

221

DELMARVA POWER & LIGHT COMPANY  
T.M. #13-012.00-058  
D.R. S-91-330

**BEGIN  
CONTRACT T200911308  
STATION 667+50**

220

DELMARVA POWER & LIGHT COMPANY  
T.M. #13-012.00-057  
D.R. S-91-330

**DRAFT**

**US 301 SOUTHBOUND**

**NOT FOR BIDDING**

**US 301 NORTHBOUND**

**AUGUST 2015**

**MATCH LINE STA. 671+00**

220.01 DELMARVA POWER & LIGHT COMPANY  
T.M. #13-012.00-059  
D.R. S-91-336

GR 200\*\*

GR 201\*\*

220  
DELMARVA POWER & LIGHT COMPANY  
T.M. #13-012.00-057  
D.R. S-91-330

223

RAUSCH ENTERPRISES, LLC  
T.M. #13-013.00-069  
INS. #20060411-0034295

SEE CS-67 FOR STAGING  
AREA DETAILS

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
200	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	667+53.00	64.97	50.00
201	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	668+03.00	62.92	303.22

\*\*WORK TO BE PERFORMED UNDER THIS CONTRACT. ALL  
OTHER WORK TO BE PERFORMED UNDER CONTRACT  
T200911301 - US 301, NORFOLK SOUTHERN RR TO SR 896.



ADDENDUMS / REVISIONS



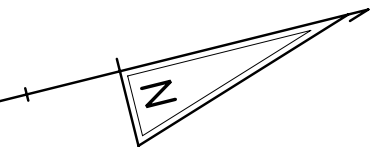
**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: WJD
	CHECKED BY: BT

**BORING LOCATION PLAN**  
Sheet 1 of 37

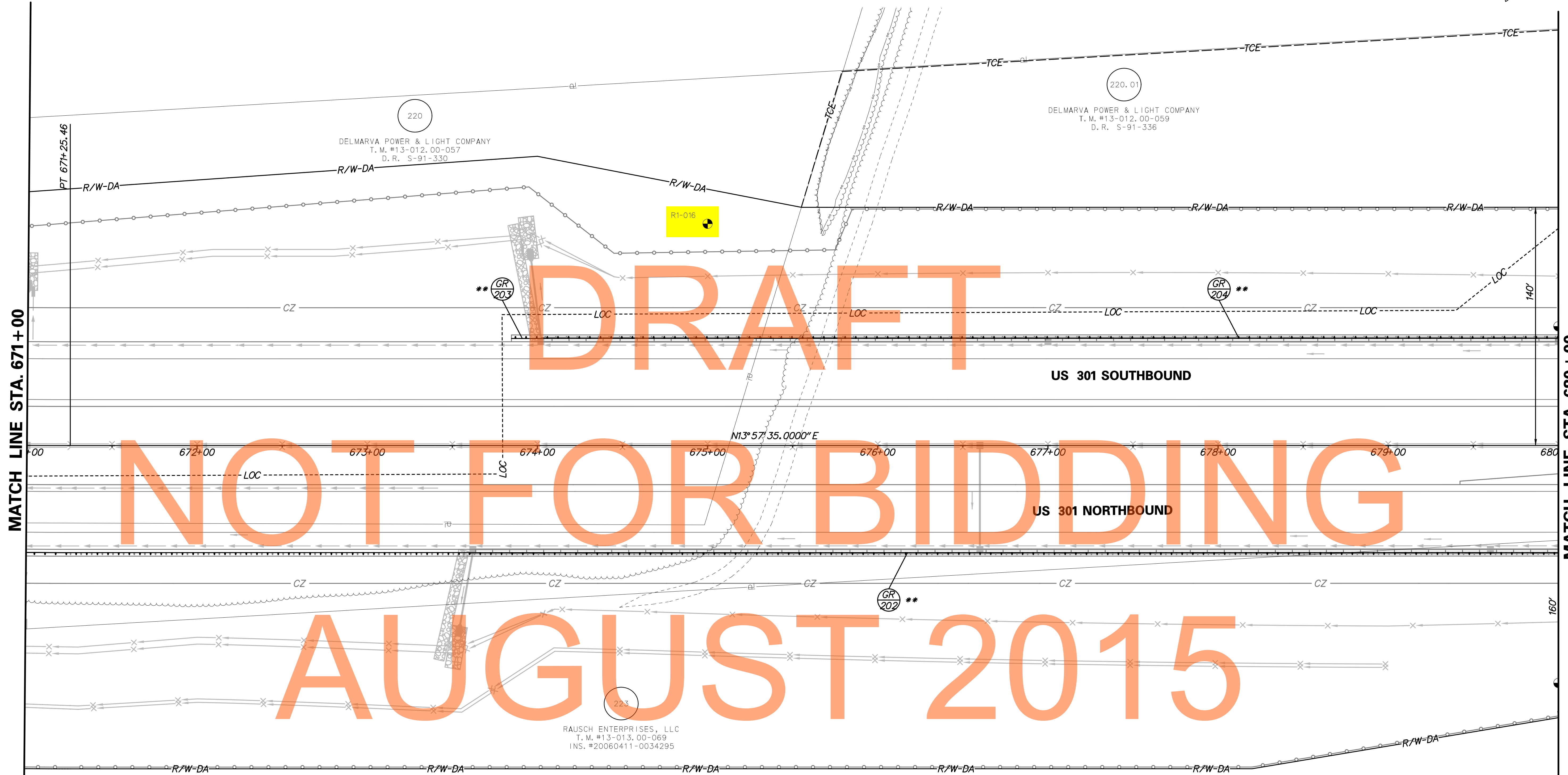
<b>CP-01</b>
SHEET NO. 67
TOTAL SHTS. 875

P:\1445 US 301 SECT.1\DESIGN\FINAL\_SUBMISSION\CONTRACT\_1A-PSE\REF\SB0030301\_1A.DGN



MATCH LINE STA. 671+00

MATCH LINE STA. 680+00



DRAFT

NOT FOR BIDDING

AUGUST 2015

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
202	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	671+00.00	62.92	900.54
203	GUARDRAIL END ANCHORAGE 31	673+84.73	-62.92	12.50
204	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	673+97.23	-62.92	602.77

SEE CS-67 FOR STAGING  
AREA DETAILS

\*\*WORK TO BE PERFORMED UNDER THIS CONTRACT. ALL  
OTHER WORK TO BE PERFORMED UNDER CONTRACT  
T200911301 - US 301, NORFOLK SOUTHERN RR TO SR 896.



ADDENDUMS / REVISIONS



**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: WJD
	CHECKED BY: BT

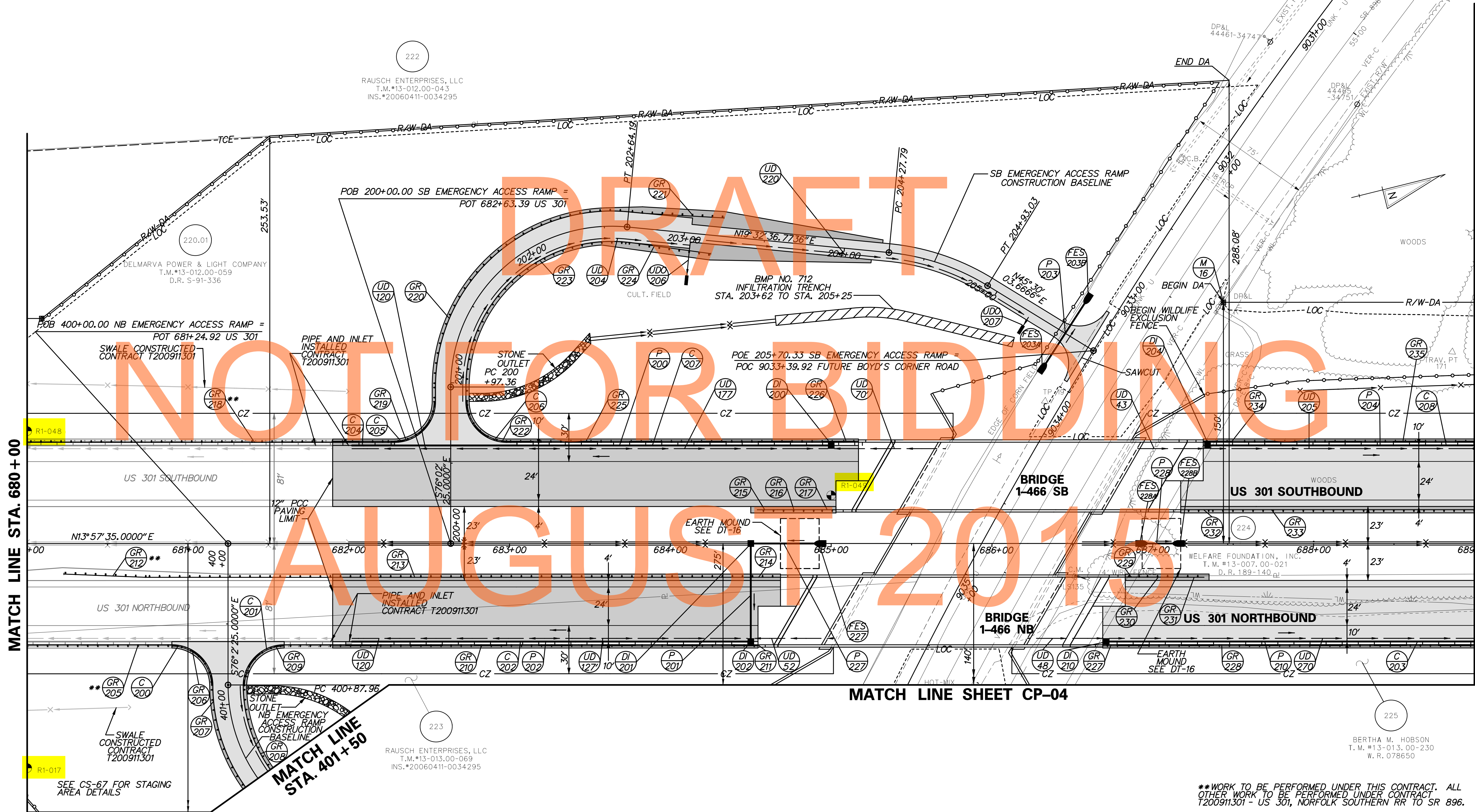
**BORING LOCATION PLAN**  
Sheet 2 of 37

<b>CP-02</b>
SHEET NO. 68
TOTAL SHTS. 875

NOTES:

1. FOR REMAINDER OF ACTIVITY ON PARCEL 222 AND PARCEL 220.01 SEE CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLANS.

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



MATCH LINE STA. 680 + 00

MATCH LINE STA. 689 + 00

MATCH LINE SHEET CP-04

MATCH LINE SHT CP-04

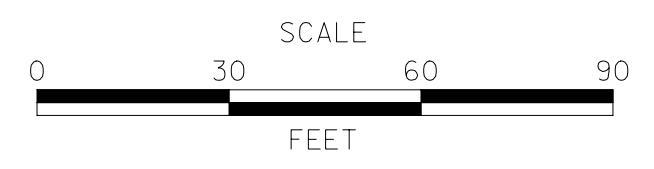
MATCH LINE STA. 401 + 50

\*\*WORK TO BE PERFORMED UNDER THIS CONTRACT. ALL OTHER WORK TO BE PERFORMED UNDER CONTRACT T200911301 - US 301, NORFOLK SOUTHERN RR TO SR 896.

SEE NEXT SHEET FOR SCHEDULES



ADDENDUMS / REVISIONS	



US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO. 1-9
COUNTY NEW CASTLE	DESIGNED BY: WJD
	CHECKED BY: BT

BORING LOCATION PLAN  
Sheet 3 of 37

CP-03
SHEET NO. 69
TOTAL SHTS. 875

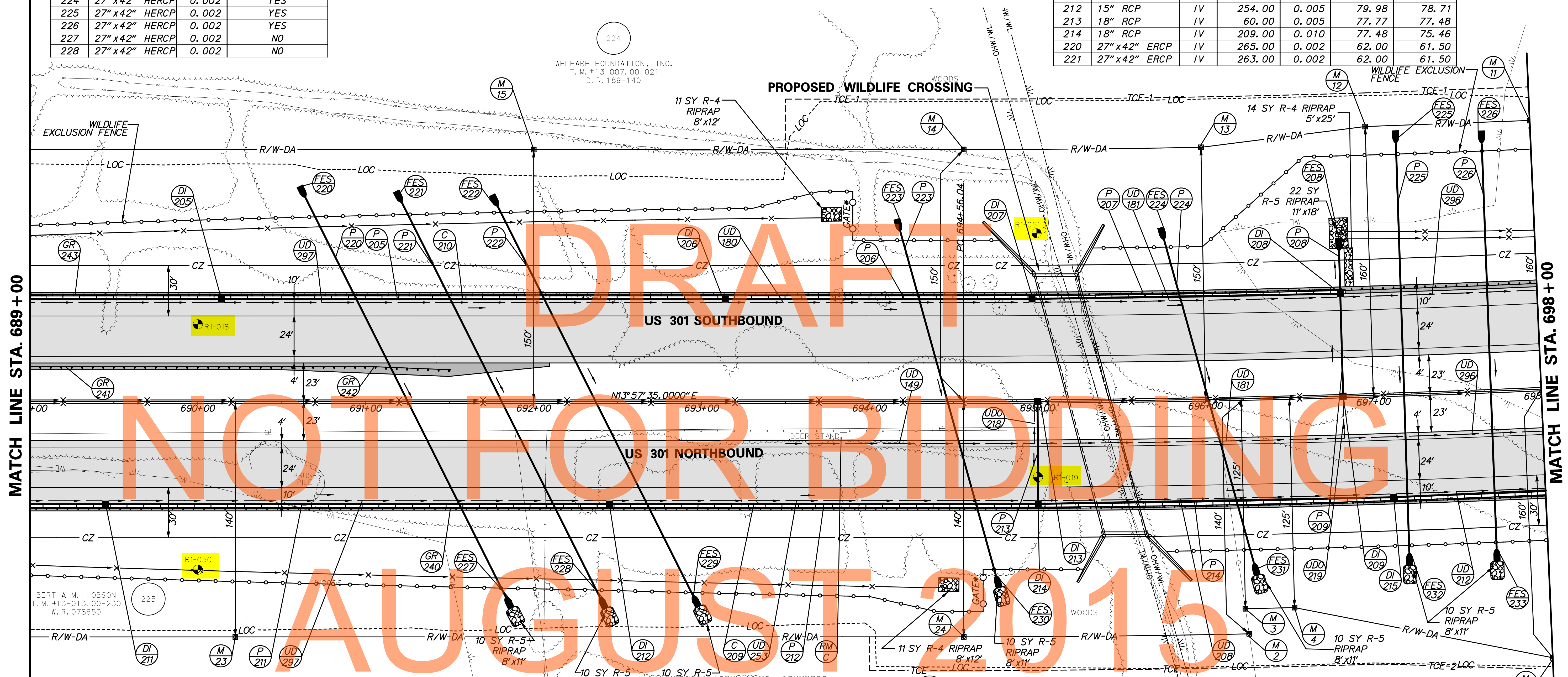
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FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
208	18" RCP	0.010	NO
220	27" x 42" HERCP	0.002	YES
221	27" x 42" HERCP	0.002	YES
222	27" x 42" HERCP	0.002	YES
223	27" x 42" HERCP	0.002	YES
224	27" x 42" HERCP	0.002	YES
225	27" x 42" HERCP	0.002	YES
226	27" x 42" HERCP	0.002	YES
227	27" x 42" HERCP	0.002	NO
228	27" x 42" HERCP	0.002	NO

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
229	27" x 42" HERCP	0.002	NO
230	27" x 42" HERCP	0.002	NO
231	27" x 42" HERCP	0.002	NO
232	27" x 42" HERCP	0.002	NO
233	27" x 42" HERCP	0.002	NO

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
222	27" x 42" ERCP	IV	259.00	0.002	62.00	61.50
223	27" x 42" ERCP	IV	212.00	0.002	62.00	61.50
224	27" x 42" ERCP	IV	199.00	0.002	62.00	61.50
225	27" x 42" ERCP	IV	243.00	0.002	62.00	61.50
226	27" x 42" ERCP	IV	241.00	0.002	62.00	61.50

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
205	15" RCP	IV	298.00	0.005	82.71	81.22
206	15" RCP	IV	181.00	0.004	78.19	77.46
207	15" RCP	IV	181.00	0.018	77.46	74.22
208	18" RCP	IV	26.00	0.010	73.26	73.00
209	18" RCP	IV	60.00	0.005	73.55	73.26
211	15" RCP	IV	298.00	0.005	84.05	82.57
212	15" RCP	IV	254.00	0.005	79.98	78.71
213	18" RCP	IV	60.00	0.005	77.77	77.48
214	18" RCP	IV	209.00	0.010	77.48	75.46
220	27" x 42" ERCP	IV	265.00	0.002	62.00	61.50
221	27" x 42" ERCP	IV	263.00	0.002	62.00	61.50



WELFARE FOUNDATION, INC.  
T. M. #13-007.00-021  
D. R. 189-140

N13°57'35.0000" E

R/W FROM PARCEL 220.01, 222, 223 & 225  
ACQUIRED UNDER R/W PLANS FOR CONSTR.  
CONTRACT T200911301, US 301, NORFOLK  
SOUTHERN RR TO SR 896

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T. G. EL.	INV. EL.
205	690+14.00	-62.92	48" x 30"	2	89.95	82.71
206	693+14.00	-62.92	48" x 30"	2	85.60	78.19
207	694+97.00	-62.92	48" x 30"	2	81.66	77.46
208	696+82.00	-62.92	48" x 30"	2	78.43	73.26
209	696+82.00	0.00	34" x 24"	2	77.39	73.55
211	689+45.00	62.92	48" x 30"	2	90.64	84.05
212	692+45.00	62.92	48" x 30"	2	86.94	79.98
213	695+00.00	0.00	34" x 18"	2	80.48	77.77
214	695+00.00	62.92	48" x 30"	2	83.36	77.48
215	697+10.00	62.92	48" x 30"	2	79.94	74.72

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
209	P. C. C CURB AND GUTTER, TYPE 1-4	905.00
210	P. C. C CURB AND GUTTER, TYPE 1-4	785.00

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
218	23.00	79.06
219	23.00	75.97

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
240	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	689+00.00	62.92	902.71
241	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	689+00.00	-21.00	199.63
242	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	690+99.63	-21.00	50.00
243	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	689+00.00	-62.92	897.29

\*NOTE: GATES INSTALLED WITHIN LIMITS OF THE ANIMAL EXCLUSION FENCE TO BE PAID UNDER ITEM 727012 - VEHICULAR GATE

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



ADDENDUMS / REVISIONS



US 301,  
SR 896 TO SR 1

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: WJD
	CHECKED BY: BT

BORING LOCATION PLAN  
Sheet 4 of 37

SHEET NO.	71
TOTAL SHTS.	875

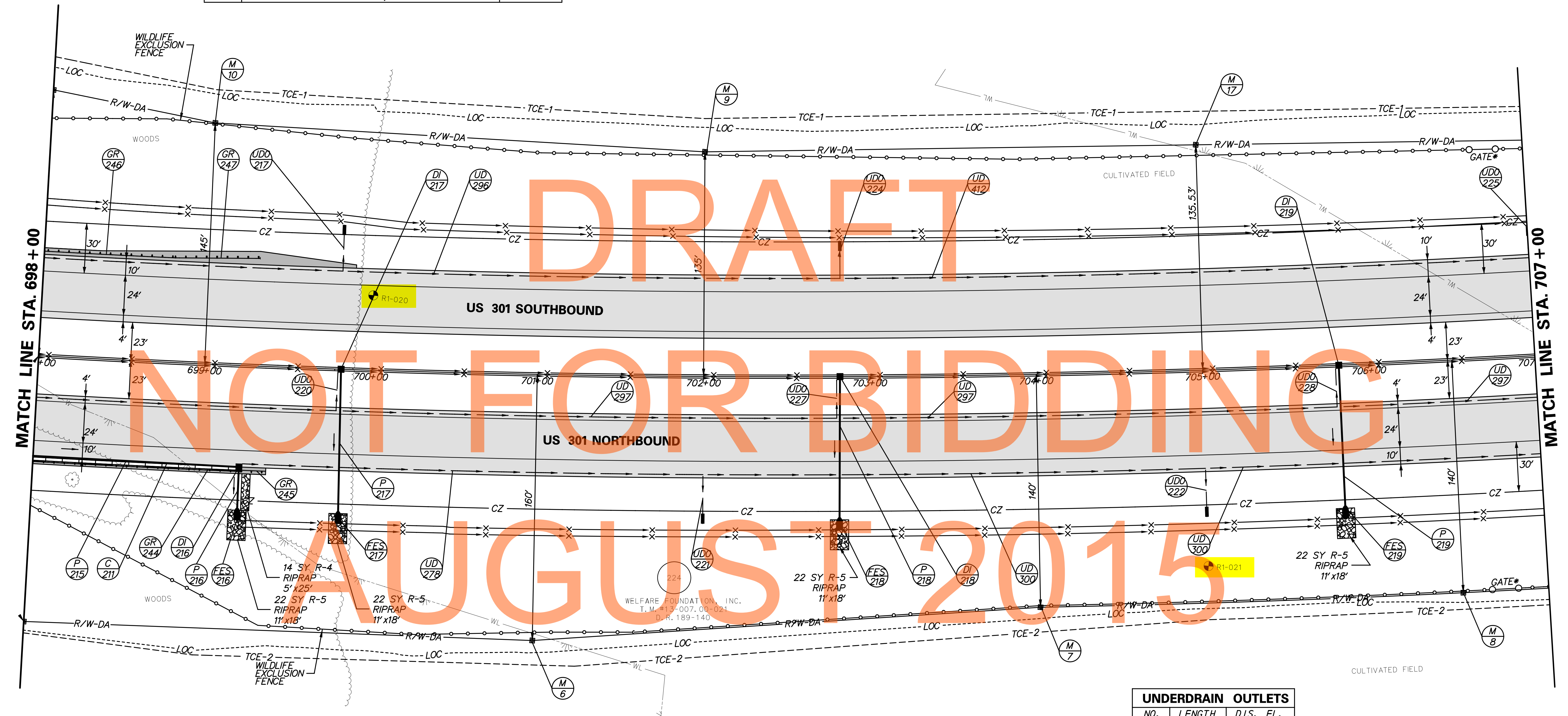
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FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
216	18" RCP	0.010	NO
217	18" RCP	0.005	NO
218	18" RCP	0.004	NO
219	18" RCP	0.003	NO

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
244	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	698+00.00	62.92	127.68
245	END ANCHORAGE 31	699+26.68	62.92	12.50
246	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	698+00.00	-62.92	78.83
247	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	698+79.46	-62.92	50.00

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
215	18" RCP	IV	212.00	0.005	74.72	73.66
216	18" RCP	IV	25.00	0.010	72.37	72.12
217	18" RCP	IV	87.00	0.005	72.25	71.79
218	18" RCP	IV	86.00	0.004	70.96	70.66
219	18" RCP	IV	85.00	0.003	69.46	69.23

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
211	P. C. C. CURB AND GUTTER, TYPE 1-4	126.00



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

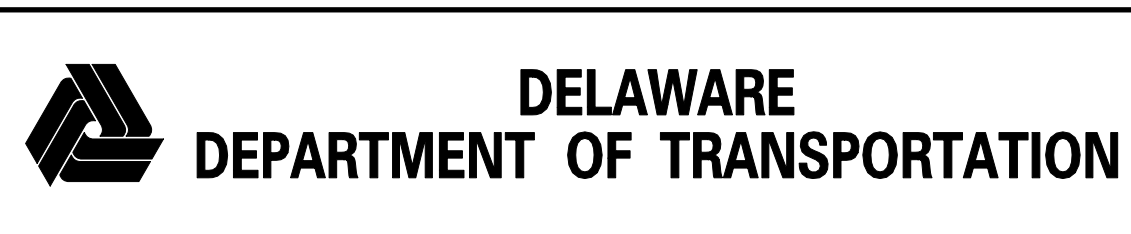
DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
216	699+23.00	62.92	48" x 30"	2	78.33	72.37
217	699+82.00	0.00	34" x 18"	2	74.96	72.25
218	702+82.00	0.00	34" x 18"	2	73.46	70.96
219	705+82.00	0.00	34" x 18"	2	71.96	69.46

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
217	28.00	72.67
220	24.00	73.54
221	28.00	72.48
222	28.00	71.07
224	32.00	71.43
225	28.00	69.64
227	24.00	72.04
228	24.00	70.54

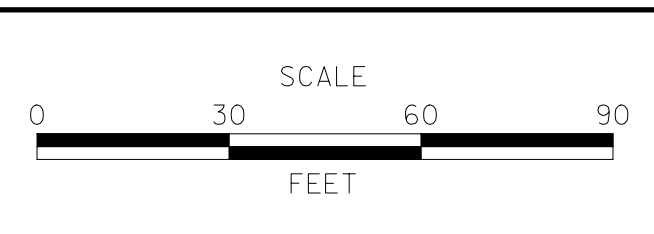
\*NOTE: GATES INSTALLED WITHIN LIMITS OF THE ANIMAL EXCLUSION FENCE TO BE PAID UNDER ITEM 727012 - VEHICULAR GATE

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

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ADDENDUMS / REVISIONS	

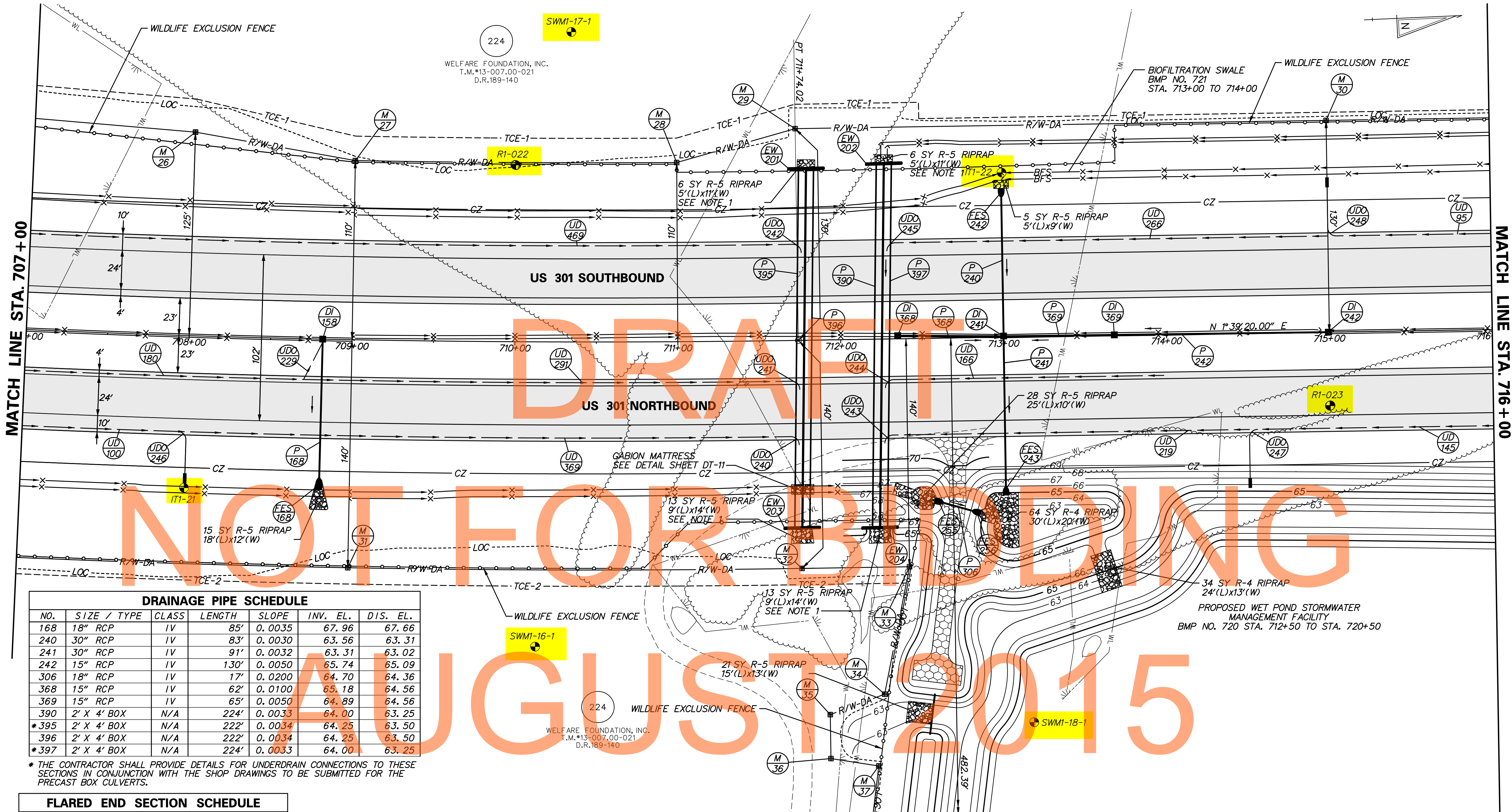


**US 301,  
SR 896 TO SR 1**

CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: WJD
	CHECKED BY: BT

BORING LOCATION PLAN  
Sheet 5 of 37

CP-06
SHEET NO. 72
TOTAL SHTS. 875



DRAFT

NOT FOR CONSTRUCTION

AUGUST 2015

**DRAINAGE PIPE SCHEDULE**

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
168	18" RCP	IV	85'	0.0035	67.96	67.66
240	30" RCP	IV	83'	0.0030	63.56	63.31
241	30" RCP	IV	91'	0.0032	63.31	63.02
242	15" RCP	IV	130'	0.0050	65.74	65.09
306	18" RCP	IV	17'	0.0200	64.70	64.36
368	15" RCP	IV	62'	0.0100	65.18	64.56
369	15" RCP	IV	65'	0.0050	64.89	64.56
390	2' X 4' BOX	N/A	224'	0.0033	64.00	63.25
*395	2' X 4' BOX	N/A	222'	0.0034	64.25	63.50
396	2' X 4' BOX	N/A	222'	0.0034	64.25	63.50
*397	2' X 4' BOX	N/A	224'	0.0033	64.00	63.25

\* THE CONTRACTOR SHALL PROVIDE DETAILS FOR UNDERDRAIN CONNECTIONS TO THESE SECTIONS IN CONJUNCTION WITH THE SHOP DRAWINGS TO BE SUBMITTED FOR THE PRECAST BOX CULVERTS.

**FLARED END SECTION SCHEDULE**

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
168	18" RCP	0.0035	NO
242	30" RCP	0.0030	YES
243	30" RCP	0.0032	NO
255	18" RCP	0.0200	NO
256	18" RCP	0.0200	NO

**ENDWALL SCHEDULE**

NO.	SIZE / TYPE	INVERT
201	2' X 4' BOX	64.25
202	2' X 4' BOX	64.00
203	2' X 4' BOX	63.50
204	2' X 4' BOX	63.25

**UNDERDRAIN OUTLETS**

NO.	LENGTH	DIS. EL.
229	28'	69.71
240	8'	65.73
241	8'	65.84
242	8'	66.10
243	8'	65.47
244	8'	66.53
245	8'	65.85
246	32'	68.77
247	36'	66.33
248	36'	64.70

**NOTES:**  
 1. WHERE NOTED, PLACE RIPRAP TO WITHIN 4-INCHES OF FINAL GRADE. CHOKe RIPRAP VOIDS WITH DELAWARE NO. 57 STONE. FILL ANY REMAINING VOIDS TO TOP OF RIPRAP WITH TOPSOIL. PLACE AN ADDITIONAL 4-INCHES OF TOPSOIL TO FINAL GRADE, COVER WITH TYPE 5 SOIL RETENTION BLANKET MULCH AND SEED. THE COST OF THE TOPSOIL DEPTH TRANSITION SHALL BE INCIDENTAL TO THE TOPSOIL/TOPSOILING ITEM.

**DRAINAGE INLET SCHEDULE**

NO.	STATION	OFFSET	BOX SIZE	GRATE	T. G. EL.	INV. EL.
158	708+82	0.00	34" x 24"	2	70.46	67.96
241	713+00	-0.72	48" x 30"	2	68.33	63.31
242	714+99	0.00	34" x 18"	2	68.82	65.74
368	712+32	-1.93	34" x 18"	2	68.53	65.18
369	713+68	-0.35	34" x 18"	2	68.53	64.89

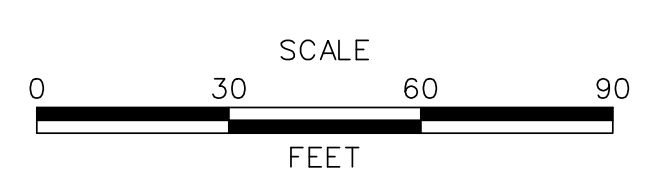
ENDWALLS SHALL BE PAID UNDER ITEM NO. 617515 HEADWALL.

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ADDENDUMS / REVISIONS

NO.	DESCRIPTION



**US 301,  
SR 896 TO SR 1**

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

BORING LOCATION PLAN  
Sheet 6 of 37

CP-07
SHEET NO. 73
TOTAL SHTS. 875

MATCH LINE STA. 716+00

MATCH LINE STA. 725+00

WELFARE FOUNDATION, INC.  
T.M.\*13-007.00-021  
D.R.189-140

END WILDLIFE  
EXCLUSION FENCE  
STA. 722+50

WELFARE FOUNDATION, INC.  
T.M.\*13-007.00-021  
D.R.189-140

PROPOSED WET POND  
STORMWATER  
MANAGEMENT FACILITY  
BMP NO. 720  
STA. 712+50 TO STA. 720+50

MATCH LINE SHEET CP-08

DRAFT  
NOT FOR BIDDING  
AUGUST 2015

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
240	18" RCP	0.0573	NO
241	18" RCP	0.0573	NO
246	18" RCP	0.0040	NO
247	18" RCP	0.0293	NO

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
243	15" RCP	IV	299'	0.0030	67.05	66.15
244	18" RCP	IV	89'	0.0040	65.90	65.55
245	18" RCP	IV	84'	0.0293	69.70	67.24
254	18" RCP	IV	33'	0.0573	65.06	63.18

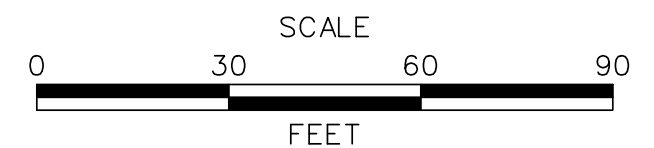
UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
250	39'	63.33
251	39'	65.55
252	27'	69.64
253	39'	67.05
254	29'	71.06
255	53'	67.55

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
243	717+99	0.00	34" x 18"	2	70.30	67.05
244	721+00	1.01	34" x 24"	2	71.64	65.90
245	723+99	3.27	34" x 18"	2	73.06	69.70

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ADDENDUMS / REVISIONS



US 301,  
SR 896 TO SR 1

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

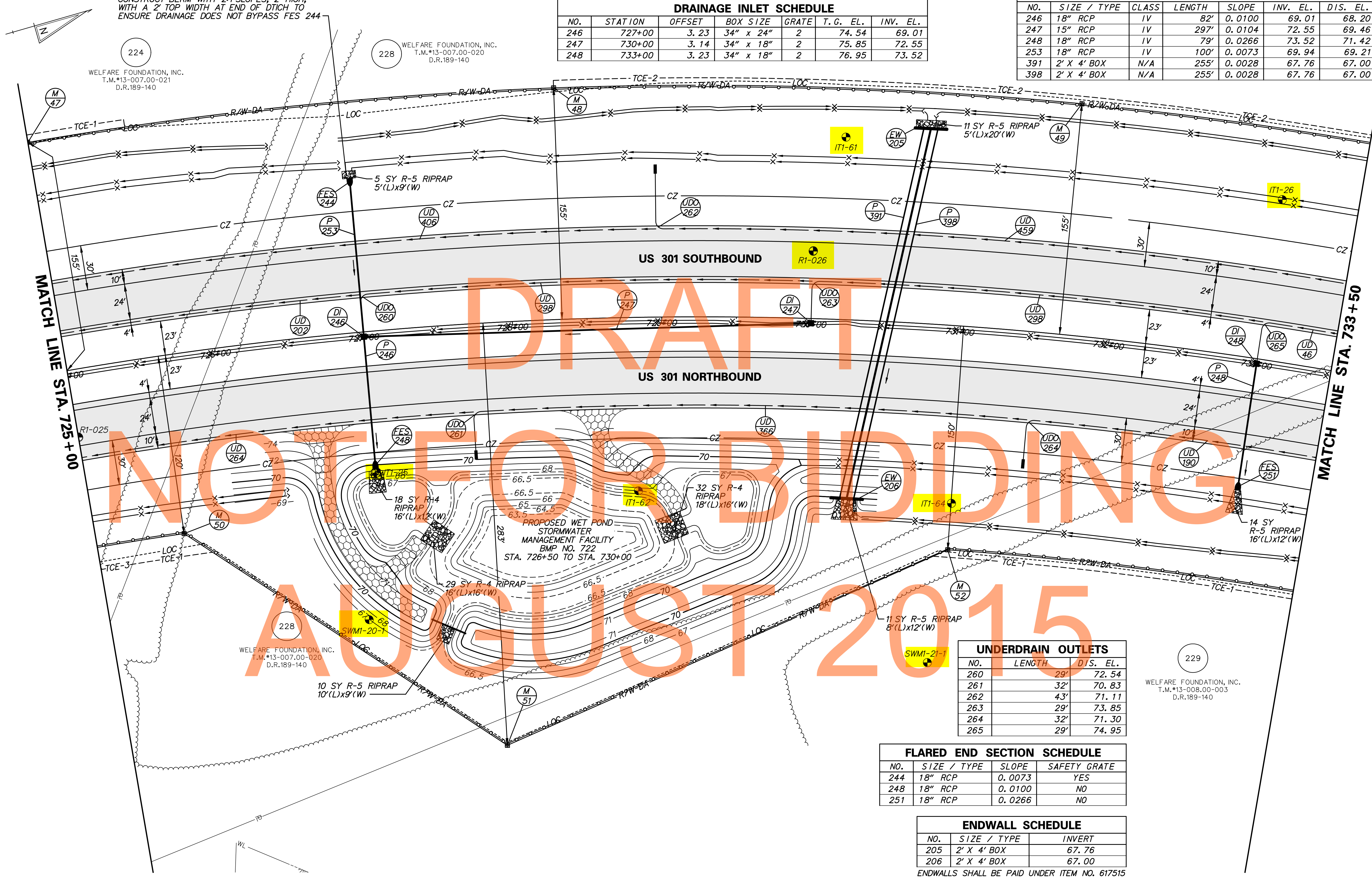
BORING LOCATION PLAN  
Sheet 7 of 37

CP-09
SHEET NO.
75
TOTAL SHTS.
875

CONSTRUCT BERM WITH 2:1 SLOPES, 2' HIGH, WITH A 2' TOP WIDTH AT END OF DITCH TO ENSURE DRAINAGE DOES NOT BYPASS FES 244

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
246	727+00	3.23	34" x 24"	2	74.54	69.01
247	730+00	3.14	34" x 18"	2	75.85	72.55
248	733+00	3.23	34" x 18"	2	76.95	73.52

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
246	18" RCP	IV	82'	0.0100	69.01	68.20
247	15" RCP	IV	297'	0.0104	72.55	69.46
248	18" RCP	IV	79'	0.0266	73.52	71.42
253	18" RCP	IV	100'	0.0073	69.94	69.21
391	2' X 4' BOX	N/A	255'	0.0028	67.76	67.00
398	2' X 4' BOX	N/A	255'	0.0028	67.76	67.00



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
260	29'	72.54
261	32'	70.83
262	43'	71.11
263	29'	73.85
264	32'	71.30
265	29'	74.95

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
244	18" RCP	0.0073	YES
248	18" RCP	0.0100	NO
251	18" RCP	0.0266	NO

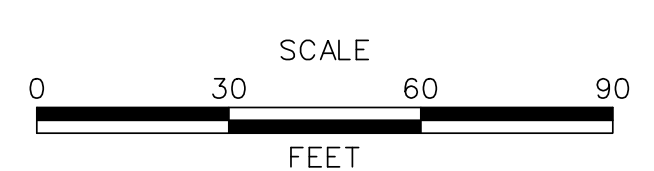
ENDWALL SCHEDULE		
NO.	SIZE / TYPE	INVERT
205	2' X 4' BOX	67.76
206	2' X 4' BOX	67.00

ENDWALLS SHALL BE PAID UNDER ITEM NO. 617515 HEADWALL.

NO. 21653-000, COUNTY OF NEW CASTLE, DE, DATE: 08/11/15, 11:49 AM



ADDENDUMS / REVISIONS	



US 301, SR 896 TO SR 1

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

BORING LOCATION PLAN  
Sheet 8 of 37

CP-10
SHEET NO. 76
TOTAL SHTS. 875





UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
277	30'	77.06
278	55'	73.95
279	32'	74.55
280	30'	77.36
281	26'	75.22

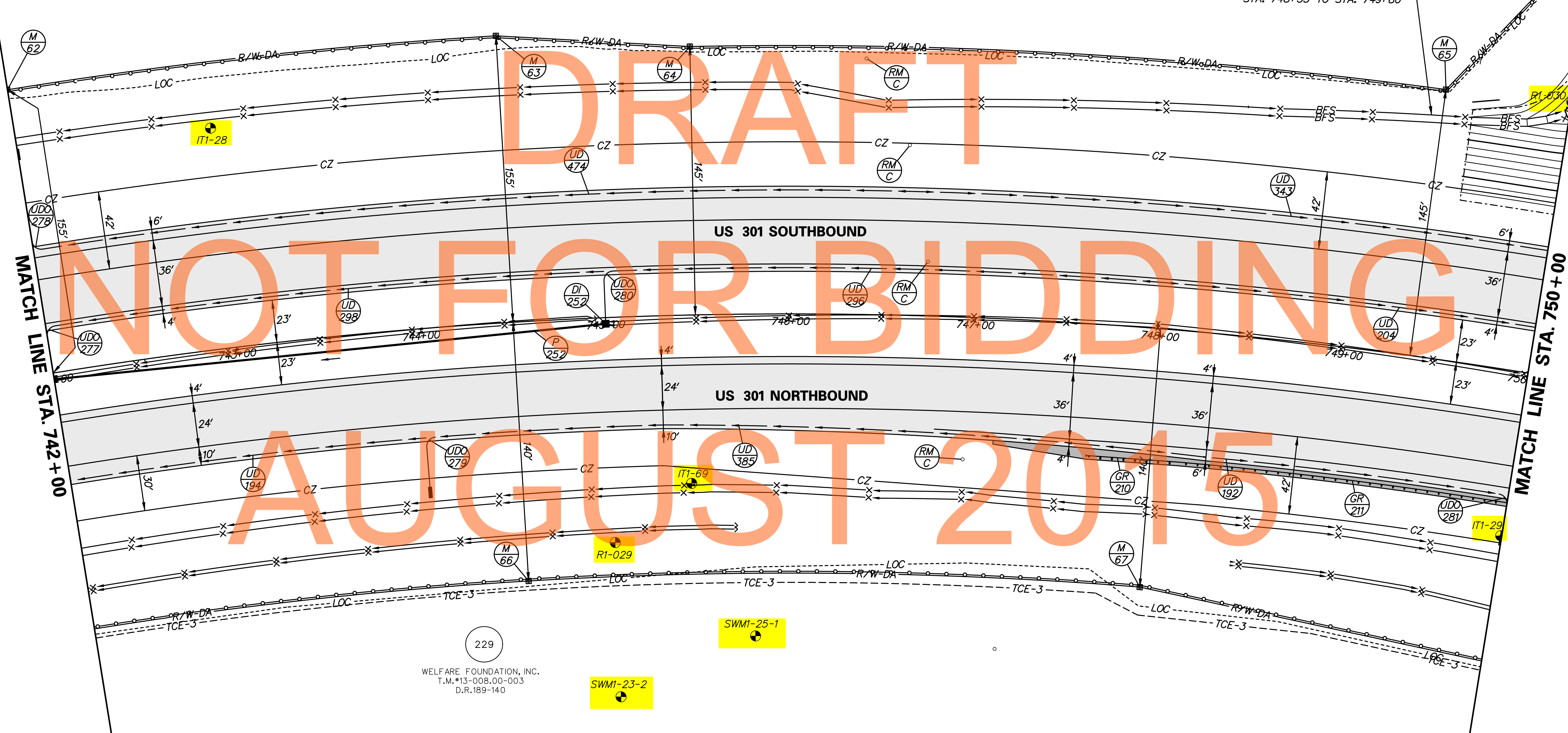
229  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-003  
D.R.189-140

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
252	745+00	3.33	34" x 18"	2	79.36	76.19

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
252	15" RCP	IV	298'	0.0050	76.19	74.70

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
210	END TREATMENT ATTENUATOR, TYPE 1-31	747+64.00	71.00 RT.	50.00'
211	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	748+14.00	71.00 RT.	537.50'

BIOFILTRATION SWALE  
BMP NO. 724  
STA. 748+35 TO STA. 749+80



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

229  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-003  
D.R.189-140

SWMI-23-2

SWMI-25-1

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GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
212	GUARDRAIL END ANCHORAGE 31	753+63.00	75.50 RT.	12.50'

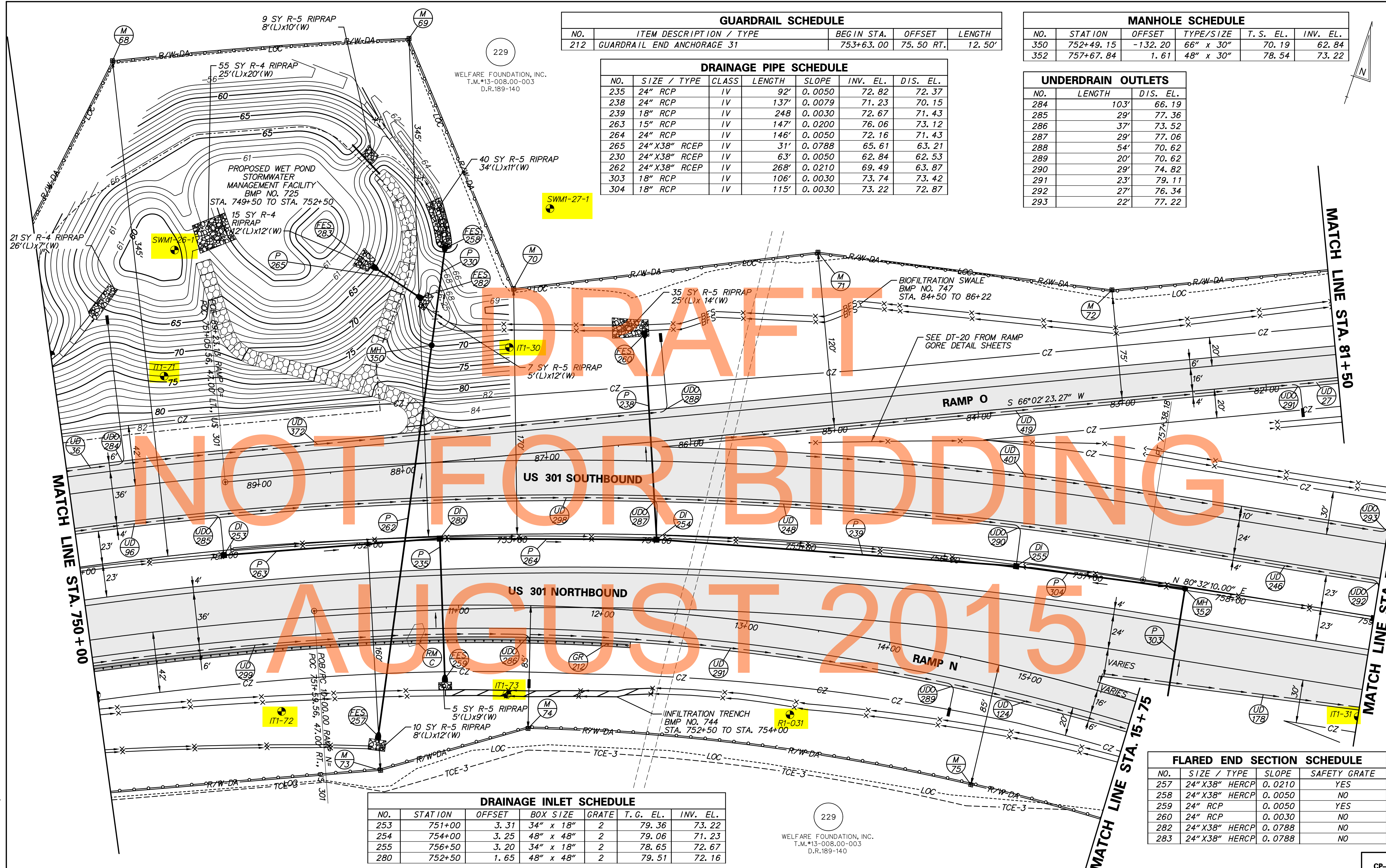
MANHOLE SCHEDULE					
NO.	STATION	OFFSET	TYPE/SIZE	T.S. EL.	INV. EL.
350	752+49.15	-132.20	66" x 30"	70.19	62.84
352	757+67.84	1.61	48" x 30"	78.54	73.22

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
235	24" RCP	IV	92'	0.0050	72.82	72.37
238	24" RCP	IV	137'	0.0079	71.23	70.15
239	18" RCP	IV	248	0.0030	72.67	71.43
263	15" RCP	IV	147'	0.0200	76.06	73.12
264	24" RCP	IV	146'	0.0050	72.16	71.43
265	24" X38" RCEP	IV	31'	0.0788	65.61	63.21
230	24" X38" RCEP	IV	63'	0.0050	62.84	62.53
262	24" X38" RCEP	IV	268'	0.0210	69.49	63.87
303	18" RCP	IV	106'	0.0030	73.74	73.42
304	18" RCP	IV	115'	0.0030	73.22	72.87

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
284	103'	66.19
285	29'	77.36
286	37'	73.52
287	29'	77.06
288	54'	70.62
289	20'	70.62
290	29'	74.82
291	23'	79.11
292	27'	76.34
293	22'	77.22

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
253	751+00	3.31	34" x 18"	2	79.36	73.22
254	754+00	3.25	48" x 48"	2	79.06	71.23
255	756+50	3.20	34" x 18"	2	78.65	72.67
280	752+50	1.65	48" x 48"	2	79.51	72.16

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
257	24" X38" HERCP	0.0210	YES
258	24" X38" HERCP	0.0050	NO
259	24" RCP	0.0050	YES
260	24" RCP	0.0030	NO
282	24" X38" HERCP	0.0788	NO
283	24" X38" HERCP	0.0788	NO



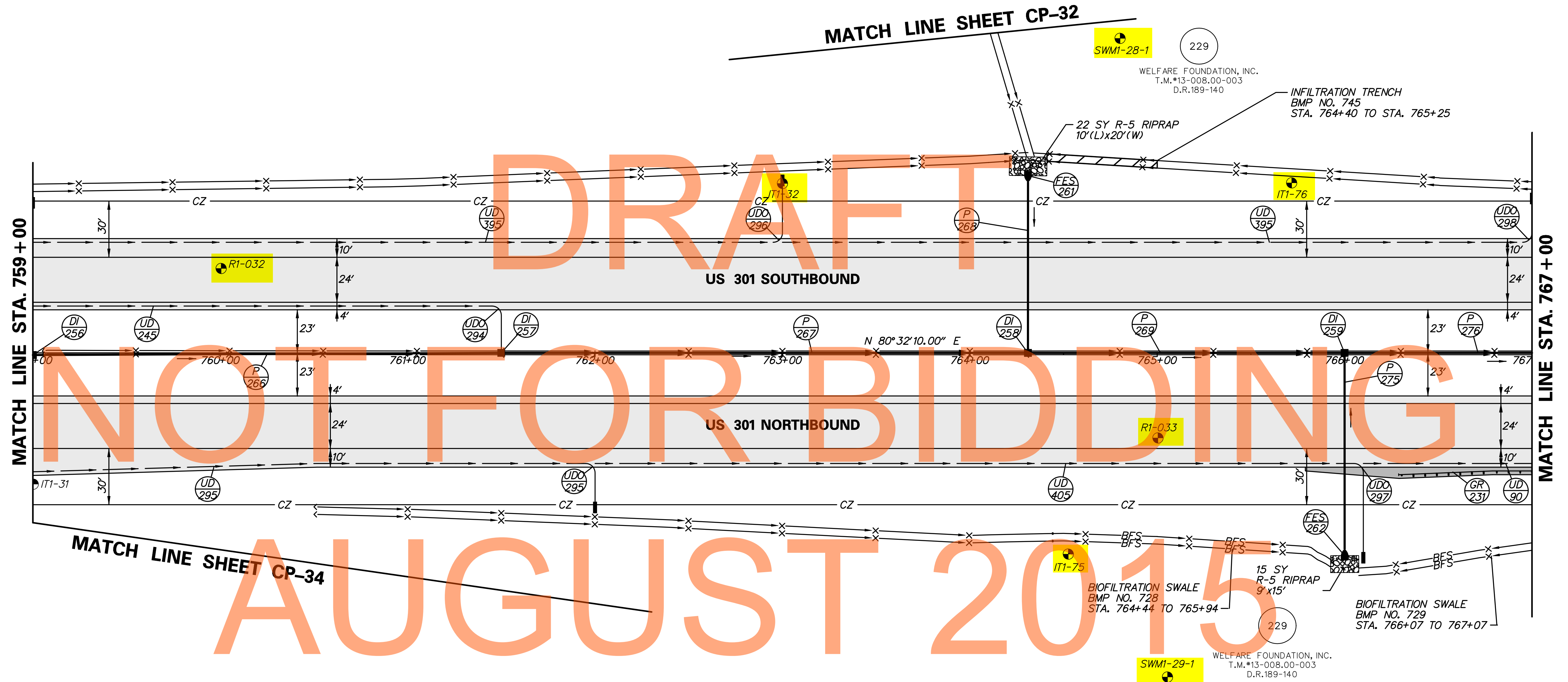
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UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
294	26'	75.66
295	26'	75.75
296	36'	73.70
297	45'	70.19
298	26'	74.07

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T. G. EL.	INV. EL.
256	759+00	1.14	34" x 18"	2	78.15	75.00
257	761+50	0.00	34" x 18"	2	77.66	73.56
258	764+31	0.00	48" x 48"	2	76.72	71.10
259	766+00	0.00	48" x 30"	2	76.13	68.26

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
261	24" RCP	0.0050	YES
262	18" RCP	0.0030	YES

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
266	15" RCP	IV	248'	0.0050	75.00	73.76
267	15" RCP	IV	278'	0.0061	73.56	71.85
268	24" RCP	IV	89'	0.0050	71.75	71.30
269	24" RCP	IV	166'	0.0141	71.10	68.76
275	18" RCP	IV	103'	0.0030	69.57	69.26
276	30" RCP	IV	248'	0.0050	68.26	67.02

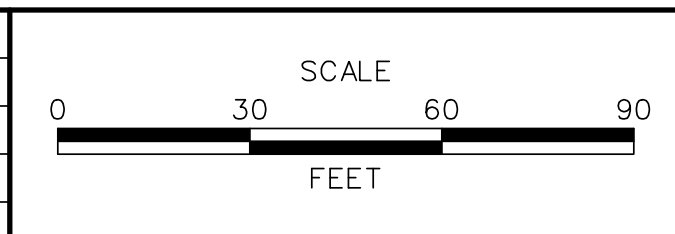


GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
231	END TREATMENT ATTENUATOR, TYPE 1-31	766+22.00	64.60 RT.	50.00'

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
 Sheet 12 of 37

CP-14
SHEET NO. 80
TOTAL SHTS. 875

BARRIER SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
220*	CONCRETE SINGLE FACE BARRIER TYPE 1	65.45
221*	CONCRETE SINGLE FACE BARRIER TYPE 1	65.45

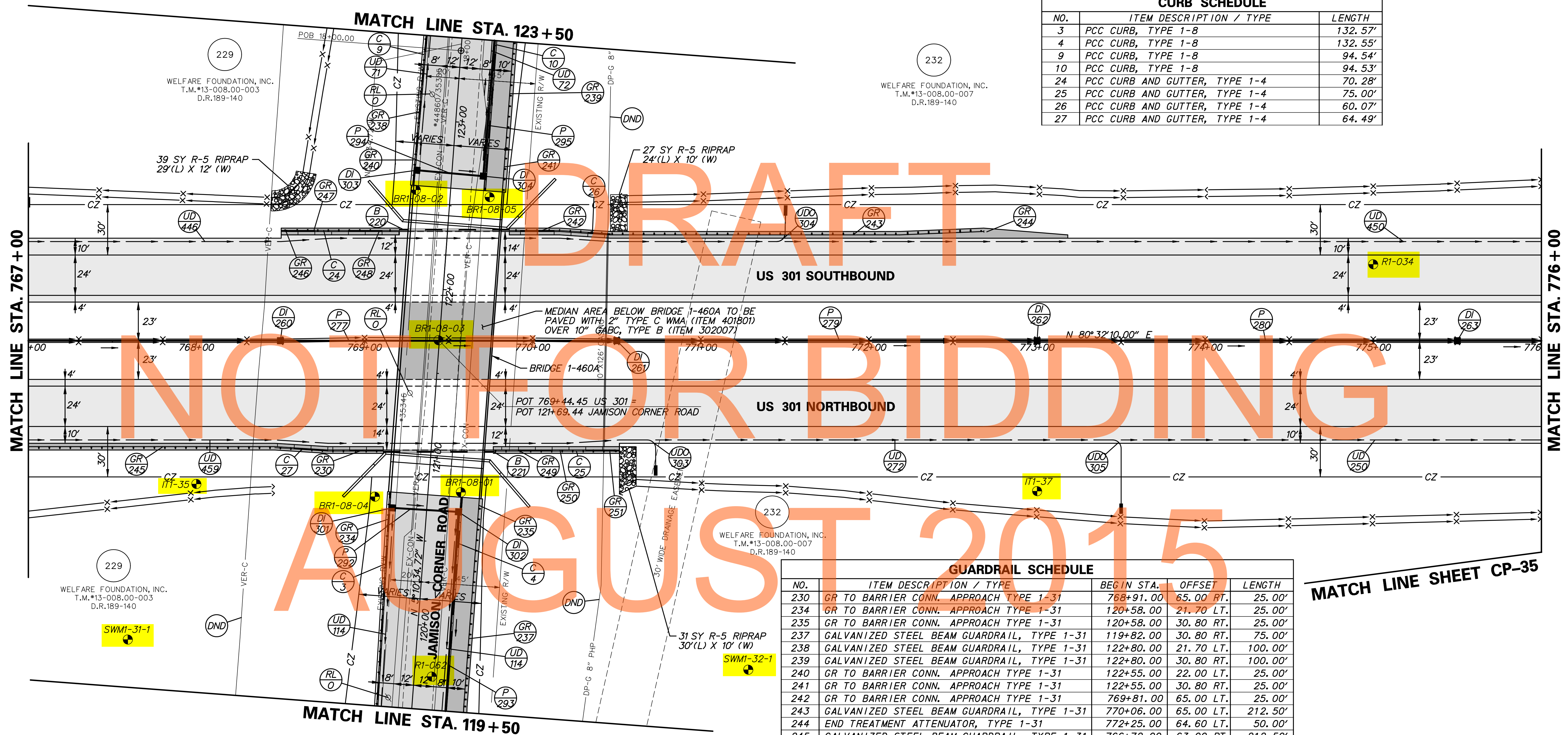
\*SEE SHEET DT-18 FOR DETAIL

UNDERDRAIN OUTLETS		
NO.	LENGTH	D/S. EL.
303	19'	73.64
304	20'	73.11
305	44'	67.77

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
260	768+50	0.00	48" x 30"	2	75.22	66.82
261	770+50	0.00	48" x 30"	2	74.30	65.63
262	773+00	0.00	48" x 30"	2	72.86	64.19
263	775+50	0.00	48" x 30"	2	71.11	62.75
301	120+68	-21.85	34" x 24"	1	101.50	97.00
302	120+68	20.00	48" x 30"	1	101.50	96.29
303	122+70	-21.87	34" x 24"	1	101.52	97.00
304	122+70	20.00	48" x 30"	1	101.52	96.32

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	D/S. EL.
277	30" RCP	IV	198'	0.0050	66.82	65.83
278	30" RCP	IV	248'	0.0050	65.63	64.39
280	30" RCP	IV	248'	0.0050	64.19	62.95
292	18" RCP	IV	38'	0.0132	97.00	96.50
293	18" RCP	IV	146'	0.0225	96.29	93.00
294	18" RCP	IV	37'	0.0128	97.00	96.52
295	18" RCP	IV	146'	0.0221	96.31	93.10

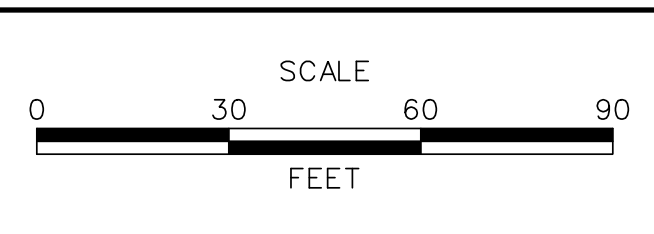
CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
3	PCC CURB, TYPE 1-8	132.57'
4	PCC CURB, TYPE 1-8	132.55'
9	PCC CURB, TYPE 1-8	94.54'
10	PCC CURB, TYPE 1-8	94.53'
24	PCC CURB AND GUTTER, TYPE 1-4	70.28'
25	PCC CURB AND GUTTER, TYPE 1-4	75.00'
26	PCC CURB AND GUTTER, TYPE 1-4	60.07'
27	PCC CURB AND GUTTER, TYPE 1-4	64.49'



GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
230	GR TO BARRIER CONN. APPROACH TYPE 1-31	768+91.00	65.00 RT.	25.00'
234	GR TO BARRIER CONN. APPROACH TYPE 1-31	120+58.00	21.70 LT.	25.00'
235	GR TO BARRIER CONN. APPROACH TYPE 1-31	120+58.00	30.80 RT.	25.00'
237	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	119+82.00	30.80 RT.	75.00'
238	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	122+80.00	21.70 LT.	100.00'
239	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	122+80.00	30.80 RT.	100.00'
240	GR TO BARRIER CONN. APPROACH TYPE 1-31	122+55.00	22.00 LT.	25.00'
241	GR TO BARRIER CONN. APPROACH TYPE 1-31	122+55.00	30.80 RT.	25.00'
242	GR TO BARRIER CONN. APPROACH TYPE 1-31	769+81.00	65.00 LT.	25.00'
243	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	770+06.00	65.00 LT.	212.50'
244	END TREATMENT ATTENUATOR, TYPE 1-31	772+25.00	64.60 LT.	50.00'
245	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	766+72.00	63.00 RT.	212.50'
246	GUARDRAIL END ANCHORAGE 31	768+54.00	65.00 LT.	12.50'
247	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	768+66.00	65.00 LT.	43.00'
248	GUARDRAIL TO BARRIER CONN. EXIT TYPE 31	769+09.00	65.00 LT.	14.23'
249	GUARDRAIL TO BARRIER CONN. EXIT TYPE 31	769+74.00	65.00 RT.	14.23'
250	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	769+88.00	65.00 RT.	48.00'
251	GUARDRAIL END ANCHORAGE 31	770+36.00	65.00 RT.	12.50'

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ADDENDUMS / REVISIONS



**US 301, SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
 Sheet 13 of 37

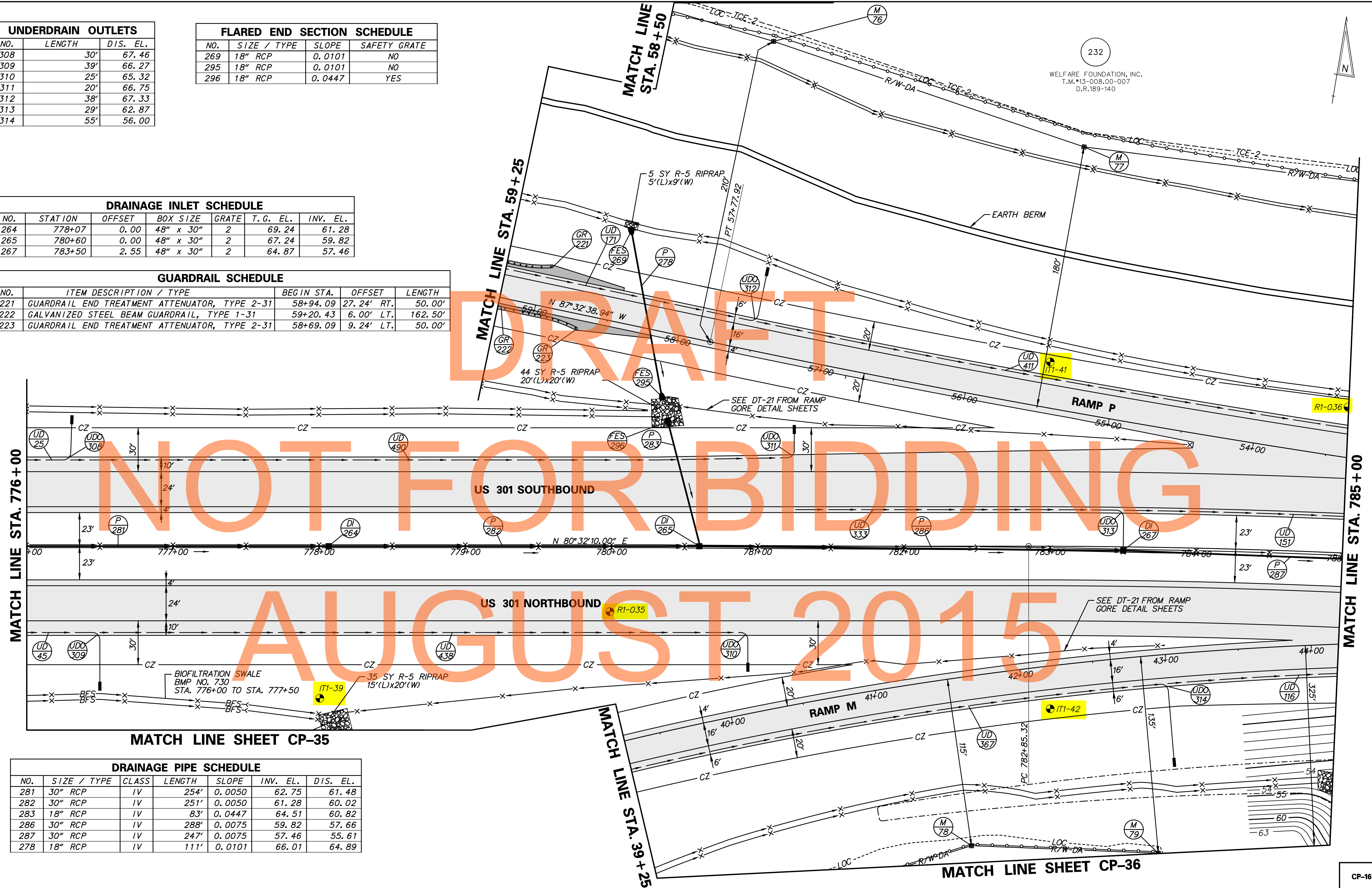
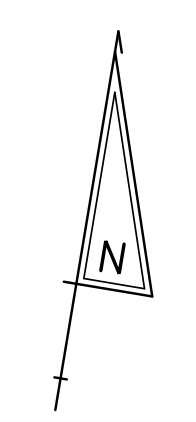
UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
308	30'	67.46
309	39'	66.27
310	25'	65.32
311	20'	66.75
312	38'	67.33
313	29'	62.87
314	55'	56.00

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
269	18" RCP	0.0101	NO
295	18" RCP	0.0101	NO
296	18" RCP	0.0447	YES

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
264	778+07	0.00	48" x 30"	2	69.24	61.28
265	780+60	0.00	48" x 30"	2	67.24	59.82
267	783+50	2.55	48" x 30"	2	64.87	57.46

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
221	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	58+94.09	27.24' RT.	50.00'
222	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	59+20.43	6.00' LT.	162.50'
223	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	58+69.09	9.24' LT.	50.00'

232  
WELFARE FOUNDATION, INC.  
T.M.#13-008.00-007  
D.R.189-140



DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
281	30" RCP	IV	254'	0.0050	62.75	61.48
282	30" RCP	IV	251'	0.0050	61.28	60.02
283	18" RCP	IV	83'	0.0447	64.51	60.82
286	30" RCP	IV	288'	0.0075	59.82	57.66
287	30" RCP	IV	247'	0.0075	57.46	55.61
278	18" RCP	IV	111'	0.0101	66.01	64.89

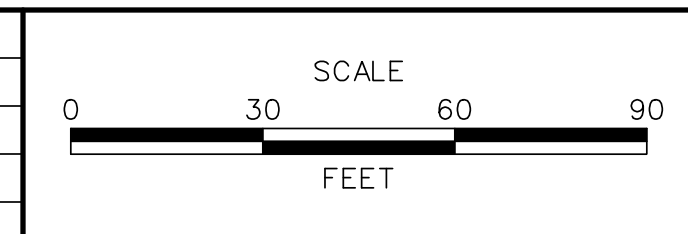
MATCH LINE SHEET CP-35

MATCH LINE SHEET CP-36

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ADDENDUMS / REVISIONS	



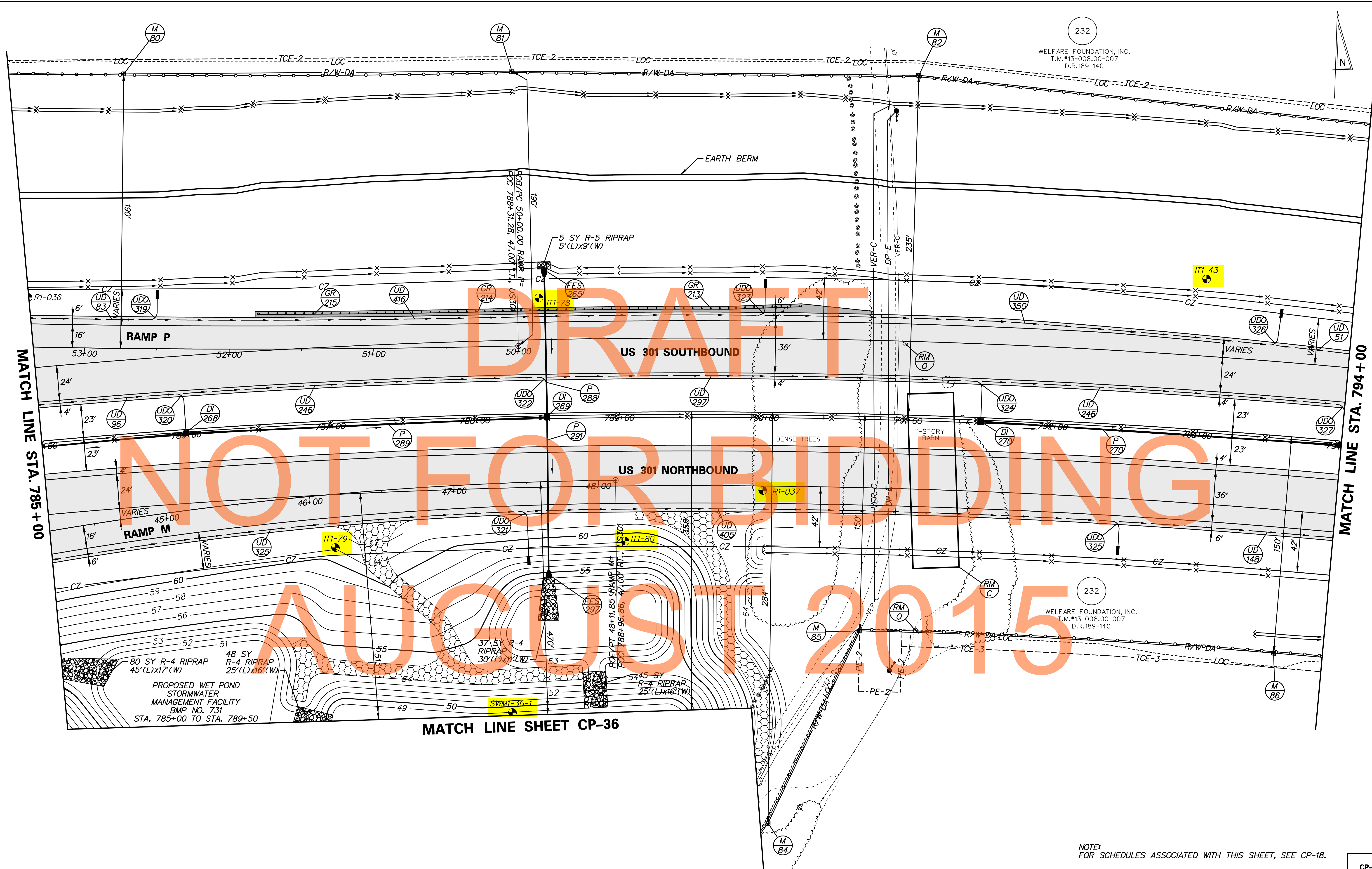
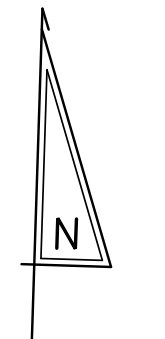
US 301,  
SR 896 TO SR 1

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

BORING LOCATION PLAN  
Sheet 14 of 37

CP-16
SHEET NO. 82
TOTAL SHTS. 875

232  
WELFARE FOUNDATION, INC.  
T.M.#13-008.00-007  
D.R.189-140



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NOT FOR BIDDING  
AUGUST 2015

232  
WELFARE FOUNDATION, INC.  
T.M.#13-008.00-007  
D.R.189-140

80 SY R-4 RIPRAP  
45'(L)x17'(W)  
PROPOSED WET POND  
STORMWATER  
MANAGEMENT FACILITY  
BMP NO. 731  
STA. 785+00 TO STA. 789+50

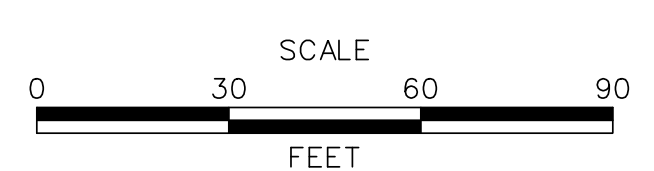
MATCH LINE SHEET CP-36

NOTE:  
FOR SCHEDULES ASSOCIATED WITH THIS SHEET, SEE CP-18.

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
Sheet 15 of 37

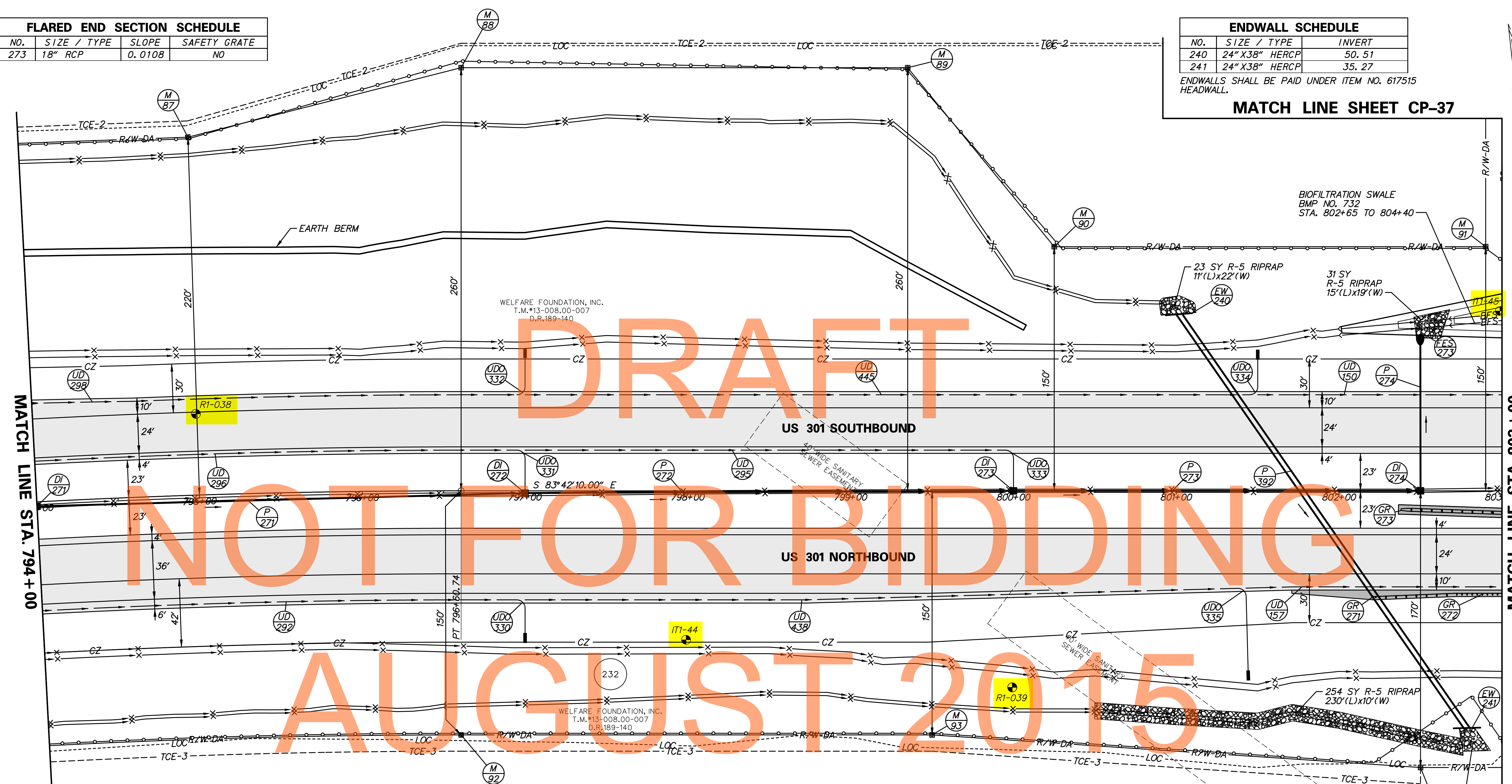
<b>CP-17</b>
SHEET NO. 83
TOTAL SHTS. 875

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
273	18" RCP	0.0108	NO

ENDWALL SCHEDULE		
NO.	SIZE / TYPE	INVERT
240	24" X38" HERCP	50.51
241	24" X38" HERCP	35.27

ENDWALLS SHALL BE PAID UNDER ITEM NO. 617515 HEADWALL.

**MATCH LINE SHEET CP-37**



DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
271	15" RCP	IV	298'	0.0050	54.77	53.28
272	15" RCP	IV	299'	0.0050	53.08	51.59
273	15" RCP	IV	248'	0.0074	51.39	49.56
274	18" RCP	IV	89'	0.0075	49.31	48.65
392	24" X38" HERCP	IV	311'	0.0491	50.51	35.27

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
271	794+00	2.75	34" x 18"	2	58.07	54.77
272	797+00	1.41	34" x 18"	2	56.57	53.08
273	800+00	0.00	34" x 18"	2	55.31	51.39
274	802+50	0.00	34" x 24"	2	54.06	49.31

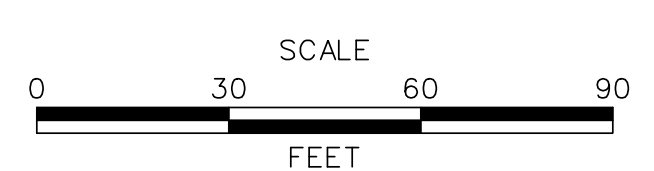
UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
330	24'	54.87
331	27'	54.57
332	27'	56.10
333	26'	53.31
334	27'	52.50
335	56'	43.00

GUARDRAIL SCHEDULE			
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	LENGTH
271	END TREATMENT ATTENUATOR, TYPE 1-31	802+21.00	50.00'
272	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	802+71.00	29.10'
273	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 3-31	802+38.00	50.00'

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
Sheet 16 of 37

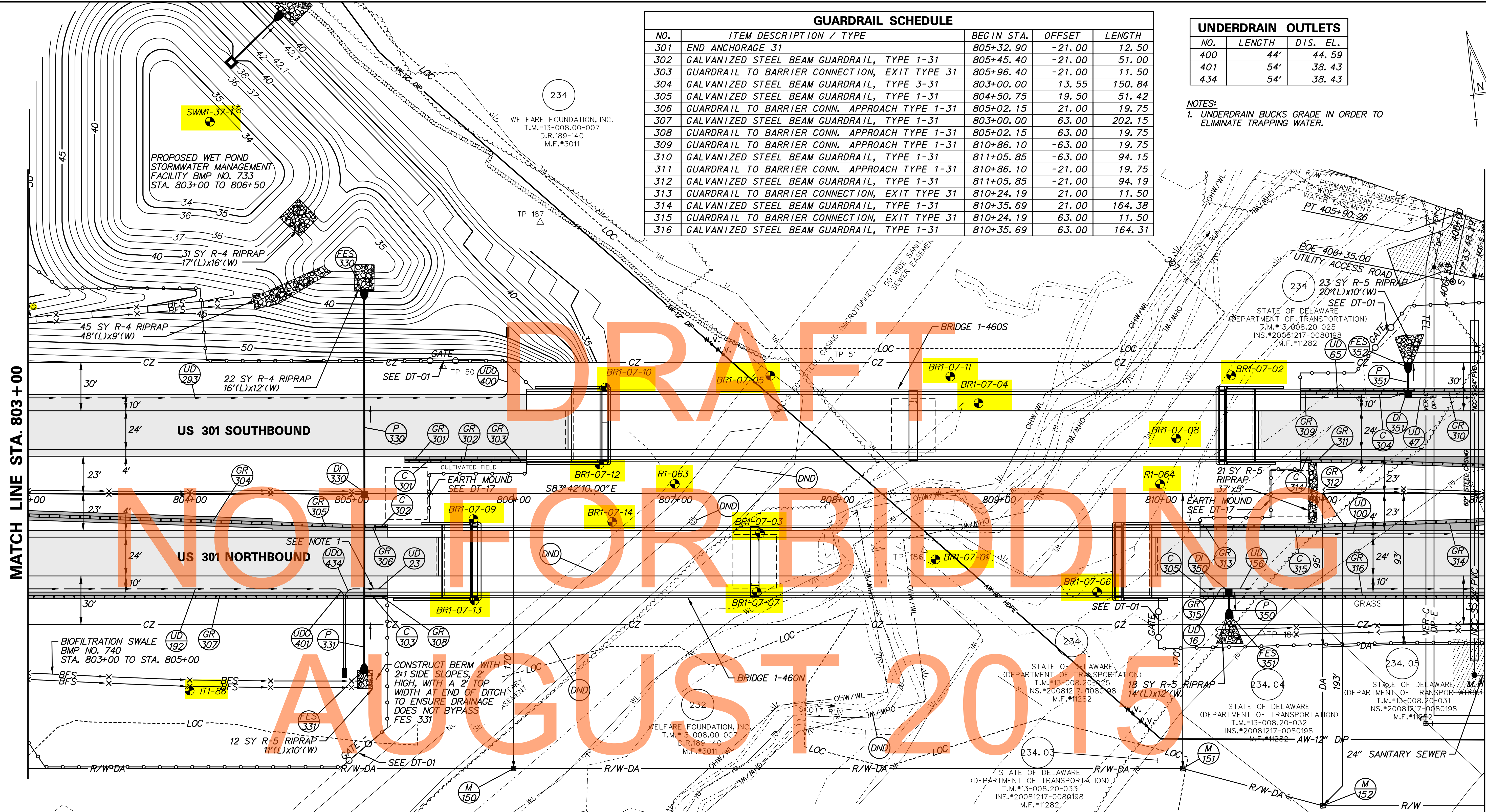
CP-19	
SHEET NO.	TOTAL SHTS.
85	875



GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
301	END ANCHORAGE 31	805+32.90	-21.00	12.50
302	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	805+45.40	-21.00	51.00
303	GUARDRAIL TO BARRIER CONNECTION, EXIT TYPE 31	805+96.40	-21.00	11.50
304	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31	803+00.00	13.55	150.84
305	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	804+50.75	19.50	51.42
306	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	805+02.15	21.00	19.75
307	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	803+00.00	63.00	202.15
308	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	805+02.15	63.00	19.75
309	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	810+86.10	-63.00	19.75
310	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	811+05.85	-63.00	94.15
311	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	810+86.10	-21.00	19.75
312	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	811+05.85	-21.00	94.19
313	GUARDRAIL TO BARRIER CONNECTION, EXIT TYPE 31	810+24.19	21.00	11.50
314	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	810+35.69	21.00	164.38
315	GUARDRAIL TO BARRIER CONNECTION, EXIT TYPE 31	810+24.19	63.00	11.50
316	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	810+35.69	63.00	164.31

UNDERDRAIN OUTLETS			
NO.	LENGTH	DIS.	EL.
400	44'		44.59
401	54'		38.43
434	54'		38.43

NOTES:  
1. UNDERDRAIN BUCKS GRADE IN ORDER TO ELIMINATE TRAPPING WATER.



CURB AND GUTTER SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
301	PCC CURB AND GUTTER, TYPE 1-4	75.00'
302*	PCC CURB AND GUTTER, TYPE 1-4	7.17'
303*	PCC CURB AND GUTTER, TYPE 1-4	13.98'
304	PCC CURB AND GUTTER, TYPE 1-4	70.04'
305**	PCC CURB AND GUTTER, TYPE 1-4	21.17'
314*	PCC CURB AND GUTTER, TYPE 1-4	5.90'
315	PCC CURB AND GUTTER, TYPE 1-4	67.81'

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
330	24" RCP	0.0030	NO
331	24" RCP	0.0030	YES
351	15" RCP	0.0159	NO
352	15" RCP	0.0346	NO

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
*330	805+08	-0.03	34" x 18"	2	52.63	36.67
350	810+42	63.00	34" x 24"	2	50.67	48.00
351	811+53	-63.00	34" x 24"	2	48.86	46.00

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
330	24" RCP	IV	120'	0.0030	36.67	36.31
331	24" RCP	IV	105'	0.0030	36.98	36.67
350	15" RCP	IV	9'	0.0159	48.00	47.87
351	15" RCP	IV	12'	0.0346	46.00	45.61

\* ANY DRAINAGE INLET OR MANHOLE WITH A STRUCTURE DEPTH EXCEEDING THE MAXIMUM DEPTH PROVIDED IN THE DELDOT STANDARD CONSTRUCTION DETAILS WILL REQUIRE THE CONTRACTOR TO SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SECTION 105.04 OF THE STANDARD SPECIFICATIONS. COST FOR THESE STRUCTURES WILL BE INCIDENTAL TO THE RESPECTIVE STANDARD ITEM AS SPECIFIED ON THE CONSTRUCTION PLANS.

SEE CURB TRANSITION DETAILS AT GUARDRAIL TO BARRIER CONNECTION, SHEET DT-03.  
\*MATCH SHOULDER SLOPE FOR ENTIRE CURB AND GUTTER LENGTH  
\*\*TRANSITION GUTTER SLOPE FROM -4.00% AT STA. 810+24.19 TO NORMAL GUTTER SLOPE AT STA. 810+32.27

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FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
333	24" RCP	0.0030	NO
332	18" RCP	0.0263	YES
355	18" RCP	0.0030	NO

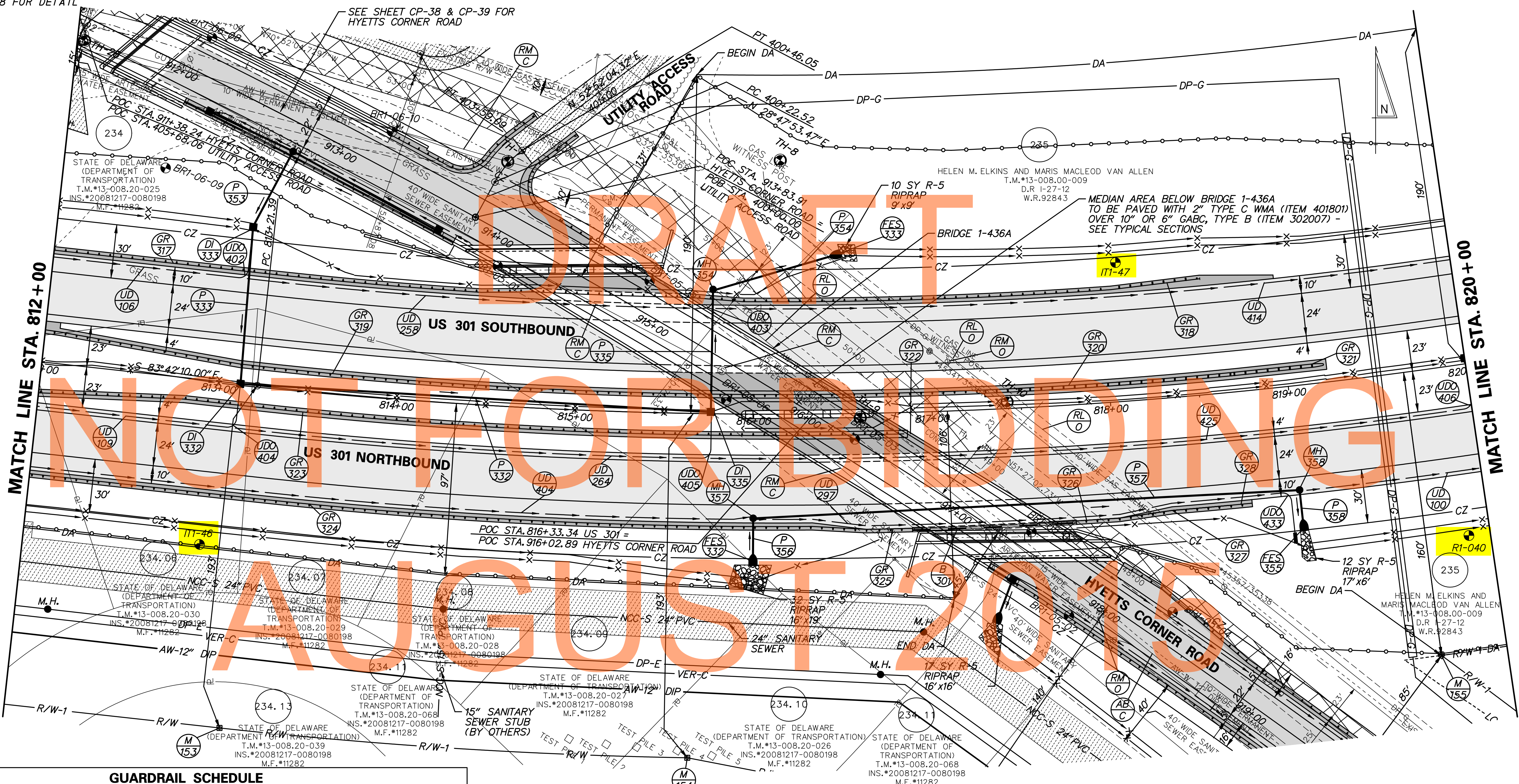
DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
332	24" RCP	IV	261'	0.0034	38.80	37.91
333	18" RCP	IV	86'	0.0050	39.73	39.30
335	24" RCP	IV	65'	0.0030	37.91	37.72
353	15" RCP	IV	47'	0.2308	50.60	39.98
354	24" RCP	IV	67'	0.0030	37.72	37.52
356	18" RCP	IV	19'	0.0263	41.93	41.45
357	18" RCP	IV	304'	0.0050	41.25	39.73
358	18" RCP	IV	15'	0.0030	39.73	39.69

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
402	28'	41.56
403	11'	39.43
404	25'	43.30
405	25'	40.03
406	28'	36.89
433	27'	39.85

MANHOLE SCHEDULE					
NO.	STATION	OFFSET	SIZE	T.G. EL.	INV. EL.
354	815+76.28	-69.67'	48" x 48"	41.84	37.72
357	816+00.00	58.39'	48" x 30"	46.50	41.25
358	819+00.00	58.37'	48" x 30"	44.06	39.73

BARRIER SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
301*	CONCRETE SINGLE FACE BARRIER TYPE 1	91.94

\*SEE SHEET DT-18 FOR DETAIL



GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
317	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	812+00.00	-63.00	593.35
318	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	818+04.80	-63.00	50.00
319	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	812+00.00	-18.07	528.38
320	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 3-31	817+29.84	-10.08	139.98
321	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 3-31	818+70.35	-10.08	50.00
322	END ANCHORAGE 31	816+83.80	12.00	12.50
323	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	812+00.00	17.41	485.62
324	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	812+00.00	63.00	476.15
325	GUARDRAIL TO BARRIER CONN. APPROACH TYPE 1-31	816+67.83	65.00	19.75

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
326	GUARDRAIL TO BARRIER CONN., EXIT TYPE 31	817+76.85	65.00	11.50
327	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	817+88.07	65.00	75.00
328	END ANCHORAGE 31	818+61.24	63.00	12.50

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
332	813+12	-0.02	48" x 30"	2	44.80	38.80
333	813+09	-88.04	34" x 18"	2	43.05	39.73
335	815+76	-1.00	48" x 48"	2	41.53	37.91

M.F. #11282  
 T.M.#13-008.20-039  
 INS.#20081217-0080198  
 M.F.#11282  
 T.M.#13-008.20-026  
 INS.#20081217-0080198  
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 INS.#20081217-0080198  
 M.F.#11282  
 T.M.#13-008.20-025  
 INS.#20081217-0080198  
 M.F.#11282  
 T.M.#13-008.20-009  
 D.R. 1-27-12  
 W.R.92843



ADDENDUMS / REVISIONS	

US 301, SR 896 TO SR 1	

CONTRACT	T200911308	BRIDGE NO.	1-5
COUNTY	NEW CASTLE	DESIGNED BY:	K.S.B.
		CHECKED BY:	B.R.T.

BORING LOCATION PLAN	
Sheet 18 of 37	

CP-21	SHEET NO.	87
	TOTAL SHTS.	875

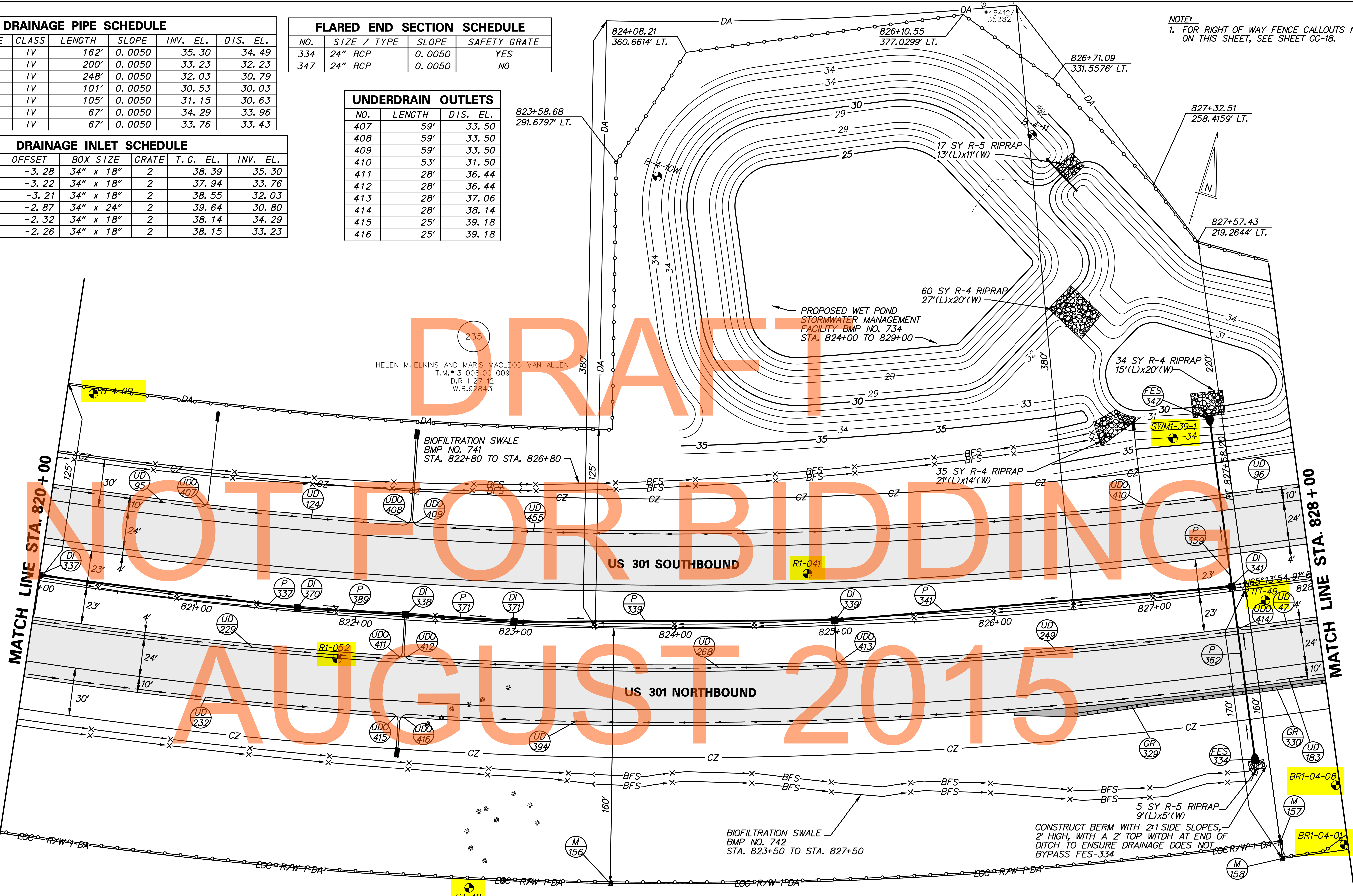
DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
337	15" RCP	IV	162'	0.0050	35.30	34.49
339	15" RCP	IV	200'	0.0050	33.23	32.23
341	15" RCP	IV	248'	0.0050	32.03	30.79
359	24" RCP	IV	101'	0.0050	30.53	30.03
362	24" RCP	IV	105'	0.0050	31.15	30.63
389	15" RCP	IV	67'	0.0050	34.29	33.96
371	15" RCP	IV	67'	0.0050	33.76	33.43

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
334	24" RCP	0.0050	YES
347	24" RCP	0.0050	NO

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
407	59'	33.50
408	59'	33.50
409	59'	33.50
410	53'	31.50
411	28'	36.44
412	28'	36.44
413	28'	37.06
414	28'	38.14
415	25'	39.18
416	25'	39.18

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
337	820+00	-3.28	34" x 18"	2	38.39	35.30
338	822+31	-3.22	34" x 18"	2	37.94	33.76
339	825+00	-3.21	34" x 18"	2	38.55	32.03
341	824+50	-2.87	34" x 24"	2	39.64	30.80
370	821+63	-2.32	34" x 18"	2	38.14	34.29
371	822+99	-2.26	34" x 18"	2	38.15	33.23

NOTE:  
1. FOR RIGHT OF WAY FENCE CALLOUTS NOT SHOWN ON THIS SHEET, SEE SHEET GG-18.



DRAFT  
NOT FOR BIDDING  
AUGUST 2015

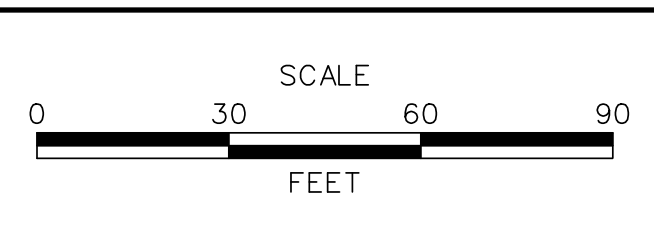
GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
329	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	826+44.71	65.00	50.00
330	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	826+93.53	63.00	108.00

HELEN M. ELKINS AND MARIS MACLEOD VAN ALLEN  
T.M.\*13-008.00-009  
D.R. I-27-12  
W.R.92843

← SITE ACCESS  
CONTRACT T200911302 →



ADDENDUMS / REVISIONS	



US 301,  
SR 896 TO SR 1

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

BORING LOCATION PLAN  
Sheet 19 of 37

CP-22	SHEET NO. 88
	TOTAL SHTS. 875

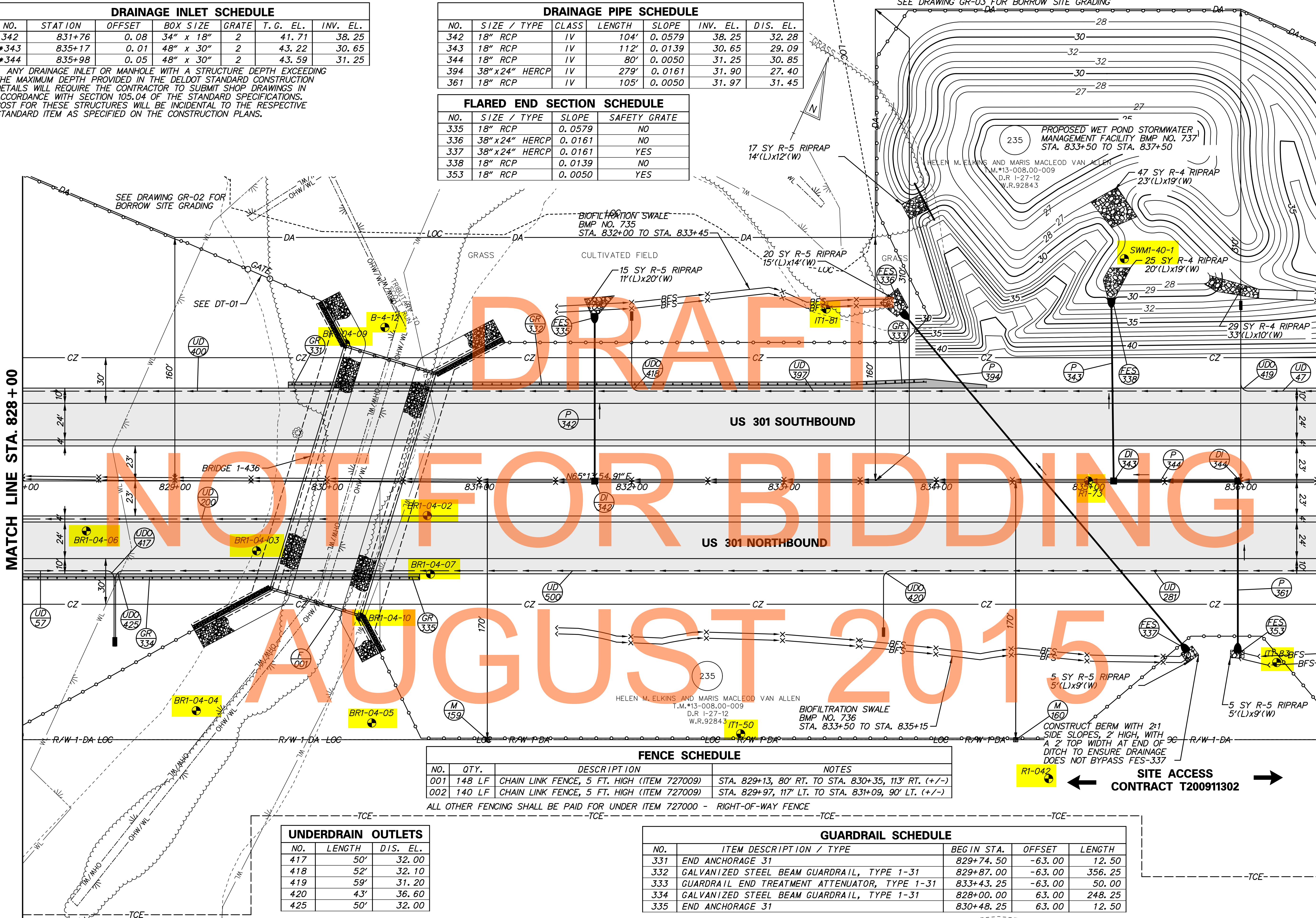
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DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
342	831+76	0.08	34" x 18"	2	41.71	38.25
*343	835+17	0.01	48" x 30"	2	43.22	30.65
*344	835+98	0.05	48" x 30"	2	43.59	31.25

\* ANY DRAINAGE INLET OR MANHOLE WITH A STRUCTURE DEPTH EXCEEDING THE MAXIMUM DEPTH PROVIDED IN THE DELDOT STANDARD CONSTRUCTION DETAILS WILL REQUIRE THE CONTRACTOR TO SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SECTION 105.04 OF THE STANDARD SPECIFICATIONS. COST FOR THESE STRUCTURES WILL BE INCIDENTAL TO THE RESPECTIVE STANDARD ITEM AS SPECIFIED ON THE CONSTRUCTION PLANS.

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
342	18" RCP	IV	104'	0.0579	38.25	32.28
343	18" RCP	IV	112'	0.0139	30.65	29.09
344	18" RCP	IV	80'	0.0050	31.25	30.85
394	38" x 24" HERCP	IV	279'	0.0161	31.90	27.40
361	18" RCP	IV	105'	0.0050	31.97	31.45

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
335	18" RCP	0.0579	NO
336	38" x 24" HERCP	0.0161	NO
337	38" x 24" HERCP	0.0161	YES
338	18" RCP	0.0139	NO
353	18" RCP	0.0050	YES



FENCE SCHEDULE			
NO.	QTY.	DESCRIPTION	NOTES
001	148 LF	CHAIN LINK FENCE, 5 FT. HIGH (ITEM 727009)	STA. 829+13, 80' RT. TO STA. 830+35, 113' RT. (+/-)
002	140 LF	CHAIN LINK FENCE, 5 FT. HIGH (ITEM 727009)	STA. 829+97, 117' LT. TO STA. 831+09, 90' LT. (+/-)

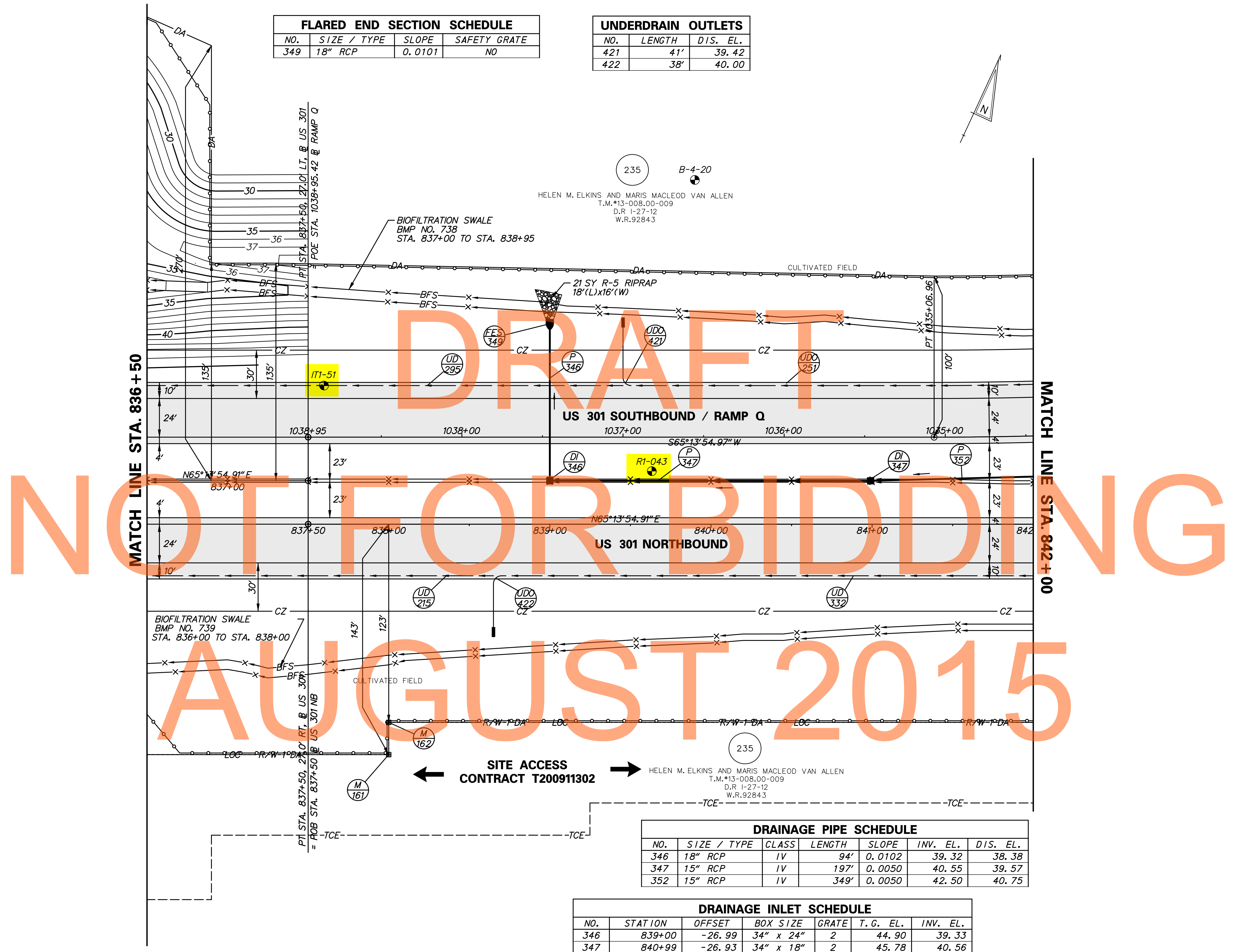
ALL OTHER FENCING SHALL BE PAID FOR UNDER ITEM 727000 - RIGHT-OF-WAY FENCE

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
417	50'	32.00
418	52'	32.10
419	59'	31.20
420	43'	36.60
425	50'	32.00

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
331	END ANCHORAGE 31	829+74.50	-63.00	12.50
332	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	829+87.00	-63.00	356.25
333	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	833+43.25	-63.00	50.00
334	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	828+00.00	63.00	248.25
335	END ANCHORAGE 31	830+48.25	63.00	12.50

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
349	18" RCP	0.0101	NO

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
421	41'	39.42
422	38'	40.00



DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
346	18" RCP	IV	94'	0.0102	39.32	38.38
347	15" RCP	IV	197'	0.0050	40.55	39.57
352	15" RCP	IV	349'	0.0050	42.50	40.75

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
346	839+00	-26.99	34" x 24"	2	44.90	39.33
347	840+99	-26.93	34" x 18"	2	45.78	40.56

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ADDENDUMS / REVISIONS	

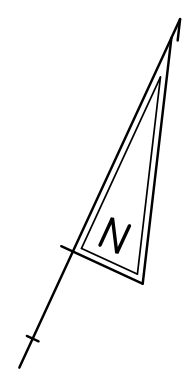


**US 301,**  
**SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
 Sheet 21 of 37

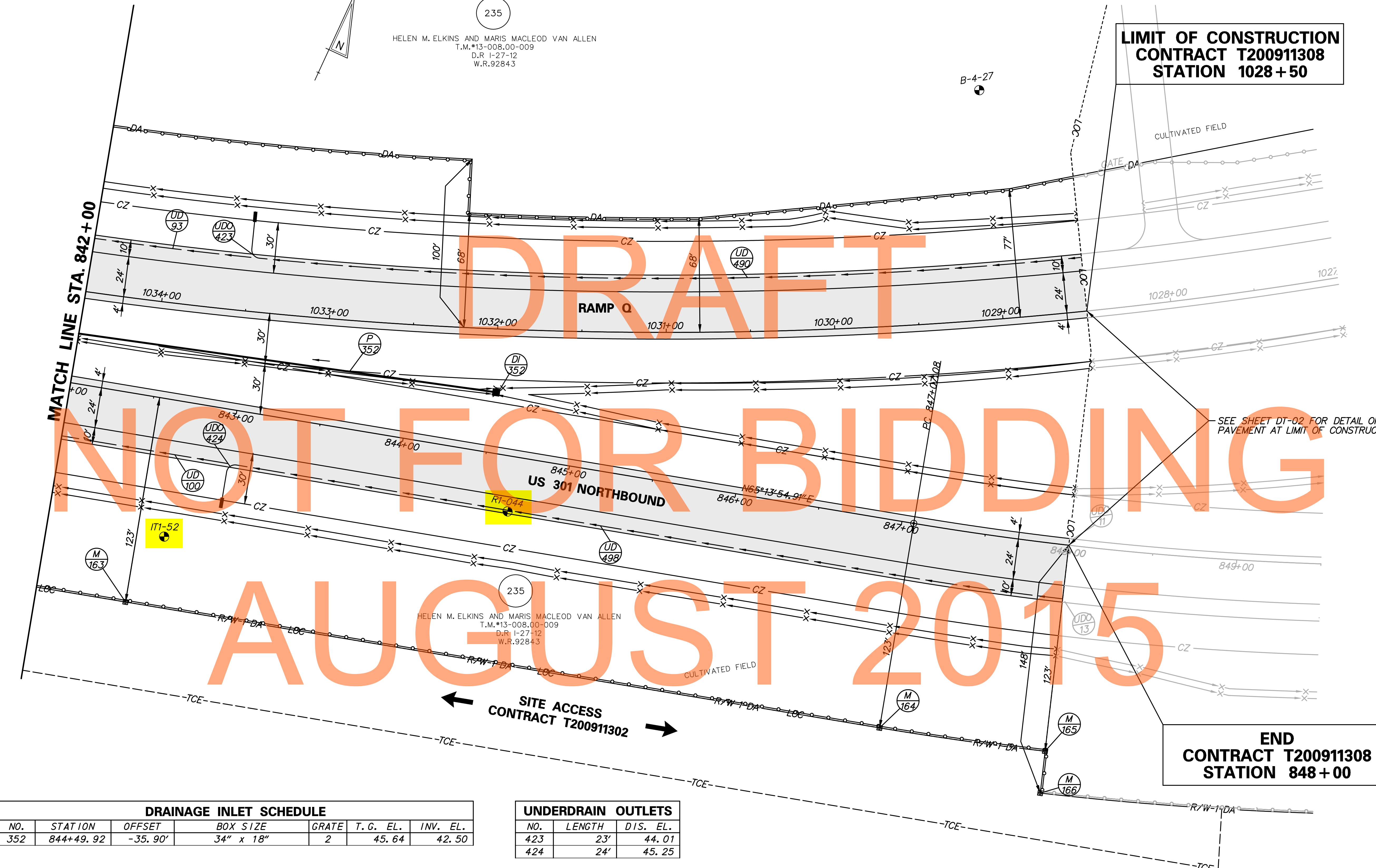
CP-24
SHEET NO.
90
TOTAL SHTS.
875



235

HELEN M. ELKINS AND MARIS MACLEOD VAN ALLEN  
 T.M.#13-008.00-009  
 D.R. 1-27-12  
 W.R.92843

**LIMIT OF CONSTRUCTION  
 CONTRACT T200911308  
 STATION 1028 + 50**



MATCH LINE STA. 842 + 00

RAMP Q

US 301 NORTHBOUND

SITE ACCESS  
 CONTRACT T200911302

SEE SHEET DT-02 FOR DETAIL OF  
 PAVEMENT AT LIMIT OF CONSTRUCTION.

**END  
 CONTRACT T200911308  
 STATION 848 + 00**

**DRAINAGE INLET SCHEDULE**

NO.	STATION	OFFSET	BOX SIZE	GRATE	T. G. EL.	INV. EL.
352	844+49.92	-35.90'	34" x 18"	2	45.64	42.50

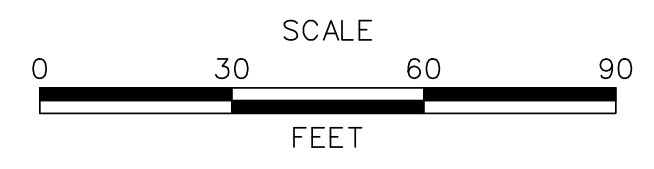
**UNDERDRAIN OUTLETS**

NO.	LENGTH	DIS. EL.
423	23'	44.01
424	24'	45.25

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ADDENDUMS / REVISIONS	

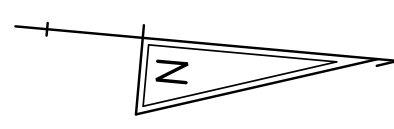


**US 301,  
 SR 896 TO SR 1**

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

BORING LOCATION PLAN  
 Sheet 22 of 37

CP-25
SHEET NO. 91
TOTAL SHTS. 875



LIMIT OF CONSTRUCTION  
CONTRACT T200911308  
STATION 103+00

DRAFT

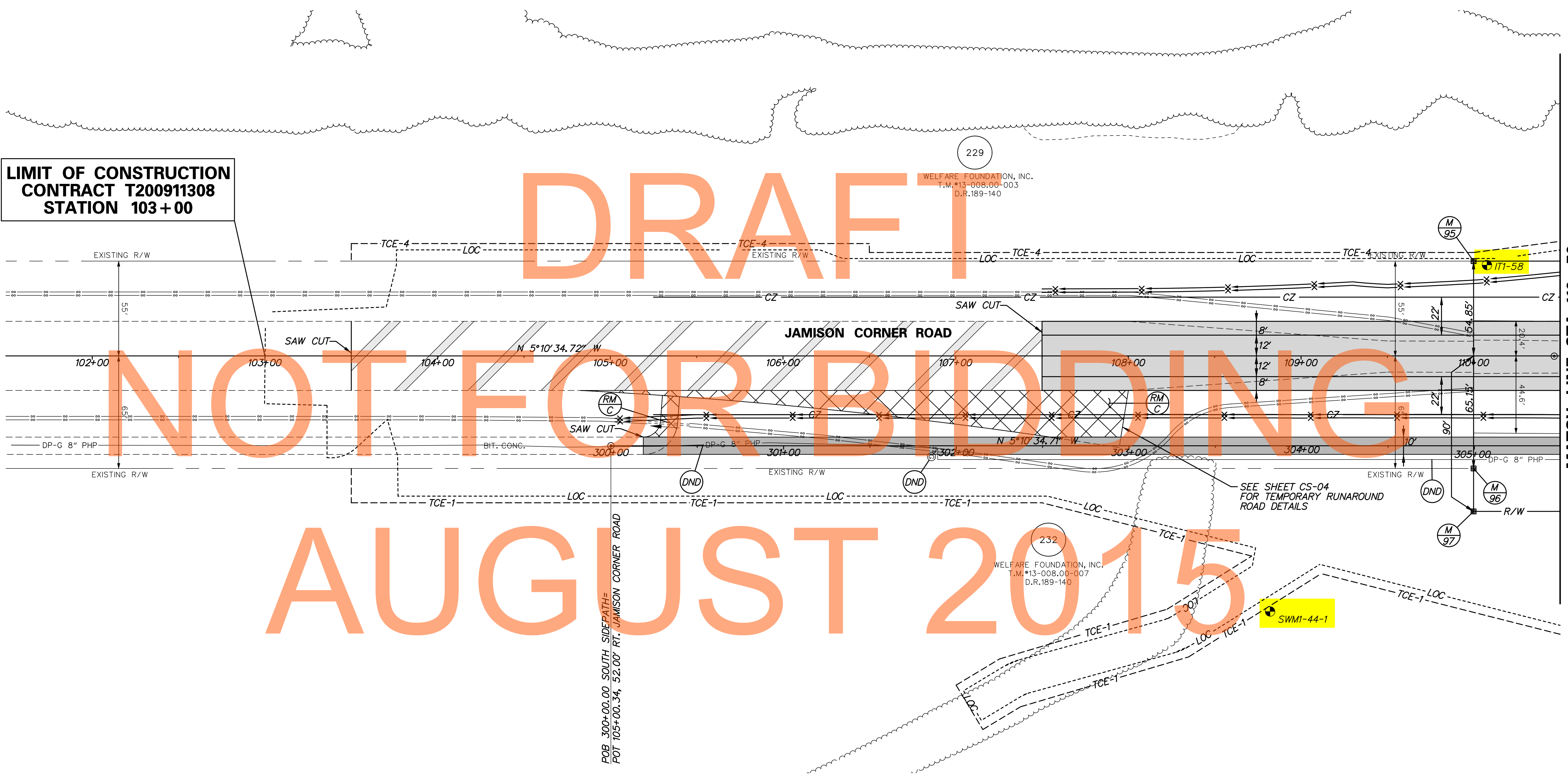
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AUGUST 2015

229  
WELFARE FOUNDATION, INC.  
T.M.#13-008.00-003  
D.R.189-140

232  
WELFARE FOUNDATION, INC.  
T.M.#13-008.00-007  
D.R.189-140

POB 300+00.00 SOUTH SIDE  
POT 105+00.34, 52.00' RT, JAMISON CORNER ROAD

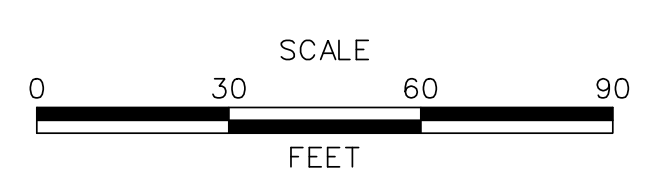


MATCH LINE STA. 110+50

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ADDENDUMS / REVISIONS	



US 301,  
SR 896 TO SR 1

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

BORING LOCATION PLAN  
Sheet 23 of 37

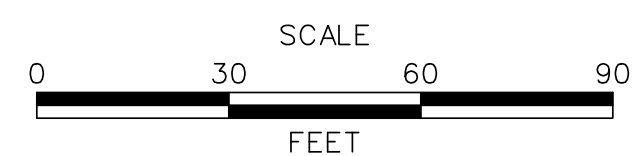
CP-26
SHEET NO. 92
TOTAL SHTS. 875

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

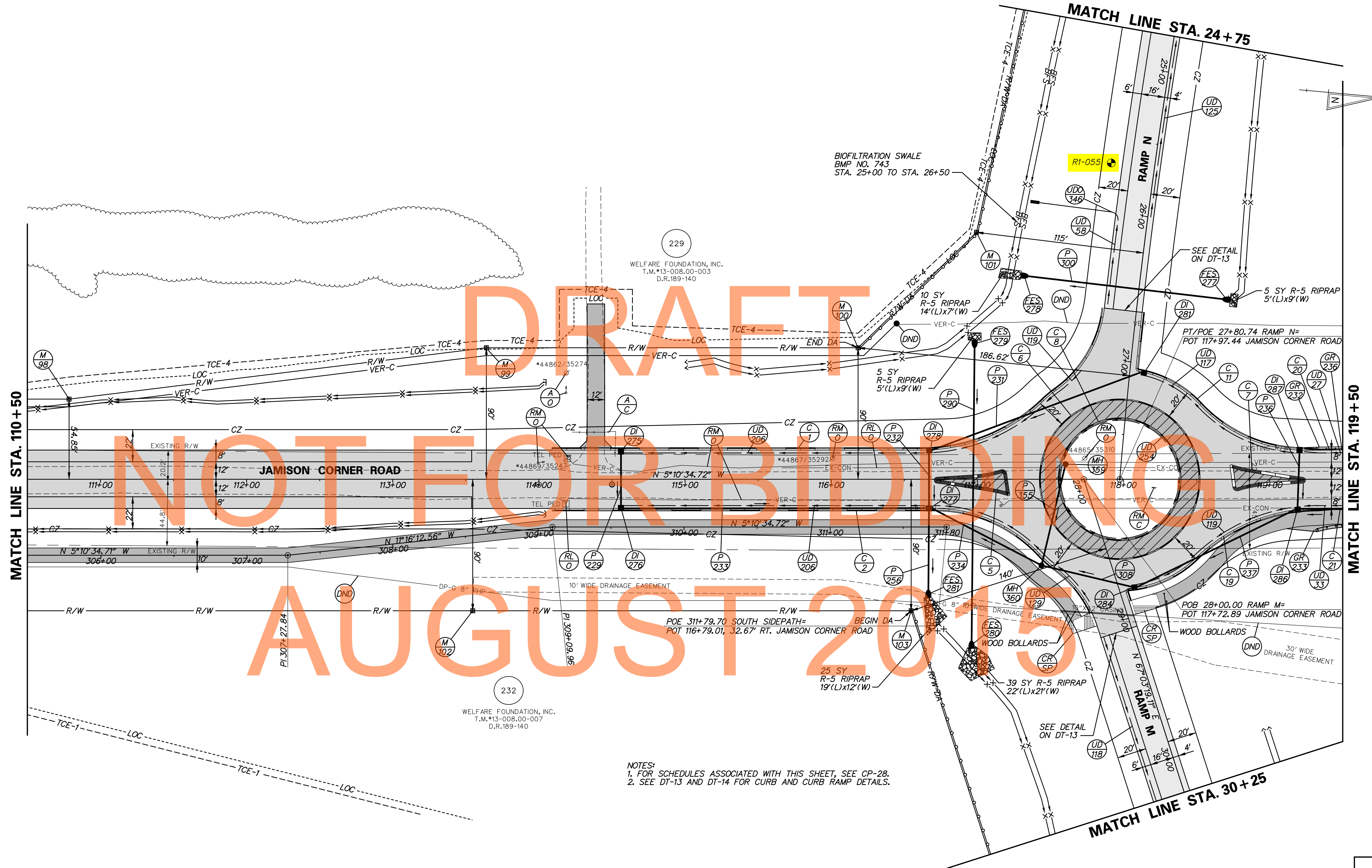


US 301, SR 896 TO SR 1

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

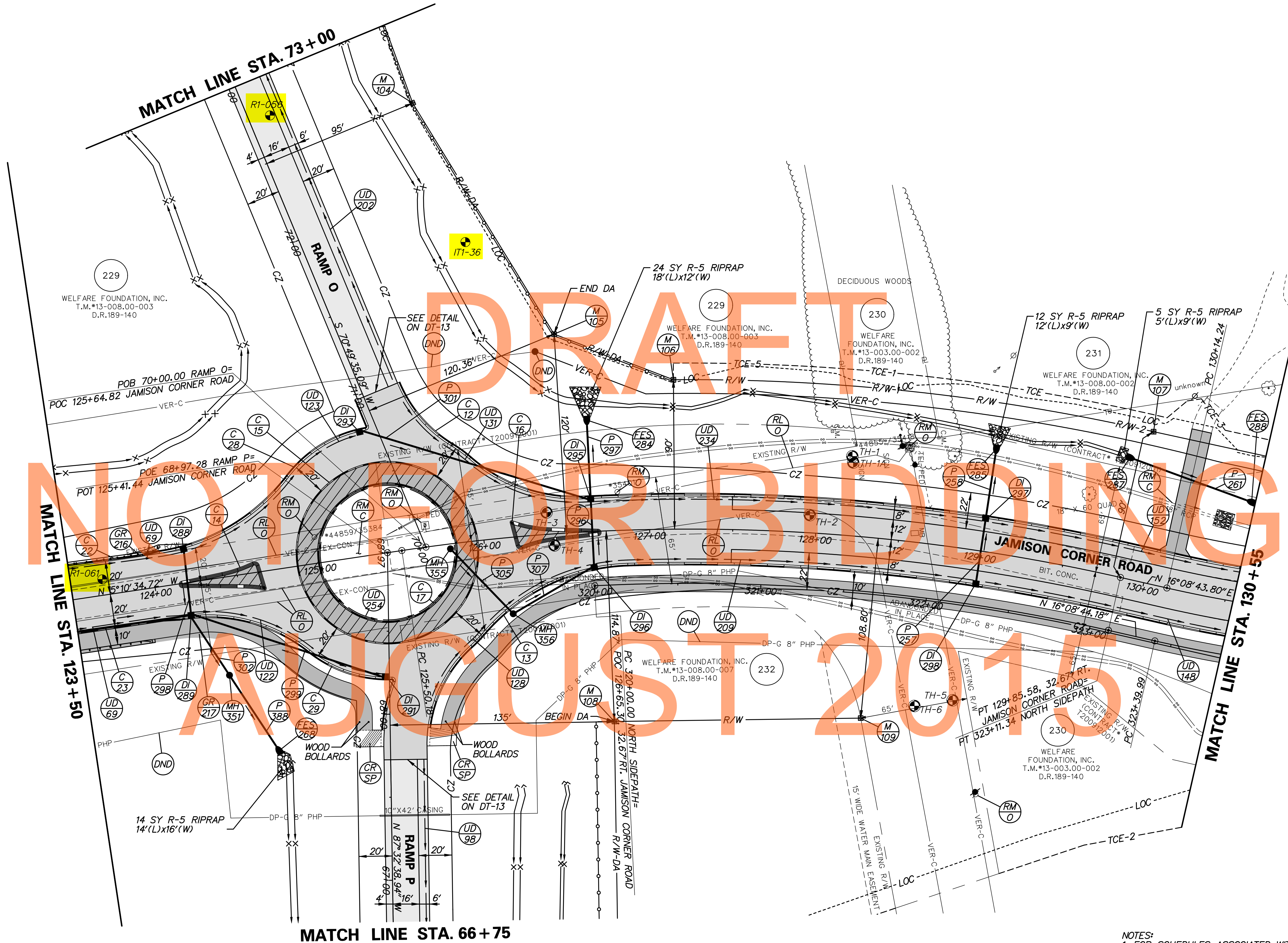
BORING LOCATION PLAN Sheet 24 of 37

CP-27
SHEET NO.
93
TOTAL SHTS.
875



NOTES:  
 1. FOR SCHEDULES ASSOCIATED WITH THIS SHEET, SEE CP-28.  
 2. SEE DT-13 AND DT-14 FOR CURB AND CURB RAMP DETAILS.





WELFARE FOUNDATION, INC.  
T.M.#13-008.00-003  
D.R.189-140

WELFARE FOUNDATION, INC.  
T.M.#13-008.00-003  
D.R.189-140

WELFARE FOUNDATION, INC.  
T.M.#13-003.00-002  
D.R.189-140

WELFARE FOUNDATION, INC.  
T.M.#13-008.00-002  
D.R.189-140

WELFARE FOUNDATION, INC.  
T.M.#13-008.00-007  
D.R.189-140

WELFARE FOUNDATION, INC.  
T.M.#13-003.00-002  
D.R.189-140

MATCH LINE STA. 123+50

MATCH LINE STA. 130+55

MATCH LINE STA. 73+00

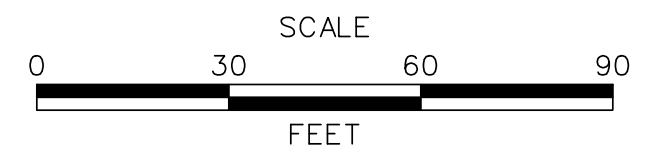
MATCH LINE STA. 66+75

- NOTES:  
1. FOR SCHEDULES ASSOCIATED WITH THIS SHEET, SEE CP-30.  
2. SEE DT-13 AND DT-14 FOR CURB AND CURB RAMP DETAILS.

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ADDENDUMS / REVISIONS



**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
Sheet 25 of 37

CP-29
SHEET NO. 95
TOTAL SHTS. 875



UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
342	63'	72.68
343	67'	70.43

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
218	GUARDRAIL END ANCHORAGE 31	61+32.71	24.00 RT.	12.50'
219	GUARDRAIL END ANCHORAGE 31	60+82.93	6.00 LT.	12.50'
220	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	59+45.21	24.00 RT.	187.50'

232  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-007  
D.R.189-140

232  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-007  
D.R.189-140

MATCH LINE STA. 66 + 75

MATCH LINE STA. 59 + 25

MATCH LINE STA. 58 + 50

DRAFT  
NOT FOR BIDDING

AUGUST 2015

SEE SHEETS 833-875 FOR TOLL PLAZA DETAILS

PARKING AREA

RAMP P

SWM1-34-1

IT1-40

R1-060

R1-058

IT1-38

UD 156

UD 342

UD 262

UD 343

UD 323

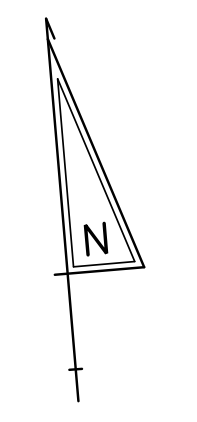
GR 220

GR 218

GR 219

M 115

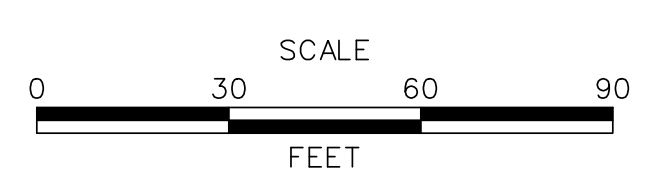
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ADDENDUMS / REVISIONS	



US 301,  
SR 896 TO SR 1

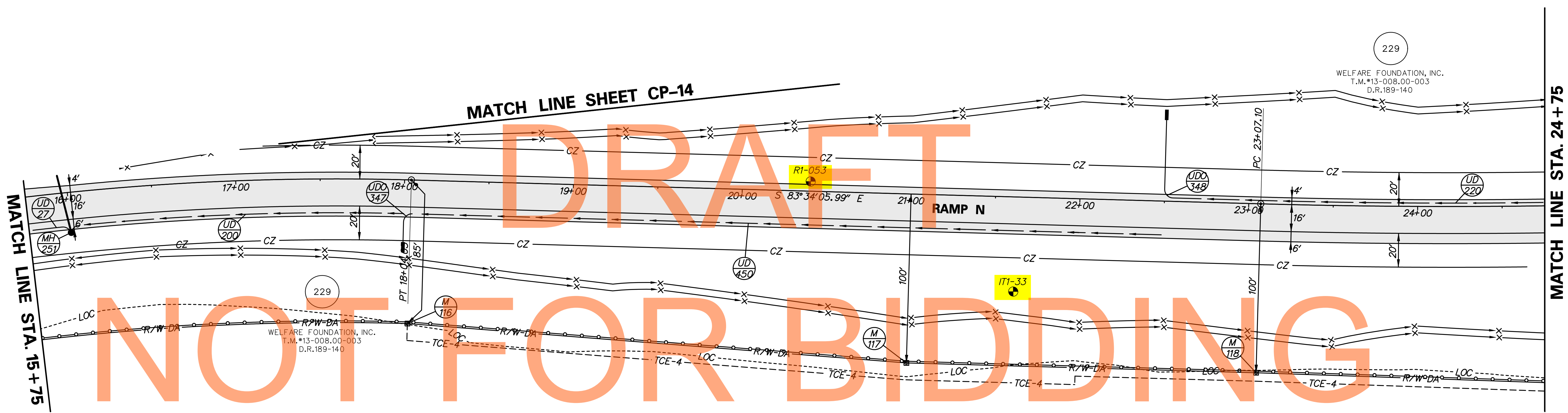
CONTRACT T200911308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: KGMA
	CHECKED BY: TAO

BORING LOCATION PLAN  
Sheet 27 of 37

CP-33
SHEET NO. 99
TOTAL SHTS. 875

MANHOLE SCHEDULE					
NO.	STATION	OFFSET	TYPE/SIZE	T. S. EL.	INV. EL.
251	16+00	27.79	48" x 30"	77.44	73.74

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
347	21'	75.06
348	51'	73.06

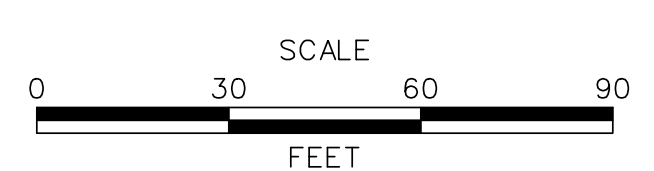


AUGUST 2015

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ADDENDUMS / REVISIONS	



**US 301,  
SR 896 TO SR 1**

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

BORING LOCATION PLAN  
Sheet 28 of 37

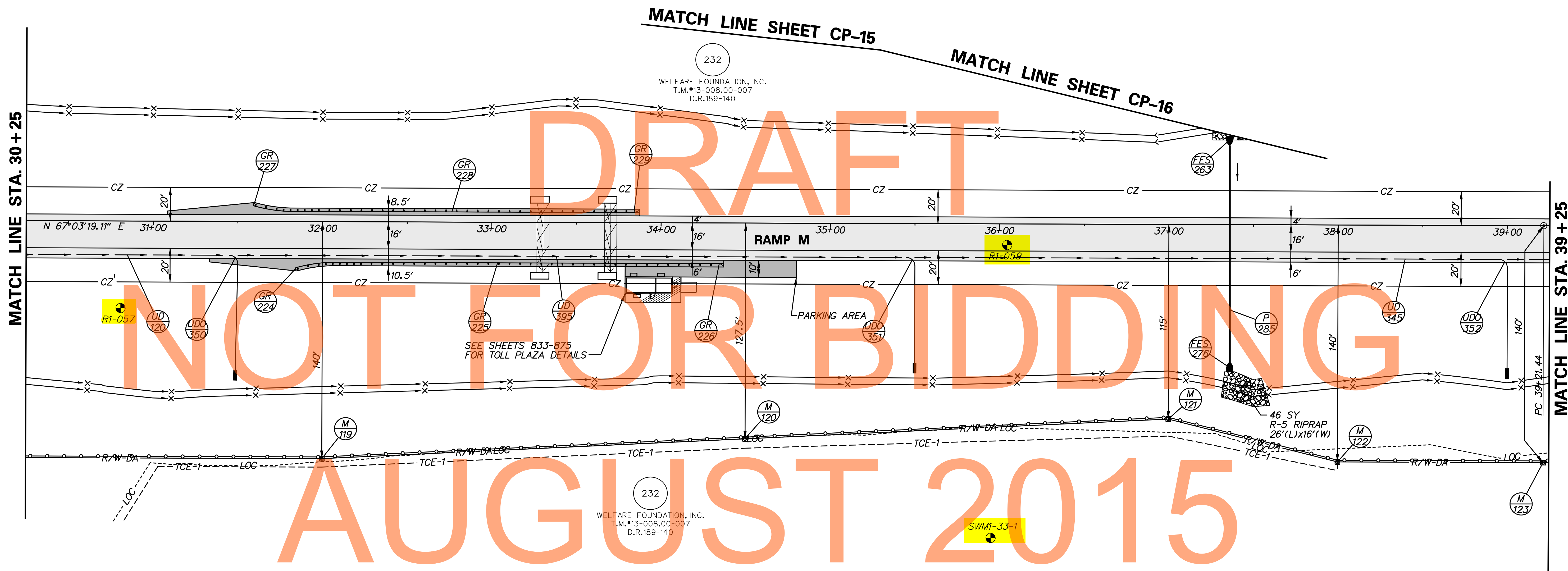
<b>CP-34</b>
SHEET NO. 100
TOTAL SHTS. 875

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
224	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	31+84.36	27.24' RT.	50.00'
225	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	32+35.48	24.00' RT.	187.50'
226	GUARDRAIL END ANCHORAGE 31	34+22.98	24.00' RT.	12.50'
227	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	31+59.36	9.24' LT.	50.00'
228	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	32+10.48	6.00' LT.	162.50'
229	GUARDRAIL END ANCHORAGE 31	33+72.98	6.00' LT.	12.50'

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INV. EL.	DIS. EL.
285	24" RCP	IV	128'	0.0461	62.77	56.89

UNDERDRAIN OUTLETS			
NO.	LENGTH	DIS.	EL.
350	74'	65.39	
351	69'	60.69	
352	71'	56.24	

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
263	24" RCP	0.0461	YES
276	24" RCP	0.0461	NO



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ADDENDUMS / REVISIONS	

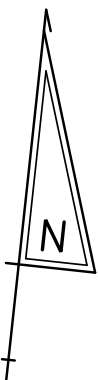


**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
Sheet 29 of 37

CP-35
SHEET NO. 101
TOTAL SHTS. 875



MATCH LINE SHEET CP-16

MATCH LINE SHEET CP-17

SWM1-35-1

232  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-007  
D.R.189-140

PROPOSED WET POND  
STORMWATER  
MANAGEMENT FACILITY  
BMP NO. 731  
STA. 785+00 TO STA. 789+00

DRAFT  
NOT FOR BIDDING  
AUGUST 2015

232  
WELFARE FOUNDATION, INC.  
T.M.\*13-008.00-007  
D.R.189-140

415 SY R-5 RIPRAP  
163'(L)x23'(W)

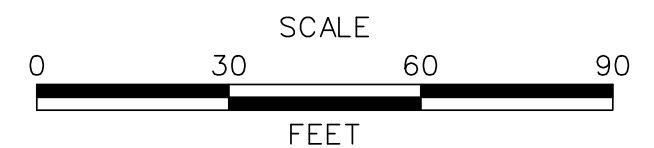
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DELAWARE  
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NO.	DATE	DESCRIPTION



US 301,  
SR 896 TO SR 1

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

BORING LOCATION PLAN  
Sheet 30 of 37

CP-36
SHEET NO. 102
TOTAL SHTS. 875

CURB AND GUTTER SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
307	PCC CURB AND GUTTER, TYPE 3-8	156.12'
308	PCC CURB AND GUTTER, TYPE 3-8	94.62'
309	PCC CURB AND GUTTER, TYPE 1-4	90.45'
310	PCC CURB AND GUTTER, TYPE 1-4	70.06'

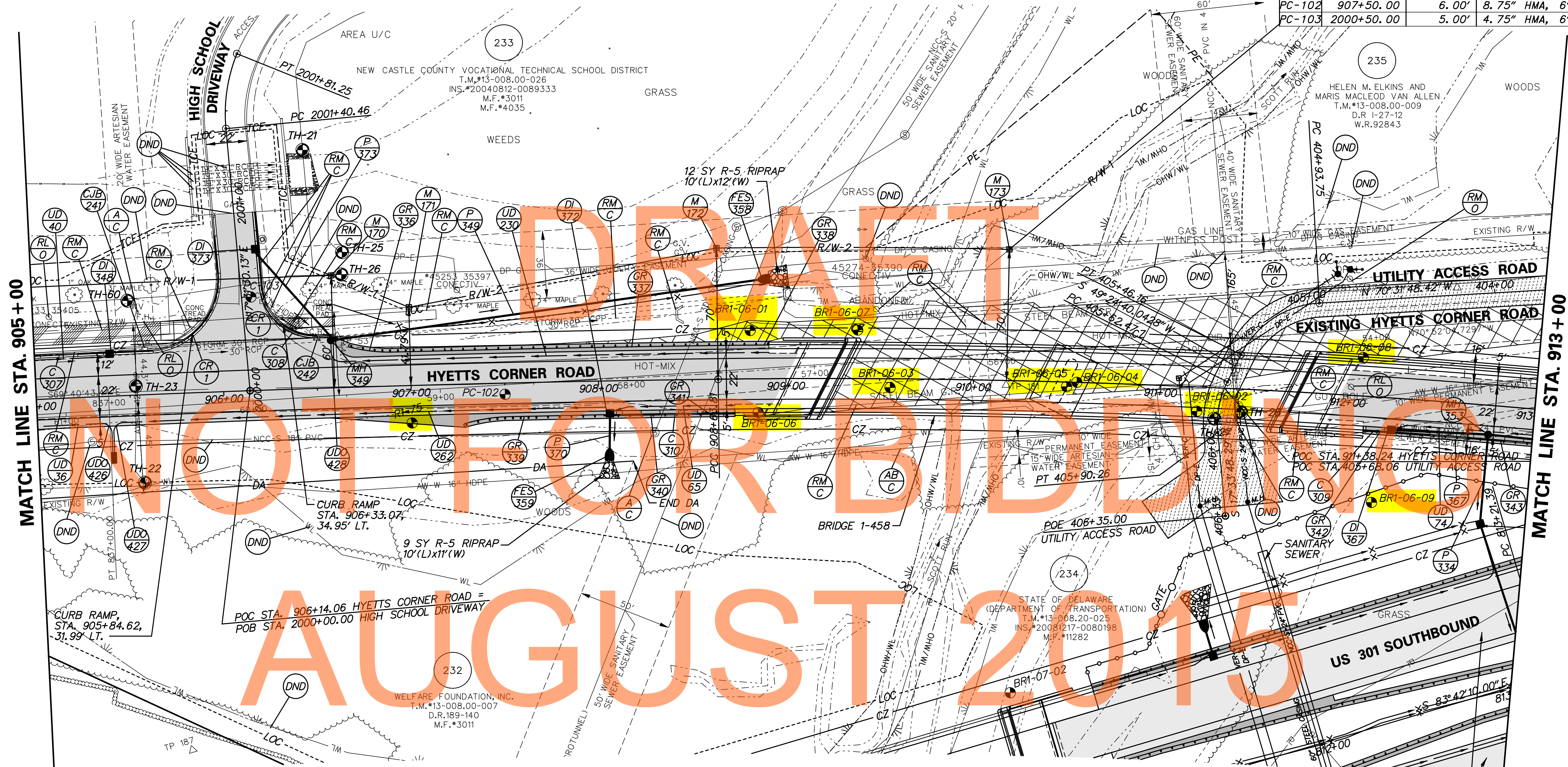
SEE CURB TRANSITION DETAILS AT GUARDRAIL TO BARRIER CONNECTION, SHEET DT-03.

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
TH-21	DPG	906+46.26	-127.40	33.38	2.98	6" PLASTIC
TH-22	ARTESIAN	905+55.97	46.86	32.49	3.72	12" METAL
TH-23	ARTESIAN	905+53.24	-4.82	35.93	7.60	12" METAL
TH-25	DPE	906+65.42	-72.25	36.36	3.53	3/4" CABLE
TH-26	DPG	906+64.70	-60.32	36.46	4.90	8" PLASTIC
TH-27	ARTESIAN	911+29.39	16.53	32.29	12.66	12" PLASTIC
TH-28	ARTESIAN	911+43.58	12.39	32.00	10.96	12" PLASTIC
TH-60	DPG	905+50.66	-50.55	37.45	4.76	8" PLASTIC

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
*348	905+40	-22.70	48" x 30"	1	36.46	29.33
367	912+24	-18.00	34" x 24"	1	61.27	56.50
372	908+06	18.00	34" x 18"	1	41.04	33.02
373	906+21	-75.57	48" x 30"	1	35.49	32.26

\*INLET SHALL BE CAST IN PLACE ON EXISTING PIPE IN ACCORDANCE WITH STANDARD D-5

ROADWAY CORE SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
PC-102	907+50.00	6.00'	8.75" HMA, 6" CR
PC-103	2000+50.00	5.00'	4.75" HMA, 6" CR



GUARDRAIL SCHEDULE			
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	LENGTH
336	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	906+67.69	50.00
337	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	907+18.79	153.20
338	GUARDRAIL TO BARRIER CONN., APPROACH TYPE 1-31	908+63.81	19.75
339	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	907+27.98	50.00
340	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	907+78.94	75.00
341	GUARDRAIL TO BARRIER CONN., APPROACH TYPE 1-31	908+52.79	19.75
342	GUARDRAIL TO BARRIER CONN., APPROACH TYPE 1-31	912+09.22	19.75
343	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	912+29.05	70.66

FLARED END SECTION SCHEDULE			
NO.	SIZE/TYPE	SLOPE	SAFETY GRATE
358	30" RCP	0.0030	NO
359	15" RCP	0.0500	NO

CONVERT TO JUNCTION BOX SCHEDULE				
NO.	STATION	OFFSET	T.C. EL.	INV. EL.
241	905+58.89	-23.11'	35.54	29.18
242	906+50.59	-25.79'	34.06	29.04

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
349	30" RCP	IV	229'	0.0030	28.91	28.22
367	15" RCP	IV	49'	0.0050	56.50	56.26
373	15" RCP	IV	60'	0.0101	32.26	31.66
370	15" RCP	IV	19'	0.0500	33.02	32.12
334	15" RCP	IV	90'	0.0337	63.00	60.00

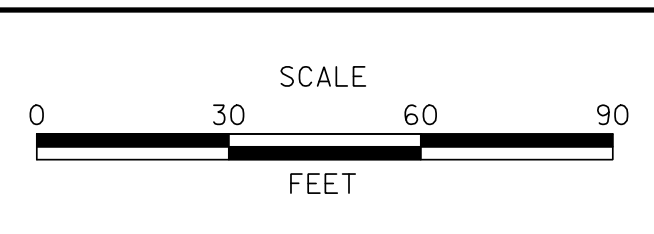
UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
426	16'	34.24
427	16'	34.24
428	12'	34.00

MANHOLE SCHEDULE					
NO.	STATION	OFFSET	SIZE	T.G. EL.	INV. EL.
349	906+57.95	-25.43'	48" x 30"	37.27	28.91
353	912+76.21	15.63'	48" x 30"	63.40	50.50

SEE SHEETS CP-20 - CP-21 FOR US 301



ADDENDUMS / REVISIONS	



US 301,  
SR 896 TO SR 1

CONTRACT	BRIDGE NO.	1-6
T200911308	DESIGNED BY:	J.A.D.
COUNTY	CHECKED BY:	B.R.T.
NEW CASTLE		

BORING LOCATION PLAN  
Sheet 31 of 37

CP-38
SHEET NO.
104
TOTAL SHTS.
875



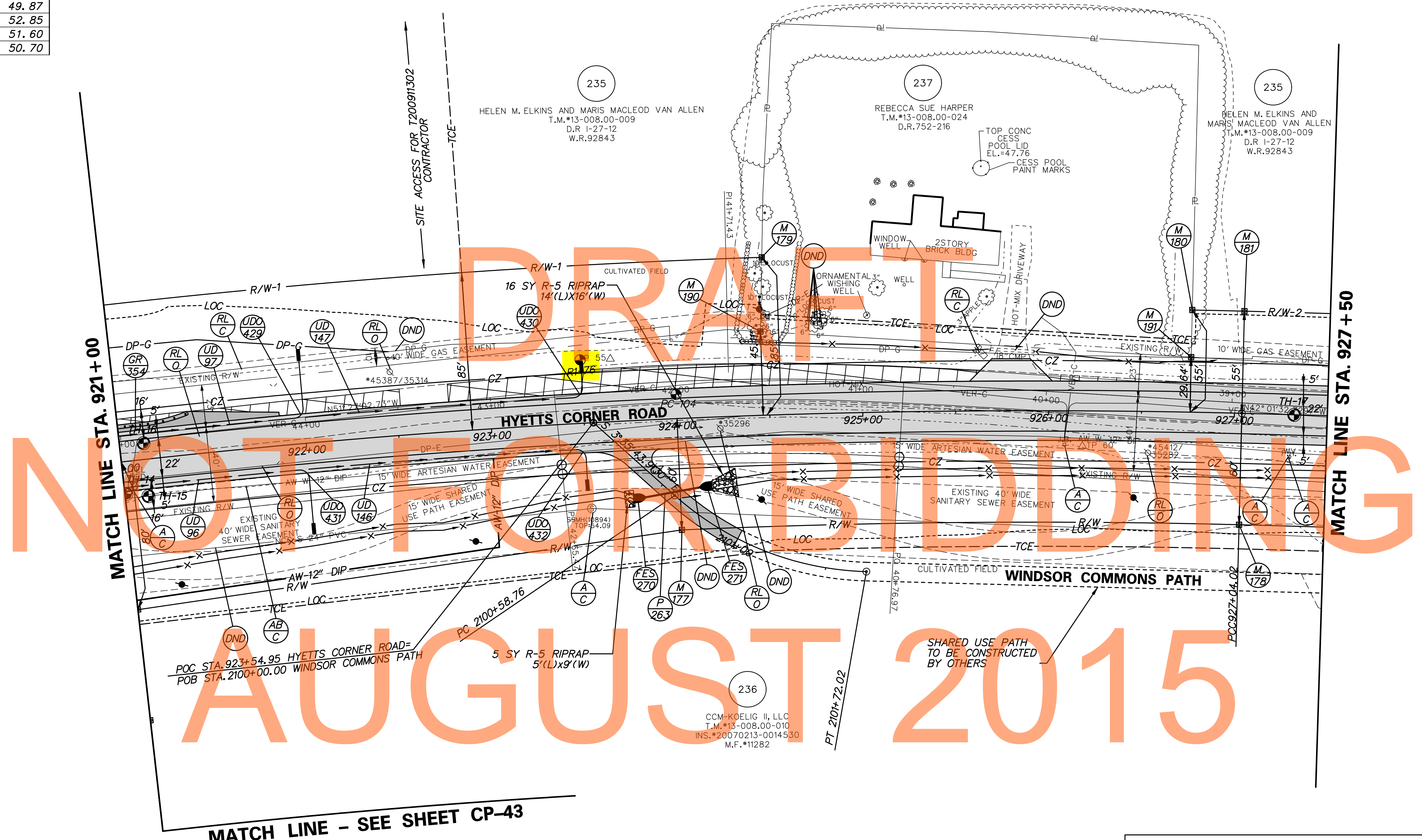


GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
354	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 2-31	920+87.16	-18.00	50.00

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
270	18" RCP	0.0070	NO
271	18" RCP	0.0070	NO

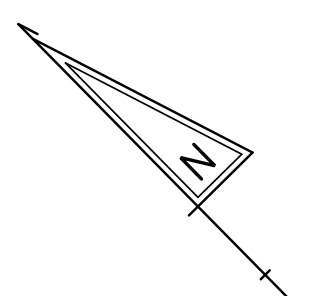
DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
263	18" RCP	IV	37	0.0070	50.02	49.75

UNDERDRAIN OUTLETS		
NO.	LENGTH	DIS. EL.
429	37'	49.87
430	18'	52.85
431	35'	51.60
432	22'	50.70



UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O. D. & MATERIAL
TH-14	VERIZON	921+00.78	17.41	54.06	1.32	2 1/4" CABLE
TH-15	ARTESIAN	921+12.52	19.93	53.89	3.74	12" METAL
TH-16	VERIZON	921+12.95	-8.75	53.57	2.43	1" CABLE
TH-17	VERIZON	927+32.19	0.12	45.48	3.06	1" CABLE

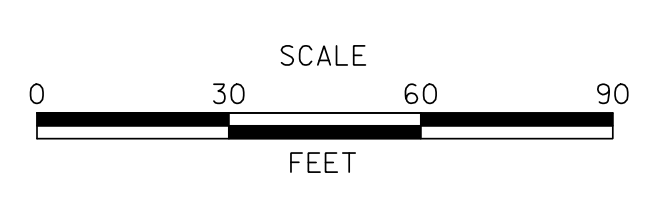
ROADWAY CORE SCHEDULE			
NO.	STATION	OFFSET	DESCRIPTION
PC-104	924+00.00	13.00' LT.	3" HMA, 5.5" STONE



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ADDENDUMS / REVISIONS



US 301,  
 SR 896 TO SR 1

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

BORING LOCATION PLAN  
 Sheet 33 of 37

CP-40
SHEET NO.
106
TOTAL SHTS.
875



PHASE 2-EARTH DIKE SCHEDULE					
NO.	BEG. IN STA.	END STA.	OFFSET	LENGTH	TYPE
52	832+10	833+32	-365'	151'	A-1
53	831+58	832+10	-508'	222'	A-1
54	831+58	833+31	-780'	365'	A-1

PHASE 2-SEDIMENT TRAP SCHEDULE										
NO.	D. AREA	LENGTH	WIDTH	DEPTH	OUT. TYPE	WEIR EL.	CLEAN EL.	WEIR LENGTH	EMBANK. EL.	
13	14.19 AC	164'	84'	2.00'	RIPRAP	29.00	26.00	16'	30.00	
22	1.74 AC	60'	29'	2.00'	STONE	28.60	26.00	7'	30.00	

MATCHLINE SHEET GR-04

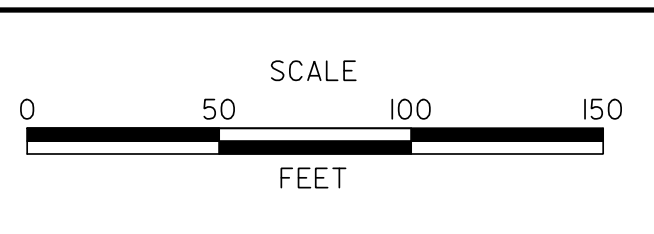
- NOTES:**
- SEE SHEET GR-01 FOR NOTES REGARDING VILLAGE OF SCOTT RUN WEST BORROW SITE.
  - WITHIN THE LIMITS INDICATED, EROSION AND SEDIMENT CONTROL SHALL BE PER ITEM 202572 - BORROW AREA EROSION AND SEDIMENT CONTROL AND DEWATERING.
  - WITHIN THE STORMWATER MANAGEMENT LIMITS INDICATED, AND ABOVE TOP OF BERM ELEVATION (EL. 34), EROSION AND SEDIMENT CONTROL SHALL BE PER ITEM 202572 - BORROW AREA EROSION AND SEDIMENT CONTROL AND DEWATERING. ADDITIONAL EROSION AND SEDIMENT CONTROL ACTIVITIES INDICATED FOR CONSTRUCTION OF THE STORMWATER MANAGEMENT POND SHALL BE PAID UNDER THE APPLICABLE EROSION AND SEDIMENT CONTROL LINE ITEMS. SEE CONSTRUCTION PHASING, MOT, & EROSION CONTROL PLANS.
  - EROSION AND SEDIMENT CONTROL FOR TOPSOIL STOCKPILES SHALL BE PAID PER THE APPLICABLE BID ITEMS.



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ADDENDUMS / REVISIONS

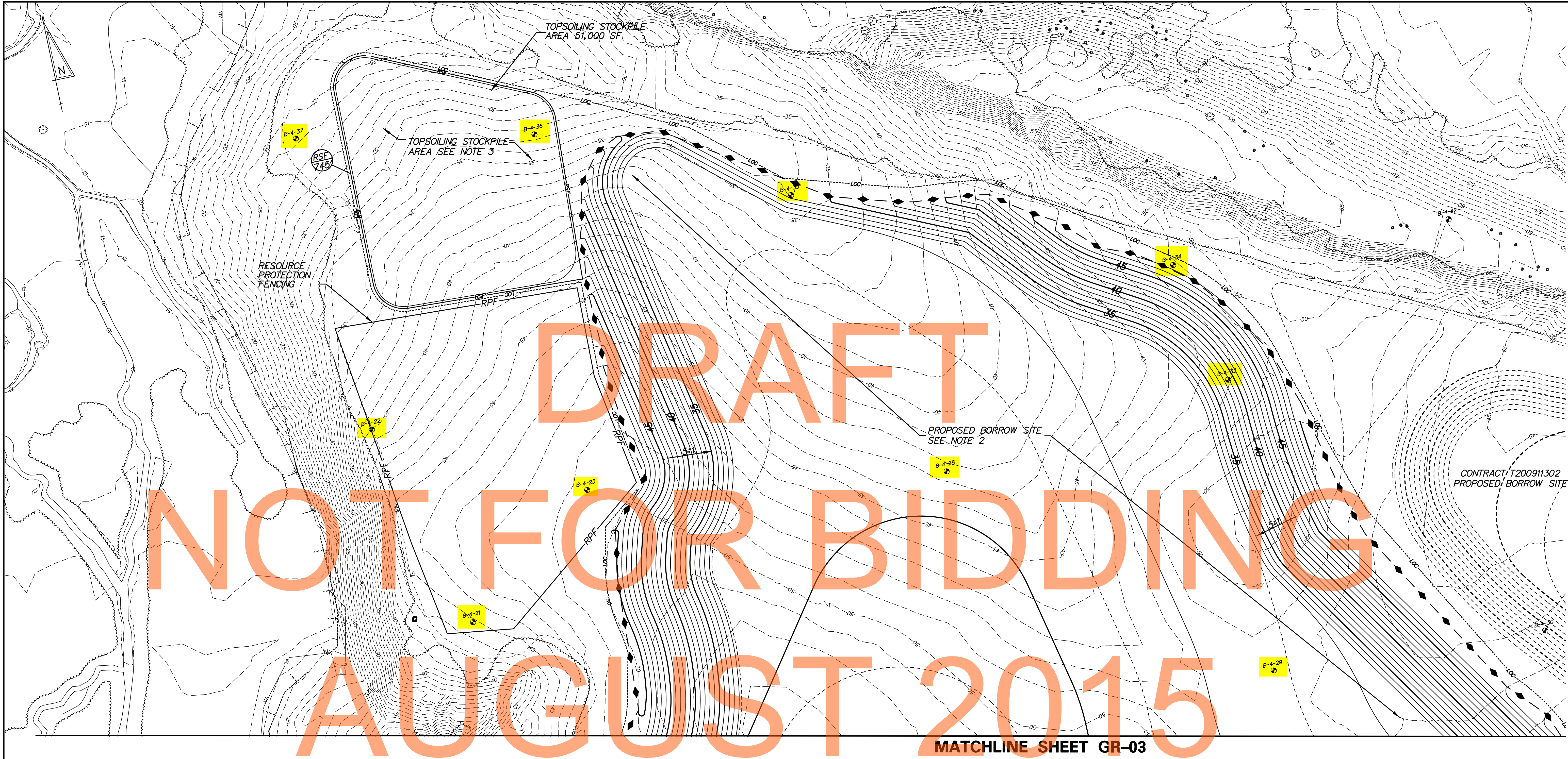


**US 301,  
SR 896 TO SR 1**

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

**BORING LOCATION PLAN**  
Sheet 35 of 37

GR-03
SHEET NO. 221
TOTAL SHTS. 875



CONTRACT T20091302  
PROPOSED BORROW SITE

DRAFT  
NOT FOR BIDDING  
AUGUST 2015

MATCHLINE SHEET GR-03

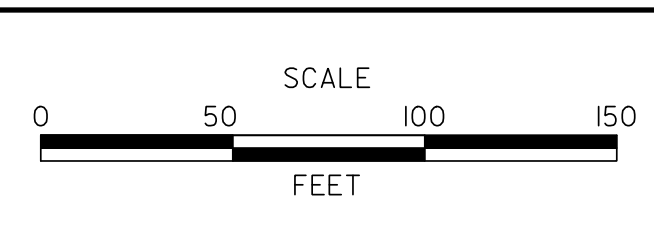
**NOTES:**

1. SEE SHEET GR-01 FOR NOTES REGARDING VILLAGE OF SCOTT RUN EAST BORROW SITE.
2. WITHIN THE LIMITS INDICATED, EROSION AND SEDIMENT CONTROL SHALL BE PER ITEM 202572 - BORROW AREA EROSION AND SEDIMENT CONTROL AND DEWATERING.
3. EROSION AND SEDIMENT CONTROL FOR TOPSOIL STOCKPILES SHALL BE PAID PER THE APPLICABLE BID ITEMS.

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ADDENDUMS / REVISIONS	

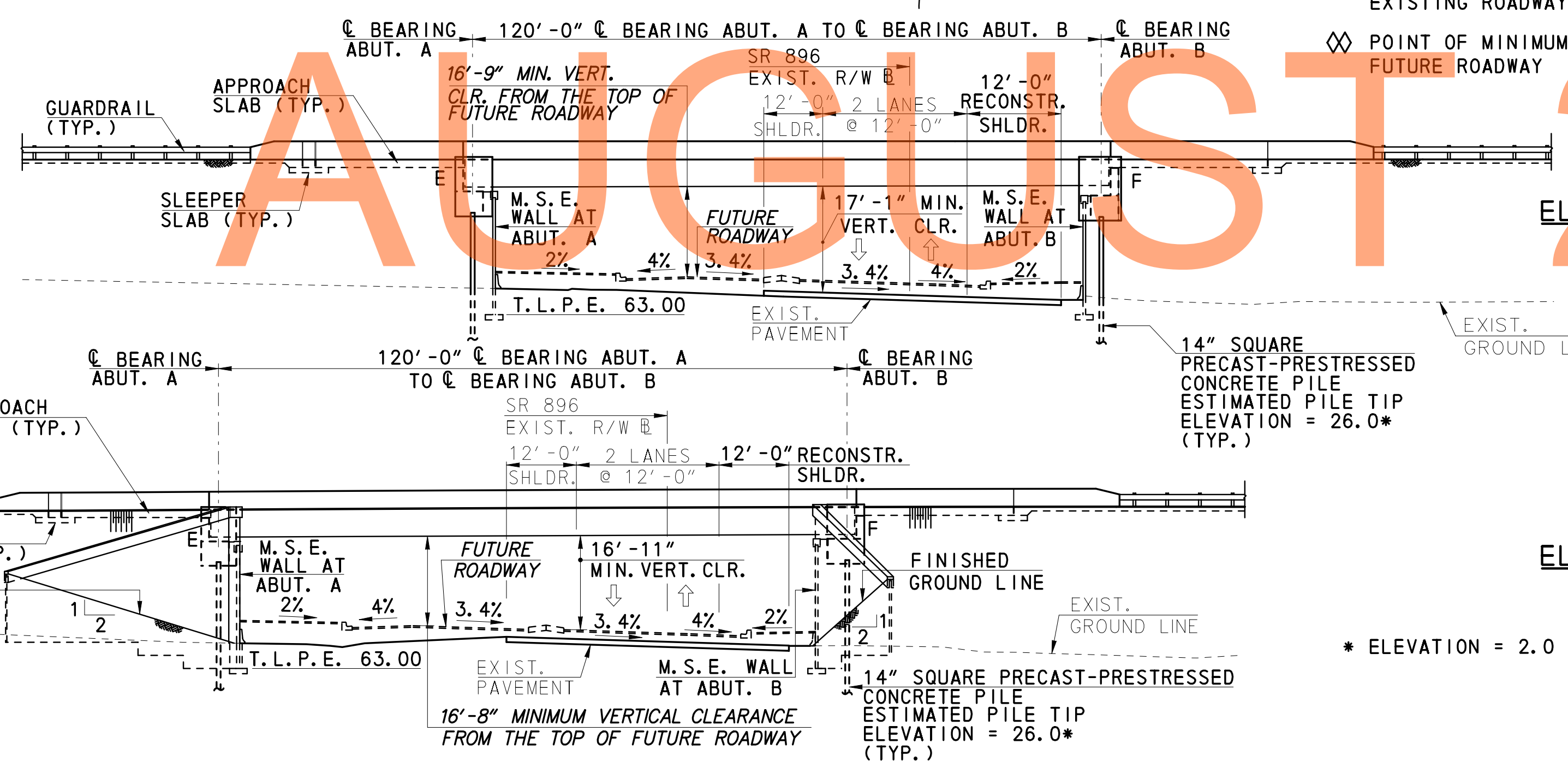
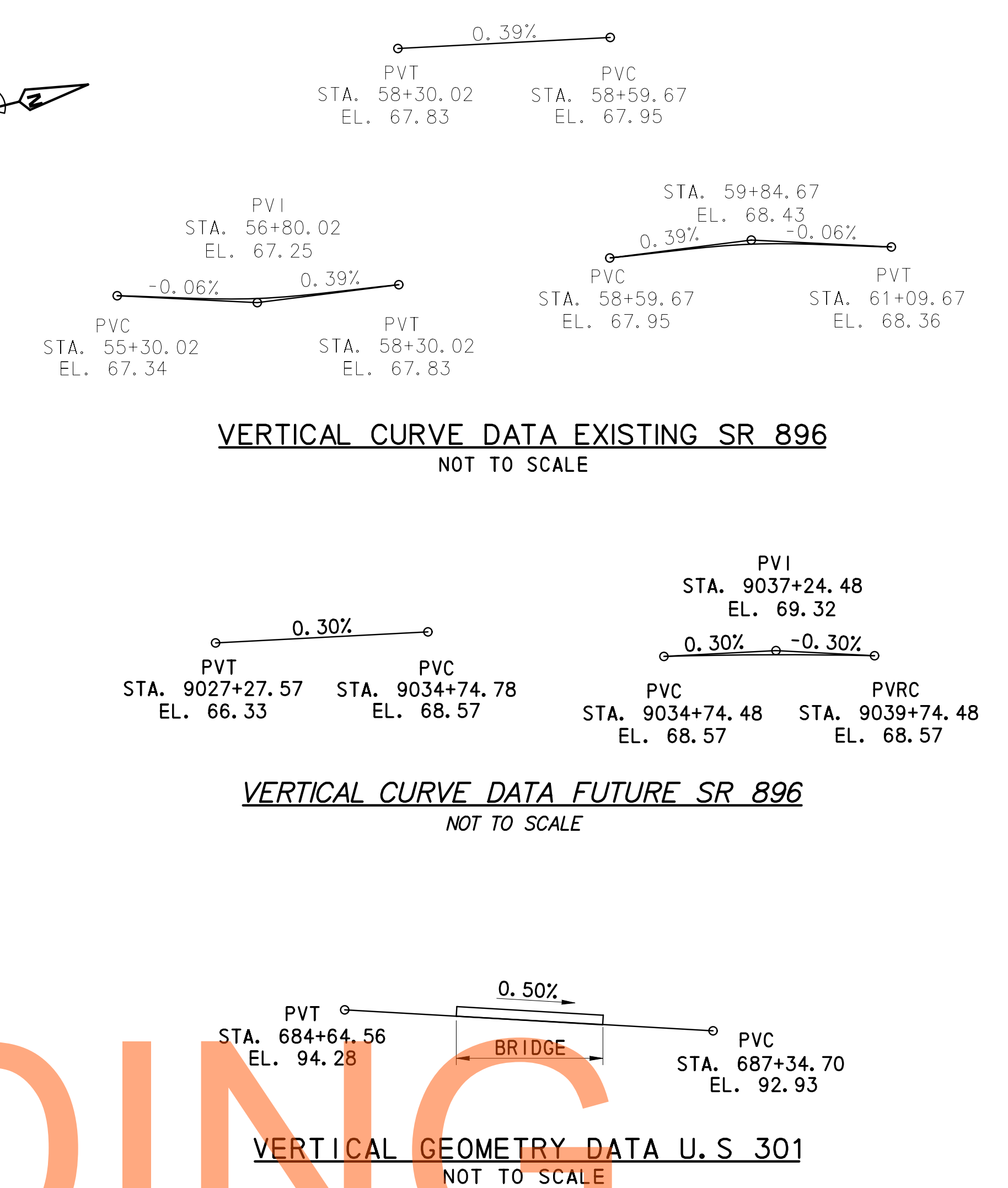
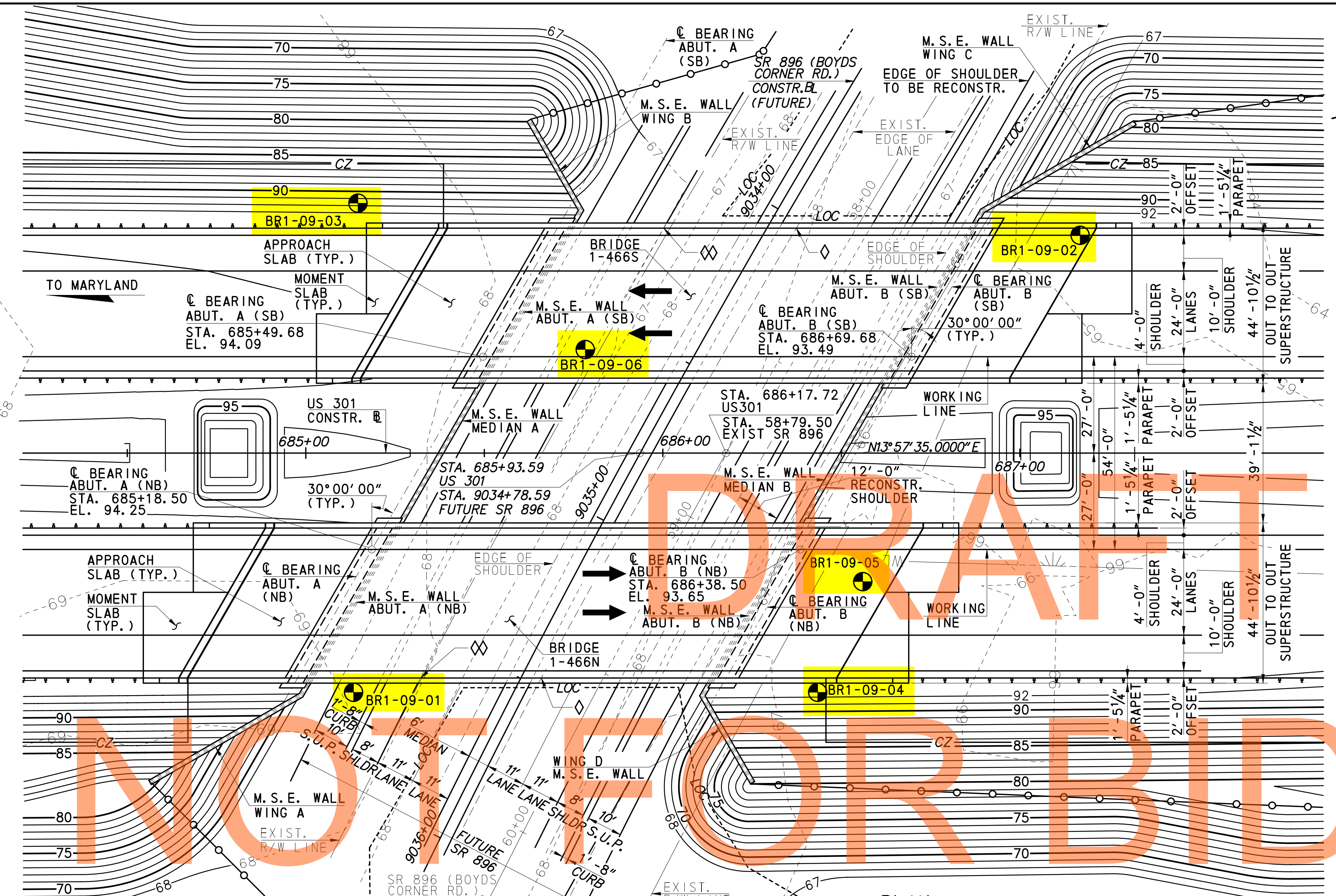


**US 301,  
SR 896 TO SR 1**

CONTRACT T20091308	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: S.E.S. CHECKED BY: B.R.T.

BORING LOCATION PLAN  
Sheet 36 of 37

<b>GR-04</b>
SHEET NO. 222
TOTAL SHTS. 875



- LEGEND:**
- ABUT. = ABUTMENT
  - APPROX. = APPROXIMATE
  - CONSTR. = CONSTRUCTION
  - CLR. = CLEAR
  - CZ = CLEAR ZONE
  - DA = DENIAL OF ACCESS
  - E = EXPANSION
  - EL. = ELEVATION
  - F = FIXED
  - LT. = LEFT
  - MIN. = MINIMUM
  - M.S.E. = MECHANICALLY STABILIZED EARTH
  - NB = NORTHBOUND
  - P/S = PRESTRESSED
  - RECONSTR. = RECONSTRUCTED
  - RT. = RIGHT
  - R/W = RIGHT-OF-WAY
  - SB = SOUTHBOUND
  - SHLDR = SHOULDER
  - STA. = STATION
  - TYP. = TYPICAL
  - T.L.P.E. = TOP OF LEVELING PAD ELEVATION
  - VERT. = VERTICAL
  - W.S. = WATER SURFACE