State Job No. 476370
Project No.

PID No. 25099
FED. No. NON-FEDERAL

STATE OF OHIO
OHIO DEPARTMENT OF TRANSPORTATION
MIA-41-18.78
VILLAGE OF COVINGTON

MIA - SR 41-18.78/Various
050407 PID - 25099
Dist 7 7/13/2005

LOCATION MAP

MAINTENANCE
TWO-LANE RESURFACING

Project Earth Disturbed Area = 0.0 Acres
Estimated Contractor Earth Disturbed Area = N/A
Notice of Intent Earth Disturbed Area = N/A

2002 SPECIFICATIONS

The Standard 2002 Specifications of the State of Ohio Department of Transportation, including changes and supplemental specifications listed in the plans and the proposal shall govern these improvements.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic and that provisions for the maintenance and safety of traffic will be as set forth in the plans and estimates.

4-15-05 William L. Harrison /PRN
Date Approved — District Deputy Director

05-05-05 Gordon Proctor /JL
Date Approved — Director, Department of Transportation

PROJECT DESCRIPTION: The work proposed by this project consists of pavement planing and resurfacing the existing State Route 41 and State Route 48 roadways using Item 442, Asphalt Concrete as set forth in these plans.

(1) MIA-41-18.78 (East Corporation Limits of Covington to U. S. Route 36)

(2) MIA-48-9.62 (North Corporation Limits of Pleasant Hill to the North Corporation Limits of Covington

1 - Title Sheet
2 & 3 - Pavement Data
4 - Approach Typicals
5 & 6 - General Notes
7 thru 9 - Curb Ramp Sheets
10 & 11 - Bridge Sheets
12 - Raised Pavement Markers
13 - General Summary

ENGINEER'S SEAL

STATE OF OHIO
PAUL ROBERT HARTMAN
No. 47088
PROFESSIONAL ENGINEER

Signed Paul Robert Hartman
Date 4-15-05

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

PLAN PREPARED BY:
District D7

STANDARD DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-16-04	MT-99.20M	1-30-95		
DM-4.3	7-19-02			832	4-17-04
DM-4.4	7-19-02	TC-65.10	1-21-05	833	2-12-03
		TC-65.11	1-21-05	908	4-18-03
MT-97.10	4-19-02				
MT-97.11	4-19-02	TC-71.10	1-21-05		

MIA41B78 March 10, 2005

PLAN NO.

TYPICAL 1

TYPICAL 2

TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT SLM	LENGTH MILE	LENGTH FEET	AVG. PAVEMENT WIDTH FEET	TYPICAL	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT 407 TACK COAT @0.075 gal./sq. yard GALLONS	ASPHALT CONCRETE 442 THICK INCH AVG.	442 CUBIC YARD	442 THICK INCH	442 CUBIC YARD	442 APP THICK INCH	442 APP CUBIC YARD	202 WEARING COURSE REMOVED (BT. JT.) SQ. YD.	617 COMPACTED AGGREGATE THICK INCH AVG.	617 COMPACTED AGGREGATE CUBIC YARD
1	SR 41	18.78 - 19.07	0.29	1531	28.0	1	4763	357					2.0	265		1.5	28
		19.07 - 19.54	0.47	2482	38.0	2	10480	786					2.0	583			
	Intersections (17)						1094	82					2.0	61			
	Drives & Mailboxes (14)						247	19					2.0	14			
	Total Part 1		0.76	4013			16584	1244						923			28

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MIAMI COUNTY
MIA-41-18.78

PAVEMENT DATA

PLAN NO.

TYPICAL 1

TYPICAL 2

Item 407, Tack Coat, calculated at 0.10 gallon per square yard
Apply 0.075 gallon per square yard for Intermediate Course
Apply 0.025 gallon per square yard for Surface Course

TYPICAL - COMPACTED AGGREGATE

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT SLM	LENGTH MILE	LENGTH FEET	AVG. PAVEMENT WIDTH FEET	TYPICAL	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT 407 TACK COAT @0.10 gal./sq. yard GALLONS	ASPHALT CONCRETE 448 THICK INCH AVG.	448 CUBIC YARD	442 THICK INCH	442 CUBIC YARD	442 APP THICK INCH	442 APP CUBIC YARD	202 WEARING COURSE REMOVED (BT. JT.) SQ. YD.	617 COMPACTED AGGREGATE THICK INCH AVG.	617 COMPACTED AGGREGATE CUBIC YARD
2	SR 48	9.62 - 12.96	3.34	17635	28.0	1	54864	5486	0.5	762	1.25	1905			156	2.0	435
		12.96 - 13.14	0.18	950	32.0	1	3378	338	0.5	47	1.25	117					
		13.14 - 13.25	0.11	581	28.0	1	1808	181	0.5	25	1.25	63					
		13.25 - 13.30	0.05	264	32.0	1	939	94	0.5	13	1.25	33					
		13.30 - 13.36	0.06	317	42.0	2	1479	148	0.5	21	1.25	51					
		13.36 - 13.65	0.29	1531	34.0	2	5783	578			1.5	241					
		13.65 - 14.12			(Suspend Work, Overlap with State Route 41)												
		14.12 - 14.20	0.08	422	28.0	2	1313	131					2.0	73			
		14.20 - 14.61	0.41	2165	28.0	2	6736	674			1.5	281					
	Intersections (17)						1911	191	0.5	27	1.25	66			140		
	Drives & Mailboxes (119)						3101	310	0.5	43	1.25	108			880		
	Total Part 2		4.52	23865			81313	8131		938		2865		73	1176		435

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MIAMI COUNTY
MIA-41-18.78

PAVEMENT DATA

PLAN NO.

TYPICAL DRIVEWAY

SLOPE FOR TYPICAL MAILBOX APPROACH AND DRIVES TO BE ½" PER FOOT DOWN FROM FINISHED PAVEMENT EDGE.

TYPICAL COMBINATION DRIVE & MAILBOX APPROACHES

TYPICAL MAILBOX APPROACH

● ADD 2 FEET FOR EACH ADDITIONAL MAILBOX

TYPICAL APPROACH ROAD PAVING

W = To Back of Radius or As Directed By the Engineer

OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN MAINTENANCE

TYPICAL APPROACHES FOR ROADS, DRIVES AND MAILBOXES

APPROVED

CALCULATED BY	MIAMI COUNTY MIA-41-18.78	APPROACH TYPICALS	4 13
CHECKED BY			

GENERAL NOTES

PLAN NO.

PLANING IN CURBED AREAS

1. Item 254 - Pavement Planing, Asphalt Concrete
2. Item 442 - Asphalt Concrete Intermediate Course
3. Item 442 - Asphalt Concrete Surface Course
4. Item 407 - Tack Coat
5. Existing Pavement

An estimated quantity of Item 254, Pavement Planing, Asphalt Concrete has been carried to the General Summary and included in the plans to be used as directed by the Engineer.

The approximate depth of pavement planing shall vary from zero inches (0.0") to two inches (2.0"). All planed cuttings shall become the property of the Contractor and shall be removed from the limits of the project.

Part 1 - SLM 18.78 to SLM 19.54 = 2.0" deep
Part 2 - SLM 13.30 to SLM 13.65 = 1.5" deep
SLM 14.12 to SLM 14.20 = 2.0" deep
SLM 14.20 to SLM 14.61 = 1.5" deep

The approximate width of pavement planing will vary from twenty-eight feet (28.0') to forty-two feet (42.0').

The Contractor is to arrange his work schedule and begin placement of Item 442, Asphalt Concrete, Intermediate Course within forty-eight (48) hours after Item 254, Pavement Planing, Asphalt Concrete is completed on a daily operation.

The following intersections are located within the planing area:

Part 1 -	Wenrick St. - 1	Pearl St. - 2	Spring St. - 2
	Harrison St. - 1	Bridge St. - 2	Walnut St. - 2
	Wall Street -2	Thompson St. - 1	Wright St. - 2
Part 2 -	George St. - 1	Lindsay St. - 2	Park Street - 2
	Dodds Street - 2	Olive Street - 1	Fountain St. - 1
	Railroad St. - 1		

There are approximately sixty-one (61) castings within the planing area. The Contractor shall be responsible for furnishing all labor and equipment necessary to maintain traffic around the castings and shall include the cost in the unit price bid for Item 614 - Maintaining Traffic.

Manholes = 36 each Water Valves = 25 each

Any castings that require adjusting during construction will become the responsibility of the Contractor.

Item 254 - Pavement Planing, Asphalt Concrete
Part 1 = 17,434.0 square yards
Part 2 = 15,779.0 square yards

UNDERGROUND UTILITIES

The locations of the underground utilities listed on the plans are as obtained from the owners of the utility as required by Section 153.64 ORC. *Ohio Utility Protection Service at 1-800-362-2764.*

The underground utility companies with buried services within the project limits on State Route 41 are as follows:

Village of Covington
10 South Main Street
Covington, Ohio 45318
Phone: (937) 473-2102 or (937) 473-5577

GENERAL NOTES

PLAN NO.

TRAFFIC

Traffic shall be maintained at all times. The length of restricted traffic zones shall be kept to a minimum consistent with the specification requirements for protection of completed courses.

The use of paved berms to maintain traffic is prohibited. Should any existing or new berm areas become damaged or destroyed due to the Contractor's negligence or failure to provide adequate signs, barricades, cones, flagmen or other traffic control devices, the restoration of the berms will be at the Contractor's expense, unless otherwise approved by the Engineer.

ALIGNMENT AND PROFILE

The work proposed by this project consists of pavement planing and resurfacing of the existing pavement. The alignment of the existing pavement will not be changed and the profile of the proposed surface will be similar to that of the existing pavement.

INTERMEDIATE COURSE

This material shall be placed in a separate operation where and as directed by the Engineer.

NOTIFICATION

The Contractor shall notify the Ohio Department of Transportation District Seven Construction Engineer two weeks prior to beginning any work. Phone: (937) 497-6848.

CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

The Metric Standard Drawings referenced in this plan shall be converted to English units using the SI (Metric) to English conversion factors provided in Section 109.02 of the 2002 Construction and Material Specifications. Conversions shall be appropriately precise and shall reflect standard industry English values where suitable.

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

The material used for the resurfacing shall consist of two inches (2.0") of Item 442, Asphalt Concrete Surface Course, 12.5 mm, Type A (448), As Per Plan.

The 442.04 binder shall be PG 76-22M for the Surface Course.

Use a superpave asphalt concrete mix design for an ADT of 9130 and a T24 of 1500 for State Route 41 from SLM 18.78 to SLM 19.54 and for State Route 48 from SLM 14.12 to SLM 14.20. Use a superpave asphalt concrete mix design for an ADT of 2560 and a T24 of 140 for State Route 48 from SLM 9.62 and SLM 14.12 and from SLM 14.20 to SLM 14.61.

ITEM 608, CURB RAMPS, AS PER PLAN

An estimated quantity of Item 608, Curb Ramps with Truncated Domes, As Per Plan, has been included in the General Summary. The Truncated Domes are to be included in the cost of Item 608, Curb Ramps, As Per Plan.

The Contractor shall be responsible for saw cuts for sidewalk and curb removal of sidewalk and curb, replacement of sidewalk and curb, materials and restoration. The estimated quantity is seventy-five (75) square feet of surface area per location.

See Standard Drawing BP-7.1 for detailed information and requirements.

To be used as directed:

Item 608, Concrete Walk, Four Inch (4.0")	50 square feet
Item 609, Combination Curb and Gutter, Type 2	50 feet

PLAN NO.

See Sht. 3/3 for SECTION A-A

PERPENDICULAR CURB RAMP DETAIL

See Sht. 3/3 for SECTION B-B

PARALLEL CURB RAMP DETAIL (DOUBLE)

See Sht. 3/3 for SECTION C-C

COMBINED CURB RAMP DETAIL

$B = C / 0.083$

$C = [\text{Curb ht.} + A(S_S)] - [(A-D)S_R + D(0.02)]$

See Sht. 3/3 for SECTION B-B

PARALLEL CURB RAMP DETAIL (SINGLE)

Street Slope	Ramp Length @ 1"/ft [0.083]	
	$L_{LOW\ SIDE}$*	$L_{HIGH\ SIDE}$*
0.01	5'-6" [1.7 m]	7'-2" [2.2 m]
0.02	5'-0" [1.5 m]	8'-4" [2.5 m]
0.03	4'-6" [1.4 m]	10'-0" [3.0 m]
0.04	4'-2" [1.3 m]	12'-6" [3.8 m]
0.05	3'-10" [1.2 m]	16'-8" [5.1 m]

* Measured along the back of a 6" [150] high curb.

$L_{HIGH} = \frac{\text{Curb ht.}}{0.083 - \text{Street Slope}}$ 2

$L_{LOW} = \frac{\text{Curb ht.}}{0.083 + \text{Street Slope}}$ 2

LEGEND

1. May be reduced to 3'-0" [915] in existing sidewalks if the landing is unconstrained along the back edge.
2. May be reduced to 3'-4" [1.02 m] in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
3. Where landing width (D) has been reduced to 3'-0" [915] the flared sides shall have a maximum slope of 12:1 [0.083].

   Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheel chair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

   The slope of the ramp toward the curb is preferred to be 12:1 [0.083] or flatter related to the horizontal, but the maximum slope shall be 12:1 [0.083] relative to the existing or proposed walk slope.

   In existing sidewalks, where the maximum ramp slope (S_R) is not feasible, it may be reduced as follows:

   A) 10:1 [0.10] for a max. rise of 6" [150].
   B) 8:1 [0.125] for a max. rise of 3" [75].
   C) 6:1 [0.167] over a max. run of 2'-0" [610] for historic areas where a flatter slope is not feasible.
4. The minimum length of a perpendicular ramp is 6' [2.0 m] from the back of a 6" [150] curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.
5. Gutter counter slopes at the foot of perpendicular curb ramps should not exceed 20:1 [0.05] over a distance of 2'-0" [610] from the curb.
6. Dimensions derived by equation are nominal. Construct ramps to meet required slopes and existing conditions.
7. Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" [610] from the back of the curb by the width of the ramp. See NOTES on sheet 3.

CALCULATED BY	MIAMI COUNTY MIA-41-18.78	CURB RAMPS WITH TRUNCATED DOMES	7/13
CHECKED BY			

PLAN NO.

DESIGN A
PERPENDICULAR RAMP

DESIGN B
PARALLEL RAMP

DESIGN C
COMBINATION RAMP

DESIGN D
DIAGONAL RAMP

Use in existing walks only and when site constraints prohibit other designs. The diagonal ramp may be perpendicular, parallel or combination.
Avoid using where curb radii are less than 20'-0" [6.0 m].

CORNER CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

For LEGEND, See sheet 1.

DESIGN E
PERPENDICULAR RAMP

DESIGN F
PARALLEL RAMP

DESIGN G
PERPENDICULAR RAMPS
W/O FLARES

MID BLOCK CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

CALCULATED BY	MIAMI COUNTY	CURB RAMPS WITH TRUNCATED DOMES	8
CHECKED BY	MIA-41-18.78		13

PLAN NO.

NOTES

SURFACE TEXTURE: Texture of concrete surfaces shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

TRUNCATED DOMES: Install detectable warnings (truncated domes) for a distance of 24" [610] from the back of the curb for the entire width of the ramp opening as shown on details on Sheet 1.

Pavers will meet ASTM C 902 Class SX, Type I, or C 936, or C 1272 Type R.

Acceptable manufacturers and products are:
1) Whitacre-Greer Fireproofing Company, 1400 S. Mahoning Ave, Alliance, OH, 44601, ADA Paver, 4"x8"x2-1/4", Clear Red (Rustic) #30.
2) Hanover Architectural Products, 240 Bender Rd., Hanover, PA. 17331, Detectable Warning Paver, 4"x8"x2", Red or Quarry Red.
3) Endicott Clay Products, PO Box 17, Fairbury, NE, 68352, Handicap Detectable Warning Paver, 4"x8"x2-1/4", Red Blend.

Pavers will laid on top of a 4" [100] unreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum ½" [13] thick bed of latex modified cement mortar. Mortar joints to a width not greater than ⅜" [4] and not less than 1/16" [1.5]. Pavers shall not be directly touching each other unless they have spacing bars.

Mortared joints are to be flush with top surface and struck so as to give a smooth surface. Pavers shall be laid such that joints are level with adjoining joints so as to provide a smooth transition from brick to brick and brick to concrete surface.

The surface of any two adjacent units should not differ by more than ⅛" [3] in height. Bricks shall be placed in a running bond pattern. Face of all brick shall be clean of cement and protected so as to avoid chipping during construction.

EXPANSION JOINTS: shall be provided in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. A ½" [13] Item 705.03 expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

PAYMENT: Walk and curb, Items 608 and 609, shall be measured through the curb ramp area paid for under their respective items. **Item 608 - Curb Ramp, As Per Plan, Each** constructed in new curb and walk shall include the cost of any additional materials and installation (including truncated domes), grading, forming and finishing. **Item 608 - Curb Ramp, As Per Plan, Square Feet [Meter],** constructed in existing curb and walk shall include the cost of furnishing and installing all materials (including truncated domes), grading, forming, and finishing of the curb and walk of the curb ramp. Removal of existing curb and walk shall be paid for under Item 202.

SECTION A-A
NORMAL DETAIL
See Sheet 1 of 3.
(Gutter shown)

SECTION B-B
See Sheet 1 of 3.

SECTION A-A
EXISTING WALK DETAIL
See Sheet 1 of 3.

SECTION C-C
See Sheet 1 of 3.

DETAIL A

CALCULATED BY	MIAMI COUNTY MIA-41-18.78	CURB RAMPS WITH TRUNCATED DOMES	9/13
CHECKED BY			

EXISTING STRUCTURE VERIFICATION

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

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE-BID EXAMINATION OF THE EXISTING STRUCTURES BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS, WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD. PLANS OF THE EXISTING STRUCTURES MAY BE EXAMINED AT THE DISTRICT SEVEN OFFICE IN SIDNEY, OHIO OR THE BUREAU OF BRIDGES AND STRUCTURAL DESIGN AT COLUMBUS, OHIO.

PROPOSED WORK - MIA-48-0993

REMOVE 4.0" OF EXISTING ASPHALT CONCRETE WEARING COURSE FROM BRIDGE DECK. OVERLAY DECK WITH 2.0" ASPHALT CONCRETE. GRIND BACK 150.0' FROM EACH EDGE OF BRIDGE FOR A SMOOTH TRANSITION. SEAL EXPANSION JOINTS WITH JOINT SEALER, 705.04. ADJUST THE BRIDGE RAILING TO THE PROPER HEIGHT DURING THE PAVING OPERATION.

PROPOSED WORK - MIA-48-1131, MIA-48-1244

REMOVE 3.0" OF EXISTING ASPHALT CONCRETE WEARING COURSE FROM BRIDGE DECK. OVERLAY DECK WITH 2.0" ASPHALT CONCRETE. GRIND BACK 100.0' FROM EACH EDGE OF BRIDGE FOR A SMOOTH TRANSITION. SEAL EXPANSION JOINTS WITH JOINT SEALER, 705.04. ADJUST THE BRIDGE RAILING TO THE PROPER HEIGHT DURING THE PAVING OPERATION.

PROPOSED WORK - MIA-41-1880

OVERLAY AS REGULAR ROADWAY.

PROPOSED WORK - MIA-48-1426

MAINTAIN VERTICAL CLEARANCE.

ITEM 517 - RAILING REBUILT, AS PER PLAN

THE RAILING SHALL BE ADJUSTED TO THE PROPER HEIGHT AS PER STANDARD DRAWING GR2.2M. SLOTS MAY NEED TO BE LENGTHENED OR NEW GUARDRAIL POSTS USED TO ACHIEVE REQUIRED HEIGHT.

MIA-48-0993, MIA-48-1131, MIA-48-1244

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MIAMI COUNTY
MIA-41-18.78

BRIDGE - PROPOSED WORK

PART	MIA-48 0993	MIA-48 1131	MIA-48 1244				ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
	993	696	684				202	23500	2373	SQ. YD.	WEARING COURSE REMOVED
	72	72	73				516	31000	217	FT.	JOINT SEALER
	-	-	-							EACH	Wedges
	2"	2"	2"								Proposed Asphalt Concrete Thickness
	4"	3"	3"								Wearing Course Removed Thickness

BRIDGE NO.	LENGTH (Bridge Limits) FT.	WIDTH FT.	BRIDGE DECK AREA S.Y.	STRUCTURE FILE NUMBER	COMMENTS (Existing Wearing Course)
MIA-48-0993	15.00	36.00	60	5501008	5"-7" Asphalt Concrete
MIA-48-1131	18.50	36.00	74	5501067	5" Asphalt Concrete
MIA-48-1244	15.52	36.00	62	5501091	5" Asphalt Concrete

Quantities to be carried to the General Summary

CALCULATED BY LEE
CHECKED BY

MIAMI COUNTY
MIA-41-18.78

BRIDGE SUMMARY

RAISED PAVEMENT MARKERS

PLAN NO.

LOCATION				DETAIL	RPM	PRISMATIC RETRO-REFLECTOR TYPES					REMARKS
		SLM SECTION				ONE-WAY		TWO-WAY			
PART	ROUTE	FROM	TO			WHITE	YELLOW	WHITE/ WHITE	YELLOW/ YELLOW	WHITE/ RED	
2	SR 48	8.97	9.04	GAP	5				5		
		9.71	13.22	GAP	232				232		
		TOTAL PART 2			237				237		

PAVEMENT MARKING NOTES

Lane Width = 12.0 feet

Solid Line Equivalent = 4.35 miles

The Edge Line shall be continued around all radii to match the Edge Line of the intersecting route. If the intersecting route has a Center Line, the Center Line shall be re-striped over the area of the resurfacing.

1	Multilane Divided	5	Multilane Divided / Expressway	10	4 Lane Divided to 2 Lane Transition	15	Horizontal Curve
1	Typical Spacing	6	Stop Approach	11	4 Lane Undivided to 2 Lane Transition	16	Horizontal Curve Alt.
2	Tapered Acceleration Lane	7	1 Lane Approach w/Left Turn Lane	12	Two Lane Narrow Bridge	17	Stop Approach Alt.
3	Deceleration Lane	8	Thru Approach	13	Two Way Left Turn Lane	GAP	Centerline at 80 feet Typical
4	Parallel Acceleration Lane	9	2 Lane Approach w/Left Turn Lane	14	One Lane Bridge		

CALCULATED BY

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MIAMI COUNTY
MIA-41-18.78

RAISED PAVEMENT MARKERS

GENERAL SUMMARY

PLAN NO.

PART 1	PART 2	ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	DESCRIPTION
	3549	202	23500	3549	SQ. YD.	Wearing Course Removed
	241	202	54000	241	EACH	RPM Removed and Disposed
17434	15779	254	01000	33213	SQ. YD.	Pavement Planing, Asphalt Concrete
1244	8131	407	10000	9375	GALLON	Tack Coat
	2865	442	10500	2865	CU. YD.	Asphalt Concrete Surface Course, 9.5 mm, Type A (448)
923	73	442	20001	996	CU. YD.	Asphalt Concrete Surface Course, 12.5 mm, Type A (448), As Per Plan
	938	442	20100	938	CU. YD.	Asphalt Concrete Intermediate Course, 9.5 mm, Type A (448)
	217	516	31000	217	FT.	Joint Sealer
7	5	604	34500	12	EACH	Manhole Adjusted to Grade
	50	608	10000	50	SQ. FT.	4 Inch Sidewalk
	6	608	49001	6	EACH	Curb Ramp, As Per Plan
	50	609	12000	50	FT.	Combination Curb and Gutter, Type 2
6	21	614	12460	27	EACH	Work Zone Marking Sign
1.52	9.04	614	21000	10.56	MILE	Work Zone Center Line, Class I
28	435	617	10100	463	CU. YD.	Compacted Aggregate, TYPE A
	237	621	00100	237	EACH	RPM
5	7	638	10800	12	EACH	Valve Box Adjusted to Grade
0.58	7.36	642	00100	7.94	MILE	Edge Line, Type I
0.76	4.52	642	00300	5.28	MILE	Center Line, Type I
75	80	644	00400	155	FT.	Channelizing Line
166	20	644	00500	186	FT.	Stop Line
1278	636	644	00600	1914	FT.	Crosswalk Line
1	2	644	01300	3	EACH	Lane Arrow
1	1	644	01400	2	EACH	Word on Pavement, 72"
LUMP	LUMP	614	11000	LUMP		Maintaining Traffic
LUMP	LUMP	624	10000	LUMP		Mobilization

CALCULATED BY

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MIAMI COUNTY
MIA-41-18.78

GENERAL SUMMARY