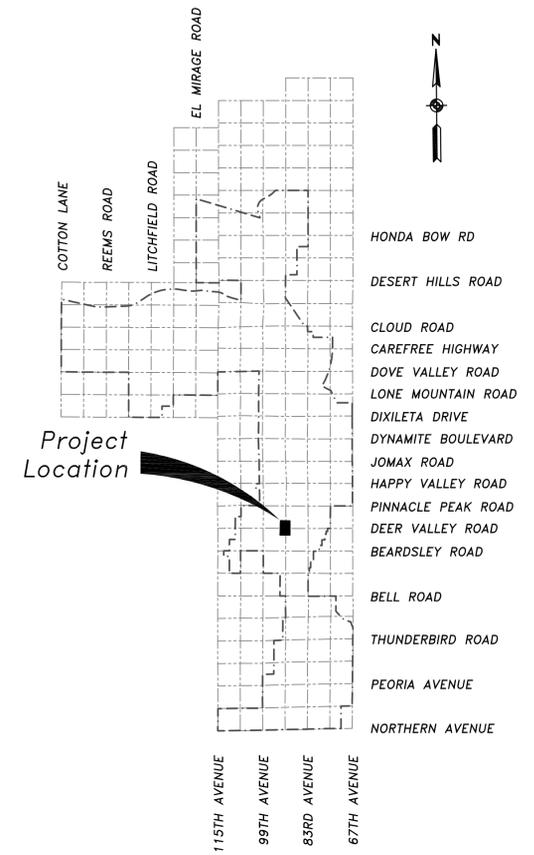




TRAFFIC SIGNAL INSTALLATION
CITY OF PEORIA
91ST AVENUE & DEER VALLEY ROAD
INTERSECTION IMPROVEMENT PLANS
 A PORTION OF SECTION 15, 16, 21, 22
 TOWNSHIP 4 NORTH, RANGE 1 EAST
 OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
 MARICOPA COUNTY
 PEORIA PROJECT NO. TS--
 SOLICITATION NO.

VICINITY MAP



ENGINEER

KIRKHAM MICHAEL CONSULTING ENGINEERS
 9201 NORTH 25TH AVENUE, SUITE 150
 PHOENIX, AZ 85021
 PHONE (602) 944-6564

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWINGS" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR/ENGINEER _____ DATE _____

REGISTRATION NUMBER _____

THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. THIS COMPLIANCE REVIEW SHALL NOT PREVENT THE CITY TRAFFIC ENGINEER FROM REQUIRING CORRECTION OF ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.

CITY TRAFFIC ENGINEER _____ DATE _____

APPROVALS

ENGINEERING DIRECTOR / CITY ENGINEER _____ DATE _____

CITY COUNCIL

MAYOR

John C. Keegan

VICE MAYOR

Vicki Hunt

COUNCIL MEMBERS

Patrick Hickson

Cathy Carlat

Pat Dennis

Carlo Leone

Joan Evans

UTILITY CONTACTS

UTILITY COMPANY	CONTACT	PHONE	DATE NOTIFIED	RESPONSE DATE
Arizona Public Service	Bobby Garza	602-371-7989	1/12/06	2/02/06
Southwest Gas	Vivian Hunsaker	602-484-5277	3/07/06	3/14/06
Qwest	Ron Floyd	602-630-1392	3/07/06	5/03/06
Cox Communications	Suzanne Holzer	623-322-7288	3/07/06	4/03/06
City of Peoria-Water	William Mattingly	623-773-7286	3/07/06	
City of Peoria-Sewer	William Mattingly	623-773-7286	3/07/06	
CAP	Marilyn Pomper	623-869-2265	3/07/06	3/20/06
AZ American Water	Timothy Friday	623-445-2403	3/07/06	

SHEET INDEX

SHEET 1	COVER SHEET (CV01)
SHEET 2	GENERAL NOTES (GN01)
SHEET 3	91ST AVENUE TYPICAL SECTIONS (TY01)
SHEET 4	DEER VALLEY TYPICAL SECTIONS (TY02)
SHEET 5-10	PAVING PLAN (PP01-PP06)
SHEET 11-13	SIGNING AND STRIPING (SS01-SS03)
SHEET 14-16	TRAFFIC SIGNAL (TS01-TS03)
SHEET 17	DEER VALLEY ROAD CROSS SECTIONS (CS01)

HORIZONTAL CONTROL

LOCAL GROUND DATUM SET AT INTERSECTION OF 91ST AVENUE AND DEER VALLEY ROAD.
 BASIS OF BEARING: ESTABLISHED USING ML'S FROM DEER VALLEY UNIT 1 PLAT MCR BK438 PG 36 SOUTHEAST QUADRANT OF DEER VALLEY ROAD AND 91ST AVENUE.

PROJECT BENCHMARK

CITY OF PEORIA, BRASS CAP FLUSH AT THE INTERSECTION OF 91ST AVENUE AND DEER VALLEY ROAD.
 CITY OF PEORIA
 ELEVATION = 1281.39 FT

A material or product installed after January 1, 1993, that comes into contact with water or a water treatment chemical shall conform to ANSI/NSF Standard 61 (R18-4-119 B).

Each product added directly to water during production or treatment shall conform to ANSI/NSF Standard 60 (R18-4-119).

90% REVIEW



CALL TWO WORKING DAYS BEFORE YOU DIG 602-263-1100 1-800-STAKE-IT <small>(OUTSIDE MARICOPA COUNTY)</small>	NO.	AUTHORIZED BY	REVISION	MADE BY	DATE	DESIGNED BY: SWA	CITY OF PEORIA PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION <small>8401 WEST MONROE STREET - ROOM 210</small> <small>PEORIA, ARIZONA 85345 - (623) 773-7212</small>		KIRKHAM MICHAEL <small>CONSULTING ENGINEERS</small> <small>9201 North 25th Avenue - Suite 150</small> <small>Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592</small>	COVER SHEET	PROJECT NUMBER: 0501905
						DRAWN BY: SWA					HORIZONTAL SCALE: AS SHOWN

91st AVE – DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

GENERAL INFORMATION

No person, Corporation, Contractor, or utility shall work within the right-of-way, road, street, or easements granted for public use or alleys without securing an off-site/on-site permit from the Engineering Department.

Off-site/On-site permits are required for the following:

Grading/drainage, erosion control, flood control structures, grading, hauling material in excess of 500 cubic yards, oiling, graveling or any surfacing of any street, or alley, water system, sewer system, storm drain system, trenching, gas or any other types of pipe lines, drywells, paving, curb, gutter, sidewalks, driveways (concrete), flood irrigation, landscape/irrigation, traffic signals, striping and signage, bank stabilization and channelization, street lights, well abandonment, utility lines such as electric, telephones, television, communications and other franchised facilities.

The City's Ordinance No. 98-04 establishes construction work hours as follows:

CONSTRUCTION TYPE:	April 2-September 29	September 30-April 1
A Concrete Work	5:00 am to 7:00 pm	6:00 am to 7:00 pm
B Other Construction (within 500 ft of residential area)	6:00 am to 7:00 pm	7:00 am to 7:00 pm
C Construction Work (more than 500 ft of residential area)	5:00 am to 7:00 pm	5:00 am to 7:00 pm

This document establishes work hours in the public right-of-way as follows:
No interference with traffic flow on arterial streets shall be permitted during the hours of 6:00 a.m. to 8:30 a.m. or from 4:00 p.m. to 7:00 p.m. unless prior authorization is obtained in writing by the City of Peoria Traffic Engineer or his designee. Prior to issuance of Off-site/On-site permits, the Contractor must provide the City of Peoria with the specific information and payment of fees listed below. Any person, Corporation, Contractor, or utility company working in the right-of-way, road, street, or easements granted for public use or alleys without securing a permit is subject to a fine in accordance with Ordinance No. 01-181.

GENERAL NOTES

- All construction shall conform to the latest Maricopa Association of Governments, Uniform Standard Specifications and Details for Public Works Construction (MAG). City of Peoria Infrastructure Guide, Peoria Details and City of Phoenix Standard Details will continue to apply where such details were not adopted or included by MAG. Alternate details and specifications may be submitted for review and acceptance by the Engineering Department. If accepted, alternate details will be shown as part of the approved plans/detail sheets.
- This set of plans has been reviewed for compliance with City requirements prior to issuance of construction permits. However, such review shall not prevent the City Engineer from requiring correction of errors or omissions in plans found to be in violation of any law or ordinance.
- Approval by the City Engineer means for general layout in right-of-way only. This approval of construction plans is valid for a period of nine (9) months. Construction permits shall be obtained within this period or the plans shall be resubmitted for approval. Work shall also be continuously pursued in order to maintain a valid plan approval and permit. Approval is only for work within that jurisdiction of the City of Peoria.
- The City Engineer does not warrant any quantities shown on these plans.
- Off-site Permits for any work within the right-of-way and easements, and any grading and drainage, whether on-site or off-site, are required prior to commencing work. The building permit shall not be construed in any way as permission to commence work covered by an Off-Site Permit. It shall be the responsibility of the Contractor to understand the work covered by various permits.
- The Engineering Department, Inspection Section, shall be notified twenty-four (24) hours prior to any construction work by telephone at (623) 773-7210. Any work conceded without inspection shall be subject to removal and replacement at the Contractor's expense.
- An approved set of plans must be available on the job site at all times. The Contractor's representative (capable of communicating with the City's representatives) shall be on the job at all times the work is being pursued.
- The Contractor is responsible to provide emergency telephone numbers to the City of Peoria at time of issuance of Off-site/On-site permits and have personnel available 24-hours a day to respond to emergencies. If the City is required to respond and make emergency repairs on behalf of the Contractor, the Contractor is responsible to reimburse the City for man-hours, equipment rights-of-way or easements to the City of Peoria prior to issuance of permits.
- It shall be the responsibility of the permittee to arrange for the relocation and relocation costs of all utilities, and submit a utility relocation schedule prior to the issuance of a construction permit.
- All underground tanks require a permit from the Fire Department prior to removal.
- The procedures and methods used to sample, test materials, and report test results will be determined by the Engineering Department. For all phases of construction, the type, scheduling, frequency and location of all materials testing and sampling shall be determined by the Engineering Department. All test results shall be reported directly (in writing) to the Engineering Department. For each phase of construction, test results (in writing) must be received from the testing laboratory, prior to start of the next phase of construction.

GENERAL NOTES (Cont.)

- The Contractor must give location for wasting excess excavation and a letter from the City giving permission for dumping prior to starting on-site construction.
 - It is the Contractor's sole responsibility to verify the presence and location of all existing overhead and/or underground utilities that may interfere with this construction, whether or not said utilities are shown on the construction plans for this project and to adequately protect and maintain any such utilities.
 - The Engineering Department does not assume any liability for errors of line and/or grade on any staking which has been disturbed in any way, nor does the engineer assume any liability for errors of line and/or grade on any staking that has been in place for a period of twenty-four (24) hours or more without the commencement of the construction for which it was set.
 - The Contractor shall contact Blue Stake (602) 263-1100 prior to construction. It is the responsibility of the Contractor to maintain current Blue Stake markings throughout construction.
 - The Contractor shall obtain a fire hydrant meter for construction from the Management Services Department, Customer Services. Contact Customer Service at (623) 773-7160 to schedule the relocation of hydrant meters. Contractors shall not relocate hydrant meters themselves.
 - All Contractors s are responsible to construct stabilized construction entrances in order to reduce or eliminate the tracking of sediment onto public rights-of-ways or streets. Gravel track-out pads shall meet current Maricopa County standards.
 - All drainage protective devices such as swales, interception ditches, pipes protective berms, concrete channels or other measures designed to protect improvements, whether existing or proposed, from runoff or damage from storm water, must be constructed prior to the construction of any improvements.
 - Traffic control shall conform with the City of Phoenix Traffic Barricade Manual, MUTCD, and the City of Peoria Infrastructure Development Guidelines.
 - Any and all obstructions within the rights-of-way and easements shall be removed before any construction is commenced.
 - Contractor is responsible to obtain a National Pollution Discharge Elimination System (NPDES) Permit in accordance with Federal and State Regulations, including Notice of Intent (NOI), Notice of Termination, and Storm Water Pollution Prevention Plan (SWPPP). A copy of the NOI and SWPPP shall be available on the job site at all times.
 - All contractors s are responsible to obtain the necessary 401 and 404 permits. A copy of the permit shall be submitted to the City prior to approval of the Grading and Drainage plans.
 - It is the responsibility of the Contractor to obtain any and all other permits and meet any requirements set forth by other agencies or utilities, which have jurisdiction, at the Contractor's expense, including OSHA. Contractor shall meet OSHA standards for trench safety.
 - As a reminder, Maricopa County Environmental Services Department has asked the City to inform all Contractors s working in the City of Peoria of the following:
Per the Maricopa County Air Pollution Control Rules and Regulations on Earth Moving Equipment Permits, no person shall cause or permit the use of any power of mechanical equipment for commercial purposes to clear, excavate or level land, including but not limited to blasting, demolition, road and street construction, trenching, vegetation removal, or engage in any other earth moving activities without first obtaining a permit from the Maricopa County Environmental Services Department. Contractor will be responsible for acquiring the permit.
Also as a reminder, if the above referenced project has work that needs to be done in the Maricopa County rights-of-way, please obtain all permits from the Maricopa County Department of Transportation. The Off-site permits issued by the City of Peoria do not cover the Maricopa County rights-of-way.
- GRADING AND DRAINAGE**
- The Grading and Drainage plans must be approved by the City Engineer or their designee. The City Engineer's Office shall be notified at (623) 773-7210, 48-hours before any on-site construction begins.
 - A separate permit is required prior to any on-site grading, including custom homes.
 - Grading and Drainage Plan approval includes:
 - Construction of all surface improvements shown on the plan, including but not limited to, retention areas and/or other drainage facilities, drainage patterns, channels, walls, curbing, asphalt pavement, bank protection and channelization.
 - Contractor shall provide minimum slope to the bottom in all retention basins at elevations as shown on the plans. Retention basin side slopes shall not exceed 2:1, as confirmed through the geotechnical report, on private property and 6:1 adjacent to public right-of-way unless noted otherwise on plans. Retention basins shall not exceed 3 feet in depth without written approval from the City Engineer or their designee.
 - All drainage protective devices such as swales, interceptor ditches, pipes, protective berms, concrete channels or other measures designed to protect homes or other improvements whether existing or proposed, from runoff or damage from storm water, must be constructed prior to the construction of any improvements.
 - Drywells must be drilled a minimum of ten (10) feet into permeable porous strata and percolation tests will be required. The Off-site Inspector must be present before backfill or wall pipes are placed within any drywell. Percolation tests must be conducted by an independent laboratory and results provided to the Engineering Department. All drywells must be registered with ADEQ. Copies of drilling logs and ADEQ registration information must be provided to the City.
 - The Contractor is responsible for locating and confirming depth of all existing utility lines within proposed retention and drainage facility areas. If the drainage facilities cannot be constructed per plan as a result of conflict with underground utilities, the Contractor should contact the City Engineer and the Design Engineer and request modification of the drainage facility design.
 - All bank protection and channelization must be completed prior to final acceptance of the project.
 - A separate haul permit shall be required whenever hauling in excess of 500 cubic yards of material in or out of a site. A haul route must be submitted and approved by the Engineering Department. Additional requirements as set forth by the Engineering Department shall be met.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				
KIRKHAM MICHAEL					
9201 North 25th Avenue - Suite 195 Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592					
DES	DR:	CK:	DATE:		

90% REVIEW

GRADING AND DRAINAGE (Cont.)

- The Contractor is responsible to obtain a National Pollution Discharge Elimination System (NPDES) permit in accordance with Federal and State Regulations, including Notice of Intent (NOI), Notice of Termination, and Storm Water Pollution Prevention Plan (SWPPP). A copy of the NOI and SWPPP shall be available on the job site at all times.
- Once an existing shoulder is disturbed by the grading operation or any other phase of construction, the shoulder shall be barricaded. Such barricading shall remain in place until final acceptance of the project.

PAVING

- Exact point of pavement matching, termination and/or overlay, if necessary, shall be determined in the field by the Field Engineering Division.
- All frames, covers, valve boxes and manholes shall be adjusted to finished grade upon completion of paving or related construction. The concrete collar shall be adjusted level with existing bituminous pavement. Adjustment of existing Type "A" or Type "B" water valve boxes in right-of-way shall be considered incidental.
- All Contractors shall comply with the City of Peoria Standard Detail 149 for Trench Plating.
- Paving shall not start until all appropriate testing has been completed and accepted (pressure testing of utilities, density testing, videoing of sewer line, etc.). All conflicting utility construction completed prior to start of paving.
- Trees and shrubbery in the right-of-way, which conflict with the improvements proposed herein, are not to be removed or relocated without prior approval of the City of Peoria. The permittee shall be responsible for obtaining the necessary authorization to remove and/or relocate said trees or shrubbery.
- In all areas where new construction of curb, gutter, sidewalks, and driveways is required, and the engineer determines the existing grade to consist of soils with swelling characteristics, the moisture content shall be brought as close as possible to optimum required for compaction by the addition of water, blending of dry suitable material or by drying of existing material.
- Construction loads: During construction operations, heavy equipment may cross existing or proposed pipe. In this case, an earth fill should be constructed to at least three (3) feet above pipe. The fill must be sufficient to prevent the lateral displacement of the pipe.
- Unless otherwise specified, the City of Peoria requires that the asphaltic concrete mix design meet the current City of Phoenix mix design for a C-3/4" mix. Copies of this mix design and related product codes are available from the Engineering Department.
- All Contractors are responsible to construct stabilized construction entrances in order to reduce or eliminate the tracking of sediment onto public rights-of-ways or streets. Gravel track-out pads shall meet current Maricopa County standards. The contractor shall immediately remove any sediment tracked onto public rights-of-ways or streets.
- If any existing barricades, traffic signs or street name signs need to be removed during construction, notify the City of Peoria Public Works Streets Division at (623) 773-7432. A minimum of 48-hours notice is needed for removals. If signs and barricades belong to another agency, it is the responsibility of the contractor to notify them.
- No water supply hose or ramps shall be placed across or in the arterial or collector streets.

CITY OF PEORIA ARIZONA DEPARTMENT OF PUBLIC WORKS							
91st AVENUE – DEER VALLEY ROAD							
GENERAL NOTES							
DR HT	DES	SR	ICK	SR	SHEET	TOTAL	AS
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	NO.	SHEETS	BUILT
SCALE: 1" = HORIZONTAL VERTICAL					GN01	2 OF 17	

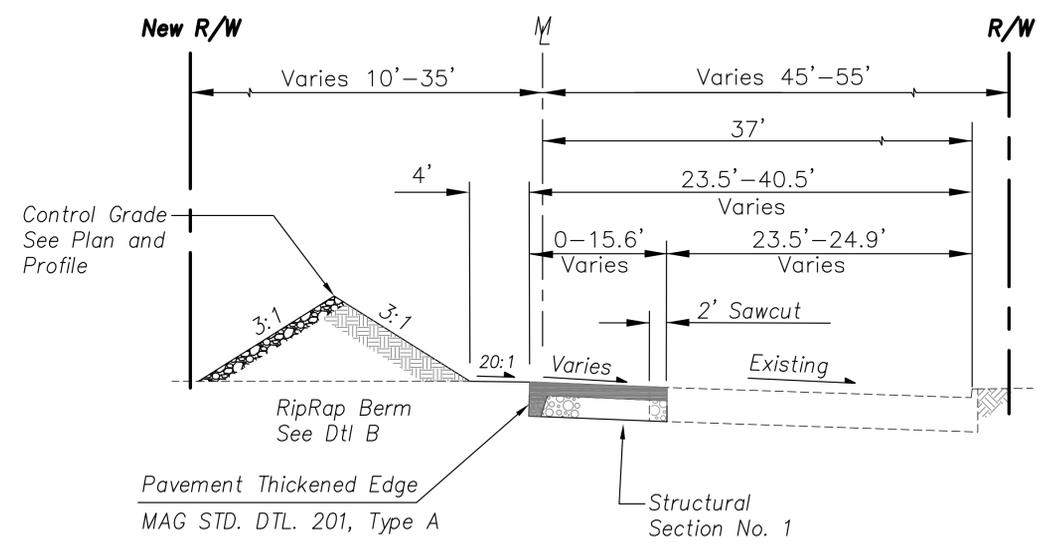
91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA



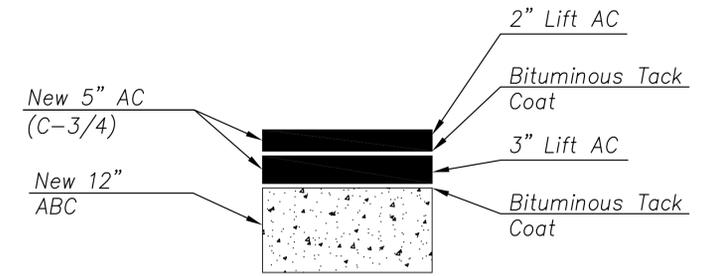
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

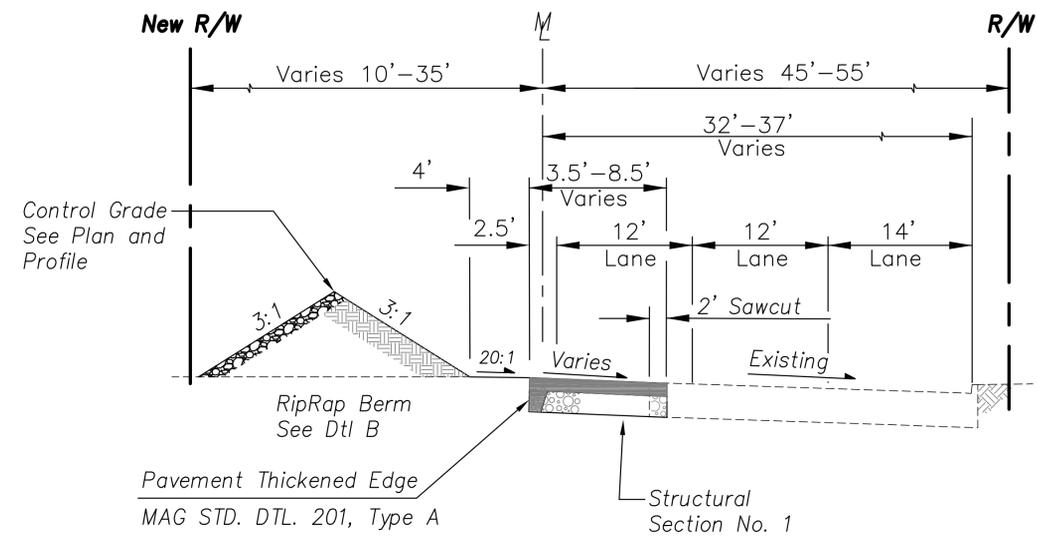
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TYPICAL SECTION 1
DEER VALLEY ROAD
Sta 40+32.41 to Sta 47+32.52



PAVEMENT STRUCTURAL SEC NO 1



TYPICAL SECTION 2
DEER VALLEY ROAD
Sta 47+32.52 to Sta 49+45.74

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

CITY OF PEORIA ARIZONA DEPARTMENT OF PUBLIC WORKS					
91st AVENUE - DEER VALLEY ROAD					
TYPICAL SECTIONS AND DETAILS DEER VALLEY ROAD					
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DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	SHEET NO.	TOTAL SHEETS
SCALE: 1" = 10' HORIZONTAL 2" = 2' VERTICAL				TY01	3 OF 17

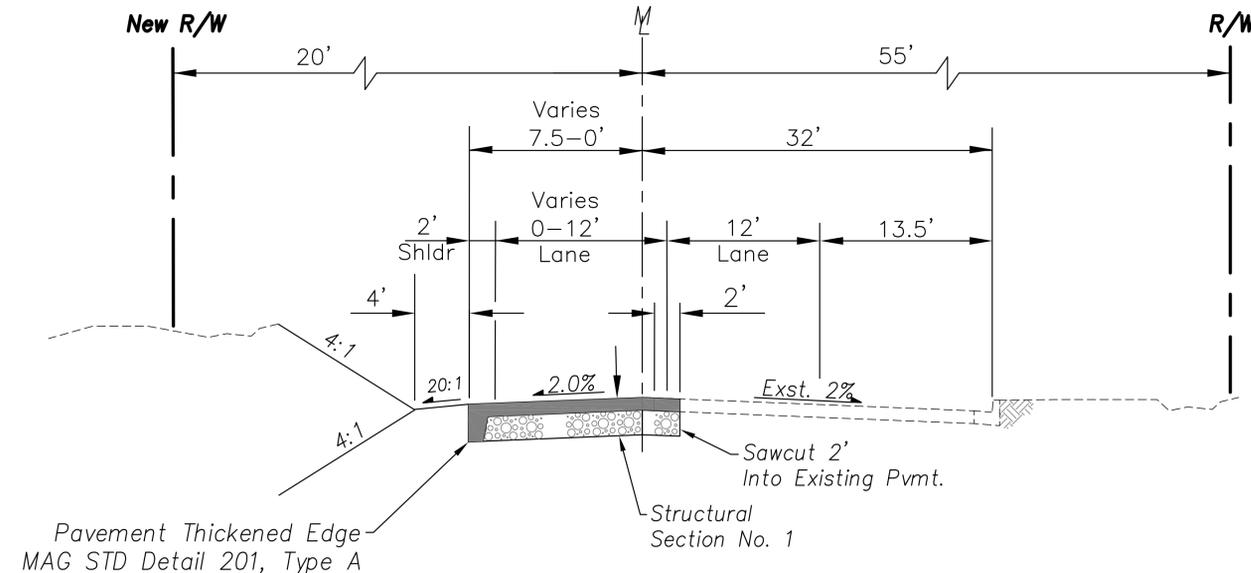
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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

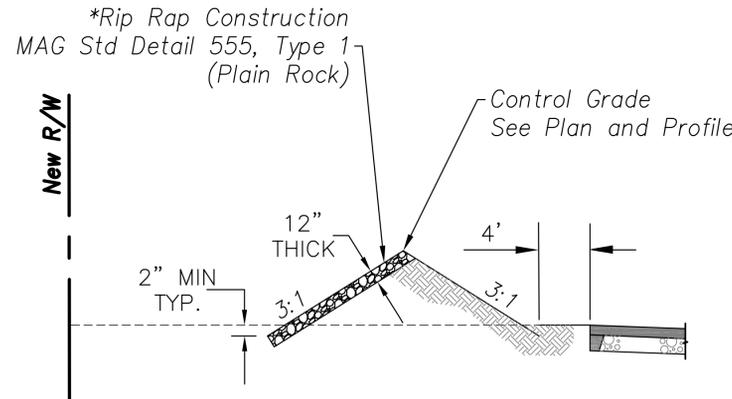


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				
KIRKHAM MICHAEL					
9201 North 25th Avenue - Suite 195 Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592					
DES	DR:	CK:	DATE:		

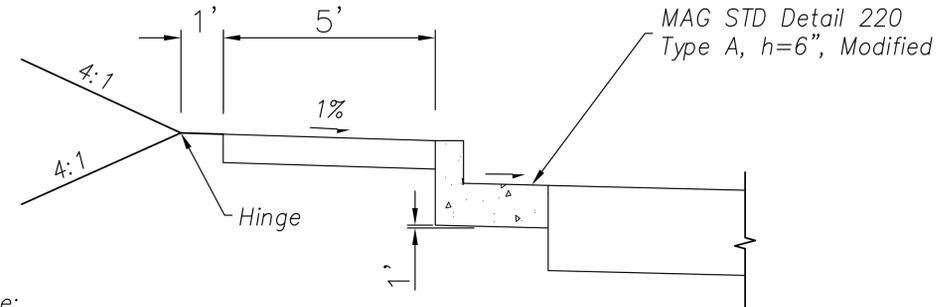
90% REVIEW



TYPICAL SECTION 3
91st Avenue
Sta 20+50.82 to Sta 27+65.00



RIPRAP BERM
Detail B



Note:
All Other MAG STD Detail 220, Type A
Dimensions Remain Unchanged
See PPO3 & PPO6

SPECIAL CURB AND GUTTER
Detail A

Lt Sta 49+45.74 Deer Valley Rd to Lt Sta 20+61.17 91st Avenue

BERM CONSTRUCTION NOTES

- EXISTING BERM TO BE REMOVED A MINIMUM OF TWO (2) INCHES BELOW THE EXISTING TOE OF SLOPE.
- THE CONTRACTOR SHALL STOCKPILE AND RE-USE SOIL AND ROCK TO CONSTRUCT NEW BERM ALIGNMENT PER THE PLANS.
- THE REMOVAL OF EXISTING VEGETATION AND DEBRIS SHALL BE INCLUDED IN THE LINEAR FOOT COST ASSOCIATED WITH REMOVAL AND STOCKPILE OF THE EXISTING BERM.
- RE-USED FILL MATERIAL SHALL BE FREE OF VEGETATION AND ROCKS HAVING A DIAMETER GREATER THAN SIX (6) INCHES.
- ANY NEW FILL MATERIAL NECESSARY TO CONSTRUCT THE BERM IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE NEW BERM ALIGNMENT.
- COMPACTION LAYERS SHALL BE SIX (6) INCHES MAXIMUM.
- COMPACTION SHALL MEET SPECIFIED DENSITIES AT OR NEAR THE OPTIMUM MOISTURE CONTENT (2% VARIATION) IN ACCORDANCE WITH MAG SPECIFICATION SECTION 211.
- COMPACTION TO BE 95% MINIMUM PER MAG SPECIFICATIONS.
- FIELD DENSITY TESTS SHOULD BE TAKEN FOR EACH TWELVE (12) INCHES OF COMPACTED FILL EVERY 200 FEET OF LENGTH ALONG THE BERM ALIGNMENT OR AT THE DISCRETION OF THE CITY INSPECTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR GRADING THE AREA TO DRAIN NORTH OF THE BERM. THE COST ASSOCIATED WITH THIS ITEM IS CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE NEW BERM ALIGNMENT.
- CONSTRUCTION OF BERM SHALL BE DONE IN ACCORDANCE WITH MAG SPECIFICATION 211, THE SPECIAL PROVISIONS, AND THESE PLANS.

CITY OF PEORIA ARIZONA DEPARTMENT OF PUBLIC WORKS					
91st AVENUE - DEER VALLEY ROAD TYPICAL SECTIONS AND DETAILS 91st Avenue					
DR	HT	DES	HT	ICK	KAG
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	SHEET	TOTAL
SCALE: 1" = 20' HORIZONTAL 1" = 2' VERTICAL				NO.	AS BUILT
				TY02	4 OF 17

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA



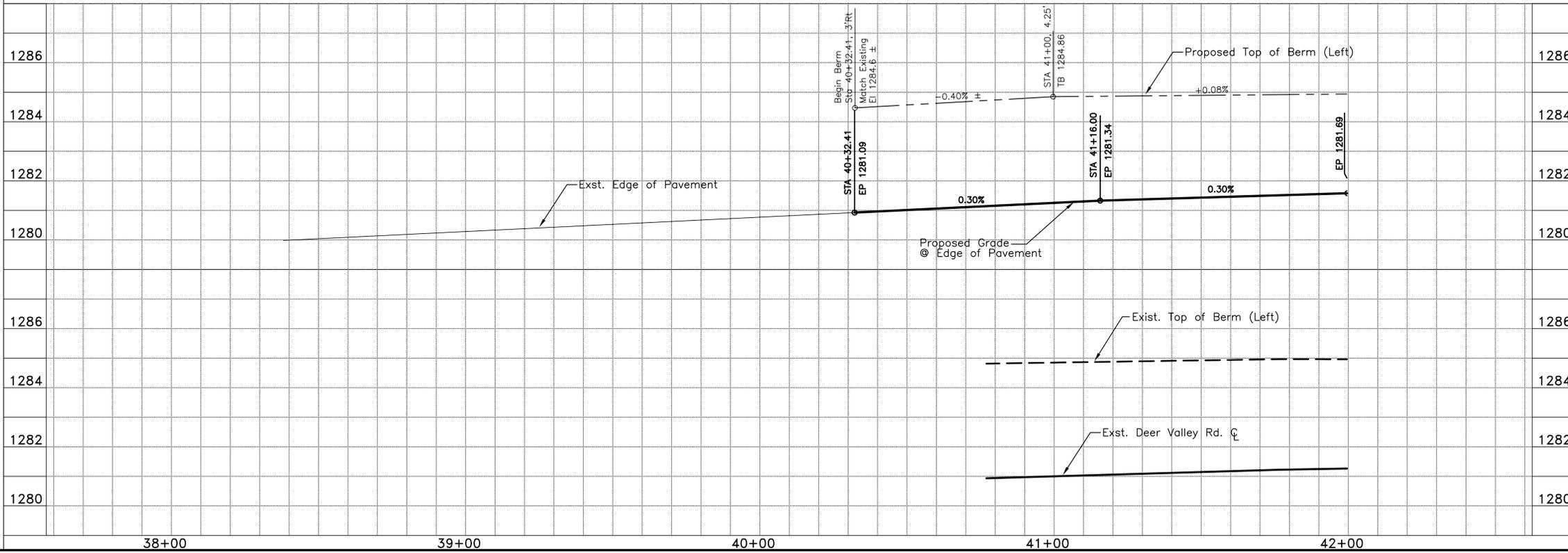
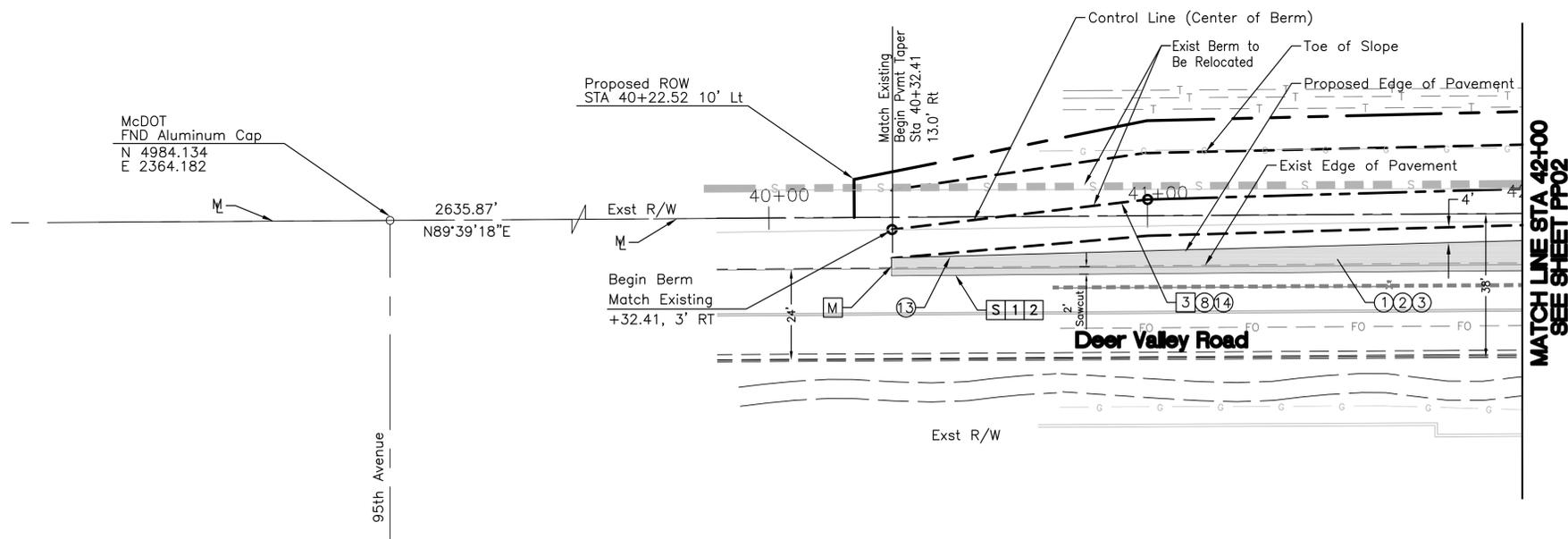
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



DES: _____ DR: _____ CK: _____ DATE: _____

SAWCUT AND MATCH EXISTING
 MATCH EXISTING

CONSTRUCTION NOTES

1	Saw Cutting	168 SY
2	Removal of A.C Pavement	37 SY
3	Remove Berm & Stockpile	342 CY

SHEET TOTALS

ITEM	DESCRIPTION	QUANTITY
1	SUBGRADE PREPARATION	189 SY
2	ASPHALT CONCRETE SURFACE COURSE, TYPE 'C' 3/4", 5" THICK	42 T
3	ASPHALT CONCRETE BASE COURSE, 12" THICK	66 T
8	RIPRAP BERM-MAG STD DTL 555 TYPE 1(SEE DTL B)	76 C.Y.
13	PAVEMENT THICKENED EDGE PER MAG STD DETAIL 201, TYPE A QUANTITY INCLUDED IN ITEM 2, ASPHALT CONCRETE.	
14	CONSTRUCT NEW BERM ALIGNMENT PER DETAIL ON SHEET TY02 AND PLANS	266 C.Y.

CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE - DEER VALLEY ROAD
PLAN AND PROFILE
Sta 38+00 to Sta 42+00

DR HT	DES HT	ICK KAG	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06	PP01	5 OF 17	

SCALE: 1" = 20' HORIZONTAL
VERTICAL

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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

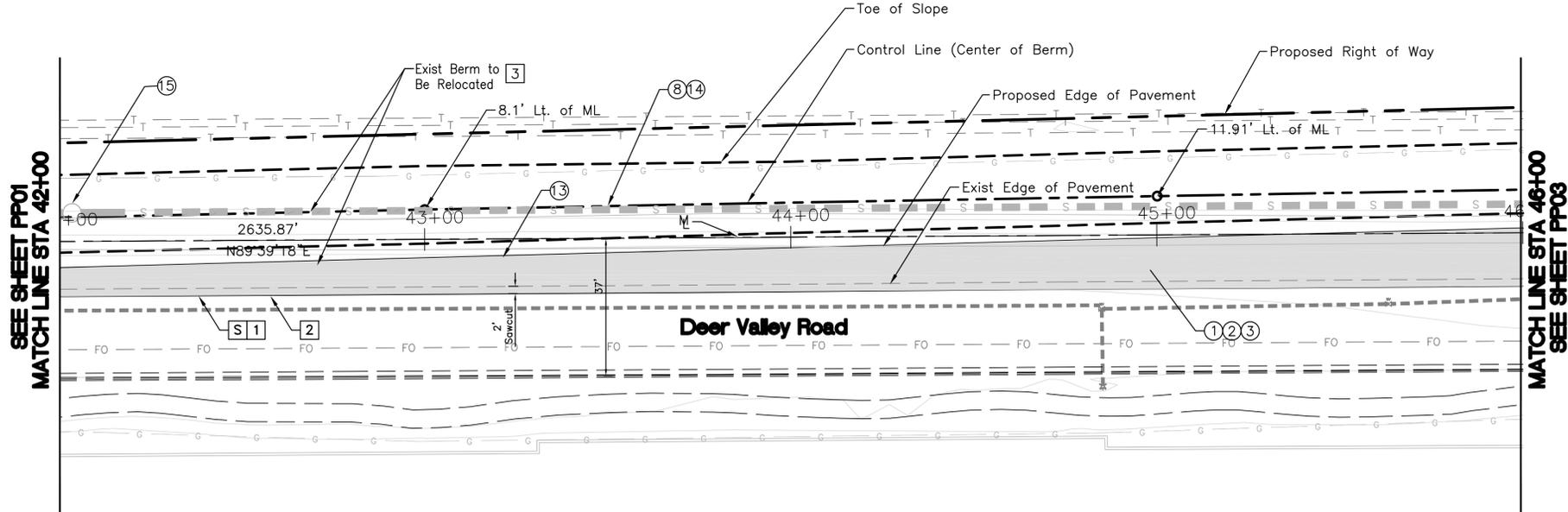


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER



NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE



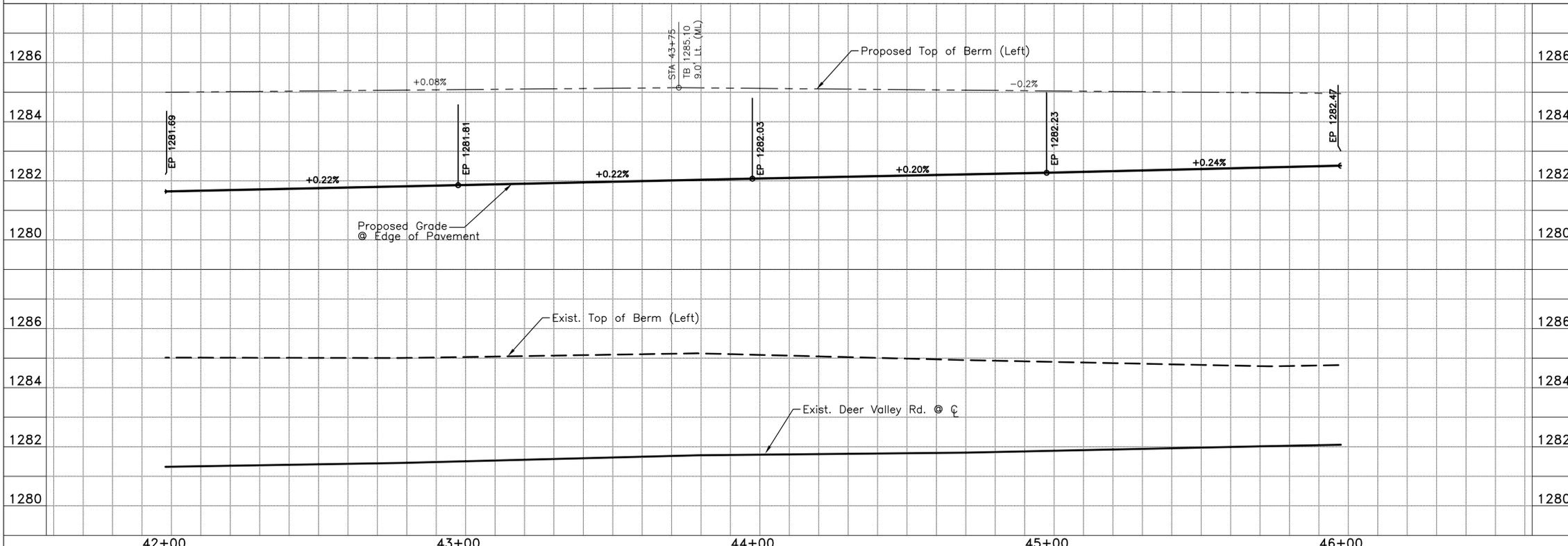
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SAWCUT AND MATCH EXISTING
 MATCH EXISTING

CONSTRUCTION NOTES

1	Saw Cutting	400 LF
2	Removal of A.C Pavement	89 SY
3	Remove Berm & Stockpile	772 CY

ITEM	DESCRIPTION	QUANTITY
1	SUBGRADE PREPARATION	700 SY
2	ASPHALT CONCRETE SURFACE COURSE, TYPE 'C' 3/4", 5" THICK	172 T
3	ASPHALT CONC. BASE 12" THICK	319 T
8	RIPRAP BERM-MAG STD DTL 555 TYPE 1(SEE DTL B)	179 C.Y.
3	PAVEMENT THICKENED EDGE PER MAG STD DETAIL 201, TYPE A. QUANTITY INCLUDED IN ITEM 2 ASPHALT CONCRETE.	
4	CONSTRUCT NEW BERM ALIGNMENT PER DETAIL ON SHEET TY02 AND PLANS	593 C.Y.
5	ADJUST SEWER MANHOLE	1 EA



CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE - DEER VALLEY ROAD
PLAN AND PROFILE
Sta 42+00 to Sta 46+00

DR HT	DES HT	ICK	KAG	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06		P02	6 OF 17	

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

K:\05\0501905 - PEORIA_P02_S02A\0501905\Plan\91st\91st_Plan_P02.dwg Administrator 02/05/07 - 4:22 P

91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA



**PRELIMINARY
NOT FOR
CONSTRUCTION**

90% REVIEW

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

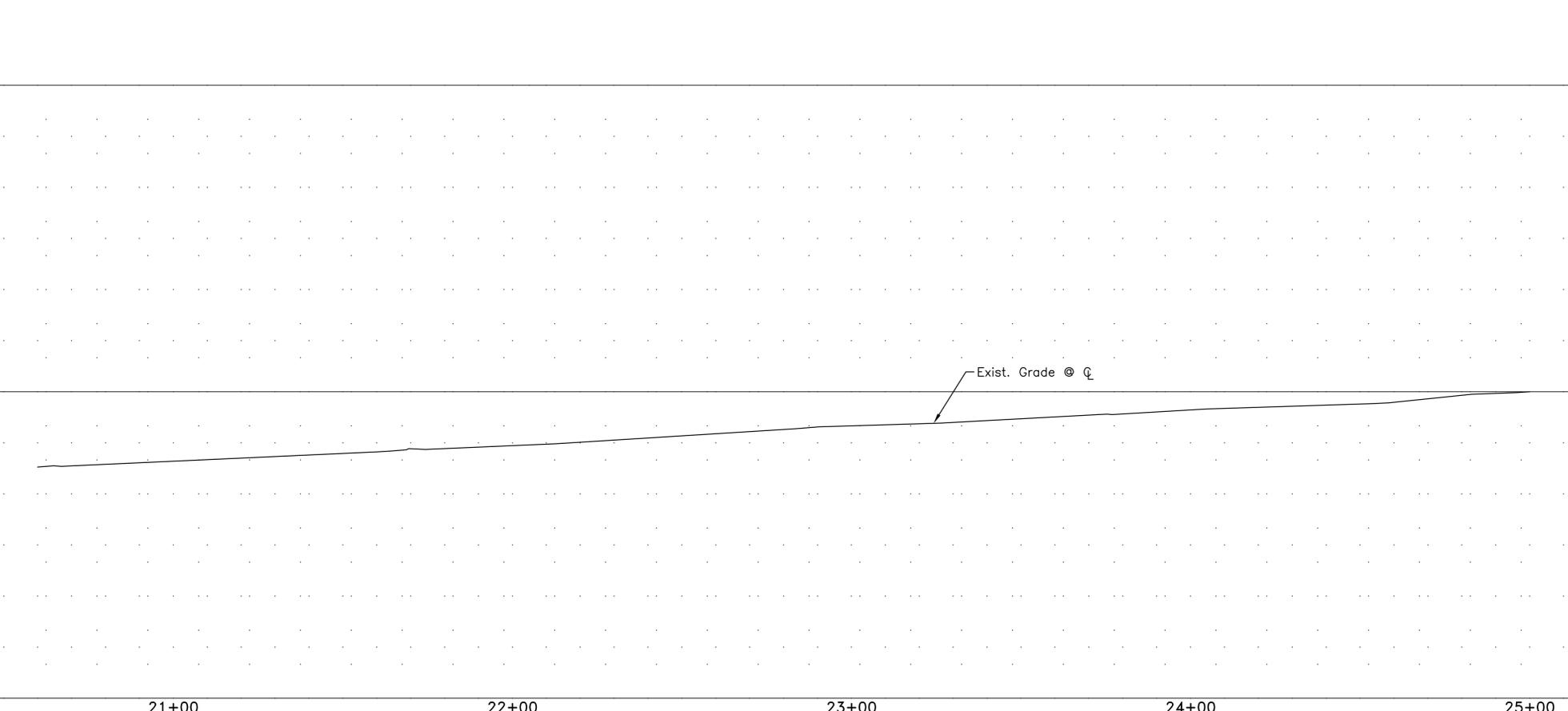
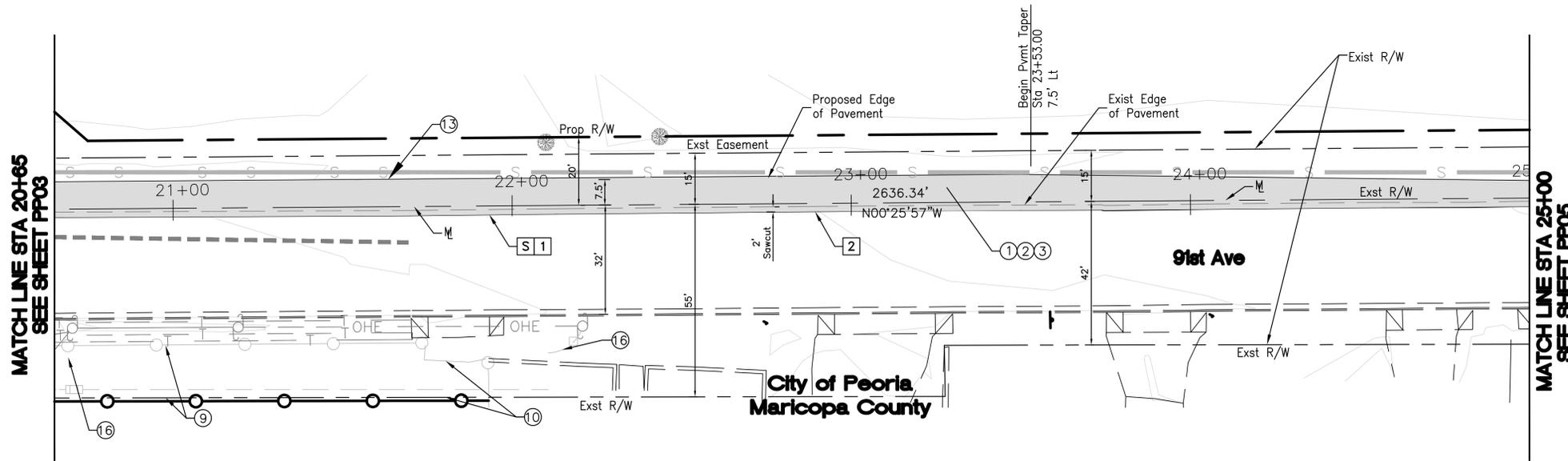
KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

DES: _____ DR: _____ CK: _____ DATE: _____

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE



<input type="checkbox"/> SAWCUT AND MATCH EXISTING	
<input type="checkbox"/> MATCH EXISTING	
CONSTRUCTION NOTES	
1 Saw Cutting	435 LF
2 Removal of A.C Pavement	97 SY

SHEET TOTALS		
ITEM	DESCRIPTION	QUANTITY
1	SUBGRADE PREPARATION	676 SY
2	ASPHALT CONCRETE SURFACE COURSE, TYPE 'C' 3/4", 5" THICK	162 T
3	ASPHALT CONCRETE BASE COURSE, 12" THICK	299 T
9	RELOCATE EXISTING FENCE	118 LF
10	RELOCATE EXISTING GATE	1 EA
13	PAVEMENT THICKENED EDGE PER MAG STD DETAIL 201, TYPE A. QUANTITY INCLUDED IN ITEM 2 ASPHALT CONCRETE.	
16	SEE SHEETS TS01-TS03 FOR TRAFFIC SIGNAL INSTALLATION	

CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE - DEER VALLEY ROAD
PLAN AND PROFILE
Sta 20+64 to Sta 25+00

DR HT	DES HT	CHK SR	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06	PP04	8 OF 17	

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA



**PRELIMINARY
NOT FOR
CONSTRUCTION**

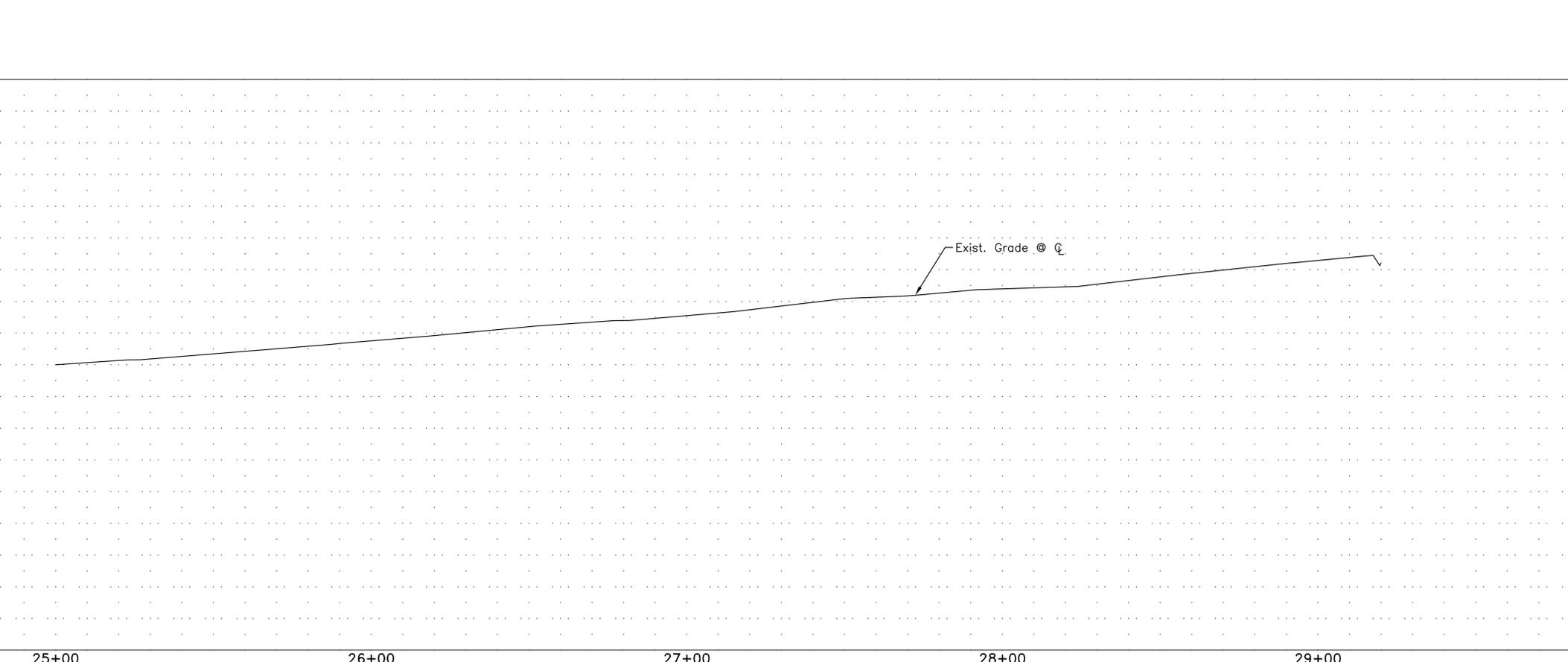
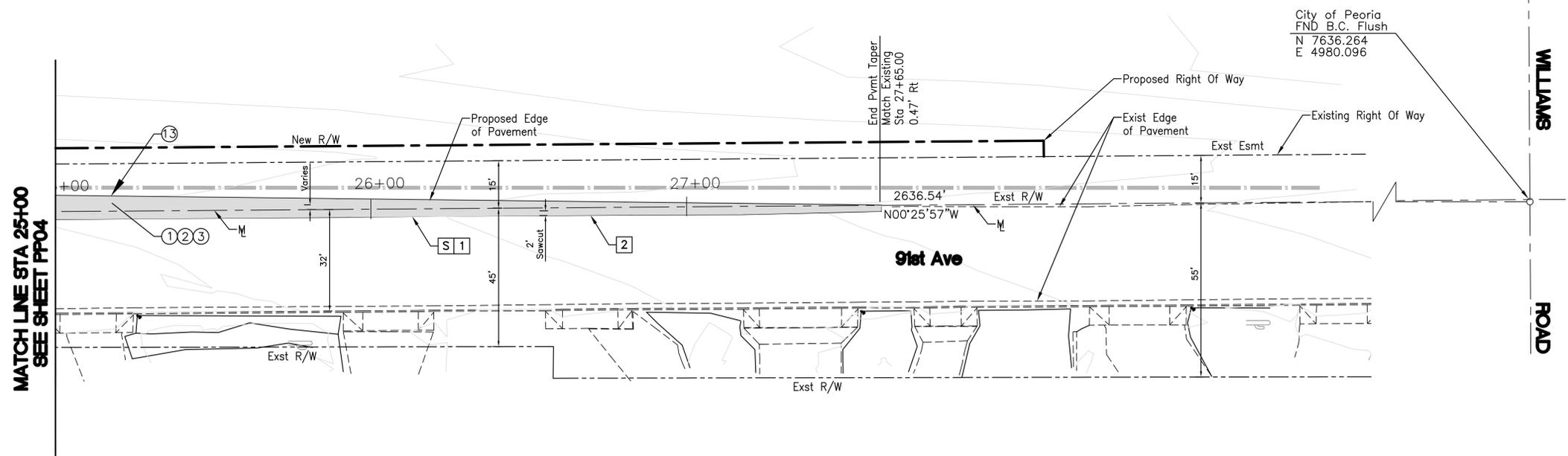
90% REVIEW

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

DES: _____ DR: _____ CK: _____ DATE: _____

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



<input type="checkbox"/> SAWCUT AND MATCH EXISTING		
<input type="checkbox"/> MATCH EXISTING		
CONSTRUCTION NOTES		
1 Saw Cutting	265 LF	
2 Removal of A.C Pavement	59 SY	
SHEET TOTALS		
ITEM	DESCRIPTION	QUANTITY
1	SUBGRADE PREPARATION	258 SY
2	ASPHALT CONCRETE SURFACE COURSE, TYPE 'C' 3/4", 5" THICK	55 T
3	ASPHALT CONCRETE BASE COURSE, 12" THICK	82 T
13	PAVEMENT THICKENED EDGE PER MAG STD DETAIL 201, TYPE A. QUANTITY INCLUDED IN ITEM 2 ASPHALT CONCRETE.	

CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS

91st AVENUE - DEER VALLEY ROAD

PLAN AND PROFILE
Sta 25+00 to Sta 29+00

DR. HT.	DES. HT.	ICK	SR	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	PP05	9 OF 17	

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

**PRELIMINARY
NOT FOR
CONSTRUCTION**

90% REVIEW

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

DES: _____ DR: _____ CK: _____ DATE: _____

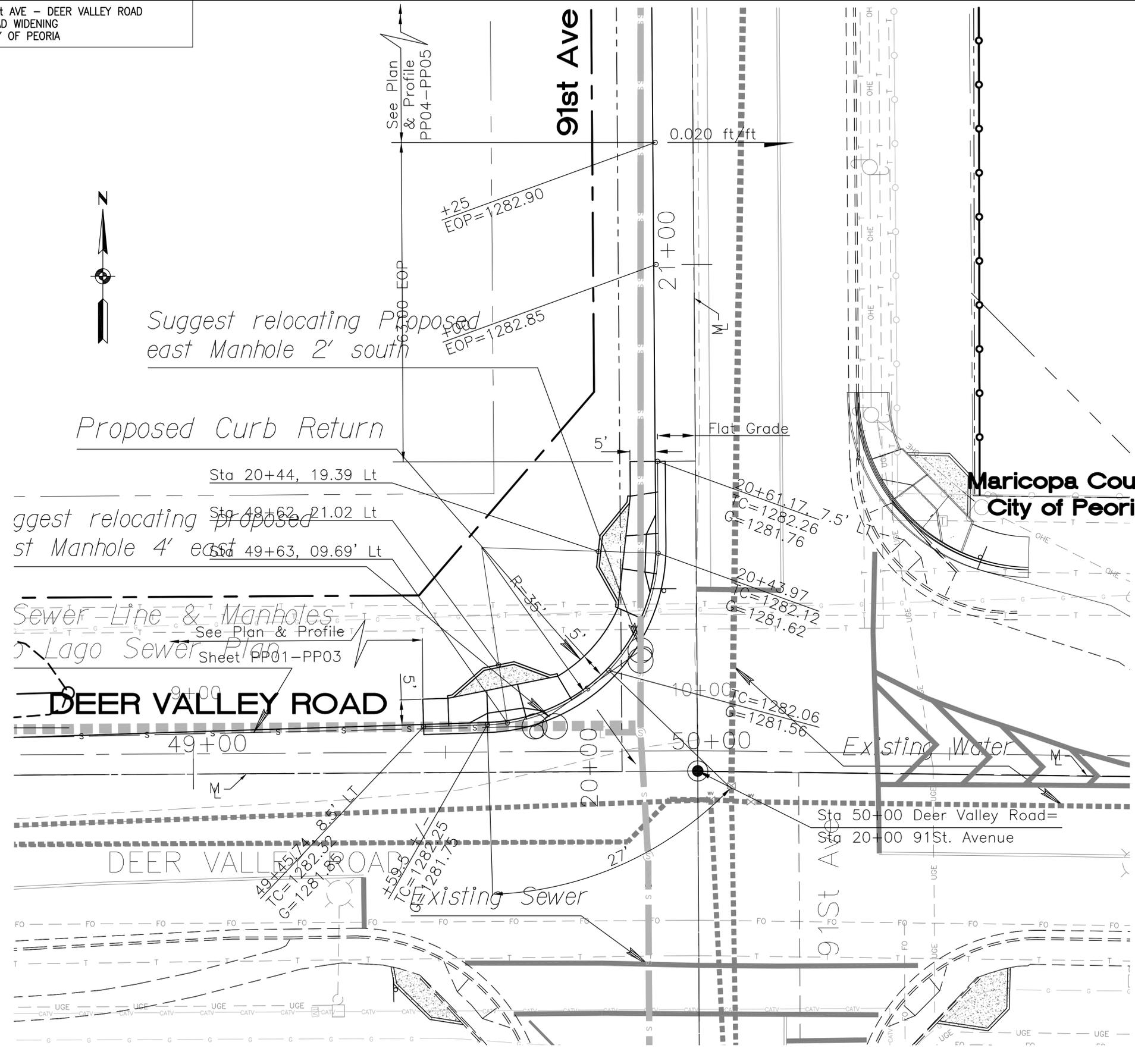
- SAWCUT AND MATCH EXISTING
- MATCH EXISTING

CONSTRUCTION NOTES

SHEET TOTALS

ITEM	DESCRIPTION	QUANTITY

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE



**Maricopa County
City of Peoria**

CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS

91st AVENUE - DEER VALLEY ROAD

STAKING PLAN
Sta 48+00 to Sta 50+00

DR	HT	DES	HT	CK	SR	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06			PP06	10 OF 17	

SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

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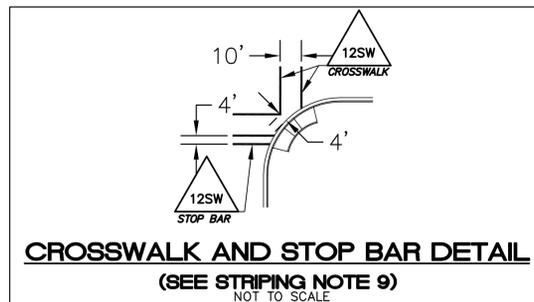
91st AVE – DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

STRIPING GENERAL NOTES

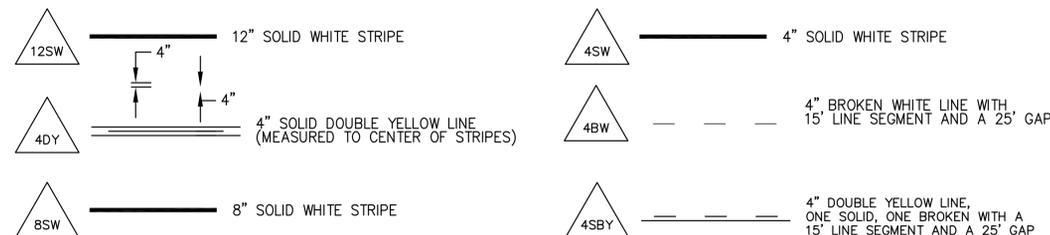
1. ALL PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), ADOT ADOPTED EDITION, PEORIA PAVEMENT MARKING DETAILS, THESE PLANS AND THE SPECIAL PROVISIONS.
2. CONTRACTOR TO SPOT MARK ENTIRE PROJECT BEFORE STRIPING IT. CONTRACTOR SHALL NOTIFY THE CITY OF PEORIA SENIOR TRAFFIC ENGINEERING TECHNICIAN AT LEAST 48 HOURS IN ADVANCE OF ANY STRIPING AT (623) 773-7536, TO MAKE ARRANGEMENTS FOR INSPECTION PRIOR TO APPLYING ANY PAINT. ANY STRIPING APPLIED BEFORE INSPECTION SHALL BE REMOVED AND RESTRIPEDED AT THE CONTRACTOR'S EXPENSE. IF NOT CONSISTENT WITH CITY STANDARDS. THE PERMANENT PAVEMENT MARKING PLANS MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.
3. ALL LONGITUDINAL STRIPING, SUCH AS LANE LINES, EDGE LINES, CENTER LINES, TAPER LINES, AND CROSSHATCH SHALL BE INSTALLED WITH WATER BASED PAINT AS PER STRIPING PLANS. CROSSWALKS, STOP BARS, AND ARROWS SHALL BE INSTALLED, IN ACCORDANCE WITH THE CITY OF PEORIA STANDARD, THERMOPLASTIC MATERIAL APPLIED WITH A THICKNESS OF NINETY (90) MILS IN ALKYD THERMOPLASTIC PAINT.
4. RAISED PAVEMENT MARKERS WILL NOT BE INSTALLED ON THIS PROJECT.
5. WHEN STRIPING OBLITERATION IS NECESSARY, IT SHALL BE ACCOMPLISHED BY WATERBLASTING OR OTHER METHODS APPROVED BY THE CITY. IF THE REMOVAL OF THE STRIPING CAUSES A DEPRESSION OF 1/8 INCH OR GREATER IN DEPTH OF THE PAVEMENT SURFACE, THE CONTRACTOR SHALL SEAL THE AREA WITH SLURRY PER M.A.G. STANDARD SPECIFICATIONS 713 AND 715, TYPE 1. PAINTING OVER STRIPING DOES NOT CONSTITUTE STRIPE OBLITERATION. STRIPING OBLITERATION MAY GO BEYOND THE PROJECT LIMITS, SO THE NEW STRIPING WILL MATCH EXISTING.
6. AN APPROVED SET OF PLANS SHALL BE ON THE SITE DURING CONSTRUCTION AND INSPECTION.
7. ALL EXISTING PAVEMENT MARKING AND TRAFFIC SIGNS THAT NEED TO BE REMOVED, REPLACED, RELOCATED OR REPAIRED BECAUSE OF CONTRACTOR'S WORK SHALL BE DONE BY THE CONTRACTOR AT HIS EXPENSE. ALL TRAFFIC SIGNS THAT ARE REMOVED SHALL BE STOCKPILED ON THE PROJECT SITE AND THE CONTRACTOR IS TO NOTIFY THE INSPECTOR WHEN ALL SIGNS HAVE BEEN REMOVED.
8. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE CITY INSPECTOR, BY SWEEPING AND/OR AIR JET BLOWING, IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS.
9. CROSSWALK AND STOP BARS SHALL BE INSTALLED PRIOR TO ACTIVATION OF TRAFFIC SIGNALS.

NOTE TO CONTRACTOR:

1. PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE EXISTING FIELD CONDITIONS AND THE QUANTITIES OF WORK REQUIRED TO COMPLETE THE WORK OF THIS PROJECT. NO CLAIM SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY HEREIN, ACTUAL OR RELATIVE.
2. ALL NO PARKING SIGNS SHALL BE VERTICALLY MOUNTED AT RIGHT ANGLES TO THE DIRECTION OF, AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE.
3. ALL EXISTING PAVEMENT MARKINGS INCLUDING RPM'S WHICH ARE OBSOLETE OR CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE OBLITERATED PRIOR TO THE INSTALLATION OF THE NEW PAVEMENT MARKINGS.
4. THE DIMENSIONS SHOWN TO PAVEMENT STRIPING ARE TO THE CENTER OF THE STRIPING OR, IN THE CASE OF DOUBLE STRIPING, TO THE CENTER OF THE DOUBLE STRIPE.
5. ALL STREET NAME SIGNING SHALL BE MANUFACTURED PER CITY OF PEORIA STANDARDS. TEXT LETTER SHALL BE 6 INCHES.
6. ALL EXISTING STRIPING AND SIGNAGE NOT IN CONFLICT WITH NEW STRIPING AND SIGNAGE TO REMAIN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. EXISTING PAVEMENT MARKINGS AND RPM'S IN CONFLICT WITH NEW STRIPING, SHALL BE REMOVED PER CITY OF PEORIA'S SPECIFICATIONS, WHETHER OR NOT THEY ARE CALLED OUT ON THE PLAN.
8. EXISTING STOP SIGNS SHALL REMAIN UNTIL TRAFFIC SIGNAL BECOMES FULLY OPERATIONAL AND SIGNAL TESTING IS COMPLETE.



LEGEND



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

DES: DR: CK: DATE:

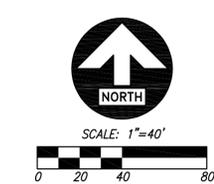
90% REVIEW

SIGNING GENERAL NOTES

1. ALL SIGNS SHALL BE IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) ADOT ADOPTED EDITION, CITY OF PEORIA DETAILS #132-1 AND #132-2, THESE PLANS AND THE SPECIAL PROVISIONS.
2. CONTRACTOR SHALL MARK ALL SIGN LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL CALL CITY OF PEORIA PROJECT INSPECTOR, TO MAKE ARRANGEMENTS FOR INSPECTION PRIOR TO ANY PERMANENT SIGN INSTALLATION. ANY SIGNING INSTALLED PRIOR TO INSPECTION, IF IMPROPERLY INSTALLED, SHALL BE REMOVED AND REINSTALLED AT THE CONTRACTOR'S EXPENSE. THE PERMANENT SIGNING PLANS MAY BE MODIFIED AS DIRECTED BY THE TRAFFIC ENGINEER OR HIS REPRESENTATIVE.
3. ALL EXISTING SIGNING PERMANENTLY REMOVED BY THE CONTRACTOR SHALL BE SALVAGED FOR RETURN TO THE CITY OF PEORIA SIGN SHOP AT 8850 NORTH 79TH AVENUE. CONTACT THE TRAFFIC MAINTENANCE SUPERVISOR AT (623)773-7470.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL SIGNING ON 1 3/4" SQUARE TUBE PERFORATED POSTS, POSTS AND FOUNDATIONS FOR THE SIGN POSTS, AT LOCATIONS SHOWN ON THE PLANS. FOR ANY QUESTIONS CONCERNING SIGNING, CONTACT THE PROJECT INSPECTOR.
5. ALL STATION LOCATIONS AND OFFSETS SHOWN ON THE SIGNING PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE ACTUAL SIGN LOCATIONS WITH THE TRAFFIC ENGINEER, OR HIS REPRESENTATIVE, PRIOR TO INSTALLATION. ALL TRAFFIC SIGNS SHALL BE ATTACHED TO THE STREET LIGHT POLES IF THE POLE IS WITHIN 25 FEET OF THE SIGN LOCATION AS SHOWN ON THE PLANS.
6. ALL POSTS, FOUNDATIONS, AND SIGN PANELS SHALL BE NEW.
7. STANDARD OFFSET FOR ALL SIGNS IS 12 FEET FROM THE NEAR EDGE OF SIGN TO THE EDGE OF PAVEMENT WITHOUT CURB AND GUTTER, AND 2 FEET MINIMUM FROM THE NEAR EDGE OF SIGN TO THE FACE OF CURB WITH CURB AND GUTTER, OR 2 FEET FROM THE BACK OF SIDEWALK.
8. ALL SIGNS SHALL BE MADE OF FLAT SHEET ALUMINUM PANELS WITH REFLECTIVE SHEETING AND DIRECT APPLIED CHARACTERS PER SECTIONS 465.2.03 AND 465.2.05 OF THE MCDOT SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. ALL SIGN SHEETING SHOULD BE ASTM TYPE IV HIGH INTENSITY SHEETING.
9. EXISTING STOP SIGNS SHALL NOT BE REMOVED UNTIL SIGNAL IS FULLY OPERATIONAL.

STRIPING AND SIGNING QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
WHITE THERMOPLASTIC PAVEMENT MARKING (4" EQUIVALENT)	LF	7088
YELLOW THERMOPLASTIC PAVEMENT MARKING (4" EQUIVALENT)	LF	8318
OBLITERATE EXISTING WHITE PAVEMENT MARKING (4" EQUIVALENT)	LF	3480
OBLITERATE EXISTING YELLOW PAVEMENT MARKING (4" EQUIVALENT)	LF	6497
THERMOPLASTIC PAVEMENT MARKING SYMBOL (LEFT TURN ARROW)	EA	4
FLAT SHEET ALUMINUM SIGN PANEL (4 - W32-1AZ)	SF	36
PERFORATED SIGN POST	LF	12
PERFORATED SIGN POST FOUNDATION	EA	1
U-CHANNEL SIGN POST	LF	48
U-CHANNEL SIGN POST FOUNDATION	EA	4
RELOCATE EXISTING SIGN	EA	1



CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE – DEER VALLEY ROAD
PAVEMENT SIGNING AND STRIPING
NOTES

DR HT	DES HT	ICK	KAC	SHEET	TOTAL	AS
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	NO.	SHEETS	BUILT
SCALE: 1" = - HORIZONTAL				SS01	11 OF 17	
				VERTICAL		

K:\05\0501905 - PEORIA - P205 - SIGNALS\CADD\Plan\91st\1905_S501.dwg Administrator 02/07/07 - 2:14 P

91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

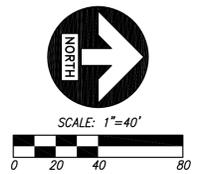
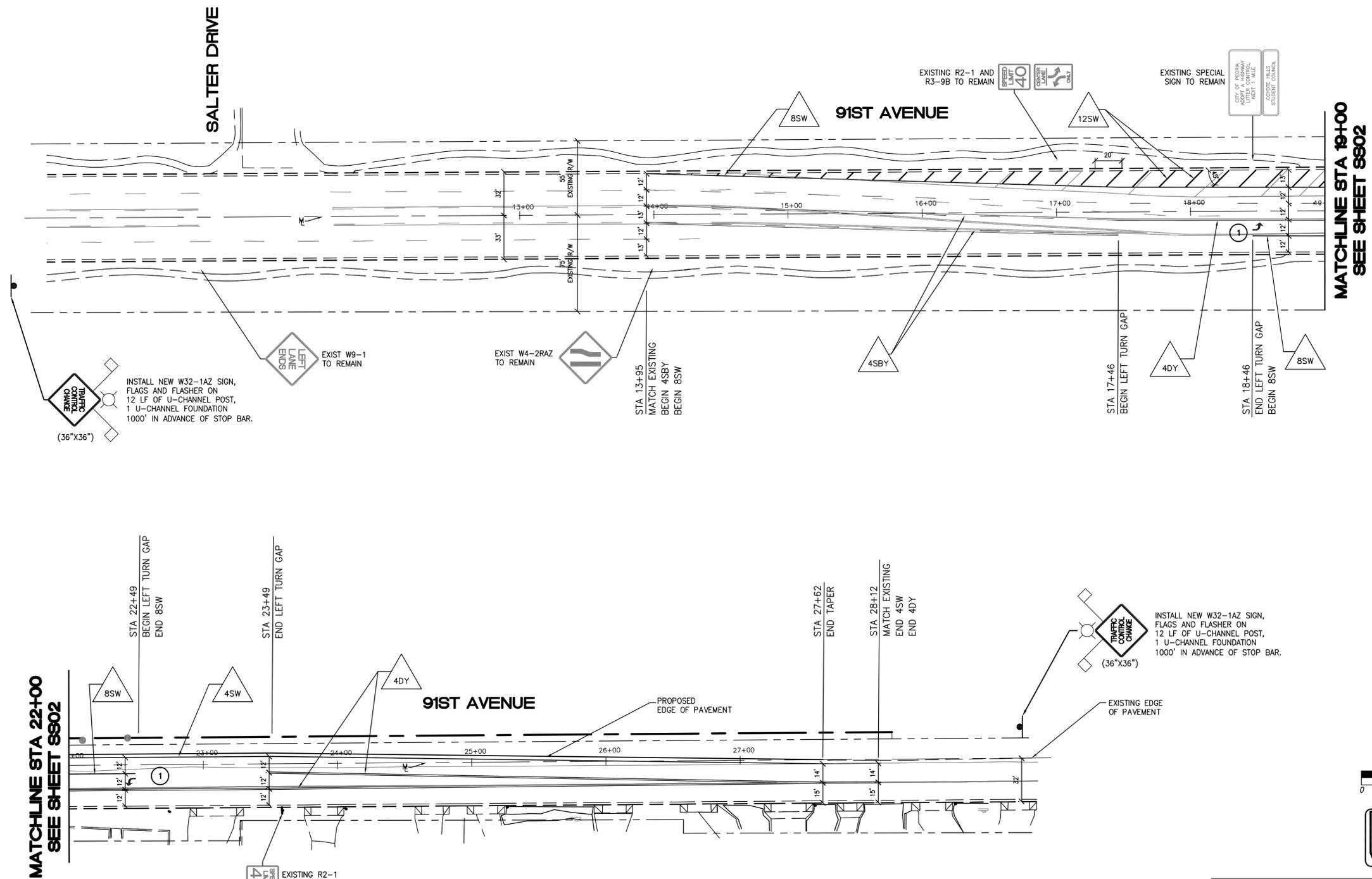


F.H.W.A. REGION 9	STATE ARIZ	PROJ. NO.	NO.	TOTAL	AS BUILT
KIRKHAM MICHAEL					
9201 North 25th Avenue - Suite 195 Phoenix, AZ 85021 (602)944-6564 Fax (602)944-6592					
DES	DR:	CK:	DATE:		

STRIPING CONSTRUCTION NOTES

- 1 INSTALL LEFT TURN ARROW

NO.	DESCRIPTION	REV BY	CHK BY	DATE



CITY OF PEORIA ARIZONA DEPARTMENT OF PUBLIC WORKS					
91st AVENUE - DEER VALLEY ROAD SIGNING AND PAVEMENT MARKING Sta 13+00 to Sta 19+00 Sta 22+00 to Sta 30+00					
DR	HT	DES	HT	CK	KAC
DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06	DATE: 09/06
SCALE: 1" = 40'		HORIZONTAL		VERTICAL	
SS03		13 OF 17		AS BUILT	

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91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

TRAFFIC SIGNAL QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
APS Junction Box	EA	1
No. 7 Pull Box (ADOT Standard)	EA.	3
No. 7 Pull Box w/ Extension	EA.	1
Sch 40 PVC APS Electrical Service Conduit (2 1/2")	LF	150
Sch 40 PVC Electrical Conduit (3" trench)	LF	75
Sch 40 PVC Electrical Conduit (2-3" trench)	LF	50
Sch 40 PVC Electrical Conduit (2-3" directional boring)	LF	250
Pole Foundation, Type A	EA.	1
Pole Foundation, Type Q	EA.	1
Pole Foundation, Type R	EA.	1
Pole Foundation, Type K (City of Peoria)	EA.	2
ADOT Type A (10') Signal Pole	EA.	1
ADOT Type Q Signal Pole	EA.	1
ADOT Type K Mod. Signal Pole (Specialty)	EA.	1
ADOT Type K Mod. Signal Pole	EA.	1
ADOT Type R Signal Pole	EA.	1
ADOT Signal Mast Arm, 30 ft	EA	2
ADOT Signal Mast Arm, 45 ft	EA	1
ADOT Signal Mast Arm, 50 ft	EA	1
ADOT Luminaire Mast Arm, 20 ft	EA.	2
Electrical Service Pedestal (MYERS MEUG16-TS)	EA.	1
Meter Pedestal Foundation	EA	1
Control Cabinet Foundation	EA.	1
Signal Control Cabinet and Controller (TS2 Econolite ASC/2S-1000)	EA	1
Opticom Pre-emption Equipment (3-M)	LS	1
Furnish and Install Video Detection System (4 cameras) (Autoscope Econolite)	LS	1
Traffic Signal Face (Type F) (LED)	EA.	14
Traffic Signal Face (Pedestrian) (Man/Hand) (LED)	EA.	8
ADA Pedestrian Push Button w/ Sign	EA.	8
R10-4b(L) Ped. Push Button Sign	EA	4
R10-4b(R) Ped. Push Button Sign	EA	4
Traffic Signal Mounting Assembly (Type II) (Peoria)	EA.	8
Traffic Signal Mounting Assembly (Type X)	EA.	14
250 Watt HPS Luminaire (Horizontal Mount)	EA.	2
Furnish and Install Internally Illuminated Street Name Signs & Mounting Brackets	EA.	4
Electrical Conductors	LS	1

TRAFFIC SIGNAL GENERAL NOTES

- ALL MATERIAL, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) 2000 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION; THE ADOT TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS. LATEST EDITION; THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION ADOPTED BY ADOT; THE TRAFFIC SIGNAL SPECIAL PROVISIONS; THE CITY OF PEORIA TRAFFIC SIGNAL CABINET ASSEMBLY BID DOCUMENTATION FOR CONTROLLER ASSEMBLY SPECIFICATIONS, AND THESE PLANS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITIES FOR BLUE STAKE LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL MEET WITH THE CITY OF PEORIA INSPECTOR AND THE DESIGN ENGINEER FOR THESE PLANS AT THE PROJECT SITE AFTER UTILITIES HAVE BEEN LOCATED BY BLUE STAKE BUT PRIOR TO ANY CONSTRUCTION ACTIVITY OR ORDERING OF MATERIALS TO REVIEW THE TRAFFIC SIGNAL POLE LOCATIONS.
- APS ELECTRICAL SERVICE TO BE PROVIDED BY APS. FOR ELECTRIC SERVICE REQUIREMENTS, CONTACT ARIZONA PUBLIC SERVICE, BOBBY GARZA AT (602) 371-7989.
- EXISTING LANDSCAPING AND/OR IRRIGATION SYSTEM DISTURBED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR. CONTRACTOR SHALL CALL AND COORDINATE THIS WORK WITH THE CITY OF PEORIA COMMUNITY SERVICES LANDSCAPE MAINTENANCE SUPERVISOR AT (602) 773-7472.
- THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DURING CONSTRUCTION PER THE CITY OF PHOENIX TRAFFIC BARRICADE MANUAL. POLICE CONTROL FOR THE INTERSECTION IS REQUIRED ANYTIME THE TRAFFIC SIGNAL OPERATION IS TO BE INTERRUPTED, TO BE PROVIDED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOTIFY THE SENIOR TRAFFIC ENGINEERING TECHNICIAN, WITH THE CITY OF PEORIA, AT (623) 773-7536 AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF PEORIA PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS FOR TRAFFIC CONTROL, BARRICADING, SIGNING AND STRIPING AS PER THE CITY OF PHOENIX BARRICADE MANUAL AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION ADOPTED BY THE ARIZONA DEPARTMENT OF TRANSPORTATION.
- THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERROR AND OMISSIONS. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THESE PLANS.
- THE CONTRACTOR SHALL RETURN ALL REMOVED TRAFFIC SIGNAL EQUIPMENT TO THE CITY OF PEORIA MUNICIPAL OPERATIONS CENTER, 8850 N. 79TH AVENUE. CONTACT THE TRAFFIC MAINTENANCE SUPERVISOR AT (623) 773-7456 FOR MORE INFORMATION.
- ELECTRICAL SERVICE ADDRESS: IBD

UNDERGROUND UTILITIES

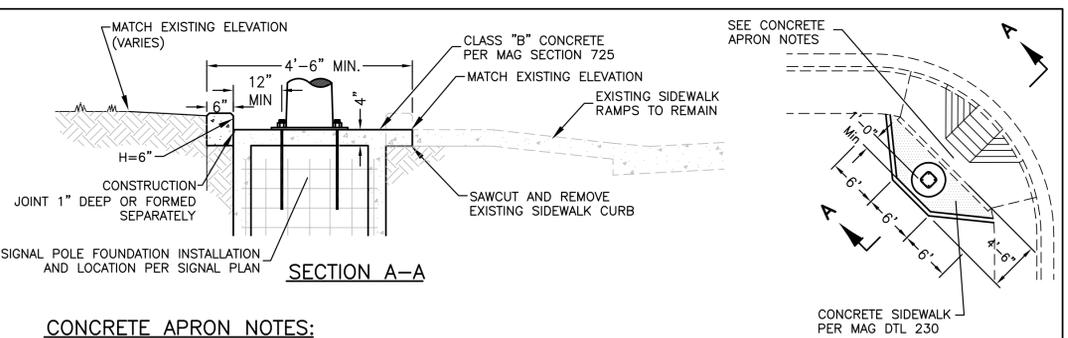
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR STRUCTURE DEPICTED HEREON ARE BASED UPON THE BEST AVAILABLE INFORMATION AT THE TIME OF THE FIELD SURVEY. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE DRAWINGS AND THE ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OF THEIR DEPICTED LOCATION ON THESE DRAWINGS. THE CONTRACTOR SHALL CONTACT BLUE STAKE AT (602) 263-1100, 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL INVOLVED AGENCIES, AND FIELD VERIFY EXACT LOCATIONS OF ALL UTILITIES. IF DISCREPANCIES EXIST THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

91ST AVENUE & DEER VALLEY ROAD		TYPE QO		100 AMP MAIN BKR	
120/240 1Ø 3W		PEDESTAL MOUNTED		NEMA 3R	
DESCRIPTION	BKR SIZE	LOAD A PHASE	LOAD B PHASE	DESCRIPTION	BKR SIZE
TRAFFIC SIGNAL CONTROLLER	50	5060	840	STREET LIGHTING	20
SIGN LIGHTING*	20		900		2
	1		840		4
	2				2
	3				2
	4				2
	5				2
	6				2
	7				2
	8				2
	9				2
	10				2
	11				2
	12				2
CODE TOTAL VA		5900	1740		
CODE TOTAL AMPS		49	14.5	10,000 AIC BREAKERS	

* LOAD X 1.25 FOR CONTINUOUS

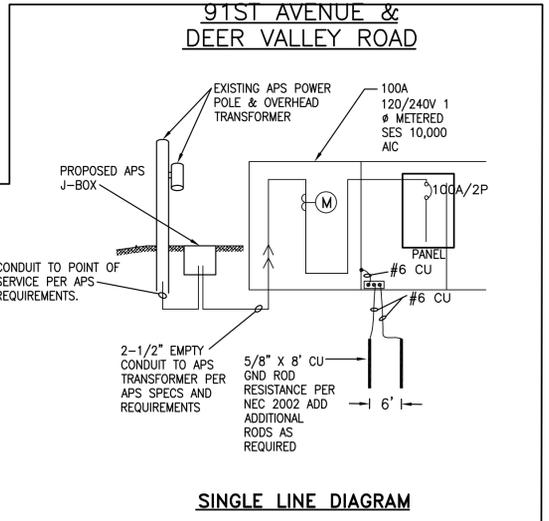
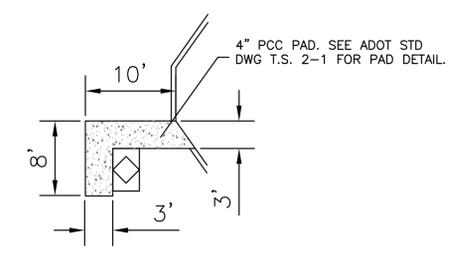
TRAFFIC SIGNAL LEGEND

- NEW SIGNAL POLE/CONTROLLER IDENTIFIER
- NEW CONDUIT RUN IDENTIFIER
- NEW PULL BOX IDENTIFIER
- NEW CONTROL CABINET & CONTROLLER
- NEW NO. 7 PULL BOX
- NEW NO. 7 PULL BOX WITH EXTENSION
- NEW CONDUIT RUN
- NEW SIGNAL POLE WITH SIGNAL MAST ARM, SIGNAL HEAD, AND LUMINAIRE WITH MAST ARM
- VIDEO DETECTION ZONE
- NEW PEDESTRIAN PUSH BUTTON
- NEW PEDESTRIAN HEAD
- EXISTING LUMINAIRE
- NEW LUMINAIRE
- NEW SIGNAL HEAD
- NEW SIGNAL HEAD WITH LEFT TURN ARROW
- NEW EMERGENCY VEHICLE DETECTOR (EVD)
- NEW ILLUMINATED STREET NAME SIGN (ISNS)
- EXISTING QUADRUPOLE LOOP DETECTOR
- VIDEO CAMERA



- #### CONCRETE APRON NOTES:
- NORTHEAST, SOUTHWEST, AND SOUTHWEST RAMPS TO REMAIN, UNLESS OTHERWISE SPECIFIED IN THE PLAN SET.
 - CONTRACTOR IS RESPONSIBLE FOR INSTALLING CONCRETE APRONS ON NORTHEAST, SOUTHWEST, AND SOUTHWEST CORNERS IN ACCORDANCE WITH THE DETAIL.
 - NEW CURB RETURN AND RAMPS TO BE INSTALLED ON THE NORTHWEST CORNER AS SPECIFIED ON SHEET PP03 OF THIS PLAN SET AND MODIFY TO PROVIDE CONCRETE AS SHOWN IN THE DETAIL.
 - THE CONCRETE APRON LOCATION IS CONTROLLED BY THE LOCATION OF THE TRAFFIC SIGNAL POLE FOUNDATION. APRON ADJUSTMENTS MAY BE NECESSARY TO ACCOMMODATE SIGNAL POLE FOUNDATION FIELD CHANGES. ANY CHANGES ARE CONSIDERED INCIDENTAL TO THIS ITEM.
 - THE QUANTITY ASSOCIATED WITH THE CONCRETE APRON IS INCLUDED IN THE SIDEWALK QUANTITY SHOWN ON SHEET PPO3.

TYPICAL CONCRETE APRON DETAIL FOR TRAFFIC SIGNAL POLES - NTS



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

KIRKHAM MICHAEL
9201 North 25th Avenue - Suite 195
Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

DES: DR: CK: DATE:



90% REVIEW

NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE
NAME OF MUNICIPALITY	DESCRIPTION	REV BY	CHK BY	DATE

91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

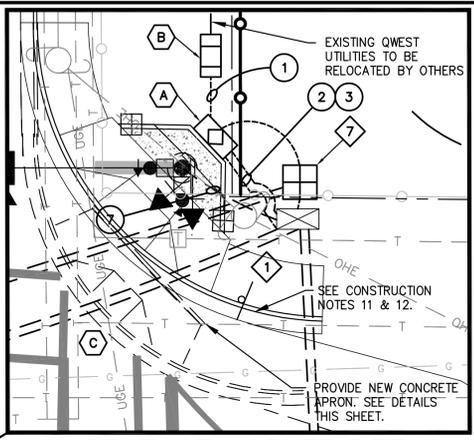


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				
KIRKHAM MICHAEL					
9201 North 25th Avenue - Suite 195 Phoenix, AZ 85021 (602)944-6564 Fax (602)944-6592					
DES	DR:	CK:	DATE:		

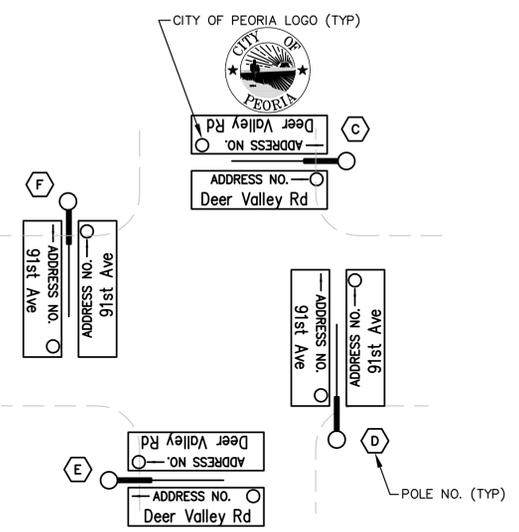
90% REVIEW

CONSTRUCTION NOTES

- ALL BACKPLATES FOR SIGNAL FACES SHALL BE METAL LOUVERED BACKPLATES.
- CONTRACTOR TO PROVIDE NEW IMSA CONDUCTORS. NO SPLICING OF CONDUCTORS IN CONDUIT RUN WILL BE ALLOWED. PULL NEW CONDUCTORS INTO CONDUIT AS SPECIFIED IN THE CONDUCTOR SCHEDULE.
- ALL PULL BOXES SHALL BE LEFT IN A CLEAN CONDITION, FREE OF DIRT AND DEBRIS UPON COMPLETION OF THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING NEW 2 1/2" (160 LF) APS SERVICE CONDUIT RUN FROM EXISTING APS POWER POLE TO NEW METER PEDESTAL. APS IS RESPONSIBLE FOR PULLING NEW SERVICE WIRE FROM APS POWER POLE TO METER PEDESTAL. CONTACT BOBBY GARZA AT (602)371-7989 TO COORDINATE SERVICE AND OBTAIN INSTALLATION REQUIREMENTS. SERVICE CONDUIT TO BE INSTALLED IN ACCORDANCE WITH APS REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TRANSFORMER CONCRETE PAD IN ACCORDANCE WITH APS GUIDELINES. APS IS RESPONSIBLE FOR PROVIDING AND INSTALLING THE SINGLE PHASE TRANSFORMER AND SERVICE CONDUCTORS.
- PRIOR TO THE CONSTRUCTION, THE CONTRACTOR SHALL POTHOLE AND VERIFY LOCATIONS OF FIBER OPTIC CABLE LINES, AND ALL OTHER UTILITIES THAT ARE POTENTIALLY IN CONFLICT.
- PRIOR TO CONSTRUCTION, IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD INVESTIGATE THE INTERSECTION PHYSICAL CONDITIONS. SHOULD THE EXISTING CONDITIONS BE DIFFERENT THAN WHAT IS IDENTIFIED IN THESE PLANS, THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE CITY OF PEORIA IMMEDIATELY.
- DURING CONSTRUCTION IF EXISTING IRRIGATION AND LANDSCAPING IS DISTURBED, IT IS THE CONTRACTORS RESPONSIBILITY FOR REPLACING, IN KIND, DISTURBED IRRIGATION AND LANDSCAPING. ALL COSTS SHALL BE INCIDENTAL TO THE TRAFFIC SIGNAL WORK.
- ALL IMSA CONDUCTORS SHALL BE INSTALLED WITHOUT SPLICING FROM THE SIGNAL HEAD TO THE PULL BOXES. TS BLOCKS SHALL NOT BE USED AS A CONNECTION POINT BETWEEN THE PULL BOX AND THE VEHICLE OR PEDESTRIAN INDICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SPLICING/TERMINATION REQUIRED TO COMPLETE INSTALLATION.
- PAVEMENT MARKING IS SHOWN FOR INFORMATION PURPOSES ONLY. SEE SIGNING AND STRIPING SHEETS SS01 THROUGH SS03 WITHIN THIS PLAN SET FOR ADDITIONAL INFORMATION.
- STOP SIGNS SHALL NOT BE REMOVED UNTIL SIGNAL HAS BEEN TESTED AND IS FULLY OPERATIONAL.
- ALL CONDUIT CROSSING ROADWAYS OR DRIVEWAYS SHALL BE INSTALLED BY DIRECTIONAL BORING.
- CONCRETE APRONS SHALL BE INSTALLED BY THE CONTRACTOR AROUND ALL SIGNAL POLE FOUNDATIONS AS SHOWN ON THIS SHEET AND IN ACCORDANCE WITH THE DETAILS AND NOTES SHOWN ON SHEET TS01.



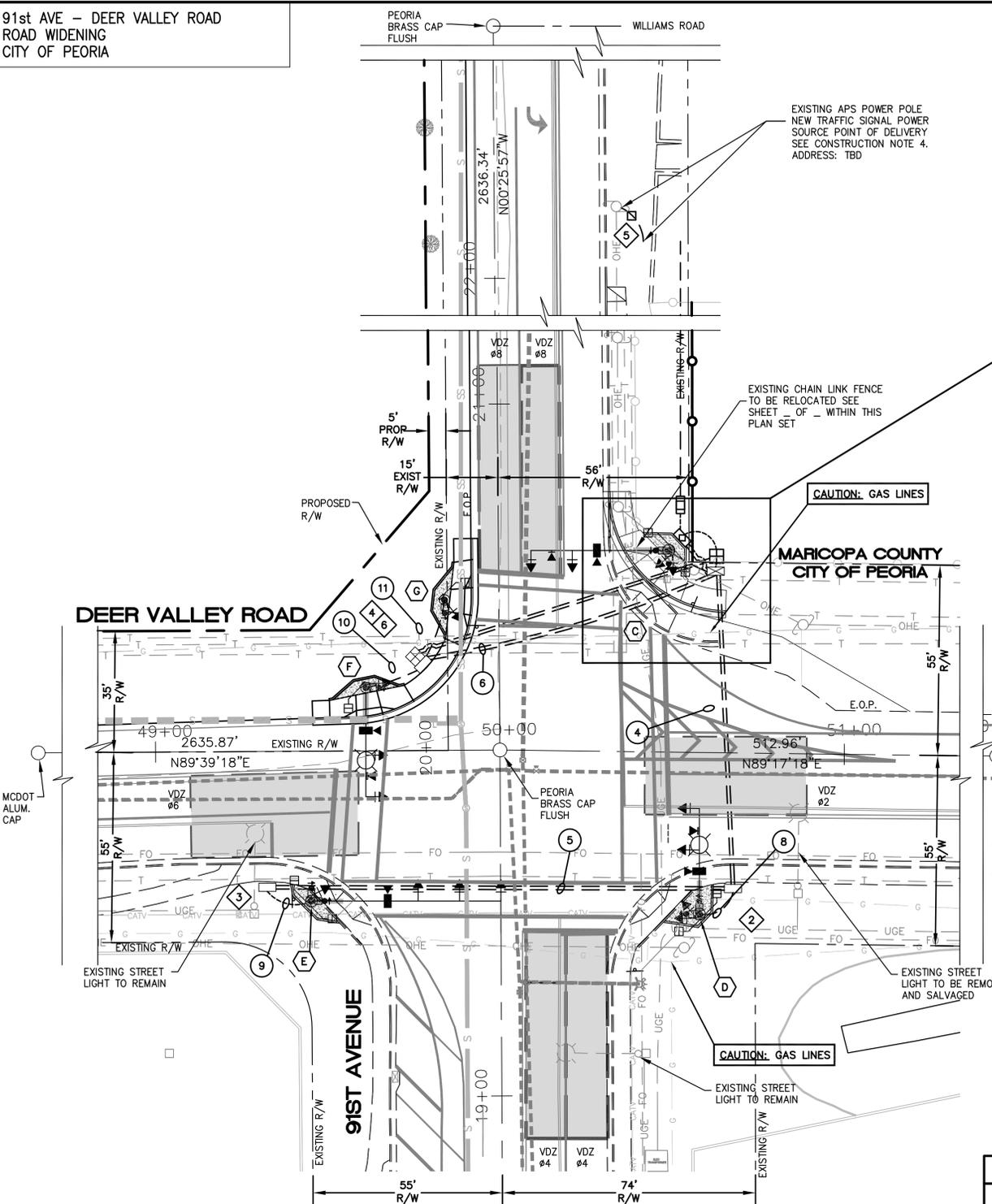
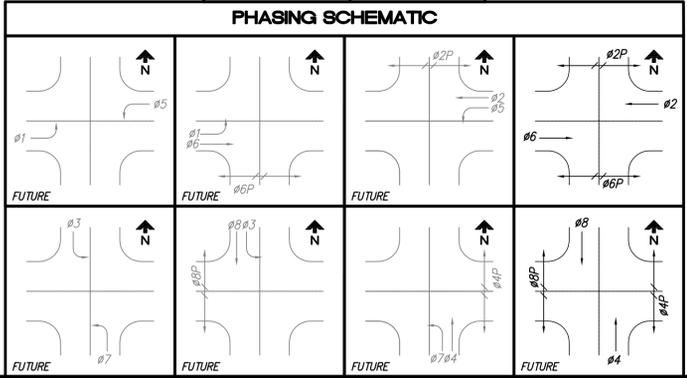
**NORTHEAST CORNER DETAIL
SCALE 1"=10'**



ILLUMINATED STREET NAME SIGN (ISNS) DETAIL

FLASH SEQUENCE	
PHASES 2 & 6	RED
PHASES 4 & 8	RED
FLASH PHASE TOGETHER	
2 & 6	FLASH CRT #1
4 & 8	FLASH CKT #2

PHASING SCHEMATIC



PULL BOX SCHEDULE

NO.	TYPE	LOCATION	REMARK
1	NO. 7 W/ EXT	STA. 50+54, 47' LT	PROVIDE & INSTALL INSTALL PER ADOT DETAIL T.S.1-3 AND T.S.1-4
2	NO. 7	STA. 50+68, 39' RT	PROVIDE & INSTALL INSTALL PER ADOT DETAIL T.S.1-3
3	NO. 7	STA. 49+32, 39' RT	PROVIDE & INSTALL INSTALL PER ADOT DETAIL T.S.1-3
4	NO. 7	STA. 49+77, 25' LT	PROVIDE & INSTALL INSTALL PER ADOT DETAIL T.S.1-3
5	APS J-BOX	APPROX. AS SHOWN	PROVIDE & INSTALL INSTALL PER APS REQUIREMENTS

PULL BOX SCHEDULE

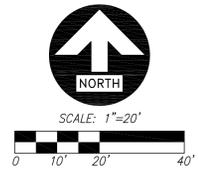
NO.	TYPE	LOCATION	REMARK
6	NO. 9	STA. 50+54, 47' LT	PROVIDE & INSTALL INSTALL PER C.O.P. DETAIL 176
7	NO. 9	STA. 50+68, 39' RT	PROVIDE & INSTALL INSTALL PER C.O.P. DETAIL 178

NAME OF MUNICIPALITY	REV. BY	CHK. BY	DATE
DESCRIPTION			
NO.			
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DESCRIPTION			
NO.			
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DESCRIPTION			
NO.			

CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE - DEER VALLEY ROAD
TRAFFIC SIGNAL LAYOUT

DR. HT.	DES. HT.	ICK	KAC	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06		TS02	15 OF 17	

SCALE: 1" = 20' HORIZONTAL
SCALE: 1" = 20' VERTICAL



91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA

POLE LAYOUT SCHEDULE

TRAFFIC SIGNAL CONTROLLER		REMARKS		LOCATION FROM CL				
CABINET	TYPE	CONTROLLER	AUX. CONTROL					
A	TS2 TYPE I SIZE 6	TS2 ECONOLITE ASC/ 2S-1000 WITH ETHERNET MODULE	INSTALL TWO SEPARATE 20 AMP FUSED LIGHTING CONTACTORS, ONE FOR STREET LIGHTS, AND ONE FOR ILLUMINATED SIGNS (ISNS) AND SEPARATE CIRCUIT FOR SERVICE.	STA. 50+58' 47' RT (91ST AVENUE)				
B		MYERS MEUG16-TS		STA. 50+69 42' RT (91ST AVENUE)				
POLES		REMARKS		LOCATION FROM CL				
NO.	LAYOUT	TYPE	SIG.	FACE	P.B. SIGN			
C		R	45'	20'	2-II 2-XI 2-XI	2-F 2-F 2-M/H	2-ADA P.P.B. R10-4b(L) R10-4b(R)	STA. 50+46' 47' LT (DEER VALLEY RD)
D		Q	30'	-	2-II 2-XI 2-XI	2-F 2-F 2-M/H	2-ADA P.P.B. R10-4b(L) R10-4b(R)	STA. 50+58' 47' RT (DEER VALLEY RD)
E		K MOD	55'	-	3-II 2-XI 1-XI	3-F 2-M/H 1-F	2-ADA P.P.B. R10-4b(L) R10-4b(R)	STA. 49+45' 43' RT (DEER VALLEY RD)
F		Q	30'	20'	2-II 1-XI 1-XI	2-F 1-F 1-M/H	1-ADA P.P.B. R10-4b(L) R10-4b(R)	STA. 49+61' 18' LT (DEER VALLEY RD)
G		A (10')	-	-	1-XI	1-M/H	1-ADA P.P.B. R10-4b(L) R10-4b(R)	STA. 50+84' 43' LT (DEER VALLEY RD)

EVD = EMERGENCY VEHICLE DETECTOR
ISNS = ILLUMINATED STREET NAME SIGN
VDC = VIDEO DETECTION CAMERA

NOTES:

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL FOUNDATIONS LOCATIONS FOR POTENTIAL CONFLICTS. SHOULD CONFLICTS EXIST, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR DIRECTION ON POLE LOCATION.
- TOP OF NEW POLE FOUNDATIONS SEE APRON DETAIL ON SHEET TS01. THE CONTRACTOR SHALL COMPACT THE FILL AROUND THE POLE FOUNDATIONS FOR STRUCTURAL SUPPORT.
- ALL RED, GREEN, VEHICLE SIGNAL INDICATIONS AND FILLED IN MAN/HAND PEDESTRIAN INDICATIONS SHALL BE "DIALIGHT" LED MODULES. YELLOW VEHICLE SIGNAL INDICATIONS SHALL BE A TRAFFIC SIGNAL INCANDESCENT LAMP RATED AT 17,000 HOURS. SEE SPECIAL PROVISIONS.
- 52,000 HOUR LAMPS TO BE USED IN LUMINARIES.
- PRIOR TO INSTALLATION, THE CONTRACTOR IS RESPONSIBLE FOR POSITIONING THE INDIVIDUAL HEADS SO THEY ARE COMPLETELY VISIBLE TO THE APPROACHING DRIVER THE SIGNAL IS INTENDED TO CONTROL.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND PULLING THE NEW CONDUCTORS IN CONDUIT RUNS, AS INDICATED IN THE CONDUCTOR SCHEDULE. CONDUCTORS SHALL NOT BE SPLICED.
- AT ALL SIDEWALK RAMPS CONCRETE SHALL BE BROUGHT UP AND AROUND THE BASE OF THE SIGNAL POLES PER CONCRETE APRON DETAIL SHOWN ON SHEET TS01.
- CABINET "COURTESY PAD" SHALL BE CONSTRUCTED PER DETAIL ON SHEET TS01 AND CONSIST OF A 4" PCC PAD IN FRONT OF THE CABINET. PAD SHOULD CONNECT AND BE FLUSH WITH SIDEWALK AS SHOWN IN PLANS AND DETAIL. PAD SHALL BE SET 2" BELOW THE FOUNDATION ELEVATION. SLOPE PAD AWAY FROM CABINET. SEE ADOT STD DWG T.S. 2-1.
- PROVIDE 6-FOOT COILED CORD IN THE POLICE PANEL OF THE CONTROL CABINET.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A VERTICAL EXTENSION FOR MOUNTING OF THE VIDEO CAMERA ABOVE THE SIGNAL MAST ARM. COSTS ASSOCIATED WITH ITEM SHALL BE INCLUDED IN THE COST FOR THE VIDEO DETECTION SYSTEM.

Cycle Length = 90
Offset = -

PROPOSED TRAFFIC SIGNAL CONTROLLER TIMING

INTERVALS MOVEMENTS	#1 EBLT	#2 WBLT	#3 SBLT	#4 NBLT	#5 WBLT	#6 EBLT	#7 NBLT	#8 SBLT
Vehicle / Pedestrian Data								
Minimum Green	-	10	-	10	-	10	-	10
Passage	-	2	-	2	-	2	-	2
Maximum Green #1	-	22	-	56	-	22	-	56
Maximum Green #2	-	22	-	56	-	22	-	56
Walk	-	7	-	7	-	7	-	7
Pedestrian Clearance								
Yellow	-	12	-	20	-	21	-	13
All Red	-	3.6	-	3.9	-	3.6	-	3.9
Detectors	-	2.3	-	2.1	-	2.3	-	2.1
Vehicle Recall	-	N/L	-	N/L	-	N/L	-	N/L
Dual Entry	-	MAX	-	MIN	-	MAX	-	MIN
Miscellaneous Pre-Emp Data								
Minimum Green	-	10	-	10	-	10	-	10
Detectors N/L	-	1	-	1	-	1	-	1
Delay	-	0	-	0	-	0	-	0
Extend	-	10	-	10	-	10	-	10
Duration	-	0	-	0	-	0	-	0
Maximum Call	-	0	-	0	-	0	-	0
Lock Out	-	0	-	0	-	0	-	0
Exit	-	No	-	No	-	No	-	No
Pedestrian Call								
Pre-Emp / Vehicle Status								
Track Green	-	Green	-	Red	-	Green	-	Red
Dwell	-	Green	-	Red	-	Green	-	Red
Cycle	-	No	-	No	-	No	-	No
Pre-Emp / Pedestrian Status								
Track Green	-	D/W	-	D/W	-	D/W	-	D/W
Dwell	-	D/W	-	D/W	-	D/W	-	D/W
Cycle	-	No	-	No	-	No	-	No
Pre-Emp / Interval Times								
Select Pedestrian Clearance:	-		-	Tract Yellow / 10:	-	0	-	
Select Yellow Clearance / 10:	-	0	-	Tract Red / 10:	-	0	-	
Select Red / 10:	-	0	-	Dwell Green:	-	0	-	
Tract Green	-	0	-	Return Ped. Clearance:	-	0	-	
Tract Pedestrian Clearance:	-	0	-	Return Yellow / 10:	-	0	-	
	-	-	-	Return Red / 10:	-	0	-	

CONDUCTOR SCHEDULE

CONDUIT RUN NUMBER	1	2	3	4	5	6	7	8	9	10	11	
CONDUIT SIZE IN INCHES	2	2	3	3	2-3	2-3	2-3	3	3	3	3	
AWG	PHASE		NUMBER OF WIRES									
CIRCUIT	NO. OF CABLES	NO. OF CONDUCTORS	4	20	20	20	20	20	20	20	20	
IMSA CABLE												
SIGNAL #1			2	2	2	2	2	2	2	2	2	
SIGNAL #2			3	3	3	3	3	3	3	3	3	
SIGNAL #3			2	2	2	2	2	2	2	2	2	
SIGNAL #4			3	3	3	3	3	3	3	3	3	
SIGNAL #5			2	2	2	2	2	2	2	2	2	
SIGNAL #6			3	3	3	3	3	3	3	3	3	
SIGNAL #7			2	2	2	2	2	2	2	2	2	
SIGNAL #8			3	3	3	3	3	3	3	3	3	
SIGNAL COMMON												
PED. SIGNAL #2			2	2	2	2	2	2	2	2	2	
PED. SIGNAL #4			2	2	2	2	2	2	2	2	2	
PED. SIGNAL #6			2	2	2	2	2	2	2	2	2	
PED. SIGNAL #8			2	2	2	2	2	2	2	2	2	
PED. SIGNAL COMMON												
PED. P.B. #2			1	1	1	1	1	1	1	1	1	
PED. P.B. #4			1	1	1	1	1	1	1	1	1	
PED. P.B. #6			1	1	1	1	1	1	1	1	1	
PED. P.B. #8			1	1	1	1	1	1	1	1	1	
PED. P.B. COMMON												
SPARES							6	6	6	3	3	
VIDEO DETECTION			4	2	1	1	1	1	1	1	1	
SERVICE 120V/240V			3									
#10 LIGHTING 240V			2	2			2	2			2	
#12 ISNS 120V			3	2	2	2	2	2	2	2	2	
#8 INSULATED BOND (GREEN)			1	1	1	1	1	1	1	1	1	
#8 SIGNAL COMMON			1	1	1	1	1	1	1	1	1	
#8 EMERGENCY VEHICLE PRE-EMPTION (EVD)			4	2	1	1	1	1	1	1	1	

- 3-M OPTICOM MODEL 138 DETECTOR CABLE
- THE IMSA 20-CONDUCTOR, 7-CONDUCTOR AND 4- CONDUCTOR CABLES SHALL BE #14 AWG IMSA 19-1.
- THE INSULATED BOND SHALL HAVE THE INSULATION STRIPPED INSIDE THE PULL BOXES. A CRIMP CONNECTION SHALL BE USED FOR SPLICING IN PULL BOX.
- VIDEO DETECTION COMMUNICATION CABLE (18 AWG STRANDED CONDUCTORS 6 TWISTED PAIRS) SHALL BE BELDEN 8691 OR APPROVED EQUAL. NO SPLICES IN HAND HOLE.
- CONDUCTOR TYPE AND QUANTITIES ABOVE ARE BELIEVED TO BE ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES AND TO SUPPLY ALL NECESSARY CONDUCTORS REQUIRED FOR A FULLY FUNCTIONING SIGNAL PER PLANS. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CABLING NECESSARY TO ACTIVATE SIGNAL AND ASSOCIATED ITEMS FOR FULL FUNCTIONALITY.



F.H.W.A. REGION 9 STATE ARIZ PROJ. NO. NO. TOTAL AS BUILT

KIRKHAM MICHAEL
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Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592

CONSULTING ENGINEER

DES: DR: CK: DATE:

90% REVIEW

IMSA CABLE 19-1, #14 AWG, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR	TRACER STRIPE	SIGNAL INTERVAL
#1	#5	RED		RED
	OR	BLACK	WHITE	YELLOW
#2	OVERLAP A	GREEN	WHITE	GREEN
	#6	RED		RED
#3	OVERLAP B	ORANGE		YELLOW
	#7	BLACK	RED	RED
#4	OVERLAP C	ORANGE	RED	YELLOW
	#8	RED	BLACK	RED
#5	OVERLAP D	ORANGE	BLACK	YELLOW
	#8	GREEN	BLACK	GREEN
#2 PED.	#6 PED.	BLUE		WALK
#4 PED.	#8 PED.	BLACK		DON'T WALK
		WHITE	BLACK	PUSH BUTTON
ALL PHASES	ALL PHASES	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE TAPE SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT MAIN PULL BOX LOCATION. INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

SEE SEPARATE SHEET FOR FIELD/LABELING/WIRING.

CITY OF PEORIA COLOR CODE, 3/4" TAPE

PHASE	COLOR	CONFIGURATION
#1	RED	1 WRAP
#2	WHITE	1 WRAP
#3	BLUE	1 WRAP
#4	GREEN	1 WRAP
#5	RED	2 WRAPS
#6	WHITE	2 WRAPS
#7	BLUE	2 WRAPS
#8	GREEN	2 WRAPS

IMSA CABLE 19-1, #14 AWG, 4 CONDUCTOR & 7 CONDUCTOR

SIGNAL HEADS OUTBOARD & FAR LEFT		SIGNAL HEADS INBOARD & SIDEMOUNT		PEDESTRIAN HEADS		PUSH BUTTON	
7 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE	4 CONDUCTOR CABLE
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	PUSH BUTTON STATION
RED	RED	RED	RED	RED	DON'T WALK	RED	PUSH BUTTON
BLACK	YELLOW	BLACK	YELLOW	GREEN	WALK	WHITE	P.B. COM.
GREEN	GREEN	GREEN	GREEN	WHITE	PED. COM.	GREEN	SPARE
ORANGE	YELLOW ARROW	WHITE	VEH. COM.	BLACK	SPARE	BLACK	SPARE
BLUE	GREEN ARROW						
WHITE	VEH. COM.						
WHT/BLK TR	VEH. COM.						

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

NOTES (CONTINUED):

- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING VIDEO DETECTION EQUIPMENT. ALL MATERIALS, PROCESSOR, CAMERAS, EXTENSIONS, MOUNTS AND CONSTRUCTION SHALL COMPLY WITH THE SPECIAL PROVISIONS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT BILL ELFRITZ TO COORDINATE MOUNTING AND INSTALLATION OF THE VIDEO DETECTION DEVICES.

CITY OF PEORIA ARIZONA DEPARTMENT OF PUBLIC WORKS

91st AVENUE - DEER VALLEY ROAD
POLE AND CONDUCTOR SCHEDULE PLAN

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

DR HT	DES HT	CK KAC	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06	TS03	16 OF 17	

SCALE: 1" = 20' HORIZONTAL
VERTICAL

91st AVE - DEER VALLEY ROAD
ROAD WIDENING
CITY OF PEORIA



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ				

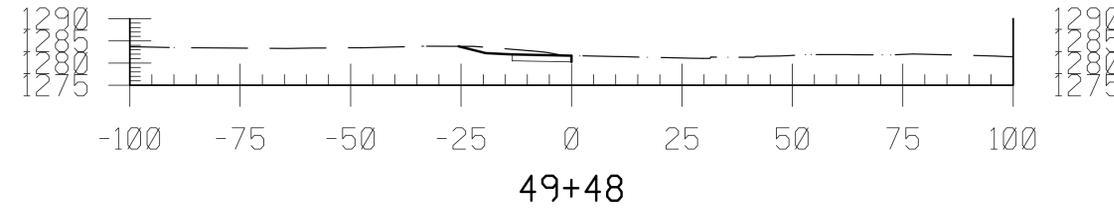
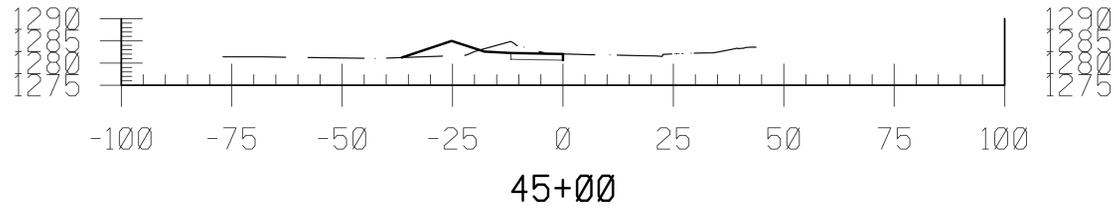
KIRKHAM MICHAEL
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Phoenix, AZ 85021 (602)944-6564 Fax(602)944-6592
CONSULTING ENGINEER

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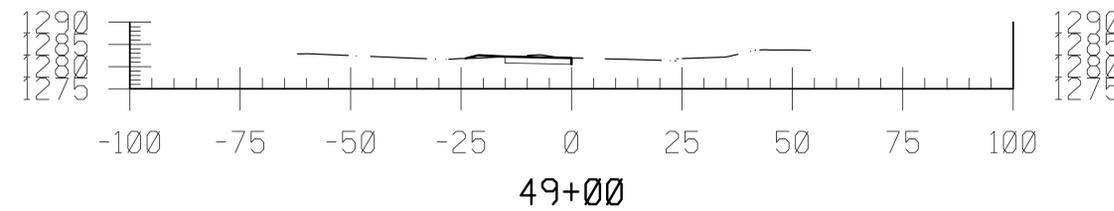
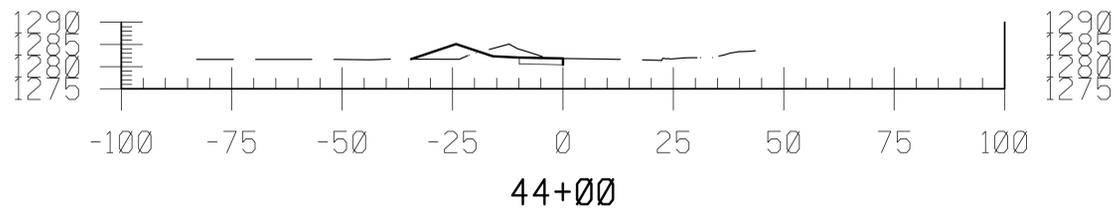
- SAWCUT AND MATCH EXISTING
- MATCH EXISTING

CONSTRUCTION NOTES

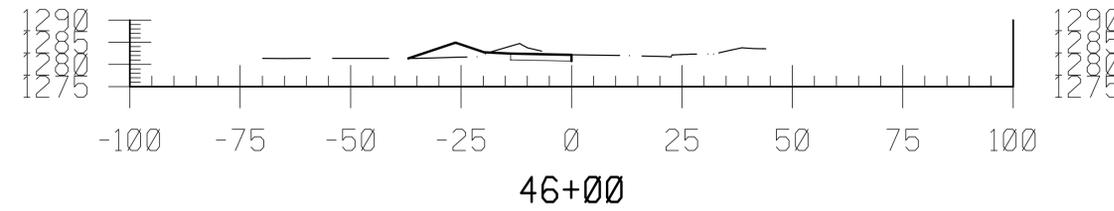
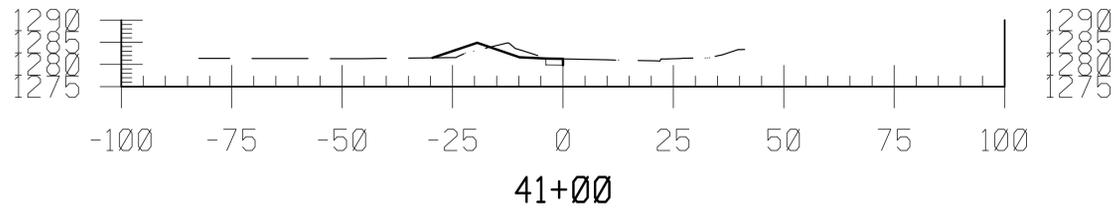
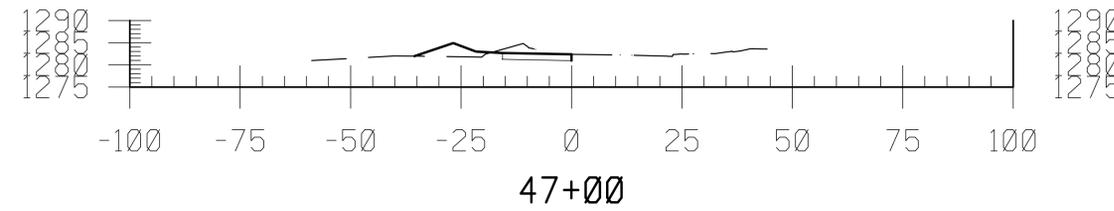
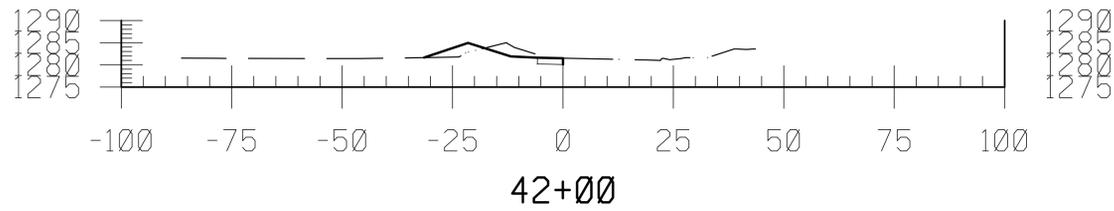
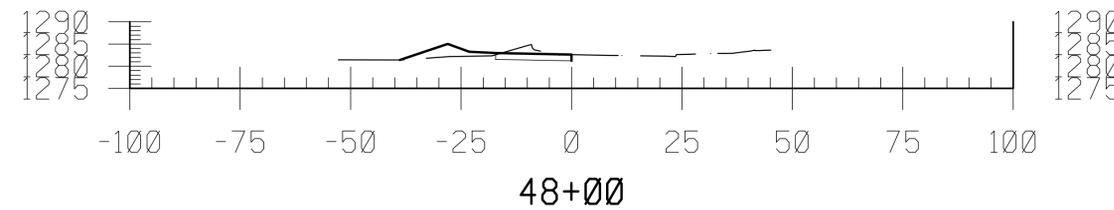
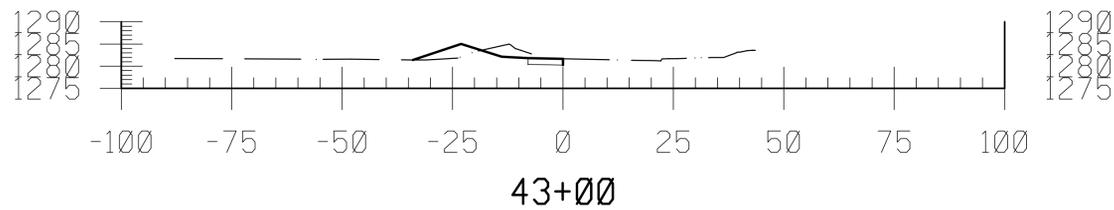
NAME OF MUNICIPALITY	REV BY	CHK BY	DATE
DESCRIPTION			
NO.			



NAME OF MUNICIPALITY	REV BY	CHK BY	DATE
DESCRIPTION			
NO.			



NAME OF MUNICIPALITY	REV BY	CHK BY	DATE
DESCRIPTION			
NO.			



CITY OF PEORIA ARIZONA
DEPARTMENT OF PUBLIC WORKS
91st AVENUE - DEER VALLEY ROAD

DR	DES	CK	SHEET NO.	TOTAL SHEETS	AS BUILT
DATE: 09/06	DATE: 09/06	DATE: 09/06		17 OF 17	
SCALE: 1" =			HORIZONTAL		
			VERTICAL		