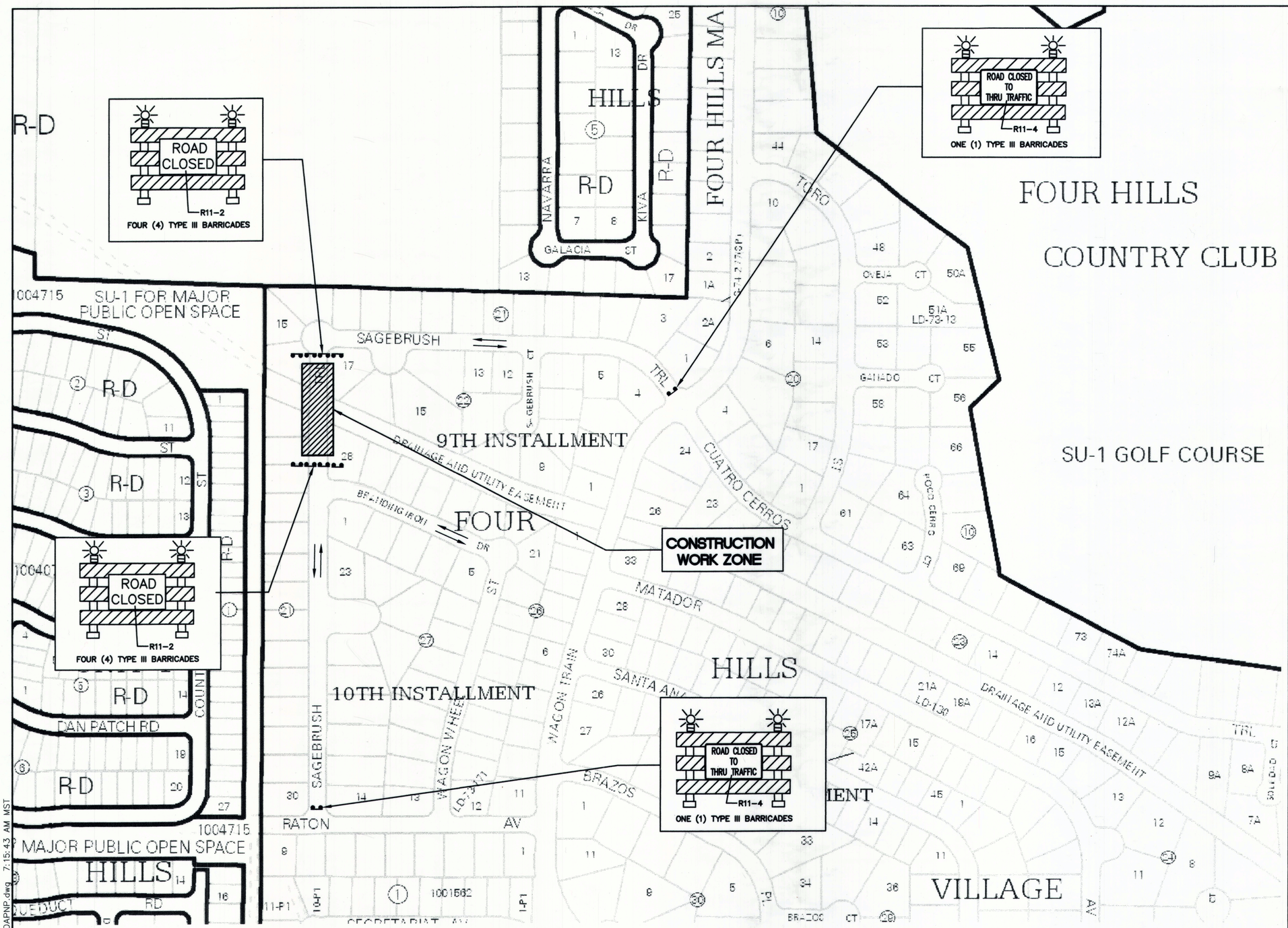

SUGGESTED TRAFFIC CONTROL PLAN

NOT TO SCALE

SUGGESTED TRAFFIC CONTROL GENERAL NOTES:

1. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE COA CONSTRUCTION COORDINATION DIVISION (924-3400). THE CONTRACTOR MUST OBTAIN APPROVAL OF THE SUBMITTED TRAFFIC CONTROL PLAN FROM THE COA CONSTRUCTION COORDINATION DIVISION PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR SHALL PROVIDE PEDESTRIAN ACCESS TO ALL PROPERTIES AT ALL TIMES DURING CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR	STAR PAVING CO.	
WORK STAKED BY	SANDIA LAND SURVEYING, LLC	DATE 3-12
INSPECTORS ACCEPTANCE BY	COA	DATE 7-12
FIELD VERIFICATION BY	COA	DATE 7-12
DRAWINGS CORRECTED BY	SMITH ENGINEERING CO.	DATE 1-13

MICRO-FILM INFORMATION

RECORDED BY	DATE
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ENGINEER'S SEAL

DOUGLAS L. ANDREWS — NEW MEXICO — 11771 — REGISTERED PROFESSIONAL ENGINEER

10-05-2011

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY	D.A.	DATE	08/2011
DRAWN BY	SEC	DATE	08/2011
CHECKED BY	D.A.	DATE	08/2011

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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

TITLE: FOUR HILLS ARROYO DIP SECTION REPLACEMENT AT SAGEBRUSH TRAIL
SUGGESTED TRAFFIC CONTROL (For Information Only)

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

City Project No. 756391 | Zone Map No. M-22-Z | Sheet 22 | Of 22

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