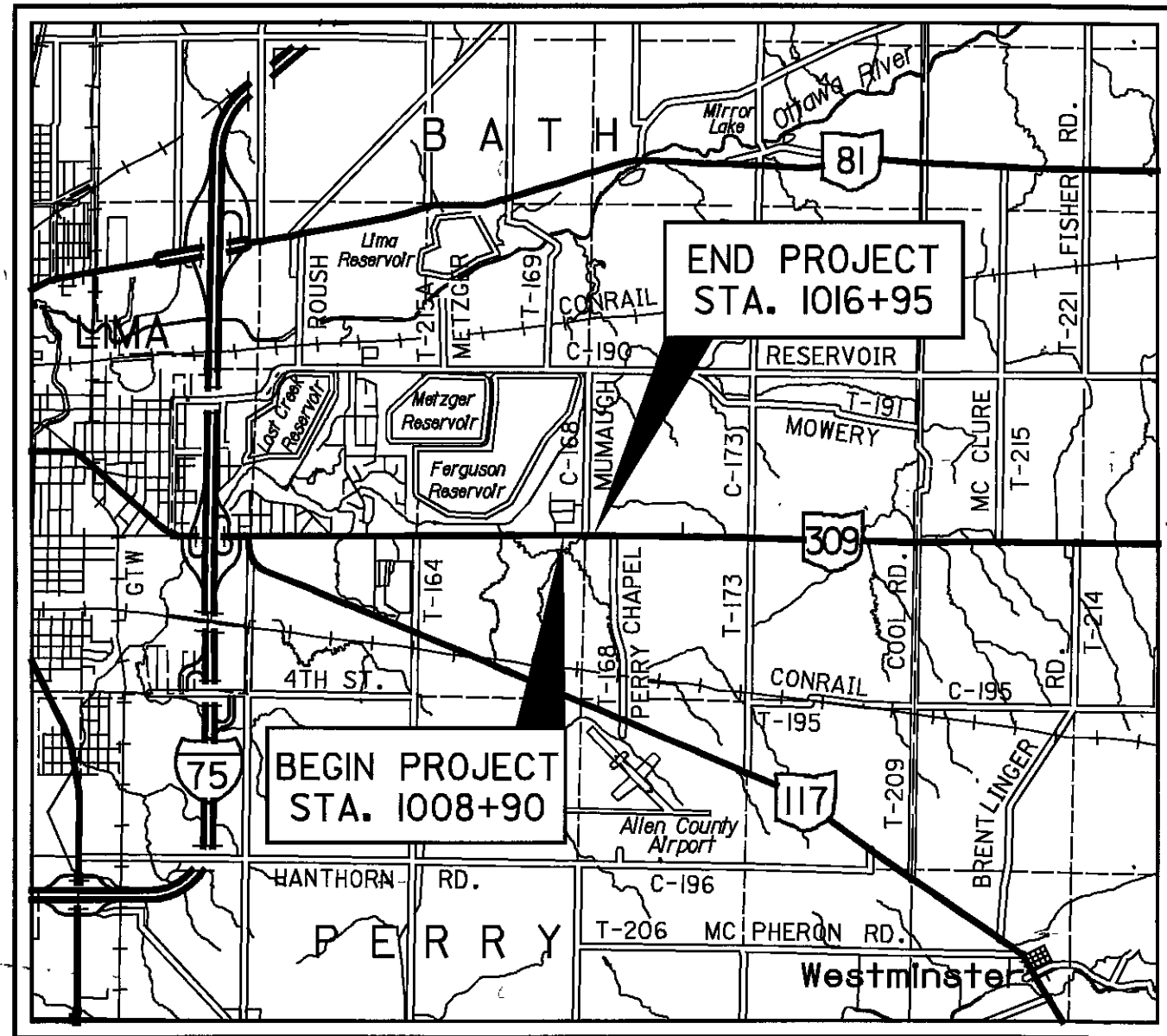
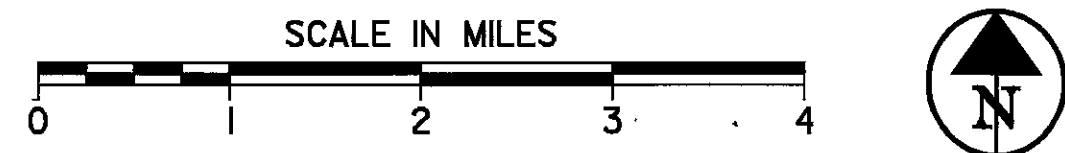


ALL - SR 309-16.95
050059 PID - 23469
Dist 1 1/26/2005



LOCATION MAP

LATITUDE: N40°-44'-00" LONGITUDE: W84°-26'-50"



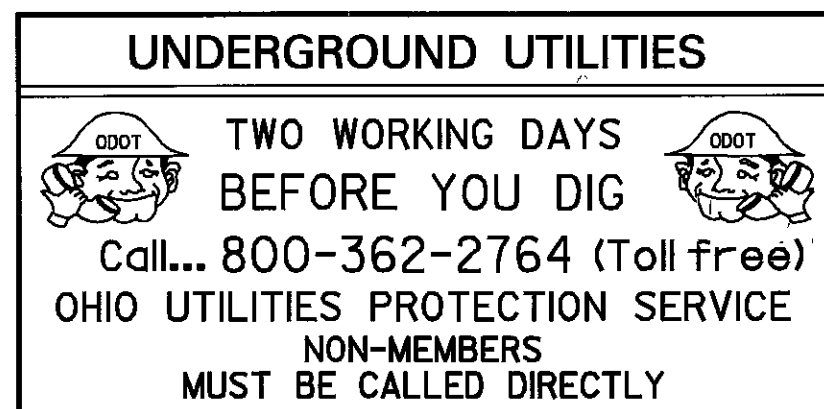
INTERSTATE & DIVIDED HIGHWAY
UNDIVIDED STATE & FEDERAL ROUTES
OTHER ROADS

DESIGN DESIGNATION

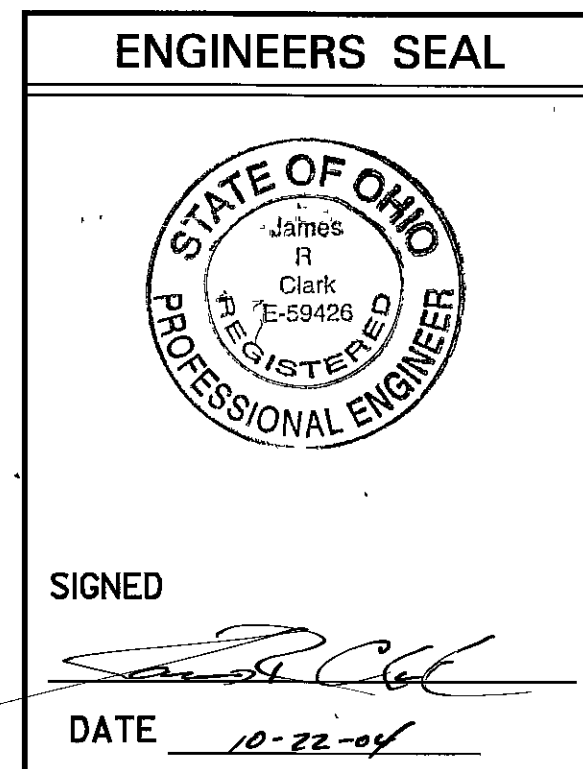
FOR DESIGN DESIGNATION, SEE SHEET 2

DESIGN EXCEPTIONS

NO DESIGN EXCEPTIONS REQUIRED



PLAN PREPARED BY:
DISTRICT NO. 1
OHIO DEPARTMENT OF
TRANSPORTATION



STATE OF OHIO DEPARTMENT OF TRANSPORTATION ALL-309-16.95 BATH & PERRY TOWNSHIPS ALLEN COUNTY

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SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS									
BP-3.1	7-16-04	RM-1.1	4-18-03	MT-95.81	4-19-02	TC-52.20	4-20-01	TC-84.21	3-06-00
BP-4.1	7-16-04	RM-4.2	4-18-03	MT-101.60	10-18-02	TC-65.10	10-19-01	TC-85.20	5-01-00
		CB-1.1	7-19-02	MT-105.10	10-18-02	TC-65.12	10-19-01		
GR-1.1	7-16-04	HW-2.2	7-19-02	MT-105.11	10-18-02	TC-71.10	4-19-02	HL-20.11	4-19-02
GR-2.1	1-16-04					TC-81.10	5-01-00	HL-30.11	4-19-02
GR-4.2	10-17-03	DM-1.1	7-18-03	TC-41.20	1-19-01	TC-82.10	4-19-02	HL-30.21	4-19-02
		DM-4.3	7-19-02	TC-42.20	7-16-04	TC-83.10	5-01-00	HL-30.22	4-19-02
		DM-4.4	7-19-02	TC-52.10	4-20-01	TC-84.20	5-01-00		

PROJECT DESCRIPTION

PAVEMENT WIDENING AND RESURFACING OF 0.15 MILES OF SR 309 WITH NEW GRADING, NEW TURNING RADIUS & TRAFFIC SIGNALS AT MUMAUGH ROAD AND CULVERT REPLACEMENT UNDER SR 309.

2002 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 8.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA = 1.60 AC.
CONTRACTOR EARTH DISTURBED AREA = 0.16 AC.
NOTICE OF INTENT EARTH DISTURBED AREA = 4.9 AC.

APPROVED 
DATE 11-18-04 DISTRICT DEPUTY DIRECTOR

APPROVED 
DATE 11-18-04 DIRECTOR, DEPARTMENT OF TRANSPORTATION

SUPPLEMENTAL SPECIFICATIONS	
802	7-19-02
832	4-17-04
833	2-12-03
864	7-11-00
908	4-18-03

SPECIAL PROVISIONS	
U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 3 12-12-03	

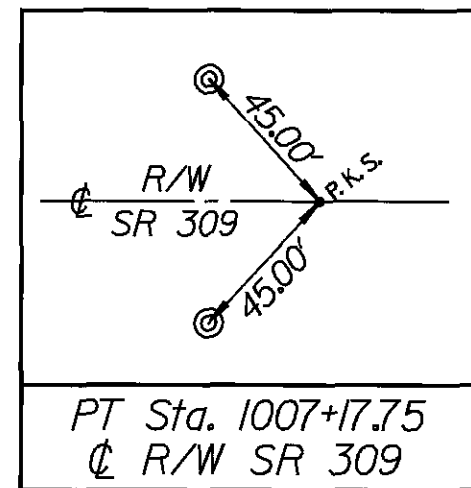
FEDERAL PROJECT No.
NON-FEDERAL

PID No.
23469

CONSTRUCTION PROJECT No.

RAILROAD INVOLVEMENT
NONE

ALL-309-16.95



DESIGN DESIGNATION SR 309

CURRENT ADT (2004) = 11,940
DESIGN YEAR ADT (2024) = 14,180
DESIGN HOURLY VOLUME (2024) = 1418
DIRECTIONAL DISTRIBUTION = 57%
TRUCKS (24 HOUR B & C) = 7%
DESIGN SPEED = 55 mph
LEGAL SPEED = 45/55 mph

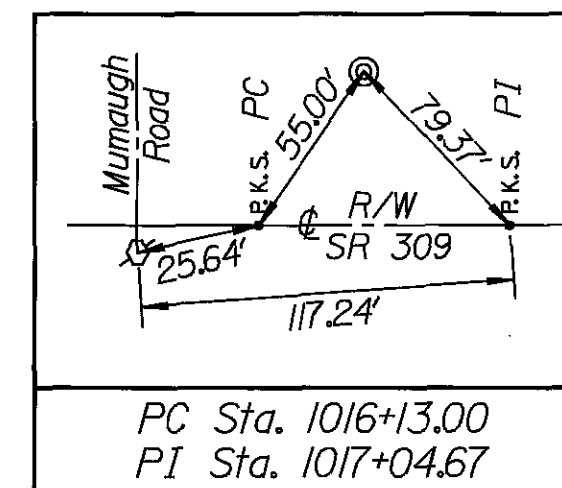
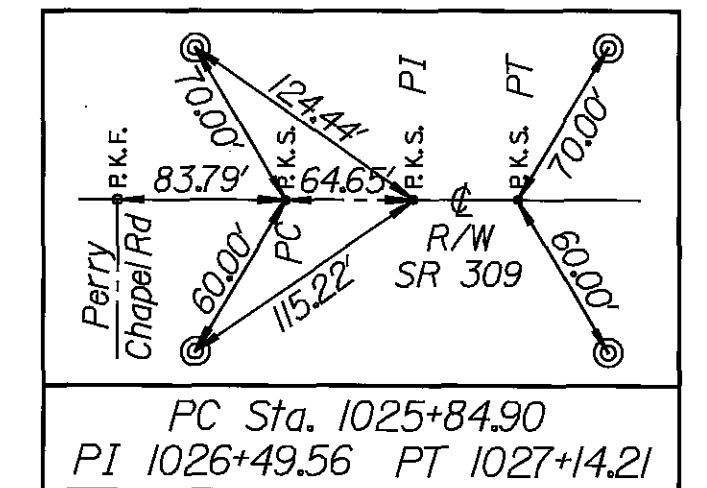
DESIGN FUNCTIONAL CLASSIFICATION =
URBAN PRINCIPLE ARTERIAL

DESIGN DESIGNATION MUMAUGH RD

CURRENT ADT (2004) = 3910
DESIGN YEAR ADT (2024) = 4440
DESIGN HOURLY VOLUME (2024) = 444
DIRECTIONAL DISTRIBUTION = 57%
TRUCKS (24 HOUR B & C) = 7%
DESIGN SPEED = 45 mph
LEGAL SPEED = 45 mph

DESIGN FUNCTIONAL CLASSIFICATION =
URBAN COLLECTOR

STRUCTURE No.
ALL-309-I706



ALLEN COUNTY
BATH TOWNSHIP
SW 1/4 SECTION 35
T-3-N R-7-E

ALLEN COUNTY
BATH TOWNSHIP
SE 1/4 SECTION 34
T-3-N R-7-E

ALLEN COUNTY
PERRY TOWNSHIP
NE 1/4 SECTION 3
T-4-N R-7-E

ALLEN COUNTY
PERRY TOWNSHIP
NW 1/4 SECTION 2
T-4-N R-7-E

CURVE DATA	
CL Const. SR 309	
PI Sta. 1005+88.58	
$\Delta = 0^\circ-12'-00''$ Rt	
$D_c = 0^\circ-04'-39''$	
$R = 74,008.88'$	
$T = 129.17'$	
$L = 258.34'$	
$E = 0.11'$	
PC Sta. 1004+59.41	
PT Sta. 1007+17.75	

CURVE DATA	
CL Const. SR 309	
PI Sta. 1017+04.67	
$\Delta = 0^\circ-31'-07''$ Rt	
$D_c = 0^\circ-16'-59''$	
$R = 20,250.26'$	
$T = 91.67'$	
$L = 183.34'$	
$E = 0.21'$	
PC Sta. 1016+13.00	
PT Sta. 1017+96.34	

BENCHMARK #1
Top Flange Bolt N Side
Fire Hydrant, 1011+0.8,
32.9'Rt, Elev 915.61

BENCHMARK #2
Mine Spike In Telephone
Pole, 1015+46.1, 48.5'Rt
Elevation 915.12

MONUMENT LEGEND	
OR.F.	~ PK Nail Found
X	~ RR Spike Found
△	~ Stone Found
⊙	~ Concrete Monument Fd
■	~ Proposed Monument Box



SCHEMATIC PLAN

ALL - 309 - 16.95

TYPICAL CUT AND FILL

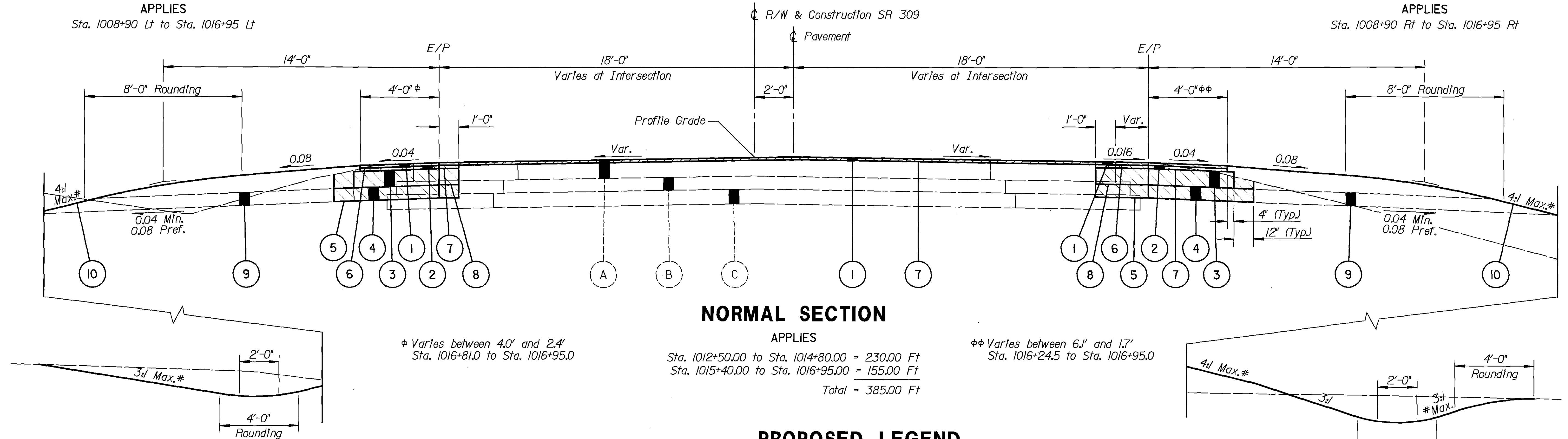
APPLIES

Sta. 1008+90 Lt to Sta. 1016+95 Lt

TYPICAL CUT AND FILL

APPLIES

Sta. 1008+90 Rt to Sta. 1016+95 Rt



NORMAL SECTION

APPLIES

Sta. 1012+50.00 to Sta. 1014+80.00 = 230.00 Ft
Sta. 1015+40.00 to Sta. 1016+95.00 = 155.00 Ft
Total = 385.00 Ft

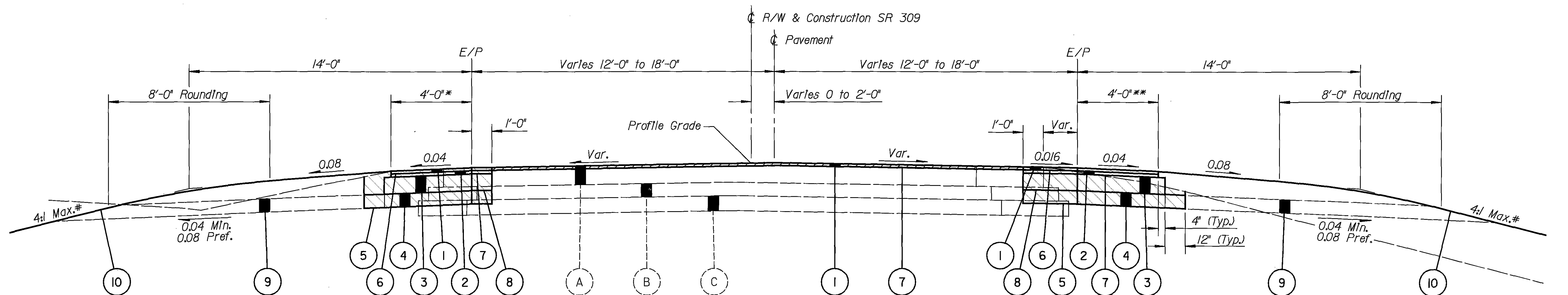
PROPOSED LEGEND

EXISTING LEGEND

- (A) 11"± Asphalt Concrete
- (B) 8"± Aggregate Base
- (C) 9"± Subbase

- (1) Item 448 1-1/2" Asphalt Concrete Surface Course, Type 1H
- (2) Item 448 1-3/4" Asphalt Concrete Intermediate Course, Type 2, PG64-28
- (3) Item 301 10" Asphalt Concrete Base, PG64-22
- (4) Item 304 8" Aggregate Base
- (5) Item 204 Subgrade Compaction
- (6) Item 407 Tack Coat for Intermediate Course (See General Note)
- (7) Item 407 Tack Coat (See General Note)
- (8) Item 408 Prime Coat applied at a rate of 0.40 Gallons per Sq Yd
- (9) Item 605 Aggregate Drains
- (10) Item 659 Seeding and Mulching
- (11) Item 254 Pavement Planting, Asphalt Concrete (T = 1-1/4")
- (12) Item 203 Excavation

See Cross Sections

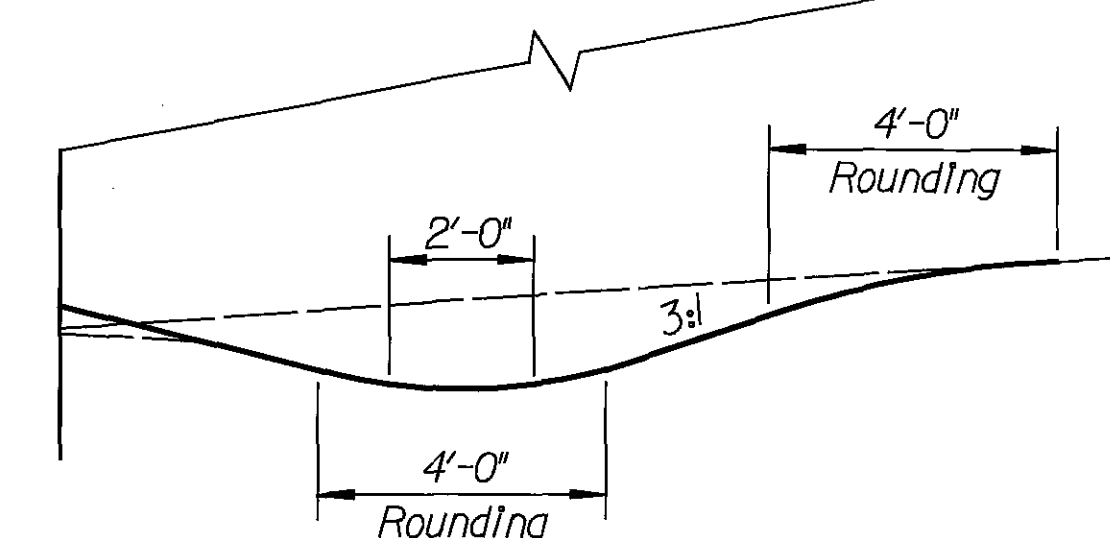


NORMAL SECTION

APPLIES

Sta. 1008+90.0 to Sta. 1012+50.0 = 360.00 Ft
Total = 360.00 Ft

**Tapers from 3.4' to 4.0'
Sta. 1008+90.0 to Sta. 1009+39.3



APPLIES

** Tapers from 4.0' to 0.0'
Sta. 11+75.0 to Sta. 12+00.0



- 1 Item 448 1-1/2" Asphalt Concrete Surface Course, Type 1H
- 2 Item 448 1-3/4" Asphalt Concrete Intermediate Course, Type 2, PG64-28
- 3 Item 301 10" Asphalt Concrete Base, PG64-22
- 4 Item 304 8" Aggregate Base

- 5 Item 204 Subgrade Compaction
- 6 Item 407 Tack Coat for Intermediate Course (See General Note)
- 7 Item 407 Tack Coat (See General Note)
- 8 Item 408 Prime Coat applied at a rate of 0.40 Gallons per Sq Yd

- | | | |
|---|----------|--|
|  | Item 605 | Aggregate Drains |
|  | Item 659 | Seedling and Mulching |
|  | Item 606 | Guardrail Rebuilt, Type 5 |
|  | Item 254 | Pavement Planing, Asphalt Concrete ($T = 1\frac{1}{4}"$) |
|  | Item 203 | Excavation |

- ☐ A 11"± Asphalt Concrete
- ☐ B 8"± Aggregate Base
- ☐ C 9"± Subbase
- ☐ D Curb and Gutter


$$\begin{array}{r} \text{Sta. } 1014+80.00 \text{ to Sta. } 1015+40.00 = 60.00 \text{ Ft} \\ \hline \text{Total} = 60.00 \text{ Ft} \end{array}$$

See Cross Sections

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITY OWNERSHIP

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

TELEPHONE	ELECTRIC	WATER
SprInt 122 S. Elizabeth Street Uma, Ohio 45801 419-228-1200	American Electric Power 369 E. O'Connor Ave. Uma, Ohio 45801 419-222-9010	City of Uma 50 Town Square Uma, Ohio 45801 419-228-5462
CABLE	GAS	
Time Warner Cable 3100 Elida Road Uma, Ohio 45805 419-331-1111	East Ohio Gas 150 S. Jackson Street Uma, Ohio 45801 419-226-4700	

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT OF WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT OF WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

MONUMENTS

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS AS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON SHEET 40.

PAVEMENT RESTORATION FOR MONUMENT ASSEMBLY INSTALLATIONS

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 604 MONUMENT ASSEMBLIES.

ITEM 301	ASPHALT CONCRETE BASE, PG64-22	=	3	CU YD
ITEM 304	AGGREGATE BASE	=	3	CU YD
ITEM 448	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	=	1	CU YD
ITEM 448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN	=	1	CU YD

THE ABOVE QUANTITIES ARE BASED ON A 304 THICKNESS OF 8", A 301 THICKNESS OF 10" AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE MONUMENT ASSEMBLIES.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

AIRWAY-HIGHWAY CLEARANCE

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 125 FEET. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, THE CONTRACTOR IS ADVISED THAT COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION(FAA) WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION. THE CONTRACTOR IS ADVISED THAT NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

THE CONTRACTOR IS FURTHER ADVISED THAT THE FAA APPROVAL MAY TAKE UP TO 45 DAYS. ALL SUBMISSIONS SHALL BE DIRECTED TO THESE OFFICES:

FEDERAL AVIATION ADMINISTRATION GREAT LAKES REGIONAL OFFICE AIR TRAFFIC DIVISION AGL-530 2300 EAST DEVON AVENUE DES PLAINES, ILLINOIS 60018 (847) 294-7568	OHIO DEPARTMENT OF TRANSPORTATION OFFICE OF AVIATION 2829 WEST DUBLIN-GRANVILLE RD. COLUMBUS, OHIO 43235 (614) 793-5046
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ITEM 605 AGGREGATE DRAIN

AGGREGATE DRAINS SHALL BE PLACED AT THE LOCATIONS SHOWN ON SHEET 12.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN

THIS ITEM SHALL MEET ALL REQUIREMENTS OF THE SPECIFICATIONS FOR 401, 441, AND 448 WITH THE FOLLOWING EXCEPTION:

1) NO RECYCLED ASPHALT PAVEMENT SHALL BE USED IN THE SURFACE COURSE.

ALL COSTS ASSOCIATED WITH THE EQUIPMENT, LABOR AND MATERIALS NECESSARY FOR SUPPLYING AND PLACING THIS ITEM SHALL BE INCLUDED IN THE PRICE BID PER CUBIC YARD FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN.

ITEM 407 TACK COAT AND ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF:

ITEM 407 TACK COAT	=	0.075 GAL PER SQ YD
ITEM 407 TACK COAT FOR INTERMEDIATE COURSE	=	0.075 GAL PER SQ YD

RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS OR YARD DRAINS DISTURBED BY THE WORK SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 PS46 MIN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603	6" CONDUIT, TYPE C	=	30 FT
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ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
201	LUMP		CLEARING AND GRUBBING
301	3	CU YD	ASPHALT CONCRETE BASE, PG64-22
304	3	CU YD	AGGREGATE BASE
448	1	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22
448	1	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN
603	30	FT	6" CONDUIT, TYPE C
QUANTITIES CARRIED TO GENERAL SUMMARY			

DESIGN FILE : I:\pd\23469\Construction\309gn.dgn
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DATE : 27-OCT-2004
TIME : 08:59

ENVIRONMENTAL COMMITMENTS

THE ENVIRONMENTAL DOCUMENT WAS APPROVED 2/26/04 AND CONTAINED THE FOLLOWING CONSTRUCTION RELATED ITEMS THAT THE CONTRACTOR AND PROJECT ENGINEER ARE TO ENSURE ARE CARRIED OUT. IF THEY CANNOT BE FOLLOWED THE DISTRICT PLANNING AND PROGRAM ADMINISTRATOR SHOULD BE NOTIFIED IMMEDIATELY.

1. IN STREAM WORK (THE PLACEMENT OR REMOVAL OF TEMPORARY AND/OR PERMANENT FILL MATERIALS BELOW ORDINARY HIGH WATER MARK) WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN NON-ERODIBLE MATERIAL WILL BE USED FOR TEMPORARY CONSTRUCTION ACCESS FILLS. TEMPORARY FILLS WILL BE CONSTRUCTED SO AS TO ALLOW FOR FISH PASSAGE AND WILL NOT BACK UP WATER. TEMPORARILY PLACED MATERIAL WILL BE REMOVED AND THE STREAM BOTTOM RESTORED TO NEAR RECONSTRUCTION CONDITIONS WHEN THE WORK IS RESTORED.
2. THE SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD DRAWINGS WILL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
3. WRITTEN PERMISSION MUST BE OBTAINED FOR ANY NECESSARY IN-STREAM BLASTING FROM THE CHIEF OF O.D.N.R.'S DIVISION OF WILDLIFE IN ACCORDANCE WITH OHIO REVISED CODE (ORC) SECTION 1533.58.
4. NO TREES THAT CONTAIN SUITABLE SUMMER BROOD REARING AND/OR ROOSTING HABITAT FOR THE INDIANA BAT WILL BE REMOVED BETWEEN 04/15 TO 09/15 WHEN THE BATS WOULD BE UTILIZING SUCH HABITATS. THE UNDERSIDE OF OLD CONCRETE BRIDGES HAVE BEEN FOUND TO PROVIDE SUITABLE DAY-ROOST HABITAT FOR MALE INDIANA BATS. PRIOR TO DEMOLITION OF THE EXISTING BRIDGE, THE UNDERSIDE OF THE EXISTING STRUCTURE SHALL BE INSPECTED DURING DAYTIME HOURS FOR PRESENCE/ABSENCE OF THE INDIANA BAT. IF A BAT IS FOUND, THE OFFICE OF ENVIROMENTAL SERVICES WILL BE NOTIFIED.

THIS INSPECTION DOES NOT REQUIRE AN INDIANA BAT SPECIALIST. THE CONTRACTOR AWARDED THE PROJECT SHALL BE RESPONSIBLE FOR PERFORMING THIS TASK. ANY COSTS ASSOCIATED WITH THIS RESPONSIBILITY SHALL BE CONSIDERED TO BE INCIDENTAL TO THE COST OF REMOVING THE EXISTING STRUCTURE.
5. THE APPROPRIATE 404/401 PERMIT CONDITIONS WILL BE ADDED TO THE CONSTRUCTION PLANS AS SPECIAL PROVISIONS. ALL CONDITIONS OF THE PERMIT SHALL BE ADHERED TO DURING PROJECT CONSTRUCTION.
6. PROPERTY OWNER NOTIFICATION LETTERS WILL BE SENT TO ALL OF THE ADJACENT PROPERTY OWNERS TO THE PROJECT.
7. THE NWP *3 WILL BE ADDED TO THE CONSTRUCTION PLANS AS SPECIAL PROVISIONS. ALL CONDITIONS OF THE PERMIT SHALL BE ADHERED TO DURING PROJECT CONSTRUCTION.

MAINTENANCE OF EXISTING DRAINAGE STRUCTURES

THE CONTRACTOR SHALL KEEP ALL EXISTING DRAINAGE STRUCTURES AND DITCHES IN SATISFACTORY OPERATING CONDITIONS WITH POSITIVE FLOWING INLETS AND OUTLETS UNTIL THE PROPOSED DRAINAGE STRUCTURES AND DITCHES ARE CAPABLE OF PROVIDING ADEQUATE DRAINAGE FOR THE ROADWAY, MEDIAN AND SHOULDERS. ALL WORK SHALL DONE IN ACCORDANCE WITH SPEC. 105.14.

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4" BY 4" SQUARE OR 4-1/2" DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ECT.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING UTILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED AND EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER OPERATED CONSTRUCTION TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, ANY SUCH DEVICE SHALL NOT BE OPERATED AT ANY TIME IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

EXISTING PLANS

EXISTING PLANS ENTILTED ALL-309-18.40 MAY BE INSPECTED IN THE ODOT DISTRICT ONE OFFICE IN LIMA, OHIO.

CALCULATED
NJY
CHECKED
GW

GENERAL NOTES

ALL-309-16.95

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44

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ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON SR 309 AND MUMAUGH ROAD AT ALL TIMES (EXCEPT AS NOTED IN THE DETOUR NOTE ON THIS SHEET) IN ACCORDANCE WITH THE REQUIREMENTS OF SPEC. 614, THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS. THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 11 FEET AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

THE CONTRACTOR SHALL SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

PAYMENT FOR FURNISHING, ERECTING, MAINTAINING AND REMOVING SIGNS, BARRICADES, CONES, MARKERS, ALL WORK ZONE PAVEMENT MARKINGS, WORK ZONE RAISED PAVEMENT MARKERS, PORTABLE CONCRETE BARRIER, PORTABLE CONCRETE BARRIER END TREATMENTS, OBJECT MARKERS, ETC... SHALL BE INCLUDED IN THE LUMP SUM ITEM BID ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, MAINTAIN, AND REMOVE ALL ADDITIONAL SIGNS OR TRAFFIC CONTROL DEVICES DEEMED NECESSARY BY THE ENGINEER WITH ALL ASSOCIATED COSTS INCLUDED IN THE LUMP SUM PRICE BID ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

THIS ITEM SHALL ALSO INCLUDE ALL COSTS ASSOCIATED WITH MAINTAINANCE OF TRAFFIC FOR TRAFFIC SIGNAL INSTALLATION AS DETAILED ON SHEET 32.

ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, THEY MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DISTRICT CONSTRUCTION ENGINEER.

ACCESS TO ADJACENT PROPERTY

ACCESS TO ADJACENT PROPERTY WITHIN THE WORK LIMITS ON THE VARIOUS ROADS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES, AS PER 614.02(a). THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF LOCAL TRAFFIC:

ITEM 410 TRAFFIC COMPACTED SURFACE, TYPE A = 100 CU YD

PAVEMENT MARKING

PRIOR TO PLACEMENT OF ANY TEMPORARY PAVEMENT MARKINGS, THE CONTRACTOR SHALL COMPLETELY OBLITERATE, AS PER SPEC. 641.10, ALL EXISTING PAVEMENT MARKINGS THAT WOULD CREATE CONFUSION OR CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS. PAYMENT FOR THIS COMPLETE REMOVAL SHALL BE INCLUDED IN THE PERTINENT 614 ITEM.

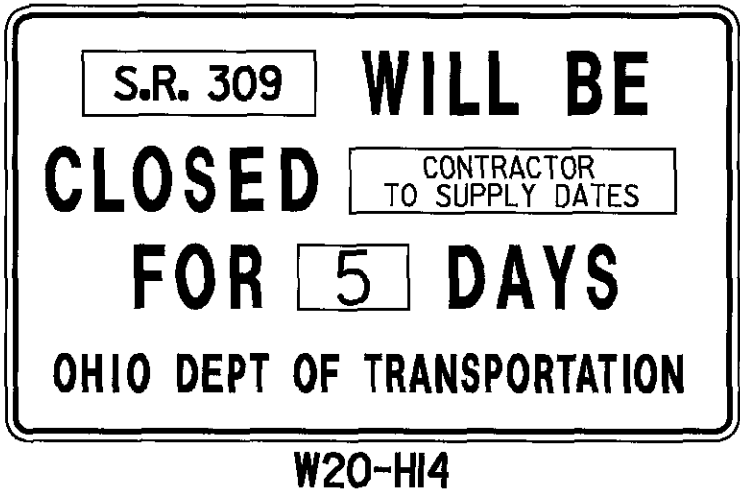
DETOURS AND CLOSURES

TRAFFIC ON SR 309 SHALL BE MAINTAINED AT ALL TIMES AS NOTED IN THESE PLANS EXCEPT FOR A PERIOD NOT TO EXCEED FIVE (5) CONSECUTIVE CALENDAR DAYS THAT THROUGH TRAFFIC MAY BE DETOURED FOR CULVERT REPLACEMENT OPERATIONS. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH 108.07 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THROUGH TRAFFIC SHALL BE DETOURED AS SHOWN ON SHEET 8. THE DETOURS SHALL BE ESTABLISHED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE STATE OF OHIO.

THE FIRST DAY THAT THE DETOUR IS IN EFFECT SHALL BE CONSIDERED THE STARTING DATE OF THE 5 DAY OR DETOUR LIMITATION. THE 5TH DAY OF THE 5 DAY DETOUR LIMITATION SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE. ON OR BEFORE THE 5TH DAY, THE ROADWAY SHALL BE OPENED TO THE SAFE AND CONVENIENT USE OF THE TRAVELING PUBLIC. IF THE ROADWAY IS NOT OPENED BY THIS INTERIM COMPLETION DATE, LIQUIDATED DAMAGES SHALL BE ASSESSED AS PER SPECIFICATION 108.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS BOOK.

THE CONTRACTOR SHALL NOTIFY THE DISTRICT ONE ROADWAY SERVICES ADMINISTRATOR A MINIMUM OF TWENTY-ONE (21) DAYS IN ADVANCE OF THE PLANNED DATE OF CLOSURE. AT THAT TIME THE CONTRACTOR SHALL ARRANGE FOR THE PICK UP OF THE "NOTICE OF CLOSURE" SIGNS FROM THE DISTRICT WHICH THEN SHALL BE ERECTED BY THE CONTRACTOR AT LEAST 14 DAYS IN ADVANCE OF THE SCHEDULED CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT SIDE OF THE ROAD FACING TRAFFIC. THE SIGNS SHALL BE ERECTED AT THE POINT OF CLOSURE AND BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. AFTER THE ROAD IS OPENED TO THROUGH TRAFFIC AND THE "NOTICE OF CLOSURE" SIGNS ARE NO LONGER NEEDED THE CONTRACTOR IS SUBSEQUENTLY RESPONSIBLE FOR RETURNING THE SIGNS TO THE DISTRICT.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLAN.



TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING ADJACENT TO TRAVELED LANES SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES IN ACCORDANCE WITH THE DROPOFFS IN THE WORK ZONE NOTES AND DETAILS IN THESE PLANS AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 1½" INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY AND SIGNED USING W8-11. NO TRENCH SHALL BE LEFT OPEN DURING ON WORKING HOURS EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. THIS NOTE ALSO APPLIES TO ALL AREAS EXCEPT IN AREAS PROTECTED BY PORTABLE CONCRETE BARRIER. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

ITEM 614 REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH ITEM SPECIAL, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

ITEM 614 REPLACEMENT DRUM = 20 EACH

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 WATER = 14 M GAL

ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
410	100	CU YD	TRAFFIC COMPACTED SURFACE, TYPE A
614	20	EACH	REPLACEMENT DRUM
614	LUMP		MAINTAINING TRAFFIC, AS PER PLAN
616	14	M GAL	WATER
QUANTITIES CARRIED TO GENERAL SUMMARY			

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PORTABLE CONCRETE BARRIER END TREATMENT

THE CONTRACTOR SHALL PROTECT THE ENDS OF ANY PORTABLE CONCRETE BARRIER WITH EITHER A TAPERED END SECTION OR A WORK ZONE IMPACT ATTENUATOR AS SPECIFIED IN THESE PLANS AND THE STANDARD DRAWINGS.

SHOULD TAPERED END SECTIONS BE USED AT THE APPROACH END OF P.C.B. RUNS THE TAPERED END SECTIONS SHALL BE LOCATED AT LEAST 17 FEET FROM THE EDGE OF THE TRAVELED LANE. THE CROSS SLOPE OF THE APPROACH EMBANKMENT SHALL BE A MAXIMUM OF 10:1. THE PLACEMENT AND SUBSEQUENT REMOVAL OF ANY GRADING REQUIRED SHALL BE INCLUDED IN THE LUMP SUM BID ITEM 614 MAINTAINING TRAFFIC AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO PERFORM THE WORK DESCRIBED. SHOULDERS AT NO EXPENSE TO THE STATE.

SHOULD THE CONTRACTOR ELECT TO USE WORK ZONE IMPACT ATTENUATORS, THIS WORK SHALL CONSIST OF FURNISHING QUADGUARD WORK ZONE IMPACT ATTENUATORS, MODEL QZ2406Y. THIS SHALL INCLUDE ALL RELATED HARDWARE AS REQUIRED BY THE MANUFACTURER TO CONSTRUCT A COMPLETE AND FUNCTIONAL QUADGUARD WORK ZONE IMPACT ATTENUATOR SYSTEM. THE ATTENUATORS SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND AT THE LOCATIONS SHOWN ON THE PLANS. THE IMPACT ATTENUATOR SHALL BE MANUFACTURED BY THE ENERGY ABSORPTION SYSTEMS, INC., ONE EAST WACKER DRIVE, CHICAGO, ILLINOIS 60601; TELEPHONE (312) 467-6750.

FOR ANY WORK ZONE INSTALLATION, THE NOSE COVER SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING MT-95.81. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, REPAIRING, AND OTHERWISE RESTORING THE WORK ZONE IMPACT ATTENUATOR IN ACCORDANCE WITH THE MANUFACTURER'S MAINTENANCE INSTRUCTIONS WHILE IT IS IN USE ON THE PROJECT. SUCH REPAIRS SHALL BE PERFORMED WITHIN 12 HOURS OF THE INCIDENT WHICH CAUSED DAMAGE TO THE PROJECT. IN ADDITION TO ANY EXTRA UNITS SUPPLIED FOR THIS PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT REQUIRED TO PERFORM THE ABOVE DESCRIBED RESTORATION OF THE WORK ZONE ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL INCLUDE FURNISHING, INSTALLING MAINTAINING, REMOVING AND RE-ERECTING. REMOVAL FROM THE PROJECT UPON COMPLETION, RESTORATION AFTER EACH VEHICLE IMPACT OF THE WORK ZONE IMPACT ATTENUATOR, INCLUDING ALL LABOR, TOOLS, EQUIPMENT AND MISCELLANEOUS HARDWARE AND MATERIALS NECESSARY TO COMPLETE THESE ITEMS OF WORK.

PAYMENT FOR ALL ABOVE WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

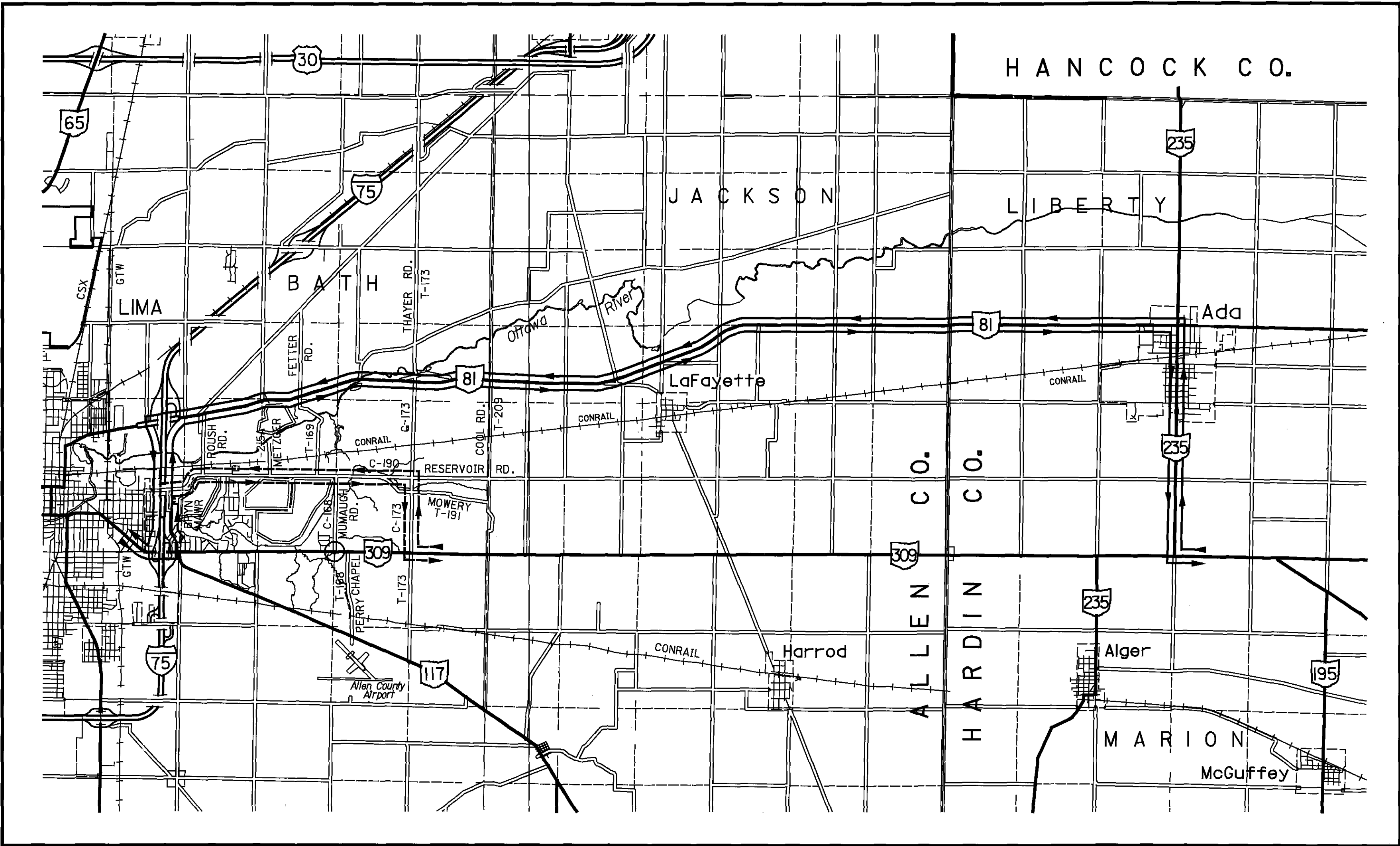
ITEM 622 PORTABLE CONCRETE BARRIER, 32"

THIS STANDARD TYPE OF P.C.B. SHALL BE FURNISHED AND INSTALLED AS PER STD. DWG. RM-4.2. ALL BARRIERS SHALL USE "J-J" HOOKS OR CONNECTING PIN AND STEEL ROD CONNECTOR METHOD OF CONNECTING THE SECTIONS TOGETHER. NO TONGUE AND GROOVE CONNECTIONS SHALL BE PERMITTED.

ALL PCB SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT AND FURNISHING,INSTALLING, MAINTAINING AND SUBSEQUENTLY REMOVING ALL PCB SHALL BE INCLUDED IN THE LUMP SUM PRICE BID ITEM 614 MAINTAINING TRAFFIC AS PER PLAN. ALL PCB SHALL BE IN GOOD SHAPE, FREE OF CRACKS, SPALLING OR ANY OTHER DAMAGE OR DETERIORATION. PCB SHALL BE USED AT LOCATIONS REQUIRED BY THE DROPOFF IN WORK ZONES SHEET INCLUDED IN THESE PLANS.

ITEM 614 BARRIER REFLECTOR AND OBJECT MARKER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE CONCRETE BARRIER USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO THE APPROPRIATE PROPOSAL NOTE AND SHALL BE SPACED AT 25 FEET. BASIS OF PAYMENT SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN AND SHALL INCLUDE ALL LABOR, EQUIPMENT, HARDWARE AND INCIDENTALS REQUIRED TO PERFORM THE WORK.



DESIGNATED LOCAL DETOUR ROUTE

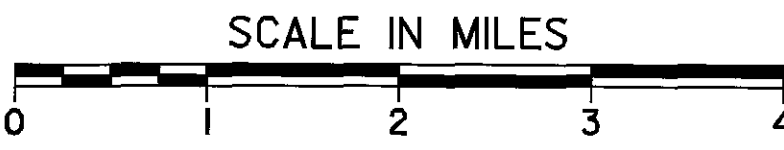
IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTES, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON THIS SHEET. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DIRECTED BY THE ENGINEER. THE REPLACEMENT PAVEMENT FOR ITEM 253 PAVEMENT REPAIR SHALL CONSIST OF 1-1/4" ITEM 448, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 PLACED ON 5" OF ITEM 301, ASPHALT CONCRETE BASE, PG64-22.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTES:

ITEM 253	PAVEMENT REPAIR	=	20 CU YD
ITEM 301	ASPHALT CONCRETE BASE, PG64-22	=	10 CU YD
ITEM 304	AGGREGATE BASE	=	10 CU YD
ITEM 407	TACK COAT	=	10 GALLON
ITEM 408	BITUMINOUS PRIME COAT	=	50 GALLON
ITEM 448	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN	=	5 CU YD

DETOUR MAP

- - PROJECT LOCATION
- - OFFICIAL SIGNED DETOUR
- - DESIGNATED LOCAL DETOUR



ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
253	20	CU YD	PAVEMENT REPAIR
301	10	CU YD	ASPHALT CONCRETE BASE, PG64-22
304	10	CU YD	AGGREGATE BASE
407	10	GALLON	TACK COAT
408	50	GALLON	BITUMINOUS PRIME COAT
448	5	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN
QUANTITIES CARRIED TO GENERAL SUMMARY			

DROPOFFS IN WORK ZONE NOTES

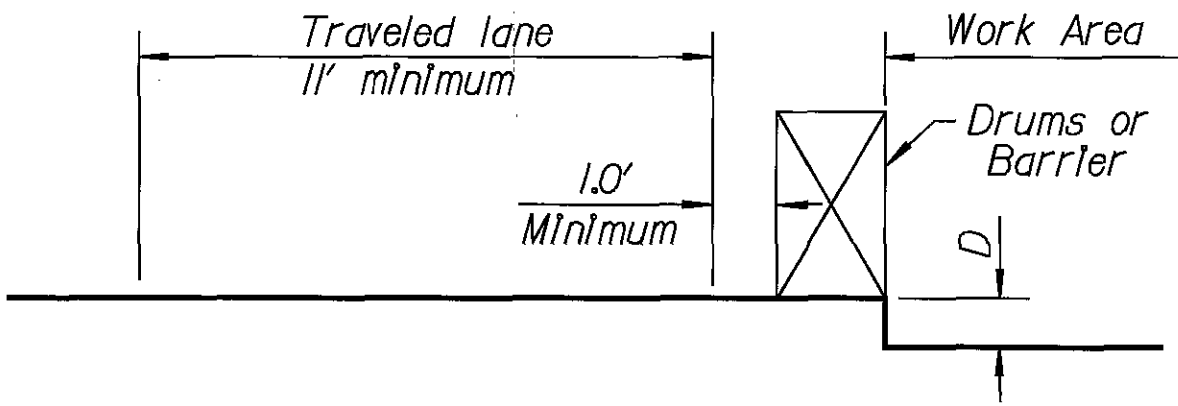
1. IT IS INTENDED THAT THIS SHEET BE USED FOR TREATMENT OF DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS, AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE CONSTRUCTION PLANS. ALL LABOR, EQUIPMENT OR MATERIALS TO IMPLEMENT THE DROPOFF TREATMENTS SPECIFIED HEREON SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.
2. WHILE THE NEED FOR CERTAIN ADVISORY SIGNING IS NOTED HEREON, IT IS NOT INTENDED THAT THIS BE INDICATIVE OF ALL SIGNING THAT MAY BE REQUIRED TO ADVISE OR WARN MOTORISTS, AND ALL REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) MUST BE FULFILLED.
3. WHERE CONCRETE BARRIER IS SPECIFIED, IT SHALL BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING RM-4.2 AND ITEM 622.
4. WHEN DRUMS ARE SPECIFIED FOR A DROPOFF CONDITION, A MINIMUM NUMBER OF FOUR DRUMS SHALL BE USED. SPACING SHALL BE AS INDICATED IN THE PLANS OR AS SPECIFIED IN THE OMUTCD.
5. PORTABLE CONCRETE BARRIER SHALL BE PLACED ON THE SAME LEVEL AS THE TRAFFIC SURFACE AND SHALL NOT ENCROACH ON LANE WIDTH(S) DESIGNATED AS THE MINIMUM REQUIRED FOR TRAFFIC USE. WHERE DRUMS ARE USED AND THEIR PRESENCE WOULD REDUCE TRAVELED LANE WIDTHS TO LESS THAN 10', DRUMS MAY BE PLACED ON THE OPPOSITE LEVEL FROM THAT OF TRAFFIC PROVIDED THE DROPOFF DEPTH DOES NOT EXCEED 5" AND APPROVAL IS GRANTED BY THE PROJECT ENGINEER.
6. FOR LOCATIONS, SUCH AS LANE SHIFTS, LANE CLOSURES, ECT., WHERE TRAFFIC IS REQUIRED TO NEGOTIATE ANY DIFFERENCE IN ELEVATION BETWEEN PAVEMENTS, A 3:1 SLOPE TREATMENT SIMILAR TO THE OPTIONAL WEDGE TREATMENT SHALL BE PROVIDED.

PAVEMENT RECONSTRUCTION AND WIDENING WORK:

- A. LENGTHS GREATER THAN 60 FEET - PROTECT AS SHOWN ON THIS SHEET.
- B. LENGTHS OF 60 FEET OR LESS -
DRUMS MAY BE USED AS A SEPARATOR ADJACENT TO THE TRAVELED LANE.

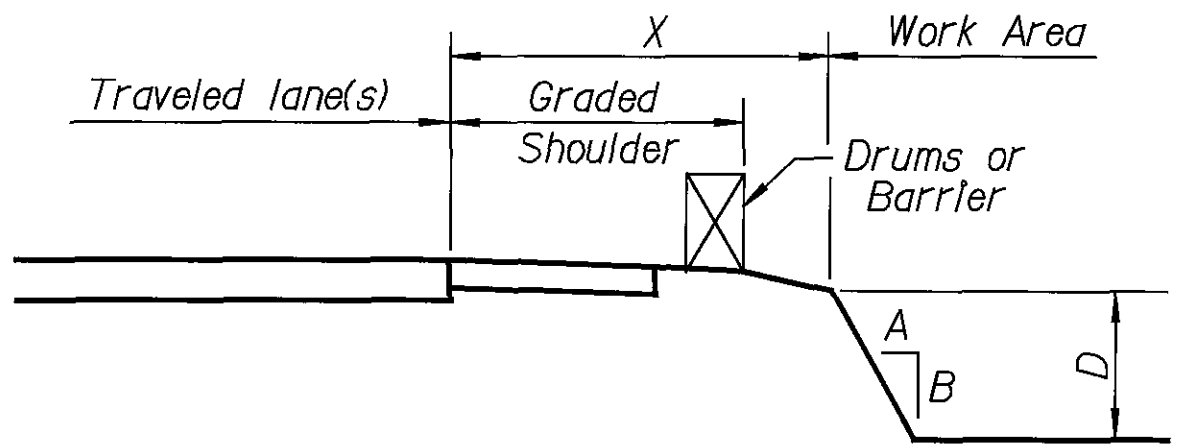
WORK AREA PROTECTION
ADJACENT TO TRAVELED LANES

D (In.)	TREATMENT
≤5	Maintain lanes utilizing drums as shown below.
>5-24	Lane closure utilizing portable concrete barrier as shown below.



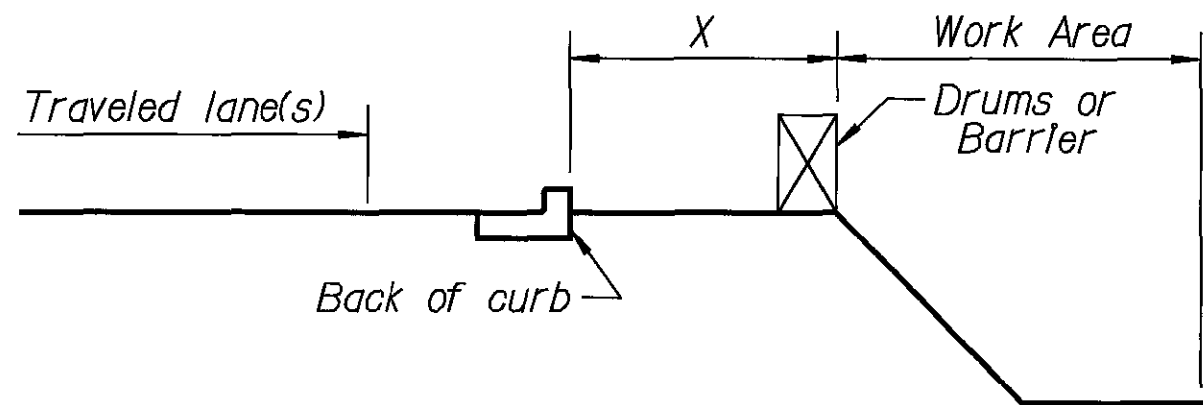
WORK AREA PROTECTION
BEYOND TREATED SHOULDER

USE FOR: Uncurbed Facilities



X (Ft.)	D (In.)	A/B	Treatment Required
0-30	Any	3:1 or Flatter	None
4-12	<12	Steeper than 3:1	Drums
4-12	>12	Steeper than 3:1	Barrier
>12-30	<24	Steeper than 3:1	Drums
>12-30	>24	Steeper than 3:1	Barrier
>30	Any	Any	None

USE FOR: Curbed facilities, where the curb is 6" or greater

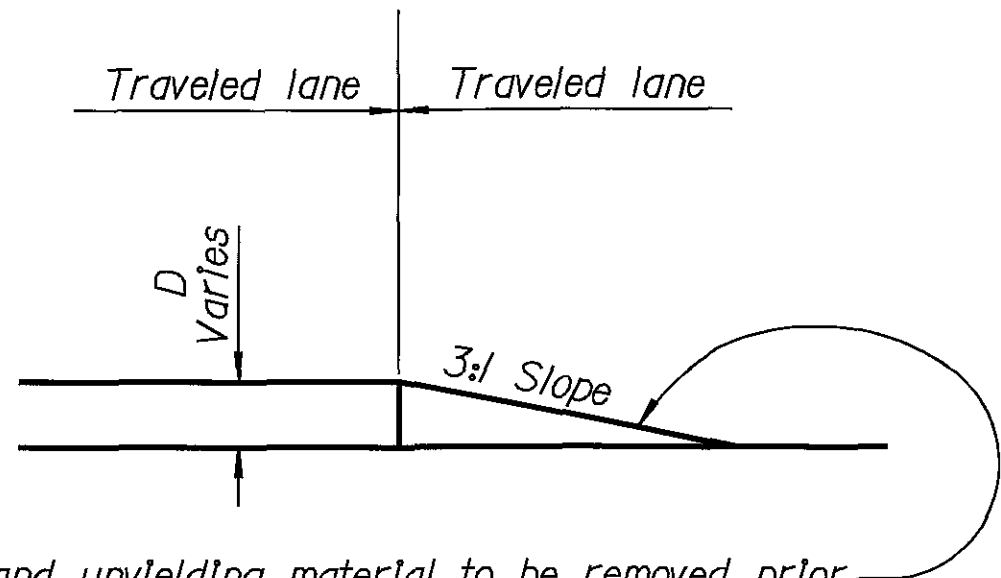


X (Ft.)	Treatment Required
0-10	Drums
>10	None

OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used between traveled lanes.
2. W8-11 sign required.



Firm and unyielding material to be removed prior to placing the abutting pavement course, unless otherwise permitted to remain by the plans or specifications. All cost associated with the supplying, placing and removing this material shall be included in the price bid Item 614 Maintaining Traffic, as per plan.

SHEET NO.													ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
			5	7	8	12	13	14		26	27	28						
																	ROADWAY	
			LUMP										201	11000	LUMP		CLEARING AND GRUBBING	
							1						202	20010	1	EACH	HEADWALL REMOVED	
							193						202	32500	193	FT	CURB AND GUTTER REMOVED	
							395						202	35100	395	FT	PIPE REMOVED, 24" AND UNDER	
						100							202	38000	100	FT	GUARDRAIL REMOVED	
											18		202	54000	18	EACH	RPM REMOVED AND DISPOSED	
							1						202	58100	1	EACH	CATCH BASIN REMOVED	
							462						202	75000	462	FT	FENCE REMOVED	
							1						202	98100	1	EACH	REMOVAL MISC: CONCRETE SLAB REMOVED	
							6						202	98100	6	EACH	REMOVAL MISC: MAILBOX REMOVED FOR REUSE	
							1940						203	10000	1940	CU YD	EXCAVATION	
							1448						203	20000	1448	CU YD	EMBANKMENT	
						1923				576			204	10000	2499	SQ YD	SUBGRADE COMPACTION	
							4						604	38500	4	EACH	MONUMENT ASSEMBLY	
						87.5							606	13000	87.5	FT	GUARDRAIL, TYPE 5	
						1							606	26500	1	EACH	ANCHOR ASSEMBLY, TYPE T	
							6						SPECIAL	69050000	6	EACH	MAILBOX SUPPORT	6
																	EROSION CONTROL	
							2						601	32300	2	CU YD	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER	
							5690						659	10000	5690	SQ YD	SEEDING AND MULCHING	
							0.77						659	20000	0.77	TON	COMMERCIAL FERTILIZER	
							31						659	35000	31	M GAL	WATER	
								1					832	10000	1	EACH	STORM WATER POLLUTION PREVENTION PLAN	
								3000					832	30000	3000	EACH	EROSION CONTROL	
																	DRAINAGE	
							0.3						602	20000	0.3	CU YD	CONCRETE MASONRY	
			30				5						603	00406	5	FT	4" CONDUIT, TYPE F, 707.41	
													603	01100	30	FT	6" CONDUIT, TYPE C	
							27						603	02000	27	FT	8" CONDUIT, TYPE C	
							95						603	03300	95	FT	10" CONDUIT, TYPE C	
							21						603	03700	21	FT	10" CONDUIT, TYPE F, 707.02	
							110						603	04900	110	FT	12" CONDUIT, TYPE D	
							22						603	06100	22	FT	15" CONDUIT, TYPE C, 706.02	
							347						603	07600	347	FT	18" CONDUIT, TYPE C	
							68						603	07600	68	FT	18" CONDUIT, TYPE C, 706.01	
							5						604	04500	5	EACH	CATCH BASIN, NO. 2-2B	
						326							605	31100	326	FT	AGGREGATE DRAINS	
																	PAVEMENT	
						3656							254	01000	3656	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
			3			468							301	46000	471	CU YD	ASPHALT CONCRETE BASE, PG64-22	
			3			528				106			304	20000	637	CU YD	AGGREGATE BASE	
						397							407	10000	397	GALLON	TACK COAT	
						122				41			407	14000	163	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
						673				219			408	10000	892	GALLON	PRIME COAT	
																	(Continued)	

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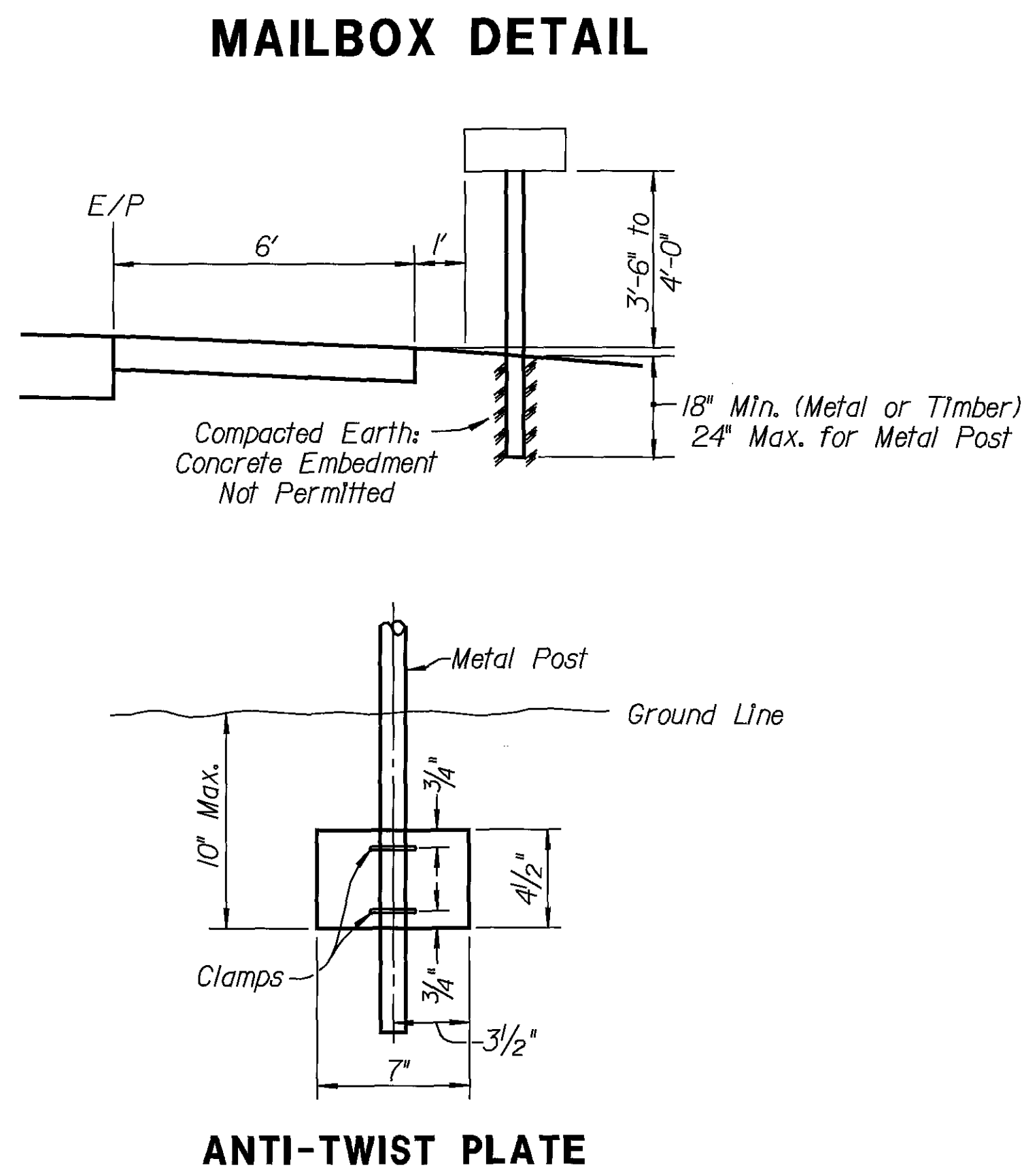
SHEET NO.													ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
			5	7	8	12	13	14		26	27	28						
																	PAVEMENT (Continued)	
						79							448	46040	79	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28	
			1							27			448	46050	28	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
			1							19			448	47021	20	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN	5
						205							448	50000	205	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H	
						6							617	10100	6	CU YD	COMPACTED AGGREGATE, TYPE A	
																	TRAFFIC CONTROL	
											26		621	00100	26	EACH	RPM	
						2							626	00300	2	EACH	BARRIER REFLECTOR, TYPE A2	
												109.0	630	03100	109.0	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
												20.0	630	80100	20.0	SQ FT	SIGN, FLAT SHEET	
												3	630	85000	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	
												6	630	85100	6	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
												7	630	86002	7	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
												1	630	86010	1	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION	
										0.37			642	00090	0.37	MILE	EDGE LINE	
										0.24			642	00290	0.24	MILE	CENTER LINE	
										450			647	18010	450	FT	CHANNELIZING LINE, TYPE B	
										113			647	18060	113	FT	STOP LINE, TYPE B	
										75			647	20110	75	FT	TRANSVERSE LINE, TYPE B	
										10			647	20610	10	EACH	LANE ARROW, TYPE B	
										2			647	20740	2	EACH	WORD ON PAVEMENT, 96", TYPE B	
																	TRAFFIC SIGNALS	
																	FOR TRAFFIC SIGNAL GENERAL SUMMARY	31
																	STRUCTURES	
																	FOR STRUCTURE GENERAL SUMMARY	36
																	MAINTENANCE OF TRAFFIC	
					20								253	02000	20	CU YD	PAVEMENT REPAIR	
					10								301	46000	10	CU YD	ASPHALT CONCRETE BASE, PG64-22	
					10								304	20000	10	CU YD	AGGREGATE BASE	
					10								407	10000	10	GALLON	TACK COAT	
					50								408	10000	50	GALLON	PRIME COAT	
				100									410	10000	100	CU YD	TRAFFIC COMPACTED SURFACE, TYPE A	
					5								448	47021	5	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, AS PER PLAN	5
													614	12600	20	EACH	REPLACEMENT DRUM	
					20								616	10000	14	M GAL	WATER	
					14													
					LUMP								614	11001	LUMP		MAINTAINING TRAFFIC, AS PER PLAN	
													619	16010	5	MONTH	FIELD OFFICE, TYPE B	
													623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
													624	10000	LUMP		MOBILIZATION	
													SPECIAL	10810000	LUMP		CPM PROGRESS SCHEDULE	

PAVEMENT TABLE																
LOCATION		NORMAL WIDTH	TOTAL AREA	204	254		301	304		407	407	408	448	448		617
				Subgrade Compaction	Pavement Planing, Asphalt Concrete (T=1-1/4")		Bituminous Aggregate Base, PG64-22 (T=10')	Aggregate Base (T=8')	Aggregate Base (T=12')	Tack Coat (@ 0.075 Gallon per Sq Yd)	Tack Coat for Interim. Course (@ 0.075 Gallon per Sq Yd)	Prime Coat (@ 0.40 Gallon per Sq Yd)	Asphalt Concrete Intermediate Course, Type 2, PG64-28 (T=1-3/4")	Asphalt Concrete Surface Course, Type 1H (T=1-1/2')		Compacted Aggregate, Type A (T=8')
Station		Ft	Sq Yd	Sq Yd	Sq Yd		Cu Yd	Cu Yd	Cu Yd	Gallon	Gallon	Gallon	Cu Yd	Cu Yd		Cu Yd
1008+90 to 1014+80		Varies	27.1													6.0
			1954.5		1954.5					146.6						
			711.2							53.3	53.3		34.6			
			743.7				206.6					297.5				
			885.6					196.8								
			907.9	907.9												
			2665.7											111.1		
1014+80 to 1015+40		36'	366.1							27.5	27.5		17.8	15.3		
			370.6				102.9					148.2				
			384.2					85.4								
Over Culvert			386.5	386.5					108							
			191													
1015+40 to 1016+95 (Includes Mumaugh Rd)		Varies	1701.6		1701.6					127.6						
			551.8							41.4	41.4		26.8			
			569.0				158.1					227.6				
			619.9					137.8								
			628.6	628.6												
			2253.4											78.2		
	Subtotals							420	108							
TOTALS TO GENERAL SUMMARY				1923	3656		468	528		397	122	673	79	205		6

AGGREGATE DRAINS					
Location	Spacing	605	Location	Spacing	605
		Aggregate Drains			Aggregate Drains
Station		Ft	Station		Ft
1010+35 Rt		12	1014+60 Lt		15
1011+15 Rt		14	1015+00 Lt		15
1011+65 Rt		15	1015+55 Lt		15
1011+85 Lt		13	1016+40 Rt		8
1012+25 Rt to 1015+25 Rt	50	105	1016+65 Lt		8
1012+60 Lt		15	1016+90 Rt		8
1013+05 Lt		15	10+75 Rt to 11+75 Rt (Mu)	50	24
1013+60 Lt		15	10+00 Lt (Mumaugh)		7
1014+05 Lt		15	10+50 Lt (Mumaugh)		7
TOTALS TO GENERAL SUMMARY					326

GUARDRAIL "G"							
Reference No.	Sheet No.	Location	202		606		626
			Guardrail Removed		Guardrail, Type 5	Anchor Assembly, Type T	Barrier Reflector, Type A2
		Station	Ft		Ft	Each	Each
IG	22	11+00 Lt to 12+00 Lt	100		87.5	1	2
TOTALS TO GENERAL SUMMARY			100		87.5	1	2

DRAINAGE "D"																					
Reference No.	Sheet No.	Location	202			601	602	603								604	Bends & Branches				
			Headwall Removed	Pipe Removed 24" & Under	Catch Basin Removed	Rock Channel Protection, Type D w/Filter (T=24")	Concrete Masonry	Conduit (Ft)	Catch Basin, No. 2-2B					8"x60"	10"x60"	10"x90"	18"x45"				
										Type											
										4"	8"	10"						12"	15"	18"	
Station	Each	Ft	Each	Cu Yd	Cu Yd	F	C	C	F	D	C	C	C	Each							
							707.41				707.02		706.02		706.01						
1D	15	1011+85 Lt to 1013+05 Lt		50									120		1						
2D	15	1009+58 Rt to 1010+23 Rt									65										
3D	15	1010+53 Rt to 1010+98 Rt		40							45										
4D	15	1012+18 Rt to 1012+35 Rt				1.5			21												
5D	16	1013+05 Lt to 1014+05 Lt		42									100		1						
6D	16	1014+05 Lt to 1015+28 Lt	1	160			5			55			127		2		1	1			
7D	16	10+54 Rt (Mu.) to 11+17 Rt (Mu.)		77	1			27	40			22			1	1	1				
8D	16	1013+92 Rt to 1013+96 Rt		13		1.2	0.33														
9D	16	1014+97 Rt to 1015+48 Rt		13									68					2			
TOTALS TO GENERAL SUMMARY			1	395	1	2	0.3	5	27	95	21	110	22	347	68	5					



SEEDING		
Sheet No.	Location	659 Seeding and Mulching
		Sq Yd
17	SR 309	484
18		1533
19		1009
20		1468
21		466
23	MUMAUGH RD	66
24		664
TOTAL		5690
TO GENERAL SUMMARY		

EARTHWORK			
Sheet No.	Location	203	
		Excavation	Embankment
		Cu Yd	Cu Yd
17	SR 309	434	18
18		676	103
19		224	332
20		344	579
21		115	208
23	MUMAUGH RD	0	8
24		147	200
TOTALS		1940	1448
TO GENERAL SUMMARY			

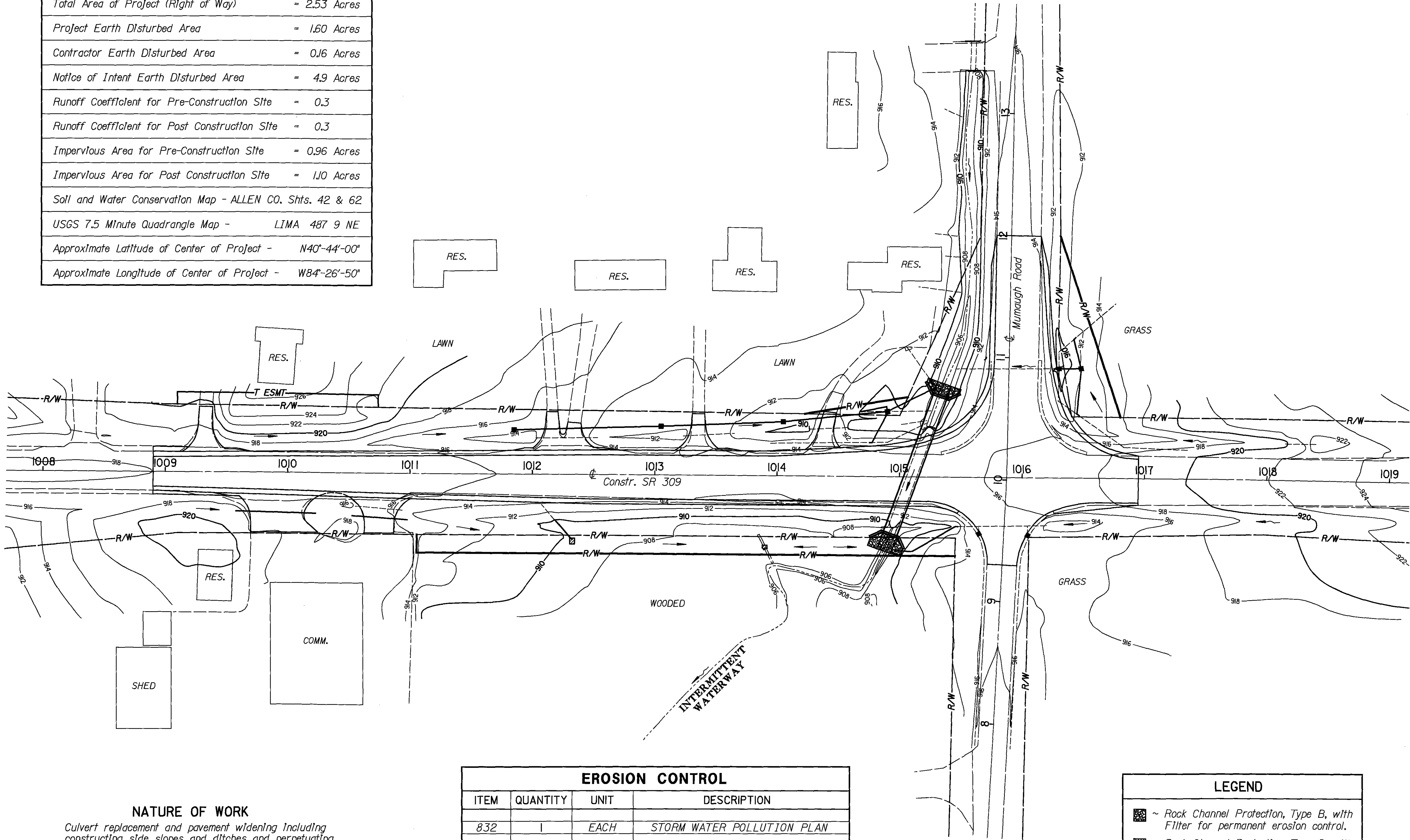
FENCE "F"				
Reference No.	Sheet No.	Location	202	Fence Removed
			Station	
			Ft	
1F	15-16	1011+11.3 to 9+35 Lt (Mumaugh)	462	
TOTALS TO GENERAL SUMMARY				462

SEEDING & MULCHING CALCULATIONS	
659 COMMERCIAL FERTILIZER Seeding and Mulching = 5690 Sq Yd (5690X9X1/1000X30X1/2000) = 0.77 Ton	
659 WATER (2X5690X9X1/1000X300X1/1000) = 31 M Gal	
QUANTITIES CARRIED TO GENERAL SUMMARY	

ROADWAY "R"						
Reference No.	Sheet No.	Location	202	604	690	
			Curb and Gutter Removed	Removal Misc.: Concrete Slab Removed	Removal Misc.: Mailbox Removed for Reuse	Monument Assembly
			Ft	Each	Each	Each
1R	15	5/4 Cor. of Section 34				1
2R	15	1009+49.8 Lt			1	1
3R	15	1011+98.6 Lt		1	1	1
4R	15	1012+50.8 Lt			1	1
5R	15	1009+59.3 Rt			1	1
6R	16	1013+52.5 Lt			1	1
7R	16	1014+52.5 Lt			1	1
8R	16	1015+26.46, 2.23 Rt				1
9R	16	1015+87.44, 2.06 Rt				1
10R	16	1015+34.0 Lt to 10+96.5 Lt (Mu)	97			
11R	16	10+99.2 Rt (Mu) to 1016+52.3 Lt	96			
12R	22	36+57.47 C (Mumaugh Rd)				1
TOTALS TO GENERAL SUMMARY			193	1	6	4

DESIGN FILE : I:\p\23469\Construction\309pp.dgn
DATE : 27-OCT-2004
TIME : 08:52
USERNAME : nvondere

PROJECT DATA	
Total Area of Project (Right of Way)	= 2.53 Acres
Project Earth Disturbed Area	= 1.60 Acres
Contractor Earth Disturbed Area	= 0.16 Acres
Notice of Intent Earth Disturbed Area	= 4.9 Acres
Runoff Coefficient for Pre-Construction Site	= 0.3
Runoff Coefficient for Post Construction Site	= 0.3
Impervious Area for Pre-Construction Site	= 0.96 Acres
Impervious Area for Post Construction Site	= 1.10 Acres
Soil and Water Conservation Map - ALLEN CO. Shts. 42 & 62	
USGS 7.5 Minute Quadrangle Map -	LIMA 487 9 NE
Approximate Latitude of Center of Project -	N40°-44'-00"
Approximate Longitude of Center of Project -	W84°-26'-50"



NATURE OF WORK
Culvert replacement and pavement widening including constructing side slopes and ditches and perpetuating all existing drainage items encountered during the previously mentioned operations.

EROSION CONTROL			
ITEM	QUANTITY	UNIT	DESCRIPTION
832	1	EACH	STORM WATER POLLUTION PLAN
832	3000	EACH	EROSION CONTROL
QUANTITIES CARRIED TO GENERAL SUMMARY			

LEGEND	
	~ Rock Channel Protection, Type B, with Filter for permanent erosion control.
	~ Rock Channel Protection, Type D, with Filter for permanent erosion control.



HORIZONTAL SCALE IN FEET

0

20

40

80

CALCULATED
A/JV

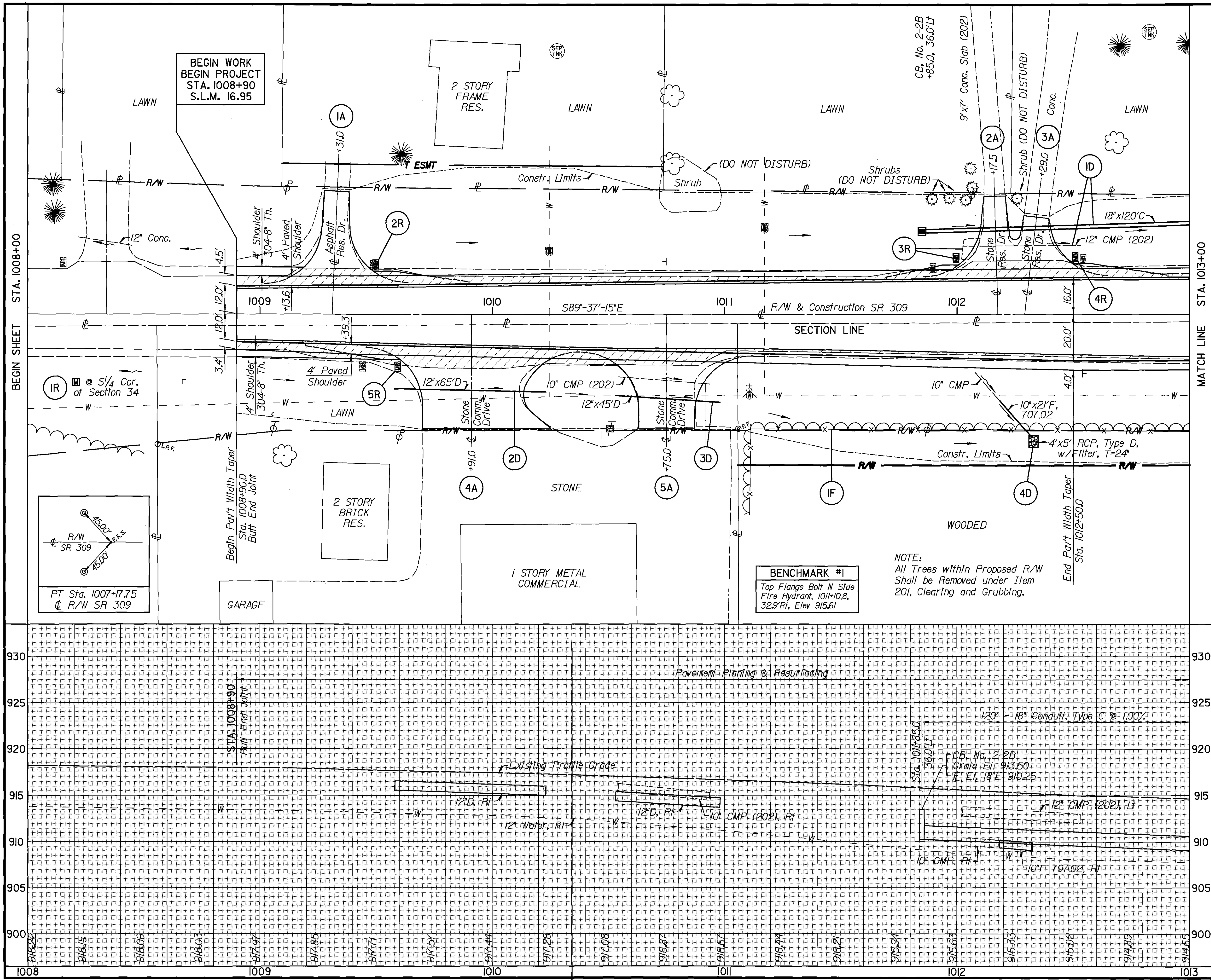
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CW

PROJECT SITE PLAN

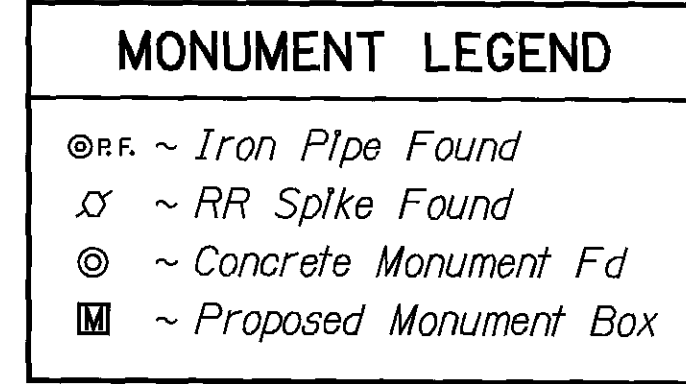
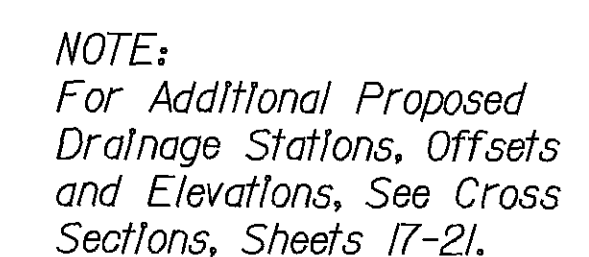
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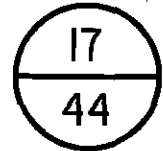
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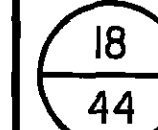


ESTIMATED QUANTITIES	
ITEM	Sheet
DRAINAGE "D"	13
ROADWAY "R"	13
FENCE "F"	13



DATE : 27-OCT-2004
TIME : 08:34





EARTHWORK			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
27	68		
		15	0
		40	91
35	73		
		51	104
34	68		
		31	58
31	52		
		25	0
		22	34
34	51		
		40	45
50	42		
SHT. 13		224	332
SQ. FT.		CU. YD.	

ALL-309-16.95

DATE : 27-OCT-2004
TIME : 08:32

EARTHWORK			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
90	106		
		133	143
90	88		
01 Prt 77.0		33	35
88 30	100 100		
		43	119
28	60		
		12	0
		43	105
30	82		
		50	113
37	70		
		30	64
27	68		
SHT. 13		344	579
SQ FT		CU YD	

ALL-309-16.95

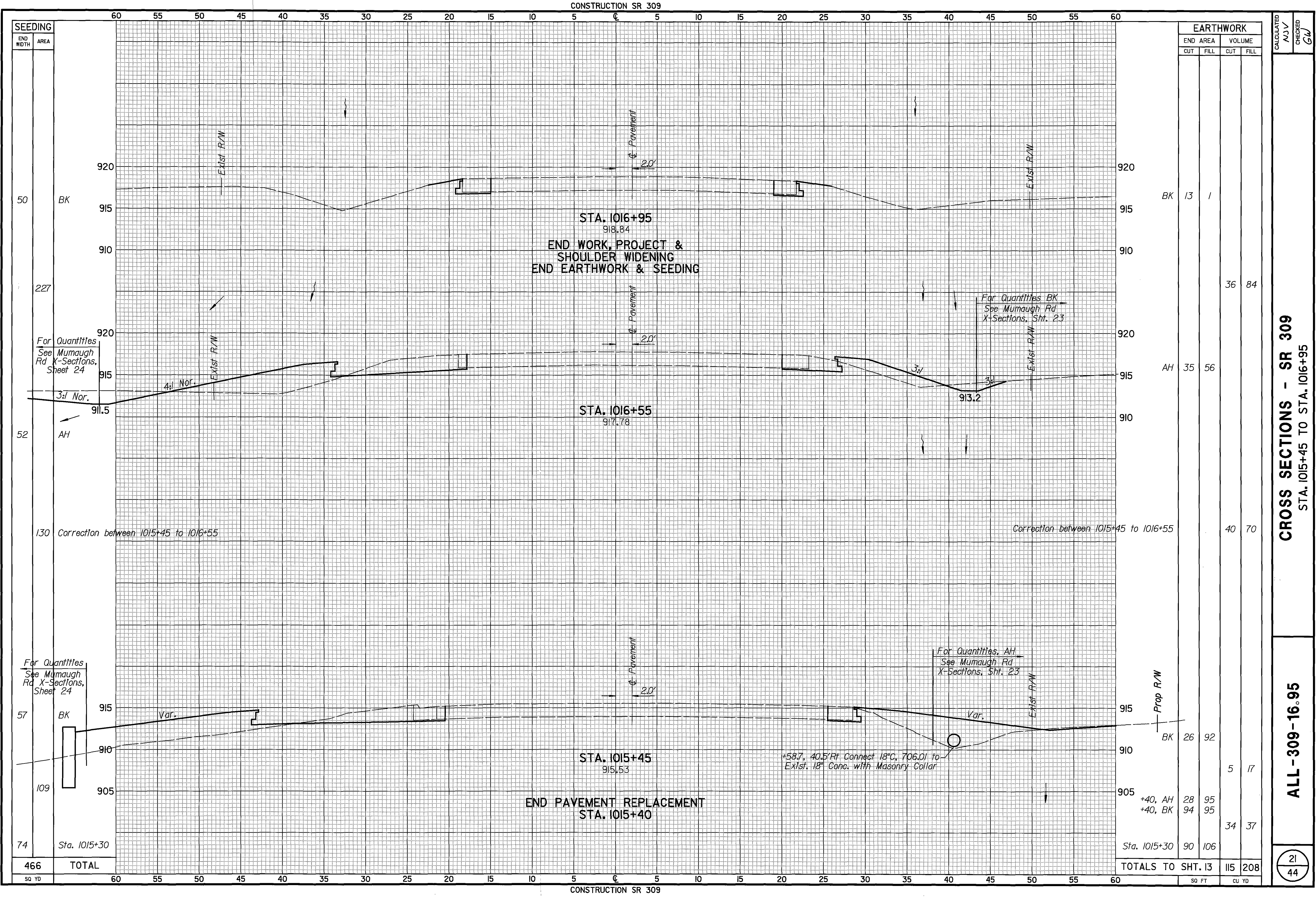


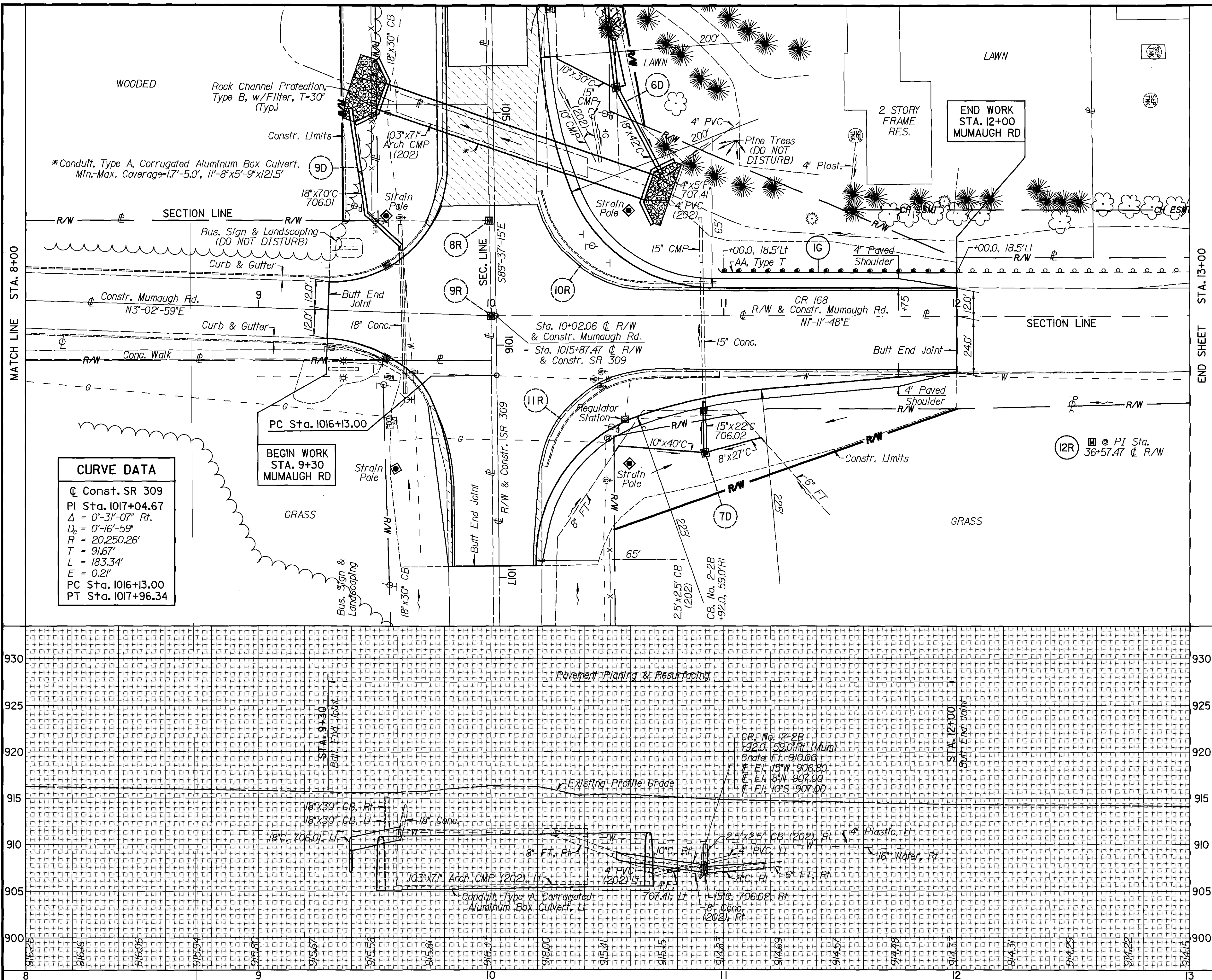
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DATE : 27-OCT-2004
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USERNAME : nvandere

DATE : 27-OCT-2004
TIME : 08:31





CURVE DATA	
CL Const. SR 309	
PI Sta. 1017+04.67	
$\Delta = 0^\circ-31'-07''$ Rt.	
$D_c = 0^\circ-16'-59''$	
$R = 20,250.26'$	
$T = 91.67'$	
$L = 183.34'$	
$E = 0.21'$	
PC Sta. 1016+13.00	
PT Sta. 1017+96.34	

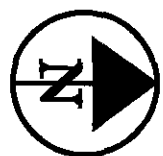
ESTIMATED QUANTITIES	
ITEM	Sheet
DRAINAGE "D"	13
ROADWAY "R"	13
GUARDRAIL "G"	13
FENCE "F"	13
STRUCTURE	
Quantities & Details 35-39	

NOTE:
For Intersection Detail,
See Sheet 25.



MONUMENT LEGEND	
⊙ R.F. ~ Iron Pipe Found	
⊗ ~ RR Spike Found	
⊙ ~ Concrete Monument Fd	
⊞ ~ Proposed Monument Box	

NOTE:
For Additional Proposed
Drainage Stations, Offsets
and Elevations, See Cross
Sections, Sheets 23-24.



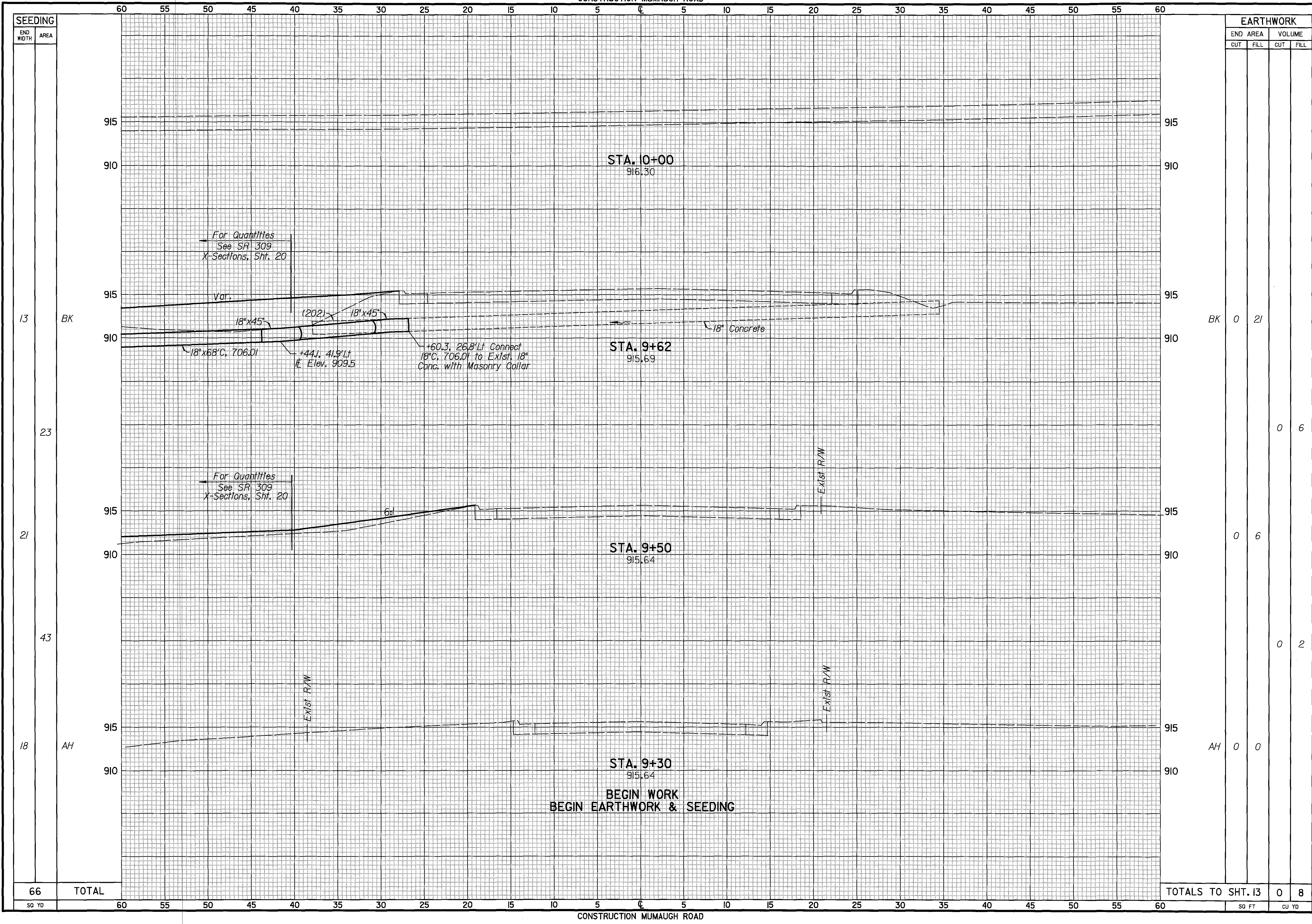
HORIZONTAL
SCALE IN FEET
0 10 20 40

PLAN AND PROFILE - MUMAUGH ROAD
STA. 8+00 TO STA. 13+00

ALL - 309 - 16.95

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DATE : 27-OCT-2004
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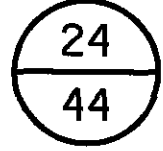


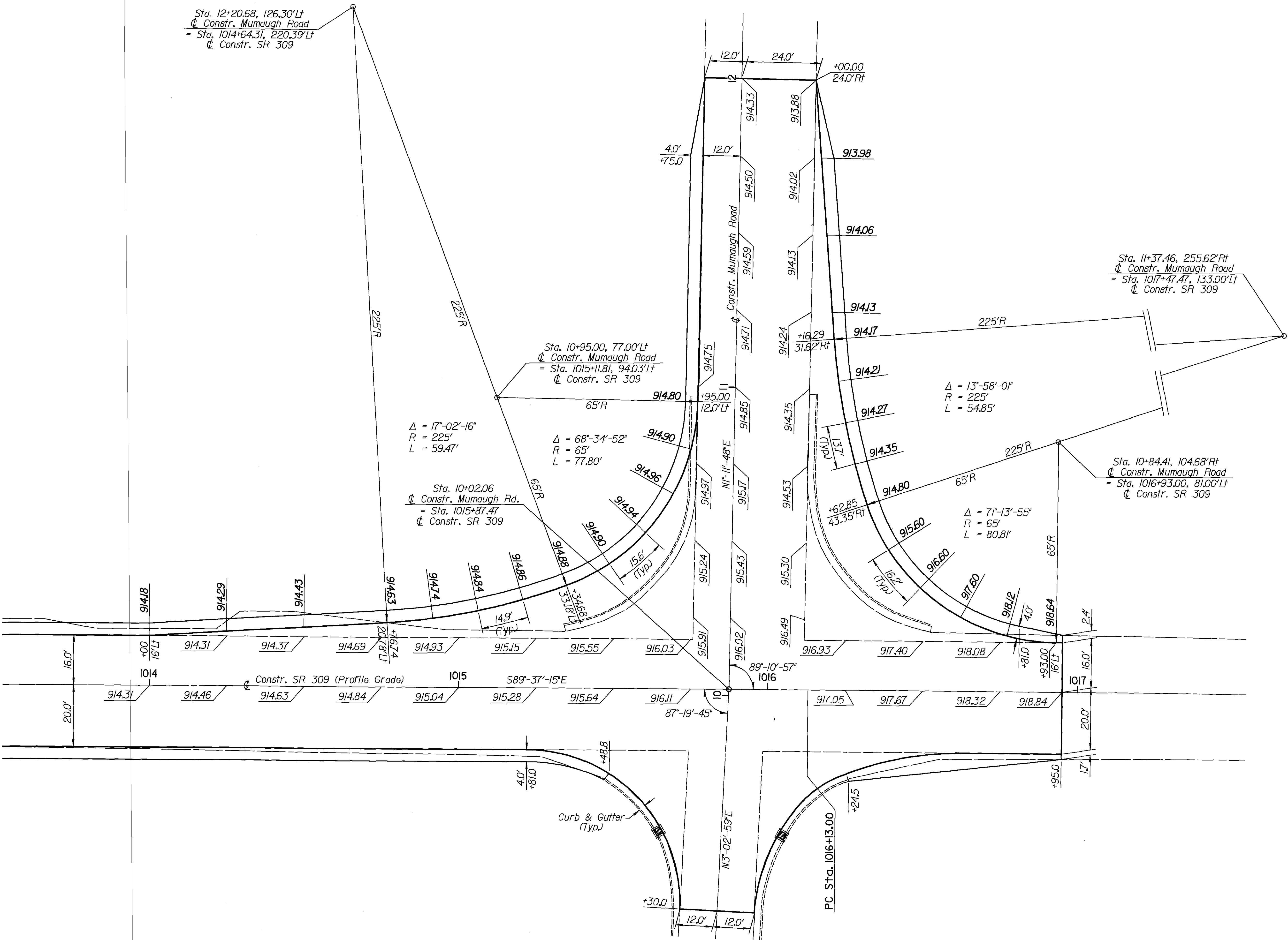
SEEDING	
END WIDTH	AREA
13	BK
23	
21	
43	
18	AH
66	TOTAL

EARTHWORK			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
BK	0	21	
		0	6
	0	6	
		0	2
AH	0	0	
TOTALS TO SHT. 13		0	8

CROSS SECTIONS - MUMAUGH ROAD
STA. 9+30 TO STA. 10+00

ALL-309-16.95

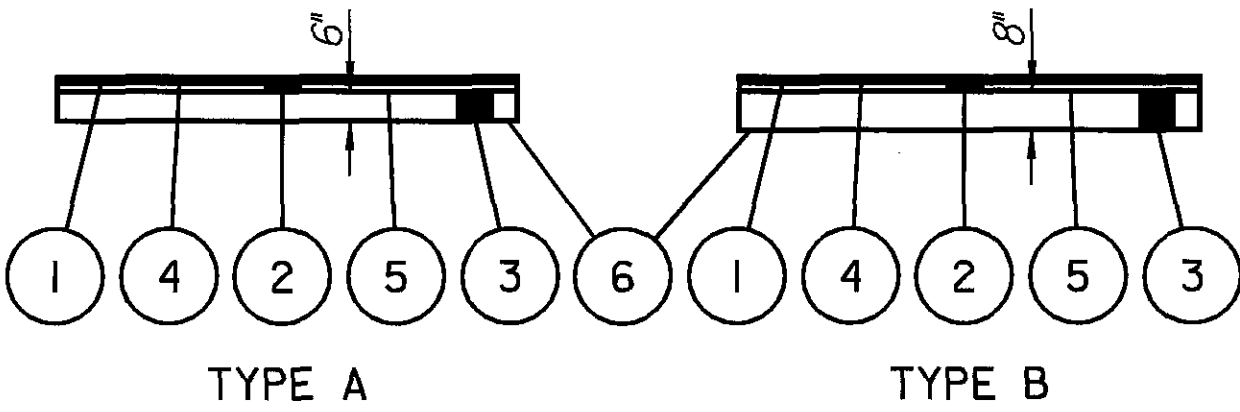




PROPOSED LEGEND

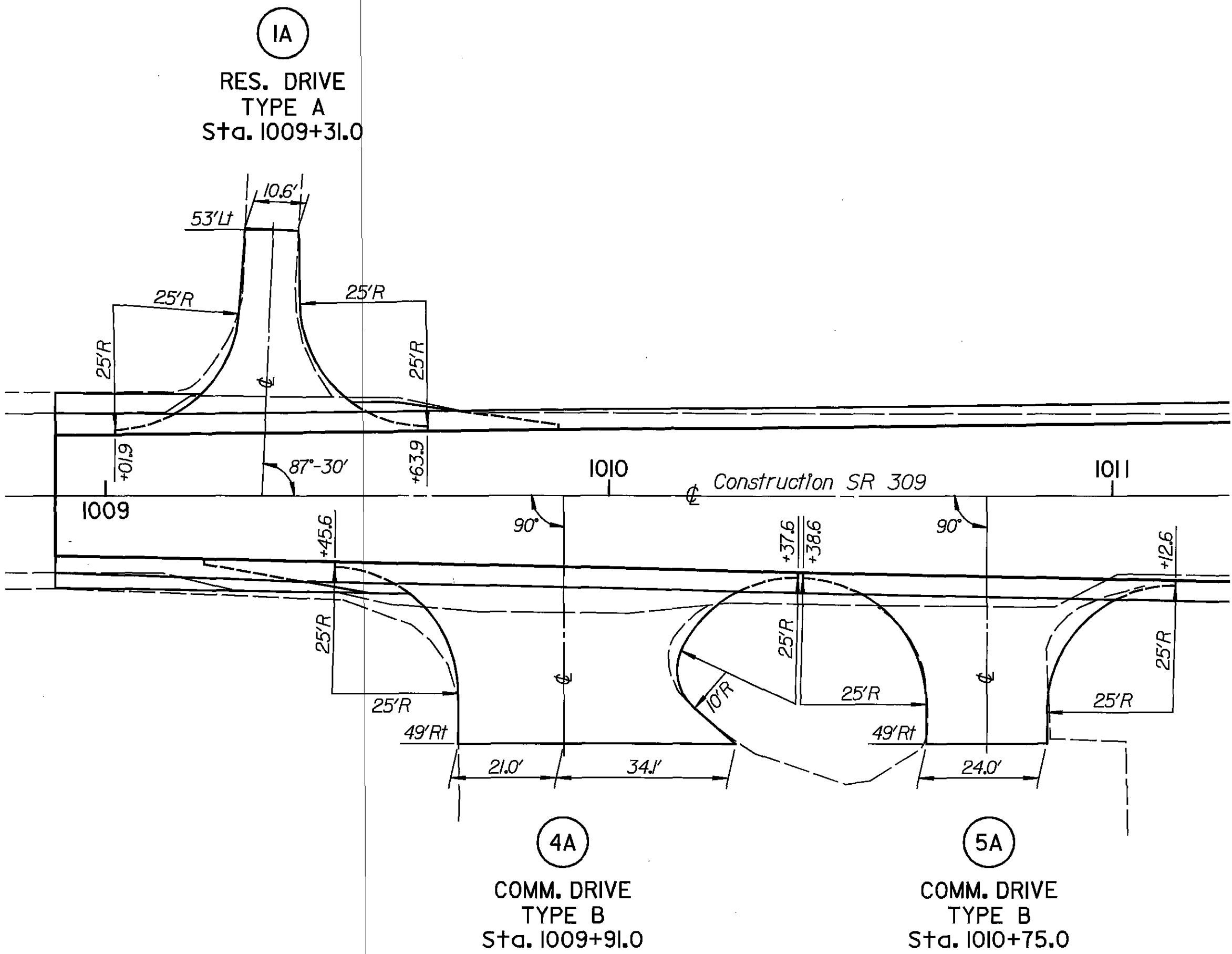
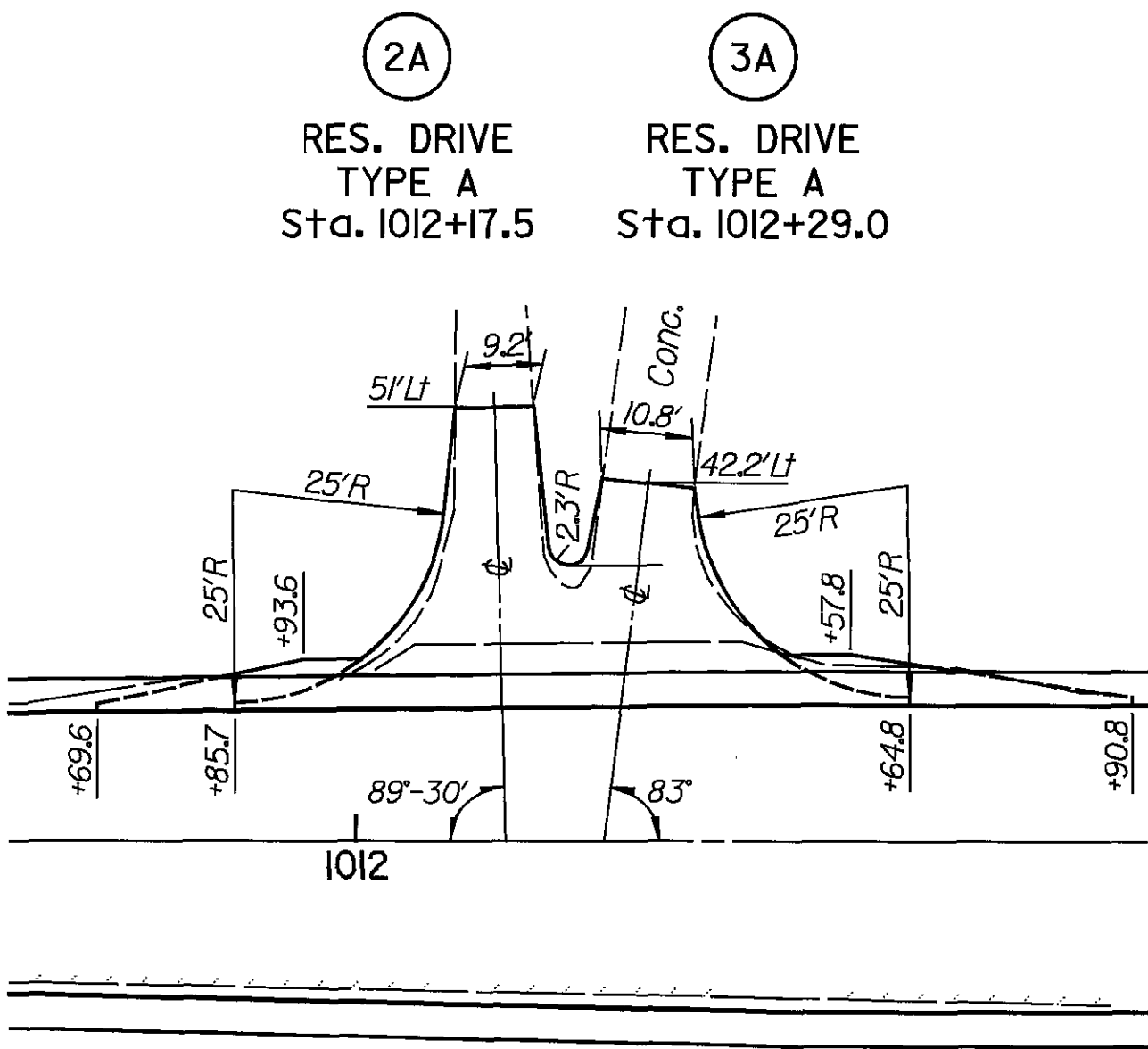
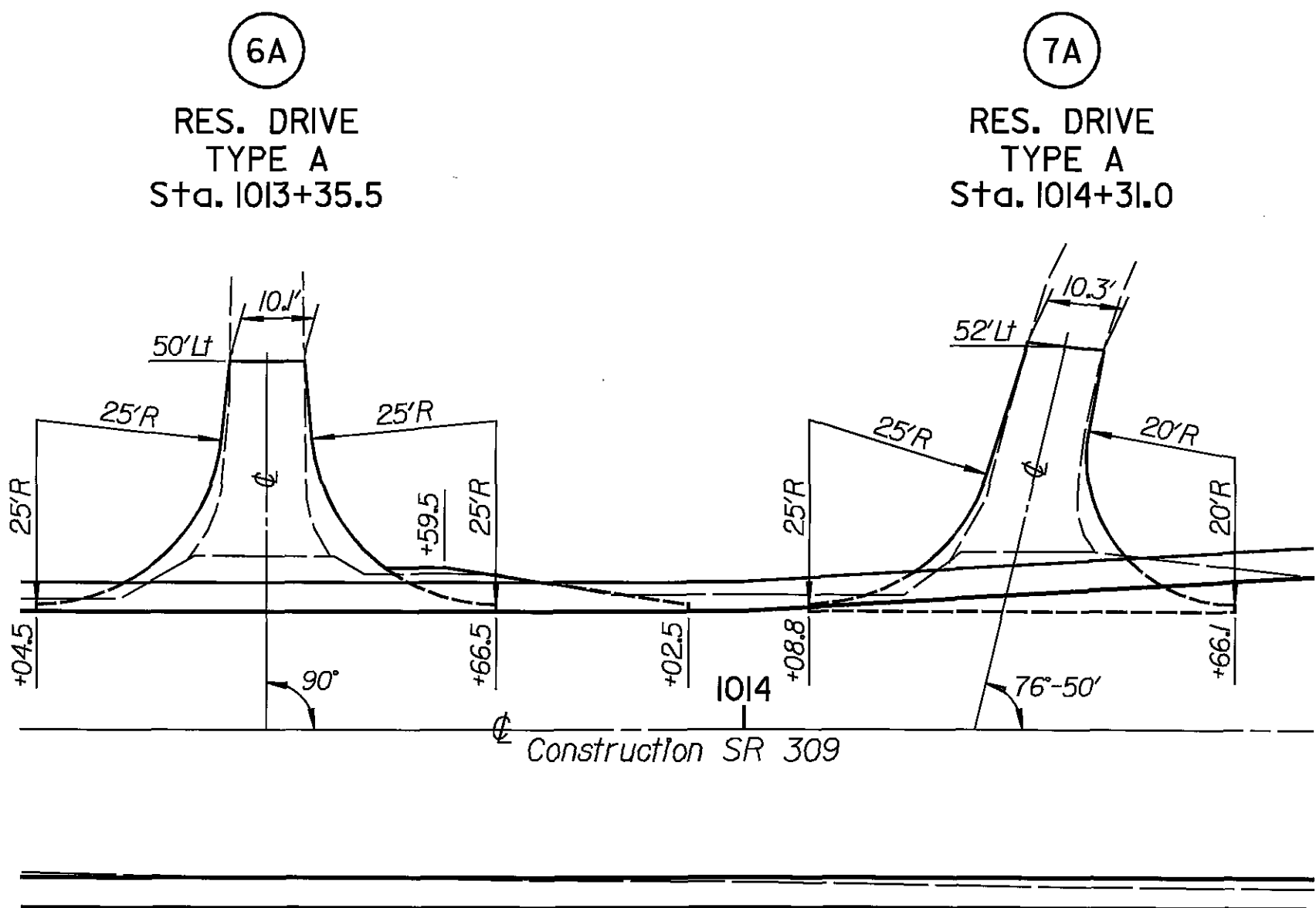
- 1 Item 448 1-1/4" Asphalt Concrete Surface Course, Type 1, PG64-22, as per Plan
- 2 Item 448 1-3/4" Asphalt Concrete Intermediate Course, Type 2, PG64-22
- 3 Item 304 Aggregate Base (Thickness as Shown)
- 4 Item 407 Tack Coat for Intermediate Course (See General Note)
- 5 Item 408 Prime Coat applied at a rate of 0.40 Gallons per Sq Yd
- 6 Item 204 Subgrade Compaction

TYPICAL SECTIONS - DRIVES

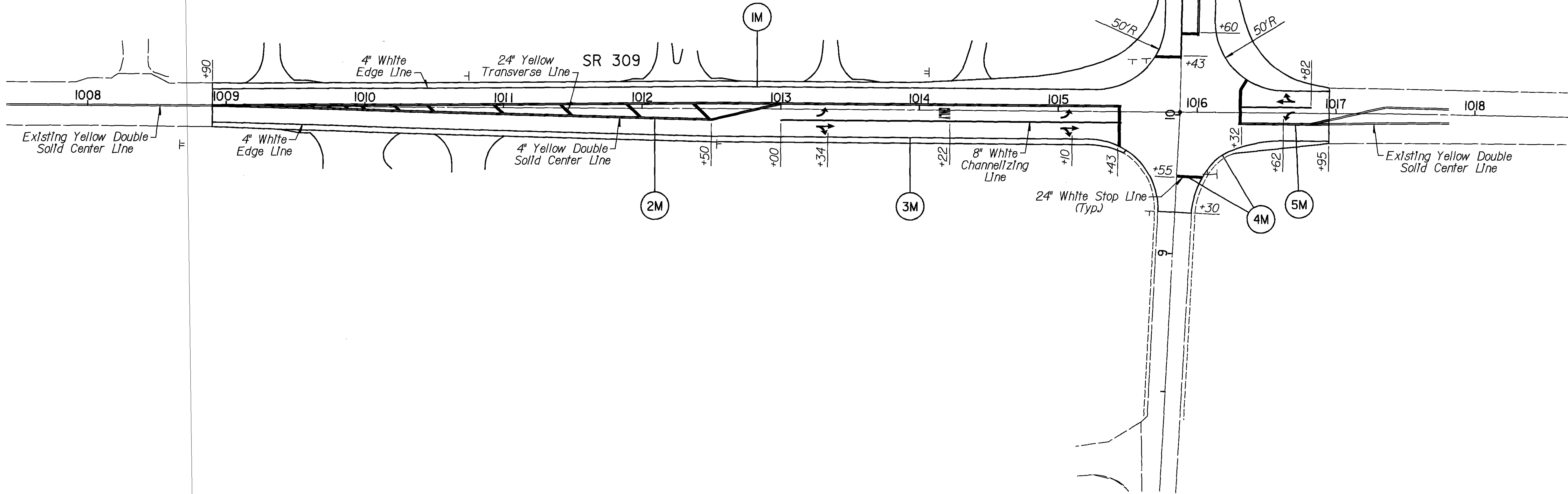


SIDE APPROACHES "A"

Reference No.	Sheet No.	Location	Type	Total Area	204	304	407	408	448	
					Subgrade Compaction	Aggregate Base	Tack Coat for Intermediate Course	Bituminous Prime Coat, applied at 0.40 Gallon/Sq Yd	Asphalt Concrete Intermed. Course, Type 2, PG64-22 (T=1-3/4")	Asphalt Concrete Surface Course, Type 1, PG64-22, APP (T=1-1/4")
				Sq Yd	Sq Yd	Cu Yd	Gallon	Gallon	Cu Yd	Cu Yd
1A		1009+31.0 Lt	Res.	69.2	76.2	11.5	5.2	27.7	3.4	2.4
2A		1012+17.5 Lt	Res.							
3A		1012+29.0 Lt	Res.	100.9	106.5	16.8	7.6	40.4	4.9	3.5
4A		1009+91.0 Rt	Comm.	173.8	174.7	38.6	13.0	69.5	8.4	6.0
5A		1010+75.0 Rt	Comm.	95.5	99.0	21.2	7.2	38.2	4.6	3.3
6A		1013+35.5 Lt	Res.	60.4	65.2	10.1	4.5	24.1	2.9	2.1
7A		1014+31.0 Lt	Res.	48.6	54.3	8.1	3.7	19.4	2.4	1.7
TOTALS TO GENERAL SUMMARY					576	106	41	219	27	19

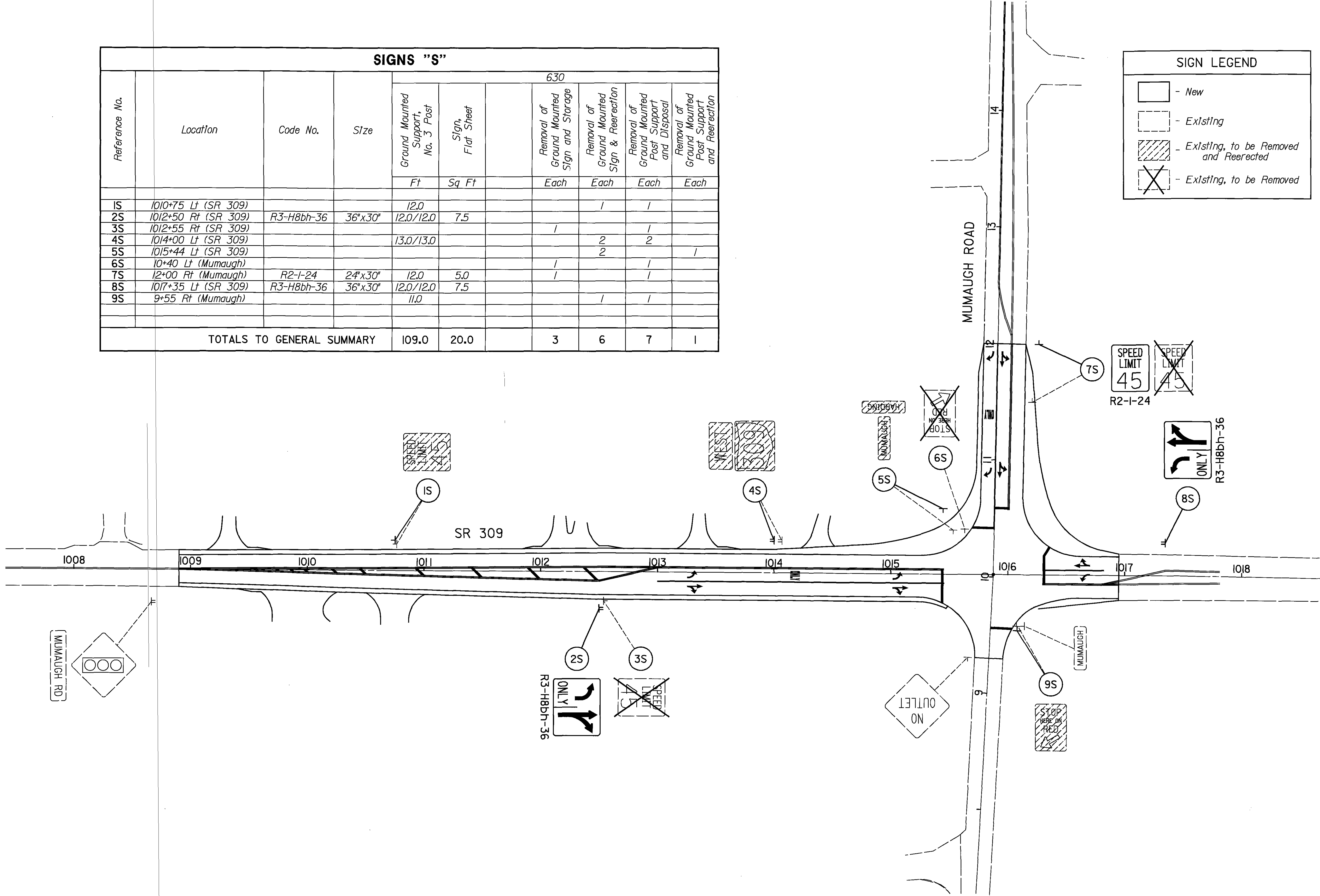


PAVEMENT MARKING "M"											
Reference No.	Location	202	621		642		647				
		RPM Removed and Disposed	RPM		Edge Line	Center Line	Channelizing Line, Type B	Stop Line, Type B	Transverse Line, Type B	Lane Arrow, Type B	Word On Pavement, 96", Type B
			2-Way Yellow	2-Way Wh/Red							
	Station	Each	Each	Each	Mile	Mile	Ft	Ft	Ft	Each	Each
1M	1008+90 Lt to 12+00 Lt (Mumaugh)				0.161						
2M	1008+90 C to 1015+43 C	13	14	7		0.202	243	30	75	4	1
3M	1008+90 Rt to 9+30 Lt (Mumaugh)				0.135						
4M	9+30 Rt (Mumaugh) to 1016+95 Rt				0.024			18			
5M	1016+32 Rt to 1016+95 Rt	5	2	3		0.014	50	34		2	
6M	10+43 C to 12+00 C (Mumaugh)					0.027	157	31		4	1
7M	12+00 Rt (Mumaugh) to 1016+95 Lt				0.046						
TOTALS TO GENERAL SUMMARY		18	26		0.37	0.24	450	113	75	10	2



SIGNS "S"									
Reference No.	Location	Code No.	Size	630					
				Ground Mounted Support, No. 3 Post	Sign, Flat Sheet		Removal of Ground Mounted Sign and Storage	Removal of Ground Mounted Sign & Reerection	Removal of Ground Mounted Post Support and Disposal
				Ft	Sq Ft		Each	Each	Each
1S	1010+75 Lt (SR 309)			12.0				1	1
2S	1012+50 Rt (SR 309)	R3-H8bh-36	36"x30"	12.0/12.0	7.5				
3S	1012+55 Rt (SR 309)						1		1
4S	1014+00 Lt (SR 309)			13.0/13.0				2	2
5S	1015+44 Lt (SR 309)							2	
6S	10+40 Lt (Mumaugh)						1		1
7S	12+00 Rt (Mumaugh)	R2-I-24	24"x30"	12.0	5.0		1		1
8S	1017+35 Lt (SR 309)	R3-H8bh-36	36"x30"	12.0/12.0	7.5				
9S	9+55 Rt (Mumaugh)			11.0				1	1
TOTALS TO GENERAL SUMMARY				109.0	20.0		3	6	7

SIGN LEGEND	
	- New
	- Existing
	- Existing, to be Removed and Reerected
	- Existing, to be Removed



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REF-FILE *3
REF-FILE *3 LEVELS 0N:
REF-FILE *4
REF-FILE *4 LEVELS 0N:

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POWER SUPPLY FOR TRAFFIC SIGNALS

ELECTRIC POWER SHALL BE OBTAINED FROM THE AMERICAN ELECTRIC POWER COMPANY AT THE LOCATION INDICATED ON THE PLANS. POWER SUPPLIED SHALL BE 120 VOLTS.

ODOT SPECIFICATIONS FOR THE FURNISHING AND INSTALLATION OF TRAFFIC SIGNAL EQUIPMENT ARE CONTAINED IN THE FOLLOWING CMS SECTIONS:
625 AND 725 TRENCH, CONDUIT, GROUND RODS AND PULL BOXES
632 AND 732 TRAFFIC SIGNAL EQUIPMENT
633 AND 733 TRAFFIC SIGNAL CONTROLLERS
CMS SPECIFICATIONS RELATED TO SPECIFIC TRAFFIC SIGNAL ITEMS HAVE BEEN REFERENCED INDIVIDUALLY AS THEY HAVE BEEN DISCUSSED IN THIS PART.

625. GROUND ROD, AS PER PLAN

IN ADDITION TO CMS ITEM 625.09, THIS ITEM SHALL CONSIST OF FURNISHING AND RUNNING OF A SEVEN STRAND #4 COPPER WIRE FROM THE TOP OF THE GROUND ROD AND ATTACHING IT TO THE NEUTRAL BAR IN THE CABINET.

GROUND RODS INTENDED FOR STRAIN POLE LOCATIONS SHALL FOLLOW STANDARD CONSTRUCTION DRAWING TC-21.20.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER EACH.

632. REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC., SHALL BE REMOVED IN ACCORDANCE WITH CMS 632.26 AND AS INDICATED ON THE PLANS.

THE FOLLOWING SALVAGED ITEMS SHALL BE DELIVERED TO ODOT DISTRICT ONE SIGNAL SHOP.

2070L CONTROLLER
TYPE 336 CABINET & ACCESSORIES
VIDEO DETECTION CAMERA/EQUIPMENT & PROCESSOR
WOODEN POLES
SIGNAL HEADS & HANGERS

DISTRICT ONE(1) HIGHWAY MANAGEMENT,
2100 N. WEST STREET,
LIMA,
OHIO 45801, ATTN.: TODD STUMP.

THE CONTRACTOR SHALL NOTIFY TODD STUMP @ (419) 222-9055 EXT. 271 FIVE WORKING DAYS IN ADVANCE TO ARRANGE FOR THESE ITEMS TO BE DROPPED OFF.

THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE REMAINDER OF THE TRAFFIC SIGNAL INSTALLATION ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

THE ABOVE ITEM SHALL BE PAID FOR AT THE CONTRACT BID PRICE PER EACH-ITEM 632 'REMOVAL TRAFFIC SIGNAL INSTALLATION FOR STORAGE'.

STRAIN POLE FOUNDATION ELEVATIONS, AS PER PLAN

ELEVATIONS SHOWN IN THE PLANS FOR STRAIN POLE FOUNDATIONS ARE FOR COMPUTATIONAL PURPOSES ONLY. THE ACTUAL ELEVATION OF THE FOUNDATION SHALL BE IN ACCORDANCE WITH SCD TC-21.20 PROVIDED THE EXISTING SLOPE IS LESS THAN 6:1.

AT LOCATIONS WHERE THE EXISTING SLOPE IS 6:1 OR GREATER, THE BURIED DEPTH OF FOUNDATION, AS SHOWN IN SCD TC-21.20 SHALL APPLY TO THE LOW SIDE OF THE SLOPE. THE TOP OF THE FOUNDATION SHALL BE SET 2 INCHES ABOVE THE EXISTING SURFACE ON THE HIGH SIDE OF THE SLOPE. THE ADDITIONAL DEPTH OF FOUNDATION NECESSARY TO MEET THESE REQUIREMENTS SHALL BE ADDED TO THE FORMED TOP.

632 VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, BY TYPE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

LAMPS:

LED, LIGHT EMITTING DIODE, SIGNAL LAMP UNITS SHALL MEET THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 872. ALL LAMP UNITS SHALL BE THE 12 INCH SIZE. LED SIGNAL LAMP UNITS SHALL BE PROVIDED FOR ALL SIGNAL LENS TYPES.

MOUNTING HARDWARE:

- ALL UPPER SIGNAL SUPPORT HARDWARE AND PIPING UP TO AND INCLUDING THE WIRE INLET FITTING SHALL BE FERROUS METAL FOR SIGNAL DISPLAYS OF TWO OR MORE SECTIONS.
- THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.
- WHEN SIGNAL HEADS ARE SUSPENDED FROM SPAN WIRES OR MAST ARMS AND NOT RIGIDLY MOUNTED THEY SHALL BE PROVIDED WITH A PIVOT AND LOCK BALANCE ADJUSTER. ALL BALANCE ADJUSTERS SHALL HAVE A MINIMUM THREE-QUARTER INCH EYE BOLT AND THREE-QUARTER INCH WIDE SLOT. EYE BOLTS ARE CAST FROM 316 STAINLESS STEEL AND PROVIDED WITH A SATIN FINISH. THREE-QUARTER INCH BODY HALVES ARE CAST FROM AN MINIMUM 65-45-12 DUCTILE IRON AND PROVIDED WITH A BRIGHT ZINC FINISH (ZNI). BALANCE ADJUSTERS SHALL ONLY BE USED WHERE NECESSARY. BALANCE ADJUSTERS SHALL BE USED ON ONE-WAY HEADS.

THE CONTRACTOR SHALL PROVIDE ODOT, IN WRITING, THE LED MANUFACTURER NAME, SERIAL NUMBER, PART NUMBER, DESCRIPTION OF LAMP, AND DATE OF MANUFACTURE FOR ALL LED UNITS TO BE USED IN THE TRAFFIC SIGNAL HEADS PRIOR TO INSTALLATION, FOR ACCEPTANCE AND WARRANTY PURPOSES. THE INFORMATION SHALL BE SENT TO THE FOLLOWING LOCATION: ODOT DISTRICT 1

ATTN: STEVE REICHENBACH
ADDRESS: 1885 N. McCULLOUGH STREET
LIMA, OHIO 45806
PHONE: (419) 222-9055 EXT.216

THE DEPARTMENT WILL MEASURE VEHICULAR SIGNAL HEAD WITH LED LENSES, BY TYPE, AS PER PLAN BY THE NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, DISCONNECT HANGERS, CLOSURE CAPS, DIMMERS, AND LAMPS AS SPECIFIED.

632 POWER SERVICE, AS PER PLAN

POWER SERVICE SHALL BE AS PER CMS ITEM 632 AND SCD TC-83.10 WITH THE FOLLOWING EXCEPTIONS:

- THE METER BASE MOUNTING HEIGHT SHALL BE NO MORE THAN 5 FEET HIGH TO THE CENTER OF THE METER BASE FROM THE GROUND.
- THE CONTRACTOR SHALL SUPPLY THE NECESSARY METER BASES.
- ALL POWER SERVICES SHALL BE METERED. THE METER SHALL HAVE A LEVER OPERATED BYPASS.

DISCONNECT SWITCH ENCLOSURES FURNISHED IN ACCORDANCE WITH CMS ITEM 632, POWER SERVICE, AS PER PLAN, SHALL INCLUDE A PADLOCK EQUAL TO MASTER NO. 4BKA OR WILSON BOHANNON 660, WITH LOCK BODY OF BRONZE OR BRASS AND KEYING SHALL BE TO THE STATE MASTER.

THE CONTRACTOR SHALL CONTACT THE METER SECTION OF THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE VOLTAGE SUPPLIED SHALL BE NOMINALLY 120 VOLTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNAL IS ACCEPTED BY THE MAINTAINING AGENCY.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 90 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY. EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLERS AND ASSOCIATED EQUIPMENT, DETECTOR UNITS, INTERCONNECTION ITEMS AND MASTER CONTROL EQUIPMENT.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

632 CONTROLLER UNIT, TYPE 2070, WITH CABINET, TYPE (332 OR 336), AS PER PLAN

THE TYPE 2070 LOCAL CONTROLLER SHALL BE SUPPLIED WITHOUT CONTROLLER SOFTWARE, BUT WILL BE SUPPLIED WITH THE OPERATION SYSTEM AND CALTRANS REQUIRED SOFTWARE. THE CONTROLLER UNIT SHALL BE DELIVERED TO THE ODOT DISTRICT OFFICE 14 DAYS IN ADVANCE OF WHEN THE SOFTWARE IS NEEDED. ODOT WILL INSTALL THE LOCAL CONTROLLER SOFTWARE PROGRAM. THE CONTRACTOR SHALL PICK UP THE CONTROLLER UNIT WITH THE INSTALLED SOFTWARE FROM DISTRICT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROGRAM THE TYPE 2070 SIGNAL CONTROLLERS PER THE PLANS. THE CONTRACTOR SHALL NOT REASSIGN THE DETECTOR INPUTS IN ORDER TO REDUCE THE NUMBER OF 2-CHANNEL DETECTOR UNITS SUPPLIED, BUT SHALL USE THE STANDARD CALTRANS INPUT FILE DESIGNATIONS.

ODOT DISTRICT ONE - SIGNAL SHOP
2100 N. WEST STREET
LIMA, OHIO 45801

CONTACT: TODD STUMP @ (419) 222-9055 EXT. 271

632 STRAIN POLE FOUNDATION, AS PER PLAN

DUE TO THE CLOSE PROXIMITY OF THE CULVERT, THE STRAIN POLE LOCATED IN THE NORTH WEST QUADRANT OF THE INTERSECTION SHALL HAVE IT'S FOUNDATION ADJUSTED SO THAT IT'S REQUIRED DEPTH STARTS AT THE E ELEVATION OF THE CULVERT.

ITEM 603- 4" CONDUIT, TYPE E, AS PER PLAN

THIS ITEM SHALL CONSIST OF TRENCHING, FURNISHING MATERIALS AND INSTALLING A 4" CONDUIT TYPE E UNDER DRAIN, AT EXISTING OR NEW PULL BOXES, AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY TWENTY (20) FEET. REFERENCE IS MADE TO SCD HL-30.11 FOR DETAILS OF DRAINING PULL BOXES. AN TYPE E IS INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE. PAYMENT WILL BE MADE AT THE CONTRACT UNIT ESTIMATED QUANTITY OF 20 FEET OF ITEM 603 4" CONDUIT, PRICE PER FOOT.

CALCULATED

REVIEWED

EXP

TRAFFIC SIGNAL GENERAL NOTES

ALL -309-16.95

29
44

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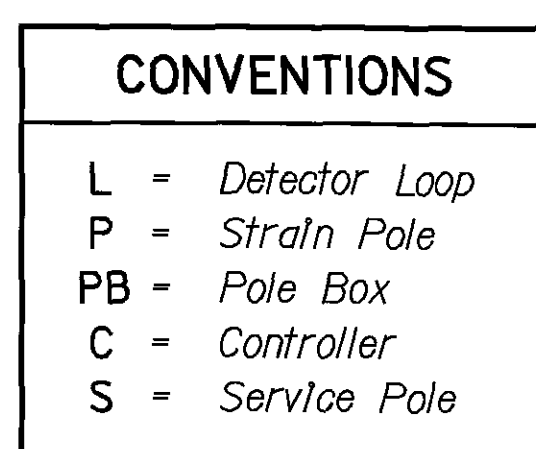
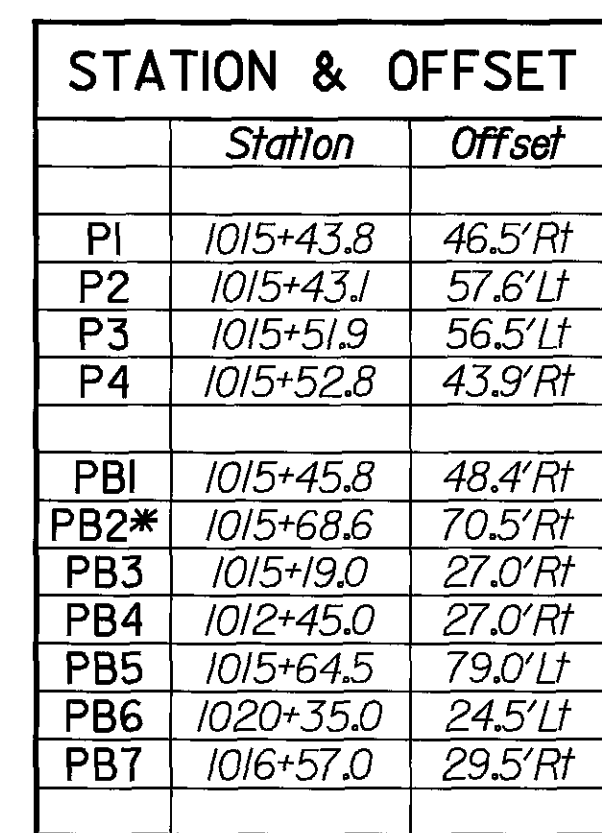
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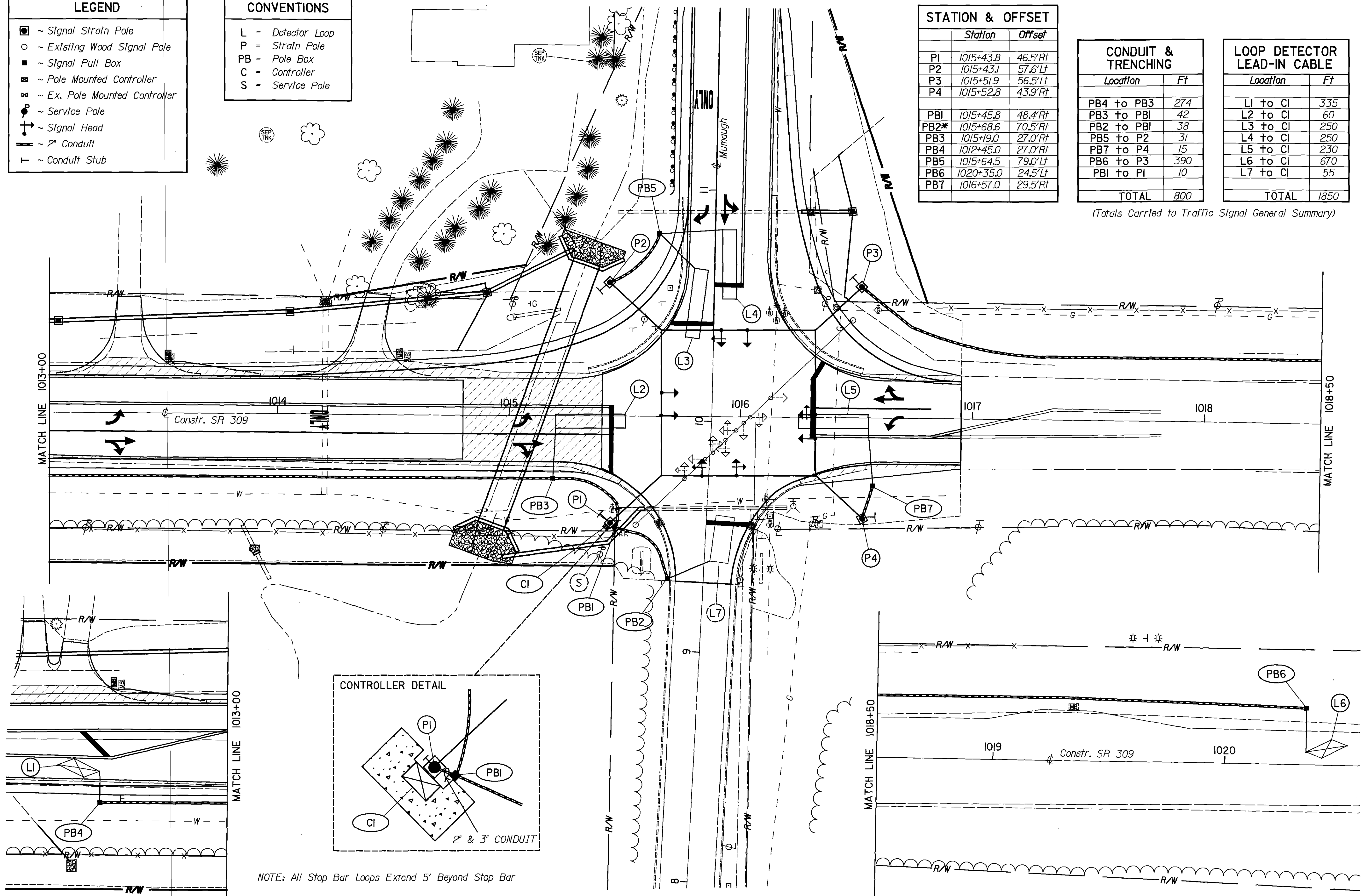
TRAFFIC SIGNAL GENERAL SUMMARY

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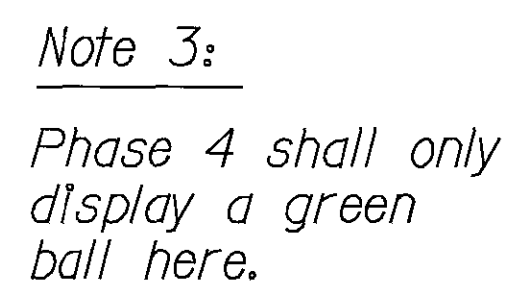


CONDUIT & TRENCHING	
Location	Ft
PB4 to PB3	274
PB3 to PBI	42
PB2 to PBI	38
PB5 to P2	31
PB7 to P4	15
PB6 to P3	390
PBI to PI	10
TOTAL	800

LOOP DETECTOR LEAD-IN CABLE	
<i>Location</i>	<i>Ft</i>
L1 to C1	335
L2 to C1	60
L3 to C1	250
L4 to C1	250
L5 to C1	230
L6 to C1	670
L7 to C1	55
TOTAL	1850



*NOTE: The exact location of PB2 shall be field verified to enclose the existing buried coils of loop wire & loop lead-in wire from loop L7 located at the end of the curved section of curbing.



Note 2:
Recall 2 & 6
No Skip -
~~2~~ & ~~5~~ shall not be
served till after ~~4~~ or ~~8~~

Note 1:
Southbound Green & Yellow arrows
shall be wired to Eastbound Green &
Yellow arrows.

			TRAFFIC SIGNAL DETECTORS							
LOOP DESIGNATION	SIZE	NO. OF TURNS	PULSE OR PRESENCE	DELAY (SEC.)	INPUT FILE	SLOT	CH.	FIELD TERMINAL	ASSOC. PHASE	DELAY INHIBIT PHASE
L-1	6x6	4	PLUSE		I	2	U	2-D,E	2	
L-2	6x30	3	PRESENCE		I	5	U	5-D,E	5	
L-3	6x30	3	PRESENCE	10	I	4	U	4-D,E	4	4
L-4	6x30	3	PRESENCE		I	7	U	7-D,E	7	
L-5	6x30	3	PRESENCE		I	1	U	1-D,E	1	
L-6	6x6	4	PLUSE		I	6	U	6-D,E	6	
* L-7	8x20	3	PRESENCE	6	I	8	U	8-D,E	8	8

Existing Loop

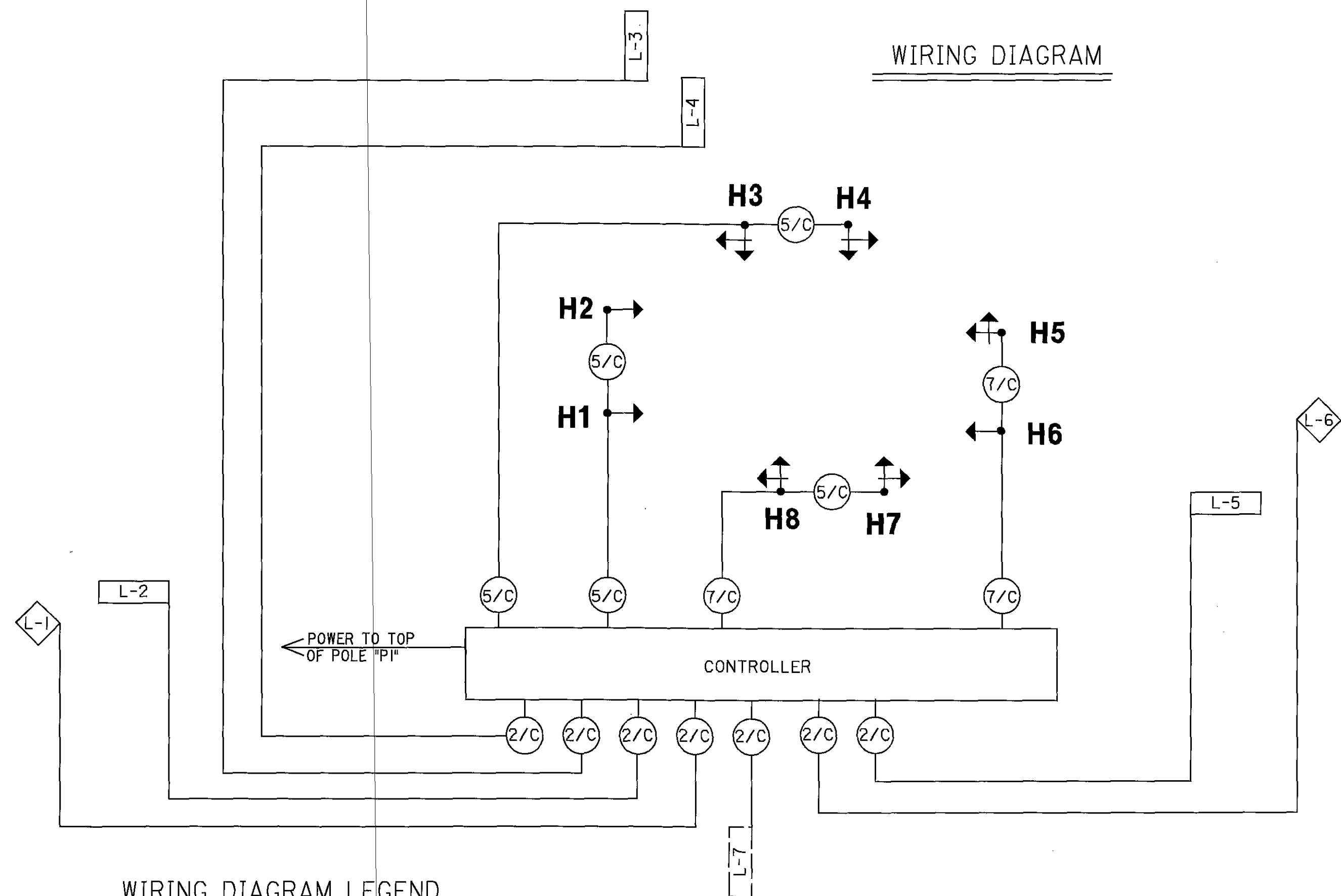
INTERSECTION SR 309 @ Mumaugh RD.
MAINTAINING AGENCY ODOT

START UP		DUAL ENTRY ☒	
START IN: Y/R FLASH ☒ ; ALL RED ☐		REST IN RED: RING 1 ☐ ; RING 2 ☐	
TIME FOR FLASH OR ALL RED <u>6 seconds</u>		OVERLAP	<div style="display: flex; justify-content: space-around;"> A B C D </div>
FIRST PHASE(S) * <u>2</u> & * <u>6</u>		PHASES	<div style="display: flex; justify-content: space-around;"> </div>
COLOR DISPLAYED: GREEN ☒ YELLOW ☐			

INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.							
	1	2	3	4	5	6	7	8
INTERSECTION MOVEMENT								
MINIMUM GREEN (INITIAL) (SEC.)		15		10	7	15		10
ADDED INITIAL * (SEC/ACTUATION)		-		-	-	-		-
PASSAGE TIME (PRESET GAP) (SEC.)		3		3	3	3		3
TIME BEFORE REDUCTION * (SEC.)		-		-	-	-		-
MAXIMUM VARIABLE INITIAL * (SEC.)		-		-	-	-		-
MINIMUM GAP * (SEC.)		5		3	3	5.5		3
TIME TO REDUCE * (SEC.)		-		-	-	-		-
MAXIMUM GREEN I (SEC.)		60		40	30	60		20
MAXIMUM GREEN II (SEC.)		60		40	30	60		20
YELLOW CHANGE (SEC.)		4.3		4.3	4.3	5.0		3.6
ALL RED CLEARANCE (SEC.)		1.2		1.4	1.1	1.0		1.6
WALK (SEC.)		-		-	-	-		-
PED CLEARANCE (SEC.)		-		-	-	-		-
RECALL	MAXIMUM (ON/OFF)		OFF		OFF	OFF	OFF	OFF
	MINIMUM (ON/OFF)		ON		OFF	OFF	ON	OFF
	PEDESTRAIN (ON/OFF)		-		-	-	-	-
MEMORY (ON/OFF)			OFF		OFF	OFF	OFF	OFF
CALL TO NON-ACTUATED		NO.1						
		NO.2						

* VOLUME DENSITY CONTROLS

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TIME : 10:06

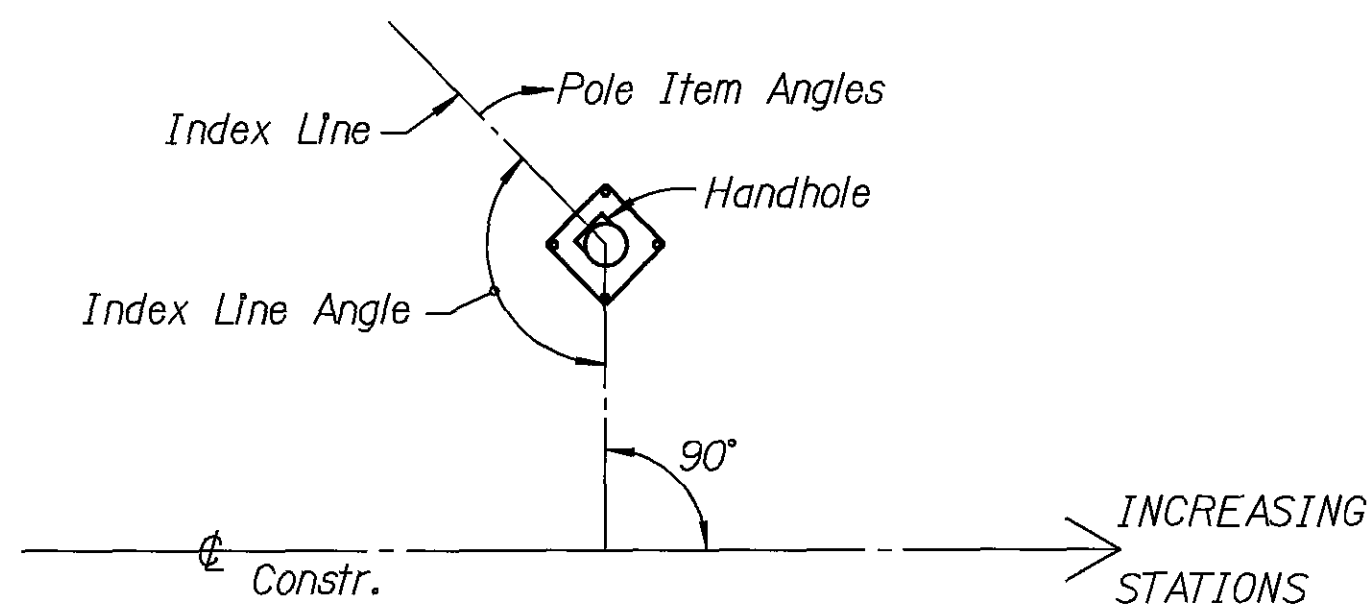


WIRING DIAGRAM LEGEND

→ PROPOSED VEHICULAR SIGNAL LED HEAD

- (2/C)— 2/C LOOP LEAD-IN
- (5/C)— 5/C #14 AWG.
- (7/C)— 7/C #14 AWG.

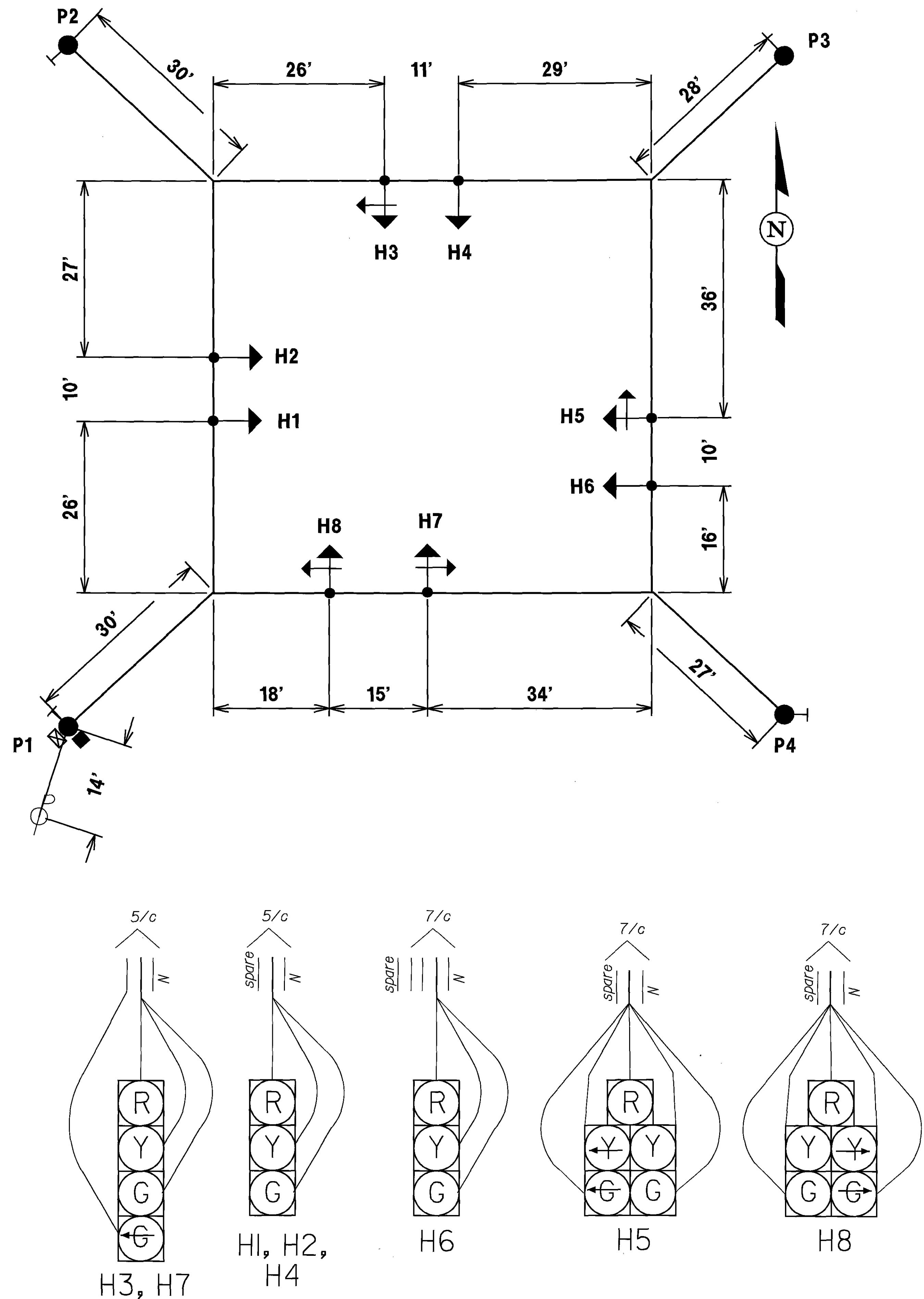
POLE ORIENTATION DIAGRAM

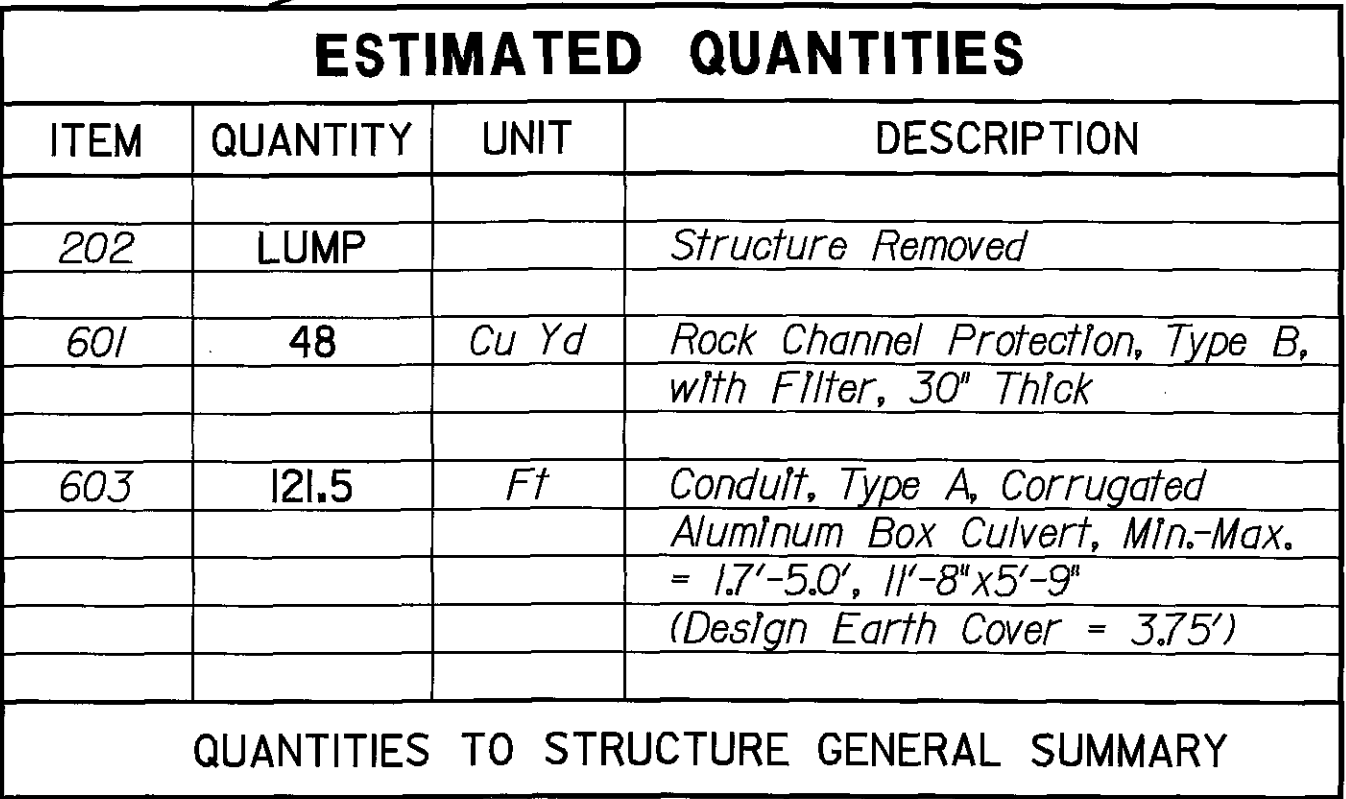


- NOTE: 1. ALL ANGLES MEASURED CLOCKWISE
2. INDEX LINE GOES THROUGH THE CENTER OF THE HANDHOLE

POLE ORIENTATION CHART

POLE No.	POLE DESIGN	POLE HEIGHT	STATION	OFFSET	FOUNDATION ELEVATION	INDEX LINE ANGLE	SIGNAL CABLE ENT.	POWER SERVICE	CAPPED 2" SPARE COND.
P1	6	34	1015+43.8	46.5'Rt	913.3	226.4°	180°		/
P2	6	34	1015+43.1	57.6'Lt	913.2	132.8°	180°	331.4°	/
P3	6	34	1015+51.9	56.5'Lt	912.8	226.4°	180°		/
P4	6	34	1015+52.8	43.9'Rt	913.8	132.8°	180°		/





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DATE : 27-OCT-2004
TIME : 08:22
USERNAME : nvondere

STRUCTURE NOTES

DESIGN SPECIFICATIONS

THE STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION AND THE ODOT BRIDGE MANUAL.

SUPPLEMENTAL SPECIFICATION

SS 864 DATED 7-II-00.

DESIGN LOADING

HS-25-44 AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES

CAST-IN-PLACE STRUCTURES
CONCRETE CLASS "C" - f'_c = UNIT STRESS 4000 psi SUBSTURCTURE
REINFORCING STEEL - ASTM A615 OR A996
 F_y = GRADE 60 - UNIT STRESS 60,000 psi
PRECAST STRUCTURE: FOR BOX AND PIPE CULVERTS SEE CMS 603.

UTILITY LINES

UTILITY LINES: THE UTILITY(IES) SHALL BORE ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

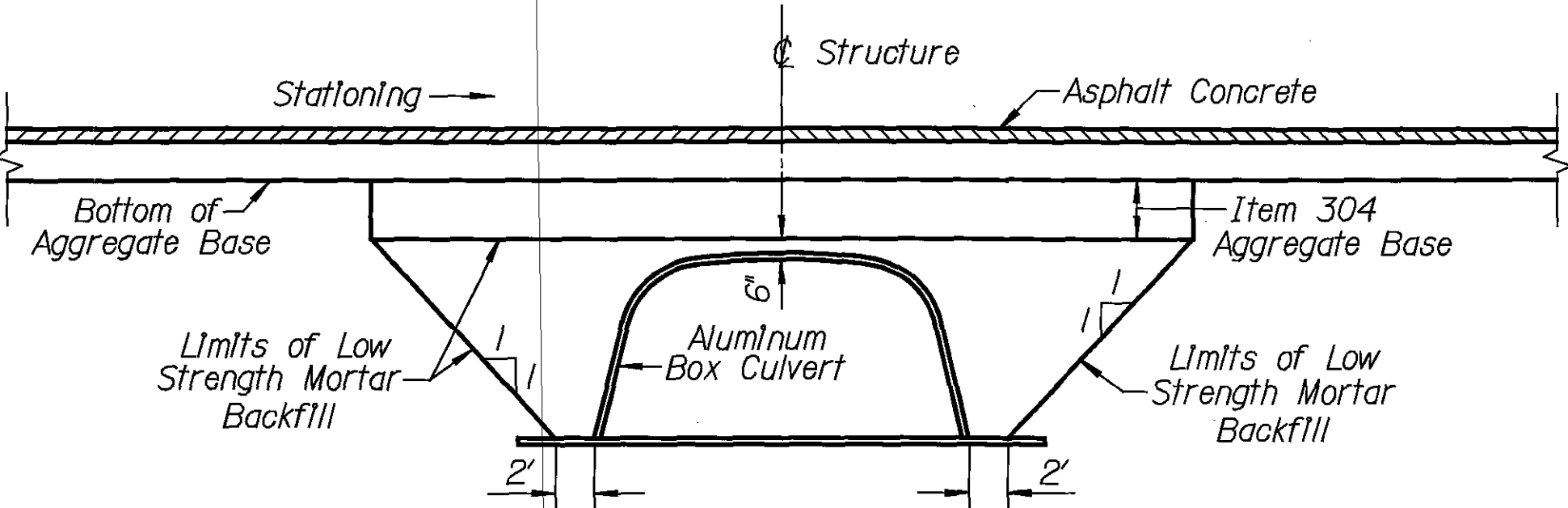
PROPOSED WORK

1. CLOSE SR 309 AND DETOUR TRAFFIC (SEE NOTE SHEET 4)
2. REMOVE EXISTING STRUCTURE
3. CONSTRUCT PROPOSED STRUCTURE
4. REOPEN SR 309 TO TRAFFIC

ITEM 613 LOW STRENGTH MORTAR BACKFILL

LOW STRENGTH MORTAR BACKFILL SHALL BE PLACED AS SHOWN AND Laterally TO THE EDGE OF THE PAVED SHOULDER. PAYMENT FOR LOW STRENGTH MORTAR BACKFILL SHALL BE MADE ONLY FOR BACKFILL PLACED TO THE LIMITS SHOWN. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 613 LOW STRENGTH MORTAR BACKFILL = 180 CU YD



ITEM 511 CLASS C CONCRETE, AS PER PLAN

IN ADDITION TO THE SPECIFICATIONS SHOWN FOR ITEM 511 IN THE CMS, THIS ITEM SHALL INCLUDE ANY AND ALL EXCAVATION AND EMBANKMENT NEEDED TO CONSTRUCT THE WINGWALLS. THE EXCAVATION AND EMBANKMENT SHALL FOLLOW THE SPECIFICATIONS OUTLINED IN THE CMS FOR ITEM 203 EXCAVATION AND ITEM 203 EMBANKMENT.

PAYMENT WILL BE AT THE CONTRACT BID PRICE PER CUBIC YARD FOR ITEM 511, CLASS C CONCRETE, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 511 CLASS C CONCRETE, AS PER PLAN = 20 CU YD

ITEM 511 CLASS C CONCRETE, FOOTING, AS PER PLAN

IN ADDITION TO THE SPECIFICATIONS SHOWN FOR ITEM 511 IN THE CMS, THIS ITEM SHALL ALSO INCLUDE ANY AND ALL EXCAVATION AND EMBANKMENT NEEDED TO CONSTRUCT THE FOOTINGS. THE EXCAVATION AND EMBANKMENT SHALL FOLLOW THE SPECIFICATIONS OUTLINED IN THE CMS FOR ITEM 203 EXCAVATION AND ITEM 203 EMBANKMENT.

PAYMENT WILL BE AT THE CONTRACT BID PRICE PER CUBIC YARD FOR ITEM 511, CLASS C CONCRETE, FOOTING, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE STRUCTURE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 511 CLASS C CONCRETE, FOOTING, AS PER PLAN = 42 CU YD

ITEM 864 SEALING OF CONCRETE SURFACES

THE FOLLOWING ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED IN THE STRUCTURE GENERAL SUMMARY:

ITEM 864 SEALING OF CONCRETE SURFACES = 40 SQ YD

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 102.05 AND 105.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED ON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ITEM 202 STRUCTURE REMOVED

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING 103"x71" ARCH CMP AND ADJACENT HEADWALLS.

CONDUIT FABRICATION AND APPROVAL

PRIOR TO CLOSING THE ROADWAY TO TRAFFIC, THE CONTRACTOR SHALL HAVE THE ITEM 603 TYPE A CONDUIT SPECIFIED IN THESE PLANS FABRICATED AND APPROVED. ALL COSTS ASSOCIATED WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PERTINENT CONDUIT.

STRUCTURE GENERAL SUMMARY

SHEET NO.			ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHEET No.
35	36	39						
LUMP			202	11000	LUMP		STRUCTURE REMOVED	
		6022	509	10000	6022	POUND	EPOXY COATED REINFORCING STEEL	
	20		511	46001	20	CU YD	CLASS C CONCRETE, AS PER PLAN	36
	42		511	46501	42	CU YD	CLASS C CONCRETE, FOOTING, AS PER PLAN	36
48			601	32100	48	CU YD	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
121.5			603	73500	121.5	FT	CONDUIT, TYPE A, CORRUGATED ALUMINUM BOX CULVERT, MIN.-MAX. = 1.7'-5.0', 11'-8"x5'-9" (DESIGN EARTH COVER = 3.75')	
	180		613	41200	180	CU YD	LOW STRENGTH MORTAR BACKFILL	
	40		864	10000	40	SQ YD	SEALING OF CONCRETE SURFACES	

DESIGN AGENCY
DISTRICT ONE
PRODUCTION DEPARTMENT

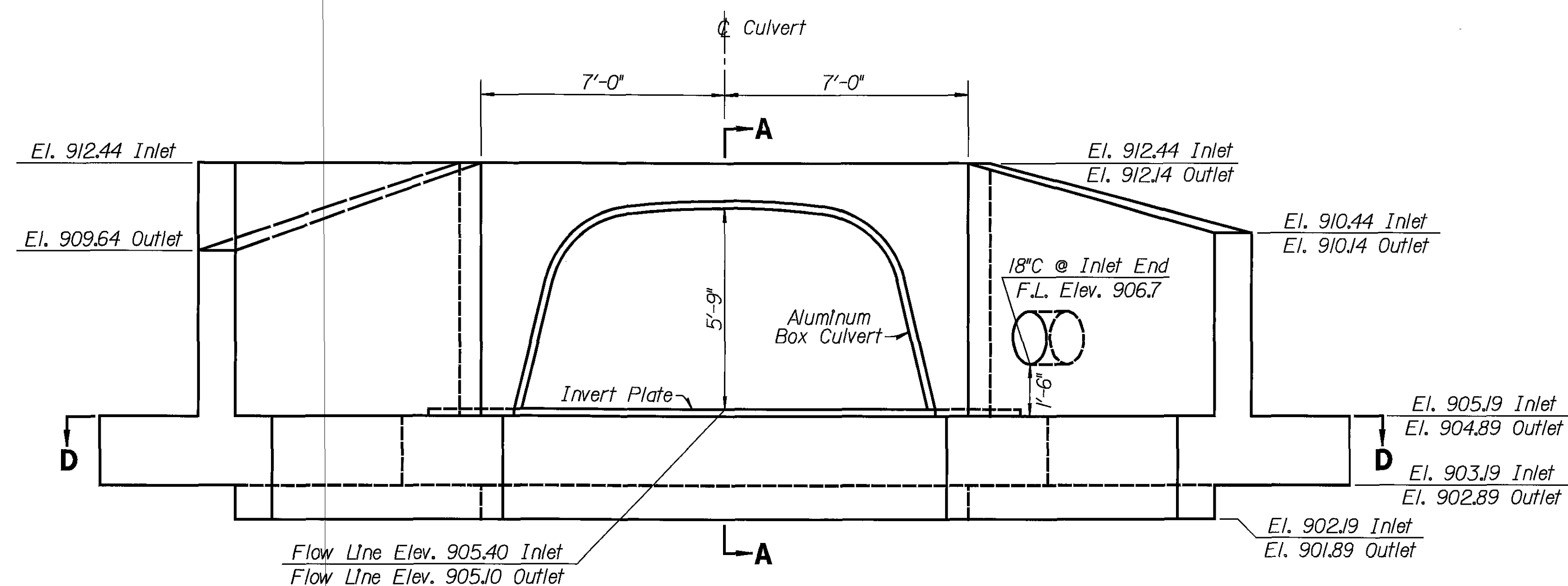
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STRUCTURE NOTES AND SUMMARY
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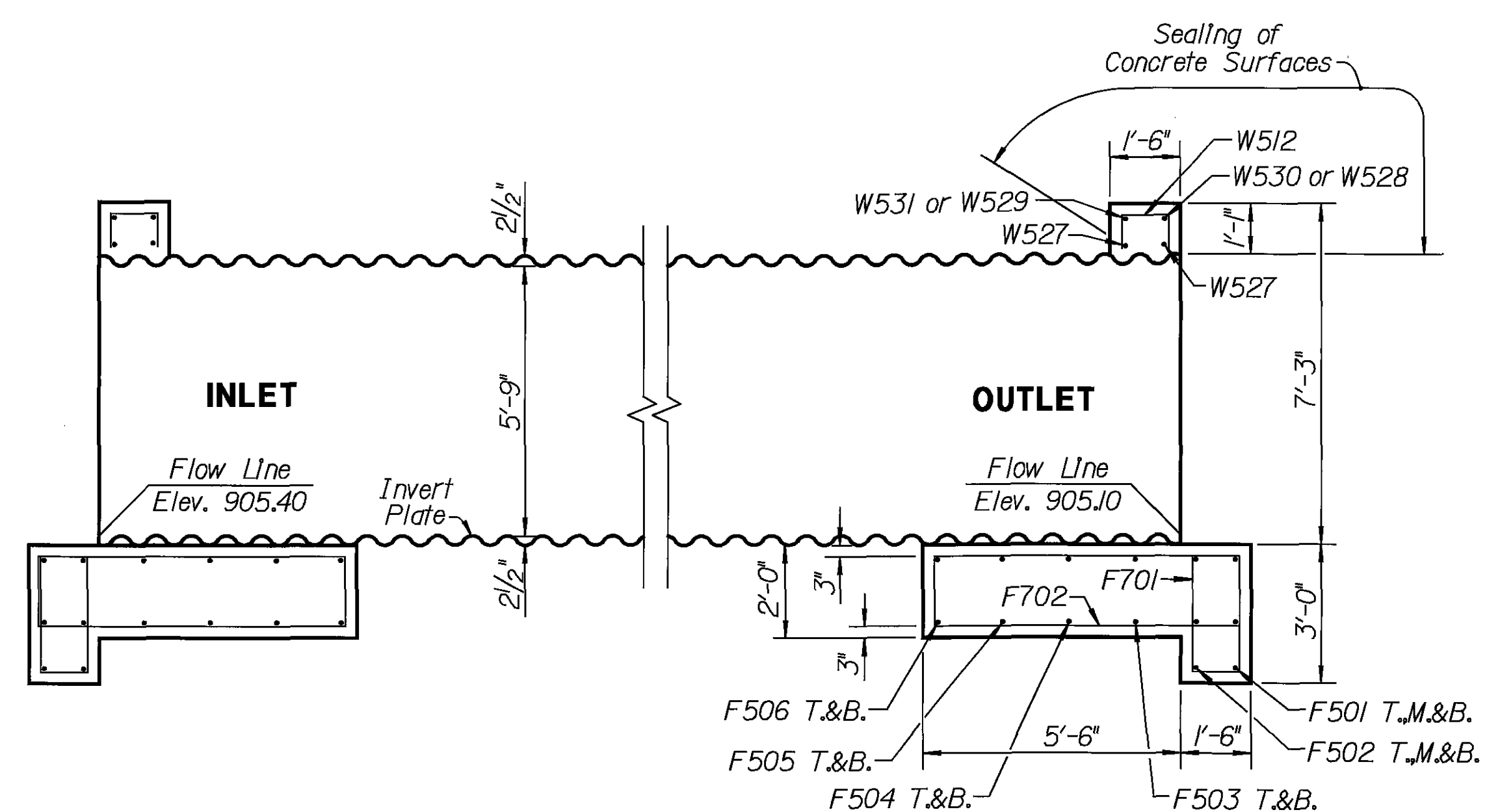
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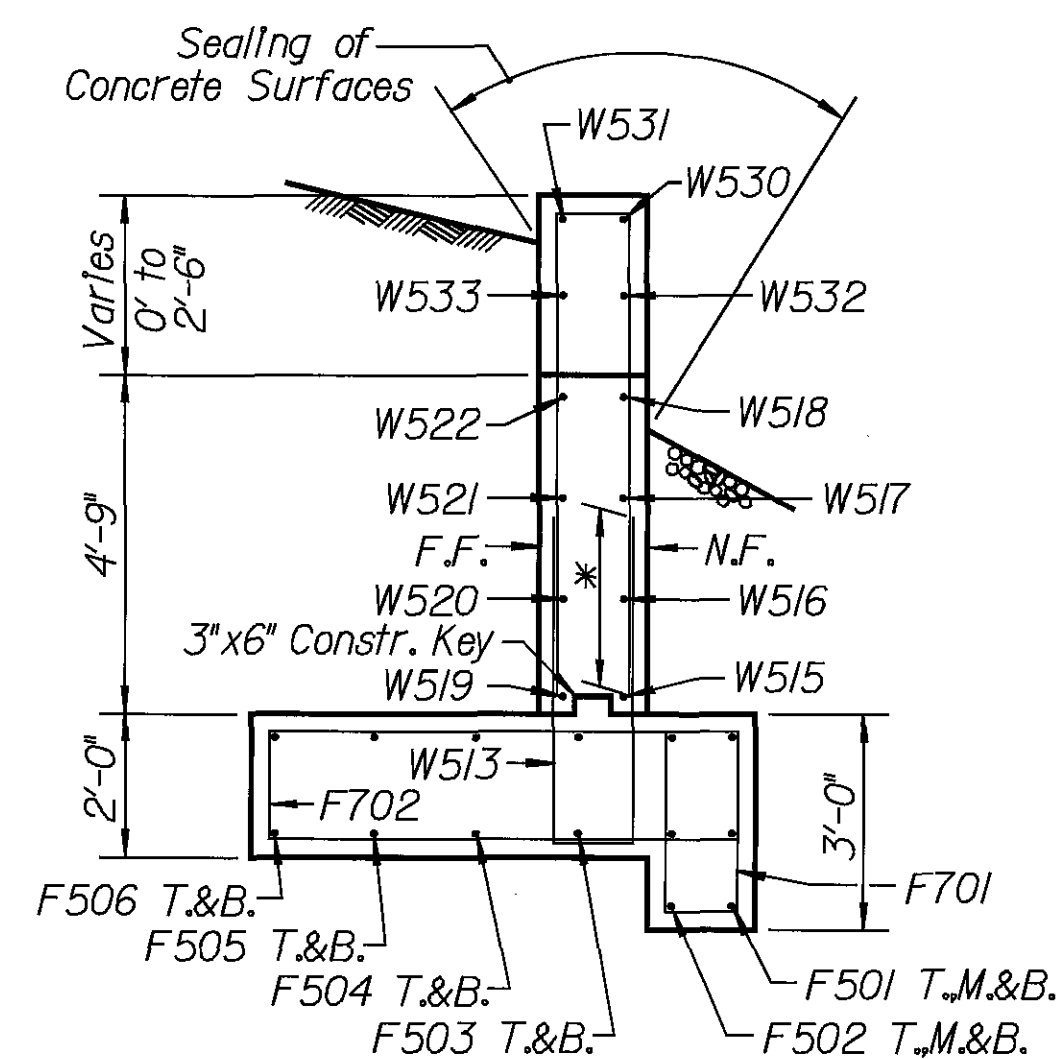
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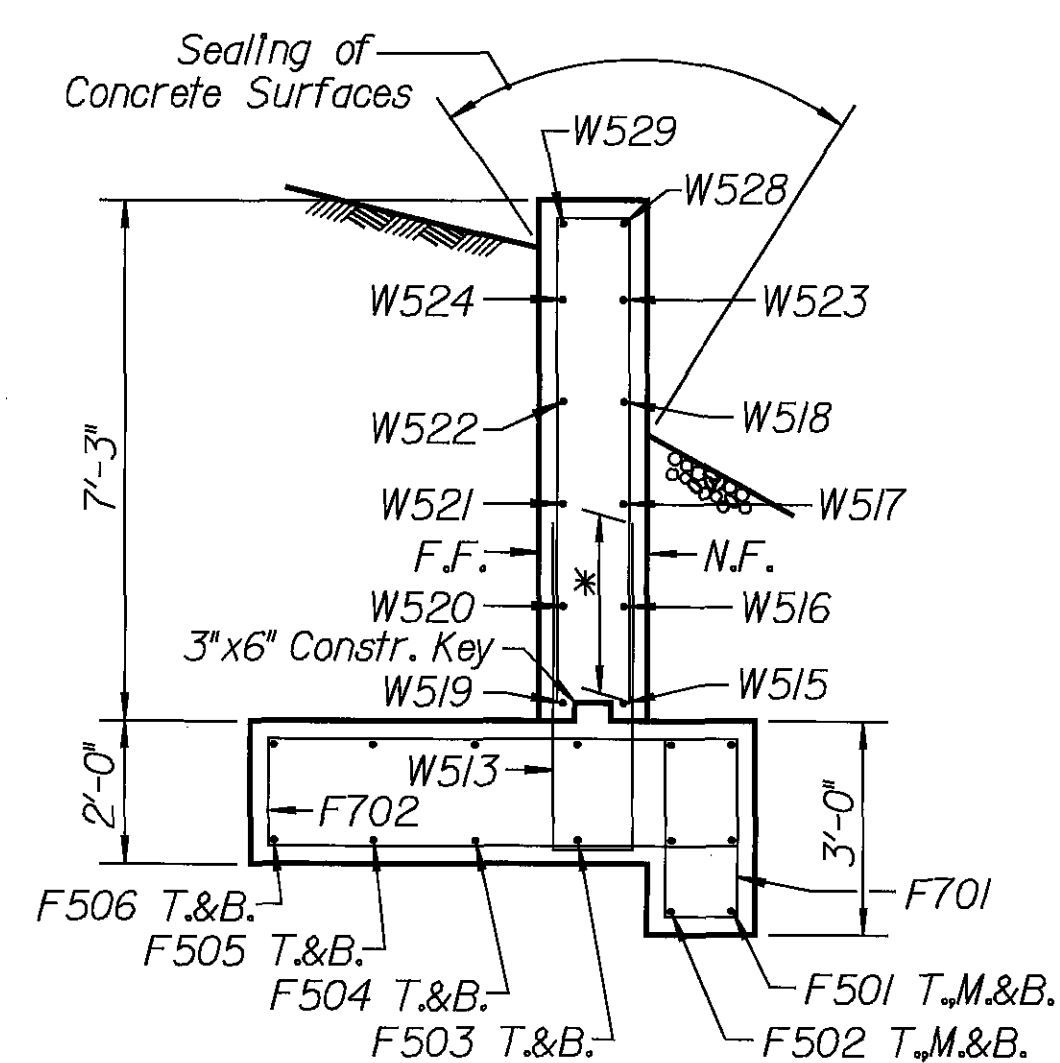
ELEVATION VIEW



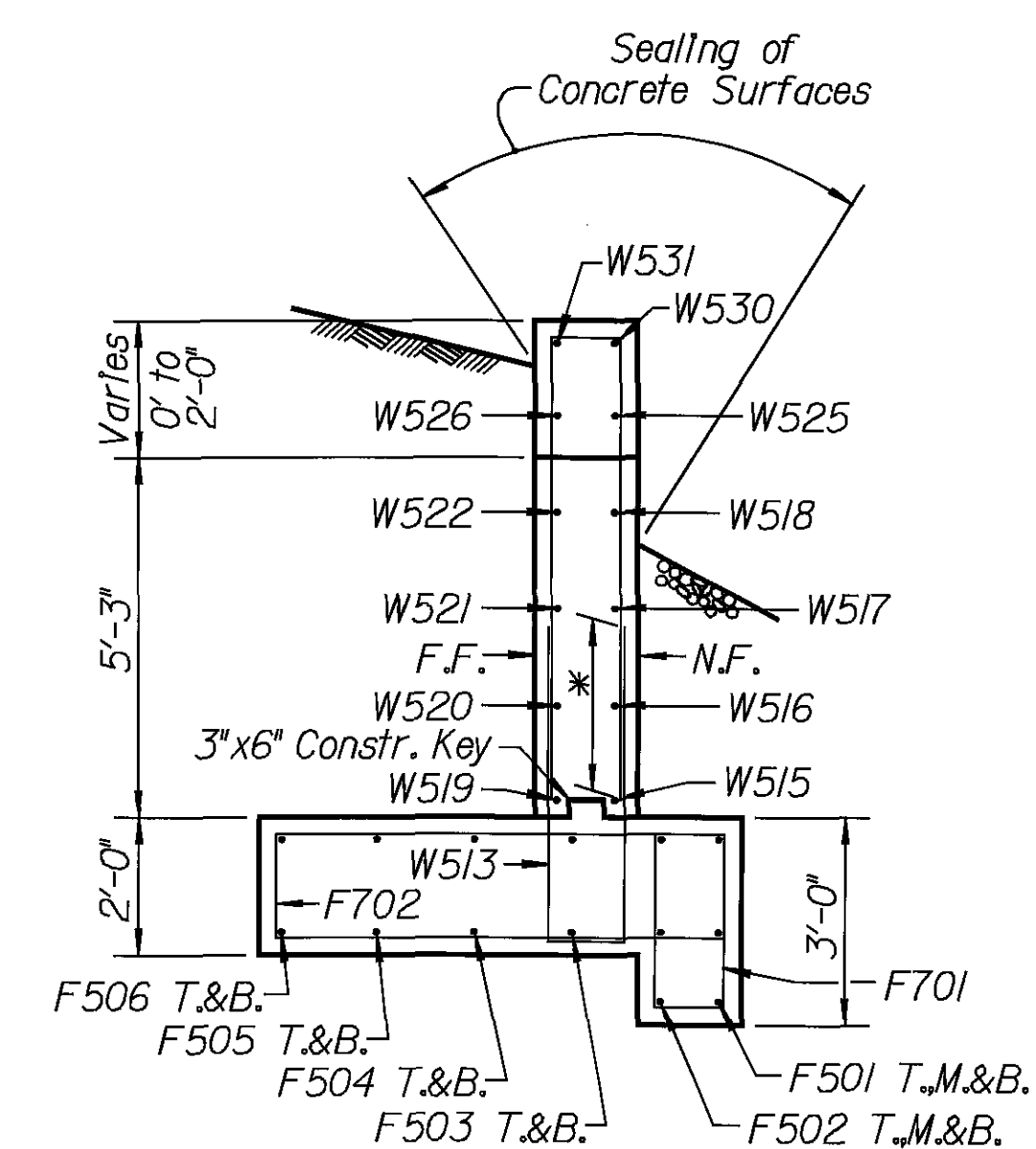
SECTION A-A



OUTLET SECTION B-B



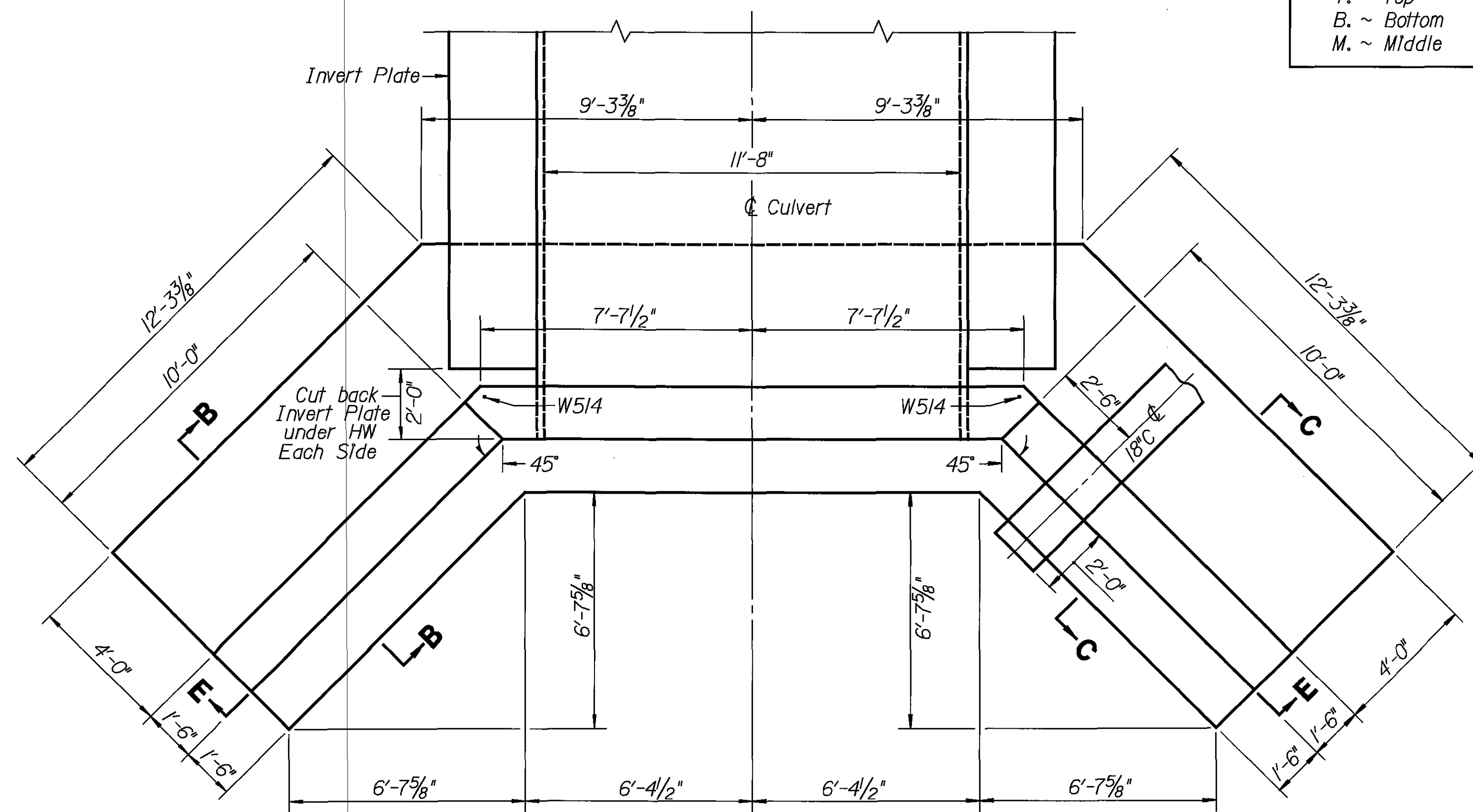
INLET SECTION B-B



SECTION C-C

NOTE: All Reinforcing Steel Clearances
are 3" from the Concrete Surface

* - 2'-6" Lap Length (Typ.)



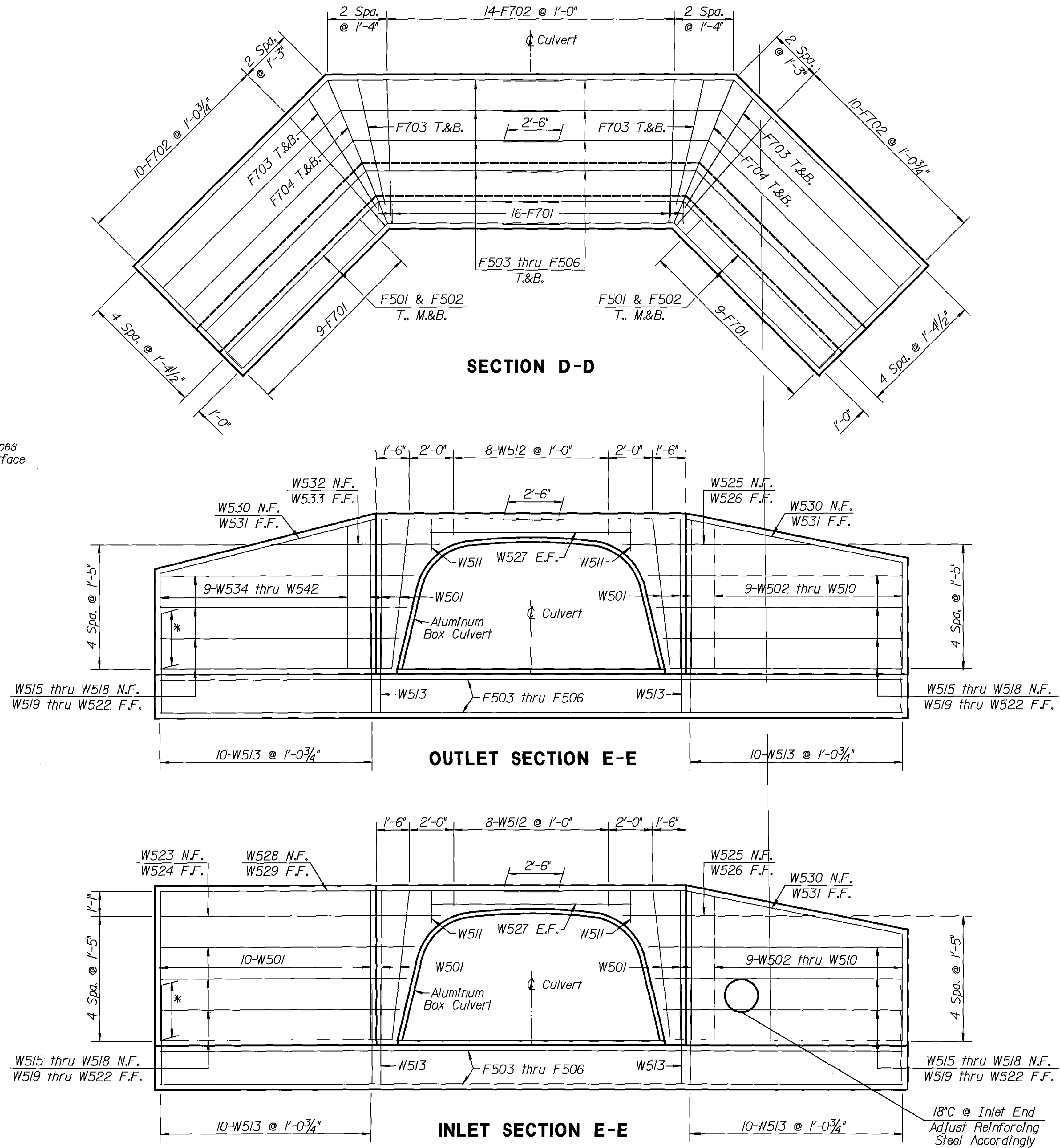
PLAN VIEW

KEY
<i>E.F.</i> ~ <i>Each Face</i>
<i>N.F.</i> ~ <i>Near Face</i>
<i>F.F.</i> ~ <i>Far Face</i>
<i>T.</i> ~ <i>Top</i>
<i>B.</i> ~ <i>Bottom</i>
<i>M.</i> ~ <i>Middle</i>

DESIGN FILE : i:\pd\23469\Construction\va309sch.dgn
USERNAME : nvondere
DATE : 27-OCT-2004
TIME : 08:19

NOTE: All Reinforcing Steel Clearances
are 3" from the Concrete Surface

* - 2'-6" Lap Length (Typ.)



REINFORCING STEEL LIST

INLET					
Item 509 Epoxy Coated Reinforcing Steel					
MARK	No.	FACE	LENGTH	SHAPE	WEIGHT Pound
W501	15		14'-3"	BT.	222.9
W502	1		13'-9"	BT.	
thru					113.4
W510	1		10'-5"	BT.	
W511	2		3'-9"	BT.	7.8
W512	8		2'-3"	BT.	18.8
W513	22		9'-9"	BT.	223.7
W514	2	F.F.	6'-9"	ST.	14.1
W515	2	N.F.	10'-9"	BT.	22.4
W516	2	N.F.	11'-0"	BT.	23.0
W517	2	N.F.	11'-3"	BT.	23.5
W518	2	N.F.	11'-7"	BT.	24.2
W519	2	F.F.	11'-7"	BT.	24.2
W520	2	F.F.	11'-10"	BT.	24.7
W521	2	F.F.	12'-1"	BT.	25.2
W522	2	F.F.	12'-5"	BT.	25.9
W523	1	N.F.	12'-11"	BT.	13.5
W524	1	F.F.	13'-9"	BT.	14.3
W525	1	N.F.	8'-11"	BT.	9.3
W526	1	F.F.	9'-9"	BT.	10.2
W527	2	E.F.	9'-2"	ST.	19.3
W528	1	N.F.	18'-3"	BT.	19.0
W529	1	F.F.	19'-1"	BT.	19.9
W530	1	N.F.	18'-5"	BT.	19.2
W531	1	F.F.	19'-3"	BT.	20.1
F501	6	T, M, & B.	17'-0"	BT.	106.4
F502	6	T, M, & B.	17'-10"	BT.	111.6
F503	4	T. & B.	19'-0"	BT.	79.3
F504	4	T. & B.	20'-2"	BT.	84.1
F505	4	T. & B.	21'-3"	BT.	88.7
F506	4	T. & B.	22'-5"	BT.	93.5
F701	34		5'-6"	BT.	382.2
F702	34		14'-3"	BT.	990.3
F703	8	T. & B.	5'-10"	ST.	95.3
F704	4	T. & B.	7'-1"	ST.	57.9
TOTAL TO STRUCTURE GENERAL SUMMARY					3030

REINFORCING STEEL LIST

OUTLET					
Item 509 Epoxy Coated Reinforcing Steel					
MARK	No.	FACE	LENGTH	SHAPE	WEIGHT Pound
W501	6		14'-3"	BT.	89.2
W502	1		13'-9"	BT.	
thru					113.4
W510	1		10'-5"	BT.	
W511	2		3'-9"	BT.	7.8
W512	8		2'-3"	BT.	18.8
W513	22		9'-9"	BT.	223.7
W514	2	F.F.	6'-9"	ST.	14.1
W515	2	N.F.	10'-9"	BT.	22.4
W516	2	N.F.	11'-0"	BT.	23.0
W517	2	N.F.	11'-3"	BT.	23.5
W518	2	N.F.	11'-7"	BT.	24.2
W519	2	F.F.	11'-7"	BT.	24.2
W520	2	F.F.	11'-10"	BT.	24.7
W521	2	F.F.	12'-1"	BT.	25.2
W522	2	F.F.	12'-5"	BT.	25.9
W525	1	N.F.	8'-11"	BT.	9.3
W526	1	F.F.	9'-9"	BT.	10.2
W527	2	E.F.	9'-2"	ST.	19.3
W530	2	N.F.	18'-5"	BT.	38.4
W531	2	F.F.	19'-3"	BT.	40.2
W532	1	N.F.	7'-11"	BT.	8.3
W533	1	F.F.	8'-9"	BT.	9.1
W534	1		9'-5"	BT.	
thru					108.0
W542	1		13'-7"	BT.	
F501	6	T, M, & B.	17'-0"	BT.	106.4
F502	6	T, M, & B.	17'-10"	BT.	111.6
F503	4	T. & B.	19'-0"	BT.	79.3
F504	4	T. & B.	20'-2"	BT.	84.1
F505	4	T. & B.	21'-3"	BT.	88.7
F506	4	T. & B.	22'-5"	BT.	93.5
F701	34		5'-6"	BT.	382.2
F702	34		14'-3"	BT.	990.3
F703	8	T. & B.	5'-10"	ST.	95.3
F704	4	T. & B.	7'-1"	ST.	57.9
TOTAL TO STRUCTURE GENERAL SUMMARY					2992

Note: W523, W524, W528 & W529 Not Used

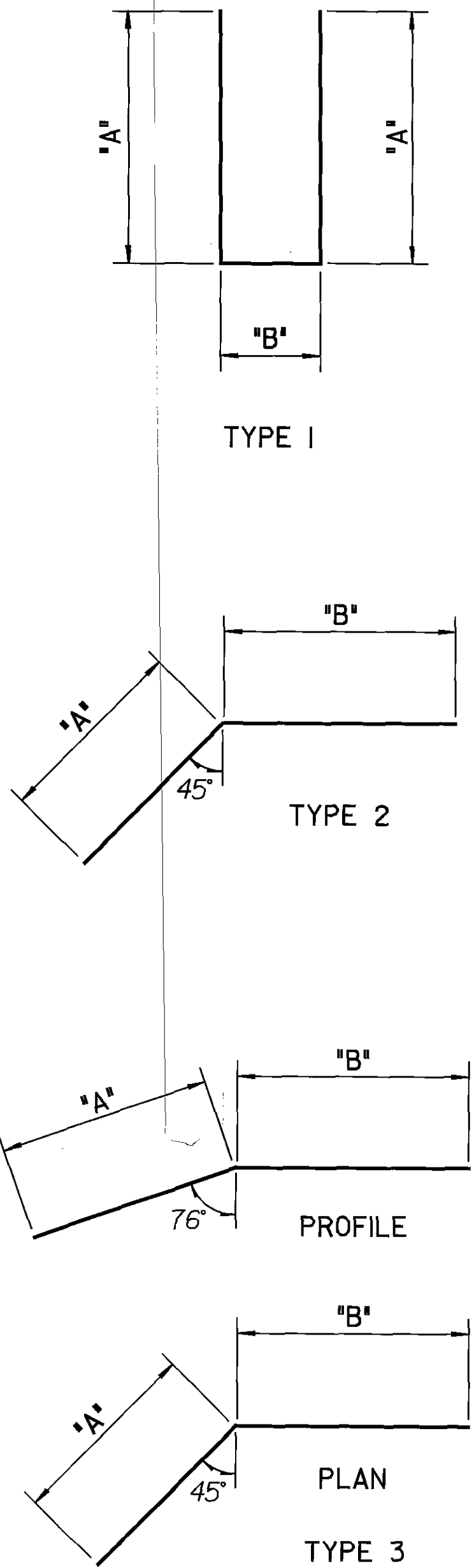
BEND TABLE

MARK	TYPE	"A"	"B"	"C"
W501	1	6'-9"	1'-0"	
W502	1	6'-6"	1'-0"	
thru		2 1/2" INC.		
W510	1	4'-10"	1'-0"	
W511	1	1'-6"	1'-0"	
W512	1	9"	1'-0"	
W513	1	4'-6"	1'-0"	
W515	2	9'-11"	10"	
W516	2	9'-11"	1'-1"	
W517	2	9'-11"	1'-4"	
W518	2	9'-11"	1'-8"	
W519	2	10'-4"	1'-3"	
W520	2	10'-4"	1'-6"	
W521	2	10'-4"	1'-9"	
W522	2	10'-4"	2'-1"	
W523	2	9'-11"	3'-0"	
W524	2	10'-4"	3'-5"	
W525	2	5'-11"	3'-0"	
W526	2	6'-4"	3'-5"	
W528	2	9'-11"	8'-4"	
W529	2	10'-4"	8'-9"	
W530	3	10'-1"	8'-4"	
W531	3	10'-6"	8'-9"	
W532	2	4'-11"	3'-0"	
W533	2	5'-4"	3'-5"	
W534	1	4'-4"	1'-0"	
thru		3 1/8" INC.		
W542	1	6'-5"	1'-0"	
F501	2	9'-3"	7'-9"	
F502	2	9'-8"	8'-2"	
F503	2	10'-3"	8'-9"	
F504	2	10'-10"	9'-4"	
F505	2	11'-5"	9'-10"	
F506	2	12'-0"	10'-5"	
F701	1	2'-6"	1'-0"	
F702	1	6'-6"	1'-6"	

KEY

E.F. ~ Each Face
N.F. ~ Near Face
F.F. ~ Far Face
T. ~ Top
B. ~ Bottom
M. ~ Middle
BT. ~ Bent Bar
ST. ~ Straight Bar

BENDING DIAGRAMS



ALL-309-16.95
 BATH TOWNSHIP
 SECTIONS 34 & 35 T-3-S R-7-E
 PERRY TOWNSHIP
 SECTIONS 2 & 3 T-4-S R-7-E
 ALLEN COUNTY

BASIS OF EXISTING R/W

Existing Right of Way widths and locations were derived as follows:
 SR 309 - ALL-309-16.95(16.73-18.81) Right of Way Plans dated 6-16-54 on file at the O.D.O.T. District One Office, Lima.
 Mumaugh Road - Mumaugh Road Str. BATH-168-009 Plans dated 9-87 on file at the Allen County Engineer's Office, Lima, Ohio and Mumaugh Rd. Street dedication in record Plat Book 16, Page 42 dated 5-18-82 on file at Allen County Recorder's Office, Lima.

BASIS OF BEARINGS

All Bearings are to an assumed Meridian and denote angles only.

CURVE DATA

Const. SR 309
 PI Sta. 1005+88.58
 $\Delta = 0^\circ-12'-00''$ Rt
 $D_b = 0^\circ-04'-39''$
 $R = 74,008.88'$
 $T = 129.17'$
 $L = 258.34'$
 $E = 0.11'$
 $C = 258.34'$
 C Bear $S89^\circ-43'-15''E$
 PC Sta. 1004+59.41
 PT Sta. 1007+17.75

LOCATIONS OF MONUMENTS

Centerline Monuments are to be set during construction at the following Stations at a Tolerance of ± 0.02 Ft.

STATION	OFFSET	NORTHING	EASTING
SR 309			
		391542.0370	1541231.8650
1015+46.56	2.23' Rt	391535.3195	1543834.1971
1015+87.44	2.06' Rt	391535.2140	1543875.0870
Mumaugh Rd			
PI 36+57.47	0.00'	394192.1039	1543930.5857

MONUMENT LEGEND

- PK.F. ~ PK Nail Found
- SR ~ RR Spike Found
- △ ~ Stone Found
- ⊙ ~ Concrete Monument Fd
- ⊞ ~ Existing Monument Box
- ⊞ ~ Proposed Monument Box

CURVE DATA

Const. SR 309
 PI Sta. 1026+49.56
 $\Delta = 0^\circ-06'-13''$ Lt
 $D_b = 0^\circ-04'-48''$
 $R = 71,501.93'$
 $T = 64.66'$
 $L = 129.31'$
 $E = 0.03'$
 $C = 129.31'$
 C Bear $S89^\circ-09'-14''E$
 PC Sta. 1025+84.90
 PT Sta. 1027+14.21

CURVE DATA

Const. SR 309
 PI Sta. 1017+04.67
 $\Delta = 0^\circ-31'-07''$ Rt
 $D_b = 0^\circ-16'-59''$
 $R = 20,250.26'$
 $T = 91.67'$
 $L = 183.34'$
 $E = 0.21'$
 $C = 183.34'$
 C Bear $S89^\circ-21'-42''E$
 PC Sta. 1016+13.00
 PT Sta. 1017+96.34

I hereby certify that this is a true delineation of a survey made by the Ohio Department of Transportation, Lima, Ohio.
 The establishment of the property lines and existing right of way lines shown on this plan as of this date was performed by me or under my direct supervision.

By Evan Anders
 Evan Anders
 Surveyor No. 7635 Date 12/15/2003

Received 20
 Recorded DEC 22 2003
 Book 6 Page 105



COUNTY RECORDER SURVEYORS SEAL

CENTERLINE PLAT

ALL-309-16.95

1/5

40
44



County Line _____
Township Line _____
Section Line _____
Corporation Line or
Fence Line (existing) —x—x— (proposed) —x—x—
Center Line _____ 20' _____ 20' _____
Trees , Stumps , (to be removed)
Utility Poles: Telephone , Power , Light
Limited Access (only) _____ LA _____
Right of Way (only) _____ R/W _____
Limited Access & Right of Way _____ LA-R/W _____
Existing Right of Way _____ Exist. R/W _____
Property Line —E— (In existing fence) —x—E—x—
Railroad or _____
Guardrail (existing) —o—o— (proposed) —●—●—
Construction Limits _____ Constr. Limits _____

ALLEN COUNTY
BATH TOWNSHIP
SE 1/4 SECTION 34
T 3 S - R 7 E

ALLEN COUNTY
BATH TOWNSHIP
SW 1/4 SECTION 35
T 3 S - R 7 E

The location of the underground utilities shown on these plans are as obtained from the owners of the utilities as required by Section 153.64 ORC.

BEGIN WORK
BEGIN PROJECT
STA. 1008+90
S.L.M. 16.95

BEGIN ACQUISITION
STA. 1009+09.42

JACKLYN R. HINES
37-3412-05-020.000
LOT 22266

MICHAEL S.
SWALLOW
-3412-05-024.000
LOT 22270

END WORK
STA. 12+00
MUMAUGH RD

END ACQUISITION
STA. 1016+80.00

BEGIN WORK
STA. 9+30
MUMLAUGH RD

END WORK
END PROJECT
STA. 1016+95
S.L.M. 17.10

 - Residential Building
 - Commercial Building

- ~ 3/4"x30" Reinforcing Rod with aluminum cap stamped "ODOT R/W District 1" to be set by O.D.O.T. Survey forces prior to construction

UTILITY OWNERSHIP	
TYPE	NAME & ADDRESS
TELEPHONE	<i>SprInt</i> 122 S. Elizabeth Street Lima, Ohio 45801 419-228-1200
CABLE	<i>Time Warner Cable</i> 3100 Elida Road Lima, Ohio 45805 419-331-1111
ELECTRIC	<i>American Electric Power</i> 369 E. O'Connor Ave. Lima, Ohio 45801 419-222-9010
GAS	<i>East Ohio Gas</i> 150 S. Jackson Street Lima, Ohio 45801 419-226-4700
WATER	<i>City of Lima</i> 50 Town Square Lima, Ohio 45801 419-228-5462

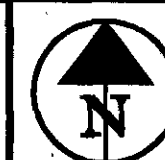
ALLEN COUNTY
PERRY TOWNSHIP
NE 1/4 SECTION 3
T 4 S - R 7 E

JOHN A. ROSCHMAN, TRUSTEE
UNDER THE JOHN A. ROSCHMAN
DECLARATION OF TRUST
47-0300-01-003.0000

37-3500-03-004.000

ALLEN COUNTY
PERRY TOWNSHIP
NW¹/₄ SECTION 2
T 4 S - R 7 E

REV	DATE	DESCRIPTION
DATE OF COMPLETION		12-15-03



SCALE IN FEET

PID No.
23469

PROPERTY MAP

ALL-309-16.95

2 / 5

$$\frac{41}{44}$$

DESIGN FILE : I:\pd\23469\Construction\309rm.dgn
 USERNAME : nvondere

DATE : 15-DEC-2003
TIME : 11:05

4	OWNERSHIPS	0	OWNERSHIPS WITH STRUCTURES INVOLVED
4	PARCELS	0	OWNERSHIPS WITH "P" ITEMS
0	TOTAL TAKES		

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF
STATE OF OHIO UNLESS OTHERWISE SHOWN.

REV	DATE	DESCRIPTION
DATE OF COMPLETION 12-15-03		

PARCEL	OWNER	SHEET NO.	OWNERS RECORD		AUDITOR'S PARCEL NO.	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED	
			Book	Page		Acres	Acres	Acres	Acres	Acres		Left	Right			Book	Page
IT	JACKLYN R. HINES	4	846 818 Ease 840	152 618 231	37-3412-05-020.000	0.78	0	0.038		0.038				State	Lot 22266 (Skycrest Heights Subdivision Plat Book 9 Page 118) To Grade Slopes		
2WD	JOHN A. ROSCHMAN, TRUSTEE UNDER THE JOHN A. ROSCHMAN DECLARATION OF TRUST	4, 5	819	842	47-0300-01-003.000	6.51	0.726 *	0.571	0.419	0.152		5.632			0.419 Acres of P.R.O. In Take Converted to WD		
3WD	MICHAEL S. SWALLOW	5	866 833 Ease 408	33 340 181	37-3412-05-024.000	0.47	0	0.013	0	0.013		0.457			Lot 22270 (Skycrest Heights Subdivision Plat Book 9 Page 118)		
4SHV	ROBERT R. STONE	5	881 652 Ease 230	825 30 247	37-3500-03-003.000 37-3500-03-004.000 Total SH	16.37 10.1 26.47	0.962 * 1.054 * 2.016	0.334 0 0.334	0.255 0 0.255	0.079 0 0.079		15.329 9.046 24.375		State	To be Acquired In the name of Allen County # Wood Fence		

DENOTES RIGHT OF WAY ENCROACHMENT

SUMMARY OF ADDITIONAL RIGHT OF WAY

ALL-309-16.95

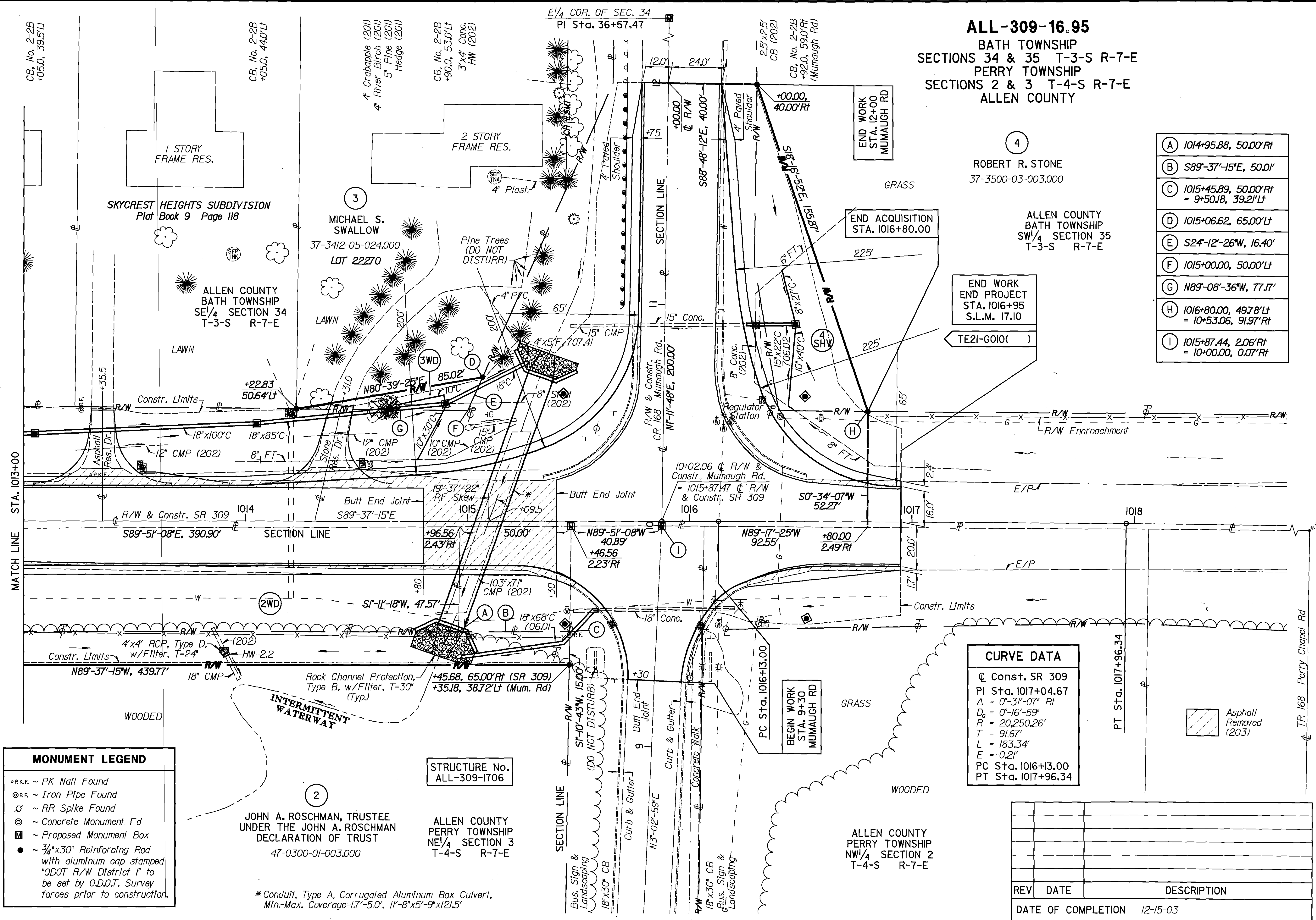
FEDERAL PROJECT NO.:

STATE JOB NO.

FILE NO.

TE21-G010(

$$\frac{3}{5}$$
$$\frac{42}{44}$$



MONUMENT LEGEND	
OR.F.	~ PK Nail Found
IR.F.	~ Iron Pipe Found
RR	~ RR Spike Found
CM	~ Concrete Monument Fd
PM	~ Proposed Monument Box
R	~ 3/4"x30" Reinforcing Rod with aluminum cap stamped "ODOT R/W District I" to be set by O.D.O.T. Survey forces prior to construction.

JOHN A. ROSCHMAN, TRUSTEE
UNDER THE JOHN A. ROSCHMAN
DECLARATION OF TRUST
47-0300-01-003.000

STRUCTURE NO.
ALL-309-1706

ALLEN COUNTY
PERRY TOWNSHIP
NE 1/4 SECTION 3
T-4-S R-7-E

* Conduit, Type A, Corrugated Aluminum Box Culvert,
Min-Max. Coverage=17'-5.0', 11'-8"x5'-9"x121.5'

ALL-309-16.95
BATH TOWNSHIP
SECTIONS 34 & 35 T-3-S R-7-E
PERRY TOWNSHIP
SECTIONS 2 & 3 T-4-S R-7-E
ALLEN COUNTY

ROBERT R. STONE
37-3500-03-003.000

ALLEN COUNTY
BATH TOWNSHIP
SW 1/4 SECTION 35
T-3-S R-7-E

END WORK
END PROJECT
STA. 1016+95
S.L.M. 17.10

CURVE DATA	
Const. SR 309	
PI Sta. 1017+04.67	
$\Delta = 0^{\circ}31'07''$ Rt	
$D_s = 0^{\circ}16'59''$	
$R = 20,250.26'$	
$T = 91.67'$	
$L = 183.34'$	
$E = 0.21'$	
PC Sta. 1016+13.00	
PT Sta. 1017+96.34	

REV	DATE	DESCRIPTION
DATE OF COMPLETION		12-15-03

(A)	1014+95.88, 50.00'Rt
(B)	S89-37'-15"E, 50.01'
(C)	1015+45.89, 50.00'Rt = 9+50.18, 39.21'Lt
(D)	1015+06.62, 65.00'Lt
(E)	S24-12'-26"W, 16.40'
(F)	1015+00.00, 50.00'Lt
(G)	N89-08'-36"W, 77.17'
(H)	1016+80.00, 49.78'Lt = 10+53.06, 91.97'Rt
(I)	1015+87.44, 2.06'Rt = 10+00.00, 0.07'Rt

SPECIAL PROVISIONS

WATERWAY PERMITS FOR

CRS: ALL-309-16.95 (PID 23469)

U.S. ARMY CORPS OF ENGINEERS
PERMIT NUMBER: #3

OHIO EPA
PERMIT NUMBER: _____

EFFECTIVE DATE: December 12, 2003

NATIONWIDE PERMIT #3 - MAINTENANCE

Activities related to:

(i) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards which are necessary to make repair, rehabilitation, or replacement, are permitted, provided the adverse environmental effects resulting from such repair, rehabilitation, or replacement are minimal. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the District Engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(ii) Discharges of dredged or fill material, including excavation, into all waters of the United States to remove accumulated sediments and debris in the vicinity of, and within, existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional rip rap to protect the structure, provided the permittee notifies the District Engineer in accordance with General Condition 13. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. The placement of rip rap must be the minimum necessary to protect the structure or to ensure the safety of the structure. All excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the District Engineer under separate authorization. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the District Engineer.

(iii) Discharges of dredged or fill material, including excavation, into all waters of the United States for activities associated with the restoration of upland areas damaged by a storm, flood, or other discrete event, including the construction, placement, or installation of upland protection structures and minor dredging to remove obstructions in water of the US. (Uplands lost as a result of a storm, flood, or other discrete event can be replaced without a Section 404 permit provided the uplands are restored to their original pre-event location. This NWP is for the activities in waters of the US associated with the replacements of the uplands.) The permittee must notify the District Engineer, in accordance with General Condition 13, within 12 months of the date of the damage and the work must commence, or be under contract to commence, within two years of the date of the damage. The permittee should provide evidence, such as a recent topographic survey or photographs, to justify

the extent of the proposed restoration. The restoration of the damaged areas cannot exceed the contours, or ordinary high water mark, that existed before the damage. The District Engineer retains the right to determine the extent of the pre-existing conditions and the extent of any restoration work authorized by this permit. Minor dredging to remove obstructions from the adjacent waterbody is limited to 50 cubic yards below the plane of the ordinary high water mark, and is limited to the amount necessary to restore the pre-existing bottom contours of the waterbody. The dredging may not be done primarily to obtain fill for any restoration activities. The discharge of dredged or fill material and all related work needed to restore the upland must be part of a single and complete project. This permit cannot be used in conjunction with NWP 18 or NWP 19 to restore damaged upland areas. This permit cannot be used to reclaim historic lands lost, over an extended period, to normal erosion processes.

This permit does not authorize maintenance dredging for the primary purpose of navigation and beach restoration. This permit does not authorize new stream channelization or stream relocation projects. Any work authorized by this permit must not cause more than minimal degradation of water quality, more than minimal changes to the flow characteristics of the stream, or increase flooding (See General Conditions 9 and 21).

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure of fill that does not qualify for the Section 404(f) exemption for maintenance.

Nationwide 3 Specific Regional Conditions

- i. Notification required prior to the use of vertical sheet piling and closed structures in the special habitat waters of Lake Erie (See General Conditions, Critical Resource waters (1)).
- ii. The Pre-Construction Notification (PCN) for activities involving the removal of accumulated sediments and debris in the vicinity of existing structures, to restore the waterway to the approximate dimensions that existed when the structure was built, must include evidence of such dimensions. If this information is not available, the PCN must include evidence of the existing depths immediately outside the proposed work area.

WATER QUALITY CERTIFICATION

Pursuant to Section 401 of the Clean Water Act, the Ohio Environmental Protection Agency hereby certifies that activities authorized by these Permits, undertaken in accordance with all of the special and general conditions listed below, will comply with the applicable provisions of the Clean Water Act and applicable Ohio water quality standards. Those NWPs with no special Water Quality Certification (WQC) conditions remain subject to general WQC conditions unless otherwise indicated (Reference 1 below).

Water Quality Certification – Special Conditions:

The Ohio State Certification General Limitations and Conditions apply to this nationwide permit.

Ohio State Water Quality Certification Special Conditions and Limitations:

- 1. Total surface water and vegetation impacts on either side of the replacement structure shall be limited to the greater of 25 feet beyond the structure, or 25 feet beyond the toe of the slope of the structure's approach embankment. [Where the use of a crane is necessary to conduct a maintenance activity, total impacts shall not exceed 50 feet on either side of the structure or approach embankment]. In either case, total impacts, including the structure, shall not exceed 200 feet [except for stabilization projects]. Width shall be measured at the structure's narrowest point as it crosses the waterbody, and be measured parallel to stream flow.
- 2. Culvert replacement:
 - a. This Certification shall only authorize minor deviations from the existing structure's centerline and minor deviations in culvert dimensions, unless these deviations are necessary to follow current safety standards.
- 3. Bridge Replacement:
 - a. This Certification shall only authorize minor deviations from the existing structure's centerline, unless these deviations are necessary to follow current safety standards.
 - b. Bridge replacements shall not result in additional lanes unless necessary to follow current safety standards.
- 4. Maintenance or repair of existing fills (stabilization projects):
 - a. Impacts from maintenance or repair of existing fills shall not exceed the dimensions of the fill prior to the damage; and
 - b. This nationwide shall not authorize the replacement of existing structures that are open to the flow of water with structures that are not open to the flow of water.
- 5. For replacement vertical bulkheads, the following conditions apply:
 - a. For ship channels and harbors adjacent to federal navigation channels within the following harbors: Sandusky Harbor, Huron Harbor, Vermilion Harbor, Lorain Harbor, Conneaut Harbor, Port Clinton Harbor, Rocky River Harbor, Cleveland Harbor, Fairport Harbor, Ashtabula Harbor, and Toledo Harbor, 1,000 feet of existing vertical bulkheads may be replaced if recessed areas for aquatic habitat, or other aquatic habitat improvements, are incorporated within the design and construction of the replacement vertical bulkhead;
 - b. For all other areas, except Lake Erie, Lake Erie Islands, or Sandusky Bay, up to 1,000 feet of existing vertical bulkheads may be replaced. Toe stone shall be placed at the base of these replacement vertical bulkheads except in areas where the shoreline is composed of bedrock and slopes are predominately greater than 75 percent;
 - c. Replacement vertical bulkheads are not to be placed more than one foot waterward of the intersection of the ordinary high water level of the waterbody and the existing shoreline;

d. Minor dredging necessary for the installation of the replacement vertical bulkhead is authorized;

e. Placement of fill between the replacement vertical bulkhead and existing shoreline is authorized; and

f. Toe stone shall be placed at the base of these replacement vertical bulkheads except in areas where the original shoreline is composed of bedrock and slopes are predominately greater than 75 percent or where the placement of toe stone would interfere with shipping activity. When required, toe stone shall be placed at an average rate of one-third the total height of the replacement vertical bulkhead at a 2:1 slope.

6. Removal of accumulated sediment:

a. Removal of accumulated sediment shall occur only once per year, except in cases of emergency situations which threaten life of property.

B. Removal of accumulated sediments shall be limited to low-flow conditions whenever practicable, except in cases of emergency situations which threaten life or property.

NATIONWIDE PERMIT CONDITIONS

GENERAL CONDITIONS:

The following general conditions must be followed in order for any authorization by a NWP to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.

2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

6. Regional and Case-By-Case Conditions. The activity must comply with any regional

conditions which may have been added by the division engineer (see 33 CFR 330.4(e) and with any case specific conditions added by the Corps or by the State or tribe in its section 401 Water Quality Certification and Coastal Zone management Act consistency determination.

7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. Water Quality.

(a) In certain States and tribal lands an individual Section 401 water quality certification must be obtained or waived (see 33 CFR 330.4(c)).

(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the State or tribal 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWPs). This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see Section 330.4(d)).

11. Endangered Species.

(a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or critical habitat might be affected or is in the vicinity of.

the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS, the District Engineer may add species-specific regional endangered species conditions to the NWP.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the National Marine Fisheries Service (NMFS), both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their World Wide Web pages at <http://www.fws.gov/r9endspp/endspp.html> and http://www.nmfs.noaa.gov/prot_res/overview/es.html, respectively.

12. Historic properties. No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification.

(a) **Timing:** where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the PCN is complete within 30 days of the date of receipt and can request the additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:

- (1) Until notified in writing by the District Engineer that the activity may proceed

under the NWP with any special conditions imposed by the District or Division Engineer; or

- (2) If notified in writing by the District or Division Engineer that an individual permit is required; or

- (3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) **Contents of Notification:** The notification must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;

- (2) Location of the proposed project;

- (3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);

- (4) For NWP 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));

- (5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed.

- (6) For NWP 14 (Linear Transportation Crossings), the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses of waters of the US will be minimized to the maximum extent practicable;

- (7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;

- (8) For NWP 27 (Stream and Wetland Restoration Activities), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee.

- (9) For NWP 29 (Single-Family Housing), the PCN must also include:

- (i) Any past use of this NWP by the individual permittee and/or the

permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring 1/4 acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than 1/4 acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31 (Maintenance of Existing Flood Control Facilities), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided that the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site;

(11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;

(12) For NWPs 39, 43, and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;

(13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not

authorize the relocation of greater than 300 linear-feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer, waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;

(15) For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the US. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(16) For NWP 44 (Mining Activities), the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(c) Form of Notification: The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP

and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP. If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either:

- (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit;
- (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or
- (3) that the project is authorized under the NWP with specific modifications or conditions.

Where the District Engineer determines that mitigation is required in order to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. For activities requiring notification to the District Engineer that result in the loss of greater than ½ acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will

provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetland Delineations: Wetland Delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than 1/4-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:

- (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).

16. Water Supply Intakes. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

17. Shellfish Beds. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the US discharges of dredged or fill material, may consist of unsuitable material (e.g. trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic

pollutants in toxic amounts (see Section 307 of the CWA).

19. Mitigation. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWP's. For example, 1/4-acre of wetlands cannot be created to change a 3/4-acre loss of wetlands to a 1/2-acre loss associated with NWP 39 verification. However, 1/2-acre of created wetlands can be used to reduce the impacts of a 1/2-acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWP's.

(e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed;

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps

will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow. This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated

marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWP 7 in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWP 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWP 3 only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26. Fills Within 100-Year Floodplains. For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100-year floodplain, below headwaters (i.e., five cfs), resulting in permanent above-grade fills, are not authorized by NWP 39, 40, 42, 43, and 44.

(b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWP 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. Construction Period. For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12-months after such date (including any modification that affects the project). For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps. For projects that have been verified by the Corps, an extension of a Corps approved completion date may be requested. This request must be submitted at least one month before the previously approved completion date.

FURTHER INFORMATION

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWP 3 do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.
3. NWP 3 do not grant any property rights or exclusive privileges.
4. NWP 3 do not authorize any injury to the property or rights of others.
5. NWP 3 do not authorize interference with any existing or proposed Federal project.

DEFINITIONS

Best Management Practices (BMPs): BMPs are policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural. A BMP policy may affect the limits on a development.

Compensatory Mitigation: For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Creation: The establishment of a wetland or other aquatic resource where one did not formerly exist.

Enhancement: Activities conducted in existing wetlands or other aquatic resources that increase one or more aquatic functions.

Ephemeral Stream: An ephemeral stream has flowing water only during and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Farm Tract: A unit of contiguous land under one ownership that is operated as a farm or part of a farm.

Flood Fringe: That portion of the 100-year floodplain outside of the floodway (often referred to as "floodway fringe").

Floodway: The area regulated by Federal, state, or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program) within the 100-year floodplain.

Independent Utility: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Intermittent Stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water from stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of Waters of the US: Waters of the US that include the filled area and other waters that are permanently adversely affected by flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent above-grade, at-grade, or below-grade fills that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the US is the threshold measurement of the impact to existing waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and values. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Impacts to ephemeral streams are not included in the linear foot measurement of loss of stream bed for the purpose of determining compliance with the linear foot limits of NWPs 39, 40, 42, and 43. Water of the US temporarily filled, flooded, excavated, or drained, but restored to preconstruction contours and elevations after construction, are not included in the measurement of loss of waters of the US.

Non-tidal Wetland: A non-tidal wetland is a wetland (i.e., a water of the US) that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open Water: An area that, during a year with normal patterns of precipitation, has standing or flowing water for sufficient duration to establish an ordinary high water mark. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. The term "open water" includes rivers, streams, lakes, and ponds. For the purposes of the NWPs, this term does not include ephemeral waters.

Perennial Stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Permanent Above-grade Fill: A discharge of dredged or fill material into waters of the US,

including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the waterbody to dry land. Structural fills authorized by NWPs 3, 25, 36, etc. are not included.

Preservation: The protection of ecologically important wetlands or other aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the overall aquatic ecosystem.

Restoration: Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state.

Riffle and Pool Complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Single and Complete Project: The term single and complete project is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers (see definition of independent utility). For linear projects, the single and complete project (i.e., a single and complete crossing) will apply to each crossing of a separate water of the US (i.e., a single waterbody) at that location. An exception is for linear projects crossing a single waterbody several times at separate and distant locations: each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies.

Stormwater Management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater Management Facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and BMPs, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream Bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not

considered part of the stream bed.

Stream Channelization: The manipulation of a stream channel to increase the rate of water flow through the stream channel. Manipulation may include deepening, widening, straightening, armoring, or other activities that change the stream cross-section or other aspects of stream channel geometry to increase the rate of water flow through the stream channel. A channelized stream remains a water of the US, despite the modifications to increase the rate of water flow.

Tidal Wetland: A tidal wetland is a wetland (i.e., water of the US) that is inundated by tidal waters. The definition of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line (i.e., spring high tide line) and are inundated by tidal waters two times per lunar month, during spring high tides.

Vegetated Buffer: A vegetated upland or wetland area next to rivers, streams, lakes, or other open waters which separates the open water from developed areas, including agricultural land. Vegetated buffers provide a variety of aquatic habitat functions and values (e.g., aquatic habitat for fish and other aquatic organisms, moderation of water temperature changes, and detritus for aquatic food webs) and help improve or maintain local water quality. A vegetated buffer can be established by maintaining an existing vegetated area or planting native trees, shrubs, and herbaceous plants on land next to open-waters. Mowed lawns are not considered vegetated buffers because they provide little or no aquatic habitat functions and values. The establishment and maintenance of vegetated buffers is a method of compensatory mitigation that can be used in conjunction with the restoration, creation, enhancement, or preservation of aquatic habitats to ensure that activities authorized by NWP's result in minimal adverse effects to the aquatic environment. (See General Condition 19.)

Vegetated Shallows: Vegetated shallows are special aquatic sties under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: A waterbody is any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody.

REGIONAL GENERAL CONDITIONS

1. Notifications for all Nationwide permits should include a location map (USGS topographical map) and project drawings on 8.5" x 11" paper.

2. Nationwide Permits shall not authorize any activity which impact bogs and/or fens.

3. No Nationwide permit may be used in Lake Erie for purposes of diverting water from the Great Lakes.

4. In order to determine if a project meets the terms and conditions of the Ohio EPA's 401 water quality certification, two copies of the following information is necessary:

(a) All wetland delineations must include the latest approved version of the Ohio Rapid Assessment Method (ORAM) for wetland evaluation, long form. (This will assist OEPA in determining the category of wetland the applicant proposes to impact.)

(b) Photographs of the wetland.

NOTE: This information is in addition to the required information listed under General Condition 13 (Notification) of the NWP.

5. Notification is required for all work in the following designated Critical Resource Waters:

Special Habitat water of Lake Erie: Special habitat waters of Lake Erie including the shoreline, off shore islands, rock outcrops, and adjacent waters within the boundaries defined as 82 22' 30" West Longitude, 83 07' 30" West Longitude, 41 33' 00" North Latitude and 42 00' 00" North Latitude.

Piping Plover Critical Habitat: In Ohio, two areas have been designated critical habitat for the piping plover (*Charadrius melodus*) and are defined as lands 0.62 miles inland from normal high water line. Unit OH-1, extends from the mouth of Sawmill Creek to the western property boundary of Sheldon Marsh State Natural Area, Erie County, encompassing approximately 2.0 miles. Unit OH-2, extends from the eastern boundary line of Headland Dunes Nature Preserve to the western boundary of the Nature Preserve and Headland Dunes State Park, Lake County, encompassing approximately 0.5 mile.

Big and Little Darby Creeks (National Wild and Scenic River System): Big Darby Creek from Champaign-Union County line downstream to the Conrail railroad trestle and from the confluence with the Little Darby Creek downstream to the Scioto River. Little Darby Creek from the Lafayette-Plain City Road Bridge downstream to within 0.8 mile from the confluence with Big Darby Creek. Total designation is approximately 82 miles.

Little Beaver Creek (National Wild and Scenic River System): Little Beaver Creek main stem, from the confluence of West Fork with Middle Fork near Williamsport to mouth; North Fork from confluence of Brush Run and North Fork to confluence of North Fork with main stem at Fredericktown; Middle Fork from vicinity of Co. Rd. 901 (Elkton Road) bridge crossing to confluence of Middle Fork with West Fork near Williamsport; West Form from vicinity of Co. Rd. 914 (Y-Camp Road) bridge crossing east to

confluence of West Fork with Middle Fork near Williamsport. Total designation is 33 miles

Little Miami River: (Scenic component of the National System from Clifton to Foster) The portion from Foster to the Ohio River was designated a Recreational component of the National System. Total designation is 92 miles.

6. Notification is required for all activities in state Wild and Scenic Rivers (see list below). The following are **State Wild and Scenic Rivers**:

Little Miami River - Clermont County line at Loveland to headwaters, including North Fork, Clermont County line at Loveland to confluence with East Fork and from the confluence with East Fork to Ohio River. Miles designated (approximate): 105

Sandusky River - US Rt. 30 in Upper Sandusky to Roger Young Memorial Park in Fremont. Miles designated (approximate): 65

Olentangy River - Delaware Dam to Old Wilson Road in Worthington. Miles designated (approximate): 22

Little Beaver Creek - Wild segments - West Fork from 1/4 mile downstream from Twp. Rd. 914 to confluence with Middle Fork. North Fork from Twp. Rd. 952 to confluence with Little Beaver Creek. Little Beaver Creek from confluence of West and Middle Forks downstream to 3/4 mile north of Grimm's Bridge. Scenic segments - North Fork from Ohio-Pennsylvania line downstream to Jackman Road. Middle Fork from Elkton Rd. (Twp. Rd. 901) downstream to confluence with West Fork. Little Beaver Creek from 3/4 mile north of Grimm's Bridge downstream to the Ohio-Pennsylvania line. Miles designated (approximate): Wild 20, Scenic 16

Grand River - Wild segment - from Harpersfield covered bridge downstream to Norfolk and Western Railroad trestle south of Painesville. Scenic segment - from St. Rt. 322 bridge in Ashtabula County downstream to Harpersfield covered bridge. Miles designated (approximate): Scenic 33, Wild 23

Upper Cuyagoga River - Troy-Burton Township line in Geauga County to US Rt. 14. Miles designated (approximate): 25

Maumee River - Scenic segment - Ohio-Indiana line to St. Rt. 24 bridge west of Defiance. Recreational segment - St. Rt. 24 bridge west of Defiance to US Rt. 25 bridge near Perrysburg. Miles designated (approximate): Scenic 43, Recreational 53

Stillwater River System - Recreational segment - Englewood dam to confluence with Great Miami River. Scenic segments - Stillwater River from Riffle Road bridge in Darke Co. to Englewood dam. Greenville Creek from the Ohio-Indiana state line to the

confluence with the Stillwater. Miles designated (approximate): Scenic 83, Recreational 10

Chagrin River - Aurora Branch from St. Rt. 82 bridge downstream to confluence with Chagrin. Chagrin River from confluence with Aurora Branch downstream to St. Rt. 6 bridge. East Branch from Heath Road bridge downstream to confluence with Chagrin. Miles designated (approximate): 49

Big and Little Darby Creeks - Big Darby Creek from the Champaign-Union County line downstream to the U.S. Rt. 40 Bridge, from the northern boundary of Battelle-Darby Creek Metro Park to the confluence with the Little Darby Creek downstream to the Scioto River. Little Darby Creek from the Lafayette-Plain City Road Bridge downstream to the confluence with Big Darby Creek. Miles designated (approximate): 84

Kokosing River - Knox/Morrow County line to confluence with Mohican River. North Branch of Kokosing from confluence with East Branch downstream to confluence with main stem. Miles designated (approximate): 48

OHIO STATE CERTIFICATION GENERAL LIMITATIONS AND CONDITIONS (WATER QUALITY CERTIFICATION)

1. Streams

- a) Temporary or permanent impacts to intermittent and perennial streams for any single and complete project are limited to a maximum of two hundred (200) linear feet [except for NWP 3, 12, 21, 27, and 41];
- b) Temporary or permanent impacts to ephemeral streams for any single and complete project are limited to a maximum of three hundred (300) linear feet [except for NWP 3, 12, 21, 27, and 41];
- c) Temporary or permanent impacts to Exceptional Warmwater Habitat (EWH), Cold Water Habitat (CWH), Seasonal Salmonid (SS), or any equivalent designation, or with an antidegradation category of State Resource Water, Superior High Quality Water (except as it applies to Lake Erie), Outstanding National Resource Waters, or Outstanding High Quality Waters are prohibited [except for NWP 3 and maintenance activities covered under NWP 7, 12, and 33];
- d) Temporary or permanent impacts to the designated portions of national or state scenic rivers are prohibited [except for NWP 3 and maintenance activities under NWP 12];
- e) Stream reconstruction activities shall adhere to natural channel design techniques;
- f) Off-site stream or buffer improvements and/or mitigative measures required by the

Corps:

i. In order of priority, these measures shall focus on 1) the stream segment being impacted, 2) upstream segments and tributaries, 3) the receiving stream. The measures should, to the extent practicable, consider the causes and sources of impairment of the stream where the measures would be undertaken if the stream is listed as impaired in the most recent final report submitted to the United States environmental protection agency by the director of Ohio EPA to fulfill the requirements of Section 303(d) of the Clean Water Act. The current list of impaired streams, as of the date of this certification, can be found on the Ohio EPA web site at (Tables 1 through 6):

<http://www.epa.state.oh.us/dsw/tmdl/303dnote.html>

ii. If the applicant cannot find appropriate mitigation on streams listed in section a) above, mitigation shall be in the Ohio EPA 8-digit watershed.

g) On-site stream or buffer improvements and/or mitigative measures required by the Corps:

- i. Vegetative buffers on both stream banks an appropriate length; and
- ii. A minimum width of 25 feet for preservation of existing vegetative buffers; or
- iii. A minimum width of 50 feet for re-vegetating buffers cleared during construction.

h) Compensatory mitigation for linear projects (e.g., highways) in streams may be mitigated for by the following, in descending order of practicability:

- i. Stream impacts associated with a linear project may be mitigated on-site, defined as within one mile of the linear project, in each Ohio EPA 8-digit watershed as shown in OAC 3745-1-54(F)(2); or
- ii. Stream impacts associated with a linear project may be mitigated at a single stream mitigation location or stream mitigation bank (if and when such a bank is established), acceptable to the director, within each Ohio EPA 8-digit watershed in which the impacts occur; or
- iii. If no stream mitigation bank, acceptable to the director, is located within the Ohio EPA 8-digit watershed in which the impact occurs, then mitigation may occur in another Ohio EPA 8-digit watershed impacted by the linear project; at a single stream mitigation location, or a stream mitigation bank acceptable to the director; or
- iv. In no stream mitigation bank exists within any of the watersheds connected with the linear project, then mitigation should occur within the watershed in which the largest impacts (in terms of area) occur.

2. Wetlands

a) Temporary or permanent impacts to Category 3 wetlands are prohibited.

b) Temporary or permanent impacts to Category 1 and 2 wetlands for any single and complete project are limited to a maximum total of ½ acre [except for NWP 21 & 27].

c) Wetland mitigation shall adhere to the requirements set forth in Ohio EPA's Wetland Water Quality Standards (OAC 3745-1-50 through 54). [In the event that suitable mitigation cannot be located on-site (within one mile) or within the watershed, mitigation may be located outside of the watershed if there are significant ecological reasons to do so].

3. General

a) Impacts shall be measured linearly from upstream to downstream, including the length of stream impoundments, when calculating the total length of stream impacts [except for NWP 12, for which impacts shall be measured bank-to-bank].

b) NWPs cannot be combined to increase any of the aforementioned limitations.

c) Authorization under this Certification does not relieve the permittee from the responsibility of obtaining any other federal, state or local permits, approvals or authorizations required by law including without limitation, National Pollutant Discharge Elimination System (NPDES) permits or Permits to install (PTIs).

d) In order to control pollution of public waters by soil sediment from accelerated stream channel erosion and flood plain erosion caused by accelerated stormwater runoff from development areas, permittees shall comply with Ohio Administrative Code 1501:15-1-05 Stream Channel and Floodplain Erosion, or successor rule, as applicable to the project pursuant to OAC 1501:15-1-02.

e) OAC 1501:15-1-05 states that the peak rates of runoff from an area after development may be no greater than the peak rates of runoff from the same area before development for all twenty-four-hour storms from one to one-hundred-year frequency.

f) Locally required post development stormwater ponds shall incorporate specific design features for water quality such as those listed in Chapter One of the Ohio Department of Natural Resource's *Rainwater and Land Development: Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection, 2nd Ed. Mecklenburg, Dan. Ohio Department of Natural Resources, Division of Soil and Water Conservation, 1996* (or successor document), to the extent allowed by local stormwater requirements. These features include: infiltration trenches, extended detention, wet pools, forebays, aquatic benches and wetlands, optimum flow length, reverse flow pipe, optimum pool depth, shading and buffer plants, and runoff reuse.

g) The Best Management Practices (BMPs) listed below shall be utilized with all NWPs when applicable.

- i. The filling of, and discharge of dredged material into, Category 3 wetlands is

prohibited under this permit;

ii. Only suitable material, free of toxic contaminants in other than trace quantities, shall be used as fill material;

iii. The use of asphalt and rubber tires as fill is prohibited under this permit;

iv. All hydric topsoil removed from a trench shall be separated and saved for later placement as the topmost backfill layer when the trench is refilled;

v. The stockpiling of side-cast dredged material in wetlands in excess of three (3) months is prohibited;

vi. The applicant will comply with all requirements for final stabilization of the site contained in applicable NPDES construction stormwater permits for the site;

vii. Vegetated buffer strips extending to the top of both stream banks and beyond as stipulated by the Corps or Ohio EPA, using native tree and shrub species with rapid growth characteristics, shall be planted as soon as practicable after impacting stream channel slopes;

viii. Impacts to surface water buffer vegetation shall be minimized to the maximum extent practicable;

ix. Excavating equipment shall not be placed below the Ordinary High Water Mark (OHWM) of any surface water, except when no other alternative is practicable. When no other alternative is practicable to placing excavating equipment below the OHWM, entry to surface waters shall be through a single point of access per stream bank whenever practicable to minimize disturbance to buffer vegetation;

x. In-stream activities shall not result in the permanent destabilization of the stream banks or stream bed so that aquatic habitat from turbidity, erosion or scouring is minimized;

xi. In-stream work shall be conducted during low-flow conditions whenever practicable in order to minimize adverse impacts to water quality away from the project site, except in cases of emergency situations which threaten life or property;

xii. All dredged material placed at an upland site shall be controlled so that sediment runoff to remaining streams and wetlands is minimized to the maximum extent practicable; and

xiii. Disturbed areas shall be controlled so that sediment runoff to remaining streams and wetlands is minimized to the maximum extent practicable.

INFORMATION ON NATIONWIDE PERMIT VERIFICATION

Verification of the applicability of this Nationwide permit is valid for two years from the date of affirmation unless the Nationwide permit is modified, suspended or revoked. This verification will remain valid for two years if during this two year period the Nationwide permit is reissued without modification or your activity complies with any subsequent permit modification. Please note that if you commence or are under contract to commence this activity in reliance of your permit prior to the date this Nationwide permit is suspended or revoked, or is

modified such that your activity no longer complies with the terms and conditions, you have twelve months from the date of permit modification, expiration, or revocation to complete the activity under the present terms and conditions of this permit, unless this permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the Nationwide Permit program. A public notice announcing any changes will be issued when they occur. Finally, note that if your activity is not undertaken within the two year period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

Possession of this permit does not obviate you of the need to contact all appropriate state and/or local government officials to insure that the project complies with their requirements.