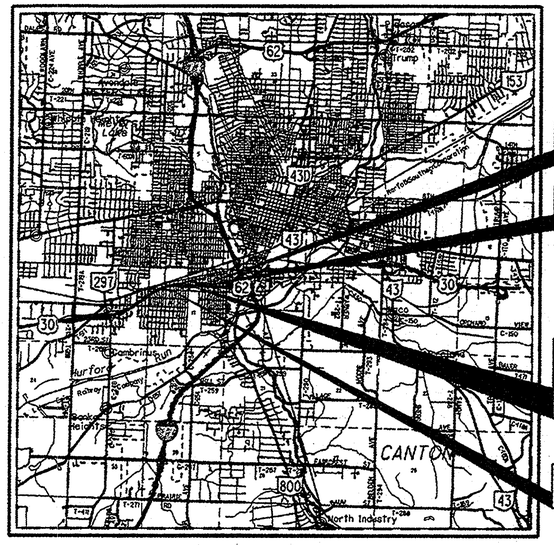
STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

STA-BH-FY2013

CITY OF CANTON

STARK COUNTY



LOCATION MAP

LATITUDE: 40°47'4" LONGITUDE: 81°24'16"

SCALE IN MILES 0 1 2 3 4

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION:
PRINCIPAL ARTERIAL - OTHER FREWY/ EXPRESSWY (URBAN)
NHS PROJECT. YES

DESIGN EXCEPTIONS

NONE

INDEX OF SHEETS:

PROJECT DESCRIPTION

IMPROVEMENT OF 826 FEET OF HARRISON AVE BY PLANING THE ASPHALT SURFACE AND PLACING AN ASPHALT LAYER. ALSO MAINTENANCE OF STRUCTURES STA-30-1391, STA-30-1421, STA-30-1438, AND STA-30-1443.

PROJECT EDA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EDA: 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 EXCEPT AS NOTED ON SHEETS 8-11, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:
ODOT-- DISTRICT 4
2088 SOUTH ARLINGTON RD
AKRON, OH 44306

ENGINEERS SEAL:

STATE OF OHIO ★ LAUREN M. PHILLIS E-75639 REGISTERED PROFESSIONAL ENGINEER ★

SIGNED: Lauren M Phillis
DATE: 1-8-13

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	4/20/12	MT-110.10	7/20/12				
BP-4.1	7/16/04						
BP-5.1	7/28/00	TC-41.20	1/19/01				
BP-7.1	10/15/10	TC-42.20	1/21/11				
		TC-52.10	1/19/07				
DM-4.3	7/20/12	TC-52.20	1/19/07				
DM-4.4	7/20/12	TC-71.10	10/19/12				
		TC-73.10	4/20/12				
MT-95.30	7/20/12	TC-82.10	1/21/11				
MT-95.31	7/20/12						
MT-95.32	7/20/12						
MT-97.10	7/20/12						
MT-97.12	7/20/12						
MT-98.29	7/20/12						
MT-101.60	7/20/12						
MT-105.10	7/20/12						

SUPPLEMENTAL SPECIFICATIONS

800-2010	1/18/13
821	4/20/12
832	5/5/09
843	4/18/03
848	10/21/11

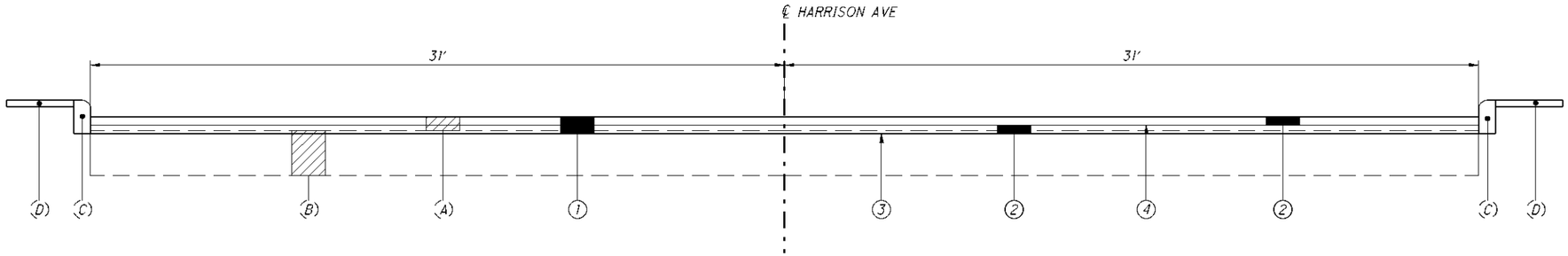
SPECIAL PROVISIONS

APPROVED: Jeffrey M. Shanks
DATE 1-9-13 DISTRICT DEPUTY DIRECTOR

APPROVED: Jerry Wray
DATE 1-18-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E(120)404
PID NO. 93089
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
STA-BH-FY2013
1 / 23

STA - VA-BH-FY2013
130242 PID - 93089
Dist 4 4/11/2013



SECTION APPLIES TO:

STATION 35+77 TO STATION 39+18
STATION 41+24 TO STATION 44+03

LEGEND

(1) ITEM 254, PAVEMENT PLANING ASPHALT CONCRETE (T = 3")
(2) ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 12.5 M, TYPE B (448) AS PER PLAN (T = 1½")
(3) ITEM 690, TRACKLESS TACK COAT @ 0.15 GAL/SY
(4) ITEM 690, TRACKLESS TACK COAT @ 0.04 GAL/SY

(A) EXISTING ASPHALT SURFACE
(B) EXISTING BITUMINOUS CONCRETE BASE
(C) EXISTING TYPE 8 CONCRETE CURB
(D) EXISTING 4" CONCRETE WALK

TYPICAL SECTIONS

STA-BH-FY2013

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEAD-QUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)
OGPUPS 1-800-925-0988
ODOT 330-786-3145 KEN GREENE

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.

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

AEP
ATTN: Ray Zitney
301 Cleveland Avenue, SW
P.O. Box 24400
Canton, Ohio 44701
330-438-7718

AT&T
The Ohio Bell Telephone Company
ATTN: Cindy Zuchegno
50 W. Bowery St.
4th Floor
Akron, OH 44308
330-384-3561

City of Canton
Water Department
ATTN Lewis Miller
2664 Harrisburg Ave. N.E.
Canton, OH 44705
330-489-3310

City of Canton Sewer Collection
ATTN: James DiMarzio
City Service Center
2901 Regent Ave. NE
Canton, OH 44705
330-489-3031
330-489-3057 Fax

Dominion East Ohio Gas
ATTN: Mary Long
320 Springside Drive
Suite 320
Akron, OH 44333
330-664-2409
888-504-0126 Fax

Stark County Metro Sewer District
ATTN: Jim Jones
1701 Mahoning Rd., N.E.
Canton, OH 44705
330-451-2314
330-453-9044 Fax

Time Warner Cable
ATTN: Ron Ferdinand
5520 Whipple Ave. NW
North Canton, OH 44720
330-494-9200
ext.330-555-3003

The Timken Company
ATTN: C. Andrew Black
1835 Dueber Ave. SW
Canton, OH 44706
330-471-3470
330-471-3774 Fax

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS WILL BE SUPPLIED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS (AT LEAST 3 DAYS PRIOR TO PERFORMING THE WORK CONTACT THE TRAFFIC OFFICE AT 330-786-3147 TO CONFIRM THE WIDTHS):

ROUTE	S.L.M. TO S.L.M.	LANE WIDTH
HARRISON AVE	35+77 TO 44+03	12'

ITEM 442- ASPHALT CONCRETE SURFACE COURSE, 12.5MM TYPE B (448), AS PER PLAN

703.05 DO NOT USE ANY FINE OR COARSE AGGREGATE WITH A 'SR' OR 'SRH' DESIGNATION ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

CURB RAMPS / DETECTABLE WARNINGS

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, INSTALLATION OF THE CURB RAMPS / DETECTABLE WARNINGS WILL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

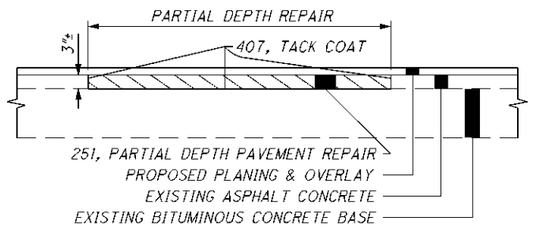
WORK LIMITS

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 251 - PARTIAL DEPTH PAVEMENT REPAIR

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 448 ASPHALT CONCRETE, TYPE 2. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

251, PARTIAL DEPTH PAVEMENT REPAIR, 50 SQ. YD.



CALCULATED CNC
CHECKED LMP

GENERAL NOTES

STA-BH-FY2013

3
23

ITEM 690 SPECIAL-MISC.: TRACKLESS TACK COAT

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

ALTERNATE PRODUCTS TO BE USED MUST BE ON FILE WITH THE NEW PRODUCT ENGINEER AT THE TIME OF THE ADVERSTISEMENT DATE OF THE PROJECT PLANS. PLEASE CONTACT BRAD YOUNG, ODOT NEW PRODUCT ENGINEER, 614-351-2882.

THIS WORK IS CONSIDERED AN EXPERIMENTAL CONSTRUCTION FEATURE FOR EVALUATION OF PRODUCTS THAT ARE ON FILE WITH THE NEW PRODUCT ENGINEER.

MEET ALL REQUIREMENTS OF ODOT 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

A MANUFACTURER'S REPRESENTATIVE MUST BE AT THE PROJECT SITE DURING THE FIRST TWO DAYS OF APPLICATION OF TRACKLESS TACK.

MATERIAL: IF USING BLACKLIDGE TRACKLESS TACK THE MATERIAL WILL CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	--	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	--	5
RESIDUE BY DISTILLATION, %	AASHTO T59	50	--
OIL DISTILLATE, %	AASHTO T59	--	1
SIEVE TEST, %	AASHTO T59	--	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C,	AASHTO T49	--	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	--
SOLUBILITY, %	AASHTO T44	97.5	--
ORIGINAL BINDER DSR@82°C G*/SIN δ,10 RAD/SEC	AASHTO T315	1.00	--

FOR TRACKLESS TACK OTHER THAN BLACKLIDGE TRACKLESS TACK, THE MATERIAL WILL CONFORM TO THE PHYSICAL PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER FOR THE TESTS LISTED BELOW:

PARAMETER	TEST METHOD
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59
STORAGE STABILITY, 24 HRS, %	AASHTO T59
STORAGE STABILITY, 5 DAYS, %	AASHTO T59
RESIDUE BY DISTILLATION, %	AASHTO T59
OIL DISTILLATE, %	AASHTO T59
SIEVE TEST, %	AASHTO T59
TEST ON RESIDUE	
PENETRATION, @ 25°C,	AASHTO T49
SOFTENING POINT RANGE DEG C	AASHTO T53
SOLUBILITY, %	AASHTO T44
ORIGINAL BINDER DSR@82°C G*/SIN δ,10 RAD/SEC	AASHTO T315

NOTE: TRACKLESS TACK SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC.

ACCEPTANCE AND SAMPLING OF MATERIALS: FOR ALL TRACKLESS TACK SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LABORATORY TO THE ENGINEER AND TO THE DISTRICT LABORATORY SHOWING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS THE PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF 2 QUARTS OF TRACKLESS TACK SAMPLED FROM THE DISTRIBUTOR ON THE FIRST DAY OF APPLICATION. CLEARLY MARK ON THE SAMPLES THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

ADDITIONAL SAMPLING OF BLACKLIDGE TRACKLESS TACK WILL FOLLOW THE REQUIREMENTS OF ITEM 407. FOR ALTERNATE TRACKLESS TACK MATERIAL, 2 QUARTS OF MATERIAL WILL BE SAMPLED EACH DAY THE MATERIAL IS USED.

EQUIPMENT: SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180° F. DO NOT EXCEED 180°F. THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: FOR ANY TRACKLESS TACK USED SUPPLY DATA FOR SHEAR AND TENSILE BOND STRENGTH ACCORDING TO METHODS DESCRIBED IN VIRGINIA TRANSPORTATION RESEARCH COUNCIL REPORT VTRC 09-R21. RANDOMLY TAKE 6-4 INCH DIAMETER CORES FROM THE PROJECT AND PERFORM 3 SHEAR AND 3 TENSILE BOND STRENGTH TESTS. BE SURE CORES TAKEN INCLUDE BOTH AN ASPHALT LAYER ABOVE AND ASPHALT LAYER BELOW THE TRACKLESS TACK LAYER.

DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DET AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY BLACKLIDGE TRACKLESS TACK FOR THE REMAINDER OF THE PROJECT AT NO COST TO THE DEPARTMENT.

ANY FAILING EXPERIMENTAL TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE NEW PRODUCT ENGINEER'S LIST.

IN THE EVENT THE PRODUCT FAILS TO PERFORM TO THE SATISFACTION OF THE DEPARTMENT, THE MANUFACTURER MAY PERFORM THE FOLLOWING ITEMS IN ORDER TO BE CONSIDERED FOR FUTURE EXPERIMENTAL CONSTRUCTION FEATURE PROJECTS:

1. SUBMIT IN WRITING TO THE DEPARTMENT THE REASON(S) WHY PRODUCT FAILED TO PERFORM AND DETAIL CHANGES THAT WILL BE MADE TO ELIMINATE THE CAUSE(S) OF FAILURE, AND
2. PROPOSE CHANGES TO THE PRODUCT'S SPECIFICATIONS, AND
3. SUBMIT SAMPLES OF THE REDEVELOPED PRODUCT TO THE LABORATORY FOR TESTING TO THE NEW SPECIFICATIONS, AND
4. DEMONSTRATE TO THE DEPARTMENT SUCCESSFUL USE OF THE MATERIAL ON AT LEAST ONE NON-ODOT PROJECT.

WHEN THE ABOVE ITEMS ARE COMPLETED TO THE DEPARTMENT'S SATISFACTION, THE REDEVELOPED AND FIELD TESTED PRODUCT MAY BE PUT BACK ON FILE WITH THE NEW PRODUCT ENGINEER AND EVALUATED ON FUTURE ODOT PROJECTS USING THE EXPERIMENTAL CONSTRUCTION FEATURE PROCESS.

CALCULATED CNC
CHECKED LMP

GENERAL NOTES

STA-BH-FY2013

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING AND COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET ON US-30 OR TWENTY (20) FEET ON HARRISON AVE. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.

4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.

6. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.

7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS ONE [1] MILE URBAN.

8. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

9. A QUANTITY OF 10 CU. YDS. OF 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.

10. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE I- PLANED SURFACE
- 614, WORK ZONE CENTER LINE, CLASS II, 0.12 MILE
- 614, WORK ZONE LANE LINE, CLASS II, 0.31 MILE
- 614, WORK ZONE STOP LINE, CLASS I, 96 FT
- 614, WORK ZONE CHANNELIZING LINE, CLASS I, 1017 FT

PHASE II- SURFACE COURSE
- 614, WORK ZONE CENTER LINE, CLASS II, 0.12 MILE
- 614, WORK ZONE LANE LINE, CLASS II, 0.31 MILE
- 614, WORK ZONE STOP LINE, CLASS I, 96 FT
- 614, WORK ZONE CHANNELIZING LINE, CLASS I, 1017 FT

PHASE III- SURFACE COURSE
- 614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT, 0.12 MILE
- 614, WORK ZONE LANE LINE, CLASS III, 642 PAINT, 0.31 MILE
- 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT, 96 FT
- 614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT, 1017 FT

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/ SUPERVISOR HAS BEEN GRANTED.

WINTER TRAFFIC LIMITATIONS

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 1. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND DISINCENTIVES OF $1300 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

DETOUR NOTIFICATION [ODOT] AND THE CITY OF CANTON

THE CONTRACTOR SHALL ADVISE THE ODOT DISTRICT OFFICE (330-786-3148) AND THE CITY OF CANTON (330-489-3381) EIGHTEEN (18) DAYS IN ADVANCE OF WHEN A DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

BRIDGE PAINTING EQUIPMENT ON SHOULDERS

IF BRIDGE PAINTING EQUIPMENT IS TO REMAIN ON THE SHOULDERS WHEN THE CONTRACTOR IS NOT WORKING, IT SHALL BE PLACED BEHIND PORTABLE CONCRETE BARRIER (PCB) AND A WORK ZONE IMPACT ATTENUATOR (WZIA) SHALL PROTECT THE LEADING BLUNT END OF THE PCB (SEE OMUTCD, FIGURE 6H-5 "SHOULDER CLOSURE ON FREEWAY" (TYPICAL APPLICATION 5)). IF THE CONTRACTOR CHOOSES TO PROTECT PAINTING EQUIPMENT WITH PCB AND A WZIA, THE COST SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

LANE CLOSURES- US 30

DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AS PER THE PERMITTED LANE CLOSURE CHART. THE PERMITTED LANE CLOSURE CHART USED FOR THIS PROJECT SHALL BE THE MOST CURRENT CHART AVAILABLE ON THE DATE THIS PROJECT SELLS.

THE CHART CAN BE FOUND AT:
http://plcm.dot.state.oh.us

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THE REQUIREMENTS IN THE CHART, THE CONTRACTOR SHALL BE ASSESSED DISINCENTIVES IN THE AMOUNT OF $2500 PER HOUR OR PORTION THEREOF THAT THE LANE REDUCTION REMAINS BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) (STA-30-1391, STA-30-1443)

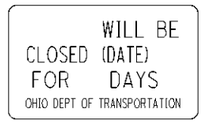
A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 5 CONSECUTIVE CALENDAR DAYS PER BRIDGE, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 7-8.

THE DETOURS FOR STA-30-1391 AND STA-30-1443 SHALL NOT BE CONCURRENT.

A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $1000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.



W20-H14-60

HARRISION AVE PAVING

ALL PAVING AND ASSOCIATED WORK FOR HARRISON AVE SHALL BE PERFORMED FROM 8:00PM TO 6:00 AM.

CALCULATED CNC CHECKED MJH

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-BH-FY2013

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR) FOR RAMP "S" CLOSURE (US 30 WEST TO HARRISON AVE) AND RAMP "T" CLOSURE (HARRISON AVE TO US 30 EAST)

THE RAMPS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 7 CONSECUTIVE CALENDAR DAYS PER RAMP, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEETS 10-11. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $1000 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

RAMP S AND T SHALL NOT BE CLOSED SIMUTANEOUSLY.

COOPERATION BETWEEN CONTRACTORS- DETOURS FOR RAMP S AND T

THE CONTRACTOR SHALL BE ADVISED THAT THERE IS A CURRENT PROJECT UNDER CONSTRUCTION, STA-77-9.05, PID 90554, ODOT PROJECT 694(2012). AS A PART OF ODOT PROJECT 694(2012) THE RAMPS AT HARRISON AVE WILL BE USED TO DETOUR TRAFFIC FROM US 30 WEST TO IR 77. ODOT PROJECT 694(2012) SHALL TAKE PRECEDENCE OVER THE CLOSURE OF RAMPS S AND T FOR BRIDGE PAINTING. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE NO DELAY OR CONFLICT WITH ODOT PROJECT 694 (2012). ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THIS COORDINATION SHALL BE INCIDENTAL TO THE VARIOUR PAY ITEMS WITHIN THIS CONTRACT.

SIDEWALK CLOSURE

ALL SIDEWALK REPAIRS AT CLARENDON AVE AND DUEBER AVE SHALL BE COMPLETED DURING THE STRUCTURE CLOSURE.

SIDEWALK REPAIRS ON EAST AND WEST SIDE OF HARRISON AVE SHALL NOT BE CONCURRENT.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-3146) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE FOLLOWING INTERSECTIONS:

HARRISON AVE AND NAVARRE RD
HARRISON AVE AND 15TH ST

LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS SPECIFIED BELOW. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10 AND THE LOOP SHALL BE PLACED AT THE SAME LOCATION AS THE EXISTING LOOPS.

THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

632 DETECTOR LOOP, AS PER PLAN, 5 EACH
(2 EACH, POWERHEAD (20' EACH), 3 EACH, ADD)

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS UNIDIRECTIONAL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS. THE APPROVED LIST IS AVAILABLE AT THE "ROADWAY STANDARDS: PROPRIETARY ROADSIDE SAFETY DEVICES" WEB PAGE ON THE OFFICE OF ROADWAY ENGINEERING WEBSITE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

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 OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

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

DAY OF HOLIDAY OR EVENT	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 FRIDAY
THURSDAY (THANKSGIVING ONLY)	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

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

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $3000 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

CALCULATED CNC CHECKED MJH

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-BH-FY2013

6
23

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 50 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A PORTABLE CHANGEABLE MESSAGE SIGN, EACH SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THIS LIST IS AVAILABLE ON THE ODOT WEBSITE AT http://www.dot.state.oh.us/divisions/constructionmgt/materials/pages/portable-changeable.aspx THE CLASS A UNITS SHALL HAVE A MINIMUM LEGIBILITY DISTANCE OF 650 FEET.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHOULD BE LOCATED BEHIND GUARDRAIL WHEREVER POSSIBLE. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE CONTRACTOR. A LIST OF ALL PROPOSED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES (ROM AND RAM) AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. MESSAGE MEMORY OR PREPROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF SIX MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF THREE MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR AREAS) ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614. THE CONTRACTOR SHALL PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 614.02.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE BID FOR EACH DAY OF ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

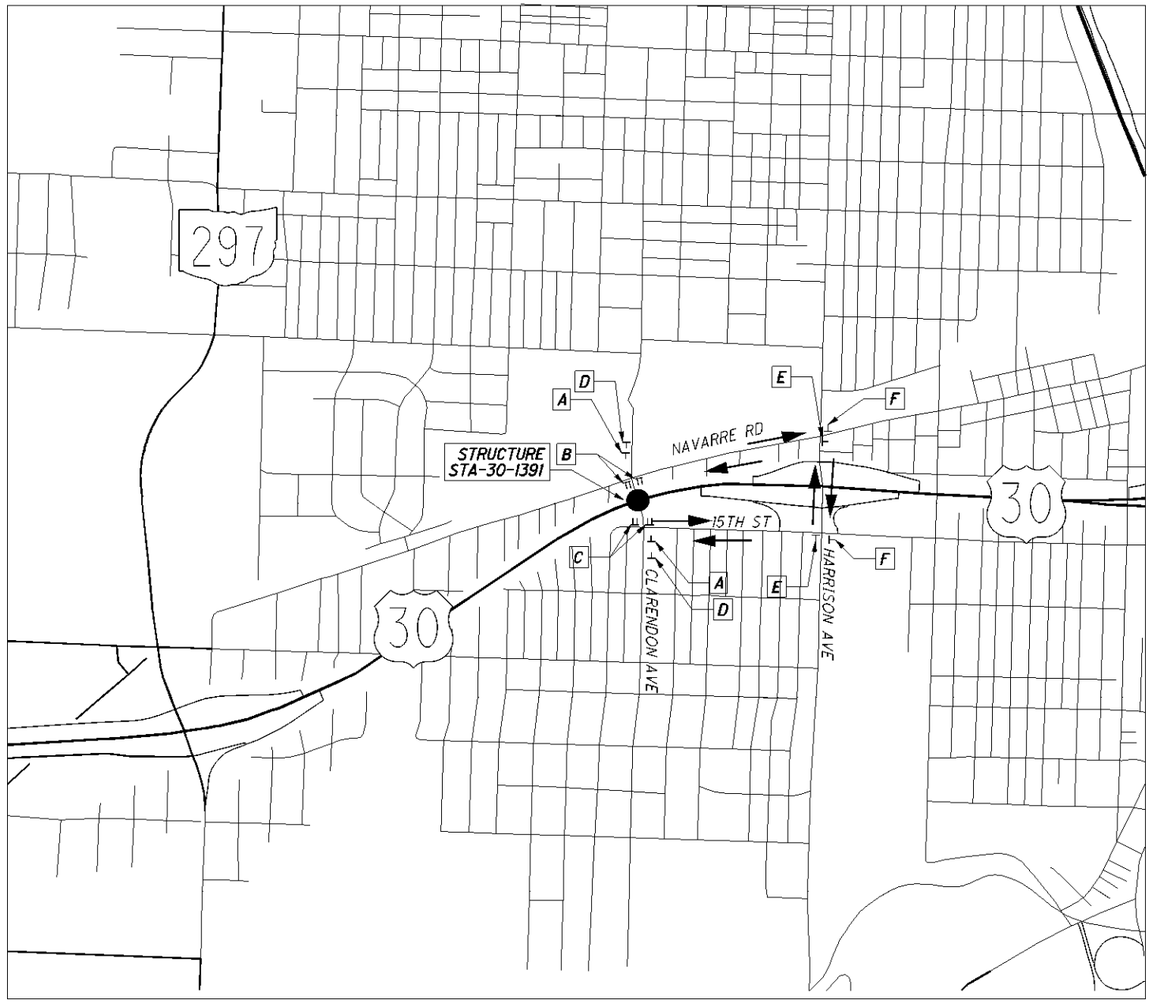
614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 14 DAY

614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 14 DAY

CALCULATED CNC CHECKED MJH

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-BH-FY2013



A

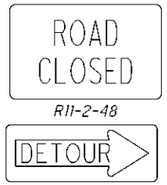
W20-2-36

B #

R11-2-48

M4-10L-48

C #



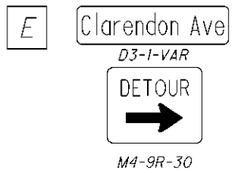
R11-2-48

M4-10R-48

D

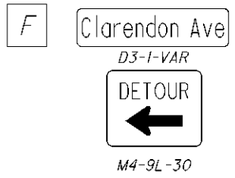
W20-3-36

E



M4-9R-30

F



M4-9L-30

NOT TO SCALE

DETOUR ROUTE FOR: STA-30-1391

OFFICIAL DETOUR ROUTE: NAVARRE RD / HARRISON AVE / 15TH STREET

CLOSED AS PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-20 (TYPICAL APPLICATION 20), FOR SIGN SPACING.

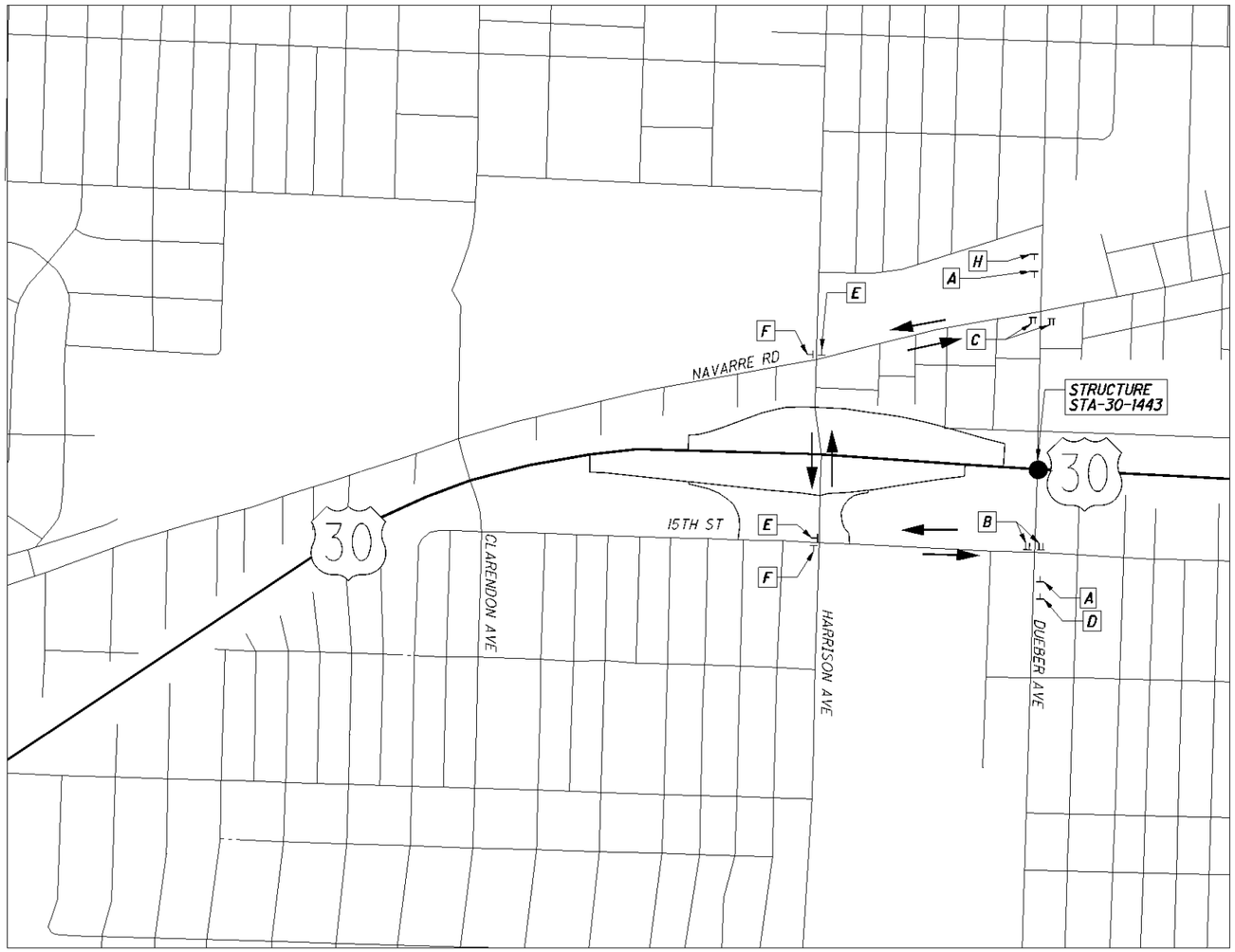
ON TYPE III BARRICADE WITH TYPE B FLASHER MOUNTED PER MT 101.60

CALCULATED CNC
CHECKED MJH

DETOUR PLAN (STA-30-1391)

STA-BH-FY2013

8
23



A — DETOUR AHEAD
W20-2-36

B # — ROAD CLOSED
R11-2-48
DETOUR
M4-10L-48

C # — ROAD CLOSED MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3A-60
DETOUR
M4-10R-48

D — ROAD CLOSED AHEAD
W20-3-36

E — Dueber Ave
D3-1-VAR
DETOUR
M4-9R-30

F — Dueber Ave
D3-1-VAR
DETOUR
M4-9L-30

NOT TO SCALE

DETOUR ROUTE FOR: STA-30-1443

OFFICIAL DETOUR ROUTE: NAVARRE RD / HARRISON AVE / 15TH STREET

CLOSED AS PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-20 (TYPICAL APPLICATION 20), FOR SIGN SPACING.

ON TYPE III BARRICADE WITH TYPE B FLASHER MOUNTED PER MT 101.60

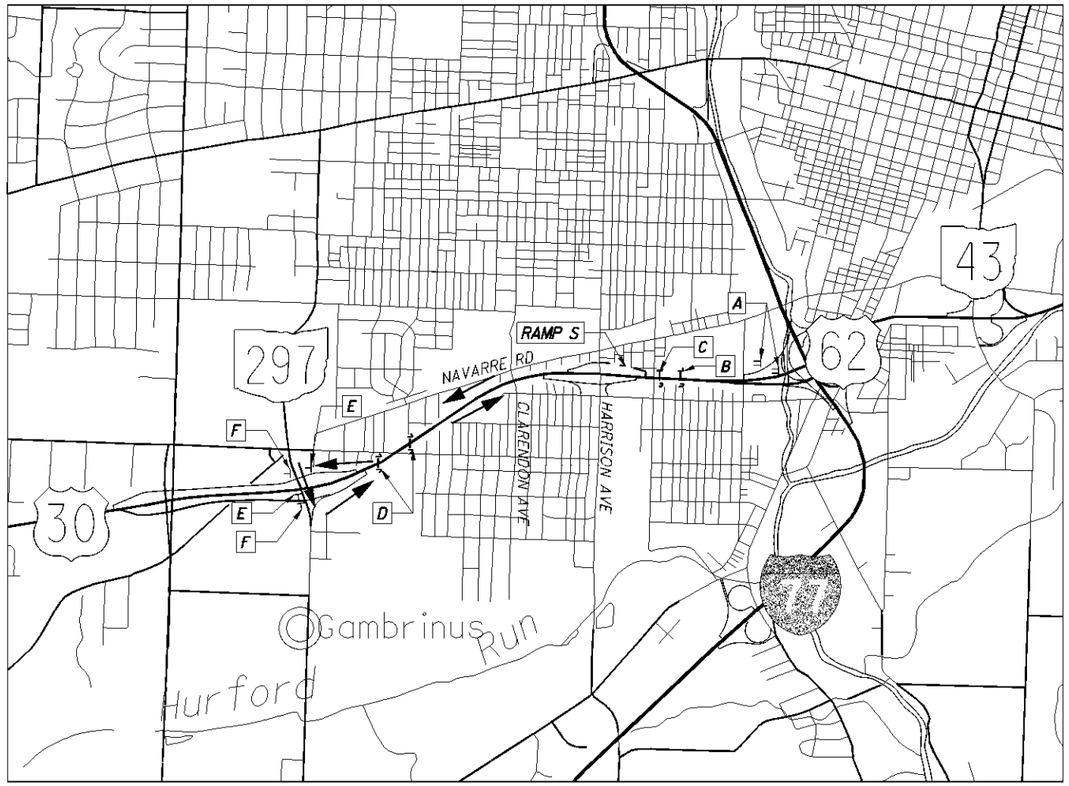
CALCULATED CNC
CHECKED MJH

DETOUR PLAN (STA-30-1443)

STA-BH-FY2013

9
23

I:\Projects\STA\93089_STA-BH FY2013\93089\roadway\sheets\93089MD001.dgn 07-JAN-2013 11:15:AM ccopelan



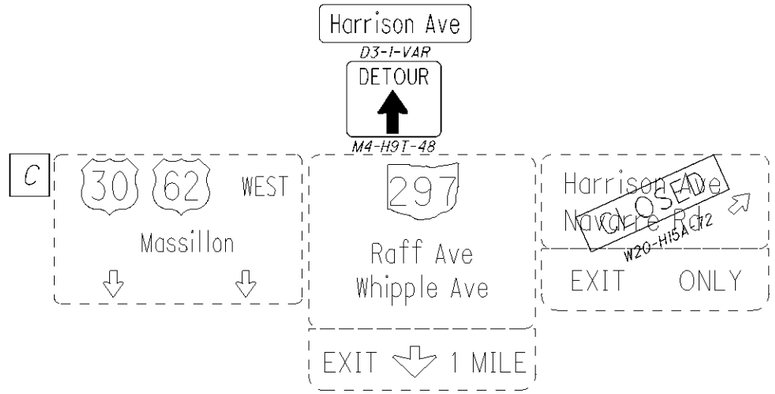
DETOUR ROUTE FOR: RAMP S (US 30 TO HARRISON AVE)

NOT TO SCALE

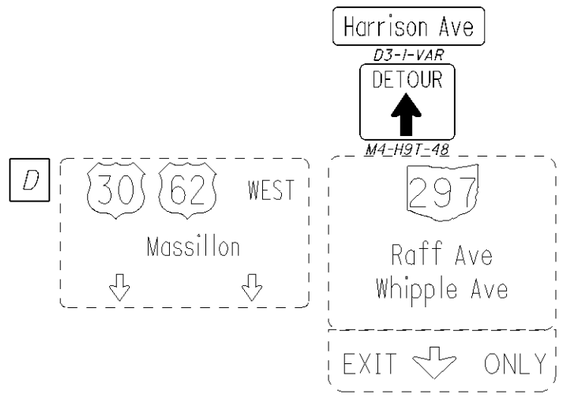
OFFICIAL DETOUR ROUTE: US 30 EAST / SR 297 / US 30 WEST

CLOSE RAMP S AS PER MT-98.29

C



D



E

F

A

PORTABLE CHANGEABLE MESSAGE SIGN MESSAGES:

1. HARRISON AVE EXIT CLOSED
2. USE SR-297 EXIT

B

CALCULATED C.NC
CHECKED MJH

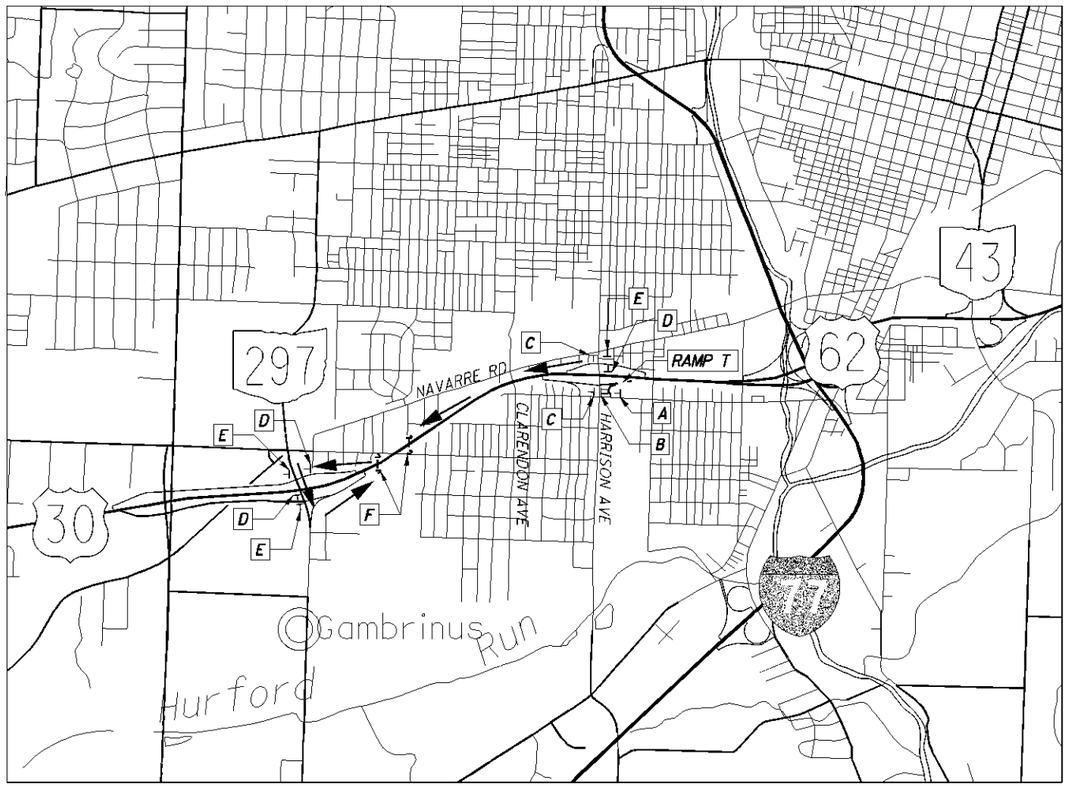
DETOUR PLAN (RAMP "S")

STA-BH-FY2013

10
23

07-JAN-2013 11:15AM ccopelan

I:\Projects\STA\93089_STA-BH FY2013\93089\roadway\sheets\93089MD001.dgn



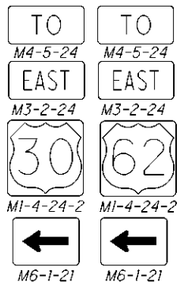
DETOUR ROUTE FOR: RAMP (HARRISON AVE TO US 30/US 62 EAST)

NOT TO SCALE

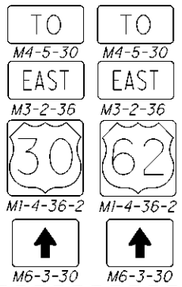
OFFICIAL DETOUR ROUTE: US 30 WEST / SR 297

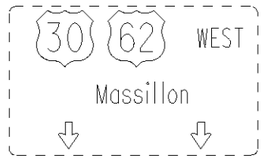
CLOSE RAMP T AS PER MT-101.60

E



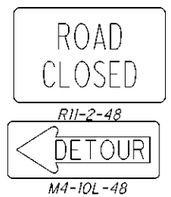
F



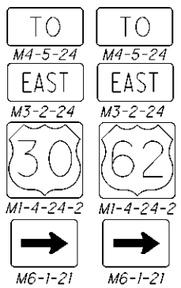


A

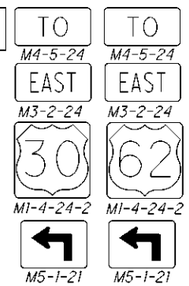
B #



C



D



ON TYPE III BARRICADE WITH TYPE B FLASHER MOUNTED PER MT 101.60

CALCULATED CNC
CHECKED MJH

DETOUR PLAN (RAMP "T")

STA-BH-FY2013

11
23

I:\Projects\STA\93089_STA-BH FY2013\93089\roadway\sheets\93089MD001.dgn 07-JAN-2013 11:15AM ccopelan

SHEET NUMBER													PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	5	6	7	13	14	15							03/S>2/PV/	01/BRO/BR/						
																			ROADWAY	
					6								6		202	23000	6	SQ YD	PAVEMENT REMOVED	
				111									111		202	23500	111	SQ YD	WEARING COURSE REMOVED	
					920								920		202	30000	920	SQ FT	WALK REMOVED	
					187								187		202	32000	187	FT	CURB REMOVED	
					240								240		608	10000	240	SQ FT	4" CONCRETE WALK	
					600								600		608	52000	600	SQ FT	CURB RAMP	
					24								24		608	53020	24	SQ FT	DETECTABLE WARNING	
					8								8		609	26000	8	FT	CURB, TYPE 6	
																			EROSION CONTROL	
														1000	832	30000	1000	EACH	EROSION CONTROL	
																			PAVEMENT	
50													50		251	01000	50	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	
				4272									4272		254	01000	4272	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
				356									356		442	20051	356	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN	3
				812									812		SPEC	69098900	812	GALLON	MISC.: TRACKLESS TACK COAT	4
																			TRAFFIC SURVEILLANCE	
		5											5		632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN	6
																			TRAFFIC CONTROL	
						0.31								0.31	646	10100	0.31	MILE	LANE LINE, 4"	
						0.12								0.12	646	10200	0.12	MILE	CENTER LINE	
						1017							1017		646	10300	1017	FT	CHANNELIZING LINE, 8"	
						96							96		646	10400	96	FT	STOP LINE	
						464							464		646	10500	464	FT	CROSSWALK LINE	
						24							24		646	10600	24	FT	TRANSVERSE/DIAGONAL LINE	
						56							56		646	10800	56	SQ FT	ISLAND MARKING	
						14							14		646	20300	14	EACH	LANE ARROW	
																			STRUCTURES	
																			FOR STRUCTURE STA-30-1391 ESTIMATED QUANTITIES	19
																			FOR STRUCTURE STA-30-1421 ESTIMATED QUANTITIES	19
																			FOR STRUCTURE STA-30-1432 ESTIMATED QUANTITIES	19
																			FOR STRUCTURE STA-30-1441 ESTIMATED QUANTITIES	19
																			MAINTENANCE OF TRAFFIC	
			50											50	614	11110	50	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	LUMP													LUMP	614	12420	LUMP		DETOUR SIGNING	
	10													10	614	13000	10	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			14											14	614	18401	14	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
	0.62												0.62		614	20400	0.62	MILE	WORK ZONE LANE LINE, CLASS II	
	0.31												0.31		614	20550	0.31	MILE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	
	0.24												0.24		614	21400	0.24	MILE	WORK ZONE CENTER LINE, CLASS II	
	0.12												0.12		614	21550	0.12	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
	2034												2034		614	23650	2034	FT	WORK ZONE CHANNELIZING LINE, CLASS II	
	1017												1017		614	23680	1017	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
	192												192		614	26000	192	FT	WORK ZONE STOP LINE, CLASS I	
	96												96		614	26610	96	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
														LUMP	614	11000	LUMP		MAINTAINING TRAFFIC	
														6	619	16000	6	MONTH	FIELD OFFICE, TYPE A	
														LUMP	623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
														LUMP	624	10000	LUMP		MOBILIZATION	

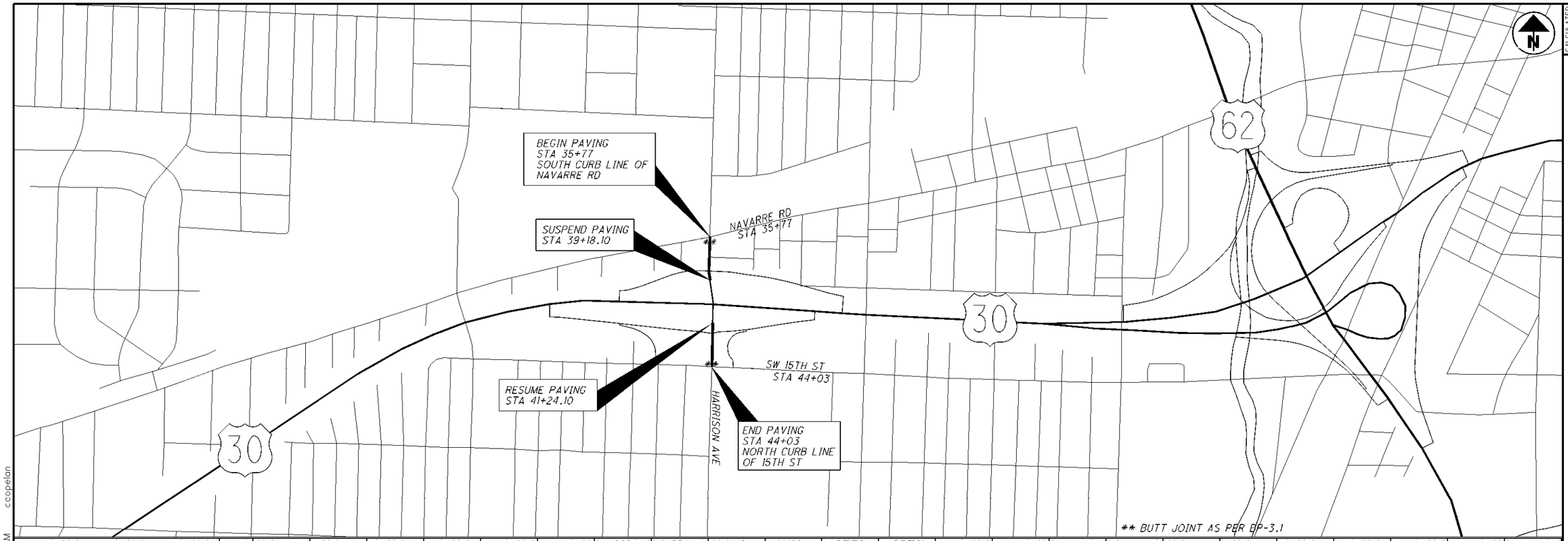
CALCULATED C.NC | CHECKED LMP

GENERAL SUMMARY

STA-BH-FY2013

12
23

E:\Projects\STA\93089_STA-BH FY2013\93089\roadway\sheets\93089GG001.dgn 07-JAN-2013 11:15AM ccopelan



STATION TO STATION			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA		202 WEARING COURSE REMOVED	254 PAVEMENT PLANING, ASPHALT CONCRETE(T= 3")	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN(T = 1 1/2")	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN(T = 1 1/2")	SPEC MISC.: TRACKLESS TACK COAT @ 0.15 GAL/SY	SPEC MISC.: TRACKLESS TACK COAT @ 0.04 GAL/SY											
					FT	FT	SQ YD	SQ YD		SQ YD	SQ YD	CU YD	CU YD	GALLON	GALLON											
35+77.00	TO	39+18.10			341.10	62.00	2349.80			55.11	2349.80	97.91	97.91	352.47	93.99											
41+24.10	TO	44+03.00			278.90	62.00	1921.31			55.11	1921.31	80.05	80.05	288.20	76.85											
								SUBTOTALS	0.00	110.22	4271.11	177.96	177.96	640.67	170.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								TOTALS CARRIED TO GENERAL SUMMARY	0	111	4272	178	178	641	171	0	0	0	0	0	0	0	0	0	0	0

CALCULATED CNC
CHECKED LMP

PAVEMENT CALCULATIONS (HARRISON AVE)

STA-BH-FY2013

CURB RAMP SUB SUMMARY

MAIN ROUTE	INTERSECTING ROUTE	QUADRANT RL=REAR LT, RR=REAR RT FL=FWD LT, FR=FWD RT (LOOKING UPSTATION)	CURB RAMP TYPE (SCD BP-7.1, SHEET 2/3)		202 PAVEMENT REMOVED	202 PAVEMENT REMOVED, ASPHALT	202 WALK REMOVED	202 CURB REMOVED	202 CURB AND GUTTER REMOVED		203 EXCAVATION (FOR WALK OR CURB RAMP INSTALLATION)		608 4" CONCRETE WALK	608 6" CONCRETE WALK	608 CURB RAMP	608 DETECTABLE WARNING			609 COMBINATION CURB AND GUTTER, TYPE 2	609 CURB, TYPE 6	
					SQ YD	SQ YD	SQ FT	FT	FT		CU YD		SQ FT	SQ FT	SQ FT	SQ FT			FT	FT	
HARRISON AVE	EXIT FROM US 30 WEST	FL			1.78											8.00					
HARRISON AVE	EXIT FROM US 30 WEST	RL	B3				72.00	18.00							40.00						
HARRISON AVE	15TH ST	FL	D				66.00	11.00							40.00						
HARRISON AVE	15TH ST	RL	D				121.00	18.00					73.00		48.00						
HARRISON AVE	15 TH ST	RR	D				60.00	17.00							40.00						
HARRISON AVE	15TH ST	FR	B2				50.00	10.00							48.00						
HARRISON AVE	RAMP TO US 30 WEST	RR			1.78											8.00					
HARRISON AVE	RAMP TO US 30 WEST	FR	B3				48.00	14.00							48.00						
HARRISON AVE	RAMP FROM US 30 EAST	RR	B3				48.00	14.00							48.00						
HARRISON AVE	RAMP FROM US 30 EAST	FR	B3				48.00	14.00							48.00					8.00	
HARRISON AVE	RAMP TO US 30 EAST	RL	B3				48.00	16.00							48.00						
HARRISON AVE	RAMP TO US 30 EAST	FL	B2				48.00	12.00							48.00						
HARRISON AVE	NARVARRE RD	RL	B2				48.00	12.00							48.00						
HARRISON AVE	NARVARRE RD	FL	D				215.00	22.00					167.00		48.00						
HARRISON AVE	NARVARRE RD	FR	D				48.00	9.00							48.00						
HARRISON AVE	NARVARRE RD	RR	D		1.78											8.00					
SUBTOTALS					0.00	5.33	0.00	920.00	187.00	0.00	0.00	0.00	0.00	240.00	0.00	600.00	24.00	0.00	0.00	0.00	8.00	0.00
TOTALS CARRIED TO GENERAL SUMMARY					0	6	0	920	187	0	0	0	0	240	0	600	24	0	0	0	8	0

CALCULATED CNC
CHECKED LMP

STA-BH-FY2013

GENERAL SPEC: 640
MATERIAL TYPE: 646

CALCULATED CNC CHECKED

EDGE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	WHITE EDGE LINE TOTAL	WHITE EDGE LINE HIGHWAY	WHITE EDGE LINE RAMP	YELLOW EDGE LINE TOTAL	YELLOW EDGE LINE HIGHWAY	YELLOW EDGE LINE RAMP	COMMENTS
TOTAL												

LANE LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	4" LANE LINE DASHED	4" LANE LINE SOLID	COMMENTS
STA	HARRISON	35+77	NAVARRE RD	44+03	15TH ST	0.31			
TOTAL						0.31			

CENTER LINE

CTY	ROUTE	TRUE LOG	FROM	TRUE LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
STA	CLARENDON	40+74.22	CLARENDON AVE	43+8.23	CLARENDON AVE	0.04		
STA	HARRISON	35+77	NAVARRE RD	44+03	15th ST	0.02		
STA	DUEBER	15+62.21	DUEBER AVE	18+14.96	DUEBER AVE	0.06		
TOTAL						0.12		

AUXILIARY

CTY	ROUTE LOCATION	TRUE LOG	CHANNEL LINE	STOP LINE	CROSS WALK LINES	TRANSVERSE DIAGONAL LINES WHITE	TRANSVERSE DIAGONAL LINES YELLOW	ISLAND MARKING	SYMBOL MARKINGS RxR	SYMBOL MARKINGS SCHOOL 72"	SYMBOL MARKINGS SCHOOL 96"	LANE ARROWS TURN LEFT	LANE ARROWS TURN RIGHT	LANE ARROWS THRU	LANE ARROWS COMB.	WORD ON PVMT ONLY 72"	WORD ON PVMT ONLY 96"	DOTTED LINES	COMMENTS
			FT	FT	FT	FT	FT	SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	
STA	HARRISON AVE		1017	96	464		24	56				8	4	2					
TOTAL			1017	96	464		24	56				8	4	2					

PAVEMENT MARKING SUB SUMMARY

STA-BH-FY2013

15
23

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

843 DATED 4-18-03
848 DATED 10-21-11

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION, INCLUDING THE 2002 INTERIM SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

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

PROPOSED WORK - STA-30-1391 (CLARENDON AVE OVER US 30)

- REMOVE EXISTING ASPHALT CONCRETE OVERLAY/ WATERPROOFING, REPLACE WITH MICRO SILICA CONCRETE OVERLAY
- CLEAN OUT EXISTING SCUPPERS
- REPAIR TRANSITION BETWEEN STRUCTURE SIDEWALK AND APPROACH SIDEWALK
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- REPAIR FACE OF CURB
- REPLACE END CROSS FRAMES WITH SECTION LOSS
- REPAIR STEEL BEAMS
- RESET AND REFUBISH FOWARD AND REAR ABUTMENT BEARINGS
- PAINT STRUCTURAL STEEL WITH OZEU PAINT SYSTEM
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, SIDEWALKS, ABUTMENTS, BACK WALLS, WING WALLS, AND PIERS WITH EPOXY-URETHANE
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE FOR SEALING OPERATIONS
- REMOVE ALL SPALLED AREAS OF BOTTOM OF DECK FLOOR AND SEAL AREAS WITH EPOXY URETHANE
- NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - STA-30-1421 (HARRISON AVE OVER US 30)

- REMOVE EXISTING ASPHALT CONCRETE OVERLAY/ WATERPROOFING, REPLACE WITH NEW ASPHALT CONCRETE OVERLAY WITH TYPE 3 WATERPROOFING
- PATCH ALL UNSOUND AREAS OF THE EXPOSED EXISTING CONCRETE WEARING SURFACE
- CLEAN OUT EXISTING SCUPPERS
- REPAIR TRANSITION BETWEEN STRUCTURE SIDEWALK AND APPROACH SIDEWALK
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- REPAIR FACE OF CURB
- REMOVE ALL SPALLED AREAS OF BOTTOM DECK FLOOR AND SEAL WITH EPOXY URETHANE
- REPLACE END CROSS FRAMES WITH SECTION LOSS
- RESET AND REFUBISH FOWARD AND REAR ABUTMENT BEARINGS
- PAINT STRUCTURAL STEEL WITH OZEU PAINT SYSTEM
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, SIDEWALKS, ABUTMENTS, BACK WALLS, WING WALLS, AND PIERS WITH EPOXY-URETHANE
- REPAIR STEEL BEAMS
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE FOR SEALING OPERATIONS
- NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - STA-30-1438 (24" O/H WATERMAIN OVER US 30)

- REPAIR STEEL RAILING
- PAINT STRUCTURAL STEEL AND RAILING WITH OZEU PAINT SYSTEM
- SEAL ALL EXPOSED CONCRETE SURFACES OF ABUTMENTS, BACK WALLS, AND WING WALLS WITH EXPOXY- URETHANE
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE FOR SEALING OPERATIONS
- NEW STRUCTURE IDENTIFICATION SIGNS

PROPOSED WORK - STA-30-1443 (DUEBER AVE OVER US 30)

- REMOVE EXISTING ASPHALT CONCRETE OVERLAY/ WATERPROOFING, REPLACE WITH CONCRETE OVERLAY.
- CLEAN OUT EXISTING SCUPPERS
- REPAIR TRANSITION BETWEEN STRUCTURE SIDEWALK AND APROACH SIDEWALK
- PATCH ALL UNSOUND AREAS OF THE CONCRETE SUBSTRUCTURE
- REPAIR FACE OF CURB
- REMOVE ALL SPALLED AREAS OF BOTTOM DECK FLOOR AND SEAL AREAS WITH EPOXY URETHANE
- REPAIR STEEL BEAMS
- REPLACE END CROSS FRAMES WITH SECTION LOSS
- RESET AND REFURBISH FOWARD AND REAR ABUTMENT BEARINGS
- PAINT STRUCTURAL STEEL WITH OZEU PAINT SYSTEM
- SEAL ALL EXPOSED CONCRETE SURFACES OF THE PARAPETS, SIDEWALKS, ABUTMENTS, BACK WALLS, WING WALLS, AND PIERS WITH EPOXY-URETHANE
- REPAIR TUBULAR RAILING
- CLEARING AND GRUBBING 15' AROUND THE STRUCTURE FOR SEALING OPERATIONS
- NEW STRUCTURE IDENTIFICATION SIGNS

CLEARING AND GRUBBING

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

ITEM 513 - STRUCTURAL STEEL, MISC.: REPLACEMENT OF END CROSSFRAMES

THIS WORK CONSISTS OF REPLACING END CROSSFRAMES THAT ARE BENT OF HAVE SECTION LOSS. THIS ITEM WILL INCLUDE SUPPLYING NEW CROSSFRAMES AND WELDING THEM BACK TO THE ORIGINAL POSITIONS OF THE CROSSFRAMES THAT ARE BEING REPLACED. AFTER REMOVAL, ALL WELDS WILL BE GROUND SMOOTH IN PREPARATION OF WELDING THE NEW CROSSFRAMES IN PLACE. ALL CROSSFRAMES TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIAL. THE NEW CROSSFRAMES WILL BE WELDED TO THE GIRDERS OR BEAMS ON BOTH SIDES OF THE VERTICAL LEG AND ON THE TOP SIDE OF THE HORIZONTAL LEG. THE ANGLE WILL BE WELDED USING A 1/4" CONTINUOUS FILLET WELD. STEEL MEMBERS TO BE FABRICATED UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. AISC CERTIFICATION IS NOT REQUIRED. THE CONTRACTOR WILL TAKE THE NECESSARY FIELD MEASUREMENTS TO VERIFY MEASUREMENTS BEFORE ORDERING MATERIALS. THE ENGINEER WILL HAVE THE AUTHORITY AND THE RESPONSIBILITY FOR ENSURING THAT THE STEEL IS ACCEPTABLE. AFTER FABRICATION THE PAY WEIGHTS SHALL BE COMPUTED IN COMPLIANCE WITH ITEM 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM EXCEPT FOR PAINT WILL BE INCLUDED FOR PAYMENT UNDER ITEM 513 - STRUCTURAL STEEL MISC.: REPLACEMENT OF END CROSSFRAMES.

ITEM 513 - STRUCTURAL STEEL, MISC.: STEEL BEAM REPAIRS

AFTER ABRASIVE BLASTING OF THE STRUCTURAL STEEL HAS BEEN COMPLETED IN PREPARATION FOR PAINTING AND THE PRIME COAT OF PAINT APPLIED (WORK WILL CONFORM TO CMS 514) THE CONTRACTOR WILL EXAMINE THE CONDITION OF THE EXISTING BEAMS AT THE ABUTMENTS AND INTERMEDIATE JOINTS (IF THEY EXIST) AND MAKE THE NECESSARY REPAIR RECOMMENDATIONS.

THE STRUCTURAL STEEL REPAIR WORK WILL CONSIST OF REPAIRING THE DETERIORATED BEAMS BY THE ADDITION OF WELDED STEEL PLATES, STIFFENERS, ANGLES, ETC. ALL WORK WILL CONFORM TO CMS 513.

THESE TASKS, AS DIRECTED BY THE ENGINEER, WILL BE COMPLETED BEFORE THE INTERMEDIATE COAT OF PAINT IS APPLIED. THE CONTRACTOR WILL PROVIDE THE ENGINEER WITH THE REPAIR PROCEDURE AND FIELD MEASUREMENT CALCULATIONS IN DETERMINING THE ACTUAL QUANTITY OF WORK REQUIRED PER THE REQUIREMENTS NOTED BELOW.

1. THE POTENTIAL REPAIR AREAS WILL BE LIMITED TO 10 FEET FROM THE ABUTMENT BEARINGS AND 10 FEET IN EACH DIRECTION FROM INTERMEDIATE JOINTS (IF THEY EXIST).
2. FLANGE AREA PERFORATIONS WILL BE REPAIRED.
3. USING A UT THICKNESS GAUGE, THE CONTRACTOR WILL QUANTIFY THE AREA OF SECTION LOSS FOR EACH BRIDGE. THE REPAIR AREA WILL BE IDENTIFIED USING A 4" x 4" WEB GRID. THE THINNEST STEEL WITHIN EACH GRID AREA WILL BE NOTED. MEASUREMENTS WILL BE RECORDED AND A COPY SUBMITTED TO THE ENGINEER.
4. ANY AREA 8" HIGH x 4" WIDE WITH 30% AVERAGE SECTION LOSS ON THE WEB WILL BE REPAIRED.
5. SECTION LOSS MORE THAN 50% FOR AN AREA GREATER THAN 8" HIGH x 4" WIDE WILL BE REPAIRED FOR THE FULL HEIGHT OF THE WEB.
6. USE THE MOST READILY AVAILABLE STEEL MATERIAL THICKNESS THAT IS AT MINIMUM EQUAL TO THE ORIGINAL THICKNESS OF THE BEAM/GIRDER SECTION TO BE REPAIRED.
7. NEW STEEL MATERIAL WILL BE SHOP PRIMED.
8. AREAS OF SECTION LOSS LOCATED BEHIND THE BACK SIDE OF THE BEARING, BETWEEN THE BEARING LOAD PLATE AND BACKWALL WILL NOT BE REPAIRED.
9. AFTER THE REPAIRS HAVE BEEN COMPLETED, REPAIR ALL DAMAGED AREAS OF THE PRIME COAT IN ACCORDANCE WITH CMS 514.22.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES BASED UPON ACTUAL DETAILS AND DIMENSIONS AT UNIT PRICE (POUND) BID FOR ITEM 513 - STRUCTURAL STEEL, MISC.: STEEL BEAM REPAIRS.

DESIGN AGENCY
ODOT -- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED		STRUCTURE FILE NUMBER
LMP			

STRUCTURE GENERAL NOTES
STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013
PID No. 93089

ITEM 514- PAINTING OF STRUCTURAL STEEL

THIS ITEM OF WORK SHALL CONSIST OF PAINTING ALL STRUCTURAL STEEL INCLUDING BUT NOT LIMITED TO THE FENCE, RAILING, STEEL DOOR, AND WATER LINE SUPPORTS ON STRUCTURES STA-30-1391, STA-30-1421, STA-30-1438, AND STA-30-1443.

THE COLOR FOR THE FINISHED COAT OF STRUCTURES STA-30-1391, STA-30-1421, STA-30-1438, AND STA-30-1443 WILL CONFORM TO FEDERAL COLOR NUMBER 14272 (GREEN).

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPER-STRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60 DEGREES F, LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 517 - RAILING MISC.: REPLACE TUBULAR RAILING

THIS WORK WILL CONSIST OF REMOVING THE DAMAGED TUBULAR RAILING AND SUPPORTS AT LEFT SIDE AT MIDSPAN AND REPLACING WITH ONE NEW TUBULAR RAILING SECTION ON THE TOP AND ONE SUPPORT ON STRUCTURE STA-30-1443. ALL RALING TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIALS. REPLACING TUBULAR RAILING AND SUPPORT WILL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 517 RAILING MISC.: REPLACE TUBULAR RAILING. THIS PRICE WILL INCLUDE THE COST FOR MATERIALS, LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE REPLACEMENT OF THE TUBULAR RAILING.

ITEM 517 - RAILING MISC.: REPLACE HAND RAILING

THIS WORK WILL CONSIST OF REMOVING SECTIONS OF THE HAND RAIL WITH SECTION LOSS WITH NEW HAND RAIL SECTIONS ON STRUCTURE STA-30-1438. ALL HAND RAILING TO BE REPLACED WILL BE FIELD MEASURED TO VERIFY SIZE AND LENGTHS PRIOR TO ORDERING MATERIALS. REPLACING THE HAND RAIL SECTIONS WILL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM 517 RAILING, MISC.: REPLACE HAND RAILING. THIS PRICE WILL INCLUDE THE COST FOR MATERIALS, WELDING NEW SECTIONS, LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE REPLACEMENT OF THE HAND RAILING.

ITEM 518 - SCUPPER MISC.: CLEANOUT

THIS WORK WILL CONSIST OF REMOVING ALL DEBRIS FROM ON TOP AND INSIDE OF THE SCUPPERS. SCUPPER CLEANOUT WILL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 518, SCUPPER MISC.: CLEANOUT. THIS PRICE WILL INCLUDE THE COST FOR LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR

THIS ITEM WILL BE USED TO REPAIR THE DETERIORATED FACE OF THE CURB ON THE BRIDGE DECK AND/OR APPROACH SLABS. THIS WORK WILL BE PERFORMED IN ACCORDANCE WITH ITEM 519 - PATCHING CONCRETE STRUCTURES AND AS MODIFIED HEREIN.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR SPECIAL - PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR AND WILL BE PAID FOR PER FOOT.

SPECIAL - STRUCTURE MISC.: CONCRETE SPALL REMOVAL

THIS WORK WILL CONSIST OF REMOVING ALL VISIBLY SPALLED AREAS OF THE BOTTOM DECK FLOOR OF STRUCTURES STA-30-1391, STA-30-1421, AND STA-30-1443 WITHOUT SOUNDING. AFTER SPALLED CONCRETE AREAS HAVE BEEN REMOVED, REMOVAL AREAS WILL BE SEALED WITH ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE).

CONCRETE SPALL REMOVAL WILL BE PAID FOR AT THE UNIT BID PRICE FOR SPECIAL 1¾ STRUCTURE MISC.: CONCRETE SPALL REMOVAL. THIS PRICE WILL INCLUDE THE COST OF LABOR, EQUIPMENT, AND ALL INCIDENTALS REQUIRED TO COMPLETE THIS WORK.

STA-30-1391
SPEC, STRUCTURE MISC.: CONCRETE SPALL REMOVAL, 75 SQ YD
512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 75 SQ YD

STA-30-1421
SPEC, STRUCTURE MISC.: CONCRETE SPALL REMOVAL, 75 SQ YD
512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 75 SQ YD

STA-30-1443
SPEC, STRUCTURE MISC.: CONCRETE SPALL REMOVAL, 75 SQ YD
512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), 75 SQ YD

STRUCTURE IDENTIFICATION SIGNS

STRUCTURE IDENTIFICATION SIGNS (I-H25a) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5' IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING STRUCTURES:
STA-30-1391 (2 APPROACHES), STA-30-1421 (2 APPROACHES), STA-30-1438 (2 APPROACHES), STA-30-1443 (2 APPROACHES)

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:
- ITEM 630 - SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 - GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

ITEM 202- WALK REMOVED
ITEM 304- AGGREGATE BASE
ITEM 608- 6" CONCRETE BASE

THESE ITEMS OF WORK WILL BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER TO REPLACE THE EXISTING APPROACH CONCRETE WALK THAT HAS DROPPED LOWER THAN THE CONCRETE WALK ON THE FOLLOWING STRUCTURES STA-30-1391, STA-30-1421, AND STA-30-1443.

DESIGN AGENCY
ODOT-- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED	STRUCTURE FILE NUMBER	

STRUCTURE GENERAL NOTES
STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013
PID No. 93089

2 / 8

17
23

ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN
ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN
ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN
ITEM 848 - WEARING COURSE REMOVED, ASPHALT, AS PER PLAN
ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN

THESE ITEMS SHALL BE PERFORMED PER SUPPLEMENTAL SPECIFICATION "BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO DEMOLITION" WITH THE FOLLOWING REVISIONS:

THE THICKNESS OF THE CONCRETE OVERLAY REMOVED, ASPHALT WEARING COURSE REMOVED, PROPOSED OVERLAY, AND THE DEPTH OF HYDRODEMOLITION SHALL BE AS SPECIFIED IN THE PLANS.

CONSTRUCTION JOINTS WILL NOT BE PERMITTED IN THE WHEEL LINE.

(SEE 848.12) THE COMPONENTS OF THE MICRO-SILICA MODIFIED CONCRETE SHALL BE PROPORTIONED AS FOLLOWS.

CONCRETE TABLE
QUANTITIES PER CUBIC YARD
AGGREGATES (SSD)

AGG. TYPE	FINE AGG. (LB)	#8 COARSE AGG. (LB) *	AGG. TOTAL (LB) *	CEMENT CONTENT (LB)	MICRO SILICA (LB)	WATER TO CEMENTITIOUS RATIO	AIR CONTENT +/- 2%	FIBER (1 1/4" POLYPROPYLENE) (LB) **
GRAVEL	1410	1430	2840	600	50	0.4	6	1
LIME-STONE	1410	1450	2860	600	50	0.4	6	1
SLAG	1300	1350	2650	600	50	0.4	6	1

* ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED PER ASTM C127

** FIBER MESH SHALL BE 100% VIRGIN POLYPROPYLENE IN A FIBRILLATED NETWORK FORM AND SHALL BE 1 ¼" IN LENGTH

THE WEIGHTS SPECIFIED IN THE CONCRETE TABLE WERE CALCULATED FOR MATERIALS OF THE FOLLOWING BULK SPECIFIC GRAVITIES (SSD): NATURAL SAND AND GRAVEL 2.62, LIMESTONE SAND 2.68, LIMESTONE 2.65, SLAG 2.30, MICRO-SILICA SOLIDS 2.20, AND PORTLAND CEMENT 3.15. FOR AGGREGATES OF SPECIFIC GRAVITIES DIFFERING MORE THAN PLUS OR MINUS 0.02 FROM THESE, THE WEIGHTS IN THE TABLE WILL BE CORRECTED. FIBER MESH WEIGHTS NOT INCLUDED IN MIX DESIGN.

ALL COARSE AGGREGATE SHALL HAVE AN ABSORPTION OF 1.00% OR GREATER AS DEFINED BY ASTM C127

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

(SEE 848.21) THE FINAL DECK SOUNDING MAY TAKE PLACE WITHIN 24 HOURS OF A RAIN, AND THE DECK DOES NOT HAVE TO BE COMPLETELY DRY.

(SEE 848.23) FULL DEPTH REPAIR IS NOT REQUIRED IF LESS THAN ONE HALF OF THE DECK ORIGINAL CONCRETE THICKNESS IS SOUND.

(SEE 848.29) THE WET CURE TIME IS REDUCED FROM 72 HOURS TO 24 HOURS OR UNTIL A BEAM BREAK OF 600 PSI IS ACHIEVED, WHICHEVER IS GREATER. AFTER THE 24 HOUR WET CURE, THE FINISHED OVERLAY SURFACE SHALL BE CURED BY SPRAYING A UNIFORM APPLICATION OF CURING MATERIAL OF 705.07, TYPE 1 OR ID, AS PER CMS 511.17 METHOD (B) MEMBRANE CURING. IF THE CURING COMPOUND CAN NOT BE PLACED WITHIN THE SAME SHORT TERM CLOSURE PERIOD AS THE OVERLAY, THE CONTRACTOR MAY ALLOW TRAFFIC ONTO THE OVERLAY, AND SHALL, AT THE NEXT AVAILABLE SHORT TERM CLOSURE PERIOD, APPLY THE MEMBRANE CURING COMPOUND.

(SEE 848.29) TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED OVERLAY SURFACE UNTIL AFTER THE COMPLETION OF THE 24 HOUR WET CURE, AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 600 PST (4.2 Mpa).

(SEE 848.30) THE OVERLAY SURFACE EVAPORATION RATE REQUIREMENTS ARE IN EFFECT FROM 11:00 AM TO 11:00 PM. THEY ARE NOT IN EFFECT FROM 11:00 PM TO 11:00 AM.

(SEE 848.31) FOR EACH PHASE, THE CONTRACTOR SHALL PROVIDE ENOUGH MATERIAL FOR TWO BEAM BREAKS EACH AT 12 HOURS, 24 HOURS, 36 HOURS, AND 48 HOURS. THE DEPARTMENT WILL PERFORM THE BEAM BREAK TESTS AND DOCUMENT THE TIME OF THE POUR, THE TIME OF THE BEAM BREAK TESTS, AND THE MODULUS OF RUPTURE FOR EACH BEAM UNTIL THE MODULUS OF RUPTURE OF THE TWO TESTS IS NOT LESS THAN 650 PSI (4.5 MPa). TRAFFIC IS ALLOWED ON THE OVERLAY AT 600 PSI (4.5 Mpa).

ALL OTHER REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION SHALL REMAIN IN EFFECT.

DESIGN AGENCY
ODOT -- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED	STRUCTURE FILE NUMBER	

STRUCTURE GENERAL NOTES

STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013
PID No. 93089

3 / 8

18 / 23

I:\Projects\STA\93089_STA-BH FY2013\93089\structures\STA030_1391C\sheets\30_1391CGN001.dgn 07-JAN-2013 11:15AM ccopelan

CALC:	CNC	DATE:	11/26/2012
CHECKED:	LMP	DATE:	1/7/2013

ESTIMATED QUANTITIES

BRIDGE NO. / STRUCTURE FILE NO.								ITEM	EXTENSION	UNIT	DESCRIPTION	SEE SHEET
STA-30-1391 SFN 7607733 01/BRO/BR	STA-30-1421 SFN 7607776 01/BRO/BR	STA-30-1438 SFN 7600917 02/NHS/BR	STA-30-1443 SFN 7607806 01/BRO/BR									
LUMP	LUMP	LUMP	LUMP					201	11000		CLEARING AND GRUBBING	
	1765							202	23500	SQ YD	WEARING COURSE REMOVED	
325	750		485					202	30000	SQ FT	WALK REMOVED	
20	20		20					304	20000	CU YD	AGGREGATE BASE	
	150							442	20051	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN	3 / 23
1000	1131	47	1251					512	10100	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	1448							512	33010	SQ YD	TYPE 3 WATERPROOFING	
3254	2199		3483					513	90000	POUND	STRUCTURAL STEEL, MISC.:STEEL BEAM REPAIRS	1 / 8
3	3		3					513	95030	EACH	STRUCTURAL STEEL, MISC.:REPLACEMENT OF END CROSS FRAMES	1 / 8
LUMP	LUMP	LUMP	LUMP					514	00100		SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	
LUMP	LUMP	LUMP	LUMP					514	00200		FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT	
LUMP	LUMP	LUMP	LUMP					514	00300		FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	
LUMP	LUMP	LUMP	LUMP					514	00400		FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	
20	31	34	30					514	00504	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL	
8	13	14	12					514	10000	EACH	FINAL INSPECTION REPAIR	
10	18		14					516	45305	EACH	REFURBISH BEARING DEVICE, AS PER PLAN	2 / 8
LUMP	LUMP		LUMP					516	47001		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN	2 / 8
			25					517	76300	FT	RAILING, MISC.:REPLACE TUBULAR RAILING	1 / 8
		200						517	76300	FT	RAILING, MISC.:REPLACE HAND RAILING	2 / 8
13	14		10					518	12500	EACH	SCUPPER, MISC.:CLEANOUT	2 / 8
200	300		300					519	11101	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	2 / 8
117	52		126					SPEC	51911720	FT	PATCHING CONCRETE STRUCTURE, MISC.: CURB REPAIR	2 / 8
	54							SPEC	51912304	SQ YD	PATCHING CONCRETE BRIDGE DECK - TYPE C	
75	75		75					SPEC	53000800	SQ YD	STRUCTURE, MISC.: CONCRETE SPALL REMOVAL	2 / 8
325	750		485					608	13000	SQ FT	6" CONCRETE WALK	
15	15	15	15					630	02100	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
2	2	2	2					630	80100	SQ FT	SIGN, FLAT SHEET, 730.20	
			1					630	84900	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
			1					630	86002	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	71							SPEC	69098900	GALLON	MISC.: TRACKLESS TACK COAT	4 /23
100	150		150					843	50000	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
952								848	10001	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T = 2 3/4")	3 / 8
			1345					848	10001	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T= 2")	3 / 8
952			1345					848	20001	SQ YD	SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN	3 / 8
25			35					848	30001	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	3 / 8
29			41					848	50000	SQ YD	HAND CHIPPING	
LUMP			LUMP					848	50100		TEST SLAB	
1			1					848	50201	CU YD	FULL DEPTH REPAIR, AS PER PLAN	3 / 8
952			1345					848	50301	SQ YD	WEARING COURSE REMOVED, ASPHALT, AS PER PLAN	3 / 8

DESIGN AGENCY
ODOT -- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/7/13
CHECKED	REVISED		STRUCTURE FILE NUMBER
LMP			

STRUCTURE DETAILS
STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

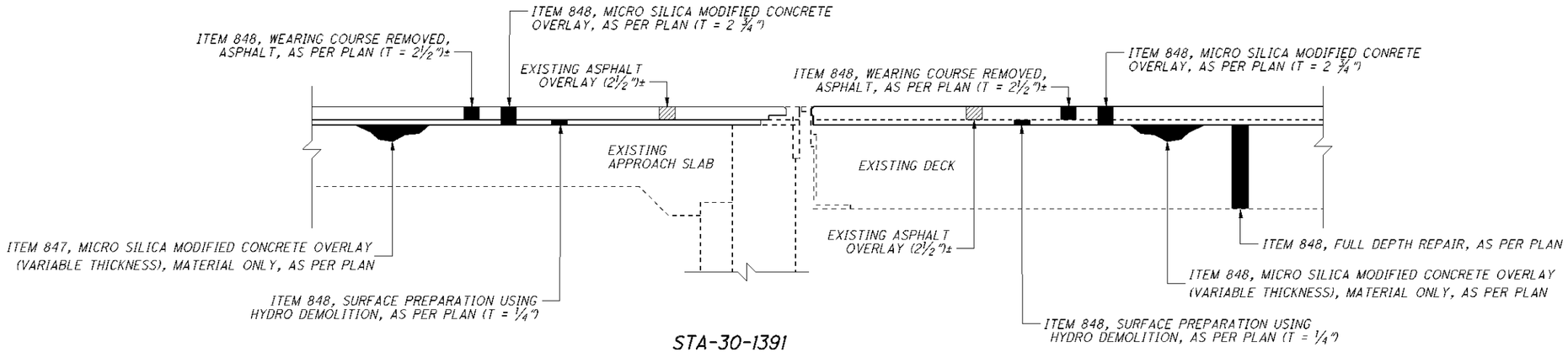
STA-BH-FY2013
PID No. 93089

4 / 8

19
23

24-JAN-2013 11:31AM lshevetz

I:\Projects\STA\93089_STA-BH_FY2013\93089\structures\STA030_139IC\sheets\030_139ICE0001.dgn



STA-30-1391

APPROACH SHOWN, TRAILING SIMILAR

BRIDGE NUMBER	BRIDGE DECK												APPROACH SLABS												
	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA	848 MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T= 2 3/4")	848 SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN(T= 1/4")	848 MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	848 HAND CHIPPING	848 TEST SLAB	848 FULL DEPTH REPAIR, AS PER PLAN	848 WEARING COURSE REMOVED, ASPHALT, AS PER PLAN (T = 2 1/2")±			LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	848 MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T= 2 3/4")	848 SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN(T = 1/4")	848 MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	848 HAND CHIPPING	848 WEARING COURSE REMOVED, ASPHALT, AS PER PLAN (T = 2 1/2")±				
	FT	FT	SQ YD	SQ YD	SQ YD	CU YD	SQ YD	LUMP	CU YD	SQ YD			FT	FT	SQ YD		SQ YD	SQ YD	CU YD	SQ YD	SQ YD				
STA-30-1391	234.01	28.00	728.03	728.03	728.03	18.20	21.84	LUMP	1.00	728.03			25.00	40.00	111.11	FWD	111.11	111.11	2.78	3.33	111.11				
													25.00	40.00	111.11	REAR	111.11	111.11	2.78	3.33	111.11				
			TOTALS	729	729	19	22	0	1	729	0	0				TOTALS	223	223	6	7	223	0	0	0	0

DESIGN AGENCY
ODOT-- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED	STRUCTURE FILE NUMBER	
LMP			

STRUCTURE DETAILS

STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013

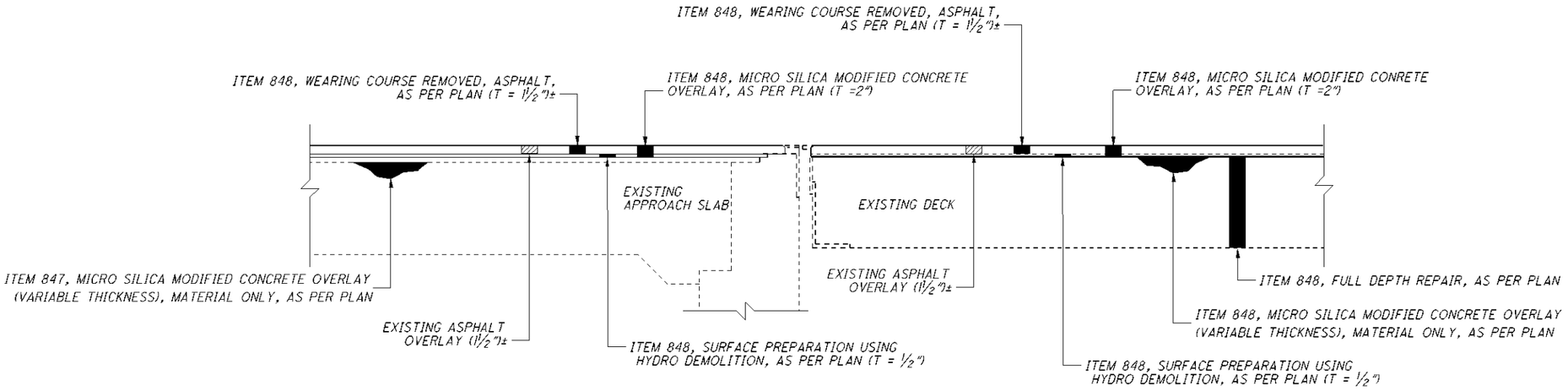
PID No. 93089

5 / 8

20 / 23

07-JAN-2013 11:15AM ccopelan

I:\Projects\STA\93089_STA-BH FY2013\93089\structures\STA030_1391C\sheets\030_1391CSD001.dgn



STA-30-1443

APPROACH SHOWN,
TRAILING SIMILAR

BRIDGE NUMBER	BRIDGE DECK												APPROACH SLABS												
	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA	848 MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T= 2")	848 SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN(T = 1/2")	848 MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	848 HAND CHIPPING	848 TEST SLAB	848 FULL DEPTH REPAIR, AS PER PLAN	848 WEARING COURSE REMOVED, ASPHALT, AS PER PLAN (T = 1 1/2")±			LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	848 MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN(T= 2")	848 SURFACE PREPARATION USING HYDRO DEMOLITION, AS PER PLAN(T = 1/2")	848 MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN	848 HAND CHIPPING	848 WEARING COURSE REMOVED, ASPHALT, AS PER PLAN (T = 1 1/2")±				
	FT	FT	SQ YD	SQ YD	SQ YD	CU YD	SQ YD	LUMP	CU YD	SQ YD			FT	FT	SQ YD		SQ YD	SQ YD	CU YD	SQ YD	SQ YD				
STA-30-1443	252.35	40.00	1121.56	1121.56	1121.56	28.04	33.65	LUMP	1.00	1121.56			25.00	40.00	111.11	FWD	111.11	111.11	2.78	3.33	111.11				
													25.00	40.00	111.11	REAR	111.11	111.11	2.78	3.33	111.11				
			TOTALS	1122	1122	29	34	0	1	1122	0	0				TOTALS	223	223	6	7	223	0	0	0	0

DESIGN AGENCY
ODOT-- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED	STRUCTURE FILE NUMBER	
LMP			

STRUCTURE DETAILS

STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

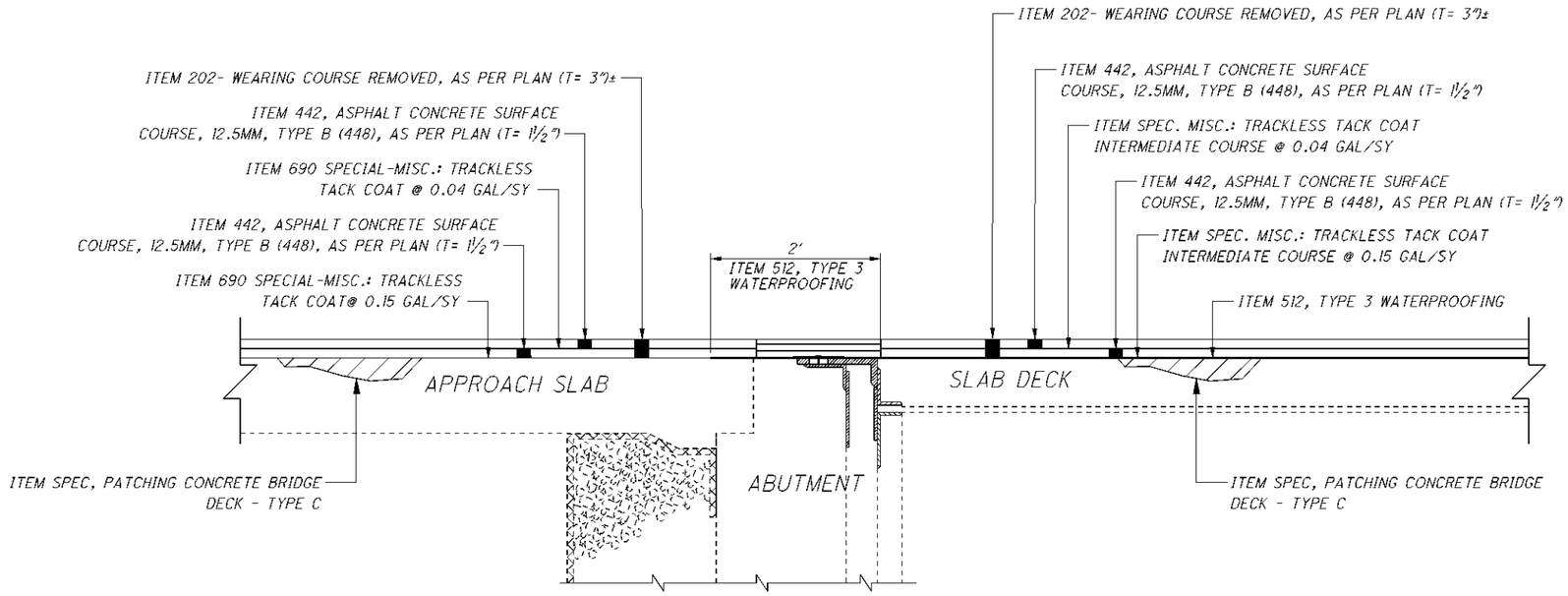
STA-BH-FY2013
PID No. 93089

6 / 8

21
23

07-JAN-2013 11:15AM ccopelan

i:\Projects\STA\93089_STA-BH FY2013\93089\structures\STA030_1391C\sheets\030_1391CSD001.dgn



STA-30-1421

APPROACH PAVEMENT SHOWN, TRAILING PAVEMENT SIMILAR

	BRIDGE DECK												APPROACH SLABS											
BRIDGE NUMBER	LENGTH (BRIDGE LIMITS)	BRIDGE WIDTH	DECK AREA	202	442	442	SPEC	SPEC	512				LENGTH (APPROACH SLABS)	APPROACH SLAB WIDTH	APPROACH SLAB AREA	APPROACH (FORWARD / REAR)	202	442	442	SPEC	SPEC	512			
				WEARING COURSE REMOVED, AS PER PLAN(T = 3")	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN (T= 1 1/2")	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN (T= 1 1/2")	MISC.: TRACKLESS TACK COAT @ 0.04 GAL/SY	PATCHING CONCRETE BRIDGE DECK - TYPE C	TYPE 3 WATERPROOFING								WEARING COURSE REMOVED, AS PER PLAN	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN (T= 1 1/2")	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (448), AS PER PLAN (T= 1 1/2")	MISC.: TRACKLESS TACK COAT @ 0.04 GAL/SY	PATCHING CONCRETE BRIDGE DECK - TYPE C	TYPE 3 WATERPROOFING			
	FT	FT	SQ YD	SQ YD	CU YD	CU YD	GALLON	SQ YD	SQ YD				FT	FT	SQ YD		SQ YD	CU YD	CU YD	GALLON	SQ YD	SQ YD			
STA-30-1421	206.00	62.00	1419.11	1419.11	59.13	59.13	56.76	42.57	1419.11				25.00	62.00	172.22	FWD	172.22	7.18	7.18	6.89	5.17	13.78			
													25.00	62.00	172.22	REAR	172.22	7.18	7.18	6.89	5.17	13.78			
TOTALS				1420	60	60	57	43	1420	0	0	0				TOTALS	345	15	15	14	11	28	0	0	0

DESIGN AGENCY
ODOT-- DISTRICT 4
PLANNING AND ENGINEERING

DATE 1/3/13
REVIEWED LMP
STRUCTURE FILE NUMBER

DRAWN CNC
REVISED

DESIGNED CNC
CHECKED LMP

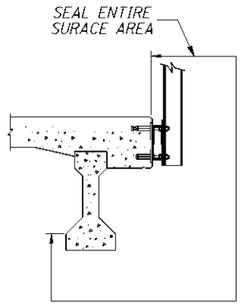
STRUCTURE DETAILS
STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013
PID No. 93089

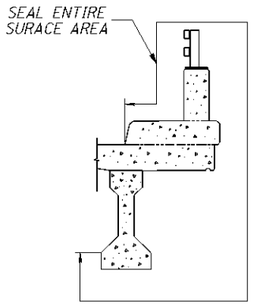
7 / 8

22
23

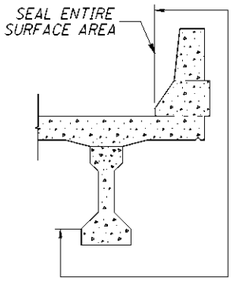
07-JAN-2013 11:15AM ccopelan
I:\Projects\STA\93089_STA-BH FY2013\93089\structures\STA030_1391C\sheets\030_1391LSD001.dgn



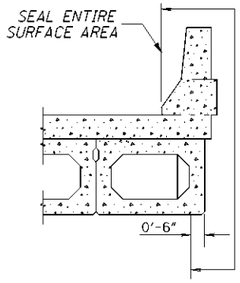
DETAIL A
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



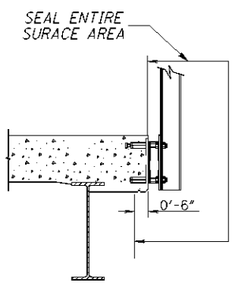
DETAIL B
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



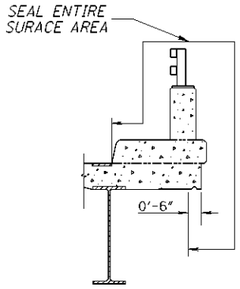
DETAIL C
CONCRETE DECK WITH
DEFLECTOR PARAPET



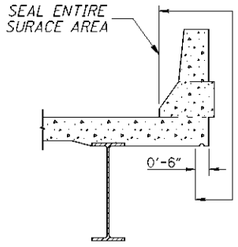
DETAIL D
PRESTRESSED BOX BEAM DECK
WITH DEFLECTOR PARAPET



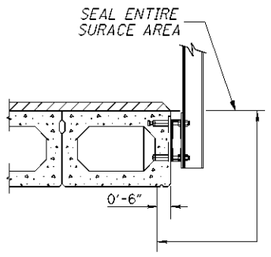
DETAIL E
CONCRETE DECKS WITH
OVER THE SIDE DRAINAGE



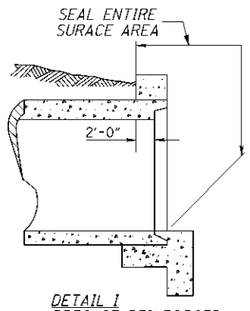
DETAIL F
CONCRETE DECKS WITH CURBS,
SIDEWALKS AND PARAPET



DETAIL G
CONCRETE DECK WITH
DEFLECTOR PARAPET



DETAIL H
PRESTRESSED BOX BEAM DECK
WITH OVER THE SIDE DRAINAGE



DETAIL I
PRECAST REINFORCED
CONCRETE BOX CULVERT

				ESTIMATED QUANTITIES				
BRIDGE NUMBER	STRUCTURE TYPE	PROPOSED SEALING	FEDERAL COLOR NUMBER	ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)
STA-30-1391	4 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL F SEAL ALL EXPOSED CONCRETE AT ABUTMENTS AND PIERS SEAL SPALL REMOVAL AREAS OF BOTTOM OF DECK FLOOR	17778 (LIGHT NEUTRAL)	70	315	540	75	1000
STA-30-1421	4 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL F SEAL ALL EXPOSED CONCRETE AT ABUTMENTS AND PIERS SEAL SPALL REMOVAL AREAS OF BOTTOM OF DECK FLOOR	17778 (LIGHT NEUTRAL)	135	190	731	75	1131
STA-30-1438	2 SPAN CONTINIOUS STEEL GIRDER	SEAL ALL EXPOSED CONCRETE AT ABUTMENTS AND PIERS	17778 (LIGHT NEUTRAL)	25	22			47
STA-30-1443	4 SPAN CONTINUOUS STEEL BEAM	SEAL PARAPETS PER DETAIL F SEAL ALL EXPOSED CONCRETE AT ABUTMENTS AND PIERS SEAL SPALL REMOVAL AREAS OF BOTTOM OF DECK FLOOR	17778 (LIGHT NEUTRAL)	105	440	631	75	1251

NOTES:
- EPOXY-URETHANE SEALER SHALL BE USED UNLESS SHOWN OTHERWISE
- DETAILS E, F, G AND H ALSO APPLY TO CONCRETE SLAB BRIDGES

SEALING OF BEAM SEATS

SEALING OF BEAM SEATS: IF THE BEAMS SEATS ARE SEALED WITH AN EPOXY OR NON-EPOXY SEALER PRIOR TO SETTING THE BEARINGS, DO NOT APPLY SEALER TO THE CONCRETE SURFACES UNDER THE PROPOSED BEARING LOCATIONS. IF THESE LOCATIONS ARE SEALED, REMOVE THE SEALER TO THE SATISFACTION OF THE ENGINEER PRIOR TO SETTING THE BEARINGS. THE DEPARTMENT WILL NOT PAY FOR THIS REMOVAL.

DESIGN AGENCY
ODOT-- DISTRICT 4
PLANNING AND ENGINEERING

DESIGNED	DRAWN	REVIEWED	DATE
CNC	CNC	LMP	1/3/13
CHECKED	REVISED	STRUCTURE FILE NUMBER	
LMP			

STRUCTURE DETAILS
STA-30-1391, STA-30-1421, STA-30-1438, STA-30-1443

STA-BH-FY2013
PID No. 93089

8 / 8

23
23

07-JAN-2013 11:15AM ccopelan

I:\Projects\STA\93089_STA-BH FY2013\93089\structures\STA030_1391C\sheets\030_1391CMD001.dgn