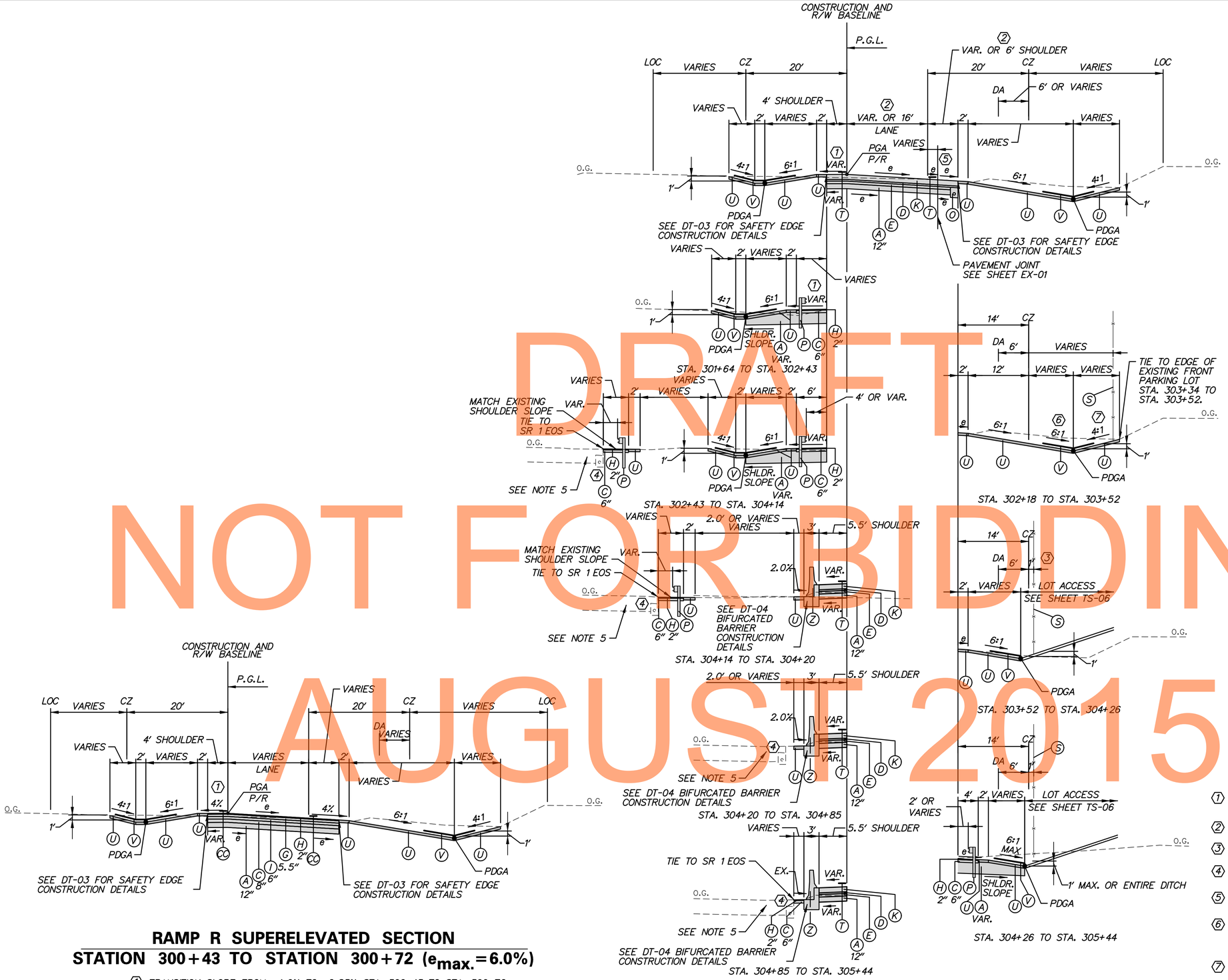


DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING SR 1 ROADWAY PAVEMENT SECTION
   12" PCC PAVEMENT
   4" PERMEABLE ASPHALT TREATED BASE
   6" SOIL CEMENT TREATED BASE
   14" BORROW TYPE A
5. EXISTING SR 1 SHOULDER ADJACENT SECTION
   2" HOT MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C
   10" MAX. BITUMINOUS CONCRETE BASE COURSE
   4" PERMEABLE ASPHALT TREATED BASE
   6" SOIL CEMENT TREATED BASE
   14" BORROW TYPE A
6. SEE CONSTRUCTION DETAIL AS-04 FOR RAMP R OVER TOLL PLAZA PEDESTRIAN ACCESS TUNNEL (STA. 304+14 TO STA. 304+44).

(1) TRANSITION SLOPE FROM -2.83 TO +0.25% STA. 300+72 TO STA. 301+48.
TRANSITON SLOPE FROM +0.25% TO -2.0% STA. 301+48 TO STA. 302+03.

(2) VARIES FROM STA. 300+72 TO STA. 301+50.

(3) FENCE VARIES FROM STA. 302+52 TO STA. 303+54.

(4) CONTRACTOR SHALL PROTECT EXISTING SR1 UNDERDRAIN DURING ALL EXCAVATION AND CONSTRUCTION ACTIVITIES.

(5) SLOPE -4% STA. 300+72 TO STA. 301+03.
TRANSITION SLOPE FROM -4% TO -6% STA. 301+03 TO 301+51.

(6) TRANSITION SLOPE FROM -6:1 TO -4:1 STA. 302+18 TO 302+42.
HOLD SLOPE -4:1 STA. 302+42 TO STA. 302+60.
TRANSITION SLOPE FROM -4:1 TO -6:1 STA. 302+60 TO STA. 302+85.

(7) SLOPE VARIES (3:1 MAX) STA. 303+34 TO STA. 303+52.

RAMP R SUPERELEVATED SECTION
STATION 300+43 TO STATION 300+72 ($e_{max.}$=6.0%)

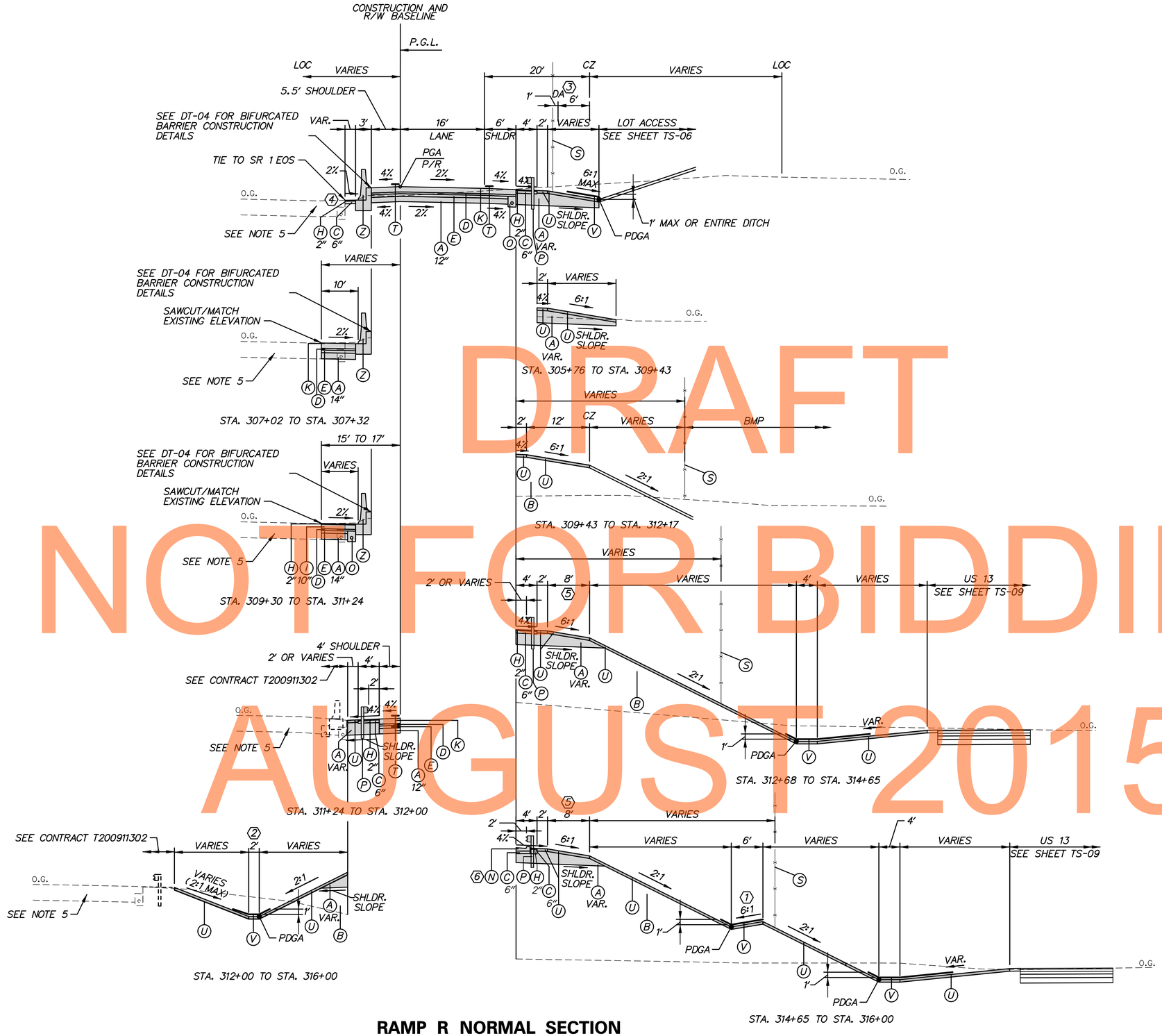
(1) TRANSITION SLOPE FROM -4.0% TO -2.83% STA. 300+43 TO STA. 300+72.

RAMP R SUPERELEVATED SECTION
STATION 300+72 TO STATION 305+44 ($e_{max.}$=6.0%)

N:\31653-000\Contract 1D\CADD\TS001U301_1D.dgn
6/17/2015 9:42:11 AM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302	BRIDGE NO.	TYPICAL SECTIONS
				COUNTY NEW CASTLE	DESIGNED BY: S.E.S.	
					CHECKED BY: B.R.T.	

	TS-01
SHEET NO.	11
TOTAL SHTS.	179



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
EOS - EDGE OF SHOULDER
EOR - EDGE OF ROAD
4. EXISTING SR 1 ROADWAY PAVEMENT SECTION
12" PCC PAVEMENT
4" PERMEABLE ASPHALT TREATED BASE
6" SOIL CEMENT TREATED BASE
14" BORROW TYPE A
5. EXISTING SR 1 SHOULDER ADJACENT SECTION
2" HOT MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C
10" MAX. BITUMINOUS CONCRETE BASE COURSE
4" PERMEABLE ASPHALT TREATED BASE
6" SOIL CEMENT TREATED BASE
14" BORROW TYPE A

(1) TRANSITION BENCH SLOPE -2:1 TO +6:1 STA. 314+64 TO STA. 314+95.

(2) WIDTH VARIES 0' TO 2' STA. 312+00 TO STA. 312+50.

(3) DENIAL OF ACCESS/ FENCE VARIES FROM STA. 305+44 TO STA. 305+74.
DENIAL OF ACCESS/ FENCE VARIES FROM STA. 309+50 TO STA. 316+00.

(4) CONTRACTOR SHALL PROTECT EXISTING SR1 UNDERDRAIN DURING ALL EXCAVATION AND CONSTRUCTION ACTIVITIES.

(5) WIDTH VARIES 8' TO 0' STA. 314+75 TO STA. 315+00.
WIDTH 0' STA. 315+00 TO STA. 316+00.

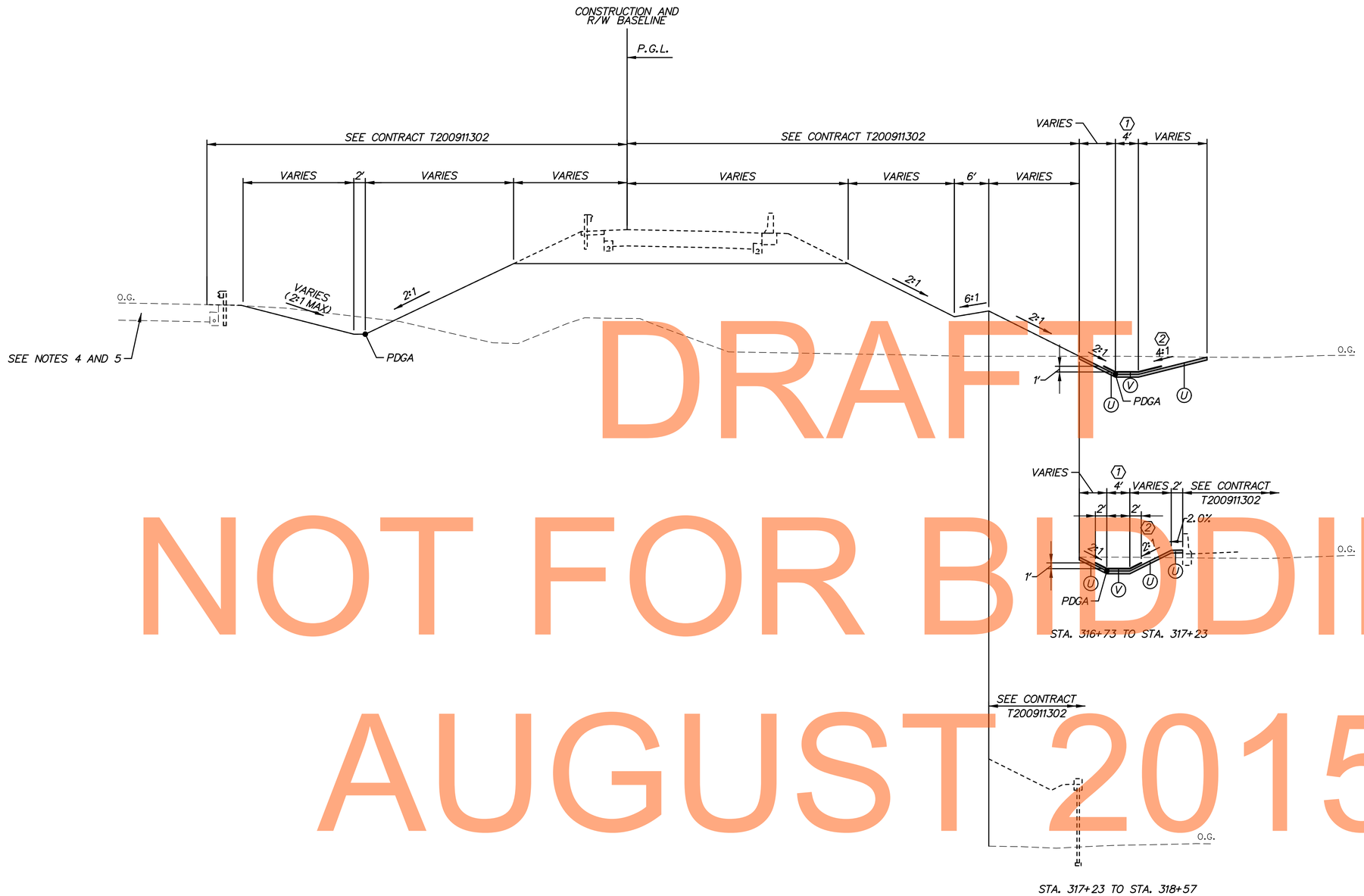
(6) CURB AND GUTTER STA. 315+85 to STA. 316+00.

RAMP R NORMAL SECTION
STATION 305+44 TO STATION 316+00

TS-02

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: S.E.S. / CHECKED BY: B.R.T.	TYPICAL SECTIONS	SHEET NO. 12 / TOTAL SHTS. 179

n:\31653_000\contract_td\cadd\TS002U301_1D.dgn
6/17/2015 9:40:43 AM



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
EOS - EDGE OF SHOULDER
EOR - EDGE OF ROAD
4. EXISTING SR 1 ROADWAY PAVEMENT SECTION
12" PCC PAVEMENT
4" PERMEABLE ASPHALT TREATED BASE
6" SOIL CEMENT TREATED BASE
14" BORROW TYPE A
5. EXISTING SR 1 SHOULDER ADJACENT SECTION
2" HOT MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C
10" MAX. BITUMINOUS CONCRETE BASE COURSE
4" PERMEABLE ASPHALT TREATED BASE
6" SOIL CEMENT TREATED BASE
14" BORROW TYPE A

RAMP R SECTION (SEE CONTRACT T200911302)
STATION 316+00 TO STATION 317+76

NOTE: SEE DT-01 FOR PAVEMENT DETAIL AT LIMIT OF CONSTRUCTION.

NOTE: IF THIS CONTRACT IS THE FIRST WORK TO BE PERFORMED IN THIS AREA, CONTRACTOR SHALL CONSTRUCT THE GRADING AS SHOWN SOLID ABOVE OR AT THE DIRECTION OF THE ENGINEER. OTHERWISE SECTION ONLY APPLIES FOR DITCH CONSTRUCTION RIGHT AND LEFT.

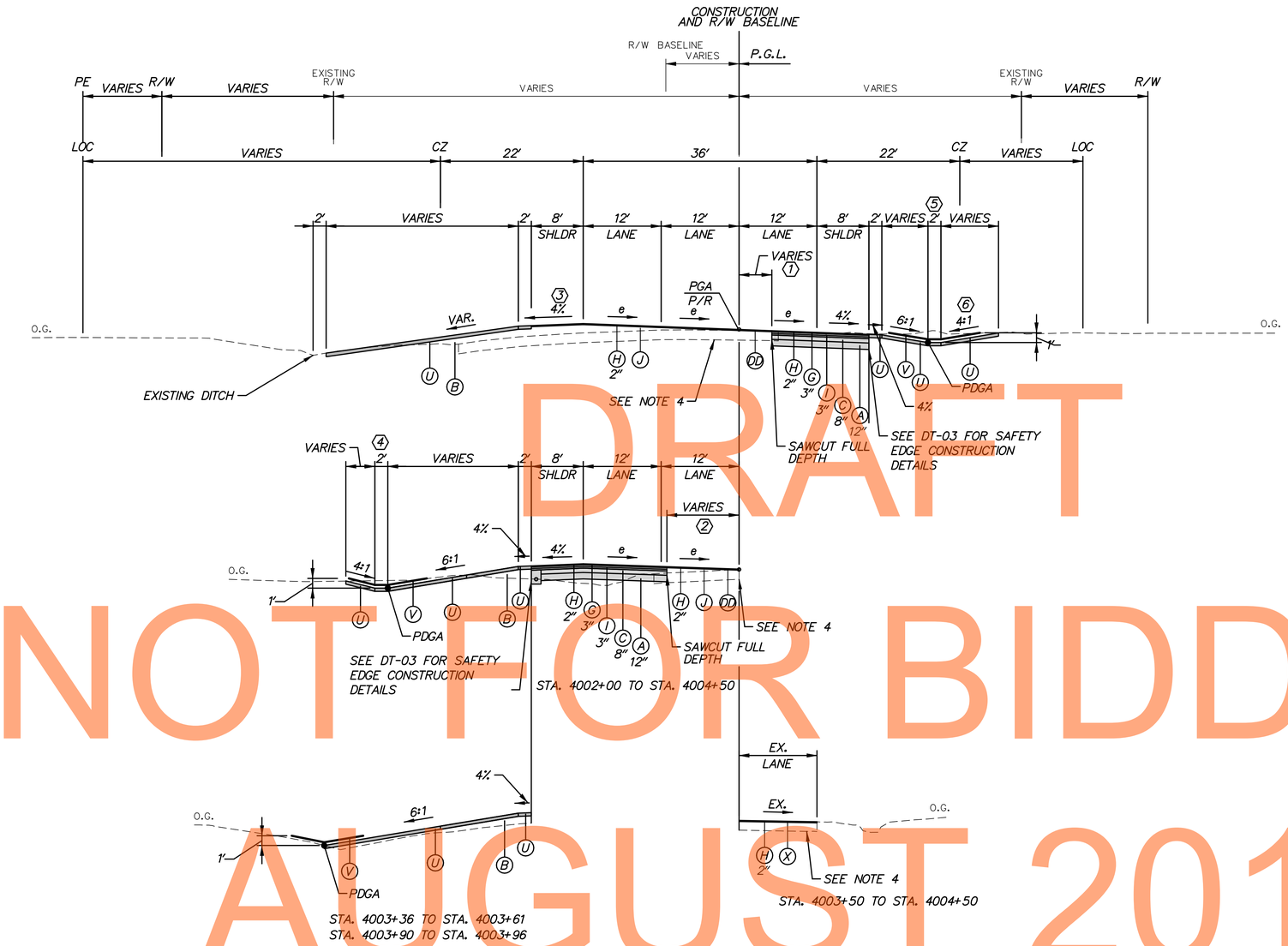
(1) TRANSITION DITCH WIDTH 4' TO 0' STA. 316+55 TO STA. 317+00. HOLD DITCH WIDTH 0' STA. 317+00 TO STA. 317+23.

(2) TRANSITION SLOPE +8.8% TO +4:1 STA. 316+00 TO STA. 316+50. TRANSITION SLOPE +4:1 TO +2:1 STA. 316+50 TO STA. 317+00.

TS-03

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302	BRIDGE NO.	TYPICAL SECTIONS
				COUNTY NEW CASTLE	DESIGNED BY: S.E.S.	SHEET NO. 13
					CHECKED BY: B.R.T.	TOTAL SHTS. 179

n:\31653-000\contract td\cadd\TS003U301_1D.dgn
9/17/2015 9:40:44 AM



DRAFT
NOT FOR BIDDING
AUGUST 2015

PORT PENN SUPERELEVATED SECTION

STATION 4000+47 TO STATION 4004+50 ($e_{max.}$=3.9%)

(1) WIDTH 35' STA. 4000+47 TO STA. 4000+62.
WIDTH VARIES 18' TO -4' STA. 4000+62 TO STA. 4000+80.
WIDTH -4' STA. 4000+80 TO STA. 4001+10.
WIDTH VARIES -1.86' TO 10.56' STA. 4001+10 TO STA. 4003+56.

(2) WIDTH VARIES 24' TO 11' STA. 4001+75 TO STA. 4004+50.

(3) TRANSITION SLOPE FROM EX. TO -1.50% STA. 4000+47 TO STA. 4000+54.
HOLD -1.50% STA. 4000+54 TO STA. 4001+08. TRANSITION SLOPE FROM -1.50% TO -4.0% STA. 4001+08 TO STA. 4001+77.

(4) DITCH WIDTH 0' FROM STA. 4002+00 TO STA. 4002+50.
WIDTH VARIES 0' TO 2' STA. 4002+50 TO STA. 4003+00.

(5) DITCH WIDTH 0' FROM STA. 4000+47 TO STA. 4000+99.
WIDTH VARIES 0' TO 2' STA. 4000+99 TO STA. 4001+34.

(6) TRANSITION SLOPE +4:1 TO +2:1 STA. 4001+50 TO STA. 4002+00.
HOLD +2:1 SLOPE STA. 4002+00 TO STA. 4003+50.

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

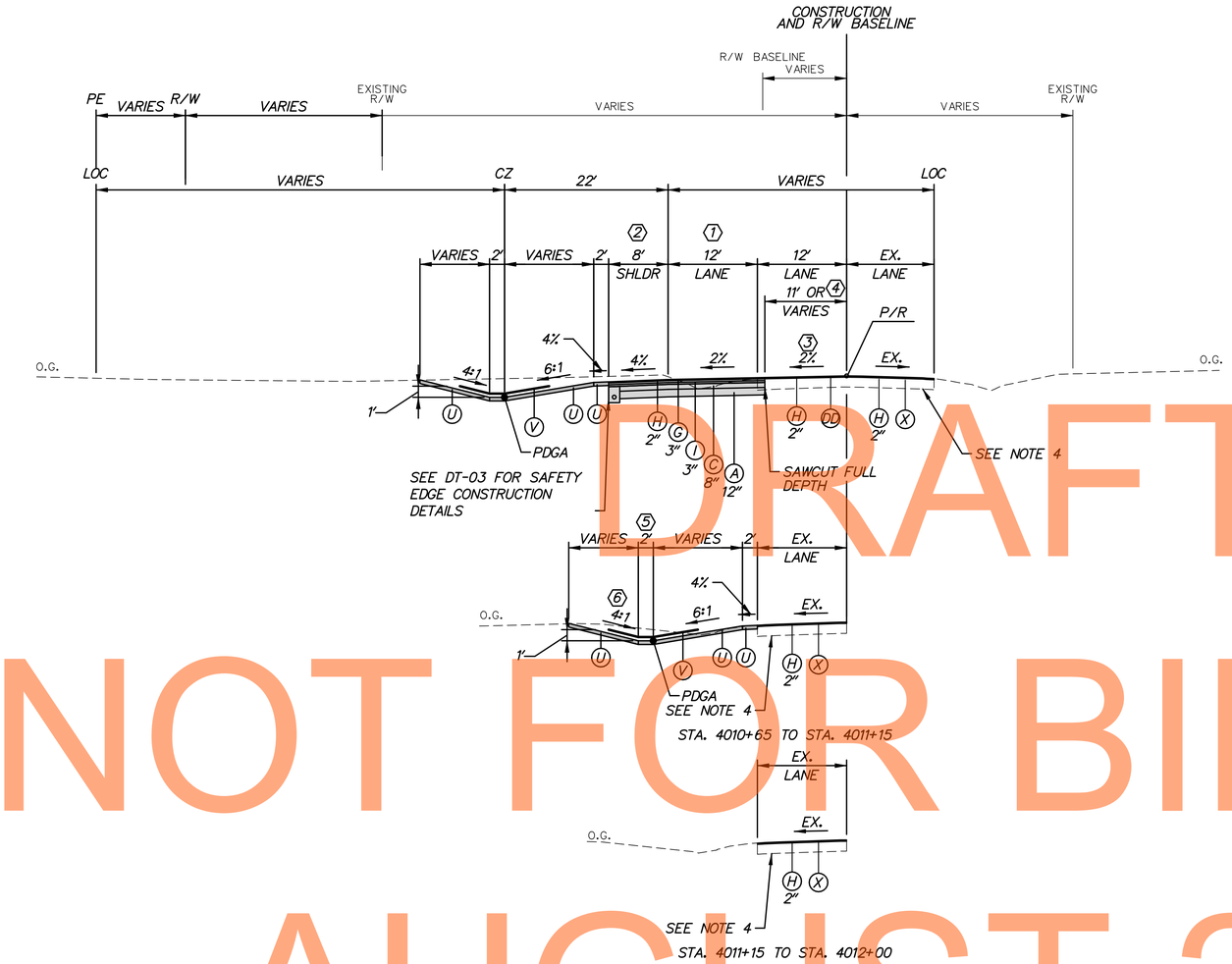
TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING PORT PENN ROAD PAVEMENT SECTION (MAY NOT REPRESENT FULL PAVEMENT WIDTH)
   6" HMA PAVEMENT
   6.5" PCC BASE

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: S.E.S. / CHECKED BY: B.R.T.	TYPICAL SECTIONS

TS-04
SHEET NO. 14
TOTAL SHTS. 179

n:\31653-000\contract 14\cadd\TS004U301_10.dgn
6/17/2015 9:46:45 AM



PORT PENN ROAD NORMAL SECTION
STATION 4004+50 TO STATION 4012+00

1. VARY LANE WIDTH 12' TO 0' STA. 4008+85 TO STA. 4010+65.
2. VARY SHOULDER WIDTH 8' TO 2' STA. 4008+85 TO STA. 4010+65.
3. TRANSITION SLOPE FROM -2% TO EX. FROM STA. 4010+35 TO STA. 4010+65.
4. WIDTH VARIES 11' TO 10.08' STA. 4010+50 TO STA. 4010+65.
5. WIDTH VARIES 2' TO 0' STA. 4010+65 TO STA. 4011+15.
6. TRANSITION SLOPE FROM 4:1 TO 2:1 STA. 4010+65 TO STA. 4011+15.

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING PORT PENN ROAD PAVEMENT SECTION (MAY NOT REPRESENT FULL PAVEMENT WIDTH)
   6" HMA PAVEMENT
   6.5" PCC BASE

DRAFT
NOT FOR BIDDING
AUGUST 2015

TS-05

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

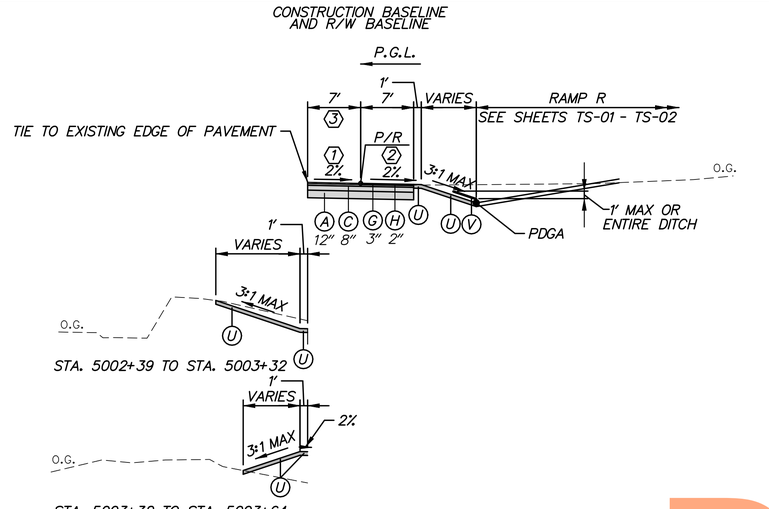
US 13 & PORT PENN RD INTERSECTION

CONTRACT T201011302
COUNTY NEW CASTLE
BRIDGE NO.
DESIGNED BY: S.E.S.
CHECKED BY: B.R.T.

TYPICAL SECTIONS

SHEET NO. 15
TOTAL SHTS. 179

n:\31653-000\contract 1d\cadd\TS005U301_1D.dgn
6/17/2015 9:40:46 AM

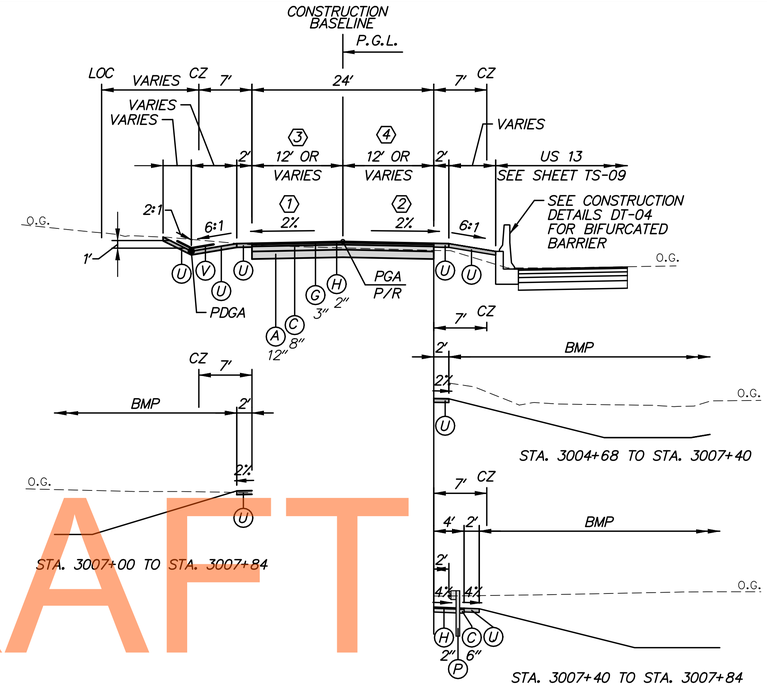


FRONT PARKING LOT ACCESS ROAD NORMAL SECTION
STATION 5002+39 TO STATION 5004+35

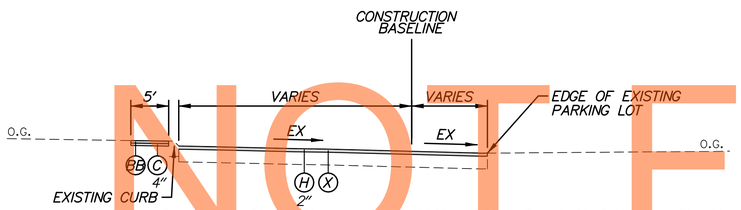
(1) TRANSITION SLOPE FROM EX. (+3.77%) TO +2.0% STA. 5002+39 TO STA. 5002+75.

(2) TRANSITION SLOPE FROM EX. (-3.77%) TO -2.0% STA. 5002+39 TO STA. 5002+75.

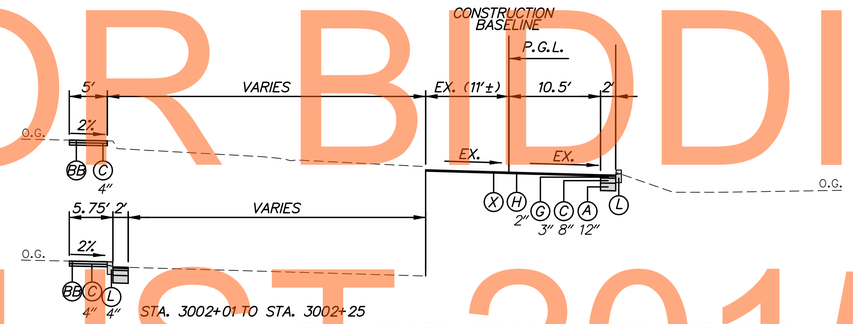
(3) VARY WIDTH 7' TO 19.2' STA. 5003+49 TO STA. 5003+64.
VARY WIDTH 19.2' TO 0' STA. 5003+64 TO STA. 5004+35.



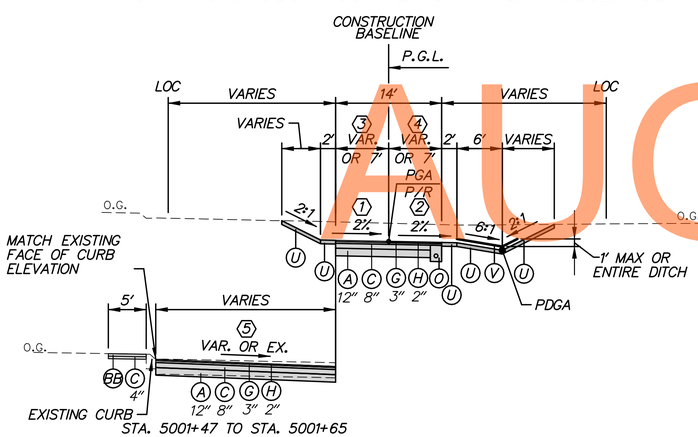
TOLL PLAZA ROAD NORMAL SECTION
STATION 3003+08 TO STATION 3007+87



FRONT PARKING LOT ACCESS ROAD NORMAL SECTION
STATION 5001+65 TO STATION 5002+39



TOLL PLAZA ROAD NORMAL SECTION
STATION 3001+75 TO STATION 3003+08



FRONT PARKING LOT ACCESS ROAD NORMAL SECTION
STATION 5000+12 TO STATION 5001+65

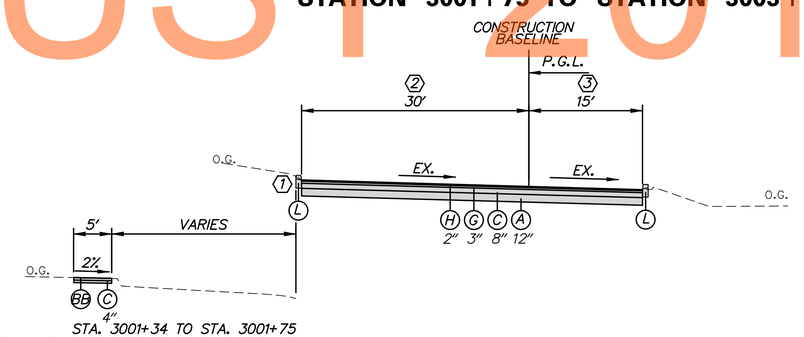
(1) TRANSITION SLOPE FROM +2.7% TO +2.0% STA. 5000+12 TO STA. 5000+23.
TRANSITION SLOPE FROM +2.0% TO EX. STA. 5001+15 TO STA. 5001+65.

(2) TRANSITION SLOPE FROM -2.7% TO -2.0% STA. 5000+12 TO STA. 5000+23.
TRANSITION SLOPE FROM -2.0% TO EX. STA. 5001+15 TO STA. 5001+65.

(3) WIDTH VARIES STA. 5000+12 TO STA. 5000+23.

(4) WIDTH VARIES STA. 5000+12 TO STA. 5000+78.

(5) MATCH EXISTING SLOPE STA. 5001+65.



TOLL PLAZA ROAD NORMAL SECTION
STATION 3000+17 TO STATION 3001+75

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

(1) HOLD EX (+1.61%) SLOPE STA. 3003+08 TO STA. 3002+17.
TRANSITION SLOPE FROM EX. (+1.61%) TO -2.0% STA. 3003+17 TO STA. 3003+75.
TRANSITION SLOPE FROM -2.0% TO -1.12% STA. 3007+40 TO STA.3007+55.
HOLD -1.12% STA. 3007+55 TO STA. 3007+87.

(2) HOLD EX (-1.61%) SLOPE STA. 3003+08 TO STA. 3002+17.
TRANSITION SLOPE FROM EX. (-1.61%) TO -2.0% STA. 3003+17 TO STA. 3003+75.
TRANSITION SLOPE FROM -2.0% TO +1.12% STA. 3007+04 TO STA.3007+55.
HOLD +1.12% STA. 3007+55 TO STA. 3007+87.

(3) WIDTH VARIES STA. 3007+47 TO STA. 3007+87.

(4) WIDTH VARIES STA. 3007+53 TO STA. 3007+87.

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD

(1) SEE PLAN SHEETS FOR LIMITS OF CURB AND GUTTER.

(2) WIDTH 74.35' STA. 3000+35 TO STA. 3000+37. WIDTH 34' STA .3000+37 TO STA. 3000+64. MATCH EXISITING WIDTH STA. 3000+64 TO STA. 3001+75.

(3) WIDTH 15' STA. 3000+17 TO STA. 3000+57. WIDTH VARIES 15' TO 33' STA. 3000+57 TO STA. 3000+75. WIDTH 33' STA. 3000+75 TO STA. 3001+59. WIDTH 12.5' STA. 3001+59 TO STA. 3001+75

DRAFT
NOT FOR BIDDING
AUGUST 2015

TS-06

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

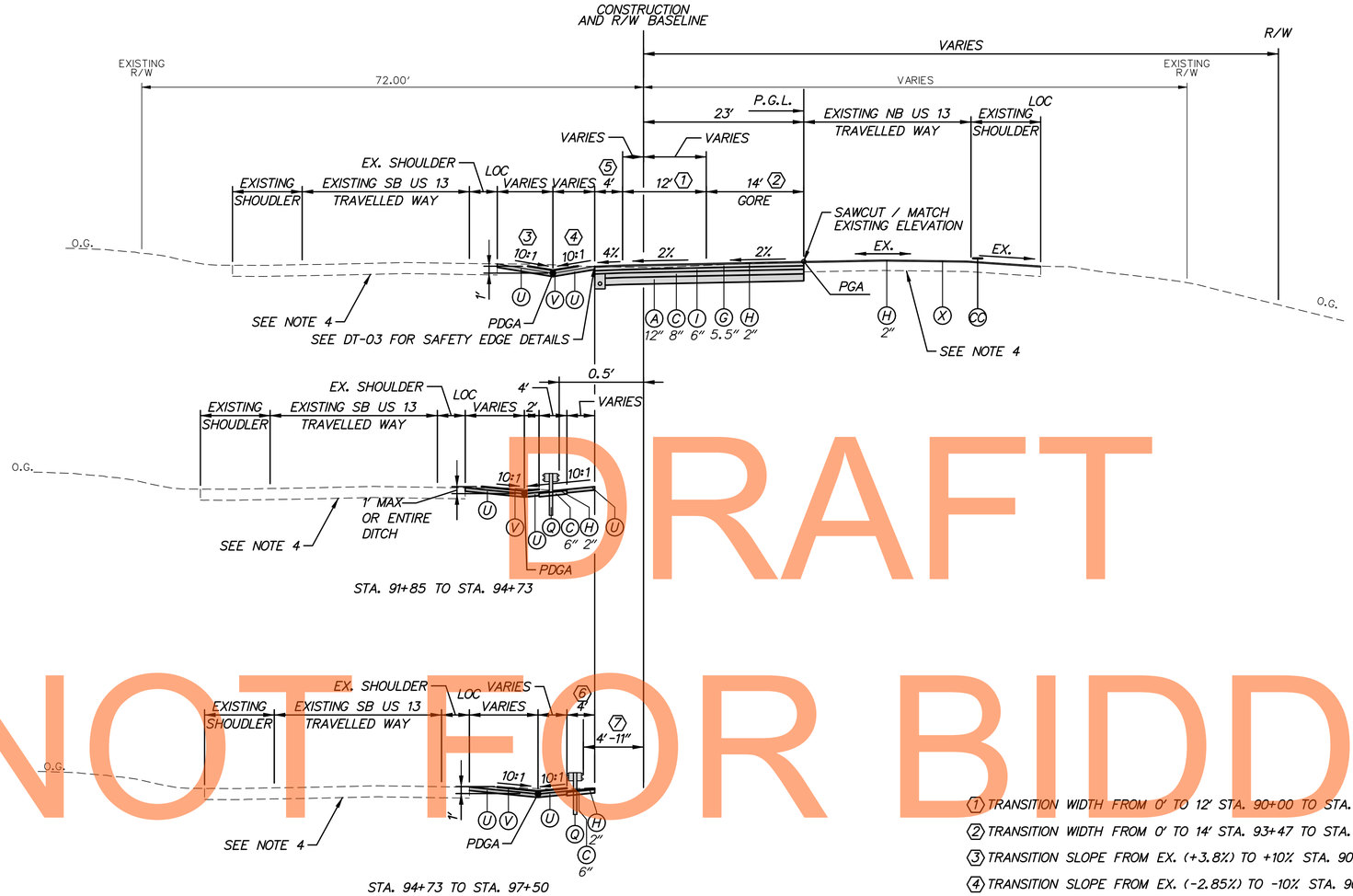
US 13 & PORT PENN RD INTERSECTION

CONTRACT	BRIDGE NO.
T201011302	DESIGNED BY: S.E.S.
COUNTY	
NEW CASTLE	CHECKED BY: B.R.T.

TYPICAL SECTIONS

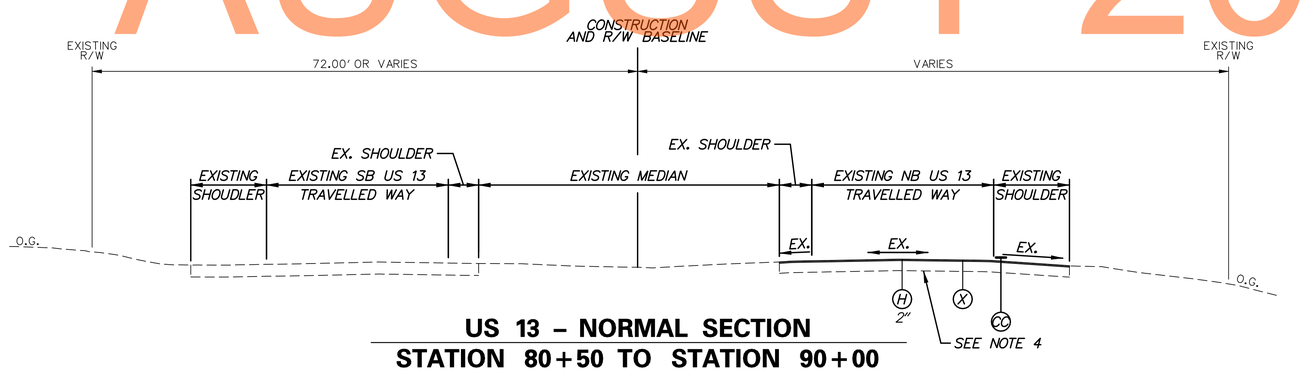
SHEET NO. 16
TOTAL SHTS. 179

n:\3653-000\contract 1a\cadd\TS006U301_1D.dgn
6/17/2015 9:40:48 AM



US 13 – NORMAL SECTION
STATION 90+00 TO STATION 97+50

1. TRANSITION WIDTH FROM 0' TO 12' STA. 90+00 TO STA. 93+47.
2. TRANSITION WIDTH FROM 0' TO 14' STA. 93+47 TO STA. 97+50.
3. TRANSITION SLOPE FROM EX. (+3.8%) TO +10% STA. 90+00 TO STA. 90+50.
4. TRANSITION SLOPE FROM EX. (-2.85%) TO -10% STA. 90+00 TO STA. 90+50.
5. VARY WIDTH 4' TO 0' STA. 96+35 TO STA. 97+50.
6. VARY WIDTH 6' TO 4' STA. 94+73 TO STA. 95+31.
7. WIDTH 0.5' STA. 94+73 TO STA. 95+05.
   VARY WIDTH 0.5' TO 4'-11" STA. 95+05 TO STA. 96+35.



US 13 – NORMAL SECTION
STATION 80+50 TO STATION 90+00

LEGEND

- A ITEM 209001 - BORROW, TYPE A
- B ITEM 209006 - BORROW, TYPE F
- C ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- D ITEM 304501 - PERMEABLE TREATED BASE, 4"
- E ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- G ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- H ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- I ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- J ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- K ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- L ITEM 701010 - PCC CURB, TYPE 1-8
- N ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- O ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- P ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- Q ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- S ITEM 727000 - RIGHT OF WAY FENCE
- T ITEM 760017 - RUMBLE STRIPS, CONCRETE
- U ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- V ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- X ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- Z ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- AA ITEM 701011 - PCC CURB TYPE 2
- BB ITEM 705001 - PCC SIDEWALK, 4"
- CC ITEM 760016 - RUMBLE STRIPS, HOTMIX
- DD ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

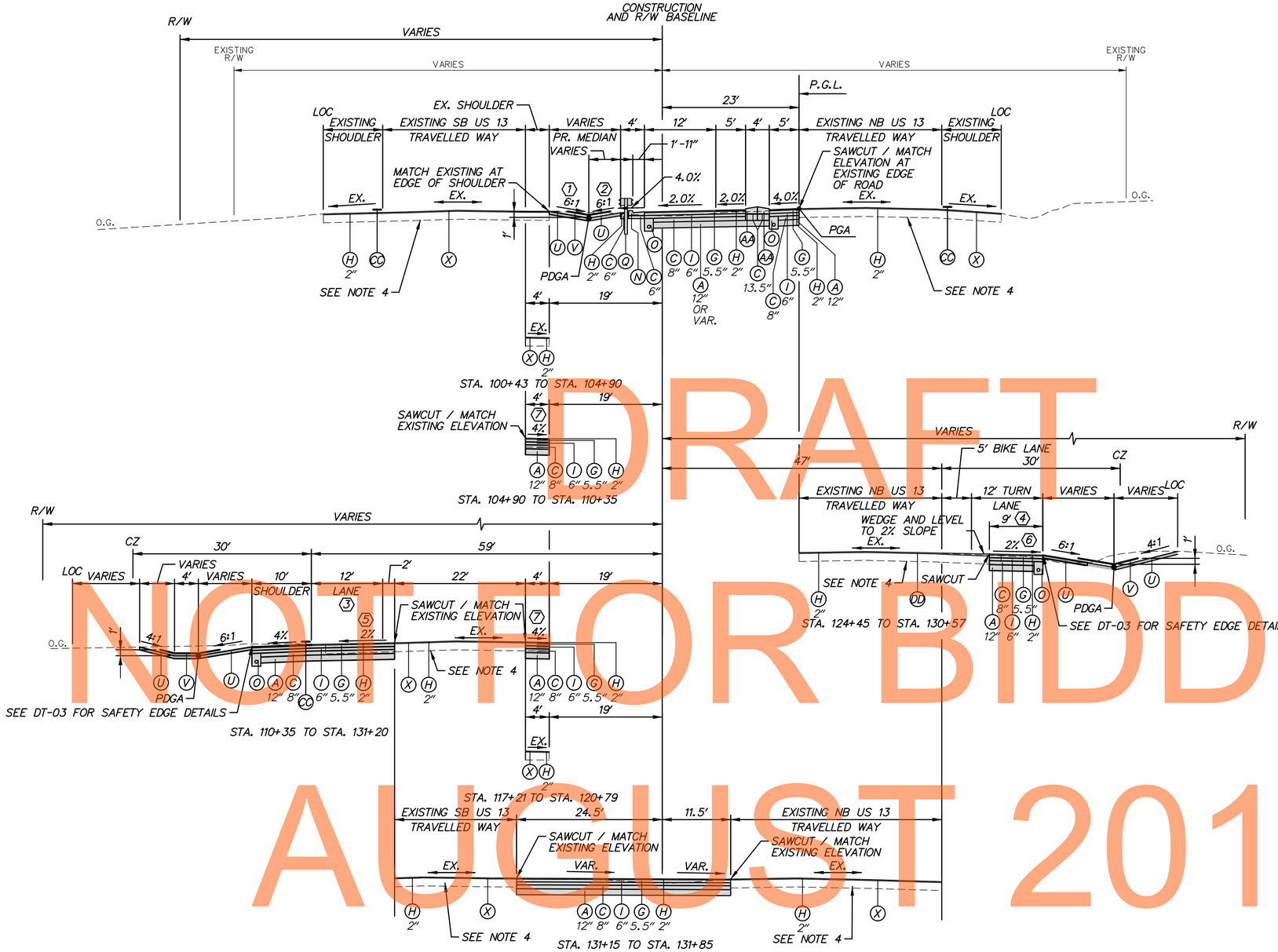
TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING US 13 TRAVEL LANE PAVEMENT SECTION (23' LT TO 45' LT; 23' RT TO 47' RT)
   10" HOT MIX PAVEMENT
   8" PCC BASE

DRAFT
NOT FOR BIDDING
AUGUST 2015

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302	BRIDGE NO.	TYPICAL SECTIONS	TS-07 SHEET NO. 17
				COUNTY NEW CASTLE	DESIGNED BY: J.A.D. CHECKED BY: B.R.T.		TOTAL SHTS. 179

p:\31653-000\contract 1d\cadd\TS0070301_1D.dgn
6/17/2015 9:40:49 AM



DRAFT
NOT FOR BIDDING
AUGUST 2015

US 13 – NORMAL SECTION

STATION 97+50 TO STATION 131+85

(1) TRANSITION SLOPE FROM +10:1 TO +6:1 STA. 97+50 TO STA. 97+75.

(2) TRANSITION SLOPE FROM -10:1 TO -6:1 STA. 97+50 TO STA. 97+75.

(3) TRANSITION WIDTH FROM 0' TO 12' STA. 110+35 TO STA. 118+15.

(4) WIDTH 4' STA. 124+45 TO STA. 125+05. TRANSITION WIDTH FROM 4' TO 9' STA. 125+05 TO STA. 125+80.

(5) TRANSITION SLOPE -2% TO -0.69% STA. 130+65 TO STA. 131+20.

(6) TRANSTION SLOPE -2% TO -3.65% STA. 130+07 TO STA. 130+57.

(7) SEE CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLANS FOR WIDTH TO BE CONSTRUCTED FOR MAINTENANCE OF TRAFFIC.

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

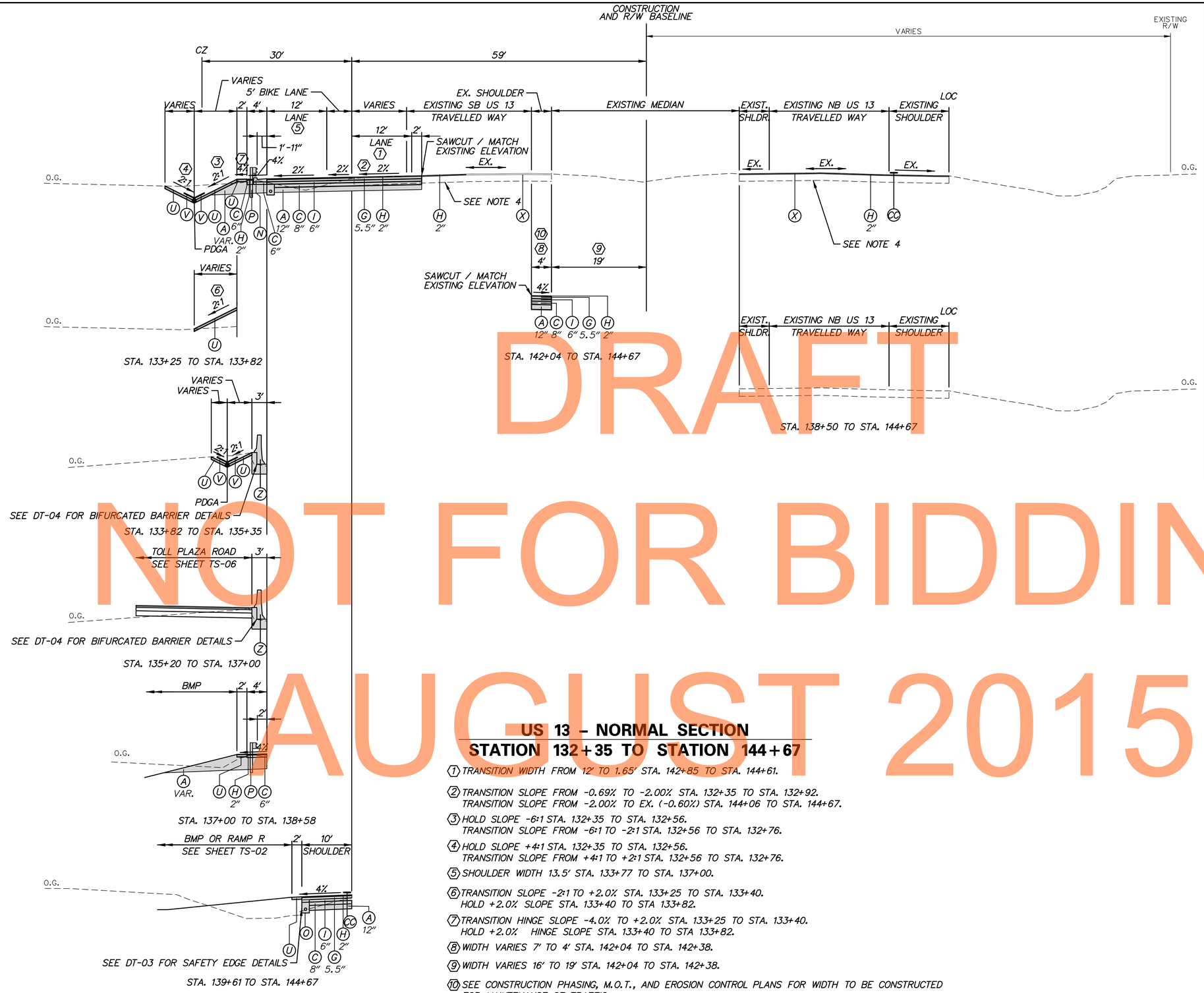
TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING US 13 TRAVEL LANE PAVEMENT SECTION (23' LT TO 45' LT; 23' RT TO 47' RT)
   10" HOT MIX PAVEMENT
   8" PCC BASE

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: J.A.D. / CHECKED BY: B.R.T.	TYPICAL SECTIONS

TS-08
SHEET NO. 18
TOTAL SHTS. 179

r:\31653-000\contract 1d\cadd\TS008U301_1D.dgn
6/17/2015 9:40:51 AM



DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING US 13 TRAVEL LANE PAVEMENT SECTION (23' LT TO 45' LT; 23' RT TO 47' RT)
   10" HOT MIX PAVEMENT
   8" PCC BASE

US 13 – NORMAL SECTION
STATION 132+35 TO STATION 144+67

(1) TRANSITION WIDTH FROM 12' TO 1.65' STA. 142+85 TO STA. 144+61.

(2) TRANSITION SLOPE FROM -0.69% TO -2.00% STA. 132+35 TO STA. 132+92.
TRANSITION SLOPE FROM -2.00% TO EX. (-0.60%) STA. 144+06 TO STA. 144+67.

(3) HOLD SLOPE -6:1 STA. 132+35 TO STA. 132+56.
TRANSITION SLOPE FROM -6:1 TO -2:1 STA. 132+56 TO STA. 132+76.

(4) HOLD SLOPE +4:1 STA. 132+35 TO STA. 132+56.
TRANSITION SLOPE FROM +4:1 TO +2:1 STA. 132+56 TO STA. 132+76.

(5) SHOULDER WIDTH 13.5' STA. 133+77 TO STA. 137+00.

(6) TRANSITION SLOPE -2:1 TO +2.0% STA. 133+25 TO STA. 133+40.
HOLD +2.0% SLOPE STA. 133+40 TO STA 133+82.

(7) TRANSITION HINGE SLOPE -4.0% TO +2.0% STA. 133+25 TO STA. 133+40.
HOLD +2.0% HINGE SLOPE STA. 133+40 TO STA 133+82.

(8) WIDTH VARIES 7' TO 4' STA. 142+04 TO STA. 142+38.

(9) WIDTH VARIES 16' TO 19' STA. 142+04 TO STA. 142+38.

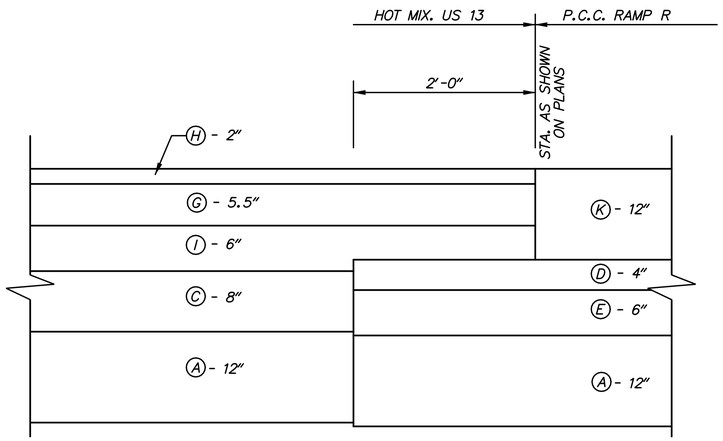
(10) SEE CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLANS FOR WIDTH TO BE CONSTRUCTED FOR MAINTENANCE OF TRAFFIC.

TS-09

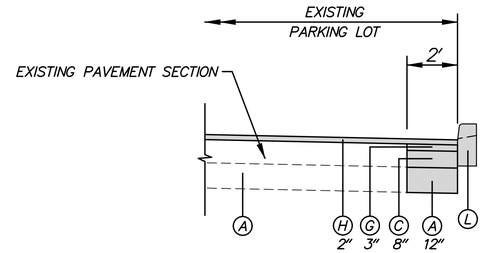
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302	BRIDGE NO.	TYPICAL SECTIONS
				COUNTY NEW CASTLE	DESIGNED BY: J.A.D.	
					CHECKED BY: B.R.T.	

SHEET NO. 19
TOTAL SHTS. 179

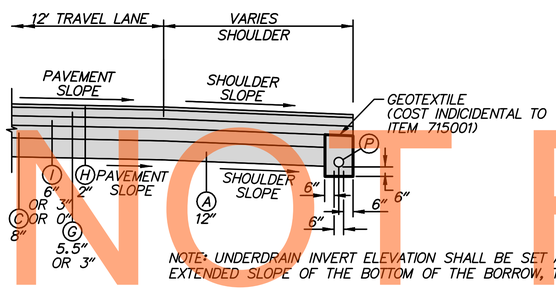
p:\31653-000\contract 1d\cadd\TS009U301_1D.dgn
6/17/2015 9:40:52 AM



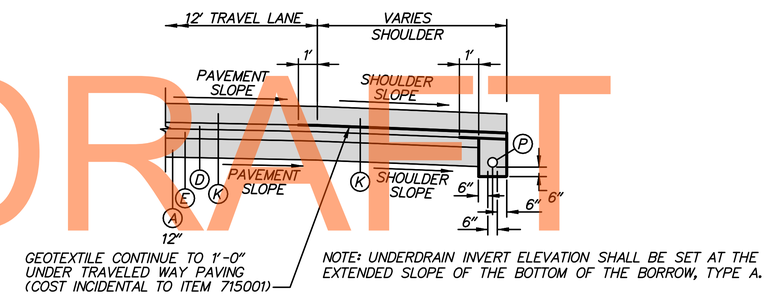
P.C.C. RAMP R/HOT MIX US 13 INTERFACE DETAIL



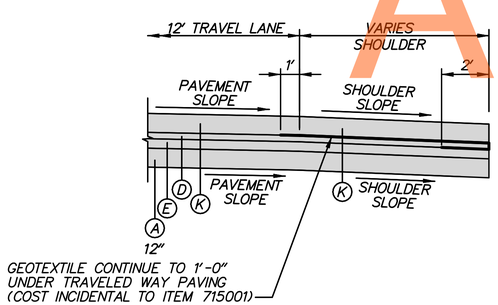
WARM MIX ASPHALT PAVEMENT PATCH EXISTING PAVEMENT WITH PROPOSED CURB



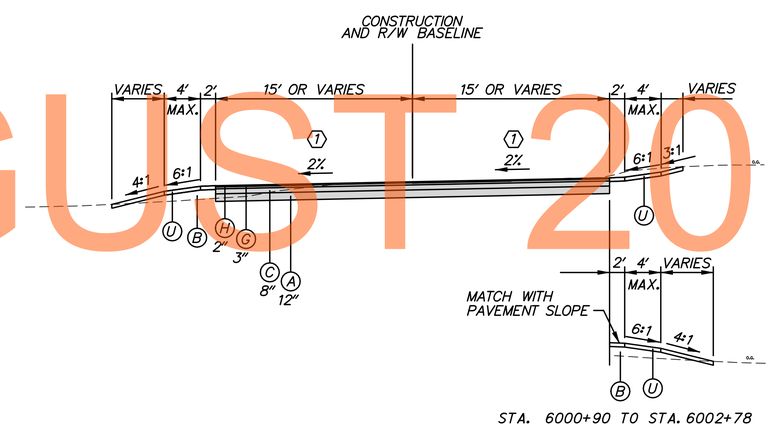
WARM MIX ASPHALT PAVEMENT UNDERDRAIN DETAIL NOT TO SCALE



PCC PAVEMENT UNDERDRAIN DETAIL NOT TO SCALE



PCC PAVEMENT WITHOUT UNDERDRAIN DETAIL NOT TO SCALE



CHES-DEL DRIVEWAY TYPICAL SECTION

(1) TRANSITION SLOPE FROM EX. TO -2.0% STA. 6000+20 TO STA. 6000+50. HOLD -2.0% STA. 6000+50 TO STA. 6002+55. TRANSITION SLOPE FROM -2.0% TO -1.4% STA. 6002+55 TO STA. 6002+78.

LEGEND

- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (G) ITEM 401813 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
- (H) ITEM 401830 - WMA, SUPERPAVE,TYPE C, 160 GYRATIONS, PG 70-22 (NON-CARBONATE STONE)
- (I) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (J) ITEM 401824- WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701016 - PCC CURB AND GUTTER TYPE 1-4
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (P) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (Q) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH; ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (X) ITEM 760006 - PAVEMENT MILLING, HOTMIX, 2" DEPTH
- (Z) ITEM 720629 - BIFURCATED CONCRETE MEDIAN BARRIER
- (AA) ITEM 701011 - PCC CURB TYPE 2
- (BB) ITEM 705001 - PCC SIDEWALK, 4"
- (CC) ITEM 760016 - RUMBLE STRIPS, HOTMIX
- (DD) ITEM 760003 - PAVEMENT MILLING, HOT MIX, VARIABLE DEPTH

TYPICAL SECTION NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. P.G.L. - PROFILE GRADE LINE
   PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   EOS - EDGE OF SHOULDER
   EOR - EDGE OF ROAD
4. EXISTING SR 1 ROADWAY PAVEMENT SECTION
   12" PCC PAVEMENT
   4" PERMEABLE ASPHALT TREATED BASE
   6" SOIL CEMENT TREATED BASE
   14" BORROW TYPE A
5. EXISTING SR 1 SHOULDER ADJACENT SECTION
   2" HOT MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C
   10" MAX. BITUMINOUS CONCRETE BASE COURSE
   4" PERMEABLE ASPHALT TREATED BASE
   6" SOIL CEMENT TREATED BASE
   14" BORROW TYPE A

DRAFT
NOT FOR BIDDING
AUGUST 2015

N:\33653-000\Contract 1D\CADD\TS010U301_1D.dgn
6/17/2015 9:38:04 AM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 13 & PORT PENN RD INTERSECTION	CONTRACT T201011302	BRIDGE NO.	TYPICAL SECTIONS	TS-10
				COUNTY NEW CASTLE	DESIGNED BY: KAH		SHEET NO. 20
					CHECKED BY: BRT		TOTAL SHTS. 179