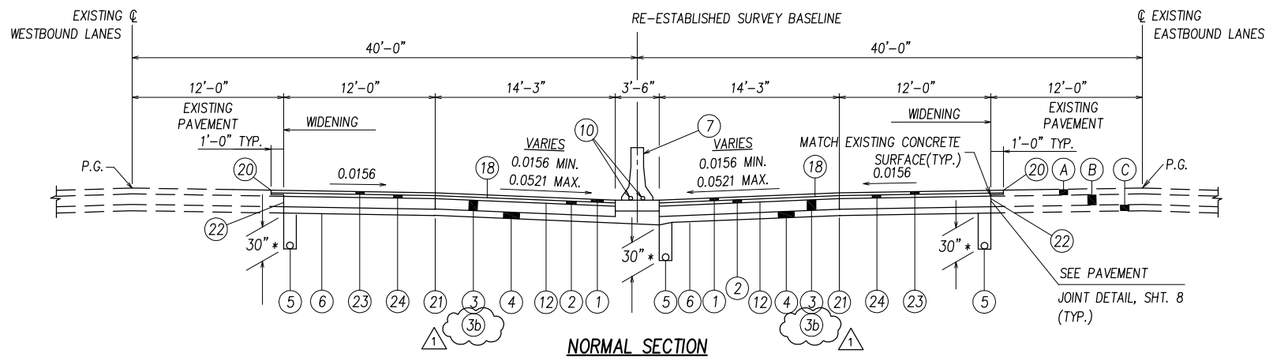
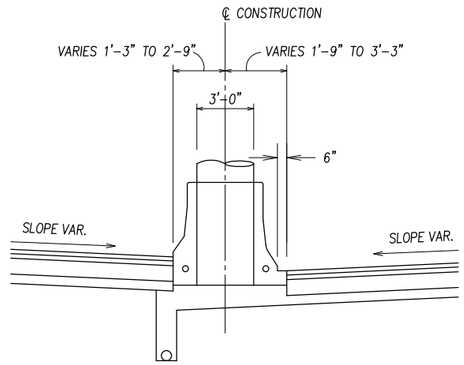


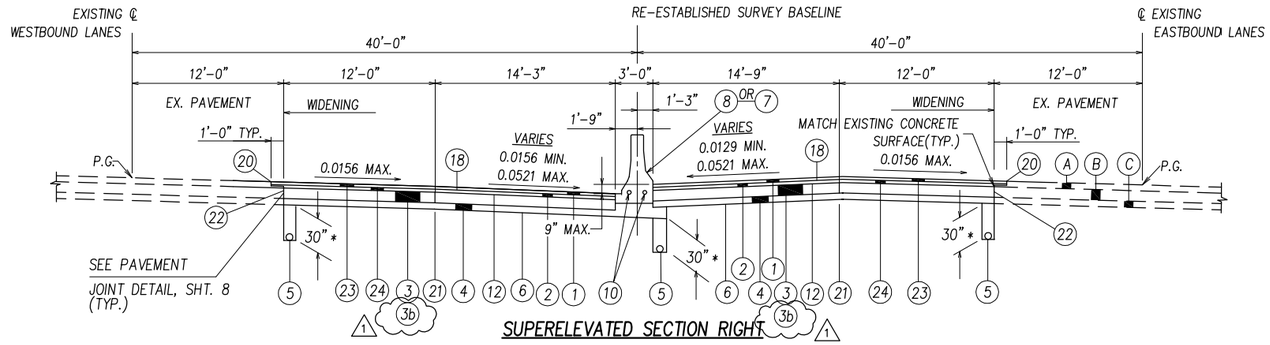
NORMAL SECTION

STA. 586+50 TO STA. 593+20
STA. 617+20 TO STA. 621+25
STA. 635+75 TO STA. 660+75
STA. 681+00 TO STA. 695+97.60
STA. 700+05.88 TO STA. 751+25
STA. 7+81.69 TO STA. 8+00
STA. 20+50 TO STA. 26+87.83
STA. 29+00.70 TO STA. 32+29.14
STA. 34+65.57 TO STA. 36+50
STA. 50+00 TO STA. 59+00

* UNDERDRAIN DEPTH IS 30" UNLESS SHOWN OTHERWISE IN THE PLANS



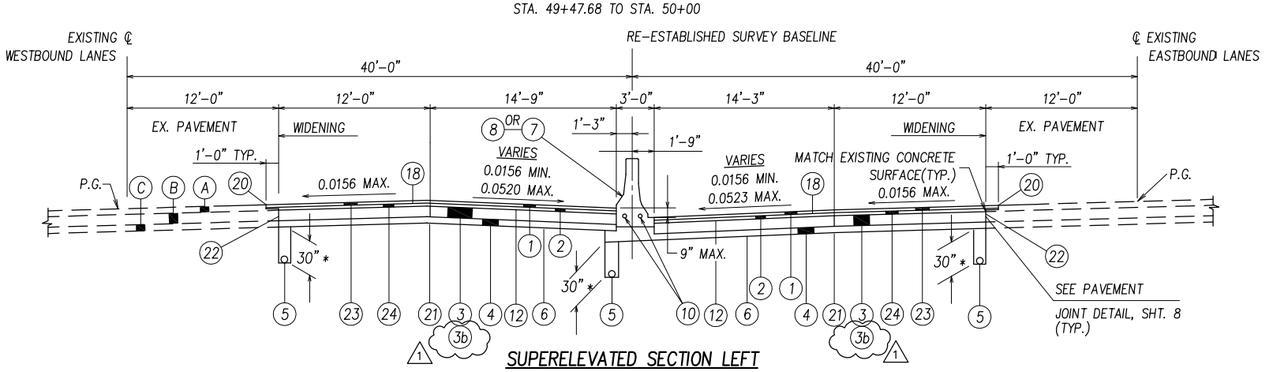
TYPE C-50 BARRIER-MEDIAN TRANSITION AT EXISTING PIERS



SUPERELEVATED SECTION RIGHT

STA. 593+20 TO STA. 603+27.57
STA. 605+55.75 TO STA. 617+20
STA. 660+75 TO STA. 670+94.80
STA. 673+14.10 TO STA. 681+00
STA. 751+25 TO STA. 752+00
STA. 765+25 TO STA. 765+49.09
STA. 765+49.09 TO STA. 765+66.09 (E.B. SIDE ONLY)
STA. 36+50 TO STA. 47+74.97
STA. 49+47.68 TO STA. 50+00

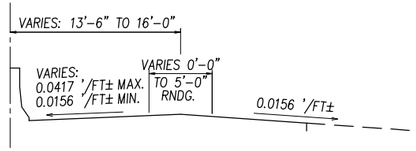
* UNDERDRAIN DEPTH IS 30" UNLESS SHOWN OTHERWISE IN THE PLANS



SUPERELEVATED SECTION LEFT

STA. 621+25 TO STA. 635+75 (STA. 633+16.52 BK. = STA. 635+00 AH.)
STA. 8+00 TO STA. 8+50
STA. 19+45.10 TO STA. 20+50

* UNDERDRAIN DEPTH IS 30" UNLESS SHOWN OTHERWISE IN THE PLANS



ROUNDING TRANSITION DETAIL

STA. 602+00 TO STA. 603+27.57, EB
STA. 605+55.75 TO STA. 607+00, EB
STA. 669+50 TO STA. 670+95.12, EB
STA. 673+14.10 TO STA. 674+25, EB
STA. 753+25 TO STA. 754+50, EB
STA. 764+00 TO STA. 765+25, EB
STA. 9+50 TO STA. 10+75, WB
STA. 16+00 TO STA. 17+24.69, WB

NOTES

1. CONSTRUCTION RELATIVE TO THE EXISTING EDGE OF PAVEMENT
2. MILL EXISTING ASPHALT 3" MINIMUM. IF LESS THAN 1" OF EXISTING ASPHALT REMAINS, MILL TO THE EXISTING CONCRETE PAVEMENT SURFACE.
3. BOTTOM OF MEDIAN WALL FOOTING SHALL BE CONSTRUCTED A MINIMUM 3'-6" BELOW THE LOWER GUTTER LINE. SEE MEDIAN WALL SHEETS 115-118 FOR DETAILS.
4. AN INTERMEDIATE TACK SHALL BE APPLIED BETWEEN ALL LIFTS AND COURSES OF SP402 AND SP404.
5. FOR PAVEMENT ELEVATION TABLES SEE SHEET 94-114.
6. THE BASE BID PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: CONCRETE BASE PAVEMENT WITH AN ASPHALT OVERLAY (1)
7. THE ALTERNATE PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: FULL DEPTH ASPHALT PAVEMENT SECTION

PROPOSED LEGEND

(1) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 64-22
(2) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22 (PLACED IN 2 LIFTS)
(2a) ITEM SP402 – 1¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22
(3) ITEM 305 – 10" CONCRETE BASE, AS PER PLAN (BASE BID ITEM) (1)
(3a) ITEM SP302 – 6" BITUMINOUS AGGREGATE BASE, PG 64-22
(3b) ITEM SP302 – 10" BITUMINOUS AGGREGATE BASE, PG 64-22 (ALTERNATE BID ITEM) (1)
(4) ITEM SP304 – AGGREGATE BASE (6")
(4a) ITEM SP304 – AGGREGATE BASE (VARIABLE DEPTH)
(4b) ITEM SP304 – AGGREGATE BASE (8")
(5) ITEM SP605 – 6" SHALLOW OR UNCLASSIFIED PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP
(6) ITEM 204 – SUBGRADE COMPACTION
(7) ITEM 622 – CONCRETE BARRIER, TYPE B-50, AS PER PLAN
(8) ITEM 622 – CONCRETE BARRIER, TYPE C-50, AS PER PLAN
(9) ITEM SP622C – MEDIAN WALL
(10) ITEM SP625 – CONDUIT, 4" WITH 3-CELL INTERDUCT, 713.07 (WESTBOUND) CONDUIT, 4" WITH 4-CELL INTERDUCT, 713.07 (EASTBOUND)
(11) (NOT USED)
(12) ITEM SP407 – TACK COAT (APPLICATION RATE 0.1 GAL./S.Y.)
(13) ITEM 606 – GUARDRAIL, TYPE 5 USING STEEL POSTS WHERE SHOWN ON THE PLANS
ITEM SP606 – GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS
(14) ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (3"± THICK – PAVEMENT WIDENING) (3"± THICK – SHOULDER RESURFACING)
(15) ITEM SP617 – (9"± THICK – SHOULDER RESURFACING AT INTERCHANGE) (TO BE USED WITHOUT GUARDRAIL)
(16) ITEM SP627 – STONE SHOULDER PROTECTION (TO BE USED WITH GUARDRAIL)
(17) ITEM SP526 – CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12")
(18) ITEM SP407 – INTERMEDIATE TACK COAT (SEE NOTE 4) (APPLICATION RATE = 0.06 GAL./S.Y.)
(19) ITEM SP609 – ASPHALT CONCRETE CURB, PG64-22, STANDARD TYPE 1
(20) ITEM SP404A – JOINT SEALER
(21) LONGITUDINAL JOINT-TIED
(22) LONGITUDINAL JOINT-UNTIED
(23) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70-22(FR)
(24) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22(FR) (PLACED IN 2 LIFTS)

EXISTING LEGEND

(A) EXISTING 5"± ASPHALT CONCRETE
(B) EXISTING 10"± REINFORCED CONCRETE PAVEMENT
(C) EXISTING 6"± AGGREGATE BASE
(D) EXISTING ASPHALT SHOULDER (±9" ASPHALT CONCRETE, ±12" LIMESTONE BASE)
(E) EXISTING ASPHALT CURB
(F) EXISTING REINFORCED CONCRETE APPROACH SLAB (T=10")
(G) EXISTING AGGREGATE DRAIN
(H) GUARDRAIL

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
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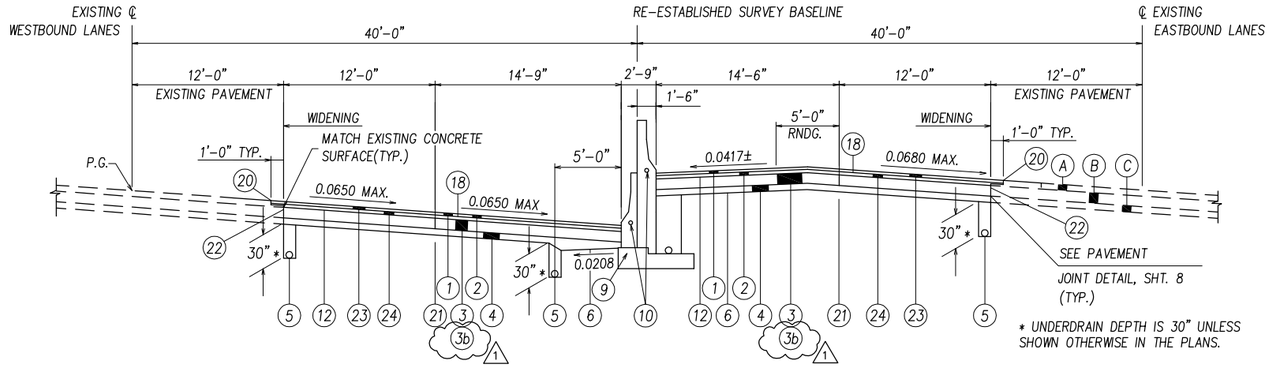
DESIGNED: RJM	CHECKED: RHB	DATE: 05-99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

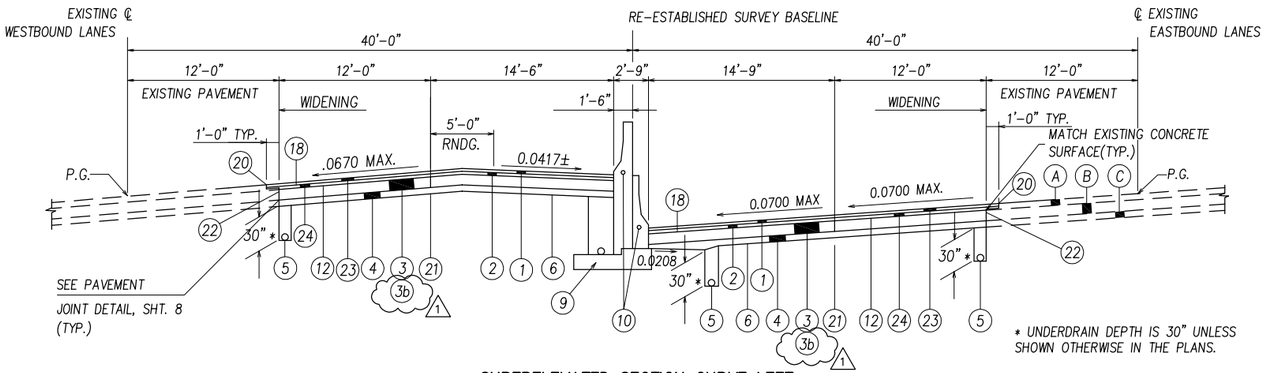
CONTRACT 77-13-01 SHEET 5 OF 322

CAD FILE NAME: 9808-5.DWG



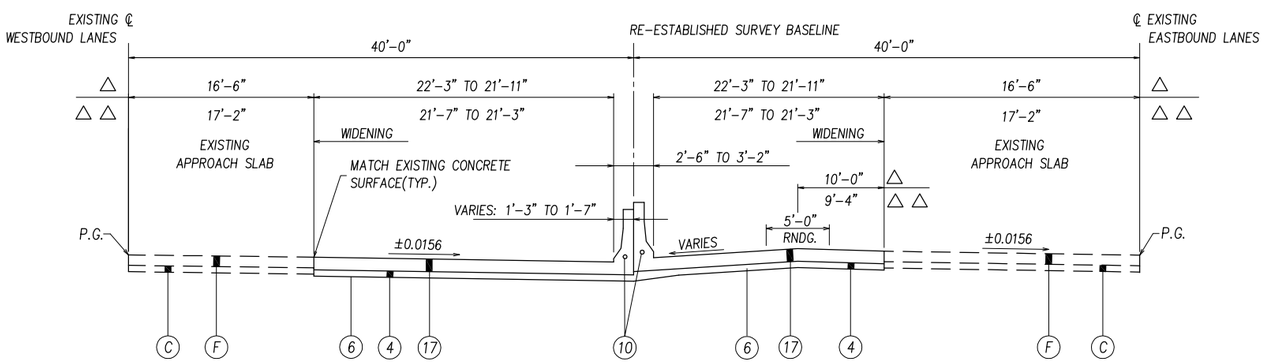
SUPERELEVATED SECTION CURVE RIGHT

STA. 752+00 TO STA. 765+25= MEDIAN WALL NO. 1



SUPERELEVATED SECTION CURVE LEFT

STA. 8+50 TO STA. 17+24.69 = MEDIAN WALL NO. 2



APPROACH SLABS (U.S. 20 & MICHIGAN AVE.)

△ STA. 603+27.57 TO 603+42.10
STA. 603+42.10 TO 605+40.66 = STRUCTURE OVER U.S. 20
△ STA. 605+40.66 TO 605+55.75
△△ STA. 670+94.80 W.B., 670+95.12 E.B. TO STA. 671+14.11 W.B., 671+15.00 E.B.
STA. 671+14.11 W.B., 671+15.00 E.B. TO STA. 672+93.86 W.B., 672+92.92 E.B. = STRUCTURES OVER EASTGATE/MICHIGAN AVE.
△△ STA. 672+93.86 W.B., 672+92.92 E.B. TO 673+14.10 W.B., 673+13.94 E.B.

PROPOSED LEGEND

(1)	ITEM SP404 –	1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 64–22
(2)	ITEM SP402 –	±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64–22 (PLACED IN 2 LIFTS)
(2a)	ITEM SP402 –	1¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64–22
(3)	ITEM 305 –	10" CONCRETE BASE, AS PER PLAN (BASE BID ITEM)
(3a)	ITEM SP302 –	6" BITUMINOUS AGGREGATE BASE, PG 64–22
(3b)	ITEM SP302 –	10" BITUMINOUS AGGREGATE BASE, PG 64–22 (ALTERNATE BID ITEM)
(4)	ITEM SP304 –	AGGREGATE BASE (6")
(4a)	ITEM SP304 –	AGGREGATE BASE (VARIABLE DEPTH)
(4b)	ITEM SP304 –	AGGREGATE BASE (8")
(5)	ITEM SP605 –	6" SHALLOW OR UNCLASSIFIED PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP
(6)	ITEM 204 –	SUBGRADE COMPACTION
(7)	ITEM 622 –	CONCRETE BARRIER, TYPE B–50, AS PER PLAN
(8)	ITEM 622 –	CONCRETE BARRIER, TYPE C–50, AS PER PLAN
(9)	ITEM SP622C –	MEDIAN WALL
(10)	ITEM SP625 –	CONDUIT, 4" WITH 3–CELL INTERDUCT, 713.07 (WESTBOUND) CONDUIT, 4" WITH 4–CELL INTERDUCT, 713.07 (EASTBOUND)
(11)	(NOT USED)	
(12)	ITEM SP407 –	TACK COAT (APPLICATION RATE 0.1 GAL./S.Y.)
(13)	ITEM 606 –	GUARDRAIL, TYPE 5 USING STEEL POSTS WHERE SHOWN ON THE PLANS
	ITEM SP606 –	GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS
(14)	ITEM 254 –	PAVEMENT PLANING, ASPHALT CONCRETE (3"± THICK – PAVEMENT WIDENING) (3"± THICK – SHOULDER RESURFACING)
(15)	ITEM SP617 –	(9"± THICK – SHOULDER RESURFACING AT INTERCHANGE) (TO BE USED WITHOUT GUARDRAIL)
(16)	ITEM SP627 –	STONE SHOULDER PROTECTION (TO BE USED WITH GUARDRAIL)
(17)	ITEM SP526 –	CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12")
(18)	ITEM SP407 –	INTERMEDIATE TACK COAT (SEE NOTE 4) (APPLICATION RATE = 0.06 GAL./S.Y.)
(19)	ITEM SP609 –	ASPHALT CONCRETE CURB, PG64–22, STANDARD TYPE 1
(20)	ITEM SP404A –	JOINT SEALER
(21)		LONGITUDINAL JOINT–TIED
(22)		LONGITUDINAL JOINT–UNTIED
(23)	ITEM SP404 –	1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70–22(FR)
(24)	ITEM SP402 –	±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70–22(FR) (PLACED IN 2 LIFTS)

EXISTING LEGEND

(A)	EXISTING 5"± ASPHALT CONCRETE
(B)	EXISTING 10"± REINFORCED CONCRETE PAVEMENT
(C)	EXISTING 6"± AGGREGATE BASE
(D)	EXISTING ASPHALT SHOULDER (±9" ASPHALT CONCRETE, ±12" LIMESTONE BASE)
(E)	EXISTING ASPHALT CURB
(F)	EXISTING REINFORCED CONCRETE APPROACH SLAB (T=10")
(G)	EXISTING AGGREGATE DRAIN
(H)	GUARDRAIL

NOTES

1. CONSTRUCTION RELATIVE TO THE EXISTING EDGE OF PAVEMENT
2. MILL EXISTING ASPHALT 3" MINIMUM. IF LESS THAN 1" OF EXISTING ASPHALT REMAINS, MILL TO THE EXISTING CONCRETE PAVEMENT SURFACE.
3. BOTTOM OF MEDIAN WALL FOOTING SHALL BE CONSTRUCTED A MINIMUM 3'–6" BELOW THE LOWER GUTTER LINE. SEE MEDIAN WALL SHEETS 115–118 FOR DETAILS.
4. AN INTERMEDIATE TACK SHALL BE APPLIED BETWEEN ALL LIFTS AND COURSES OF SP402 AND SP404.
5. FOR PAVEMENT ELEVATION TABLES SEE SHEET 94–114.
6. THE BASE BID PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: CONCRETE BASE PAVEMENT WITH AN ASPHALT OVERLAY (1)
7. THE ALTERNATE PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: FULL DEPTH ASPHALT PAVEMENT SECTION
8. FOR APPROACH SLAB DETAILS, SEE OTC. STD. DWGS. AS–1 THRU AS–5 AND SHEETS 196–205.
9. FOR MEDIAN WALL DETAILS, SEE OTC. STD. DWGS. CBM–1 THRU CBM–6 AND SHEETS 115–118.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS

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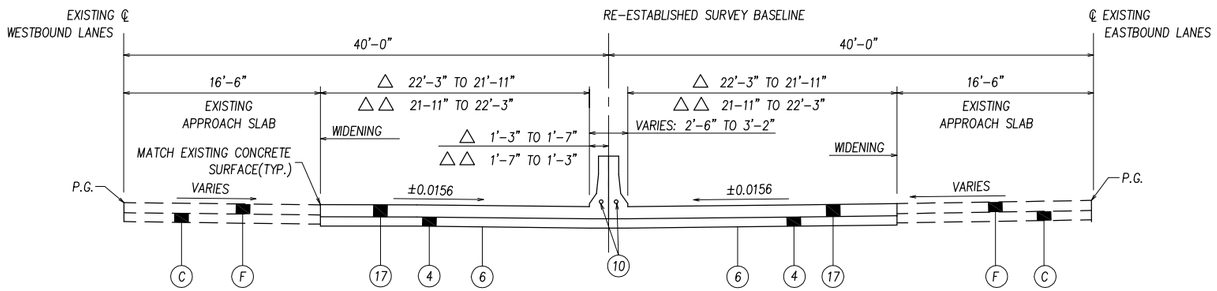
DESIGNED: RJM	CHECKED:	DATE: 05–99	
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE	

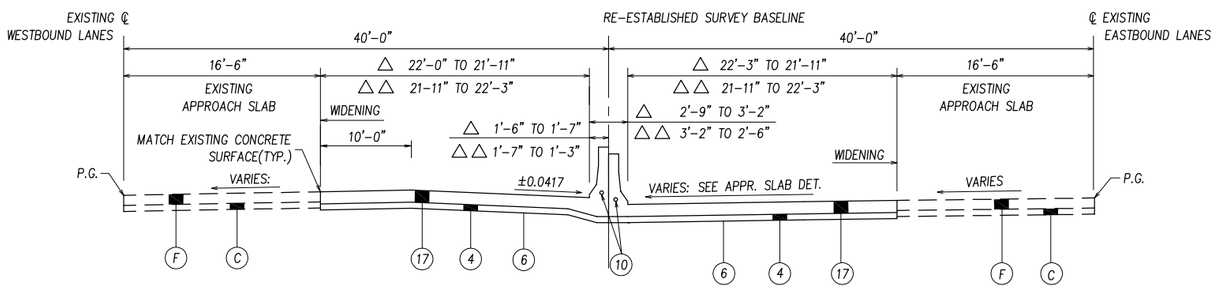
CONTRACT 77–13–01 SHEET 6 OF 322

CAD FILE NAME: 9808–6.DWG



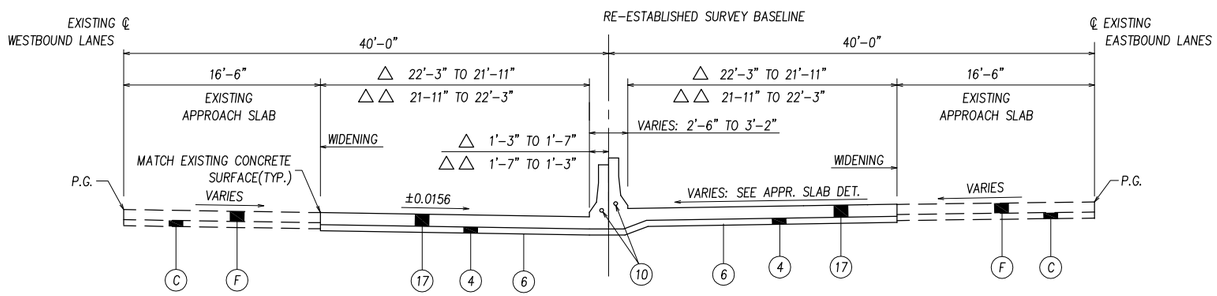
APPROACH SLABS (N.S. RR. & STENGEL AVE., CSX RAILROAD, & WHITE RD.)

△ STA. 695+97.60 TO 696+13.80
STA. 696+13.80 TO 699+89.28 = STRUCTURE OVER N.S. RR. & STENGEL AVE.
△△ STA. 699+89.28 TO 700+05.88
△ STA. 26+87.83 TO 27+03.67
STA. 27+03.67 TO 28+84.91 = STRUCTURE OVER CSX RAILROAD
△△ STA. 28+84.91 TO 29+00.70
△ STA. 32+29.14 TO 32+46.00
STA. 32+46.00 TO 34+49.36 = STRUCTURE OVER WHITE RD.
△△ STA. 34+49.36 TO 34+65.57



APPROACH SLAB (S.R. 65)

△ STA. 17+24.69 TO 17+40.68
STA. 17+40.68 TO 19+29.40 = STRUCTURE OVER S.R.65
△△ STA. 19+29.40 TO 19+45.10



APPROACH SLAB (SIMMONS RD.)

△ STA. 47+74.97 TO 47+92.07
STA. 47+92.07 TO 49+30.35 = STRUCTURE OVER SIMMONS RD.
△△ STA. 49+30.35 TO 49+47.68

PROPOSED LEGEND

(1) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 64-22
(2) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22 (PLACED IN 2 LIFTS)
(2a) ITEM SP402 – 1¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22
△1 (3) ITEM 305 – 10" CONCRETE BASE, AS PER PLAN (BASE BID ITEM)
(3a) ITEM SP302 – 6" BITUMINOUS AGGREGATE BASE, PG 64-22
△1 (3b) ITEM SP302 – 10" BITUMINOUS AGGREGATE BASE, PG 64-22 (ALTERNATE BID ITEM)
(4) ITEM SP304 – AGGREGATE BASE (6")
(4a) ITEM SP304 – AGGREGATE BASE (VARIABLE DEPTH)
(4b) ITEM SP304 – AGGREGATE BASE (8")
(5) ITEM SP605 – 6" SHALLOW OR UNCLASSIFIED PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP
(6) ITEM 204 – SUBGRADE COMPACTION
(7) ITEM 622 – CONCRETE BARRIER, TYPE B-50, AS PER PLAN
(8) ITEM 622 – CONCRETE BARRIER, TYPE C-50, AS PER PLAN
(9) ITEM SP622C – MEDIAN WALL
(10) ITEM SP625 – CONDUIT, 4" WITH 3-CELL INTERDUCT, 713.07 (WESTBOUND) CONDUIT, 4" WITH 4-CELL INTERDUCT, 713.07 (EASTBOUND)
(11) (NOT USED)
(12) ITEM SP407 – TACK COAT (APPLICATION RATE 0.1 GAL./S.Y.)
(13) ITEM 606 – GUARDRAIL, TYPE 5 USING STEEL POSTS WHERE SHOWN ON THE PLANS
ITEM SP606 – GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS
(14) ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE (3"± THICK – PAVEMENT WIDENING) (3"± THICK – SHOULDER RESURFACING)
(15) ITEM SP617 – (9"± THICK – SHOULDER RESURFACING AT INTERCHANGE) (TO BE USED WITHOUT GUARDRAIL)
(16) ITEM SP627 – STONE SHOULDER PROTECTION (TO BE USED WITH GUARDRAIL)
(17) ITEM SP526 – CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12")
(18) ITEM SP407 – INTERMEDIATE TACK COAT (SEE NOTE 4) (APPLICATION RATE = 0.06 GAL./S.Y.)
(19) ITEM SP609 – ASPHALT CONCRETE CURB, PG64-22, STANDARD TYPE 1
(20) ITEM SP404A – JOINT SEALER
(21) LONGITUDINAL JOINT–TIED
(22) LONGITUDINAL JOINT–UNTIED
(23) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70-22(FR)
(24) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22(FR) (PLACED IN 2 LIFTS)

EXISTING LEGEND

(A) EXISTING 5"± ASPHALT CONCRETE
(B) EXISTING 10"± REINFORCED CONCRETE PAVEMENT
(C) EXISTING 6"± AGGREGATE BASE
(D) EXISTING ASPHALT SHOULDER (±9" ASPHALT CONCRETE, ±12" LIMESTONE BASE)
(E) EXISTING ASPHALT CURB
(F) EXISTING REINFORCED CONCRETE APPROACH SLAB (T=10")
(G) EXISTING AGGREGATE DRAIN
(H) GUARDRAIL

NOTES

1. CONSTRUCTION RELATIVE TO THE EXISTING EDGE OF PAVEMENT
2. MILL EXISTING ASPHALT 3" MINIMUM. IF LESS THAN 1" OF EXISTING ASPHALT REMAINS, MILL TO THE EXISTING CONCRETE PAVEMENT SURFACE.
3. BOTTOM OF MEDIAN WALL FOOTING SHALL BE CONSTRUCTED A MINIMUM 3'-6" BELOW THE LOWER GUTTER LINE. SEE MEDIAN WALL SHEETS 115-118 FOR DETAILS.
4. AN INTERMEDIATE TACK SHALL BE APPLIED BETWEEN ALL LIFTS AND COURSES OF SP402 AND SP404.
5. FOR PAVEMENT ELEVATION TABLES SEE SHEET 94-114.
△1 6. THE BASE BID PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: CONCRETE BASE PAVEMENT WITH AN ASPHALT OVERLAY
7. THE ALTERNATE PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: FULL DEPTH ASPHALT PAVEMENT SECTION
8. FOR APPROACH SLAB DETAILS, SEE OTC. STD. DWGS. AS-1 THRU AS-5 AND SHEETS 196-205.
9. FOR MEDIAN WALL DETAILS, SEE OTC. STD. DWGS. CBM-1 THRU CBM-6 AND SHEETS 115-118.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS

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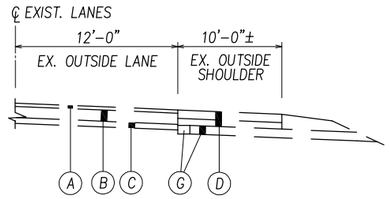
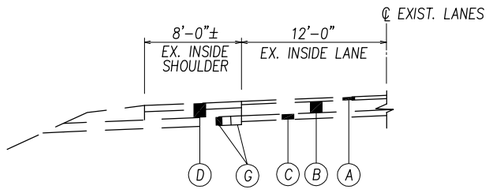
DESIGNED: RJM	CHECKED: RHB	DATE: 05-99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 7 OF 322

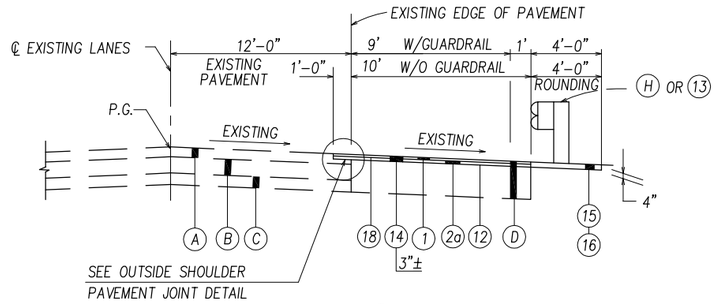
CAD FILE NAME: 9808-7.DWG



EXISTING OUTSIDE SHOULDER

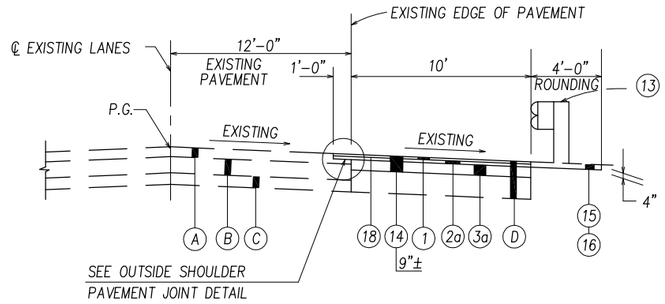


EXISTING INSIDE SHOULDER



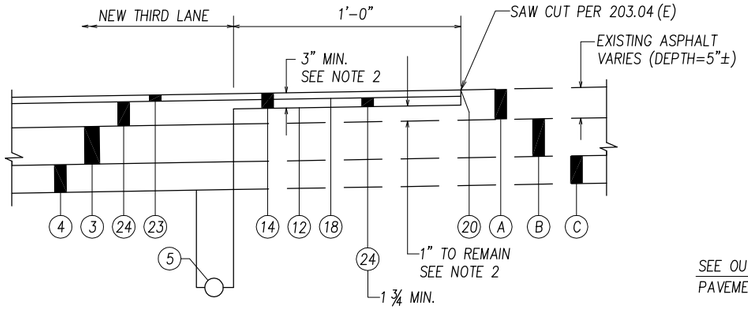
OUTSIDE SHOULDER 3" PLANING AND RESURFACING

(FOR LIMITS SEE: O/S SHOULDER QUANTITIES, SUB-SUMMARY SHT. 47–48)

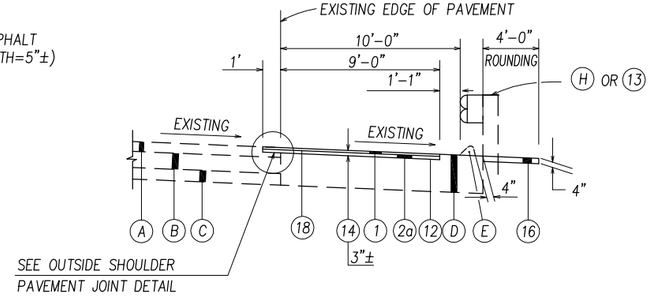


OUTSIDE SHOULDER 9" PLANING AND RESURFACING

(FOR LIMITS SEE: O/S SHOULDER QUANTITIES, SUB-SUMMARY SHT. 47–48)

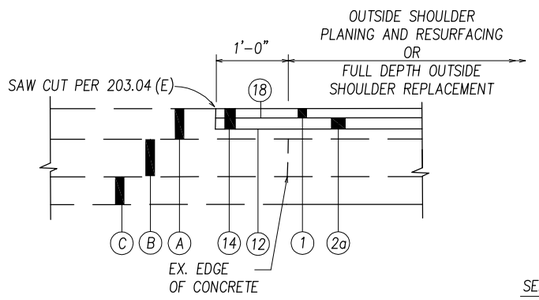


INSIDE SHOULDER PAVEMENT JOINT DETAIL

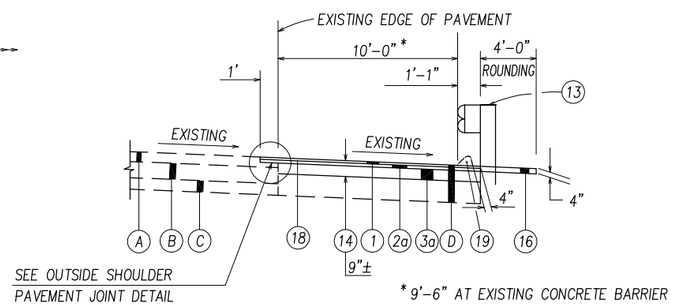


OUTSIDE SHOULDER 3" PLANING AND RESURFACING (ASPHALT CURB)

(FOR LIMITS SEE: O/S SHOULDER QUANTITIES, SUB-SUMMARY SHT. 47–48)



OUTSIDE SHOULDER PAVEMENT JOINT DETAIL



OUTSIDE SHOULDER 9" PLANING AND RESURFACING (ASPHALT CURB)

(FOR LIMITS SEE: O/S SHOULDER QUANTITIES, SUB-SUMMARY SHT. 47–48)

NOTES

1. CONSTRUCTION RELATIVE TO THE EXISTING EDGE OF PAVEMENT
2. MILL EXISTING ASPHALT 3" MINIMUM. IF LESS THAN 1" OF EXISTING ASPHALT REMAINS, MILL TO THE EXISTING CONCRETE PAVEMENT SURFACE.
3. BOTTOM OF MEDIAN WALL FOOTING SHALL BE CONSTRUCTED A MINIMUM 3'–6" BELOW THE LOWER GUTTER LINE. SEE MEDIAN WALL SHEETS 115–118 FOR DETAILS.
4. AN INTERMEDIATE TACK SHALL BE APPLIED BETWEEN ALL LIFTS AND COURSES OF SP402 AND SP404.
5. FOR PAVEMENT ELEVATION TABLES SEE SHEET 94–114.
6. THE BASE BID PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: CONCRETE BASE PAVEMENT WITH AN ASPHALT OVERLAY (1)
7. THE ALTERNATE PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: FULL DEPTH ASPHALT PAVEMENT SECTION
8. FOR APPROACH SLAB DETAILS, SEE OTC. STD. DWGS. AS–1 THRU AS–5 AND SHEETS 196–205.
9. FOR MEDIAN WALL DETAILS, SEE OTC. STD. DWGS. CBM–1 THRU CBM–6 AND SHEETS 115–118.

PROPOSED LEGEND

(1) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 64–22

(2) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64–22 (PLACED IN 2 LIFTS)

(2a) ITEM SP402 – 1¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64–22

(3) ITEM 305 – 10" CONCRETE BASE, AS PER PLAN (BASE BID ITEM) (1)

(3a) ITEM SP302 – 6" BITUMINOUS AGGREGATE BASE, PG 64–22

(3b) ITEM SP302 – 10" BITUMINOUS AGGREGATE BASE, PG 64–22 (ALTERNATE BID ITEM) (1)

(4) ITEM SP304 – AGGREGATE BASE (6")

(4a) ITEM SP304 – AGGREGATE BASE (VARIABLE DEPTH)

(4b) ITEM SP304 – AGGREGATE BASE (8")

(5) ITEM SP605 – 6" SHALLOW OR UNCLASSIFIED PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP

(6) ITEM 204 – SUBGRADE COMPACTION

(7) ITEM 622 – CONCRETE BARRIER, TYPE B–50, AS PER PLAN

(8) ITEM 622 – CONCRETE BARRIER, TYPE C–50, AS PER PLAN

(9) ITEM SP622C – MEDIAN WALL

(10) ITEM SP625 – CONDUIT, 4" WITH 3–CELL INTERDUCT, 713.07 (WESTBOUND)
CONDUIT, 4" WITH 4–CELL INTERDUCT, 713.07 (EASTBOUND)

(11) (NOT USED)

(12) ITEM SP407 – TACK COAT (APPLICATION RATE 0.1 GAL./S.Y.)

(13) ITEM 606 – GUARDRAIL, TYPE 5 USING STEEL POSTS WHERE SHOWN ON THE PLANS
ITEM SP606 – GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS

(14) ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE
(3"± THICK – PAVEMENT WIDENING)
(3"± THICK – SHOULDER RESURFACING)

(15) ITEM SP617 – (9"± THICK – SHOULDER RESURFACING AT INTERCHANGE)
(TO BE USED WITHOUT GUARDRAIL)

(16) ITEM SP627 – STONE SHOULDER PROTECTION
(TO BE USED WITH GUARDRAIL)

(17) ITEM SP526 – CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12")

(18) ITEM SP407 – INTERMEDIATE TACK COAT (SEE NOTE 4)
(APPLICATION RATE = 0.06 GAL./S.Y.)

(19) ITEM SP609 – ASPHALT CONCRETE CURB, PG64–22, STANDARD TYPE 1

(20) ITEM SP404A – JOINT SEALER

(21) LONGITUDINAL JOINT–TIED

(22) LONGITUDINAL JOINT–UNTIED

(23) ITEM SP404 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70–22(FR)

(24) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70–22(FR) (PLACED IN 2 LIFTS)

EXISTING LEGEND

(A) EXISTING 5"± ASPHALT CONCRETE

(B) EXISTING 10"± REINFORCED CONCRETE PAVEMENT

(C) EXISTING 6"± AGGREGATE BASE

(D) EXISTING ASPHALT SHOULDER (±9" ASPHALT CONCRETE, ±12" LIMESTONE BASE)

(E) EXISTING ASPHALT CURB

(F) EXISTING REINFORCED CONCRETE APPROACH SLAB (T=10")

(G) EXISTING AGGREGATE DRAIN

(H) GUARDRAIL

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

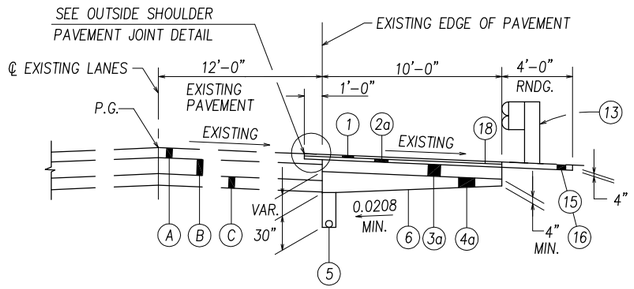
TYPICAL SECTIONS

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535–1015

DESIGNED: RJM	CHECKED:	DATE: 05–99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

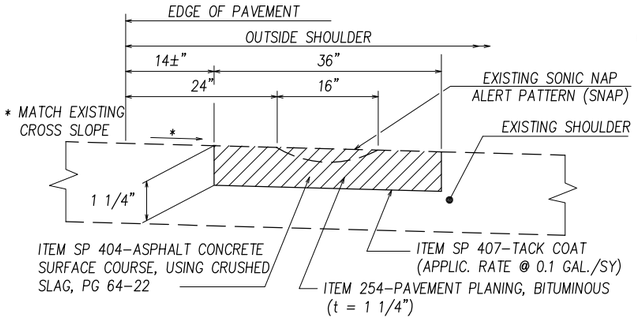
CONTRACT 77–13–01 SHEET 8 OF 322

CAD FILE NAME: 9808–8.DWG



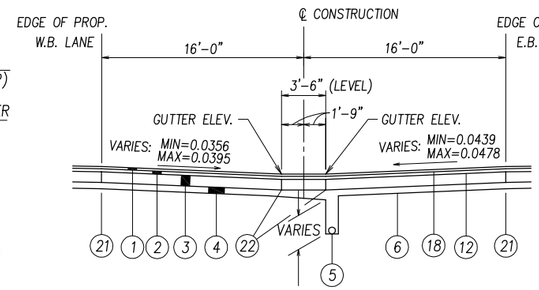
FULL DEPTH OUTSIDE SHOULDER REPLACEMENT
(NORMAL AND LOW SIDE OF SUPERELEVATION)

LOCATIONS AS DIRECTED BY THE ENGINEER



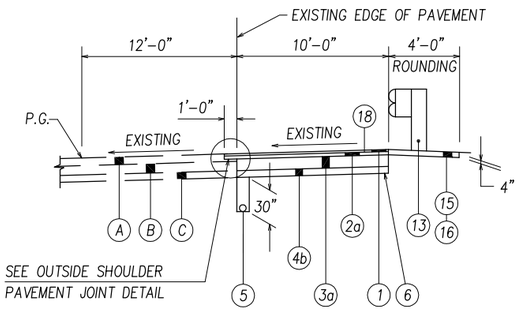
SNAP REMOVAL AND REPLACEMENT

STA. 59+00 TO STA. 72+20



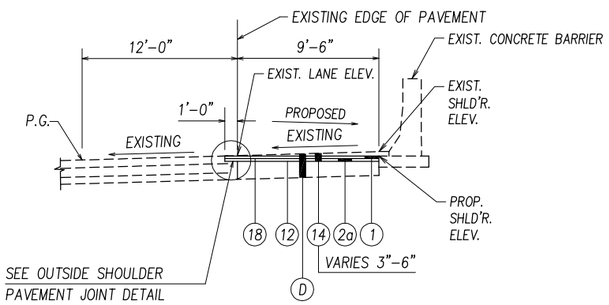
MAINTENANCE CROSSOVER

STA. 622+10 TO 623+90



FULL DEPTH OUTSIDE SHOULDER REPLACEMENT
(HIGH SIDE OF SUPERELEVATION)

LOCATIONS AS DIRECTED BY THE ENGINEER



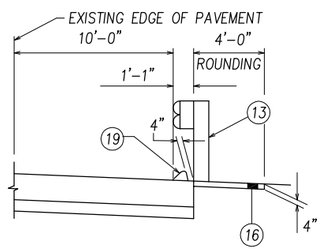
EASTBOUND SHOULDER PLANING AND RESURFACING
(REQUIRED FOR 14'-7" MIN. VERT. CLEARANCE UNDER CASS RD. STRUCTURE)

STA. 630+80 TO STA. 631+46 (SEE TABLE A)

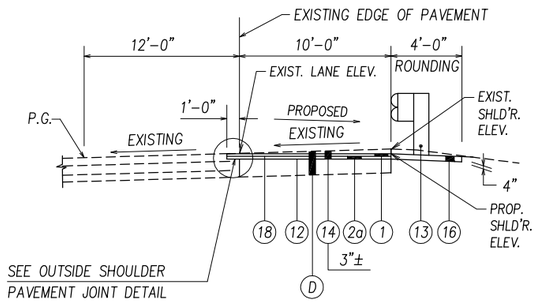
TABLE A

STATION	EXISTING LANE ELEVATION	EXISTING SHOULDER ELEVATION	PROPOSED SHOULDER ELEVATION
629+00	632.34	632.35*	632.35
629+50	632.37	632.46*	632.33
630+00	632.39	632.50*	632.32
630+50	632.41	632.52*	632.30
631+00	632.43	632.55*	632.28
631+50	632.46	632.52*	632.27
632+00	632.42	632.15*	632.15

* ELEVATIONS ARE FOR INFORMATION ONLY.



FULL DEPTH SHOULDER WITH ASPHALT CURB



EASTBOUND SHOULDER PLANING AND RESURFACING
(REQUIRED FOR 14'-7" MIN. VERT. CLEARANCE UNDER CASS RD. STRUCTURE)

STA. 629+00 TO STA. 630+80 (SEE TABLE A)
STA. 631+46 TO STA. 632+00 (SEE TABLE A)

NOTES

1. CONSTRUCTION RELATIVE TO THE EXISTING EDGE OF PAVEMENT
2. MILL EXISTING ASPHALT 3" MINIMUM. IF LESS THAN 1" OF EXISTING ASPHALT REMAINS, MILL TO THE EXISTING CONCRETE PAVEMENT SURFACE.
3. BOTTOM OF MEDIAN WALL FOOTING SHALL BE CONSTRUCTED A MINIMUM 3'-6" BELOW THE LOWER GUTTER LINE. SEE MEDIAN WALL SHEETS 115-118 FOR DETAILS.
4. AN INTERMEDIATE TACK SHALL BE APPLIED BETWEEN ALL LIFTS AND COURSES OF SP402 AND SP404.
5. FOR PAVEMENT ELEVATION TABLES SEE SHEET 94-114.
6. THE BASE BID PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: CONCRETE BASE PAVEMENT WITH AN ASPHALT OVERLAY (1)
7. THE ALTERNATE PAVEMENT SECTION FOR THIS PROJECT SHALL BE AS FOLLOWS: MAINLINE PAVEMENT: FULL DEPTH ASPHALT PAVEMENT SECTION
8. FOR APPROACH SLAB DETAILS, SEE OTC. STD. DWGS. AS-1 THRU AS-5 AND SHEETS 196-205.
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(2) ITEM SP402 – ±3 ¾" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22 (PLACED IN 2 LIFTS)
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(3) ITEM 305 – 10" CONCRETE BASE, AS PER PLAN (BASE BID ITEM) (1)
(3a) ITEM SP302 – 6" BITUMINOUS AGGREGATE BASE, PG 64-22
(3b) ITEM SP302 – 10" BITUMINOUS AGGREGATE BASE, PG 64-22 (ALTERNATE BID ITEM) (1)
(4) ITEM SP304 – AGGREGATE BASE (6")
(4a) ITEM SP304 – AGGREGATE BASE (VARIABLE DEPTH)
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(6) ITEM 204 – SUBGRADE COMPACTION
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(11) (NOT USED)
(12) ITEM SP407 – TACK COAT (APPLICATION RATE 0.1 GAL./S.Y.)
(13) ITEM 606 – GUARDRAIL, TYPE 5 USING STEEL POSTS WHERE SHOWN ON THE PLANS
ITEM SP606 – GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS
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(15) ITEM SP617 – (9"± THICK – SHOULDER RESURFACING AT INTERCHANGE) (TO BE USED WITHOUT GUARDRAIL)
(16) ITEM SP627 – STONE SHOULDER PROTECTION (TO BE USED WITH GUARDRAIL)
(17) ITEM SP526 – CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (T=12")
(18) ITEM SP407 – INTERMEDIATE TACK COAT (SEE NOTE 4) (APPLICATION RATE = 0.06 GAL./S.Y.)
(19) ITEM SP609 – ASPHALT CONCRETE CURB, PG64-22, STANDARD TYPE 1
(20) ITEM SP404A – JOINT SEALER
(21) LONGITUDINAL JOINT-TIED
(22) LONGITUDINAL JOINT-UNTIED
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(B) EXISTING 10"± REINFORCED CONCRETE PAVEMENT
(C) EXISTING 6"± AGGREGATE BASE
(D) EXISTING ASPHALT SHOULDER (±9" ASPHALT CONCRETE, ±12" LIMESTONE BASE)
(E) EXISTING ASPHALT CURB
(F) EXISTING REINFORCED CONCRETE APPROACH SLAB (T=10")
(G) EXISTING AGGREGATE DRAIN
(H) GUARDRAIL

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

TYPICAL SECTIONS

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: RJM	CHECKED:	DATE: 05-99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 9 OF 322

CAD FILE NAME: 9808-9.DWG

GENERAL

CONSTRUCTION SPECIFICATIONS

THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS DATED JANUARY 1, 2010, AND THE SPECIAL PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS SHALL GOVERN THIS PROJECT.

ROUNDING

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

UTILITIES

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

UTILITY OWNERSHIP

GENERAL:

OHIO TURNPIKE COMMISSION
682 PROSPECT STREET
BEREA, OH. 44017
440-234-2081

ODOT DISTRICT 11
317 E. POE RD.
BOWLING GREEN, OH. 43402
419-373-4466

ELECTRIC:

FIRST ENERGY
1910 W. MARKET
AKRON, OH. 44313
BLDG. A-FAIR-1
330-436-4055

WATER/SANITARY:

CITY OF MAUMEE
400 CONANT STREET
MAUMEE, OH. 43537
419-897-7150

CITY OF TOLEDO
4032 CREEKSIDE AVE.
TOLEDO, OH. 43612
419-936-2924

NORTHWESTERN WATER AND SEWER DIST.
P.O. BOX 348
BOWLING GREEN, OH. 43402
419-354-9090

GAS & OIL:

COLUMBIA GAS OF OHIO
2901 E. MANHATTAN
TOLEDO, OH. 43611
419-539-6064

CITGO PETROLEUM
1840 OTTCERCREEK RD.
OREGON, OH. 43612
419-698-8055

COMMUNICATIONS:

CSX R.R.
6737 SOUTHPOINT DRIVE S.
JACKSONVILLE, FL. 32216
859-426-6924

AT&T
7630 FINZEL RD.
WHITEHOUSE, OH. 43571
419-877-0414

BUCKEYE CABLE SYSTEM INC.
4818 ANGOLA RD.
TOLEDO, OH. 43615
419-724-3723

LEVEL 3 COMMUNICATIONS
1025 ELDORADO BLVD.
BROOMFIELD, CO. 80021
720-888-2639

CENTURY LINK
700 W. MINERAL AVE.
LITTLETON, CO. 80120
303-837-3926

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

CENTURY LINK FIBER OPTIC CABLE

EXTREME CARE MUST BE TAKEN BY THE CONTRACTOR TO PRESERVE AND PROTECT THE FIBER OPTIC CABLE DURING ALL PHASES OF CONSTRUCTION. SPECIAL CARE SHALL BE EXERCISED DURING THE EXISTING STRUCTURE REMOVAL AND NEW STRUCTURE CONSTRUCTION. THE EXISTING FIBER OPTIC CABLE LOCATED WITHIN THE MEDIAN WILL BE ABANDONED PRIOR TO CONSTRUCTION OF THIS PROJECT, AND A NEW FIBER OPTIC CABLE WILL BE INSTALLED. THE NEW CABLE LOCATION IS DEPICTED ON THE PLAN AND PROFILE SHEETS. EXCAVATION ADJACENT TO THE NEW CABLE FOR ANY REASON SHALL NOT BE PERFORMED WITHOUT CENTURY LINK FIRST LOCATING THE CABLE. AFTER THE CABLE HAS BEEN LOCATED BY CENTURY LINK, THE CONTRACTOR SHALL EXCAVATE TO WITHIN 12" OF THE CABLE DEPTH AS PROVIDED. CENTURY LINK REPRESENTATIVES WILL THEN HAND DIG TO EXPOSE THE CABLE. REFER TO SP118 FOR ADDITIONAL INFORMATION

CONTINGENCY QUANTITIES

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

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE EASTERN ADJACENT PROJECT AND THE MAUMEE RIVER BRIDGE PROJECT(43-97-02) ARE CONSTRUCTED TO A DIFFERENT ELEVATION DATUM.

WORK LIMITS

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

AS-BUILT INFORMATION

THE ORIGINAL 1953 AS-BUILT PLANS INCLUDING CROSS-SECTIONS, STANDARD DRAWINGS AND TURNPIKE SPECIFIC STANDARD DRAWINGS MAY BE INSPECTED IN THE OHIO TURNPIKE COMMISSION OFFICE LOCATED AT 682 PROSPECT STREET, BEREA, OHIO 44017. TELEPHONE (440) 234-2081.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE CHIEF ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT OF WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE CHIEF ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS THIRTY (30) FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE CHIEF ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE CHIEF ENGINEER.

ITEM 607, FENCE REBUILT, TYPE 47
ITEM 607, FENCE REBUILT, TYPE CLT

CAREFULLY RECONDITION AND RE-ERECT FENCE AND COMPONENT PARTS AS DETAILED ON THE PLANS. DO NOT DAMAGE THE FENCE OR COMPONENT PARTS. ANY NEW PARTS WHICH ARE NEEDED, AS DETERMINED BY THE CHIEF ENGINEER, WILL BE SUPPLIED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE COMMISSION.

THE AMOUNT OF REBUILT FENCE TO BE PAID FOR WILL BE THE NUMBER OF FEET REBUILT, COMPLETE IN PLACE AND MEASURED AS PROVIDED FOR IN CMS 607.09.

PAYMENT FOR THE ABOVE WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR: ITEM 607, FENCE REBUILT, TYPE 47
ITEM 607, FENCE REBUILT, TYPE CLT

ITEM 607, FENCE, TYPE 47, AS PER PLAN

IF EXISTING FENCE TO BE REBUILT IS FOUND TO BE UNSATISFACTORY FOR RE-USE, AS DETERMINED BY THE CHIEF ENGINEER, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING FENCE IN ACCORDANCE WITH CMS 202.09 AND FURNISH AND INSTALL NEW FENCING IN ACCORDANCE WITH CMS 607 AND OTC STANDARD DRAWING F-1.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE CHIEF ENGINEER:

202, FENCE REMOVED	100 LIN. FT.
607, FENCE, TYPE 47, AS PER PLAN	100 LIN. FT.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH CMS 607.09.

FENCE REMOVED FOR REUSE AND FENCE REBUILT

QUANTITIES ARE PROVIDED IN THE PLANS FOR FENCE REMOVED FOR REUSE AND FENCE REBUILT. ANY ADDITIONAL FENCE REMOVED AND REBUILT OVER AND ABOVE THESE QUANTITIES FOR THE CONVENIENCE OF THE CONTRACTOR'S OPERATIONS ARE AT THE CONTRACTOR'S EXPENSE.

ROADWAY

BUILD TO MEET EXISTING CONDITIONS

THE PROPOSED PAVEMENT SHALL BE CONSTRUCTED ADJACENT TO THE EXISTING PAVEMENT EDGE AND MATCH THE EXISTING ELEVATION. EXISTING PAVEMENT LOCATION AND ELEVATION INFORMATION SHOWN IN THE PLANS WAS OBTAINED FROM THE ORIGINAL AS-BUILT DRAWINGS AND IS PROVIDED FOR INFORMATION ONLY.

SLIGHT HORIZONTAL AND/OR VERTICAL ADJUSTMENTS SHALL BE MADE BY THE CONTRACTOR TO ACCOMMODATE THE EXISTING FIELD CONDITIONS. ANY ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

ITEM SP201- CLEARING AND GRUBBING, AS PER PLAN

ITEM SP201 IS AMENDED AS FOLLOWS: THE LUMP SUM PRICE BID FOR ITEM SP201 - CLEARING AND GRUBBING, AS PER PLAN SHALL INCLUDE ALL EXCAVATION AND EMBANKMENT REQUIRED FOR THE REPLACEMENT OF MATERIALS REMOVED IN THE SCALPING OPERATIONS. NO ADDITIONAL PAYMENT FOR ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION OR ITEM 203 - EMBANKMENT MAY BE CLAIMED. PAYMENT FOR EARTHWORK QUANTITIES WILL BE BASED ON MEASUREMENTS FROM THE EXISTING GROUND LINE TO THE PLAN LINES AS SHOWN ON THE CROSS SECTIONS.

SOFT SUBGRADE

THE FOLLOWING ESTIMATED QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE REMEDIATION OF SOFT SUBGRADE.

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	22000 CU. YD.
ITEM 203 - EMBANKMENT	22000 CU. YD.
ITEM 861 - GEOGRID FOR SUBGRADE STABILIZATION	66000 SQ. YD.
ITEM 206 - LIME STABILIZED SUBGRADE, 16 INCHES DEEP	66000 SQ. YD.
ITEM 206 - CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	66000 SQ. YD.
ITEM 206 - LIME	3300 TON
ITEM 206 - CEMENT	4125 TON
ITEM 206 - WATER FOR CURING	990 M. GAL.
ITEM 206 - TEST ROLLING	30 HOURS
ITEM 206 - MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	1 LUMP SUM

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BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATION IN CERTAIN AREAS, NO WAIVER OF SPECIFICATIONS IS INTENDED. ALL OTHER SLOPED EMBANKMENT AREAS SHALL BE BENCHED AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

NO.	REVISIONS	BY	DATE
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OHIO TURNPIKE COMMISSION

ROADWAY
GENERAL NOTES

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DRAINAGE

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

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

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

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

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

EXISTING UNDERDRAINS

ALL EXISTING UNDERDRAINS THAT ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE PROVIDED UNOBSTRUCTED OUTLETS AS DIRECTED BY THE ENGINEER.

THE EXISTING UNDERDRAIN OUTLETS LOCATED DURING THE REVIEW OF DRAINAGE FACILITIES SHALL BE PERPETUATED PRIOR TO THE INSTALLATION OF THE PROPOSED PAVEMENT COURSES AS DESCRIBED BELOW.

EXISTING PIPE UNDERDRAINS ENCOUNTERED IN THE MEDIAN SHALL BE CONNECTED TO THE PROPOSED PIPE UNDERDRAIN SYSTEM OR DRAINAGE STRUCTURES USING ITEM 603 -CONDUIT, TYPE B. EXISTING PIPE UNDERDRAINS ENCOUNTERED IN THE OUTSIDE SHOULDER AREA SHALL BE CONNECTED TO THE PROPOSED OUTSIDE SHOULDER UNDERDRAIN SYSTEM OR THE ROADWAY DITCH USING ITEM 603 - CONDUIT, TYPE F. ITEM SPECIAL - PRECAST REINFORCED CONCRETE OUTLETS, SHALL BE PROVIDED AT THE OUTLET END OF ALL NEW PIPE UNDERDRAINS OUTLETTING INTO A ROADWAY DITCH.

THE LOCATION, TYPE, SIZE AND GRADE OF UNDERDRAIN OUTLETS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS. PAYMENT FOR ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT

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

ITEM 603 -	6" CONDUIT, TYPE B, 707.41 NON PERFORATED ASTM D 3034 (SDR-35), 707.42 OR 707.33	200 LIN. FT.
ITEM 603 -	6" CONDUIT, TYPE F, 707.41 NON PERFORATED ASTM D 3034 (SDR-35), 707.42 OR 707.33	200 LIN. FT.
ITEM 603 -	8" CONDUIT, TYPE B	200 LIN. FT.
ITEM 603 -	8" CONDUIT, TYPE F	200 LIN. FT.
ITEM SPECIAL-	PRECAST REINFORCED CONCRETE OUTLET	5 EACH
ITEM SP605 -	AGGREGATE DRAIN, TYPE I, WITH FABRIC WRAP	200 LIN. FT.
ITEM SP605 -	AGGREGATE DRAIN, TYPE II, WITH FABRIC WRAP	200 LIN. FT.

ITEM SPECIAL - CONDUIT BORED AND JACKED, (SIZE), TYPE B, 706.02, AS PER PLAN

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING AND JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN TEN (10) FEET TO THE EDGE OF EXISTING PAVEMENT. TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SPECIFICATION REQUIREMENTS FOR CLASS B BEDDING SHALL BE WAIVED. IF A CASING PIPE IS USED IN THE BORING AND JACKING OPERATION, THE VOID BETWEEN IT AND THE INTERIOR CARRIER PIPE SHALL BE COMPLETELY FILLED WITH SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603 - CONDUIT BORED OR JACKED BY TYPE AND SIZE.

WHEN ITEM SPECIAL-CONDUIT, BORED AND JACKED, (SIZE), TYPE B, 706.02, AS PER PLAN IS CALLED FOR IN THE PLANS, 707.33 CORRUGATED POLYETHYLENE SMOOTH LINE PIPE MAY BE SUBSTITUTED FOR 706.02 WITHIN THE STEEL CASING. PIPES OF DIFFERENT MATERIALS SHALL BE CONNECTED WITH A MASONRY COLLAR AS PER ODOT STANDARD DRAWING DM-1.1. THE COST OF THE MASONRY COLLAR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603- CONDUIT, BORED OR JACKED BY TYPE AND SIZE.

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ITEM SP 604 - CATCH BASIN, NO. CB-1

WHERE SHOW IN THE DRAWINGS, THE CONTRACTOR SHALL REPLACE THE EXISTING CATCH BASINS WITH A NEW PRECAST CATCH BASIN CB-1 IN ACCORDANCE WITH OTC STANDARD DRAWING CB-1. THE PROPOSED GRATE ELEVATION SHALL MATCH THE EXISTING ELEVATION AND THE DEPTH SHALL BE 5'-4" IN ORDER TO ACCEPT UNDERDRAINS IN THE FUTURE. THREE (3) BLOCK OUTS SHALL BE PROVIDED BUT NOT REMOVED TO ACCEPT THREE FUTURE UNDERDRAINS

PIPE CONNECTIONS TO CORRUGATED METAL STRUCTURES

CONNECTIONS OF PROPOSED LONGITUDINAL DRAINAGE TO CORRUGATED METAL STRUCTURES SHALL BE MADE BY MEANS OF A SHOP FABRICATED OR FIELD WELDED STUB ON THE STRUCTURE. THE STUB SHALL MEET THE REQUIREMENTS OF CMS 707 AND HAVE A MINIMUM LENGTH OF TWO (2) FEET AND A MINIMUM WALL THICKNESS OF 0.064 INCHES.

THE LOCATION AND ELEVATION OF THE STUB ARE TO BE CONSIDERED APPROXIMATE AND MAY BE ADJUSTED BY THE CHIEF ENGINEER TO AVOID CUTTING THROUGH JOINTS IN THE STRUCTURE.

THE FIELD WELDED JOINT, IF USED, SHALL BE THOROUGHLY CLEANED AND REGALVANIZED OR OTHERWISE SUITABLY REPAIRED. WELDING SHALL MEET THE REQUIREMENTS OF CMS 513.21.

A MASONRY COLLAR, AS PER ODOT STANDARD DRAWING DM-1.1, WILL BE REQUIRED TO CONNECT THE LONGITUDINAL DRAINAGE TO THE STUB, WHEN PIPE OTHER THAN CORRUGATED METAL IS PROVIDED FOR THE LONGITUDINAL DRAINAGE.

PAYMENT FOR CUTTING INTO THE STRUCTURE AND PROVIDING THE CONNECTION DESCRIBED, SHALL BE INCLUDED IN THE CONTRACT PRICE FOR CMS ITEM 603 OR 522.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT, AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OHIO TURNPIKE COMMISSION, REPRESENTATIVES OF THE COMMISSION AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS 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 COMMISSION.

THE EXISTING UNDERDRAIN PIPE OUTLETS SHALL ALSO BE LOCATED DURING THIS INSPECTION. ONCE LOCATED, THE EXISTING UNDERDRAIN PIPE OUTLET LOCATIONS SHALL BE MARKED ON THE SHOULDER PAVEMENT WITH PAINT AND RECORDED IN THE INSPECTOR'S REPORTS.

ALL NEW UNDERDRAIN PIPE OUTLETS, 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 COMMISSION.

ALL EXISTING UNDERDRAIN PIPE OUTLETS AND 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 CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE RIGHT OF WAY LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603, TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE CHIEF ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

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

ITEM 603 -	6" CONDUIT, TYPE B, 707.41 NON-PERFORATED ASTM D 3034 (SDR-35) 707.42 OR 707.33	30 LIN. FT.
ITEM 603 -	6" CONDUIT, TYPE E	25 LIN. FT.
ITEM 603 -	6" CONDUIT, TYPE F, 707.41 NON-PERFORATED ASTM D 3034 (SDR-35), 707.42 OR 707.33	30 LIN. FT.

EXISTING CONDUITS

EXISTING CONDUIT MAY BE ENCOUNTERED WITHIN THE PLANNED ROADWAY EXCAVATION AND SUBGRADE COMPACTION LIMITS. THE LOCATION OF WHICH MAY OR MAY NOT BE SHOWN ON THE PLANS. IT IS ANTICIPATED THE CONDUITS ARE MOST PREVALENT AT THE EXISTING MEDIAN CROSSOVER LOCATIONS. THE REMOVAL AND DISPOSAL OF ANY EXISTING CONDUIT ENCOUNTERED SHALL BE INCIDENTAL TO ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION AND ITEM 204, SUBGRADE COMPACTION.

ITEM SPECIAL, PRECAST REINFORCED CONCRETE OUTLET

ITEM SPECIAL, PRECAST REINFORCED CONCRETE OUTLET SHALL BE CONSTRUCTED IN ACCORDANCE WITH OTC STANDARD CONSTRUCTION DRAWING UD-1. PAYMENT FOR ALL MATERIALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL, PRECAST REINFORCED CONCRETE OUTLET.

SLOPE DRAIN REPAIR

THE SLOPE DRAIN REPAIR WORK SHALL CONSIST OF REMOVING THE EXISTING CATCH BASIN AND THE EXISTING PIPE, AND REPLACING THEM INACCORDANCE WITH OTC STD. DWG. CB-1. EACH ITEM OF WORK WILL BE PAID FOR SEPERATELY AS ITEMIZED IN THE PLANS. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 604	– CATCH BASIN, NO. CB-1	4	EACH
ITEM 603	– 12" CONDUIT, TYPE F, 706.02 OR 707.33	200	LIN. FT.
ITEM SPECIAL	– 12" PRECAST FLARRED END SECTION	4	EACH
ITEM 601	– ROCK CHANNEL PROTECTION, TYPE C, WITH FILTER	6	CU. YD.
ITEM 202	– CATCH BASIN REMOVED	4	EACH
ITEM 202	– PIPE REMOVED 24" AND UNDER	200	LIN. FT.

PAVEMENT

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISIONS OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE, ACROSS THE ENTIRE LENGTH OF THE PROJECT. THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE SHALL BE 15', IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING BP-2.2.

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EXISTING EXPANSION JOINTS

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR MATCHING UNRECORDED EXPANSION JOINTS ON THE EXISTING MAINLINE PAVEMENT WITH THE PROPOSED THIRD LANE WIDENING. SEE OTC STD. DWG. CJ-1 AND CJ-2 FOR EXPANSION JOINT DETAILS.

ITEM SP451 - EXPANSION JOINT 300 LIN. FT.

ITEM SP526 - CLASS C CONCRETE APPROACH SLAB, USING TYPE I CEMENT, AS PER PLAN

THE MODIFICATION TO THE EXISTING APPROACH SLAB SHALL BE MADE IN ACCORDANCE WITH THE NOTES AND DETAILS ON SHEET 199A. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SP526 - CLASS C CONCRETE APPROACH SLAB, USING TYPE I CEMENT, AS PER PLAN

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JOINT REPAIR

THE FOLLOWING ITEM HAS BEEN PROVIDED FOR THE REPAIR OF UNSOUND PAVEMENT JOINTS IN THE EXISTING CONCRETE PAVEMENT THAT MAY BE ENCOUNTERED AFTER REMOVAL OF THE EXISTING ASPHALT SURFACE COURSE. JOINTS TO BE REPAIRED SHALL BE DETERMINED BY THE ENGINEER. REPAIRS SHALL BE AS PER OTC STANDARD DRAWING CJ-2.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

SP 202B -	3 CORNER CRACK REPAIR USING ITEM SP 402	10	CU. YD.

FULL-DEPTH SHOULDER REPLACEMENT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR FULL-DEPTH SHOULDER REPLACEMENT AS DIRECTED BY THE ENGINEER:

ITEM 202 -	GUARDRAIL REMOVED FOR REUSE	4300	LIN. FT.
ITEM 204 -	SUBGRADE COMPACTION	6100	SQ. YD.
ITEM 203 -	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	2400	CU. YD.
ITEM SP 302 -	BITUMINOUS AGGREGATE BASE, PG. 64-22	1020	CU. YD.
ITEM SP 304 -	AGGREGATE BASE	1360	CU. YD.
ITEM 603 -	6" CONDUIT TYPE F, 707.41 NON-PERFORATED ASTM 3034 (SDR-35), 707.42 OR 707.33	400	LIN. FT.
ITEM SP 605 -	6" SHALLOW PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP	5500	LIN. FT.
ITEM SP 606 -	GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS	4300	LIN. FT.
ITEM SP 609 -	ASPHALT CONCRETE CURB, PG. 64-22 STANDARD TYPE I	2500	LIN. FT.
ITEM SPECIAL -	ASPHALT PAVEMENT REINFORCEMENT	2000	SQ. YD.
ITEM SPECIAL -	PRECAST REINFORCED CONCRETE OUTLET	8	EACH

THIS WORK SHALL INCLUDE PLACEMENT OF SHOULDER UNDERDRAINS FOR THE ENTIRE LENGTH AND INSTALLATION OF UNDERDRAIN OUTLETS EVERY 500' ON EACH SIDE OR AS DIRECTED BY THE ENGINEER.

NO FULL DEPTH SHOULDER REPLACEMENT SHALL BE PERFORMED WITHOUT THE AUTHORIZATION OF THE ENGINEER.

ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT

THIS ITEM SHALL INCLUDE FURNISHING AND PLACING AN ASPHALT PAVEMENT REINFORCEMENT GRID AS DIRECTED BY THE ENGINEER. THE ASPHALT PAVEMENT REINFORCEMENT GRID SHALL BE 'GLASGRID - 'AS MANUFACTURED BY SAINT-GOBAIN TECHNICAL FABRICS OR APPROVED EQUAL. THE ASPHALT PAVEMENT REINFORCEMENT GRID SHALL BE INSTALLED AS PER THE RECOMMENDATIONS OF THE MANUFACTURE. THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

ASPHALT INTERMEDIATE COURSE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR AREAS WHERE THE EXISTING ASPHALT THICKNESS IS GREATER THAT THE AVERAGE THICKNESS SHOWN IN THE PLANS:

ITEM SP 402-	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE PG 64-22	700	CU. YD.
ITEM SP 402-	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE PG 70-22	300	CU. YD.

ITEM 305 - CONCRETE BASE, AS PER PLAN

WHEN THIS ITEM IS TO BE OVERLAID WITH ASPHALT, COMPOUNDS FOR CURING CONCRETE AS DESCRIBED IN SECTION 705.07 OF THE SPECIFICATIONS SHALL NOT BE USED. ANY CURING COMPOUNDS SHALL MEET THE REQUIREMENTS OF ASTM C309 AND SHALL BE COMPATIBLE WITH ITEM 407 TACK COAT. CURING SHALL BE IN ACCORDANCE WITH ALTERNATE METHODS SPECIFIED IN SECTION 451.10 OF THE SPECIFICATIONS AND SUPPLEMENTED WITH SPECIFICATION 305.02. CONTRACTOR MAY USE OTHER WATER-BASED CURING COMPOUNDS AS AN ALTERNATIVE WHICH RESULT IN A SURFACE THAT PREVENTS DE-BONDING BETWEEN CONCRETE BASE AND ASPHALT OVERLAY. THE SPECIFICATIONS FOR ALTERNATIVE CURING COMPOUNDS SHALL BE SUBMITTED TO THE CHIEF ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY APPLICATION OR PURCHASE. 1

COATED DOWEL BARS

DOWEL BARS REQUIRED ON ODOT STANDARD DRAWING BP-2.2 SHALL BE COATED IN ACCORDANCE WITH SECTION 709.13 OF THE SPECIFICATIONS.

PAVEMENT WIDENING CONSTRUCTION

THE CONTRACTOR SHALL ESTABLISH THE ACTUAL CENTERLINE OF THE TURNPIKE BY MEASUREMENT BETWEEN THE EASTBOUND AND WESTBOUND EDGES OF PAVEMENT. VARIATIONS IN THE ACTUAL WIDTH, AS SHOWN ON THE PLANS, SHALL BE EQUALLY APPLIED TO BOTH PROPOSED SHOULDERS AS DIRECTED BY THE ENGINEER. THE CROSS SLOPE OF THE PROPOSED SHOULDERS MAY VARY FROM THE ACTUAL EDGE OF PAVEMENT TO THE PER PLAN GUTTER LINE ELEVATIONS AS DIRECTED BY THE ENGINEER. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES. ALL WORK IS TO BE PERFORMED RELATIVE TO EXISTING FIELD LOCATIONS.

SIDE ROAD RESTORATION

DURING THE CONSTRUCTION OF MAINLINE OHIO TURNPIKE BRIDGES OVER SIDE ROADS, IT MAY BE NECESSARY TO REMOVE AND REPLACE PORTIONS OF THE EXISTING SIDE ROAD PAVEMENT, EXISTING AGGREGATE SHOULDERS AND EXISTING CONCRETE BARRIER. FOR REPLACEMENT PAVEMENT AND SHOULDER BUILDUP, SEE DETAILS ON SHEET 10. FOR REPLACEMENT CONCRETE BARRIER DETAILS SEE OTC-STD DWG. CBR-3.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR SIDE ROAD RESTORATION:

ITEM 202,	CURB AND GUTTER REMOVED	110	LIN. FT.
ITEM 202,	CONCRETE BARRIER REMOVED	480	LIN. FT.
ITEM 202,	GUARDRAIL REMOVED	125	LIN. FT.
ITEM 202,	FENCE REMOVED FOR REUSE	80	LIN. FT.
ITEM 202,	WALK REMOVED	300	SQ. FT.
ITEM 301,	ASPHALT CONCRETE BASE	50	CU. YD.
ITEM 304,	AGGREGATE BASE	50	CU. YD.
ITEM 448,	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1, PG 64-22	10	CU. YD.
ITEM 448,	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64-22	7	CU. YD.
ITEM 606,	GUARDRAIL, TYPE 5	125	LIN. FT.
ITEM 607,	FENCE REBUILT, TYPE CLT	80	LIN. FT.
ITEM 608,	4' CONCRETE WALK	300	SQ. FT.
ITEM 609,	COMBINATION CURB & GUTTER, TYPE 2	110	LIN. FT.
ITEM 622,	CONCRETE BARRIER, TYPE D, AS PER PLAN	480	LIN. FT.
ITEM 659,	SEEDING AND MULCHING	200	SQ. YD.

EXISTING APPROACH SLABS

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO STABILIZE AND PROVIDE ELEVATION ADJUSTMENTS TO EXISTING APPROACH SLABS TO IMPROVE THE RIDEABILITY OF THE FINISHED PAVEMENTS:

ITEM SP 526A -	GROUT HOLE	140	EACH
ITEM SP 526A -	GROUT	28	C.Y.

BRIDGE DECK, ABUTMENT SLAB, APPROACH SLAB, AND ROADWAY MODIFICATIONS

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO PROVIDE ELEVATION ADJUSTMENTS TO THE EXISTING BRIDGE DECKS, ABUTMENT SLABS, APPROACH SLABS, AND APPROACH ROADWAYS TO IMPROVE THE RIDEABILITY OF THE FINISHED PAVEMENTS:

ITEM SPECIAL -	DIAMOND GRINDING	140	SQ. YD.
ITEM SPECIAL -	THIN CONCRETE OVERLAY	140	SQ. YD.
ITEM 254 -	PAVEMENT PLANING, ASPHALT CONCRETE (T-1")	280	SQ. YD.
ITEM SP 404 -	ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG, PG. 64-22	7	CU. YD.
ITEM SP 407 -	TACK COAT	70	GALLON
ITEM SP 404 -	ASPHALT CONCRETE SURFACE COURSE USING CRUSHED SLAG, PG. 70-22	7	CU. YD.

CROSSMAN DITCH IMPROVEMENTS PLAN

THE CROSSMAN DITCH IMPROVEMENTS WERE PREPARED BY TETRA TECH, INC. THESE IMPROVMENTS SHALL BE INCLUDED IN THIS CONTRACT. ESTIMATED QUANTITIES FROM THE CROSSMAN DITCH IMPROVEMENTS HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE LUMP SUM QUANTITIES FROM THE CROSSMAN DITCH SUBSUMMARY LISTED BELOW SHALL BE CONSIDERED A PART OF THE LUMP SUM QUANTITIES FOR THE 77-13-01 THIRD LANE CONSTRUCTION PROJECT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE FOLLOWING:

ITEM SP 614, MAINTAINING TRAFFIC
ITEM SP 623, CONSTRUCTION LAYOUT SURVEY
ITEM 624, MOBILIZATION

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MAINTENANCE OF TRAFFIC GENERAL NOTES

THE CONTRACTOR'S RESPONSIBILITY TO THE SAFETY OF THE MOTORING PUBLIC WHILE PERFORMING THE REQUIREMENTS OF THE CONTRACT SHALL BE IN ACCORDANCE WITH THESE MAINTENANCE OF TRAFFIC PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, THE CURRENT EDITION, LATEST REVISION OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND "TEMPORARY TRAFFIC CONTROL ON THE TURNPIKE", LATEST REVISION.

IN ADDITION TO THESE MAINTENANCE OF TRAFFIC GENERAL NOTES, SEE THE NOTES CONTAINED ON OHIO TURNPIKE STANDARD DRAWING TCR-1, DATED JUNE 25, 2007.

THE CONTRACTOR SHALL IMMEDIATELY CORRECT ANY DEFICIENCY IN TRAFFIC ZONE ALIGNMENT, EQUIPMENT, NUMBER OF DEVICES OR PROCEDURE OF FLAG PERSONS WHICH IS BROUGHT TO HIS ATTENTION BY THE ENGINEER. THE CONTRACTOR SHALL HAVE THE QUALIFIED ZONE PERSON ON THE SITE, AVAILABLE, AND IN RADIO CONTACT AT ALL TIMES WHENEVER WORK IS BEING PERFORMED AND SUITABLY EQUIPPED TO PROPERLY MAINTAIN, REPLACE OR ADJUST ANY TRAFFIC CONTROL.

ALL MAINTENANCE OF TRAFFIC DEVICES, DRUMS, SIGNS, FLASHING ARROW PANELS, FLAGGERS, ETC. AS SHOWN AND LOCATED ON THE MAINTENANCE OF TRAFFIC DRAWINGS SHALL BE INCORPORATED FOR THE VARIOUS PHASES OF WORK AREAS UNDER NORMAL TRAFFIC CONDITIONS. IF SPECIAL TRAFFIC CONDITIONS EXIST, THESE MAINTENANCE OF TRAFFIC PLANS MAY HAVE TO BE MODIFIED. HOWEVER, NO MODIFICATIONS TO THE LAYOUT OF THE DEVICES SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS TO BE MADE UNLESS APPROVED BY THE CHIEF ENGINEER.

OHIO TURNPIKE MAINTENANCE OF TRAFFIC PHASE DATES, LANE REDUCTION TIME LIMITATIONS, AND LIQUIDATED DAMAGE CLAUSES ARE CONTAINED IN THE FOLLOWING SPECIAL PROVISIONS:

SP 103 – CONSTRUCTION PHASING AND TIME OF COMPLETION
SP 104 – ACCESS TO TURNPIKE AND RESTRICTIONS
SP 107 – TIME OF THE ESSENCE – LIQUIDATED DAMAGES

THE CONTRACTOR SHALL PROVIDE A 48 HOUR NOTICE TO THE OHIO TURNPIKE COMMISSION CHIEF ENGINEER PRIOR TO INSTALLING AND CHANGING MAINTENANCE OF TRAFFIC PHASES.

TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED BY THE CONTRACTOR AS PER ODOT ITEM 614. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE TYPE 1 PAINT AS PER ODOT ITEM 642 AND SHALL FOLLOW APPLICATION RATES FOR CLASS I WORK ZONE PAVEMENT MARKINGS AS SPECIFIED IN 614.11 (B). REMOVAL OF EXISTING PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS SHALL BE AS PER SP641C. GRINDING OR WATER BLASTING SHALL BE DETERMINED IN SPECIFIC LOCATIONS BY THE CHIEF ENGINEER.

CONSTRUCTION ZONE MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND SHALL CONFORM TO ITEM SP 626A.

ALL PORTABLE CONCRETE BARRIER SHOWN ON THE PLANS FOR MAINLINE MAINTENANCE OF TRAFFIC WILL BE AS PER SPECIAL PROVISION SP 622. THE SAME BARRIER CAN BE USED FOR THE VARIOUS PHASES. THE COST FOR TRANSPORTATION, INSTALLING, MAINTAINING, REMOVAL AND STORING THE PORTABLE CONCRETE BARRIER FOR EACH PHASE SHALL BE INCLUDED IN THE ORIGINAL LUMP SUM COST OF SUPPLYING THE BARRIER FOR ITEM SP 622. GLARE SHIELDS SHALL BE INSTALLED ON PORTABLE CONCRETE BARRIER AS SPECIFIED IN THE PLANS AND SPECIFICATIONS. PAYMENT OF THE GLARE SHIELDS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION SPECIAL, GLARE SHIELDS AND BE CONSIDERED INCIDENTAL TO ITEM SP 622.

ITEM 606, IMPACT ATTENUATOR, AS PER PLAN

THIS ITEM SHALL CONSIST OF PROVIDING THE MAXIMUM NUMBER OF IMPACT ATTENUATORS NEEDED FOR A GIVEN PHASE. THE IMPACT ATTENUATOR SHALL BE AN ABSORB 350 AS MANUFACTURED BY BARRIER SYSTEMS INC., OR APPROVED EQUAL. THE IMPACT ATTENUATOR SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND SHALL BE DESIGNED FOR 62 MPH. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT COPIES OF ALL DESIGN DRAWINGS AND INFORMATION SUPPLIED BY THE MANUFACTURER FOR REVIEW AND APPROVAL BY THE CHIEF ENGINEER. THE IMPACT ATTENUATOR SHALL INCLUDE THE PERTINENT TRANSITION PIECE, CORRECT NUMBER AND TYPE OF ELEMENTS, NOSE PIECE AND ANY PERTINENT HARDWARE NEEDED TO INSTALL A COMPLETE UNIT. A 50' CLEAR ZONE SHALL BE MAINTAINED WHEN NO WORK IS ADJACENT.

PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NEEDED TO INSTALL THE IMPACT ATTENUATOR, REMOVE THE IMPACT ATTENUATOR, TRANSPORT AND REINSTALL THE IMPACT ATTENUATOR AT A NEW LOCATION AND REMOVAL UPON COMPLETION OF THE WORK. IT SHALL ALSO INCLUDE MAINTENANCE AND REPAIR OF THE IMPACT ATTENUATOR DURING THE DURATION OF THE WORK. ALL OF THE ABOVE SHALL BE PAID FOR IN THE PRICE BID AS EACH FOR ITEM 606, IMPACT ATTENUATOR, AS PER PLAN.

MOT DEVICES

ALL TEMPORARY SIGNS ALONG THE MAINLINE SHALL BE FURNISHED BY THE OHIO TURNPIKE COMMISSION. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE, UNLESS NOTED, THESE SIGNS. IF THE TRAFFIC SIGNS ON POSTS HAVE NOT BEEN INSTALLED, ROLL-UP TRAFFIC SIGNS ON X-FOOTPRINT SIGN STANDS SHALL BE FURNISHED, INSTALLED, MAINTAINED AND REMOVED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH FLASHING ARROW PANELS, CONES, DRUMS, ROLL-UP SIGNS, CONSTRUCTION ZONE MARKERS AND BARRICADES REQUIRED FOR MAINTAINING TRAFFIC. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, MOVE AND SUBSEQUENTLY REMOVE ALL CONES, DRUMS, FLASHING ARROW PANELS, ROLL-UP SIGNS, CONSTRUCTION ZONE MARKERS AND BARRICADES IN ACCORDANCE WITH THE MAINTENANCE OF TRAFFIC DRAWINGS. THE CONTRACTOR SHALL COVER AND UNCOVER EXISTING TEMPORARY SIGNS AS DIRECTED BY THE CHIEF ENGINEER AND AS NEEDED TO DISPLAY THE APPROPRIATE SIGNS AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS. SIGN COVERS WILL BE FURNISHED BY AND SHALL BE RETURNED TO THE COMMISSION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE TEMPORARY TRAFFIC CONTROL DEVICES FURNISHED AND FOR ANY DEVICES LOST, DAMAGED OR DESTROYED. THE CONTRACTOR WILL PROVIDE FOR THE TEMPORARY TRAFFIC CONTROL DEVICES SEVEN (7) DAYS PER WEEK, TWENTY-FOUR (24) HOURS PER DAY. FINAL SIGN AND OTHER MAINTENANCE OF TRAFFIC DEVICE LOCATIONS MAY HAVE TO BE ADJUSTED TO FIT GEOMETRIC ROADWAY CONDITIONS AS DIRECTED BY THE CHIEF ENGINEER.

ALL DRUMS ORGINALLY FURNISHED FOR THIS PROJECT SHALL BE NEW OR LIKE-NEW PLASTIC SAFETY TYPE AS SHOWN ON OHIO TURNPIKE COMMISSION STANDARD DRAWING TCR-2. THESE DRUMS ARE PERMITTED FOR REUSE IN SUBSEQUENT CONSTRUCTION PHASES PROVIDED THEY ARE FREE OF DAMAGE AND DISPLAY THE REQUIRED REFLECTORIZATION AS DETERMINED BY THE ENGINEER. ANY DRUM DETERMINED TO BE UNACCEPTABLE BY THE ENGINEER SHALL BE REPLACED WITH A NEW DRUM. PAYMENT FOR PLASTIC SAFETY DRUMS INCLUDING THE SETTING, MAINTENANCE, REPLACEMENT AND SUBSEQUENT REMOVAL SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614-MAINTAINING TRAFFIC.

SINGLE-LANE ZONES

ALL SINGLE LANE ZONES SHALL BE PER SP 104. THE CONTRACTOR SHALL BE PERMITTED TO HAVE A SINGLE-LANE ZONE ONLY AT NIGHT, BETWEEN THE HOURS OF 8:00 PM AND 6:00 AM. THERE SHALL BE NO SINGLE LANE ZONES PERMITTED DURING THE DAY UNLESS APPROVED BY THE CHIEF ENGINEER. ANY SINGLE LANE ZONE, WETHER AT NIGHT OR DURING THE DAY, SHALL BE TAKEN DOWN IF TRAFFIC BACKUP IS MORE THAN 1/2 MILE BEYOND THE ARROW BOARD, AND MAY NOT BE SET AGAIN UNTIL THE TRAFFIC HAS CLEARED. ALL SINGLE LANE ZONES SHALL BE REMOVED WHEN WORK IS NOT BEING PERFORMED, PRIOR TO THE CONTRACTOR LEAVING THE SITE.

DURING PHASE 1 CONSTRUCTION THE CONTRACTOR SHALL REOPEN THE ROADWAY TO TWO LANES IN EACH DIRECTION BY 12:00 PM (NOON) FRIDAY. THE TWO LANE DIRECTIONAL ROADWAY MUST REMAIN OPEN UNTIL AT LEAST 10:00 PM FRIDAY. THE STAGING OF THE OUTSIDE SHOULDER CONSTRUCTION SHALL BE SCHEDULED SO THAT NO MORE THAN A 3-INCH DROPOFF EXISTS BY THE FRIDAY 12:00 PM (NOON) PERIOD. THE DRUM LINE SHALL BE PLACED IN THE SHOULDER AT THE PAVEMENT EDGE. FOR SATURDAY WORK THE DIRECTIONAL ROADWAYS CAN BE RETURNED TO THE PHASE 1 MAINTENANCE OF TRAFFIC TYPICAL SECTION. THE ROADWAY MUST BE REOPENED TO TWO DIRECTION LANES SUNDAY BY 12:00 PM (NOON) AND REMAIN OPEN UNTIL AT LEAST 10:00 PM. IN ADDITION TO THE DRUM PLACEMENT REQUIREMENT AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL INSTALL AND MAINTAIN DURING PHASE 2 MAINTENANCE OF TRAFFIC TWO DRUMS IN ADVANCE OF EACH GUARDRAIL TERMINAL ASSEMBLY ET-2000. THE FIRST DRUM SHALL BE PLACED DIRECTLY IN FRONT OF THE ET-2000 FACE AND THE SECOND DRUM SPACED 50 FEET IN ADVANCE OF THE FIRST DRUM. 1

THE CONTRACTOR'S REQUEST FOR USE OF A NIGHT WORK ZONE SHALL COMPLY WITH SP 106 AND INCLUDE THE TYPE OF WORK TO BE DONE, THE DURATION OF THE WORK, LOCATION OF THE INTENDED WORK, AND THE CONTRACTOR'S PROPOSED LIGHTING PLAN. TEMPORARY LIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE SUCH THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE HIGHWAY. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. ALL TEMPORARY LIGHTING REQUIRED FOR NIGHT WORK SHALL BE INCIDENTAL AND INCLUDED IN THE LUMP SUM BID FOR ITEM SP 614 – MAINTAINING TRAFFIC.

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

AMBER FLASHING LIGHTS SHALL BE USED ON ALL VEHICLES AND/OR EQUIPMENT FOR INGRESS AND EGRESS OF THE WORK ZONE. WHILE IN THE WORK ZONE LIMITS THE FLASHERS ARE TO BE TURNED OFF.

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE MANUAL, THE TURNPIKE CHIEF ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

PAYMENT FOR THE ABOVE, UNLESS SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM SP 614 – MAINTAINING TRAFFIC WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO COMPLETE THE ABOVE WORK.

NO.	REVISION	BY	DATE
1	ADDENDUM NO. 2	SCW	12/14/12

OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC GENERAL NOTES

DATE: SEPTEMBER 2012 | SCALE: N.T.S.
CONTRACT: 77-13-01 | SHEET: 16 OF 322

DESIGNED BY: EWK | CHECKED BY: KPW
DATE: 1/98 | DATE: 9/12
DRAWN BY: JJS | REVISED BY: TKI
DATE: 1/98 | DATE: 09/27/12
CAD FILE NAME: I:\PROJECTS\TPIKE\17699\OTC 3rdLANE 2012\DWGS\MOT\GENNOTE

SEQUENCE OF CONSTRUCTION

THESE PLANS ARE BASED ON THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION. THE CONTRACTOR MAY SUBMIT AN ALTERNATE SEQUENCE OF CONSTRUCTION FOR CONSIDERATION. NO ALTERNATE SEQUENCE OF CONSTRUCTION SHALL BE IMPLEMENTED WITHOUT WRITTEN PRIOR APPROVAL OF THE CHIEF ENGINEER.

THE ADDITION OF A THIRD DIRECTIONAL LANE AND A BARRIER WALL MEDIAN ALONG THE OHIO TURNPIKE SHALL BE ACCOMPLISHED WHILE TRAFFIC IS BEING MAINTAINED IN ACCORDANCE WITH THE ENCLOSED MAINTENANCE OF TRAFFIC PLANS.

THIS CONSTRUCTION CONTRACT WILL INVOLVE A SHARING OF COMMON AREAS DURING PHASE ONE WITH ANOTHER ADJOINING CONSTRUCTION CONTRACT. COOPERATION BETWEEN CONTRACTORS IS VITAL TO THE SUCCESS OF THE TOTAL PROJECT. THE CONTRACTOR SHALL SUBMIT A PLAN AND SCHEDULE OF OPERATIONS TO THE OHIO TURNPIKE CONSTRUCTION MANAGEMENT FIRM FOR APPROVAL.

PHASE ONE CONSTRUCTION (2013)

THE EXISTING OUTSIDE SHOULDER IS TO BE MILLED AND RESURFACED. SEE THE ROADWAY CONSTRUCTION PLANS FOR SHOULDER BUILD–UP AND WORK LIMITS. THE OUTSIDE DRAINAGE WORK (SLOPE DRAIN REPLACEMENT) SHALL BE COMPLETED. THE CONSTRUCTION OF OUTSIDE SHOULDER TYPE D BARRIER BETWEEN THE MAUMEE RIVER BRIDGE AND THE STATE ROUTE 65 BRIDGE, INCLUDING CATCH BASIN AND SLOPE DRAIN REPLACEMENT, SHALL BE COMPLETED. THIS CONSTRUCTION EFFORT SHOULD HAVE A SHORT TIME–FRAME AND IS COVERED IN SPECIAL PROVISION SP 104.

PHASE ONE MAINTENANCE OF TRAFFIC (2013)

INSTALL EASTBOUND LEAD–IN SIGNING RELATIVE TO REDUCING THE EXISTING TWO DIRECTION LANES TO ONE. INSTALL WESTBOUND LEAD–IN SIGNING RELATIVE TO REDUCING THE EXISTING THREE DIRECTION LANES TO ONE.

PLACE THE MAINTENANCE OF TRAFFIC DEVICES THROUGH THE TAPER AREAS AND ALIGN THE MAINLINE IN ACCORDANCE WITH THE PHASE ONE MAINTENANCE OF TRAFFIC TYPICAL SECTION AND PLANS.

PHASE TWO CONSTRUCTION (2013–2014)

THE MAJOR ELEMENT OF THIS PHASE IS THE CONSTRUCTION OF THE TURNPIKE MEDIAN WHICH INCLUDES AN ADDITIONAL DIRECTIONAL LANE, A WIDENED SHOULDER AND A MEDIAN BARRIER SAFETY WALL. ALL EXISTING MAINLINE BRIDGES ARE TO BE WIDENED.

PHASE TWO MAINTENANCE OF TRAFFIC (2013–2014)

TWO LANES OF TRAFFIC ARE TO BE USED ALONG THE TURNPIKE USING THE DRIVING LANE AND RECONSTRUCTED OUTSIDE SHOULDER. SEE PHASE TWO MAINTENANCE OF TRAFFIC TYPICAL SECTION. PRIOR TO THE WORK ZONE TRAFFIC WILL BE SHIFTED TO THE RIGHT USING DEVICES AS SHOWN IN THE PLANS. TRUCKS WILL BE DIRECTED TO USE THE LEFT MOST LANE. A QUANTITY OF 8 SIGNS WILL BE REQUIRED AND PLACED AS SHOWN IN THE PLANS. SETTING THE TEMPORARY CONCRETE BARRIER SHALL BE AS PER TCB–1.

FOR INSTALLATION OF THE BRIDGE EXPANSION JOINT STRIP SEAL THE CONTRACTOR HAS THREE LANES OF PAVEMENT AND BOTH SHOULDERS TO PROVIDE SHORT TERM LANE SHIFTS. USE OHIO TURNPIKE COMMISSION STANDARD DRAWING TCR–12 FOR SIGN AND DRUM PLACEMENT.

OPTIONAL WINTER PHASE CONSTRUCTION

THE CONTRACTOR SHALL BEGIN THE MAINLINE BRIDGE PIER AND ABUTMENT CONSTRUCTION IN THE MEDIAN. NO EXISTING BRIDGE PARAPETS ARE PERMITTED TO BE REMOVED.

OPTIONAL WINTER PHASE MAINTENANCE OF TRAFFIC (2013–2014)

TWO DIRECTIONAL LANES SHALL BE MAINTAINED AT ALL TIMES UNLESS A REQUEST FOR REDUCING TO A SINGLE LANE CONDITION IS GRANTED BY THE OHIO TURNPIKE COMMISSION CHIEF ENGINEER.

OPTIONAL WINTER PHASE NO CONSTRUCTION

TWO DIRECTIONAL LANES SHALL BE MAINTAINED AT ALL TIMES ON THE EXISTING PAVEMENT.

ANY CHANGE BEYOND THE ENCLOSED TEMPORARY TRAFFIC CONTROL PHASING PLANS DUE TO THE CONTRACTOR'S WORK SCHEDULE WILL REQUIRE PRIOR APPROVAL BY THE TURNPIKE CHIEF ENGINEER. THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN REQUEST FOR CHANGE A MINIMUM OF 10 DAYS PRIOR TO ALLOW FOR REVIEW TIME.

THE MAINLINE BRIDGE WIDENING AT THE CSX RAILROAD (MP 63.5) AND THE NORFOLK–SOUTHERN RAILROAD (MP 61.5) SHALL NOT BEGIN UNTIL THE REQUIREMENTS OF SP 104 ARE MET.

QUANTITY SUBSUMMARY

ITEM NUMBERS

PHASE	LOCATION: STATION TO STATION	DIRECTION	606 IMPACT ATTENUATOR, AS PER PLAN (EACH)	SP 622 CONCRETE BARRIER DELINEATOR (FOR INFORMATION ONLY) (EACH)	SP 622 TEMPORARY CONCRETE BARRIER (FOR INFORMATION ONLY) (MILE)	SP 626A CONSTRUCTION ZONE MARKER– ONE (1) WAY WHITE (EACH)	614 4" TEMPORARY WHITE EDGE LINE (MILE)	614 4" TEMPORARY YELLOW EDGE LINE (MILE)	614 4" TEMPORARY WHITE LANE LINE (MILE)	614 8" TEMPORARY WHITE CHANNELIZING LINE (MILE)	614 8" TEMPORARY YELLOW CHANNELIZING LINE (MILE)	SP 614 ZONE PERSON (HOUR)	SP 641C REMOVAL OF PAVEMENT MARKING (MILE)	SP 802 BARRIER REFLECTOR, TYPE A (EACH)	SP 802 BARRIER REFLECTOR, TYPE B (EACH)
1	MP 58.70 TO MP 65.44	EB												333	32
1	MP 59.00 TO MP 64.58	WB												279	32
2	MP 59.28 TO MP 64.36	EB	1	2682	5.08	537	5.08	5.08	5.08	0.30	0.15		10.16		
2	MP 59.24 TO MP 64.88	WB	1	2978	5.64	596	5.64	5.64	5.64	0.30	0.15		11.28		
	CONSTRUCTION ACCESS AND STRUCTURES														
2	MP 60.53 ACCESS	EB	2					0.37		0.50					
2	MP 62.58 ACCESS	WB	2					0.37		0.50					
2	MP 59.86 US 20 BRIDGE		2					0.37		0.50					
2	MP 61.10 MICHIGAN AVENUE BRIDGE		2					0.37		0.50					
2	MP 61.58 NORFOLK SOUTHERN RR BRIDGE		2					0.37		0.50					
2	MP 63.04*	EB	1					0.12		0.43					
2	MP 63.38*	EB	1					0.12		0.30					
2	MP 63.71*	EB	1					0.19		0.27					
2	MP 63.08*	WB						0.25		0.35					
2	MP 63.42*	WB	1					0.09		0.18					
2	MP 63.58*	WB	1					0.04		0.10					
2	MP 63.70*	WB	1					0.12		0.27					
TOTALS CARRIED TO GENERAL SUMMARY			18	5660	10.72	1133	10.72	13.50	10.72	5.00	0.30	13392	21.44	612	64

* – SEE SHEETS 35A TO 35D

NO.	REVISION	BY	DATE
2	ADDENDUM 3	SCW	12/17/12
1	ADDENDUM 1	SCW	12/10/12

OHIO TURNPIKE COMMISSION

SEQUENCE OF CONSTRUCTION AND QUANTITY SUBSUMMARY

DATE: SEPTEMBER 2012 SCALE: N.T.S.
CONTRACT: 77–13–01 SHEET 17 OF 322

DESIGNED BY: EWK CHECKED BY: KPW
DATE: 1/98 DATE: 9/12
DRAWN BY: JJS REVISED BY: TKI
DATE: 1/98 DATE: 09/27/12
CAD FILE NAME: I:\PROJECTS\TPIKE\17699\OTC 3rdLANE 2012\DWGS\MOT\QUAN

MAINTENANCE OF TRAFFIC

MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH ITEM SP614 MAINTAINING TRAFFIC AND THE FOLLOWING:

THE WORK AREAS SHOWN ON THE FOLLOWING SHEETS REPRESENT THE AREAS REQUIRED FOR CONSTRUCTION OF THE ABUTMENTS FOR THE PROPOSED WIDENING OF THE OHIO TURNPIKE BRIDGES OVER OHIO STATE ROUTE 20 (REYNOLDS ROAD).

TRAFFIC LANES ON STATE ROUTE 20 (REYNOLDS ROAD) MAY BE REDUCED TO ONE LANE, AS SHOWN ON SHEETS 37 AND 38, DURING THE CONSTRUCTION OF ANY FALSEWORK, TEMPORARY BRACING OR PROTECTIVE STRUCTURES NECESSARY TO THE PROPOSED WIDENING OF THE OHIO TURNPIKE BRIDGES OVER OHIO STATE ROUTE 20 (REYNOLDS ROAD). ALSO, THIS WORK AREA MAY BE USED IF ADDITIONAL WORK AREA IS REQUIRED DURING THE CONSTRUCTION OF THE PROPOSED ABUTMENTS AND FOUNDATIONS. LANE CLOSURES ON OHIO STATE ROUTE 20 (REYNOLDS ROAD) WILL BE PERMITTED DURING THE HOURS OF 9:00 A.M. AND 3:00 P.M., AND BETWEEN 8:00 P.M. AND 6:00 A.M. MAINTENANCE OF TRAFFIC SHALL BE COORDINATED WITH THE CITY OF MAUMEE.

1 ALL LANES OF TRAFFIC ON OHIO STATE ROUTE 20 (REYNOLDS ROAD) MAY BE CLOSED FOR A PERIOD NOT TO EXCEED 15 MINUTES DURING DAYLIGHT HOURS FOR STEEL PLACEMENT. THE TIME OF DAY FOR THESE SHORT DURATION CLOSURES SHALL BE AS APPROVED BY THE CHIEF ENGINEER.

ADDITIONAL WORK SPACE IN THE MEDIAN OF THE OHIO TURNPIKE WILL BE AVAILABLE FOR THE CONTRACTORS EQUIPMENT TO PERFORM CONSTRUCTION PROCEDURES FROM ABOVE OHIO STATE ROUTE 20 (REYNOLDS ROAD).

DRUMS OR CONES SHALL BE SPACED AT 40 FOOT INTERVALS, UNLESS OTHERWISE NOTED IN THE PLANS.

ANY BLUNT ENDS OR OPEN EXCAVATIONS MUST BE PROTECTED WITH TEMPORARY PORTABLE CONCRETE BARRIER, AND SHALL BE INCIDENTAL TO SP 614 – MAINTAINING TRAFFIC.

1 THE WORK TRUCK WITH IMPACT ATTENUATOR SHOWN AT THE BEGINNING OF THE WORK AREA SHALL BE IN PLACE AND UNOCCUPIED WHENEVER PERSONS ARE WORKING WITHIN THE WORK AREA. THIS TRUCK SHALL BE MOVED FROM THE PAVEMENT WHENEVER WORKERS ARE NOT IN THE WORK AREA. OTHER PROTECTIVE DEVICES MAY BE USED IN LIEU OF THE WORK TRUCK WHEN APPROVED BY THE CHIEF ENGINEER.

IT MAY BE NECESSARY TO ADJUST THE LOCATION OF AN EXISTING YIELD CONDITION. IN THESE CASES, THE PERMANENT R1-2 SIGN INSTALLATION SHALL BE COVERED AND THE TEMPORARY INSTALLATION SHALL BE INSTALLED SUBJECT TO THE APPROVAL OF THE CHIEF ENGINEER.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM SP614 AND APPLICABLE PORTIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION CMS AS WELL AS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE THIS METHOD OF TRAFFIC CONTROL SHALL BE INCIDENTAL TO THE LUMP SUM BID FOR SP614 MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED ON THE PLAN.

STATE OF OHIO
LAURELL L. ADAMS
53947
REGISTERED PROFESSIONAL ENGINEER

Laurell L. Adams

FOR MAINTENANCE OF TRAFFIC SHEETS

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

GENERAL NOTES
MAINTENANCE OF TRAFFIC

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: LLA	CHECKED: –	DATE: 11-12
DRAWN: LLA	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 36 OF 322

CAD FILE NAME: 9808-36.DWG

Sheet Number																	Item	Grand Total	Unit	Description	As Per Plan & Special Reference
		11	12	13	14	15	46		49	50	51	55	60	118	195A	296	CROSSMAN DITCH 1 OF 9					
																				Roadway	
																		SP 201	LUMP SUM		CLEARING AND GRUBBING, AS PER PLAN	SHT. 11
						480					128							202	608	LIN. FT.	CONCRETE BARRIER REMOVED	
					200							2879						202	3079	LIN. FT.	PIPE REMOVED, 24" AND UNDER	
											38							202	38	EACH	GUARD POST REMOVED	
												13			1		2	202	16	EACH	HEADWALL REMOVED	
					4							41						202	45	EACH	CATCH BASIN REMOVED	
															12			202	12	LIN. FT.	PIPE REMOVED OVER 24"	
						80				110								202	190	LIN. FT.	FENCE REMOVED FOR REUSE	
						125					12148							202	12273	LIN. FT.	GUARDRAIL REMOVED	
						4300					5156							202	9456	LIN. FT.	GUARDRAIL REMOVED FOR REUSE	
																	125	202	125	LIN. FT.	GUARDRAIL REMOVED FOR STORAGE	
		100								1016								202	1116	LIN. FT.	FENCE REMOVED	
						300												202	300	SQ. FT.	WALK REMOVED	
						110												202	110	LIN. FT.	CURB AND GUTTER REMOVED	
											19							202	19	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
																	2	202	2	EACH	ANCHOR ASSEMBLY REMOVED FOR STORAGE	
						10												SP 202B	10	CU. YD.	3 CORNER CRACK REPAIR, USING ITEM SP402	
												555						SP 202J	555	LIN. FT.	PLUG AND FILL EXISTING CONDUIT	
											24							SP 202K	24	EACH	ANCHOR ASSEMBLY, SYRO STEEL ET-2000, REMOVED FOR STORAGE	
											2							SP 202L	2	EACH	ANCHOR ASSEMBLY, SYRO STEEL ET-2000, REMOVED AND RESET	
		22000				2400				38110							350	203	62860	CU. YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	
		22000								15553					16			203	37569	CU. YD.	EMBANKMENT	
			44															204	44	HOUR	PROOF ROLLING	
						6100	131637		2719									204	140456	SQ. YD.	SUBGRADE COMPACTION	
	2	LUMP SUM																206	LUMP SUM		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS	
		66000																206	66000	SQ. YD.	LIME STABILIZED SUBGRAOE, 16 INCHES DEEP	
		66000																206	66000	SQ. YD.	CEMENT STABILIZED SUBGRADE, 16 INCHES DEEP	
	2	30																206	30	HOUR	TEST ROLLING	
		3300																206	3300	TON	LIME	
		4125																206	4125	TON	CEMENT	
	2	990																206	990	M. GAL	WATER FOR CURING	
			500									4331			50			209	4881	LIN. FT.	DITCH CLEANOUT, AS PER PLAN	SHT. 12
		1	31,489															SP 536A	31,489	SQ. YD.	MASONRY COATING 1	
			27															604	27	EACH	MONUMENT ASSEMBLY	
											5							606	5	EACH	ANCHOR ASSEMBLY, TYPE T	
											24							606	24	EACH	BRIDGE TERMINAL ASSEMBY, TYPE 1, USING STEEL POSTS	
											1							606	1	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2, USING STEEL POSTS	
						125											450	606	575	LIN. FT.	GUARDRAIL, TYPE 5	
											1213							606	1213	LIN. FT.	GUARDRAIL, TYPE 5, USING STEEL POSTS	
						4300					5156							SP 606	9456	LIN. FT.	GUARDRAIL REBUILT, TYPE 5, USING STEEL POSTS	
			100															SP 606	100	EACH	GUARDRAIL POST, STEEL, NINE (9) FT.	
						80												607	80	LIN. FT.	FENCE REBUILT, TYPE CLT	SHT. 11
										110								607	110	LIN. FT.	FENCE REBUILT, TYPE 47	SHT. 11
		100																607	100	LIN. FT.	FENCE, TYPE 47, AS PER PLAN	SHT. 11
						300												608	300	SQ. FT.	4" CONCRETE WALK	
												10						613	10	CU. YD.	LOW STRENGTH MORTAR BACKFILL	
														20				613	20	CU. YD.	LOW STRENGTH MORTAR BACKFILL, TYPE 2	
							12429											622	12429	LIN. FT.	CONCRETE BARRIER, TYPE B-50, AS PER PLAN	SHT. 12
							5661											622	5661	LIN. FT.	CONCRETE BARRIER, TYPE C-50, AS PER PLAN	SHT. 12
						480					1099							622	1579	LIN. FT.	CONCRETE BARRIER, TYPE D, AS PER PLAN	SHT. 12/CBR-3
							152											622	152	LIN. FT.	PORTABLE CONCRETE BARRIER, 32", AS PER PLAN	XOV-3
														448				SP 622C	448	LIN. FT.	MEDIAN WALL (DESIGN HEIGHT = 2 FEET)	
														1627				SP 622C	1627	LIN. FT.	MEDIAN WALL (DESIGN HEIGHT = 4 FEET)	
		66000																861	66000	SQ. YD.	GEOGRID FOR SUBGRADE STABILIZATION	
										1								SPECIAL	1	EACH	INERTIA BARRIER REMOVED	SHT. 12
			300									1415						SPECIAL	1715	LIN. FT.	PIPE CLEANOUT, 12" TO 36"	SHT. 12
			300									240						SPECIAL	540	LIN. FT.	PIPE CLEANOUT, OVER 36"	SHT. 12
																					EROSION CONTROL	
				980														207	980	SQ. YD.	TEMPORARY SEEDING AND MULCHING	
				1800									1050					207	2850	LIN. FT.	FILTER FABRIC FENCE, AS PER PLAN	SHT. 13
				130									648					207	778	LIN. FT.	FILTER FABRIC DITCH CHECKS	
				380									1880					207	2260	LIN. FT.	INLET PROTECTION	
				200														207	200	SQ. YD.	TEMPORARY DITCH PROTECTION	
				30	6							549			10			601	595	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
				760														601	760	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITHOUT FILTER	
																	175	601	175	CU. YD.	ROCK CHANNEL PROTECTION, TYPE B WITH FABRIC FILTER	
																96		601	96	LIN. FT.	PAVED GUTTER, AS PER PLAN	
												520			110			601	630	LIN. FT.	PAVED GUTTER, BROKEN IN PLACE, AS PER PLAN	SHT. 12
				1000		200				4895		2300			65		241	659	8701	SQ. YD.	SEEDING AND MULCHING	
				250													56	659	306	SQ. YD.	REPAIR SEEDING AND MULCHING	

NO.	REVISIONS	BY	DATE
2	ADDENDUM NO. 3	SCW	12/17/12
1	ADDENDUM NO. 1	SCW	12/7/12

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: JVP	CHECKED: RJM	DATE: 05-99
DRAWN: JVP	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 42 OF 322

CAD FILE NAME: 9808-42.DWG

Sheet Number																		Item	Grand Total	Unit	Description	As Per Plan & Special Reference
			13	14	15	46	48	49	50		55	59				195A	CROSSMAN DITCH 1 OF 9					
																					EROSION CONTROL (continued)	
			0.05						0.44								0.16	659	0.65	TON	COMMERCIAL FERTILIZER	
																	56	659	56	SQ. YD.	INTER-SEEDING	
																	0.23	659	0.23	ACRE	LIME	
			13						11								6	659	30	M. GAL.	WATER	
																	870	670	870	SQ. YD.	DITCH EROSION PROTECTION	
											2220					65		671	2285	SQ. YD.	EROSION CONTROL MAT, TYPE G	
			16															SPECIAL	16	EACH	DRY ENHANCED SWALE (ROCK CHECK CONVERSION)	SHT. 195C
																					DRAINAGE	
																	1856	509	1856	POUND	EPOXY COATED REINFORCING STEEL	
																	18	511	18	CU. YD.	CLASS C CONCRETE, HEADWALL	
											62							SP 511	62	CU. YD.	CLASS C CONCRETE, MISCELLANEOUS	
											5							SP 516A	5	LIN. FT.	CRACK REPAIR USING NON-SHRINK, NON-METALLIC GROUT	
											50					86		SP 519	136	SQ. FT.	PATCHING CONCRETE STRUCTURES	
																	1	602	1	CU. YD.	CONCRETE MASONRY	
				230								2472						603	2702	LIN. FT.	6" CONDUIT, TYPE B, 707.41 NON-PERFORATED ASTM D 3034 (SDR-35), 707.42 OR 707.33	
				25														603	25	LIN. FT.	6" CONDUIT, TYPE E	
				230	400							490						603	1120	LIN. FT.	6" CONDUIT, TYPE F, 707.41 NON-PERFORATED ASTM D 3034 (SDR-35), 707.42 OR 707.33	
				200														603	200	LIN. FT.	8" CONDUIT, TYPE B	
				200														603	200	LIN. FT.	8" CONDUIT, TYPE F	
											8							603	8	LIN. FT.	12" CONDUIT, TYPE B, 706.02	
											830							603	830	LIN. FT.	15" CONDUIT, TYPE B, 706.02	
				200							870							603	1070	LIN. FT.	12" CONDUIT, TYPE F, 707.33	
											1060							603	1060	LIN. FT.	15" CONDUIT, TYPE F, 707.33	
											14							603	14	LIN. FT.	15" CONDUIT, TYPE B, 706.02, 3000 D LOAD	
											359							603	359	LIN. FT.	18" CONDUIT, TYPE B, 706.02	
											262							603	262	LIN. FT.	24" CONDUIT, TYPE B, 706.02	
																	132	603	132	LIN. FT.	24" CONDUIT, TYPE C, AS PER PLAN, 706.02 W/ 706.11 JOINTS	
																24		603	24	LIN. FT.	30" CONDUIT, TYPE A, 706.02	
											2							604	2	EACH	CATCH BASIN, NO. 6	
				4							28							SP 604	32	EACH	CATCH BASIN, NO. CB-1	
											3							604	3	EACH	CONCRETE BARRIER INLET, TYPE D, PER I-2.3	
											23							SP 604	23	EACH	INLET, NO. I-3B50, DOUBLE GRATE	
											8							SP 604	8	EACH	CATCH BASIN, MEDIAN WALL	
											1							SP 604	1	EACH	CATCH BASIN, NO. 5 WITHOUT APRON	
											11							SP 604	11	EACH	INLET, NO. I-3C50, DOUBLE GRATE	
											3							SP 604	3	EACH	MANHOLE, NO. 3	
					5500							39020						SP 605	44520	LIN. FT.	6" SHALLOW PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP	
												23006						SP 605	23006	LIN. FT.	6" UNCLASSIFIED PIPE UNDERDRAIN, 707.31, WITH FABRIC WRAP	
				200														SP 605	200	LIN. FT.	AGGREGATE DRAIN, TYPE I, WITH FABRIC WRAP	
				200				230										SP 605	430	LIN. FT.	AGGREGATE DRAIN, TYPE II, WITH FABRIC WRAP	
											560							SPECIAL	560	LIN. FT.	CONDUIT, BORED OR JACKED, 15", TYPE B, 706.02	SPECIAL PROVISIONS
											126							SPECIAL	126	LIN. FT.	CONDUIT, BORED OR JACKED, 18", TYPE B, 706.02	SPECIAL PROVISIONS
											54						163	SPECIAL	217	LIN. FT.	CONDUIT, BORED OR JACKED, 24", TYPE B, 706.02	SPECIAL PROVISIONS
				4							17							SPECIAL	21	EACH	12" PRECAST FLARED END SECTION	
											37							SPECIAL	37	EACH	15" PRECAST FLARED END SECTION	DR-1
											3							SPECIAL	3	EACH	18" PRECAST FLARED END SECTION	DR-1
											1							SPECIAL	1	EACH	24" PRECAST FLARED END SECTION	DR-1
																1		SPECIAL	1	EACH	30" PRECAST FLARED END SECTION	DR-1
				5	8													SPECIAL	13	EACH	PRECAST REINFORCED CONCRETE OUTLET	UD-1
																					PAVEMENT	
					280													254	280	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE (t=1")	
							880											254	880	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE (t=1¼")	
						4702	42967											254	47669	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE (t=3")	
							330											254	330	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE (VARIABLE t=3"~6")	
							13183											254	13183	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE (t=9")	
					50													301	50	CU. YD.	ASPHALT CONCRETE BASE	1
					1020		2197	250										SP 302	3467	CU. YD.	BITUMINOUS AGGREGATE BASE COURSE, PG 64-22 (SHOULDER)	
					50													304	50	CU. YD.	AGGREGATE BASE	
					1360	23505		455										SP 304	25320	CU. YD.	AGGREGATE BASE	
					700	7013	2746	73										SP 402	10532	CU. YD.	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 64-22	
					300	6102												SP 402	6402	CU. YD.	ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22	
					7	2338	1992	52										SP 404	4389	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 64-22	
					7	2121												SP 404	2128	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG 70-22	
						42312												SP 404A	42312	LIN. FT.	JOINT SEALER	
						15127	3389	90										SP 407	18606	GALLON	INTERMEDIATE TACK COAT	
					70	12841	4418											SP 407	17329	GALLON	TACK COAT	
					10													448	10	CU. YD.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE I, PG 64-22	

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: JVP	CHECKED: RJM	DATE: 5-99
DRAWN: JVP	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 43 OF 322

CAD FILE NAME: 9808-43.DWG

Sheet Number																		CROSSMAN DITCH 1 OF 9	Item	Grand Total	Unit	Description	As Per Plan & Special Reference
				14	15	17	40	46	48	49		51											
																						PAVEMENT (continued)	
					7														448	7	CU. YD.	ASPHALT CONCRETE, SURFACE COURSE, TYPE L, PG 64-22	
								123713											305	123713	SQ. YD.	10" CONCRETE BASE, AS PER PLAN (MAINLINE PAVEMENT BASE BID) 1	SHT. 15
				300						739									SP 451	1039	LIN. FT.	EXPANSION JOINT	CJ-1, CJ-2
										13									SP 526	13	SQ. YD.	CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT, AS PER PLAN	SHT. 14
										1219									SP 526	1219	SQ. YD.	CLASS C CONCRETE, APPROACH SLAB, USING TYPE 1 CEMENT (t=12")	
					140														SP 526A	140	EACH	GROUT HOLE	
					28														SP 526A	28	CU. YD.	GROUT	
					110														609	110	LIN. FT.	COMBINATION CURB AND GUTTER, TYPE 2	
					2500				507										SP 609	3007	LIN. FT.	ASPHALT CONCRETE CURB, PG 64-22, STANDARD TYPE 1	
									8829										617	8829	SQ. YD.	SHOULDER PREPARATION	
									981										617	981	CU. YD.	COMPACTED AGGREGATE	
									32										617	32	M. GAL.	WATER	
									2518										SP 627	2518	TON	STONE SHOULDER PROTECTION	
					2000														SPECIAL	2000	SQ. YD.	ASPHALT PAVEMENT REINFORCEMENT	SHT. 15
					140														SPECIAL	140	SQ. YD.	DIAMOND GRINDING	SHT. 15
					140														SPECIAL	140	SQ. YD.	THIN CONCRETE OVERLAY	SHT. 15
																						1	
							1 34365												SP 302	34365	CU. YD.	BITUMINOUS AGGREGATE BASE COURSE, PG 64-22 (MAINLINE PAVEMENT ALTERNATE BID)	
																						LIGHTING	
												524							625	524	LIN. FT.	TRENCH, 24" DEEP	
												5							625	5	EACH	PULL BOX, 725.08, 24"	
												22619							SP 625	22619	LIN. FT.	CONDUIT, 4" WITH 3 CELL INNERDUCT, 725.051	
												22635							SP 625	22635	LIN. FT.	CONDUIT, 4" WITH 4 CELL INNERDUCT, 725.051	
												248							SP 625	248	LIN. FT.	CONDUIT, 4" WITH 3 CELL INNERDUCT, 725.04 OR 725.051, SCHEDULE 80	
												322							SP 625	322	LIN. FT.	CONDUIT, 4" WITH 4 CELL INNERDUCT, 725.04 OR 725.051, SCHEDULE 80	
												194							SP 625	194	LIN. FT.	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 4" WITH 4 CELL INNERDUCT, 725.04 OR 725.051, SCHEDULE 80	
												62							SP 625	62	LIN. FT.	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 4" WITH 3 CELL INNERDUCT, 725.04 OR 725.051, SCHEDULE 80	
												48							SP 625A	48	EACH	JUNCTION BOX, POLYMER CONCRETE	JB-1
																						MAINTENANCE OF TRAFFIC	
												19							202	19	EACH	ANCHOR ASSEMBLY, TYPE T REMOVED	
						18	2												606	20	EACH	IMPACT ATTENUATOR, AS PER PLAN	SHT. 16
												1							SP 606A	1	EACH	ANCHOR ASSEMBLY SYRO STEEL (ET-2000), OPTION A, WITH ALL POSTS IN FOUNDATION TUBES	
												325							SP 606C	325	LIN. FT.	TEMPORARY GUARDRAIL FOR MAINTAINING TRAFFIC	
							11												614	18	EACH	BARRIER REFLECTORS	
							18												614	18	EACH	STEADY BURNING TYPE A WARNING LIGHTS	
							724												614	724	LIN. FT.	FOUR (4) INCH TEMPORARY WHITE EDGE LINE	
						10.72													614	10.72	MILE	FOUR (4) INCH TEMPORARY WHITE EDGE LINE	
						13.50													614	13.50	MILE	FOUR (4) INCH TEMPORARY YELLOW EDGE LINE	
						10.72													614	10.72	MILE	FOUR (4) INCH TEMPORARY WHITE LANE LINE	
						5													614	5	MILE	EIGHT (8) INCH TEMPORARY WHITE CHANNELIZING LINE	
						0.3													614	0.3	MILE	EIGHT (8) INCH TEMPORARY YELLOW CHANNELIZING LINE	
						LUMP	LUMP												SP 622	LUMP SUM		TEMPORARY CONCRETE BARRIER	
						LUMP													SP 622	LUMP SUM		CONCRETE BARRIER DELINEATOR	
						1133													SP 626A	1133	EACH	CONSTRUCTION ZONE MARKER - ONE (1) WAY WHITE	
						21.44													SP 641C	21.44	MILE	REMOVAL OF PAVEMENT MARKING	
						612													SP 802	612	EACH	BARRIER REFLECTOR, TYPE A	
						64													SP 802	64	EACH	BARRIER REFLECTOR, TYPE B	
																						FOR TRAFFIC CONTROL GENERAL SUMMARY SEE SHEET 206	
																						FOR STRUCTURE OVER U.S. 20 GENERAL SUMMARY SEE SHEET 236	
																						FOR STRUCTURE OVER MICHIGAN AVE. GENERAL SUMMARY SEE SHEET 248	
																						FOR STRUCTURE OVER STENGEL RD. GENERAL SUMMARY SEE SHEET 264	
																						FOR STRUCTURE OVER S.R. 65 GENERAL SUMMARY SEE SHEET 279	
																						FOR STRUCTURE OVER CSX R.R. GENERAL SUMMARY SEE SHEET 291	
																						FOR STRUCTURE OVER WHITE RD. GENERAL SUMMARY SEE SHEET 302	
																						FOR STRUCTURE OVER SIMMONS RD. GENERAL SUMMARY SEE SHEET 313	
																			IB - ART. 6	LUMP SUM		PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	
																			SP 115	LUMP SUM		RAILROAD PROTECTIVE LIABILITY INSURANCE - CSX RAILROAD	
																			SP 115	LUMP SUM		RAILROAD PROTECTIVE LIABILITY INSURANCE - NORFOLK AND SOUTHERN RAILROAD	
																			SP 614	LUMP SUM		MAINTAINING TRAFFIC	
																			SP 619	LUMP SUM		FIELD OFFICE	
																			SP 623	LUMP SUM		CONSTRUCTION LAYOUT SURVEY	
																			624	LUMP SUM		MOBILIZATION	

CAD FILE NAME: 9808-44.DWG

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

GENERAL SUMMARY

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: JVP	CHECKED: RJM	DATE: 5-99	
DRAWN: JVP	IN CHARGE: RWG	SCALE: NONE	

CONTRACT 77-13-01 SHEET 44 OF 322

PAVEMENT CALCULATIONS										PAVEMENT QUANTITIES																				
		L	WP1	WP2	EP1	EP2	A1	A2	AB	204	254	SP302	SP304	SP304	SP402	SP 402	SP 402	SP 404	SP 404	SP 404A	SP 407	SP 407	SP 407	SP 407	SP 407	305	622	622	622
FROM STATION	TO STATION	LENGTH	WESTBOUND PAVEMENT WIDTH	WETBOUND SHOULDER WIDTH	EASTBOUND PAVEMENT WIDTH	EASTBOUND SHOULDER WIDTH	PAVEMENT SURFACE AREA A=L x (WP2+EP2)	SHOULDER SURFACE AREA A=L x (WP2+EP2)	AREA UNDER BARRIER (AB)	SUBGRADE COMPACTION (36)(L)/9	PAVEMENT PLANING ASPHALT CONCRETE (1=3") (1" x L x 2)/9	10" BITUMINOUS AGGREGATE BASE 10(A1+A2)/(12x27) (UNDER PAVMENT) (ALTERNATE BID	AGGREGATE BASE (6") 6(A1+A2)/(12x27) (UNDER PAVMENT)	AGGREGATE BASE (VAR.) (AB x L)/27 (UNDER BARRIER)	3.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG70-22 (3.75xA1)/(12x27) (PAVEMENT)	1.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22 1.75x1xL x2/12x27 (PAVT. JOINT)	3.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG64-22 (3.75xA2)/(12x27) (SHOULDER)	1.25" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 1.25x[A1+(1xL x2)]/12x27 (PAVEMENT)	1.25" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG64-22 1.25 XA2/12X27 (SHOULDER)	JOINT SEALER 2xL	TACK COAT 0.10 GAL/SY 0.10x(A1+A2)/9	TACK COAT 0.10xWx2x1/9 (PAVEMENT JOINT)	INTERMEDIATE TACK COAT 0.06 GAL/SY 0.06x2x(A1+A2)/9	INTERMEDIATE TACK COAT 0.06x2xW1/9 (PAVEMENT JOINT)	10" CONCRETE BASE, AS PER PLAN (A1+A2)/9	CONCRETE BARRIER, TYPE B-50, AS PER PLAN	CONCRETE BARRIER, TYPE C-50, AS PER PLAN	PORTABLE CONCRETE BARRIER 32', AS PER PLAN
		FT.	FT.	FT.	FT.	FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	LIN. FT.	GAL.	GAL.	GAL.	GAL.	SQ. YD.	LIN. FT.	LIN. FT.	LIN. FT.
586+50.00	587+40.00	90.00	12.00	14.25	12.00	14.25	2160.00	2565.00	3.85	560.00	20.00	145.83	87.50	12.83	25.00	0.97	29.69	9.03	9.90	180.00	52.50	2.00	63.00	1.20	525.00	90.00		
587+40.00	587+80.00	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
587+80.00	588+20.00	40.00	12.00	12.75	12.00	12.75	960.00	1020.00	7.48	248.89	8.89	61.11	36.67	11.08	11.11	0.43	11.81	4.01	3.94	80.00	22.00	0.89	26.40	0.53	220.00	40.00		
588+20.00	588+60.00	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
588+60.00	591+00.00	240.00	12.00	14.25	12.00	14.25	5760.00	6840.00	3.85	1493.33	53.33	388.89	233.33	34.22	66.67	2.59	79.17	24.07	26.39	480.00	140.00	5.33	168.00	3.20	1400.00	240.00		
591+00.00	594+25.00	325.00	12.00	14.25	12.00	14.25	7800.00	9262.50	3.85	2022.22	72.22	526.62	315.97	46.34	90.28	3.51	107.20	32.60	35.73	650.00	189.58	7.22	227.50	4.33	1895.83	325.00		
594+25.00	603+00.00	875.00	12.00	14.25	12.00	14.75	21000.00	25375.00	4.40	5444.44	194.44	1431.33	858.80	142.59	243.06	9.45	293.69	87.77	97.90	1750.00	515.28	19.44	618.33	11.67	5152.78		875.00	
603+00.00	603+27.57	27.57	12.00	14.25	12.00	14.75	661.68	799.53	4.40	171.55	6.13	45.10	27.06	4.49	7.66	0.30	9.25	2.77	3.08	55.14	16.24	0.61	19.48	0.37	162.36		27.57	
605+55.75	615+00.00	944.25	12.00	14.25	12.00	14.75	22662.00	27383.25	4.40	5875.33	209.83	1544.61	926.76	153.88	262.29	10.20	316.94	94.72	105.65	1888.50	556.06	20.98	667.27	12.59	5560.58		944.25	
615+00.00	615+50.00	50.00	12.00	14.25	12.00	14.75	1200.00	1450.00	4.40	311.11	11.11	81.79	49.07	8.15	13.89	0.54	16.78	5.02	5.59	100.00	29.44	1.11	35.33	0.67	294.44		50.00	
615+50.00	622+10.00	660.00	12.00	14.25	12.00	14.25	15840.00	18810.00	3.85	4106.67	146.67	1069.44	641.67	94.11	183.33	7.13	217.71	66.20	72.57	1320.00	385.00	14.67	462.00	8.80	3850.00	660.00		
622+10.00	623+90.00	180.00	12.00	16.00	12.00	16.00	4320.00	5760.00		1120.00	40.00	311.11	186.67		50.00	1.94	66.67	18.06	22.22	360.00	112.00	4.00	134.40	2.40	1120.00			152.00
623+90.00	627+00.00	310.00	12.00	14.75	12.00	14.25	7440.00	8990.00	4.40	1928.89	68.89	507.10	304.26	50.52	86.11	3.35	104.05	31.10	34.68	620.00	182.56	6.89	219.07	4.13	1825.56		310.00	
627+00.00	630+47.62	347.62	12.00	14.75	12.00	14.25	8342.88	10080.98	4.40	2162.97	77.25	568.64	341.18	56.65	96.56	3.76	116.68	34.87	38.89	695.24	204.71	7.72	245.65	4.63	2047.10		347.62	
630+47.62	630+87.62	40.00	12.00	14.00	12.00	13.50	960.00	1100.00	5.63	248.89	8.89	63.58	38.15	8.34	11.11	0.43	12.73	4.01	4.24	80.00	22.89	0.89	27.47	0.53	228.89		40.00	
630+87.62	631+22.62	35.00	12.00	13.25	12.00	12.75	840.00	910.00	6.85	217.78	7.78	54.01	32.41	8.88	9.72	0.38	10.53	3.51	3.51	70.00	19.44	0.78	23.33	0.47	194.44		35.00	
631+22.62	631+62.62	40.00	12.00	14.00	12.00	13.50	960.00	1100.00	5.63	248.89	8.89	63.58	38.15	8.34	11.11	0.43	12.73	4.01	4.24	80.00	22.89	0.89	27.47	0.53	228.89		40.00	
631+62.62	631+75.00	12.38	12.00	14.75	12.00	14.25	297.12	359.02	4.40	77.03	2.75	20.25	12.15	2.02	3.44	0.13	4.16	1.24	1.39	24.76	7.29	0.28	8.75	0.17	72.90		12.38	
631+75.00	633+16.52	141.52	12.00	14.25	12.00	14.25	3396.48	4033.32	3.85	880.57	31.45	229.31	137.59	20.18	39.31	1.53	46.68	14.20	15.56	283.04	82.55	3.14	99.06	1.89	825.53	141.52		
635+00.00	640+00.00	500.00	12.00	14.25	12.00	14.25	12000.00	14250.00	3.85	3111.11	111.11	810.19	486.11	71.30	138.89	5.40	164.93	50.15	54.98	1000.00	291.67	11.11	350.00	6.67	2916.67	500.00		
640+00.00	652+00.00	1200.00	12.00	14.25	12.00	14.25	28800.00	34200.00	3.85	7466.67	266.67	1944.44	1166.67	171.11	333.33	12.96	395.83	120.37	131.94	2400.00	700.00	26.67	840.00	16.00	7000.00	1200.00		
652+00.00	658+17.75	617.75	12.00	14.25	12.00	14.25	14826.00	17605.88	3.85	3843.78	137.28	1000.98	600.59	88.09	171.60	6.67	203.77	61.97	67.92	1235.50	360.35	13.73	432.43	8.24	3603.54	617.75		
658+17.75	658+57.75	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
658+57.75	659+15.75	58.00	12.00	12.75	12.00	12.75	1392.00	1479.00	7.48	360.89	12.89	88.61	53.17	16.07	16.11	0.63	17.12	5.82	5.71	116.00	31.90	1.29	38.28	0.77	319.00	58.00		
659+15.75	659+55.75	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
659+55.75	661+25.00	169.25	12.00	14.25	12.00	14.25	4062.00	4823.63	3.85	1053.11	37.61	274.75	164.55	24.13	47.01	1.83	55.83	16.98	18.61	338.50	98.73	3.76	118.48	2.26	987.29	169.25		
661+25.00	664+00.00	275.00	12.00	14.25	12.00	14.75	6600.00	7975.00	4.40	1711.11	61.11	449.85	269.91	44.81	76.39	2.97	92.30	27.58	30.77	550.00	161.94	6.11	194.33	3.67	1619.44		275.00	
664+00.00	670+94.96	694.96	12.00	14.25	12.00	14.75	16679.04	20153.84	4.40	4324.20	154.44	1136.82	682.09	113.25	193.04	7.51	233.26	69.71	77.75	1389.92	409.25	15.44	491.11	9.27	4092.54		694.96	
673+14.02	676+00.00	285.98	12.00	14.25	12.00	14.75	6863.52	8293.42	4.40	1779.43	63.55	467.81	280.68	46.60	79.44	3.09	95.99	28.69	32.00	571.96	168.41	6.36	202.09	3.81	1684.10		285.98	
676+00.00	680+50.00	450.00	12.00	14.25	12.00	14.75	10800.00	13050.00	4.40	2800.00	100.00	736.11	441.67	73.33	125.00	4.86	151.04	45.14	50.35	900.00	265.00	10.00	318.00	6.00	2650.00		450.00	
680+50.00	688+00.00	750.00	12.00	14.25	12.00	14.25	18000.00	21375.00	3.85	4666.67	166.67	1215.28	729.17	106.94	208.33	8.10	247.40	75.23	82.47	1500.00	437.50	16.67	525.00	10.00	4375.00	750.00		
688+00.00	695+97.60	797.60	12.00	14.25	12.00	14.25	19142.40	22731.60	3.85	4962.84	177.24	1292.41	775.44	113.73	221.56	8.62	263.10	80.01	87.70	1595.20	465.27	17.72	558.32	10.63	4652.67	797.60		
700+05.88	712+00.00	1194.12	12.00	14.25	12.00	14.25	28658.88	34032.42	3.85	7430.08	265.36	1934.92	1160.95	170.27	331.70	12.90	393.89	119.78	131.30	2388.24	696.57	26.54	835.88	15.92	6965.70	1194.12		
712+00.00	719+58.69	758.69	12.00	14.25	12.00	14.25	18208.56	21622.67	3.85	4720.74	168.60	1229.36	737.62	108.18	210.75	8.20	250.26	76.10	83.42	1517.38	442.57	16.86	531.08	10.12	4425.69	758.69		
719+58.69	719+98.69	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
719+98.69	720+39.03	40.34	12.00	12.75	12.00	12.75	968.16	1028.67	7.48	251.00	8.96	61.63	36.98	11.18	11.21	0.44	11.91	4.05	3.97	80.68	22.19	0.90	26.62	0.54	221.87	40.34		
720+39.03	720+79.03	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
720+79.03	724+00.00	320.97	12.00	14.25	12.00	14.25	7703.28	9147.65	3.85	1997.15	71.33	520.09	312.05	45.77	89.16	3.47	105.88	32.20	35.29	641.94	187.23	7.13	224.68	4.28	1872.33	320.97		
724+00.00	736+00.00	1200.00	12.00	14.25	12.00	14.25	28800.00	34200.00	3.85	7466.67	266.67	1944.44	1166.67	171.11	333.33	12.96	395.83	120.37	131.94	2400.00	700.00	26.67	840.00	16.00	7000.00	1200.00		
736+00.00	736+75.00	75.00	12.00	14.25	12.00	14.25	1800.00	2137.50	3.85	466.67	16.67	121.53	72.92	10.69	20.83	0.81	24.74	7.52	8.25	150.00	43.75	1.67	52.50	1.00	437.50	75.00		
736+75.00	737+15.00	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
737+15.00	738+85.00	170.00	12.00	12.75	12.00	12.75	4080.00	4335.00	7.48	1057.78	37.78	259.72	155.83	47.10	47.22	1.84	50.17	17.05	16.72	340.00	93.50	3.78	112.20	2.27	935.00	170.00		
738+85.00	739+25.00	40.00	12.00	13.50	12.00	13.50	960.00	1080.00	5.67	248.89	8.89	62.96	37.78	8.40	11.11	0.43	12.50	4.01	4.17	80.00	22.67	0.89	27.20	0.53	226.67	40.00		
739+25.00	748+00.00	875.00	12.00	14.25	12.00	14.25	21000.00	24937.50	3.85	5444.44	194.44	1417.82	850.69	124.77	243.06	9.45	288.63	87.77	96.21	1750.00	510.42	19.44	612.50	11.67	5104.17	875.00		
748+00.00	750+75.00	275.00	12.00	14.25	12.00	14.25	6600.00	7837.50	3.85	1711.11	61.11	445.60	267.36	39.21	76.39	2.97	90.71	27.58	30.24	550.00	160.42	6.11	192.50	3.67	1604.17	275.00		
750+75.00	752+25.00	150.00	12.00	14.75	12.00	14.25	3600.00	4350.00	4.40	933.33	33.33	245.37	147.22	24.44	41.67	1.62	50.35	15.05	16.78	300.00	88.33	3.33	106.00	2.00	883.33		150.00	
752+25.00	752+50.00	25.00	12.00	14.75	12.00	14.38	600.00	728.25	4.40	155.56	5.56	41.00	24.60	4.07	6.94	0.27	8.43	2.51	2.81	50.00	14.76	0.56	17.71	0.33	147.58		25.00	
752+50.00	760+00.00	750.00	12.00	14.75	12.00	14.50	18000.00	21937.50		4666.67	166.67	1232.64	739.58		208.33	8.10	253.91	75.23	84.64	1500.00	443.75	16.67	532.50	10.00	4437.50			
								TOTAL (THIS SHEET)		101491	3625	26487	15892	2356	4531	176	5402	1636	1801	32622	9535	362	11442	217	95353	10818	4563	152

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

PAVEMENT CALCULATIONS AND QUANTITIES

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: JMY	CHECKED: RJM	DATE: 07-99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 45 OF 322

CAD FILE NAME: 9808-45 & 46

PAVEMENT CALCULATIONS										PAVEMENT QUANTITIES																		
		L	WP1	WP2	EP1	EP2	A1	A2	AB	204	254	SP302	SP304	SP304	SP402	SP 402	SP 402	SP 404	SP 404	SP 404A	SP 407	SP 407	SP 407	SP 407	305	622	622	622
FROM STATION	TO STATION	LENGTH	WESTBOUND PAVEMENT WIDTH	WETBOUND SHOULDER WIDTH	EASTBOUND PAVEMENT WIDTH	EASTBOUND SHOULDER WIDTH	PAVEMENT SURFACE AREA A=L x (WP2+EP2)	SHOULDER SURFACE AREA A=L x (WP2+EP2)	AREA UNDER BARRIER (AB)	SUBGRADE COMPACTION (56)(L)/9	PAVEMENT PLANING ASPHALT CONCRETE (=3") (1' x L x 2)/9	10" BITUMINOUS AGGREGATE BASE 10(A1+A2)/(12x27) (UNDER PAVEMENT) (ALTERNATE BID)	AGGREGATE BASE (6") 6(A1+A2)/(12x27) (UNDER PAVMENT)	AGGREGATE BASE (VAR.) (AB x L)/27 (UNDER BARRIER)	3.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG70-22 (3.75xA1)/(12x27) (PAVEMENT)	1.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG 70-22 1.75x1xLx2/12x27 (PAVT. JOINT)	3.75" ASPHALT CONCRETE BASE COURSE OR RECYCLED ASPHALT CONCRETE BASE COURSE, PG64-22 (3.75xA2)/(12x27) (SHOULDER)	1.25" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 1.25x[A1+(1xLx2)]/12x27 (PAVEMENT)	1.25" ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG64-22 1.25"xLx2/12X27 (SHOULDER)	JOINT SEALER 2xL	TACK COAT 0.10 GAL/SY 0.10x(A1+A2)/9	TACK COAT 0.10xlx2x1/9 (PAVEMENT JOINT)	INTERMEDIATE TACK COAT 0.06 GAL/SY 0.06x2x(A1+A2)/9	INTERMEDIATE TACK COAT 0.06x2xlx1/9 (PAVEMENT JOINT)	10" CONCRETE BASE, AS PER PLAN (A1+A2)/9	CONCRETE BARRIER, TYPE B-50, AS PER PLAN	CONCRETE BARRIER, TYPE C-50, AS PER PLAN	PORTABLE CONCRETE BARRIER 32", AS PER PLAN
		FT.	FT.	FT.	FT.	FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	CU. YD.	LIN. FT.	GAL.	GAL.	GAL.	GAL.	SQ. YD.	LIN. FT.	LIN. FT.	LIN. FT.
760+00.00	762+75.56	275.56	12.00	14.75	12.00	14.50	6613.44	8060.13		1714.60	61.24	452.89	271.73		76.54	2.98	93.29	27.64	31.10	551.12	163.04	6.12	195.65	3.67	1630.40			
762+75.56	763+15.56	40.00	12.00	13.72	12.00	13.72	960.00	1097.60		248.89	8.89	63.51	38.10		11.11	0.43	12.70	4.01	4.23	80.00	22.86	0.89	27.43	0.53	228.62			
763+15.56	763+63.31	47.75	12.00	12.69	12.00	12.94	1146.00	1223.83		297.11	10.61	73.14	43.89		13.26	0.52	14.16	4.79	4.72	95.50	26.33	1.06	31.60	0.64	263.31			
763+63.31	764+03.31	40.00	12.00	13.72	12.00	13.72	960.00	1097.60		248.89	8.89	63.51	38.10		11.11	0.43	12.70	4.01	4.23	80.00	22.86	0.89	27.43	0.53	228.62			
764+03.31	765+25.00	121.69	12.00	14.75	12.00	14.50	2920.56	3559.43		757.18	27.04	200.00	120.00		33.80	1.31	41.20	12.21	13.73	243.38	72.00	2.70	86.40	1.62	720.00			
765+25.00	765+49.09	24.09	12.00	14.75	12.00	14.50	578.16	704.63	4.40	149.89	5.35	39.59	23.76	3.93	6.69	0.26	8.16	2.42	2.72	48.18	14.25	0.54	17.10	0.32	142.53		24.09	
765+49.09	765+69.09	20.00			12.00	14.38	240.00	287.60	4.40	124.44	4.44	16.28	9.77	3.26	2.78	0.22	3.33	1.08	1.11	40.00	5.86	0.44	7.03	0.27	58.62			
7+81.69	9+00.00	118.31	12.00	14.75	12.00	14.50	2839.44	3460.57	4.40	736.15	26.29	194.44	116.67	19.28	32.86	1.28	40.05	11.87	13.35	236.62	70.00	2.63	84.00	1.58	700.00		118.31	
9+00.00	9+25.00	25.00	12.00	14.63	12.00	14.63	600.00	731.50	4.40	155.56	5.56	41.10	24.66	4.07	6.94	0.27	8.47	2.51	2.82	50.00	14.79	0.56	17.75	0.33	147.94		25.00	
9+25.00	12+00.00	275.00	12.00	14.50	12.00	14.75	6600.00	8043.75		1711.11	61.11	451.97	271.18		76.39	2.97	93.10	27.58	31.03	550.00	162.71	6.11	195.25	3.67	1627.08			
12+00.00	17+24.69	524.69	12.00	14.50	12.00	14.75	12592.56	15347.18		3264.74	116.60	862.34	517.40		145.75	5.67	177.63	52.63	59.21	1049.38	310.44	11.66	372.53	7.00	3104.42			
19+45.10	20+00.00	54.90	12.00	14.75	12.00	14.25	1317.60	1592.10	4.40	341.60	12.20	89.81	53.88	8.95	15.25	0.59	18.43	5.51	6.14	109.80	32.33	1.22	38.80	0.73	323.30		54.90	
20+00.00	24+00.00	400.00	12.00	14.25	12.00	14.25	9600.00	11400.00	3.85	2488.89	88.89	648.15	388.89	57.04	111.11	4.32	131.94	40.12	43.98	800.00	233.33	8.89	280.00	5.33	2333.33	400.00		
24+00.00	26+87.83	287.83	12.00	14.25	12.00	14.25	6907.92	8203.16	3.85	1790.94	63.96	466.39	279.83	41.04	79.95	3.11	94.94	28.87	31.65	575.66	167.90	6.40	201.48	3.84	1679.01	287.83		
29+00.70	32+29.10	328.40	12.00	14.25	12.00	14.25	7881.60	9359.40	3.85	2043.38	72.98	532.13	319.28	46.83	91.22	3.55	108.33	32.94	36.11	656.80	191.57	7.30	229.88	4.38	1915.67	328.40		
34+65.57	36+00.00	134.43	12.00	14.25	12.00	14.25	3226.32	3831.26	3.85	836.45	29.87	217.83	130.70	19.17	37.34	1.45	44.34	13.48	14.78	268.86	78.42	2.99	94.10	1.79	784.17	134.43		
36+00.00	37+00.00	100.00	12.00	14.25	12.00	14.25	2400.00	2850.00	3.85	622.22	22.22	162.04	97.22	14.26	27.78	1.08	32.99	10.03	11.00	200.00	58.33	2.22	70.00	1.33	583.33	100.00		
37+00.00	47+74.97	1074.97	12.00	14.25	12.00	14.75	25799.28	31174.13	4.40	6688.70	238.88	1758.44	1055.06	175.18	298.60	11.61	360.81	107.83	120.27	2149.94	633.04	23.89	759.65	14.33	6330.38		1074.97	
49+47.68	50+25.00	77.32	12.00	14.25	12.00	14.75	1855.68	2242.28	4.40	481.10	17.18	126.48	75.89	12.60	21.48	0.84	25.95	7.76	8.65	154.64	45.53	1.72	54.64	1.03	455.33		77.32	
50+25.00	59+00.00	875.00	12.00	14.25	12.00	14.25	21000.00	24937.50	3.85	5444.44	194.44	1417.82	850.69	124.77	243.06	9.45	288.63	87.77	96.21	1750.00	510.42	19.44	612.50	11.67	5104.17	875.00		
							TOTALS (THIS SHEET)			30146	1077	7878	4727	530	1343	52	1611	485	537	9690	2836	108	3403	65	28360	2126	1375	0
							TOTALS (SHEET 45)			101491	3625	26487	15892	2356	4531	176	5402	1636	1801	32622	9535	362	11442	217	95353	10818	4563	152
							DEDUCT FOR SIGN SUPPORTS																				−20	−30	
							DED. FOR JUNCTION BOX LOCS.																				−35	−28	
							DED. FOR MEDIAN INLETS																				−460	−220	
							TOTALS			131637	4702	34365	20619	2886	5874	228	7013	2121	2338	42312	12371	470	14845	282	123713	12429	5661	152
							GRAND TOTAL TO GENERAL SUMMARY			131637	4702	34365	23505		6102		7013	2121	2338	42312	12841		15127		123713	12429	5661	152

CAD FILE NAME: 9808-45 & 46

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

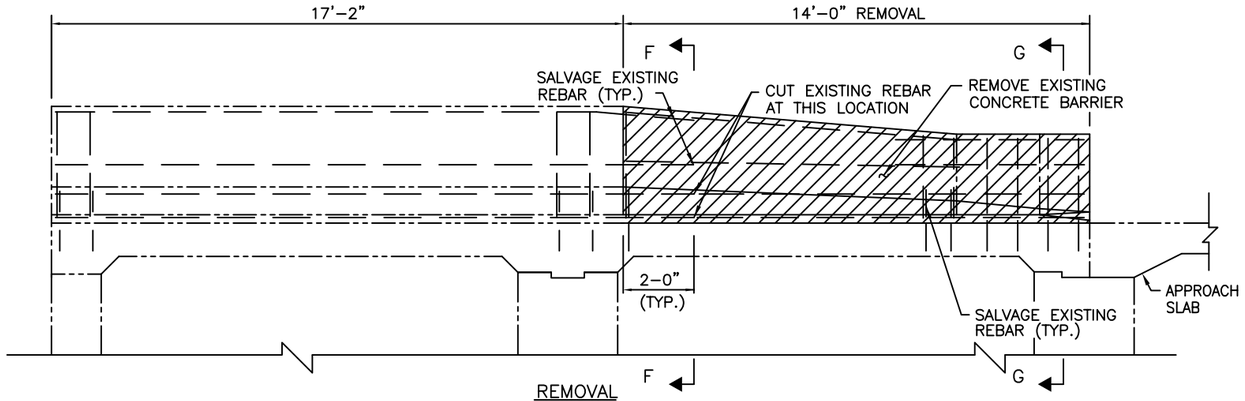
OHIO TURNPIKE COMMISSION

PAVEMENT CALCULATIONS AND QUANTITIES

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

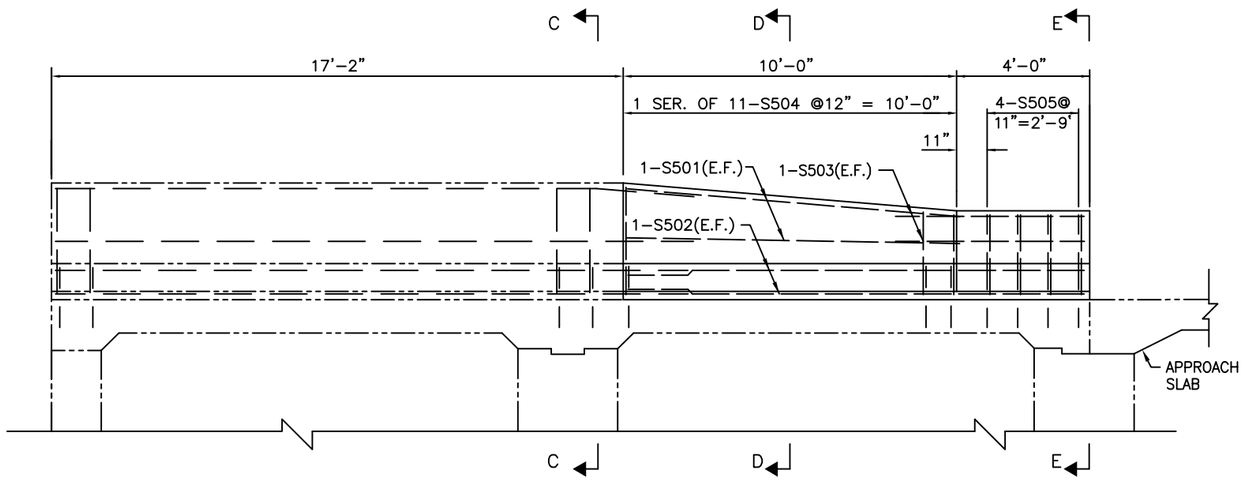
DESIGNED: JMY	CHECKED: RJM	DATE: 07-99
DRAWN: JMY	IN CHARGE: RWG	SCALE: NONE

CONTRACT 77-13-01 SHEET 46 OF 322



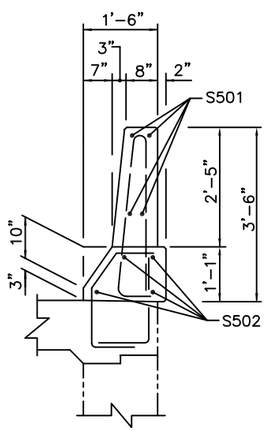
REMOVAL

NE WINGWALL BARRIER, MAUMEE RIVER BRIDGE SHOWN
(NW WINGWALL BARRIER, SR 65 BRIDGE SIMILIAR)

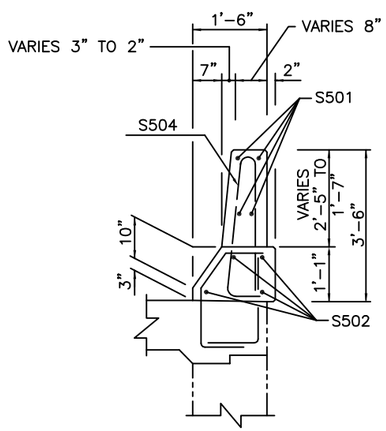


ELEVATION

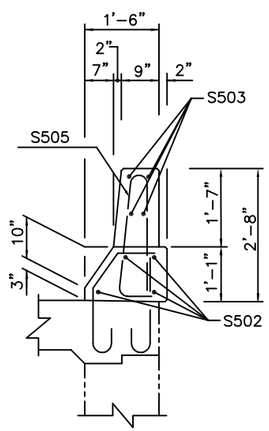
NE WINGWALL BARRIER, MAUMEE RIVER BRIDGE SHOWN
(NW WINGWALL BARRIER, SR 65 BRIDGE SIMILIAR)



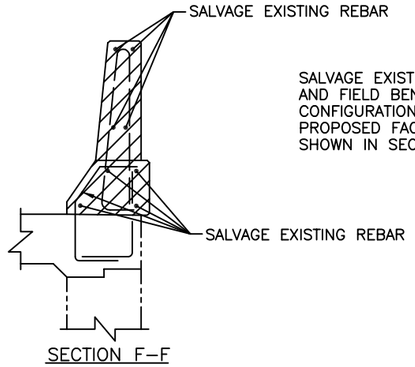
SECTION C–C



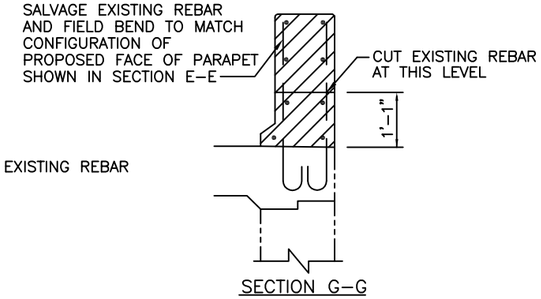
SECTION D–D



SECTION E–E

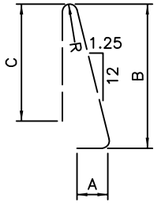


SECTION F–F



SECTION G–G

REINFORCING BAR SCHEDULE (PER BRIDGE)									
BAR MARK	NUMBER	LENGTH	WEIGHT (LB)	TYPE	DIMENSIONS				
					A	B	C	R	INC
S501	4	10'–0"	42	STR					
S502	4	13'–10"	58	STR					
S503	4	5'–10"	24	STR					
	1 SER.	5'–3"				2'–5"	2'–2"		
S504	OF	TO	70	23	0'–8"	TO	TO	0'–1½"	
	11	6'–11"				3'–3"	3'–0"		0'–2"
S505	4	5'–3"	22	23	0'–8"	2'–5"	2'–2"	0'–1½"	



TYPE–23

NOTES:

1. EXISTING REINFORCING STEEL TO BE RETAINED SHALL BE CLEANED OF ALL CONCRETE FRAGMENTS AND FOREIGN MATTER. EPOXY COATING WHICH IS DAMAGED DURING THE REMOVAL PROCESS AND DURING THE CUTTING OR BARS SHALL BE REPAIRED PER CMS 509.09. COST OF THIS WORK SHALL BE INCIDENTAL TO SP 202 – PORTIONS OF STRUCTURE REMOVED.
2. REINFORCING STEEL SHALL BE AS PER ITEM SP 509– EPOXY COATED REINFORCING STEEL, GRADE 60.
3. DOWEL HOLES SHALL BE AS PER ITEM 510 – DOWEL HOLES USING SP 853 GROUT ANCHORING.
4. CONCRETE SHALL BE AS PER SP 511A – CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT.
5. ABBREVIATIONS:

E.F	EACH FACE
TYP.	TYPICAL
SER.	SERIES

LEGEND:

INDICATES REMOVAL LIMITS, ITEM 202, PORTIONS OF STRUCTURE REMOVED

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

MAUMEE RIVER & SR 65 BRIDGE BARRIER TRANSITION

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535–1015

DESIGNED: JVP	CHECKED: RJM	DATE: 2–99
DRAWN: JVP	IN CHARGE: RWG	SCALE: 1"=10'

CONTRACT 77–13–01 SHEET 195B OF 322

TRAFFIC CONTROL GENERAL SUMMARY

ITEM	TOTAL QUANTITY	UNIT	DESCRIPTIONS	AS PER PLAN & SPECIAL REFERENCES
625	11	EACH	GROUND ROD	
626	6	EACH	BARRIER REFLECTOR, TYPE A	FROM SHEET 1 OF 9 (CROSSMAN DITCH)
SP 626	625	EACH	RAISED PAVEMENT MARKERS (WHITE), STIMSONITE MODEL 101 LP	
SP 626	608	EACH	REPLACMENT PRISMATIC RETROREFLECTOR (WHITE)	
SP 626	10	EACH	REPLACMENT RAISED PAVEMENT MARKER CASTING – STIMSONITE MODEL 101 LP	
630	6	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION (1)	
630	3	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC–21.40	
630	2	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC–21.40, AS PER PLAN	206
630	209	LIN. FT.	GROUND MOUNTED SUPPORT, NO. 3 POST	
630	3	EACH	GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN	206
630	105	LIN. FT.	GROUND MOUNTED SUPPORT, NO. 4 POST	
630	90	LIN. FT.	GROUND MOUNTED SUPPORT, NO. 6 POST (1)	
630	4	EACH	OVERHEAD SIGN SUPPORT, TYPE TC–12.30, DESIGN 10	
630	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC–12.30, DESIGN 12	
630	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC–7.65, DESIGN 8, 69' SPAN	
630	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC–7.65, DESIGN 8, 90' SPAN	
630	12	EACH	SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN	OTC STD. TC–1
630	1	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
630	444	SQ. FT.	SIGNS ERECTED, FLAT SHEET, AS PER PLAN	206
630	1928	SQ. FT.	SIGNS ERECTED, EXTRUSHEET, AS PER PLAN	206
630	24	EACH	REMOVAL OF GROUND MOUNTED SIGN & STORAGE, AS PER PLAN	206
630	7	EACH	REMOVAL OF GROUND MOUNED SIGN & REERECTION	
630	29	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT & STORAGE, AS PER PLAN	206
630	3	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN & REERECTION	
630	2	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN & STORAGE, AS PER PLAN	206
630	1	EACH	REMOVAL OF TEMPORARY OVERLAY SIGN AS PER PLAN	206
630	4	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT & STORAGE, TYPE TC–12.30 (1)	
630	1	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT & STORAGE, TYPE TC–7.65	
630	2	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT & REERECTION, TYPE TC–12.30	
631	10	EACH	REMOVAL OF BALLAST FOR STORAGE, AS PER PLAN	206
631	10	EACH	REMOVAL OF LUMINAIRE FOR STORAGE, AS PER PLAN	206
631	2	EACH	REMOVAL OF DISCONNECT SWITCH FOR STORAGE, AS PER PLAN	206
631	2	EACH	REMOVAL OF SIGN SERVICE AND DISPOSAL	
642	18.45	MILE	LANE LINE, TYPE 1, AS PER PLAN	206
642	21.76	MILE	EDGE LINE, TYPE 1, AS PER PLAN	206
642	3262	LIN. FT.	CHANNELIZING LINE, TYPE 1	
642	2178	LIN. FT.	TRANSVERSE LINE, TYPE 1	
642	3948	LIN. FT.	REMOVAL OF PAVEMENT MARKINGS	
SP 802	88	EACH	BARRIER REFLECTOR, TYPE A	FROM SHEET 51 (GUARDRAIL SUBSUMMARY)
SP 802	524	EACH	BARRIER REFLECTOR, TYPE B	
SPECIAL	10	EACH	AIR SPEED ZONE MARKING	206
SPECIAL	20.33	MILE	SONIC NAP ALERT PATTERN (SNAP)	OTC STD. TC–2

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 861, 957, 958 AND 961 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THIS PLAN SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEM 630, 631, 633, 730, 731 AND 733.

SP 626 REPLACEMENT PRISMATIC RETROREFLECTOR AND RAISED PAVEMENT MARKER CASTING – STIMSONITE MODEL 101 (101LP)

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TRAFFIC CONTROL:

SP 626 REPLACEMENT RAISED PAVEMENT MARKER CASTING – STIMSONITE MODEL 101LP 10 EACH

THIS ITEM SHALL CONSIST OF PLACING NEW PRISMATIC RETROREFLECTORS IN ACCORDANCE WITH 621.05 WITH THE TYPE SPECIFIED IN SP 626.

ITEM 630 SIGN ERECTED, (FLAT SHEET OR EXTRUSHEET), AS PER PLAN

SIGNS ERECTED UNDER THIS ITEM SHALL BE SUPPLIED BY THE OHIO TURNPIKE COMMISSION (O.T.C.) AND PICKED UP BY THE CONTRACTOR AT TOLL PLAZA TP59. THE CONTRACTOR SHALL GIVE TWO WEEKS NOTICE PRIOR TO PICK–UP.

MEASUREMENT SHALL BE IN ACCORDANCE WITH 630.14 EXCEPT THAT MOUNTING HARDWARE SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 630 SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN

BRIDGE MOUNTED SIGN SUPPORTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 630 AND THE DETAILS SHOWN ON STANDARD DRAWING TC–1. NO WELDING TO EXISTING STRUCTURAL STEEL SHALL BE PERMITTED. PAYMENT, INCLUDING ALL LABOR AND MATERIALS, SHALL BE INCIDENTAL TO THE CONTRACT BID PRICE FOR EACH ITEM 630 SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN.

ITEM 630 GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 630.06, SIGN SUPPORTS SHALL BE FURNISHED AND INSTALLED AS SHOWN ON STANDARD DRAWING TC–1. PAYMENT, INCLUDING ALL LABOR AND MATERIALS, SHALL BE INCIDENTAL TO THE CONTRACT BID PRICE FOR EACH ITEM 630 GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN

ITEM 631 REMOVAL OF SIGN LIGHTING ITEMS AND STORAGE, AS PER PLAN

SIGN LIGHTING ITEMS REMOVED UNDER THIS ITEM SHALL BE STORED ON THE PROJECT SITE UNTIL DELIVERED BY THE CONTRACTOR TO THE NEAREST OHIO TURNPIKE COMMISSION MAINTENANCE BUILDING. THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS FOR DELIVERY.

DEPARTMENT OF INDUSTRIAL RELATIONS, INSPECTION

THERE IS A RULE THAT ALL NEW OR RELOCATED ELECTRIC SERVICE ENCLOSURES ARE TO BE INSPECTED BY A LICENSED STATE INSPECTOR PRIOR TO CONNECTION TO A UTILITY DISTRIBUTION LINE. THIS RULE IS NOW BEING ENFORCED BY THE UTILITY COMPANIES AND THE OHIO DEPARTMENT OF INDUSTRIAL RELATIONS. THIS IS A NEW SITUATION BECAUSE STATE INSPECTIONS ARE NOW BEING REQUIRED FOR TRAFFIC CONTROL DEVICES AND LIGHTING INSTALLATIONS. THE CONTRACTOR SHALL APPLY FOR THE INDUSTRIAL RELATIONS INSPECTION(S) ; PAY THE APPROPRIATE FEE(S) TO THE INDUSTRIAL RELATIONS DEPARTMENT AND ADVISE THE ENGINEER OF THE TIME OF THE INSPECTION(S). SO THAT HE MAY HAVE A REPRESENTATIVE IN ATTENDANCE. IT IS TO BE NOTED THAT THE INDUSTRIAL RELATIONS INSPECTION IS NOT A SUBSTITUTE FOR FINAL INSPECTION, NOR SUPERSEDES REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

THE COST OF THE INDUSTRIAL RELATIONS INSPECTIONS, ESTIMATED AT $100.00, SHALL BE CONSIDERED AS INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE ELECTRICAL INSTALLATIONS OR TRAFFIC CONTROL DEVICES. THE CONTRACTOR SHALL SUPPLY THE COMMISSION A COPY OF THE PERMIT AND THE FINAL SIGN OFF BY THE STATE INSPECTOR.

ITEM 630 REMOVAL OF TEMPORARY OVERLAY SIGN AND STORAGE, AS PER PLAN

OVERLAY SIGNS REMOVED UNDER THIS ITEM SHALL BE STORED ON THE PROJECT SITE UNTIL DELIVERED BY THE CONTRACTOR TO THE NEAREST O.T.C. MAINTENANCE BUILDING. THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS FOR DELIVERY.

ITEM 630 REMOVAL OF GROUND (OVERHEAD) MOUNTED SIGN (SUPPORT) AND STORAGE, AS PER PLAN

SIGNS OR SUPPORTS REMOVED UNDER THIS ITEM SHALL BE STORED ON THE PROJECT SITE UNTIL DELIVERED BY THE CONTRACTOR TO THE NEAREST O.T.C. MAINTENANCE BUILDING. THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS FOR DELIVERY.

ITEM 642 LANE LINE, TYPE 1, AS PER PLAN
ITEM 642 EDGE LINE, TYPE 1, AS PER PLAN

PAVEMENT MARKINGS PLACED UNDER THIS ITEM SHALL BE PLACED IN ACCORDANCE WITH 641 AND 642, EXCEPT THAT THE LINES SHALL BE 6–INCHES IN WIDTH.

ITEM SPECIAL AIR SPEED ZONE MARKING

SPEED MEASUREMENT MARKINGS SHALL BE SOLID ITEM 642, TYPE 1 WHITE STRIPS 24–INCHES WIDE, 48–INCHES LONG, AND PLACED ON THE PAVED SHOULDER AT 90 DEGREES TO THE DIRECTION OF TRAVEL AS DETAILED ON OTC STD–DWG TC–2. THEY SHALL BE PLACED DIRECTLY OPPOSITE ONE ANOTHER AT ONE–QUATER MILE INTERVALS AS SHOWN ON THE PLANS. THE LINEAR MEASUREMENTS SHALL BE SURFACE MEASURE (NOT HORIZONTAL PROJECTION).

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. A RECORD SHALL BE KEPT AND COPIES FIRNISHED TO THE OHIO TURNPIKE COMMISSION AND THE OHIO HIGHWAY PATROL.

ALL LABOR, TOOLS, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM THE REQUIRED WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR EACH ITEM SPECIAL AIR SPEED ZONE MARKING.

ITEM 630 CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC–21.40, AS PER PLAN

FOUNDATIONS INSTALLED UNDER THIS ITEM SHALL INCLUDE FOUR 3" x 138" ANCHOR BOLTS FURNISHED AND INSTALLED. COST FOR THE ANCHOR BOLTS SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE FOR EACH ITEM 630 CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TYPE TC–21.40, AS PER PLAN.

STATE OF OHIO
LAURELL L. ADAMS
53947
REGISTERED PROFESSIONAL ENGINEER

Laurell L. Adams

FOR TRAFFIC CONTROL SHEETS

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

GENERAL NOTES & GENERAL SUMMARY TRAFFIC CONTROL PLANS

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535–1015

DESIGNED: LLA	CHECKED: JEG	DATE: 7–98
DRAWN: LLA	IN CHARGE: RWG	SCALE: NONE

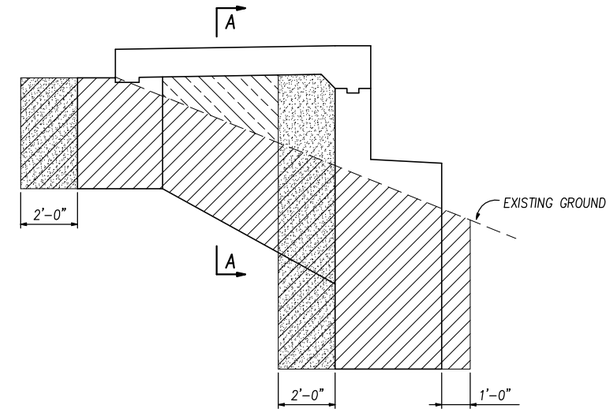
CONTRACT 77–13–01 SHEET 206 OF 322

CAD FILE NAME: 9808–206.DWG

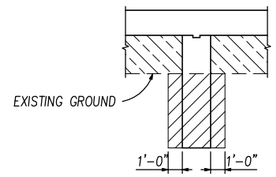
STRUCTURE ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED				LUMP ④	
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	504	CU. YD.	UNCLASSIFIED EXCAVATION	247	257			
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP ⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1 ⑤	G2/G11
507	4680	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, (FURNISHED)	1656	3024			
507	4250	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, (DRIVEN)	1496	2754			
509	3804	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		3804			G1/G11
SP509	102526	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	26234		75992	300 ⑤	
510	160	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	160				
SP511	181	CU. YD.	CLASS C CONCRETE, ABUTMENTS	181				
SP511	72	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		72			
SP511	93	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		93			
SP511A	257	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			251	6 ①	
SP511A	47	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	47				
SP511A	62	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	12		50		
SP511A	3	CU. YD.	CLASS S CONCRETE, USING SHRINKAGE COMPENSATING CEMENT, FOR PRE-PLACEMENT TESTING				3 ⑤	
SP512	22	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	22				
513	191200	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			191200		G2/G11
513	180	EACH	WELDED STUD SHEAR CONNECTORS			180		
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24		
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32		
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP		
516	30	EACH	BEARING DEVICES	12	18			
SP516B	916	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	100		698	118 ③	
518	40	CU. YD.	POROUS BACKFILL, AS PER PLAN	40				G1/G11
518	94	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	94				
518	176	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	176				
518	126	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	126				
SP519	46	SQ. FT.	PATCHING CONCRETE STRUCTURES	26			20 ②	
523	1	EACH	DYNAMIC LOAD TESTING				1 ⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP	
SP525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				20	
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP	
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP	
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP	
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP	
SP528	48	EACH	REPLACE EXISTING RIVET WITH NEW HIGH STRENGTH BOLT			48		
SP533R	166	LIN. FT.	REPLACEMENT OF 3-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			166 ⑤		
SP533W	102	LIN. FT.	3-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			102		
SP536	1308	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	122		1041	145 ③	
SP536A	421	SQ. YD.	MASONRY COATING /1	28		358	35 ③	
SP536	435	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	89	346			
601	1060	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				1060	
SP825	22644	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		22644			

QUANTITIES:
CALCULATED BY: SAM 2/99
CHECKED BY: RJJ 2/99



EXCAVATION DIAGRAM



SECTION A-A

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER. SEE GENERAL NOTES SHEET G1/G11.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 – PORTIONS OF STRUCTURE REMOVED INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

ABUTMENT PARAPETS	3	CU. YD.
ABUTMENT SLAB	2	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
DECK PARAPETS	58	CU. YD.
DECK SLAB	8	CU. YD.
STEEL EXPANSION JOINT	8	LIN. FT.
LCI F.O.C. CONDUIT & APPURT.	198	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 59.8
OVER U.S. ROUTE 20

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: SAM	CHECKED: RJJ	DATE: 2/99
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS

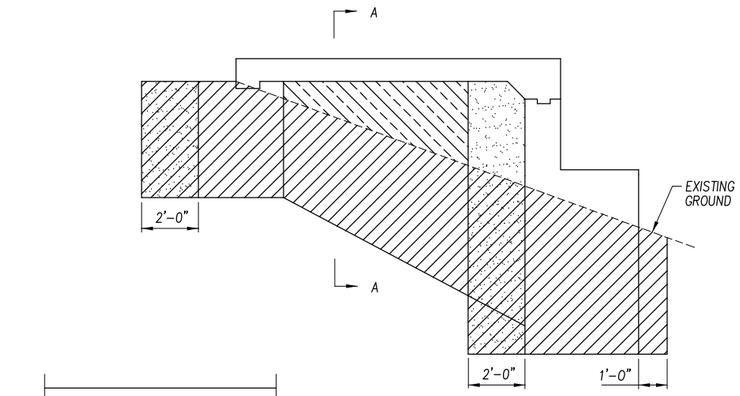
DESIGNED BY: CHECKED BY:
DATE: DATE:
DRAWN BY: REVISED BY:
DATE: DATE:
CAD FILE NAME:9808 A-QUAN01.DWG

STRUCTURE ESTIMATED QUANTITIES

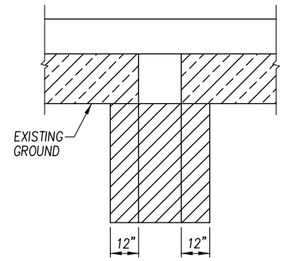
ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED				LUMP (4)	
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	428	CU. YD.	UNCLASSIFIED EXCAVATION	290	138			
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP (5)	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1 (5)	G2/G11
507	3,338	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED, AS PER PLAN	2,314	1,024			5/16
507	3,078	LIN. FT.	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	2,134	944			
SPECIAL	266	LIN. FT.	DRILLED SHAFT, 48" DIAMETER		266			4/16
509	2,135	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		2,135			G1/G11
SP509	97,621	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	31,142		66,179	300 (5)	
510	132	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	132				
SP511	201	CU. YD.	CLASS C CONCRETE, ABUTMENTS	201				
SP511	75	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		75			
SP511	29	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		29			
SP511A	48	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	48				
SP511A	220	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			214	6 (1)	
SP511A	52	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	8		44		
SP512	20	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	20				
513	171,000	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			171,000		G2/G11
513	180	EACH	WELDED STUD SHEAR CONNECTORS			180		
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24		
SP514A	32	HOUR	SPOT WASHING TO REMOVE CHLORIDES			32		
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP		
516	24	EACH	BEARING DEVICES	12	12			
SP516B	745	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	51		612	82 (3)	
518	37	CU. YD.	POROUS BACKFILL, AS PER PLAN	37				G1/G11
518	118	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	118				
518	267	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	267				
518	114	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	114				
SP519	58	SQ. FT.	PATCHING CONCRETE STRUCTURES	38			20 (2)	
523	1	EACH	DYNAMIC LOAD TESTING				1 (5)	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP	
SP525A	100	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				100	
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP	
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP	
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP	
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP	
SP528	36	EACH	REPLACE EXISTING RIVET WITH NEW HIGH STRENGTH BOLT			36		
SP533W	137	LIN. FT.	4 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			137		
SP533R	202	LIN. FT.	REPLACEMENT OF 4 INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			202+		
SP536	1,248	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS	123		929	196 (3)	
SP536A	292	SQ. YD.	MASONRY COATING (1)	35		211	46 (3)	
SP536	409	SQ. YD.	CONCRETE WEATHERPROFFING, SUBSTRUCTURE	134	275			
601	1,541	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				1541	
SP825	49,840	POUND	GALVANIZED REINFORCING STEEL		49,840			

+ ITEM TO BE PERFORMED ONLY IF THE NEW STRUCTURAL STEEL JOINT RETAINER IS COMPATIBLE WITH THE EXISTING JOINT RETAINER, AND AS DIRECTED BY THE ENGINEER.

QUANTITIES:
CALCULATED BY: EKL 7-25-99
CHECKED BY: BE/MEG 7-28-99



EXCAVATION DIAGRAM



SECTION A-A

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC

(1) AS A CONTINGENCY 6 CU. YD. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE. SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILE ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 – PORTIONS OF STRUCTURE REMOVED, INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

ABUTMENT PARAPETS	5 CU.YD.
ABUTMENT SLAB	2 CU.YD.
ABUTMENTS	2 CU.YD.
APPROACH SLABS	0.5 CU.YD.
DECK PARAPETS	26 CU.YD.
DECK SLAB	28 CU.YD.
STEEL EXPANSION JOINT	10 L.F.
LCI F.O.C., CONDUIT, & APPURTENANCES	180 L.F.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) TO BE USED AS DIRECTED BY THE ENGINEER, SEE GENERAL NOTES SHEETS G1/G11 AND G2/G11.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 61.1
OVER MICHIGAN AVE.

DANSARD · GROHNKE · LONG, LIMITED
ULRICH-CH'ANG & ASSOCIATES, INC.
Toledo, Ohio

DESIGNED: RYY	CHECKED: EKL	DATE: 01-13-00
DRAWN: RYY	IN CHARGE: EEC	SCALE: NTS

CONTRACT 77-13-01 SHEET 248 OF 322

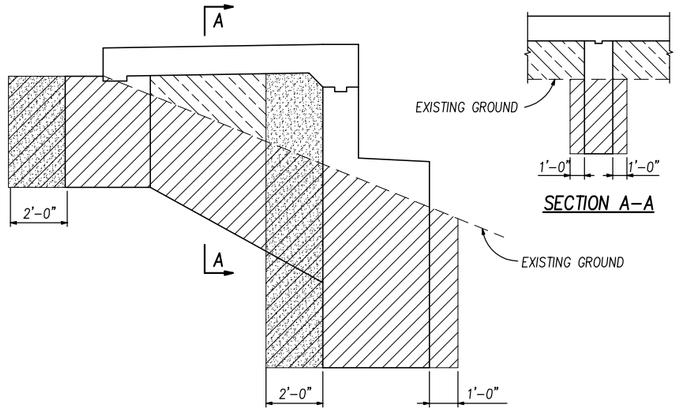
2 / 16

DESIGNED BY: RYY	CHECKED BY: EKL
DATE: 8-1-98	DATE: 01-13-00
DRAWN BY: RYY	REVISED BY: MEG
DATE: 8-28-98	DATE: 01-13-00
CAD FILE NAME:	OTCMI_GNN.DWG

STRUCTURE ESTIMATED QUANTITIES

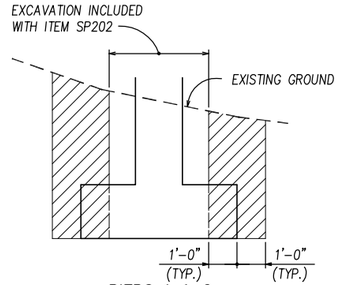
ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED				LUMP ④	
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	491	CU. YD.	UNCLASSIFIED EXCAVATION	248	243			
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP ⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1 ⑤	G2/G11
507	3,506	LIN. FT.	STEEL PILES HP10X42, FURNISHED	1630	1876			
507	2,946	LIN. FT.	STEEL PILES HP10X42, DRIVEN	1470	1476			
507	112	EACH	STEEL POINT (OR SHOE), AS PER PLAN	32	80			G2/G11
509	5,930	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		5930			G1/G11
SP509	177,653	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	27925		149428	300 ⑤	
510	112	EACH	DOWEL HOLES, USING SP853 GROUT ANCHORING	112				
SP511	175	CU. YD.	CLASS C CONCRETE, ABUTMENTS	175				
SP511	124	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		124			
SP511	135	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		135			
SP511	155	CU. YD.	CLASS C CONCRETE MISCELLANEOUS: PIER CRASH WALLS		155			
SP511A	488	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			482	6 ①	
SP511A	67	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	67				
SP511A	111	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	13		98		
SP512	24	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	24				
513	589,400	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			589400		G2/G11
513	7,322	EACH	WELDED STUD SHEAR CONNECTORS			7322		
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24		
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32		
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP		
516	36	EACH	BEARING DEVICES			36		
SP516B	1,636	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	128		1376	132 ③	
518	67	CU. YD.	POROUS BACKFILL, AS PER PLAN	67				G1/G11
518	129	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	114	15			
518	183	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	183				
518	129	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	129				
518	47	LIN. FT.	8" PERFORATED HELICAL CORRUGATED STEEL PIPE, AS PER PLAN		47			8/15
SP519	52	SQ. FT.	PATCHING CONCRETE STRUCTURES	32			20 ②	
523	1	EACH	DYNAMIC LOAD TESTING				1 ⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP	
SP525A	100	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				100	
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP	
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP	
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP	
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP	
SP533R	84	LIN. FT.	REPLACEMENT OF 3-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			84 ⑤		
SP533R	84	LIN. FT.	REPLACEMENT OF 4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			84 ⑤		
SP533W	55	LIN. FT.	3-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			55		
SP533W	55	LIN. FT.	4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			55		
SP536	2608	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	159		2290	159 ③	
SP536A	809	SQ. YD.	MASONRY COATING (1)	66		712	31 ③	
SP536	755	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	91	664			
601	2050	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				2050	
SP825	40134	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		40134			

QUANTITIES:
CALCULATED BY: HCJ 12/98
CHECKED BY: DAR 1/99,
RJJ 8/99



SECTION A-A

ABUTMENT EXCAVATION DIAGRAM



PIERS 1 & 2
EXCAVATION DIAGRAM

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER. SEE GENERAL NOTES SHEET G1/G11.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 – PORTIONS OF STRUCTURE REMOVED, INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

CRASHWALL @ PIERS 1 & 2	250	CU. YD.
ABUTMENT PARAPETS	4	CU. YD.
ABUTMENT SLAB	4	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
DECK PARAPETS	102	CU. YD.
DECK SLAB	16	CU. YD.
LCI F.O.C. CONDUIT & APPURT.	376	LIN. FT.
8" CSP AT PIER 1	47	LIN. FT.
12" CSP AT PIER 1	47	LIN. FT.
STEEL EXPANSION JOINT	8	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 61.5
OVER N.S. RR & STENGEL AVE.

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

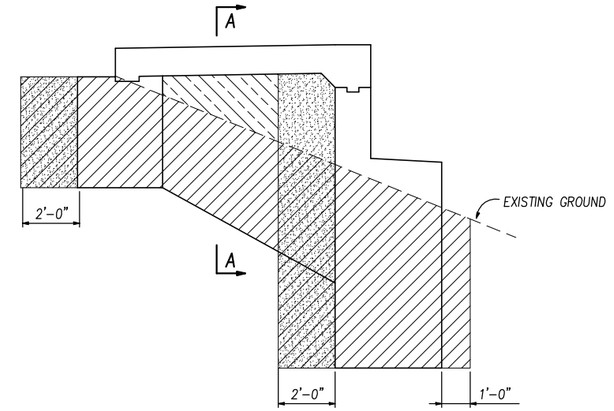
DESIGNED: HCJ	CHECKED: DAR	DATE: 1/99	
DRAWN: RJJ	IN CHARGE: RWG	SCALE: NTS	

DESIGNED BY: CHECKED BY:
DATE: DATE:
DRAWN BY: REVISED BY:
DATE: DATE:
CAD FILE NAME: 9808-264.DWG

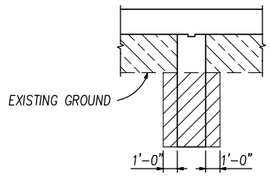
STRUCTURE ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE TO BE REMOVED				LUMP ④	
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	420	CU. YD.	UNCLASSIFIED EXCAVATION	245	175			
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP ⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1 ⑤	G2/G11
507	4,262	LIN. FT.	STEEL PILES HP10X42, FURNISHED	1994	2268			
507	3,922	LIN. FT.	STEEL PILES HP10X42, DRIVEN	1834	2088			
507	144	LIN. FT.	PREBORED HOLES		144			
509	2,535	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		2535			G1/G11
SP509	106,935	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	29729		77206		
510	164	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	164				
SP511	179	CU. YD.	CLASS C CONCRETE, ABUTMENTS	179				
SP511	48	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		48			
SP511	68	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		68			
SP511A	266	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			260	6 ①	
SP511A	53	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	53				
SP511A	60	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	14		46		
SP512	23	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	23				
513	277,600	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			277600		G2/G11
513	180	EACH	WELDED STUD SHEAR CONNECTORS			180		
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24		
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32		
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP		
516	12	EACH	LAMINATED ELASTOMERIC BEARINGS, AS PER PLAN	12				G7/G11
516	12	EACH	BEARING DEVICES		12			
SP516B	846	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	100		646	100 ③	
518	49	CU. YD.	POROUS BACKFILL, AS PER PLAN	49				G1/G11
518	107	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	107				
518	180	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	180				
518	110	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	110				
SP519	48	SQ. FT.	PATCHING CONCRETE STRUCTURES	28			20 ②	
523	1	EACH	DYNAMIC LOAD TESTING				1 ⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP	
SP525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				20	
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP	
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP	
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP	
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP	
SP533R	163	LIN. FT.	REPLACEMENT OF 4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			163 ⑤		
SP533W	103	LIN. FT.	4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			103		
SP536	1268	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS	134		968	166 ③	
SP536A	422	SQ. YD.	MASONRY COATING (1)	53		333	36 ③	
SP536	328	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	110	218			
601	398	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				398	
SP825	16069	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		16069			

QUANTITIES:
CALCULATED BY: RJJ 2/99
CHECKED BY: SAM 2/99



ABUTMENT EXCAVATION DIAGRAM



SECTION A-A

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER. SEE GENERAL NOTES SHEET G1/G11.

(3) THE QUANTITY SHOWN IS FOR APPROACH SLABS.

(4) ITEM SP202 PORTIONS OF STRUCTURES REMOVED, INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

ABUTMENT PARAPETS	4	CU. YD.
ABUTMENT SLAB	2	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
DECK PARAPETS	51	CU. YD.
DECK SLAB	7	CU. YD.
STEEL EXPANSION JOINT	8	LIN. FT.
L.C.I. F.O.C. CONDUIT & APPURTENANCES	189	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 63.3
OVER STATE ROUTE 65

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

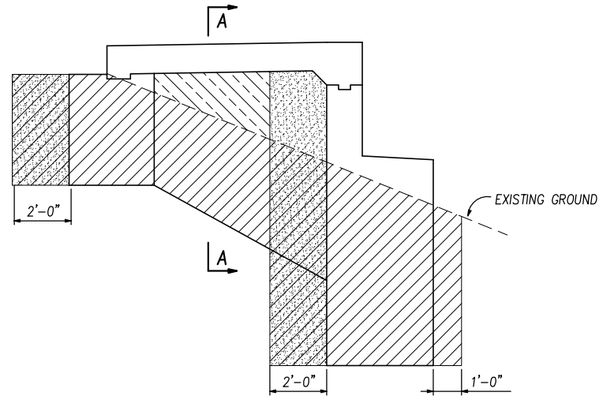
DESIGNED: SAM	CHECKED: RJJ	DATE: 2/99
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS

DESIGNED BY: CHECKED BY:
DATE: DATE:
DRAWN BY: REVISED BY:
DATE: DATE:
CAD FILE NAME: 9808-279.DWG

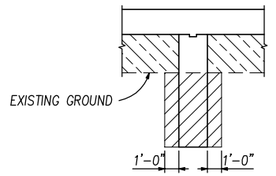
STRUCTURE ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE TO BE REMOVED				LUMP ④	
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	394	CU. YD.	UNCLASSIFIED EXCAVATION	234	160			
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP	
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP ⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1 ⑤	G2/G11
507	6,722	LIN. FT.	STEEL PILES HP10X42, FURNISHED	2762	3960			
507	6,232	LIN. FT.	STEEL PILES HP10X42, DRIVEN	2602	3630			
509	4,829	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		4829			G1/G11
SP509	103,588	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	28281		75007	300 ⑤	
510	160	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	160				
SP511	178	CU. YD.	CLASS C CONCRETE, ABUTMENTS	178				
SP511	107	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		107			
SP511	56	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		56			
SP511	169	CU. YD.	CLASS C CONCRETE, MISCELLANEOUS: PIER CRASHWALLS		169			
SP511A	281	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			275	6 ①	
SP511A	57	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	57				
SP511A	58	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	14		44		
SP512	39	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	22	17			
513	256,600	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			256600		G2/G11
513	3,178	EACH	WELDED STUD SHEAR CONNECTORS			3178		
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP		
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP		
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24		
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32		
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP		
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP		
516	12	EACH	LAMINATED ELASTOMERIC BEARINGS, AS PER PLAN			12		G7/G11
516	12	EACH	BEARING DEVICES			12		
516	217	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER		217			
SP516B	854	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	112		618	124 ③	
518	57	CU. YD.	POROUS BACKFILL, AS PER PLAN	57				G1/G11
518	158	CU.YD	POROUS BACKFILL WITH FILTER FABRIC	110	48			
518	190	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	190				
518	116	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	116				
518	96	LIN. FT.	6" PERFORATED HELICAL CORRUGATED STEEL PIPE		96			7/11
SP519	112	SQ. FT.	PATCHING CONCRETE STRUCTURES	32	60		20 ②	
523	1	EACH	DYNAMIC LOAD TESTING				1 ⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP	
SP525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				20	
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP	
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP	
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP	
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP	
SP533R	157	LIN. FT.	REPLACEMENT OF 4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			157 ⑤		
SP533W	109	LIN. FT.	4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			109		
SP536	1216	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS	130		930	156 ③	
SP536A	414	SQ. YD.	MASONRY COATING (1)	59		318	37 ③	
SP536	436	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	88	348			
601	1186	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				1186	
SP825	23645	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		23645			

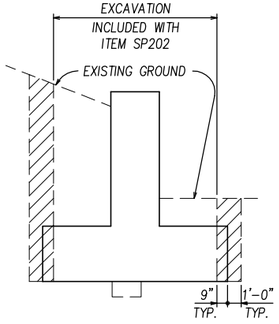
QUANTITIES:
CALCULATED BY: HCJ 12/98
CHECKED BY: RJJ 1/99



ABUTMENT EXCAVATION DIAGRAM



SECTION A-A



PIERS 1 & 2 EXCAVATION DIAGRAM

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 – PORTIONS OF STRUCTURE REMOVED, INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

ABUTMENT PARAPETS	4	CU. YD.
ABUTMENT SLAB	2	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
CRASH WALLS	255	CU. YD.
DECK PARAPETS	49	CU. YD.
DECK SLAB	7	CU. YD.
LCI F.O.C. CONDUIT & APPURT.	182	LIN. FT.
PAVED GUTTER AT PIERS	96	LIN. FT.
6" CSP @ PIERS	96	LIN. FT.
STEEL EXPANSION JOINT	8	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 63.5
OVER CSX RAILROAD

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

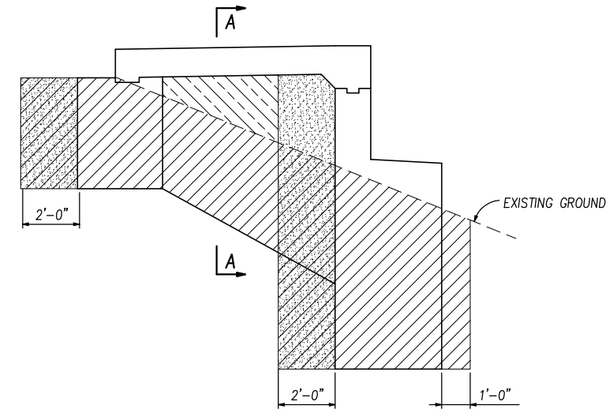
DESIGNED: HCJ	CHECKED: RJJ	DATE: 12/98	
DRAWN: DAR	IN CHARGE: SAM	SCALE: NTS	

DESIGNED BY:	CHECKED BY:
DATE:	DATE:
DRAWN BY:	REVISED BY:
DATE:	DATE:
CAD FILE NAME: 9808-291.DWG	

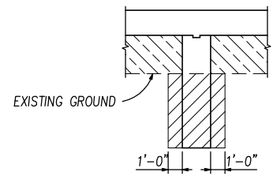
STRUCTURE ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL		AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED				LUMP		
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP		
503	519	CU. YD.	UNCLASSIFIED EXCAVATION	299	220				
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP		
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP	⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1	⑤	G2/G11
507	4082	LIN. FT.	STEEL PILES HP10X42, FURNISHED	2102	1980				
507	3742	LIN. FT.	STEEL PILES HP10X42, DRIVEN	1942	1800				
507	36	EACH	STEEL POINTS (OR SHOE), AS PER PLAN		36				G2/G11
509	2535	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		2535				G1/G11
SP509	110670	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	28955		81415	300	⑤	
510	156	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	156					
SP511	178	CU. YD.	CLASS C CONCRETE, ABUTMENTS	178					
SP511	48	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		48				
SP511	88	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		88				
SP511A	247	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			241	6	①	
SP511A	53	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	53					
SP511A	58	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	9		49			
SP512	22	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	22					
513	230400	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			230400			G2/G11
513	180	EACH	WELDED STUD SHEAR CONNECTORS			180			
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP			
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24			
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32			
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP			
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP			
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP			
516	24	EACH	BEARING DEVICES	12	12				
SP516B	951	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	128		698	124	③	
518	64	CU. YD.	POROUS BACKFILL, AS PER PLAN	64					G1/G11
518	98	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	98					
518	185	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	185					
518	108	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	108					
SP519	60	SQ. FT.	PATCHING CONCRETE STRUCTURES	40			20	②	
523	1	EACH	DYNAMIC LOAD TESTING				1	⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP		
SP525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				20		
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP		
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP		
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP		
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP		
SP533R	168	LIN. FT.	REPLACEMENT OF 4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			168	⑤		
SP533W	114	LIN. FT.	4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			114			
SP536	1363	SQ. YD.	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	152		1045	166	③	
SP536A	460	SQ. YD.	MASONRY COATING (1)	63		359	38	③	
SP536	361	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	63	298				
601	610	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				610		
SP825	21239	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		21239				

QUANTITIES:
CALCULATED BY: HCJ 12/98
CHECKED BY: RJJ 12/98



EXCAVATION DIAGRAM



SECTION A-A

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 CONSISTS OF THE FOLLOWING APPROXIMATE REINFORCED CONCRETE REMOVAL QUANTITIES:

ABUTMENT PARAPETS	4	CU. YD.
ABUTMENT SLAB	2	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
DECK PARAPETS	56	CU. YD.
DECK SLAB	8	CU. YD.
LCI F.O.C. CONDUIT & APPURT.	250	LIN. FT.
STEEL EXPANSION JOINT	8	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 63.6
OVER WHITE ROAD

DANSARD * GROHNKE * LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

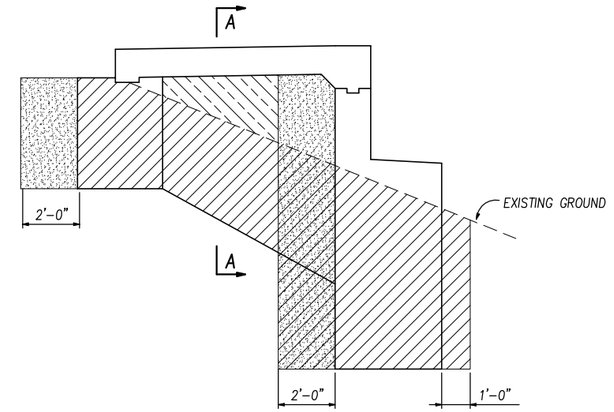
DESIGNED: SAM	CHECKED: RJJ	DATE: 12/98	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	

DESIGNED BY: CHECKED BY:
DATE: DATE:
DRAWN BY: REVISED BY:
DATE: DATE:
CAD FILE NAME: 9808-302.DWG

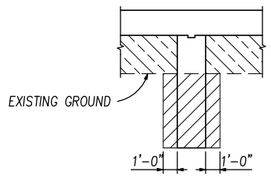
STRUCTURE ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL		AS PER PLAN REFERENCE SHEET NO.
SP202	LUMP SUM		PORTIONS OF STRUCTURE REMOVED				LUMP		
503	LUMP SUM		COFFERDAMS AND EXCAVATION BRACING				LUMP		
503	537	CU. YD.	UNCLASSIFIED EXCAVATION	314	223				
505	LUMP SUM		PILE DRIVING EQUIPMENT MOBILIZATION				LUMP		
506	LUMP SUM		STATIC LOAD TEST, AS PER PLAN				LUMP	⑤	G2/G11
506	1	EACH	SUBSEQUENT STATIC LOAD TEST, AS PER PLAN				1	⑤	G2/G11
507	3202	LIN. FT.	STEEL PILES HP10X42, FURNISHED	1882	1320				
507	2922	LIN. FT.	STEEL PILES HP10X42, DRIVEN	1722	1200				
509	2402	POUND	REINFORCING STEEL, GRADE 60, AS PER PLAN		2402				G1/G11
SP509	80220	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60	26080		53840	300	③	
510	160	EACH	DOWEL HOLES, USING SP583 GROUT ANCHORING	160					
SP511	185	CU. YD.	CLASS C CONCRETE, ABUTMENTS	185					
SP511	43	CU. YD.	CLASS C CONCRETE, PIER FOOTINGS		43				
SP511	70	CU. YD.	CLASS C CONCRETE, PIER CAPS AND COLUMNS		70				
SP511A	172	CU. YD.	CLASS S CONCRETE, SUPERSTRUCTURE DECK SLAB, USING SHRINKAGE COMPENSATING CEMENT			166	6	①	
SP511A	51	CU. YD.	CLASS S CONCRETE, ABUTMENT SLABS, USING SHRINKAGE COMPENSATING CEMENT	51					
SP511A	40	CU. YD.	CLASS S CONCRETE, BARRIERS AND PARAPETS, USING TYPE 1 CEMENT	9		31			
SP512	21	SQ. YD.	MEMBRANE WATERPROOFING (SHEET TYPE 2)	21					
513	105400	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 1, AS PER PLAN			105400			G2/G11
513	180	EACH	WELDED STUD SHEAR CONNECTORS			180			
SP514A	LUMP SUM		SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU			LUMP			
SP514A	LUMP SUM		FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU			LUMP			
SP514A	24	HOUR	GRINDING FINS, TEARS, SLIVERS			24			
SP514A	32	HOUR	REMEDIATION OF CHLORIDES			32			
SP514B	LUMP SUM		FIELD CLEANING AND TOUCH-UP OF SHOP PRIMER AND CONNECTIONS WITH ORGANIC ZINC AND FIELD CLEANING AND PAINTING OF SLIP/CREEP CRITICAL SURFACES WITH INORGANIC ZINC			LUMP			
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, INTERMEDIATE COAT, SYSTEM IZEU			LUMP			
SP514B	LUMP SUM		FIELD PAINTING OF NEW STEEL, FINISH COAT, SYSTEM IZEU			LUMP			
516	24	EACH	BEARING DEVICES	12	12				
SP516B	686	LIN. FT.	SEALING OF CONSTRUCTION JOINTS	110		438	138	③	
518	51	CU. YD.	POROUS BACKFILL, AS PER PLAN	51					G1/G11
518	106	CU. YD.	POROUS BACKFILL WITH FILTER FABRIC	106					
518	192	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	192					
518	124	LIN. FT.	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	124					
SP519	46	SQ. FT.	PATCHING CONCRETE STRUCTURES	26			20	②	
523	1	EACH	DYNAMIC LOAD TESTING				1	⑤	
SP525A	LUMP SUM		WORKER PROTECTION				LUMP		
SP525A	20	EACH	PROTECTIVE CLOTHING/EQUIPMENT SET				20		
SP525A	LUMP SUM		ESTABLISH REGULATED AREAS				LUMP		
SP525A	LUMP SUM		PAINT WASTE/HAZARDOUS WASTE CLASSIFICATION, HANDLING AND DISPOSAL				LUMP		
SP525A	LUMP SUM		CONTAINMENT SYSTEM				LUMP		
SP527	LUMP SUM		FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES				LUMP		
SP533R	168	LIN. FT.	REPLACEMENT OF 4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT			168	⑤		
SP533W	112	LIN. FT.	4-INCH CONTINUOUS STRIP SEAL IN STRUCTURAL STEEL JOINT (WIDENING)			112			
SP536	980	SQ. YD.	CONRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS	141		670	169	③	
SP536A	321	SQ. YD.	MASONRY COATING (1)	55		226	40	③	
SP536	350	SQ. YD.	CONCRETE WEATHERPROOFING, SUBSTRUCTURE	112	238				
601	276	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION				276		
SP825	17539	POUND	GALVANIZED REINFORCING STEEL, GRADE 60		17539				

QUANTITIES:
CALCULATED BY: HCJ 12/98
CHECKED BY: SAM 12/98



EXCAVATION DIAGRAM



SECTION A-A

LEGEND

DENOTES AREA INCLUDED WITH ITEM 503 UNCLASSIFIED EXCAVATION.

DENOTES AREA INCLUDED WITH ITEM 503 ABUTMENT BACKFILL, AS PER 503.10.

DENOTES AREA INCLUDED WITH ITEM 518 POROUS BACKFILL WITH FILTER FABRIC.

NOTES:

(1) AS A CONTINGENCY 6 C.Y. OF CONCRETE HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY FOR ITEM SP 511A CLASS S CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS, USING SHRINKAGE COMPENSATING CEMENT TO BE USED AS DIRECTED BY THE ENGINEER FOR ADDITIONAL CONCRETE REQUIRED IN THE HAUNCHES DUE TO PROFILES ADJUSTMENTS.

(2) AS A CONTINGENCY 20 SQ. FT. OF SP519 PATCHING OF CONCRETE STRUCTURES HAS BEEN ADDED FOR USE AS DIRECTED BY THE ENGINEER.

(3) THE QUANTITY SHOWN IS FOR THE APPROACH SLABS.

(4) ITEM SP202 CONSISTS OF THE FOLLOWING APPROXIMATE REINFORCED CONCRETE REMOVAL QUANTITIES:

ABUTMENT PARAPETS	4	CU. YD.
ABUTMENT SLAB	2	CU. YD.
ABUTMENTS	1	CU. YD.
APPROACH SLABS	1	CU. YD.
DECK PARAPETS	38	CU. YD.
DECK SLAB	8	CU. YD.
LCI F.O.C. CONDUIT & APPURT.	185	LIN. FT.
STEEL EXPANSION JOINT	8	LIN. FT.

THESE QUANTITIES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL ESTIMATE HIS OWN REMOVAL QUANTITIES IN DETERMINING HIS BID PRICE FOR ITEM SP202.

(5) FOR USE AS DIRECTED BY THE ENGINEER.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 3	SCW	12/17/12

OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
OHIO TURNPIKE MP 63.9
OVER SIMMONS ROAD

DANSARD · GROHNKE · LONG, LIMITED Consulting Engineers
110 Arco Drive Toledo, Ohio 43607 (419) 535-1015

DESIGNED: SAM	CHECKED: RJJ	DATE: 12/98	
DRAWN: SAM	IN CHARGE: RWG	SCALE: NTS	

DESIGNED BY: CHECKED BY:
DATE: DATE:
DRAWN BY: REVISED BY:
DATE: DATE:
CAD FILE NAME: 9808-313.DWG

INTRODUCTION

THE OHIO TURNPIKE COMMISSION (OTC) WILL BE CONSTRUCTING A THIRD LANE (BOTH EASTBOUND AND WESTBOUND) IN THE MEDIAN ON DESIGNATED SEGMENTS OF THE OHIO TURNPIKE. THIRD LANE DESIGN WILL PROCEED IN FOUR PHASES, BETWEEN 1996 AND 1999. THIS REPORT IS A PRESENTATION OF THE SUBSURFACE INVESTIGATION PERFORMED FOR DESIGN PROJECT 71-97-15, BETWEEN MILEPOST 59.06 AND MILEPOST 64.13. THE PURPOSE OF THIS INVESTIGATION IS TO DETERMINE THE SOIL CONDITIONS THAT WILL BE ENCOUNTERED DURING CONSTRUCTION OF THE ADDITIONAL LANES, AND TO PROVIDE SOIL DESIGN PARAMETERS APPLICABLE IN PAVEMENT DESIGN.

GEOLOGY AND OBSERVATIONS OF THE PROJECT

THE QUATERNARY PERIOD RECORDS THE GEOLOGIC HISTORY OF THE LAST TWO MILLION YEARS. THIS TIME PERIOD INCLUDES THE PLEISTOCENE ICE AGE, WHICH BEGAN TWO MILLION YEARS AGO AND ENDED APPROXIMATELY 13,000 YEARS AGO. LARGE CONTINENTAL ICE SHEETS ACCUMULATED IN CANADA AND SLOWLY MOVED SOUTHWARD INTO OHIO, BLANKETING THE REGION WITH UNSTRATIFIED DEPOSITS OF CLAY, SILT, SAND, GRAVEL, AND BOULDERS, OTHERWISE KNOWN AS GLACIAL TILL. AT LEAST FOUR MAJOR GLACIERS ARE BELIEVED TO HAVE ADVANCED OVER THE AREA. THE LAST ICE SHEET TO PASS OVER THE AREA IS KNOWN AS THE WISCONSINAN GLACIATION. THE WISCONSINAN DEPOSITS ARE WELL PRESERVED DUE TO A RELATIVELY SHORT PERIOD OF EROSION AND WEATHERING. THIS PARTICULAR STRETCH OF THE OHIO TURNPIKE PREDOMINANTLY TRAVERSES LACUSTRINE CLAYS DEPOSITED DURING THE WISCONSINAN STAGE OF GLACIATION.

PERIGLACIAL DEPOSITIONAL SEQUENCES ARE REPRESENTED BY LACUSTRINE DEPOSITS. IN THIS INSTANCE, THESE ARE CLAYS DEPOSITED IN THE LOW-VELOCITY WATER OF GLACIAL LAKES. CLAY DEPOSITS GENERALLY REPRESENT A SUSPENDED LOAD SETTLED OUT DURING THE WINTER MONTHS, WHEN LAKES WERE FROZEN AND DID NOT RECEIVE ANY RUNOFF. THIN DEPOSITS OF SILT MAY ALSO EXIST, WHICH REPRESENT SUSPENDED LOAD SETTLED OUT FROM MELTWATER DURING THE SUMMER MONTHS. FINALLY, LACUSTRINE DEPOSITS MAY ALSO INCLUDE FINE SANDS WHICH REPRESENT THE DISTAL PORTIONS OF DELTAIC DEPOSITS.- LACUSTRINE DEPOSITS ARE ENCOUNTERED FROM MILEPOST 59.06 TO 64.13, APPROXIMATELY.

FURTHERMORE, DEPOSITS FROM THE HOLOCENE EPOCH (ENCOMPASSING THE LAST 13,000 YEARS BEFORE PRESENT) ARE PRESENT ALONG THE MAUMEE RIVER AT MILEPOST 62.00 AND EAST BRANCH GRASSY CREEK AT MILEPOST 64.3. THESE LOCATIONS PREDOMINATELY CONTAIN FINE-GRAINED DEPOSITIONAL SEQUENCES OF FINE SAND, SILT, AND CLAY, ASSOCIATED WITH LATERAL AND VERTICAL ACCRETION DEPOSITS ALONG PRESENT AND FORMER FLOODPLAINS. BURIED CHANNEL DEPOSITS AND POINT BAR DEPOSITS CONSISTING OF SAND AND GRAVEL MAY ALSO BE PRESENT, WHICH REPRESENT PERIODS OF HIGHER FLOW DURING THE DEVELOPMENTAL STAGES OF THE CREEK AND RIVER.

THE UNDERLYING DOLOMITE BEDROCK WAS DEPOSITED DURING THE SILURIAN SYSTEM, AND IS APPROXIMATELY 415 MILLION YEARS OLD. AT THE BEGINNING OF THE SILURIAN SYSTEM, OHIO WAS ABOVE SEA LEVEL AND PART OF A LARGER LAND MASS LOCATED NEAR THE EQUATOR. SLOWLY ADVANCING TROPICAL SEAS FROM THE NORTH AND SOUTH EVENTUALLY COVERED OHIO, DEPOSITING THE DOLOMITE BEDROCK FOUND AT THE SITE TODAY. BASED ON THE BEDROCK TOPOGRAPHY MAP OF LUCAS AND WOOD COUNTIES, OBTAINED FROM THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR), THE TOP OF BEDROCK RANGES IN ELEVATION FROM APPROXIMATELY 541 FEET ABOVE MEAN SEA LEVEL (MSL) AT MILEPOST 59.80 TO 562 FEET ABOVE MSL AT MILEPOST 62.00.

EXPLORATION

A TOTAL OF FIFTY-EIGHT (58) TEST BORINGS WERE DRILLED ALONG THE TURNPIKE CENTERLINE AND EXISTING INSIDE SHOULDERS, AT THE APPROXIMATE STATIONS AND OFFSETS SHOWN ON THE BORING LOGS, FOR THE REFERENCED PROJECT (SEE APPENDIX C). TWENTY-TWO (22) OF THESE BORINGS, DESIGNATED C-59.05 THROUGH C-64.05, WERE DRILLED ALONG THE CENTERLINE OF THE MEDIAN OF THE EXISTING TURNPIKE. THE BORINGS WERE DRILLED APPROXIMATELY EVERY 0.2-MILE, EACH TO A DEPTH OF 10.0 FEET. THIRTY-SIX (36) OF THE TEST BORINGS, DRILLED TO DEPTHS OF 6.0 FEET, WERE LOCATED ON THE INSIDE EDGES OF BOTH THE EASTBOUND AND WESTBOUND LANES AND STAGGERED BETWEEN THE TWO BERMS AT INTERVALS OF 0.1-MILE. THESE BORINGS ARE DESIGNATED EITHER EBI (EASTBOUND) OR WBI (WESTBOUND) FOLLOWED BY THEIR CORRESPONDING MILEPOST LOCATIONS. THE BORING LOCATIONS WERE ESTABLISHED, LOCATED, AND STAKED BY RESOURCE INTERNATIONAL BASED ON ESTABLISHED MILEPOSTS. THESE TEST BORINGS WERE DRILLED USING EITHER A TRUCK-MOUNTED ROTARY DRILLING MACHINE, UTILIZING HOLLOW STEM AUGERS TO ADVANCE THE HOLES OR WITH A GEOPROBE MODEL 4220, A VEHICLE-MOUNTED HYDRAULICALLY-POWERED MACHINE THAT UTILIZES STATIC FORCE AND PERCUSSION TO ADVANCE A 48.0-INCH LONG BY 2.0-INCH DIAMETER SOIL SAMPLER.

TO SUPPLEMENT OUR ANALYSIS OF THE SUBGRADE CONDITIONS ALONG THE PROJECT, THE GEOPROBE WAS ALSO UTILIZED TO OBTAIN SOIL SAMPLES FROM SLOPE OF THE MEDIAN (BOTH EASTBOUND AND WESTBOUND SIDE OF THE CENTERLINE). A TOTAL OF SEVENTY-SEVEN (77) BORINGS WERE TAKEN ON THE SLOPES AT LOCATIONS WHERE THE PROPOSED THIRD LANE IS TO BE CONSTRUCTED. THE LOCATIONS FOR SAMPLING WERE STAGGERED AT INTERVALS OF 0.05-MILE, AND THE SAMPLING WAS PERFORMED TO A DEPTH OF 4.0 FEET. TEST RESULTS OF THE SUPPLEMENTAL ANALYSIS ARE SUMMARIZED IN APPENDIX D. THE DRILLING WAS PERFORMED BETWEEN JUNE 16 AND DECEMBER 11, 1998.

INVESTIGATIONAL FINDINGS

TWENTY OF THE TWENTY-TWO CENTERLINE BORINGS EXHIBITED BETWEEN 2.0 INCHES AND 10.0 INCHES OF TOPSOIL AT THE GROUND SURFACE, GENERALLY DESCRIBED AS BROWN SILTY CLAY, WITH THE PRESENCE OF ORGANICS. THE TWO REMAINING BORINGS EXHIBITED BETWEEN 2.0 AND 3.0 INCHES OF SAND AND GRAVEL BERM. THE SUBSURFACE SOILS ENCOUNTERED IN THE CENTERLINE BORINGS CONSIST PRIMARILY OF COHESIVE MATERIAL, GENERALLY DESCRIBED AS BROWN TO BROWN AND GRAY SILTY CLAY (CLAY, CLAY AND SILT, CLAYEY SILT, SILT AND CLAY) WITH "TRACE" TO "SOME" SAND AND "TRACE" FINE GRAVEL (ODOT A-4a, A-4b, A-6a, A-6b, AND A-7-6 SOILS). LAYERS OF GRANULAR MATERIAL (ODOT A-3 AND A-3a SOILS), DESCRIBED AS FINE SAND WITH VARYING AMOUNTS OF COARSE SAND, SILT, AND CLAY WERE ENCOUNTERED IN BORINGS C-59.05, C-59.25, C-59.45, AND C-59.65. THE DEPTHS AT WHICH THE GRANULAR MATERIAL WAS INITIALLY ENCOUNTERED VARIED FROM 2.5 TO 9.0 FEET.

A TOTAL OF TWO (2) EASTBOUND INSIDE SHOULDER BORINGS WERE DRILLED THROUGH THE ASPHALT SHOULDER. THE INSIDE SHOULDER BORINGS DRILLED THROUGH THE PAVEMENT EXHIBITED BETWEEN 3.0 INCHES AND 8.0 INCHES OF ASPHALT OVERLYING BETWEEN 8.0 INCHES AND 17.0 INCHES OF SAND AND GRAVEL BASE. THE SIXTEEN REMAINING EASTBOUND INSIDE SHOULDER BORINGS AND ALL OF THE WESTBOUND INSIDE SHOULDER BORINGS EXHIBITED SAND AND GRAVEL BERM AT THE SURFACE. THE DEPTH OF THE BERM MATERIAL EXHIBITED VARIED FROM 6.0 INCHES TO 26.0 INCHES IN THE EASTBOUND BORINGS, AND 2.0 INCHES TO 30.0 INCHES IN THE WESTBOUND BORINGS.

THE SUBSURFACE SOILS ENCOUNTERED ALONG THE WESTBOUND INSIDE SHOULDERS CONSIST PRIMARILY OF ODOT A-6b AND A-7-6 SOILS, GENERALLY DESCRIBED AS BROWN TO BROWN AND GRAY CLAY (SILTY CLAY, CLAYEY SILT, SILT AND CLAY) WITH "TRACE" TO "SOME" SAND AND "TRACE" FINE GRAVEL. SIMILARLY, THE SUBSURFACE SOILS ENCOUNTERED ALONG THE EASTBOUND INSIDE SHOULDERS CONSIST PRIMARILY OF ODOT A-6b AND A-7-6 SOILS, GENERALLY DESCRIBED AS BROWN TO BROWN AND GRAY SILTY CLAY (CLAY, SILT AND CLAY, CLAY AND SILT) WITH "TRACE" TO "SOME" SAND AND "TRACE" TO "LITTLE" FINE GRAVEL.

SEVENTY-TWO OF THE SEVENTY-SEVEN MEDIAN SLOPE BORINGS, TAKEN FROM THE SLOPE OF THE MEDIAN, EXHIBITED BETWEEN 2.0 INCHES AND 12.0 INCHES OF TOPSOIL AT THE GROUND SURFACE, GENERALLY DESCRIBED AS DARK BROWN SILTY CLAY, WITH THE PRESENCE OF ORGANICS. THE REMAINING BORINGS EXHIBITED BETWEEN 15.0 INCHES AND 36.0 INCHES OF SAND AND GRAVEL BERM. THE SUBSURFACE SOILS ENCOUNTERED IN THE MEDIAN SLOPE BORINGS CONSIST PRIMARILY OF ODOT A-6 AND A-7-6 SOILS, DESCRIBED AS BROWN SILTY CLAY (CLAY, SILT AND CLAY) WITH VARYING AMOUNTS OF SAND AND GRAVEL. A LAYER OF SAND AND GRAVEL FILL MATERIAL, GENERALLY LESS THAN 2.0 FOOT THICK, WAS ENCOUNTERED IN BORINGS EB-59.95 AND WB-63.8. THIS LAYER WAS GENERALLY LOCATED WITHIN 3.0 FEET OF THE SURFACE.

A MORE COMPREHENSIVE DESCRIPTION OF WHAT WAS ENCOUNTERED DURING THE DRILLING PROCESS MAY BE FOUND IN THE BORING LOGS IN APPENDIX C AND SUMMARY TABLE IN APPENDIX D, AT THE END OF THE SUBSURFACE INVESTIGATION REPORT. LABORATORY TEST RESULTS AND VISUAL INSPECTION OF REPRESENTATIVE SAMPLES INDICATE THAT THE SOILS ENCOUNTERED ARE CLASSIFIED AS ODOT A-1-b, A-3, A-3a, A-4a, A-4b, A-6a, A-6b, AND A-7-6.

MANY SOIL PROPERTIES, INCLUDING SOIL CONSISTENCY AND SHEAR STRENGTH (OF COHESIVE SAMPLES), ARE PRIMARILY DERIVED FROM STANDARD PENETRATION BLOW COUNTS. JUDGING FROM THE STANDARD PENETRATION BLOW COUNTS OBTAINED, THE CENTERLINE BORINGS CONSISTED PRIMARILY OF STIFF TO VERY STIFF COHESIVE SOILS. THE STANDARD PENETRATION BLOW COUNTS RANGED FROM 12 BLOWS PER FOOT (BPF) TO 23 BPF.

OVERALL, THE NATURAL MOISTURE CONTENTS OF SUBSURFACE SOILS TESTED FROM THE CENTERLINE AND INSIDE SHOULDER BORINGS RANGED FROM 6% TO 32%. HOWEVER, A LARGE MAJORITY (ALMOST 90%) OF THE MOISTURE CONTENTS WERE IN THE 10% TO 25% RANGE. THE MOISTURE CONTENTS OF THE COHESIVE SAMPLES TESTED RANGED FROM 4% BELOW TO 15% ABOVE THEIR CORRESPONDING PLASTIC LIMITS. MOISTURE CONTENTS OF THE SUBSURFACE SOILS TESTED FROM THE MEDIAN SLOPE BORINGS RANGED FROM 4% TO 30%. HOWEVER, A LARGE MAJORITY (OVER 90%) OF THE MOISTURE CONTENTS WERE IN THE 10% TO 25% RANGE. THE MOISTURE CONTENTS OF THE COHESIVE SAMPLES TESTED RANGED FROM 8% BELOW TO 10% ABOVE THEIR CORRESPONDING PLASTIC LIMITS. APPROXIMATELY 65% OF THE SOILS EXHIBITED MOISTURE CONTENTS AT OR ABOVE THEIR CORRESPONDING PLASTIC LIMITS ~~(RECOMMENDATIONS FOR STABILIZATION OF THESE SOILS ARE PRESENTED IN SECTION 4.4)~~. THE REMAINING SOIL SAMPLES DID NOT EXHIBIT MOISTURE CONTENTS IN EXCESS OF THEIR CORRESPONDING PLASTIC LIMITS AND ARE PRESENTED IN THE TABLE BELOW:

SOIL PROPERTIES AT PROPOSED SUBGRADE ELEVATION

LOCATION	CLASSIFICATION	GROUP INDEX	MOISTURE %	LIQUID LIMIT	PLASTIC LIMIT
EBI-61.2	A-6B	12	13	34	15
WBI-63.9	A-6B	12	13	35	14
C-59.85	A-6B	12	14	36	15
C-61.45	A-6B	12	13	35	15
C-61.85	A-6A	9	13	33	20
C-62.05	A-6A	9	13	29	17
C-64.05	A-6B	12	16	40	19
EB-59.15	A-7-6	13	15	41	18
EB-59.85	A-6B	11	16	38	19
EB-60.65	A-7-6	19	24	56	27
EB-60.75	A-7-6	18	21	52	23
EB-60.85	A-7-6	18	20	51	21
EB-60.95	A-7-6	19	18	53	22
EB-61.25	A-6B	11	16	37	19
EB-61.35	A-7-6	12	17	41	21
EB-61.45	A-6B	10	14	33	18
EB-61.65	A-6B	11	19	39	20
EB-61.75	A-7-6	15	19	46	21
EB-62.05	A-6A	7	13	31	17
EB-62.15	A-4A	8	13	26	20

SOIL PROPERTIES AT PROPOSED SUBGRADE ELEVATION (CONTINUED)

LOCATION	CLASSIFICATION	GROUP INDEX	MOISTURE %	LIQUID LIMIT	PLASTIC LIMIT
EB-62.25	A-4A	7	14	28	18
EB-62.45	A-6A	8	13	29	17
EB-62.55	A-6B	9	14	39	17
EB-62.65	A-6A	8	13	30	18
EB-63.65	A-6B	10	14	32	15
EB-63.75	A-6B	10	13	32	14
EB-63.95	A-6A	8	15	30	17
EB-64.05	A-7-6	12	15	40	21
WB-59.3	A-7-6	19	20	54	23
WB-59.8	A-6A	6	18	39	24
WB-59.9	A-7-6	16	19	48	22
WB-60.1	A-7-6	17	18	47	19
WB-60.3	A-7-6	16	20	48	23
WB-60.4	A-6B	10	16	36	21
WB-60.8	A-7-6	17	20	49	21
WB-61.0	A-6B	11	16	35	18
WB-61.1	A-6B	11	17	37	19
WB-61.2	A-6B	11	17	36	18
WB-61.5	A-6B	11	16	36	18
WB-61.8	A-6B	12	16	36	17
WB-62.0	A-6A	5	12	30	20
WB-62.1	A-6A	8	14	27	16
WB-62.2	A-6A	8	13	31	17
WB-62.3	A-4A	6	14	29	19
WB-62.5	A-6A	7	12	28	15
WB-62.7	A-7-6	15	14	45	19
WB-63.7	A-6A	8	14	29	16
WB-63.9	A-7-6	14	15	41	16
WB-64.0	A-6A	6	11	28	18

AS ILLUSTRATED, MOISTURE CONTENTS BELOW THEIR CORRESPONDING PLASTIC LIMITS ARE FOUND WITHIN THE ENTIRE LENGTH OF THE DESIGN PROJECT. ABOVE OPTIMUM MOISTURE CONTENTS ARE SIMILARLY FOUND ALONG THE ENTIRE LENGTH OF THE DESIGN PROJECT. OVERALL, THE SOILS ARE CONSIDERED TO BE AT TO SLIGHTLY ABOVE THEIR CORRESPONDING OPTIMUM MOISTURE CONTENTS. GROUNDWATER WAS ENCOUNTERED IN THE GEOPROBE TUBE, DURING THE DRILLING PROCESS, IN BORINGS EBI-59.2, EBI-60.2, C-59.05, C-59.25, AND C-59.45 (SEE APPENDIX C). GROUNDWATER CONDITIONS ARE CONSIDERED TO FLUCTUATE WITH LOCAL PRECIPITATION LEVELS. AT THE TIME OF THIS INVESTIGATION, THE AMOUNT OF RECENT PRECIPITATION WAS CONSIDERED TO BE NORMAL.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS - 64 SAMPLES TESTED

DESCRIPTION	HRB CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	A-1-b	VISUALLY CLASSIFIED								
FINE SAND	A-3	A-3	2	13	82	-4-		-	-	17	2
COARSE AND FINE SAND	A-3a	A-3a	1	2	78	-21-		-	-	18	2
SANDY SILT	A-4a(2)	A-4a	0	1	55	27	17	-	-	17	1
SILT	A-4b(8)	A-4b	3	3	16	52	26	-	-	13	1
SILT AND CLAY	A-6a(9)	A-6a	6	7	14	34	40	30	13	15	4
SILTY CLAY	A-6b(12)	A-6b	4	4	11	35	46	34	19	17	26
CLAY	A-7-6(17)	A-7-6	2	2	8	30	58	47	29	22	28

ASPHALT | SOD AND/OR TOPSOIL | SAND & GRAVEL BASE | SAND & GRAVEL BERM

DRIVE SAMPLE/GEOPROBE BORING - PLAN VIEW

DRIVE SAMPLE/GEOPROBE BORING PLOTTED TO VERTICAL SCALE ONLY

● WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT

—W— FREE WATER

—▽— STATIC WATER LEVEL

X/Y/Z NUMBER OF BLOWS FOR STANDARD PENETRATION TEST

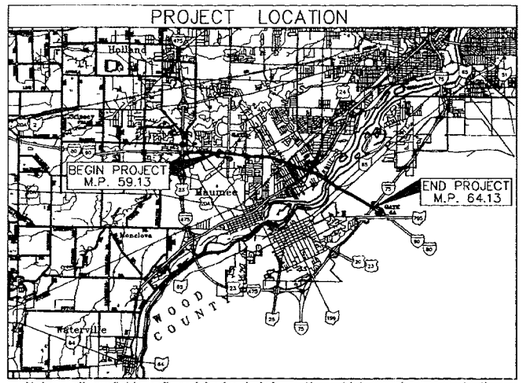
X = NUMBER OF BLOWS FOR FIRST 6 INCHES

Y = NUMBER OF BLOWS FOR SECOND 6 INCHES

Z = NUMBER OF BLOWS FOR THIRD 6 INCHES

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15

PROJECT LOCATION



Note--all available soil and bedrock information which can be conveniently shown on the structure foundation investigation sheets has been so reported. Additional subsurface investigations may have been made to study some special aspect of the project. Copies of the data, if any, may be inspected in the District Deputy Director's Office (District 7), the Pavement and Soils Section of the Office of Roadway Engineering or in the Office of Bridges at 1980 West Broad Street.

PROJECT INDEX

STATIONS FROM	STATIONS TO	PLAN VIEW SHEET	PROFILE SHEET
559+00	583+00	4	4
583+00	607+00	4	4
607+00	631+00	5	5
631+00	656+00	5	5
656+00	680+00	6	6
680+00	704+00	7	7
704+00	728+00	8	8
728+00	752+00	8	8
752+00	3+00	9	9
3+00	27+00	10	10
27+00	51+00	11	11
51+00	62+00	11	11

RESOURCE INTERNATIONAL INC.
281 ENTERPRISE DR.
WESTERVILLE, OHIO 43081
(614) 895-1959

DRAWN	REVIEWED	DATE	CALCULATED
EMC		1/14/99	CHECKED GPH
		DATE 1/15/99	

SOIL PROFILE

OHIO TURNPIKE
71-97-15

1/11

RESOURCE INTERNATIONAL INC.
PROJECT NO. W-2301

FILENAME: 7301R-1.DWG
DATE: 14-JAN-1999

ADDENDUM NO.3 12-18-12