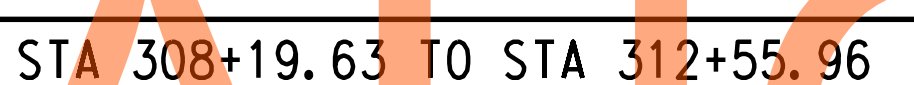
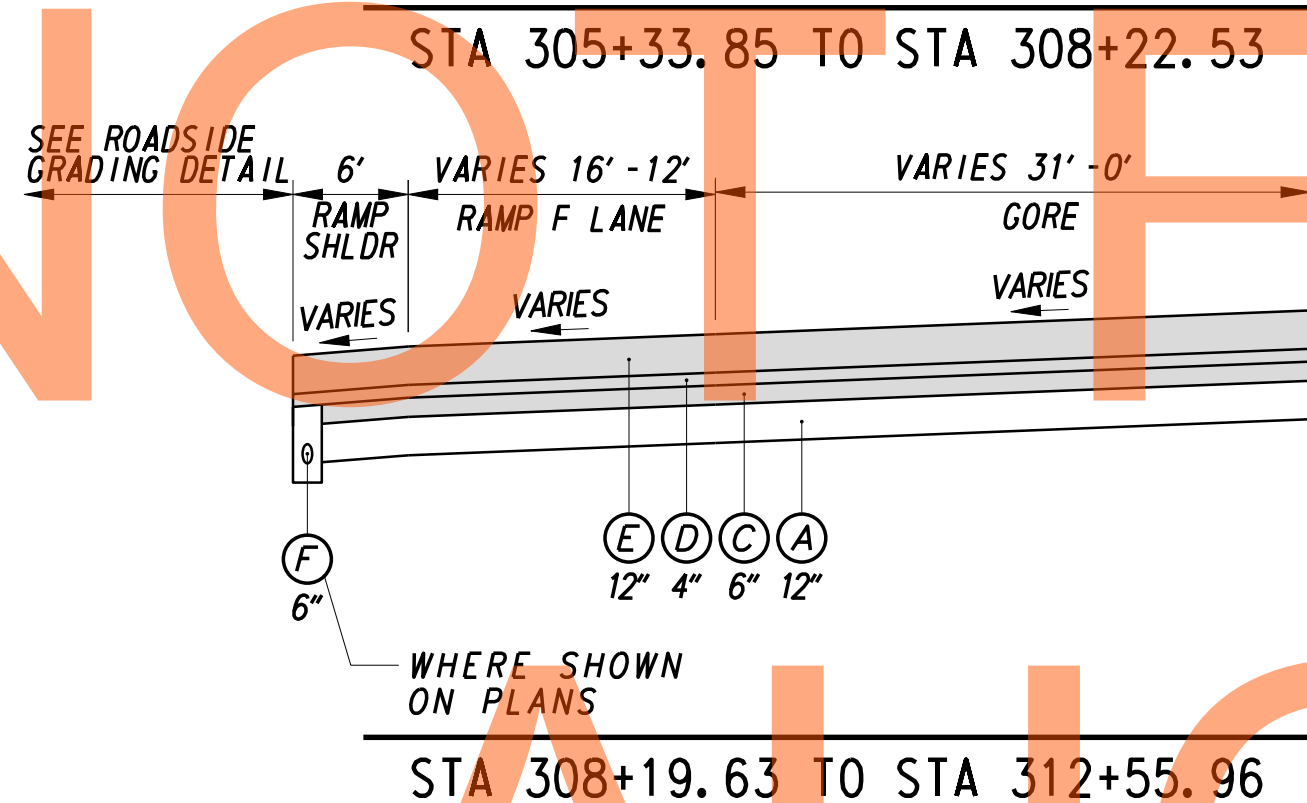


TYPICAL NORMAL SECTION US 301
 STA 258+00.00 TO STA 312+55.96

NOT FOR BIDDING



***FILL SLOPE RATIO CHART**

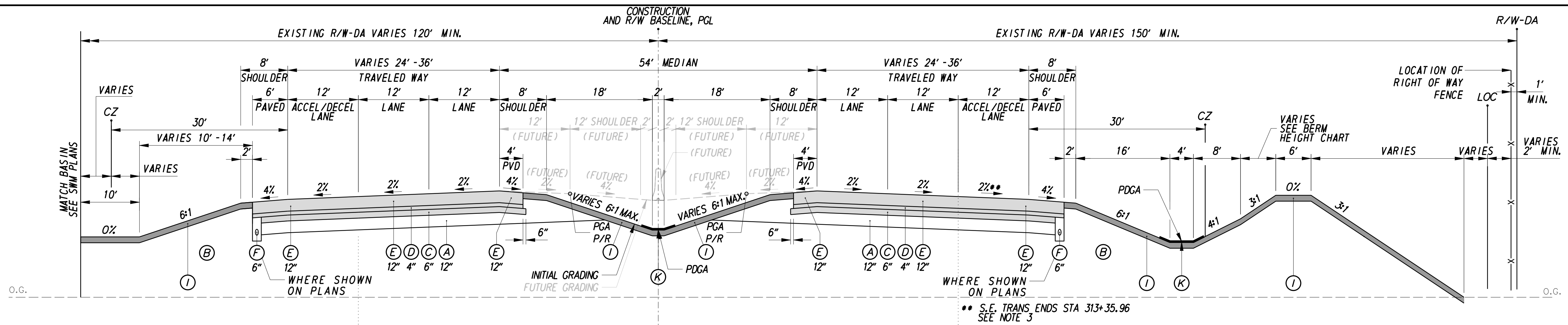
HEIGHT OF EMB.	SLOPE RATIO
0'-5'	6:1
>5'-10'	4:1
>10'-15'	3:1
>15'	2:1 WITH GUARDRAIL

LEGEND

(A) ITEM *209001, BORROW TYPE A	(D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(B) ITEM *209006, BORROW TYPE F	(R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(C) ITEM *304502, SOIL CEMENT BASE COURSE	(S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(D) ITEM *304501, PERMEABLE TREATED BASE, 4"	(T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT	(U) ITEM *401517, STONE MATRIX ASPHALT
(F) ITEM *715001, PERFORATED PIPE UNDERDRAIN	(V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(G) ITEM *705002, P.C.C. SIDEWALK, 6"	(W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4	(X) ITEM *743017, PORTABLE BARRIER
(I) ITEM *733002, TOPSOILING, 6" DEPTH	(Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
(J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND	(Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B	(AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16	(AB) ITEM *760507, PROFILE MILLING, HOT MIX
(M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)	(AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22	(AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
(O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22	(AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
(P) ITEM *705001, P.C.C. SIDEWALK, 4"	
(Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	

- NOTES:**
- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 - SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 - SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
 - SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
 - SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
 - SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
 - SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 - SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

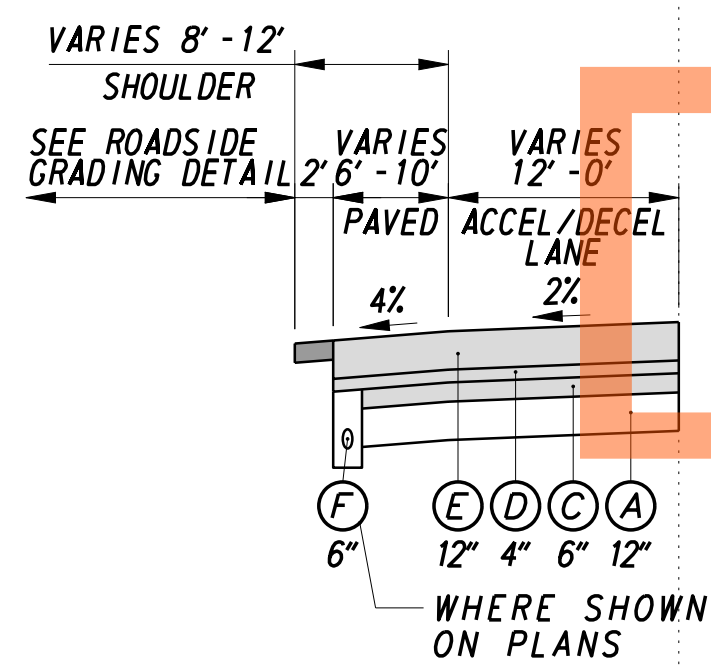
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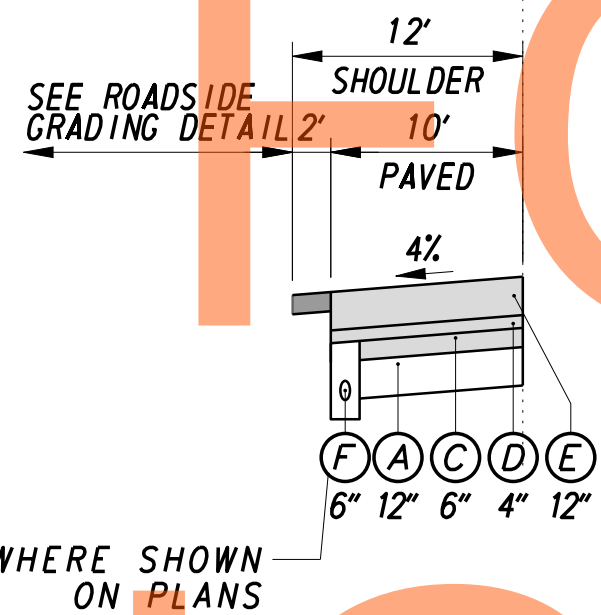
**TYPICAL NORMAL SECTION US 301
(WITH ACCELERATION / DECELERATION LANES)**

STA 312+55.96 TO STA 326+35.96
STA 449+50.00 TO STA 452+02.10

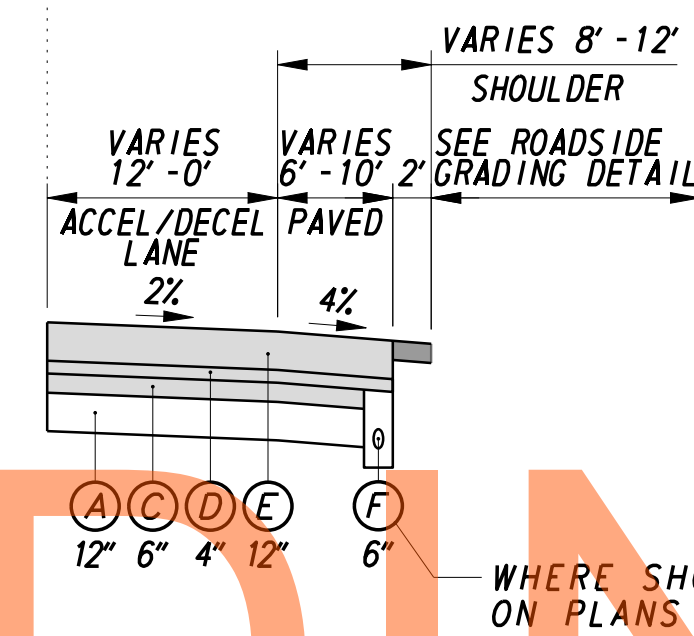
BERM HEIGHT CHART		
BERM STA LIMITS	HEIGHT ABOVE PGA	BACKSLOPE
316+00-319+50	10'	3:1
319+50-332+00	16'	3:1
332+00-334+50	16'	2.5:1
334+50-338+50	16'	3:1
338+50-345+50	10'	3:1
348+00-355+50	16'	3:1
355+50-375+00	16'	2:1
415+00-436+00	6'	2:1



STA 318+50.00 TO STA 321+50.00



STA 321+50.00 TO STA 326+35.96



STA 323+35.96 TO STA 326+35.96

DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

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- SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

ADDENDUMS / REVISIONS

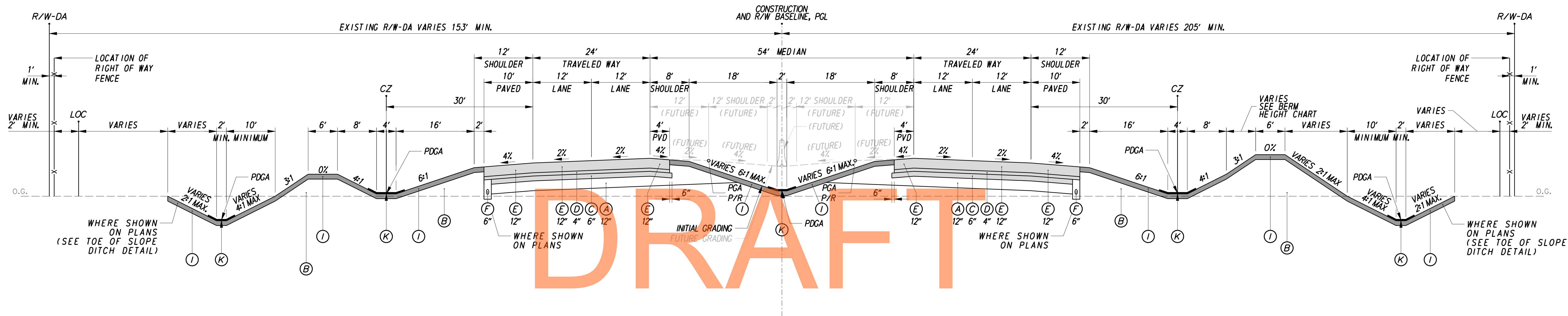
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS

TS-02
SHEET NO.
22
TOTAL SHTS.
1256



TYPICAL NORMAL SECTION US 301

STA 326+35.96 TO STA 328+28.00
 STA 353+88.00 TO STA 385+50.00
 STA 424+75.00 TO STA 427+14.00

BERM HEIGHT CHART		
BERM STA LIMITS	HEIGHT ABOVE PGA	BACKSLOPE
316+00-319+50	10'	3:1
319+50-332+00	16'	3:1
332+00-334+50	16'	2.5:1
334+50-338+50	16'	3:1
338+50-345+50	10'	3:1
348+00-355+50	16'	3:1
355+50-375+00	16'	2:1
415+00-436+00	6'	2:1

NOT FOR BIDDING

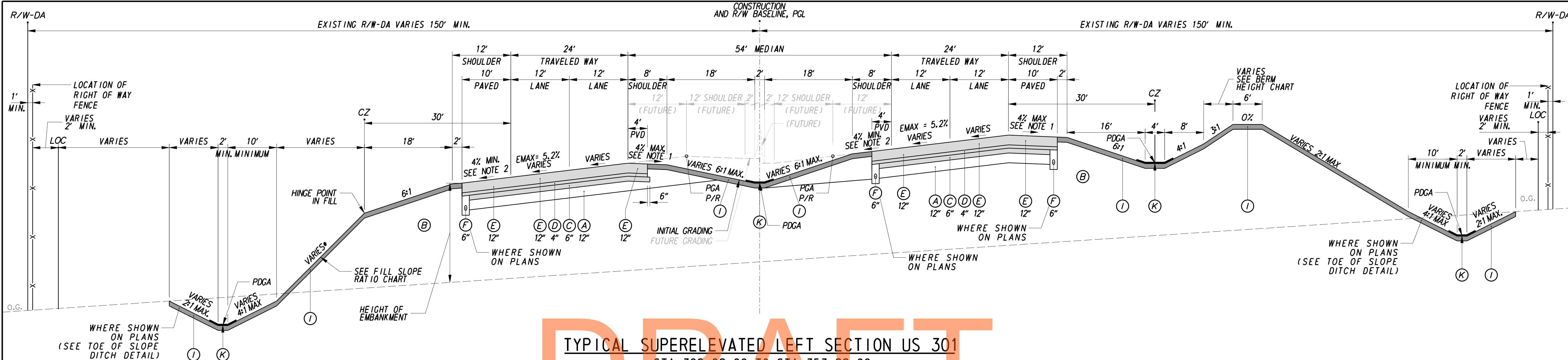
AUGUST 2015

- LEGEND**
- (A) ITEM *209001, BORROW TYPE A
 - (B) ITEM *209006, BORROW TYPE F
 - (C) ITEM *304502, SOIL CEMENT BASE COURSE
 - (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
 - (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
 - (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
 - (G) ITEM *705002, P.C.C. SIDEWALK, 6"
 - (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
 - (I) ITEM *733002, TOPSOILING, 6" DEPTH
 - (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
 - (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
 - (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
 - (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
 - (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
 - (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (P) ITEM *705001, P.C.C. SIDEWALK, 4"
 - (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
 - (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
 - (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
 - (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
 - (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
 - (V) ITEM *401517, STONE MATRIX ASPHALT
 - (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
 - (Y) ITEM *743017, PORTABLE BARRIER
 - (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
 - (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
 - (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
 - (AC) ITEM *760507, PROFILE MILLING, HOT MIX
 - (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
 - (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
 - (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOTES:

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 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

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TYPICAL SUPERELEVATED LEFT SECTION US 301
 STA 328+28.00 TO STA 353+88.00
 STA 427+14.00 TO STA 440+25.00

***FILL SLOPE RATIO CHART**

HEIGHT OF EMB.	SLOPE RATIO
0'-5'	6:1
>5'-10'	4:1
>10'-15'	3:1
>15'	2:1 WITH GUARDRAIL

BERM HEIGHT CHART

BERM STA LIMITS	HEIGHT ABOVE PGA	BACKSLOPE
316+00-319+50	10'	3:1
319+50-332+00	16'	3:1
332+00-334+50	16'	2.5:1
334+50-338+50	16'	3:1
338+50-345+50	10'	3:1
348+00-355+50	16'	3:1
355+50-375+00	16'	2:1
415+00-436+00	6'	2:1

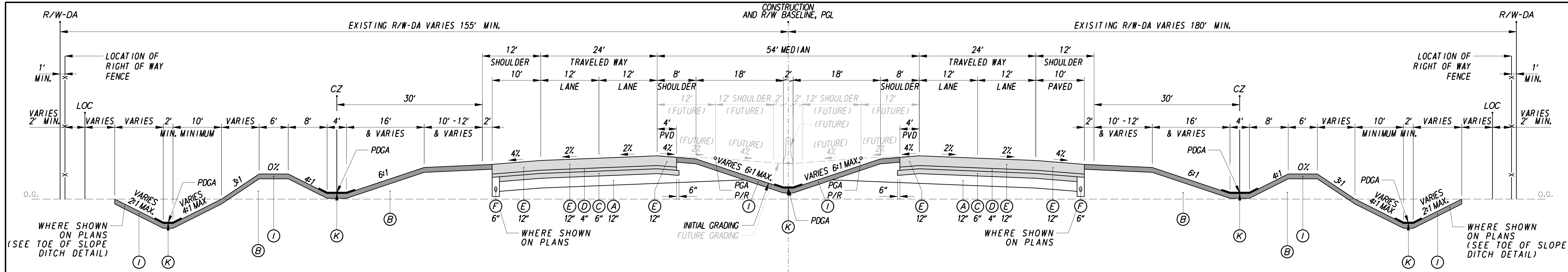
DRAFT
NOT FOR BIDDING

AUGUST 2015

- LEGEND**
- (A) ITEM *209001, BORROW TYPE A
 - (B) ITEM *209006, BORROW TYPE F
 - (C) ITEM *304502, SOIL CEMENT BASE COURSE
 - (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
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 - (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
 - (G) ITEM *705002, P.C.C. SIDEWALK, 6"
 - (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
 - (I) ITEM *733002, TOPSOILING, 6" DEPTH
 - (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
 - (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
 - (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
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 - (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
 - (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (P) ITEM *705001, P.C.C. SIDEWALK, 4"
 - (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
 - (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
 - (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
 - (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
 - (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
 - (V) ITEM *401517, STONE MATRIX ASPHALT
 - (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
 - (Y) ITEM *743017, PORTABLE BARRIER
 - (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
 - (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
 - (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
 - (AC) ITEM *760507, PROFILE MILLING, HOT MIX
 - (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
 - (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
 - (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

- NOTES:**
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 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

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TYPICAL NORMAL SECTION US 301
(AT FUTURE ACCELERATION / DECELERATION LANES)

STA 385+50.00 TO STA 402+31.00

DRAFT

NOT FOR BIDDING

AUGUST 2015

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
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- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
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- (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
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- (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

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 6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
 7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

P:\CADD\260049040_US301\CIVIL\PLANS\2A_CPLA\ETS-05.DGN



ADDENDUMS / REVISIONS

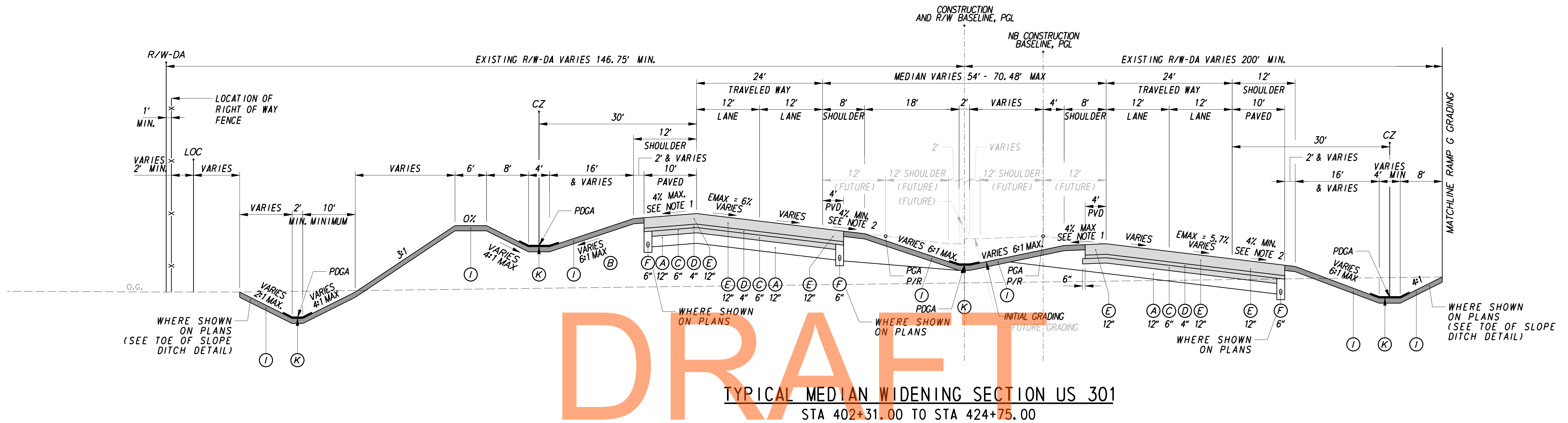
NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	DESIGNED BY:	AM	JW
T20091303		CHECKED BY:	JF	SF
COUNTY				
NEW CASTLE				

TYPICAL SECTIONS

TS-05
SHEET NO.
25
TOTAL SHTS.
1256



TYPICAL MEDIAN WIDENING SECTION US 301
 STA 402+31.00 TO STA 424+75.00

NOT FOR BIDDING

AUGUST 2015

LEGEND

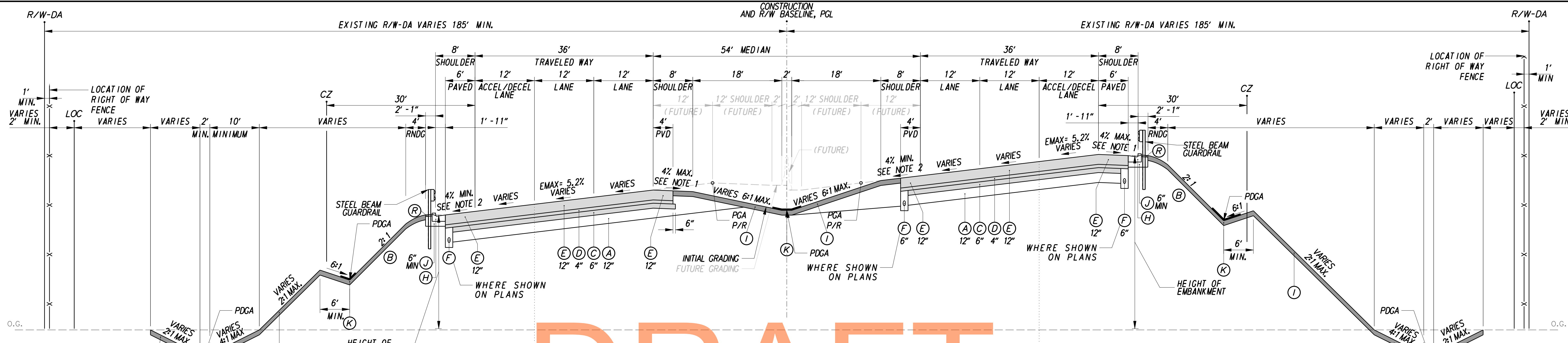
- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 - SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 - SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
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 - SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 - SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

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	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT	BRIDGE NO.	TYPICAL SECTIONS	TS-06
					T20091303		
				COUNTY	DESIGNED BY: AM JW	TOTAL SHTS.	1256
				NEW CASTLE	CHECKED BY: JF SF		



**TYPICAL SUPERELEVATED LEFT SECTION US 301
(WITH ACCELERATION/DECELERATION LANES)
STA 440+25.00 TO STA 449+50.00**

STA 440+25.00 TO STA 443+25.00

STA 440+25.00 TO STA 445+60.00

STA 445+60.00 TO STA 448+60.00

DRAFT
NOT FOR BIDDING
AUGUST 2015

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
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| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
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P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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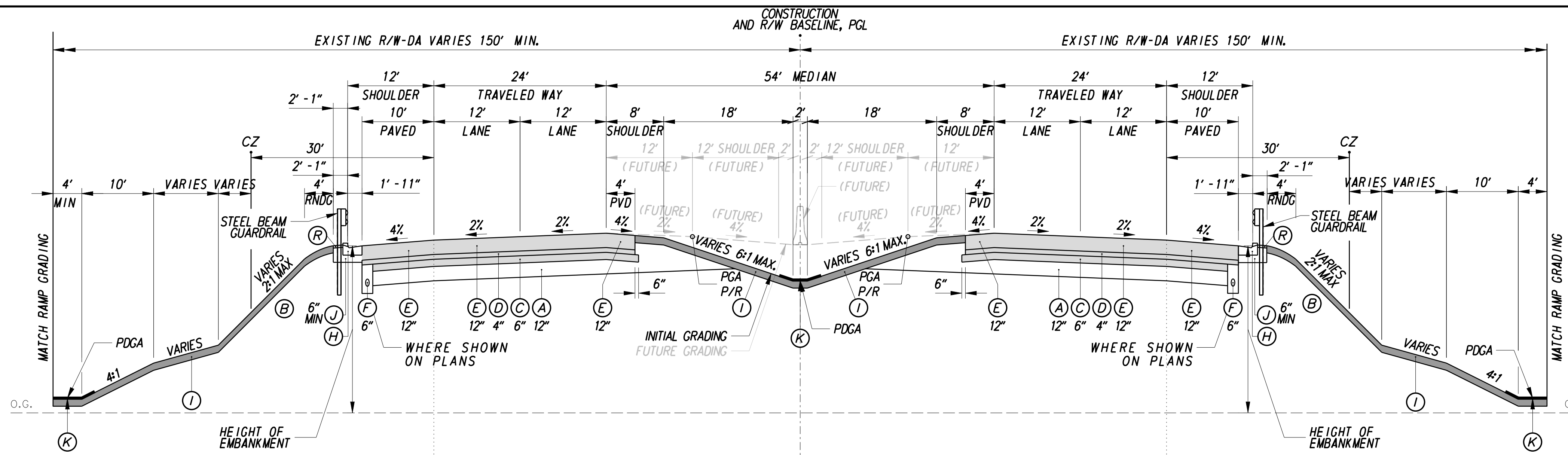
ADDENDUMS / REVISIONS

NOT TO SCALE

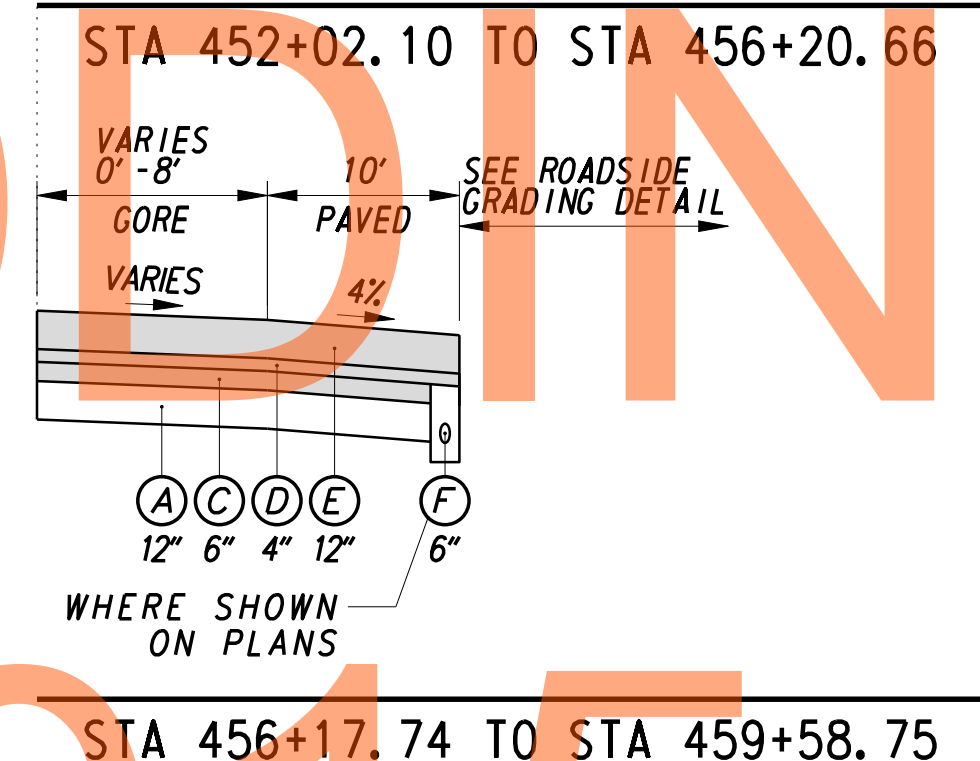
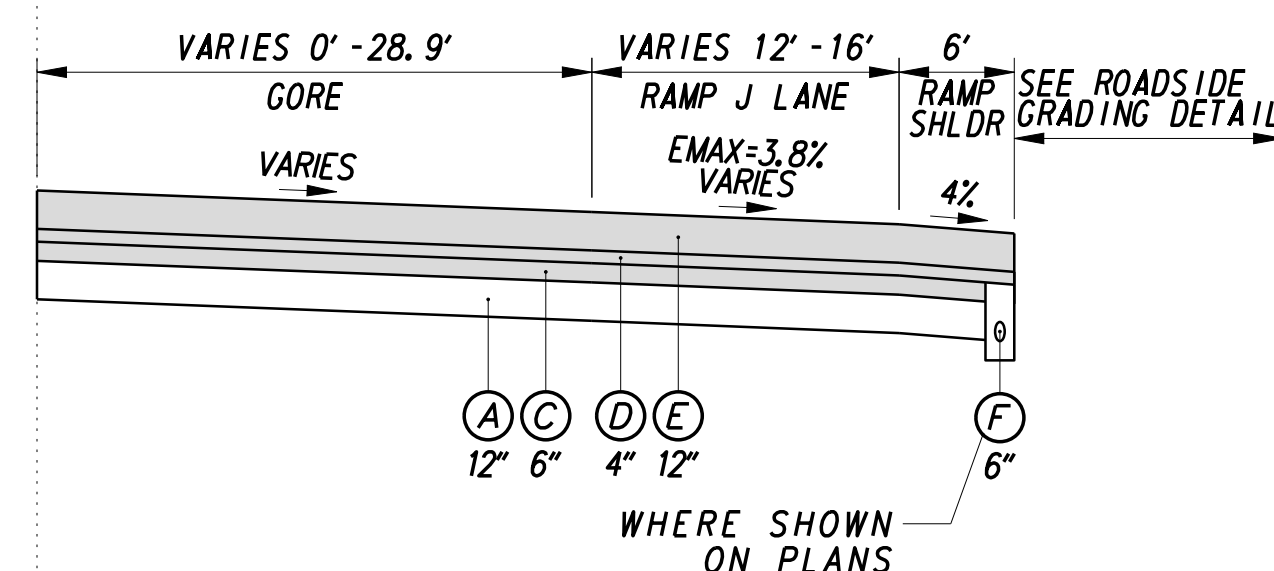
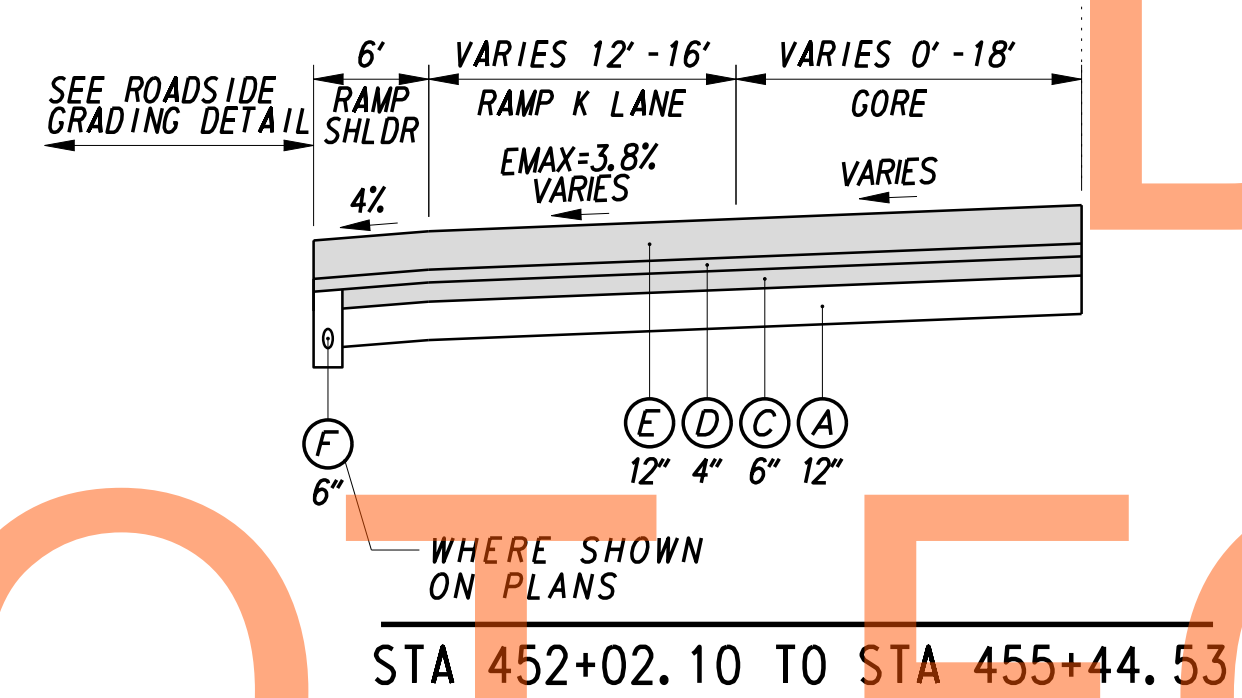
**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AM JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS	TS-07
	SHEET NO.
	27
	TOTAL SHTS.
	1256



TYPICAL NORMAL SECTION US 301
STA 452+02.10 TO STA 468+63.00



DRAFT

NOT FOR BIDDING

AUGUST 2015

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
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| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

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 - SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
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 - SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 - SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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ADDENDUMS / REVISIONS

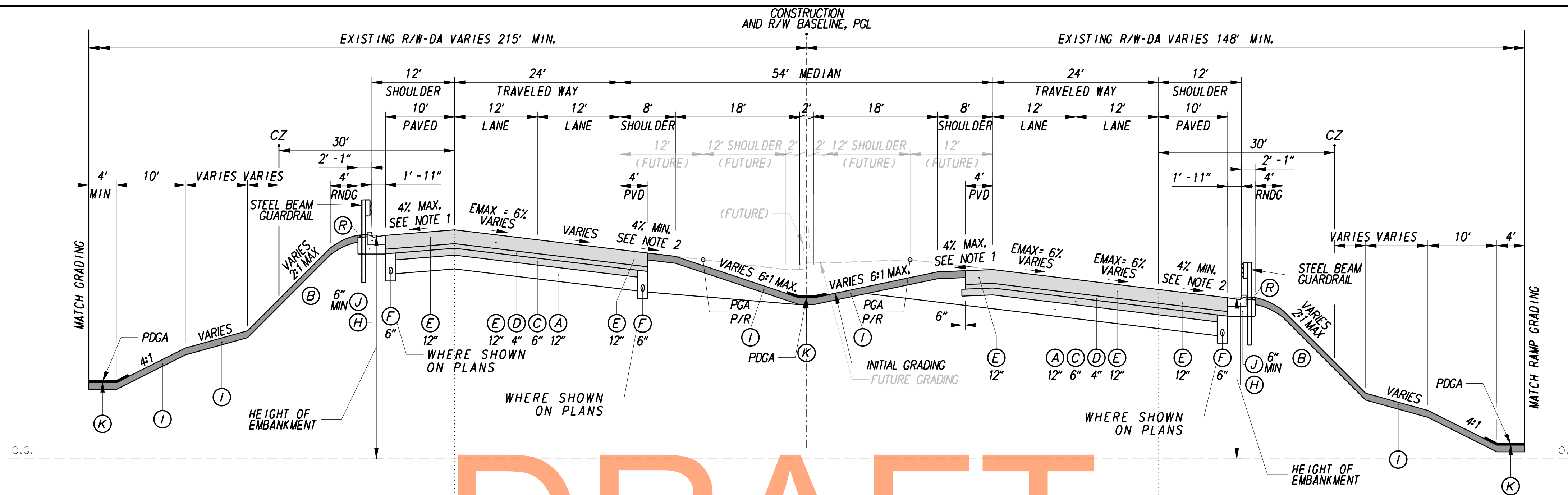
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT T20091303	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: AM JW CHECKED BY: JF SF

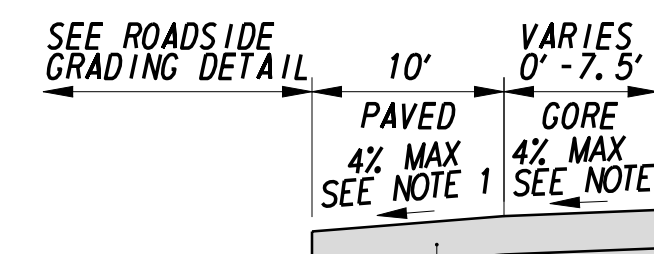
TYPICAL SECTIONS

TS-08
SHEET NO. 28
TOTAL SHTS. 1256

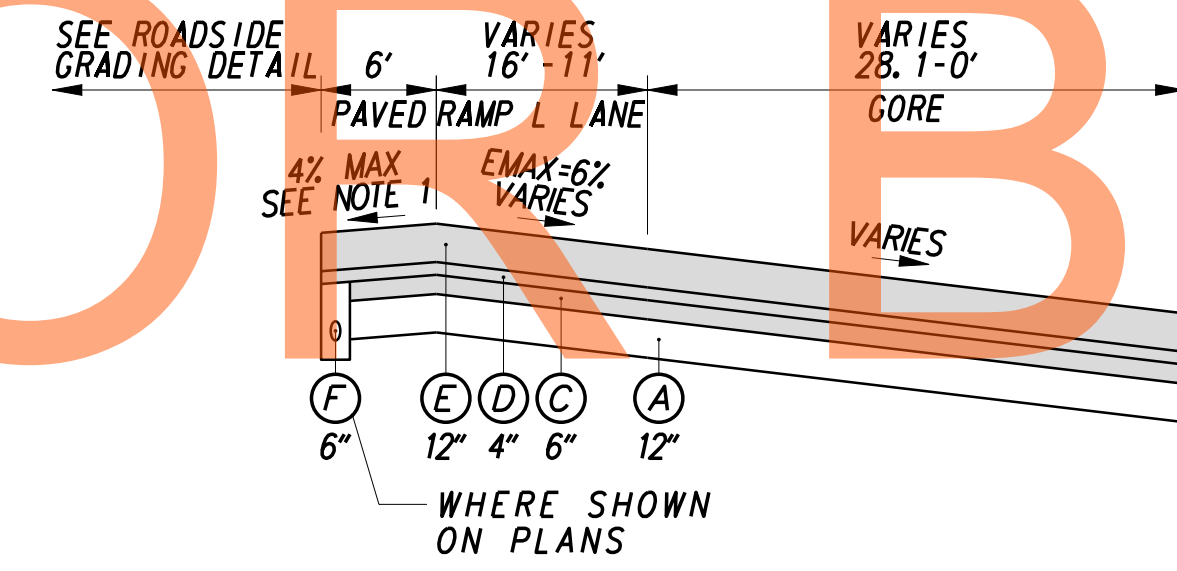


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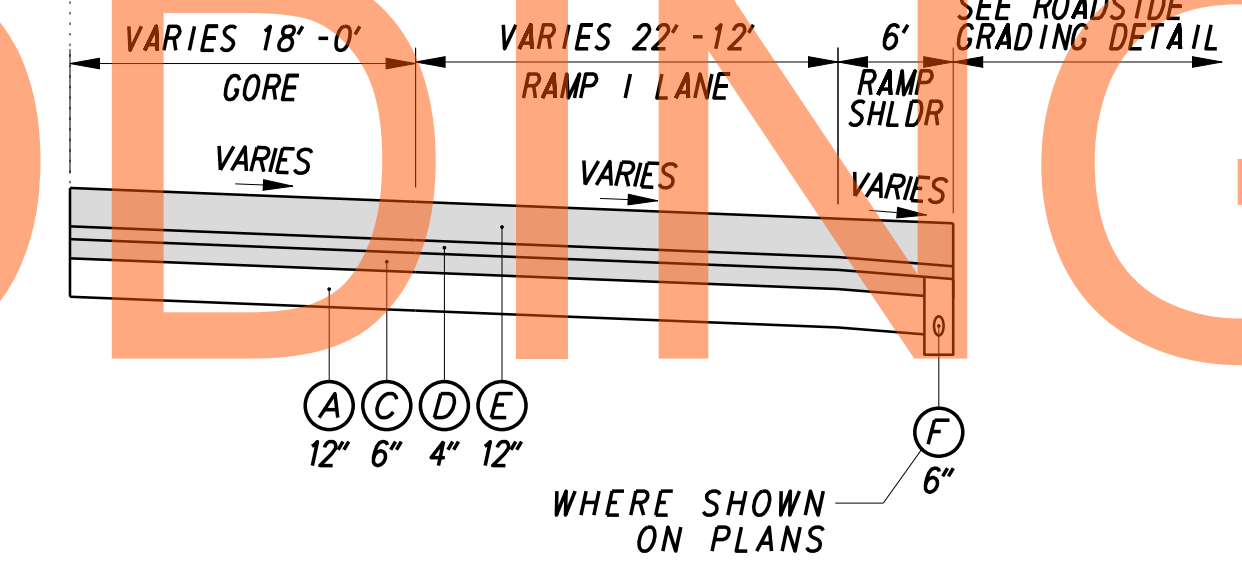
TYPICAL SUPERELEVATED RIGHT SECTION US 301
STA 468+63.00 TO STA 479+51.33



STA 472+03.36 TO STA 475+25.38



STA 475+28.20 TO STA 479+51.33



STA 474+43.65 TO STA 479+51.33

NOT FOR BIDDING

AUGUST 2015

- LEGEND**
- (A) ITEM *209001, BORROW TYPE A
 - (B) ITEM *209006, BORROW TYPE F
 - (C) ITEM *304502, SOIL CEMENT BASE COURSE
 - (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
 - (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
 - (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
 - (G) ITEM *705002, P.C.C. SIDEWALK, 6"
 - (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
 - (I) ITEM *733002, TOPSOILING, 6" DEPTH
 - (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
 - (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
 - (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
 - (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
 - (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
 - (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (P) ITEM *705001, P.C.C. SIDEWALK, 4"
 - (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
 - (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
 - (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
 - (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
 - (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
 - (V) ITEM *401517, STONE MATRIX ASPHALT
 - (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
 - (Y) ITEM *743017, PORTABLE BARRIER
 - (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
 - (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
 - (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
 - (AC) ITEM *760507, PROFILE MILLING, HOT MIX
 - (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
 - (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
 - (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

- NOTES:**
1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
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P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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ADDENDUMS / REVISIONS	

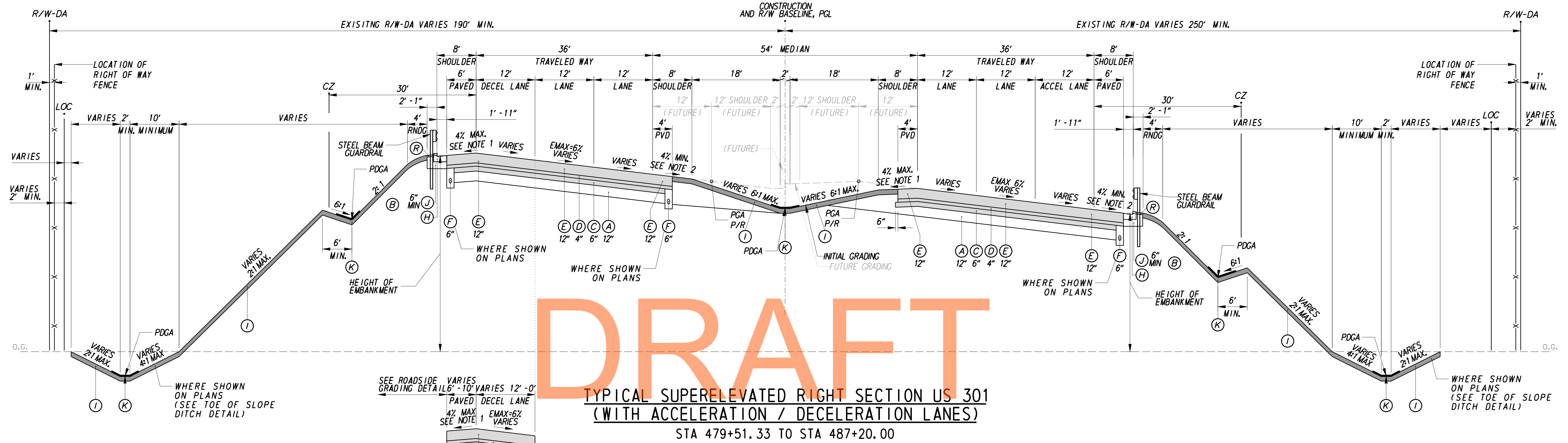
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AM JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS

TS-09
SHEET NO.
29
TOTAL SHTS.
1256



NOT FOR BIDDING

STA 484+50.00 TO STA 485+50.00

STA 485+50.00 TO STA 487+20.00

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
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| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 - SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 - SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
 - SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
 - SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
 - SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
 - SEE ROADWAY PLANS AND SWM PLANS FOR TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 - SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

G:\60049040-US301\CIVIL\PLANS\2A\CP\TS-10.DGN



ADDENDUMS / REVISIONS

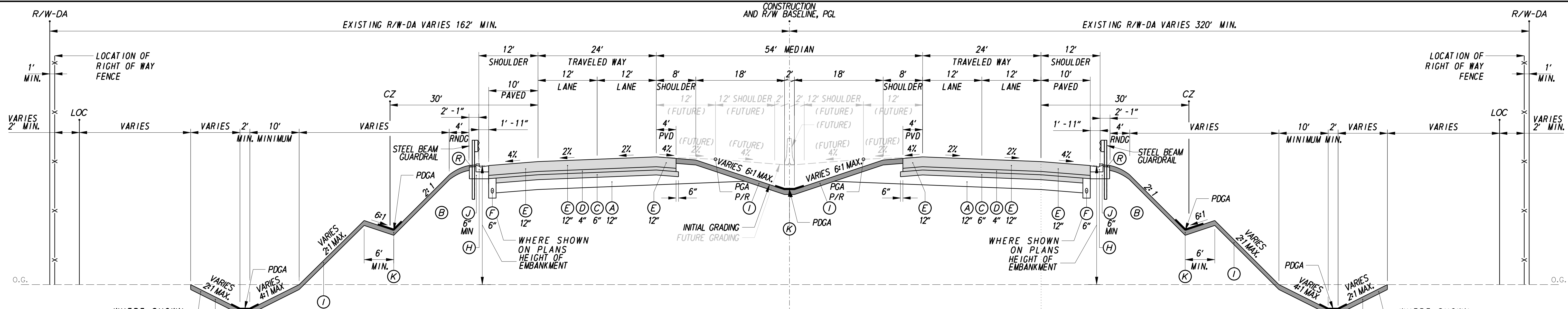
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

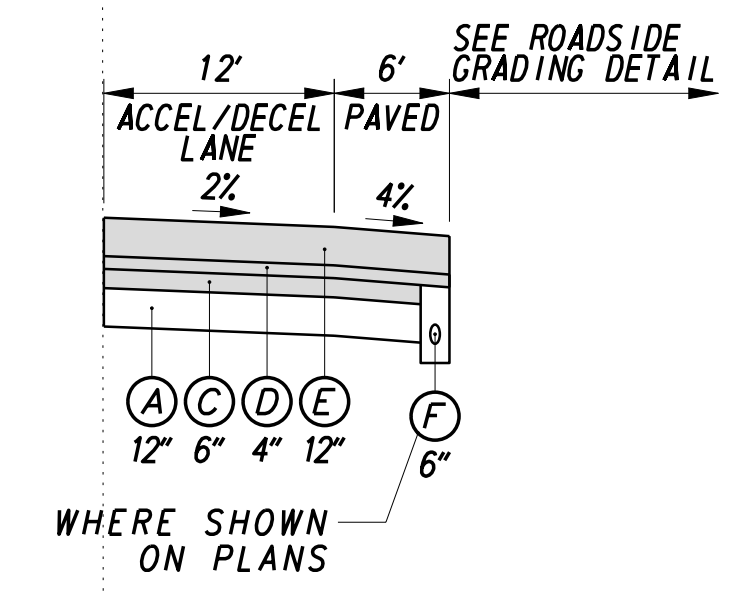
CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS

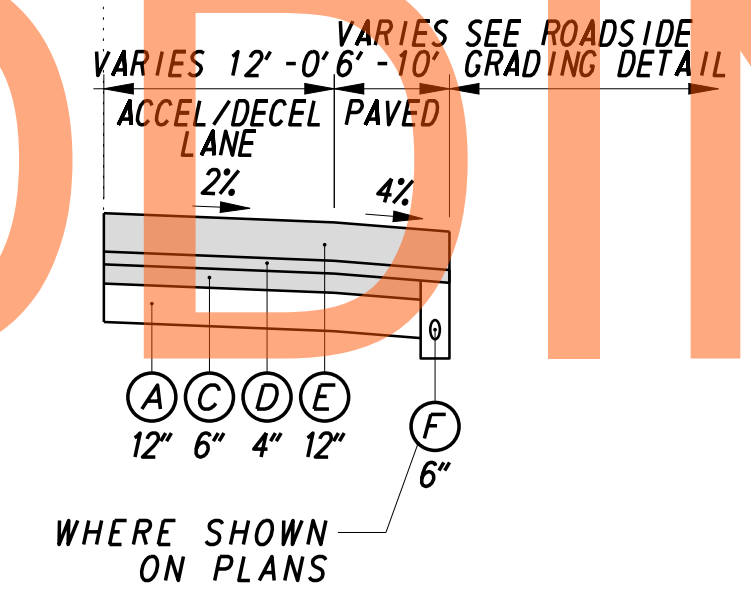
TS-10
SHEET NO.
30
TOTAL SHTS.
1256



TYPICAL NORMAL SECTION US 301
 STA 487+20.00 TO STA 494+00.00



STA 487+20.00 TO STA 489+60.00



STA 489+60.00 TO STA 492+60.00

DRAFT

NOT FOR BIDDING

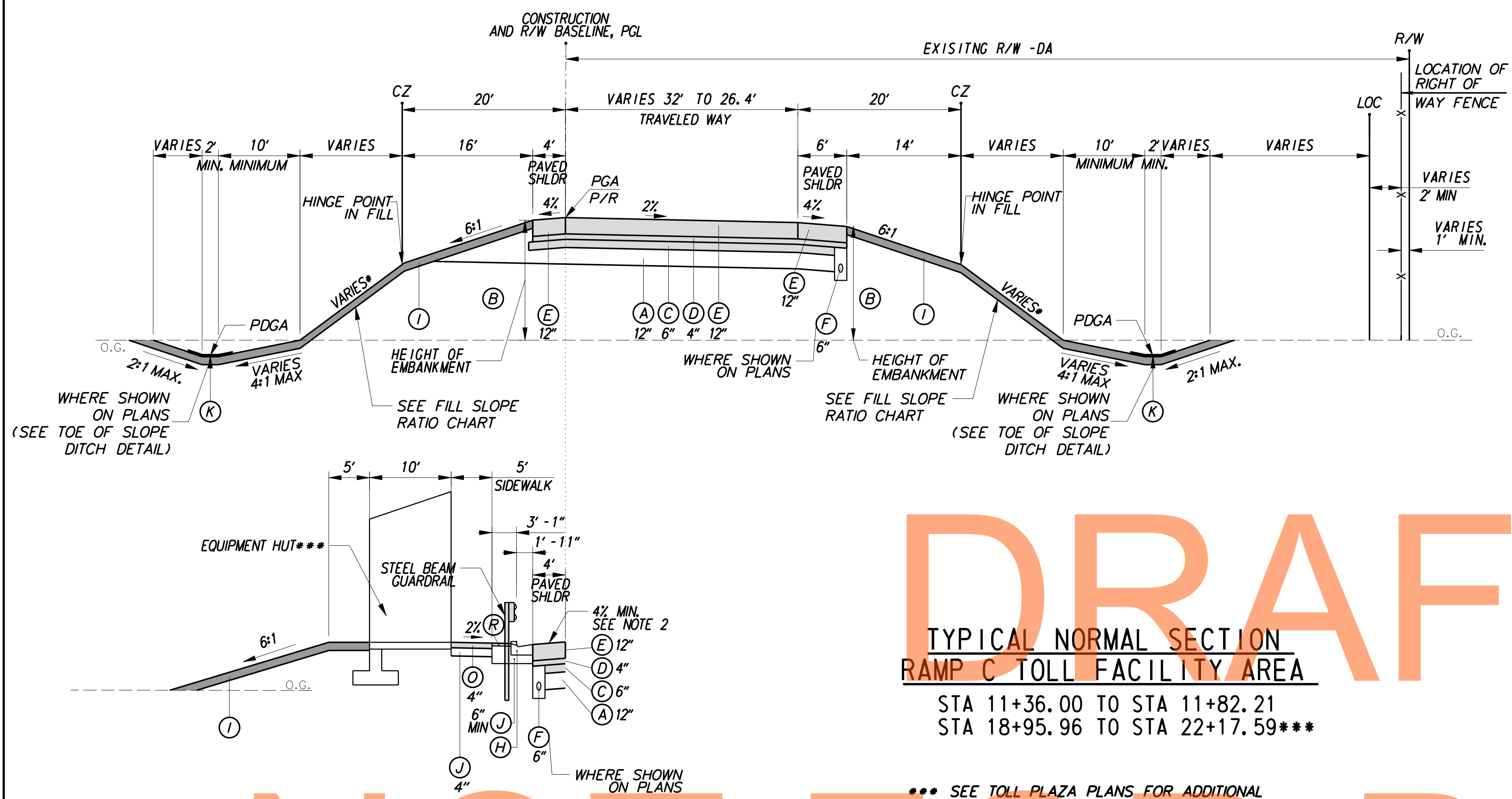
AUGUST 2015

LEGEND	
(A) ITEM *209001, BORROW TYPE A	(D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(B) ITEM *209006, BORROW TYPE F	(R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(C) ITEM *304502, SOIL CEMENT BASE COURSE	(S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(D) ITEM *304501, PERMEABLE TREATED BASE, 4"	(T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT	(U) ITEM *401517, STONE MATRIX ASPHALT
(F) ITEM *715001, PERFORATED PIPE UNDERDRAIN	(V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(G) ITEM *705002, P.C.C. SIDEWALK, 6"	(W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4	(X) ITEM *743017, PORTABLE BARRIER
(I) ITEM *733002, TOPSOILING, 6" DEPTH	(Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
(J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND	(Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B	(AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16	(AB) ITEM *760507, PROFILE MILLING, HOT MIX
(M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)	(AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22	(AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
(O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22	(AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
(P) ITEM *705001, P.C.C. SIDEWALK, 4"	
(Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	

- NOTES:**
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 - SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

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	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT	BRIDGE NO.	TYPICAL SECTIONS	TS-11
					T20091303		
				COUNTY	DESIGNED BY: AM JW	TOTAL SHTS.	1256
				NEW CASTLE	CHECKED BY: JF SF		



DRAFT

TYPICAL NORMAL SECTION RAMP C TOLL FACILITY AREA

STA 11+36.00 TO STA 11+82.21
STA 18+95.96 TO STA 22+17.59***

*** SEE TOLL PLAZA PLANS FOR ADDITIONAL
INFORMATION BETWEEN STA. 17+50 AND STA 19+50

NOT FOR BIDDING

AUGUST 2015

NOTES:

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 8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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

LEGEND

- | | |
|---|--|
| <ul style="list-style-type: none"> (A) ITEM *209001, BORROW TYPE A (B) ITEM *209006, BORROW TYPE F (C) ITEM *304502, SOIL CEMENT BASE COURSE (D) ITEM *304501, PERMEABLE TREATED BASE, 4" (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN (G) ITEM *705002, P.C.C. SIDEWALK, 6" (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 (I) ITEM *733002, TOPSOILING, 6" DEPTH ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND (J) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B (K) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 (L) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) (M) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 (N) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (O) ITEM *705001, P.C.C. SIDEWALK, 4" (P) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | <ul style="list-style-type: none"> (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) (U) ITEM *401517, STONE MATRIX ASPHALT (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 (X) ITEM *743017, PORTABLE BARRIER (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 (AB) ITEM *760507, PROFILE MILLING, HOT MIX (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
|---|--|

ADDENDUMS / REVISIONS



NOT TO SCALE

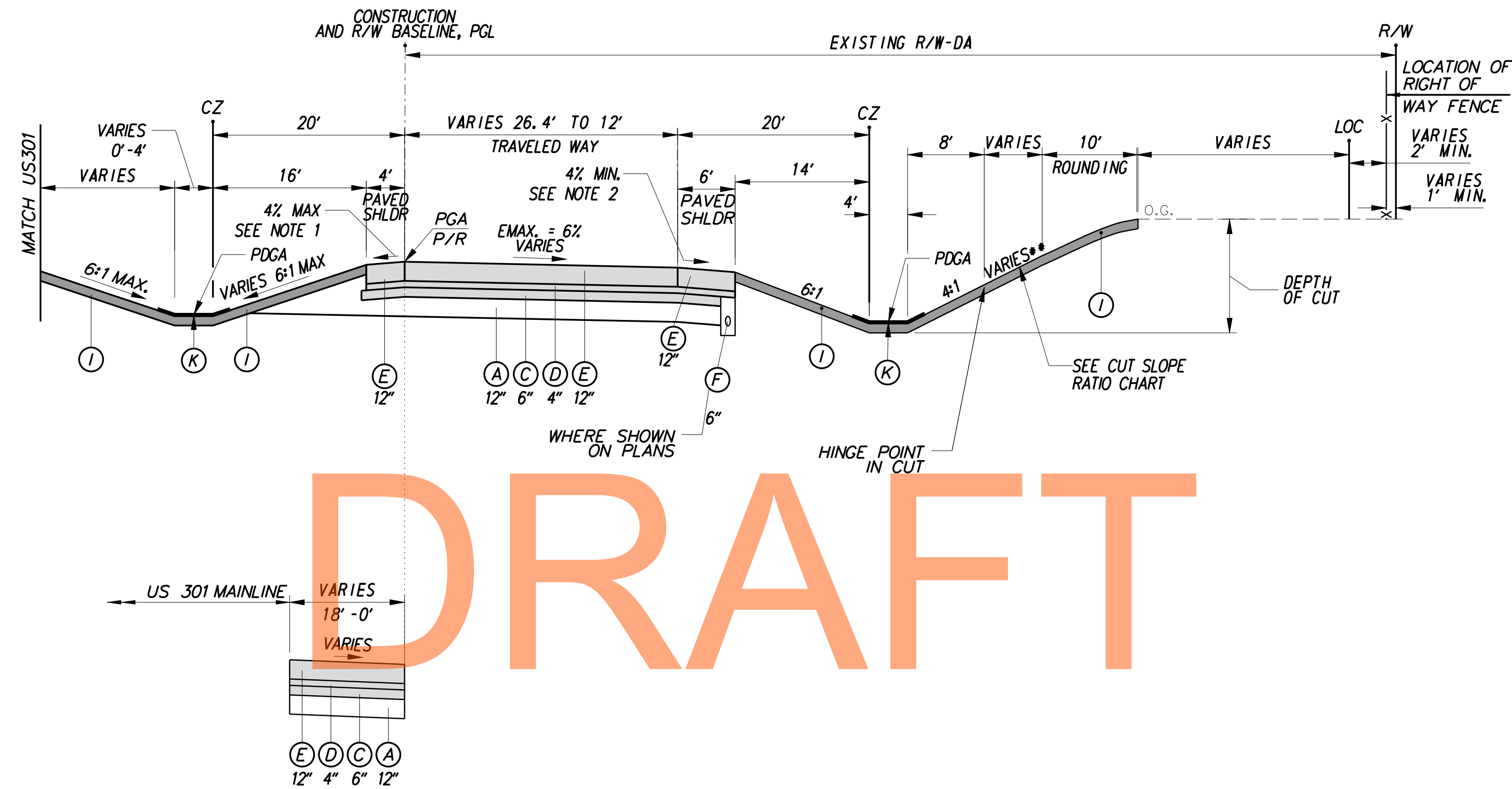
**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AW JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS

TS-12
SHEET NO.
32
TOTAL SHTS.
1256

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DRAFT

NOT FOR BIDDING

AUGUST 2015

STA 24+84.73 TO STA 26+77.74
 TYPICAL SUPERELEVATED RIGHT SECTION
 RAMP C TOLL FACILITY AREA
 STA 22+17.59 TO STA 26+77.74

LEGEND

- | | |
|---|---|
| <ul style="list-style-type: none"> (A) ITEM *209001, BORROW TYPE A (B) ITEM *209006, BORROW TYPE F (C) ITEM *304502, SOIL CEMENT BASE COURSE (D) ITEM *304501, PERMEABLE TREATED BASE, 4" (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN (G) ITEM *705002, P.C.C. SIDEWALK, 6" (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 (I) ITEM *733002, TOPSOILING, 6" DEPTH (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (P) ITEM *705001, P.C.C. SIDEWALK, 4" (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | <ul style="list-style-type: none"> (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) (V) ITEM *401517, STONE MATRIX ASPHALT (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 (Y) ITEM *743017, PORTABLE BARRIER (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 (AC) ITEM *760507, PROFILE MILLING, HOT MIX (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
|---|---|

NOTES:

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 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.

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

ADDENDUMS / REVISIONS

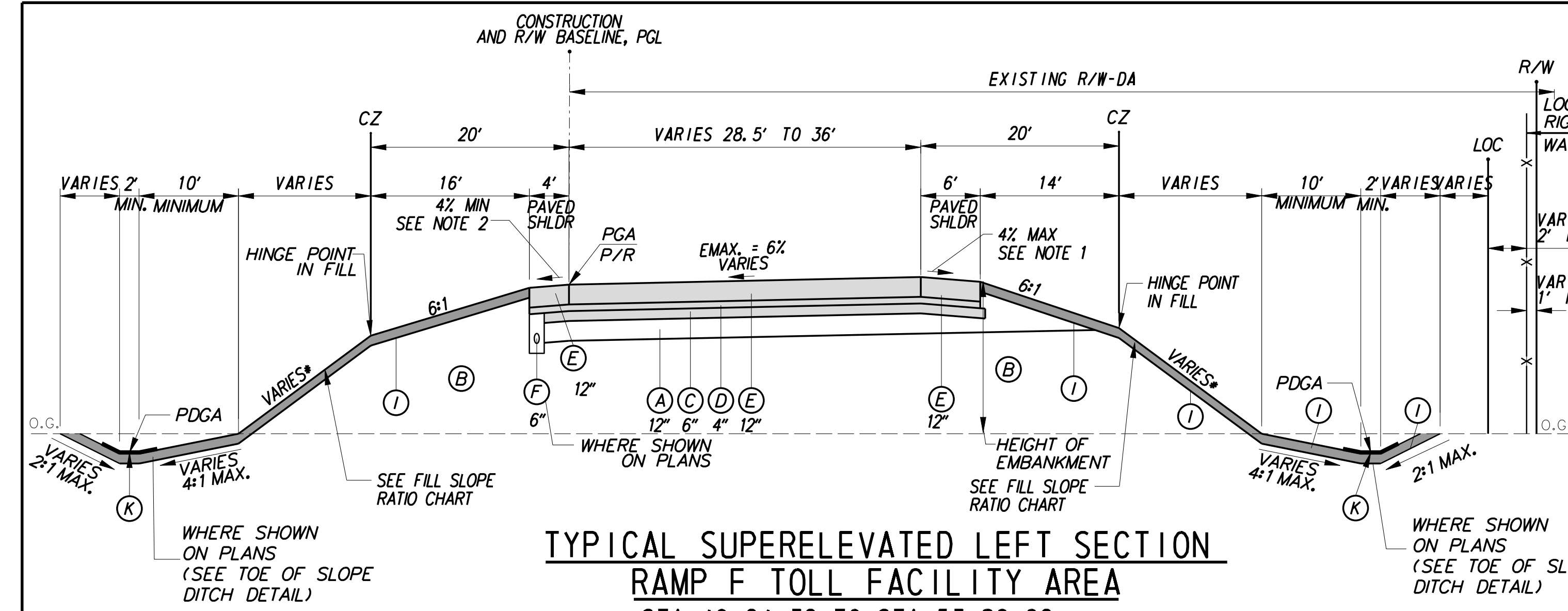
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

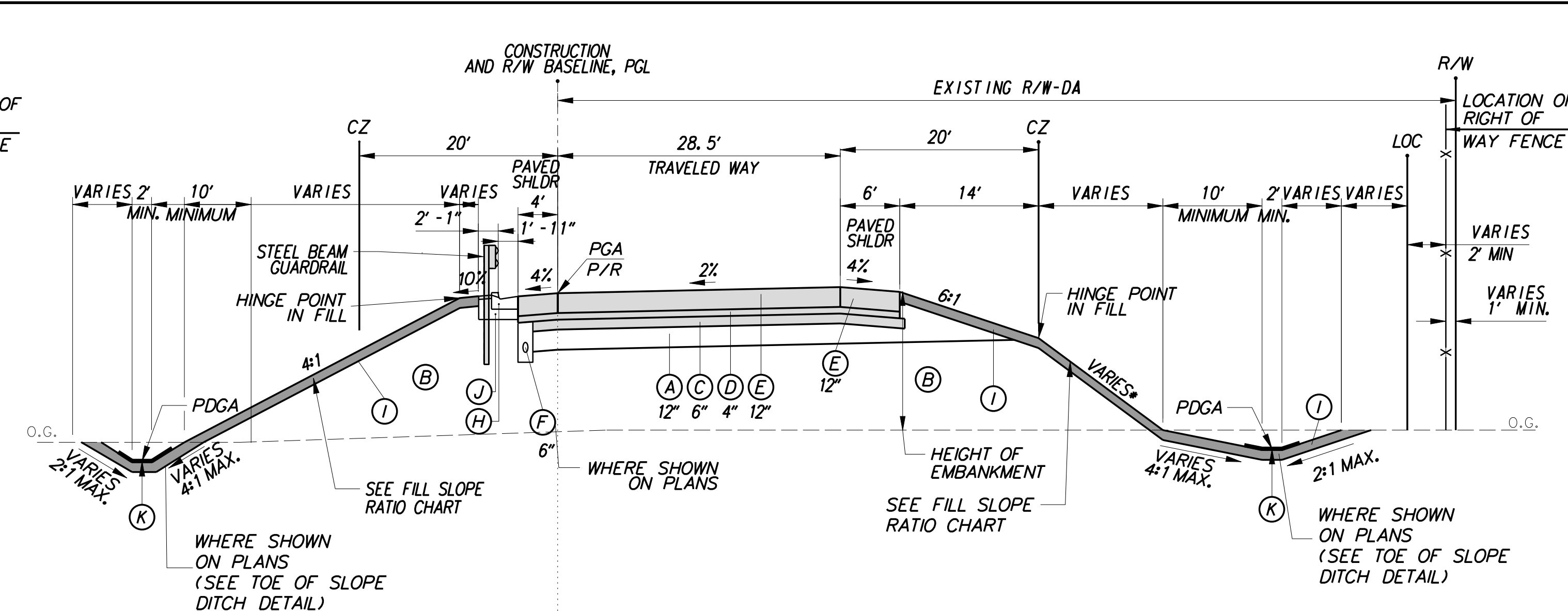
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T20091303	DESIGNED BY:	AW JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS

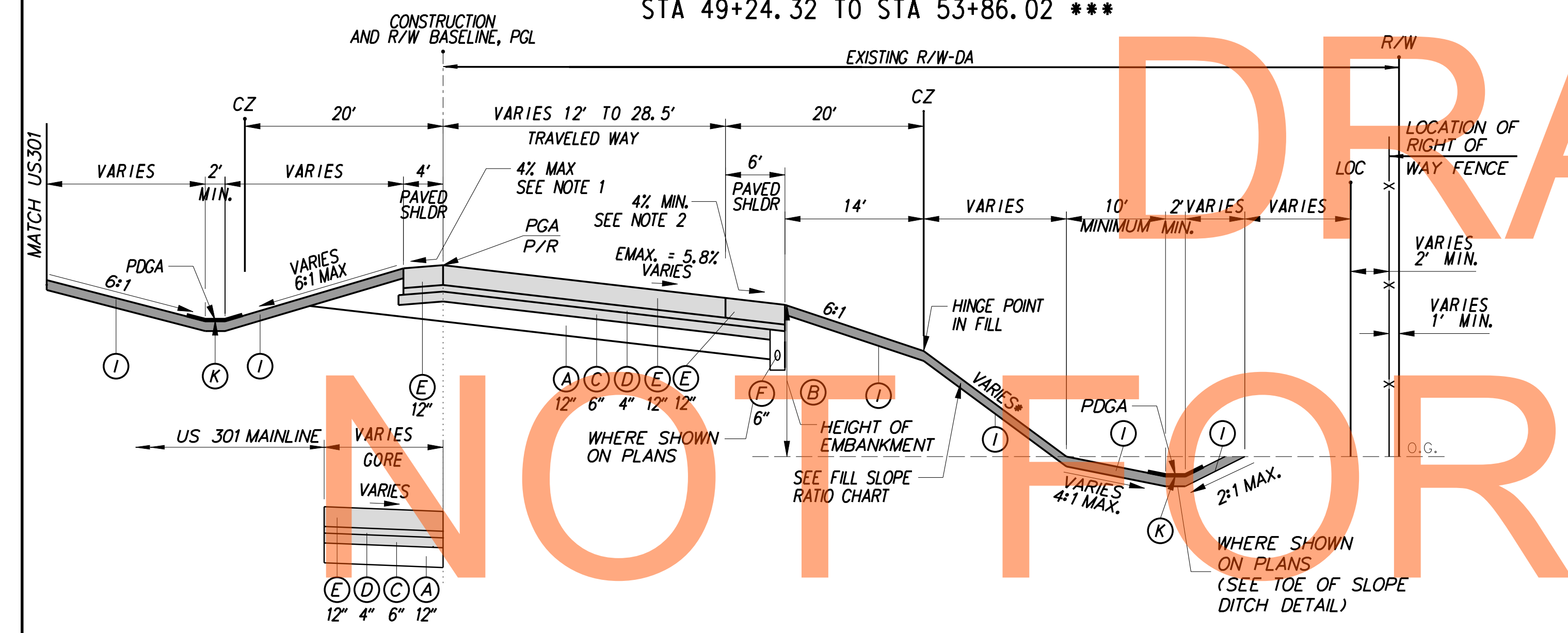
TS-13
SHEET NO.
33
TOTAL SHTS.
1256



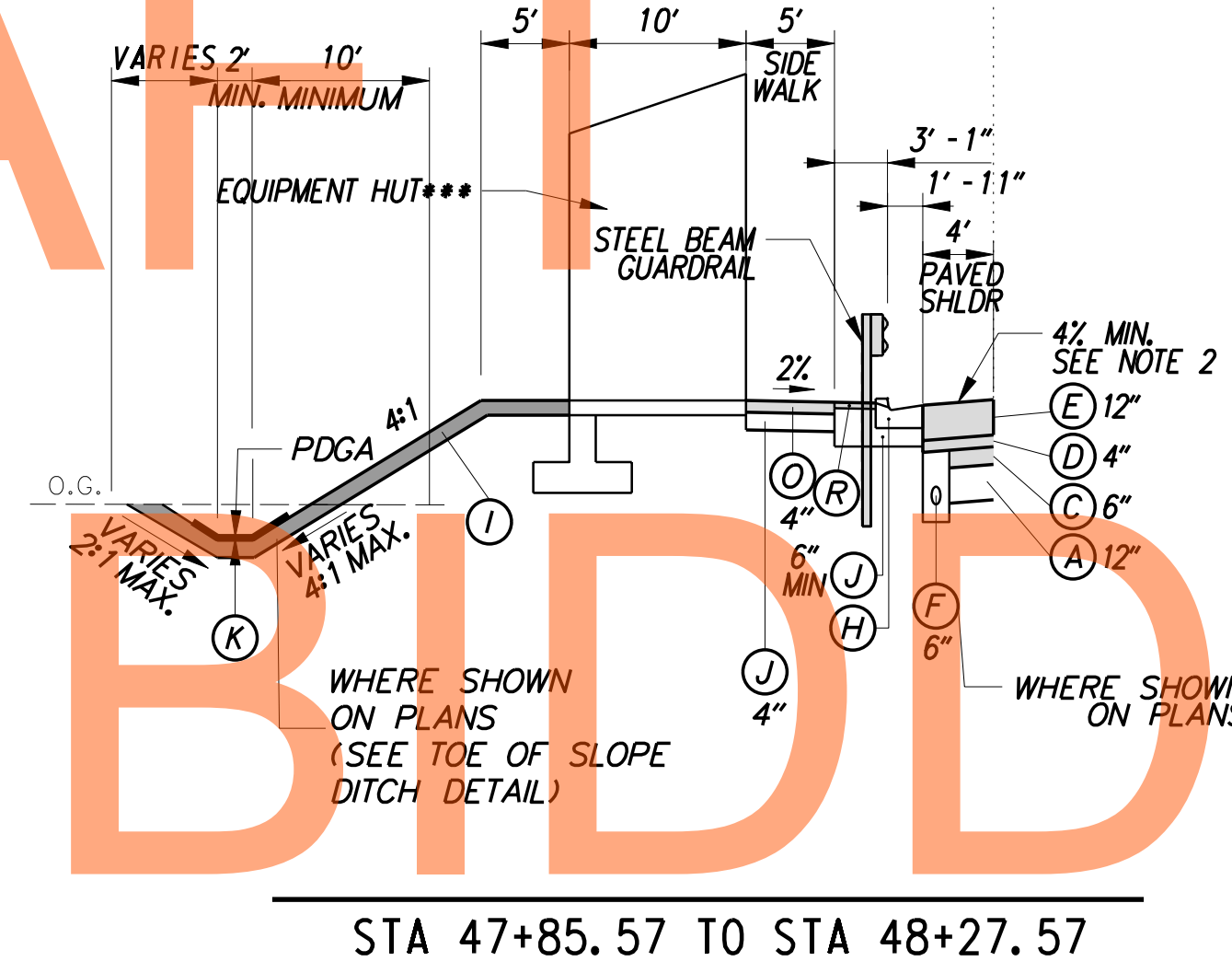
**TYPICAL SUPERELEVATED LEFT SECTION
RAMP F TOLL FACILITY AREA
STA 49+24.32 TO STA 53+86.02 *****



**TYPICAL NORMAL SECTION
RAMP F TOLL FACILITY AREA
STA 47+03.08 TO STA 49+24.32 *****



**TYPICAL SUPERELEVATED RIGHT SECTION
RAMP F TOLL FACILITY AREA
STA 40+00.00 TO STA 47+03.08 *****



STA 47+85.57 TO STA 48+27.57

*** SEE TOLL PLAZA PLANS FOR ADDITIONAL INFORMATION BETWEEN STA. 47+00.00 AND STA 49+00.00

DRAFT
NOT FOR BIDDING

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P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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

LEGEND	
(A) ITEM *209001, BORROW TYPE A	(D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
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(I) ITEM *733002, TOPSOILING, 6" DEPTH	(Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
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(P) ITEM *705001, P.C.C. SIDEWALK, 4"	
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ADDENDUMS / REVISIONS

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

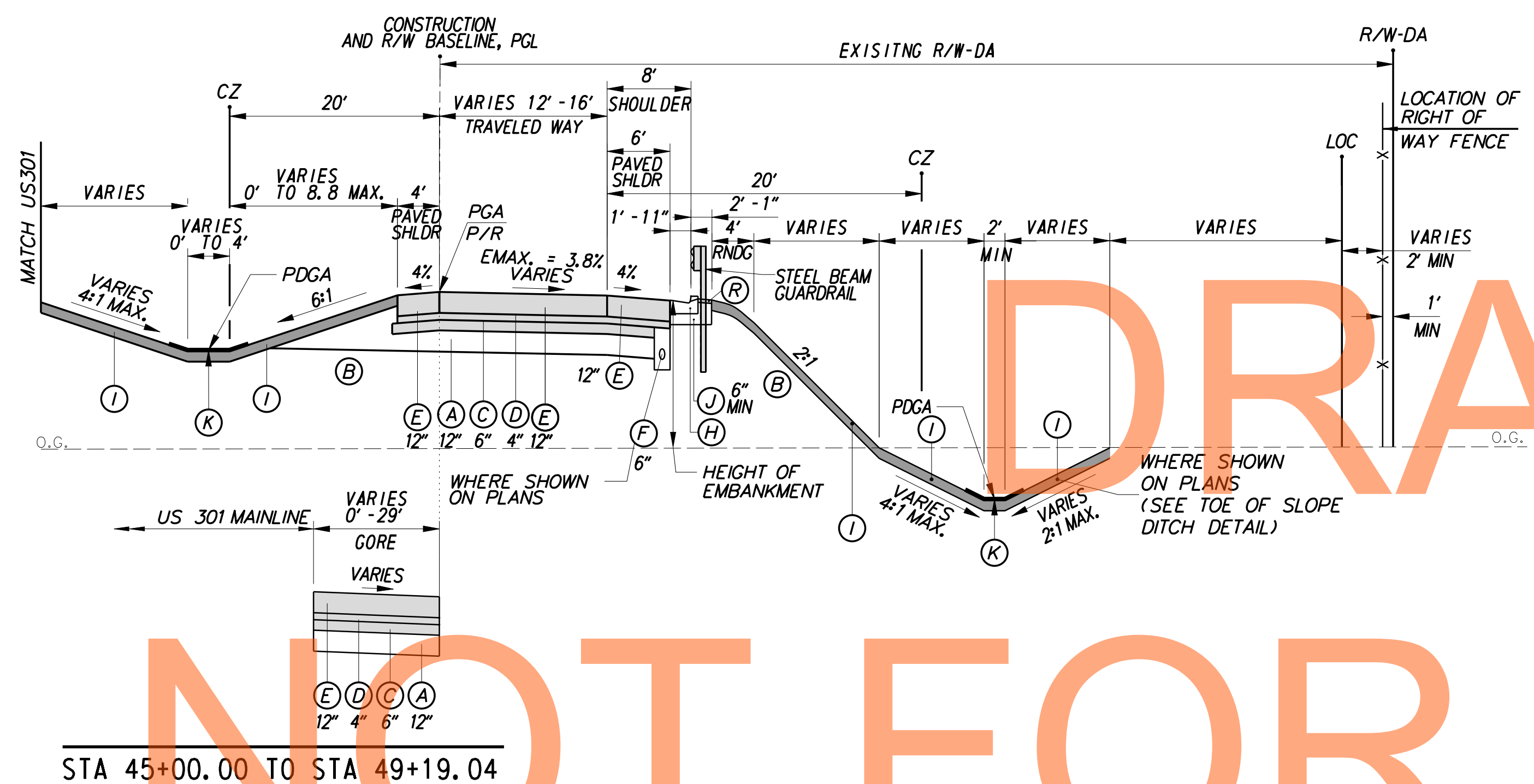
CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AW JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS

TS-14
SHEET NO.
34
TOTAL SHTS.
1256

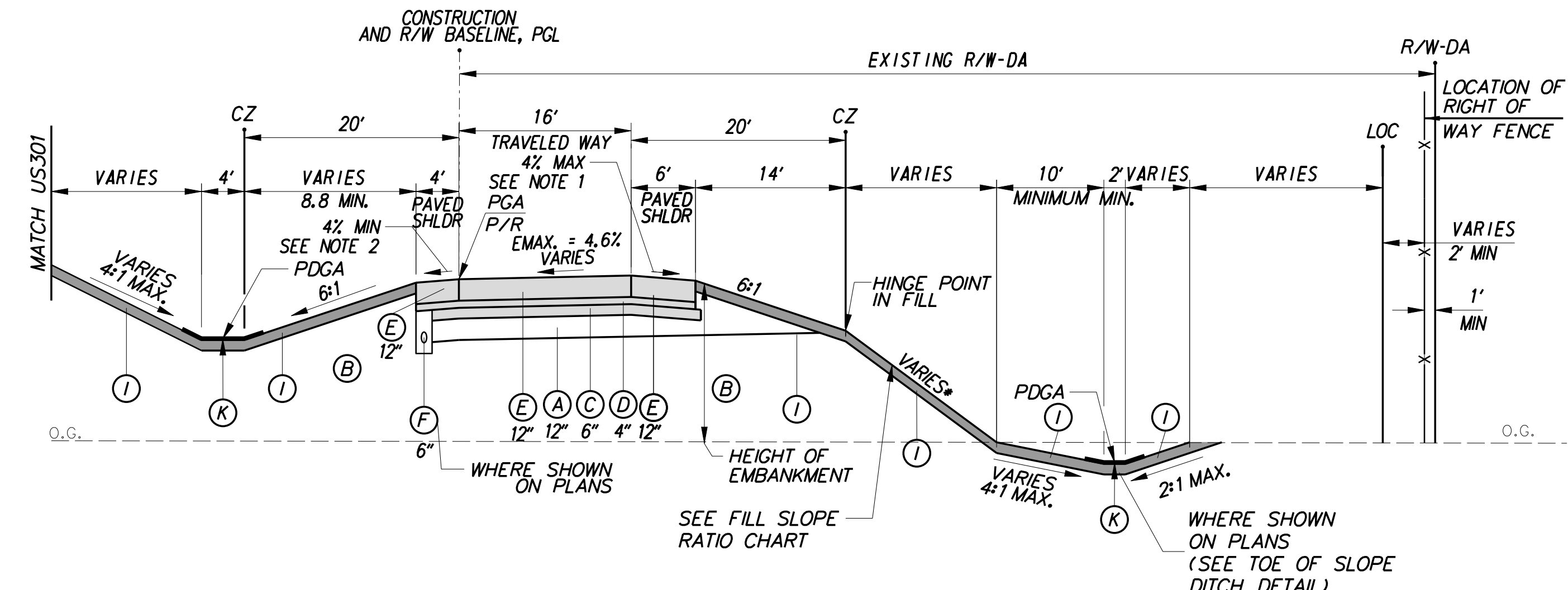
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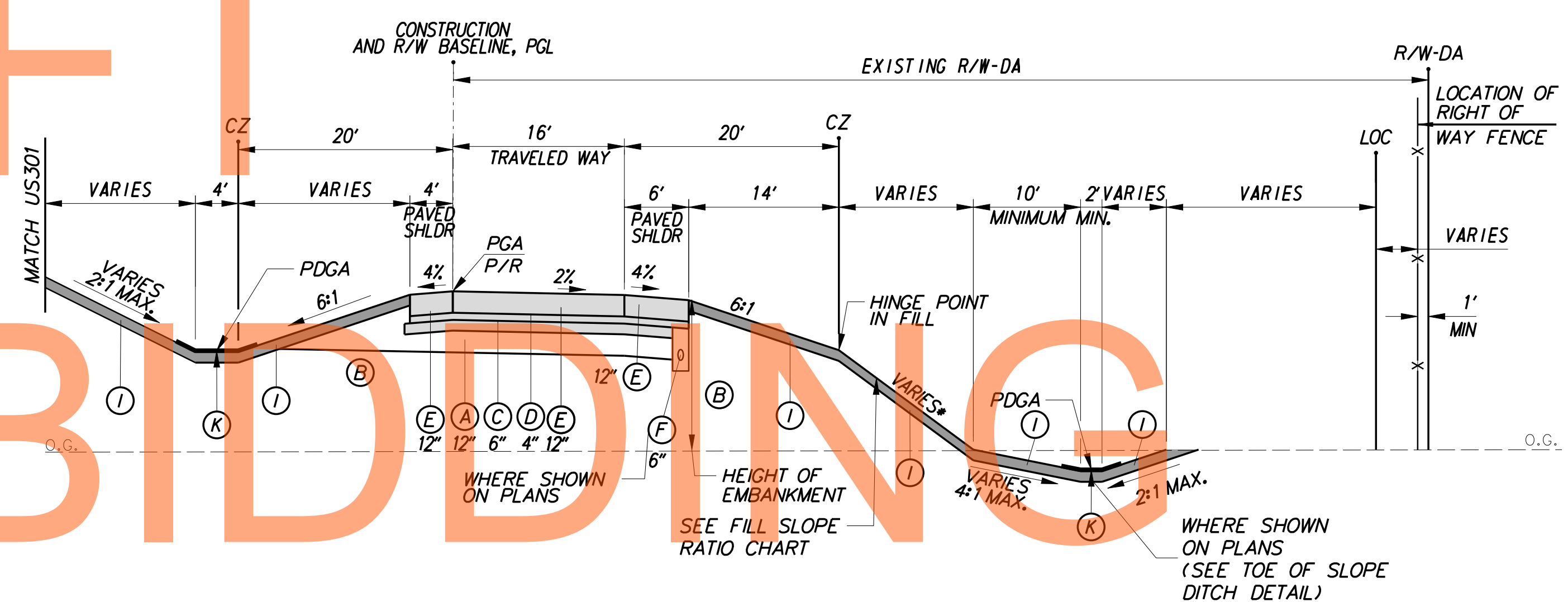


US 301 MAINLINE
GORE
VARIES
VARIES
E D C A
12" 4" 6" 12"

TYPICAL SUPERELEVATED RIGHT SECTION RAMP J
STA 45+00.00 TO STA 51+75.54



TYPICAL SUPERELEVATED LEFT SECTION RAMP J
STA 51+86.57 TO STA 56+84.77



TYPICAL NORMAL SECTION RAMP J
STA 51+75.54 TO STA 51+86.57
STA 56+84.77 TO STA 57+11.93

DRAFT
NOT FOR BIDDING

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7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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

LEGEND	
(A) ITEM *209001, BORROW TYPE A	(D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(B) ITEM *209006, BORROW TYPE F	(R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(C) ITEM *304502, SOIL CEMENT BASE COURSE	(S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(D) ITEM *304501, PERMEABLE TREATED BASE, 4"	(T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT	(U) ITEM *401517, STONE MATRIX ASPHALT
(F) ITEM *715001, PERFORATED PIPE UNDERDRAIN	(V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(G) ITEM *705002, P.C.C. SIDEWALK, 6"	(W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4	(X) ITEM *743017, PORTABLE BARRIER
(I) ITEM *733002, TOPSOILING, 6" DEPTH	(Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
(J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND	(Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B	(AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16	(AB) ITEM *760507, PROFILE MILLING, HOT MIX
(M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)	(AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22	(AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
(O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22	(AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
(P) ITEM *705001, P.C.C. SIDEWALK, 4"	
(Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	

ADDENDUMS / REVISIONS



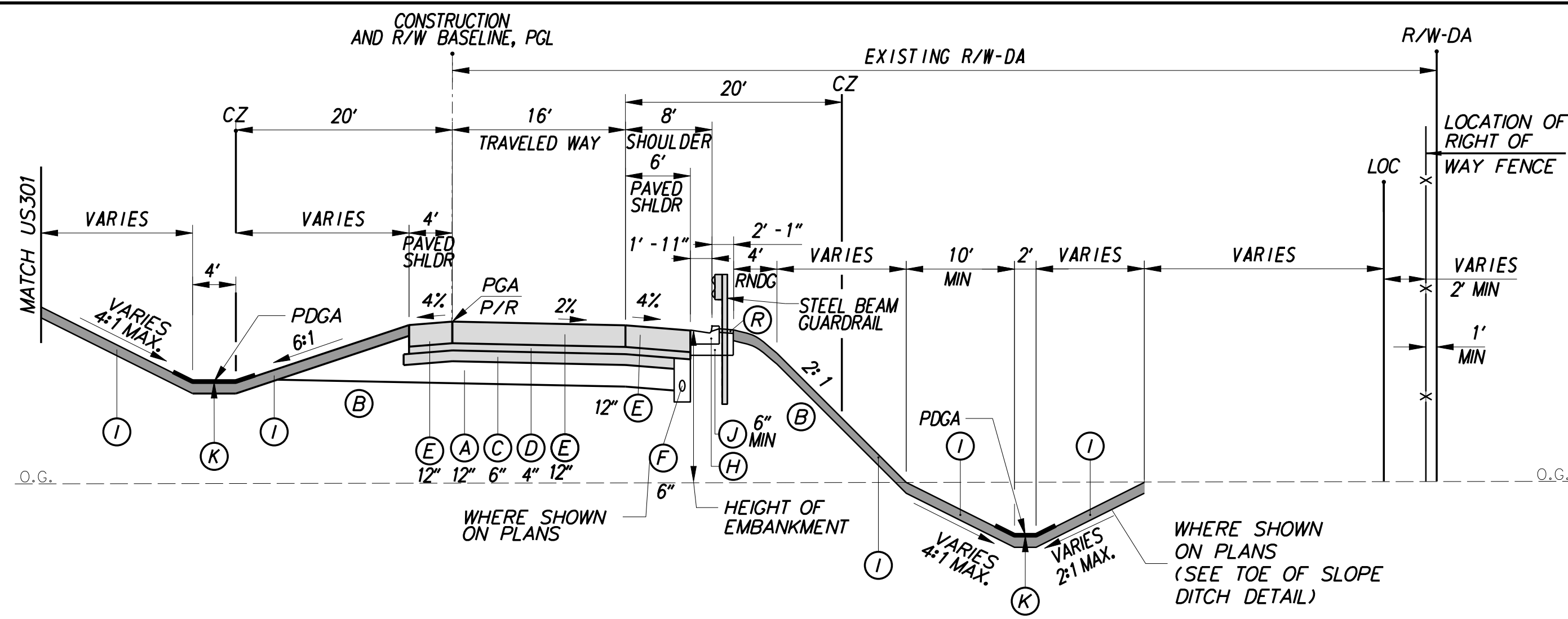
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

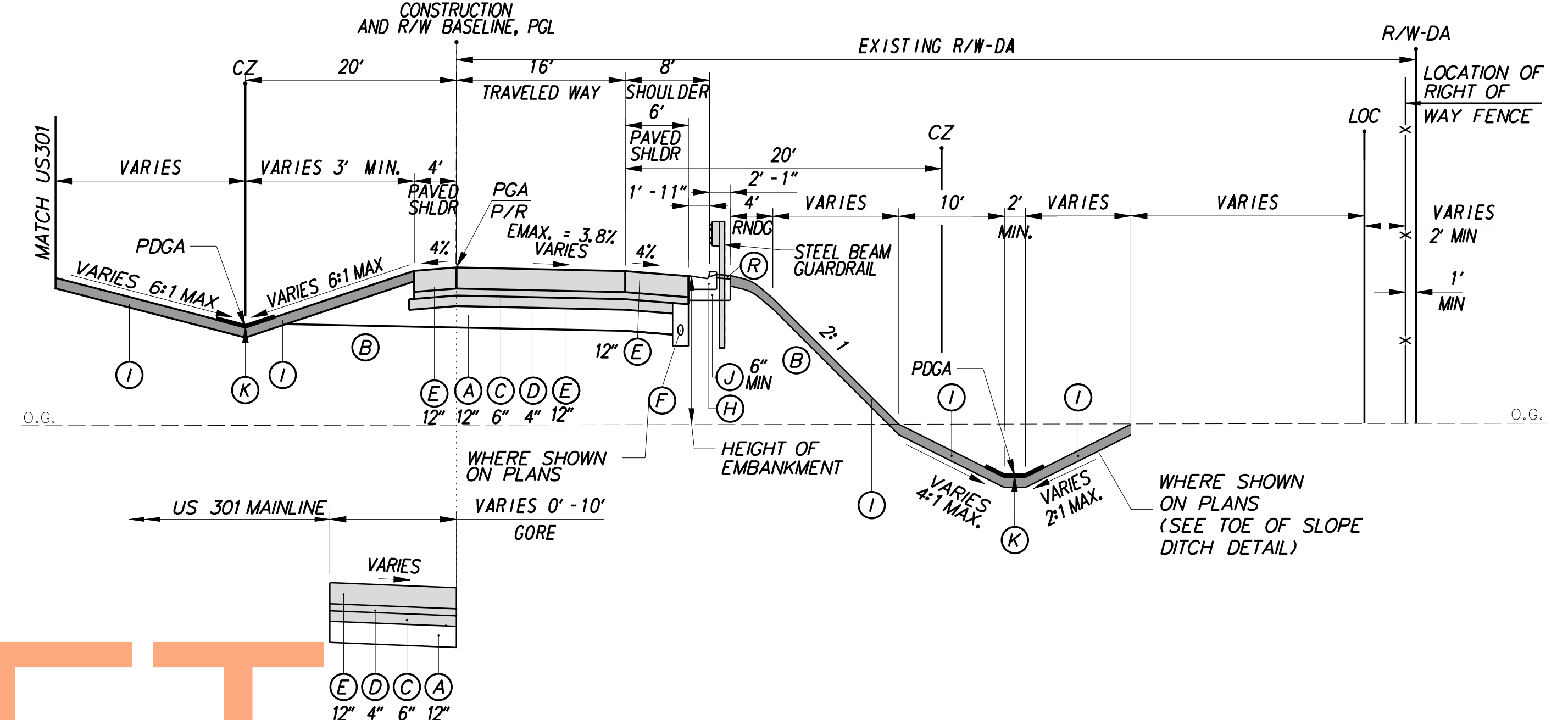
CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS

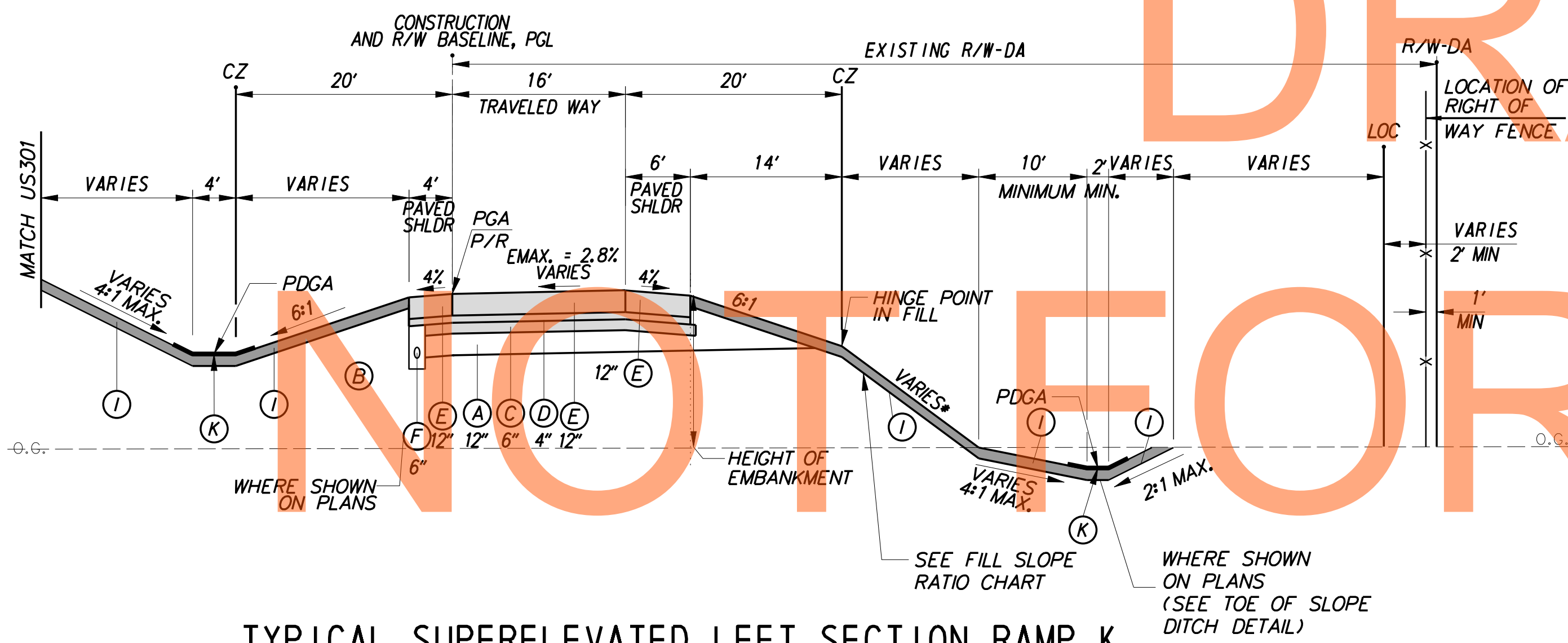
TS-15
SHEET NO.
35
TOTAL SHTS.
1256



TYPICAL NORMAL SECTION RAMP K
STA 71+27.90 TO STA 72+75.46



TYPICAL SUPERELEVATED RIGHT SECTION RAMP K
STA 74+82.47.00 TO 78+25.07
STA 72+75.46 TO STA 78+25.07



TYPICAL SUPERELEVATED LEFT SECTION RAMP K
STA 66+08.58 TO STA 71+27.90

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (P) ITEM *705001, P.C.C. SIDEWALK, 4"
- (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
- (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (V) ITEM *401517, STONE MATRIX ASPHALT
- (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (Y) ITEM *743017, PORTABLE BARRIER
- (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
- (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (AC) ITEM *760507, PROFILE MILLING, HOT MIX
- (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
 4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
 5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
 6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
 7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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

G:\60049040_US301\CIVIL\PLANS\2A.CP\TS-16.DGN



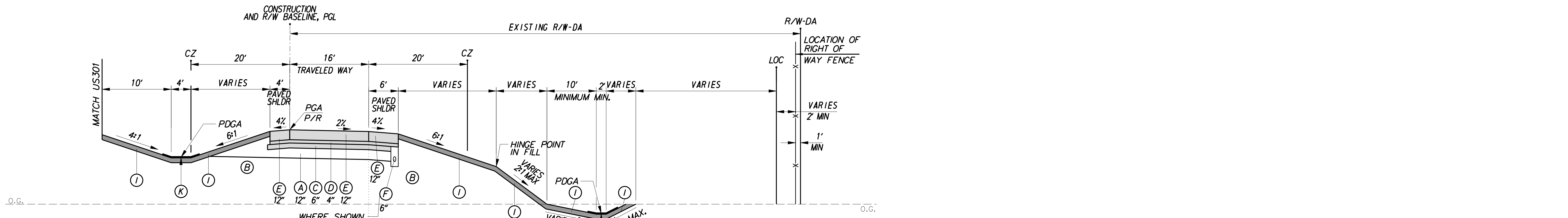
ADDENDUMS / REVISIONS

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

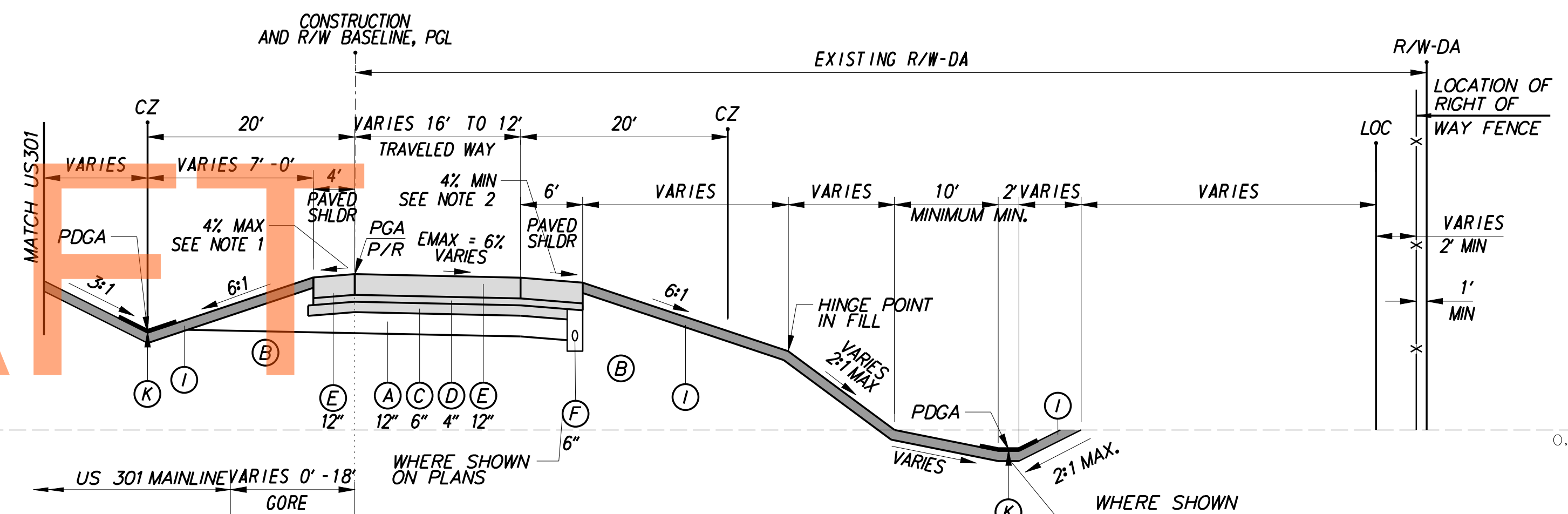
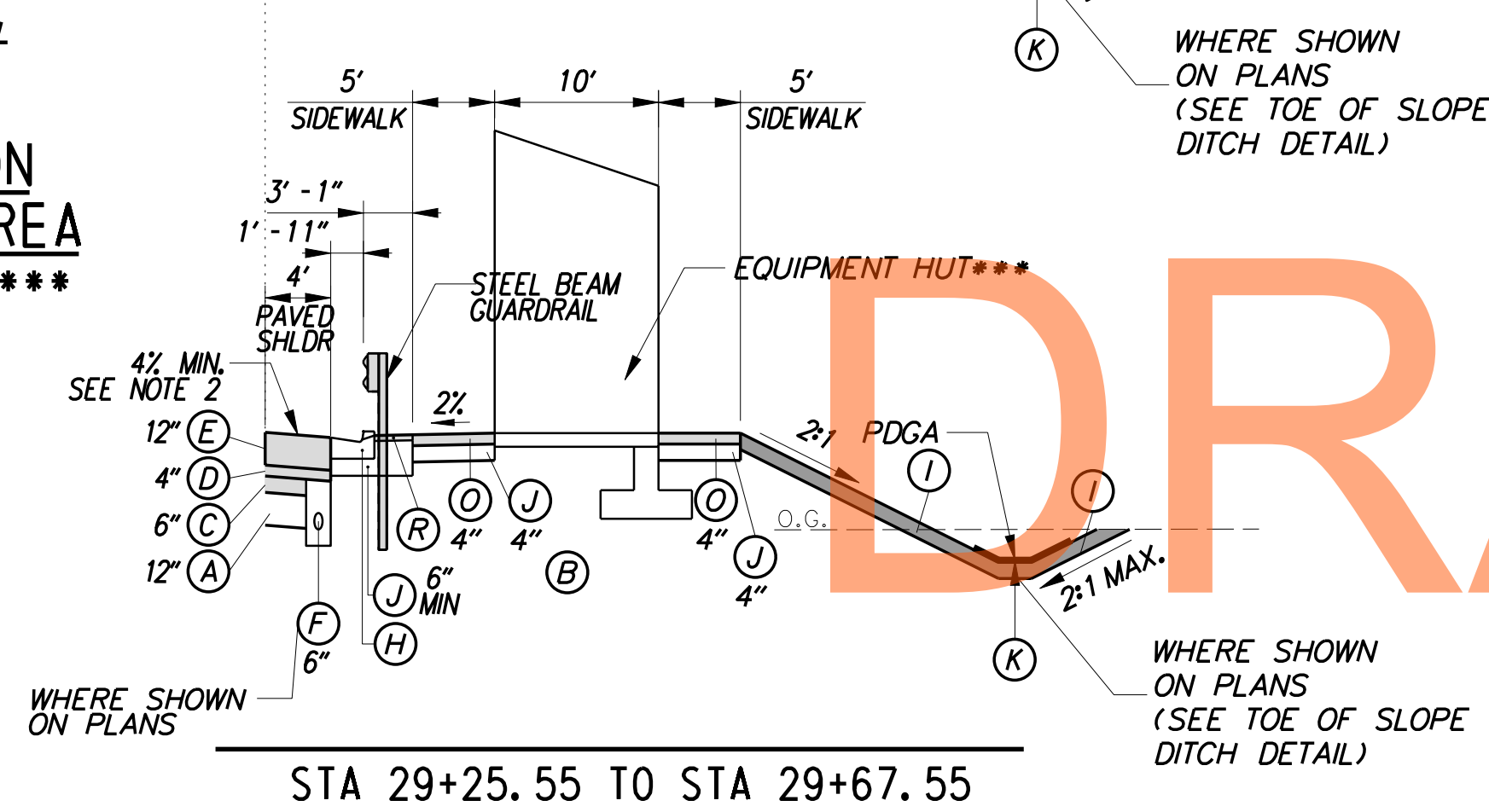
CONTRACT T20091303	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: AM JW CHECKED BY: JF SF

TYPICAL SECTIONS	TS-16
	SHEET NO. 36
	TOTAL SHTS. 1256



*** SEE TOLL PLAZA TYPICAL SECTIONS FOR ADDITIONAL INFORMATION BETWEEN STA 27+91.15 AND 29+91.15

**TYPICAL NORMAL SECTION
RAMP I TOLL FACILITY AREA
STA 26+42.72 TO STA 31+04.87 *****



**TYPICAL SUPERELEVATED RIGHT SECTION
RAMP I TOLL FACILITY AREA
STA 31+04.87 TO STA 39+05.06**

DRAFT

NOT FOR BIDDING

AUGUST 2015

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

LEGEND	
(A) ITEM *209001, BORROW TYPE A	(D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(B) ITEM *209006, BORROW TYPE F	(R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(C) ITEM *304502, SOIL CEMENT BASE COURSE	(S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(D) ITEM *304501, PERMEABLE TREATED BASE, 4"	(T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT	(U) ITEM *401517, STONE MATRIX ASPHALT
(F) ITEM *715001, PERFORATED PIPE UNDERDRAIN	(V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(G) ITEM *705002, P.C.C. SIDEWALK, 6"	(W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4	(X) ITEM *743017, PORTABLE BARRIER
(I) ITEM *733002, TOPSOILING, 6" DEPTH	(Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
(J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND	(Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B	(AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16	(AB) ITEM *760507, PROFILE MILLING, HOT MIX
(M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)	(AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22	(AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
(O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22	(AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22
(P) ITEM *705001, P.C.C. SIDEWALK, 4"	

ADDENDUMS / REVISIONS

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

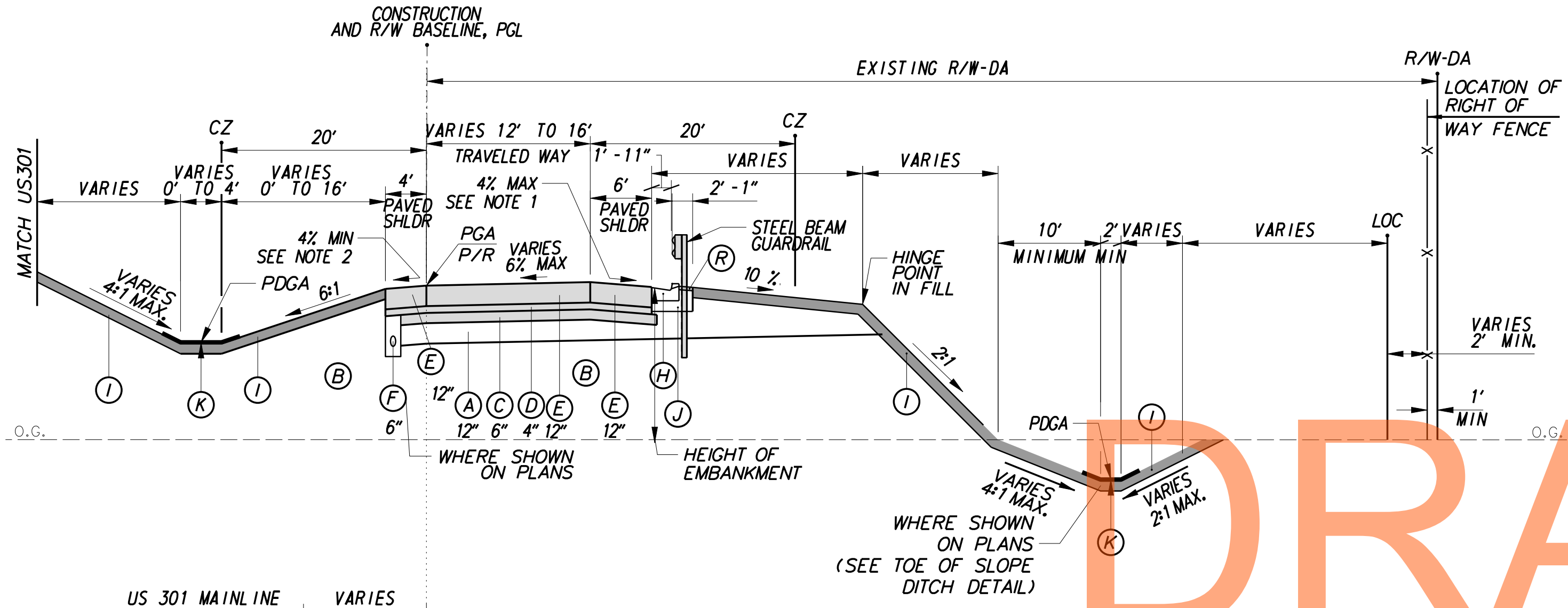
CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	SS JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

TYPICAL SECTIONS

TS-17
SHEET NO.
37
TOTAL SHTS.
1256

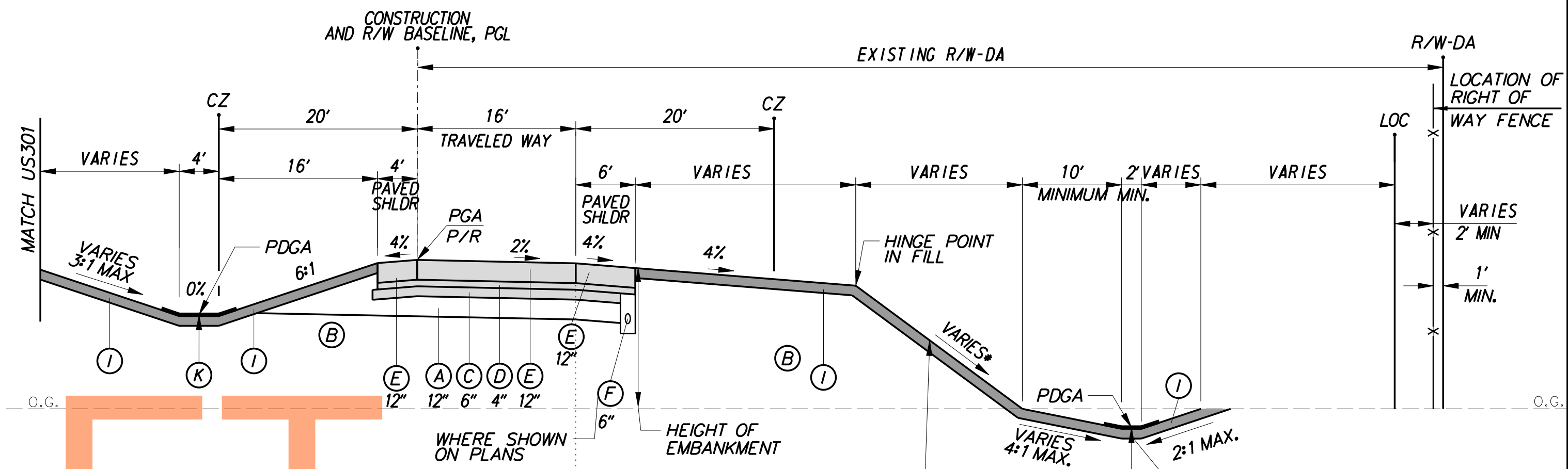
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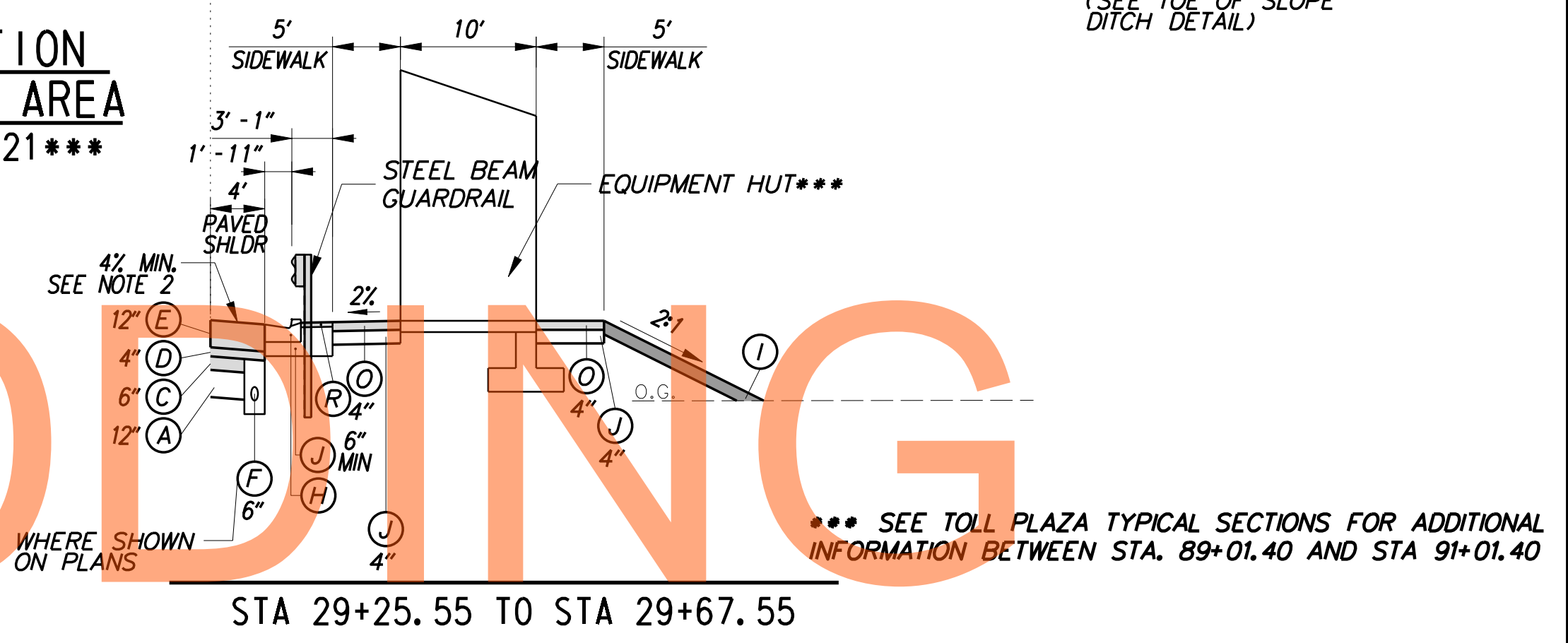


US 301 MAINLINE
VARIES GORE
VARIES

STA 80+00.00 TO STA 83+95.06
TYPICAL SUPERELEVATED LEFT SECTION
RAMP L TOLL FACILITY AREA
STA 80+00.00 TO STA 89+14.30***



TYPICAL NORMAL SECTION
RAMP L TOLL FACILITY AREA
STA 89+14.30 TO STA 93+21.21***



STA 29+25.55 TO STA 29+67.55

DRAFT

NOT FOR BIDDING

*** SEE TOLL PLAZA TYPICAL SECTIONS FOR ADDITIONAL INFORMATION BETWEEN STA. 89+01.40 AND STA 91+01.40

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (J) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (L) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (M) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (N) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (O) ITEM *705001, P.C.C. SIDEWALK, 4"
- (P) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
- (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (U) ITEM *401517, STONE MATRIX ASPHALT
- (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (X) ITEM *743017, PORTABLE BARRIER
- (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
- (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (AB) ITEM *760507, PROFILE MILLING, HOT MIX
- (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
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 8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

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

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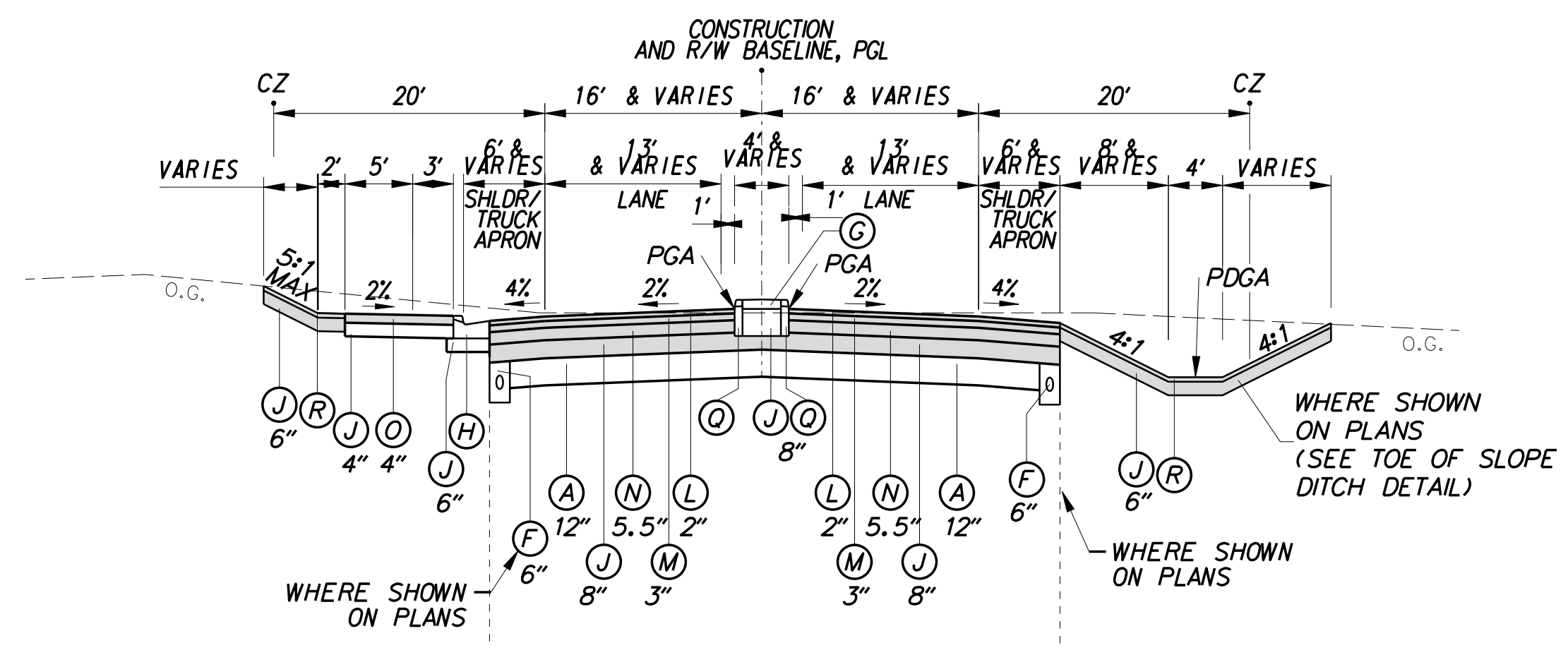
ADDENDUMS / REVISIONS

NOT TO SCALE

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

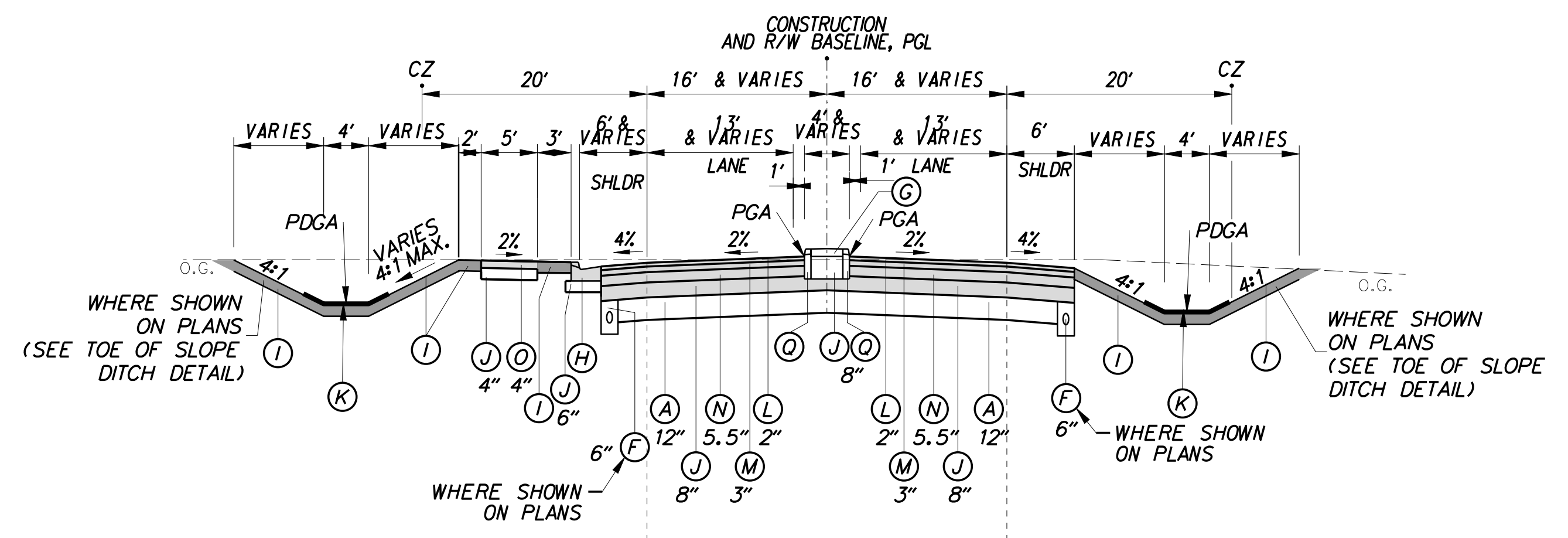
CONTRACT T20091303	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: SS JW CHECKED BY: JF SF

TYPICAL SECTIONS	TS-18
	SHEET NO. 38
	TOTAL SHTS. 1256



STA 13+86.55 TO STA 14+50.00
STA 15+80.00 TO STA 16+22.98

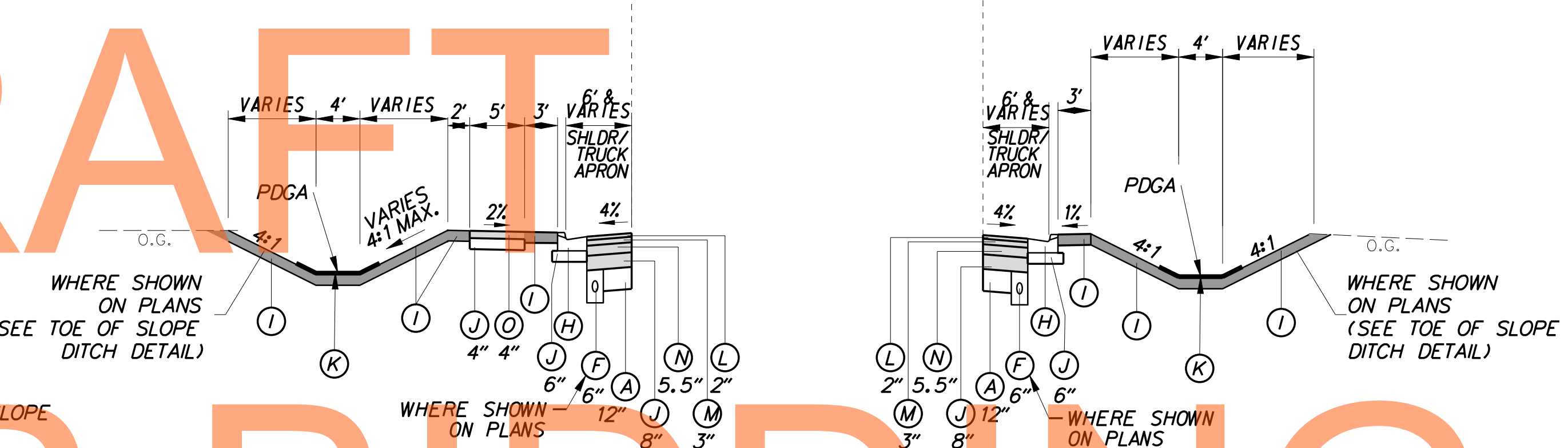
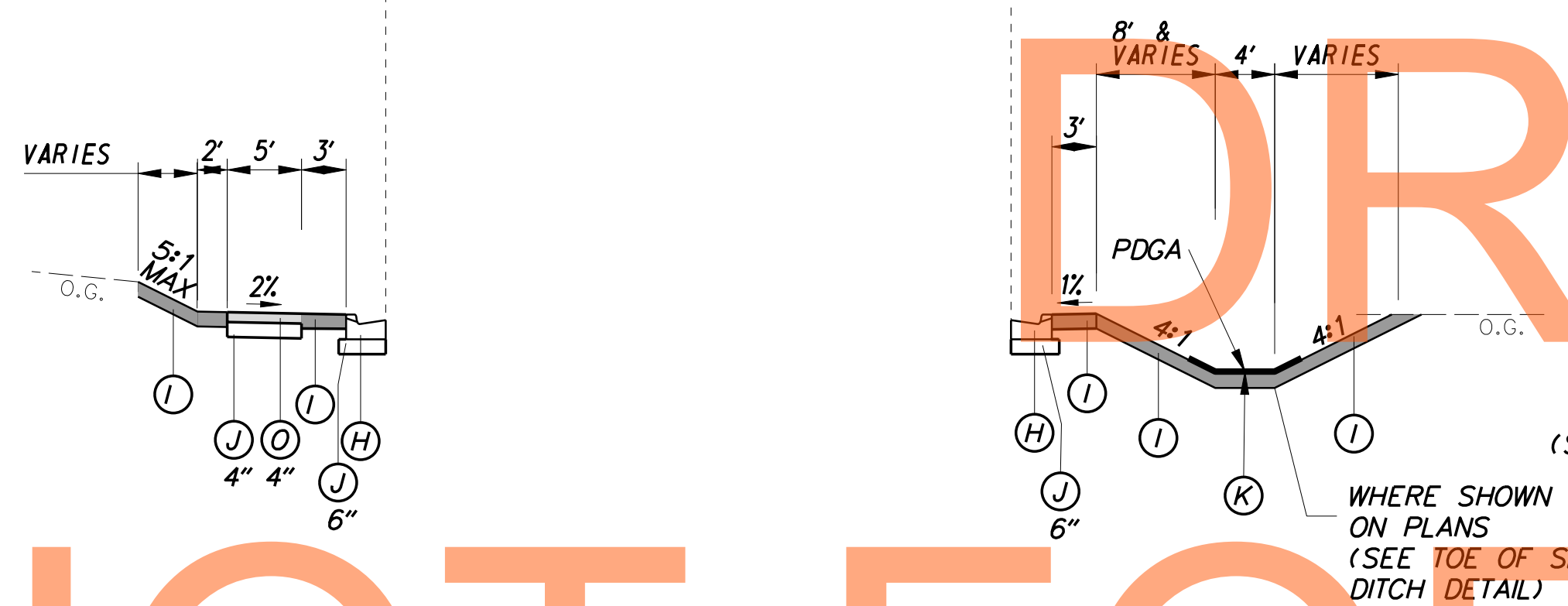
TYPICAL NORMAL CONNECTOR ROAD
STA 13+86.55 TO STA 16+22.98



STA 17+52.98 TO STA 18+03.93

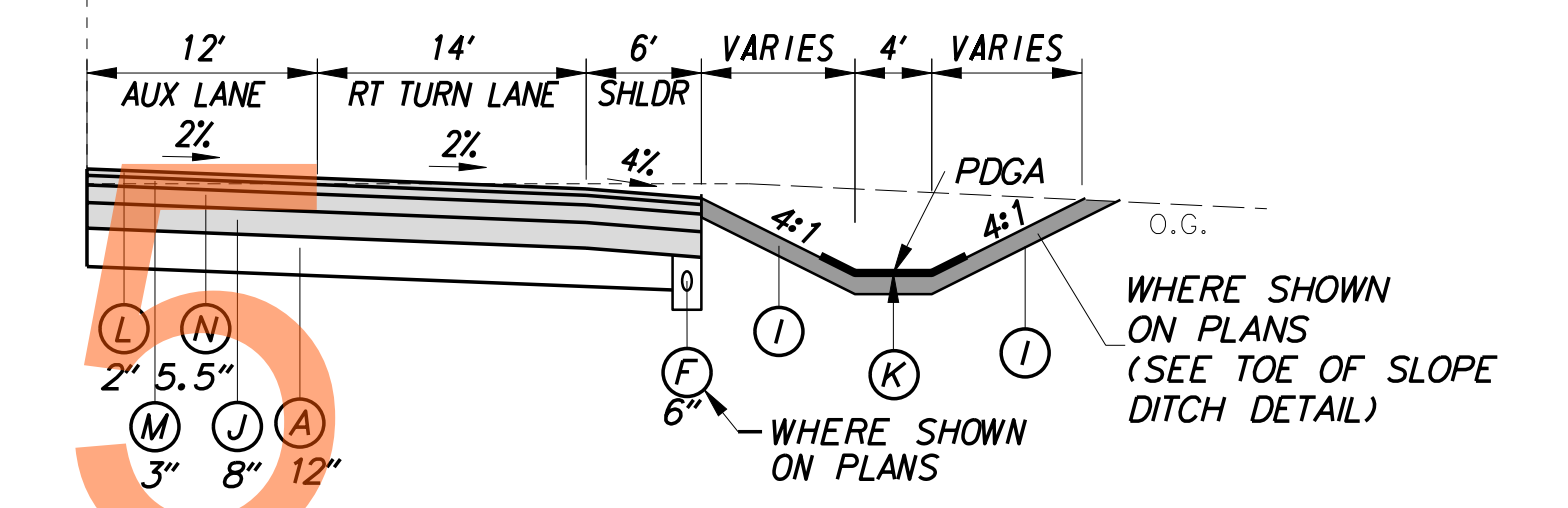
STA 17+52.98 TO STA 18+21.30

TYPICAL NORMAL CONNECTOR ROAD
STA 17+52.98 TO STA 20+50.00



DRAFT

NOT FOR BIDDING



STA 19+52.98 TO STA 20+50.00

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |

NOTES:

- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
- SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
- SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
- SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
- SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
- SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

ADDENDUMS / REVISIONS

NO.	DESCRIPTION

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

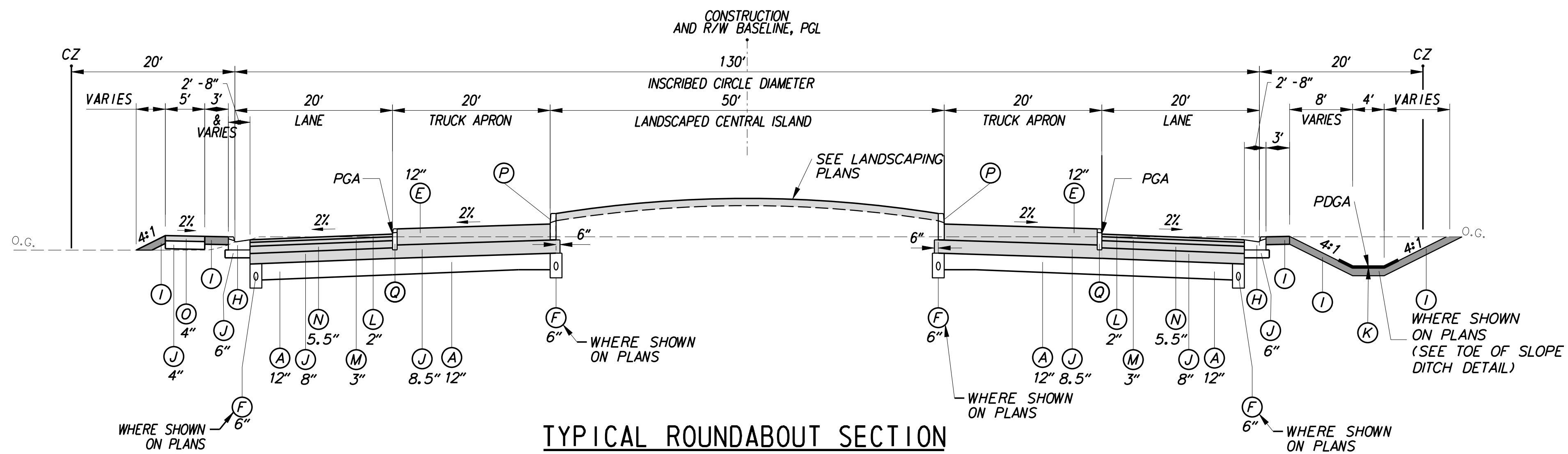
CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS

TS-19
SHEET NO.
39
TOTAL SHTS.
1256

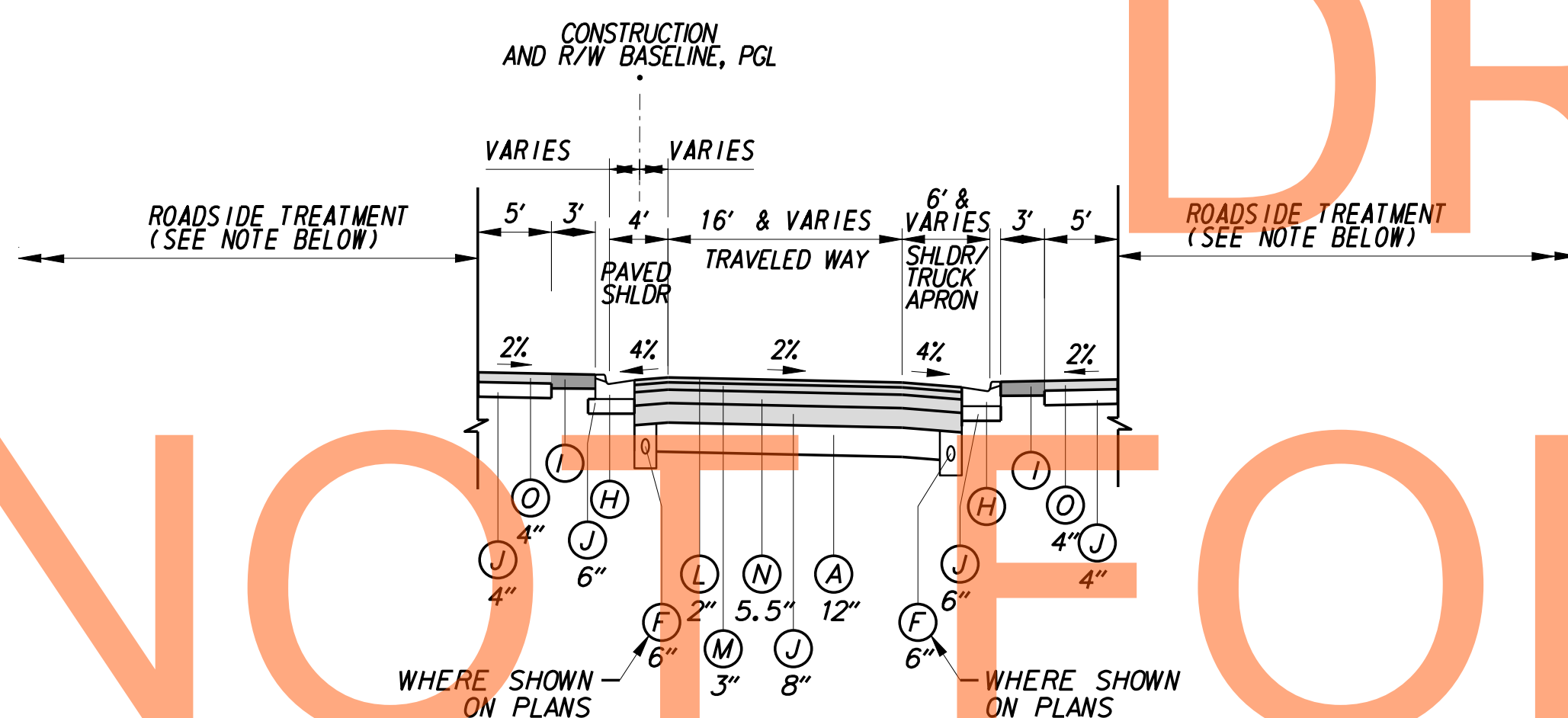
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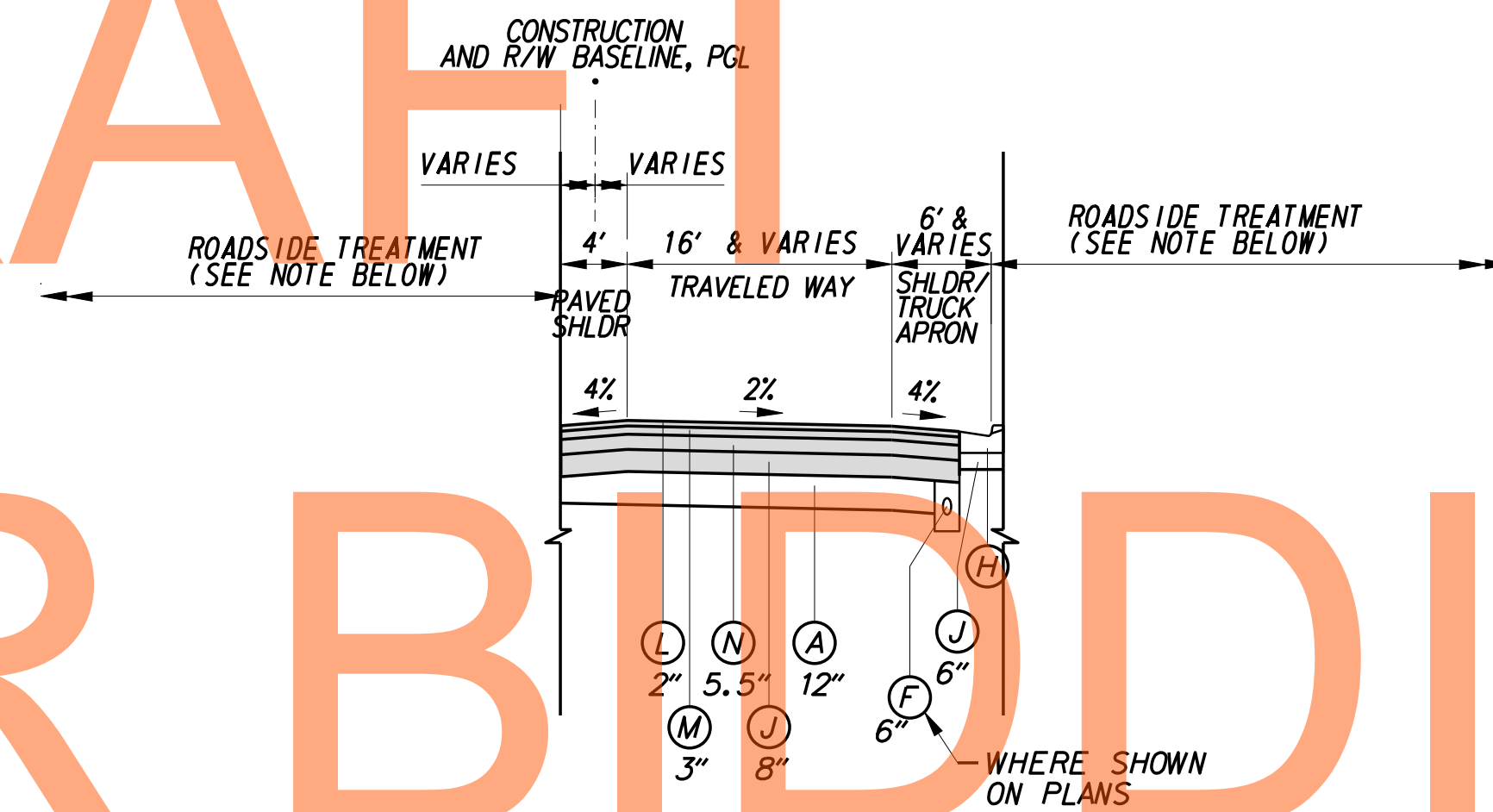
**TYPICAL ROUNDABOUT SECTION
CONNECTOR ROAD**

STA 12+56.55 TO STA 13+86.55
STA 16+22.98 TO STA 17+52.98



TYPICAL ROUNDABOUT APPROACH SECTION

RAMP I STA 25+65.19 TO STA 26+42.72
RAMP L STA 93+21.21 TO STA 93+63.44



TYPICAL ROUNDABOUT APPROACH SECTION

RAMP J STA 57+11.93 TO STA 57+78.25
RAMP K STA 65+64.88 TO STA 66+08.58

NOTE: FOR ROADSIDE TREATMENT AT ROUNDABOUT APPROACH, SEE RAMP TYPICAL SECTIONS, ROADSIDE GRADING TREATMENT DETAILS AND GRADES AND GEOMETRICS PLANS FOR SPOT GRADING INFORMATION.

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535, SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

ADDENDUMS / REVISIONS

NO.	DATE	DESCRIPTION

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

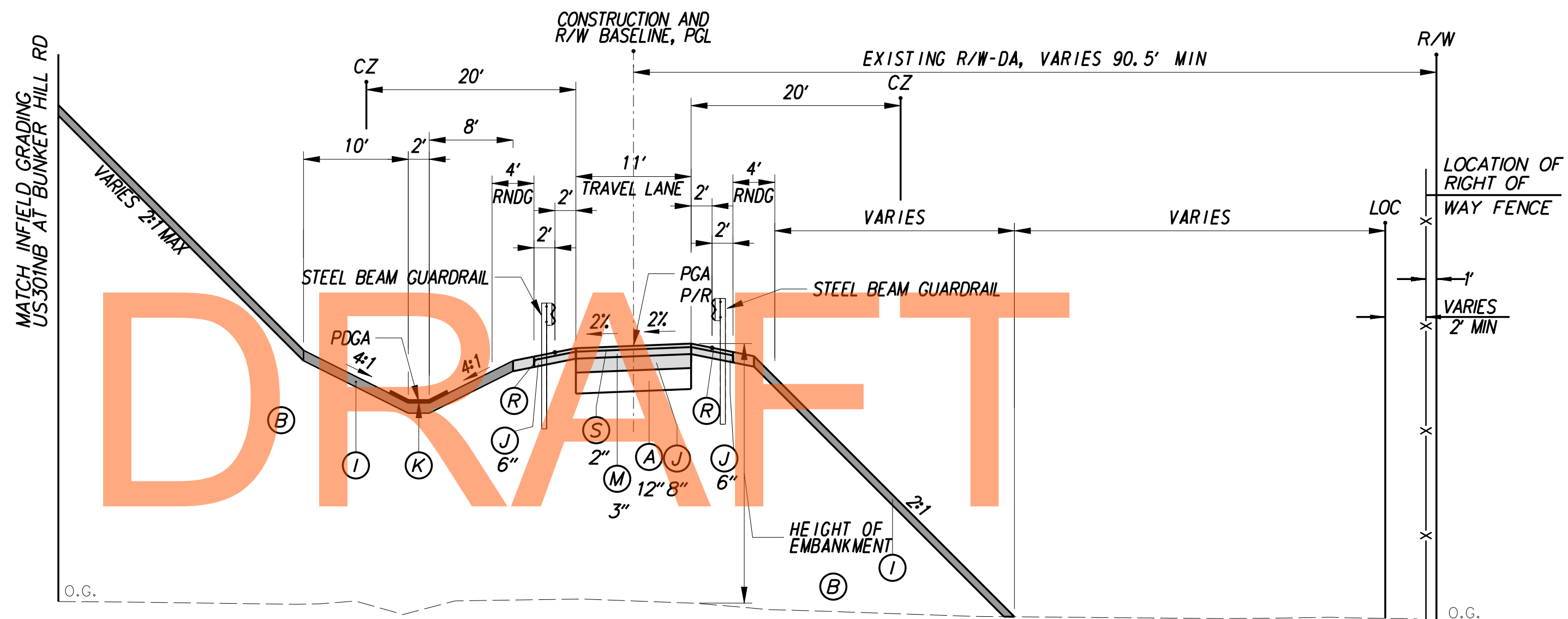
CONTRACT T20091303	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: AM JW
	CHECKED BY: JF SF

TYPICAL SECTIONS

TS-20
SHEET NO. 40
TOTAL SHTS. 1256

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NOT FOR BIDDING

**TYPICAL NORMAL SECTION
EMERGENCY ACCESS RAMP AT BUNKER HILL ROAD
STATION 1200+67.73 TO STATION 1204+21.69**

AUGUST 2015

LEGEND

- | | |
|---|---|
| <ul style="list-style-type: none"> (A) ITEM *209001, BORROW TYPE A (B) ITEM *209006, BORROW TYPE F (C) ITEM *304502, SOIL CEMENT BASE COURSE (D) ITEM *304501, PERMEABLE TREATED BASE, 4" (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN (G) ITEM *705002, P.C.C. SIDEWALK, 6" (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 (I) ITEM *733002, TOPSOILING, 6" DEPTH (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (P) ITEM *705001, P.C.C. SIDEWALK, 4" (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | <ul style="list-style-type: none"> (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) (V) ITEM *401517, STONE MATRIX ASPHALT (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 (Y) ITEM *743017, PORTABLE BARRIER (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 (AC) ITEM *760507, PROFILE MILLING, HOT MIX (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
|---|---|

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
 3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
 4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
 5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
 6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
 7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
 8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

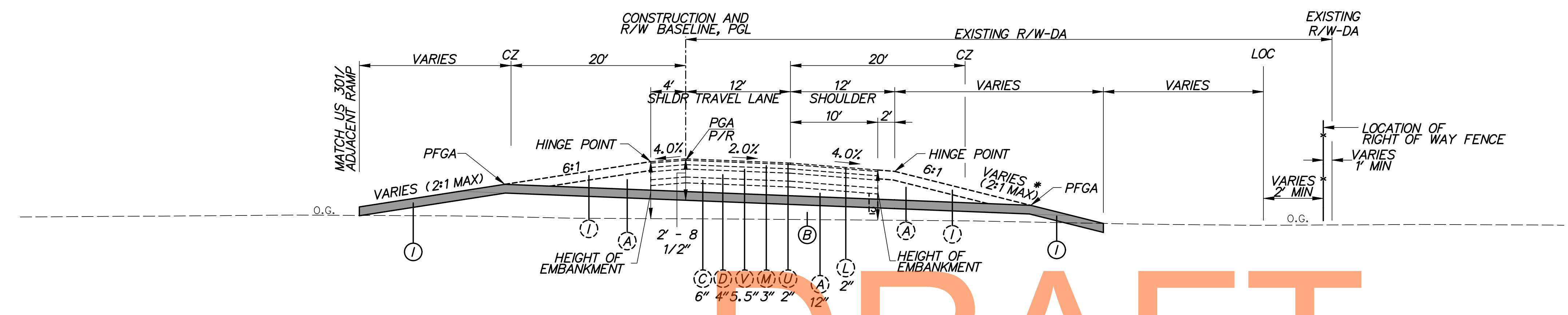
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	ADDENDUMS / REVISIONS	NOT TO SCALE	US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD	CONTRACT	BRIDGE NO.	TYPICAL SECTIONS	SHEET NO.
					T20091303		
				COUNTY	CHECKED BY: JF SF		TOTAL SHTS.
				NEW CASTLE			1256

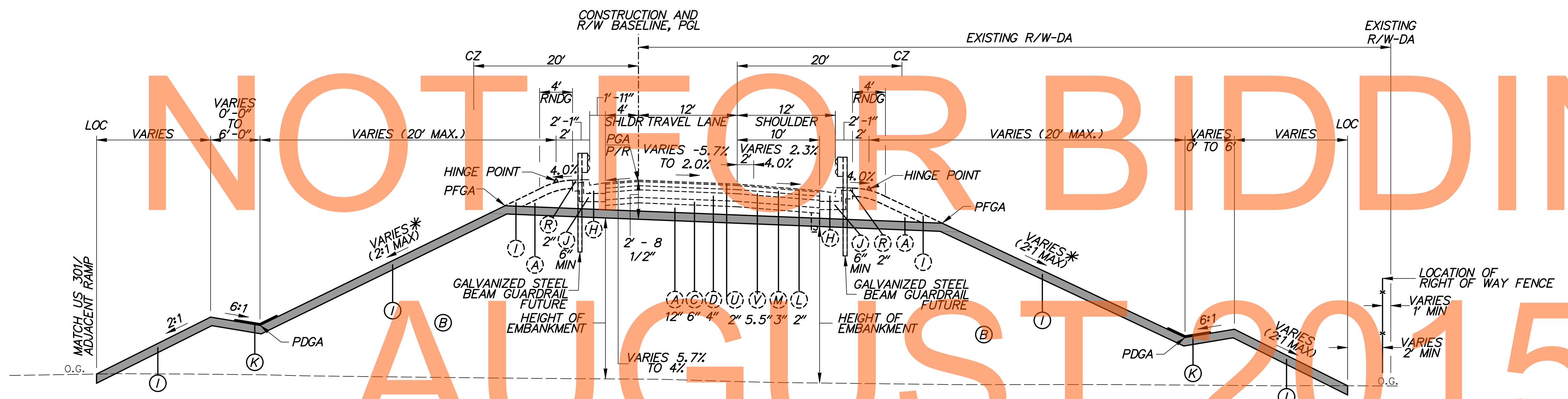
LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (L) ITEM *735535, SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (P) ITEM *705001, P.C.C. SIDEWALK, 4"
- (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
- (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
- (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (V) ITEM *401517, STONE MATRIX ASPHALT
- (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (Y) ITEM *743017, PORTABLE BARRIER
- (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
- (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (BB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (CC) ITEM *760507, PROFILE MILLING, HOT MIX
- (DD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (EE) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (FF) ITEM *401813, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

TYPICAL NORMAL SECTION RAMP G
STA. 83+00.00 TO STA. 86+50.00



TYPICAL SUPERELEVATED RIGHT SECTION RAMP G
STA. 86+50.00 TO STA. 94+00



NOTES:

1. THE ALGEBRIAC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
9. AREAS NOT RECEIVING TOPSOIL SHOULD BE HYDRO SEEDED.
10. ITEMS SHOWN AS DASHED TO BE CONSTRUCTED UNDER SEPERATE CONTRACT.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.
(A) - FUTURE CONSTRUCTION ITEMS

*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

T:\NEW CASTLE\301\ROAD\T20091303\PLANS\CPA\TS01-2A.URS.DGN



ADDENDUMS / REVISIONS	

NOT TO SCALE

US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

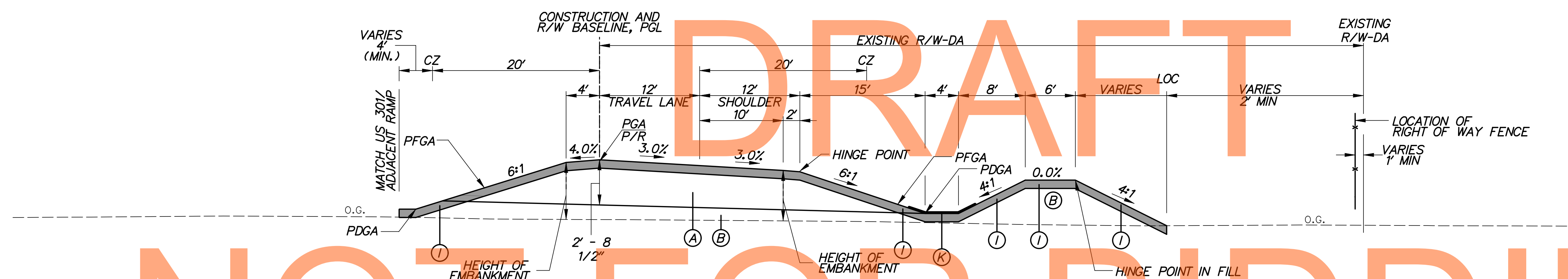
TYPICAL SECTIONS

TS-22
SHEET NO.
42
TOTAL SHTS.
1256

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4

- (I) ITEM *733002, TOPSOILING, 6" DEPTH
ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (J) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (L) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (M) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (N) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (O) ITEM *705001, P.C.C. SIDEWALK, 4"
- (P) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
- (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
- (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (U) ITEM *401517, STONE MATRIX ASPHALT
- (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (X) ITEM *743017, PORTABLE BARRIER
- (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
- (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (BB) ITEM *760507, PROFILE MILLING, HOT MIX
- (CC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (DD) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (EE) ITEM *401813, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22



TYPICAL NORMAL SECTION RAMP H
STA. 61+00.00 TO STA. 66+00.00

NOT FOR BIDDING

AUGUST 2015

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
9. AREAS NOT RECEIVING TOPSOIL SHOULD BE HYDRO SEEDED.
10. ITEMS SHOWN AS DASHED TO BE CONSTRUCTED UNDER SEPERATE CONTRACT.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.

*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

T:\NEW CASTLE\SON ROAD\T200911303\PLANS\CPA\TS02_2A_URS.DGN



ADDENDUMS / REVISIONS	

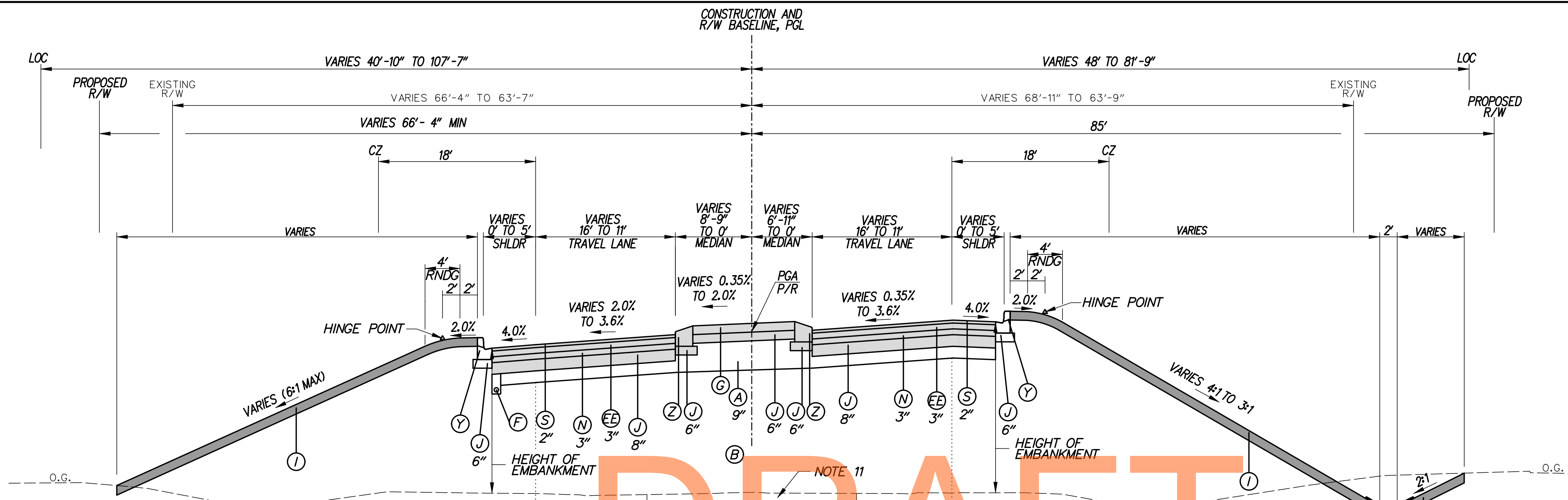
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

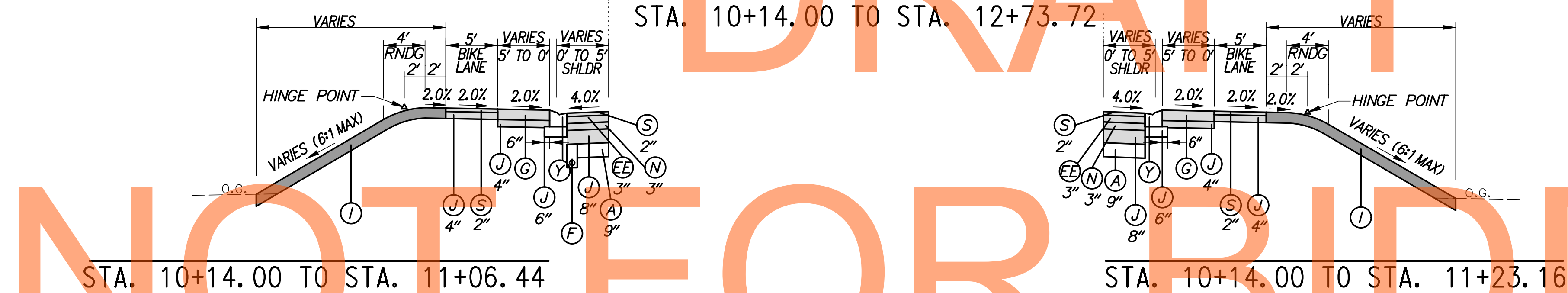
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

TYPICAL SECTIONS

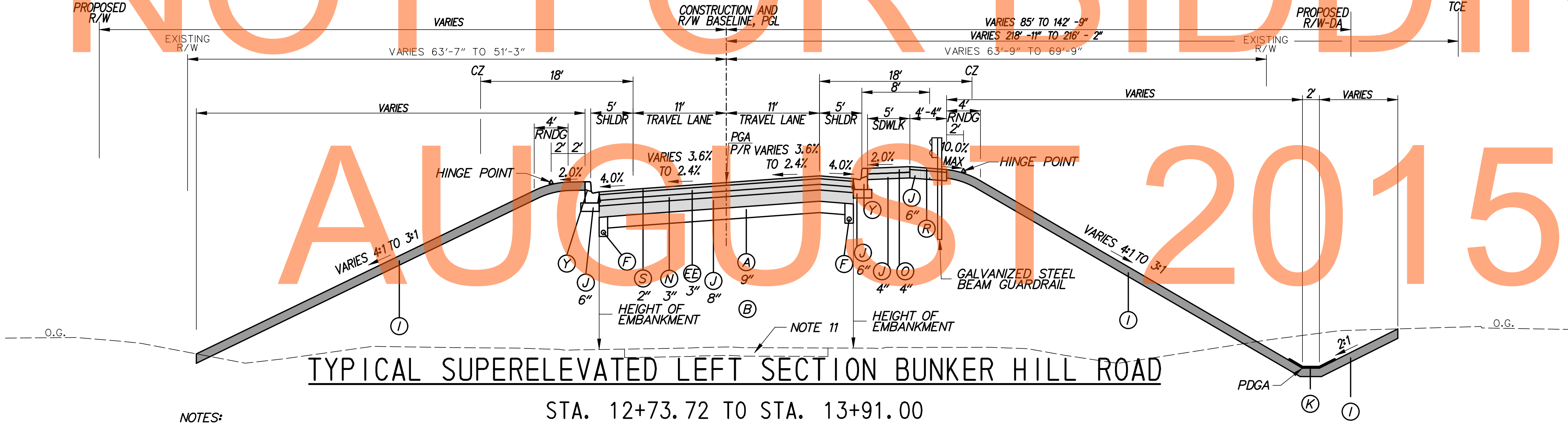
TS-23
SHEET NO.
43
TOTAL SHTS.
1256



TYPICAL SUPERELEVATED LEFT SECTION BUNKER HILL ROAD
STA. 10+14.00 TO STA. 12+73.72



TYPICAL SUPERELEVATED LEFT SECTION BUNKER HILL ROAD
STA. 10+14.00 TO STA. 11+06.44
STA. 10+14.00 TO STA. 11+23.16



TYPICAL SUPERELEVATED LEFT SECTION BUNKER HILL ROAD
STA. 12+73.72 TO STA. 13+91.00

LEGEND	
(A)	ITEM *209001, BORROW TYPE A
(B)	ITEM *209006, BORROW TYPE F
(C)	ITEM *304502, SOIL CEMENT BASE COURSE
(D)	ITEM *304501, PERMEABLE TREATED BASE, 4"
(E)	ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
(F)	ITEM *715001, PERFORATED PIPE UNDERDRAIN
(G)	ITEM *705002, P.C.C. SIDEWALK, 6"
(H)	ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
(I)	ITEM *733002, TOPSOILING, 6" DEPTH
(J)	ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
(K)	ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
(L)	ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
(M)	ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
(N)	ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(O)	ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(P)	ITEM *705001, P.C.C. SIDEWALK, 4"
(Q)	ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
(R)	ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(S)	ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(T)	ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATE STONE)
(U)	ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(V)	ITEM *401517, STONE MATRIX ASPHALT
(W)	ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(X)	ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(Y)	ITEM *743017, PORTABLE BARRIER
(Z)	ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
(AA)	ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(AB)	ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(BB)	ITEM *760507, PROFILE MILLING, HOT MIX
(CC)	ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(DD)	ITEM *760016, RUMBLE STRIPS, HOT MIX
(EE)	ITEM *401813, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOTES:

- THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
- SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
- SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
- SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
- SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
- SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
- SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
- SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
- AREAS NOT RECEIVING TOPSOIL SHOULD BE HYDRO SEEDED.
- ITEMS SHOWN AS DASHED TO BE CONSTRUCTED UNDER SEPERATE CONTRACT.
- EXISTING PAVEMENT IS 10.5" HOT-MIX ASPHALT OVER 6" CRUSHER RUN. SEE CORE SUMMARY ON PLANS.

*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

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.

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ADDENDUMS / REVISIONS	

NOT TO SCALE

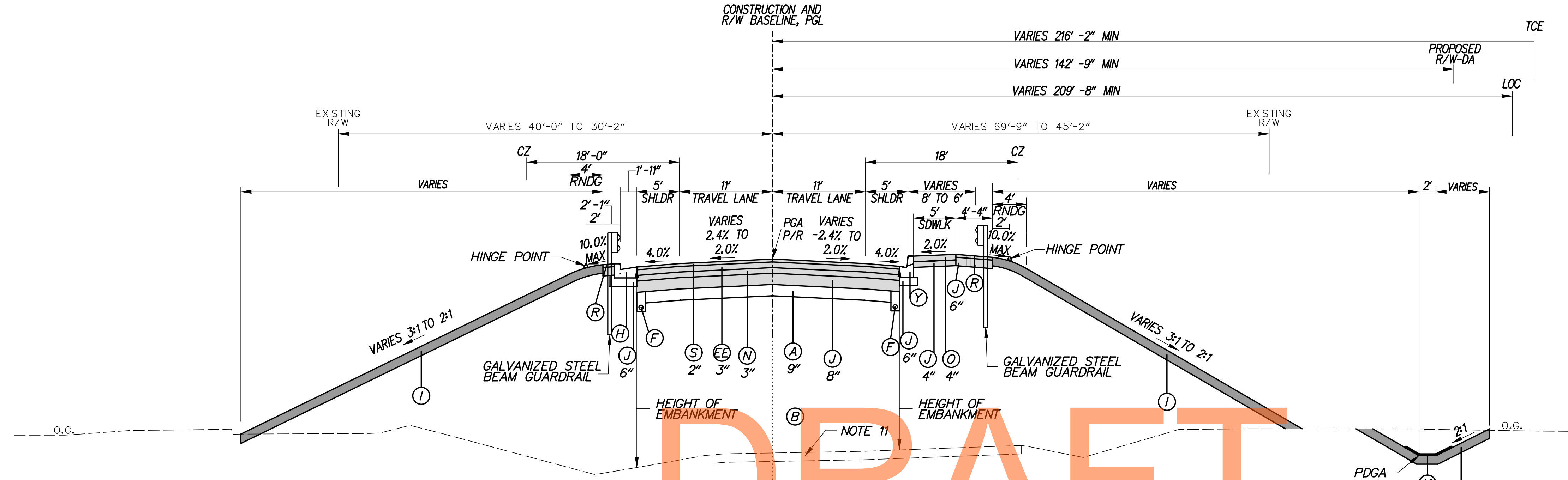
US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

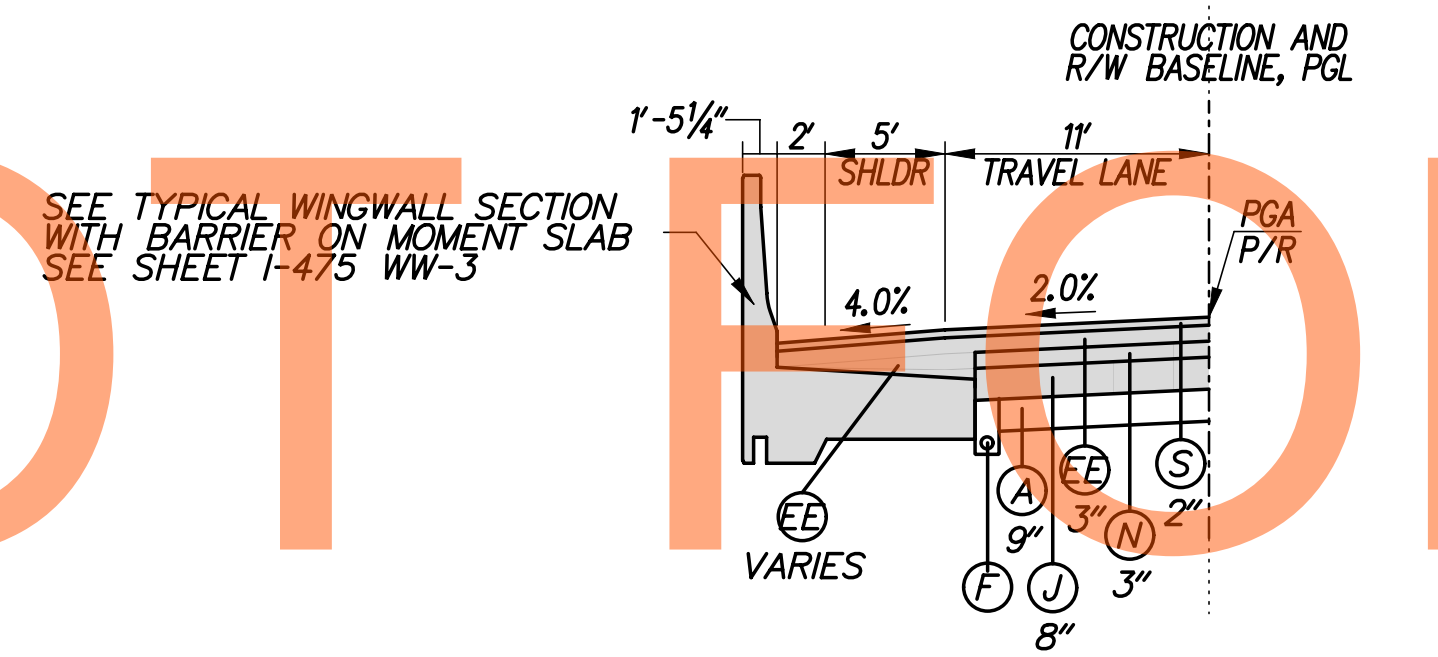
TYPICAL SECTIONS

TS-24
SHEET NO.
44
TOTAL SHTS.
1256

CONSTRUCTION AND R/W BASELINE, PGL

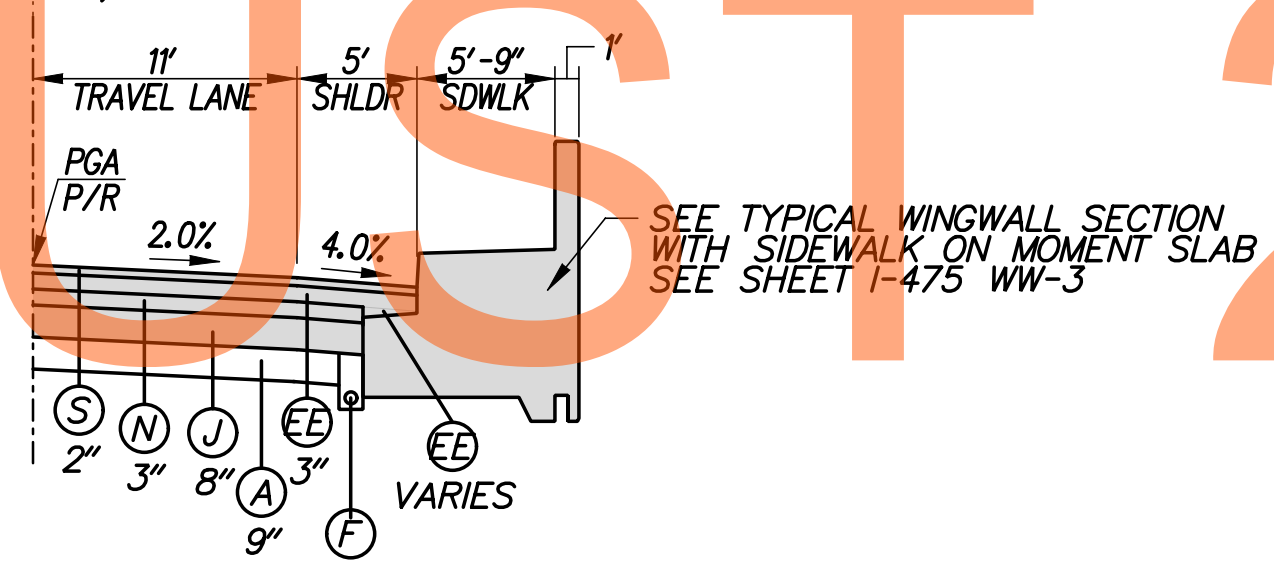


TYPICAL NORMAL SECTION BUNKER HILL ROAD
STA. 13+91.00 TO STA. 15+72.94



STA. 15+44.24 TO STA. 15+72.94

CONSTRUCTION AND R/W BASELINE, PGL



STA. 15+53.87 TO STA. 15+72.94

NOTES:

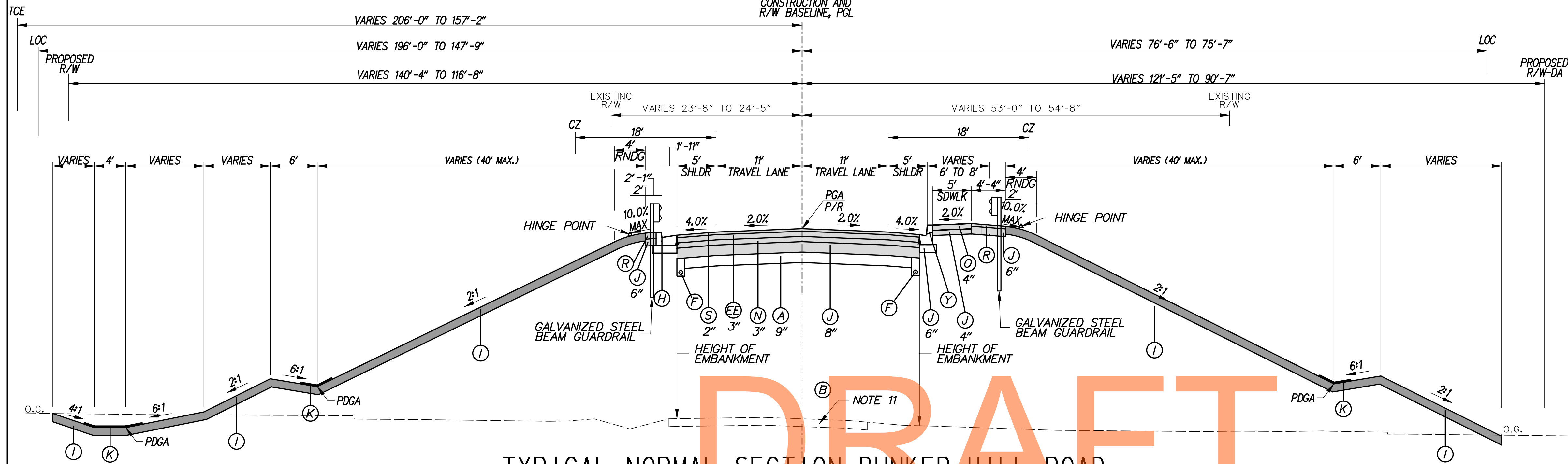
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- EXISTING PAVEMENT IS 10.5" HOT-MIX ASPHALT OVER 6" CRUSHER RUN. SEE CORE SUMMARY ON PLANS.

*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

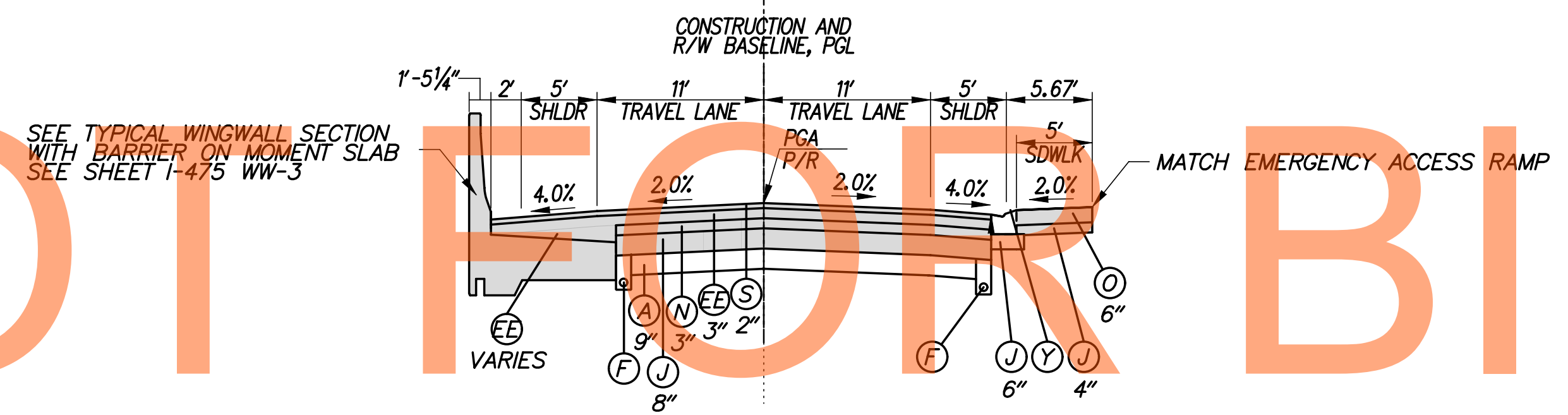
LEGEND	
(A)	ITEM #209001, BORROW TYPE A
(B)	ITEM #209006, BORROW TYPE F
(C)	ITEM #304502, SOIL CEMENT BASE COURSE
(D)	ITEM #304501, PERMEABLE TREATED BASE, 4"
(E)	ITEM #501006, PORTLAND CEMENT CONCRETE PAVEMENT
(F)	ITEM #715001, PERFORATED PIPE UNDERDRAIN
(G)	ITEM #705002, P.C.C. SIDEWALK, 6"
(H)	ITEM #701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
(I)	ITEM #733002, TOPSOILING, 6" DEPTH
(J)	ITEM #734013, PERMANENT GRASS SEEDING, DRY GROUND
(K)	ITEM #302007, GRADED AGGREGATE BASE COURSE, TYPE B
(L)	ITEM #735535, SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
(M)	ITEM #401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
(N)	ITEM #401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(O)	ITEM #401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(P)	ITEM #705001, P.C.C. SIDEWALK, 4"
(Q)	ITEM #701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
(R)	ITEM #701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(S)	ITEM #401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(T)	ITEM #401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(U)	ITEM #401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(V)	ITEM #401517, STONE MATRIX ASPHALT
(W)	ITEM #401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(X)	ITEM #401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(Y)	ITEM #743017, PORTABLE BARRIER
(Z)	ITEM #701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
(AA)	ITEM #701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(AB)	ITEM #701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(BB)	ITEM #760507, PROFILE MILLING, HOT MIX
(CC)	ITEM #760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(DD)	ITEM #760016, RUMBLE STRIPS, HOT MIX
(EE)	ITEM #401813, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

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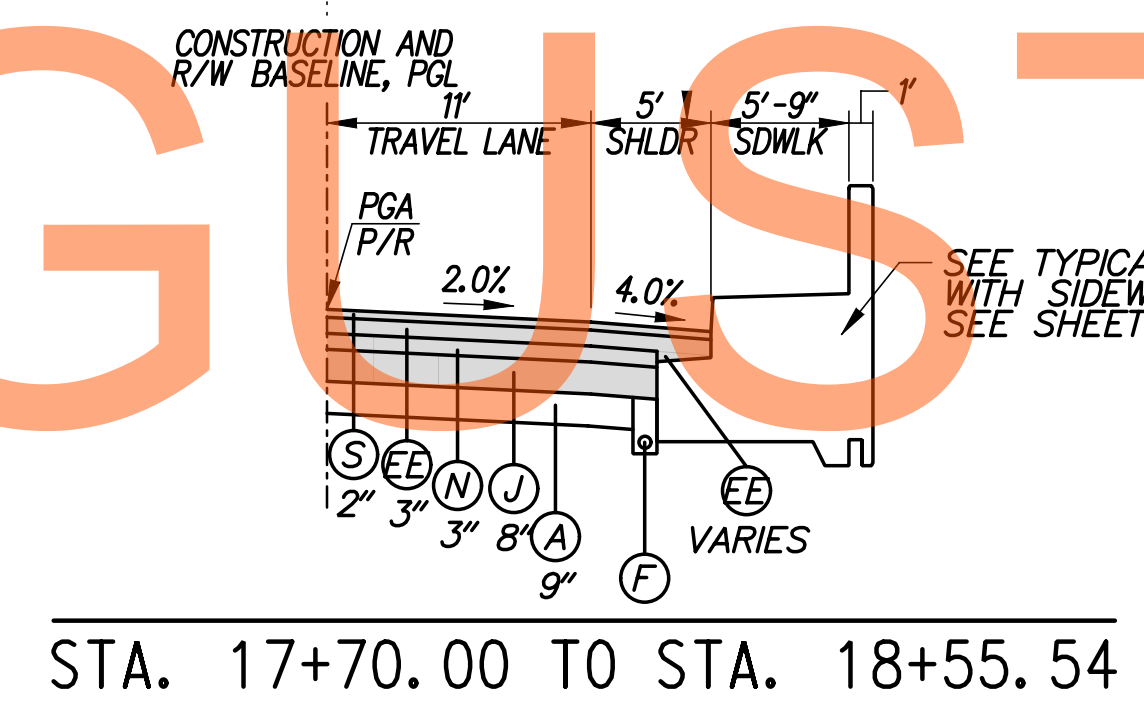
<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS	<p>NOT TO SCALE</p> <p>US 301 LEVELS ROAD TO SUMMIT BRIDGE ROAD</p>	CONTRACT	BRIDGE NO.	<p>TYPICAL SECTIONS</p>	TS-25		
			T200911303			SHEET NO.	45	
			COUNTY	DESIGNED BY:		AG	TOTAL SHTS.	1256
			NEW CASTLE	CHECKED BY:		MT		



TYPICAL NORMAL SECTION BUNKER HILL ROAD
STA. 17+70.00 TO STA. 22+00.00



STA. 17+70.00 LT TO STA. 18+30.03 LT
STA. 19+92.39 RT TO STA. 20+53.61 RT



STA. 17+70.00 TO STA. 18+55.54

LEGEND	
(A)	ITEM #209001, BORROW TYPE A
(B)	ITEM #209006, BORROW TYPE F
(C)	ITEM #304502, SOIL CEMENT BASE COURSE
(D)	ITEM #304501, PERMEABLE TREATED BASE, 4"
(E)	ITEM #501006, PORTLAND CEMENT CONCRETE PAVEMENT
(F)	ITEM #715001, PERFORATED PIPE UNDERDRAIN
(G)	ITEM #705002, P.C.C. SIDEWALK, 6"
(H)	ITEM #701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
(I)	ITEM #733002, TOPSOILING, 6" DEPTH
(J)	ITEM #734013, PERMANENT GRASS SEEDING, DRY GROUND
(K)	ITEM #302007, GRADED AGGREGATE BASE COURSE, TYPE B
(L)	ITEM #735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
(M)	ITEM #401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
(N)	ITEM #401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
(O)	ITEM #401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(P)	ITEM #705001, P.C.C. SIDEWALK, 4"
(Q)	ITEM #701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
(R)	ITEM #701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
(S)	ITEM #401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
(T)	ITEM #401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
(U)	ITEM #401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
(V)	ITEM #401517, STONE MATRIX ASPHALT
(W)	ITEM #401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
(X)	ITEM #401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(Y)	ITEM #743017, PORTABLE BARRIER
(Z)	ITEM #701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
(AA)	ITEM #701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
(BB)	ITEM #701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
(CC)	ITEM #760507, PROFILE MILLING, HOT MIX
(DD)	ITEM #760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
(EE)	ITEM #760016, RUMBLE STRIPS, HOT MIX
(FF)	ITEM #401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOT FOR BIDDING

AUGUST 2015

NOTES:

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*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

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.

T:\NEW CASTLE\301\ROAD\T200911303\PLANS\CPA\TS03_2A_URS.DGN



ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

TYPICAL SECTIONS	TS-26
	SHEET NO. 46
	TOTAL SHTS. 1256

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4

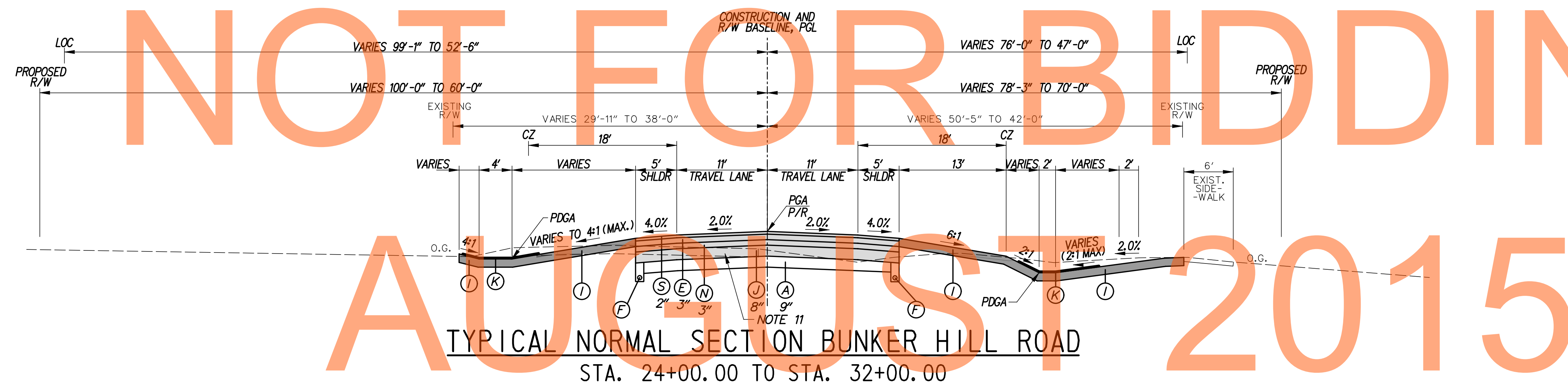
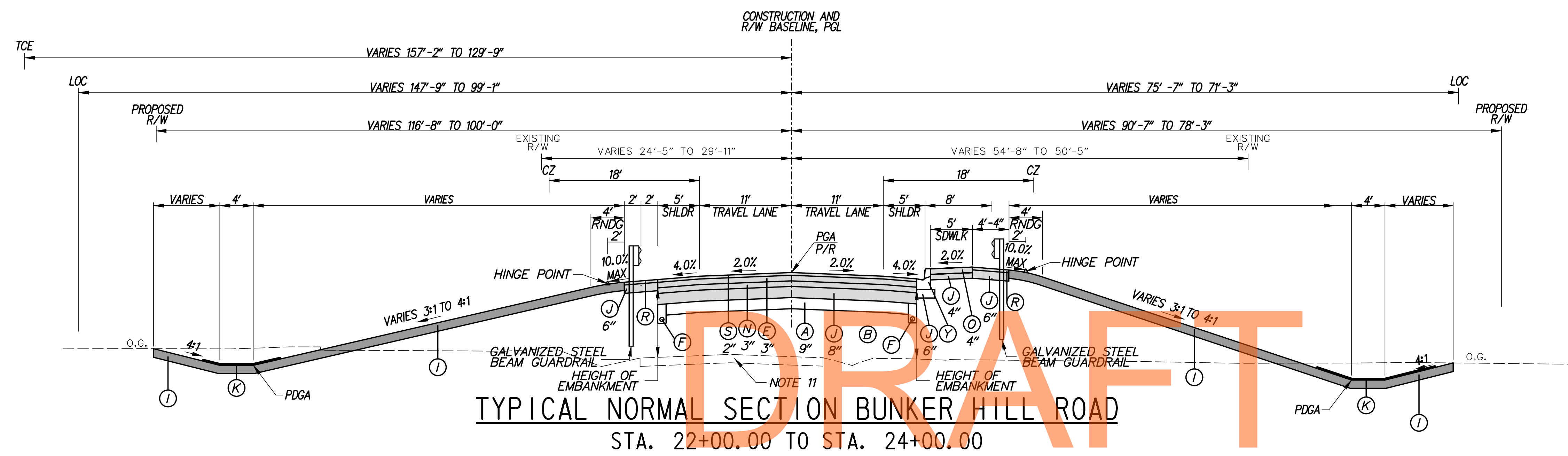
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (J) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16

- (L) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (M) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (N) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (O) ITEM *705001, P.C.C. SIDEWALK, 4"
- (P) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
- (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)

- (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (U) ITEM *401517, STONE MATRIX ASPHALT
- (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22

- (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (X) ITEM *743017, PORTABLE BARRIER
- (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
- (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2

- (BB) ITEM *760507, PROFILE MILLING, HOT MIX
- (CC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (DD) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (EE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22



NOT FOR BIDDING
AUGUST 2015

NOTES:

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7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
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11. EXISTING PAVEMENT IS 10.5" HOT-MIX ASPHALT OVER 6" CRUSHER RUN. SEE CORE SUMMARY ON PLANS.

P.G.L. - PROFILE GRADE LINE.
 P.G.A. - POINT OF GRADE APPLICATION.
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*FILL SLOPE RATIO CHART	
HEIGHT OF EMBANKMENT	SLOPE RATIO
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>15'	2:1 WITH GUARDRAIL



ADDENDUMS / REVISIONS	

NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

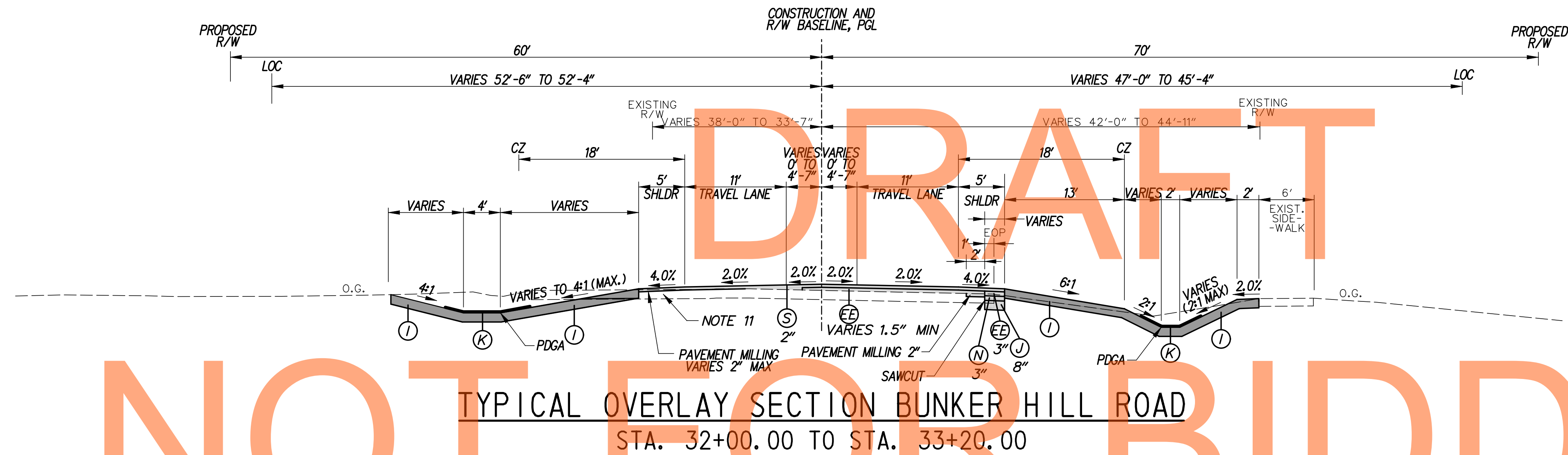
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

TYPICAL SECTIONS	TS-27
	SHEET NO. 47
	TOTAL SHTS. 1256

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4

- (I) ITEM *733002, TOPSOILING, 6" DEPTH
ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (J) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (K) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
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- (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (BB) ITEM *760507, PROFILE MILLING, HOT MIX
- (CC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (DD) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (EE) ITEM *401813, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22



NOT FOR BIDDING

AUGUST 2015

NOTES:

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9. AREAS NOT RECEIVING TOPSOIL SHOULD BE HYDRO SEEDED.
10. ITEMS SHOWN AS DASHED TO BE CONSTRUCTED UNDER SEPERATE CONTRACT.
11. EXISTING PAVEMENT IS 10.5" HOT-MIX ASPHALT OVER 6" CRUSHER RUN. SEE CORE SUMMARY ON PLANS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.

*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



ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.	
T20091303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

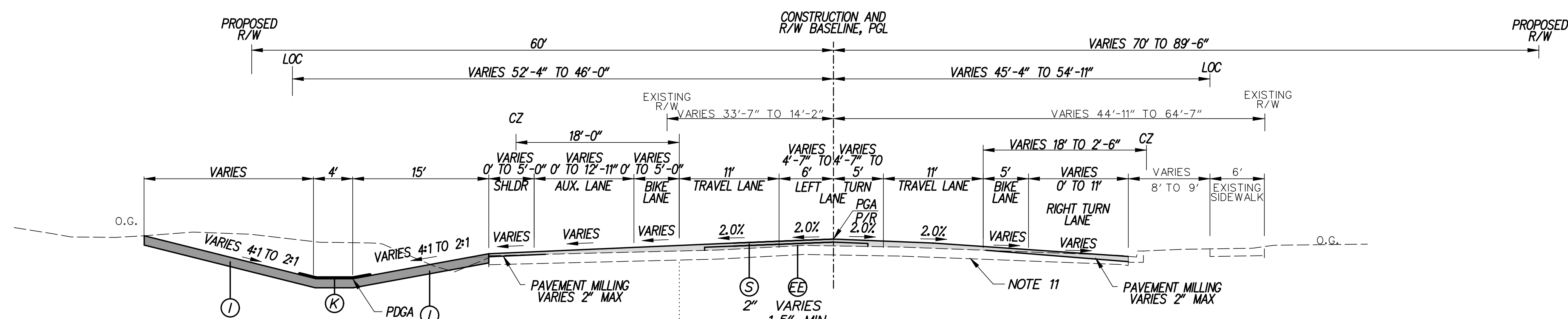
TYPICAL SECTIONS

TS-28
SHEET NO.
48
TOTAL SHTS.
1256

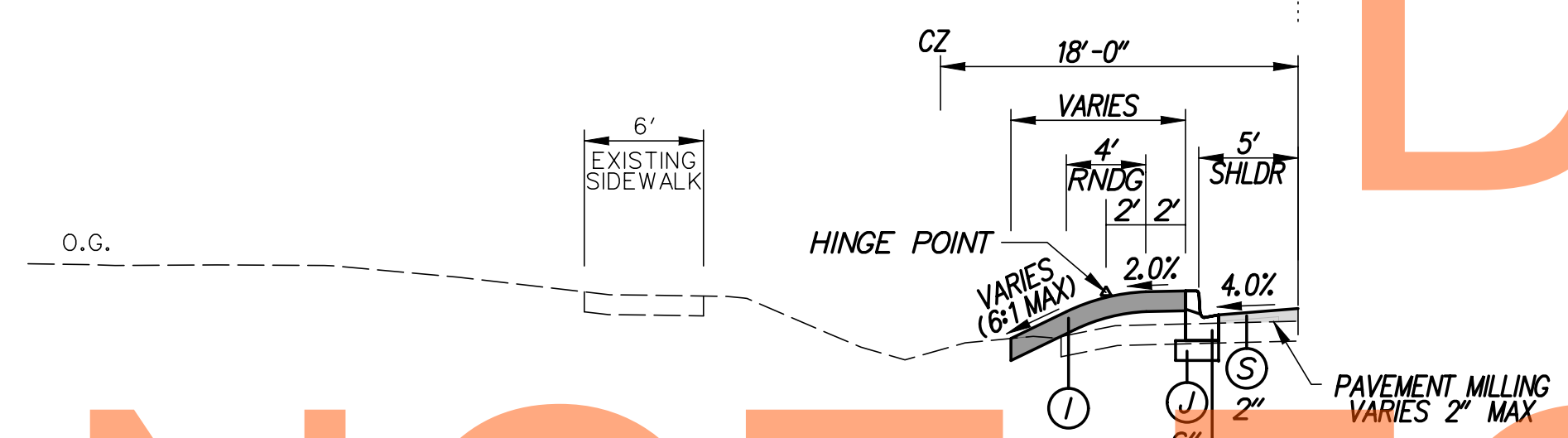
LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4

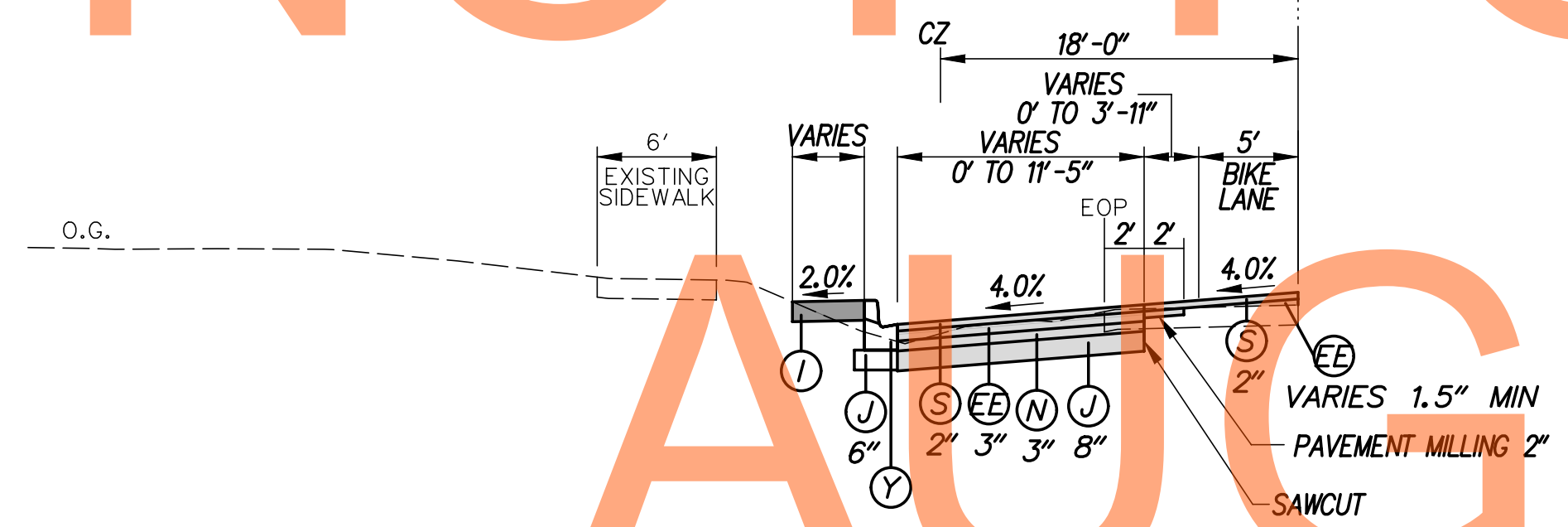
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (P) ITEM *705001, P.C.C. SIDEWALK, 4"
- (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1
- (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
- (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (V) ITEM *401517, STONE MATRIX ASPHALT
- (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE COURSE, 160 GYRATIONS, PG 64-22
- (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (Y) ITEM *743017, PORTABLE BARRIER
- (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3
- (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (BB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (CC) ITEM *760507, PROFILE MILLING, HOT MIX
- (DD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (EE) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (FF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22



TYPICAL OVERLAY SECTION BUNKER HILL ROAD
STA. 33+20.00 TO STA. 37+00.00



STA. 34+00.00 TO STA. 35+20.00



STA. 35+20.00 TO STA. 36+24.25

DRAFT
NOT FOR BIDDING
AUGUST 2015

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.
9. AREAS NOT RECEIVING TOPSOIL SHOULD BE HYDRO SEEDING.
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P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.
PFGA - POINT OF FILL GRADE APPLICATION.

*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



ADDENDUMS / REVISIONS	

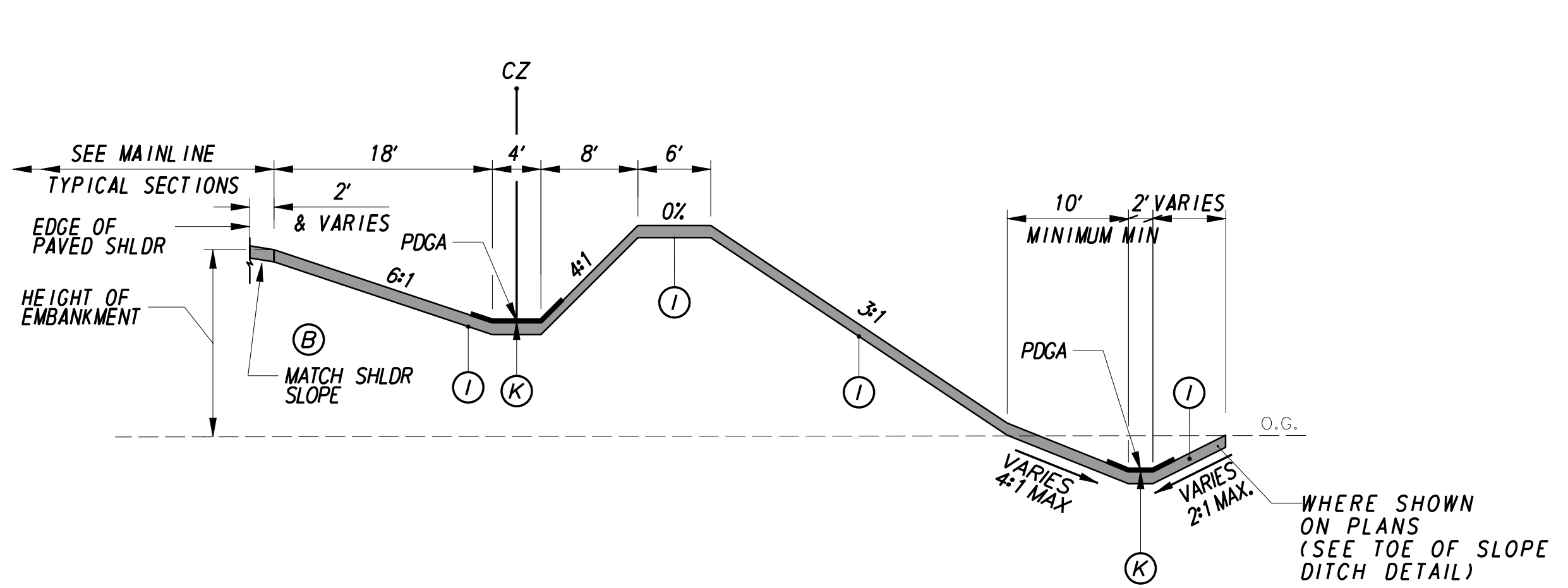
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AG
COUNTY	CHECKED BY:	MT
NEW CASTLE		

TYPICAL SECTIONS

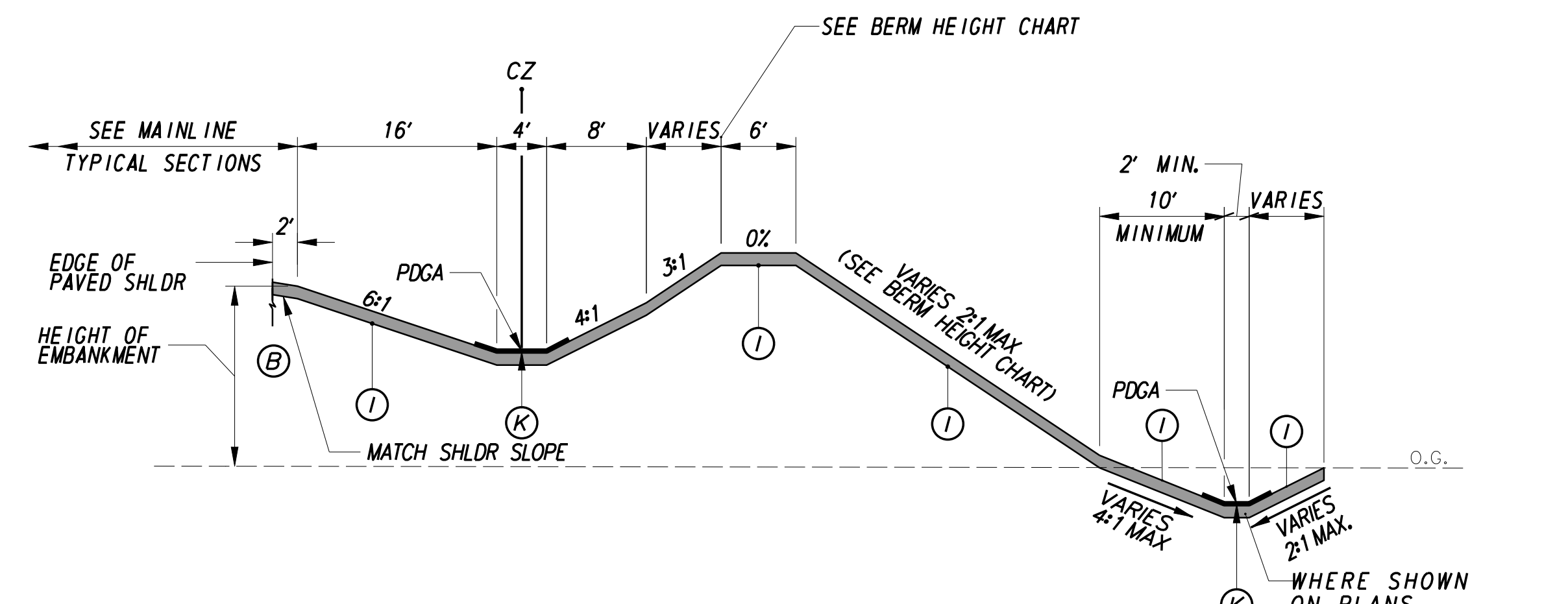
TS-29
SHEET NO.
49
TOTAL SHTS.
1256



US 301 MAINLINE ROADSIDE DITCH SECTION

- SOUTHBOUND STA 310+00.00 TO STA 312+55.62
- SOUTHBOUND STA 351+50.00 TO STA 368+00.00
- SOUTHBOUND STA 371+50.00 TO STA 408+00.00
- SOUTHBOUND STA 416+50.00 TO STA 436+50.00
- NORTHBOUND STA 312+00.00 TO STA 316+00.00
- NORTHBOUND STA 376+00.00 TO STA 399+90.79
- NORTHBOUND STA 410+00.00 TO STA 416+00.00
- NORTHBOUND STA 458+00.00 TO STA 461+73.00

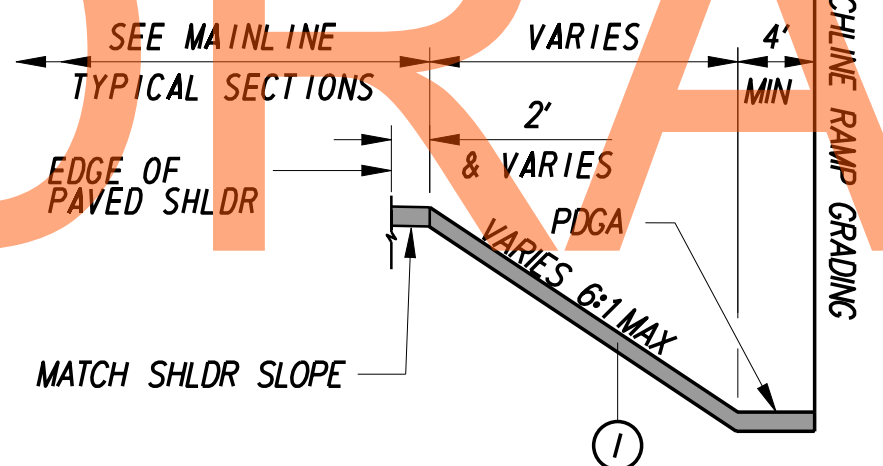
*VARIES SOUTHBOUND STA 396+50.00 TO STA 407+70.04 (FUTURE RAMP H)
 *VARIES NORTHBOUND STA 385+50.00 TO STA 396+50.00 (FUTURE RAMP G)



US 301 MAINLINE BERM SECTION

- NORTHBOUND STA 316+00.00 TO STA 345+42.00
- NORTHBOUND STA 348+00.00 TO STA 375+00.00
- NORTHBOUND STA 416+00.00 TO STA 436+00.00

BERM STA LIMITS	HEIGHT ABOVE PGA	BACKSLOPE
316+00-319+50	10'	3:1
319+50-332+00	16'	3:1
332+00-334+50	16'	2.5:1
334+50-338+50	16'	3:1
338+50-345+50	10'	3:1
348+00-355+50	16'	3:1
355+50-375+00	16'	2:1
415+00-436+00	6'	2:1



US301 MAINLINE RAMP INFIELD GRADING DETAIL

- SOUTHBOUND STA 258+00.00 TO STA 308+22.53 RAMP F
- SOUTHBOUND STA 408+00.00 TO STA 416+50.00 RAMP H & G
- SOUTHBOUND STA 455+45.40 TO STA 461+50.00 RAMP K
- NORTHBOUND STA 308+65.00 TO STA 310+66.63 RAMP C
- NORTHBOUND STA 399+90.79 TO STA 410+00.00 RAMP G
- NORTHBOUND STA 456+20.42 TO STA 458+00.00 RAMP J
- NORTHBOUND STA 470+52.00 TO STA 474+43.65 RAMP I

*VARIES SOUTHBOUND STA 408+00.00 TO STA 416+50.00 (FUTURE RAMP H & G)
 *VARIES NORTHBOUND STA 399+90.79 TO STA 410+00.00 (FUTURE RAMP G)

NOT FOR CONSTRUCTION

AUGUST 2015

- LEGEND**
- (A) ITEM *209001, BORROW TYPE A
 - (B) ITEM *209006, BORROW TYPE F
 - (C) ITEM *304502, SOIL CEMENT BASE COURSE
 - (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
 - (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
 - (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
 - (G) ITEM *705002, P.C.C. SIDEWALK, 6"
 - (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
 - (I) ITEM *733002, TOPSOILING, 6" DEPTH
 - (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
 - (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
 - (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
 - (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
 - (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
 - (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (P) ITEM *705001, P.C.C. SIDEWALK, 4"
 - (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
 - (R) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS)
 - (S) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
 - (T) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
 - (U) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
 - (V) ITEM *401517, STONE MATRIX ASPHALT
 - (W) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
 - (X) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
 - (Y) ITEM *743017, PORTABLE BARRIER
 - (Z) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
 - (AA) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
 - (AB) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
 - (AC) ITEM *760507, PROFILE MILLING, HOT MIX
 - (AD) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
 - (AE) ITEM *760016, RUMBLE STRIPS, HOT MIX
 - (AF) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
 2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
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 4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
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 7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
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 P.G.A. - POINT OF GRADE APPLICATION.
 P/R - POINT OF ROTATION.
 PDGA - POINT OF DITCH GRADE APPLICATION.



ADDENDUMS / REVISIONS

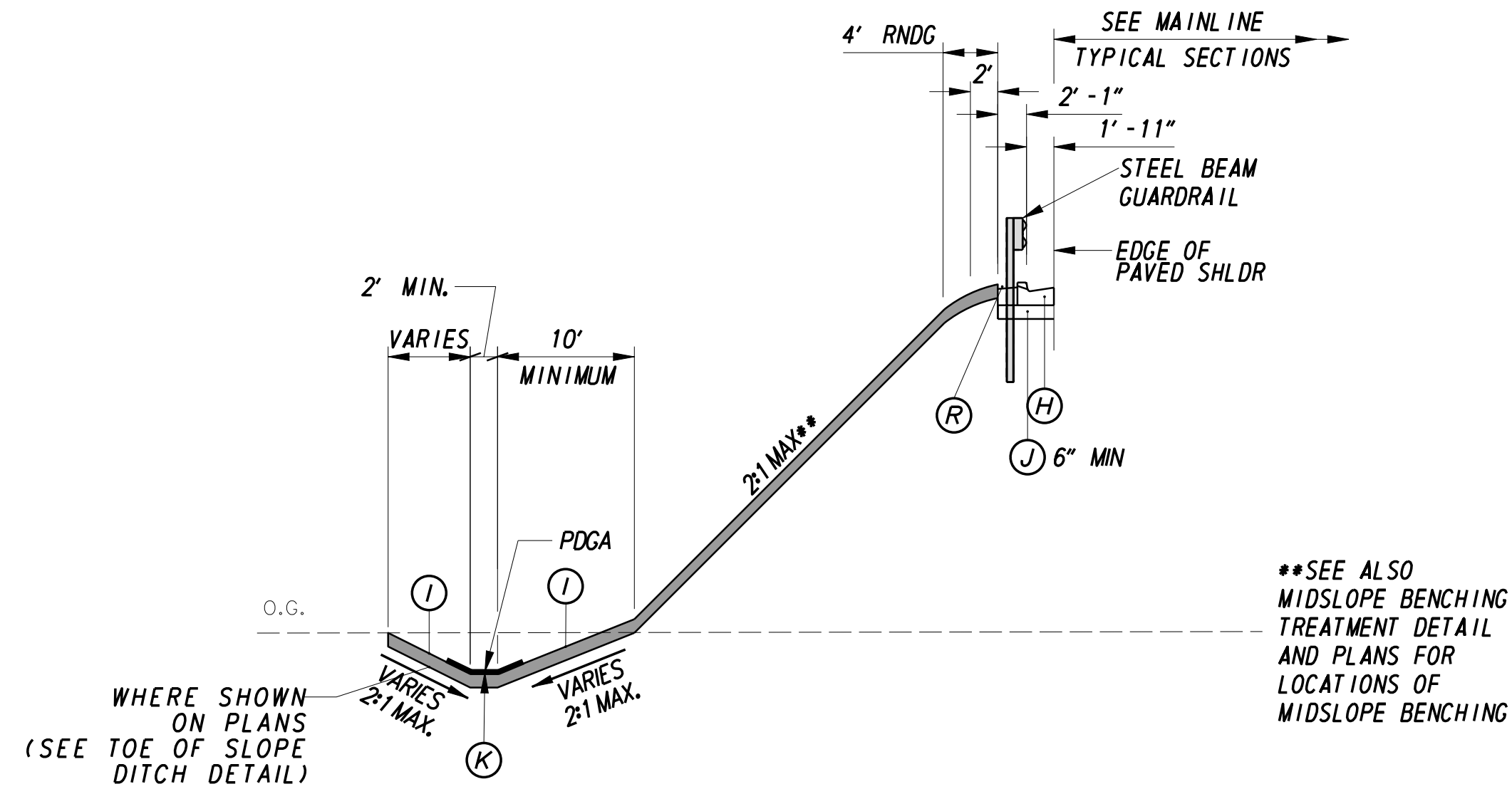
NOT TO SCALE

**US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD**

CONTRACT T200911303	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: AM JW CHECKED BY: JF SF

**ROADSIDE GRADING
TREATMENT DETAILS**

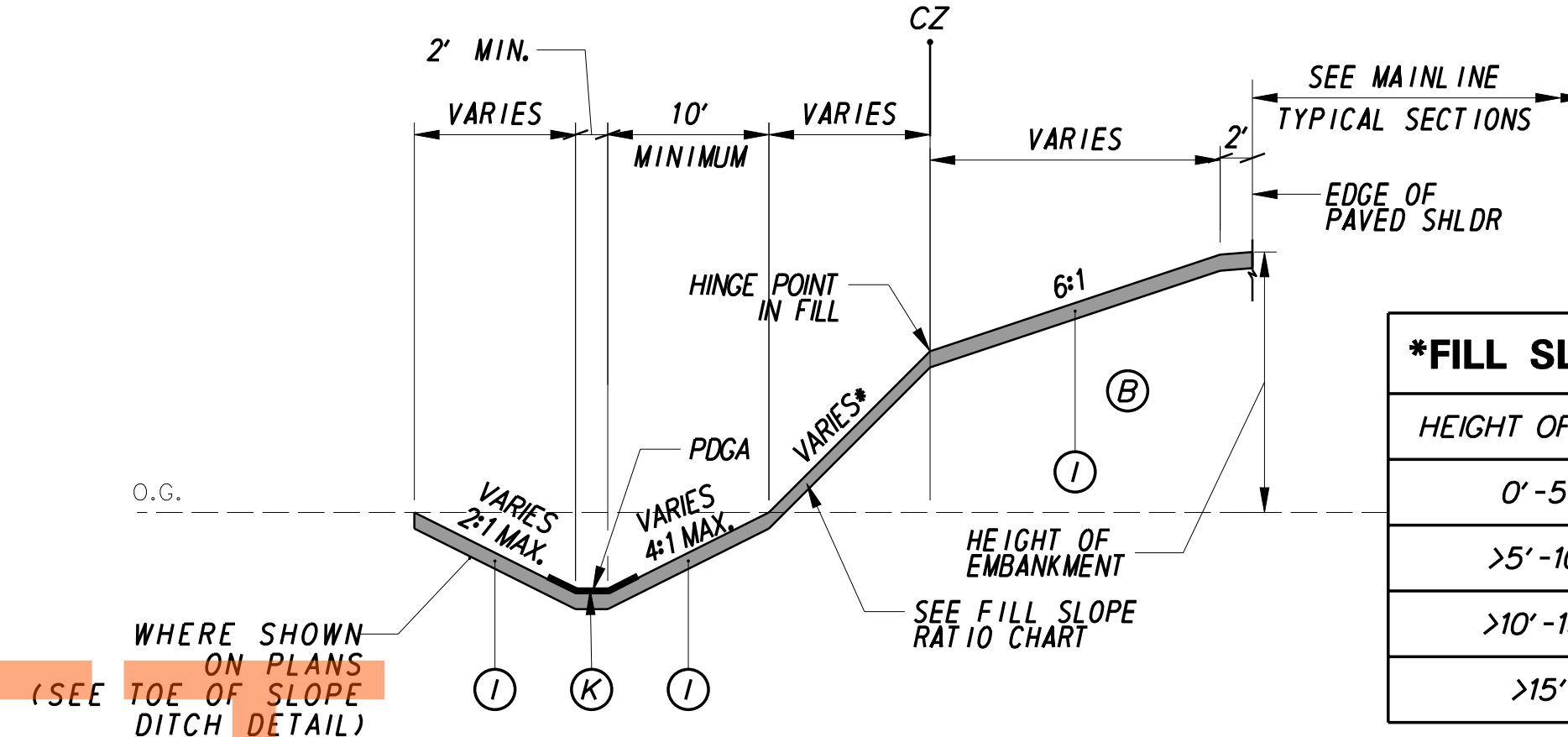
TS-30
SHEET NO. 50
TOTAL SHTS. 1256



US 301 MAINLINE 2:1 WITH GUARDRAIL SECTION

SOUTHBOUND STA 436+50.00 TO STA 455+44.40
 SOUTHBOUND STA 461+50.00 TO STA 495+09.56
 NORTHBOUND STA 436+00.00 TO STA 456+20.42
 NORTHBOUND STA 461+73.00 TO STA 470+52.00
 NORTHBOUND STA 479+51.33 TO STA 495+09.56

**SEE ALSO
 MIDSLOPE BENCHING
 TREATMENT DETAIL
 AND PLANS FOR
 LOCATIONS OF
 MIDSLOPE BENCHING



US 301 MAINLINE FILL SECTION

SOUTHBOUND STA 308+22.67 TO STA 310+00.00
 SOUTHBOUND STA 313+78.43 TO STA 351+50.00
 SOUTHBOUND STA 368+00.00 TO STA 371+50.00
 NORTHBOUND STA 258+00.00 TO STA 308+65.00

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

DRAFT

NOT FOR BIDDING

AUGUST 2015

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

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 - SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
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 P.G.A. - POINT OF GRADE APPLICATION.
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ADDENDUMS / REVISIONS

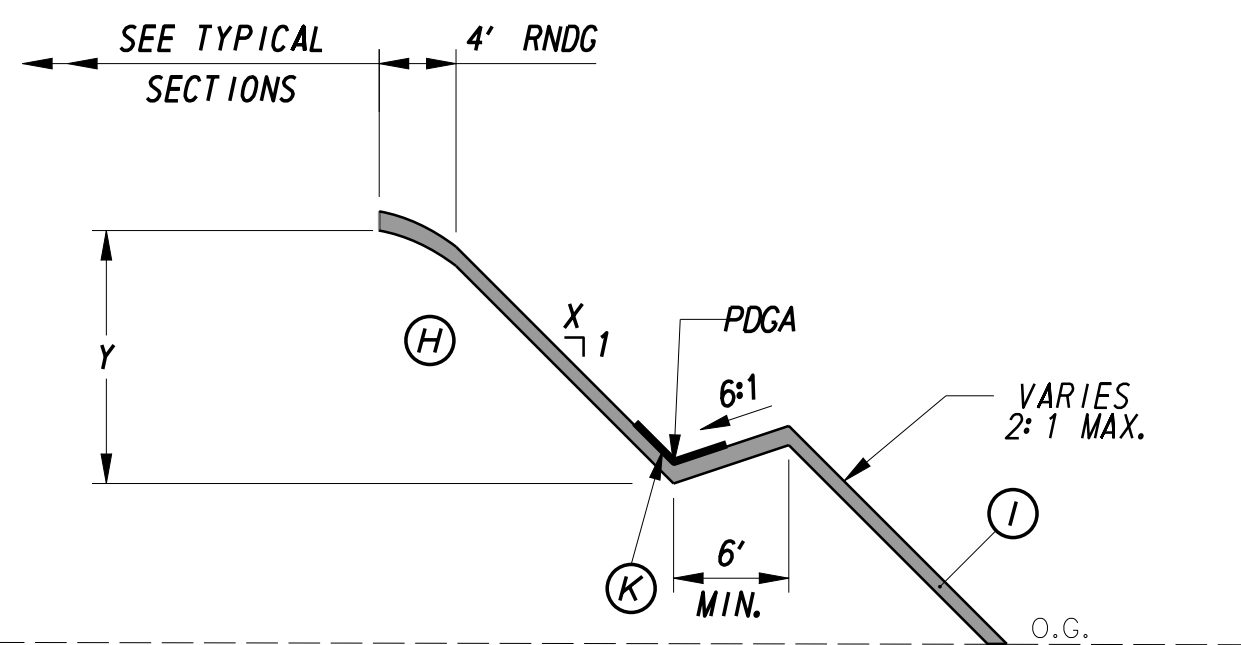
NOT TO SCALE

**US 301
 LEVELS ROAD
 TO SUMMIT BRIDGE ROAD**

CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

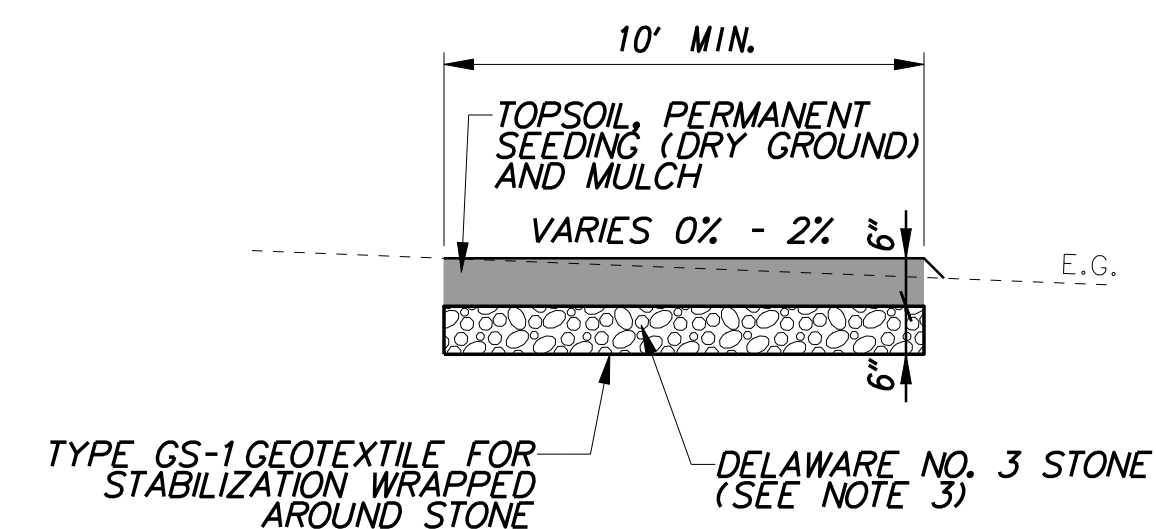
**ROADSIDE GRADING
 TREATMENT DETAILS**

TS-31
SHEET NO.
51
TOTAL SHTS.
1256



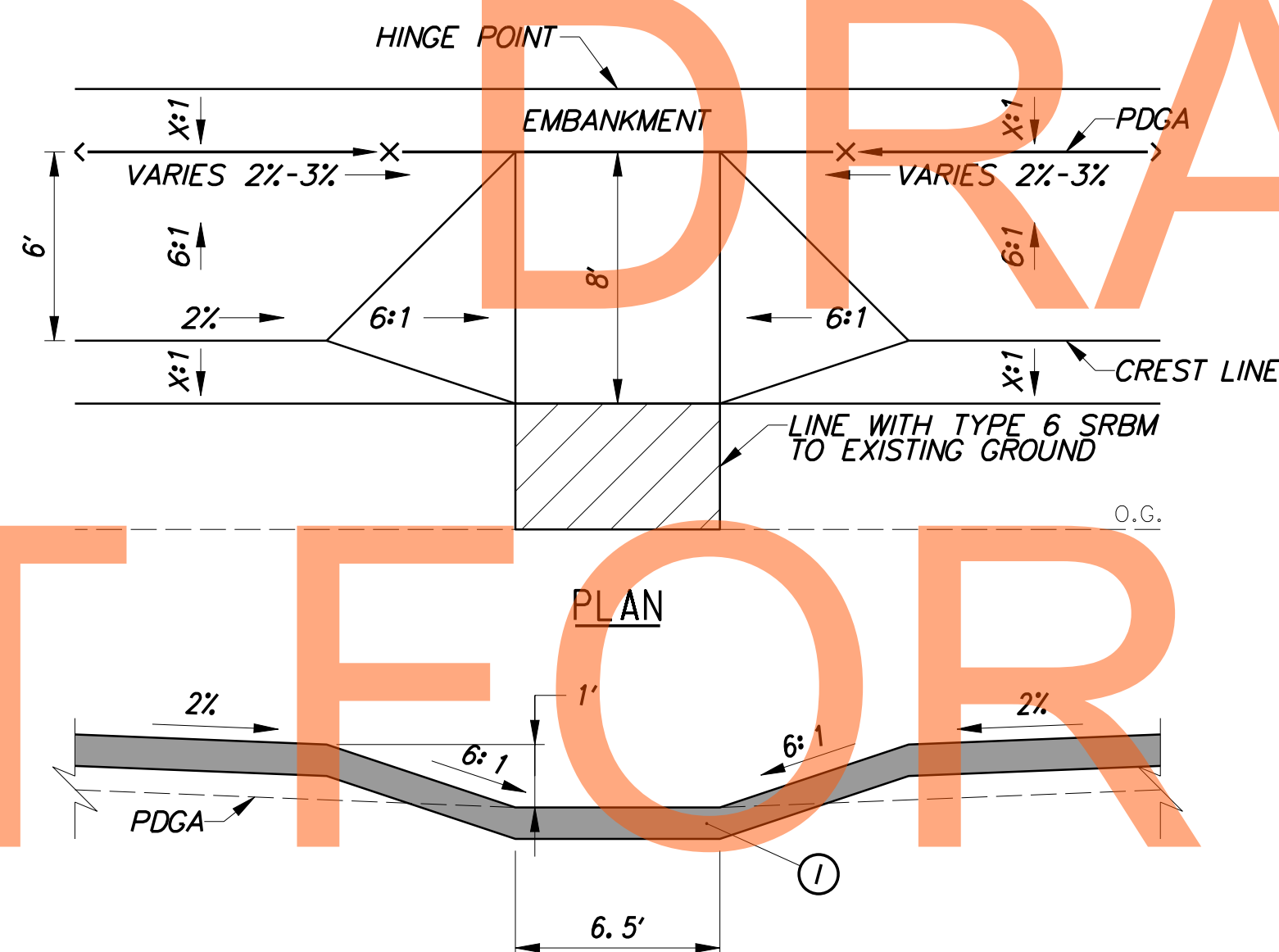
MID-SLOPE BENCHING TREATMENT DETAIL
(WHERE SHOWN ON PLANS)

SLOPE X:1	Y (MAX.)
2	20'
3	30'
4	40'



TYPICAL SECTION
POND MAINTENANCE
ACCESS ROAD

1. LOCATE MAINTENANCE ACCESS ROAD AS INDICATED ON CONSTRUCTION PLANS AND STORMWATER MANAGEMENT PLANS.
2. GRADE MAINTENANCE ACCESS ROAD TO PROVIDE A MAXIMUM LONGITUDINAL SLOPE OF 6:1, AND A MAXIMUM CROSS SLOPE OF 2%.
3. LIMITS OF STONE AS SHOWN ON STORMWATER MANAGEMENT PLANS. STONE LAYER SHALL BE OMITTED OUTSIDE OF THESE LIMITS.



ELEVATION
MID-SLOPE BENCH OUTLET

DRAFT

NOT FOR BIDDING

AUGUST 2015

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

NOTES:

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3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

ADDENDUMS / REVISIONS

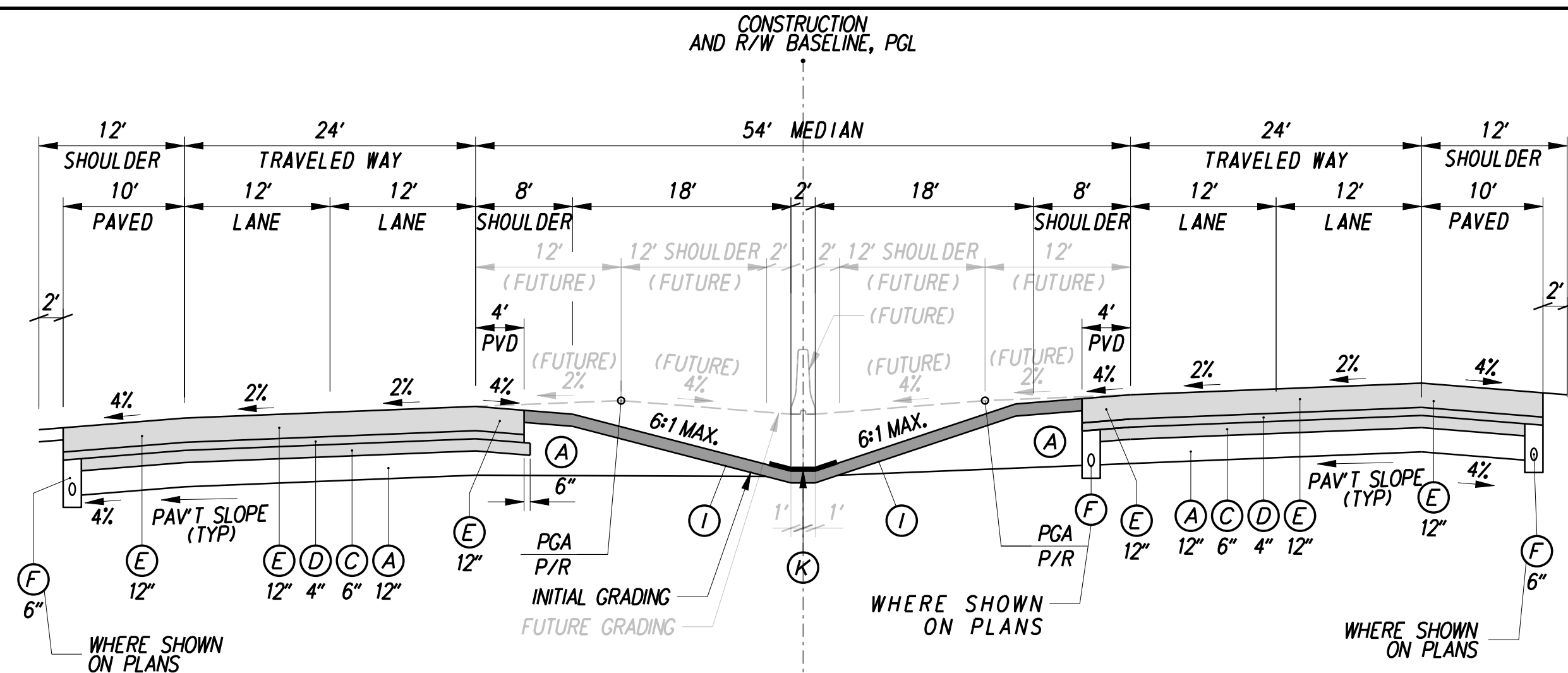
NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

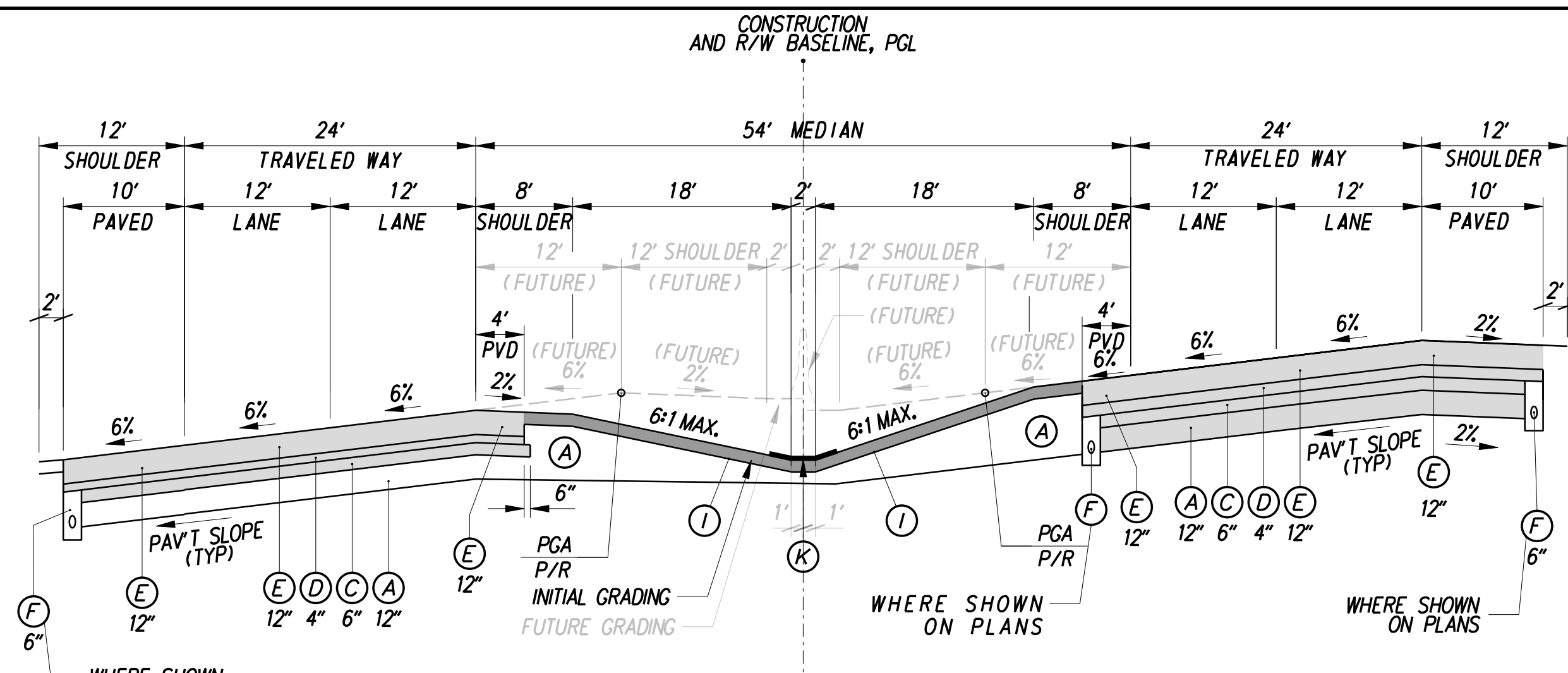
CONTRACT	BRIDGE NO.	
T200911303	DESIGNED BY:	AM JW
COUNTY	CHECKED BY:	JF SF
NEW CASTLE		

ROADSIDE GRADING
TREATMENT DETAIL

TS-32
SHEET NO.
52
TOTAL SHTS.
1256



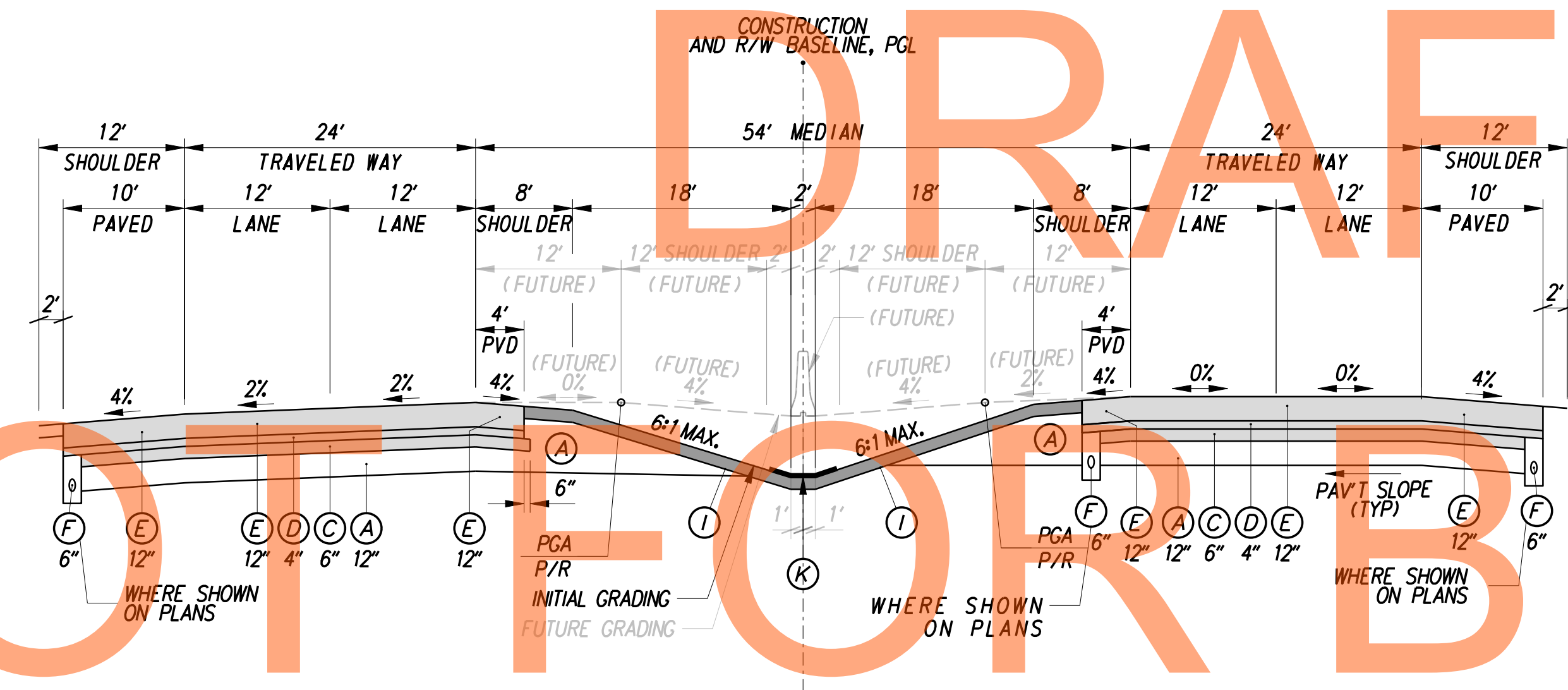
TYPICAL REVERSE CROWN (2%/2%) 4 LANE SECTION US 301



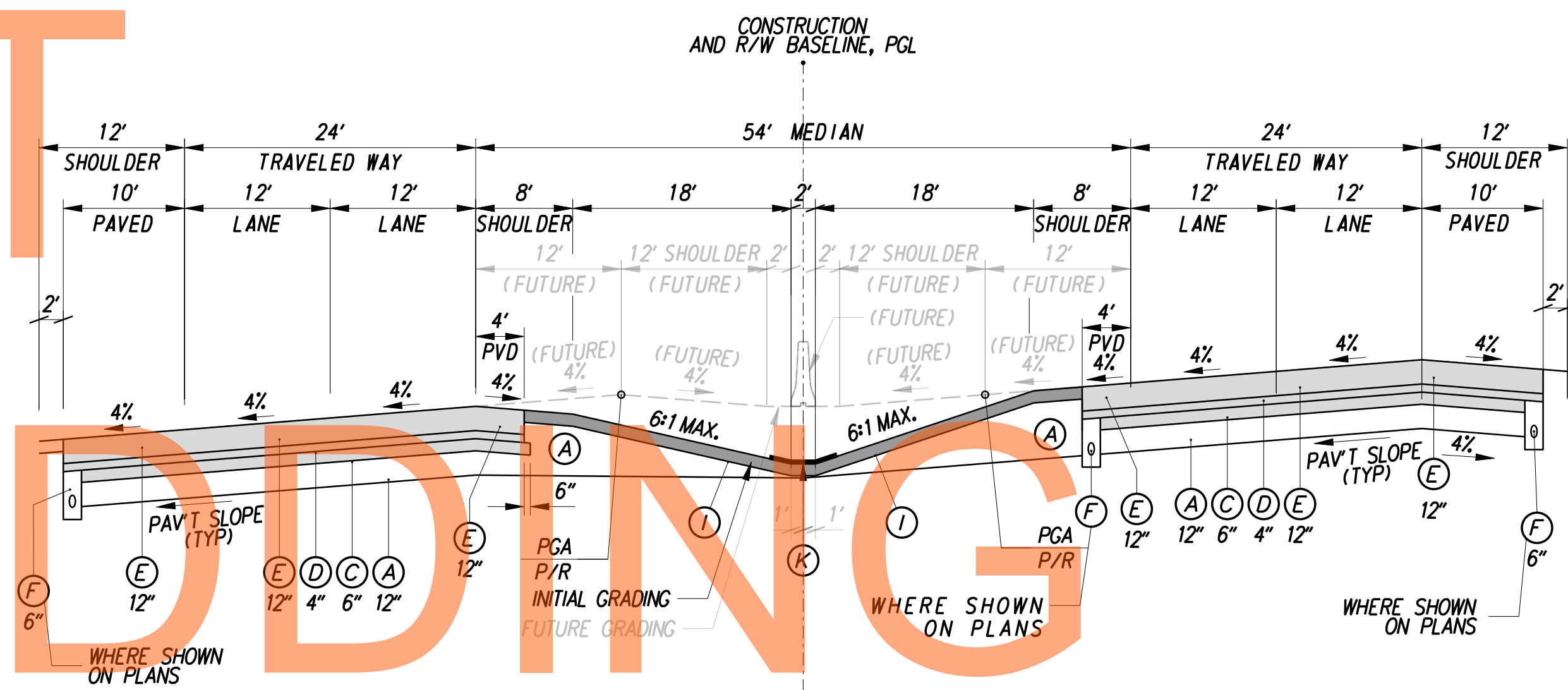
TYPICAL SUPERELEVATED (6%) 4 LANE SECTION US 301

NOTES:

1. THE ALGEBRAIC DIFFERENCE BETWEEN THE TRAVEL LANE SLOPE AND SHOULDER SLOPE SHALL NOT EXCEED 8%.
2. SHOULDER CROSS SLOPE ON THE LOW SIDE SHALL BE THE SAME AS THE TRAVEL LANE CROSS SLOPE WHEN SUPERELEVATION IS 4% OR GREATER.
3. SEE GRADES AND GEOMETRICS SHEETS FOR ADDITIONAL INFORMATION ON VARYING CROSS-SLOPE AND PAVEMENT WIDTHS.
4. SEE ROADSIDE GRADING TREATMENT DETAILS FOR CHANGES IN TYPICAL ROADSIDE TREATMENT.
5. SEE TYPICAL MAINLINE SUPERELEVATION TRANSITION DETAILS FOR ADDITIONAL MEDIAN INFORMATION IN SUPERELEVATED SECTIONS.
6. SEE CROSS-SECTIONS FOR ALL VARYING CROSS-SLOPE RATES AND SIDE SLOPE RATES.
7. SEE ROADWAY PLANS AND SWM PLANS FOR SWM POND AND BMP LOCATIONS.
8. SEE ROADWAY PLANS AND BRIDGE PLANS FOR BRIDGE LOCATIONS.



TYPICAL REVERSE CROWN (2%/0%) 4 LANE SECTION US 301

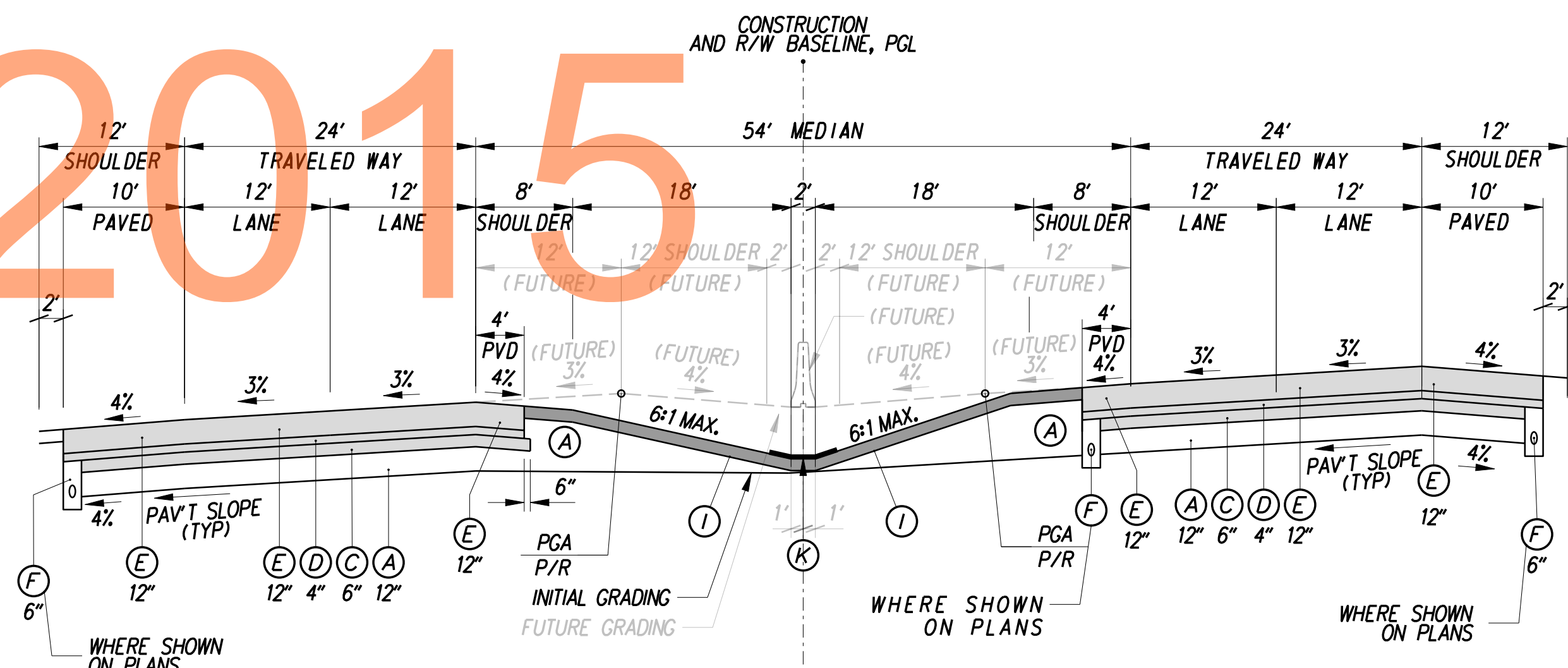


TYPICAL SUPERELEVATED (4%) 4 LANE SECTION US 301

P.G.L. - PROFILE GRADE LINE.
P.G.A. - POINT OF GRADE APPLICATION.
P/R - POINT OF ROTATION.
PDGA - POINT OF DITCH GRADE APPLICATION.

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (D) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |



TYPICAL SUPERELEVATED (3%) 4 LANE SECTION US 301

ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

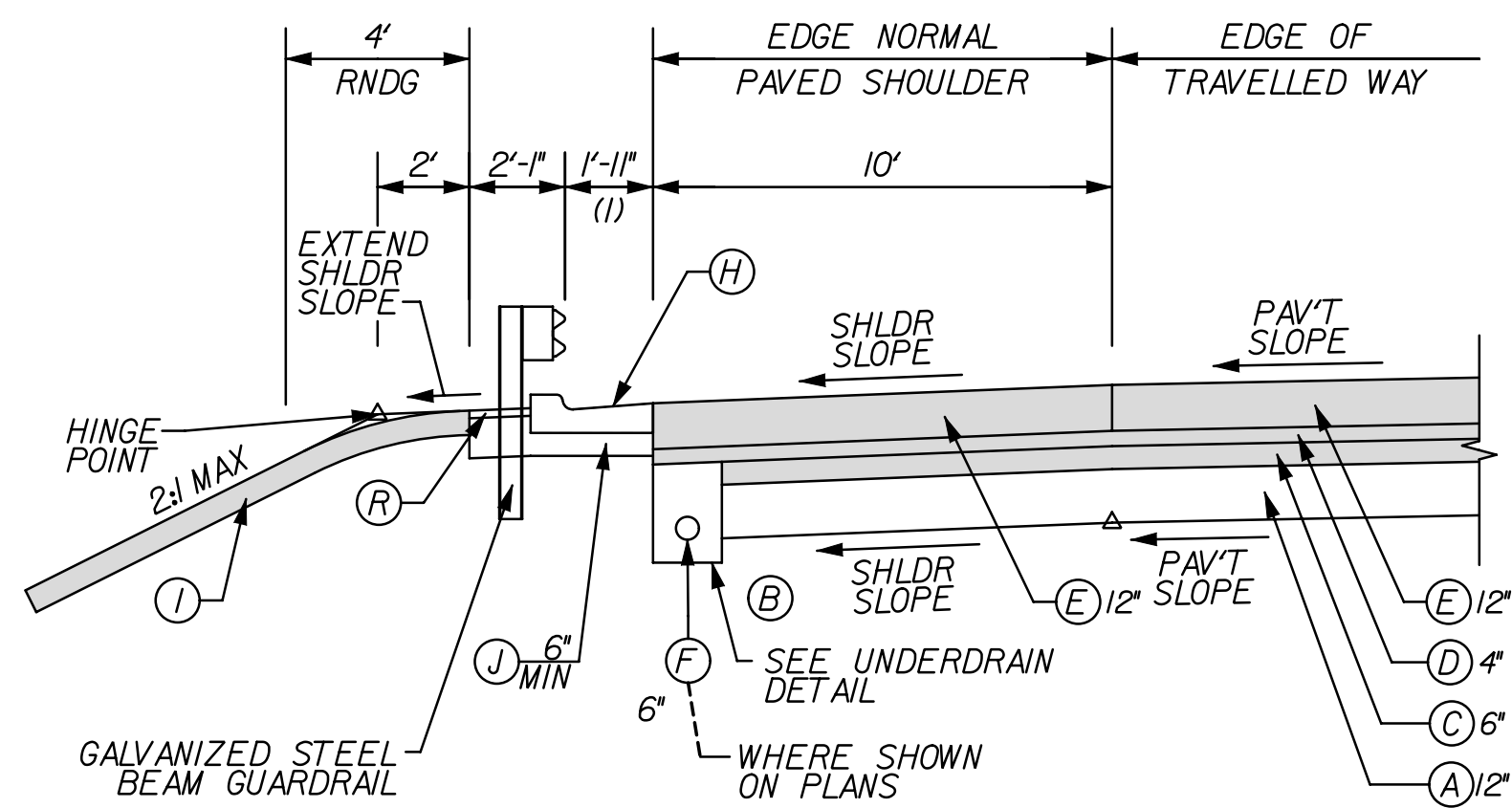
CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS
MAINLINE SUPERELEVATION
TRANSITION DETAILS

TS-33
SHEET NO.
53
TOTAL SHTS.
1256

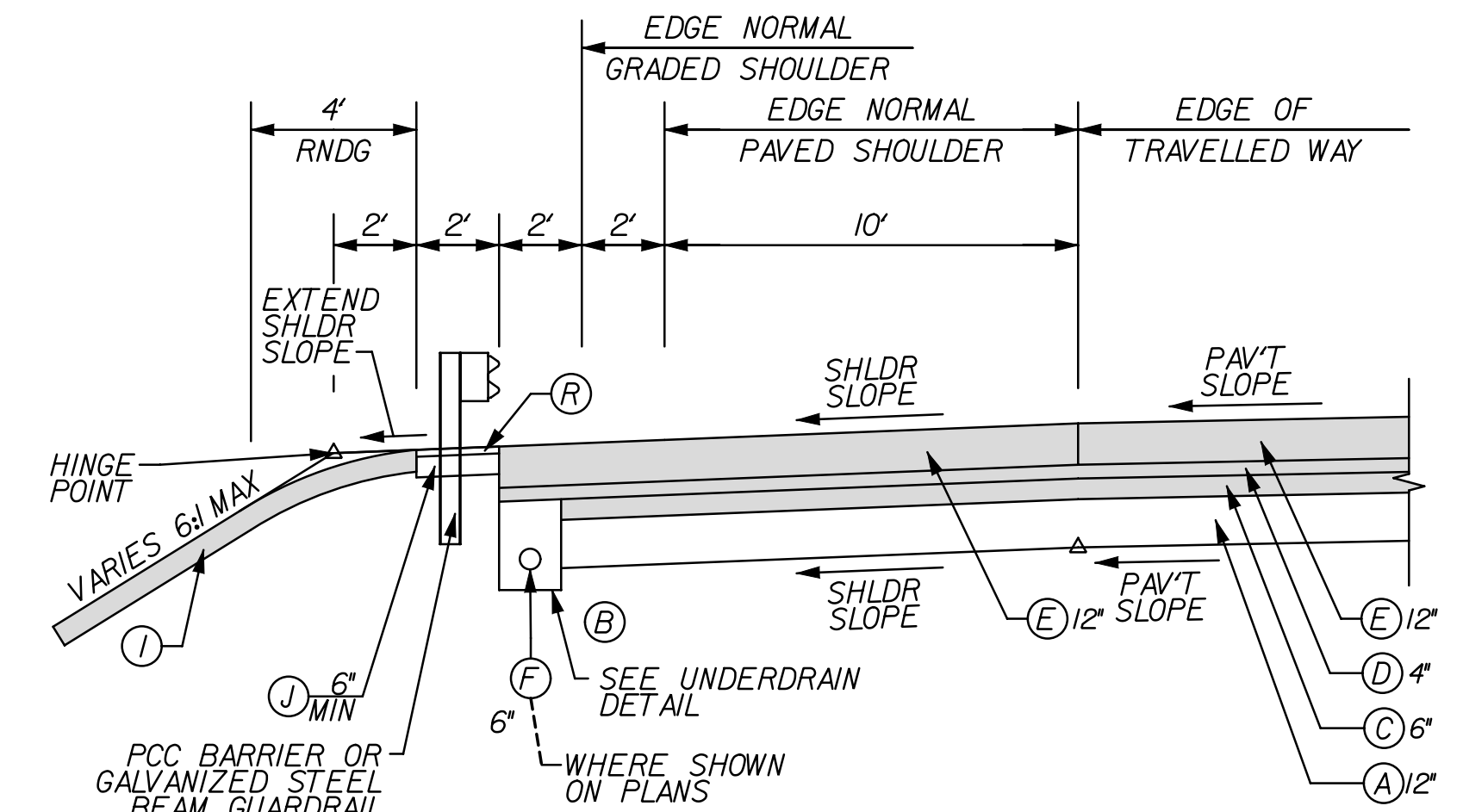
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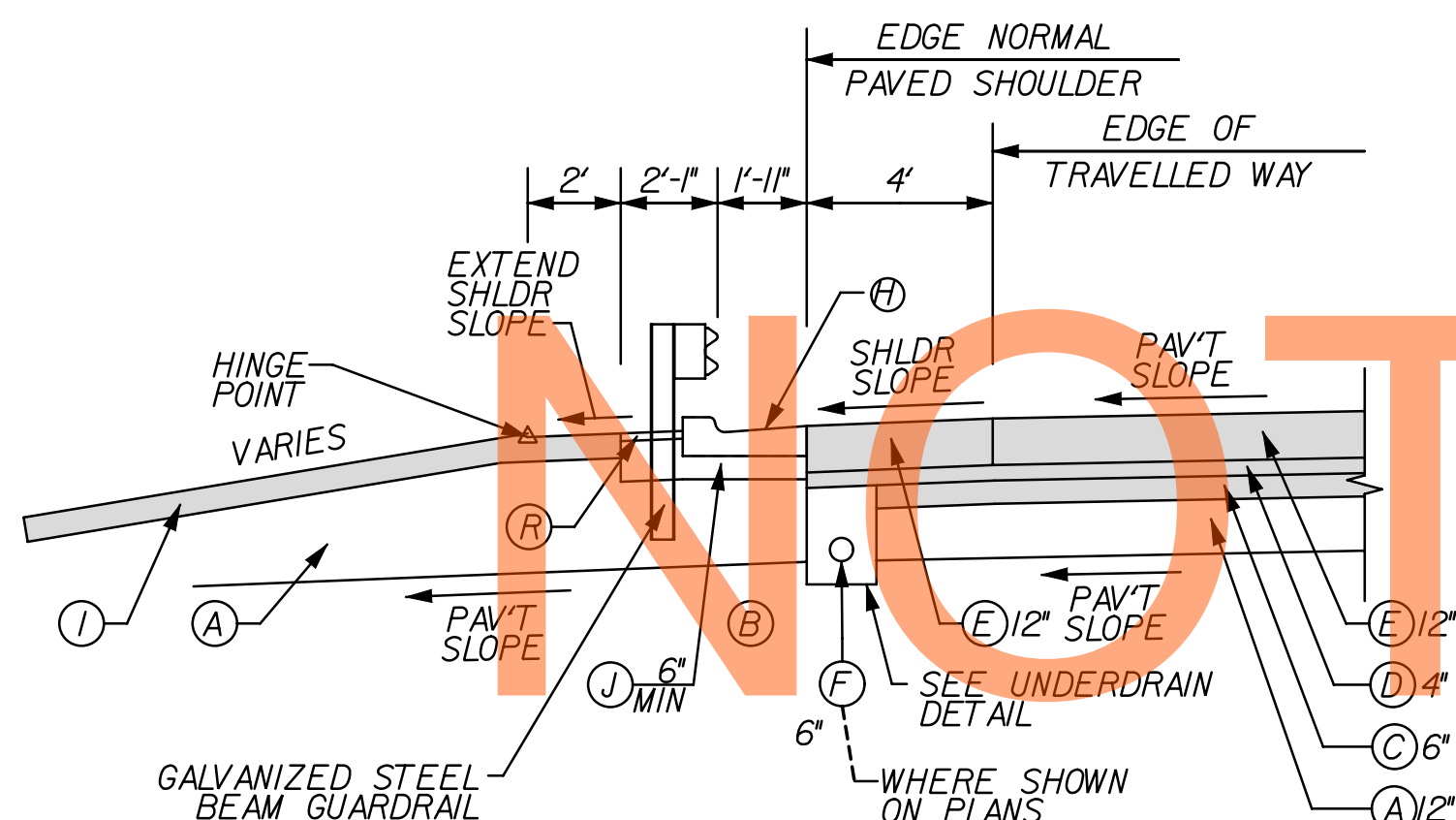
US301 MAINLINE OUTSIDE SHOULDER GUARDRAIL DETAIL WITH UNDERDRAIN

(WHERE SHOWN ON PLANS)
 LOCATION: US301 MAINLINE BRIDGE APPROACHES & OTHER LOCATIONS REQUIRING GUARDRAIL & CURB
 NOTES: (1) TRANSITION TO 2'-0" AT FACE OF BARRIERS AND PARAPETS (SEE DT-06).



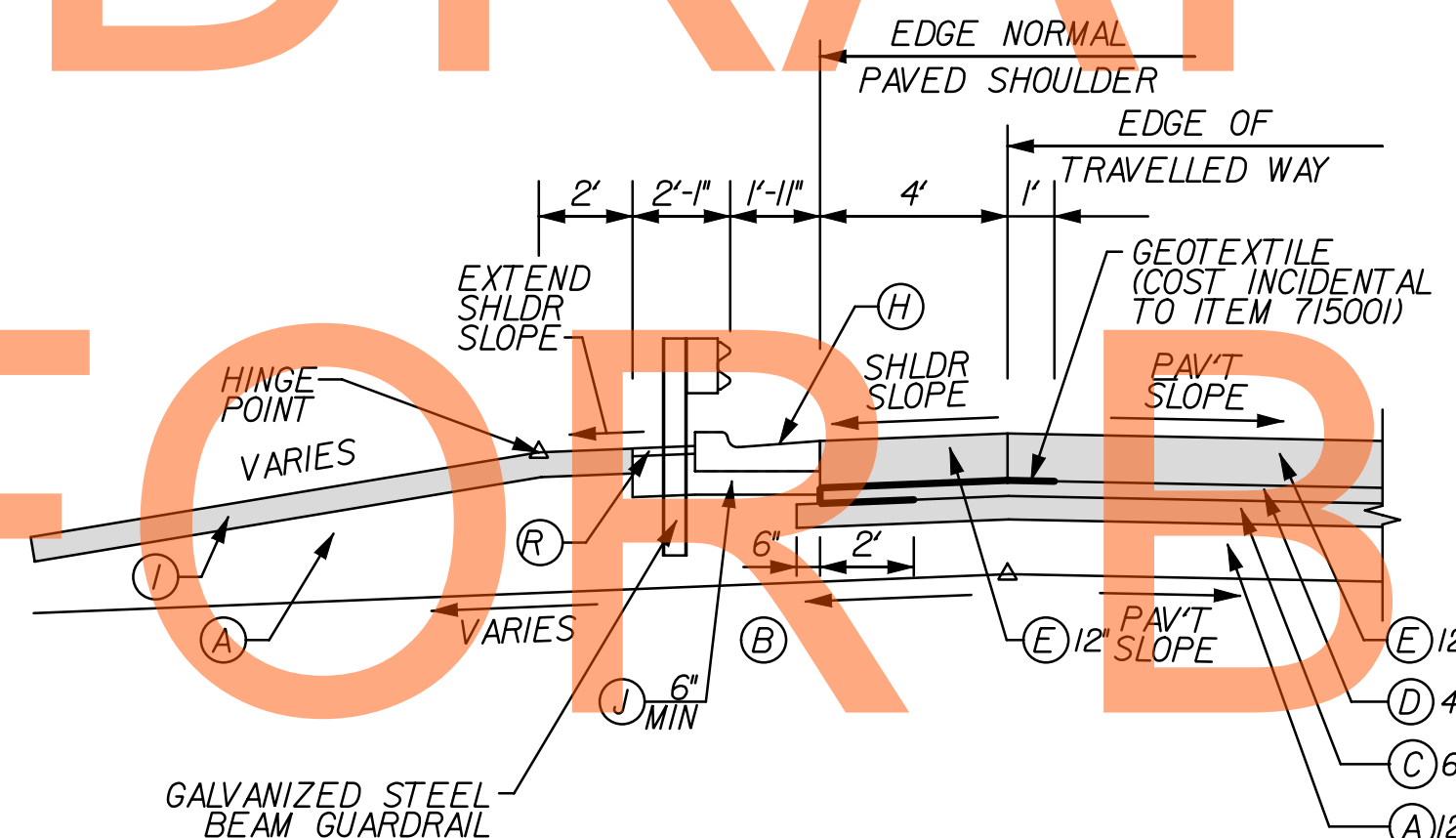
US301 MAINLINE OUTSIDE SHOULDER GUARDRAIL DETAIL WITH UNDERDRAIN, WITHOUT CURB

(WHERE SHOWN ON PLANS)
 LOCATION: US301 MAINLINE UNDER BRIDGES
 US301 MAINLINE HIGHWAY SPEED TOLL LANES



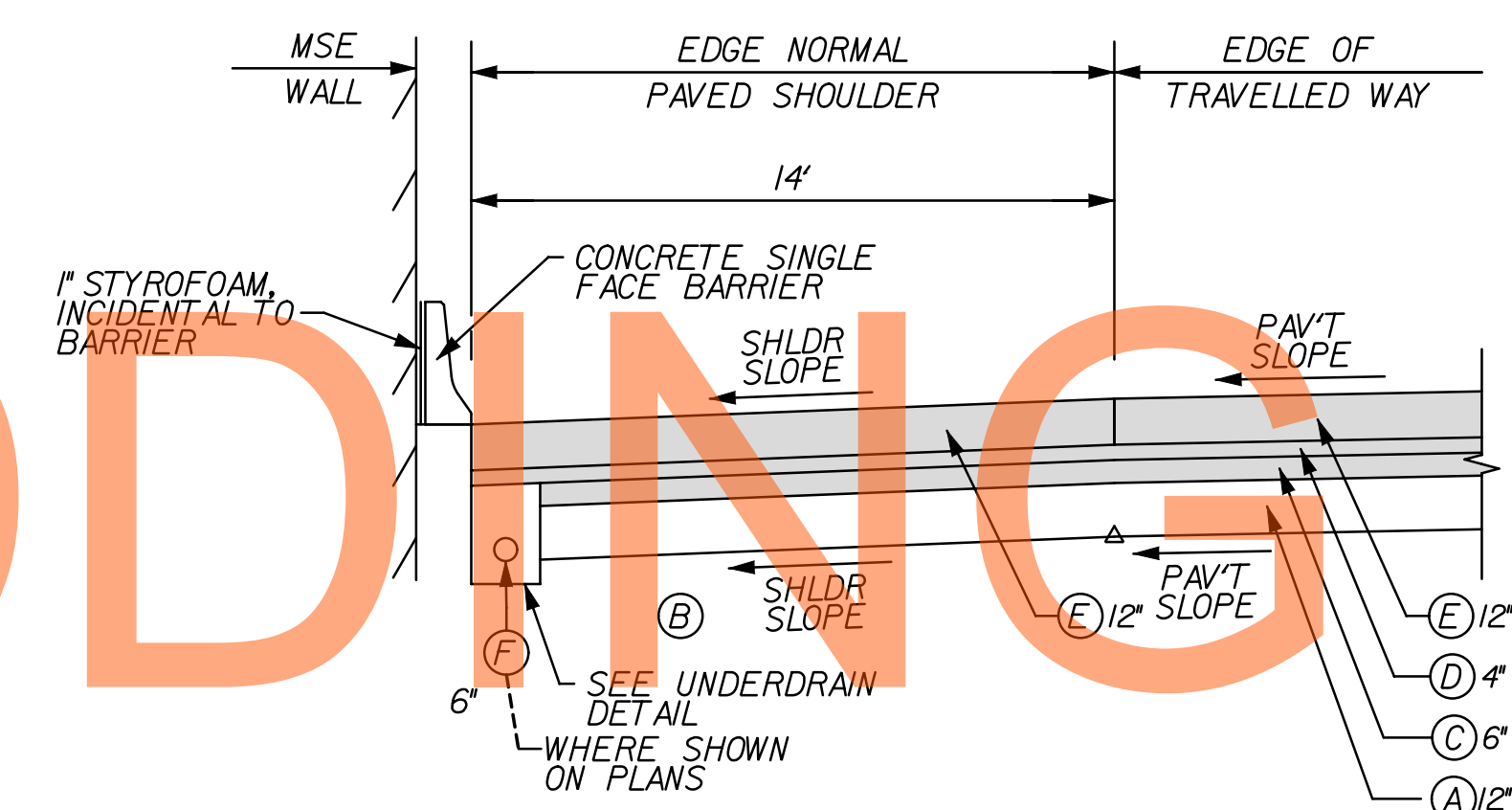
US301 MAINLINE INSIDE SHOULDER GUARDRAIL DETAIL WITH UNDERDRAIN

(WHERE SHOWN ON PLANS)



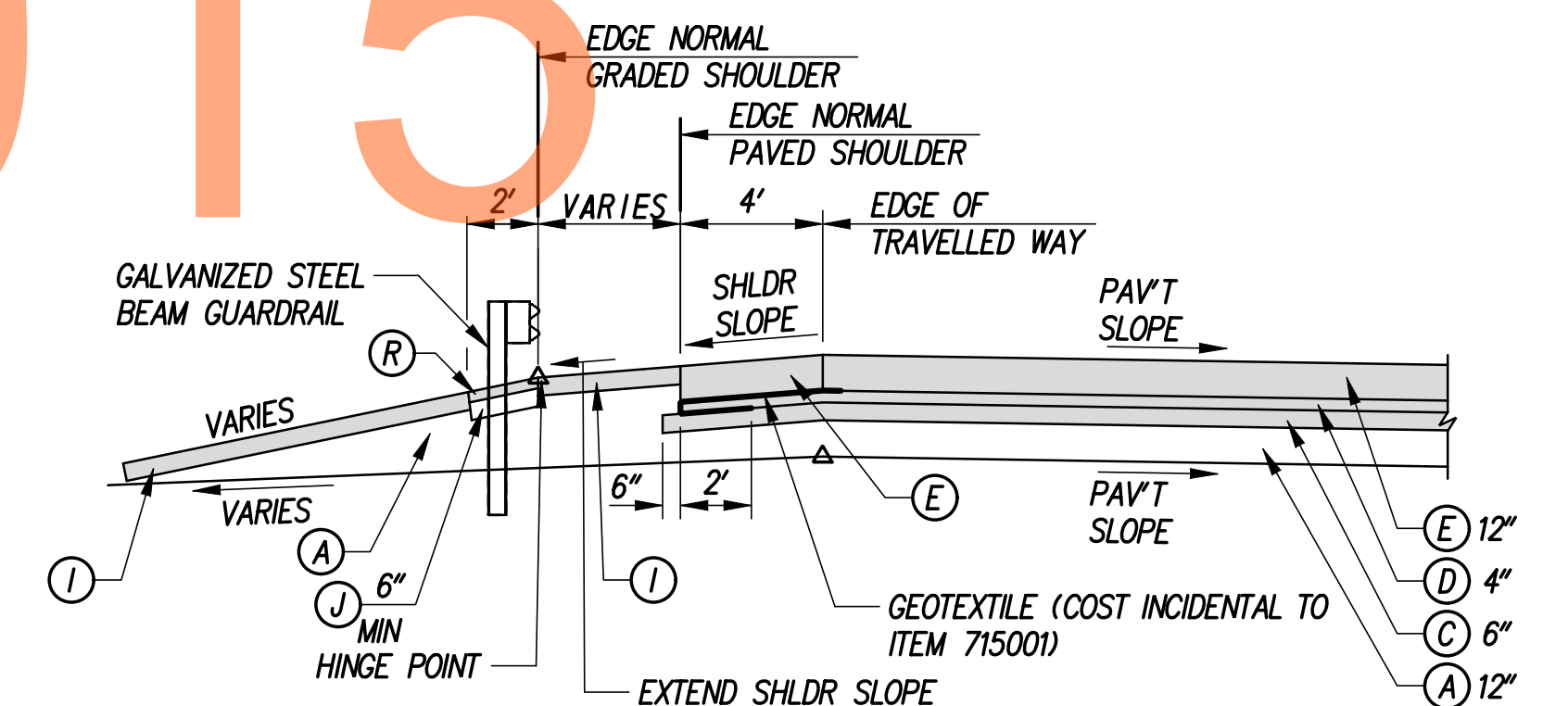
US301 MAINLINE INSIDE SHOULDER GUARDRAIL DETAIL WITHOUT UNDERDRAIN

(WHERE SHOWN ON PLANS)



US301 MAINLINE OUTSIDE SHOULDER DETAIL WITH UNDERDRAIN

(WHERE SHOWN ON PLANS)
 LOCATION: SIDE ROADS OVER US301 MAINLINE



US301 MAINLINE INSIDE SHOULDER - MEDIAN GUARDRAIL PLACEMENT

(WHERE SHOWN ON PLANS)

LEGEND

- | | |
|---|---|
| (A) ITEM *209001, BORROW TYPE A | (Q) ITEM *701013, PORTLAND CEMENT CONCRETE CURB, TYPE 1-2 (SEE CONSTRUCTION DETAILS) |
| (B) ITEM *209006, BORROW TYPE F | (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK |
| (C) ITEM *304502, SOIL CEMENT BASE COURSE | (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE) |
| (D) ITEM *304501, PERMEABLE TREATED BASE, 4" | (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE) |
| (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT | (U) ITEM *401517, STONE MATRIX ASPHALT |
| (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN | (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 |
| (G) ITEM *705002, P.C.C. SIDEWALK, 6" | (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22 |
| (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4 | (X) ITEM *743017, PORTABLE BARRIER |
| (I) ITEM *733002, TOPSOILING, 6" DEPTH | (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 |
| (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND | (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2 |
| (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B | (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2 |
| (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16 | (AB) ITEM *760507, PROFILE MILLING, HOT MIX |
| (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE) | (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH |
| (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22 | (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX |
| (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22 | (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22 |
| (P) ITEM *705001, P.C.C. SIDEWALK, 4" | |
| (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | |

ADDENDUMS / REVISIONS

NOT TO SCALE

**US 301
 LEVELS ROAD
 TO SUMMIT BRIDGE ROAD**

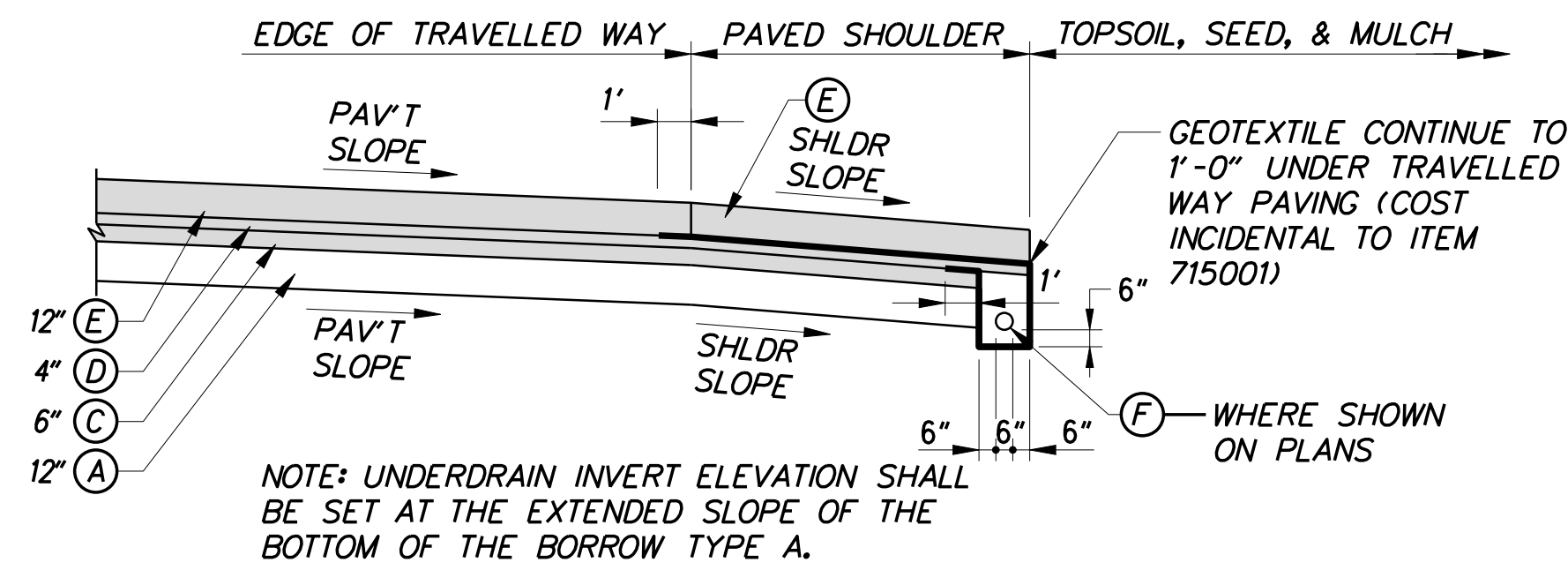
CONTRACT	BRIDGE NO.
T200911303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

**TYPICAL SECTIONS
 DETAILS**

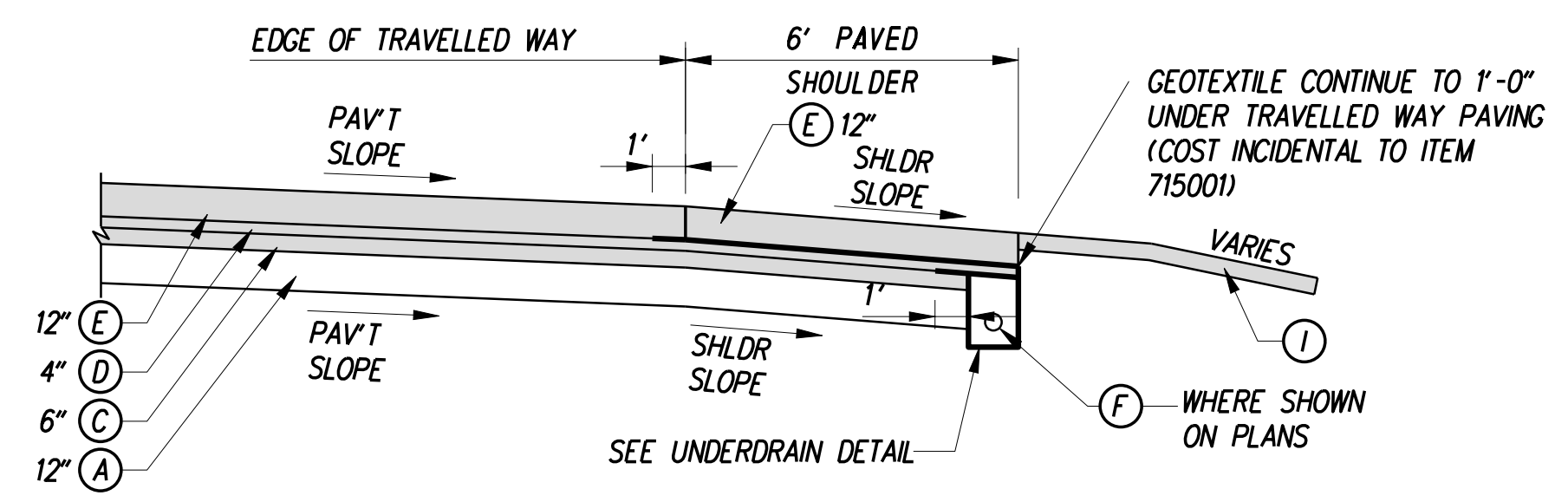
TS-34
SHEET NO.
54
TOTAL SHTS.
1256

P:\CADD\260049040 US301\CIVIL\PLANS\2A\CP\LET\TS-34.DGN

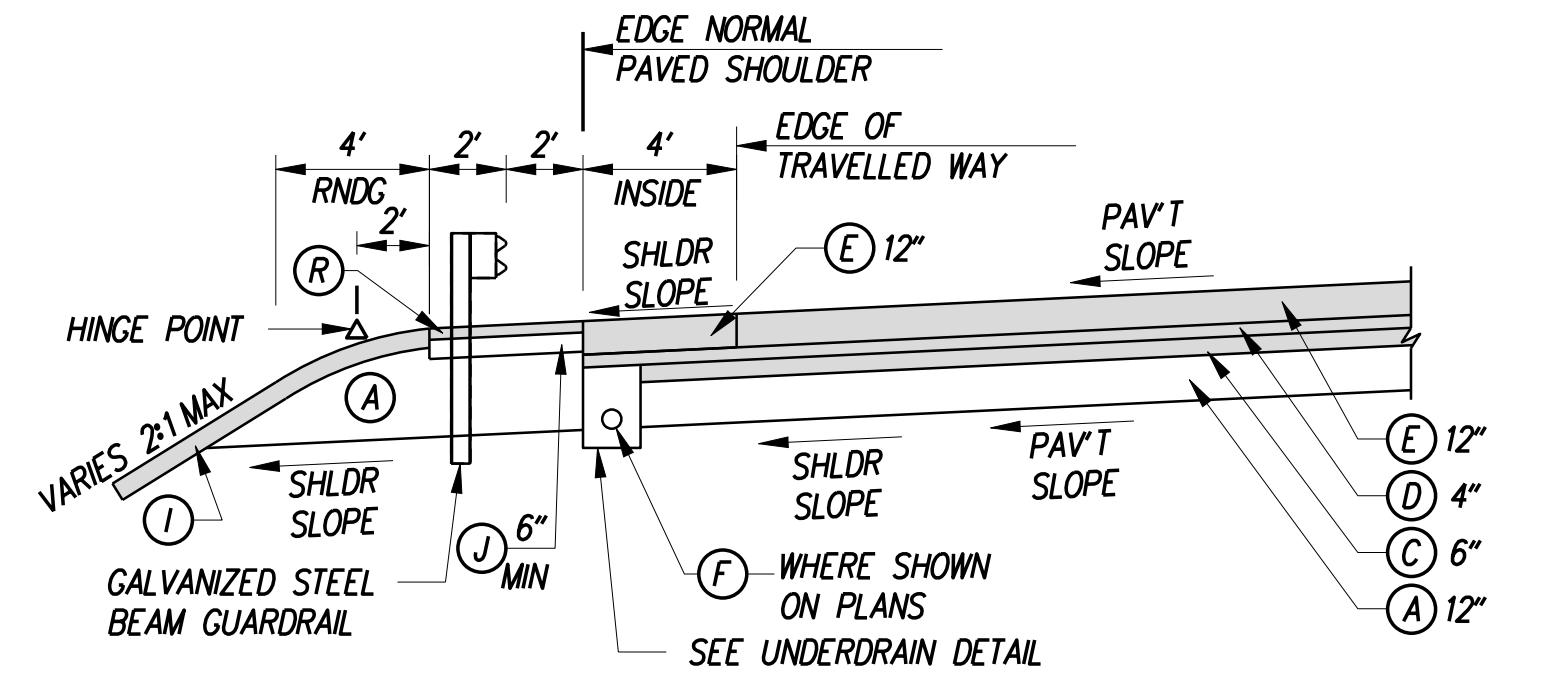
**DELAWARE
 DEPARTMENT OF TRANSPORTATION**



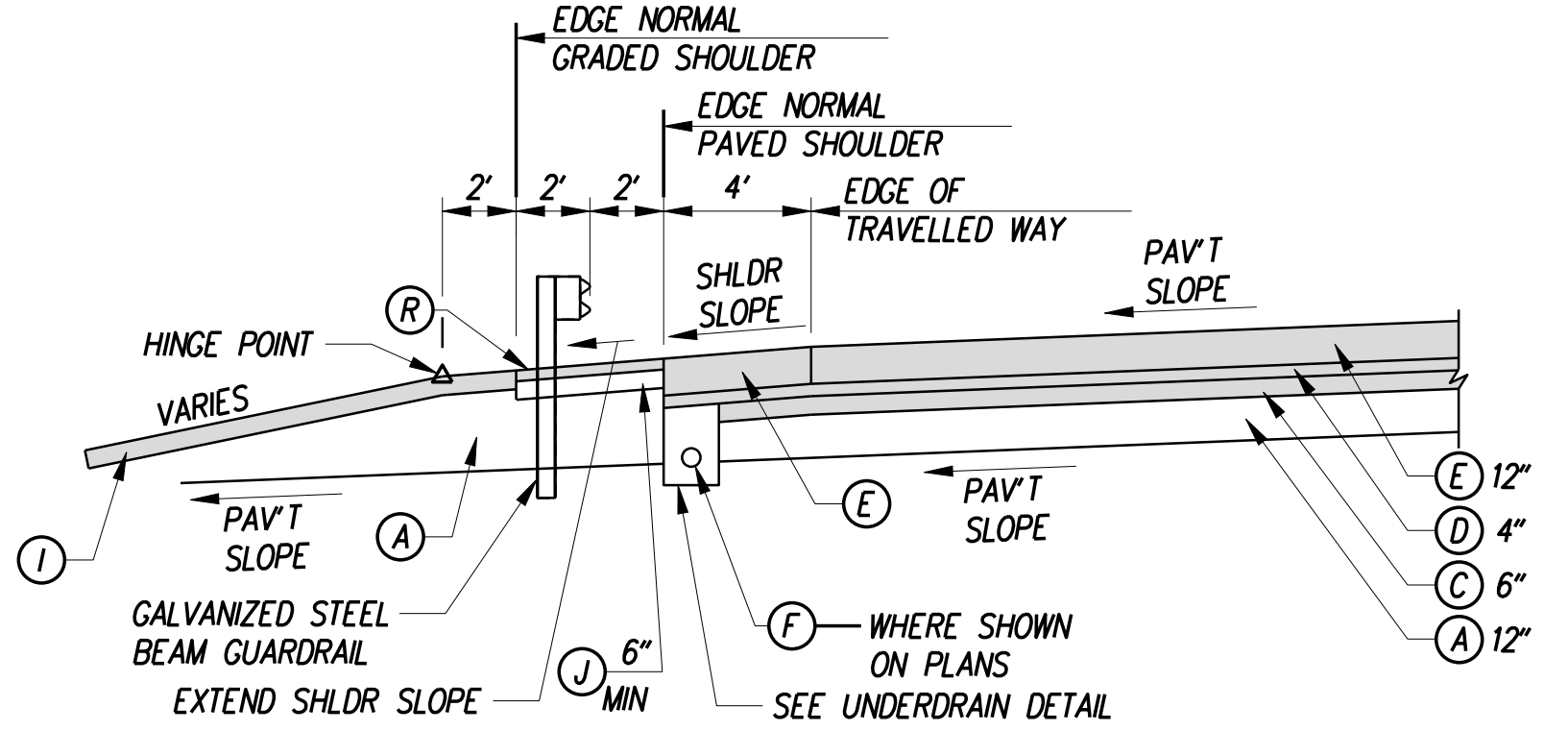
US301 MAINLINE UNDERDRAIN DETAIL



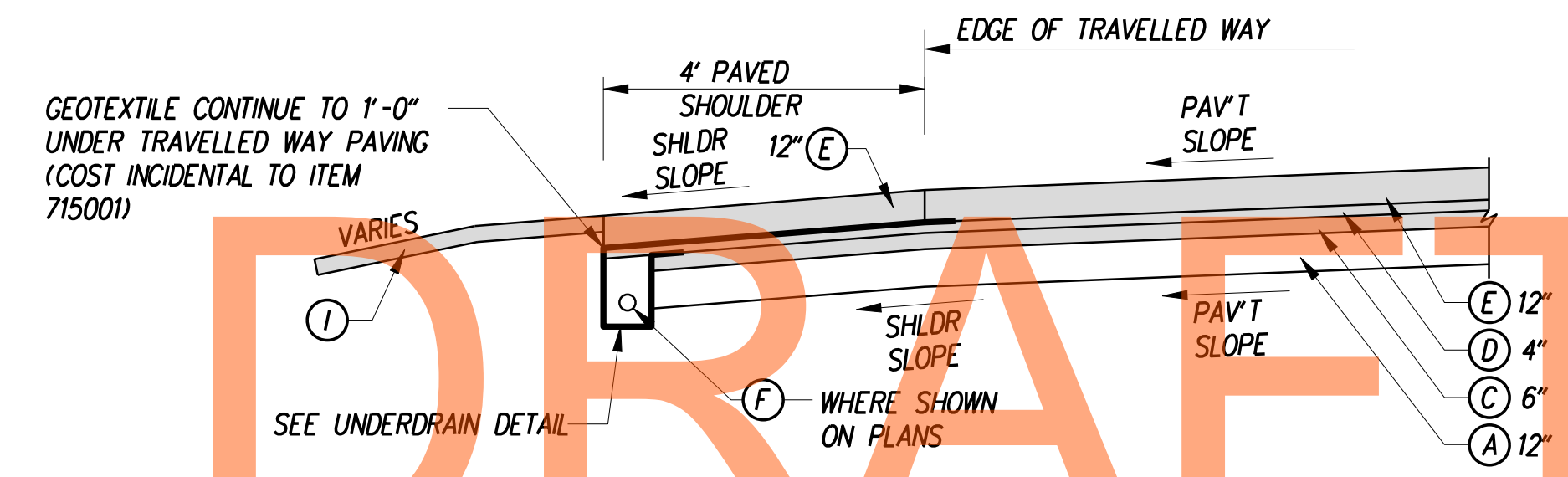
US301 RAMP UNDERDRAIN DETAIL - 6' PAVED SHOULDER



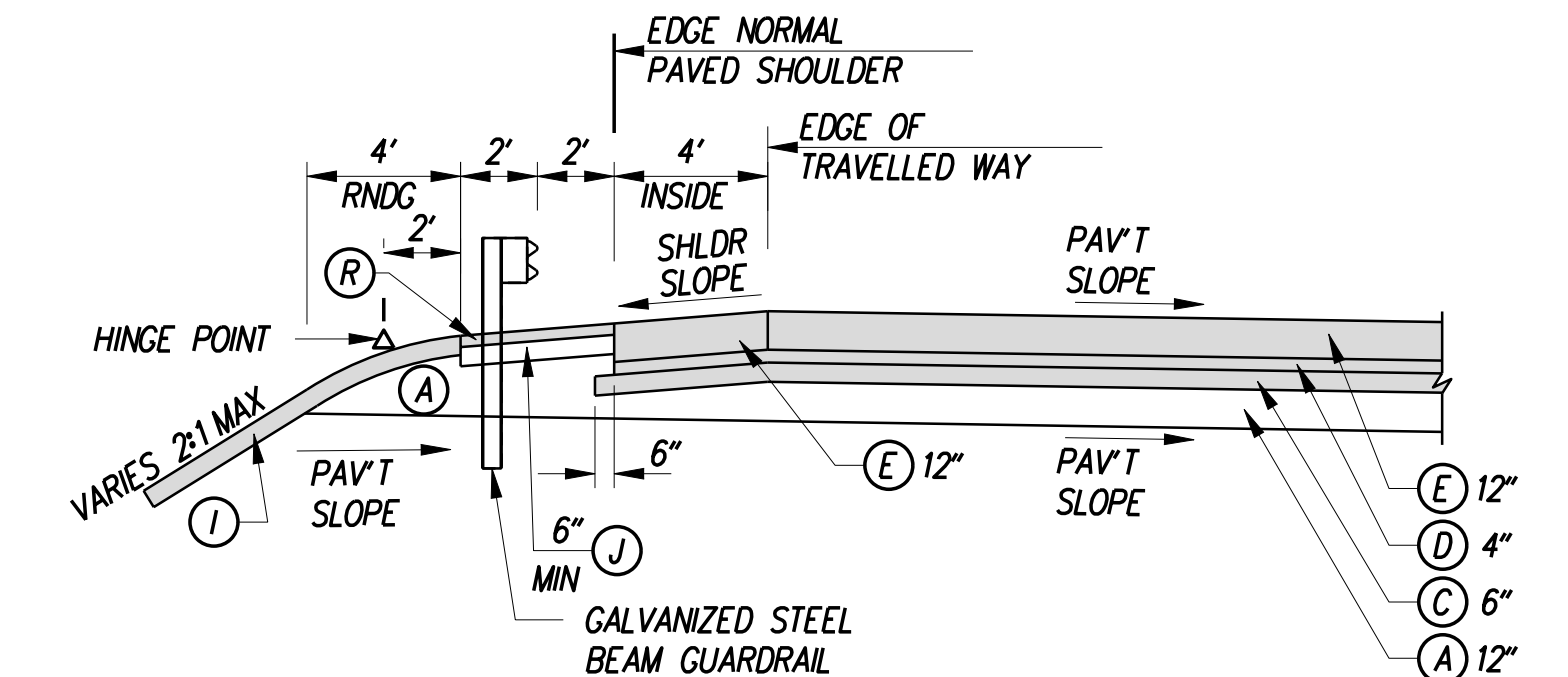
US301 RAMP INSIDE GUARDRAIL DETAIL WITH UNDERDRAIN (WHERE SHOWN ON PLANS)



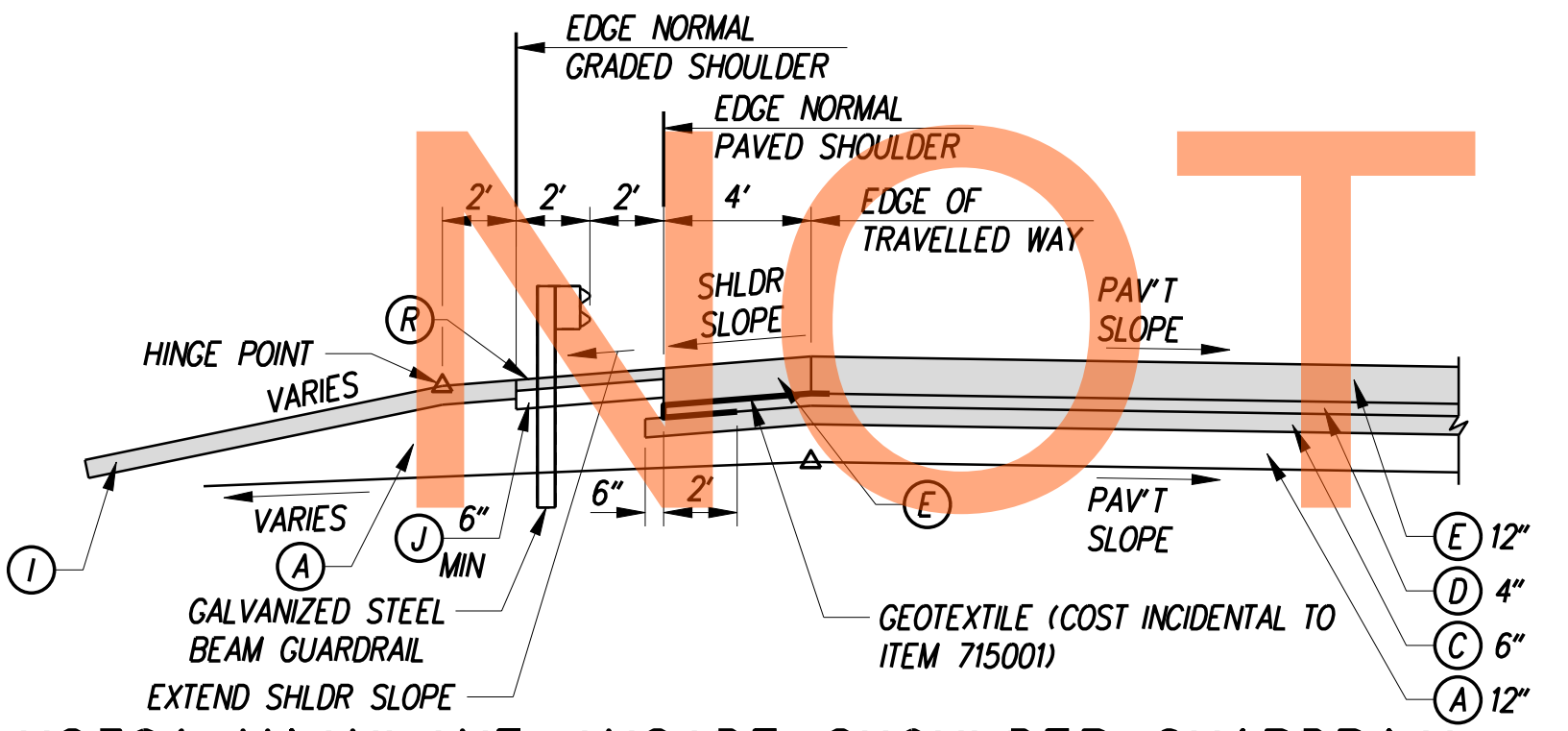
US301 MAINLINE INSIDE SHOULDER GUARDRAIL DETAIL WITH UNDERDRAIN (WHERE SHOWN ON PLANS)



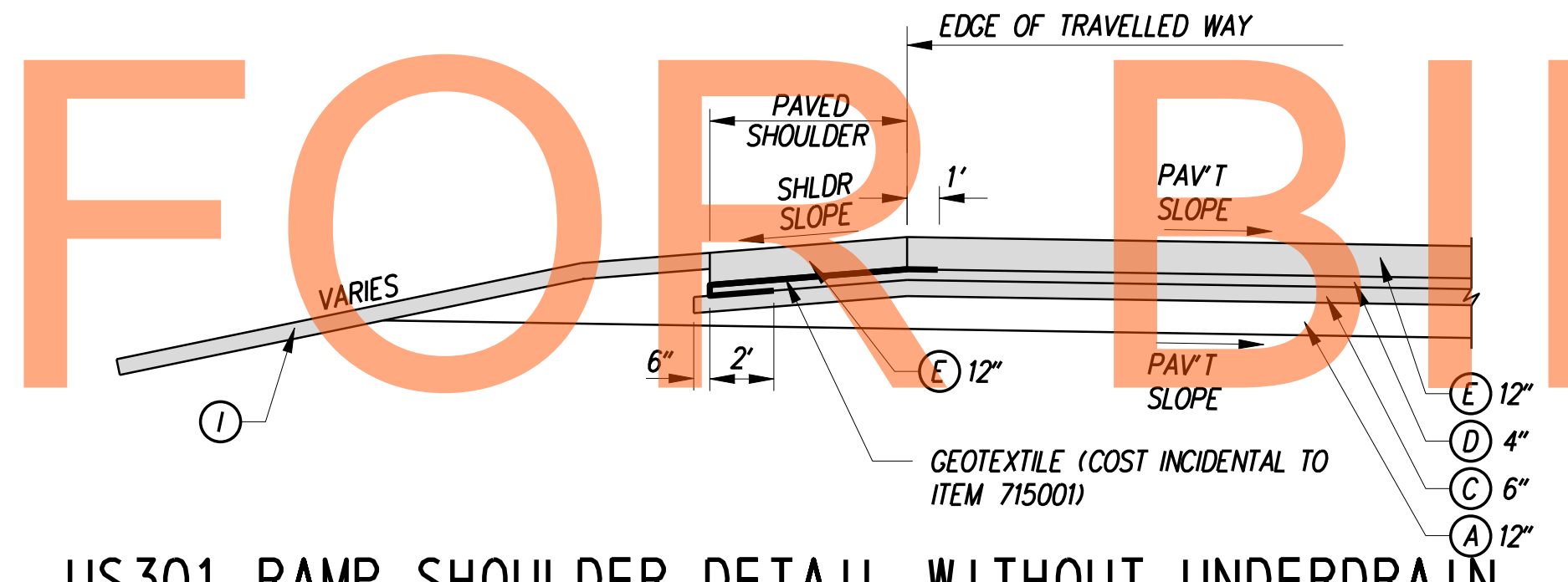
US301 RAMP UNDERDRAIN DETAIL - 4' PAVED SHOULDER



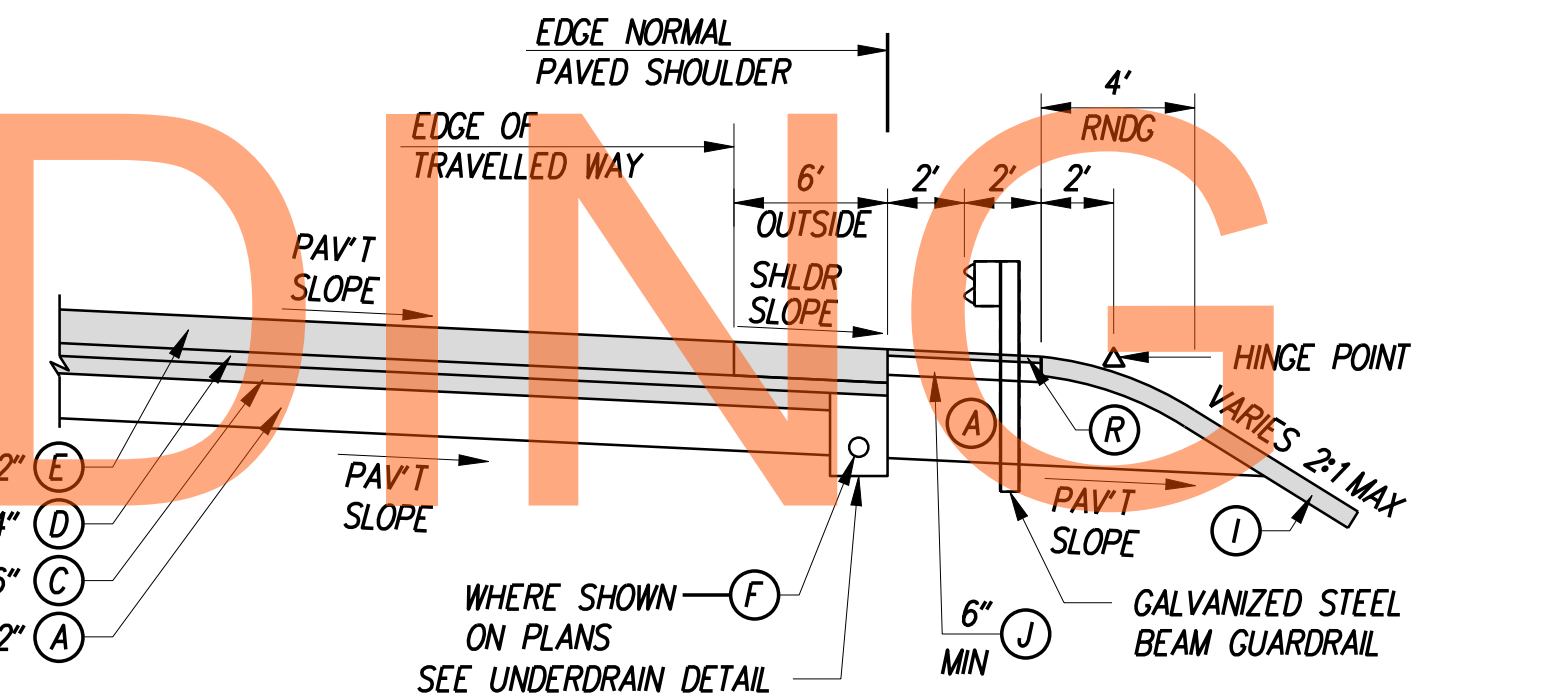
US301 RAMP INSIDE GUARDRAIL DETAIL WITHOUT UNDERDRAIN (WHERE SHOWN ON PLANS)



US301 MAINLINE INSIDE SHOULDER GUARDRAIL DETAIL WITHOUT UNDERDRAIN (WHERE SHOWN ON PLANS)



US301 RAMP SHOULDER DETAIL WITHOUT UNDERDRAIN



US301 RAMP OUTSIDE GUARDRAIL DETAIL WITH UNDERDRAIN (WHERE SHOWN ON PLANS)



US301 RAMP OUTSIDE GUARDRAIL DETAIL WITHOUT UNDERDRAIN (WHERE SHOWN ON PLANS)

LEGEND

- (A) ITEM *209001, BORROW TYPE A
- (B) ITEM *209006, BORROW TYPE F
- (C) ITEM *304502, SOIL CEMENT BASE COURSE
- (D) ITEM *304501, PERMEABLE TREATED BASE, 4"
- (E) ITEM *501006, PORTLAND CEMENT CONCRETE PAVEMENT
- (F) ITEM *715001, PERFORATED PIPE UNDERDRAIN
- (G) ITEM *705002, P.C.C. SIDEWALK, 6"
- (H) ITEM *701016, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 1-4
- (I) ITEM *733002, TOPSOILING, 6" DEPTH
- (J) ITEM *734013, PERMANENT GRASS SEEDING, DRY GROUND
- (K) ITEM *302007, GRADED AGGREGATE BASE COURSE, TYPE B
- (L) ITEM *735535 SOIL RETENTION BLANKET MULCH, TYPE 5 UNLESS OTHERWISE NOTED IN DT-16
- (M) ITEM *401801, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM *401810, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (O) ITEM *401819, WMA SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (P) ITEM *705001, P.C.C. SIDEWALK, 4"
- (Q) ITEM *701010, PORTLAND CEMENT CONCRETE CURB, TYPE 1-8
- (R) ITEM *401504, HOT MIX, HOT-LAID BITUMINOUS CONCRETE PAVEMENT TYPE C, 2" THICK
- (S) ITEM *401827, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATED STONE)
- (T) ITEM *401833, WMA SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22 (NON-CARBONATE STONE)
- (U) ITEM *401517, STONE MATRIX ASPHALT
- (V) ITEM *401663, SUPERPAVE BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22
- (W) ITEM *401816, WMA SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
- (X) ITEM *743017, PORTABLE BARRIER
- (Y) ITEM *701022, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8
- (Z) ITEM *701011, PORTLAND CEMENT CONCRETE CURB, TYPE 2
- (AA) ITEM *701021, INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 2
- (AB) ITEM *760507, PROFILE MILLING, HOT MIX
- (AC) ITEM *760006, PAVEMENT MILLING, HOT MIX, 2" DEPTH
- (AD) ITEM *760016, RUMBLE STRIPS, HOT MIX
- (AE) ITEM *401813, WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 70-22

ADDENDUMS / REVISIONS

NOT TO SCALE

US 301
LEVELS ROAD
TO SUMMIT BRIDGE ROAD

CONTRACT	BRIDGE NO.
T20091303	
COUNTY	DESIGNED BY: AM JW
NEW CASTLE	CHECKED BY: JF SF

TYPICAL SECTIONS
DETAILS

TS-35
SHEET NO.
55
TOTAL SHTS.
1256

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