

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
MED-3-13.20

**MEDINA, GRANGER AND HINCKLEY TOWNSHIP
CITY OF MEDINA
MEDINA COUNTY**

PROJECT DESCRIPTION

THIS PROJECT WILL INCLUDE PAVEMENT PLANING, PAVEMENT REPAIR, RESURFACING WITH ASPHALT CONCRETE, MISC.: GUARDRAIL REPAIR, PAVEMENT MARKINGS AND MINOR BRIDGE MAINTENANCE.

PROJECT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA = N/A (MAINTENANCE PROJECT)

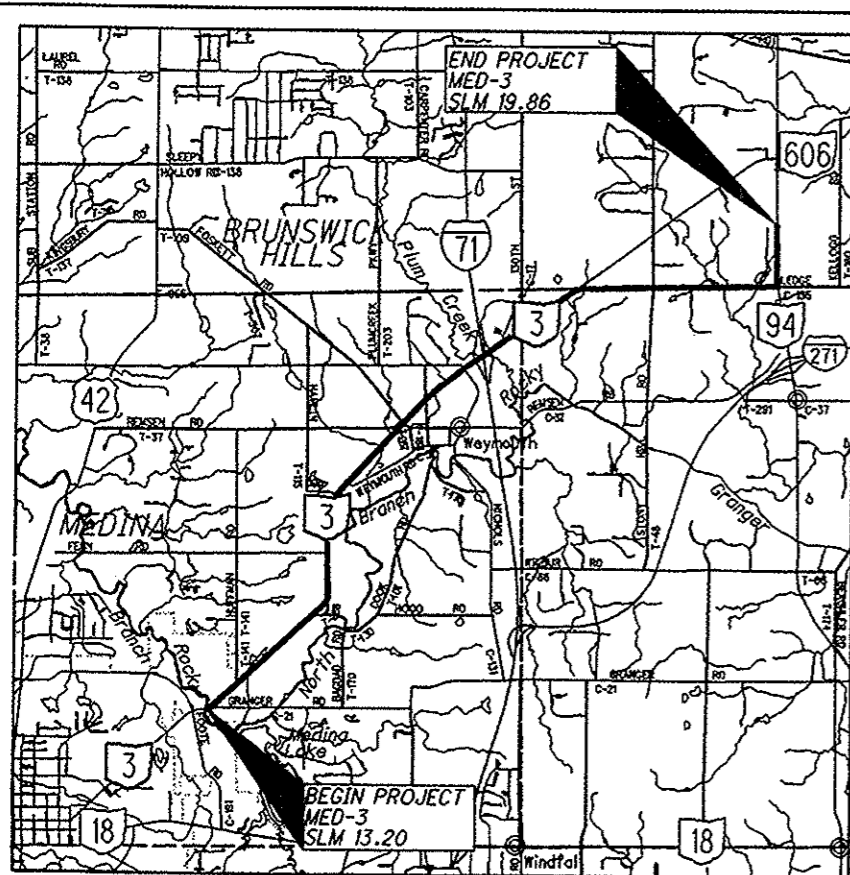
2010 SPECIFICATIONS

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 NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: Alan C. Bui
DATE: 12-9-11 DISTRICT DEPUTY DIRECTOR

APPROVED: Kevin Wray
DATE: 12-15-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP

LATITUDE: N41° 11' 20.79" LONGITUDE: 81° 47' 56.88"

SCALE IN MILES



PORTION TO BE IMPROVED: UNDIVIDED STATE & FEDERAL ROUTES: OTHER ROADS:

DESIGN DESIGNATION

SEE SHEET NO. 2.

DESIGN EXCEPTIONS

NONE

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PLAN PREPARED BY:

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-382-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988



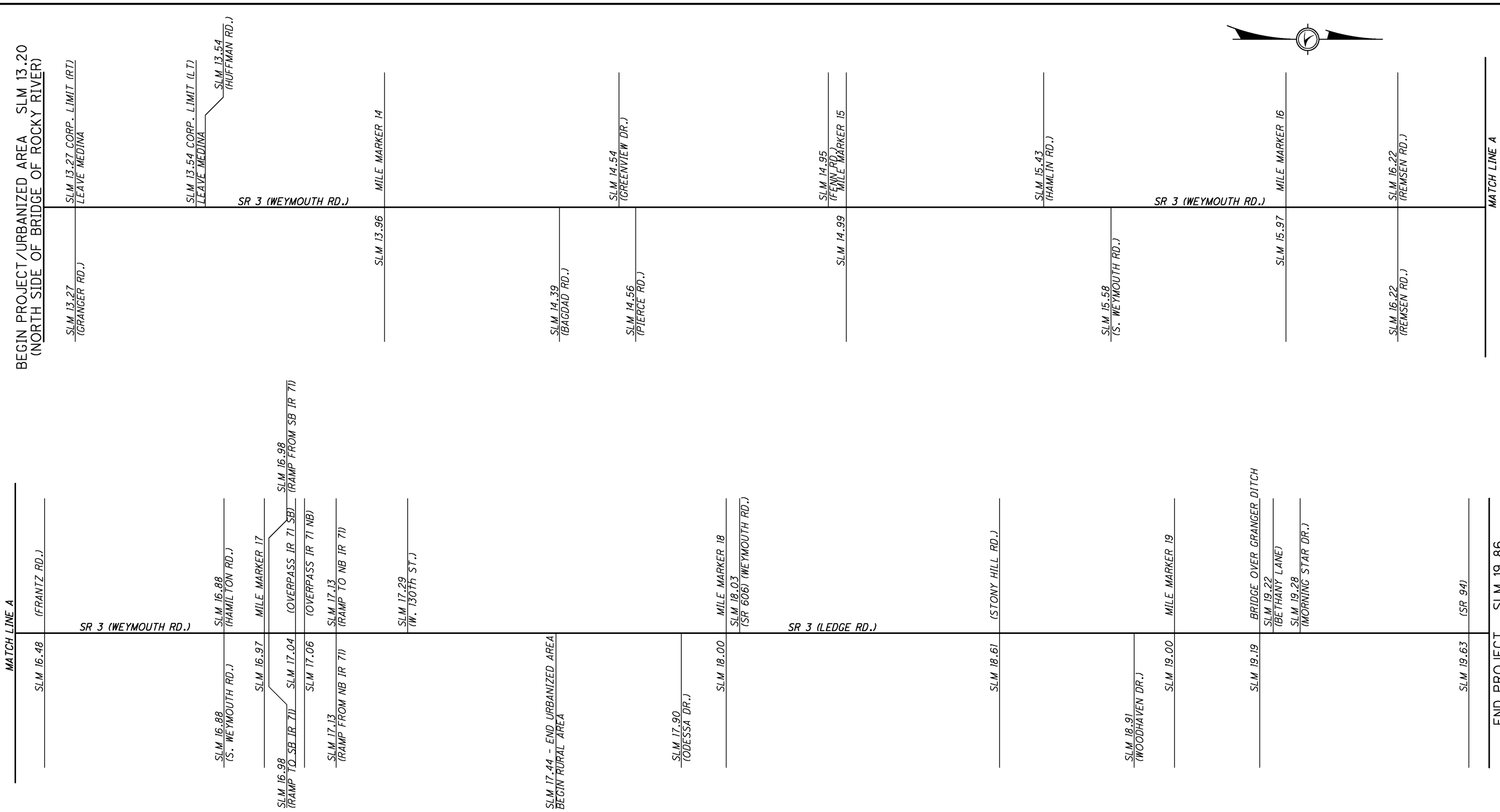
<p>STRUCTURE/CULVERT ENGINEERS SEAL:</p> <p>SIGNED: <u>David C. Mollenshott</u> DATE: <u>12/09/11</u></p>	<p>ROADWAY ENGINEERS SEAL:</p> <p>SIGNED: <u>Ahad D. Baraty</u> DATE: <u>12/19/11</u></p>
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STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10/19/07	MT-99.20	1/16/09	800	1/20/12
BP-4.1	7/16/04	MT-101.90	10/21/11		
GR-1.1	7/16/04	MT-105.10	1/16/09	832	5/5/09
GR-2.1	1/16/04				
GR-3.4	10/16/09	TC-41.20	1/19/01	DM-4.3	4/17/09
GR-4.1	1/21/11	TC-42.20	1/21/11	DM-4.4	4/17/09
GR-4.2	1/19/07	TC-52.10	1/19/07		
		TC-52.20	1/19/07		
GR-5.3	4/16/10	TC-65.10	1/21/05		
RM-1.1	7/15/11	TC-65.11	1/21/05		
		TC-71.10	1/21/11		
MT-35.10	4/20/01	TC-73.10	10/21/11		
		TC-82.10	1/21/11		
MT-97.10	10/15/10	TC-81.30	7/15/11		
MT-97.12	10/15/10				
MT-99.20	1/16/09				

SPECIAL PROVISIONS

FEDERAL PROJECT NO. **E100(840)**
PID NO. **84529**
CONSTRUCTION PROJECT NO. **NONE**
RAILROAD INVOLVEMENT **NONE**
MED-3-13.20
1/30

MED - SR-3-13.20
120131 PID - 84529
Dist 3 3/8/2012
Contract Proposal available @ www.contracts.dot.state.oh.us/home
DESIGN: projects@dot.state.oh.us FILE: www.projects@dot.state.oh.us WORKSTATION: www.projects@dot.state.oh.us



DESIGN DESIGNATION (MED-3-13.54 TO 14.95)

CURRENT ADT (2012)	11,190
DESIGN YEAR ADT (2024)	13,140
DESIGN HOURLY VOLUME (2024)	1,310
DIRECTIONAL DISTRIBUTION	0.61
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (MED-3-14.95 TO 17.04)

CURRENT ADT (2012)	16,870
DESIGN YEAR ADT (2024)	18,940
DESIGN HOURLY VOLUME (2024)	1,990
DIRECTIONAL DISTRIBUTION	0.66
TRUCKS (24 HOUR B&C)	0.08
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (MED-3-17.04 TO 18.03)

CURRENT ADT (2012)	9,340
DESIGN YEAR ADT (2024)	11,510
DESIGN HOURLY VOLUME (2024)	1,240
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (MED-3-18.03 TO 19.63)

CURRENT ADT (2012)	6,580
DESIGN YEAR ADT (2024)	8,060
DESIGN HOURLY VOLUME (2024)	910
DIRECTIONAL DISTRIBUTION	0.66
TRUCKS (24 HOUR B&C)	0.08
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (MED-3-19.63 TO 19.86)

CURRENT ADT (2012)	4,750
DESIGN YEAR ADT (2024)	5,320
DESIGN HOURLY VOLUME (2024)	530
DIRECTIONAL DISTRIBUTION	0.54
TRUCKS (24 HOUR B&C)	0.08
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

GENERAL

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

UTILITIES

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

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.

GAS
Columbia Gas of Ohio
Dan Suren
7080 Fry Road
Middleburg Heights, Ohio 44130
440-891-2428

City of Medina
132 North Elmwood Street
Medina, Ohio 44256
330-722-9020
330-722-3045 Fax
Patrick (Pat) Patton, City Engineer
330-722-9034

Gatherco Inc.
Ralph Krull
300 Tracy Bridge Rd
Orrville Oh, 44667
330-682-4144 office

Sunoco Pipeline L.P.
Bruce Swalm
525 Fritztown Road
Sinking Spring, Pennsylvania 19608
610-670-3279

Dominion East Ohio
Mary J. Long
Supervisor Gas Operations
Dominion East Ohio
320 Springside Dr., Suite 320
Akron, Ohio 44333
Phone: 330-664-2409

Frontier Communications
(formerly Verizon)
Randy Howard
6223 Norwalk Road
Medina, Ohio 44256
330-722-9586

Enervest Operating LLC
(operate wells formerly owned by Range Resources, Exco, North Coast, Belden & Blake, MB Operating, CGAS Exploration among others)
Ken Kragger, Pipeline Supervisor
330-714-2119

Windstream
(formerly Alltel & Western Reserve Telephone Co.)
Mr. Brent Hively (works the Hinckley area),
100 Owen Brown
Hudson, Ohio 44236
330-650-8212

CABLE:
Armstrong Utilities
Brian Keith
1141 Lafayette Rd.
Medina, OH 44256
Phone 330-722-3141 x224

Time Warner Cable
Dave Roush
1575 Lexington Avenue
Mansfield, Ohio 44901
419-756-6091 x. 1-419-555-5136

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UTILITIES. SECTIONS 105.07 AND 107.16 OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRE, AMONG OTHER THINGS, THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THIS CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

ROADWAY

ITEM 209. LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 LINEAR GRADING.

ITEM 604. MONUMENT BOX ADJUSTED TO GRADE

THE MONUMENT BOX TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING ADJUSTABLE FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING MONUMENT BOX TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT ADJUSTABLE FRAMES.

ITEM 254. PAVEMENT PLANING, ASPHALT CONCRETE (1.50")

THE INTENT OF THE PLANING IS TO MILL 1.5 INCHES AT THE CENTER OF PAVEMENT AT THE NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.016 PREFERRED AND 0.010 MINIMUM, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE CENTER OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES. WHEN 1.5 INCH DEPTH PAVEMENT PLANING IS BEING PERFORMED AT THE CENTERLINE, THE CONTRACTOR MAY HAVE TO PLANE DEEPER AT THE EDGE OF PAVEMENT TO ESTABLISH THE MINIMUM CROSS SLOPE. IF THIS IS THE CASE, THE CONTRACTOR SHALL PLANE A MAXIMUM OF 2.00 INCHES AT THE EDGE OF PAVEMENT EVEN IF THIS MAXIMUM DEPTH DOES NOT MEET THE MINIMUM CROSS SLOPE REQUIREMENTS.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE TO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED A DISINCENTIVE FEE OF \$1000.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF PAVEMENT PLANING, ASPHALT CONCRETE (1.50").

ITEM 254. PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254, PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

PAVEMENT CORING INFORMATION

Core	County	Route	SLM	Asphalt (in)	Concrete (in)	Brick	Location	Direction	Year Taken
1	MED	3	13.64	10.0	6.0	0.0	Inside	NB	2010
2	MED	3	13.64	10.0	6.0	0.0	Outside	NB	2010
3	MED	3	14.82	10.0	0.0	0.0	Inside	NB	2010
4	MED	3	14.82	8.0	0.0	0.0	Outside	NB	2010
5	MED	3	14.82	8.5	0.0	0.0	Shoulder	NB	2010
6	MED	3	15.80	4.0	9.0	0.0	Inside	NB	2010
7	MED	3	15.80	4.0	9.0	0.0	Outside	NB	2010
8	MED	3	15.80	8.5	0.0	0.0	Shoulder	NB	2010
9	MED	3	16.65	4.5	9.0	0.0	Inside	NB	2010
10	MED	3	16.65	3.75	9.0	0.0	Outside	NB	2010
11	MED	3	16.65	8.0	0.0	0.0	Shoulder	NB	2010
12	MED	3	17.25	4.0	8.5	0.0	Inside	NB	2010
13	MED	3	17.25	4.0	8.0	0.0	Outside	NB	2010
14	MED	3	17.25	7.75	0.0	0.0	Shoulder	NB	2010
15	MED	3	18.58	9.0	8.0	0.0	Inside	NB	2010
16	MED	3	18.58	7.0	8.0	0.0	Outside	NB	2010

PAVEMENT

**ITEM 253. PAVEMENT REPAIR, AS PER PLAN
ITEM 253. PAVEMENT REPAIR, MISC.: PARTIAL DEPTH**

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE. ITEM 253 PAVEMENT REPAIR, AS PER PLAN SHALL BE USED FOR TRANSVERSE REPAIRS AND OTHER SMALL AREA FULL DEPTH REPAIRS AS DIRECTED BY THE ENGINEER. ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH SHALL BE USED FOR LONGITUDINAL REPAIRS. CORING HAS BEEN PERFORMED TO HELP DETERMINE THE COMPONENTS THAT MAY BE ENCOUNTERED DURING THIS ITEM OF WORK. THE PAVEMENT CORING INFORMATION IS SHOWN ON THIS PLAN SHEET.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. PAVEMENT REPAIR SHALL BE PERFORMED PRIOR TO PAVEMENT PLANING AND BEFORE PLACEMENT OF THE SURFACE COURSE. THE REPAIR AREAS SHALL BE SAW CUT AND EXCAVATED TO PROVIDE STRAIGHT AND VERTICAL SURFACES AROUND THE PERIMETER OF THE REPAIR AREA. PAVEMENT PLANING MAY BE USED AS AN ALTERNATIVE TO SAW CUTTING AND EXCAVATING. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FEET WIDE.

REPLACEMENT MATERIAL SHALL BE ITEM 301, ITEM 448 TYPE 2, OR ITEM 442 19MM MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 ASPHALT CONCRETE, PG64-22 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 448 TYPE 2 OR ITEM 442 19MM CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 1.5" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". THE CONTRACTOR HAS THE OPTION OF USING EITHER ITEM 301, ITEM 448 TYPE 2, OR ITEM 442 19MM MATERIAL WHEN THE PAVEMENT REPAIR IS BETWEEN 3" AND 5" DEEP. ITEM 448 TYPE 2 OR ITEM 442 19MM MATERIAL SHALL BE PG64-22 FOR MEDIUM MIX DESIGN PAVEMENTS AND PG64-28 FOR HEAVY MIX DESIGN PAVEMENTS. ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE CLEANED AND COATED PER CMS 401.14, USING AN ASPHALT MATERIAL COMPLYING WITH 407.02. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH IS TO BE A MAXIMUM OF 5" DEEP AND ITEM 253 PAVEMENT REPAIR, AS PER PLAN IS FOR DEPTHS GREATER THAN 5". IF ANY TRANSVERSE REPAIRS ARE LESS THAN 5", THEY SHALL STILL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR, AS PER PLAN OR ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH. BELOW IS AN ESTIMATE OF THE REPAIRS AND THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

MED-3-14.00 TO 16.00 NB LONGITUDINAL REPAIRS (URBANIZED) 200 CY
MED-3-16.00 TO 17.44 NB LONGITUDINAL REPAIRS (URBANIZED) 100 CY
MED-3-17.44 TO 18.00 NB LONGITUDINAL REPAIRS (RURAL) 38 CY
MED-3-18.00 TO 19.00 NB LONGITUDINAL REPAIRS (RURAL) 41 CY

MED-3-19.00 TO 19.86 NB LONGITUDINAL REPAIRS (RURAL) 41 CY
MED-3-19.86 TO 17.44 SB LONGITUDINAL REPAIRS (RURAL) 90 CY
MED-3-17.44 TO 16.00 SB LONGITUDINAL REPAIRS (URBANIZED) 53 CY
MED-3-16.00 TO 13.54 SB LONGITUDINAL REPAIRS (URBANIZED) 117 CY

TOTAL ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH (RURAL) 210 CY
TOTAL ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH (URBAN) 470 CY

MED-3-13.20 TO 19.86 TRANSVERSE REPAIRS
MISCELLANEOUS REPAIRS GREATER THAN 5" DEEP

TOTAL ITEM 253 PAVEMENT REPAIR, AS PER PLAN CITY/FED 4 CY
URBANIZED 37 CY
RURAL 24 CY

DESIGN FILE: \\projects\84529\roadway\sheets\84529GNO01.dgn MODELNAME: Sheet
WORKSTATION: abaroty DATE: 12/12/2011

CALCULATED
GTS
CHECKED
DJV

GENERAL NOTES

MED - 3 - 13.20

INTERSECTIONS AND DRIVES

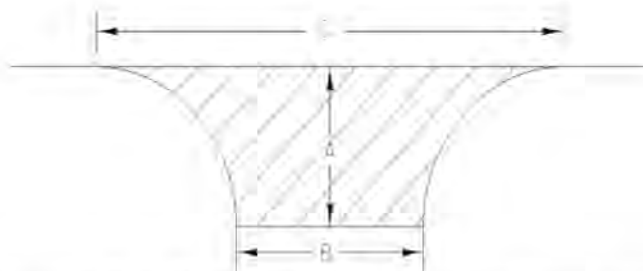
INTERSECTIONS SHALL BE PLANED AND PAVED TO THE END OF THE RADII OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

EXISTING PAVED DRIVES SHALL BE PAVED SO AS TO PROVIDE A SMOOTH TRANSITION BETWEEN THE HIGHWAY AND THE DRIVE, (DISTANCE FROM EDGE OF ROADWAY MAY VARY AT EACH DRIVE) AS DIRECTED BY THE ENGINEER.

EXISTING AGGREGATE DRIVES SHALL BE PAVED WITH AN APRON AN AVERAGE WIDTH OF 4 FT. THE SLOPE OF THIS APRON SHALL BE THE SAME AS THE ADJACENT PAVEMENT SLOPE OR AS DIRECTED BY THE ENGINEER. ANY GRADING NEEDED TO PAVE THE APRON SHALL BE INCLUDED IN THE RELATED ASPHALT ITEM FOR PAYMENT. ITEM 617 COMPACTED AGGREGATE SHALL BE PLACED ADJACENT TO THIS APRON TO PROVIDE A SMOOTH TRANSITION FROM THE APRON TO THE EXISTING DRIVE, (WIDTH OF THIS 617 APPLICATION MAY VARY) AS DIRECTED BY THE ENGINEER. AN ADDITIONAL QUANTITY OF ITEM 617 HAS BEEN ESTIMATED TO COMPLETE THIS WORK AND IS SHOWN AS AN EXTRA AREA ON THE PAVEMENT & SHOULDER DATA SHEET.

ANY HAZARD OR UNSAFE CONDITION RESULTING FROM THE ABOVE WORK MUST BE CORRECTED IMMEDIATELY. THE CONTRACTOR IS REMINDED OF SECTIONS 105.01, 107.07 & 614.02A OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE PAVING DIMENSIONS FOR THE INTERSECTIONS ARE SHOWN IN THE CHART BELOW.



Intersection Name	A (ft.)	B (ft.)	C (ft.)	Area (sq)	COMMENTS
Granger Rd. (Rt.)	20	58	115	171	Needs New Stop Bar
Huffman Rd. (Lt.)	24	30	87	131	Needs New Stop Bar
Bagdad Rd. (Rt.)	13	58	111	109	Needs New Stop Bar
Pierce Rd. (Rt.)	14	47	87	94	Needs New Stop Bar
Ferris Rd. (Lt.)	20	560	662	1335	Right Turn Lane Calculation
Hamlin Rd. (Lt.)	26	32	98	156	Needs New Stop Bar
Weymouth Rd. (Rt.)	59	23	94	306	Needs New Stop Bar
Bermsen Rd. (Rt.)	47	25	100	261	Needs New Stop Bar
Fosket Rd. (Lt.)	54	25	103	306	Needs New Stop Bar
Frantz Rd. (Lt.)	68	24	108	393	Needs New Stop Bar
Frantz Rd. (Rt.)	69	24	102	363	Needs New Stop Bar
Harrilton Rd. (Lt.)	42	26	99	235	Needs New Stop Bar
S. Weymouth Rd. (Rt.)	33	28	96	186	Needs New Stop Bar
W. 130th St. (Lt.)	72	24	107	413	Needs New Stop Bar (None at Intersection)
Odessa Dr. (Rt.)	30	40	120	222	Needs New Stop Bar
Weymouth Rd. (Lt.)	36	36	119	255	Needs New Stop Bar (None at Intersection), plus 2 ramps
Stony Hill Rd. (Lt.)	26	25	80	125	Needs New Stop Bar (None at Intersection)
Stony Hill Rd. (Rt.)	20	25	61	82	Needs New Stop Bar
Woodhaven Dr. (Rt.)	24	38	105	161	Stop before Island curb.
Bethany Ln. (Lt.)	10	62	111	87	Needs New Stop Bar (Up to Concrete)
Ridge Rd. (Rt.)	50	53	125	428	Needs 2 Stop Bars
Hinckley Hill Rd.	42	32	108	268	Needs 2 Stop Bars
Total Intersection Areas				6107	

ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERRECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR N_{des} USE 50 GYRATIONS, FOR N_{max} USE 75 GYRATIONS. MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT. USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT. WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE GRAVITY LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR MEDIUM TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT.
QUALITY CONTROL: DO NOT PERFORM N_{max} IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

DRAINAGE

ITEM 604, CASTINGS ADJUSTED TO GRADE

THE CASTING TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CASTING TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT FRAMES.

MAINTENANCE OF TRAFFIC

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC. THEY SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERRECTED AND MAINTAINED DURING THE PERIOD THE BUTT JOINT IS LEFT OPEN. THESE SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY ASPHALT WEDGE FROM THE EXISTING PAVEMENT TO THE PLANED SURFACE AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF IN EXCESS OF 1.5 INCHES. THIS QUANTITY SHALL ALSO BE USED AT PLANED SURFACES WHERE A TEMPORARY ASPHALT WEDGE IS NEEDED AROUND CASTINGS. BEFORE RESURFACING OF THE PAVEMENT, THE TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

- ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC (CITY/FED) 1 CU YD
- ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC (URBANIZED) 12 CU YD
- ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC (RURAL) 7 CU YD

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

- CHRISTMAS
- NEW YEARS
- MEMORIAL DAY
- FOURTH OF JULY
- LABOR DAY
- THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE FEE OF \$1000 PER DAY.

ITEM 614, WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

- WORK ZONE MARKING SIGN: (W8-H12A-36) NO EDGE LINE: 22 EACH (URBANIZED)
- 12 EACH (RURALIZED)
- WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS: 18 EACH (URBANIZED)
- 10 EACH (RURAL)
- WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE 8 EACH (URBANIZED)
- 5 EACH (RURAL)

TOTAL: 48 EACH URBANIZED, 27 EACH RURAL

446 DENSITY ACCEPTANCE WITH FLAGGER CLOSING OF A 2-LANE HIGHWAY FOR PAVING OPERATIONS

THIS PLAN NOTE APPLIES ONLY TO A FLAGGER CLOSURE OF ONE LANE OF A 2-LANE HIGHWAY DURING PAVING OPERATIONS WHEN USING STANDARD CONSTRUCTION DRAWING MT-97.11 OR MT-97.12, AND ALLOWS A PAVING OPERATION TO PROCEED CONCURRENTLY WITH THE MARKING AND CUTTING OF CORES REQUIRED FOR 446 DENSITY ACCEPTANCE.

IN ALL CASES THE CONTRACTOR SHOULD LENGTHEN THEIR LANE CLOSURES TO THE MAXIMUM PERMISSIBLE LENGTH DETAILED IN THE ABOVE REFERENCED STANDARD CONSTRUCTION DRAWINGS TO ALLOW THE ENGINEER ADEQUATE TIME TO MARK THE REQUIRED CORE LOCATIONS AND FOR CORE CUTTING OPERATIONS.

THE CONTRACTOR WILL PROVIDE TO THE ENGINEER THE PLANNED QUANTITY THAT WILL BE PLACED FOR THE DAY'S PRODUCTION. EACH DAY'S PRODUCTION WILL BE CONSIDERED ONE LOT AND INCLUDES SHOULDERS. TEN CORES WILL BE OBTAINED BY THE CONTRACTOR FOR EACH LOT AT RANDOM LOCATIONS DETERMINED BY THE ENGINEER. THE ENGINEER WILL DIVIDE A LOT INTO FIVE EQUAL SUBLOTS AND CALCULATE TWO RANDOM CORE LOCATIONS IN EACH SUBLOT AS DESCRIBED IN C&MS 446.05.

THE ENGINEER WILL MARK THE CORE LOCATIONS AFTER THE PAVING OPERATION (INCLUDING THE FINISH ROLLER) HAS COMPLETELY PASSED THE RANDOMLY SELECTED CORE LOCATION. THE CORE DRILL OPERATION CAN BEGIN CUTTING CORES WHEN THE NEWLY PLACED PAVEMENT SURFACE TEMPERATURE IS LESS THAN 140°F. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LANE CLOSURE DURING ALL PAVING, MARKING, AND CORING OPERATIONS PER THE REQUIREMENTS OF THE STANDARD CONSTRUCTION DRAWING USED FOR THE PAVING OPERATION.

ITEM 614. MAINTAINING TRAFFIC

A MINIMUM OF ONE (1) LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES USING FLAGGERS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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 LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

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, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF ----- AND ----- IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE 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.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ITEM 407 - TACK COAT

AS PER 407.06 THE APPLICATION RATE SHALL BE 0.08 GAL. PER SQ. YD. FOR ESTIMATING PURPOSES ONLY. THE RATE OF APPLICATION SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. A COMPLETE PAVEMENT SURFACE COVERAGE SHALL BE REQUIRED. AREAS OF TACK STRIPPED BY CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE RE-COATED PRIOR TO PLACING ASPHALT CONCRETE. ALL COSTS AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER GALLON FOR ITEM 407 - TACK COAT.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

THE CONTRACTOR MAY USE A SALVAGED EXTRUDER WHEN ASSEMBLING THE ITEM 606 ANCHOR ASSEMBLY, TYPE E. ALL WELDS ON THE EXTERIOR OF THE SALVAGED EXTRUDER SHALL NOT BE DAMAGED AND THE FEEDER SHUTE SHALL NOT BE BENT.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27 $\frac{3}{4}$ INCHES FROM THE EDGE OF THE SHOULDER.

ON SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING NON-STANDARD MAILBOX SUPPORTS AND FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED HARDWARE IN ACCORDANCE WITH THE DETAILS SHOWN, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS DETERMINED BY THE ENGINEER.

IN 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, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE BOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO MAILBOXES MAY BE MOUNTED ON A SINGLE POST. [HARDWARE SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.]

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4 1/2 IN. DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 IN. I.D., AND CONFORM TO AASHTO M 181.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

GROUP MAILBOX SUPPORTS SHALL BE PLACED ON 3 FT. CENTERS.

WHERE GUARDRAIL EXISTS, MAILBOXES AND THEIR SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL. SUPPORTS MUST STILL MEET THE BREAKAWAY REQUIREMENTS LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE S.R. 3 6 EACH (Rural)

MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH 1.50" ITEM 442 SURFACE COURSE. THEY SHALL CONFORM AS MUCH AS PRACTICAL TO STANDARD DRAWING BP-4.1 OR AS DIRECTED BY THE ENGINEER.

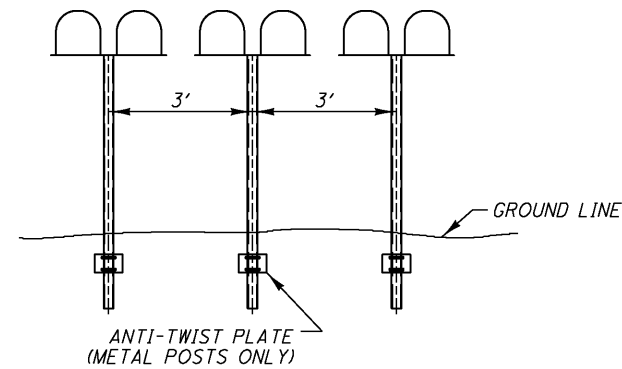
GRADING SHALL BE PERFORMED IN THESE AREAS TO OBTAIN A BASE WHICH WILL ALLOW THE FINISHED GRADE TO BE FLUSH WITH ADJACENT PAVEMENT. A QUANTITY OF ITEM 617 COMPACTED AGGREGATE, AS PER PLAN HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL. QUANTITIES TO PERFORM THIS WORK HAVE BEEN INCLUDED IN THE GENERAL SUMMARY AND ARE ESTIMATED AS FOLLOWS.

ITEM 209 - GRADING MAILBOX APPROACHES: - S.R. 3 20 EACH (URBANIZED) 30 EACH (RURAL)

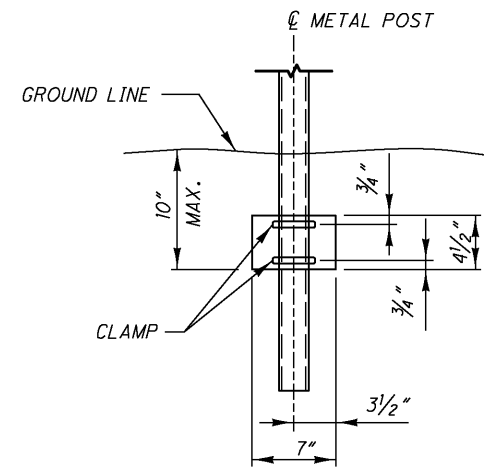
LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

ADDRESSES AND/OR LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED:

- NB - ADDRESS #1754 - 1 SINGLE
- SB - ADDRESS #1645 - 1 SINGLE
- SB - ADDRESS #1691 - 1 SINGLE
- SB - ADDRESS #1741 - 1 SINGLE
- SB - ADDRESS #1785 - 1 SINGLE
- SB - ADDRESS #2085 - 1 SINGLE



GROUP MAILBOX INSTALLATION



ANTI-TWIST PLATE

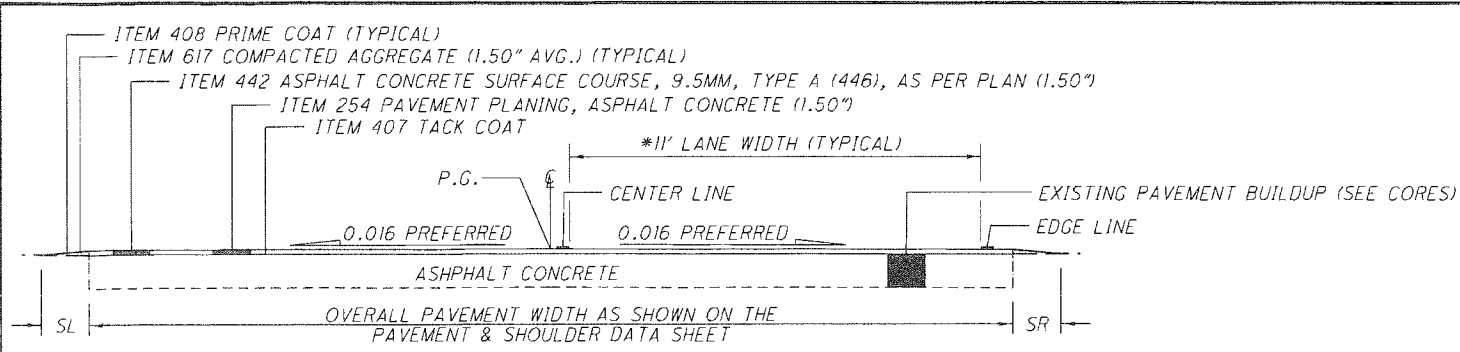
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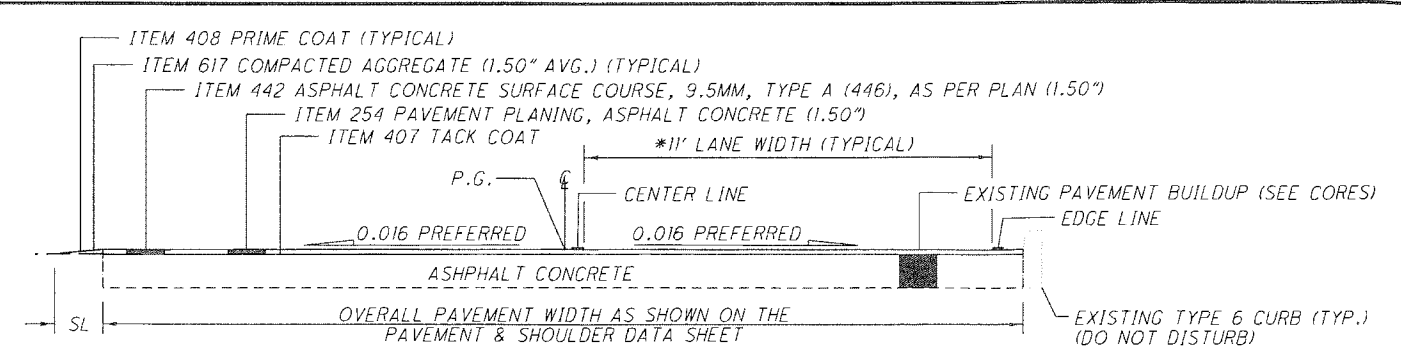
MAILBOX FACILITIES

MED -3-13.20

FOR DETAILS NOT SHOWN, SEE STANDARD DRAWING BP-4.1



TYPICAL 1



TYPICAL 2

FUNDING PARTICIPATION FM - 80% FED / 20% CITY U - 80% FED / 20% STATE (URBANIZED) R - 80% FED / 20% STATE (RURAL)	COUNTY	ROUTE	SIDE	LOG POINT TO LOG POINT		LENGTH		WIDTH FEET AVG.	TYPICAL	PAVEMENT AREA SQ YD	254		407	442		209	604	604	604	638	AGGREGATE SHOULDER PROPOSED WIDTH		AGGREGATE SHOULDER AREA		408	617					
				STRAIGHT LINE MILEAGE	MILE	FEET	PATCHING PLANED SURFACE CU.YD.				TACK COAT @ 0.08 GAL/SY GALLON	LINEAR GRADING MILE	MONUMENT BOX ADJUSTED TO GRADE EACH	MANHOLE ADJUSTED TO GRADE EACH	CATCH BASIN ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE EACH	SL	SR	SQ. YD.	SQ. YD.	PRIME COAT 0.40 GAL/SY GALLON	COMPACTED AGGREGATE 1.5 INCHES AVE. THKNSS CU.YD.	SHOULDER PREPARATION SQ. YD.								
				LOG POINT TO LOG POINT	FEET	FEET					INCH	CU.YD.																			
FM	MEDINA	SR 3	BOTH	13.22	13.27	0.05	264	37.0	1	1,085	1,085	11	87	1.5	45	0.10	28	22	14	12	2	2	117	47	5	117					
FM			LT	13.27	13.42	0.15	792	18.5	1	1,628	1,628	16	130	1.5	68	0.30					2		176	70	7	176					
U			RT	13.27	13.42	0.15	792	18.5	1	1,628	1,628	16	130	1.5	68	0.30						2		176	70	7	176				
FM			LT	13.42	13.54	0.12	634	13.0	1	916	916	9	73	1.5	38	0.24					2		141	56	6	141					
U			RT	13.42	13.54	0.12	634	13.0	1	916	916	9	73	1.5	38	0.24						2		141	56	6	141				
U			BOTH	13.54	15.07	1.53	8078	26.0	1	23,336	23,336	233	1,867	1.5	972	3.06					2	2	3,590	1436	150	3,590					
U			BOTH	15.07	16.60	1.53	8078	30.0	1	26,927	26,927	269	2,154	1.5	1,122	3.06					2	2	3,590	1436	150	3,590					
U			BOTH	16.60	16.72	0.12	634	33.0	1	2,325	2,325	23	186	1.5	97	0.24					2	2	282	113	12	282					
U			BOTH	16.72	16.77	0.05	264	51.0	1	1,496	1,496	15	120	1.5	62	0.10					2	2	117	47	5	117					
U			BOTH	16.77	16.86	0.09	475	54.0	1	2,850	2,850	29	228	1.5	119	0.18					2	2	211	84	9	211					
U			BOTH	16.86	16.88	0.02	106	77.0	1	907	907	9	73	1.5	38	0.04					2	2	47	19	2	47					
U			BOTH	16.88	16.97	0.09	475	56.0	1	2,956	2,956	30	236	1.5	123	0.18					2	2	211	84	9	211					
U			BOTH	16.97	16.99	0.02	106	75.0	1	883	883	9	71	1.5	37	0.04					2	2	47	19	2	47					
U			BOTH	16.99	17.02	0.03	158	56.0	1	983	983	10	79	1.5	41	0.06					2	2	70	28	3	70					
U			BOTH	17.02	17.08	0.06	317	68.0	1	2,395	2,395	24	192	1.5	100	0.12					2	2	141	56	6	141					
U			BOTH	17.08	17.11	0.03	158	64.0	1	1,124	1,124	11	90	1.5	47	0.06					2	2	70	28	3	70					
U			BOTH	17.11	17.13	0.02	106	75.0	1	883	883	9	71	1.5	37	0.04					2	2	47	19	2	47					
U			BOTH	17.13	17.27	0.14	739	56.0	1	4,598	4,598	46	368	1.5	192	0.28					2	2	328	131	14	328					
U			BOTH	17.27	17.28	0.01	53	74.0	1	436	436	4	35	1.5	18	0.02					2	2	24	9	1	24					
U			BOTH	17.28	17.40	0.12	634	56.0	1	3,945	3,945	39	316	1.5	164	0.24					2	2	282	113	12	282					
U			BOTH	17.40	17.44	0.04	211	45.0	1	1,055	1,055	11	84	1.5	44	0.08					2	2	94	38	4	94					
R			BOTH	17.44	17.51	0.07	370	45.0	1	1,850	1,850	19	148	1.5	77	0.14					2	2	164	66	7	164					
R			BOTH	17.51	17.82	0.31	1637	30.0	1	5,457	5,457	55	437	1.5	227	0.62					2	2	728	291	30	728					
R			BOTH	17.82	17.89	0.07	370	35.0	1	1,439	1,439	14	115	1.5	60	0.14					2	2	164	66	7	164					
R			BOTH	17.89	17.92	0.03	158	45.0	1	790	790	8	63	1.5	33	0.06					2	2	70	28	3	70					
R			BOTH	17.92	18.04	0.12	634	45.0	2	3,170	3,170	32	254	1.5	132	0.24					2	2	282	113	12	282					
R			BOTH	18.04	18.18	0.14	739	38.0	1	3,120	3,120	31	250	1.5	130	0.28					2	2	328	131	14	328					
R			BOTH	18.18	19.40	1.22	6442	26.0	1	18,610	18,610	186	1,489	1.5	775	2.44					2	2	2,863	1,145	119	2,863					
R			BOTH	19.40	19.64	0.24	1267	41.0	1	5,772	5,772	58	462	1.5	240	0.48					2	2	563	225	23	563					
R			BOTH	19.64	19.86	0.22	1162	53.0	1	6,843	6,843	68	547	1.5	285	0.44					2	2	516	207	22	516					
				EXTRA AREA FOR INTERSECTIONS								6107	6107	61	489	1.5	254														
				EXTRA AREA FOR PAVED DRIVES								468	468	5	37	1.5	20														
				EXTRA AREA FOR AGGREGATE DRIVES								522	522	5	42	1.5	22								522	209	2	522			
				EXTRA AREA FOR MAILBOX APPROACHS								500	500	5	40	1.5	21														
				EXTRA AREA FOR LT. TURN LANES @ I-71 INTERCHG								843	843	8	67	1.5	35														
				TOTALS TO GENERAL SUMMARY									138,763	1,387	11,103		5,781	13.82	28	22	14	12				6,440	654		16,102		

CONNECTING GUARDRAIL TO EXISTING RAIL

IN LOCATIONS WHERE TYPE 5 GUARDRAIL, TERMINAL ASSEMBLIES, ETC. ARE TO BE CONNECTED TO EXISTING RAIL SOME MODIFICATIONS MAY BE REQUIRED, INCLUDING EXTRA POSTS, DRILLING HOLES AND POSSIBLY PARTIAL SECTIONS OF ADDITIONAL RAIL ELEMENTS. THE COST OF THIS ADDITIONAL WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR TYPE 5 GUARDRAIL. IF ADDITIONAL PORTIONS OF RAIL ELEMENT ARE USED THE LINEAL MEASUREMENT OF THIS ADDITIONAL PORTION SHALL BE ADDED FOR PAYMENT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO 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 ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

LOCATIONS OF GUARDRAIL

THE GUARDRAIL PROTECTION PROVIDED IN THIS PLAN SHALL BE LOCATED IN THE FIELD TO ASSURE THAT THE INSTALLATION WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC. THIS LOCATION SHALL BE POSITIONED AS FAR AS POSSIBLE FROM THE EDGE OF PAVEMENT WHILE MAINTAINING PROPER GRADE IN FRONT OF GUARDRAIL AS PER STANDARD DRAWINGS AND PLAN DETAILS.

SUGGESTED SEQUENCE OF GUARDRAIL WORK

1. GUARDRAIL WORK IS TO BEGIN AFTER THE LINEAR GRADING IS COMPLETED AND THE 617 MATERIAL IS PLACED.
2. REMOVE THE GUARDRAIL.
3. PERFORM THE RESHAPING UNDER GUARDRAIL INCLUDING COMPLETING THE EMBANKMENT, AS PER PLAN.
4. REBUILD/CONSTRUCT THE GUARDRAIL RUN.
5. INSTALL BARRIER REFLECTORS.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING TYPE A, ANCHOR ASSEMBLY INCLUDING ALL POSTS, HARDWARE, RAIL ELEMENTS AND CONCRETE ANCHORS. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROPERLY DISPOSED OF.

THE EXISTING CONCRETE ANCHOR AND CONCRETE AT POSTS SHALL BE REMOVED ENTIRELY. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION. ALL FILL MATERIAL SHALL BE THOROUGHLY COMPACTED AND LEVELED, AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202, ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN.

ITEM 202 - ANCHOR ASSEMBLY REMOVED FOR REUSE, TYPE E

THIS ITEM CONSISTS OF REMOVING AN EXISTING ANCHOR ASSEMBLY AND SALVAGING FOR REUSE AT A LOCATION SHOWN ON THE PLANS. THE RESULTING HOLES SHALL BE BACKFILLED AND COMPACTED. ELEMENTS THAT ARE NOT SALVAGEABLE SHALL BE DISPOSED OF PER 202.02.

ITEM 606 - GUARDRAIL, MISC.: GUARDRAIL RAIL ELEMENT

THIS ITEM SHALL BE USED IN CONJUNCTION WITH ITEMS 606 - GUARDRAIL, MISC.: ADJUST HEIGHT, EXISTING TYPE 5 GUARDRAIL AND ITEM 606 - GUARDRAIL REBUILT, TYPE 5 AND AS DIRECTED BY THE ENGINEER. IT SHALL CONSIST OF REPLACING EXISTING GUARDRAIL RAIL ELEMENTS DEEMED BY THE ENGINEER TO BE INSUFFICIENT. THE RAIL ELEMENTS SHALL BE OF THE SAME TYPE AND SIZE OF THE EXISTING GUARDRAIL RUN. THEY SHALL BE PLACED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING GR-1.1.

ITEM 606 - GUARDRAIL REBUILT, TYPE 5, AS PER PLAN

GUARDRAIL REMOVED FOR REUSE SHALL BE REBUILT USING 9 FT. POSTS.

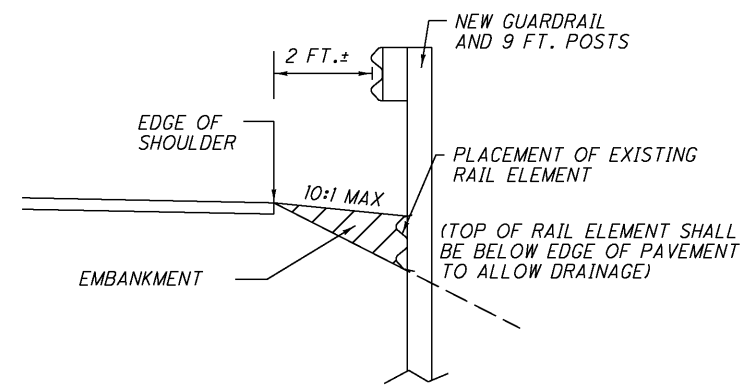
ITEM 606 - GUARDRAIL POST, 9 FEET, AS PER PLAN

GUARDRAIL POSTS INDICATED SHALL BE 9 FEET LONG AND SHALL INCLUDE 9' BREAKAWAY POSTS WHERE 6' BREAKAWAY POSTS ARE SHOWN IN STD-DWG GR-2.3.

ITEM 202 - GUARDRAIL REMOVED FOR REUSE, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL OF THE EXISTING GUARDRAIL AS PER 202.09. THE RAIL ELEMENT SHALL BE STORED BY THE CONTRACTOR FOR REUSE, AS SHOWN BELOW.

THE EXISTING RAIL ELEMENT SHALL BE PLACED ON THE GROUND ADJACENT TO NEW GUARDRAIL POST. THE RAIL ELEMENT MAY REQUIRE TO BE FASTENED TO THE POST TO FACILITATE PLACEMENT OF EMBANKMENT. THE CONTRACTOR MAY DETERMINE THIS METHOD OF FASTENING. THE ITEMS DESCRIBED ABOVE AND SHOWN BELOW (NOT INCLUDING NEW RAIL, 9 FOOT POSTS, AND EMBANKMENT) SHALL BE PAID FOR UNDER THE UNIT BID PRICE FOR ITEM 202 - GUARDRAIL REMOVED FOR REUSE, AS PER PLAN.



ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN

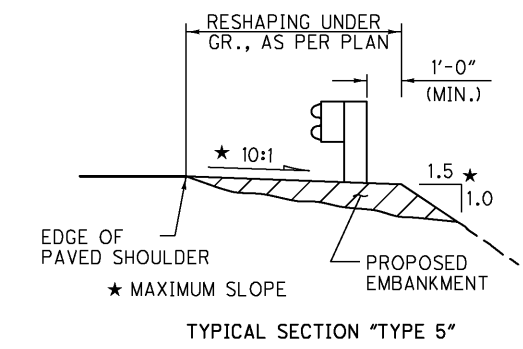
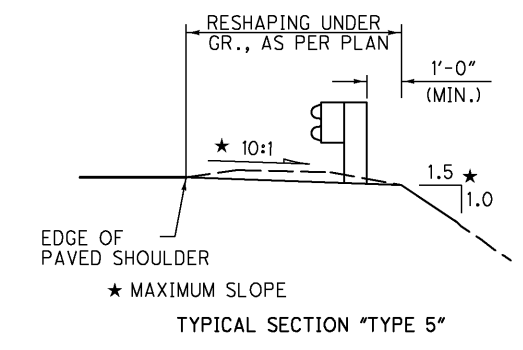
THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED AT LOCATIONS SPECIFIED FOR WORK AS WELL AS PER CMS 209.05 AND AS DESCRIBED HEREIN, AND SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER.

THE AREA IN FRONT OF, UNDER, AND BEHIND THE GUARDRAIL SHALL BE GRADED AND RESHAPED TO PROVIDE AN AREA THAT HAS A SLOPE OF 10:1 MAXIMUM (SEE DETAIL BELOW AS WELL AS THE GUARDRAIL DETAIL SHEETS FOR FURTHER DETAILS AND INFORMATION OF THE LIMITS OF THIS WORK).

EXCESS MATERIAL RESULTING SHALL BE USED ELSEWHERE FOR THIS ITEM IF SO DIRECTED OR DISPOSED OF PROPERLY. IF EXTRA MATERIAL IS REQUIRED IT SHALL BE PAID FOR WITH ITEM 203 - EMBANKMENT, AS PER PLAN. THIS WORK SHALL NOT BE STARTED UNTIL AFTER THE RESURFACING AND BERM WORK HAS BEEN COMPLETED.

THE ABOVE WORK SHALL BE PAID FOR PER STATION WITH ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN WITH THE EXCEPTION OF ANY EXTRA MATERIAL REQUIRED TO MEET THE SLOPE REQUIREMENTS WHICH SHALL BE PAID BY ITEM 203 - EMBANKMENT, AS PER PLAN.



ITEM 203 - EMBANKMENT, AS PER PLAN

AT SPECIFIED LOCATIONS AND LOCATIONS AS DIRECTED BY THE ENGINEER, EMBANKMENT SHALL BE PLACED AS TO PROVIDE A SUITABLE AREA TO CONSTRUCT GUARDRAIL AND TO PROVIDE STRUCTURAL INTEGRITY OF THE ROADWAY SHOULDER.

AREAS WHERE EMBANKMENT MATERIAL IS TO BE PLACED SHALL BE SCALPED. THE REQUIREMENTS FOR BENCHING SHALL BE WAIVED. THE DEPTH OF LAYERS IN WHICH THE EMBANKMENT IS PLACED SHALL BE LIMITED TO EIGHT (8) INCHES IN THICKNESS. THE METHOD OF COMPACTION AND EQUIPMENT USED SHALL BE SUFFICIENT TO PROVIDE A MINIMUM OF 60 PERCENT OF RELATIVE COMPACTION.

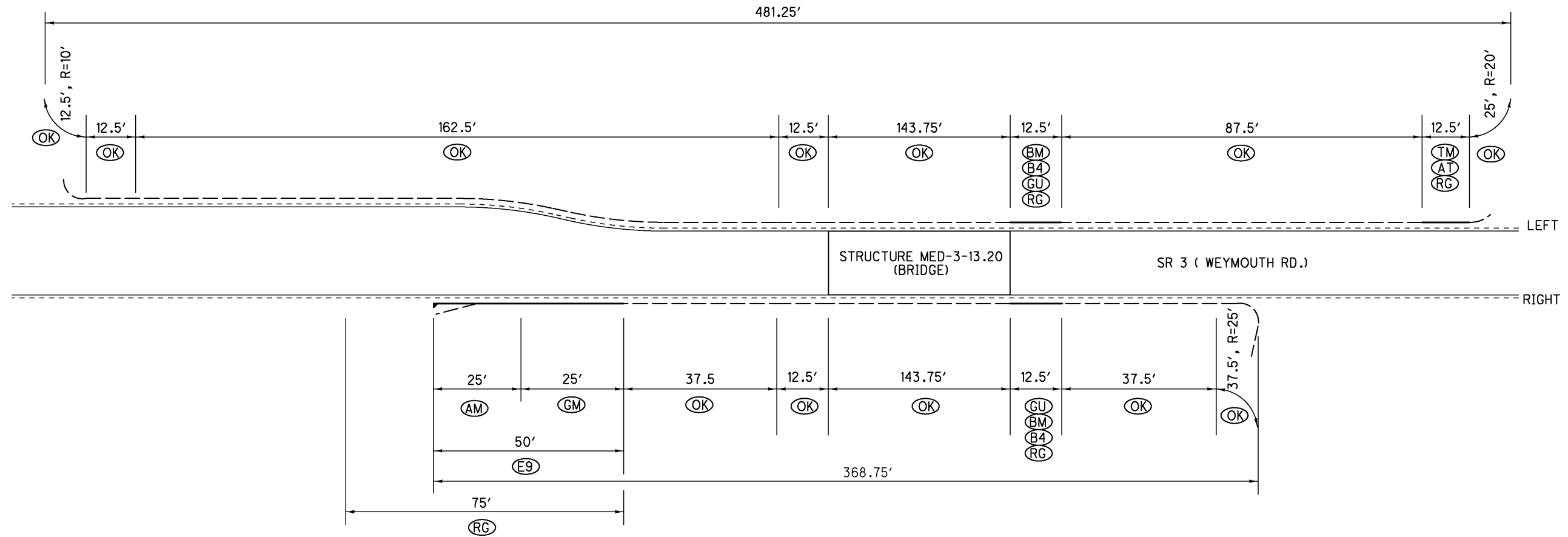
AFTER THE EMBANKMENT HAS BEEN PLACED, THE AREAS SHALL BE FERTILIZED, SEEDDED, MULCHED, AND WATERED AS PER ITEM 659. THE COST SHALL BE INCLUDED IN THIS ITEM FOR PAYMENT.

THE METHOD OF MEASUREMENT FOR EMBANKMENT MATERIAL SHALL BE BY THE NUMBER OF CUBIC YARDS MEASURED BY LOOSE VOLUME IN THE CARRIER AT THE WORK SITE, IN LIEU OF THE REQUIREMENTS OF 203.09. PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT BID PRICE PER CUBIC YARD FOR ITEM 203 - EMBANKMENT, AS PER PLAN AND SHALL INCLUDE ALL WORK DESCRIBED ABOVE.

DESIGN FILE: i:\projects\84529\roadway\sheets\84529gr002.dgn
WORKSTATION: abaraty DATE: 12/12/2011

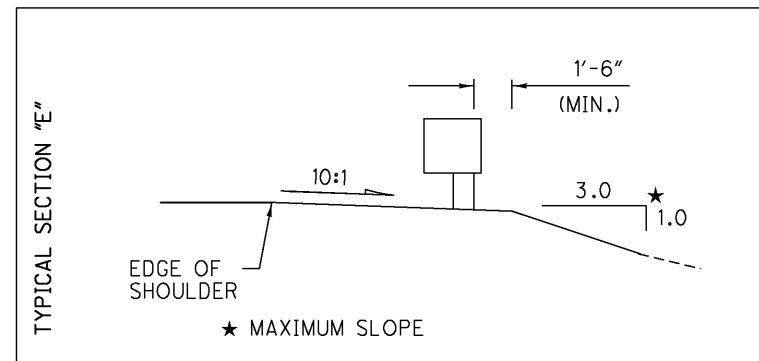
FUNDING PARTICIPATION 100% CITY URBANIZED RURAL	SHEET	LOCATION	202					203	209	606				626				
			GUARDRAIL REMOVED	GUARDRAIL REMOVED FOR REUSE	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	ANCHOR ASSEMBLY REMOVED, TYPE T	BRIDGE TERMINAL ASSEMBLY REMOVED	EMBANKMENT, AS PER PLAN	RESHAPING UNDER GUARDRAIL, AS PER PLAN	GUARDRAIL, TYPE 5	ANCHOR ASSEMBLY, TYPE B	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 4	BARRIER REFLECTOR, TYPE 2				
			FT	FT	EACH	EACH	EACH	CU YD	STATION	FT	EACH	EACH	EACH	EACH				
FC	11	STRUCTURE MED-3-13.20	25	12.5	1	1	2		0.8750		1	1	2					
U	12	MED-3-15.32	100		4				3.00		4							
U	13	MED-3-15.55	25		1	1			0.88		1	1						
U	14	MED-3-15.67			1	1			0.88		1	1						
U	15	STRUCTURE MED-3-15.95	300		3	1		15	4.88	250	3	1		6				
U	16	MED-3-17.22	25		1				0.75		1							
R	17	MED-3-17.54	225		2	2		15	3.25	162.5	2	2		9				
R	18	STRUCTURE MED-3-19.19	75		3				2.25		3							
TOTALS CARRIED TO GENERAL SUMMARY			775	12.5	16	6	2	30	16.77	412.5	16	6	2	15				

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011

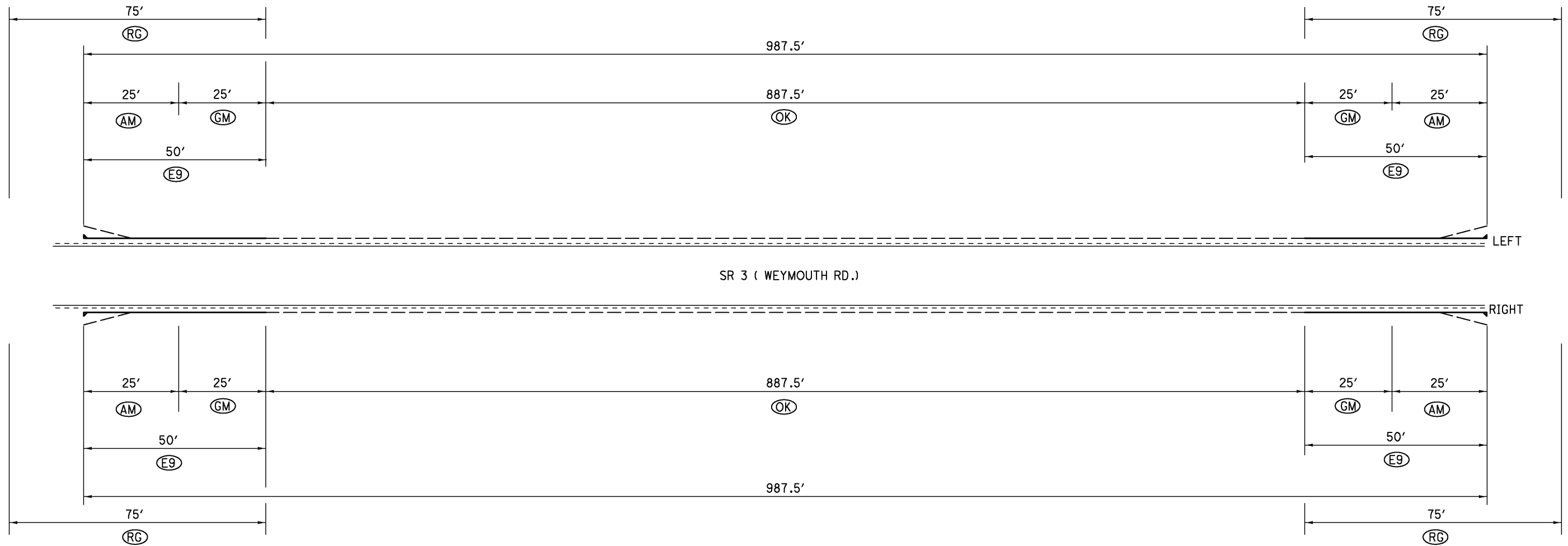


LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY(100% CITY)		TOTAL
				LEFT	RIGHT	
(TM)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1		1
(AT)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1		1
(BM)	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	1	1	2
(B4)	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	1	1	2
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH		1	1
(GU)	202	GUARDRAIL REMOVED FOR REUSE	FT	12.5	12.5	25
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH		1	1
(GM)	202	GUARDRAIL REMOVED	FT		25	25
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	0.125	0.75	.875
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.



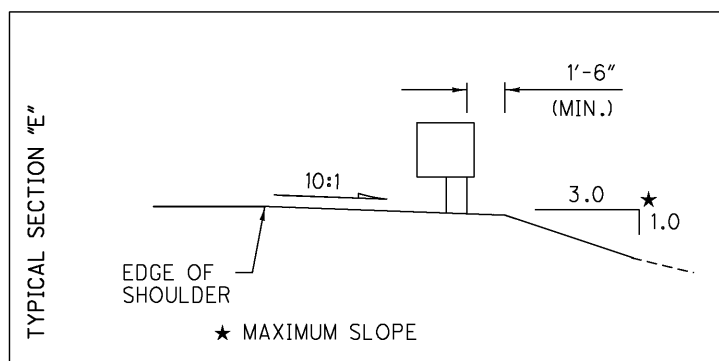
DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011



SR 3 (WEYMOUTH RD.)

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (URBANIZED)		TOTAL
				LEFT	RIGHT	
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH	2	2	4
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH	2	2	4
(GM)	202	GUARDRAIL REMOVED	FT	50	50	100
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	1.50	1.50	3.00
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.



NOT TO SCALE

CALCULATED
GTS
CHECKED
KRB

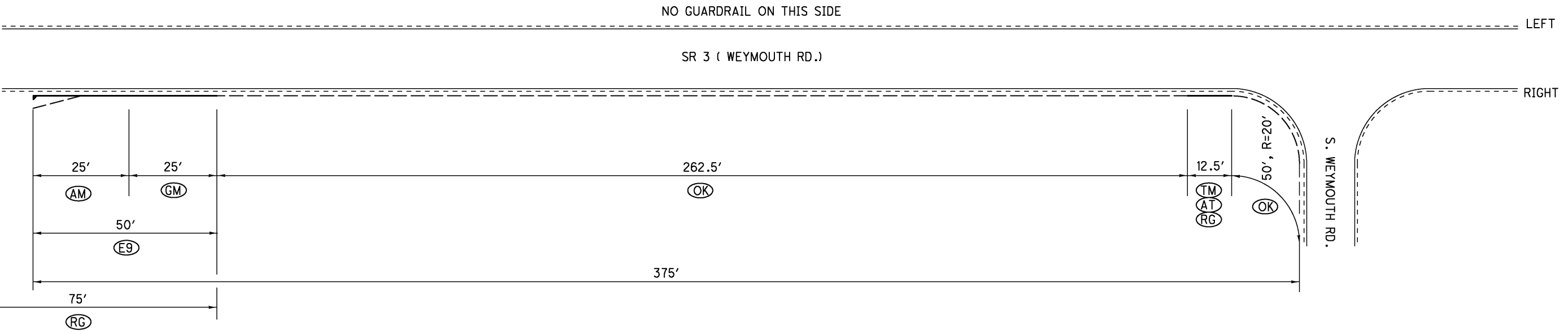
GUARDRAIL DETAIL (SLM 15.32)

MED - 3-13.20

12
30

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011

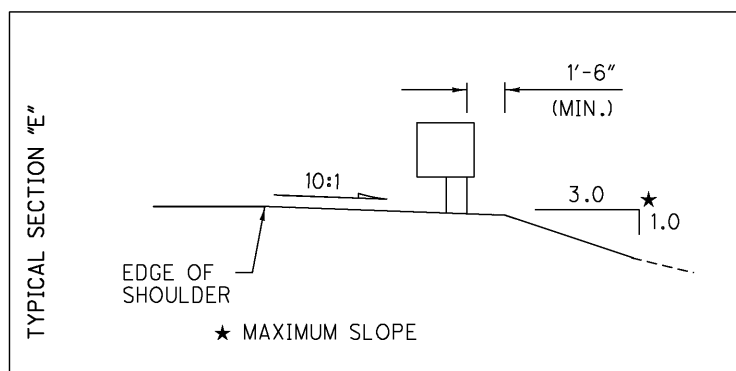
NOT TO SCALE
 CALCULATED
 GTS
 CHECKED
 KRB



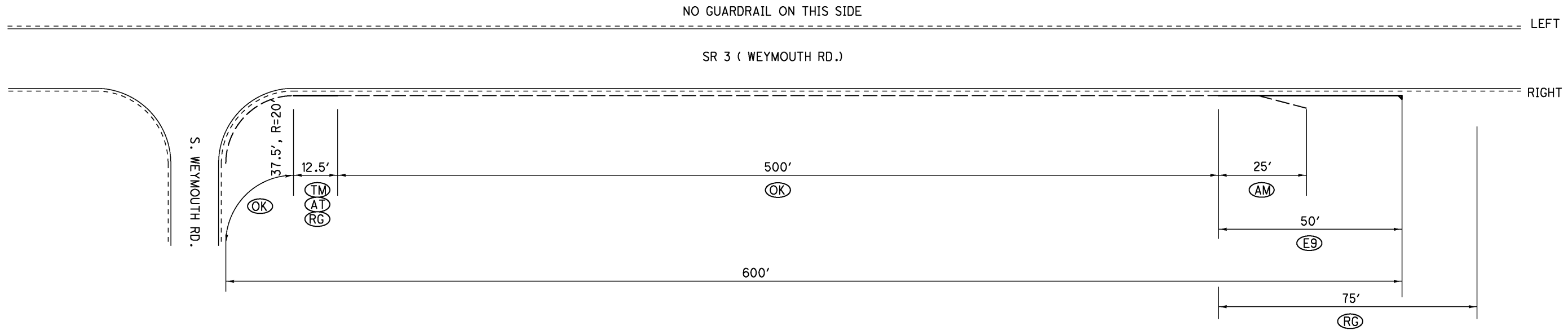
GUARDRAIL DETAIL (SLM 15.55)

LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (URBANIZED)		TOTAL
				LEFT	RIGHT	
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH		1	1
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH		1	1
(GM)	202	GUARDRAIL REMOVED	FT		25	25
(TM)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH		1	1
(AT)	606	ANCHOR ASSEMBLY, TYPE T	EACH		1	1
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION		0.875	0.88
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

ALL QUANTITIES
 CARRIED TO GUARDRAIL
 SUB-SUMMARY SHEET.

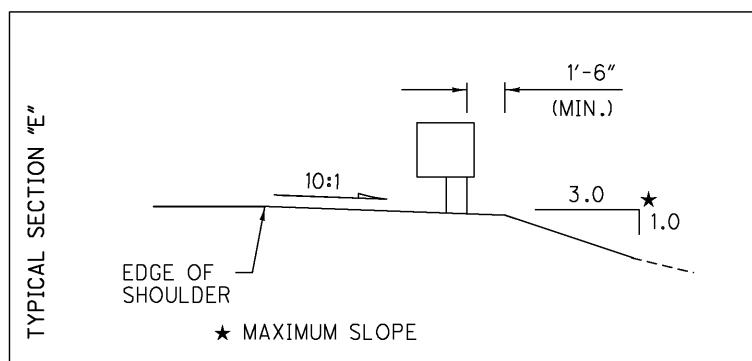


DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (URBANIZED)		TOTAL
				LEFT	RIGHT	
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH		1	1
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH		1	1
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION		0.875	0.88
(TM)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH		1	1
(AT)	606	ANCHOR ASSEMBLY, TYPE T	EACH		1	1
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

ALL QUANTITIES
 CARRIED TO GUARDRAIL
 SUB-SUMMARY SHEET.

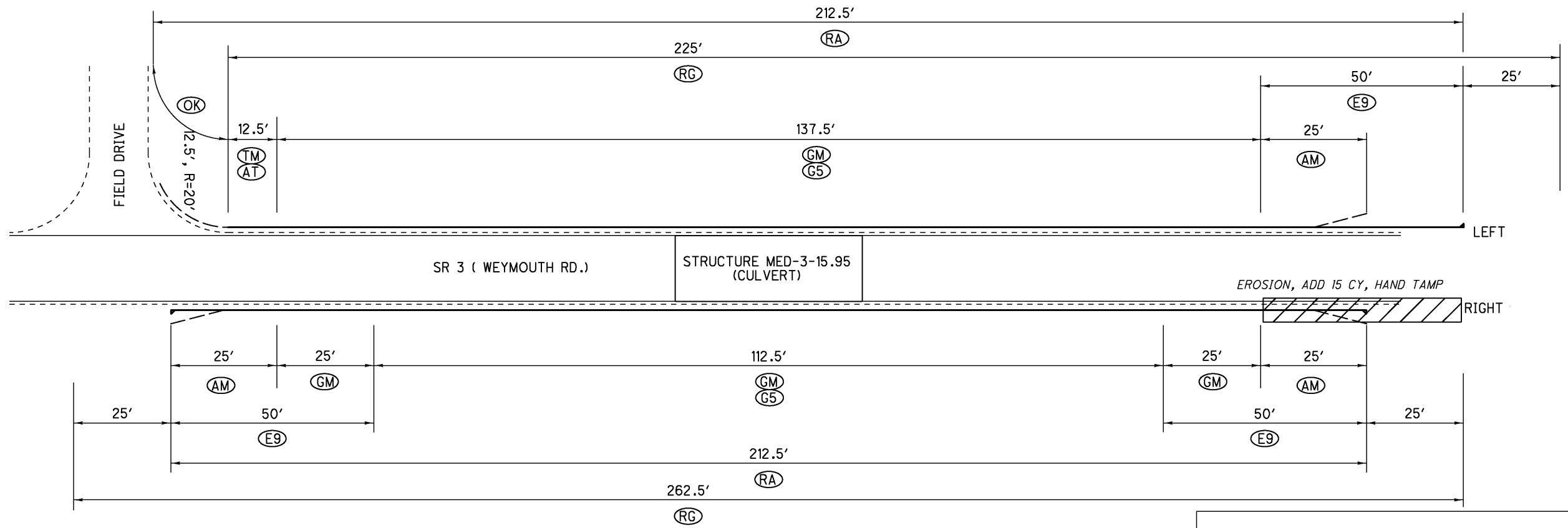


NOT TO SCALE
 CALCULATED
 GTS
 CHECKED
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GUARDRAIL DETAIL (SLM 15.67)

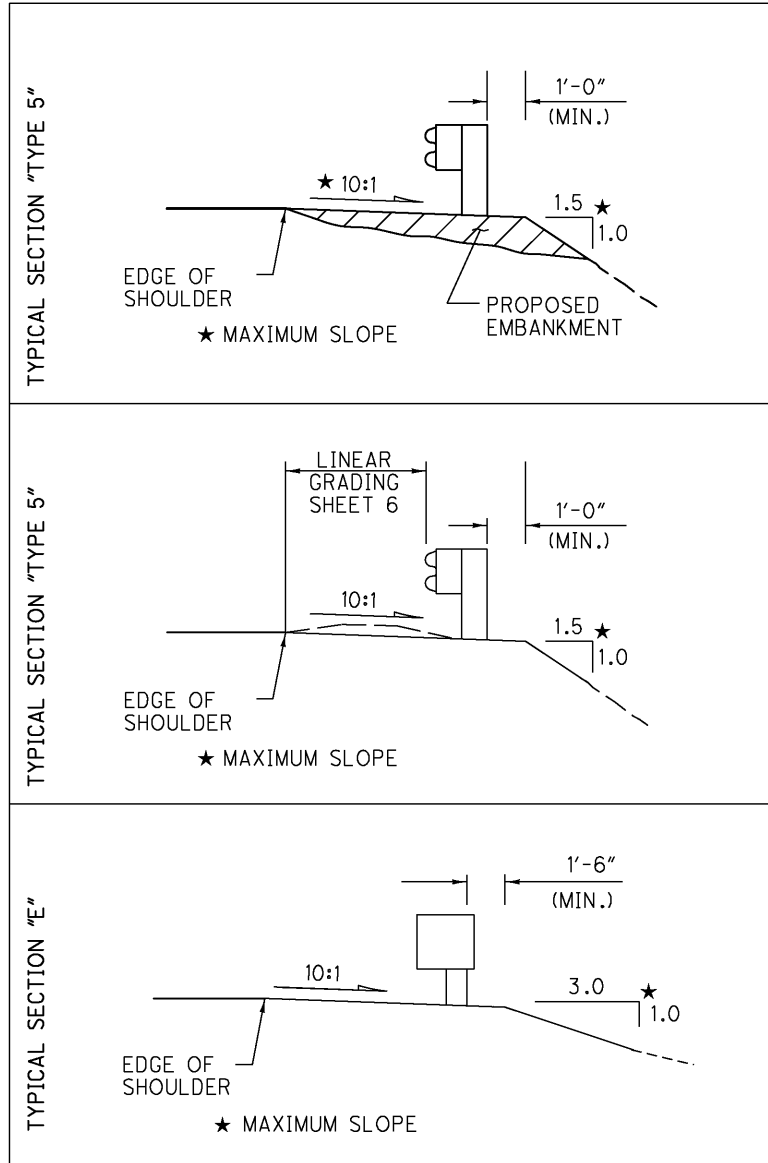
MED - 3 - 13.20

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (URBANIZED)		TOTAL
				LEFT	RIGHT	
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH	1	2	3
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	2	3
(GM)	202	GUARDRAIL REMOVED	FT	137.5	162.5	300
////	203	EMBANKMENT	CU YD		15	15
(G5)	606	GUARDRAIL, TYPE 5	FT	137.5	112.5	250
(RA)	626	BARRIER REFLECTOR, TYPE A2	EACH	3	3	6
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				
(TM)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1		1
(AT)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1		1
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	2.25	2.63	4.88

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.



GUARDRAIL DETAIL STRUCTURE MED-3-15.95

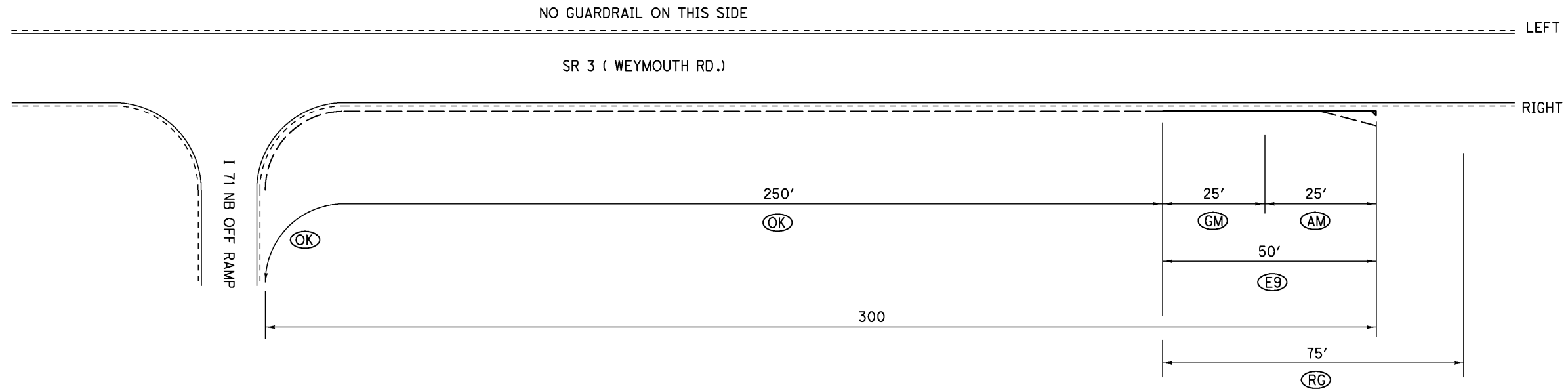
MED-3-13.20

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30

NOT TO SCALE

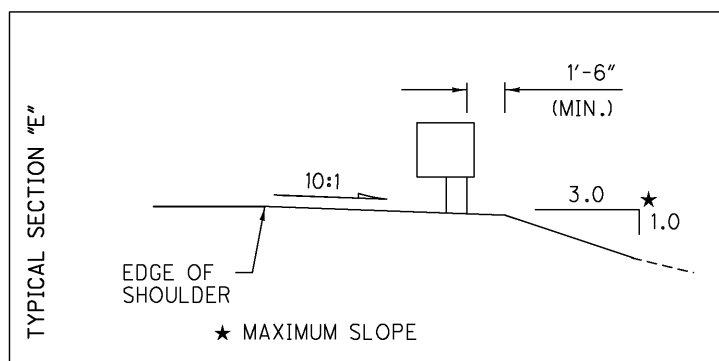
CALCULATED: GTS, CHECKED: KRB

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (URBANIZED)		TOTAL
				LEFT	RIGHT	
(AM)	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH		1	1
(E9)	606	ANCHOR ASSEMBLY, TYPE E	EACH		1	1
(GM)	202	GUARDRAIL REMOVED	FT		25	25
(RG)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION		.75	.75
(OK)		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.

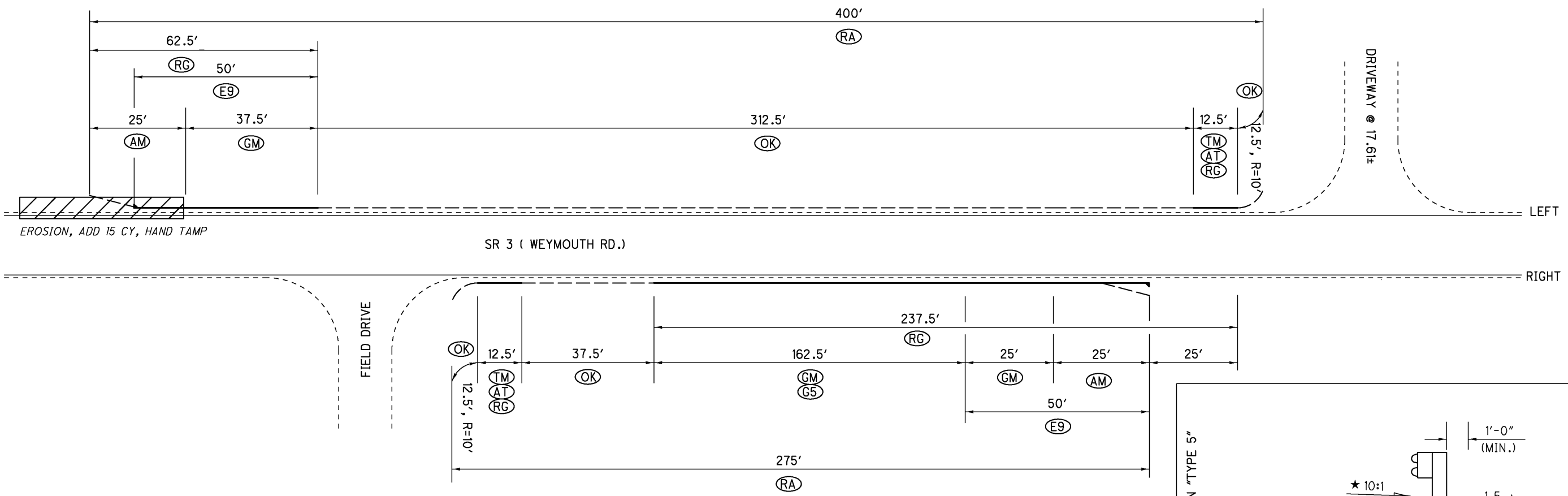


CALCULATED
 GTS
 CHECKED
 KRB
 NOT TO SCALE

GUARDRAIL DETAIL (SLM 17.22)

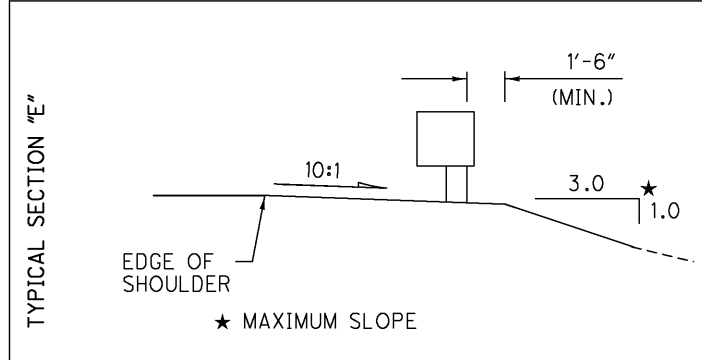
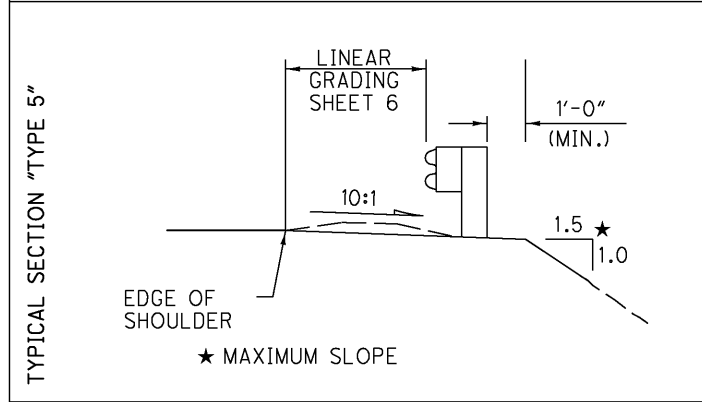
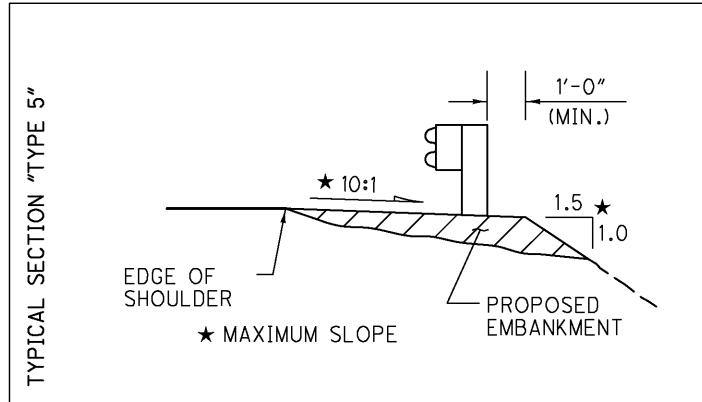
MED - 3 - 13.20

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011



LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (RURAL)		TOTAL
				LEFT	RIGHT	
AM	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH	1	1	2
E9	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	1	2
GM	202	GUARDRAIL REMOVED	FT	37.5	187.5	225
///	203	EMBANKMENT	CU YD	15		15
G5	606	GUARDRAIL, TYPE 5	FT		162.5	162.5
RA	626	BARRIER REFLECTOR, TYPE A2	EACH	5	4	9
OK		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				
TM	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1	1	2
AT	606	ANCHOR ASSEMBLY, TYPE T	EACH	1	1	2
RG	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	0.75	2.50	3.25

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.



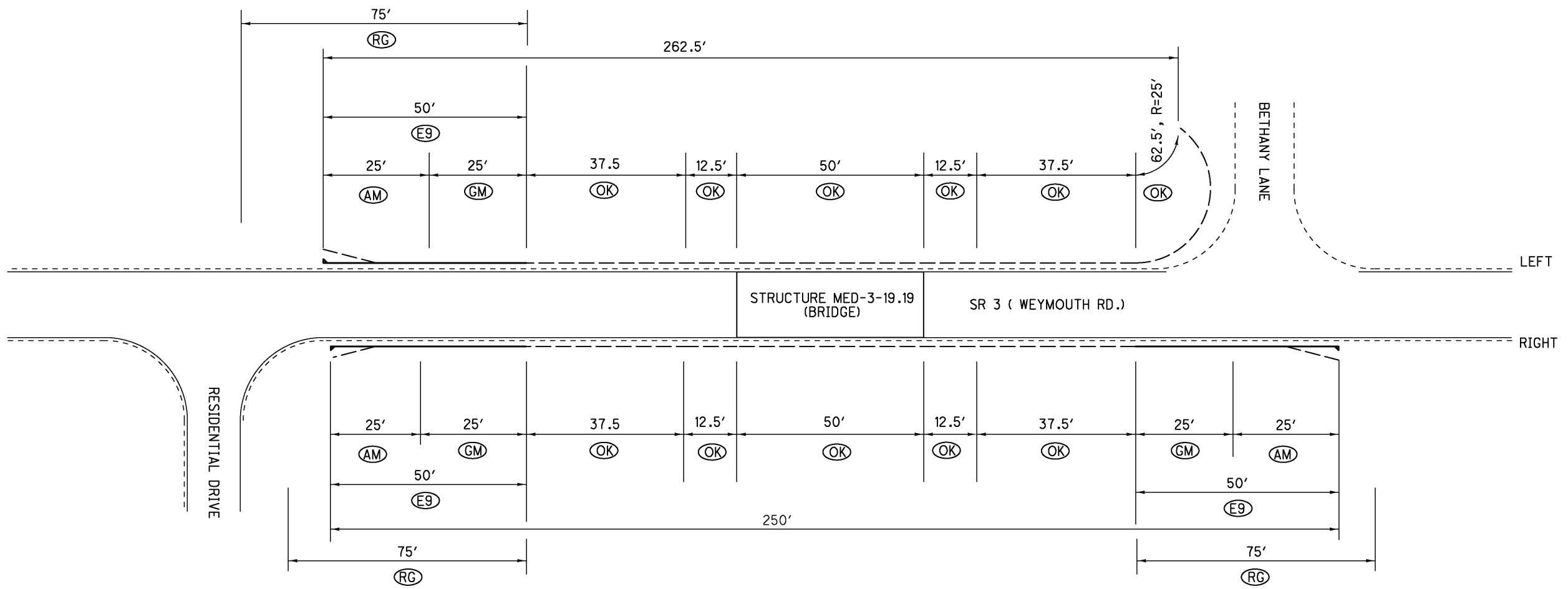
NOT TO SCALE

CALCULATED
GTS
CHECKED
KRB

GUARDRAIL DETAIL (SLM 17.54)

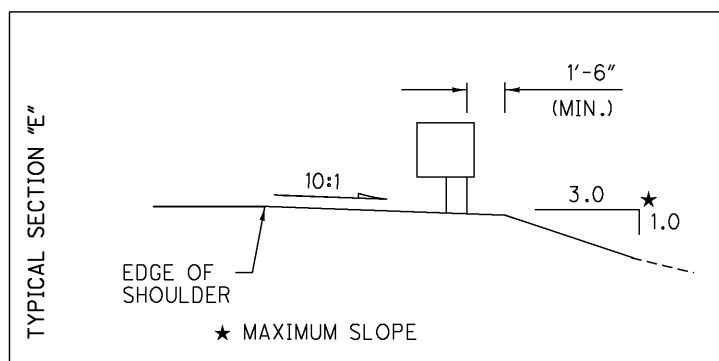
MED-3-13.20

DESIGN FILE: I:\projects\84529\roadway\sheets\84529gr000.dgn
 WORKSTATION: abaraty DATE: 12/12/2011

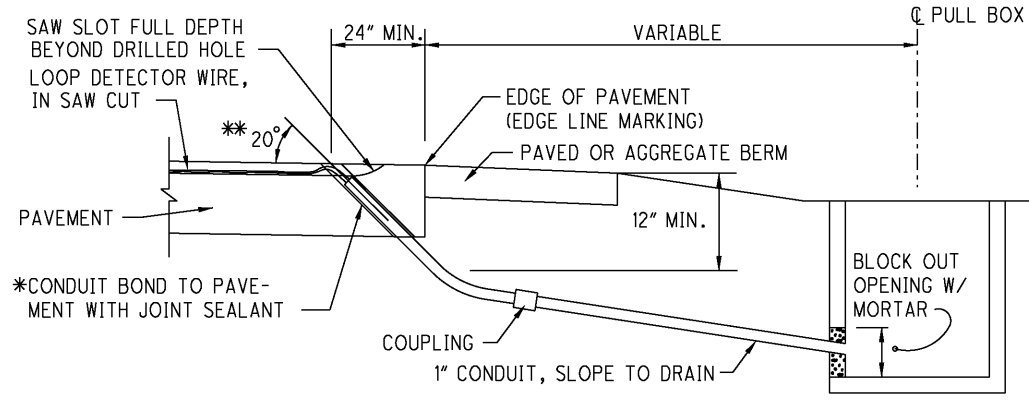


LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITY (RURAL)		TOTAL
				LEFT	RIGHT	
AM	202	ANCHOR ASSEMBLY REMOVED, TYPE A, AS PER PLAN	EACH	1	2	3
E9	606	ANCHOR ASSEMBLY, TYPE E	EACH	1	2	3
GM	202	GUARDRAIL REMOVED	FT	25	50	75
RG	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STATION	.75	1.50	2.25
OK		LEAVE EX GR AS IS (SEE ABOVE FOR LOCATION)				

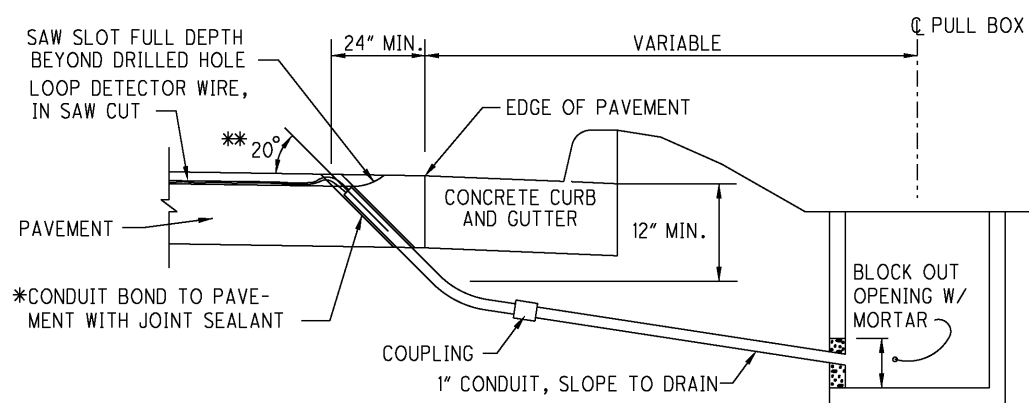
ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET.



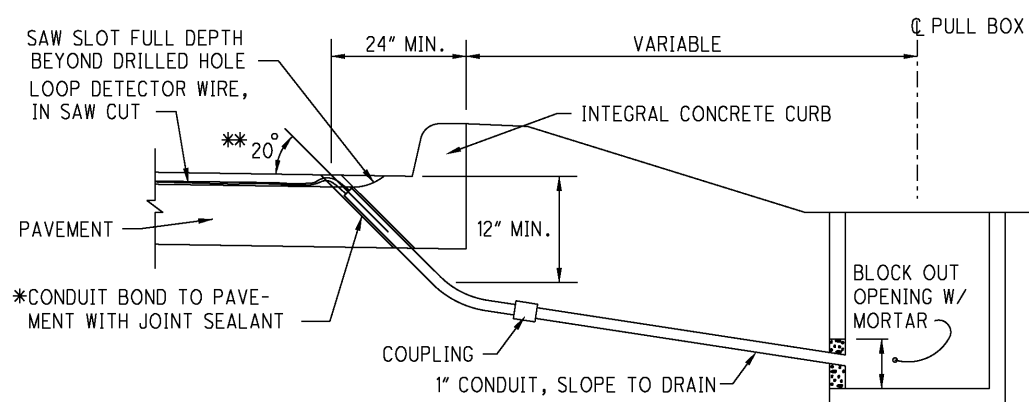
DESIGN FILE: \\projects\84529\roadway\Loop Replacement Plans\Loop Detector Notes & Details for Resurfacing Projects.dgn
 MODELNAME: Default
 WORKSTATION: baraty
 DATE: 12/12/2011



DRILLED HOLE LOCATION DETAIL WITH PAVED OR AGGREGATE BERM



DRILLED HOLE LOCATION DETAIL WITH CONCRETE CURB AND GUTTER

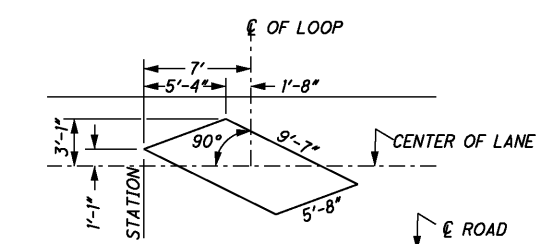


DRILLED HOLE LOCATION DETAIL WITH INTEGRAL CONCRETE CURB

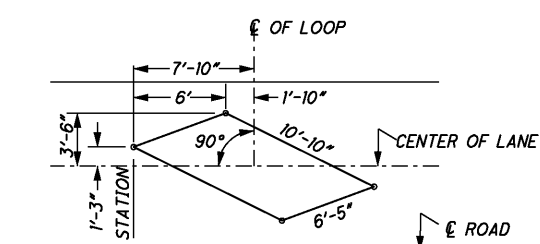
* CONDUIT SHALL BE 1" DIAMETER 725.04.

** THE RANGE OF THIS ANGLE SHALL BE FROM 15 TO 30 DEGREES.

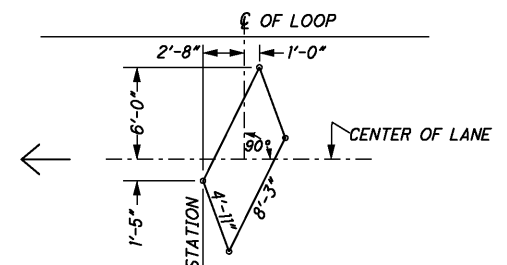
NOTE: SEE STANDARD DRAWING TC-82.10 FOR ADDITIONAL NOTES AND DETAILS



ANGULAR DESIGN DETECTION (ADD) LOOP DETAIL FOR LANE WIDTH LESS THAN 11'



ANGULAR DESIGN DETECTION (ADD) LOOP DETAIL FOR LANE WIDTH 11' & LARGER



ANGULAR DESIGN DETECTION (ADD) LOOP DETAIL FOR TYPICAL 16' WIDE RAMP

ITEM 625- CONDUIT JACKED OR DRILLED, AS PER PLAN, 2"

THIS ITEM SHALL BE PER CMS 625.14 WHEN JACKED. DIRECTIONAL BORED CONDUIT SHALL BE PER CMS 725.051 (PVC SCHEDULE 80) OR CMS 725.052. THIS ITEM SHALL INCLUDE ALL COSTS ASSOCIATED WITH TEST HOLES, WHEN NECESSARY, TO DETERMINE DEPTH OF EXISTING UTILITIES PRIOR TO INSTALLATION OF THE CONDUIT. TEST HOLES SHALL BE DONE AT EXISTING UNDERGROUND UTILITIES THAT ARE IN CONFLICT WITH THE PROPOSED CONDUIT.

PAYMENT WILL BE MADE AT CONTRACT UNIT PRICE PER LINEAR FOOT.

ITEM 625- PULL BOX, 725.08, 18", AS PER PLAN

THIS ITEM SHALL BE PER CMS 625.11 & 725.08 AND SCD HL-30.11 WITH THE FOLLOWING EXCEPTIONS: COVER SCREWS SHALL BE 1/4" STAINLESS STEEL MACHINE SCREWS WITH COUNTERSUNK SLOTTED HEADS. EACH SCREW SHALL FASTEN TO THE PULL BOX BY USE OF A THREADED METAL CLIP (U-NUT CAGE STYLE). MULTI-THREAD CLIPS WITH INTEGRAL NUT SHALL NOT BE USED. THE METAL CLIP SHALL BE CORROSION RESISTANT AND BE LUBRICATED PRIOR TO FASTENING. THREADED INSERTS EMBEDDED IN CONCRETE SHALL NOT BE PERMITTED.

PAYMENT WILL BE MADE AT CONTRACT UNIT PRICE PER EACH.

ITEM 625- TRENCH, AS PER PLAN

THIS WORK SHALL CONSIST OF EXCAVATING THE TRENCH TO A DEPTH OF THIRTY INCHES (30"), BACKFILLING, AND RESTORING THE AREA. IDENTIFYING TAPE SHALL BE USED TO IDENTIFY WHERE UNDERGROUND CABLE HAS BEEN INSTALLED. THE IDENTIFYING TAPE SHALL BE AN INERT MATERIAL MEASURING APPROXIMATELY SIX INCHES (6") IN WIDTH. THE TAPE SHALL BE COMPOSED OF A POLYETHYLENE PLASTIC HIGHLY RESISTANT TO ALKALIS, ACID OR OTHER COMPOUNDS LIKELY TO BE ENCOUNTERED IN SOILS. THE TAPE SHALL BE SUPPLIED IN CONTINUOUS ROLLS WITH THE IDENTIFYING LETTERS REPEATED CONTINUOUSLY THE FULL LENGTH OF THE TAPE. THE TAPE SHALL BE ALLEN SYSTEMS, TERRA TAPE, TECTA TAPE, OR EQUAL APPROVED BY THE ENGINEER. THIS TAPE SHALL BE BURIED IN THE ELECTRIC LINE TRENCH WITH ONE STRIP PLACED NO LESS THAN TWO INCHES (2") OR MORE THAN TWELVE INCHES (12") BELOW THE FINAL FINISHED GRADE OF THE TRENCH. THE TAPE SHALL BE PLACED WITH THE PRINTED SIDE UP AND SHALL BE ESSENTIALLY PARALLEL WITH THE FINAL GRADE.

PAYMENT FOR THIS ITEM SHALL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT.

ITEM 632- DETECTOR LOOP, AS PER PLAN, IN RESURFACED AREAS

AN ESTIMATED QUANTITY OF ITEM 632, DETECTOR LOOP, AS PER PLAN, HAS BEEN PROVIDED FOR THE PURPOSE OF REPLACING DAMAGED DETECTOR LOOPS AND/OR UPGRADING DETECTOR LOOPS TO IMPROVE MOTORCYCLE DETECTION. IT IS IMPERATIVE THAT REPLACEMENT OF DETECTOR LOOPS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT DETECTOR LOOPS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE EXISTING DETECTOR LOOPS.

THE CONTRACTOR SHALL NOTIFY MATT BLANKENSHIP, ODOT DISTRICT 3 ROADWAY SERVICES MANAGER, (PHONE 419-207-7045) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK. THIS NOTIFICATION IS NEEDED FOR DISTRICT 3 TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY MR. BLANKENSHIP WITHIN 2 WORKING DAYS AFTER THE NEW DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE DISTRICT CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF A DISINCENTIVE FEE OF \$500.00 PER DAY TO THE CONTRACTOR FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW DETECTOR LOOPS SHALL BE PLACED PER THE PLAN DETAILS AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE AFFECTED AREAS. THE DETECTOR LOOPS SHALL NOT BE CUT INTO THE SURFACE COURSE.

IN ADDITION TO THE REQUIREMENTS OF CMS 632.11, THE CONTRACTOR SHALL PROVIDE A POSITIVE AND EFFECTIVE MEANS FOR REMOVAL OF SOLID RESIDUE RESULTING FROM THE DRY SAW BLADE CUTTING OF LOOP DETECTOR SLOTS IN THE PAVEMENT. THE RESIDUE SHALL BE REMOVED BY VACUUM OR OTHER EFFECTIVE MEANS, BEFORE IT IS BLOWN BY TRAFFIC ACTION OR WIND. RESIDUE FROM DRY CUTTING SHALL NOT BE REMOVED BY COMPRESSED AIR. AS AN ALTERNATE, THE CONTRACTOR MAY USE WET CUTTING.

LOOP DETECTOR WIRE TO LEAD-IN CABLE SPLICES WITHIN EPOXY ENCAPSULATED SPLICE ENCLOSURES SHALL BE JOINED BY AN APPROVED CONNECTOR AND SOLDERED PER CMS 632.23 & 725.15. ALL COSTS ASSOCIATED WITH THE SOLDERED SPLICE CONNECTION AND EPOXY SPLICE KIT SHALL BE INCLUDED WITH THE DETECTOR LOOP.

IF THE PULL BOX IS NOT SPECIFIED IN THE PLANS, THE SPLICE SHALL BE MADE IN THE FIRST ENTERED POLE OR PEDESTAL, EXCEPT WHERE THE CONTROLLER CABINET IS MOUNTED ON THE POLE OR PEDESTAL, IN WHICH CASE THE LOOP WIRES SHALL BE ROUTED DIRECTLY INTO THE CABINET UNLESS SPECIFIED DIFFERENTLY IN THE PLANS. LOOP DETECTOR WIRE ROUTED THROUGH CONDUIT, PULL BOXES, POLES, AND PEDESTALS SHALL BE TWISTED PER CMS 632.23.

FURNISH ALL MATERIALS ACCORDING TO THE DEPARTMENT'S QUALIFIED PRODUCTS LIST (QPL).

SEE DETAILS ON THIS SHEET FOR ADDITIONAL REQUIREMENTS.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 632, DETECTOR LOOP, AS PER PLAN, IN RESURFACED AREAS.

ITEM 632- LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 632, 732.07, PART A, NEMA TS-1, AND 732.08, LOOP DETECTOR UNITS SHALL HAVE THE FOLLOWING REQUIREMENTS OR FEATURES:

- 1) THE OUTPUT DEVICE SHALL BE AN ELECTROMECHANICAL RELAY AND ALL CONTACTS SHALL BE INCLUDED IN THE WIRING HARNESS.
- 2) THE UNIT SHALL BE SELF TUNING.
- 3) THE UNIT'S ELECTRICAL CONNECTION PLUGS OR WIRING HARNESS SHALL ALLOW READY REPLACEMENT WITH SINGLE CHANNEL AMPLIFIERS AS DESCRIBED IN CMS 732.07.

IN ADDITION TO THE REQUIREMENTS LISTED ABOVE, THE DETECTOR UNIT SHALL BE A SINGLE CHANNEL UNIT AND HAVE EASILY ADJUSTABLE TIMERS INCORPORATED IN THE UNIT THAT ARE CAPABLE OF BOTH EXTEND CALL AND DELAY CALL OUTPUTS. THESE ADJUSTMENTS SHALL BE SEPARATE AND CONTROLLABLE BY CALIBRATED SWITCHES OR KNOBS ON THE OUTSIDE OF THE DETECTOR UNIT. THE EXTEND CALL TIMER SHALL BE CAPABLE OF HOLDING THE CALL OF A VEHICLE FOR A PERIOD OF TIME BEGINNING AT THE INSTANT THE VEHICLE LEAVES THE DETECTION AREA. THE DELAY CALL TIMER SHALL BE SUCH THAT IT DOES NOT ISSUE AN OUTPUT UNTIL THE DETECTION ZONE HAS BEEN OCCUPIED FOR A PERIOD OF TIME THAT HAS BEEN SET ON THE ADJUSTABLE TIMER. WHEN TIMES ARE SET ON BOTH THE DELAY AND EXTEND TIMERS, THE UNIT SHALL BE DESIGNED TO INHIBIT THE EXTEND FUNCTION UNTIL THE DELAY TIME HAS BEEN MET. WHEN THE LOOP BECOMES UNOCCUPIED, THE DELAY OUTPUT IS REMOVED. WHEN THE VEHICLE GAP EXCEEDS THE EXTEND TIME, THE ENTIRE DELAY-EXTEND OPERATION BECOMES EFFECTIVELY RESET FOR THE NEXT CYCLE - DELAY TO TIME OUT, ETC.

WORK SHALL INCLUDE ALL CONTROLLER / CABINET MODIFICATIONS AND CONNECTIONS NEEDED TO INSTALL THE LOOP DETECTOR UNIT AND TO MAKE IT FULLY OPERATIONAL.

PAYMENT FOR ITEM 632 - LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS.

ITEM 632- LOOP DETECTOR TIE-IN, AS PER PLAN

THIS WORK SHALL CONSIST OF CONNECTING EXISTING LOOP DETECTOR LEAD-IN CABLE TO NEW LOOP DETECTOR LEAD-IN CABLE WHETHER THAT CABLE IS UNDERGROUND OR AERIAL. INCLUDED IN THIS ITEM IS THE CONNECTOR KIT OR CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS.

THIS ITEM IS ONLY NEEDED WHEN A TIE-IN SITUATION EXISTS WHERE AN EXISTING CABLE IS SPLICED TO A NEW CABLE. WHEN DETECTOR WIRE IS SPLICED TO LEAD-IN CABLE, THE SPLICE IS INCLUDED WITH THE DETECTOR LOOP PAY ITEM.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL NECESSARY LABOR, MISCELLANEOUS HARDWARE, AND EQUIPMENT REQUIRED TO PROVIDE FOR THE LOOP DETECTOR TIE-IN AND OPERATION. BASIS OF PAYMENT WILL BE AT CONTRACT BID PRICE PER EACH.

DETECTOR LOOP INSTALLATION DETAILS AND TRAFFIC SIGNAL GENERAL NOTES

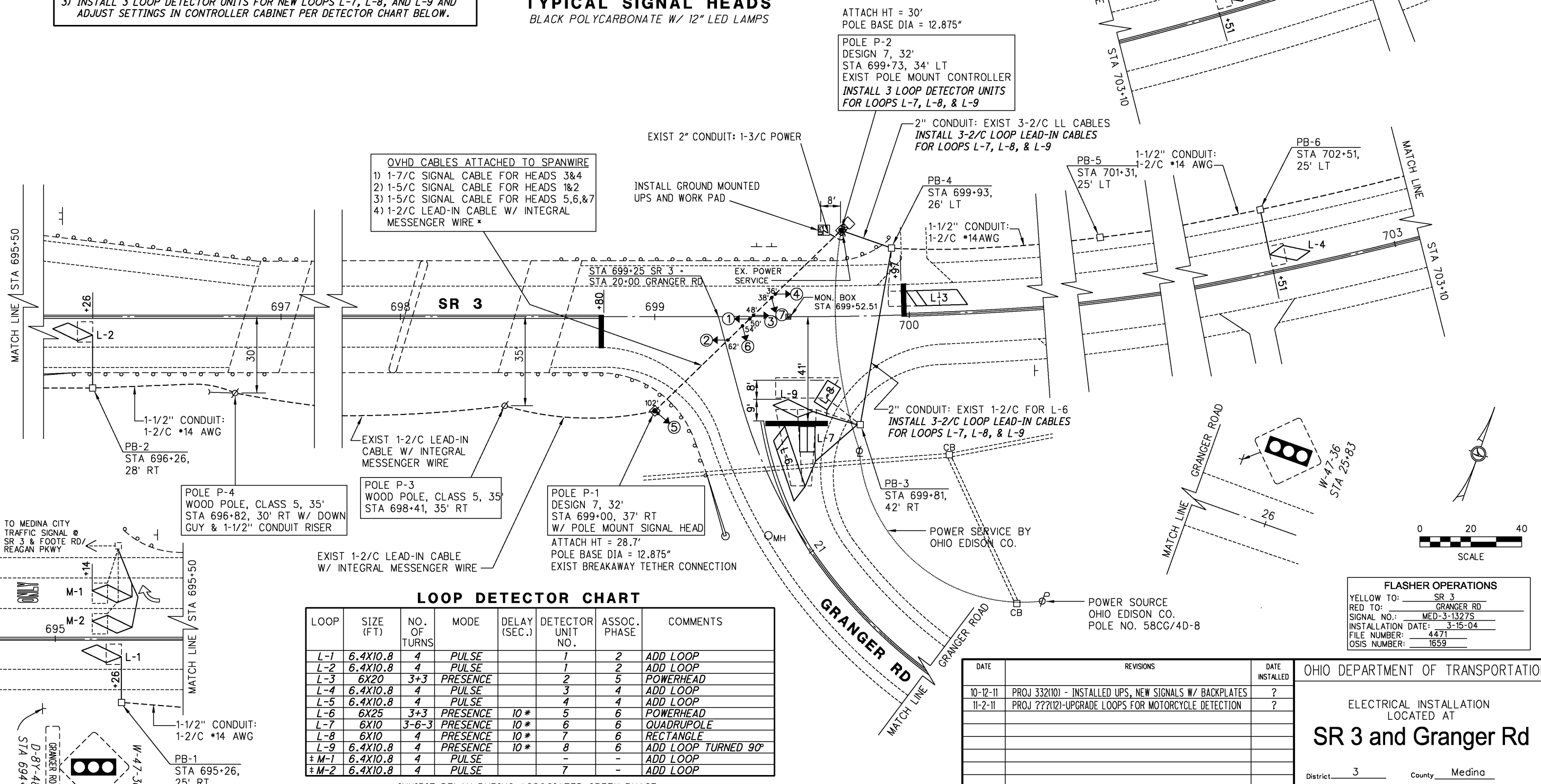
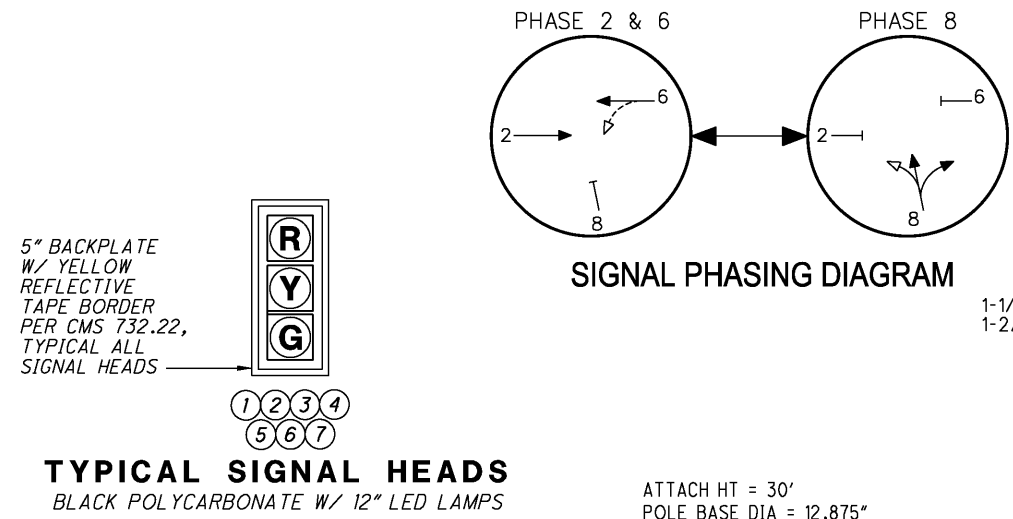
MED-3-13.20

DETECTOR LOOP QUANTITIES(URBANIZED)				
ITEM	EXT.	QTY.	UNIT	DESCRIPTION
632	26501	9 *	EACH	DETECTOR LOOP, AS PER PLAN
632	27009	3	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	65300	360	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
QUANTITIES TO GENERAL SUMMARY SHEET				

* INCLUDES 2 LOOPS FOR MEDINA CITY SIGNAL AT SR 3 & FOOTE RD

DETECTOR LOOP DESCRIPTION OF WORK

- 1) INSTALL DETECTOR LOOPS AS SHOWN. EXISTING LOOPS TO BE ABANDONED.
- 2) INSTALL LOOP DETECTOR LEAD-IN CABLE FOR NEW LOOPS L-7, L-8, AND L-9.
- 3) INSTALL 3 LOOP DETECTOR UNITS FOR NEW LOOPS L-7, L-8, AND L-9 AND ADJUST SETTINGS IN CONTROLLER CABINET PER DETECTOR CHART BELOW.



OVHD CABLES ATTACHED TO SPANWIRE
 1) 1-7/C SIGNAL CABLE FOR HEADS 3&4
 2) 1-5/C SIGNAL CABLE FOR HEADS 1&2
 3) 1-5/C SIGNAL CABLE FOR HEADS 5,6,&7
 4) 1-2/C LEAD-IN CABLE W/ INTEGRAL MESSENGER WIRE *

ATTACH HT = 30'
 POLE BASE DIA = 12.875"
 POLE P-2
 DESIGN 7, 32'
 STA 699+73, 34' LT
 EXIST POLE MOUNT CONTROLLER
 INSTALL 3 LOOP DETECTOR UNITS
 FOR LOOPS L-7, L-8, & L-9

POLE P-4
 WOOD POLE, CLASS 5, 35'
 STA 696+82, 30' RT W/ DOWN
 GUY & 1-1/2" CONDUIT RISER

POLE P-3
 WOOD POLE, CLASS 5, 35'
 STA 698+41, 35' RT

POLE P-1
 DESIGN 7, 32'
 STA 699+00, 37' RT
 W/ POLE MOUNT SIGNAL HEAD
 ATTACH HT = 28.7'
 POLE BASE DIA = 12.875"
 EXIST BREAKAWAY TETHER CONNECTION

LOOP	SIZE (FT)	NO. OF TURNS	MODE	DELAY (SEC.)	DETECTOR UNIT NO.	ASSOC. PHASE	COMMENTS
L-1	6.4X10.8	4	PULSE		1	2	ADD LOOP
L-2	6.4X10.8	4	PULSE		1	2	ADD LOOP
L-3	6X20	3+3	PRESENCE		2	5	POWERHEAD
L-4	6.4X10.8	4	PULSE		3	4	ADD LOOP
L-5	6.4X10.8	4	PULSE		4	4	ADD LOOP
L-6	6X25	3+3	PRESENCE	10 *	5	6	POWERHEAD
L-7	6X10	3-6-3	PRESENCE	10 *	6	6	QUADRUPOLE
L-8	6X10	4	PRESENCE	10 *	7	6	RECTANGLE
L-9	6.4X10.8	4	PRESENCE	10 *	8	6	ADD LOOP TURNED 90°
M-1	6.4X10.8	4	PULSE		-	-	ADD LOOP
M-2	6.4X10.8	4	PULSE		7	-	ADD LOOP

*INHIBIT DELAY DURING ASSOCIATED GREEN PHASE
 *MEDINA CITY SIGNAL AT FOOTE RD INTERSECTION

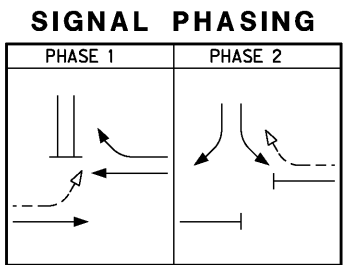
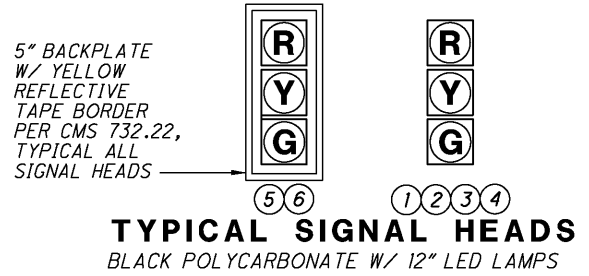
FLASHER OPERATIONS	
YELLOW TO:	SR 3
RED TO:	GRANGER RD
SIGNAL NO.:	MED-3-1327S
INSTALLATION DATE:	3-15-04
FILE NUMBER:	4471
OSIS NUMBER:	1659

DATE	REVISIONS	DATE INSTALLED
10-12-11	PROJ 332(10) - INSTALLED UPS, NEW SIGNALS W/ BACKPLATES	?
11-2-11	PROJ ???(12)-UPGRADE LOOPS FOR MOTORCYCLE DETECTION	?

OHIO DEPARTMENT OF TRANSPORTATION					
ELECTRICAL INSTALLATION LOCATED AT					
SR 3 and Granger Rd					
District	3	County	Medina		
DESIGNED	RJR	DRAWN	RJR	REVIEWED	1
11/03		11/03		SHEET	1
				OF	1

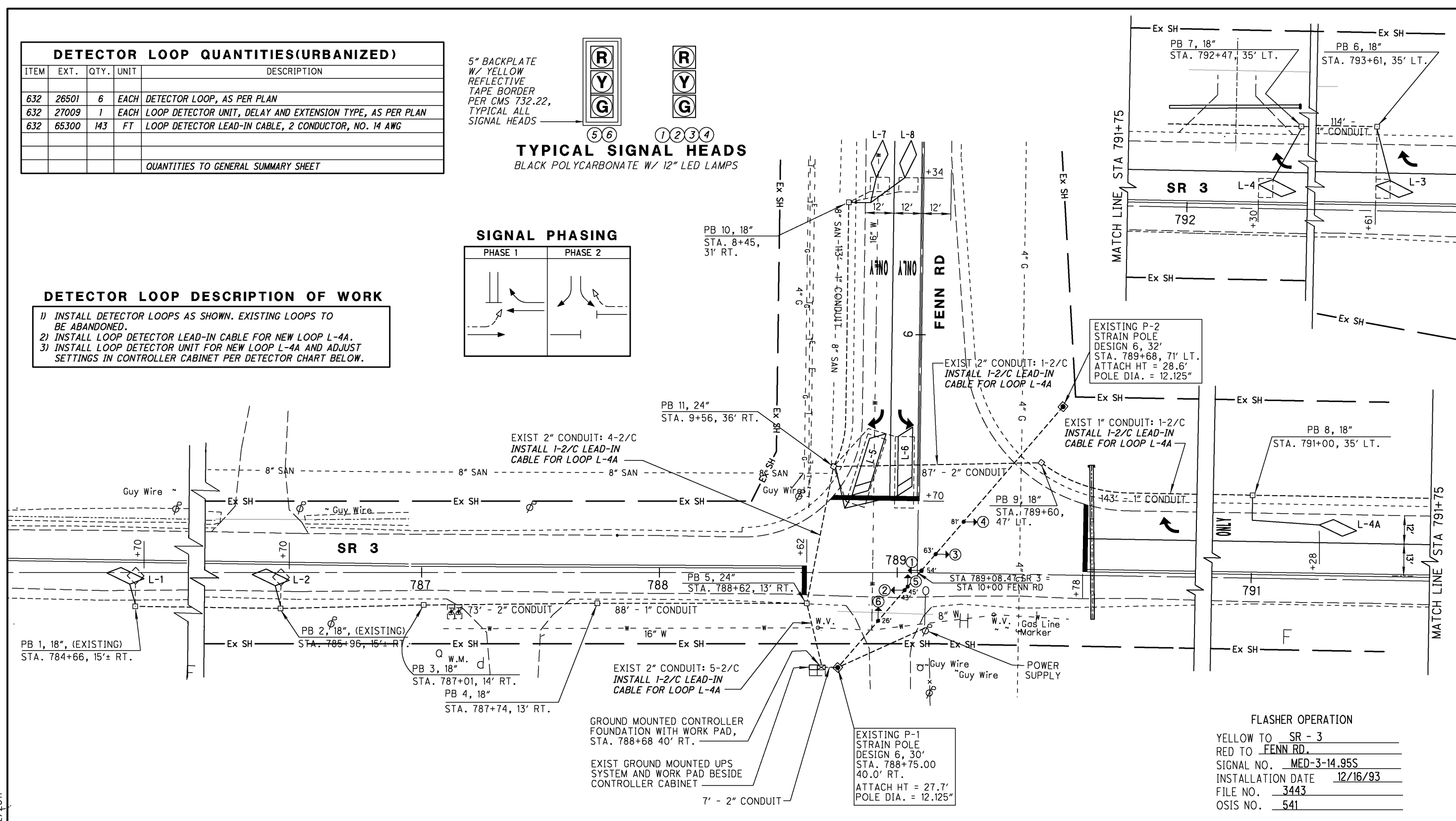
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 WORKSTATION: aboraty DATE: 12/12/2011

DETECTOR LOOP QUANTITIES(URBANIZED)						
ITEM	EXT.	QTY.	UNIT	DESCRIPTION		
632	26501	6	EACH	DETECTOR LOOP, AS PER PLAN		
632	27009	1	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN		
632	65300	143	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG		
QUANTITIES TO GENERAL SUMMARY SHEET						



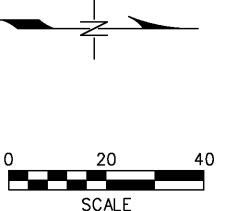
DETECTOR LOOP DESCRIPTION OF WORK

- 1) INSTALL DETECTOR LOOPS AS SHOWN. EXISTING LOOPS TO BE ABANDONED.
- 2) INSTALL LOOP DETECTOR LEAD-IN CABLE FOR NEW LOOP L-4A.
- 3) INSTALL LOOP DETECTOR UNIT FOR NEW LOOP L-4A AND ADJUST SETTINGS IN CONTROLLER CABINET PER DETECTOR CHART BELOW.



LOOP DETECTOR CHART

LOOP	SIZE	NO. TURNS	Ø	AMPLIFIER NO.	EXT (SEC)	DELAY (SEC)	MODE	REMARKS
L-1	6.4x10.8	4	1	1	-	-	PULSE	ADD LOOP
L-2	6.4x10.8	4	1	1	-	-	PULSE	ADD LOOP
L-3	6.4x10.8	4	1	2	-	-	PULSE	ADD LOOP
L-4	6.4x10.8	4	1	2	-	-	PULSE	ADD LOOP
L-4A	6.4x10.8	4	1	6	-	-	PULSE	ADD LOOP
L-5	6X25	3+3	2	4	-	8*	PRESENCE	POWERHEAD
L-6	6X25	3+3	2	5	-	5*	PRESENCE	POWERHEAD
L-7	6.4x10.8	4	2	3	-	3*	PRESENCE	ADD LOOP
L-8	6.4x10.8	4	2	3	-	3*	PRESENCE	ADD LOOP



DATE	REVISIONS	DATE INSTALLED
2-28-96	PROJ 179(96)-REDRAWN TO REFLECT WIDENING	
10-3-11	PROJ 332(10)-INSTALL NEW SIGNAL HEADS, TETHER, AND UPS	?
11-2-11	PROJ ???(12)-UPGRADE LOOPS FOR MOTORCYCLE DETECTION	?

FLASHER OPERATION
 YELLOW TO SR - 3
 RED TO FENN RD.
 SIGNAL NO. MED-3-14.95S
 INSTALLATION DATE 12/16/93
 FILE NO. 3443
 OSIS NO. 541

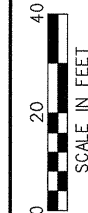
OHIO DEPARTMENT OF TRANSPORTATION
 SIGNAL INSTALLATION PLAN
SR 3 & FENN ROAD

DISTRICT	3	COUNTY	MEDINA
DRAWN		REVIEWED	

DETECTOR LOOP REPLACEMENT PLAN
 SR 3 & FENN RD
 MED-3-13.20
 21
 30

DESIGN FILE: i:\projects\84529\roadway\Loop Replacement Plans\M38\Fenn.dgn
 WORKSTATION: aboraty DATE: 12/12/2011

* INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL



CALCULATED
RJR 11/11
CHECKED
DUV

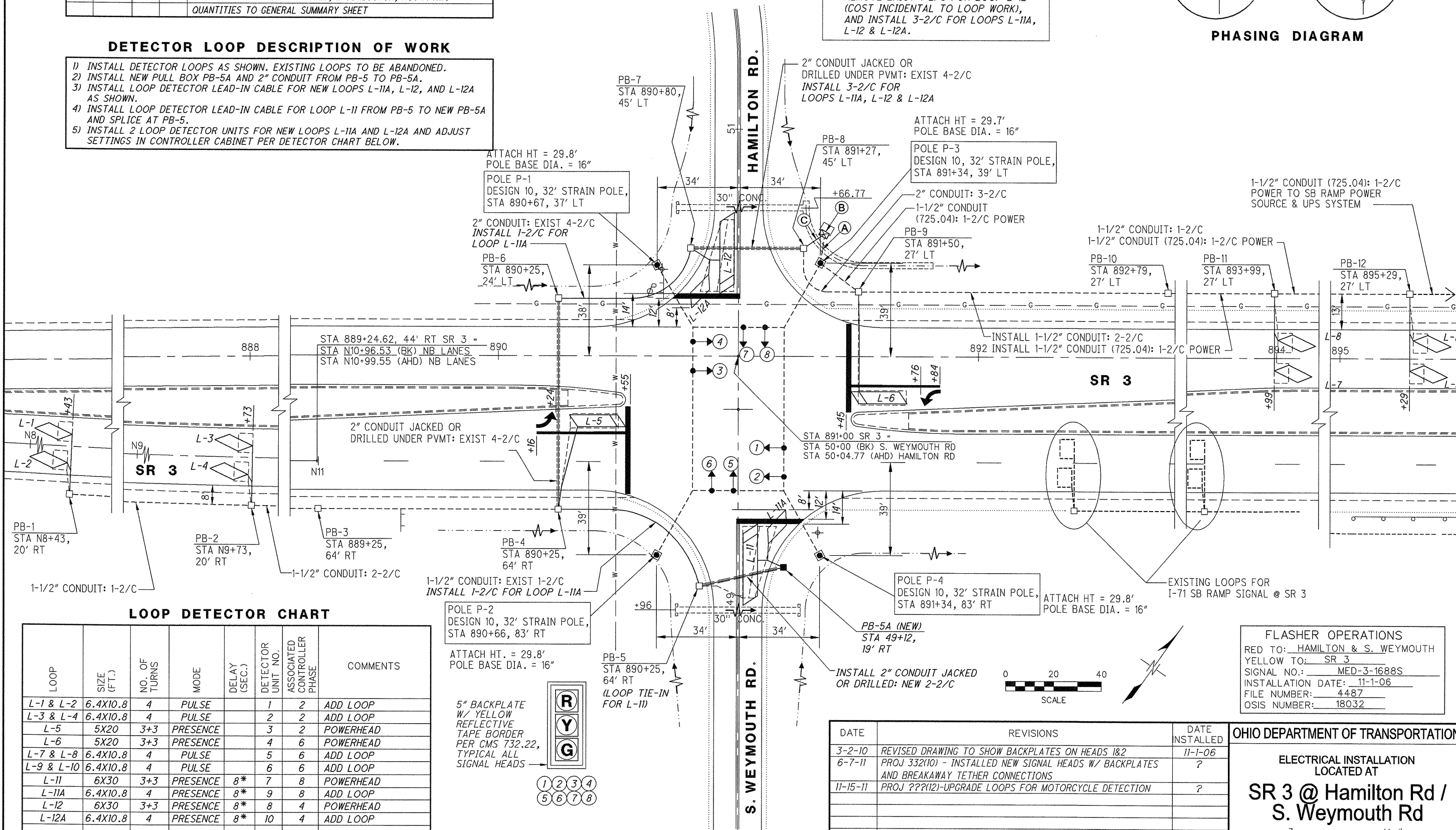
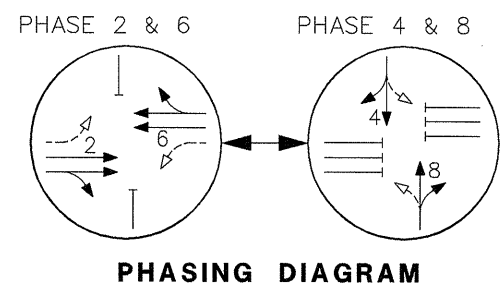
**DETECTOR LOOP REPLACEMENT PLAN
SR 3 & HAMILTON RD / S. WEYMOUTH RD**

MED-3-13.20

DETECTOR LOOP QUANTITIES(URBANIZED)				
ITEM	EXT.	QTY.	UNIT	DESCRIPTION
625	25901	36	FT	CONDUIT JACKED OR DRILLED, AS PER PLAN, 2"
625	30701	1	EACH	PULL BOX, 725.08, 18", AS PER PLAN
632	26501	14	EACH	DETECTOR LOOP, AS PER PLAN
632	27009	2	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	27201	1	EACH	LOOP DETECTOR TIE-IN, AS PER PLAN
632	65300	585	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG QUANTITIES TO GENERAL SUMMARY SHEET

- DETECTOR LOOP DESCRIPTION OF WORK**
- 1) INSTALL DETECTOR LOOPS AS SHOWN. EXISTING LOOPS TO BE ABANDONED.
 - 2) INSTALL NEW PULL BOX PB-5A AND 2" CONDUIT FROM PB-5 TO PB-5A.
 - 3) INSTALL LOOP DETECTOR LEAD-IN CABLE FOR NEW LOOPS L-11A, L-12, AND L-12A AS SHOWN.
 - 4) INSTALL LOOP DETECTOR LEAD-IN CABLE FOR LOOP L-11 FROM PB-5 TO NEW PB-5A AND SPLICE AT PB-5.
 - 5) INSTALL 2 LOOP DETECTOR UNITS FOR NEW LOOPS L-11A AND L-12A AND ADJUST SETTINGS IN CONTROLLER CABINET PER DETECTOR CHART BELOW.

- NOTES**
- (A) 3" CONDUIT: 2-5/C & 2-7/C
1-1/2" CONDUIT (725.04): 1-2/C POWER
 - (B) CONTROLLER GROUND MOUNTED & CONCRETE WORKPAD 30"x50"
STA 891+35, 51' LT
INSTALL 2 LOOP DETECTOR UNITS FOR LOOPS L-11A AND L-12A.
 - (C) 3" CONDUIT: EXIST 8-2/C
REMOVE EXIST 1-2/C FOR LOOP L-12 (COST INCIDENTAL TO LOOP WORK), AND INSTALL 3-2/C FOR LOOPS L-11A, L-12 & L-12A.



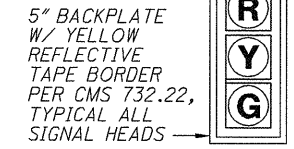
LOOP DETECTOR CHART

LOOP	SIZE (FT.)	NO. OF TURNS	MODE	DELAY (SEC.)	DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	COMMENTS
L-1 & L-2	6.4X10.8	4	PULSE		1	2	ADD LOOP
L-3 & L-4	6.4X10.8	4	PULSE		2	2	ADD LOOP
L-5	5X20	3+3	PRESENCE		3	2	POWERHEAD
L-6	5X20	3+3	PRESENCE		4	6	POWERHEAD
L-7 & L-8	6.4X10.8	4	PULSE		5	6	ADD LOOP
L-9 & L-10	6.4X10.8	4	PULSE		6	6	ADD LOOP
L-11	6X30	3+3	PRESENCE	8*	7	8	POWERHEAD
L-11A	6.4X10.8	4	PRESENCE	8*	9	8	ADD LOOP
L-12	6X30	3+3	PRESENCE	8*	8	4	POWERHEAD
L-12A	6.4X10.8	4	PRESENCE	8*	10	4	ADD LOOP

*INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL

POLE P-2
DESIGN 10, 32' STRAIN POLE,
STA 890+66, 83' RT

ATTACH HT. = 29.8'
POLE BASE DIA. = 16"



TYPICAL SIGNAL HEAD
BLACK POLYCARBONATE W/ 12" LED LAMPS

FLASHER OPERATIONS
RED TO: HAMILTON & S. WEYMOUTH
YELLOW TO: SR 3
SIGNAL NO.: MED-3-1688S
INSTALLATION DATE: 11-1-06
FILE NUMBER: 4487
OSIS NUMBER: 18032

DATE	REVISIONS	DATE INSTALLED
3-2-10	REVISED DRAWING TO SHOW BACKPLATES ON HEADS 1&2	11-1-06
6-7-11	PROJ 332(10) - INSTALLED NEW SIGNAL HEADS W/ BACKPLATES AND BREAKAWAY TETHER CONNECTIONS	?
11-15-11	PROJ ???(12)-UPGRADE LOOPS FOR MOTORCYCLE DETECTION	?

OHIO DEPARTMENT OF TRANSPORTATION

**ELECTRICAL INSTALLATION
LOCATED AT**
**SR 3 @ Hamilton Rd /
S. Weymouth Rd**

District 3 County Medina

DESIGNED RJR 4/06	REVIEWED	CHECKED	REVIEWED	SHEET OF 1
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WORKSTATION: abaroty DATE: 12/12/2011

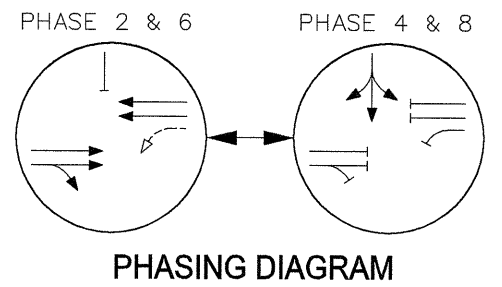
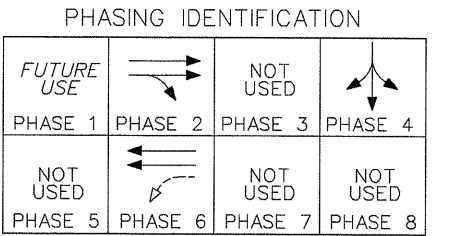
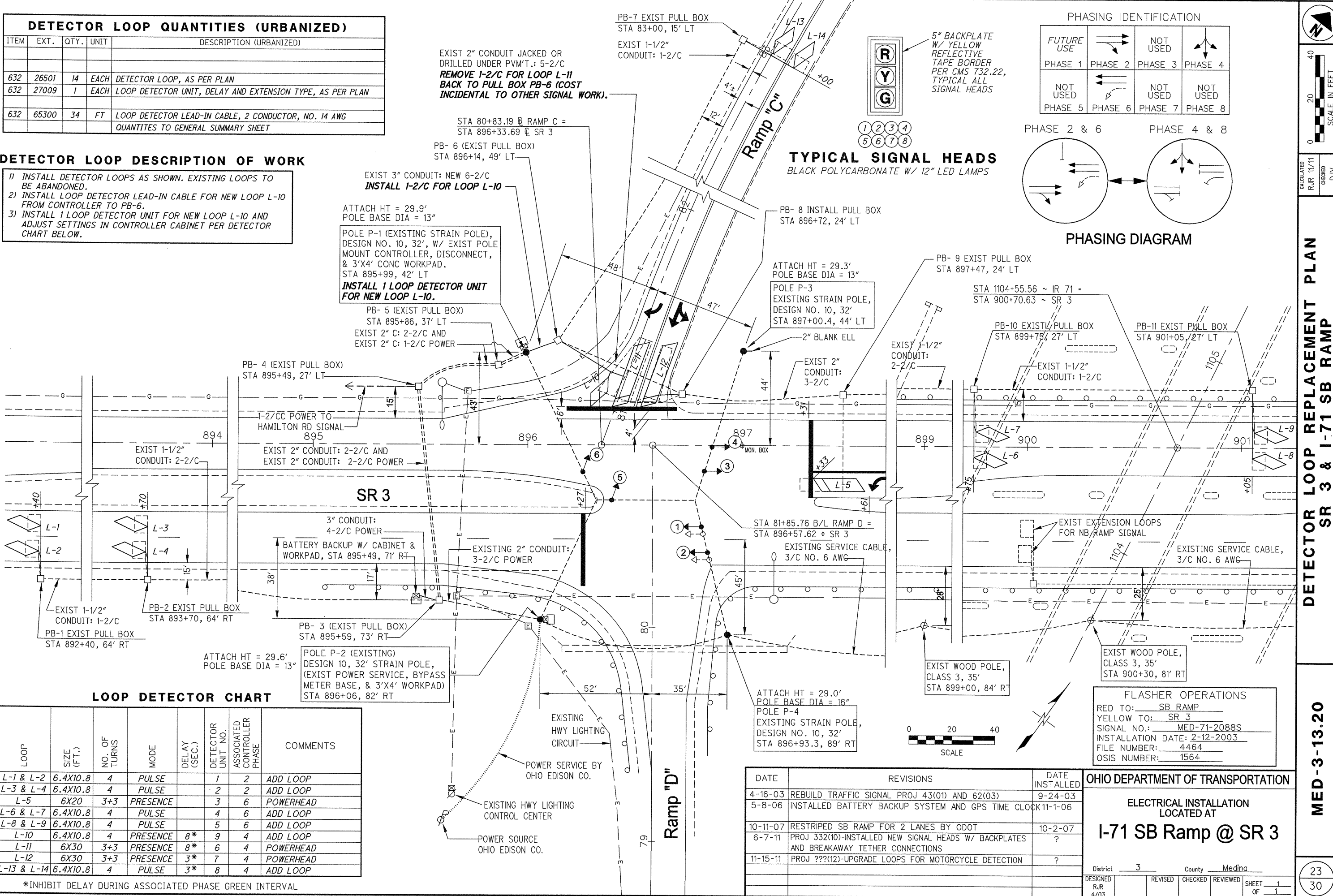
DETECTOR LOOP QUANTITIES (URBANIZED)				
ITEM	EXT.	QTY.	UNIT	DESCRIPTION (URBANIZED)
632	26501	14	EACH	DETECTOR LOOP, AS PER PLAN
632	27009	1	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	65300	34	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
QUANTITIES TO GENERAL SUMMARY SHEET				

DETECTOR LOOP DESCRIPTION OF WORK

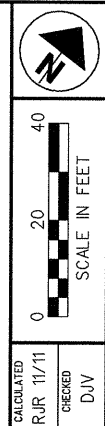
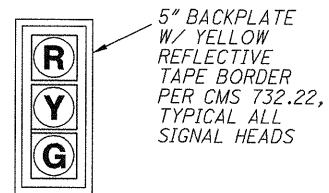
- INSTALL DETECTOR LOOPS AS SHOWN. EXISTING LOOPS TO BE ABANDONED.
- INSTALL LOOP DETECTOR LEAD-IN CABLE FOR NEW LOOP L-10 FROM CONTROLLER TO PB-6.
- INSTALL 1 LOOP DETECTOR UNIT FOR NEW LOOP L-10 AND ADJUST SETTINGS IN CONTROLLER CABINET PER DETECTOR CHART BELOW.

LOOP	SIZE (FT.)	NO. OF TURNS	MODE	DELAY (SEC.)	DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	COMMENTS
L-1 & L-2	6.4X10.8	4	PULSE		1	2	ADD LOOP
L-3 & L-4	6.4X10.8	4	PULSE		2	2	ADD LOOP
L-5	6X20	3+3	PRESENCE		3	6	POWERHEAD
L-6 & L-7	6.4X10.8	4	PULSE		4	6	ADD LOOP
L-8 & L-9	6.4X10.8	4	PULSE		5	6	ADD LOOP
L-10	6.4X10.8	4	PRESENCE	8*	9	4	ADD LOOP
L-11	6X30	3+3	PRESENCE	8*	6	4	POWERHEAD
L-12	6X30	3+3	PRESENCE	3*	7	4	POWERHEAD
L-13 & L-14	6.4X10.8	4	PULSE	3*	8	4	ADD LOOP

*INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL



TYPICAL SIGNAL HEADS
BLACK POLYCARBONATE W/ 12" LED LAMPS



DETECTOR LOOP REPLACEMENT PLAN SR 3 & I-71 SB RAMP

MED-3-13.20

FLASHER OPERATIONS
 RED TO: SB RAMP
 YELLOW TO: SR 3
 SIGNAL NO.: MED-71-2088S
 INSTALLATION DATE: 2-12-2003
 FILE NUMBER: 4464
 OSIS NUMBER: 1564

DATE	REVISIONS	DATE INSTALLED
4-16-03	REBUILD TRAFFIC SIGNAL PROJ 43(01) AND 62(03)	9-24-03
5-8-06	INSTALLED BATTERY BACKUP SYSTEM AND GPS TIME CLOCK	11-1-06
10-11-07	RESTRIPE SB RAMP FOR 2 LANES BY ODOT	10-2-07
6-7-11	PROJ 332(10)-INSTALLED NEW SIGNAL HEADS W/ BACKPLATES AND BREAKAWAY TETHER CONNECTIONS	?
11-15-11	PROJ ???(12)-UPGRADE LOOPS FOR MOTORCYCLE DETECTION	?

OHIO DEPARTMENT OF TRANSPORTATION

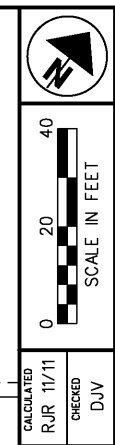
ELECTRICAL INSTALLATION
LOCATED AT
I-71 SB Ramp @ SR 3

DESIGNED	REVISED	CHECKED	REVIEWED	SHEET
RJR				1
4/03				OF 1

23
30

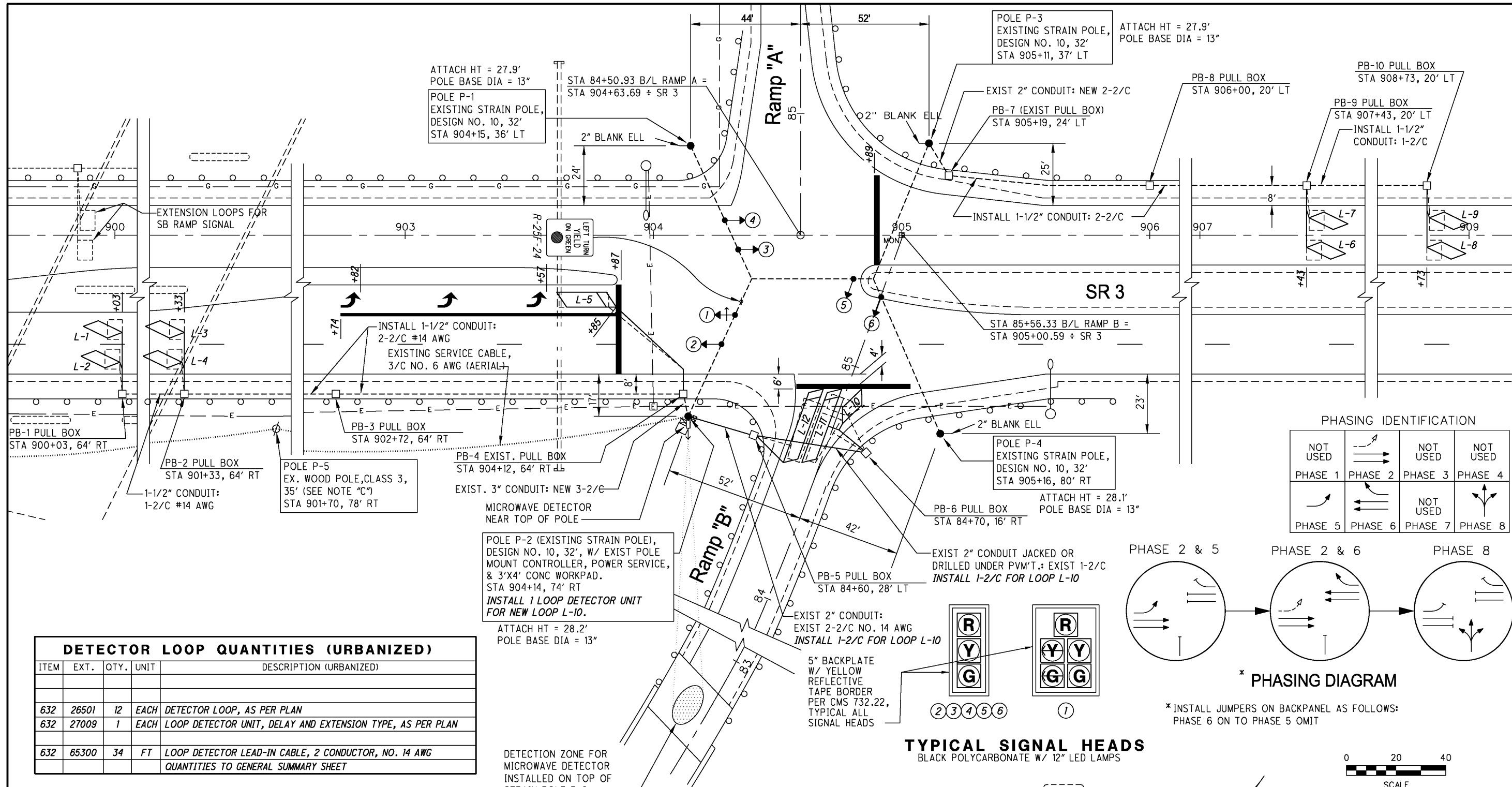
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WORKSTATION: abaraty DATE: 12/12/2011

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 WORKSTATION: aboraty DATE: 12/12/2011



**DETECTOR LOOP REPLACEMENT PLAN
 SR 3 & I-71 NB RAMP**

MED - 3-13.20



DETECTOR LOOP QUANTITIES (URBANIZED)				
ITEM	EXT.	QTY.	UNIT	DESCRIPTION (URBANIZED)
632	26501	12	EACH	DETECTOR LOOP, AS PER PLAN
632	27009	1	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	65300	34	FT	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
QUANTITIES TO GENERAL SUMMARY SHEET				

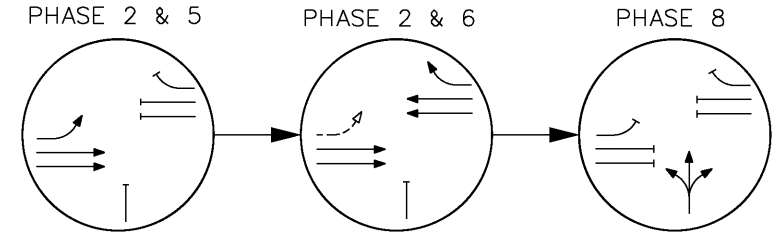
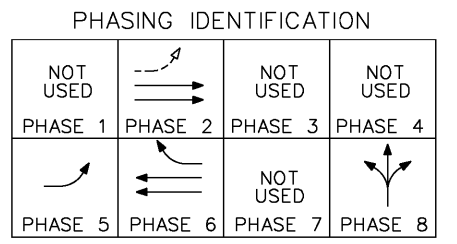
DETECTOR LOOP DESCRIPTION OF WORK

- 1) INSTALL DETECTOR LOOPS AS SHOWN. EXISTING LOOPS TO BE ABANDONED.
- 2) INSTALL LOOP DETECTOR LEAD-IN CABLE FOR NEW LOOP L-10 FROM CONTROLLER TO PB-6.
- 3) INSTALL 1 LOOP DETECTOR UNIT FOR NEW LOOP L-10 AND ADJUST SETTINGS IN CONTROLLER CABINET PER DETECTOR CHART BELOW.

LOOP DETECTOR CHART

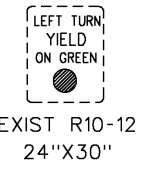
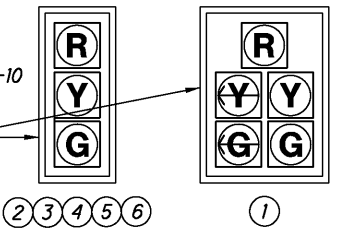
LOOP	SIZE (FT.)	NO. OF TURNS	MODE	DELAY (SEC.)	DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE	
L-1 & L-2	6.4X10.8	4	PULSE		1	2	ADD LOOP
L-3 & L-4	6.4X10.8	4	PULSE		2	2	ADD LOOP
L-5	6X20	3+3	PRESENCE		3	5	POWERHEAD
L-6 & L-7	6.4X10.8	4	PULSE		4	6	ADD LOOP
L-8 & L-9	6.4X10.8	4	PULSE		5	6	ADD LOOP
L-10	6.4X10.8	4	PRESENCE	8*	8	8	ADD LOOP
L-11	5X30	3+3	PRESENCE	8*	6	8	POWERHEAD
L-12	5X30	3+3	PRESENCE	3*	7	8	POWERHEAD
ZONE L-13	MICROWAVE DETECTOR ZONE ON RAMP FOR PHASE 8						

*INHIBIT DELAY DURING ASSOCIATED PHASE GREEN INTERVAL



* INSTALL JUMPERS ON BACKPANEL AS FOLLOWS:
 PHASE 6 ON TO PHASE 5 OMIT

TYPICAL SIGNAL HEADS
 BLACK POLYCARBONATE W/ 12" LED LAMPS



SPANWIRE MOUNTED SIGN

DATE	REVISIONS	DATE INSTALLED
4-16-03	REBUILD TRAFFIC SIGNAL PROJ 43(01) AND 62(03)	9-24-03
11-6-06	INSTALLED GPS TIME CLOCK SYNCHRONIZER & CONNECTED INTO BATTERY BACKUP AT SB RAMP PER PROJ 233(05)	11-1-06
6-8-11	PROJ 332(10)-INSTALL NEW SIGNAL HEADS W/ BACKPLATES AND BREAKAWAY TETHER CONNECTIONS	?
11-15-11	PROJ ???(12)-UPGRADE LOOPS FOR MOTORCYCLE DETECTION	?

FLASHER OPERATIONS
 RED TO: NB RAMP & EB LT TURN
 YELLOW TO: SR 3
 SIGNAL NO.: MED-71-2095S
 INSTALLATION DATE: 2-12-03
 FILE NUMBER: 4465
 OSIS NUMBER: 1563

OHIO DEPARTMENT OF TRANSPORTATION

**ELECTRICAL INSTALLATION
 LOCATED AT
 I-71 NB Ramp @ SR 3**

District 3 County Medina

DESIGNED RJR 4/03	REVISD	CHECKED	REVIEWED	SHEET OF 1 1
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AUXILIARY & LONG LINE MARKINGS

COUNTY	ROUTE	STATION / SLM		HIGHWAY MILES	614					642, TYPE 1					644										SPECIAL							
					WORK ZONE LANE LINE, CLASS 1, 642 PAINT	WORK ZONE CENTER LINE, CLASS 1, 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT	WORK ZONE CROSSWALK LINE, CLASS 1, 642 PAINT	EDGE LINE		CENTER LINE			AUXILIARY MARKINGS (740.04)																	
		FROM	TO							MILE	MILE	MILE	MILE	MILE	MILE	MILE	CHANNELIZING LINE, TYPE 1	STOP LINE, TYPE 1	CROSSWALK LINE, TYPE 1	TRANSVERSE/DIAGONAL LINE (WHITE)	TRANSVERSE/DIAGONAL LINE (YELLOW)	ISLAND MARKING	SCHOOL SYMBOL MARKING			LANE ARROW				WORD ON PAVEMENT "ONLY"		DOTTED LINE, 4"
										8"	24"	12"	24"	24"		72 INCH	96 INCH	LEFT	RIGHT	THROUGH	COMBINATION	72 INCH	96 INCH	EACH		FT	EACH					
MEDINA	SR 3	13.20	19.86	6.66	0.23	13.32			900		12.98	0.87	0.23	10.34	6.66	493	630			450	112			13	6							
TOTAL TO GENERAL SUMMARY					0.23	13.32		900		12.98	0.87	0.23	10.34	6.66	493	630			450	112			13	6								

RAISED PAVEMENT MARKERS

COUNTY	ROUTE	STATION/SLM		DETAIL	621					621					PRISMATIC RETRO-REFLECTOR TYPES	REMARKS	DETAIL	DESCRIPTION	
					RAISED PAVEMENT MARKER REMOVED	RPM	ONE-WAY	TWO-WAY											
		EACH	EACH					WHITE	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	BLUE / BLUE							
MEDINA	SR 3	13.20	14.32	GAP	71	71											1	MULTILANE UNDIVIDED TYPICAL SPACING	
		14.32	14.75	15	51	51											2	TAPERED ACCEL. LANE	
		14.75	15.11	6/7	49	49	16	22	11								3	DECELERATION LANE	
		15.11	16.61	GAP	102	102		102									4	PARALLEL ACCEL LANE	
		16.61	17.48	10	153	153		18	113	22							5	MULTILANE DIVIDED/EXPRESSWAY	
		17.48	17.80	GAP	21	21		21									6	STOP APPROACH	
		17.80	18.30	8/15	39	39		39									7	2 LANE APPR. WITH TURN LANE	
		18.30	19.69	GAP	90	90		90									8	THROUGH APPROACH	
		19.69	19.86	6	27	27	16	11									9	3 LANE APPR. WITH TURN LANE	
																	10	3 LANE DIVIDED TO 2 LANE TRANSITION	
																	11	3 LANE UNDIVIDED TO 2 LANE TRANSITION	
																	12	TWO LANE NARROW BRIDGE	
																	13	TWO WAY LEFT TURN LANE	
																	14	ONE LANE BRIDGE	
																	15	HORIZONTAL CURVE	
																	16	HORIZONTAL CURVE ALT.	
																	17	STOP APPROACH ALT.	
																	18	FIRE HYDRANT	
																	GAP	CENTER LINE AT 80 FT. TYP.	
TOTAL TO GENERAL SUMMARY																			
					603	603	32	425	124	22									

NOTES:
 1) THRU LANES SHALL BE STRIPED AT 11' WIDTHS. SEE TYPICAL SECTIONS.
 2) FOR ALL WORK ZONE MARKINGS, THE 642 PAINT USED SHALL BE TYPE 1.
 3) WORK ZONE STOP LINES SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:
 MED-3-13.27 (GRANGER RD. INTERSECTION)
 MED-3-14.95 (FENN RD. INTERSECTION)
 MED-3-16.88 (S. WEYMOUTH/HAMILTON RD. INTERSECTION)
 MED-3-16.98 (SB IR 71 RAMPS)
 MED-3-17.13 (NB IR 71 RAMPS)
 MED-3-19.63 (SR 94 INTERSECTION)

CALCULATED
GTS
CHECKED
DJV

PAVEMENT MARKING / RPM DATA

MED - 3 - 13.20

25
30

DESIGN FILE: \\projects\84529\roadway\sheet\84529TS001.dgn
 WORKSTATION: gschlett
 MODEL NAME: Design
 DATE: 3/6/2012

MED-3-1320 SFN 5200172 (URBANIZED- 80% FED/20% STATE)					
ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	98200	96	FT	REMOVAL MISC.: COMPRESSION JOINT SEAL	29
512	10100	121	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	10300	681	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	
512	74000	121	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	
516	31000	96	FT	JOINT SEALER	

MED-3-1919 SFN 5200415 (RURAL-80% FED/20% STATE)					
ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	47	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	74000	47	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES	

STRUCTURE SUMMARY

DESIGN FILE: \\projects\84529\structures\strnotes.dgn
 WORKSTATION: abaroty
 MODELNAME: Design
 DATE: 12/12/2011

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING PLANS:

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

STRUCTURE #	PLAN NAME	DATE
MED-3-1320	MED-3-12.99	1992
MED-3-1919	MED-3-19.39-PART1	1992

EXISTING STRUCTURE VERIFICATION:

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

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE BID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202 - REMOVAL MISC.: COMPRESSION JOINT SEAL:

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING ELASTOMERIC COMPRESSION SEAL GLAND LOCATED BETWEEN THE APPROACH SLAB AND THE DECK.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM, WHICH WILL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

PLACING ASPHALT CONCRETE FEATHERING ON APPROACHES TO BRIDGES

SPECIAL CARE SHALL BE TAKEN, WHEN PLACING THE ASPHALT CONCRETE FEATHERING, TO CREATE A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK OR APPROACH SLAB. THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES; SPECIFICALLY, THE CONTRACTOR SHALL PROVIDE A 600:1 TAPER RATE FOR PLANING AND PAVING OPERATIONS.

614 - MAINTAINING TRAFFIC FOR STRUCTURES MED-3-1320 & MED-3-1919:

TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING WORKING HOURS WHEN ONE LANE MAY BE CLOSED USING FLAGGERS, AS PER STANDARD DRAWING MT-97.10.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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 LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DESIGN AGENCY
 ODOT DISTRICT OF THREE
 OFFICE OF
 PLANNING AND ENGINEERING

DATE
 11/11

REVIEWED
 DJV

DRAWN
 DCM
 REVISED

DESIGNED
 DCM
 CHECKED
 CAL

STRUCTURE NOTES

MED - 3 - 13.20

DESIGN FILE: \\projects\84529\structures\Brtreat.dgn
 WORKSTATION: abaroty DATE: 12/12/2011
 MODELNAME: Design

BRIDGE DECK DATA								ROADWAY DATA		
COUNTY, ROUTE, BRIDGE NO.	LOCATION	STRUCTURE TYPE	LENGTH (BRIDGE DECK)	WIDTH	BRIDGE DECK AREA	SKEW	EXISTING WEARING SURFACE	EXISTING PAVEMENT WIDTH	EXISTING APPROACH SLAB WIDTH	EXISTING APPROACH SLAB LENGTH
			FT.	FT.	SQ.YD.			FT.	FT.	FT.
+ MED-3-1320	OVER ROCKY RIVER	3- SPAN CONCRETE SLAB	139'-2"±	44'-0"±	681	23° LF	CONCRETE	37	44	20
* MED-3-1595	OVER PLUM CREEK	PIPE					ASPHALT	30		
* MED-3-1703	OVER PLUM CREEK	TWIN-SPAN CONCRETE BOXES					ASPHALT	68		
++ MED-3-1704	UNDER I-71	4- SPAN STEEL BEAM	232'-0"±	60'-0"±	1547	26° 16' 52" RF	CONCRETE	68	60	25
++ MED-3-1706	UNDER I-71	4- SPAN STEEL BEAM	232'-0"±	60'-0"±	1547	26° 16' 52" RF	CONCRETE	68	60	25
** MED-3-1919	OVER GRANGER DITCH	SINGLE SPAN PRESTRESSED BOX BEAM	44'-2"±	44'-0"±	216	0°	ASPHALT	26	44	15

+ BUTT JOINT AT BRIDGE DECK. OMIT RESURFACING ON THE BRIDGE DECK. (SEE DETAILS IN THE PLAN FOR STRUCTURE WORK. SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES.)

* PLANE AND PAVE OVER STRUCTURE. (NO STRUCTURE WORK). (SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES.)

++ PLANE AND PAVE UNDER STRUCTURE. (NO STRUCTURE WORK). (SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES.)

** PLANE AND PAVE OVER STRUCTURE. (SEE DETAILS IN PLAN FOR STRUCTURE WORK). (SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES.)

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF
 PLANNING AND ENGINEERING

DATE
 11/11
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BRIDGE TREATMENT

MED - 3 - 13.20

DESIGN FILE: \\projects\84529\structures\MED-3-13.20.dgn
 WGRKSTATION\baratya DATE: 12/12/2011 MODELNAME: Default

DESIGN AGENCY
 ODOT DISTRICT THREE
 OFFICE OF
 PLANNING AND ENGINEERING

REVIEWED DATE 11/11
 DJV
 STRUCTURE FILE NUMBER 5200172

DRAWN KCK
 KCK
 REVISED

DESIGNED KCK
 KCK
 CHECKED

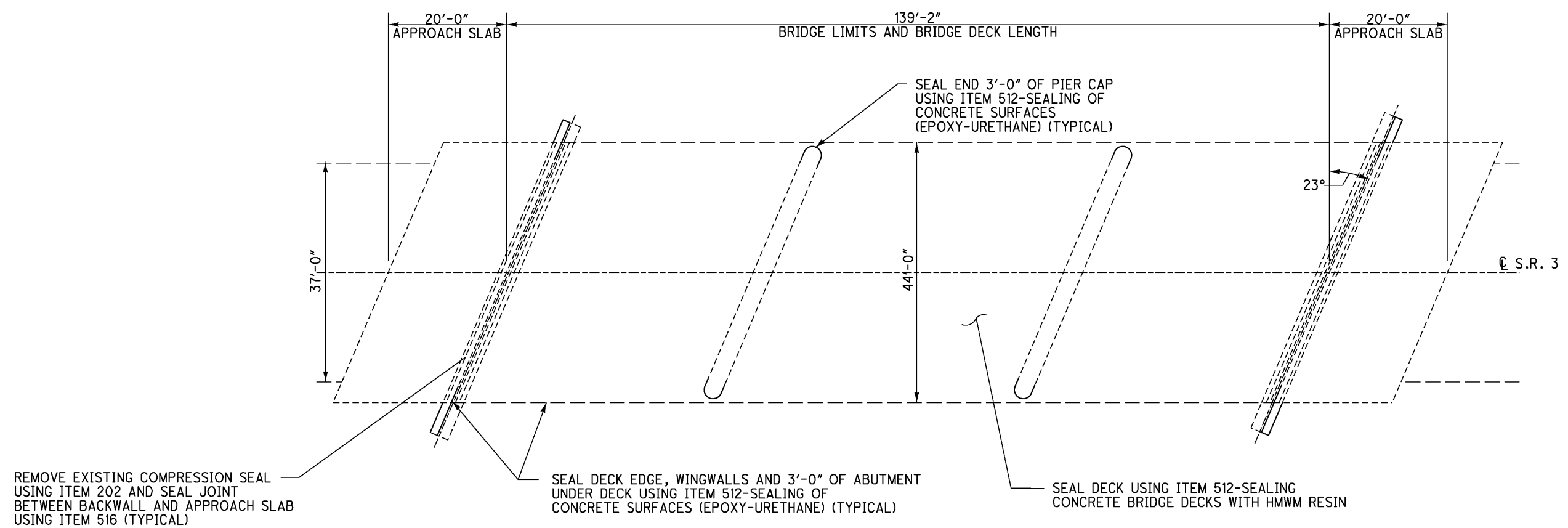
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PLAN VIEW
MED - 3-1320 OVER ROCKY RIVER

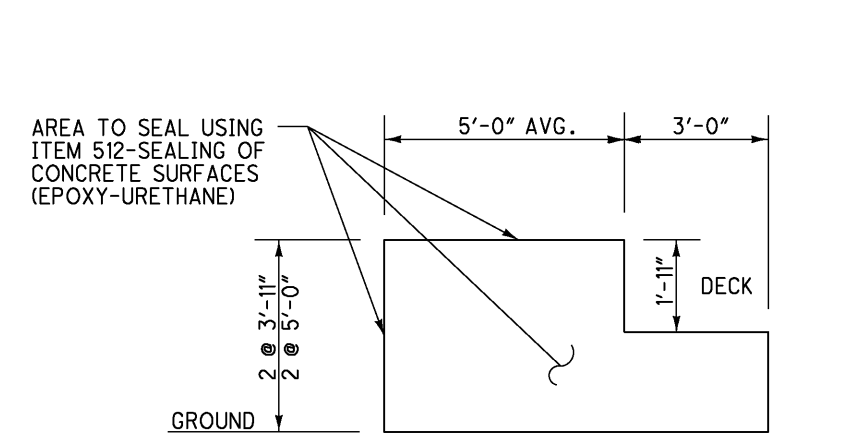
MED - 3-13.20

1 / 1

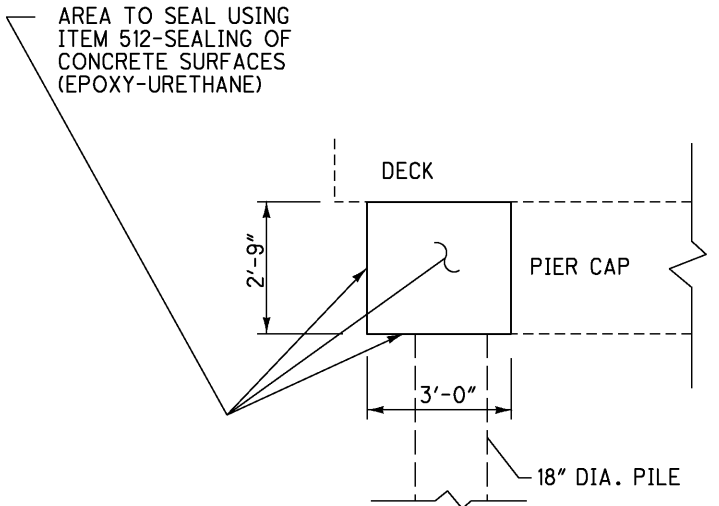
29
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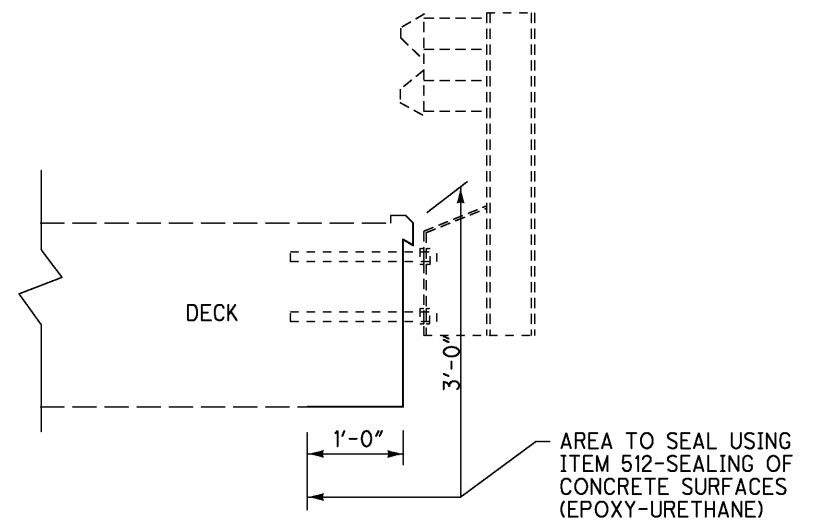
PLAN VIEW



TYPICAL WINGWALL SEALING
 (WINGWALLS ARE 1'-3" THICK)



TYPICAL PIER CAP END SEALING
 PIER CAPS ARE 2'-10" WIDE)



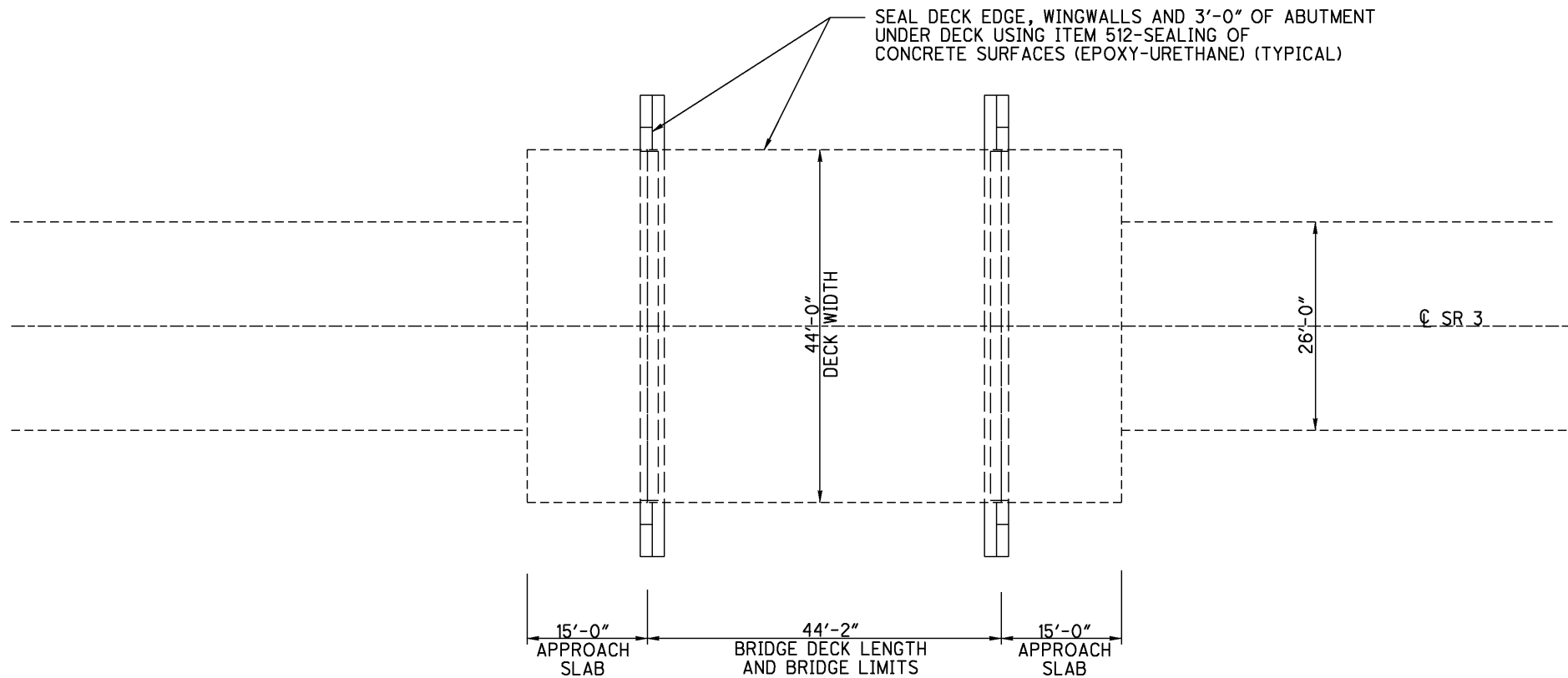
TYPICAL DECK EDGE SEALING
 (SEALING LENGTH =138')

ITEM	QUANTITY	UNIT	DESCRIPTION
202	96	FT	REMOVAL MISC.: COMPRESSION JOINT SEAL
512	121	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	681	SQ YD	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN
512	121	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES
516	96	FT	JOINT SEALER

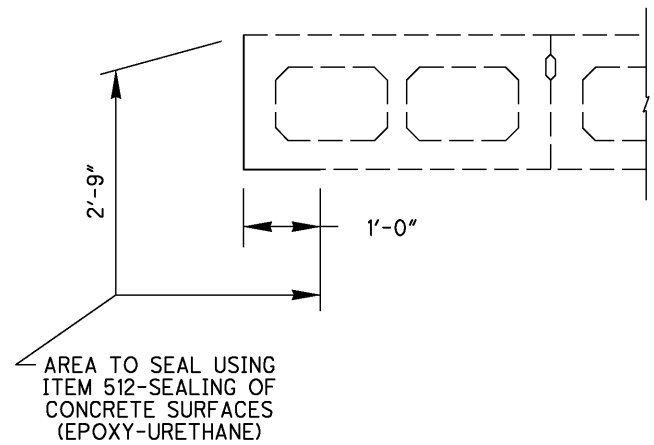
QUANTITY CARRIED TO STRUCTURE SUMMARY SHEET

DESIGN FILE: \\projects\84529\structures\MED-3-19.19.dgn
 WORKSTATION: bbaraty DATE: 12/12/2011

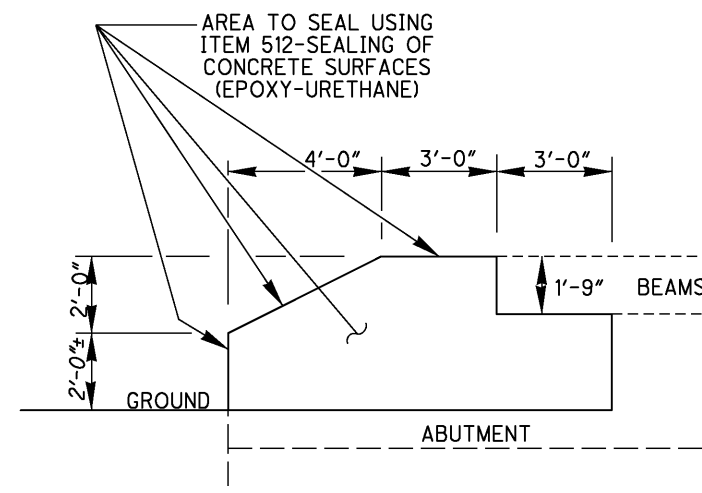
MODELNAME: Default



PLAN VIEW



TYPICAL DECK EDGE SEALING
 (SEALING LENGTH= 43'-0"±)



TYPICAL WINGWALL SEALING
 (WINGWALLS ARE 1'-6" THICK)

ITEM	QUANTITY	UNIT	DESCRIPTION
512	47	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	47	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

TOTAL QUANTITY CARRIED TO STRUCTURE SUMMARY SHEET



DESIGN AGENCY ODOT DISTRICT THREE OFFICE OF PLANNING AND ENGINEERING
REVIEWED DJV STRUCTURE FILE NUMBER 5200415
DATE 11/11
DESIGNED KCK CHECKED DCM
DRAWN KCK REVISED
PLAN VIEW MED-3-1919 OVER GRANGER DITCH
MED-3-13.20
1 / 1
30 30