NOTES:

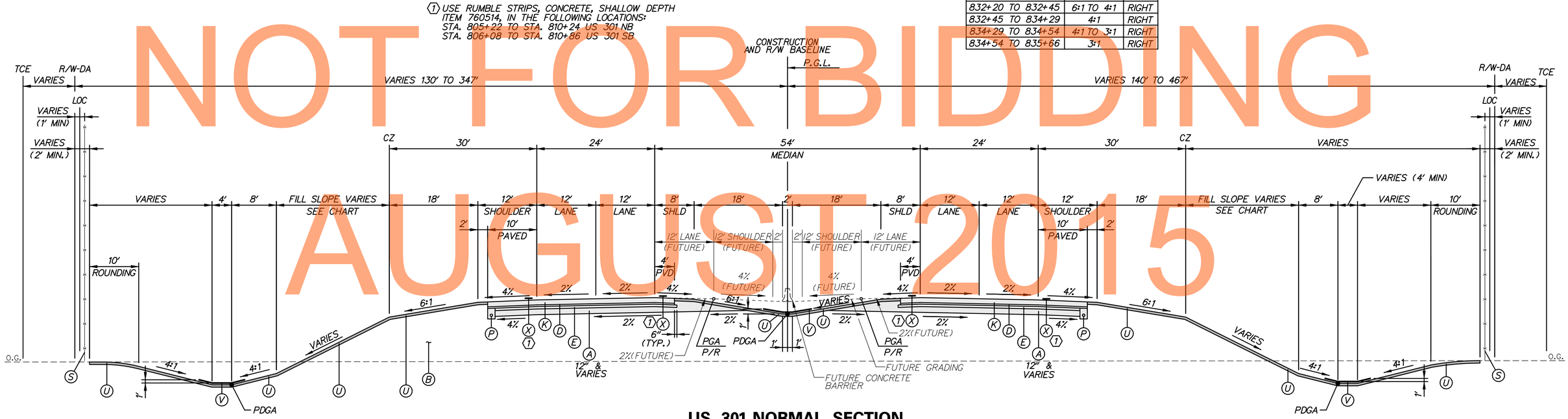
1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

FILL SLOPE CHART		
STATION	SLOPE	SIDE
762+41 TO 763+90	6:1	RIGHT
763+90 TO 764+50	6:1 TO 4:1	RIGHT
764+50 TO 765+82	4:1	RIGHT
771+90 TO 777+68	6:1	RIGHT
831+50 TO 831+65	4:1	RIGHT
831+65 TO 831+90	4:1 TO 6:1	RIGHT
831+90 TO 832+20	6:1	RIGHT
832+20 TO 832+45	6:1 TO 4:1	RIGHT
832+45 TO 834+29	4:1	RIGHT
834+29 TO 834+54	4:1 TO 3:1	RIGHT
834+54 TO 835+66	3:1	RIGHT

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

(1) USE RUMBLE STRIPS, CONCRETE, SHALLOW DEPTH ITEM 760514, IN THE FOLLOWING LOCATIONS:
STA. 805+22 TO STA. 810+24 US 301 NB
STA. 806+08 TO STA. 810+86 US 301 SB



STA. 760+90 TO STA. 766+50, LT.
STA. 775+40 TO STA. 778+80, LT.
STA. 801+60 TO STA. 803+00, LT.

FILL SLOPE CHART		
STATION	SLOPE	SIDE
760+90 TO 766+50	6:1	LEFT
775+40 TO 778+80	6:1	LEFT
801+60 TO 803+00	4:1	LEFT

US 301 NORMAL SECTION

STATION 682+00 TO STATION 692+32
STATION 713+98 TO STATION 719+44
STATION 760+90 TO STATION 780+13
STATION 799+33 TO STATION 809+75
STATION 831+10 TO STATION 837+50

SEE NORMAL SECTION TS-03 TO TS-06 FOR ADDITIONAL DETAILS

STA. 762+41 TO STA. 765+82, RT.
STA. 771+90 TO STA. 777+68, RT.
STA. 831+50 TO STA. 835+66, RT.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	DESIGNED BY: KGMA
COUNTY	CHECKED BY: TAO
NEW CASTLE	

TYPICAL SECTIONS

TS-01

SHEET NO.	TOTAL SHTS.
17	875

NOTES:

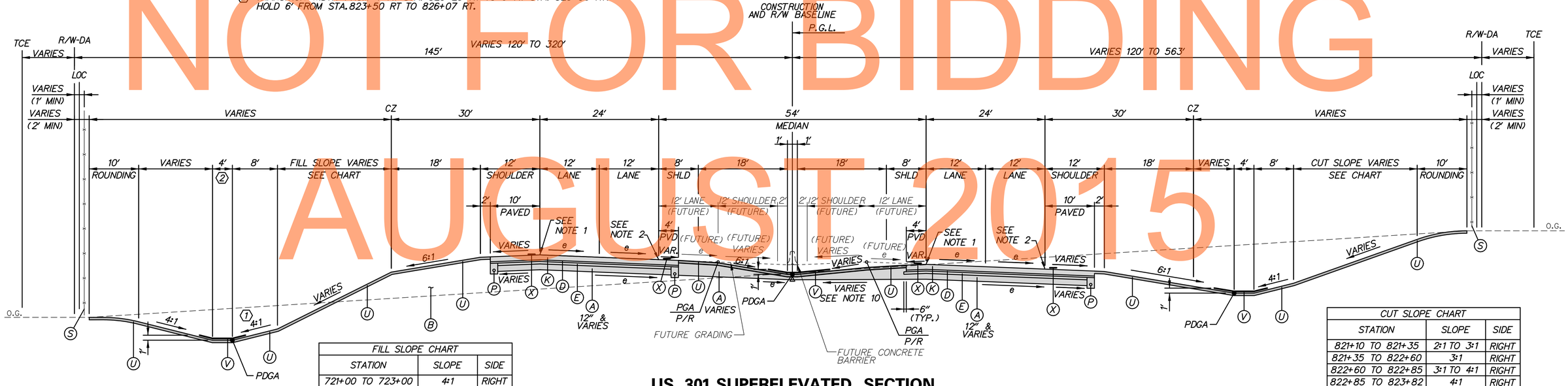
1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

(1) TRANSITION SLOPE FROM 6:1 AT STA. 823+82 RT TO 4:1 AT STA. 824+07 RT.

(2) TRANSITION WIDTH FROM 4' AT STA. 823+25 RT TO 6' AT STA. 823+50 RT. HOLD 6' FROM STA. 823+50 RT TO 826+07 RT.



STA. 721+00 TO STA. 726+50, RT.
STA. 735+80 TO STA. 737+86, LT.
STA. 801+60 TO STA. 803+00, LT.

FILL SLOPE CHART		
STATION	SLOPE	SIDE
721+00 TO 723+00	4:1	RIGHT
723+00 TO 723+25	4:1 TO 6:1	RIGHT
723+25 TO 726+50	6:1	RIGHT
735+80 TO 737+86	4:1	LEFT
749+50 TO 750+00	4:1 TO 3:1	LEFT
823+82 TO 825+25	6:1	RIGHT
825+25 TO 825+50	6:1 TO 4:1	RIGHT
825+50 TO 826+07	4:1	RIGHT

CUT SLOPE CHART		
STATION	SLOPE	SIDE
821+10 TO 821+35	2:1 TO 3:1	RIGHT
821+35 TO 822+60	3:1	RIGHT
822+60 TO 822+85	3:1 TO 4:1	RIGHT
822+85 TO 823+82	4:1	RIGHT

US 301 SUPERELEVATED SECTION

STATION 692+32 TO STATION 713+98 (emax=-2.6%)
STATION 719+44 TO STATION 760+90 (emax=5.8%)
STATION 780+13 TO STATION 799+33 (emax=3.8%)
STATION 809+75 TO STATION 831+10 (emax=-5.7%)

SEE SUPERELEVATED SECTION TS-07 TO TS-15 FOR ADDITIONAL DETAILS

NOTE:
BETWEEN SR 896/BOYD'S CORNER ROAD AND STATION 700+00, EXCAVATE 2' BELOW EXISTING GRADE FOR ENTIRE ROADWAY FOOTPRINT, PLACE SEPARATION GEOTEXTILE AND BACKFILL 2' WITH BORROW, TYPE B. EXCAVATION WITHIN WOODED AREAS WILL BE INCIDENTAL TO ITEM 201000 - CLEARING AND GRUBBING: ALL OTHER EXCAVATION WILL BE PAID UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

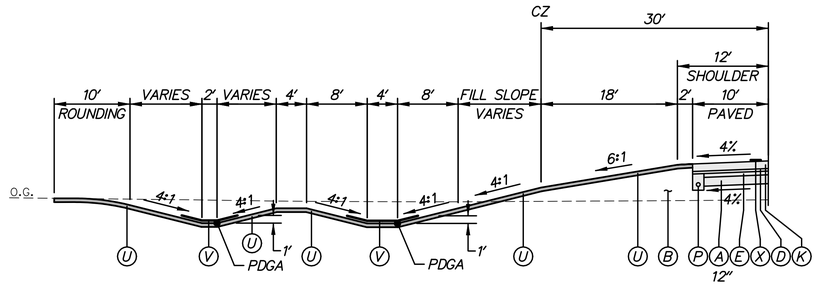
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: KGMA
NEW CASTLE	CHECKED BY: TAO

TYPICAL SECTIONS

TS-02

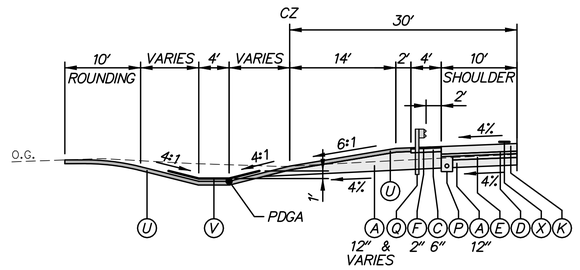
SHEET NO.	TOTAL SHTS.
18	875



FILL SLOPE CHART		
STATION	SLOPE	SIDE
713+98 TO 719+44	4:1	LEFT
799+33 TO 800+25	4:1	RIGHT
800+25 TO 800+50	4:1 TO 3:1	RIGHT
800+50 TO 801+50	3:1	RIGHT
801+50 TO 802+00	3:1 TO 2:1	RIGHT

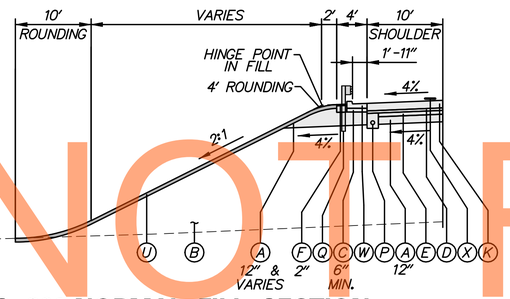
US 301 NORMAL FILL SECTION WITH DIVERSION DITCH

STA. 713+98 TO STA. 719+44, LT.
STA. 799+33 TO STA. 801+81, RT.



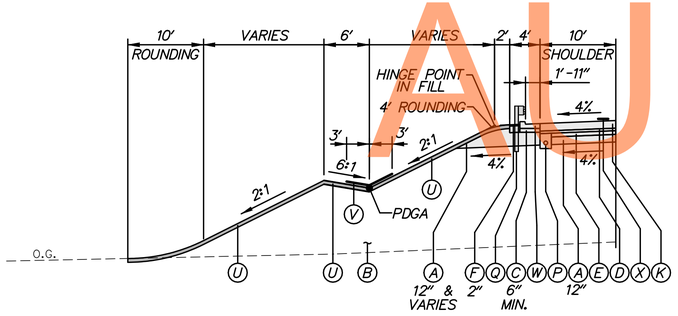
US 301 NORMAL FILL SECTION WITHOUT FILL SLOPE; WITH GUARDRAIL

STA. 770+46 TO STA. 773+15, LT.



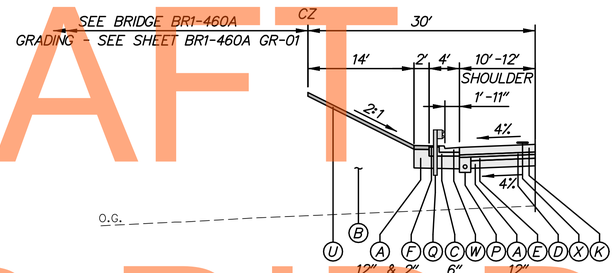
US 301 NORMAL FILL SECTION WITH CURB AND GUTTER; WITHOUT DITCH

STA. 682+50 TO STA. 685+62, LT.



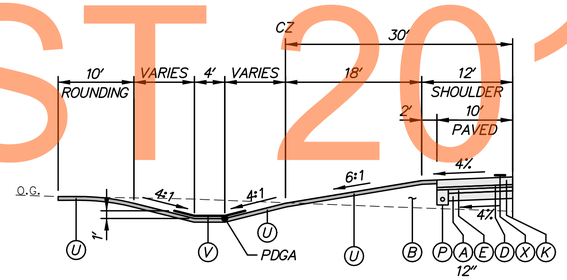
US 301 NORMAL FILL SECTION WITH CURB AND GUTTER AND HIGH FILL BENCH

STA. 682+00 TO STA. 682+50, LT.
STA. 682+00 TO STA. 684+57, RT.
STA. 686+55 TO STA. 692+32, RT.
STA. 687+32 TO STA. 692+32, LT.



US 301 NORMAL FILL SECTION AT BRIDGE BR1–460A

STA. 768+50 TO STA. 769+21, LT.
STA. 769+86 TO STA. 770+46, LT.
STA. 768+47 TO STA. 769+11, RT.
STA. 769+78 TO STA. 770+52, RT.



US 301 NORMAL FILL SECTION WITHOUT FILL SLOPE AND GUARDRAIL

STA. 766+50 TO STA. 768+50, LT.
STA. 773+15 TO STA. 775+40, LT.
STA. 801+00 TO STA. 801+60, LT.
STA. 760+90 TO STA. 762+41, RT.
STA. 770+52 TO STA. 771+90 RT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
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- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

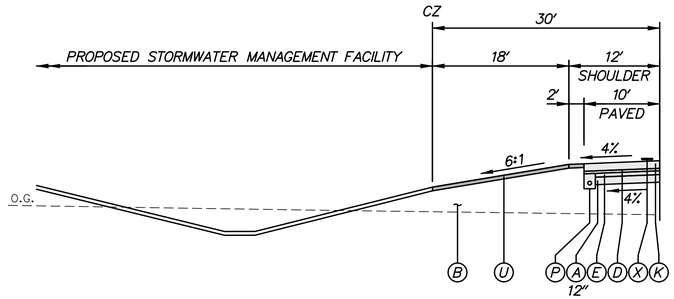
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: JAD
NEW CASTLE	CHECKED BY: BRT

TYPICAL SECTIONS

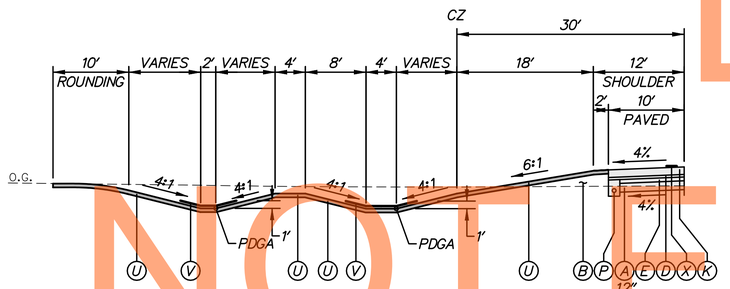
TS-03

SHEET NO.	TOTAL SHTS.
19	875



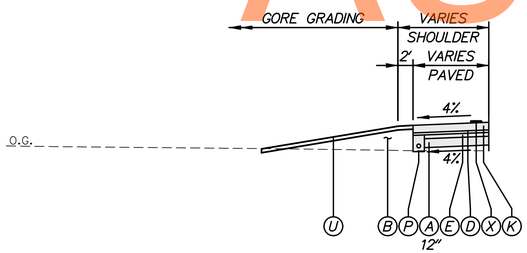
US 301 NORMAL BMP SECTION

STA. 713+98 TO STA. 719+44, RT., BMP NO. 720 - SEE SHEET SW-01
STA. 803+00 TO STA. 806+08, LT., BMP NO. 733 - SEE SHEET SW-22
STA. 834+33 TO STA. 837+50, LT., BMP NO. 737 - SEE SHEET SW-30



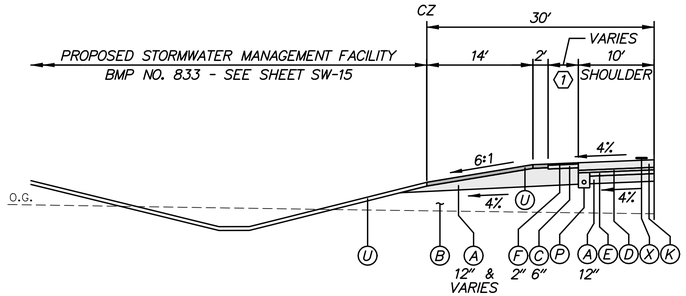
US 301 NORMAL FILL SECTION
WITH DIVERSION DITCH; WITHOUT FILL SLOPE

STA. 799+33 TO STA. 801+00, LT.



US 301 NORMAL GORE AREA

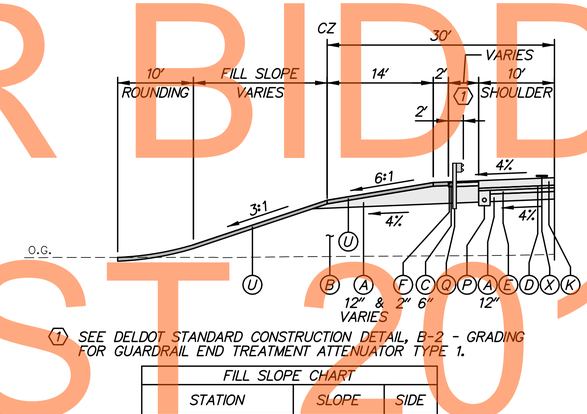
STA. 777+68 TO STA. 780+13, RT. - SEE SHEET DT-20
STA. 778+80 TO STA. 780+13, LT. - SEE SHEET DT-20



1 SEE DELDOT STANDARD CONSTRUCTION DETAIL, B-2 - GRADING FOR GUARDRAIL END TREATMENT ATTENUATOR TYPE 1.

US 301 NORMAL FILL SECTION
BMP NO. 737 WITH MAINTENANCE PAVING

STA. 833+93 TO STA. 834+33, LT.



1 SEE DELDOT STANDARD CONSTRUCTION DETAIL, B-2 - GRADING FOR GUARDRAIL END TREATMENT ATTENUATOR TYPE 1.

FILL SLOPE CHART		
STATION	SLOPE	SIDE
831+10 TO 831+15	2:1	LEFT
831+15 TO 831+35	2:1 TO 3:1	LEFT
833+71 TO 833+93	2:1	LEFT

US 301 NORMAL FILL SECTION
WITH GUARDRAIL; WITHOUT DITCH

STA. 831+10 TO STA. 831+50, LT.
STA. 833+71 TO STA. 833+93, LT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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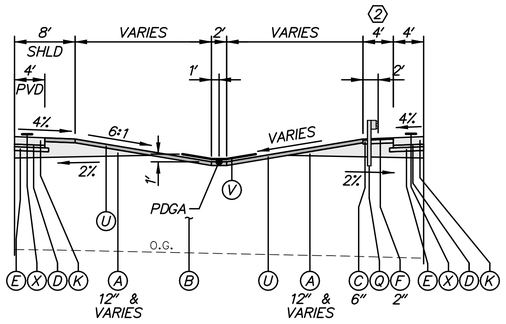
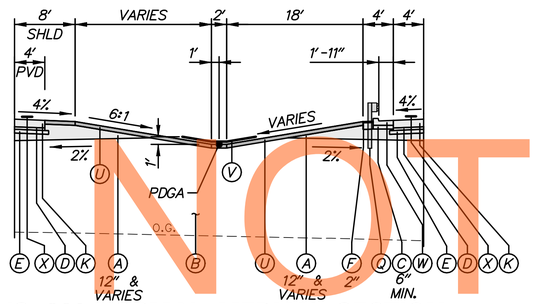
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: JAD / CHECKED BY: BRT	TYPICAL SECTIONS	TS-04 / SHEET NO. 20 / TOTAL SHTS. 875



2 TRANSITION WIDTH FROM 5.50' AT STA. 804+50 TO 4.00' AT STA. 804+96.

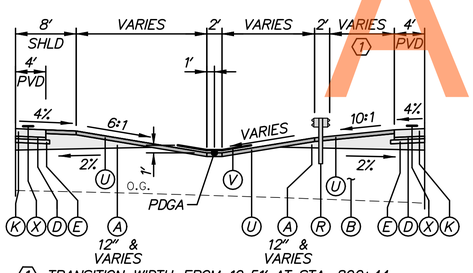
US 301 NORMAL MEDIAN SECTION WITH GUARDRAIL

STA. 804+50 TO STA. 805+15, MEDIAN



US 301 NORMAL MEDIAN SECTION WITH CURB AND GUTTER

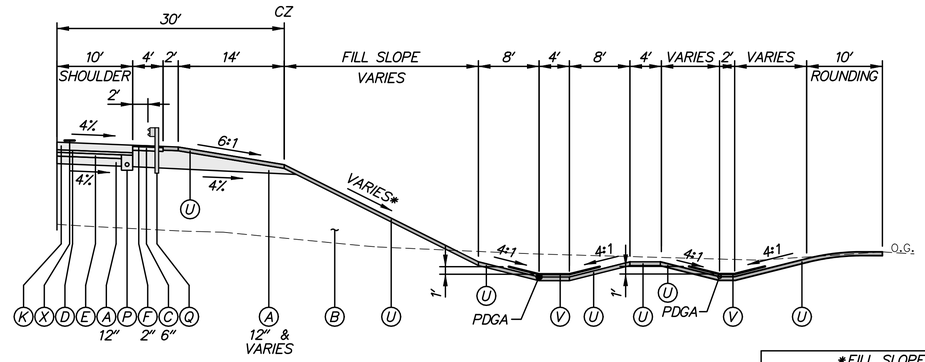
STA. 805+15 TO STA. 805+22, MEDIAN



1 TRANSITION WIDTH FROM 10.51' AT STA. 802+44 TO 3.50' AT STA. 804+50.

US 301 NORMAL MEDIAN SECTION WITH GUARDRAIL TYPE 3-31

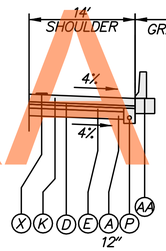
STA. 802+44 TO STA. 804+50, MEDIAN



US 301 NORMAL FILL SECTION WITH GUARDRAIL AND DIVERSION DITCH

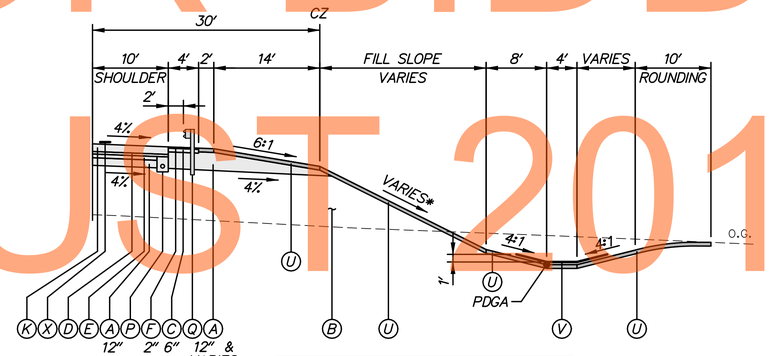
STA. 801+81 TO STA. 802+75, RT.

*FILL SLOPE CHART		
STATION	SLOPE	SIDE
801+50 TO 802+00	3:1 TO 2:1	RIGHT
802+00 TO 802+75	2:1	RIGHT



US 301 NORMAL SECTION AT BRIDGE BR1-460A ABUTMENT

STA. 769+11 TO STA. 769+77, RT.
STA. 769+21 TO STA. 769+86, LT.



*FILL SLOPE CHART		
STATION	SLOPE	SIDE
831+50 TO 832+90	3:1	LEFT
832+90 TO 833+15	3:1 TO 2:1	LEFT
833+15 TO 833+71	2:1	LEFT
765+82 TO 768+47	6:1	RIGHT

US 301 NORMAL FILL SECTION WITH GUARDRAIL

STA. 765+82 TO STA. 768+47, RT.
STA. 803+35 TO STA. 804+46, RT.
STA. 831+50 TO STA. 833+71, LT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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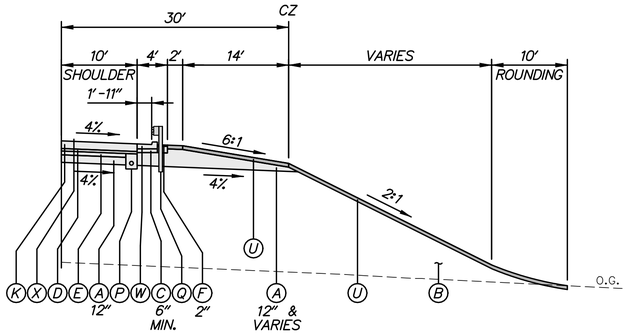
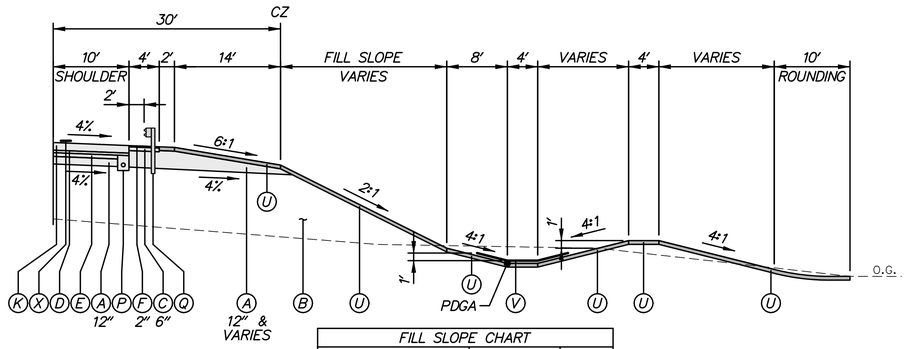
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-05
				COUNTY NEW CASTLE	DESIGNED BY: JAD		SHEET NO. 21
					CHECKED BY: BRT		TOTAL SHTS. 875



US 301 NORMAL FILL SECTION
WITH CURB AND GUTTER; WITHOUT DITCH

STA. 805+08 TO STA. 805+22, RT.



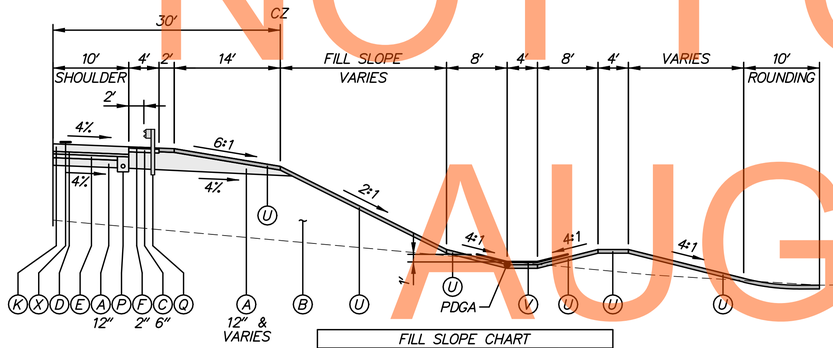
FILL SLOPE CHART		
STATION	SLOPE	SIDE
836+00 TO 837+00	3:1	RIGHT
837+00 TO 837+25	3:1 TO 4:1	RIGHT
837+25 TO 837+50	4:1	RIGHT

US 301 NORMAL FILL SECTION
WITH GUARDRAIL AND BERM 1' ABOVE EXISTING GROUND

STA. 836+00 TO STA. 837+50, RT.

LEGEND

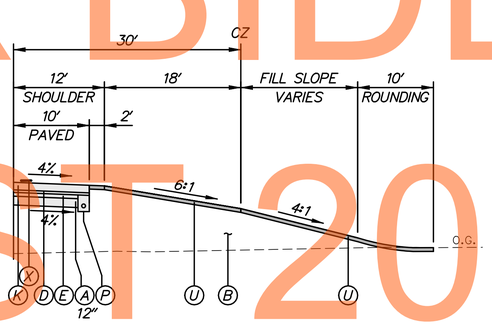
- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2



FILL SLOPE CHART		
STATION	SLOPE	SIDE
836+00 TO 837+00	3:1	RIGHT
837+00 TO 837+25	3:1 TO 4:1	RIGHT
837+25 TO 837+50	4:1	RIGHT

US 301 NORMAL FILL SECTION
WITH BERM AND GUARDRAIL

STA. 802+75 TO STA. 803+35, RT.
STA. 804+46 TO STA. 805+08, RT.



FILL SLOPE CHART		
STATION	SLOPE	SIDE
830+89 TO 831+14	3:1 TO 4:1	RIGHT
835+66 TO 836+00	3:1	RIGHT

US 301 NORMAL FILL SECTION
WITHOUT DITCH AND GUARDRAIL

STA. 831+10 TO STA. 831+50, RT.
STA. 835+66 TO STA. 836+00, RT.

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

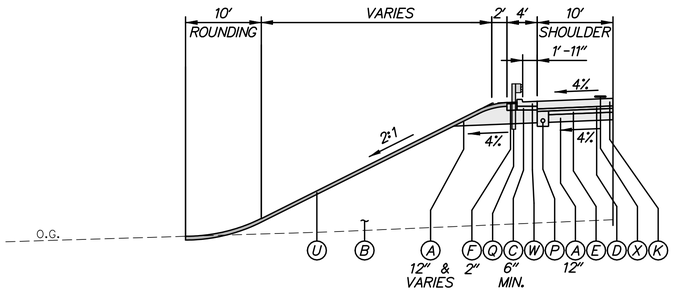
NOT TO SCALE

US 301,
SR 896 TO SR 1

CONTRACT	T200911308
COUNTY	NEW CASTLE
BRIDGE NO.	
DESIGNED BY: JAD	
CHECKED BY: BRT	

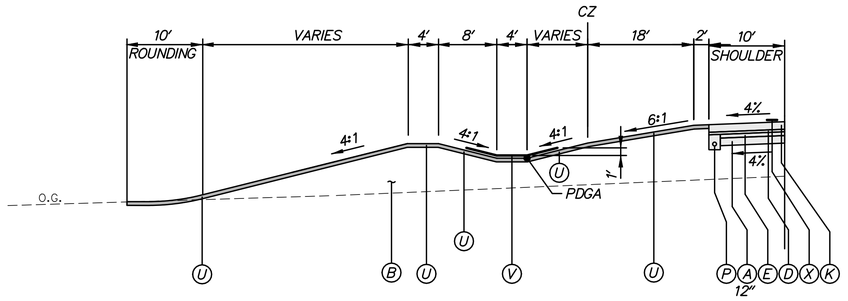
TYPICAL SECTIONS

TS-06	
SHEET NO.	22
TOTAL SHTS.	875



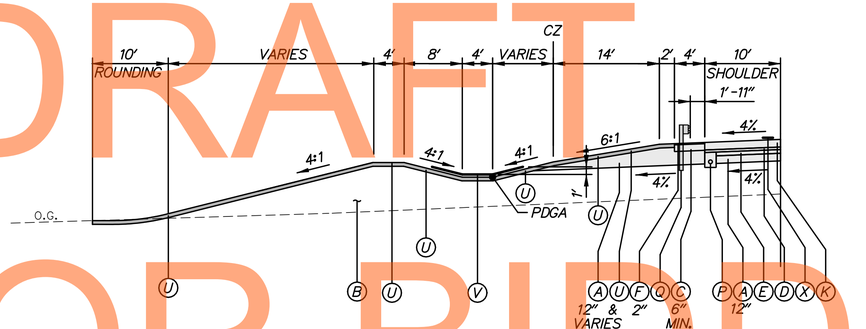
US 301 SUPERELEVATED FILL SECTION WITH CURB AND GUTTER; WITHOUT DITCH

STA. 694+00 TO STA. 696+85, LT.
STA. 694+50 TO STA. 699+25, RT.



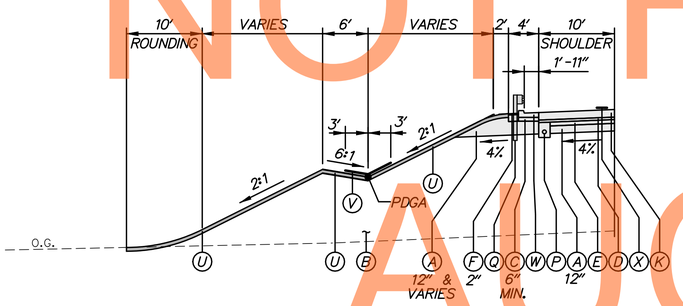
US 301 SUPERELEVATED FILL SECTION WITHOUT CURB AND GUTTER; WITH MID-FILL DITCH

STA. 699+89 TO STA. 709+00, LT.
STA. 699+37.50 TO STA. 709+00, RT.



US 301 SUPERELEVATED FILL SECTION WITH GUARDRAIL; WITH MID-FILL DITCH

STA. 696+85 TO STA. 699+89, LT.
STA. 699+25 TO STA. 709+00, RT.



US 301 SUPERELEVATED FILL SECTION WITH CURB AND GUTTER AND HIGH FILL BENCH

STA. 692+32 TO STA. 694+50, RT.
STA. 692+32 TO STA. 694+00, LT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (EE) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (FF) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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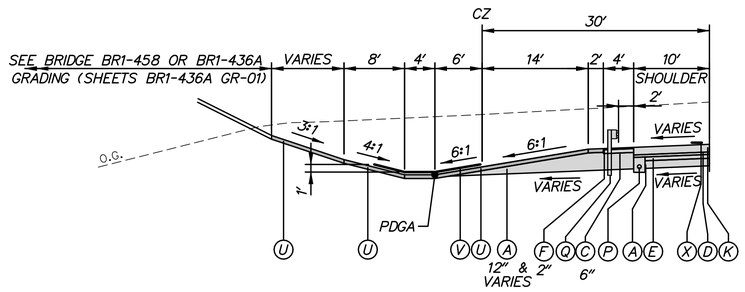
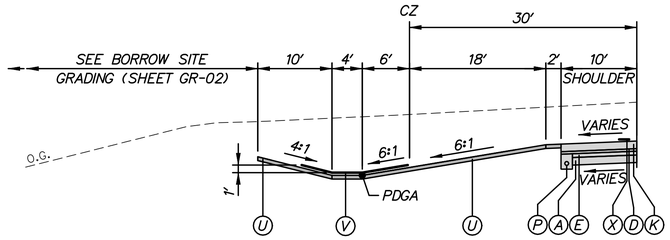
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: JAD / CHECKED BY: BRT	TYPICAL SECTIONS	TS-07 / SHEET NO. 23 / TOTAL SHTS. 875



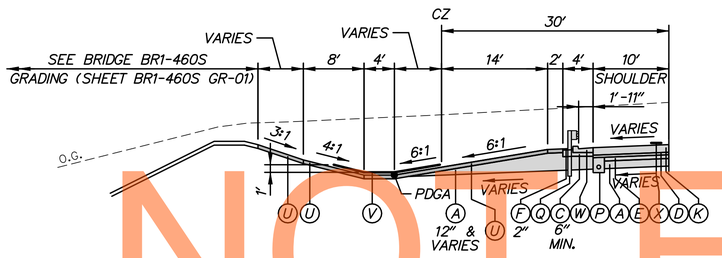
US 301 SUPERELEVATED SECTION WITH DITCH AND GUARDRAIL

STA. 811+53 TO STA. 813+12, LT.



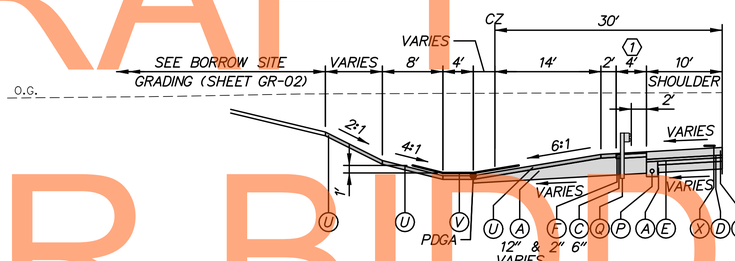
US 301 SUPERELEVATED CUT SECTION AT BORROW SITE; WITHOUT GUARDRAIL

STA. 819+17 TO STA. 820+31, LT.



US 301 SUPERELEVATED SECTION, WITH BERM AND CURB AND GUTTER

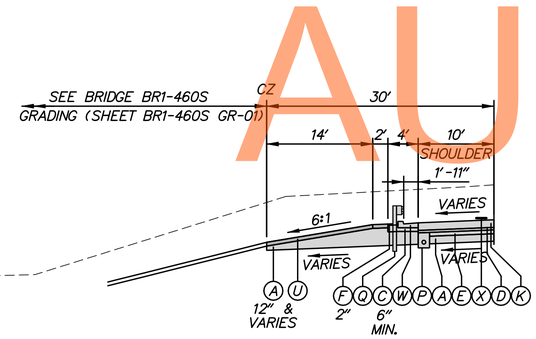
STA. 811+50 TO STA. 811+53, LT.



1. SEE DELDOT STANDARD CONSTRUCTION DETAIL, B-2 - GRADING FOR GUARDRAIL END TREATMENT ATTENUATOR TYPE 1.

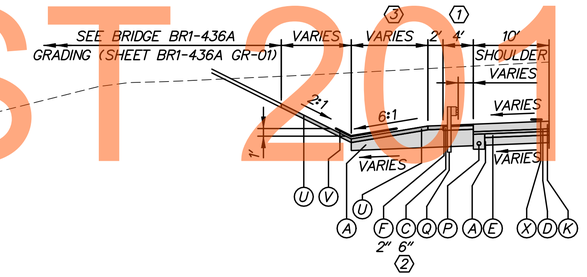
US 301 SUPERELEVATED CUT SECTION WITH GUARDRAIL AT BORROW SITE

STA. 816+50 TO STA. 819+17, LT.



US 301 SUPERELEVATED SECTION WITH CURB AND GUTTER; WITHOUT DITCH

STA. 810+86 TO STA. 811+50, LT.



1. TRANSITION WIDTH FROM 4' AT STA. 814+43 TO 6' AT STA. 814+74. HOLD 6' WIDTH FROM STA. 814+74 TO STA. 815+63. TRANSITION WIDTH FROM 6' AT STA. 815+63 TO 4' AT STA. 815+93.
2. DEPTH 10" STA. 814+43 TO STA. 815+93.
3. WIDTH 0' STA. 813+70 TO STA. 815+97.

US 301 SUPERELEVATED SECTION WITH GUARDRAIL AT BR1-436A MSE WALL/ABUTMENT

STA. 813+12 TO STA. 816+50, LT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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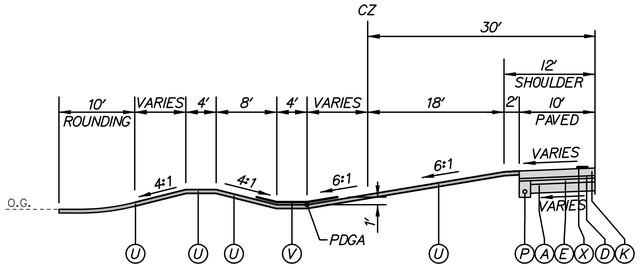
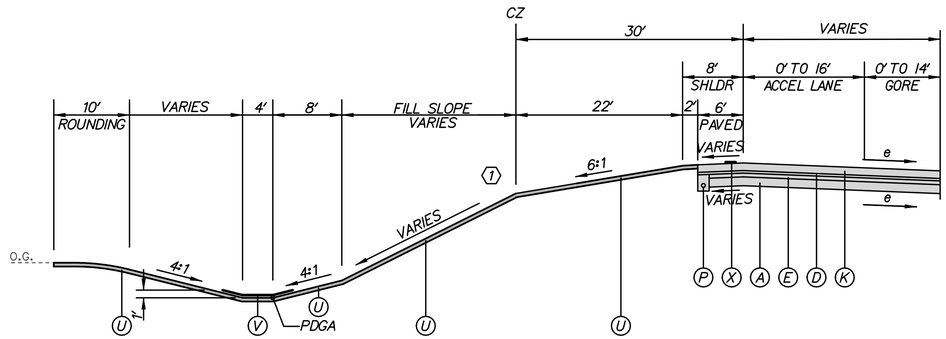
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-08
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 24
					CHECKED BY: TAO		TOTAL SHTS. 875



US 301 SUPERELEVATED CUT SECTION WITH BERM

STA. 709+00 TO 712+50, LT.

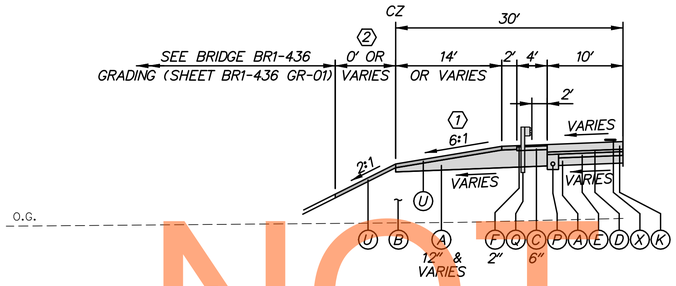


FILL SLOPE CHART		
STATION	SLOPE	SIDE
737+86 TO 749+50	4:1	LEFT
749+50 TO 750+00	4:1 TO 3:1	LEFT

1 FROM STA. 750+00 TO STA. 753+04 SEE BMP GRADING DETAIL SHEET SW-14

US 301 SUPERELEVATED ACCEL LANE

STA. 737+86 TO STA. 753+04, LT.

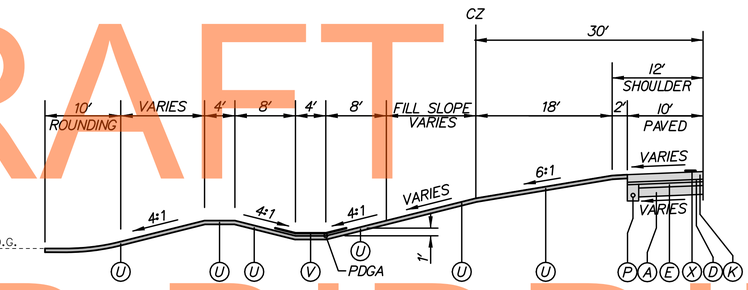


1 SLOPE 4% STA. 830+35 TO STA. 831+10.

2 WIDTH VARIES STA. 830+71 TO STA. 831+10.

US 301 SUPERELEVATED SECTION AT BRIDGE BR1–436

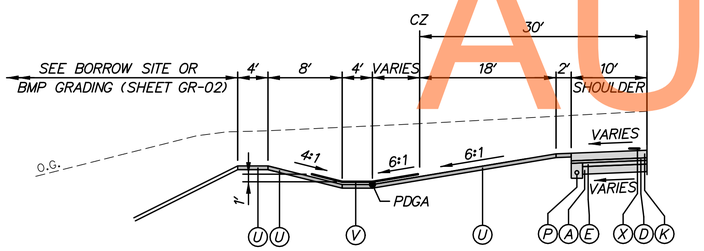
STA. 829+75 TO STA. 831+10, LT.



FILL SLOPE CHART		
STATION	SLOPE	SIDE
709+00 TO 712+50	6:1	RIGHT
735+00 TO 735+80	4:1	LEFT

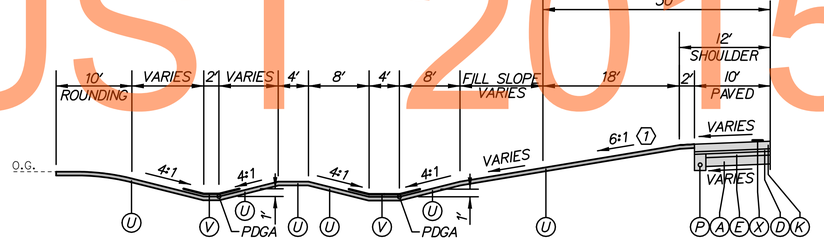
US 301 SUPERELEVATED FILL SECTION WITH BERM

STA. 709+00 TO STA. 712+50, RT.
STA. 735+00 TO STA. 735+80, LT.



US 301 SUPERELEVATED SECTION WITH BERM AT BORROW SITE; WITHOUT GUARDRAIL

STA. 820+31 TO STA. 824+05, LT. BORROW SITE - SEE SHEET GR-02.
STA. 824+05 TO STA. 826+46, LT. BMP NO. 734 - SEE SHEET SW-26.



FILL SLOPE CHART		
STATION	SLOPE	SIDE
712+50 TO 713+98	4:1	LEFT
719+44 TO 728+00	4:1	LEFT
728+00 TO 728+25	4:1 TO 3:1	LEFT
728+25 TO 734+50	3:1	LEFT
734+50 TO 735+00	3:1 TO 4:1	LEFT
730+50 TO 735+00	4:1	RIGHT
740+50 TO 745+30	6:1	RIGHT

US 301 SUPERELEVATED SECTION WITH DIVERSION DITCH

STA. 712+50 TO STA. 713+98, LT.
STA. 719+44 TO STA. 735+00, LT.
STA. 730+50 TO STA. 735+00, RT,
STA. 740+50 TO STA. 745+30, RT.

1 STA. 726+00 TO STA. 726+25, LT., SLOPE VARIES FROM 6:1 TO 7:1.
STA. 728+25 TO STA. 728+50, LT., SLOPE VARIES FROM 7:1 TO 8:1.
STA. 729+00 TO STA. 729+50, LT., SLOPE VARIES FROM 8:1 TO 6:1.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

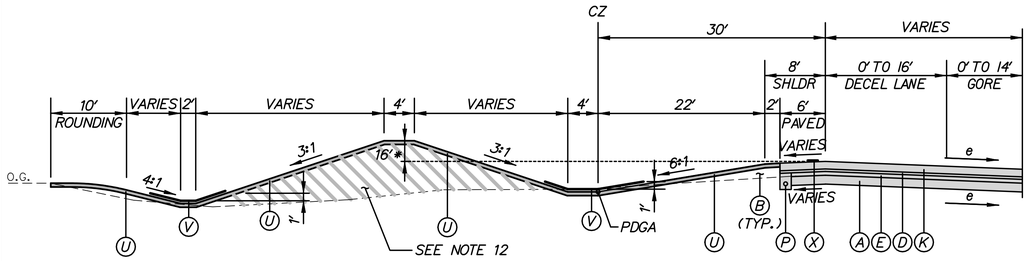
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: KGMA	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

TYPICAL SECTIONS

TS-09

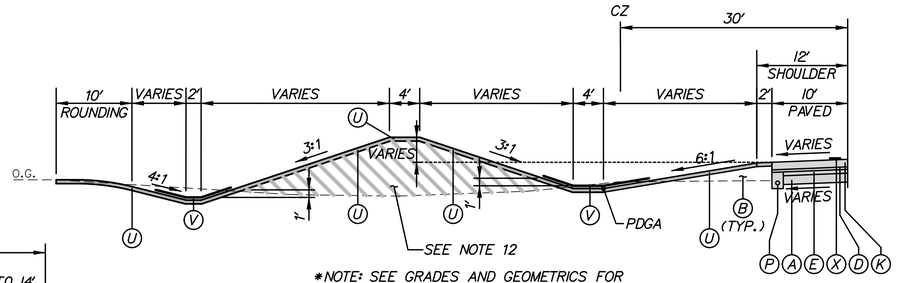
SHEET NO.
25
TOTAL SHTS.
875



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

US 301 SUPERELEVATED DECEL LANE

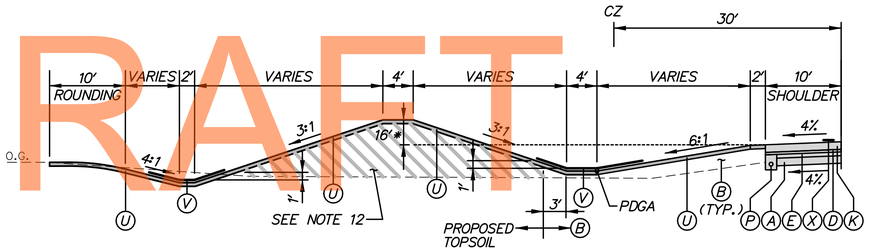
STA. 786+12 TO STA. 786+58, LT.
STA. 790+06 TO STA. 794+61, LT.



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

US 301 SUPERELEVATED FILL SECTION WITH BERM

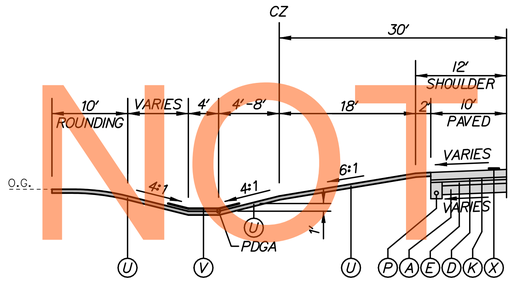
STA. 799+00 TO STA. 800+00, LT.



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

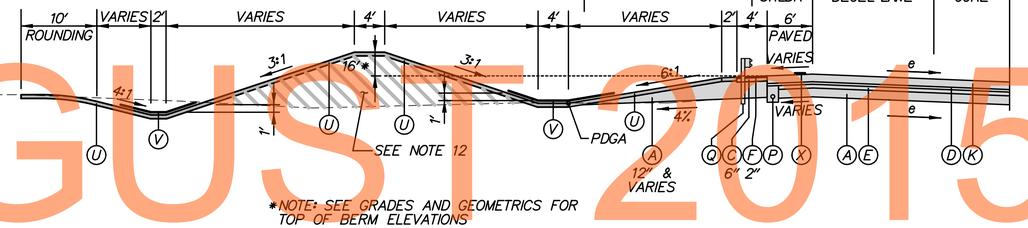
US 301 SUPERELEVATED SECTION WITH 3:1 BERM

STA. 794+61 TO STA. 799+00. LT.



US 301 SUPERELEVATED SECTION

STA. 757+25 TO STA. 760+90, LT.



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

US 301 SUPERELEVATED SECTION DECEL LANE WITH 3:1 BERM AND GUARDRAIL

STA. 786+58 TO STA. 790+06, LT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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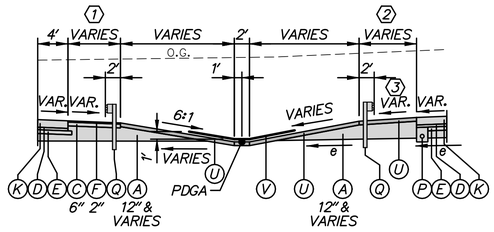
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-10
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 26
					CHECKED BY: TAO		TOTAL SHTS. 875



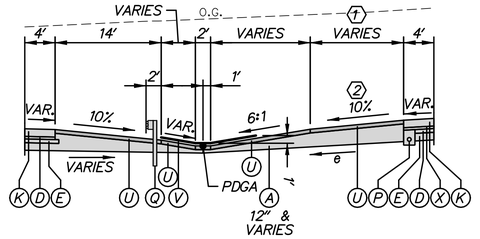
(1) WIDTH VARIES 6.74' TO 7.2' STA. 811+94 TO STA. 812+08.

(2) WIDTH VARIES 7.2' TO 8.12' STA. 811+94 TO STA. 812+08.

(2) TRANSITION SLOPE 4% TO 10% STA. 811+94 TO STA. 812+08.

US 301 SUPERELEVATED MEDIAN SECTION WITH GUARDRAIL, WITHOUT RIGHT MAINTENANCE PAVEMENT

STA. 811+94 TO STA. 812+08, MEDIAN

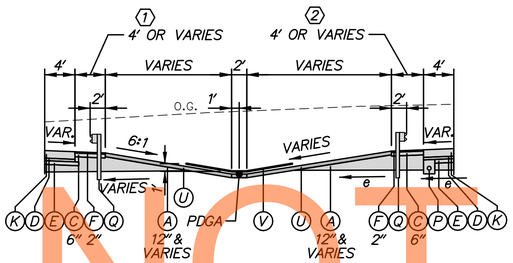


(1) WIDTH VARIES 12.51' TO 9.81' STA. 816+98 TO STA. 817+30.

(2) TRANSITION SLOPE 9.79% AT STA. 816+98 TO 8.66% AT STA. 817+30.

US 301 SUPERELEVATED MEDIAN SECTION WITH GUARDRAIL LEFT

STA. 816+98 TO STA. 817+30, MEDIAN

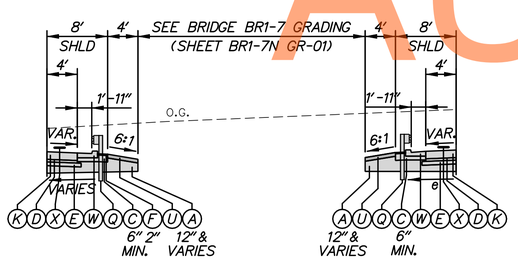


(1) WIDTH VARIES 4' TO 6.74' STA. 811+12 TO STA. 811+94.

(2) WIDTH VARIES 4' TO 7.2' STA. 810+98 TO STA. 811+94.

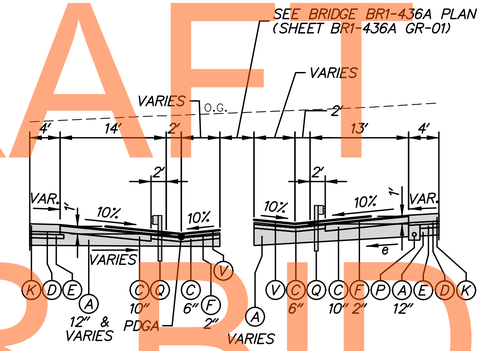
US 301 SUPERELEVATED MEDIAN SECTION WITH GUARDRAIL

STA. 810+92 TO STA. 811+94, MEDIAN



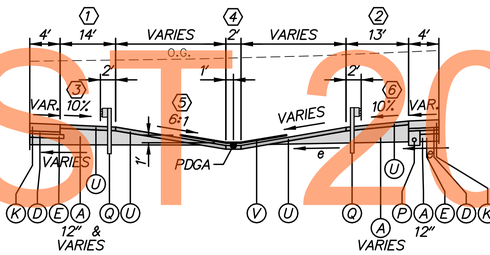
US 301 SUPERELEVATED MEDIAN SECTION WITH CURB AND GUTTER AT BR 1-7

STA. 810+86 TO STA. 810+92, MEDIAN



US 301 SUPERELEVATED MEDIAN SECTION WITH GUARDRAIL AT BR1-436A PIER

STA. 815+93 TO STA. 816+67, MEDIAN



(1) WIDTH VARIES 7.2' TO 14' STA. 812+08 TO STA. 813+10.

(2) WIDTH VARIES 8.12' TO 13' STA. 812+08 TO STA. 812+81.
WIDTH VARIES 13' TO 12.51' STA. 816+91 TO STA. 816+98.

(3) TRANSITION SLOPE 4% AT STA. 812+08 TO 10% AT STA. 812+28.

(4) WIDTH 0' STA. 816+67 TO STA. 816+87.

(5) TRANSITION SLOPE 10% AT STA. 816+67 TO 6:1 AT STA. 816+87.

(6) TRANSITION SLOPE 10% AT STA. 816+92 TO 9.79% AT STA. 816+98.

US 301 SUPERELEVATED MEDIAN SECTION WITH GUARDRAIL, WITHOUT MAINTENANCE PAVEMENT

STA. 812+08 TO STA. 815+93, MEDIAN
STA. 816+67 TO STA. 816+98, MEDIAN

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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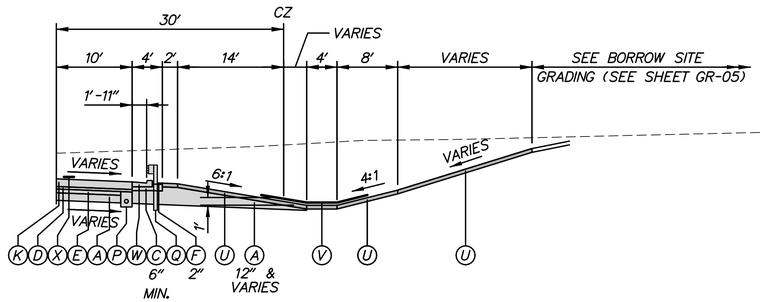
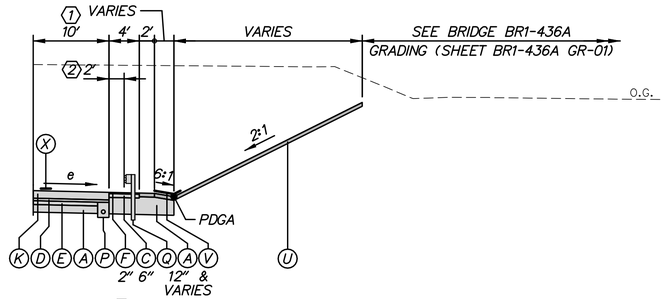
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-11
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 27
					CHECKED BY: TAO		TOTAL SHTS. 875



US 301 SUPERELEVATED CUT SECTION WITH CURB AND GUTTER

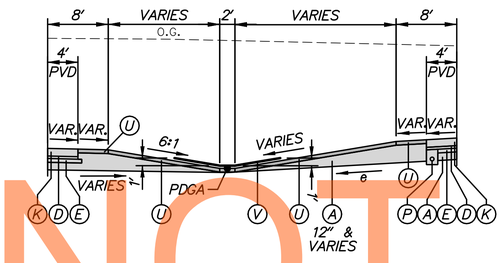
STA. 810+24 TO STA. 810+45, RT.



1. HOLD 14' WIDTH FROM STA. 817+77 TO STA. 818+01.
   TRANSITION WIDTH FROM 14' AT STA. 818+01 TO 10' AT STA. 818+30.
2. HOLD 0' WIDTH FROM STA. 817+77 TO STA. 818+01.
   TRANSITION WIDTH FROM 0' AT STA. 817+77 TO 2' AT STA. 818+30.

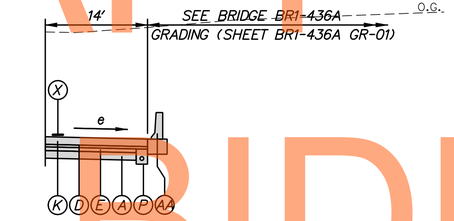
US 301 SUPERELEVATED SECTION AT BRIDGE BR1-436A WINGWALL

STA. 817+77 TO STA. 818+50, RT.



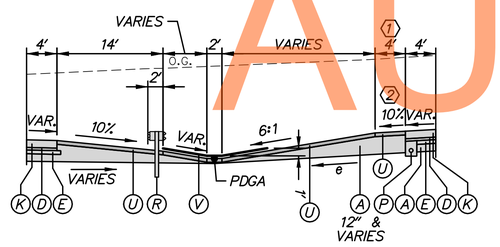
US 301 SUPERELEVATED MEDIAN SECTION WITHOUT GUARDRAIL

STA. 819+22 TO STA. 831+10, MEDIAN



US 301 SUPERELEVATED SECTION AT BRIDGE BR1-436A ABUTMENT

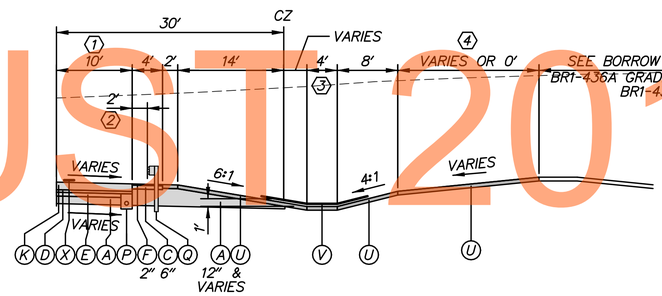
STA. 816+87 TO STA. 817+77, RT.



1. WIDTH VARIES 9.81' TO 4' STA. 817+30 TO STA. 817+99.
2. TRANSITION SLOPE 8.66% AT STA. 817+30 TO 5.70% AT STA. 818+13.

US 301 NORMAL SUPERELEVATED SECTION WITH GUARDRAIL TYPE 3-31

STA. 817+30 TO STA. 819+22, MEDIAN



1. TRANSITION WIDTH FROM 10' AT STA. 816+32 TO 14' AT STA. 816+62.
   HOLD 14' WIDTH FROM STA. 816+62 TO STA. 816+87.
2. TRANSITION WIDTH FROM 2' AT STA. 816+32 TO 0' AT STA. 816+62.
   HOLD 0' WIDTH FROM STA. 816+62 TO STA. 816+87.
3. HOLD 0' WIDTH FROM STA. 816+00 TO STA. 816+87.
4. HOLD 0' WIDTH FROM STA. 810+45 TO STA. 810+69.

US 301 SUPERELEVATED CUT SECTION WITH GUARDRAIL AT BORROW SITE

STA. 810+45 TO STA. 816+87, RT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

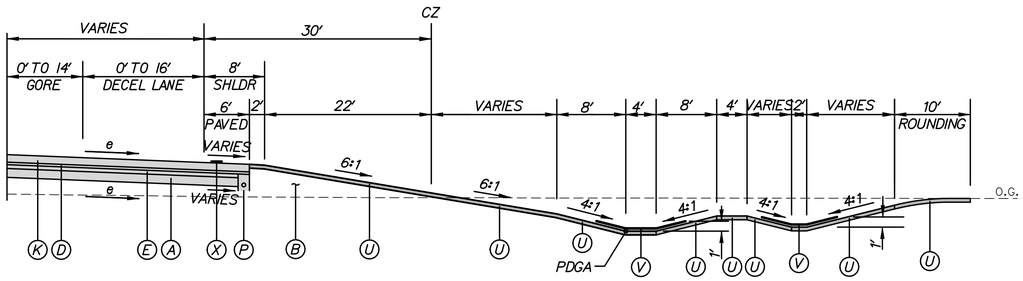
US 301, SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: KGMA	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

TYPICAL SECTIONS

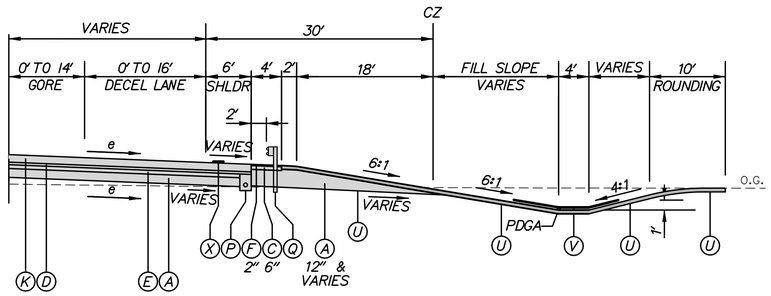
TS-12

SHEET NO.	TOTAL SHTS.
28	875



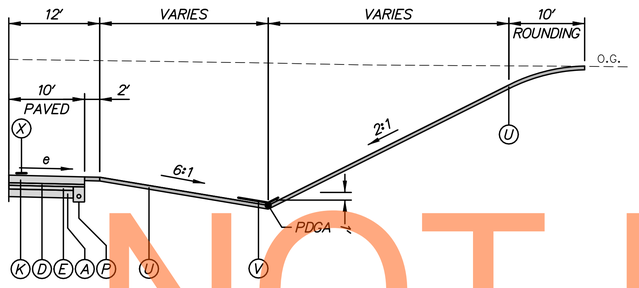
US 301 SUPERELEVATED FILL SECTION WITH DECEL LANE AND DIVERSION DITCH

STA. 745+30 TO STA. 745+70, RT.



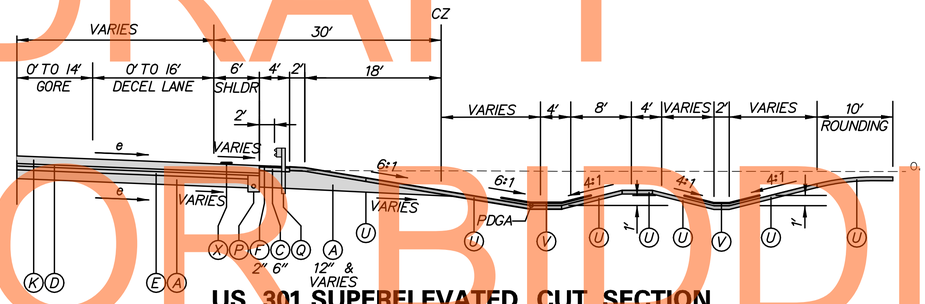
US 301 SUPERELEVATED FILL SECTION WITH DECEL LANE

STA. 747+12 TO STA. 748+50, RT.



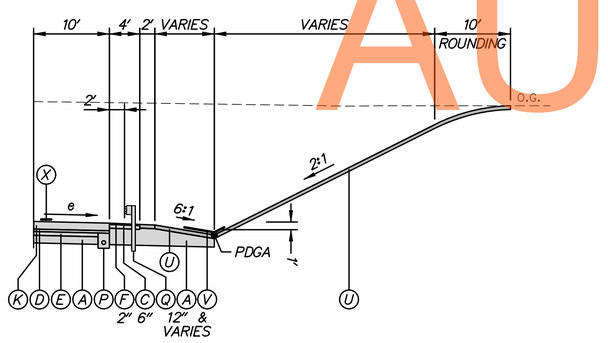
US 301 SUPERELEVATED CUT SECTION WITH V DITCH; WITHOUT GUARDRAIL

STA. 818+73 TO STA. 819+00, RT.



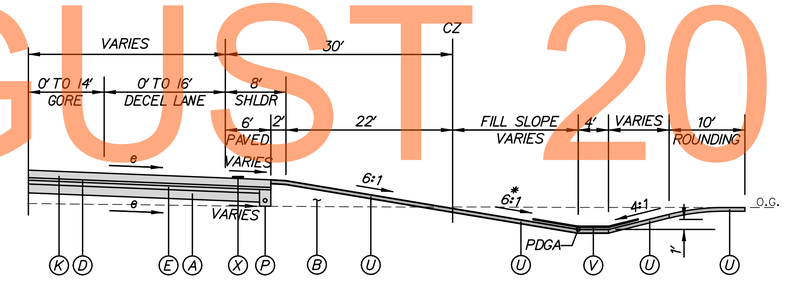
US 301 SUPERELEVATED CUT SECTION WITH DECEL LANE GUARDRAIL AND DIVERSION DITCH

STA. 748+50 TO STA. 749+92, RT.



US 301 SUPERELEVATED CUT SECTION WITH V DITCH AND GUARDRAIL

STA. 818+50 TO STA. 818+73, RT.



FILL SLOPE CHART		
STATION	SLOPE	SIDE
745+70 TO 747+12	6:1	RIGHT
753+78 TO 754+31	4:1	RIGHT

US 301 SUPERELEVATED FILL SECTION WITH DECEL LANE

STA. 745+70 TO STA. 747+12, RT.
STA. 753+78 TO STA. 754+31, RT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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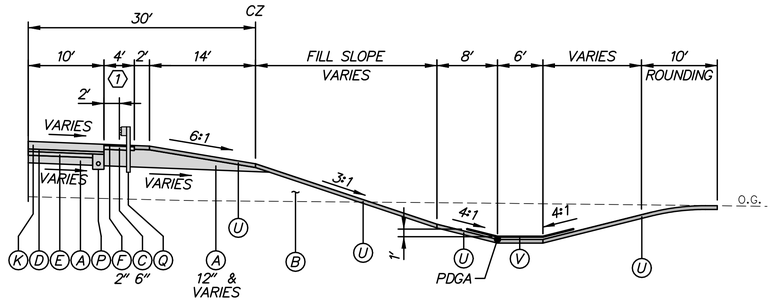
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308 / COUNTY NEW CASTLE	BRIDGE NO. / DESIGNED BY: KGMA / CHECKED BY: TAO	TYPICAL SECTIONS	TS-13 / SHEET NO. 29 / TOTAL SHTS. 875

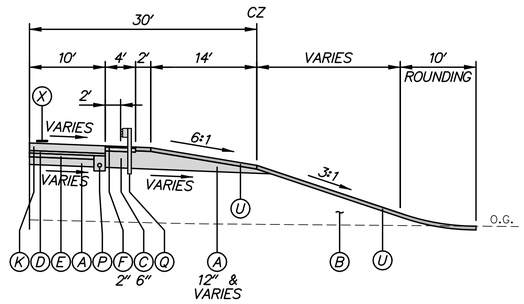


FILL SLOPE CHART		
STATION	SLOPE	SIDE
826+07 TO 826+95	4:1	RIGHT
826+95 TO 827+20	4:1 TO 3:1	RIGHT

(1) SEE DELDOT STANDARD CONSTRUCTION DETAIL, B-2 - GRADING FOR GUARDRAIL END TREATMENT ATTENUATOR TYPE 1.

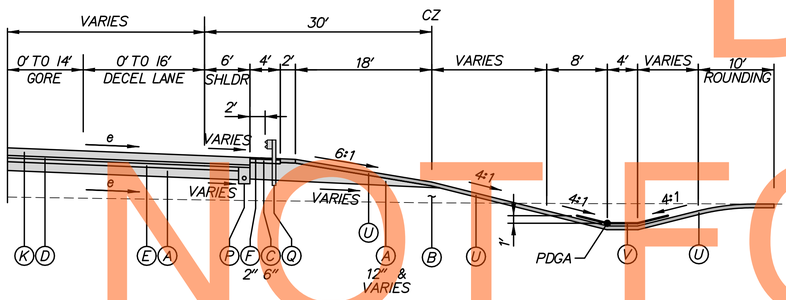
US 301 SUPERELEVATED FILL SECTION WITH GUARDRAIL

STA. 826+07 TO STA. 827+50, RT.



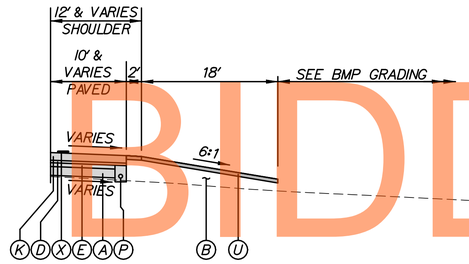
US 301 SUPERELEVATED FILL SECTION WITH GUARDRAIL; WITHOUT DITCH

STA. 827+50 TO STA. 829+13, RT.



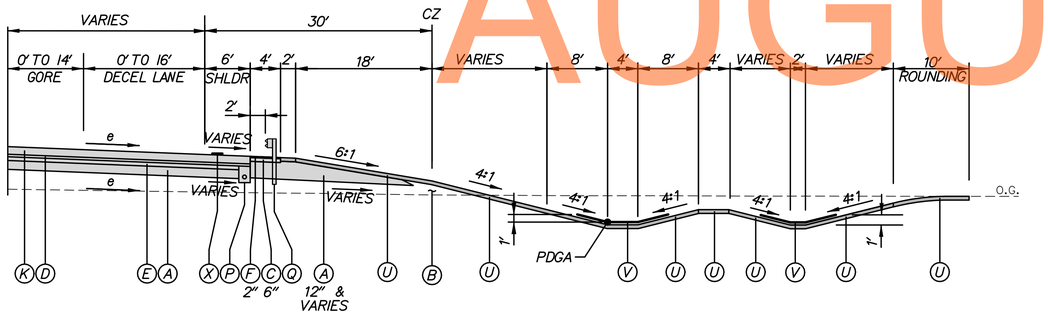
US 301 SUPERELEVATED FILL SECTION WITH DECEL LANE, GUARDRAIL AND DIVERSION DITCH

STA. 752+00 TO STA. 753+78, RT.



US 301 SUPERELEVATED BMP SECTION

STA. 712+50 TO STA. 713+98, RT. , BMP NO. 720
STA. 719+44 TO STA. 721+00, RT. , BMP NO. 720
STA. 726+50 TO STA. 730+50, RT. , BMP NO. 722
STA. 735+00 TO STA. 740+50, RT. , BMP NO. 723
STA. 826+46 TO STA. 829+75, LT. , BMP NO. 734



US 301 SUPERELEVATED FILL SECTION WITH DECEL LANE, GUARDRAIL AND DIVERSION & NORMAL DITCH

STA. 749+92 TO STA. 752+00, RT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

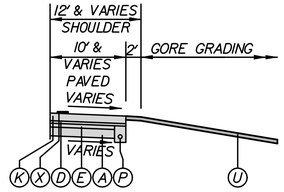
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: KGMA
NEW CASTLE	CHECKED BY: TAO

TYPICAL SECTIONS

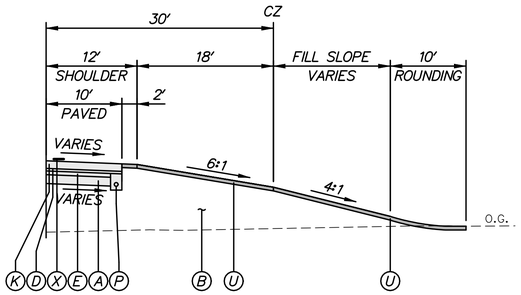
TS-14

SHEET NO.
30
TOTAL SHTS.
875



US 301 SUPERELEVATED GORE AREA

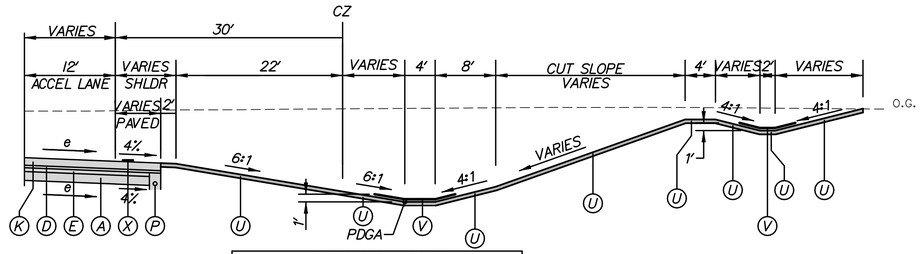
STA. 757+18 TO STA. 760+90, RT. - SEE SHEET DT-20
STA. 780+13 TO STA. 784+67, RT. - SEE SHEET DT-21
STA. 754+02 TO STA. 757+26, LT. - SEE SHEET DT-20
STA. 780+13 TO STA. 783+96, LT. - SEE SHEET DT-21



FILL SLOPE CHART		
STATION	SLOPE	SIDE
830+61 TO 830+89	3:1	RIGHT
830+89 TO 831+14	3:1 TO 4:1	RIGHT

US 301 SUPERELEVATED SECTION WITHOUT DITCH AND GUARDRAIL

STA. 830+61 TO STA. 831+10, RT.



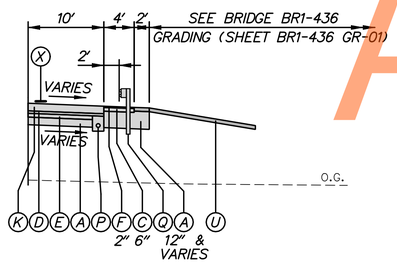
CUT SLOPE CHART		
STATION	SLOPE	SIDE
793+50 TO 796+50	3:1	RIGHT
796+50 TO 796+75	3:1 TO 4:1	RIGHT
796+75 TO 799+33	4:1	RIGHT

US 301 SUPERELEVATED CUT SECTION WITH ACCEL LANE AND DIVERSION DITCH

STA. 793+50 TO STA. 799+33, RT.

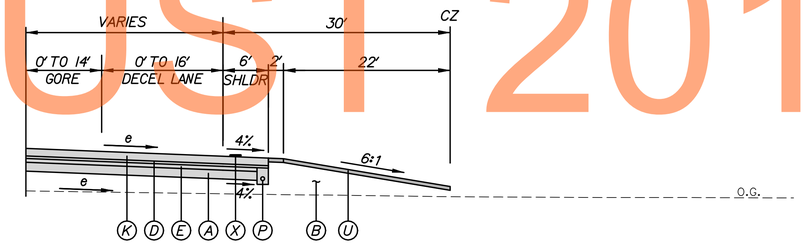
US 301 SUPERELEVATED CUT SECTION WITH ACCEL LANE

STA. 790+00 TO STA. 793+50, RT.



US 301 SUPERELEVATED SECTION AT BRIDGE BR1-436

STA. 829+13 TO STA. 830+61, RT.



US 301 SUPERELEVATED WITH ACCEL LANE AND BMP

STA. 785+96 TO STA. 790+00, RT.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

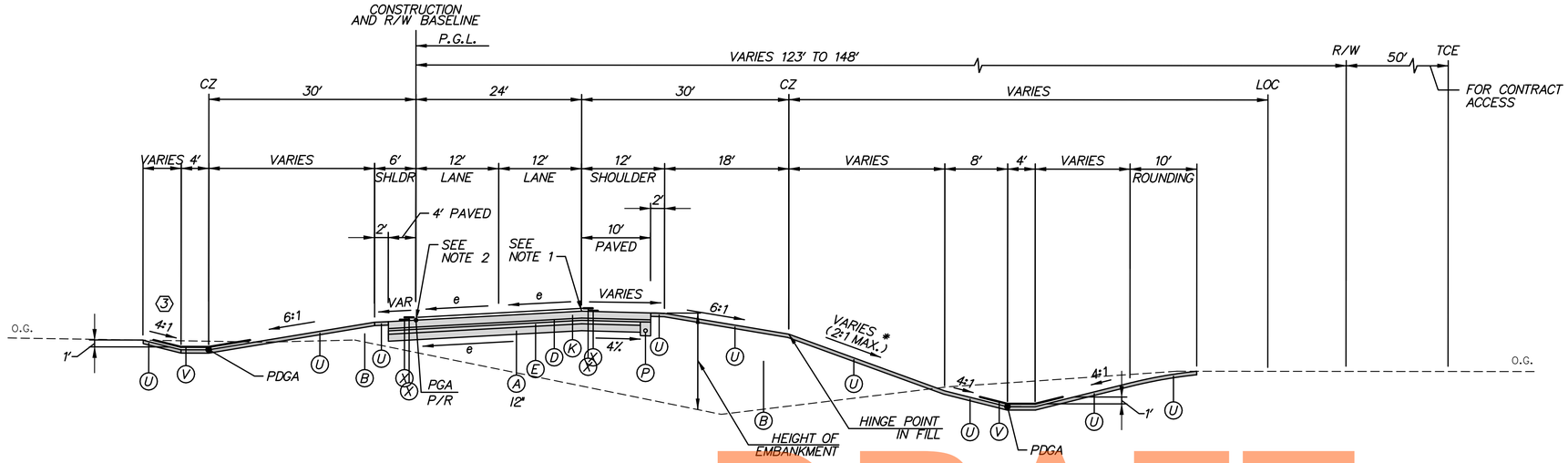
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: KGMA
NEW CASTLE	CHECKED BY: TAO

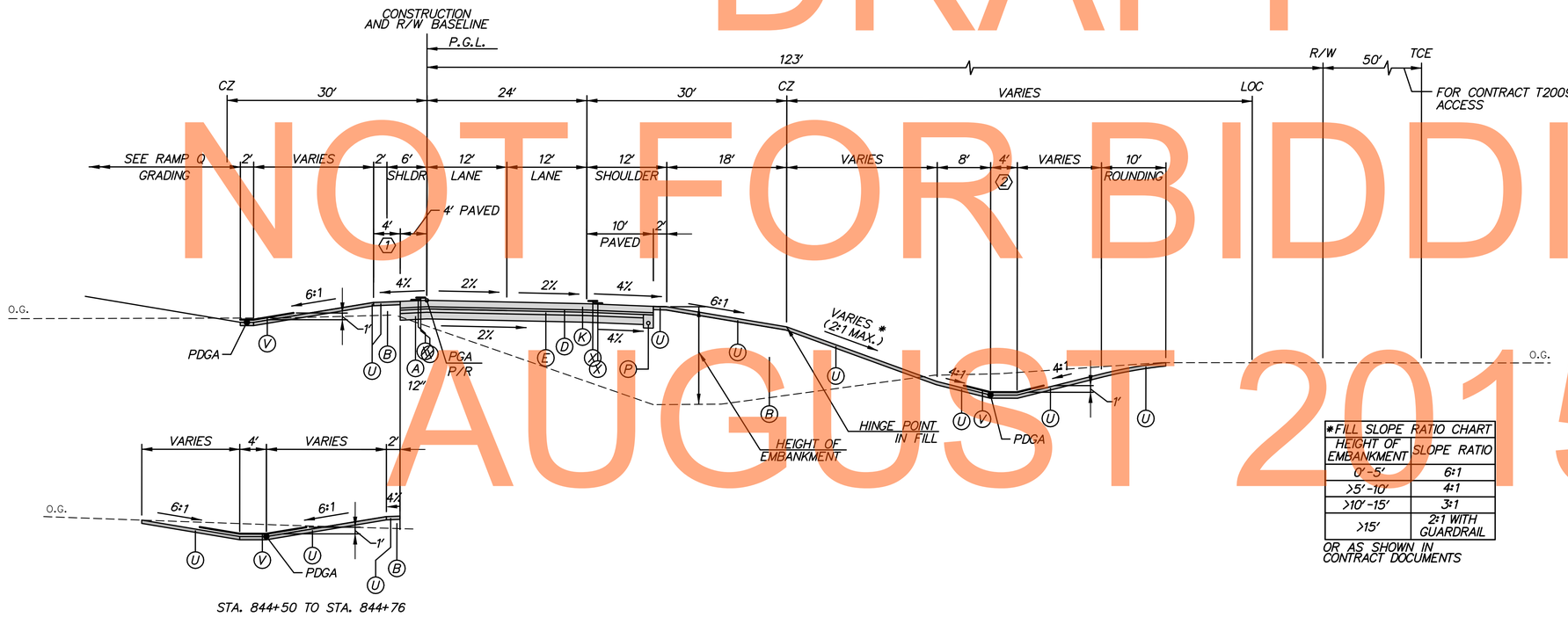
TYPICAL SECTIONS

TS-15

SHEET NO.	TOTAL SHTS.
31	875



US 301 NB RAMP SUPERELEVATED SECTION
STATION 844+76 TO STATION 848+00 ($e_{max.}$=5.6%)



STA. 844+50 TO STA. 844+76

US 301 NB RAMP NORMAL SECTION
STATION 837+50 TO STATION 844+76

1. VARY WIDTH 4' TO 2' STA. 841+38 TO STA. 841+88
   HOLD 2' WIDTH STA. 841+88 TO STA. 844+76
2. WIDTH 6' STA. 837+50 TO STA. 838+00
3. SLOPE 6:1 STA. 844+76 TO STA. 845+25
   VARY SLOPE 6:1 TO 4:1 STA. 845+25 TO STA. 845+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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

*FILL SLOPE RATIO CHART	
HEIGHT OF EMBANKMENT	SLOPE RATIO
0'-5'	6:1
>5'-10'	4:1
>10'-15'	3:1
>15'	2:1 WITH GUARDRAIL

OR AS SHOWN IN CONTRACT DOCUMENTS

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

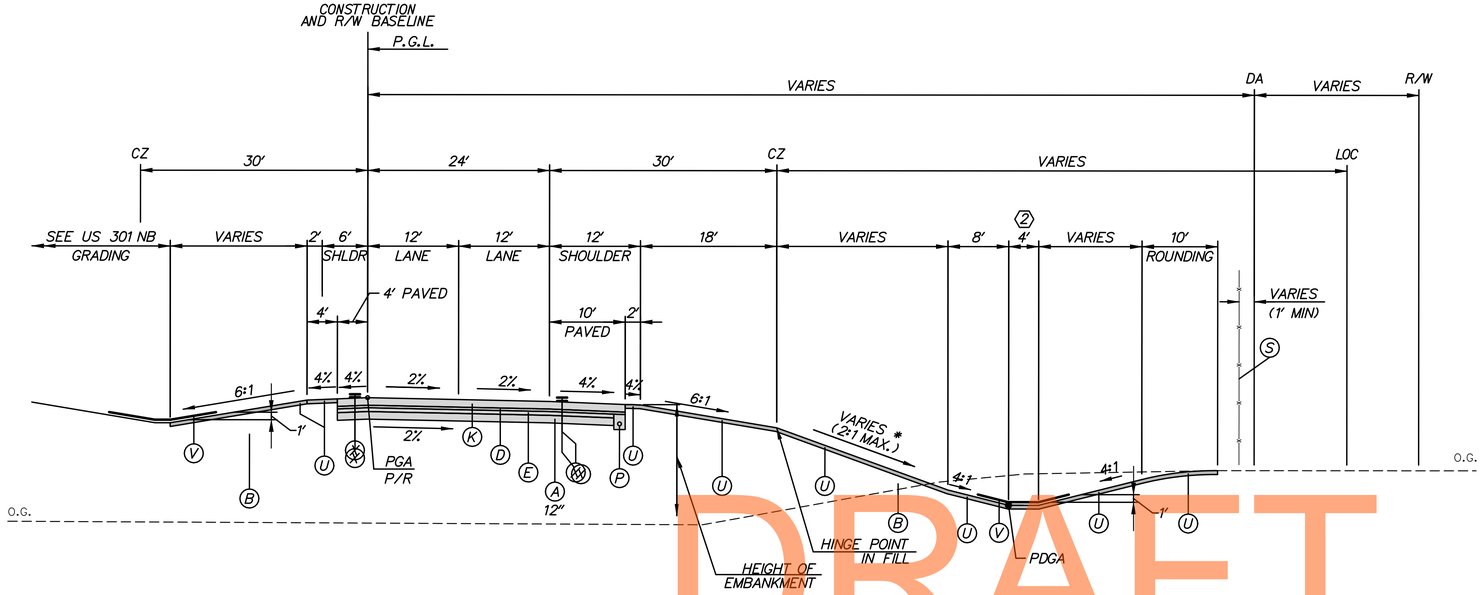
NOT TO SCALE

US 301,
SR 896 TO SR 1

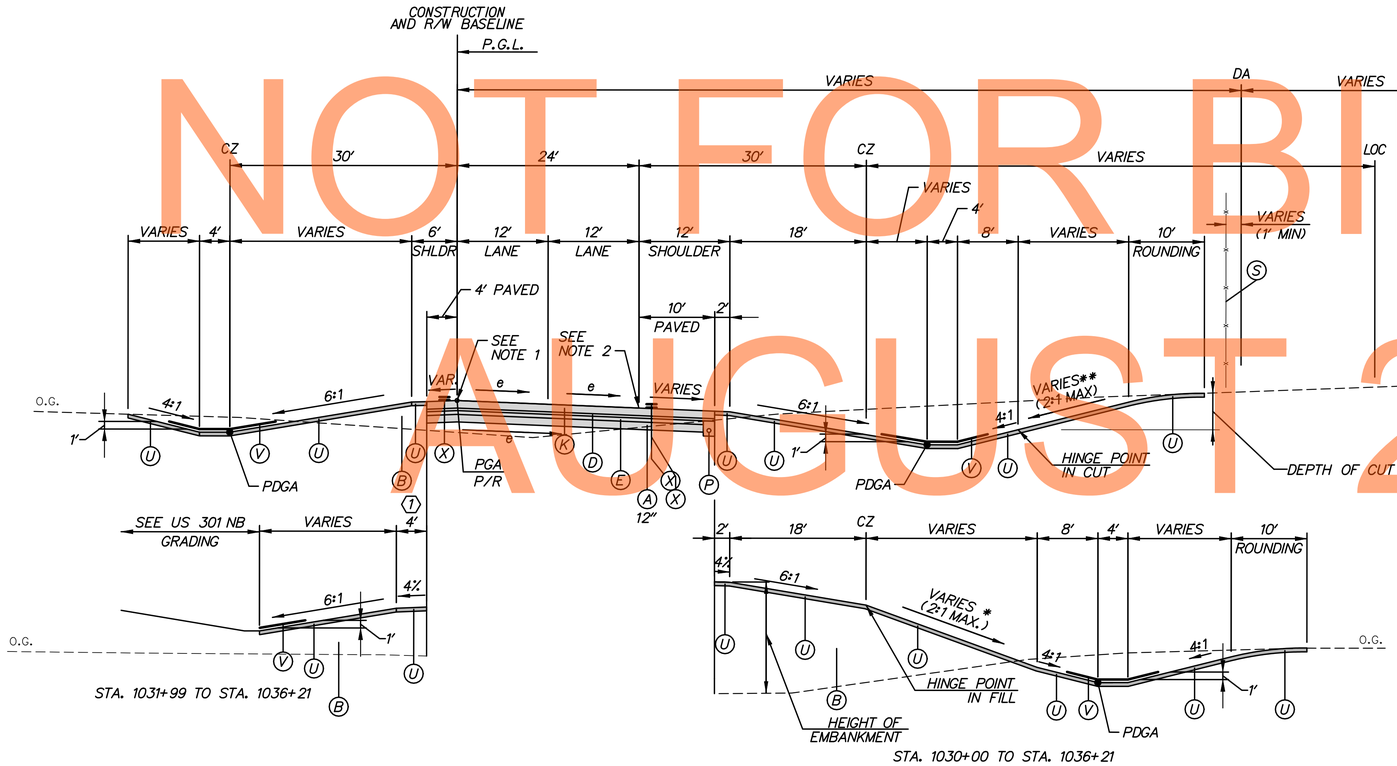
CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: S.E.S.	
COUNTY	CHECKED BY: B.R.T.	
NEW CASTLE		

TYPICAL SECTIONS

TS-16	
SHEET NO.	32
TOTAL SHTS.	875



RAMP Q NORMAL SECTION
STATION 1036+21 TO STATION 1038+95



RAMP Q SUPERELEVATED SECTION
STATION 1028+50 TO STATION 1036+21 ($e_{max.}$ = 5.8%)

**CUT SLOPE RATIO CHART	
SLOPE RATIO	DEPTH OF CUT
4:1	0'-5'
3:1	>5'-10'
2:1	>10'

*FILL SLOPE RATIO CHART	
SLOPE RATIO	HEIGHT OF EMBANKMENT
6:1	0'-5'
4:1	>5'-10'
3:1	>10'-15'
2:1 WITH GUARDRAIL	>15'

(1) WIDTH 2' STA. 1031+99 TO STA. 1034+00
VARY WIDTH 2' TO 4' STA. 1034+00 TO STA. 1035+07

(2) WIDTH 6' STA. 1037+50 TO STA. 1038+95

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
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   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
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9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
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12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

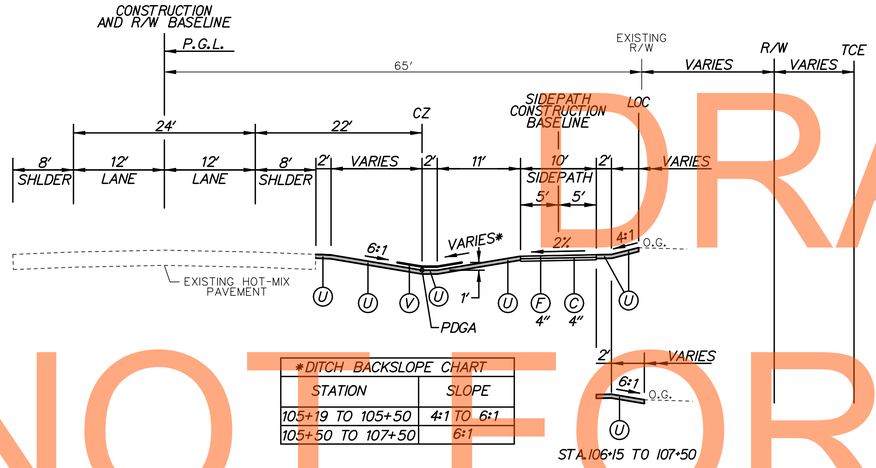
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: S.E.S.	
COUNTY	CHECKED BY: B.R.T.	
NEW CASTLE		

TYPICAL SECTIONS

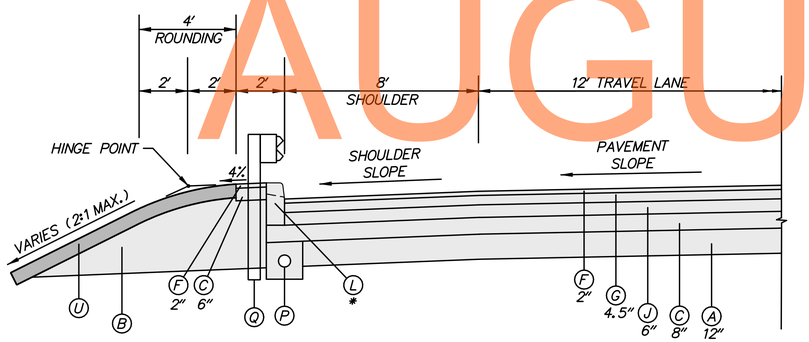
TS-17

SHEET NO.
33
TOTAL SHTS.
875



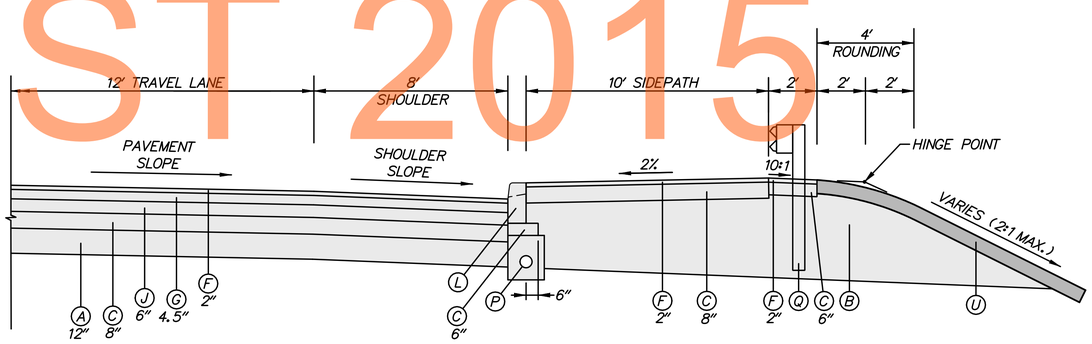
*DITCH BACKSLOPE CHART	
STATION	SLOPE
105+19 TO 105+50	4:1 TO 6:1
105+50 TO 107+50	6:1

JAMISON CORNER ROAD
STATION 105+19 TO STATION 107+50



*DEPTH OF CURB IS TO BE EXTENDED TO THE TOP OF GABC AT NO ADDITIONAL COST

JAMISON CORNER ROAD GUARDRAIL DETAIL
(WHERE SHOWN ON PLANS)



JAMISON CORNER ROAD GUARDRAIL DETAIL
(WHERE SHOWN ON PLANS)

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
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4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
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9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
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11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

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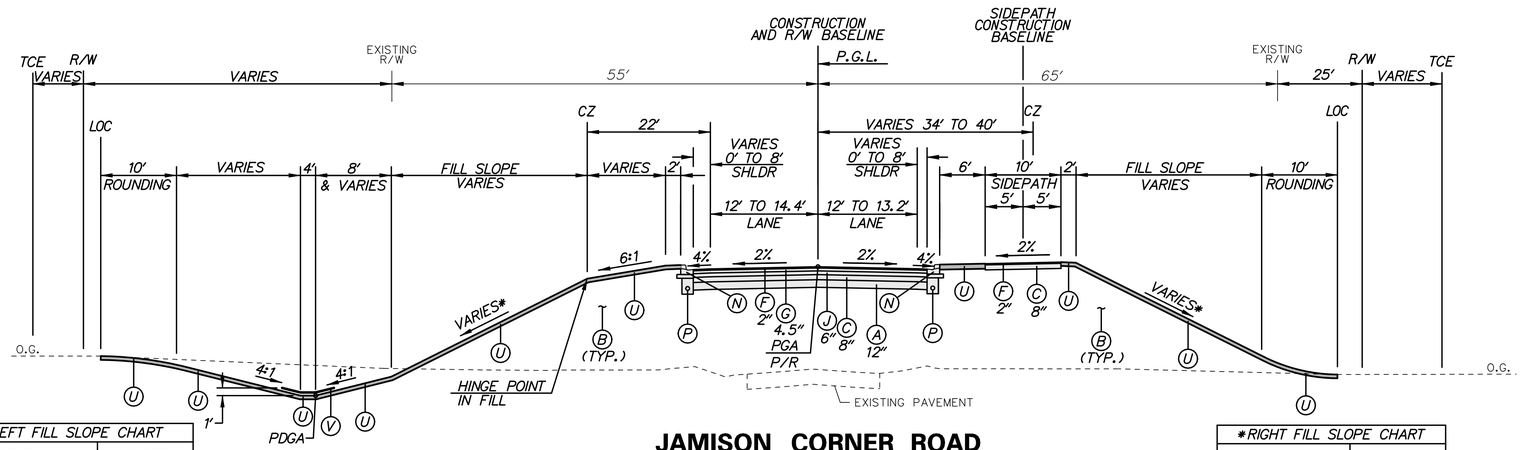
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-18
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 34
					CHECKED BY: TAO		TOTAL SHTS. 875

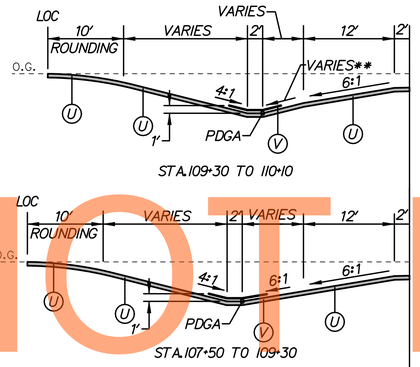


JAMISON CORNER ROAD
STATION 114+09 TO STATION 116+71

*LEFT FILL SLOPE CHART	
STATION	SLOPE
114+09 TO 114+32	4:1 TO 10:1
114+32 TO 114+46	10:1
114+46 TO 115+00	10:1 TO 3:1
115+00 TO 115+20	3:1
115+20 TO 115+50	3:1 TO 2:1
115+50 TO 116+70	2:1

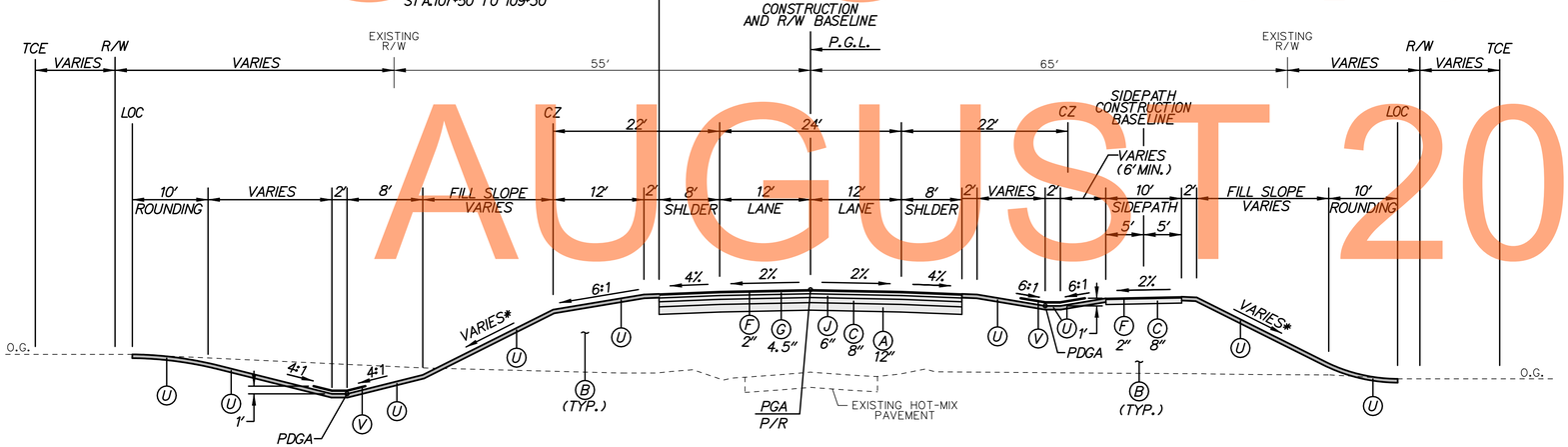
*RIGHT FILL SLOPE CHART	
STATION	SLOPE
114+09 TO 114+20	4:1
114+20 TO 114+50	4:1 TO 3:1
114+50 TO 115+20	3:1
115+20 TO 115+50	3:1 TO 2:1
115+50 TO 116+71	2:1

**LEFT CUT SLOPE CHART	
STATION	SLOPE
109+30 TO 109+50	6:1 TO 4:1
109+50 TO 110+10	4:1



STA.109+30 TO 110+10

STA.107+50 TO 109+30



*LEFT FILL SLOPE CHART	
STATION	SLOPE
110+10 TO 111+50	6:1
111+50 TO 111+80	6:1 TO 4:1
111+80 TO 114+09	4:1

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
107+50 TO 113+00	6:1
113+00 TO 113+25	6:1 TO 4:1
113+25 TO 114+09	4:1

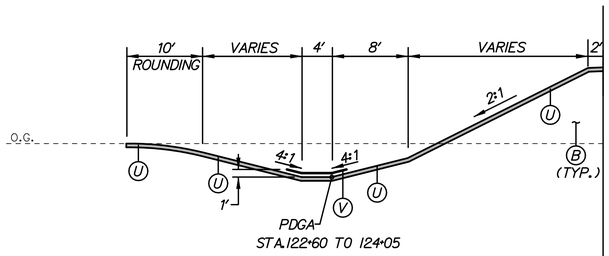
JAMISON CORNER ROAD
STATION 107+50 TO STATION 114+09

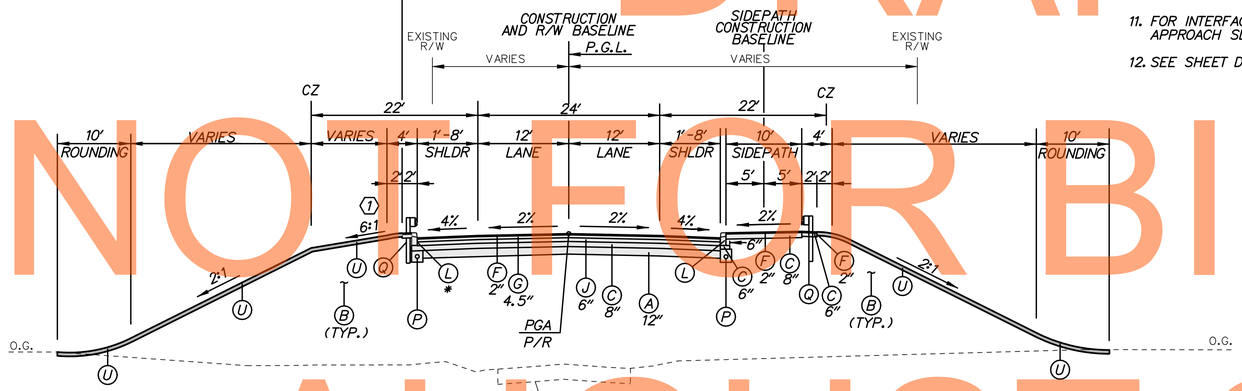
LEGEND

- (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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

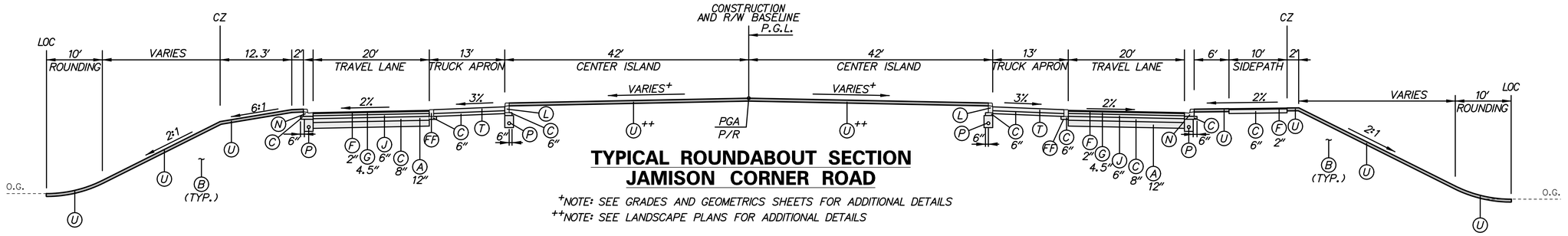
1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVELED WAY SLOPE WHEN SUPERELEVATION IS GREATER THAN 4%.
3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.





*DEPTH OF CURB IS TO BE EXTENDED TO THE TOP OF GABC AT NO ADDITIONAL COST

JAMISON CORNER ROAD
STATION 119+33 TO STATION 120+78
STATION 122+60 TO STATION 124+05



TYPICAL ROUNDABOUT SECTION
JAMISON CORNER ROAD

+NOTE: SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL DETAILS
++NOTE: SEE LANDSCAPE PLANS FOR ADDITIONAL DETAILS

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

(7) TRANSITION SLOPE FROM 6:1 AT STA. 119+44 TO 2:1 AT STA. 120+00. 2:1 SLOPE FROM STA. 120+00 TO STA. 120+78.

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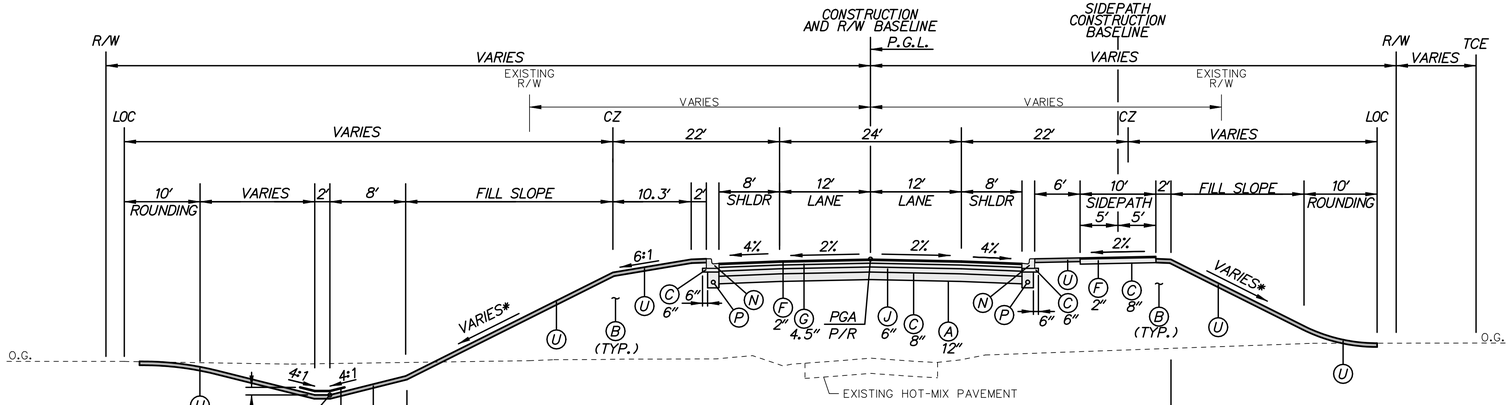
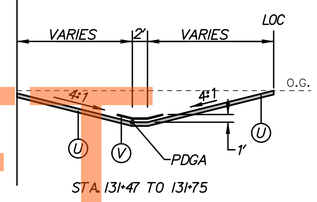
11/4/2014 8:28:06 AM

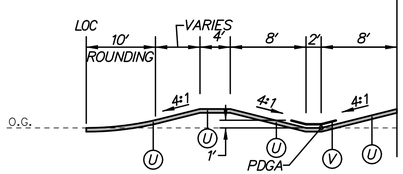
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-20
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 36
					CHECKED BY: TAO		TOTAL SHTS. 875



JAMISON CORNER ROAD
STA. 130+50 TO STA. 131+75



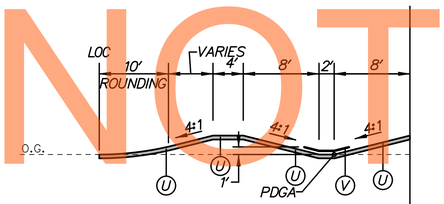
STA. 131+47 TO 131+75



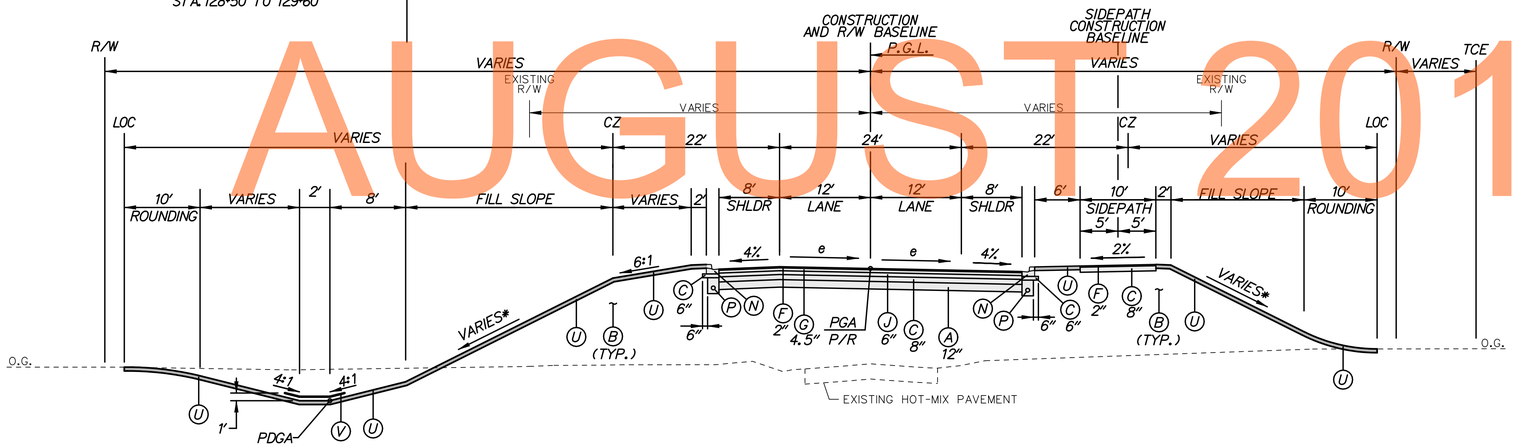
STA. 131+62 TO 131+70

*LEFT FILL SLOPE CHART	
STATION	SLOPE
126+71 TO 127+25	2:1
127+25 TO 127+55	2:1 TO 3:1
127+55 TO 129+20	3:1
129+20 TO 129+50	3:1 TO 4:1
129+50 TO 131+75	4:1

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
126+71 TO 126+80	2:1
126+80 TO 127+00	2:1 TO 3:1
127+00 TO 128+70	3:1
128+70 TO 129+00	3:1 TO 4:1
129+00 TO 129+80	4:1
129+80 TO 131+47	4:1 TO 75:1



STA. 128+50 TO 129+60



JAMISON CORNER ROAD
STA. 126+71 TO STA. 130+50 ($e_{max.}$=2.6%)

LEGEND

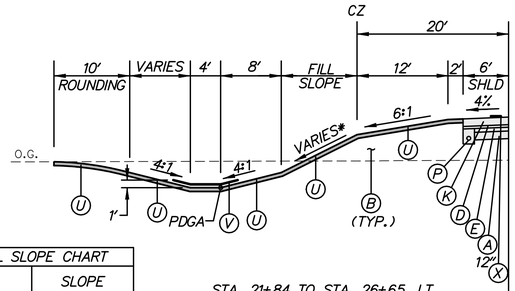
- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

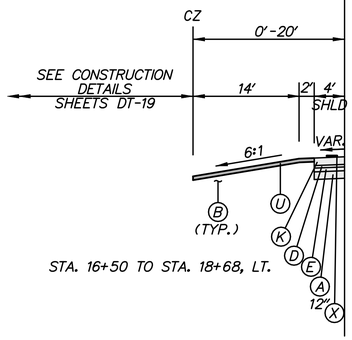
N:\31653-000\CONTRACT 1A\CADD\TS021U301_1A.dgn
11/4/2014 - 8:28:59 AM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-21
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 37
					CHECKED BY: TAO		TOTAL SHTS. 875

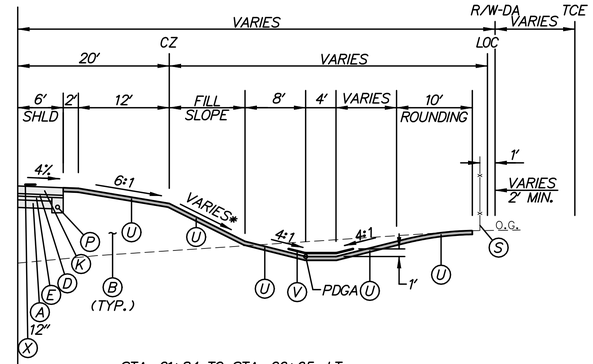


STA. 21+84 TO STA. 26+65, LT.

*LEFT FILL SLOPE CHART	
STATION	SLOPE
21+84 TO 22+00	4:1
22+00 TO 22+50	4:1 TO 3:1
22+50 TO 23+50	3:1
23+50 TO 24+00	3:1 TO 2:1
24+00 TO 26+65	2:1

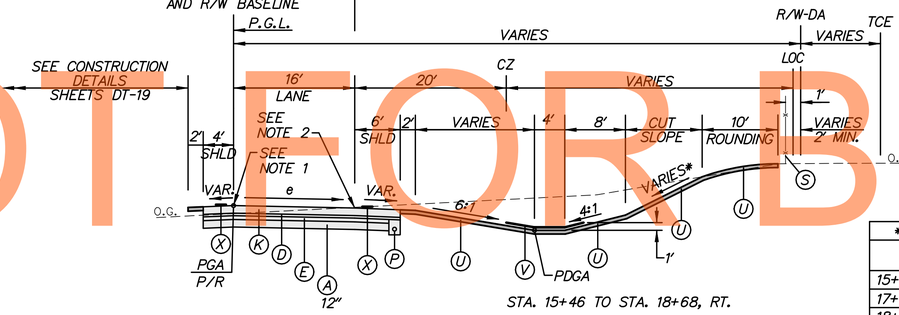


STA. 16+50 TO STA. 18+68, LT.



STA. 21+84 TO STA. 26+65, LT.

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
21+84 TO 22+00	4:1
22+00 TO 22+50	4:1 TO 3:1
22+50 TO 23+50	3:1
23+50 TO 24+00	3:1 TO 2:1
24+00 TO 26+65	2:1

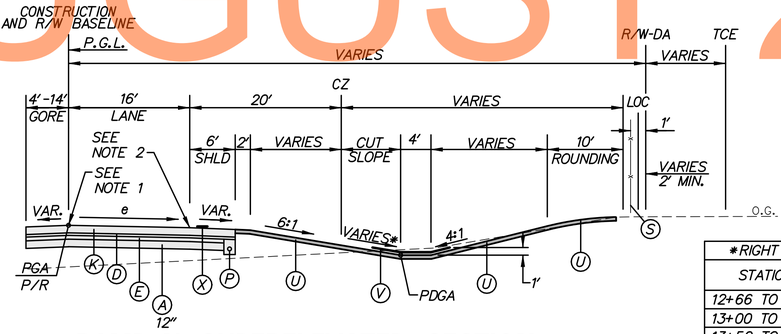


STA. 15+46 TO STA. 18+68, RT.

*RIGHT CUT SLOPE CHART	
STATION	SLOPE
15+46 TO 17+50	4:1
17+50 TO 18+00	4:1 TO 3:1
18+00 TO 18+68	3:1

RAMP N SUPERELEVATED SECTION

STATION 15+46 TO STATION 18+68 ($e_{max.}$=5.0%)
STATION 21+84 TO STATION 26+65 ($e_{max.}$=2.7%)



STA. 12+66 TO STA. 15+46, RT.

*RIGHT CUT SLOPE CHART	
STATION	SLOPE
12+66 TO 13+00	4:1
13+00 TO 13+50	4:1 TO 6:1
13+50 TO 15+46	6:1

RAMP N SUPERELEVATED SECTION

STATION 12+66 TO STATION 15+46 ($e_{max.}$=5.0%)

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

N:\3653-000\CONTRACT 1A\CADD\TS0221J301_1A.dgn
11/4/2014 8:29:50 AM

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

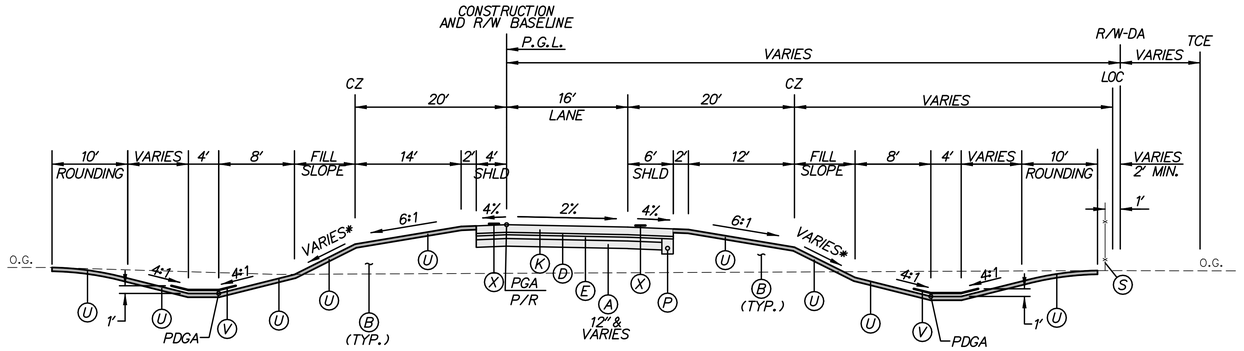
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: KGMA
NEW CASTLE	CHECKED BY: TAO

TYPICAL SECTIONS

TS-22

SHEET NO.	TOTAL SHTS.
38	875



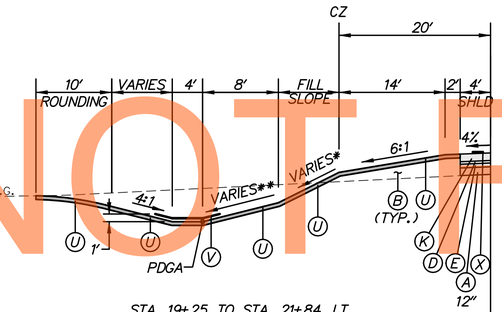
*LEFT FILL SLOPE CHART	
STATION	SLOPE
70+98 TO 71+75	2:1
71+75 TO 72+00	2:1 TO 3:1
72+00 TO 72+75	3:1
72+75 TO 73+00	3:1 TO 4:1
73+00 TO 73+55	4:1

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
70+98 TO 71+75	2:1
71+75 TO 72+00	2:1 TO 3:1
72+00 TO 72+75	3:1
72+75 TO 73+00	3:1 TO 4:1
73+00 TO 73+55	4:1

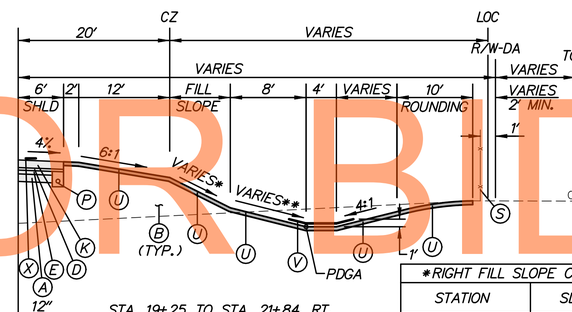
RAMP O NORMAL SECTION
STATION 70+98 TO STATION 73+55

**DITCH FRONT SLOPE CHART	
STATION	SLOPE
19+25 to 19+50	6:1 TO 4:1
19+50 to 21+84	4:1

*LEFT FILL SLOPE CHART	
STATION	SLOPE
19+25 to 20+50	6:1
20+50 to 21+00	6:1 to 4:1
21+00 to 21+84	4:1



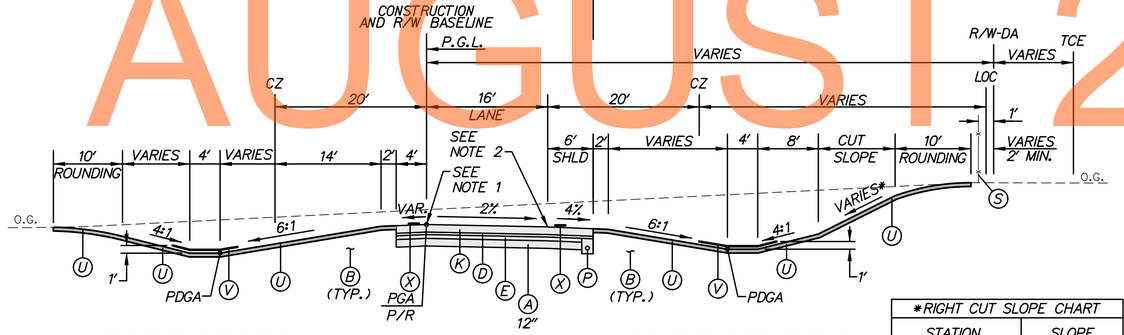
STA. 19+25 TO STA. 21+84, LT.



STA. 19+25 TO STA. 21+84, RT.

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
19+25 to 21+00	6:1
21+00 to 21+50	6:1 TO 4:1
21+50 to 21+84	4:1

**DITCH FRONT SLOPE CHART	
STATION	SLOPE
19+25 to 19+50	6:1 TO 4:1
19+50 to 21+84	4:1



STA. 18+68 TO STA. 19+25, LT.

STA. 18+68 TO STA. 19+25, RT.

*RIGHT CUT SLOPE CHART	
STATION	SLOPE
18+68 to 19+00	3:1
19+00 to 19+25	3:1 TO 4:1

RAMP N NORMAL SECTION
STATION 18+68 TO STATION 21+84

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

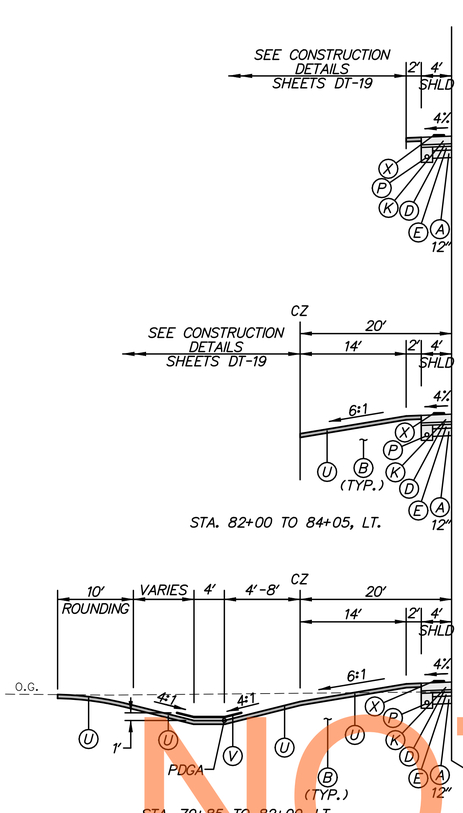
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: KGMA	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

TYPICAL SECTIONS

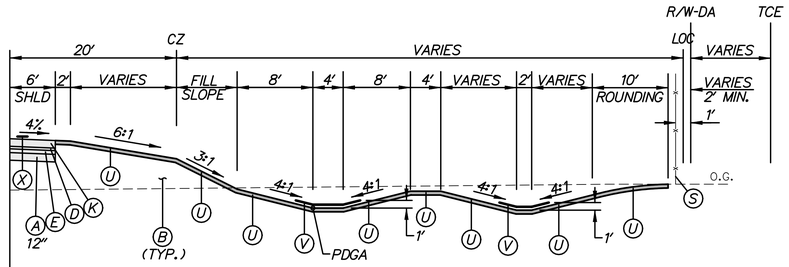
TS-23

SHEET NO.
39
TOTAL SHTS.
875

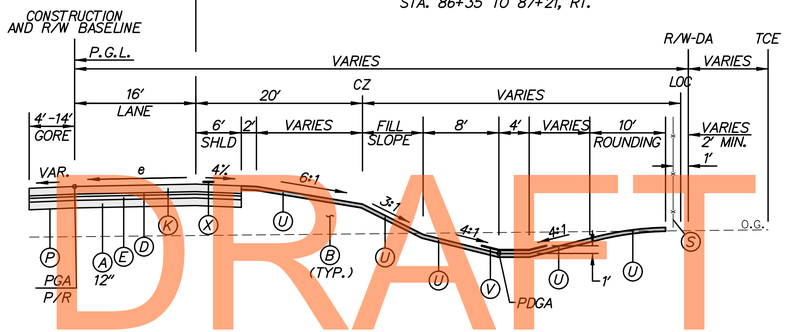


STA. 82+00 TO 84+05, LT.

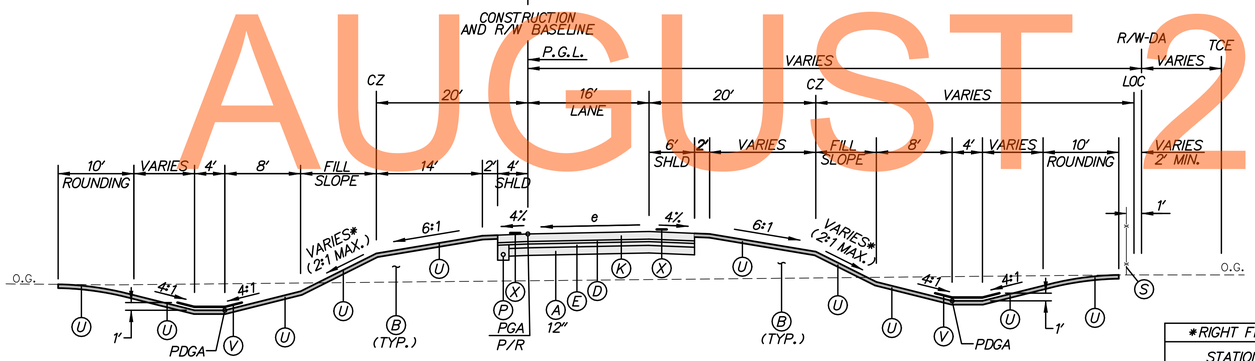
STA. 79+85 TO 82+00, LT.



STA. 86+35 TO 87+21, RT.



RAMP O SUPERELEVATED SECTION
STATION 86+20 TO STATION 87+21 ($e_{max.}$=2.0%)



STA. 73+55 TO 79+85, LT.

*LEFT FILL SLOPE CHART	
STATION	SLOPE
73+55 TO 78+25	4:1
78+25 TO 78+50	4:1 TO 6:1
78+50 TO 79+85	6:1

RAMP O SUPERELEVATED SECTION
STATION 73+55 TO STATION 78+37 ($e_{max.}$=2.6%)
STATION 78+37 TO STATION 86+20 ($e_{max.}$=2.0%)

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
73+55 TO 78+25	4:1
78+25 TO 78+50	4:1 TO 6:1
78+50 TO 84+75	6:1
84+75 TO 85+00	6:1 TO 4:1
85+00 TO 85+75	4:1
85+75 TO 86+00	4:1 TO 3:1
86+00 TO 86+20	3:1

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

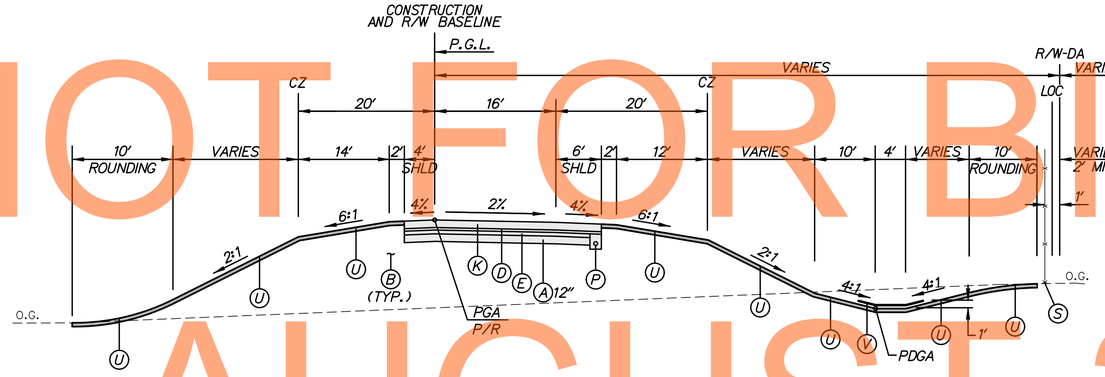
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: KGMA	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

TYPICAL SECTIONS

TS-24

SHEET NO.
40
TOTAL SHTS.
875



RAMP M NORMAL SECTION
STATION 29+08 TO STATION 30+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"
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- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
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3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
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12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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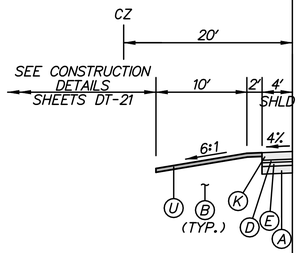
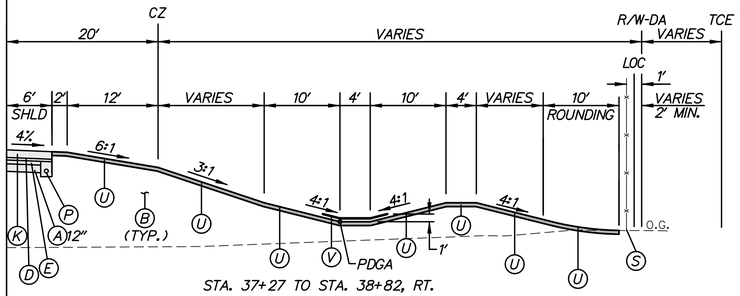
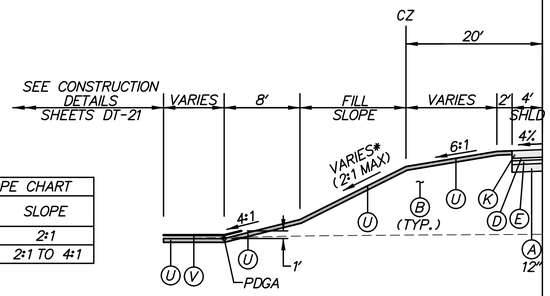
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-25
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 41
					CHECKED BY: TAO		TOTAL SHTS. 875



STA. 37+50 TO STA. 38+82, LT.

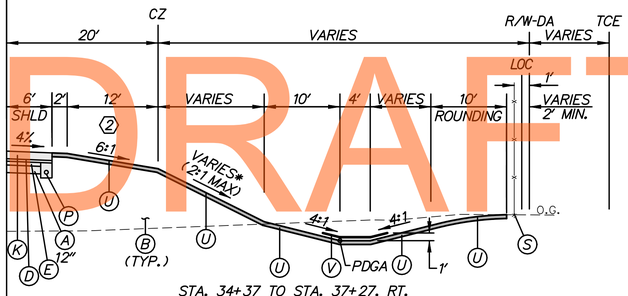


STA. 37+27 TO STA. 38+82, RT.



STA. 36+92 TO STA. 37+50, LT.

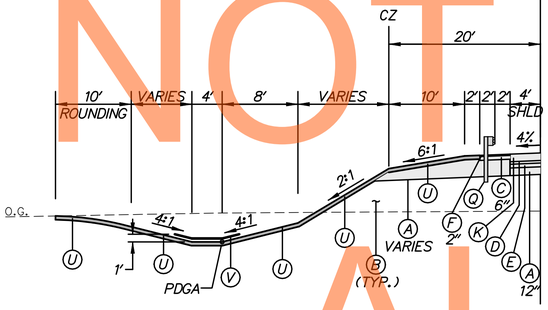
*LEFT FILL SLOPE CHART	
STATION	SLOPE
36+92 TO 37+00	2:1
37+00 TO 37+50	2:1 TO 4:1



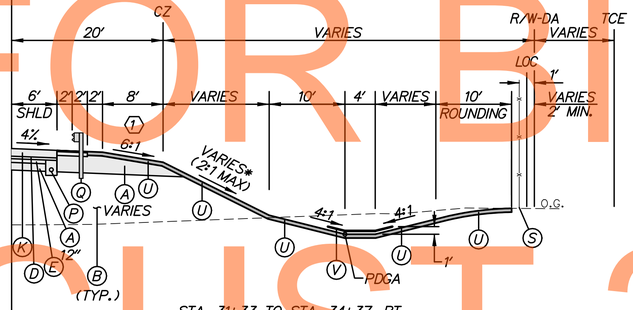
STA. 34+37 TO STA. 37+27, RT.

2 SEE SHEET 835 FOR TOLL FACILITY SITE PLAN

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
34+37 TO 34+50	2:1 TO 3:1
34+50 TO 37+27	3:1



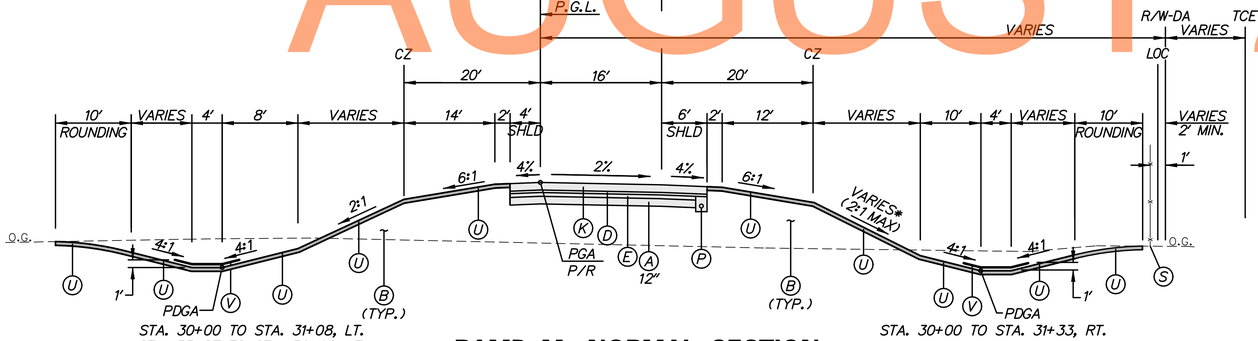
STA. 31+08 TO STA. 33+87, LT.



STA. 31+33 TO STA. 34+37, RT.

1 SEE SHEET 835 FOR TOLL FACILITY SITE PLAN

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
31+33 TO 33+50	3:1
33+50 TO 34+00	3:1 TO 2:1
34+00 TO 34+37	2:1



STA. 30+00 TO STA. 31+08, LT.
STA. 33+87 TO STA. 36+92, LT.

STA. 30+00 TO STA. 31+33, RT.

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
30+00 TO 30+50	2:1
30+50 TO 31+00	2:1 TO 3:1
31+00 TO 31+33	3:1

RAMP M NORMAL SECTION
STATION 30+00 TO STATION 38+82

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

N:\3653-000\CONTRACT 1A\CADD\TS026J301_1A.dgn
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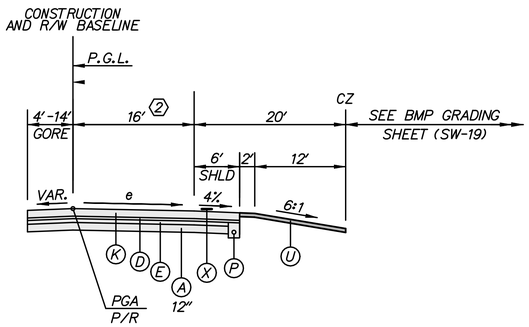
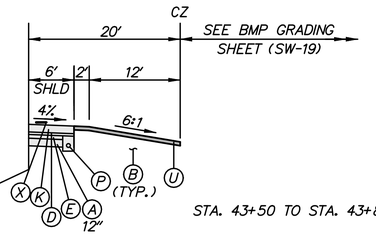
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-26
				COUNTY NEW CASTLE	DESIGNED BY: KGMA		SHEET NO. 42
					CHECKED BY: TAO		TOTAL SHTS. 875

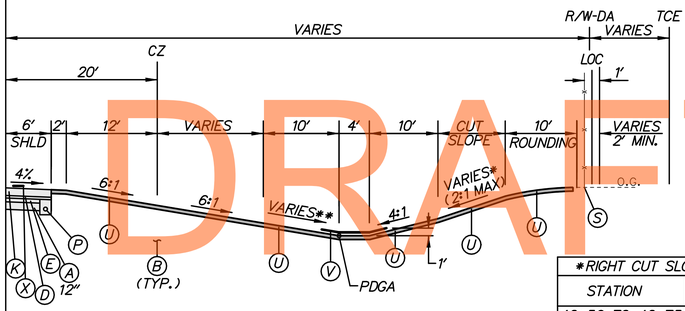


RAMP M SUPERELEVATED SECTION
STATION 43+87 TO STATION 45+14 (emax=3.8%)

1. TRANSITION SLOPE FROM 2:1 AT STA. 37+00 TO 3:1 AT STA. 37+50. TRANSITION SLOPE FROM 3:1 AT STA. 38+50 TO 4:1 AT STA. 39+00. TRANSITION SLOPE FROM 4:1 AT STA. 41+50 TO 6:1 AT STA. 42+00.
2. TRAVEL LANE WIDTH TRANSITIONS FROM 19.46' AT STA. 38+82 TO 16' AT STA. 39+81.



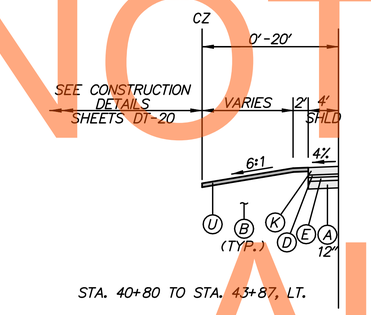
STA. 43+50 TO STA. 43+87, RT.



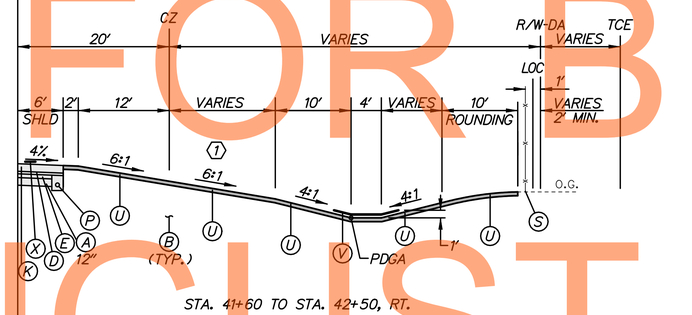
STA. 42+50 TO STA. 43+50, RT.

*RIGHT CUT SLOPE CHART	
STATION	SLOPE
42+50 TO 42+75	4:1 TO 3:1
42+75 TO 43+50	3:1

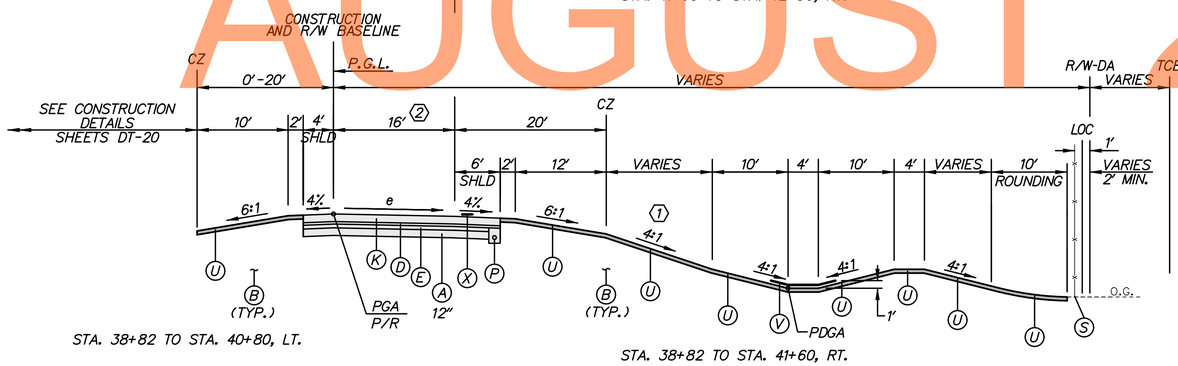
**DITCH FRONT SLOPE CHART	
STATION	SLOPE
42+75 TO 43+00	4:1 TO 6:1
43+00 TO 43+50	6:1



STA. 40+80 TO STA. 43+87, LT.



STA. 41+60 TO STA. 42+50, RT.



STA. 38+82 TO STA. 40+80, LT.

STA. 38+82 TO STA. 41+60, RT.

RAMP M SUPERELEVATED SECTION
STATION 38+82 TO STATION 43+87 (emax=3.8%)

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

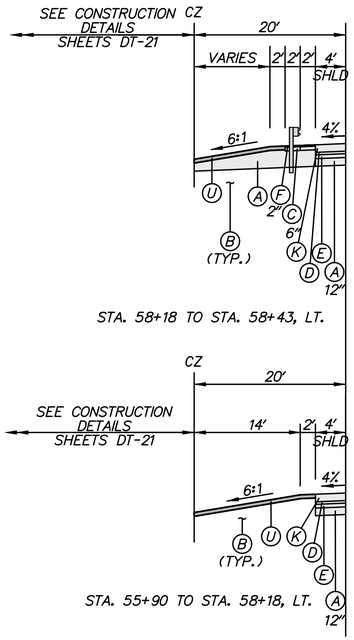
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: KGMA	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

TYPICAL SECTIONS

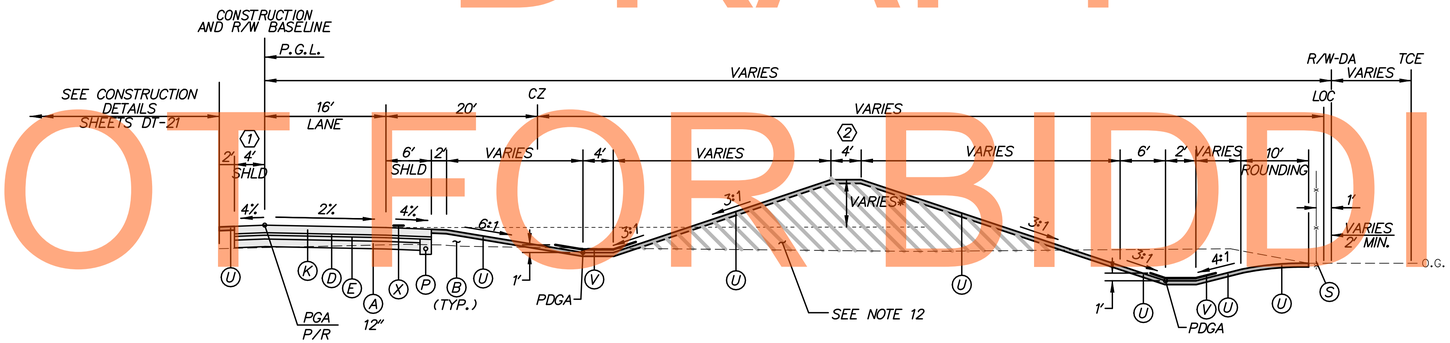
TS-27

SHEET NO.
43
TOTAL SHTS.
875



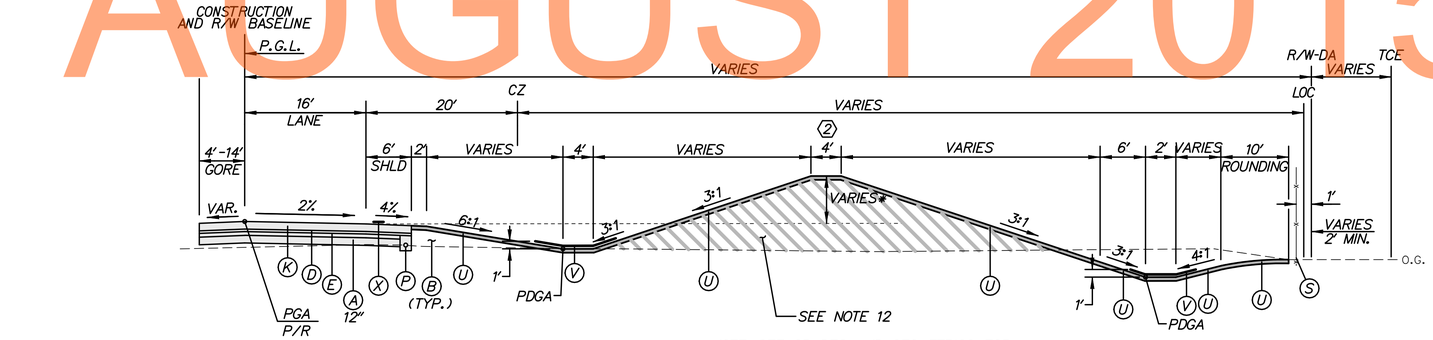
STA. 58+18 TO STA. 58+43, LT.

STA. 55+90 TO STA. 58+18, LT.



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

RAMP P NORMAL SECTION WITH BERM
STATION 54+41 TO STATION 58+43



*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

RAMP P NORMAL SECTION WITH BERM
STATION 52+22 TO STATION 54+41

1. SHOULDER WIDTH TRANSITIONS FROM 6' TO 4' FROM STA. 54+41 TO STA. 55+24.

   SHOULDER SLOPE TRANSITIONS FROM -0.64% TO 4.00% FROM STA. 54+41 TO STA. 55+91.

2. WIDTH VARIES FROM STATION STA. 57+85 TO STA. 58+29.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

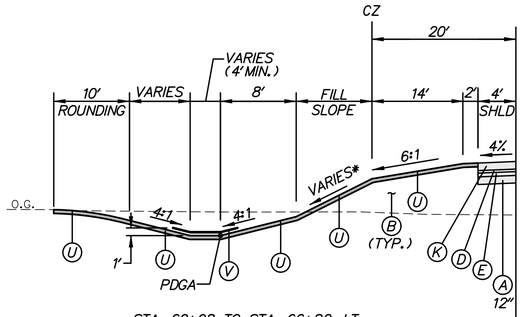
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	DESIGNED BY: KGMA
COUNTY	CHECKED BY: TAO
NEW CASTLE	

TYPICAL SECTIONS

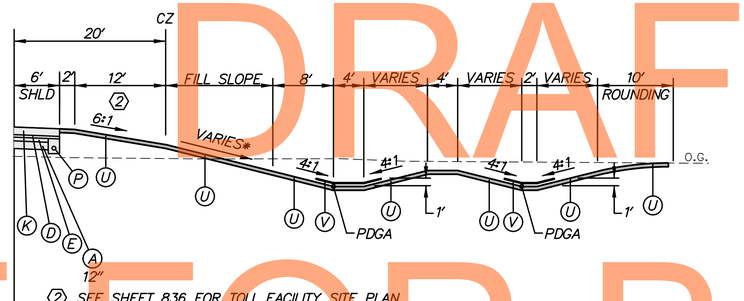
TS-28

SHEET NO.	TOTAL SHTS.
44	875



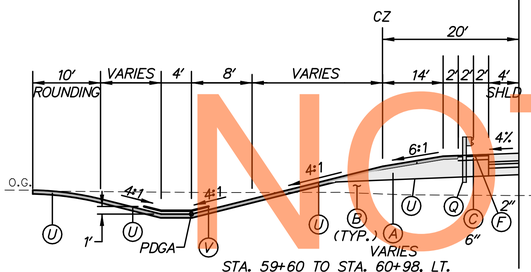
STA. 60+98 TO STA. 66+82, LT.

*LEFT FILL SLOPE CHART	
STATION	SLOPE
60+98 TO 61+50	4:1
61+50 TO 62+00	4:1 TO 3:1
62+00 TO 65+00	3:1
65+00 TO 65+50	3:1 TO 2:1
65+50 TO 66+82	2:1

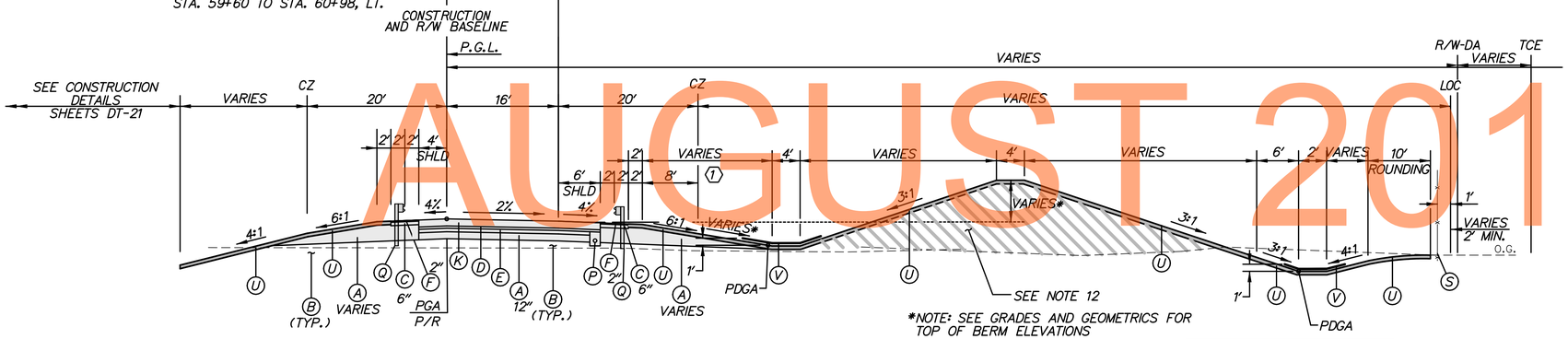


(2) SEE SHEET 836 FOR TOLL FACILITY SITE PLAN
STA. 61+47 TO STA. 65+50, RT.

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
61+47 TO 61+50	5:1
61+50 TO 62+50	5:1
62+50 TO 63+00	5:1 TO 4:1
63+00 TO 64+50	4:1
64+50 TO 65+00	4:1 TO 3:1
65+00 TO 65+50	3:1



STA. 59+60 TO STA. 60+98, LT.



STA. 58+43 TO STA. 59+60, LT.

(1) SEE SHEET 836 FOR TOLL FACILITY SITE PLAN

*NOTE: SEE GRADES AND GEOMETRICS FOR TOP OF BERM ELEVATIONS

STA. 58+43 TO STA. 61+47, RT.

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
58+50 TO 60+50	5:1
60+50 TO 61+00	5:1 TO 4:1
61+00 TO 61+25	4:1
61+25 TO 61+47	4:1 TO 5:1

RAMP P NORMAL SECTION
STATION 58+43 TO STATION 65+50

LEGEND

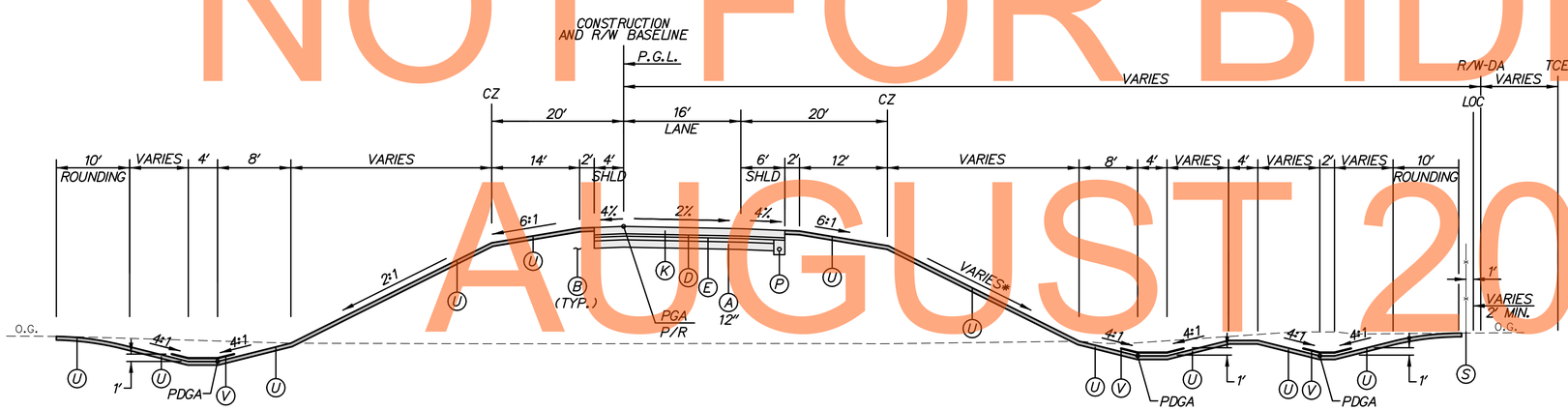
- (A) ITEM 209001 - BORROW, TYPE A
- (B) ITEM 209006 - BORROW, TYPE F
- (C) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 304501 - PERMEABLE TREATED BASE, 4"
- (E) ITEM 304502 - SOIL CEMENT BASE COURSE, 6"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2



RAMP P NORMAL SECTION
STATION 65+50 TO STATION 67+59

*RIGHT FILL SLOPE CHART	
STATION	SLOPE
65+50 TO 66+00	3:1 TO 2:1
66+00 TO 67+59	2:1

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

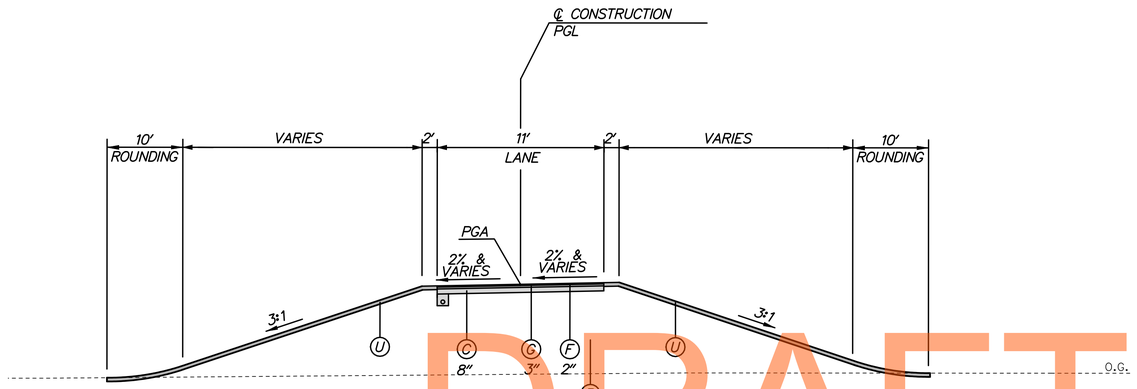
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	DESIGNED BY: KGMA
COUNTY	CHECKED BY: TAO
NEW CASTLE	

TYPICAL SECTIONS

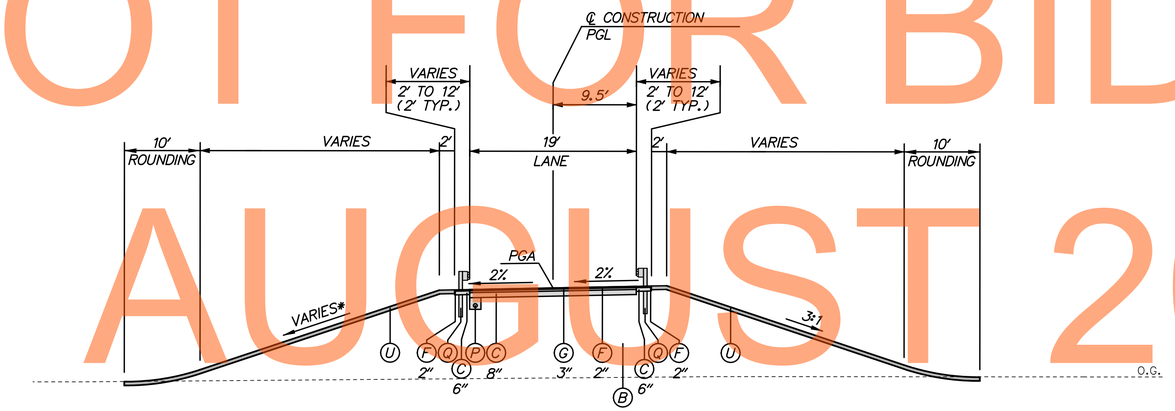
TS-30

SHEET NO.	TOTAL SHTS.
46	875



NB EMERGENCY ACCESS RAMP

STA. 403+99.28 TO STA. 405+05.98



NB EMERGENCY ACCESS RAMP

STA. 400+88.68 TO STA. 403+99.28

*VARIABLE SLOPE TABLE	
LIMITS	SLOPE
STA. 400+88.68 TO STA. 402+56.92	2:1
STA. 402+56.92 TO STA. 403+06.92	TRANSITION FROM 2:1 TO 3:1
STA. 403+06.92 TO STA. 403+95.62	3:1

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"
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- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
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4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
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   P.G.L. - POINT OF GRADE LINE
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   SUPERPAVE, TYPE B WMA - 3"
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11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

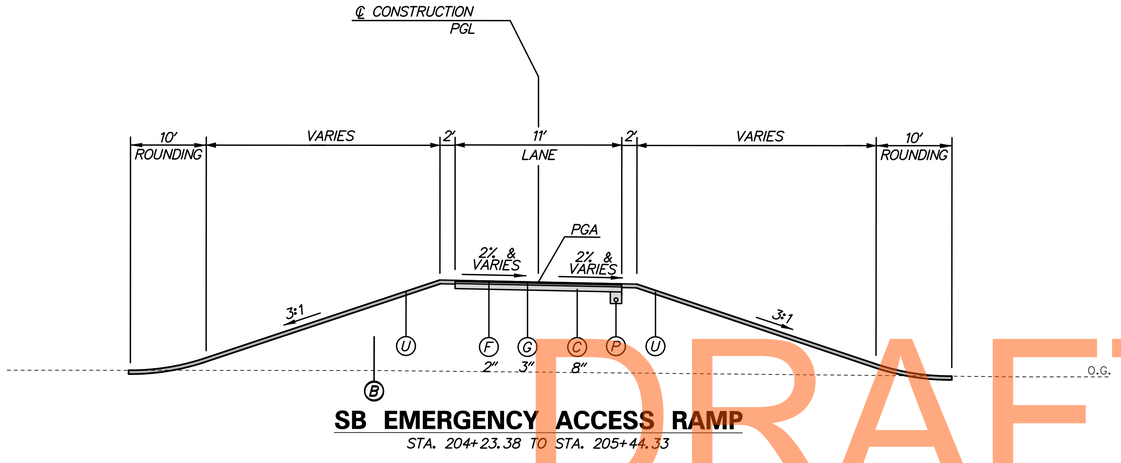
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: K.A.H.
NEW CASTLE	CHECKED BY: B.R.T.

TYPICAL SECTIONS

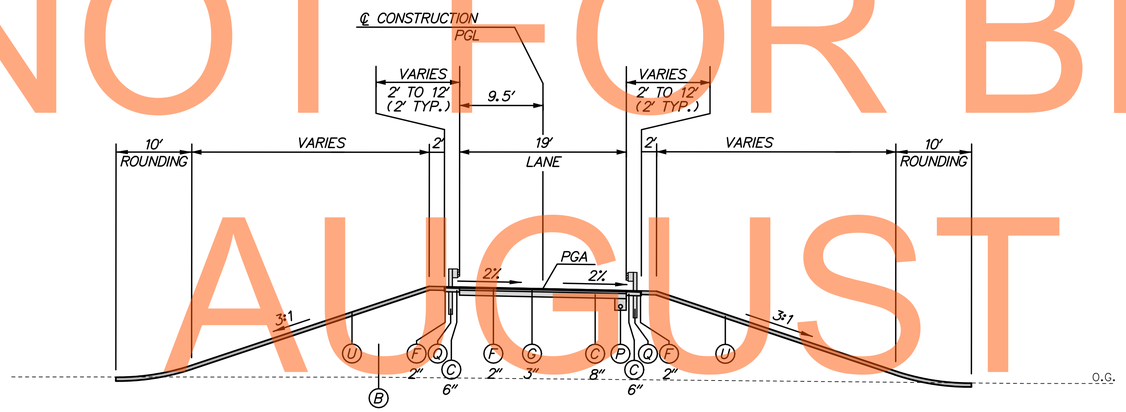
TS-31

SHEET NO.
47
TOTAL SHTS.
875



SB EMERGENCY ACCESS RAMP

STA. 204+23.38 TO STA. 205+44.33



SB EMERGENCY ACCESS RAMP

STA. 200+88.42 TO STA. 204+23.38

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
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- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
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3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
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9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
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11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

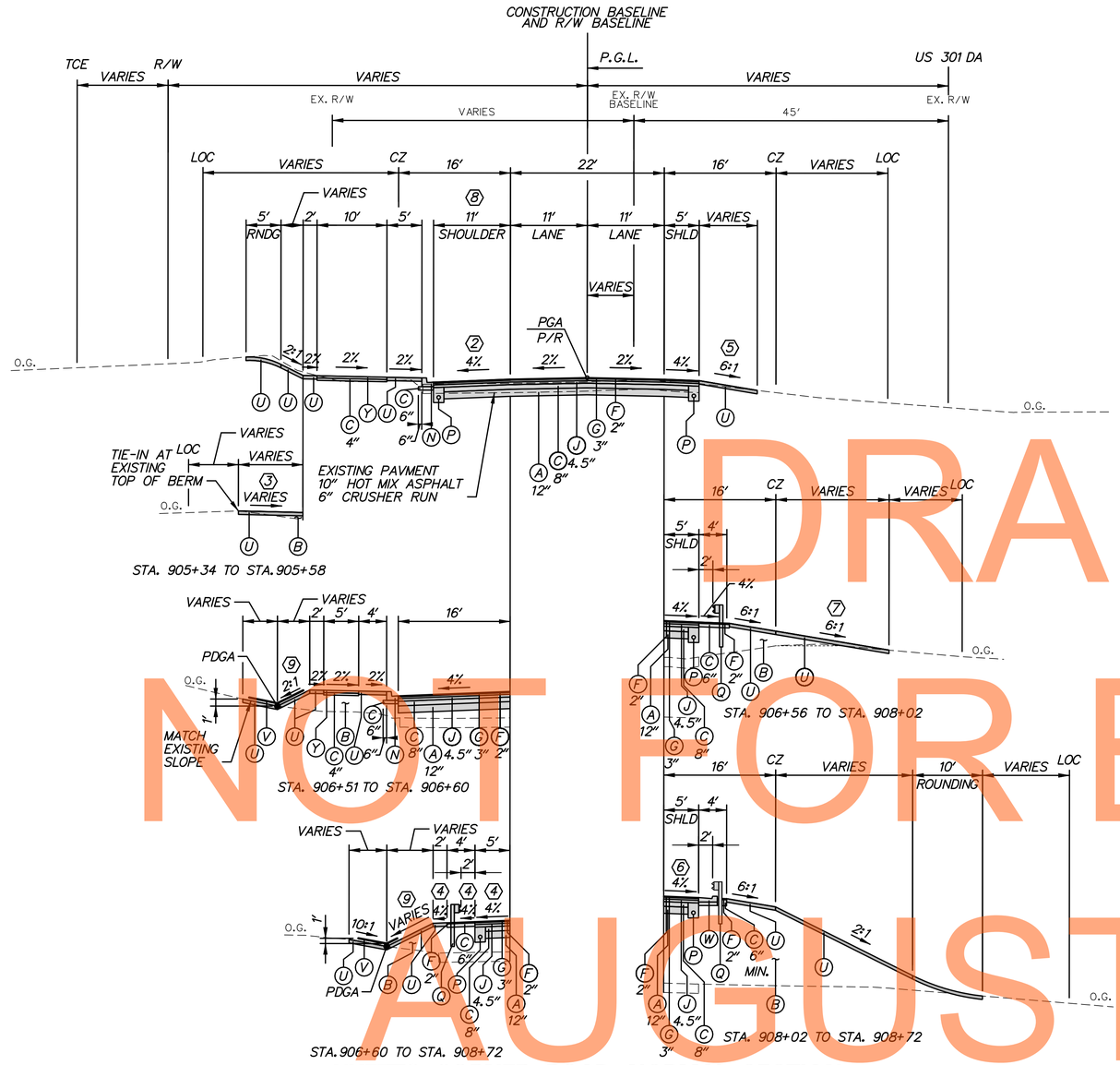
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	DESIGNED BY: K.A.H.
COUNTY	CHECKED BY: B.R.T.
NEW CASTLE	

TYPICAL SECTIONS

TS-32

SHEET NO.	TOTAL SHTS.
48	875



HYETTS CORNER ROAD NORMAL SECTION
STATION 904+00 TO STATION 908+72

(1) HOLD 6% SLOPE FROM STA. 902+80 TO STA. 903+10. TRANSITION SLOPE FROM 6% AT STA. 903+10 TO 2% AT STA. 903+90.

(2) HOLD -2% SLOPE FROM STA. 904+00 TO STA. 904+50. TRANSITION SLOPE FROM -2% AT STA. 904+50 TO -4% AT STA. 904+91.

(3) HOLD 2% SLOPE FROM STA. 905+34 TO STA. 905+46.

(4) TRANSITION SLOPE FROM -4% AT STA. 907+52 TO 2.2% AT STA. 908+79.

(5) HOLD 4% SLOPE FROM STA. 904+00 TO STA. 904+80. TRANSITION SLOPE FROM 4% AT STA. 904+80 TO 6:1 AT STA. 904+85.

(6) TRANSITION SLOPE FROM -4% AT STA. 908+42 TO -2.2% AT STA. 908+79.

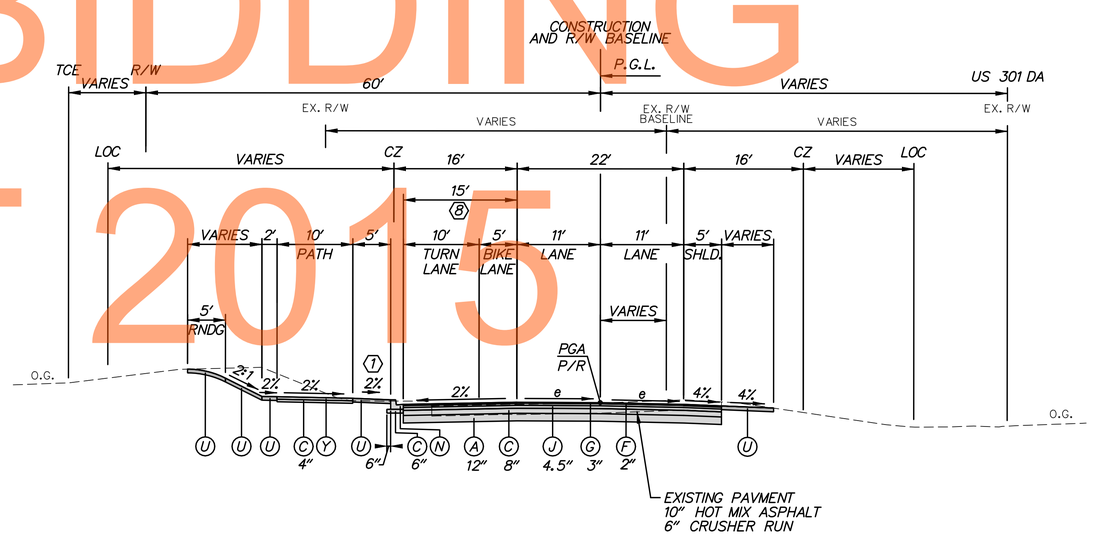
(7) TRANSITION SLOPE FROM 6:1 AT STA. 907+03 TO 2:1 AT STA. 907+28. HOLD 2:1 SLOPE FROM STA. 907+28 TO STA. 908+72.

(8) TRANSITION WIDTH FROM 15' AT STA. 903+84 TO 11' AT STA. 904+34.

(9) HOLD 2:1 SLOPE FROM STA. 907+00 TO STA. 908+72.

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.
13. STA. 908+25 TO STA. 908+75 WILL INCLUDE LIGHTWEIGHT AGGREGATE FILL ABOVE THE NCC-S 60" STEEL CASING. FOR DETAIL SEE SHEET DT-18.



HYETTS CORNER ROAD SUPERELEVATED SECTION
STATION 902+80 TO STATION 904+00 ($e_{max.}$ = 3.8%)

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

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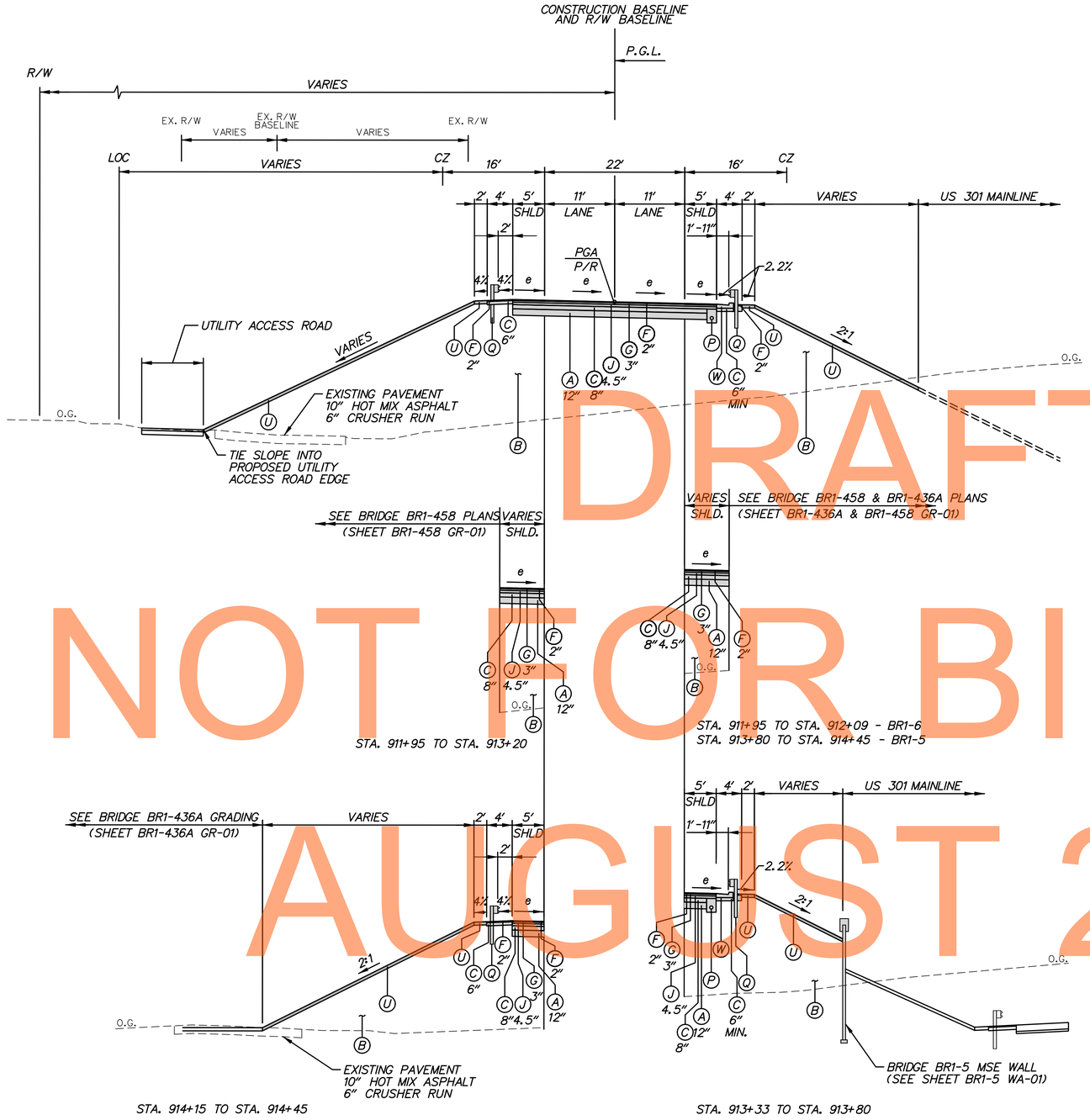
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-33
				COUNTY NEW CASTLE	DESIGNED BY: K.A.H.		SHEET NO. 49
					CHECKED BY: B.R.T.		TOTAL SHTS. 875



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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
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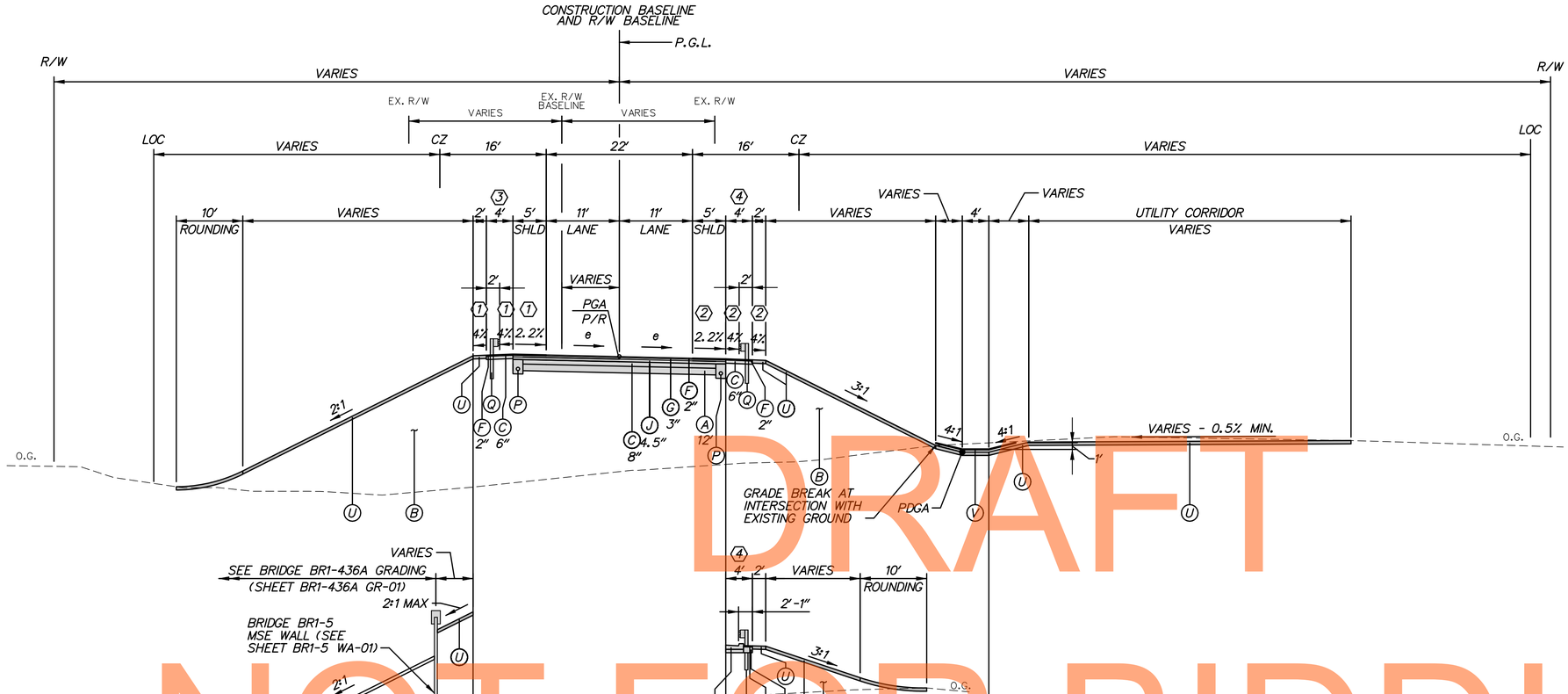
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

HYETTS CORNER ROAD SUPERELEVATED SECTION
STATION 911+95 TO STATION 914+45 ($e_{max.}$=2.2%)



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"
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- (L) ITEM 701010 - PCC CURB, TYPE 1-8
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- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL. SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

(1) TRANSITION SLOPE FROM 2.2% AT STA. 917+89 TO -4% AT STA. 919+15

(2) TRANSITION SLOPE FROM -2.2% AT STA. 917+25 TO -4% AT STA. 917+82

(3) TRANSITION WIDTH FROM 8.96' AT STA. 917+94 TO 10.24' AT STA. 918+20
TRANSITION WIDTH FROM 10.24' AT STA. 918+20 TO 4.00' AT STA. 918+82

(4) TRANSITION WIDTH FROM 5.11' AT STA. 917+50 TO 4.00' AT STA. 917+63
TRANSITION WIDTH FROM 4.00' AT STA. 919+95 TO 7.09' AT STA. 920+16

(5) TRANSITION SLOPE FROM 2:1 AT STA. 918+39 TO 3:1 AT STA. 918+63

HYETTS CORNER ROAD SUPERELEVATED SECTION
STATION 917+32 TO STATION 920+86 ($e_{max.}$=2.2%)

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

US 301, SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: K.A.H.	
COUNTY		
NEW CASTLE	CHECKED BY: B.R.T.	

TYPICAL SECTIONS

SHEET NO.
51
TOTAL SHTS.
875

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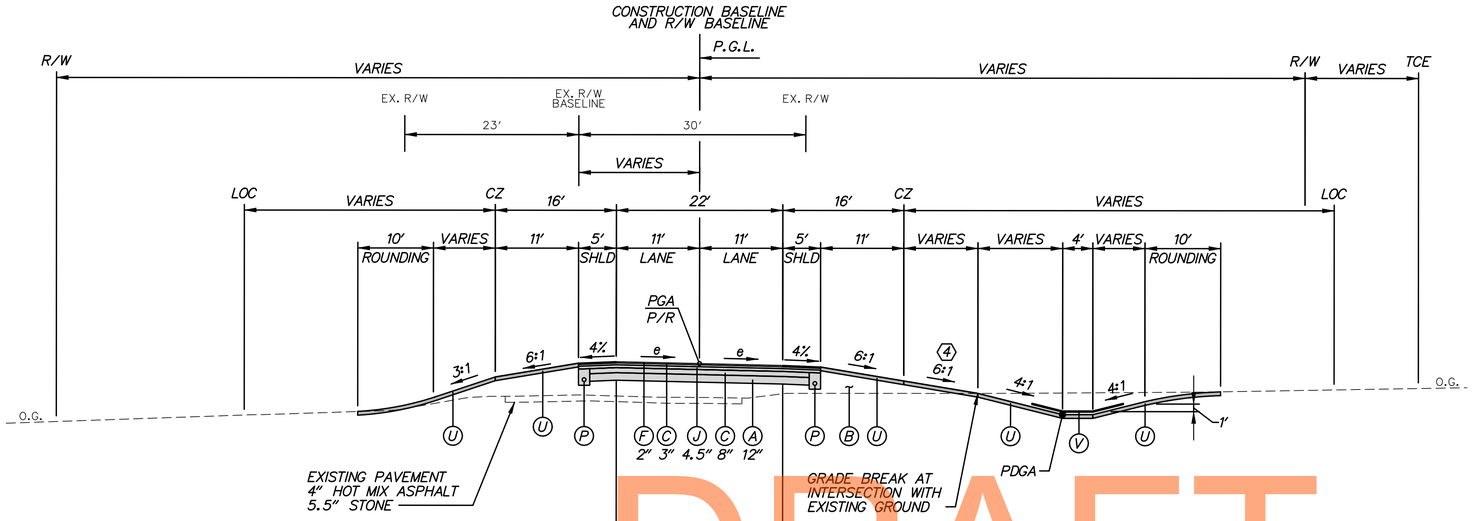

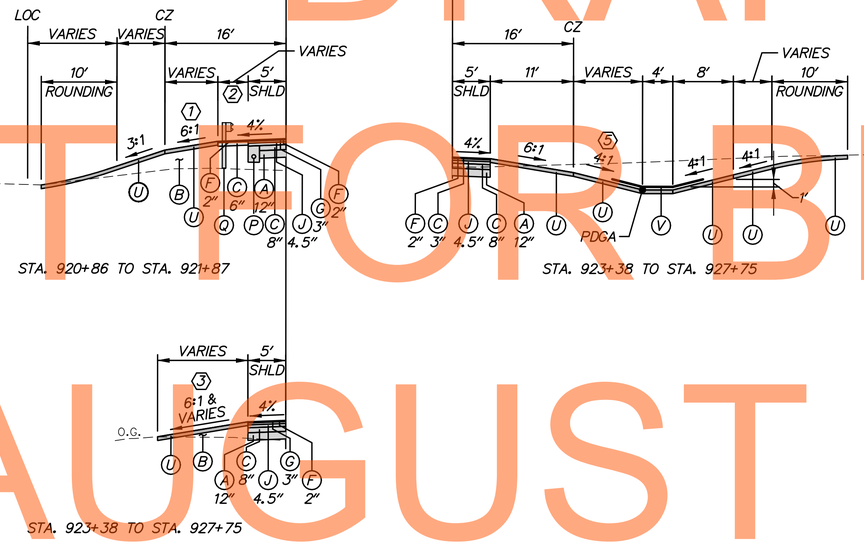

HYETTS CORNER ROAD SUPERELEVATED SECTION
STATION 920+86 TO STATION 927+75 ($e_{max.}$=2.2%)

1. TRANSITION SLOPE FROM 4.0% AT STA. 920+86 TO 6:1 AT STA. 921+11.
2. SEE DELDOT STANDARD CONSTRUCTION DETAIL, B-2 - GRADING FOR GUARDRAIL END TREATMENT ATTENUATOR TYPE 1.
3. TIE INTO EXISTING DITCH BOTTOM FROM STA. 924+35 TO STA. 925+69 & STA. 925+92 TO STA. 926+60. TIE INTO EXISTING DRIVEWAY FROM STA. 925+69 TO STA. 925+92.
4. HOLD 4:1 SLOPE FROM STA. 920+86 TO STA. 922+45. TRANSITION SLOPE FROM 4:1 AT STA. 922+45 TO 6:1 AT STA. 922+70.
5. TRANSITION SLOPE FROM 4:1 AT STA. 923+90 TO 6:1 AT STA. 924+15. HOLD 6:1 SLOPE FROM STA. 924+15 TO STA. 927+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"
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- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
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- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
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- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
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  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE SHALL NOT EXCEED 8%.
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3. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
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12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

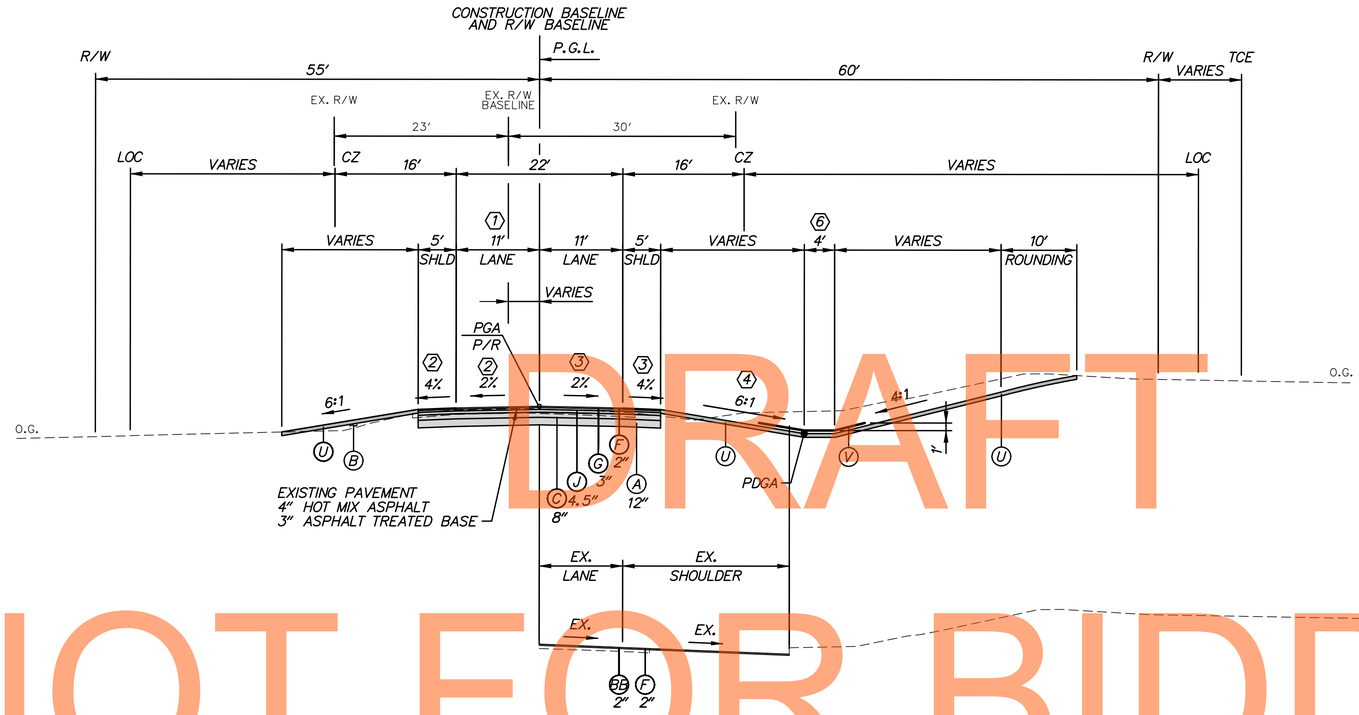
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: K.A.H.	
COUNTY	CHECKED BY: B.R.T.	
NEW CASTLE		

TYPICAL SECTIONS

TS-36

SHEET NO.	
52	
TOTAL SHTS.	
875	



STA. 929+90 TO STA. 930+25

HYETTS CORNER ROAD NORMAL SECTION
STATION 927+75 TO STATION 930+25

(1) TRANSITION WIDTH FROM 11' AT STA. 929+90 TO EXISTING AT STA. 930+25.

(2) TRANSITION SLOPE FROM NORMAL AT STA. 929+90 TO EXISTING AT STA. 930+25.

(3) TRANSITION SLOPE FROM NORMAL AT STA. 929+54 TO EXISTING STA. 929+90.

(4) TRANSITION SLOPE FROM 6:1 AT STA. 929+45 TO TIE INTO EXISTING DITCH ELEVATION AT STA. 930+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"
(F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
(G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
(L) ITEM 701010 - PCC CURB, TYPE 1-8
(N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
(P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
(Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
(R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
(S) ITEM 727000 - RIGHT OF WAY FENCE
(T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
(U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
(X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
(Y) ITEM 705001 - PCC SIDEWALK, 4"
(AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
(BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
(CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
(DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(EE) ITEM 713002 - GEOTEXTILE, SEPARATION
(FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

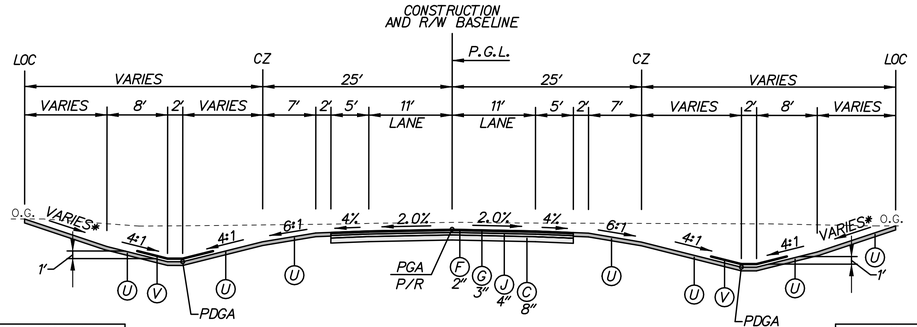
NOT TO SCALE

US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: K.A.H.
NEW CASTLE	CHECKED BY: B.R.T.

TYPICAL SECTIONS

TS-37
SHEET NO. 53
TOTAL SHTS. 875



*LEFT CUT SLOPE CHART	
STATION	SLOPE
208+55 TO 208+75	4:1
208+75 TO 209+00	4:1 TO 3:1
209+00 TO 212+50	3:1
212+50 TO 212+75	3:1 TO 4:1
212+75 TO 215+92	4:1

RUNAROUND ROAD NORMAL SECTION
STATION 208+55 TO STATION 215+92

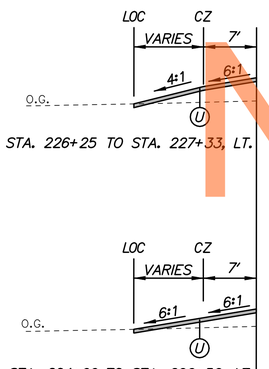
*RIGHT CUT SLOPE CHART	
STATION	SLOPE
208+55 TO 208+75	4:1
208+75 TO 209+00	4:1 TO 3:1
209+00 TO 212+50	3:1
212+50 TO 212+75	3:1 TO 4:1
212+75 TO 215+92	4:1

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

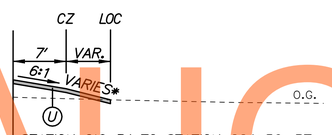
LEGEND

- (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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

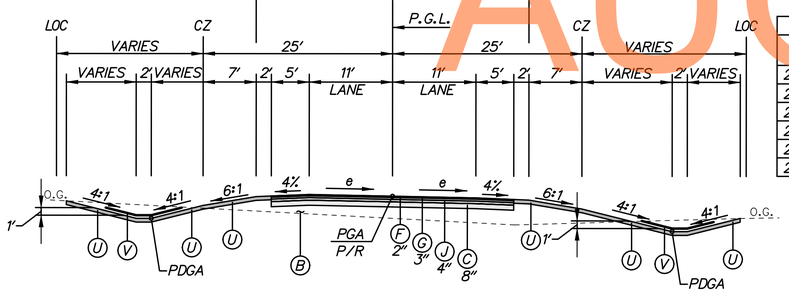


STA. 226+25 TO STA. 227+33, LT.

STA. 204+99 TO STA. 206+50, LT.

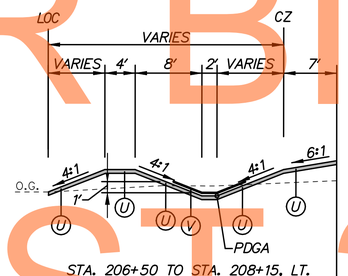


STATION 216+34 TO STATION 224+50, RT.

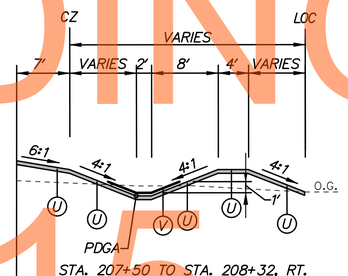


*RIGHT FILL SLOPE CHART	
STATION	SLOPE
216+34 TO 219+25	4:1
219+25 TO 219+50	4:1 TO 6:1
219+50 TO 221+50	6:1
221+50 TO 221+75	6:1 TO 4:1
221+75 TO 224+50	4:1
227+45 TO 227+33	4:1

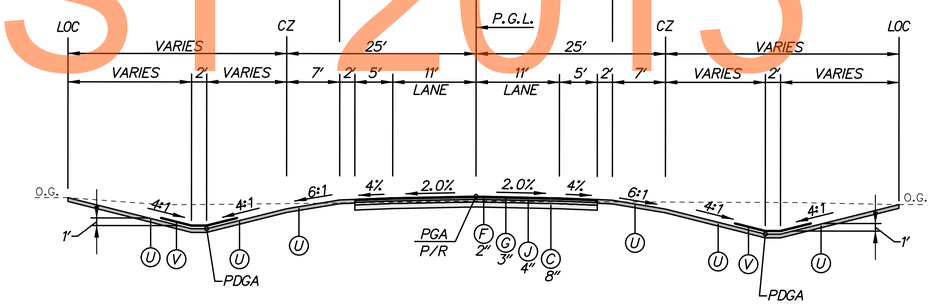
RUNAROUND ROAD SUPERELEVATED SECTION
STATION 204+99 TO STATION 206+46 (emax=2.0%)
STATION 215+92 TO STATION 224+55 (emax=-3.4%)
STATION 225+05 TO STATION 227+33 (emax=4.2%)



STA. 206+50 TO STA. 208+15, LT.



STA. 207+50 TO STA. 208+32, RT.



RUNAROUND ROAD NORMAL SECTION
STATION 206+46 TO STATION 208+55
STATION 224+55 TO STATION 225+05

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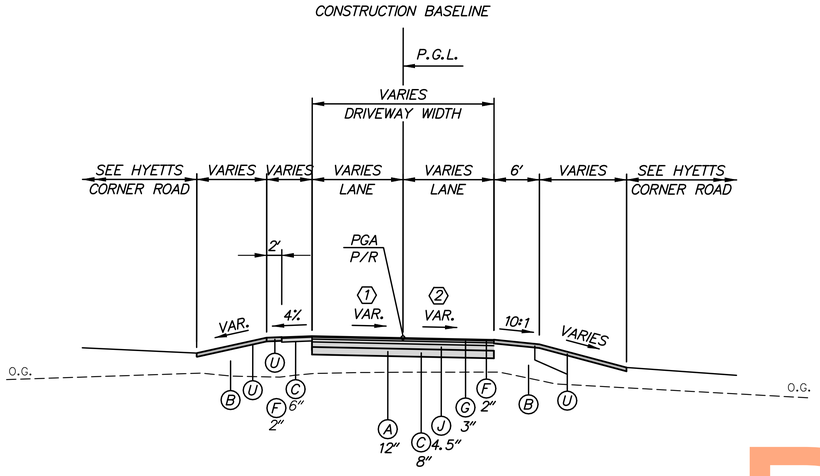
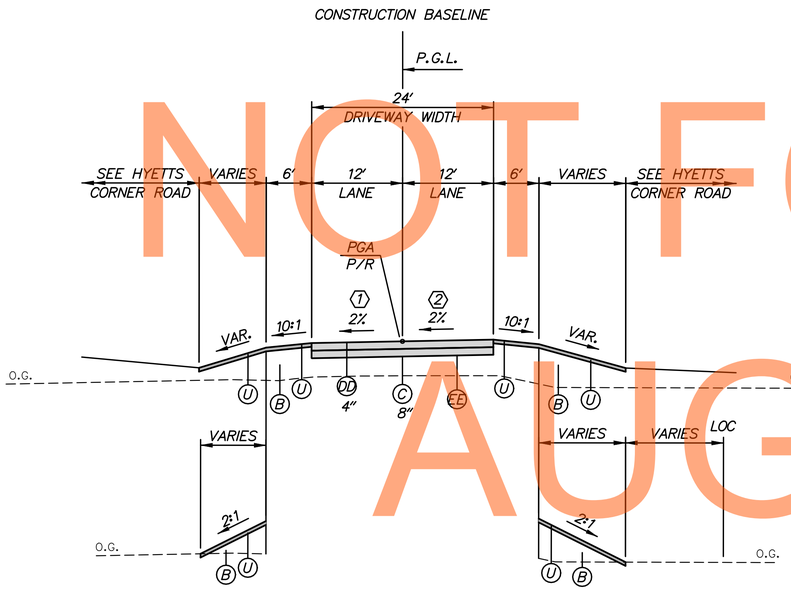
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-39
				COUNTY NEW CASTLE	DESIGNED BY: K.A.H.		SHEET NO. 54
					CHECKED BY: B.R.T.		TOTAL SHTS. 875



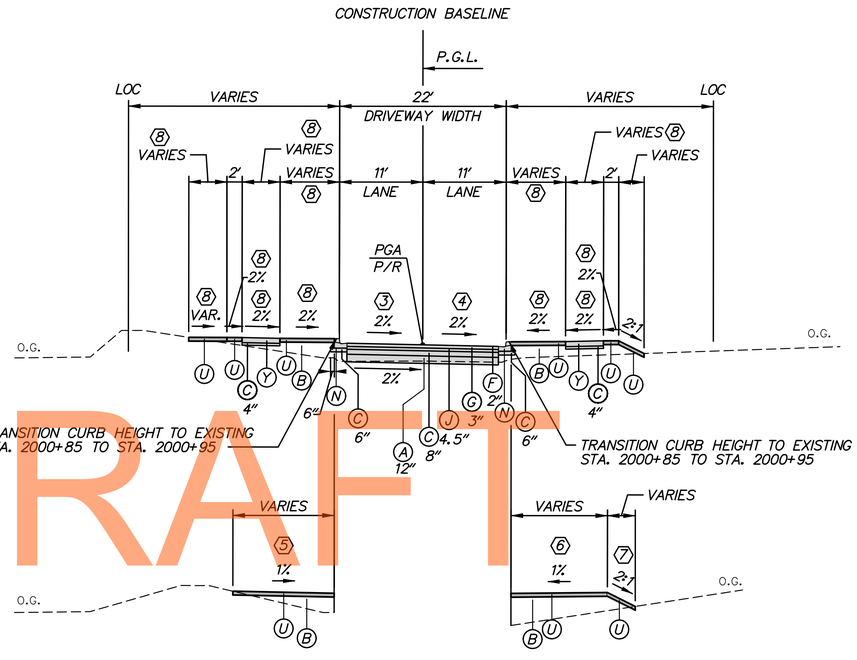
ANGELO DRIVE
STATION 451+14 TO 451+34



STA. 450+15 TO STA. 451+01

STA. 450+15 TO STA. 450+98

ANGELO DRIVE
STATION 450+15 TO 451+14



STA. 2000+42 TO STA. 2000+95

STA. 2000+37 TO STA. 2000+95

HIGH SCHOOL DRIVEWAY
STATION 2000+22 TO 2000+95

1. TRANSITION SLOPE FROM EX. TO -2% STA. 450+15 TO STA. 450+30.
   TRANSITION SLOPE FROM -2.0% TO +2.72% STA. 450+61 TO STA. 451+34.
2. TRANSITION SLOPE FROM EX. TO +2% STA. 450+15 TO STA. 450+30.
   TRANSITION SLOPE FROM +2.0% TO -2.72% STA. 450+61 TO STA. 451+34.
3. HOLD SLOPE -0.38% FROM STA. 2000+22 TO STA. 2000+25.
   TRANSITION SLOPE FROM -0.38% TO +2.0% STA. 2000+25 TO STA. 2000+40.
   TRANSITION SLOPE FROM +2.0% TO EX. STA. 2000+85 TO STA. 2000+95
4. HOLD SLOPE +0.80% FROM STA. 2000+22 TO STA. 2000+25.
   TRANSITION SLOPE FROM +0.80% TO -2.0% STA. 2000+25 TO STA. 2000+40.
   TRANSITION SLOPE FROM -2.0% TO EX. STA. 2000+75 TO STA. 2000+95
5. TRANSITION SLOPE FROM +1.0% TO EX. STA. 2000+85 TO STA. 2000+95.
6. TRANSITION SLOPE FROM +2.0% TO +1.0% STA. 2000+37 TO STA. 2000+50.
   TRANSITION SLOPE FROM +1.0% TO EX. STA. 2000+85 TO STA. 2000+95.
7. TRANSITION SLOPE FROM -2:1 TO +1.0% STA. 2000+37 TO STA. 2000+50.
   HOLD SLOPE +1.05 FROM STA. 2000+50 TO 2000+95.
8. SEE GG-36 FOR ELEVATIONS AND COORDINATES.

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

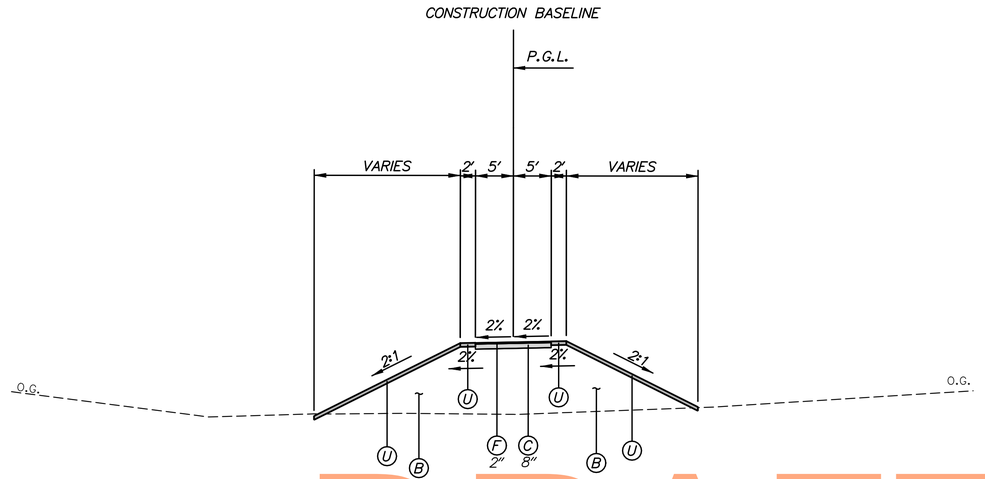
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	
T200911308	DESIGNED BY: S.E.S.	
COUNTY	CHECKED BY: B.R.T.	
NEW CASTLE		

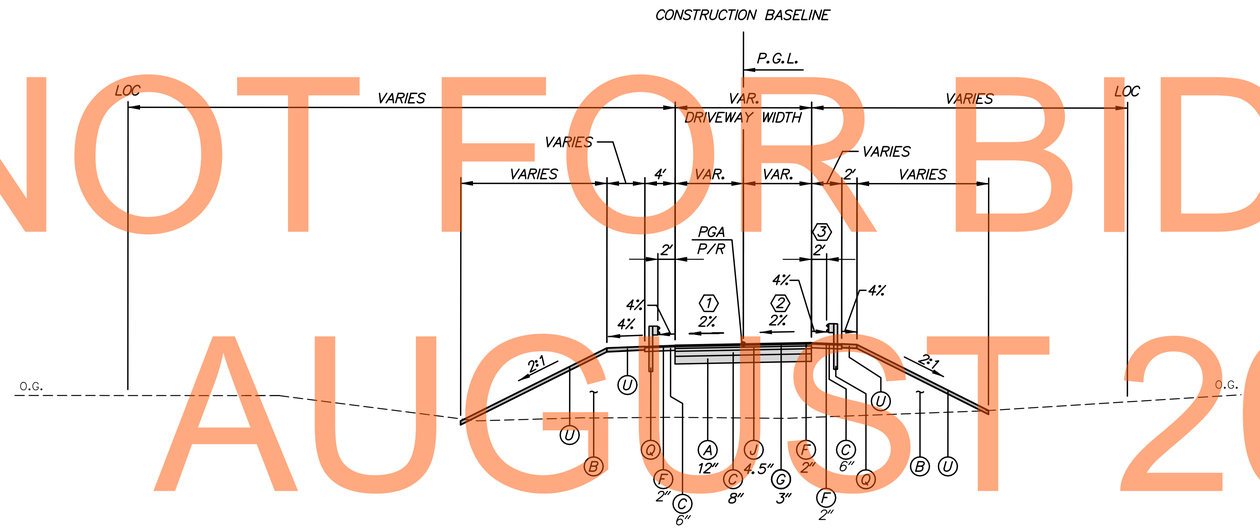
TYPICAL SECTIONS

TS-39

SHEET NO.	TOTAL SHTS.
55	875



WINDSOR COMMONS PATH
STATION 2100+23 TO 2101+72



UTILITY ACCESS ROAD NORMAL SECTION
STATION 400+16 TO 400+46

(1) TRANSITION SLOPE FROM -2.62% TO -2% STA. 400+16 TO STA. 400+26.

(2) TRANSITION SLOPE FROM +2.62% TO +2% STA. 400+16 TO STA. 400+26.

(3) WIDTH VARIES 5' TO 2.28' STA. 400+16 TO STA. 400+46

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

NOT TO SCALE

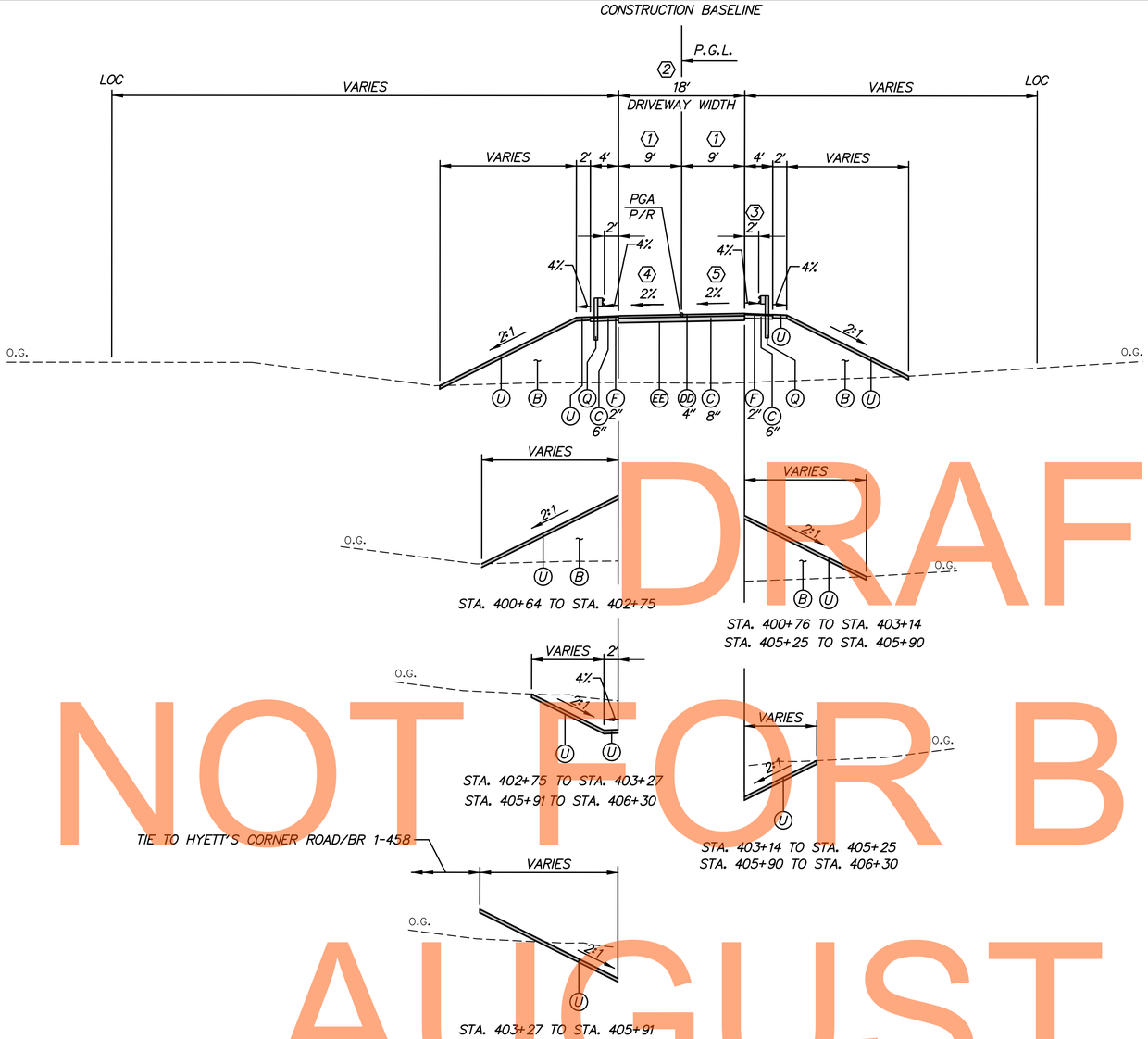
US 301,
SR 896 TO SR 1

CONTRACT	BRIDGE NO.
T200911308	
COUNTY	DESIGNED BY: S.E.S.
NEW CASTLE	CHECKED BY: B.R.T.

TYPICAL SECTIONS

TS-40

SHEET NO.	TOTAL SHTS.
56	875



UTILITY ACCESS ROAD NORMAL SECTION
STATION 400+46 TO 406+30

(1) HOLD 9' WIDTH FROM STA. 400+76 TO STA. 403+09.
TRANSITION WIDTH FROM 9' TO AT STA. 403+09 TO 7.5' AT STA. 403+25.
HOLD 7.5' WIDTH FROM STA. 403+25 TO STA. 405+90.
WIDTH VARIES STA. 405+90 TO STA. 406+30. SEE PLANS.

(2) HOLD 18' WIDTH FROM STA. 400+76 TO STA. 403+09.
TRANSITION WIDTH FROM 18' AT STA. 403+09 TO 15' AT STA. 403+25.
HOLD 15' WIDTH FROM STA. 403+25 TO STA. 405+90.
WIDTH VARIES FROM STA. 405+90 TO STA. 406+30. SEE PLANS.

(3) TRANSITION WIDTH FROM 2.18' AT STA. 400+46 TO 2' AT STA. 400+56.

(4) TRANSITION SLOPE FROM -2.0% AT STA. 400+95 TO +2.0% AT STA. 401+45.
HOLD +2.0% SLOPE FROM STA. 401+45 TO STA. 406+30.

(5) TRANSITION SLOPE FROM +2.0% AT STA. 400+95 TO -2.0% AT STA. 401+45.
HOLD -2.0% SLOPE FROM STA. 401+45 TO STA. 406+30.

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"
(F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
(G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
(L) ITEM 701010 - PCC CURB, TYPE 1-8
(N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
(P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
(Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
(R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
(S) ITEM 727000 - RIGHT OF WAY FENCE
(T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
(U) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(V) ITEM 733002 - TOPSOILING, 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
(X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
(Y) ITEM 705001 - PCC SIDEWALK, 4"
(AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
(BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
(CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
(DD) ITEM 733001 - TOPSOILING, 4" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(EE) ITEM 713002 - GEOTEXTILE, SEPARATION
(FF) ITEM 701013 - PCC CURB, TYPE 1-2

NOTES:

1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
PDGA - POINT OF DITCH GRADE APPLICATION
P/R - POINT OF ROTATION
P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
SUPERPAVE, TYPE C WMA - 2"
SUPERPAVE, TYPE B WMA - 3"
SUPERPAVE BIT. CONC. BASE COURSE - 4"
GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
10. ON THE HIGH SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL FOLLOW THE SUPERELEVATION RATE FOR THE ROADWAY EXTENDED UNTIL IT INTERSECTS WITH EITHER THE BOTTOM OF TOPSOIL FOR THE MEDIAN SIDESLOPES OR IT INTERSECTS WITH THE CONSTRUCTION BASELINE. ON THE LOW SIDE OF THE SUPERELEVATED MEDIAN SECTION THE BOTTOM OF BORROW TYPE A SHALL BE CONSTRUCTED FROM THE POINT IN WHICH THE EXTENDED SUPERELEVATION SLOPE (e) INTERSECTS THE CONSTRUCTION BASELINE TO THE GRADE BREAK AT THE INSIDE EDGE OF TRAVELED WAY.
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.

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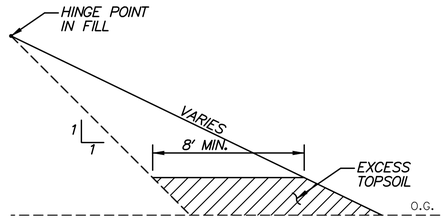
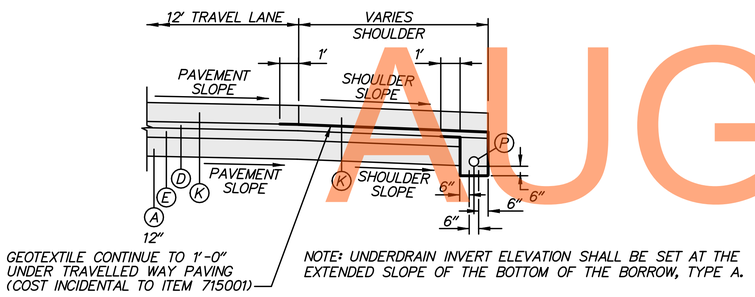
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301, SR 896 TO SR 1	CONTRACT T200911308	BRIDGE NO.	TYPICAL SECTIONS	TS-41
				COUNTY NEW CASTLE	DESIGNED BY: S.E.S.		SHEET NO. 57
					CHECKED BY: B.R.T.		TOTAL SHTS. 875



NOTES:
1. EXCESS TOPSOIL SHALL BE PLACED IN LIFTS CONCURRENTLY WITH THE CONSTRUCTION OF THE REST OF THE EMBANKMENT AND SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH SECTION 202 OF THE STANDARD SPECIFICATIONS WITH ALL COSTS INCIDENTAL TO ITEM 202000.

USE OF EXCESS TOPSOIL IN OUTER PORTIONS OF EMBANKMENT
NOT TO SCALE



US 301 MAINLINE AND RAMPS UNDERDRAIN DETAIL
NOT TO SCALE

NOTES:
1. THE MAXIMUM ALGEBRAIC DIFFERENCE ON THE HIGH SIDE BETWEEN THE TRAVELED WAY SLOPE AND THE ACCEL/DECEL LANES SHALL NOT EXCEED 4%. THE MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN THE TRAVELED WAY SLOPE AND THE SHOULDER SLOPE 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. SEE GRADES AND GEOMETRICS SHEETS FOR SUPERELEVATED CROSS SLOPE TRANSITIONS.
4. SEE SHEET TS-43 FOR UNDERDRAIN DETAIL.
   SEE CONSTRUCTION PLANS FOR PLACEMENT LOCATIONS.
5. PGA - POINT OF GRADE APPLICATION
   PDGA - POINT OF DITCH GRADE APPLICATION
   P/R - POINT OF ROTATION
   P.G.L. - POINT OF GRADE LINE
6. THE MAXIMUM LIFTS FOR THE INDIVIDUAL PAVING MATERIALS ARE AS FOLLOWS:
   SUPERPAVE, TYPE C WMA - 2"
   SUPERPAVE, TYPE B WMA - 3"
   SUPERPAVE BIT. CONC. BASE COURSE - 4"
   GRADED AGGREGATE BASE COURSE - 8"
7. SUPERPAVE, TYPE B HOT-MIX SHALL BE PLACED IN TWO EQUAL LIFTS, WHEN THICKNESS EXCEEDS 3".
8. SEE SHEET DT-01 FOR RUMBLE STRIP LOCATIONS.
9. SEE SHEET DT-12 FOR SAFETY EDGE DETAILS. THESE DETAILS SHALL BE APPLIED AT ALL INSTANCES WHERE THE EDGE OF PROPOSED PAVEMENT MEETS THE 6" TOPSOIL.
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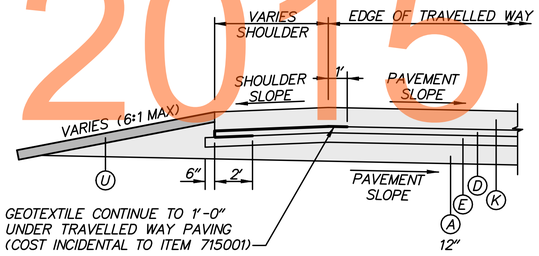
11. FOR INTERFACE BETWEEN MOMENT SLAB AND ROADWAY PAVEMENT AND APPROACH SLAB AND ROADWAY PAVEMENT, SEE STRUCTURAL DETAILS.
12. SEE SHEET DT-15 FOR DETAILS OF CONSTRUCTING PROPOSED EARTH BERM.



US 301 MAINLINE AND RAMPS SHOULDER WITHOUT UNDERDRAIN
NOT TO SCALE

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"
- (F) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22
- (G) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (J) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (K) ITEM 501006 - PORTLAND CEMENT CONCRETE PAVEMENT, 12"
- (L) ITEM 701010 - PCC CURB, TYPE 1-8
- (N) ITEM 701022 - PCC CURB AND GUTTER, TYPE 3-8
- (P) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6"
- (Q) ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31
- (R) ITEM 720052 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31
- (S) ITEM 727000 - RIGHT OF WAY FENCE
- (T) ITEM 501001 - 8" PORTLAND CEMENT CONCRETE
- (U) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (V) ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
  ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
- (W) ITEM 701016 - PCC CURB AND GUTTER, TYPE 1-4
- (X) ITEM 760017 - RUMBLE STRIPS, CONCRETE
- (Y) ITEM 705001 - PCC SIDEWALK, 4"
- (AA) ITEM 720626 - CONCRETE SINGLE FACE BARRIER, TYPE 1
- (BB) ITEM 760507 - PROFILE MILLING, HOT-MIX
- (CC) ITEM 401824 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, WEDGE
- (DD) ITEM 733001 - TOPSOILING, 4" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (EE) ITEM 713002 - GEOTEXTILE, SEPARATION
- (FF) ITEM 701013 - PCC CURB, TYPE 1-2