F.H.W.A. REGION	STATE	PROJECT NO.	FUNDS
	OHIO	BRF - IT20(1)	

SUMMIT COUNTY
SUM-WOOSTER ROAD
BRF - IT20(1)

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
SUM-WOOSTER ROAD
CITY OF BARBERTON
SUMMIT COUNTY

CONVENTIONAL SIGNS

CENTER LINE
CORPORATION LINE
FENCE LINE
GUARD RAIL (EXISTING)
GUARD RAIL (PROPOSED)
POWER POLES
TELEPHONE POLES
TREES OR STUMPS (EXISTING)
TREES OR STUMPS (TO BE REMOVED)
EXISTING R/W LINE — R/W
PROPOSED R/W LINE — R/W
PROPERTY LINE — ℄
EXISTING SANITARY SEWER — 8" SAN.
EXISTING STORM SEWER — 15" STM.
PROPOSED SANITARY SEWER — 8" SAN.
PROPOSED STORM SEWER — 15" STM
GAS LINE (EXISTING) — 4" GAS
WATER LINE (EXISTING) — 6" W.M.
PROPOSED GAS LINE — 4" GAS
PROPOSED WATER LINE — 6" W.M.
FIRE HYDRANT (EXISTING)
PROPOSED FIRE HYDRANT
GAS VALVE (EXISTING) — G.V.
GAS VALVE (PROPOSED) — G.V.
MANHOLE (EXISTING) — STM. MH. / SAN. MH
MANHOLE (PROPOSED) — STM. MH. / SAN. M.H.
INLET OR CATCH BASIN (EXISTING)
INLET OR CATCH BASIN (PROPOSED)
WATER VALVE (EXISTING) — W.V.
WATER VALVE (PROPOSED) — W.V.

INDEX TO SHEETS

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DESIGN DESIGNATION

CURRENT A.D.T. (1993) 11,793
DESIGN YEAR A.D.T. (2013) 15,639
D.H.V. 1,564
D. 55%
T. 3%

LEGAL SPEED 35 M.P.H.
DESIGN SPEED 35 M.P.H.
FUNCTIONAL CLASSIFICATION: URBAN ARTERIAL
DESIGN EXCEPTION: APPROVAL DATE
NONE

LINE DATA

BEGIN PROJECT	STA. 8+00
END PROJECT	STA. 13+10
LENGTH OF PROJECT	510 FT. or 0.097 MI.
BEGIN WORK	STA. 7+40
END WORK	STA. 13+35
LENGTH OF WORK	595 L.F. (0.113 MI.)

UNDERGROUND UTILITIES

2 WORKING DAYS
BEFORE YOU DIG
CALL-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE

NON MEMBERS
MUST BE CALLED DIRECTLY

LOCATION MAP

SCALE 1" = 3100'
FOR DETOUR SEE SHEET 14.

SCALES

PLAN:
PROFILE: HORIZONTAL = 0 20' VERTICAL = 0 20'
CROSS SECTIONS: HORIZONTAL = 0 5' VERTICAL = 0 5'

1993 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY, AND THAT DETOURS WILL BE PROVIDED AS SHOWN ON THE PLANS, SEE SHEET 14.

APPROVED: _____ SUMMIT COUNTY ENGINEER
DATE: 1-13-93

APPROVED: _____ CITY BARBERTON SAFTEY SERVICE DIRECTOR
DATE: 12/28/92

APPROVED: _____ CITY OF BARBERTON ENGINEER
DATE: 12/28/92

APPROVED: _____ DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION
DATE: _____

APPROVED: _____ ENGINEER, BUREAU OF BRIDGES AND STRUCTURES
DATE: _____

APPROVED: _____ DEPUTY DIRECTOR OF DESIGN
DATE: _____

APPROVED: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION
DATE: _____

PLANS PREPARED AND RECOMMENDED BY:
JDJ&A, INC.
CONSULTING ENGINEERS ..... ARCHITECTS ..... PLANNERS
2162 FRONT ST. CUYAHOGA FALLS, OHIO

_____ 3/5/93
STEPHANIE A. JONES P.E. No. 51365 DATE

STANDARD		DRAWINGS	
AS-1-81	11-27-81	BR-2-82	11-1-82
BP-4.1	2-21-92	EXJ-3-82	8-1-84
BP-5.1	2-21-92		
		PSBD-1-81	6-20-89
CB-6	5-1-79		
MH-1	12-18-89		
MH-3	12-18-84	MT-99.10	11-14-86
		MT-101.60	4-1-90
MC-11	8-1-78	MC-4	7-26-76

SUPPLEMENTAL		SPECIFICATIONS
836	11-12-85	
849	12-24-85	
949	9-26-86	

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED:

DIVISION ADMINISTRATOR _____ DATE

PROJECT: SUM-WOOSTER ROAD
DATE OF LETTING _____ 19__, CONTRACT No. _____

BAR-10-0361
SFN: 7731175

88011

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

2/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

TYPICAL SECTIONS

TYPE 404 ON 301

PROPOSED APPROACH SLAB
STA. 9+75.00 TO STA. 9+95.00 = 20 L.F.
STA. 10+69.50 TO STA. 10+89.50 = 20 L.F.

PROPOSED TAPER SECTION
STA. 8+08.00 TO STA. 9+75.00 = 167 L.F.
STA. 10+89.50 TO STA. 12+56.50 = 167 L.F.

** CURB TYPE VARIES
TYPE 7: STA. 8+91.20 TO STA. 9+75.00 LT.
STA. 8+59.50 TO STA. 9+75.00 RT.
STA. 10+89.50 TO STA. 12+21.50 LT.
STA. 10+89.50 TO STA. 11+40.00 RT.

TYPE 6: STA. 8+08.00 TO STA. 8+91.20 LT.
STA. 8+08.00 TO STA. 8+59.50 RT.
STA. 12+21.50 TO STA. 12+56.50 LT.
STA. 11+40.00 TO STA. 12+56.50 RT.

* 5'-0" SIDEWALK
STA.8+00.00 TO STA.8+68.50 LT.
STA.8+00.00 TO STA.8+59.95 RT.
STA.11+95.00 TO STA.13+10.00 LT.
STA.12+10.00 TO STA.13+10.00 RT.

* SIDEWALK VARIES FROM 7'-0" TO 4'-0"
STA.8+91.20 TO STA.9+75.00 LT.
STA.8+59.75 TO STA.9+75.00 RT.
* SIDEWALK VARIES FROM 4'-6" TO 7'-0"
STA.10+89.50 TO STA.11+95.00 LT.
* SIDEWALK VARIES FROM 4'-6" TO 5'-11"
STA.10+89.50 TO STA.11+40.00 RT.

PROPOSED NORMAL SECTION
STA. 8+00.00 TO STA. 8+08.00 = 8 L.F.
STA. 12+56.50 TO STA. 13+10.00 = 53.5 L.F.

EXISTING SECTION
STA. 7+40.00 TO STA. 9+97.00
STA. 10+68.00 TO STA. 13+35.00

CURB SECTION
STA. 7+45.00 TO STA. 8+00.00

LEGEND

1	ITEM 304	6" AGGREGATE BASE, AS PER PLAN
2	ITEM 611	REINFORCED CONCRETE APPROACH SLAB (T=13")
3	ITEM 301	7" BITUMINOUS AGGREGATE BASE, AC-20
4	ITEM 402	1 3/4" ASPHALT CONCRETE AC-20
5	ITEM 404	1 1/4" ASPHALT CONCRETE AC-20
6	ITEM 605	6" SHALLOW PIPE UNDERDRAIN
7	ITEM 608	4" CONCRETE WALK
8	ITEM 660	SODDING
9	ITEM 609	CURB, TYPE 7
10	ITEM 609	CURB, TYPE 6
11	ITEM 608	6" CONCRETE WALK
12	ITEM 659	SEEDING AND MULCHING
13	ITEM 203	SUBGRADE COMPACTION
14	ITEM 408	BITUMINOUS PRIME COAT
A	ITEM 202	WEARING COURSE REMOVED
B	ITEM 202	BRICK BASE REMOVED
C	ITEM 202	CURB REMOVED
D	ITEM 202	WALK REMOVED

NOTE: LEGEND CALL-OUTS ARE SYMMETRICAL ABOUT THE CENTERLINE.

BAR 10-0361
SFN: 7721175

TYPICAL SECTIONS

88011\TYPSEC.DWG

C:\D\88011\TYPSEC Thu Jun 3 13:46:57 1993 GM

GENERAL NOTES

402 - ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS: THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

403 - UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDRGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC. ALL UTILITIES ARE TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

405 - UTILITY OWNERSHIP: THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

EAST OHIO GAS
2100 EASTWOOD AVE.
AKRON, OHIO 44305
(216) 798-7148

CITY OF BARBERTON WATER
576 WEST PARK AVE.
BARBERTON, OHIO 44203
(216) 848-6720

OHIO BELL TELEPHONE CO.
2525 STATE ROAD, RM. 100
CUYAHOGA FALLS, OHIO 44223
1-800-572-4545

WARNER CABLE CO.
1655 BRITTAN ROAD
AKRON, OHIO 44310
(216) 630-9798

OHIO EDISON
111 CASCADE PLAZA
AKRON, OHIO 44308
(216) 384-4732

406 - CONTINGENCY QUANTITIES: THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEERS. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEERS' DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

510 - SEEDING

URBAN AREAS AND FREEWAYS - QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE RIGHT OF WAY FENCE LINES, BETWEEN THE RIGHT OF WAY LINES IN UNFENCED AREAS, AND WITHIN THE WORK LIMITS FOR AREAS OUTSIDE THE RIGHT OF WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT.

520 - WATERING PERMANENT SEEDED AREAS: THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09:

659 WATER 1 M GAL.

521 - TEMPORARY SOIL EROSION AND SEDIMENT CONTROL: THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207 FILTER FABRIC FENCE 100 L.F.
207 STRAW OR HAY BALES 60 EACH

207 - FILTER FABRIC FENCE:

MATERIALS: FILTER FABRIC SHALL MEET THE REQUIREMENTS OF ITEM 207.02.

CONSTRUCTION: THE BOTTOM OF THE FENCE SHALL BE BURIED 6" BELOW THE GROUND. THE FENCE SHALL BE HIGH ENOUGH TO RETAIN SEDIMENT LADEN WATER AND ADEQUATELY SUPPORTED TO PREVENT COLLAPSE OR BURSTING. THE GOUND ELEVATION OF THE FENCE SHALL BE HELD CONSTANT WITH THE EXCEPTION OF THE END ELEVATIONS WHICH SHALL BE RAISED TO PREVENT FLOW AROUND THE END OF THE FENCE.

MAINTENANCE: THE FILTER FABRIC FENCE SHALL BE MAINTAINED TO BE FUNCTIONAL. THIS SHALL INCLUDE REMOVAL OF TRAPPED SEDIMENT AND REQUIRED CLEANING, REPAIR, AND/OR REPLACEMENT OF THE FILTER FABRIC.

PAYMENT: THE COST OF ALL MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL REQUIRED SHALL BE PAID FOR UNDER ITEM 207 LIN. FT. FILTER FABRIC FENCE.

605 - CONNECTION TO EXISTING PIPE: WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING UTILITY, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS.

612 - EROSION CONTROL: ITEM 601 IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ITEM 601. THE ENGINEER SHALL ADJUST LOCATION AND QUANTITY FOR ITEM 601 WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

ELEVATION DATUM: ALL ELEVATIONS ARE BASED ON USGS DATUM. BENCH MARK SET, 1954 HI79 AT 2ND. AND HUDSON RUN ROAD, ELEVATION 970.67.

616 - REVIEW OF DRAINAGE FACILITIES: BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE PERTINENT 603 CONDUIT ITEMS OF THE CONTRACT.

619 - MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED: THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY CITY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PERTINENT 202 ITEM.

304 - AGGREGATE BASE, AS PER PLAN: MATERIALS FURNISHED FOR THIS ITEM SHALL EXCLUDE ALL SLAG EXCEPT GRANULATED SLAG OR CRUSHED AIR COOLED BLAST FURNACE SLAG.

AT THE CONTRACTOR'S OPTION, CRUSHED CONCRETE OBTAINED FROM CONCRETE PAVEMENT ON PROJECTS CONSTRUCTED UNDER ODOT SPECIFICATIONS MAY BE USED FOR ITEM 304 AGGREGATE BASE. ALL CRUSHED CONCRETE PASSING THE NO. 4 SIEVE SHALL BE REPLACED BY MATERIAL OBTAINED FROM APPROVED SOURCES. THE RECYCLED CONCRETE PAYMENT SHALL NOT CONTAIN MORE THAN 1.0% RECYCLED ASPHALT PAVEMENT. ALL OTHER REQUIREMENTS OF 304 AND 703.04 SHALL APPLY.

711 - 407 TACK COAT: THE TACK COAT OPERATION SHALL BE DETERMINED AS PER SPEC. 407.05. PLAN QUANTITIES INDICATE AVERAGE APPLICATION RATES OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

6412 - JOINT SEALERS: ALL REFERENCES TO 705.01 OR 705.02, APPEARING ON STANDARD DRAWINGS OR ON THE PLANS, SHALL BE CONSIDERED TO READ 705.04.

614 - MAINTAINING TRAFFIC:

DETOUR LIMITATION AND INTERIM COMPLETION DATE: TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 120 CONSECUTIVE CALENDAR DAYS, THROUGH TRAFFIC WILL BE DETOURED AS SHOWN ON SHEET NO. 14 .

THE CONTRACTOR SHALL NOTIFY THE DISTRICT TRAFFIC ENGINEER IN WRITING A MINIMUM OF EIGHTEEN (18) DAYS IN ADVANCE OF THE DATE THE DETOUR IS NEEDED. THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN, AND REMOVE THE DETOUR. ALL DETOUR SIGNS SHALL BECOME THE PROPERTY OF THE SUMMIT COUNTY ENGINEER'S OFFICE UPON COMPLETION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES (AT THE APPROXIMATE WORK LIMITS OF THE PROJECT) AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

THE 180 CONSECUTIVE CALENDAR DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 180 CONSECUTIVE CALENDAR DAYS THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES, AS PER SECTION 108.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 616 - CALCIUM CHLORIDE 1 TON
ITEM 616 - WATER 5 M. GALS.

LIGHTS AND SIGNS AT ADJACENT ROAD INTERSECTIONS: THE CONTRACTOR SHALL, IN ADDITION TO THE GENERAL REQUIREMENTS OF ITEM 614 ON THIS PROJECT, PERFORM THE FOLLOWING:

PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" SIZE "ROAD CLOSED" SIGNS, SIGN SUPPORTS, AND LIGHTS AT THE FOLLOWING LOCATIONS DURING PERIOD(S) IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC:

1. JUST WEST OF WOOSTER ROAD BRIDGE.
2. JUST EAST OF WOOSTER ROAD BRIDGE.

SIGN SUPPORTS AND LIGHTS FOR "ROAD CLOSED" SIGNS SHALL BE AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR PROVIDING, ERECTING, MAINTAINING, AND REMOVING LIGHTS, SIGNS, AND SIGN SUPPORTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

310 - CONTRACTOR'S MAINTENANCE RESPONSIBILITY: ON THIS PROJECT, THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF THE EXISTING PAVEMENT, PER ITEM 614, SHALL BE LIMITED TO THOSE PORTIONS OF THE EXISTING HIGHWAY LYING WITHIN THE PROPOSED WORK LIMITS. NECESSARY UPKEEP OF THE ADJOINING PAVEMENTS WHICH ARE USED FOR TRAFFIC MAINTENANCE BUT ARE OUTSIDE OF THE RIGHT OF WAY FOR THE PROPOSED HIGHWAY RELOCATION WILL BE PROVIDED BY OTHERS.

PERMANENT MARKINGS SHALL BE COMPLETE AND IN PLACE ON ALL PAVEMENT PRIOR TO EXPOSING IT TO TRAFFIC. PAYMENT FOR ACCEPTED QUANTITIES COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE FOR ITEM 642. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS, AND EQUIPMENT FOR PLACEMENT OF PERMANENT PAVEMENT MARKINGS AS OUTLINED ON STANDARD CONSTRUCTION DRAWING MT-99.10.

638 - 8-INCH WATER MAIN, DUCTILE IRON PIPE, ANSI CLASS 54, BOLTLESS-RESTRAINED JOINTS AND FITTINGS, AS PER PLAN: UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, INCIDENTALS AND EQUIPMENT NECESSARY TO CONSTRUCT COMPLETE IN PLACE THE 8-INCH WATER MAIN ALONG THE NORTH SIDE OF THE WOOSTER ROAD BRIDGE OVER WOLF CREEK BETWEEN STA. 9+77.72 AND STA. 10+87.45 AS SHOWN ON SHEETS 25, 26 AND 27 OF 34. THIS ITEM INCLUDES, BUT NOT LIMITED TO, DUCTILE IRON PIPE AND FITTINGS, PIPE EXPANSION JOINT, PIPE COUPLINGS, PIPE RIGID INSULATION WITH WATERPROOFING JACKET, PIPE ROLLS, AND FULLY THREADED HANGER RODS, AND ALL OTHER WORK NECESSARY TO COMPLETE THE WORK, ALL IN ACCORDANCE WITH THE PLANS, ITEM 638 - WATER MAINS AND SERVICE BRANCHES, AND AS DIRECTED BY THE ENGINEER.

WATERMAIN SUGGESTED SEQUENCE OF CONSTRUCTION

A HYDRANT SHALL BE MAINTAINED IN SERVICE DURING ROADWAY AND BRIDGE RECONSTRUCTION, AT THE NORTHWEST APPROACH OF THE BRIDGE.

PHASE I

1. CLOSE VALVE AT STA 12+60 AND TEMPORARILY CAP THE EXISTING 8" WATERMAIN AT STA 11+37.
2. RECONSTRUCT THE EXISTING 8" WATERMAIN FROM STA 8+99 TO STA 9+40 INCLUDING THE NEW HYDRANT AT STA 9+35 AND GATE VALVE AT STA 9+40.
3. PRESSURE TEST THE NEW WATERMAIN SECTION.
4. DISINFECT THE NEW AND THE AFFECTED EXISTING WATERMAIN SECTIONS.

PHASE II

1. RECONSTRUCT THE PROPOSED WATERMAIN ON THE BRIDGE AND IN THE APPROACHES.
2. PRESSURE TEST THE NEW WATERMAIN SECTION.
3. CONNECT WATERMAIN ON BOTH SIDES OF THE BRIDGE.
4. DISINFECT THE PROPOSED AND THE AFFECTED EXISTING WATERMAIN.

	BY	DATE
CALC.	R.B.	1/93
CHECKED	TES	1/93

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

SUMMIT COUNTY
SUM-WOOSTER RD.

GENERAL SUMMARY

ITEM	SHEET NUMBER 3	6	7	8	25	30	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
											ROADWAY
201							201	11000	LUMP		CLEARING AND GRUBBING
202		22	130				202	23000	152	SQ.YD.	PAVEMENT REMOVED
202			113				202	23500	113	SQ.YD.	WEARING COURSE REMOVED
202			1087				202	24000	1087	SQ.YD.	BRICK BASE REMOVED
202		250	234				202	30000	484	SQ.FT.	WALK REMOVED
202		500	481				202	32000	981	LIN. FT.	CURB REMOVED
202		66					202	35200	66	LIN. FT.	PIPE REMOVED, OVER 24"
202		20					202	38000	20	LIN. FT.	GUARDRAIL REMOVED
202		2					202	58000	2	EACH	MANHOLE REMOVED
202		2	2				202	58100	4	EACH	CATCH BASIN REMOVED
202		121	157				202	75000	278	LIN. FT.	FENCE REMOVED
202		1					202	75254	1	EACH	GATE REMOVED FOR REUSE
202		1					202	75610	1	EACH	VALVE BOX REMOVED
203				823			203	12000	823	CU.YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203		11		132			203	20000	143	CU.YD.	EMBANKMENT
203			2230				203	50000	2230	SQ.YD.	SUBGRADE COMPACTION
604						2	604	38500	2	EACH	MONUMENT ASSEMBLY
608		1826	1665				608	10000	3491	SQ.FT.	4" CONCRETE WALK
608		400					608	13000	400	SQ.FT.	6" CONCRETE WALK
608		115	525				608	15000	640	SQ.FT.	8" CONCRETE WALK
616	5						616	10000	5	M.GAL	WATER
616	1						616	20000	1	TON	CALCIUM CHLORIDE
653			2				653	10000	2	CU.YD.	TOP SOIL FURNISHED AND PLACED
											WATER WORKS
638		1					638	00804	1	EACH	6" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 54 BOLTLESS-RESTRAINED JOINTS & FITTINGS
638		153					638	01406	153	LIN. FT.	8" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 54 BOLTLESS-RESTRAINED JOINTS & FITTINGS
638					110		638	01407	110	LIN. FT.	8" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 54 BOLTLESS-RESTRAINED JOINTS & FITTINGS, AS PER PLAN, SEE SHEET 3.
638		1					638	07800	1	EACH	6" GATE VALVE AND VALVE BOX
638		1					638	07900	1	EACH	8" GATE VALVE AND VALVE BOX
638		1					638	10200	1	EACH	6" FIRE HYDRANT
638		1					638	10700	1	EACH	FIRE HYDRANT REMOVED AND DISPOSED OF
638		1					638	10800	1	EACH	VALVE BOX ADJUSTED TO GRADE
											EROSION CONTROL
207	100						207	30000	100	LIN.FT.	FILTER FABRIC FENCE
207	60						207	70000	60	EACH	STRAW OR HAY BALES
601		166					601	11000	166	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE
601		85					601	32304	85	CU.YD.	ROCK CHANNEL PROTECTION, TYPE D, WITH FABRIC FILTER
601		14					601	34200	14	CU.YD.	ROCK CHANNEL PROTECTION, TYPE C, WITHOUT FILTER
659				587			659	10000	587	SQ.YD.	SEEDING AND MULCHING
659			0.1				659	20000	0.1	TON	COMMERCIAL FERTILIZER
659			0.3				659	30000	0.3	TON	AGRICULTURAL LIMING
659			1				659	35000	1	M.GAL	WATER
660		80	105				660	30000	185	SQ.YD.	SODDING

BAR 10-0361
PSF N: 7731175

GENERAL SUMMARY

\D\88011\GENSUM.DWG

C:\D\88011\GENSUM Wed Jun 16 16:02:22 1993 GW

	BY	DATE
CALC.	R.B.	1/93
CHECKED	TES	1/93

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

SUMMIT COUNTY
SUM-WOOSTER RD.

GENERAL SUMMARY

ITEM	SHEET NUMBER 3	6	7			14		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
												DRAINAGE
602		7						602	20000	7	CU.YD.	CONCRETE MASONRY
603			45					603	04600	45	LIN. FT.	12" CONDUIT, TYPE C
603		53						603	13600	53	LIN. FT.	30" CONDUIT, TYPE C
604			2					604	02000	2	EACH	CATCH BASIN, No.6
604			2					604	09000	2	EACH	CATCH BASIN ADJUSTED TO GRADE
604		2	1					604	31500	3	EACH	MANHOLE No.3
604		2						604	34500	2	EACH	MANHOLE ADJUSTED TO GRADE
605		479	420					605	11100	899	LIN. FT.	6" SHALLOW PIPE UNDERDRAIN
												PAVEMENT
255		108						255	20000	108	LIN.FT.	FULL DEPTH PAVEMENT SAWING
301			381					301	10002	381	CU.YD.	BITUMINOUS AGGREGATE BASE, AC-20
304			372					304	20001	372	CU.YD.	AGGREGATE BASE, AS PER PLAN, SEE SHEET 3.
402			95					402	20000	95	CU.YD.	ASPHALT CONCRETE, AC-20
404			72					404	20000	72	CU.YD.	ASPHALT CONCRETE, AC-20
407			8.5					407	10000	8.5	GAL.	TACK COAT
408			78					408	10000	78	GAL.	BITUMINOUS PRIME COAT
452		5	17					452	12000	22	SQ.YD.	8"PLAIN CONCRETE PAVEMENT
609		261	379					609	26000	640	LIN. FT.	CURB, TYPE 6
609		221						609	28000	221	LIN. FT.	CURB, TYPE 7
611			227					611	10000	227	SQ.YD.	REINFORCED CONCRETE APPROACH SLAB (T=13")
												TRAFFIC CONTROL
614						0.11		614	21000	0.11	MILE	TEMPORARY CENTER LINE, CLASS I
616	5							616	10000	5	M. GAL	WATER
616	1							616	20000	1	TON	CALCIUM CHLORIDE
642						0.11		642	00302	0.11	MILE	CENTER LINE, TYPE 2
												GENERAL
614						LUMP		614	10000	LUMP		MAINTANING TRAFFIC
619	LUMP							619	15010	LUMP		FIELD OFFICE, TYPE B
623	LUMP							623	10000	LUMP		CONSTRUCTION LAYOUT STAKES
624	LUMP							624	10000	LUMP		MOBILIZATION

FOR STRUCTURE QUANTITIES SEE SHT. 17

BAR 10-0361
SF.NO. 773475

C:\D\88011\GENSUM2 Tue Jun 8 10:38:55 1993 GW
\D\88011\GENSUM2.DWG

MARK	STATION FROM	STATION TO	SIDE	ITEM 452 8" PLAIN CONCRETE PAVEMENT SQ. YD.	ITEM 603 30" CONDUIT TYPE C LIN. FT.	ITEM 604 MANHOLE No. 3 EACH	ITEM 604 MANHOLE ADJUSTED TO GRADE EACH	ITEM 605 6" SHALLOW PIPE UNDERDRAIN LIN. FT.	ITEM 608 4" CONCRETE WALK SQ. FT.	ITEM 608 6" CONCRETE WALK SQ. FT.	ITEM 608 8" CONCRETE WALK SQ. FT.	ITEM 609 CURB TYPE 6 LIN. FT.	ITEM 609 CURB TYPE 7 LIN. FT.	ITEM 660 SODDING SQ. YD.
D1	8+68.20	8+91.20	LT.	5										
MH1	9+75.52		RT.			1								
MH2	10+98.19		RT.			1								
P1	9+75.52	9+97.34	RT.		22									
P2	10+67.73	10+98.19	RT.		31									
U1	7+46.00	9+75.00	LT.					229						
U2	7+45.28	9+75.00	RT.					229						
U3	10+89.50	11+00.00	LT.					10.50						
U4	10+89.50	11+00.00	RT.					10.50						
SW1	8+00.00	8+68.20	LT.						341					
SW2	8+00.00	9+75.00	RT.						962					
SW3	8+68.20	8+91.20	LT.								115			
SW4	8+91.20	9+75.00	LT.						425					
SW5	9+75.00	9+95.00	LT.							100				
SW6	9+75.00	9+95.00	RT.							100				
SW7	10+69.50	10+89.50	LT.							100				
SW8	10+69.50	10+89.50	RT.							100				
SW9	10+89.50	11+00.00	LT.						49					
SW10	10+89.50	11+00.00	RT.						49					
C1	7+45.00	8+91.20	LT.									146		
C2	7+45.00	8+59.50	RT.									115		
C3	8+91.20	9+75.00	LT.										84	
C4	8+59.50	9+75.00	RT.										116	
C5	10+89.50	11+00.00	LT.										10.50	
C6	10+89.50	11+00.00	RT.										10.50	
S1	7+40.00	8+68.50	LT.											39
S2	7+40.00	8+59.95	RT.											41
AM1	8+93.60		LT.											
AM2	9+11.00		LT.				1							
							1							
TOTAL				5	53	2	2	479	1826	400	115	261	221	80

MARK	STATION FROM	STATION TO	SIDE	ITEM 202 PAVEMENT REMOVED SQ. YD.	ITEM 202 WALK REMOVED SQ. FT.	ITEM 202 CURB REMOVED LIN. FT.	ITEM 202 PIPE REMOVED OVER 24" LIN. FT.	ITEM 202 GUARD-RAIL REMOVED LIN. FT.	ITEM 202 MANHOLE REMOVED EACH	ITEM 202 FENCE REMOVED LIN. FT.	ITEM 202 GATE REMOVED FOR REUSE EACH	ITEM 255 FULL DEPTH PAVEMENT SAWING LIN. FT.
DR1	8+70.00	8+95.40	LT.	14								
DR2	10+86.00	11+00.00	LT.	8								
SR1	8+00.00	9+95.00	LT.		108							
SR2	8+00.00	9+95.00	RT.		108							
SR3	10+69.50	11+00.00	LT.		17							
SR4	10+69.50	11+00.00	RT.		17							
CR1	7+45.00	9+95.00	LT.			250						
CR2	7+45.00	9+95.00	RT.			250						
PR1	9+75.00	9+99.96	RT.				25					
PR2	10+57.28	10+98.19	RT.				41					
GR1	10+65.5	10+85.50	LT.					20				
FR1	8+06.40	9+98.40	RT.							192		
FR2	10+78.69	10+85.92	LT.							16		
FR3	10+85.92	11+64.33	LT.								1	
FR4	10+78.99	10+82.92	RT.							13		
MR1	9+93.00		LT.						1			
MR2	10+72.50		LT.						1			
PC1	7+46.00	8+00.00	LT.									54
PC2	7+46.00	8+00.00	RT.									54
TOTAL				22	250	500	66	20	2	121	1	108

UNDER STRUCTURE: STA.9+97.25 TO STA.10+67.25

ITEM 203 EMBANKMENT

VOL. = $\left[(2.5\ \text{FT.})(7\ \text{FT.})(10\ \text{FT.}) + \frac{\pi}{4}(8)^2(2.5\ \text{FT.})\right]\frac{1}{27}$ = 11 CU. YD.

ITEM 601 RIPRAP USING 6" REINFORCED CONCRETE SLAB

6" SLAB AREA: 4 $\left[(8\ \text{FT.})(10\ \text{FT.}) + \frac{\pi}{4}(8\ \text{FT.})^2(2.5\ \text{FT.})\right]\frac{1}{9}$ = 58 SQ. YD.

CUTOFF WALL: EQUIVALENT TO 108 SQ. YD. 6"THICK

TOTAL 166 SQ. YD.

ITEM 601 ROCK CHANNEL PROTECTION, TYPE D WITH FABRIC FILTER

VOL. = $\left[(21\ \text{FT.})(2\ \text{FT.})(9\ \text{FT.}) + (10\ \text{FT.})(1'-6")(8\ \text{FT.}) + \frac{\pi}{4}(8\ \text{FT.})^2(1'-6")\right]\frac{1}{27} \times 4$ = 85 CU. YD.

ITEM 602 CONCRETE MASONARY

H1: STA.9+97.34

END AREA $(1\ \text{FT.})(7.92\ \text{FT.}) + \left[\frac{1}{2}(1.5\ \text{FT.})(7.92\ \text{FT})\right]$ = 13.85 FT.²

VOL. = $\left[(13.85\ \text{FT.})^2(7\ \text{FT.} + 6.5\ \text{FT.}) - \pi\left(\frac{30"}{12}\right)^2 1\ \text{FT.}\right]\frac{1}{27}$ = 6 CU. YDS.

H2: STA.10+67.73

VOL. = $\left[(6.5\ \text{FT.})(1\ \text{FT.})(3.75\ \text{FT.}) - \frac{1}{2}\pi\left(\frac{30"}{12}\right)^2 1\ \text{FT.} + 3\ \text{FT.}(1\ \text{FT.})(3.75\ \text{FT.})\right]\frac{1}{27}$ = 1 CU. YD.

TOTAL = 7 CU. YD.

ITEM 601 ROCK CHANNEL PROTECTION, TYPE C WITHOUT FABRIC FILTER

RC1: STA.9+97.73 TO STA.10+07.34 PLANIMETERED = 114.48 FT.²

VOL. = $\left[114.48\ \text{FT.}^2\left(\frac{18"}{12}\right) + 2(1.5\ \text{FT.})(5.5\ \text{FT}) + \frac{1}{2}(1.5\ \text{FT.})(1.5\ \text{FT.})(5.5\ \text{FT.})\right]\frac{1}{27}$

= 7 CU. YD.

RC2: STA.10+57.73 TO STA.10+67.73 PLANIMETERED = 115.95 FT.²

$\left[115.95\ \text{FT.}^2(1.5\ \text{FT.}) + 2\ \text{FT.}(1\ \text{FT.})(5.5\ \text{FT.})\right]\frac{1}{27}$ = 7 CU. YD.

TOTAL 14 CU. YD.

ITEM 202 VALVE BOX REMOVED

V1: STA.9+67.00 1 EACH

	BY	DATE
CALC.	REB	12/92
CHECKED	TES	12/92

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-1T20(1)	

6/34

SUMMIT COUNTY
SUM-WOOSTER RD.

WATERWORKS MARK	STATION FROM	STATION TO	SIDE	ITEM 638 8"WATER MAIN DUCTILE IRON PIPE A.N.S.I. CLASS 54 BOLTLESS RESTAINED JOINTS & FITTINGS LIN. FT.	ITEM 638 8" GATE VALVE AND VALVE BOX EACH	ITEM 638 6" FIRE HYDRANT EACH	ITEM 638 FIRE HYD. REMOVED & DISPOSED OF EACH	ITEM 638 VALVE BOX ADJUSTED TO GRADE EACH
W1	8+99.00	9+77.72	LT.	99				
W2	10+87.45	11+37.00	LT.	54				
W3	9+35.14		LT.			1		
HR1	9+75.00		LT.				1	
GA1	9+40.00		LT.		1			
G1	12+65.00		LT.					1
TOTAL				153	1	1	1	1

QUANTITY CALCULATIONS

BAR 10-0361
SFN: 7731118

\88011\WRDQUANT.DWG

C:\D\88011\WRDQUANT Thu Jun 3 08:02:00 1993 GW

	BY	DATE
CALC.	REB	12/92
CHECKED	TES	12/92

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-1T20(1)	

SUMMIT COUNTY
SUM-WOOSTER RD.

MARK	STATION FROM	STATION TO	SIDE	ITEM 452 8" PLAIN CONCRETE PAVEMENT SQ. YD.	ITEM 603 12" CONDUIT TYPE C LIN. FT.	ITEM 604 CATCH BASIN, NO. 6 EACH	ITEM 604 MANHOLE NO. 3 EACH	ITEM 604 CATCH BASIN, ADJUSTED TO GRADE EACH	ITEM 605 6" SHALLOW PIPE UNDERDRAIN LIN. FT.	ITEM 608 4" CONCRETE WALK SQ. FT.	ITEM 608 8" CONCRETE WALK SQ. FT.	ITEM 609 CURB TYPE 6 LIN. FT.	ITEM 609 CURB TYPE 7 LIN. FT.	ITEM 660 SODDING SQ. YD.
D1	12+21.50	12+56.50	LT.	13										
D2	11+40.00	11+65.00	RT.	1										
D3	11+95.00	12+20.00		3		1								
CB1	11+86.91		LT.			1								
CB2	11+86.91		RT.											
A1	12+69.70		LT.					1						
A2	12+73.90		RT.					1						
P1	11+86.91		LT. & RT.		40									
P2	11+86.92		RT.		5									
U1	11+00.00	11+86.91	LT.						87					
U2	11+00.00	11+86.91	RT.						87					
U3	11+86.91	12+69.70	LT.						83					
U4	11+86.91	12+73.90	RT.						87					
U5	12+69.70	13+10.00	LT.						40					
U6	12+73.90	13+10.00	RT.						36					
SW1	11+00.00	12+21.50	LT.							693				
SW2	11+00.00	11+40.00	RT.							204				
SW3	12+21.50	12+56.50	LT.								175			
SW4	11+40.00	12+10.00	RT.								350			
SW5	12+56.50	13+10.00	LT.							268				
SW6	12+10.00	13+10.00	RT.							500				
C1	11+00.00	12+21.50	LT.										122	
C2	11+00.00	11+40.00	RT.										40	
C3	12+21.50	13+10.00	LT.									89		
C4	11+40.00	13+10.00	RT.									170		
C5	12+20.00	13+10.00	RT.									90		
C6	11+00.00	11+40.00	RT.										40	
C7	11+65.00	11+95.00	RT.									30		
S1	11+95.00	12+27.50	LT.											12
S2	12+21.50	13+20.00	LT.											44
S3	12+10.00	13+20.00	RT.											49
MH 3	11+90		RT.				1							
TOTAL				17	45	2	1	2	420	1665	525	379	202	105

MARK	STATION FROM	STATION TO	SIDE	ITEM 202 PAVEMENT REMOVED SQ. YD.	ITEM 202 WALK REMOVED SQ. FT.	ITEM 202 CURB REMOVED LIN. FT.	ITEM 202 CATCH BASIN REMOVED EACH	ITEM 202 FENCE REMOVED LIN. FT.
DR1	11+00.00	11+59.00	LT.	33				
DR2	10+83.20	11+79.80	RT.	53				
DR3	11+91.20	12+71.30	RT.	44				
SR1	11+00	13+10.00	LT.		117			
SR2	11+00	13+10.00	RT.		117			
CR1	10+69.50	13+10.00	LT.			240.5		
CR2	10+69.50	13+10.00	RT.			240.5		
R1	11+39.78		LT.				1	
R2	11+85.00		RT.				1	
FR1	11+00.00	12+57.00	LT.					157
TOTAL				130	234	481	2	157

PAVEMENT QUANTITIES

STA. 9+75.00 TO STA. 9+95.00 = 20 FT.
STA.10+69.50 TO STA.10+89.50 = 20 FT.
40 FT.

ITEM 203 : $\left[(40\text{ FT.})(50\text{ FT.})+2\left(\frac{6\text{ IN.}}{12}\right)(40\text{ FT.})\right]\frac{1}{9}$ = 227 SQ. YD.

ITEM 304 $(40\text{ FT.})(51\text{ FT.})\left(\frac{6\text{ IN.}}{12}\right)\frac{1}{27}$ = 37.8 CU. YD.

ITEM 611 : $\left[(40\text{ FT.})(50\text{ FT.})+2\left(\frac{6\text{ IN.}}{12}\right)(40\text{ FT.})\right]\frac{1}{9}$ = 227 SQ. YD.

STA. 8+08.00 TO STA. 9+75.00 = 167
STA.10+89.50 TO STA.12+55.47 = 166
333 FT.

ITEM 203 : $(333\text{ FT.})\left(\frac{41'-8''+51'-0''}{2}\right)\left(\frac{1}{9}\right)$ = 1714 SQ. YD.

ITEM 304 $(333\text{ FT.})\left(\frac{41'-8''+51'-0''}{2}\right)\left(\frac{6''}{12}\right)\left(\frac{1}{27}\right)$ = 285.7 CU. YD.

ITEM 301 : $(333\text{ FT.})\left(\frac{40'-8''+50'-0''}{2}\right)\left(\frac{7''}{12}\right)\left(\frac{1}{27}\right)$ = 326 CU. YD.

ITEM 402 : $(333\text{ FT.})\left(\frac{40'-8''+50'-0''}{2}\right)\left(\frac{1.75''}{12}\right)\left(\frac{1}{27}\right)$ = 81.5 CU. YD.

ITEM 404 : $(333\text{ FT.})\left(\frac{40'-8''+50'-0''}{2}\right)\left(\frac{1.25''}{12}\right)\left(\frac{1}{27}\right)$ = 58.2 CU. YD.

ITEM 408 : $(333\text{ FT.})\left(\frac{40'-8''+50'-0''}{2}\right)\left(\frac{0.04\text{ GAL}}{\text{SQ.YD.}}\right)\left(\frac{1}{9}\right)$ = 67 GAL.

STA. 8+00.00 TO STA. 8+08.00 = 8.00 FT.
STA.12+55.47 TO STA.13+10.00 = 54.53 FT.
62.53 FT.

ITEM 203 : $(62.53\text{ FT.})(41'-8'')\left(\frac{1}{9}\right)$ = 289 SQ. YD.

ITEM 304 : $(62.53\text{ FT.})(41'-8'')\left(\frac{6''}{12}\right)\left(\frac{1}{27}\right)$ = 48.2 CU. YD.

ITEM 301 : $(62.53\text{ FT.})(40'-8'')\left(\frac{7''}{12}\right)\left(\frac{1}{27}\right)$ = 55 CU. YD.

ITEM 402 : $(62.53\text{ FT.})(40'-8'')\left(\frac{1.75''}{12}\right)\left(\frac{1}{27}\right)$ = 13.7 CU. YD.

ITEM 404 : $(62.53\text{ FT.})(40'-8'')\left(\frac{1.25''}{12}\right)\left(\frac{1}{27}\right)$ = 9.8 CU. YD.

ITEM 408 : $(62.53\text{ FT.})(40'-8'')\left(\frac{0.04\text{ GAL}}{\text{SQ.YD.}}\right)\left(\frac{1}{9}\right)$ = 11 GAL.

STA.13+10.00 TO STA.13+35.00 = 25.00 FT.

ITEM 404 : $(25\text{ FT.})(40'-8'')\left(\frac{1.25''}{12}\right)\left(\frac{1}{27}\right)$ = 4 CU. YD.

ITEM 407 TACK COAT (0.075 GAL/SQ.YD.)

STA. 13+10.00 TO STA. 13+35.00 = 25.00 FT.

ITEM 407 : $(25.00\text{ FT.})(40'-8'')\left(\frac{0.075\text{ GAL}}{\text{SQ. YD.}}\right)\left(\frac{1}{9}\right)$ = 8.5 GAL

ITEM 659 COMMERCIAL FERFILIZER

STA. 8+00.00 TO STA. 13+10.00 = 510.00 FT.

ITEM 659 : $(587\text{ SQ. YD.})\left(\frac{20\text{ LB}}{1000\text{ FT.}^2}\right)\left(\frac{9\text{ FT.}^2}{\text{YD.}^2}\right)\left(\frac{1\text{ TON}}{2000\text{ LB}}\right)$ = 0.1 TON

ITEM 659 WATER

STA. 8+00.00 TO STA. 13+10.00 = 510.00 FT.

ITEM 659 : $(587\text{ SQ. YD.})\left(\frac{120\text{ GAL}}{1000\text{ FT.}^2}\right)\left(\frac{9\text{ FT.}^2}{\text{YD.}^2}\right)$(2 APPLICATIONS) = 1 M.GAL

ITEM 659 AGRICULTURAL LIMING

STA. 8+00.00 TO STA. 13+10.00 = 510.00 FT.

ITEM 659 $(587\text{ SQ. YD.})\left(\frac{100\text{ LB}}{1000\text{ FT.}^2}\right)\left(\frac{9\text{ FT.}^2}{\text{YD.}^2}\right)\left(\frac{1\text{ TON}}{2000\text{ LB}}\right)$ = 0.3 TON

ITEM 202 WEARING COURSE REMOVED

STA. 13+10.00 TO STA. 13+35.00 = 25.00 FT.

ITEM 202 : $(25.00\text{ FT.})(40'-8'')\left(\frac{1}{9}\right)$ = 113 SQ. YD.

ITEM 202 BRICK BASE REMOVED

STA. 8+00.00 TO STA. 9+75.00 = 175.00 FT.
STA. 10+69.50 TO STA. 13+10.00 = 240.50 FT.
415.50 FT.

ITEM 202 : $(415.50\text{ FT.})(40'-8'')\left(\frac{1}{9}\right)$ = 1878 SQ. YD.

TOTAL

ITEM 203 : 227 + 1714 + 289 = 2230 SQ. YD.
ITEM 304 : 37.8 + 285.7 + 48.2 = 372 CU. YD.
ITEM 301 : 326 + 55 = 381 CU. YD.
ITEM 402 : 81.5 + 13.7 = 95 CU. YD.
ITEM 404 : 5.82 + 9.8 + 4 = 72 CU. YD.
ITEM 611 : 227 SQ. YD.
ITEM 408 : 67 + 11 = 78 GAL.

BAR 10-0361
SFN: 773075

QUANTITY CALCULATIONS

\88011\WRDQUANT.DWG

C:\D\88011\WRDQUANT Tue Jun 15 13:33:25 1993 GM

	BY	DATE
CALC.	R.B.	12/92
CHECKED	B.R.H.	12/92

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

SUMMIT COUNTY
SUM-WOOSTER ROAD

4" THICK SIDEWALK

* 6" THICK APPROACH SIDEWALK SEE SHT. 13 .

FOR HEADWALL DETAILS SEE SHT. 13 .

FOR QUANTITY CALCULATIONS SEE SHT. 6 .

EXISTING STRUCTURE

TYPE: 1 SPAN RIVETED PLATE GIRDER ON STONE AND CONCRETE ABUTMENTS.

SPAN: 65'-6" F/F ABUTMENTS
ROADWAY: 40'-8" F/F CURB
SKEW : NONE
ALIGNMENT : TANGENT
APPROACH SLAB: NONE
WEARING SURFACE: ASPHALT CONCRETE
CONDITION: POOR BUILT 1910
STRUCTURE FILE No: 77-31035

PROPOSED STRUCTURE

TYPE: PRESTRESSED **CONCRETE** COMPOSITE BOX BEAMS WITH STUB ABUTMENTS ON REINFORCED CONCRETE PILES.
SPAN: 70'-0" C/C BEARINGS
ROADWAY: 50'-0" F/F CURB W/2-5'-0" SIDEWALKS
LOADING: HS 20-44 & ALT. MILITARY LOADING
SKEW: NONE
WEARING SURFACE: 5½" CONC. OVERLAY
APPROACH SLAB: 20'-0" (AS-1-81)
ALIGNMENT: TANGENT
CROWN: 3/16"/FT.

SFN: 7731175
BAR 10-0361

WOOSTER RD. PLAN AND PROFILE STA. 7+00 to STA. 11+00

#88011

	BY	DATE
CALC.	R.B.	12/92
CHECKED	BR.H.	12/92

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

SUMMIT COUNTY
SUM-WOOSTER ROAD

TYPICAL DRIVE PROFILE

PROPOSED DRIVE STA. 11+52.5 & STA. 12+07.5

STATION	CENTERLINE ELEV.	EDGE OF PAVEMENT RIGHT	EDGE OF PAVEMENT ELEV.	CURB HEIGHT	CURB ELEV.	APRON WIDTH	APRON ELEV.
11+20	966.85	24.15	966.47	10	967.31	4.354	967.40
11+40	966.63	23.59	966.26	2	966.43	4.914	966.53
11+52.5	966.53	23.24	966.17	2	966.33	5.264	966.44
11+65	966.46	22.89	966.10	2	966.27	5.614	966.39
11+75	966.43	22.61	966.07	6	966.57	5.894	966.70
11+85	966.41	22.33	966.06	6	966.56	6.174	966.69
11+95	966.42	22.05	966.07	2	966.24	6.454	966.38
12+07.5	966.45	21.70	966.12	2	966.28	6.804	966.42
12+20	966.52	21.35	966.19	2	966.35	7.154	966.50
12+30	966.59	21.07	966.26	6	966.76	7.434	966.92

FOR QUANTITY CALCULATIONS
SEE SHT. 7

BAR 10-0361

WOOSTER RD. PLAN AND PROFILE STA. 11+00 to STA. 15+00

SAN: 773175

=66011

F.H.W.A. REGION	STATE	REGION	
5	OHIO	BRF-IT20(1)	

10
34

SUMMIT COUNTY
SUM-WOOSTER RD.

	BY	DATE
CALC.	R.B.	12/92
CHECKED	T.S.	12/92

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
	40	21		
			68	10
	33.1	6		
			38	7
	47.9	9		
			84	18
8+00 AH	43.3	10		
BK	0	0		
				0
	0	0	0	0
			190	35

BAR 10-0361

WOOSTER ROAD CROSS-SECTIONS STA. 7+00 to STA. 9+00

SFN: 773 1125

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C:\D\88011\XSECT Thu Jun 3 07:48:15 1993 GW

F.H.W.A. REGION	STATE	REGION	
5	OHIO	BRF-IT20(I)	

11
34

SUMMIT COUNTY
SUM-WOOSTER RD.

	BY	DATE
CALC.	R.B.	12/92
CHECKED	T.S.	12/92

BAR 10-036.1

WOOSTER ROAD CROSS-SECTIONS STA. 9+25 to STA. 11+40.5

SFN 97 3125

\88011\XSECT.DWG

C:\D\88011\XSECT Thu Jun 3 07:49:29 1993 GW

F.H.W.A. REGION	STATE	REGION	
5	OHIO	BRF-IT20(I)	

12
34

SUMMIT COUNTY
SUM-WOOSTER RD.

	BY	DATE
CALC.	R.B.	12/92
CHECKED	T.S.	12/92

BAR 10-0361

WOOSTER ROAD CROSS-SECTIONS STA. 11+65.5 to STA. 13+50

SFN: 7731175

\86011\XSECT.DWG

C:\D\86011\XSECT Thu Jun 3 07:51:51 1993 GM

	BY	DATE
CALC.	BRH	1/93
CHECKED	RB	1/93

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

SUMMIT COUNTY
SUM-WOOSTER ROAD

HEADWALL PLAN-TYPE H1
SCALE: 1/2"=1'-0"

FOR QUANTITIES SEE SHEET 6.

HEADWALL PLAN-TYPE H2
SCALE: 1/2"=1'-0"

ELEVATION C-C
SCALE: 1/2"=1'-0"

SECTION D-D
SCALE: 3/4"=1'-0"

REINF. STEEL LIST-HEADWALLS

MARK	NO.	LENGTH	SHAPE	A	B	C	D
501	10	8'-6"	1	7'-5"	8"		
502	11	10'-0"	25	7'-5"	8"	1'-6"	2'-0"
503	14	13'-0"	4	6'-3"	6'-9"	12"	
504	14	3'-7"	2	8"	3'-0"		
505	17	4'-4"	1	3'-3"	8"		
506	3	9'-0"	4	6'-3"	2'-9"	12"	
507	3	9'-10"	4	6'-8"	3'-2'	12"	
** TOTAL Wt. = 581 lbs.							

** ALL REINFORCING STEEL SHALL BE EPOXY COATED, INCLUDE WITH ITEM 602-CONCRETE MASONRY FOR PAYMENT.

ELEVATION A-A
SCALE: 1/2"=1'-0"

SECTION B-B
SCALE: 1/2"=1'-0"

TYPICAL APPROACH SIDEWALK PLAN
SCALE: 3/8"=1'-0"

APPROACH SIDEWALK-REINF. LIST

MARK	NO.	LENGTH	SHAPE
601	20	19'-6"	STR.
602	4	9'-9"	STR.
401	40	3'-6"	STR.
402	44	4'-0"	STR.
* TOTAL Wt. = 856 lbs.			

*ALL REINFORCING STEEL SHALL BE EPOXY COATED. INCLUDE WITH ITEM 608-6" CONCRETE WALK, FOR PAYMENT.

NOTE
FOR QUANTITIES, SEE SHEET 6.

SECTION X-X
SCALE: 1"=1'-0"

BAR 10-0361

HEADWALL & APPROACH SIDEWALK DETAILS

SFN: 7730775

8011

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

13A
34

SUMMIT COUNTY
SUM-WOOSTER ROAD

Philip E. Dome, P.E.
CITY ENGINEER
11/30/73
DATE

(NOT TO SCALE)

HYDRANT AND VALVE ASSEMBLY

HYDRANTS SHALL BE DARLING, B-84-B

(NOT TO SCALE)

TYPICAL HYDRANT LOCATION IN RIGHT-OF-WAY

STANDARD HYDRANT AND VALVE SPECIFICATIONS

DETAIL NO. 16

THE CITY OF BARBERTON

THREAD DETAIL
(not to scale)

OUTER ENDS OF MALE AND FEMALE THREADS TERMINATED BY THE "HIGBEE CUT" TO AVOID CROSSING AND MUTILATION OF OTHERWISE FINELY DRAWN OUT THREAD. OUTER END OF MALE THREAD LEFT BLANK FOR 1/8".

TO BE MADE OF THE FOLLOWING PROPORTIONS:

NOT LESS THAN	83% COPPER
" " "	5% TIN
NOT MORE THAN	7% ZINC
" " "	3% LEAD

REVISIONS:

SCALE: FULL SIZE

DETAIL Nº 22
BARBERTON FIRE DEPT.
2-1/2" HOSE COUPLING
SCREW THREADS

Philip E. Dome P.E. 7-14-78
CITY ENGINEER DATE

THE CITY OF BARBERTON
BARBERTON, OHIO

HOSE COUPLING DATA

THREAD O.D.	4.875"
ROOT DIA.	4.627"
TOT. LENGTH THREADED	1-1/8"
FLAT TOP & THREAD VALLEY	0.010"
THREADS/IN.	6

OUTER END OF THREAD LEFT BLANK FOR 1/8" AND TERMINATED BY THE "HIGBEE CUT" TO AVOID CROSSING AND MUTILATION OF OTHERWISE FINELY DRAWN OUT THREAD.

TO BE MADE OF THE FOLLOWING PROPORTIONS:

NOT LESS THAN	83% COPPER
" " "	5% TIN
NOT MORE THAN	7% ZINC
" " "	3% LEAD

THREAD DETAIL
(not to scale)

REVISIONS:

SCALE: FULL SIZE

DETAIL Nº 23
BARBERTON FIRE DEPT.
4" HOSE NOZZLE
SCREW THREADS

Philip E. Dome P.E. 7-14-78
CITY ENGINEER DATE

THE CITY OF BARBERTON
BARBERTON, OHIO

TYPE 'A' HYDRANT INSTALLATION

NOT TO SCALE

BAR 10-0361
WATER MAIN DETAILS
SFN: 773115

MAINTENANCE OF TRAFFIC

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

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SUMMIT COUNTY
SUM-WOOSTER ROAD

① DETOUR AHEAD — OW-127 36" x 36"

② ROAD CLOSED AHEAD — OW-120 36" x 36"

③ ROAD CLOSED — YELLOW LIGHTS — R-75 48" x 30"

TYPE III BARRICADE W/ YELLOW FLASHING LIGHTS (2)

④ ROAD CLOSED 1/4 MILES AHEAD LOCAL TRAFFIC ONLY — DETOUR — YELLOW LIGHTS — R-76A 60" x 30" — OC-14L 48" x 24"

⑤ ROAD CLOSED 1/4 MILES AHEAD LOCAL TRAFFIC ONLY — DETOUR — YELLOW LIGHTS — R-76A 60" x 30" — OC-14R 48" x 24"

TYPE III BARRICDE W/ YELLOW FLASHING LIGHTS (2)

⑥ WOOSTER RD. — DETOUR — D-14 VAR x 8" — OC-29R 30" x 24"

⑦ WOOSTER RD. — DETOUR — D-14 VAR x 8" — OC-29L 30" x 24"

TRAFFIC NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PROVIDING AND MAINTAINING LIGHTS, SIGNS AND BARRICADES FOR THE MAINTENANCE OF TRAFFIC AND SAFETY OF HIS WORK AT ALL THE LOCATIONS SHOWN ON THESE PLANS AND AS REQUIRED BY ITEM 614 - MAINTAINING TRAFFIC. ALL SUCH DEVICES SHALL BE UTILIZED IN CONFORMANCE WITH THE STATE OF OHIO "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION, LATEST REVISION AND/OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL GIVE THE SUMMIT COUNTY TRAFFIC ENGINEERING DEPARTMENT, 538 E. SOUTH STREET, AKRON, OHIO 44311 (216) 643-2850 A MINIMUM OF 10 WORKING DAYS NOTICE PRIOR TO CLOSING THE ROAD TO THROUGH TRAFFIC.

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 CONTROL DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. A 24 HOUR EMERGENCY PHONE NUMBER SHALL BE PROVIDED BY THE CONTRACTOR FOR EMERGENCY SITUATIONS OF THIS NATURE PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614-MAINTAINING TRAFFIC.

THE CONTRACTOR SHALL HAVE ALL R-75, R-76A, R-76C AND OC-14 SIGNS MOUNTED TO TYPE III BARRICADES WITH A 7' MINIMUM HEIGHT AND YELLOW FLASHING LIGHTS.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR THE FOLLOWING QUANTITY:

ITEM 614 - MAINTAINING TRAFFIC. LUMP SUM.

ANY EQUIPMENT, MACHINERY, MATERIALS AND SUPPLIES ASSOCIATED WITH THE WORK BEING PERFORMED (STOCK) THAT CANNOT BE CONTAINED WITHIN THE WORK LIMITS SHALL CONFORM TO THE FOLLOWING:

A. NO MATERIALS OR SUPPLIES SHALL BE PLACED BETWEEN THE DITCH-LINE AND THE PAVEMENT OR WITHIN 10 FEET OF THE PAVEMENT IF LITTLE OR NO DITCH EXISTS UNLESS THE MATERIAL/SUPPLIES ARE TO BE USED AT THAT MOMENT. ALL EXCESS MATERIALS/SUPPLIES ARE TO BE MOVED TO SATISFY THIS OFF-SET CRITERIA IMMEDIATELY UPON SUSPENSION OF WORK.

B. AT THE END OF EACH DAY, ALL "STOCK" WITHIN 20 FEET OF THE PAVEMENT EDGE SHALL BE CLEARLY DELINEATED WITH DRUMS/BARRICADES SPACED AT A MAXIMUM OF 50 FEET INTERVALS (2 DRUM/BARRICADE MINIMUM).

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE MANUAL AND SUCH FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

VEHICULAR INGRESS AND EGRESS SHALL BE PROVIDED AT ALL TIMES FOR PROPERTIES ADJACENT TO THE WORK. FOR ADDITIONAL REQUIREMENTS SEE ITEM 104.04.

TRAFFIC CONTROL

ITEM 642 CENTER LINE, TYPE 2
STA.7+40 TO STA.13+35 = 0.11 MILE

BAR 10-0361

MAINTENANCE OF TRAFFIC AND TRAFFIC CONTROL PLAN

SFN: 773175

F.H.W.A. REGION	STATE	REGION	
5	OHIO		

15
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SUMMIT COUNTY
SUM-WOOSTER ROAD

EARTHWORK NOTE:
EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

SOIL BORINGS

BORE HOLE	STA.	OFFSET	ELEV.
B-1	10+74	16' LT	967.20
B-2	9+95	17' RT.	967.00
B-1A	12+16	℄	966.00
B-2A	8+50	℄	964.00

DESIGN DESIGNATION

CURRENT 1993 ADT = 11,793
DESIGN YEAR 2013 ADT = 15639
ADTT = 3%

D.H.V.	1564
D.	55
T.	3
V.	35
LEGAL SPEED	35 M.P.H.
DESIGN SPEED	35 M.P.H.

FUNCTIONAL CLASSIFICATION: URBAN ARTERIAL

HYDRAULIC DATA

DRAINAGE AREA = 62.5 SQ. MI.
DISCHARGE: Q25 = 1585 C.F.S.
Q100 = 2075 C.F.S.
VELOCITY: V25 = 4.18 F.P.S.
V100 = 4.86 F.P.S.

PROPOSED STRUCTURE
25 YR. H.W. = 962.19 FT.
100 YR. H.W. = 963.32 FT.

SLOPE PROTECTION UNDER BRIDGE

(A) RIPRAP USING 6" REINFORCED CONCRETE SLAB ON TOP OF 18" TYPE "D" ROCK CHANNEL PROTECTION WITH FABRIC FILTER. (SEE GENERAL PLAN FOR LIMITS).

(B) TYPE "D" ROCK CHANNEL PROTECTION WITH FABRIC FILTER, 24" THICK. (SEE GENERAL PLAN FOR LIMITS).

◐ INDICATE SOIL BORING LOCATIONS.

BENCH MARK
W. TOP FLANGE BOLT IN HYDRANT 11-143
STA. 14+01.8
ELEV. 972.76

EXISTING STRUCTURE

TYPE: 1 SPAN RIVETED PLATE GIRDER ON STONE AND CONCRETE ABUTMENTS.

SPAN: 65'-6" F/F ABUTMENTS
ROADWAY: 40'-8" F/F CURB
SKEW: NONE
ALIGNMENT: TANGENT
APPROACH SLAB: NONE
WEARING SURFACE: ASPHALT CONCRETE
CONDITION: POOR BUILT 1910
STRUCTURE FILE No: 77-31035

PROPOSED STRUCTURE

TYPE: PRESTRESSED CONCRETE COMPOSITE BOX BEAMS WITH STUB ABUTMENTS ON REINFORCED CONCRETE PILES.
SPAN: 70'-0" C/C BEARINGS
ROADWAY: 50'-0" F/F CURB W/2-5'-0" SIDEWALKS
LOADING: HS 20-44 & ALT. MILITARY LOADING
SKEW: NONE
WEARING SURFACE: 5 1/2" CONC. OVERLAY
APPROACH SLAB: 20'-0" (AS-1-81)
ALIGNMENT: TANGENT
CROWN: 3/16" / FT.

J.D.&E. A INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

1/15

SITE PLAN
BRIDGE NO. SUM-WOOSTER RD
OVER WOLF CREEK
SUMMIT CO. STA. 9+95.00 TO STA. 10+69.50

BAR 10-0361

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	JRK		JRS	BK	12/92	

SFN: 9238175

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

16
34

SUMMIT COUNTY
SUM-WOOSTER ROAD

NOTE:
FOR OVER HEAD LINES SEE SITE PLAN SHT. 1/15

PLAN

NOTES:

1. STEEL SHEET PILING LEFT IN PLACE SHALL HAVE A MINIMUM SECTION MODULUS OF 5.0 CU. IN. PER FT. OF WALL.
2. FOR WATERMAIN DETAILS WITHIN THE BRIDGE LIMITS, SEE SHEET 11/15.
3. FOR GASLINES DETAILS WITHIN THE BRIDGE LIMITS, SEE SHEET 12/15.
4. FOR STORM LINE HEADWALL DETAILS, SEE ROADWAY PLANS.

ELEVATION

**EXIST. SAN. TO BE REMOVED. INCLUDED WITH ITEM 202 FOR PAYMENT.

BAR 10-0361

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

2/15

GENERAL PLAN & ELEVATION

BRIDGE NO. SUM-WOOSTER RD. OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	BRH	KW	JRO	BK	12/92	

SFN 772175

88011

F.H.W.A. REGION	STATE	PROJECT		17 / 34
5	OHIO			

SUMMIT COUNTY
SUM-WOOSTER ROAD

ESTIMATED QUANTITIES

	BY	DATE
CALC.	BRH	12/92
CHECKED	BK	1/93

ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SUPER STRUCT.	ABUT.	GENERAL
202	11002	LUMP	LUMP	STRUCTURE REMOVED, OVER 20 FOOT SPAN			LUMP
503	11100	LUMP	LUMP	COFFERDAMS, CRIBS AND SHEETING			LUMP
503	21100	334	CU YD	UNCLASSIFIED EXCAVATION		334	
504	11100	1625	SQ FT	STEEL SHEET PILING LEFT IN PLACE			1625
505	11100	LUMP	LUMP	PILE DRIVING EQUIPMENT MOBILIZATION			LUMP
507	22201	TOTAL	LIN FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES , AS PER PLAN		2640	
509	15800	25205	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	9127	16078	
511	31601	114	CU YD	CLASS S CONCRETE, SUPERSTRUCTURE , AS PER PLAN	114		
511	43500	230	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING		230	
SPEC.	51267500	215	SQ YD	SEALING OF CONCRETE SURFACES *	215		
SPEC.	51267502	135	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY) *		135	
SPEC.	51271500	135	SQ YD	URETHANE TOP COAT SEALER *		135	
513	11301	1400	POUND	STRUCTURAL STEEL, A588 AISC CATEGORY I, AS PER PLAN	1400		
515	54851	15	EACH	PRESTRESSED CONCRETE COMPOSITE BOX BEAM (62'-78' LENGTH) CB27-48,AS PER PLAN *	15		
516	10500	124	LIN FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC COMPRESSION SEAL	124		
516	41100	30	EACH	1/8" PREFORMED BEARING PAD, 711.21	30		
516	43100	60	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY((NEOPRENE) 1 3/8"x7"x11"	60		
517	71500	188	LIN FT	RAILING (CONCRETE PARAPET WITH DOUBLE PIPE RAIL)	144	44	
518	21200	52	CU YD	POROUS BACKFILL WITH FILTER FABRIC		52	
SPEC.		LUMP	LUMP	GASLINES SUPPORT FRAMING (THE EAST OHIO GAS COMPANY)			LUMP

* SEE PROPOSAL NOTE

CONSTRUCTION CONSTRAINTS

THE BRIDGE DEMOLITION AND RECONSTRUCTION SHALL BE CAREFULLY PERFORMED NOT TO DISTURB THE STREAM. THE CONTRACTOR SHALL DRIVE ALL SHEETING NECESSARY AS SHOWN ON PLANS AND DIRECTED BY THE ENGINEER TO MINIMIZE STREAM DISTURBANCE.

WATERMAIN SERVICE DURING BRIDGE CONSTRUCTION IS NOT REQUIRED TO BE MAINTAINED ACROSS THE STREAM. HOWEVER, THE EXISTING SERVICE LINE AND A FIRE HYDRANT IN THE BRIDGE APPROACHES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES.

GAS LINE SERVICE IS NOT REQUIRED TO BE MAINTAINED DURING THE PERIOD OF APRIL 15 THRU OCTOBER 15. THE CONTRACTOR AND THE OWNER ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

SUGGESTED CONSTRUCTION SEQUENCE

1. INSTALL WATERMAIN SECTION, VALVES AND HYDRANT AS OUTLINED IN WATERMAIN CONSTRUCTION SEQUENCE.
2. REMOVE EXISTING BRIDGE SUPERSTRUCTURE.
3. DRIVE STEEL SHEET PILING LEFT IN PLACE, AS SHOWN ON GENERAL PLAN & ELEVATION, AND OTHER TEMPORARY SHEETING AS REQUIRED TO MINIMIZE DISTURBANCE TO THE STREAM.
4. REMOVE THE EXISTING BRIDGE SUBSTRUCTURE AND PORTION OF THE ABANDONED SANITARY AS SHOWN ON THE GENERAL PLAN AND ELEVATION SHEET 2 / 15
5. CONSTRUCT THE 30" STORM.
6. CONSTRUCT EMBANKMENT TO THE LEVEL OF SUBGRADE.
7. CONSTRUCT THE BRIDGE SUBSTRUCTURE.
8. CONSTRUCT THE BRIDGE SUPERSTRUCTURE AND UTILITIES SUPPORTS.
9. INSTALL THE 8"ø WATERMAIN.

GENERAL NOTES

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS :
AS-1-81 DATED 11-27-81
BR-2-82 DATED 11-1-82
PSBD-1-81 REVISED 06-20-89
EXJ-3-82 REVISED 08-01-84
AND TO SUPPLEMENTAL SPECIFICATIONS :
836 DATED 11-12-85
849 DATED 12-24-85
949 DATED 9-26-86

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, FIFTEENTH EDITION, 1992, AND THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN LOADING

HS20-44 AND THE ALTERNATE MILITARY LOADING.

DESIGN STRESSES

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I.
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.
REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I. (REINFORCING STEEL IN PRESTRESSED BOX BEAMS MAY BE GRADE 40 AS PER CMS 515)

CONCRETE FOR PRESTRESSED BEAMS - UNIT STRESS 2200 P.S.I. COMPRESSION, 444 P.S.I. TENSION

PRESTRESSING STRAND ASTM A416, STRESS RELIEVED
F's = 270,000 P.S.I.

INITIAL STRESS = 0.70 F's

DECK PROTECTION METHOD

EPOXY COATED BARS AND SEALING OF CONCRETE SURFACE.

REMOVAL OF EXISTING STRUCTURES

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING STRUCTURE SHALL BE REMOVED PER ITEM 202, STRUCTURES REMOVED.

PILE DESIGN LOADS

THE DESIGN LOAD FOR THE ABUTMENT PILES IS 48 TONS PER PILE.

12 INCH PRECAST PRESTRESSED CONCRETE PILES MAY BE SUBSTITUTED FOR THE 12 INCH CAST-IN-PLACE REINFORCED CONCRETE PILES SHOWN ON THESE PLANS. DRAWINGS SHOWING DETAILS OF AND SPECIFICATION FOR PRESTRESSED CONCRETE PILES ARE AVAILABLE FROM THE DIRECTOR (BUREAU OF BRIDGES). IF THE PRESTRESSED PILE ALTERNATE IS CHOSEN, THE METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE THE SAME AS FOR CAST-IN-PLACE REINFORCED CONCRETE PILES PER 507.

UTILITY LINES

ALL EXPENSE INVOLVED IN RELOCATING THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNERS OF THE SAID UTILITIES. THE CONTRACTOR AND SAID OWNER ARE REQUESTED TO CO-OPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

EMBANKMENT CONSTRUCTION

THE EMBANKMENT SHALL BE CONSTRUCTED TO THE LEVEL OF SUBGRADE. EXCAVATION MAY THEN BE MADE FOR THE ABUTMENTS AND PILE DRIVEN.

ITEM 507 - 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 507, THE PILES FOR THE FORWARD ABUTMENT SHALL MEET THE REQUIREMENTS SET FORTH HEREIN.

DUE TO THE PROXIMITY OF THE OVERHEAD OHIO EDISON CO. POWER LINES, THE PILE DRIVING EQUIPMENT SHALL BE LOCATED ON A BENCH BEHIND THE ABUTMENT. PILES SHALL BE DRIVEN IN SHORT LENGTHS (10'TO 12'), AS APPROVED BY THE ENGINEER. PRIOR TO COMMENCING EACH DAY'S WORK UNDER THE POWER LINES, THE LOWER 23KV LINES SHALL BE DE-ENERGIZED BY OHIO EDISON CO. A POSITIVE DIRECT MEANS OF COMMUNICATION SHALL BE ESTABLISHED BETWEEN THE CONTRACTOR AND OHIO EDISON TO ASSURE THAT ALL PARTIES ARE NOTIFIED OF THE DE-ENERGIZING. ALL APPLICABLE PROVISIONS OF OSHA AND OTHER REGULATORY AGENCIES HAVING JURISDICTION SHALL APPLY AS THOUGH THE POWER LINES ARE ACTIVE. AT THE END OF EACH DAY'S CONSTRUCTION OPERATIONS, THE LINES MAY BE RE-ENERGIZED, ONCE AN ALL-CLEAR SIGNAL IS GIVEN BY THE CONTRACTOR.

ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN

THE CLASS S CONCRETE FOR THE COMPOSITE DECK AND SIDEWALK SLABS SHALL BE MODIFIED BY THE USE OF AN INORGANIC WATER-PROOFING ADMIXTURE. THE ADMIXTURE SHALL BE IPANEX AS MANUFACTURED BY IPA SYSTEMS, PHILADELPHIA, PA. THE MIXTURE SHALL BE ADDED TO THE CONCRETE AT THE PLANT AT A RATE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE WATERPROOFING ADMIXTURE SHALL BE PROPERLY MIXED AND INSTALLED BY A FACTORY APPROVED TECHNICIAN. MEMBRANE CURING PER SUPPLEMENTAL SPECIFICATION 836 WILL NOT BE PERMITTED. CONCRETE SHALL BE CURED BY METHOD (a) WATER CURING. PAYMENT FOR THE WATERPROOFING ADMIXTURE SHALL BE INCLUDED WITH ITEM 511 - CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN.

ITEM 515 - PRESTRESSED CONCRETE BOX BEAM (62'-78') CB27-48, AS PER PLAN

THE CONCRETE FOR THE PRESTRESSED CONCRETE BOX BEAM SHALL BE MODIFIED BY THE USE OF AN INORGANIC WATERPROOFING ADMIXTURE. THE ADMIXTURE SHALL BE IPANEX AS MANUFACTURED BY IPA SYSTEMS, PHILADELPHIA, PA. THE ADMIXTURE SHALL BE ADDED TO THE CONCRETE AT THE PLANT AT A RATE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE WATERPROOFING SHALL BE MIXED AND INSTALLED BY A FACTORY APPROVED TECHNICIAN. PAYMENT FOR THE WATERPROOFING ADMIXTURE SHALL BE INCLUDED WITH ITEM 515 - PRESTRESSED CONCRETE BOX BEAM (62'-78') CB27-48, AS PER PLAN.

ITEM 513 - STRUCTURAL STEEL, A588 AISC CATEGORY I, AS PER PLAN

UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, INCIDENTALS AND EQUIPMENT NECESSARY TO CONSTRUCT THE STRUCTURAL STEEL FRAMING / BRACKETS FOR WATERMAIN SUPPORT ALONG THE NORTH SIDE OF WOOSTER ROAD BRIDGE AS SHOWN ON PLANS AND PER THE REQUIREMENTS OF ITEM 513. THIS ITEM INCLUDES, BUT NOT LIMITED TO, STEEL FRAMING / BRACKETS, FIELD PAINTING CARBON STEEL MEMBERS IN ACCORDANCE WITH 514.05 OF THE CMS, STAINLESS STEEL ANCHOR BOLTS WITH NUTS AND WASHERS, AND ELASTOMERIC PADS COMPLETE IN PLACE.

ITEM SPECIAL - GASLINES SUPPORT FRAMING (THE EAST OHIO GAS COMPANY)

UNDER THIS ITEM THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, INCIDENTALS AND EQUIPMENT NECESSARY TO CONSTRUCT THE STEEL FRAMING ALONG THE SOUTH SIDE OF THE WOOSTER ROAD BRIDGE OVER WOLF CREEK AS SHOWN ON SHEETS 14 AND 15 OF 15.

METHOD OF MEASUREMENT : THIS ITEM SHALL BE MEASURED FOR PAYMENT ON A LUMP SUM BASIS FOR ALL THE WORK REQUIRED TO CONSTRUCT THE GASLINES SUPPORT FRAMING COMPLETE IN PLACE AS SHOWN ON PLANS.

BASIS OF PAYMENT : PAYMENT WILL BE MADE AT CONTRACT PRICE FOR :

ITEM	UNIT	DESCRIPTION
SPECIAL	LUMP SUM	GASLINES SUPPORT FRAMING (THE OHIO GAS Co.)

ITEM SPECIAL-SEALING OF CONCRETE SURFACES

A SEALER SHALL BE APPLIED TO THE EXPOSED CONCRETE SURFACES OF THE BRIDGE AS SHOWN ON SHEETS 5/15, 6/15 & 9/15 SEE PROPOSAL NOTE FOR SEALER MATERIAL AND SURFACE PREPARATION REQUIREMENTS AND APPLICATION RATES AND PROCEDURES.

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

3 / 15

ESTIMATED QUANTITIES AND GENERAL NOTES

BRIDGE No. SUM-WOOSTER RD. OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361

SFN: 773175

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F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

18 / 34

SUMMIT COUNTY
SUM-WOOSTER ROAD

LEGEND:

- (3) DENOTES PILE NUMBER @ REAR ABUTMENT.
- (25) DENOTES PILE NUMBER @ FORWARD ABUTMENT
- DENOTES PILE TO BE BATTERED 1:4

R.A. REAR ABUTMENT
F.A. FORWARD ABUTMENT
EL. ELEVATION
E.F. EACH FACE
N.F. NEAR FACE
F.F. FAR FACE
N.E. NORTHEAST
N.W. NORTHWEST
C.J. CONSTRUCTION JOINT

PLAN

NOTE:
FOR NOTES, SEE SHEETS 5/15 & 6/15

* BEAM SEAT ELEVATIONS SHOWN ARE TAKEN @ ℄ BEARINGS.

ELEVATION

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

4 / 15

ABUTMENT PLAN & ELEVATION

BRIDGE NO. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	BRH	DPM	JRO	BK	12/92	

BAR 10-0361

SFN: 773475

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

19/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

SECTION A 4/5 — TYPICAL ABUT. DETAIL WITH ROCK CHANNEL PROTECTION

SECTION F 4/5

SECTION E 4/5

LEGEND:

R.A. REAR ABUTMENT
F.A. FORWARD ABUTMENT
EL. ELEVATION
E.F. EACH FACE
N.F. NEAR FACE
F.F. FAR FACE
N.E. NORTHEAST
N.W. NORTHWEST
C.J. CONSTRUCTION JOINT

NOTES:

1. BRIDGE SEAT REINFORCING: REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT SHALL BE ACCURATELY PLACED TO AVOID INTERFERENCE WITH THE DRILLING OF ANCHOR BAR HOLES.
2. TYPE B WATERPROOFING SHALL EXTEND FROM TOP OF FOOTING UP TO THE APPROACH SLAB SEAT. TYPE B WATERPROOFING SHALL CONFORM TO THE REQUIREMENTS OF SECTION 512.06 OF THE CMS AND SHALL BE INCLUDED WITH ITEM 511 FOR PAYMENT.
3. CONCRETE AND REINFORCING STEEL FOR PARAPETS, ABOVE THE SIDEWALK SURFACE, ARE INCLUDED WITH ITEM 517 FOR PAYMENT.
4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
5. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
6. FOR BOX BEAM BEARING PADS LOCATION AND DETAILS SEE SHEET 9/15.
7. FOR REINFORCING STEEL LIST, SEE SHEET 10/15.
8. FOR DECK EXPANSION JOINT DETAILS, SEE SHEET 10/15.
9. FOR WINGWALLS DETAILS, SEE SHEET 6/15.

SECTION B 4/5

FOR DETAILS NOT SHOWN SEE SECT. B 4/5

SECTION C 4/5

SECTION D 4/5

BAR 10-0361

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

5/15

ABUTMENT DETAILS

BRIDGE NO. SUM-WOOSTER ROAD OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	BRH	DPM	JRO	BK	12/92	

SFN: 7734175

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

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SUMMIT COUNTY
SUM-WOOSTER ROAD

TYPICAL WINGWALL ELEVATION

SECTION H 6 6

SECTION G 6 6

LEGEND:

R.A. REAR ABUTMENT
F.A. FORWARD ABUTMENT
EL. ELEVATION
E.F. EACH FACE
N.F. NEAR FACE
F.F. FAR FACE
N.E. NORTHEAST
N.W. NORTHWEST
C.J. CONSTRUCTION JOINT

NOTES:

1. CONCRETE AND REINFORCING STEEL FOR PARAPETS, ABOVE THE SIDEWALK SURFACE, ARE INCLUDED WITH ITEM 517 FOR PAYMENT.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
4. FOR REINFORCING STEEL LIST, SEE SHEET 10/15.
5. FOR ABUTMENTS PLAN AND DETAILS, SEE SHEETS 4/15 AND 5/15.

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

6 / 15

WINGWALLS
ELEVATION & SECTIONS

BRIDGE NO. SUM-WOOSTER ROAD
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	BRH	DPM	JRO	BK	12/92	

BAR 10-0361

SFN: 773078

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

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SUMMIT COUNTY
SUM-WOOSTER ROAD

FRAMING PLAN

NOTES :

1. THE FOLLOWING DETAILS FROM STANDARD DRAWING PSBD-I-81 APPLY TO THIS PROJECT.

   a. SHEET I OF 4
   BEAM LIFTING INSERTS, DETAILS AND REINFORCEMENT OF BEAM ENDS, ANCHOR DOWELS AND PLAN - FASCIA BEAM WITH NOTCH.

   b. SHEET 2 OF 4
   TYPICAL PLANS OF DIAPHRAGMS AND TRANSVERSE TIE RODS, NORMAL CROWN TREATMENT AT CENTERLINE OF ROADWAY, BEAM DIMENSIONAL TOLERANCES, AND END DETAILS OF TRANSVERSE TIE ROD ANCHORAGE.

   c. SHEET 3 OF 4
   48 INCH WIDE COMPOSITE BEAM (CB27-48)

2. THE FOLLOWING NOTES FROM STANDARD DRAWING PSBD-I-81 APPLY TO THIS PROJECT.

   a. SHEET I OF 4
   TRANSVERSE TIE RODS, GALVANIZING, ANCHOR DOWELS, NOTCHES, END OF BEAMS, MORTARING OF SHEAR KEYS, COMPOSITE BRIDGES, AND AS REQUIRED TO SUPPLEMENT THE APPLICABLE DETAILS.

   b. SHEET 2 OF 4
   AS REQUIRED TO SUPPLEMENT THE APPLICABLE DETAILS.

   c. SHEET 3 OF 4
   AS REQUIRED TO SUPPLEMENT THE APPLICABLE DETAILS.

   d. SHEET4 OF 4
   AS REQUIRED TO SUPPLEMENT THE APPLICABLE DETAILS.

3. CALCULATED CAMBER
   COMPOSITE CONCRETE DECK SLAB : CALCULATED CAMBER OF BEAMS AT TIME OF PAVING, INCLUDING ALLOWANCE FOR CAMBER GROWTH DUE TO CREEP IS (Cc=2.0"). ESTIMATED DEFLECTION OF BEAMS DUE TO WEIGHT OF DECK SLAB AND RAILING (PARAPETS, SIDEWALKS, ETC.) IS (D=3/4"). NET CAMBER IS (-5/8"), WHICH IS LESS THAN NECESSARY TO PLACE THE DECK SLAB SURFACE PARALLEL TO THE PROPOSED ROADWAY SURFACE. TO COMPENSATE FOR THIS INSUFFICIENT CURVATURE, THE DECK SLAB SHALL BE THICKENED FROM 5 1/2" AT SPANS ENDS TO (6 1/8") AT MID SPAN.

4. FOR PRESTRESSED CONCRETE BOX BEAM DETAILS, SEE SHEET 9/15

5. FOR ELASTOMERIC PAD DETAILS, SEE SHEET 9/15

6. FOR DECK PLAN DETAILS, SEE SHEET 8/15

DECK SLAB THICKNESS DIAGRAM
(COMPENSATION FOR NET CURVATURE)

BAR 10-0361

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

7/15

FRAMING PLAN

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

SFN: 7731175

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F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

22/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

DECK SLAB PLAN

NOTES :

1. FOR FRAMING PLAN, SEE SHEET 7/15
2. FOR DECK EXPANSION JOINT DETAILS, SEE SHEET 10/15
3. FOR WATERMAIN DETAILS, SEE SHEET 11/15 THRU 13/15
4. FOR GASLINE DETAILS, SEE SHEET 14/15 & 15/15
5. FOR REINFORCING STEEL LIST, SEE SHEET 10/15
6. SIDEWALK RAILING WITH CONCRETE PARAPETS, FOR ADDITIONAL SIDEWALK RAILING DETAILS, SEE STD. DWG. BR-2-82.

ALL REINFORCING STEEL SHALL BE EPOXY COATED

ALL CONCRETE AND REINFORCING STEEL IN THE PARAPETS ABOVE THE SIDEWALK SURFACES ARE INCLUDED FOR PAYMENT WITH ITEM 517-RAILING.

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

8/15

DECK PLAN

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
SFN: 7731175

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5	OHIO		

23/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

SECTION A (7/9 8/9)

NOTES :

1. FOR FRAMING PLAN, SEE SHEET 7/15
2. FOR DECK PLAN, SEE SHEET 8/15
3. FOR REINFORCING STEEL LIST, SEE SHEET 10/15
4. SEE DECK PLAN & FRAMING PLAN, FOR ADDITIONAL NOTES.
5. THIS IS THE NOMINAL DIMENSION. THE PAY QUANTITY OF THAT PORTION OF THE DECK CONCRETE OVER THE BEAMS SHALL BE BASED ON THE AVERAGE OF THIS DIMENSION AND THE DEPTH AT BEAM BEARINGS EVEN THOUGH DEVIATION FROM THE AVERAGE MAY OCCUR BECAUSE THE TOP OF THE BEAM MAY NOT HAVE THE CAMBER ANTICIPATED IN THE DESIGN : I.E. Cc, THE CAMBER OF BEAMS SHALL BE MEASURED IN THE FIELD BEFORE THE DECK IS PLACED. THE ACTUAL DEPTH AT MID-SPAN SHALL BE THE NOMINAL DIMENSION PLUS OR MINUS THE DIFFERENCE BETWEEN THE ACTUAL AND ANTICIPATED CAMBER.
6. PREFORMED EXPANSION JOINT FILLER IN THE PARAPET DEFLECTION JOINTS MAY BE EITHER 1/4" GRAY SPONGE RUBBER OR 1/4" GRAY CELLULAR POLYVINYL CHLORIDE (PVC) SPONGE. FILLER SHALL MEET THE REQUIREMENTS OF AASHTO M-153, TYPE I, EXCEPT DENSITY OF PVC SPONGE SHALL NOT BE LESS THAN 20 LBS. PER CUBIC FOOT. INCLUDE WITH ITEM 517-RAILING FOR PAYMENT.

DETAIL 3

SECTION B
EXPANSION TYPE BEARING (7/9 8/9)

SECTION C
FIXED TYPE BEARING (7/9 8/9)

DETAIL 1 (7/9)

DETAIL 2 (-/-)

Ⓔ - DEBOND 6'-6" AT EACH END
Ⓕ - DEBOND 2'-6" AT EACH END
Ⓖ - DEBOND 1'-6" AT EACH END

REINFORCEMENT DETAILS - CB27-48

LAMINATED ELASTOMERIC BEARING
(50 DUROMETER ELASTOMER)

DESIGN LOADS	
DEAD LOAD	23.3 K
LIVE LOAD	12.8 K
TOTAL	36.1 K

MAXIMUM ESTIMATED SHEAR DEFORMATION = 0.56"

SECTION THROUGH JOINT
SECTION A-A

DEFLECTION JOINT DETAILS

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

9/15

MISC. FRAMING & DECK DETAILS

BRIDGE No. SUM-WOOSTER RD. OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-036.1
SFN: 7731175

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F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

24/34

	BY	DATE
CALC.	BRH	12/92
CHECKED	BK	12/92

REINFORCING STEEL LIST

MARK	NO. TOTAL	NO. REAR	NO. FORWARD	LENGTH	SER. INC.	TYPE	WEIGHT	A	B	C
ABUTMENTS										
A801	28	14	14	30'-0"		STR.	2243			
A802	14	7	7	17'-6"		STR.	654			
A803	24	12	12	10'-0"		STR.	641			
D801	68	34	34	4'-8"		14	848	2'-4"		
A601	96	48	48	12'-0"		7	1730	4'-7"	5'-11"	1'-10"
A602	8	4	4	7'-11"		1	95	4'-7"	1'-10"	
A603	68	34	34	9'-3"		35	945	3'-8"	1'-5"	12"
A604	20	10	10	9'-7"		1	288	1'-5"	4'-3"	
A605	20	10	10	3'-10"		2	115	12"	3'-0"	
A606	68	34	34	6'-3"		1	638	11"	2'-10"	
A607	20	10	10	7'-5"		1	223	11"	3'-5"	
A608	24	12	12	19'-6"		1	703	1'-2"	9'-4"	
A501	104	52	52	7'-10"		1	849	4'-7"	1'-9"	
A502	112	56	56	6'-7"		2	769	10"	5'-11"	
A503	12	6	6	4'-7"		2	57	10"	3'-11"	
A504	32	16	16	34'-6"		STR.	1152			
A505	32	16	16	30'-0"		STR.	1001			
A506	100	50	50	8'-2"		1	852	3'-5"	2'-6"	
A507	8	4	4	8'-10"		1	74	5'-7"	1'-9"	
A508	16	8	8	6'-8"		1	111	3'-5"	1'-9"	
A509	20	10	10	10'-4"		3	216	3'-0"	1'-10"	
A510	28	14	14	7'-5"		1	216	1'-2"	3'-3"	
A511	32	16	16	7'-10"		1	261	6'-5"	10"	
A512	32	16	16	11'-11"		1	398	10'-6"	10"	
A513	32	16	16	8'-4"		18	278	8"	3'-6"	
A514	24	12	12	6'-6"		24	163	3'-0"	1'-3"	
R501	24	12	12	11'-11"		1	298	10'-6"	10"	
R502	32	16	16	4'-8"		17	156	6"	2'-2"	
R503	8	4	4	12'-5"		40	104	10'-5"	1'-6"	
TOTAL REINFORCING STEEL AT ABUTMENTS							16,078 Lbs.			
DECK SLAB										
S401	104			30'-0"		STR.	2084			
S402	52			15'-0"		STR.	521			
S403	190			29'-0"		STR.	3681			
S404	190			8'-2"		41	1037	5'-6"	10"	8"
S405	190			6'-11"		1	877	5'-9"	8"	
S501	144			6'-2"		18	927	8"	2'-5"	
* R501	24			12'-1"		STR.	302			
* R502	72			15'-0"		STR.	1126			
TOTAL REINFORCING AT DECK SLAB							9,127 Lbs.			

* INCLUDE WITH ITEM 517 FOR PAYMENT

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
2. ALL REINFORCING STEEL DIMENSIONS ARE OUT-TO-OUT.

ELASTOMERIC COMPRESSION SEAL ADJUSTMENT TABLE	
AMBIENT TEMP. F°	JOINT OPENING DIMENSION "A"
40	2 3/8"
50	2 5/16"
60	2 1/4"
70	2 3/16"
80	2 1/8"
90	2 1/8"

SUMMIT COUNTY
SUM-WOOSTER ROAD

SECTION A-A

◎ SET DIMENSION "A" TO 2 1/4"± THE ADJUSTMENT SHOWN IN THE ELASTOMERIC COMPRESSION SEAL ADJUSTMENT TABLE, THIS SHEET.

SECTION F-F

DETAIL 6/8|10
PART PLAN AT ABUTMENT

DECK EXPANSION JOINT NOTES :

1. FOR DETAILS NOT SHOWN, SEE STD. DWG. EXJ-3-82.
2. FOR DECK PLAN, SEE SHEET 8/15
3. FOR ABUTMENT PLAN, SEE SHEET 4/15

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

10/15

REINFORCING STEEL LIST
& DECK EXPANSION JOINT DETAILS
BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
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F.H.W.A. REGION	STATE	PROJECT	
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SUMMIT COUNTY
SUM-WOOSTER ROAD

WATERMAIN FRAMING SUPPORT PLAN

ELEVATION

ESTIMATED QUANTITIES

	DESCRIPTION	UNIT	QUANTITY
***	ITEM 638 - 8" WATER MAIN, DUCTILE IRON PIPE, ANSI CLASS 54, BOLTLESS-RESTRAINED JOINTS AND FITTINGS, AS PER PLAN	LF	110
*	STAINLESS STEEL ANCHOR BOLTS W/NUTS AND WASHERS	EACH	68
*	ELASTOMERIC PADS (1/4"x9 1/2"x13"), 711.23	EACH	12
**	FULLY THREADED HANGER ROD (1"øx33" LONG) W/NUTS & WASHERS	EACH	16
**	PIPE ROLLS	EACH	12
**	PIPE COUPLINGS	EACH	2
**	PIPE EXPANSION JOINT	EACH	1

* INCLUDED WITH ITEM 513 - STRUCTURAL STEEL, A588 AISC CATEGORY I, AS PER PLAN.

** INCLUDED WITH "ITEM 638 - 8" WATER MAIN, DUCTILE IRON PIPE, ANSI CLASS 54, BOLTLESS-RESTRAINED JOINTS AND FITTINGS, AS PER PLAN" FOR PAYMENT.

*** CARRIED TO GENERAL SUMMARY SHEET 4 / 34

FOR ADDITIONAL DETAILS AND NOTES, SEE SHEETS 12 / 15 & 13 / 15

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

11 / 15

WATERMAIN PLAN & ELEVATION

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
SFN: 7731125

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DETAIL 11/11 12
FIXED SUPPORT

SECTION A-A

SECTION B-B

DETAIL 13/-

SECTION C-C

WATERMAIN GENERAL NOTES

1. DUCTILE IRON PIPE AND FITTINGS
INCLUDING LINING AND COATING, AS REQUIRED, SHALL CONFORM TO THE REQUIREMENTS OF THE OHIO DEPARTMENT OF TRANSPORTATION "748 - WATERMAIN AND SERVICE BRANCH MATERIAL". PIPE JOINTS SHALL BE BOLTLESS-RESTRAINED TYPE UNLESS NOTED OTHERWISE ON PLANS.

2. PIPE INSULATION
INSULATION FOR WATER PIPE SHALL BE A RIGID HYDROUS CALCIUM SILICATE INSULATION, 2-1/2 INCHES THICK AND MOLDED IN HALF SECTIONS TO FIT THE CONTOUR OF THE PIPE. THE INSULATION SHALL BE HELD IN PLACE WITH A WATER TIGHT ALUMINUM JACKET, WITH A MOISTURE BARRIER BETWEEN THE JACKET AND THE INSULATION TO PREVENT GALVANIC OR CHEMICAL CORROSION OF THE JACKETING SURFACE.

THE CONDUCTIVITY RATING OF THE INSULATING MATERIAL SHALL BE MAXIMUM OF 42 AT 200°F. THE INSULATION MATERIAL SHALL CONFORM TO FEDERAL GOVERNMENT SPECIFICATIONS MIL-I-2781-D (OR E), MIL-I-24244 AND ASTM C 533 .

THE ALUMINUM JACKET AND ALL ALUMINUM STRAPS AND BANDS SHALL BE T-3003 OF T-5005 H14 ALLOY, 0.016 INCH THICK. THE ALUMINUM JACKETS SHALL BE IN SECTIONS A MINIMUM LENGTH OF 36 INCHES, AND SHALL BE HELD IN PLACE WITH A WATERPROOF CONTINUOUS FRICTION TYPE LONGITUDINAL JOINT. EACH CIRCUMFERENTIAL JOINT SHALL BE SEALED WITH A PREFORMED ALUMINUM STRAP CONTAINING A PERMANANTLY PLASTIC WEATHERPROOF SEALANT. THE STRAP SHALL BE CENTERED OVER THE JOINT AND SEALED WITH ALUMINUM BANDING. THE JACKET AND BANDING SYSTEM SHALL BE CONSTRUCTED TO ALLOW FOR THERMAL MOVEMENT OF THE JACKET WITHOUT THE JOINTS PULLING APART.

THE MOISTURE BARRIER SHALL CONSIST OF ONE LAYER OF ONE MIL POLYETHYLENE FILM WITH A PROTECTIVE COAT OF #40 VIRGIN CRAFT PAPER, OR OTHER MATERIAL WITH SIMILAR MOISTURE RESISTANT PROPERTIES. THE MOISTURE BARRIER MATERIAL SHALL BE CONTINUOUSLY LAMINATED TO THE ALUMINUM JACKET.

3. VICTAULIC PIPE COUPLINGS
WHERE SHOWN ON THE DRAWINGS OR WHERE REQUIRED, THE CONTRACTOR SHALL FURNISH AND INSTALL VICTAULIC PIPE COUPLINGS, STYLE-307 FOR CONNECTION OF STEEL TO DUCTILE IRON PIPE. DUCTILE IRON PIPE AND EXPANSION JOINT ENDS SHALL BE FABRICATED AND GROOVED AS INDICATED ON THE DRAWING.

COUPLINGS SHALL BE COMPOSED OF MALLEABLE IRON HOUSINGS HELD TOGETHER WITH STEEL BOLTS AND SUPPLIED WITH A CONTINUOUS HOLLOW MOLDED RUBBER SEALING RING, OF SUCH TYPE THAT THE SEAL BECOMES TIGHT AS THE PRESSURE WITHIN THE PIPE INCREASES. THE JOINTS SHALL BE CONSTRUCTED AND INSTALLED AND BE EQUAL IN ALL RESPECTS TO THOSE MANUFACTURED BY THE VICTAULIC COMPANY OF AMERICA. MALLEABLE HOUSING SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR MALLEABLE IRON CASTINGS, ASTM DESIGNATION A47-68. BOLTS SHALL BE A490 HEAT TREATED HIGH STRENGTH AND GALVANIZED IN ACCORDANCE WITH 711.02 OF THE CMS (ASTM A-123)

4. PIPE EXPANSION JOINT ASSEMBLY
THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE DIRECTOR FOR APPROVAL OF THE EXPANSION JOINT ASSEMBLY.

THE JOINT ASSEMBLY SHALL BE "DRESSER STYLE 63 TYPE I SLIP TYPE WITH MINIMUM 1/2" THICK BODY AND SLIP, WITH AN 8 INCH TRAVERSE OR APPROVED EQUAL. THE JOINT ASSEMBLY SHALL INCLUDE ALL MATERIALS, CADMIUM PLATED BOLTS, NUTS AND WASHERS. THE EXPANSION JOINT ENDS SHALL BE FABRICATED AND GROOVED FOR VICTAULIC PIPE COUPLINGS AS SHOWN ON THE DRAWINGS. NO FIELD WELDING OF GALVANIZED STEEL PIPE WILL BE PERMITTED. THE EXPANSION JOINT SHALL BE GALVANIZED EXCEPT SLIP PIPE.

5. PIPE HANGER ASSEMBLY
PIPE HANGER ASSEMBLY SHALL BE MODEL No. 605 (FOR PIPE DIAMETER = 14") AS MANUFACTURED BY MICHIGAN HANGER COMPANY, NILES, OHIO OR APPROVED EQUAL. PIPE HANGER ASSEMBLY SHALL CONSIST OF GALVANIZED CARBON STEEL HANGER RODS WITH HEX NUTS AND CAST IRON ROLLS. HANGER RODS SHALL BE FABRICATED AND INSTALLED AS SHOWN ON THE PLANS

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SUMMIT COUNTY
SUM-WOOSTER ROAD

FOR ADDITIONAL DETAILS, SEE SHEETS 11/15 & 13/15

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

12/15

WATERMAIN DETAILS

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
SFN: 724175

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SUMMIT COUNTY
SUM-WOOSTER ROAD

DETAIL 12 / 11 13

SECTION F-F
TYPE "G"

ANCHOR PLATE "C"

PIPE EXPANSION JOINT DETAIL

NOTE : BODY AND SLIP PIPE TO BE MINIMUM 1/2" THICK

SECTION D-D

SECTION G-G
TYPE "R"

PIPE GROOVING FOR COUPLING

SECTION E-E

ELASTOMERIC PAD "A" DETAIL
50 DUROMETER ELASTOMER

PROCEDURE FOR PLACEMENT OF ANCHOR BOLTS

ANCHOR BOLT DETAIL

FOR ADDITIONAL DETAILS, SEE SHEETS 11/15 & 12/12

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

13 / 15

WATERMAIN DETAILS

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
SFN: 773175

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C:\D\88011\WATDET Fri May 28 15:26:01 1993 RWM

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

28
34

SUMMIT COUNTY
SUM-WOOSTER ROAD

GAS LINE FRAMING SUPPORT PLAN

ELEVATION

* GASLINES, INSULATED U BOLTS & PIPE HANGERS TO BE FURNISHED AND INSTALLED BY THE EAST OHIO GAS COMPANY.

* ESTIMATED QUANTITIES

DESCRIPTION	UNIT	QUANTITY
STRUCTURAL STEEL A588 W/PAINT	LBS	1400
STAINLESS STEEL ANCHOR BOLTS W/NUTS AND WASHERS	EACH	48
ELASTOMERIC PADS (1/4"x9 1/2"x13")	EACH	8

* INCLUDED WITH "ITEM SPECIAL - GAS LINES SUPPORT FRAMING" FOR PAYMENT

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

14 / 15

GAS LINE PLAN & ELEVATION

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

BAR 10-0361
SFN: 7731175

C:\D\88011\GASPLAN Fri May 28 15:14:31 1993 RWM

\88011\GASPLAN.DWG

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO		

29/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

DETAIL 7/14|15

DETAIL 9/14|15

SECTION D-D

ANCHOR PLATE "C"

DETAIL 8/14|15

SECTION B-B

*TO BE FURNISHED AND INSTALLED BY THE EAST OHIO GAS COMPANY

SECTION 10/14|15

GASLINE GENERAL NOTES

1. PIPE SUPPORT FRAMING CONSISTING OF STAINLESS STEEL ANCHOR BOLTS, ELASTOMERIC PADS AND STEEL SUPPORTING BRACKETS SHALL BE FABRICATED IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL OF THE PIPE SUPPORT FRAMING.

   MATERIALS REQUIREMENTS :

   STAINLESS STEEL ANCHOR BOLTS : ALL BOLTS USED TO ANCHOR THE PIPE SUPPORTS TO THE BRIDGE DECK SHALL BE STAINLESS STEEL ASTM A276, TYPE 304.

   ELASTOMERIC PADS : THE CONTRACTOR SHALL FURNISH AND INSTALL ELASTOMERIC PADS WHERE SHOWN ON THE PLANS. ELASTOMERIC PADS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 711.23 OF THE CMS.

   THE ENTIRE STEEL FRAMING SHALL BE CARBON STEEL ASTM A588 (WEATHERING STEEL), UNLESS NOTED OTHERWISE, WITH PAINT. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ITEM 513. NO SHOP COAT IS REQUIRED. FIELD PAINT SHALL CONSIST OF ONE PRIME COAT FOR SYSTEM A OR TWO PRIME COATS FOR SYSTEM B, AND ONE FINISH COAT. ALL PAINT SHALL CONFORM TO THE REQUIREMENTS OF ITEM 514.

2. PAYMENT FOR FURNISHING AND INSTALLING THE STEEL FRAMING SUPPORT COMPLETE IN PLACE SHALL BE INCLUDED WITH ITEM SPECIAL - GASLINE SUPPORT FRAMING (THE EAST OHIO GAS COMPANY)

3. THE FOLLOWING GASLINE WORK IS NOT INCLUDED UNDER THIS CONTRACT AND SHALL BE PERFORMED BY THE EAST OHIO GAS COMPANY.

   - FURNISHING AND INSTALLING 8"ø WELDED STEEL PIPE.
   - FURNISHING AND INSTALLING 10"ø WELDED STEEL PIPE.
   - FURNISHING AND INSTALLING PIPE HANGER RODS W/HEX NUTS AND WASHERS
   - FURNISHING AND INSTALLING PIPE ROLLS
   - FURNISHING AND INSTALLING INSULATED U BOLTS W/HEX NUTS AND WASHERS
   - PIPE HANGER ASSEMBLY SHALL BE MODEL No. 605 (FOR PIPE DIAMETER =10") AS MANUFACTURED BY MICHIGAN HANGER COMPANY, NILES, OHIO, OR APPROVED EQUAL. PIPE HANGER ASSEMBLY SHALL CONSIST OF GALVANIZED CARBON STEEL HANGER RODS WITH HEX NUTS AND CAST IRON ROLLS.

SECTION A-A

ELASTOMERIC PAD "A" DETAIL
50 DUROMETER ELASTOMER

PROCEDURE FOR PLACEMENT OF ANCHOR BOLTS

ANCHOR BOLT DETAIL

U BOLT DETAIL
TO BE FURNISHED & INSTALLED BY THE EAST OHIO GAS Co.

BAR 10-036
SFN: 7731175

JDJ&A, INC.
2162 FRONT STREET
CUYAHOGA FALLS, OHIO 44221
ENGINEERS ARCHITECTS PLANNERS

15/15

GAS LINE DETAILS

BRIDGE No. SUM-WOOSTER RD.
OVER WOLF CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
BRH	RWM		JRO	BK	12-'92	

C:\D\88011\GASDET Fri May 28 16:43:56 1993 RWM

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CENTER LINE SURVEY PLAT

STATE OF OHIO
SUMMIT COUNTY
CITY OF BARBERTON
SUM-WOOSTER ROAD
OL 68
RANGE HEIRS ALLOTMENT

	BY	DATE
CALC.	R.B.	1/93
CHECKED	T.S.	1/93

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

30/34

1/5

SUMMIT COUNTY
SUM-WOOSTER ROAD
RIGHT-OF -WAY PLAN

N

0' 100' 200'
SCALE IN FEET

BASIS OF BEARINGS:
AS RECORDED RANGE HEIRS ALLOTMENT, IN LOT 68, BARBERTON, OHIO, IN SUMMIT COUNTY RECORDS, PLAT BOOK 7, PAGE 25.

LEGEND

■ INDICATES CENTER LINE MONUMENT ASSEMBLY

CENTER LINE MONUMENT ASSEMBLIES TO BE PLACED AT THE FOLLOWING LOCATIONS AFTER CONSTRUCTION	
STATION	OFFSET
8+00	℄
13+10	℄

STATE OF OHIO
JOHN DAVID JONES
4362
REGISTERED PROFESSIONAL SURVEYOR

I HEREBY CERTIFY THAT THIS PLAT IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF TRANSPORTATION.

BY: John David Jones DATE: 4/15/93

OHIO REGISTERED SURVEYOR'S NO. 4362

BAR 10-0361

SFN: 7731175

DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED _____

DATE _____

CITY OF BARBERTON ENGINEERING DEPARTMENT

APPROVED John V. Kilroy

DATE 6-17-93

RECEIVED _____
RECORDED _____
BOOK _____ PAGE _____
BY:
SUMMIT COUNTY RECORDER

REV	DATE	DESCRIPTION

CENTER LINE SURVEY PLAT

\88011\WCLSURVY.DWG

C:\D\88011\WCLSURVY Wed Jun 16 10:38:47 1993 RWM

RIGHT-OF-WAY PLAN

SUM-WOOSTER ROAD
CITY OF BARBERTON, SUMMIT COUNTY, OHIO
O.L. 68, RANGE HEIRS ALLOTMENT

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-1T20(1)	

32/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

3/5

RIGHT-OF-WAY

PLAN COMPLETION DATE

REV	DATE	DESCRIPTION

BAR 10-0361

WOOSTER RD. RIGHT-OF-WAY STA. 7+00 to STA. 11+00

SFN: 773475

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(I)	

33 / 34

4 / 5

SUMMIT COUNTY
SUM-WOOSTER ROAD

RIGHT-OF-WAY

RIGHT-OF-WAY PLAN

SUM-WOOSTER ROAD
CITY OF BARBERTON, SUMMIT COUNTY, OHIO
O.L. 68, RANGE HEIRS ALLOTMENT

DETAIL "A"
NTS

PLAN COMPLETION DATE,		
REV	DATE	DESCRIPTION

BAR 10-0361

WOOSTER RD. RIGHT-OF-WAY STA. 11+00 to STA. 15+00

SFM 723475

PROPERTY MAP
STATE OF OHIO
SUMMIT COUNTY
CITY OF BARBERTON
O.L. 68
RANGE HEIRS ALLOTMENT

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

31/34

SUMMIT COUNTY
SUM-WOOSTER ROAD

2/5

RIGHT-OF-WAY

DETAIL A

PROPERTY OWNER

1. PITTSBURGH PLATE GLASS
2. B & C DIVERSIFIED
3. BARBERTON RAMBLER

UTILITY OWNERSHIP	
TYPE	NAME & ADDRESS
OVERHEAD CABLE (TELEVISION)	WARNER CABLE CO. 1655 BRITTAN RD. AKRON, OHIO 44310 (216) 630 - 9798
OVERHEAD CABLE (TELEPHONE)	OHIO BELL TELEPHONE III CASCADE PLAZA AKRON, OHIO 44308 (216) 384 - 4732
OVERHEAD CABLE (ELECTRIC)	OHIO EDISON III CASCADE PLAZA AKRON, OHIO 44308 (216) 384 - 4732
UNDERGROUND	EAST OHIO GAS 2100 EASTWOOD AVE. AKRON, OHIO 44305-1998 (216) 798-7142
UNDERGROUND	CITY OF BARBERTON WATER & SANITARY 576 WEST PARK AVE. BARBERTON, OHIO 44203 (216) 848 - 6724

PLAN COMPLETION DATE,

REV.	DATE	DESCRIPTION

PROPERTY MAP

BAR 10-0361
SFN: 7731175

88011

TOTAL NUMBER OF ---
3 OWNERSHIPS
0 TOTAL TAKES
0 OWNERSHIPS WITH STRUCTURES INVOLVED
0 OWNERSHIPS WITH "P" ITEMS

SUMMARY OF ADDITIONAL RIGHT OF WAY

	BY	DATE
CALC.	R.B.	1/93
CHECKED	B.R.H.	1/93

PID # 7539
STATE JOB # 046750

F.H.W.A. REGION	STATE	PROJECT	
5	OHIO	BRF-IT20(1)	

34/34

SUMMIT COUNTY
SUM-WOOSTER ROAD
RIGHT-OF-WAY

5/5

AREA IN SQUARE FEET

PARCEL	OWNER	SHEET NO.	OWNERS RECORDS BOOK	OWNERS RECORDS PAGE	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRU-CTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS AND PERSONALTY	AS ACQUIRED BOOK	AS ACQUIRED PAGE	AUDITOR'S I.D. NO.
1WD	PITTSBURGH PLATE GLASS	3	4028	229	1535926	5401	4856	3067	1789	NO	1528736						
	PITTSBURGH PLATE GLASS		4028	229	103008074	11413	7046	3870	3176	NO		102993485					*01-14000
	TOTAL				104544000		11920		4965								
1T	PITTSBURGH PLATE GLASS						1650	0	1650								
1T-1	PITTSBURGH PLATE GLASS						1617	0	1617					OHIO EDISON EASEMENT IS RECORDED IN BOOK 3509 PAGE 570 AND DEPICTED ON OHIO EDISON CO. DRAWING TZ 1383 F *TAKE IS FROM AUDITOR ID NO. 01-14000, ONE OF NUMEROUS PARCELS.			
2WD	B. & C. DIVERSIFIED PRODUCTS INC.	3,4	7184	857	1075932	12632	2114	1618	496	NO	1062804						01-08467
					1742						1742						01-08468
2T	B. & C. DIVERSIFIED PRODUCTS INC.	3,4			8276		2097	0	2097		8276			CONSTRUCT DRIVE			01-08469
					3049						3049						01-08470
2T	TOTAL				1088999		2097		2097		1088999						
3WD	BARBERTON RAMBLER	3,4	3824	524	21344	0	431	0	431	NO		20913					01-00603
			3824	514	9112	0	0	0				9112					01-00604
					7223							7223					01-00606
			3819	529	7623	0	0	0				7623					01-00605
	TOTAL				45302		431					44871					
3T	BARBERTON RAMBLER	4					1091		1091					CONSTRUCT DRIVE AND SLOPES			

REV.	DATE	DESCRIPTION

R/W SUMMARY SHEET

BAR 10-0361
SFN: 7731175

B:\WRW-SUM Wed Jun 16 09:53:13 1993 GW

\D\88011\WRW-SUM.DWG