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09/08/99

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

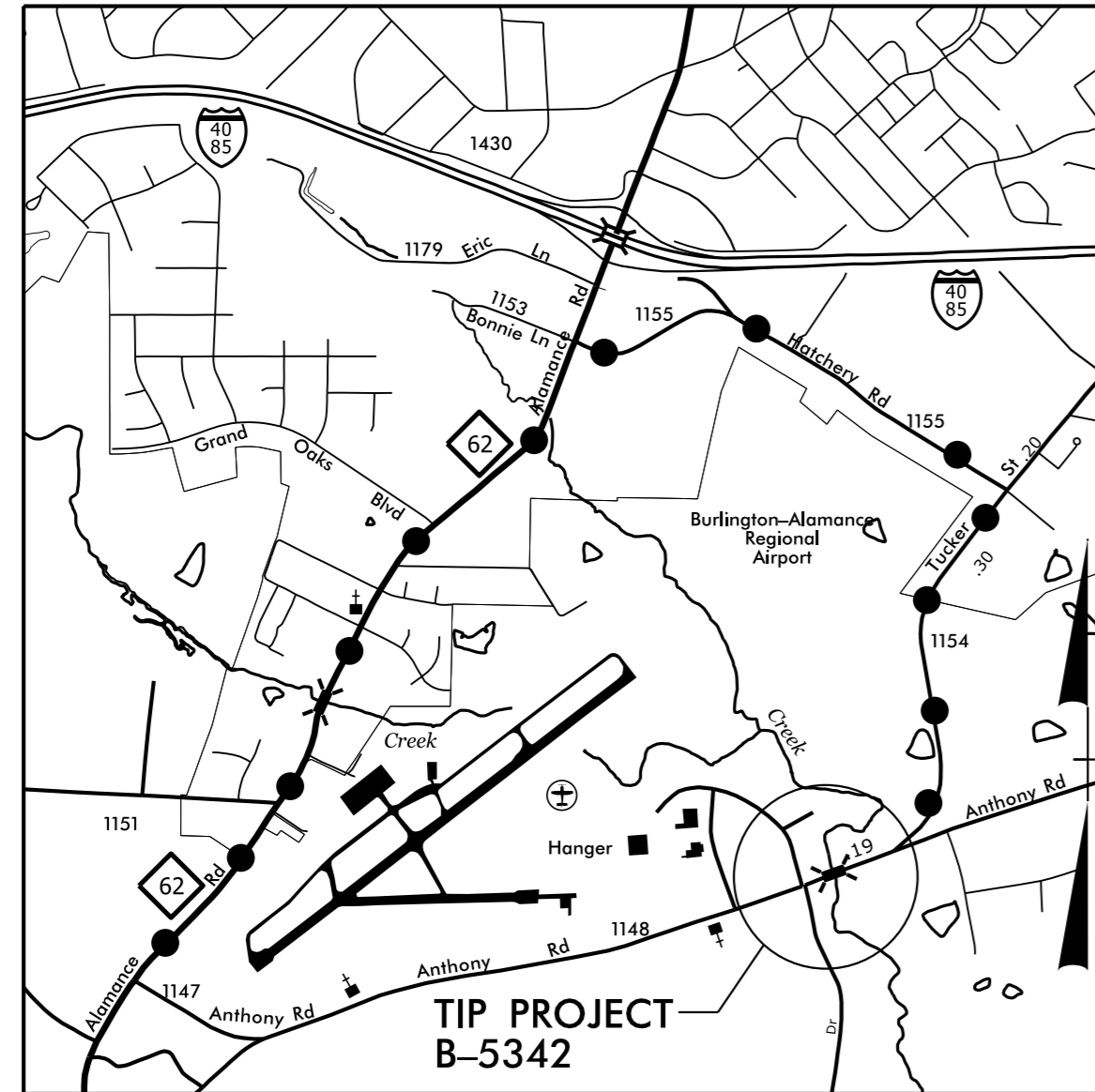
ALAMANCE COUNTY

LOCATION: BRIDGE NO. 169 OVER GUM CREEK ON SR 1148 (ANTHONY ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

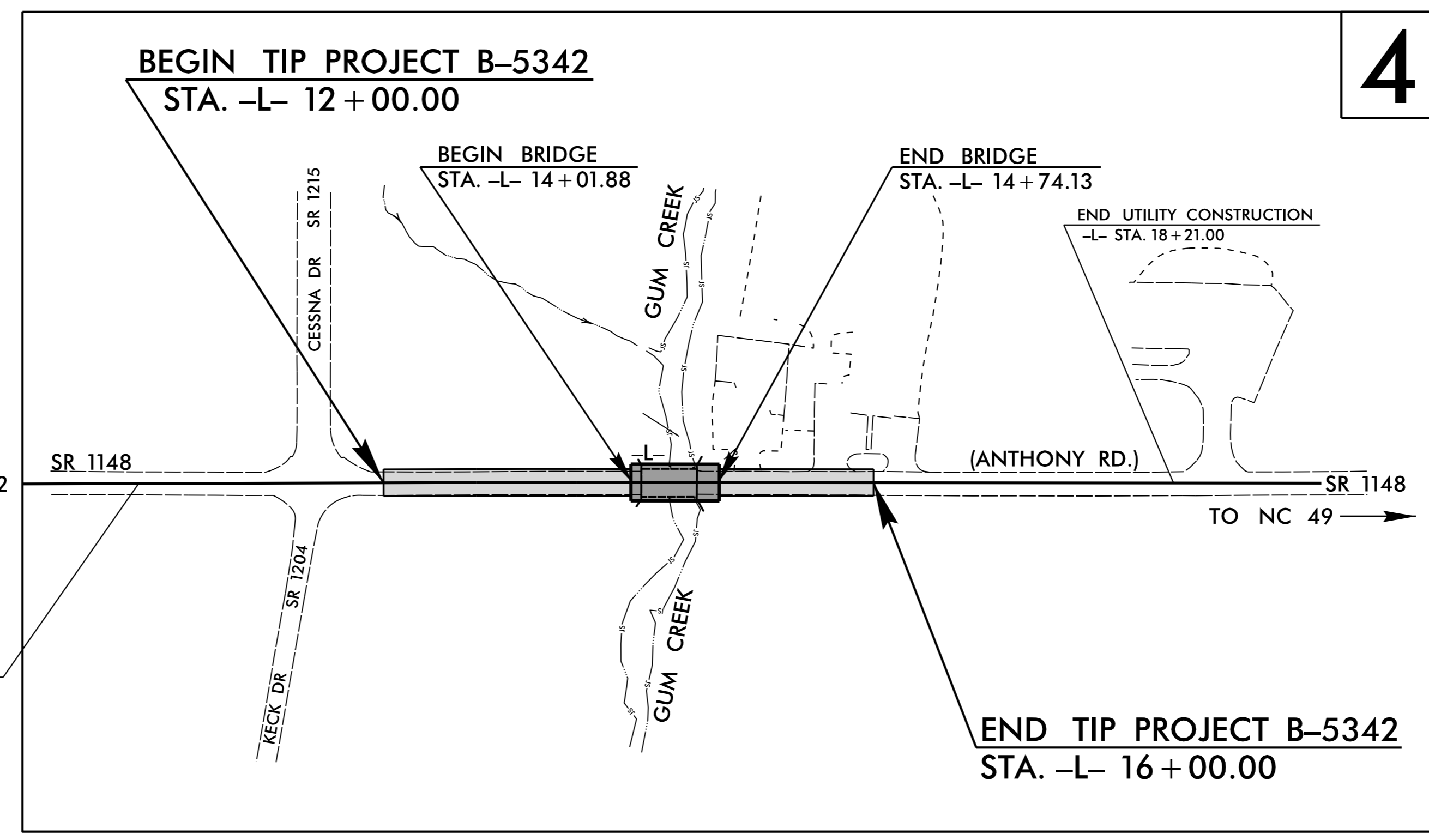
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5342	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
46056.1.1	BRSTP-1148(5)	PE	
46056.2.FD1	BRSTP-1148(5)	RW & UTIL	
46056.3.2		CONST.	

TIP PROJECT: B-5342

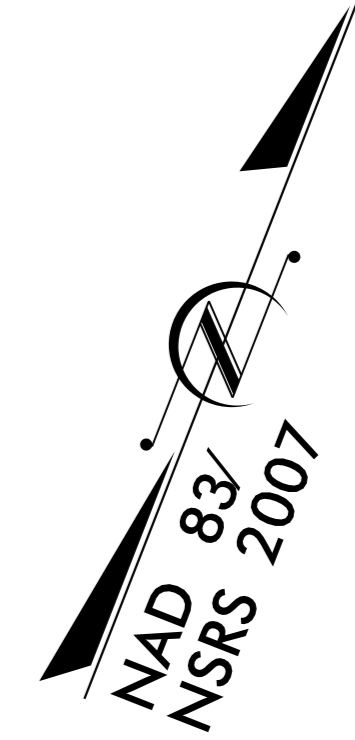


VICINITY MAP

●●●●● OFFSITE DETOUR

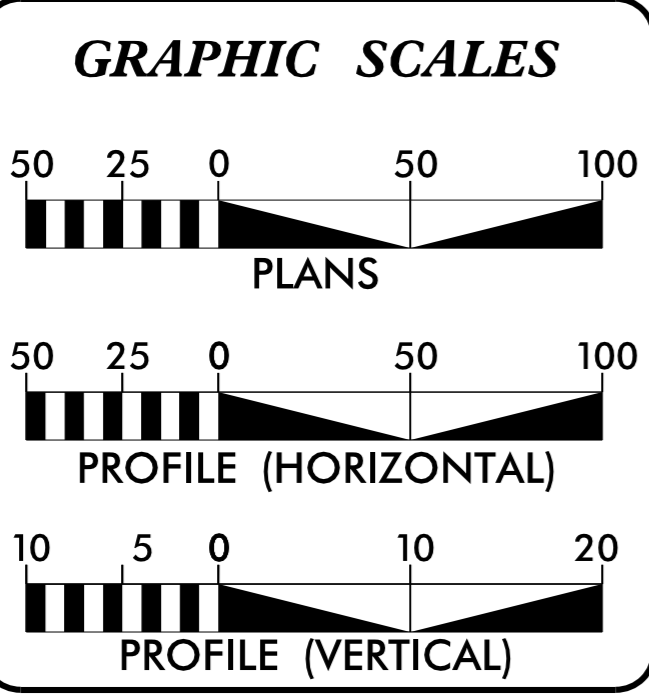


4



CONTRACT: C203660

*DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVE "K" FACTORS AND NIGHTTIME SSD.



DESIGN DATA

ADT 2015 =	4800 VPD
ADT 2035 =	6500 VPD
K =	11 %
D =	55 %
T =	8 % *
V =	50 MPH
* TTST = 2% DUAL = 6%	
FUNC CLASS = COLLECTOR	
SUB REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-5342 =	0.062 MI
LENGTH STRUCTURE TIP PROJECT B-5342 =	0.014 MI
TOTAL LENGTH OF TIP PROJECT B-5342 =	0.076 MI

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

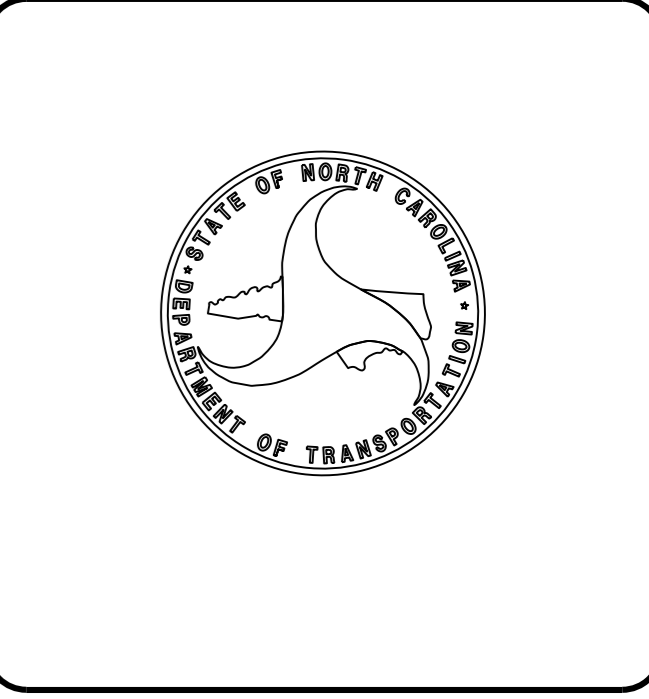
2012 STANDARD SPECIFICATIONS	
RIGHT OF WAY DATE: DECEMBER 11, 2014	JAMES A. SPEER, PE PROJECT ENGINEER
LETTING DATE: DECEMBER 15, 2015	ALLISON K. WHITE PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

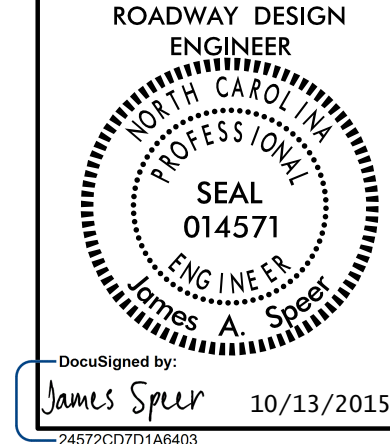
DocuSigned by:
John Oglesby
SIGNATURE: 10/19/2015 P.E.

ROADWAY DESIGN ENGINEER

DocuSigned by:
James A. Speer
SIGNATURE: 10/14/2015 P.E.



14-OCT-2015 07:32
R:\Roadway\Proj\B5342_Rdy_tsh.dgn
\$\$\$\$\$USERNAME\$\$\$\$\$



INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1	SURVEY CONTROL SHEET
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2H-1	STOCKPILE CONTAINMENT DETAIL
3B-1	ROADWAY SUMMARIES (EARTHWORK, GUARDRAIL, ASPHALT PAVEMENT REMOVAL, DRAINAGE, AND SHOULDER BERM GUTTER SUMMARY)
3G-1	GEOTECHNICAL SUMMARIES
4 THRU 5	PLAN AND PROFILE SHEET
TMP-1 THRU TMP-4	TRAFFIC MANAGEMENT PLANS
PMP-1	PAVEMENT MARKING PLANS
EC-1 THRU EC-4	EROSION CONTROL PLANS
RF-1	REFORESTATION DETAIL SHEET
SIGN-1 THRU SIGN-2	SIGNING PLANS
UO-1 THRU UO-2	UTILITIES BY OTHERS PLANS
X-1A	CROSS-SECTION SUMMARY SHEET
X-1 THRU X-2	CROSS-SECTIONS
S-1 THRU S-18	STRUCTURE PLANS

GENERAL NOTES: 2012 SPECIFICATIONS
 EFFECTIVE: 01-17-2012
 REVISED: 10-31-2014

EFF. 01-17-2012
 REV. 10-30-2012

GRADING AND SURFACING OR RESURFACING AND WIDENING:
 THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:
 CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:
 ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SIDE ROADS:
 THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

GUARDRAIL:
 THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

SUBSURFACE PLANS:
 NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

END BENTS:
 THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:
 UTILITY OWNERS ON THIS PROJECT ARE
 Duke Energy, Level 3 Communication, Piedmont Natural Gas, AT&T
 Time Warner Cable, City of Burlington
 ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

RIGHT-OF-WAY MARKERS:
 ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 4 - MAJOR STRUCTURES	
422.11	Reinforced Bridge Approach Fills - Sub Regional Tier
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
840.29	Frames and Narrow Slot Flat Grates
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
840.46	Traffic Bearing Precast Drainage Structure
846.01	Concrete Curb, Gutter and Curb & Gutter
846.04	Drop Inlet Installation in Shoulder Berm Gutter
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units (Beg. March 2013 Letting use detail in lieu of Standard)
876.02	Guide for Rip Rap at Pipe Outlets

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 24572CD10A463

12/05/11

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EP
Property Corner	----->
Property Monument	□ ECM
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	----- MLB
Proposed Wetland Boundary	----- MLB
Existing Endangered Animal Boundary	----- EAB
Existing Endangered Plant Boundary	----- EPB
Known Soil Contamination: Area or Site	☠ ☠
Potential Soil Contamination: Area or Site	☠ ? ☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□ †
Building	□
School	□
Church	□
Dam	□

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	----- JS
Buffer Zone 1	----- BZ 1
Buffer Zone 2	----- BZ 2
Flow Arrow	←
Disappearing Stream	----->
Spring	○
Wetland	-----
Proposed Lateral, Tail, Head Ditch	----- FLOW
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ CSX TRANSPORTATION MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◇
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	----- RW
Proposed Right of Way Line with Iron Pin and Cap Marker	----- RW ▲
Proposed Right of Way Line with Concrete or Granite RW Marker	----- RW ●
Proposed Control of Access Line with Concrete CA Marker	----- CA
Existing Control of Access	----- CA
Proposed Control of Access	----- CA
Existing Easement Line	----- E
Proposed Temporary Construction Easement	----- E
Proposed Temporary Drainage Easement	----- TDE
Proposed Permanent Drainage Easement	----- PDE
Proposed Permanent Drainage / Utility Easement	----- DUE
Proposed Permanent Utility Easement	----- PUE
Proposed Temporary Utility Easement	----- TUE
Proposed Aerial Utility Easement	----- AUE
Proposed Permanent Easement with Iron Pin and Cap Marker	----- ◇

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	----- CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	-----

VEGETATION:

Single Tree	☼
Single Shrub	☼
Hedge	-----
Woods Line	-----

Orchard	-----
Vineyard	----- Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	----- CONC
Bridge Wing Wall, Head Wall and End Wall	----- CONC WW
MINOR:	
Head and End Wall	----- CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	----- S

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	□
H-Frame Pole	●
Recorded U/G Power Line	----- P
Designated U/G Power Line (S.U.E.*)	----- P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	□
Recorded U/G Telephone Cable	----- T
Designated U/G Telephone Cable (S.U.E.*)	----- T
Recorded U/G Telephone Conduit	----- TC
Designated U/G Telephone Conduit (S.U.E.*)	----- TC
Recorded U/G Fiber Optics Cable	----- T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	----- T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	----- W
Designated U/G Water Line (S.U.E.*)	----- W
Above Ground Water Line	----- A/G Water

TV:

TV Satellite Dish	☼
TV Pedestal	⊕
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	----- TV
Designated U/G TV Cable (S.U.E.*)	----- TV
Recorded U/G Fiber Optic Cable	----- TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	----- TV FO

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	----- G
Designated U/G Gas Line (S.U.E.*)	----- G
Above Ground Gas Line	----- A/G Gas

SANITARY SEWER:

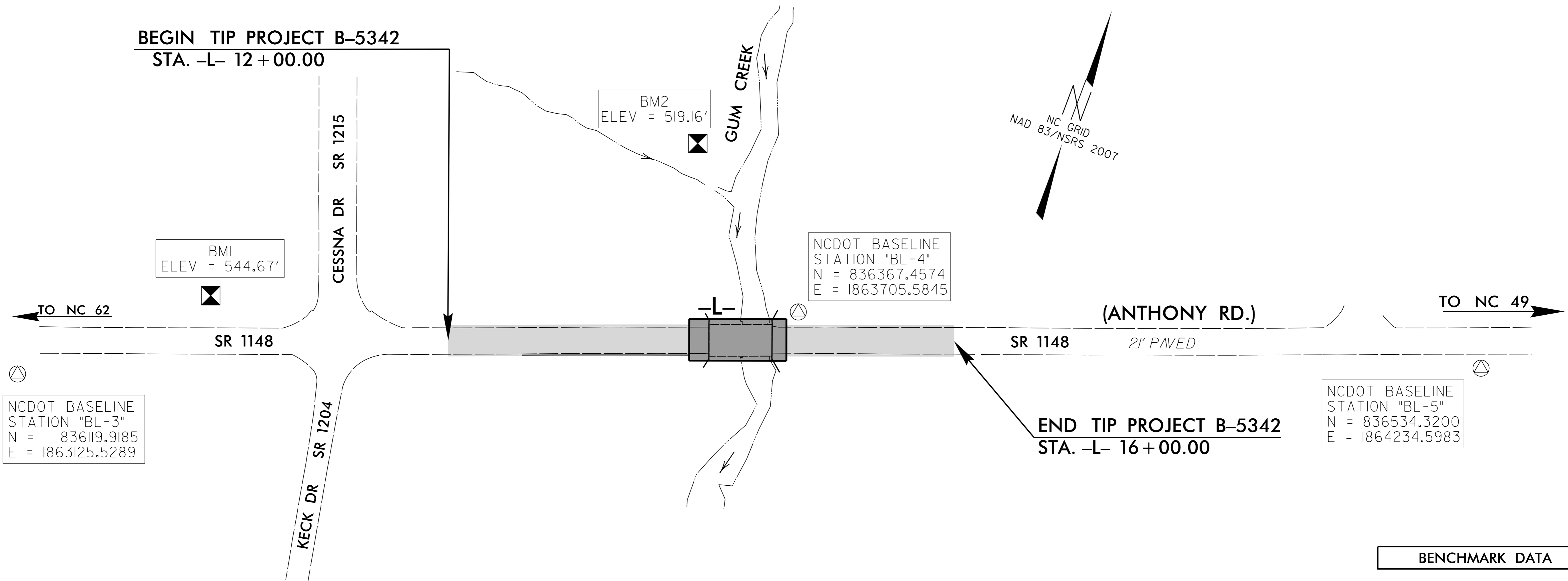
Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
Recorded SS Forced Main Line	----- FSS
Designated SS Forced Main Line (S.U.E.*)	----- FSS

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line	----- ?U/L
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

B-5342 SURVEY CONTROL SHEET

BEGIN TIP PROJECT B-5342
STA. -L- 12+00.00

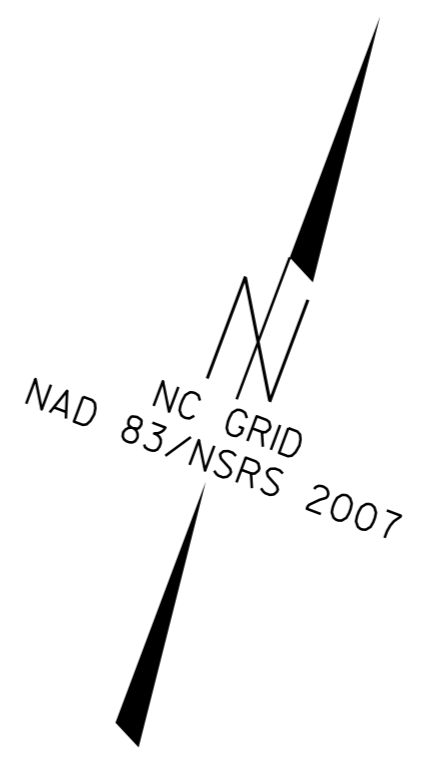


NCDOT BASELINE STATION "BL-3"
N = 836119.9185
E = 1863125.5289

BM1
ELEV = 544.67'

BM2
ELEV = 519.16'

NCDOT BASELINE STATION "BL-4"
N = 836367.4574
E = 1863705.5845



END TIP PROJECT B-5342
STA. -L- 16+00.00

NCDOT BASELINE STATION "BL-5"
N = 836534.3200
E = 1864234.5983

BENCHMARK DATA

.....
 BM1 ELEVATION = 544.67'
 N 836228 E 1863273
 L STATION 10+12.00 36' LEFT
 RR SPIKE IN 12" WALNUT

 BM2 ELEVATION = 519.16'
 N 836472 E 1863601
 L STATION 14+05.00 148' LEFT
 RR SPIKE IN 20" SWEETGUM

BASELINE DATA

BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
1	B5342-1	835621.7640	1861535.0060	598.64	OUTSIDE PROJECT LIMITS	
2	B5342-2	835906.8540	1862498.8930	565.70	OUTSIDE PROJECT LIMITS	
3	BL-3	836119.9185	1863125.5289	549.71	OUTSIDE PROJECT LIMITS	
4	BL-4	836367.4574	1863705.5845	524.01	14+66.27	14.39 LT
5	BL-5	836534.3200	1864234.5983	538.24	OUTSIDE PROJECT LIMITS	

NOTES

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTPS://CONNECT.NCDOT.GOV/RESOURCES/LOCATION/PAGES/DEFAULT.ASPX](https://connect.ncdot.gov/resources/location/pages/default.aspx)

THE FILES TO BE FOUND ARE AS FOLLOWS:
B5342_LS_CONTROL.TXT

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- ⊕ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
NETWORK ESTABLISHED FROM NGS ONLINE POSITIONING SERVICE (OPUS)

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B5342-2" WITH NAD 83 / NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 835906.854(ft) EASTING: 1862498.893(ft) ELEVATION: 565.70(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.0000537609
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B5342-2" TO -L- STATION 12+00.00 IS
 N69°49'09"E 1.025.31'
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

TYPE	STATION	L	
		NORTH	EAST
POT	10+00.00	836189.9800	1863274.1251
PC	12+75.74	836287.3013	1863532.1194
PT	13+57.96	836316.1622	1863609.1071
POT	18+98.62	836504.9049	1864115.7523

-L- PRELIMINARY NEW R/W MONUMENTS

ALIGN	STATION	OFFSET	NORTH	EAST
L	15+37.04	-62.00	836436.7786	1863755.2786
L	16+00.00	-62.04	836458.7973	1863814.2610
L	16+00.00	-30.29	836429.0418	1863825.3459

-L- PRELIMINARY NEW DRAINAGE UTILITY EASEMENTS

ALIGN	STATION	OFFSET	NORTH	EAST
L	14+72.00	-60.00	836412.1986	1863695.0270
L	13+87.00	-60.00	836382.5253	1863615.3747
L	13+87.00	-30.46	836354.8423	1863625.6876
L	14+72.00	-30.39	836384.4514	1863705.3638
L	18+21.08	60.00	836421.6100	1864064.0345
L	13+96.00	60.11	836273.1160	1863665.7376
L	14+29.00	60.10	836284.6441	1863696.6586
L	OUTSIDE LIMITS	60.00	836076.9578	1863143.4757

NOTE: DRAWING NOT TO SCALE

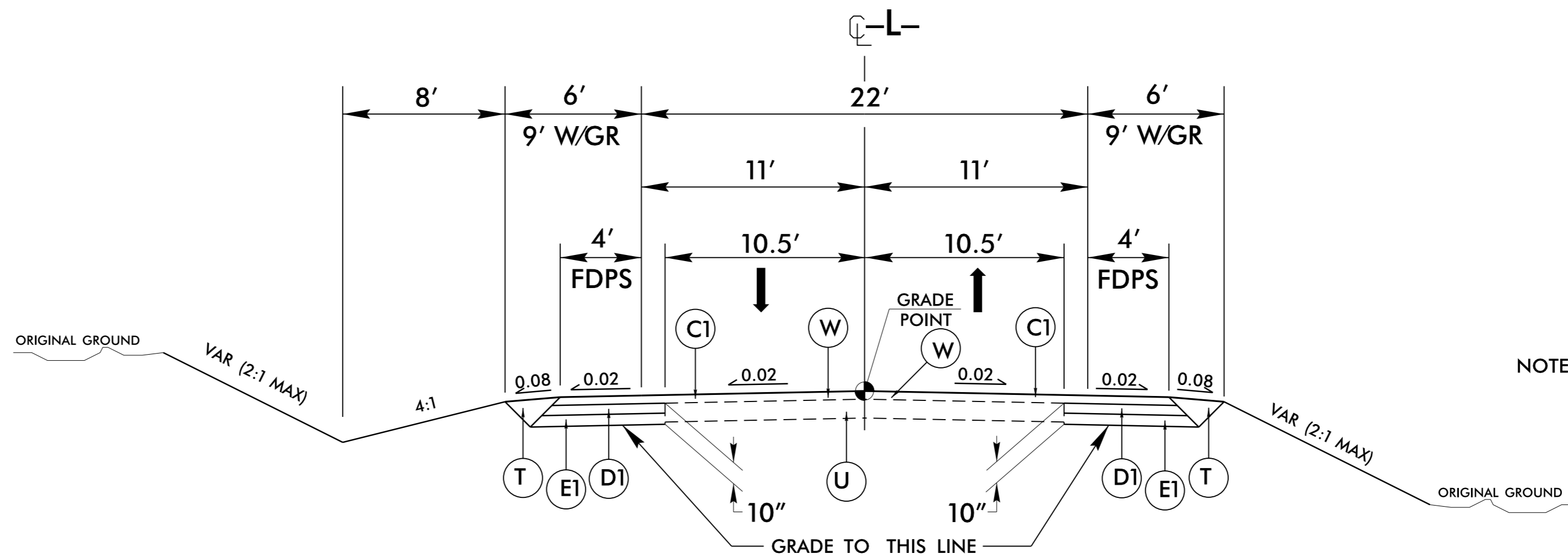
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6/2/09

PROJECT REFERENCE NO. B-5342	SHEET NO. 2A-1
ROADWAY DESIGN ENGINEER SEAL 014571 JAMES A. SPEER	PAVEMENT DESIGN ENGINEER SEAL 022896 CLARK S. MORRISON
DocuSigned by James A. Speer 9/17/2015	DocuSigned by Clark S. Morrison 9/17/2015

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
R1	SHOULDER BERM GUTTER (SEE DETAIL ON THIS SHEET)
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

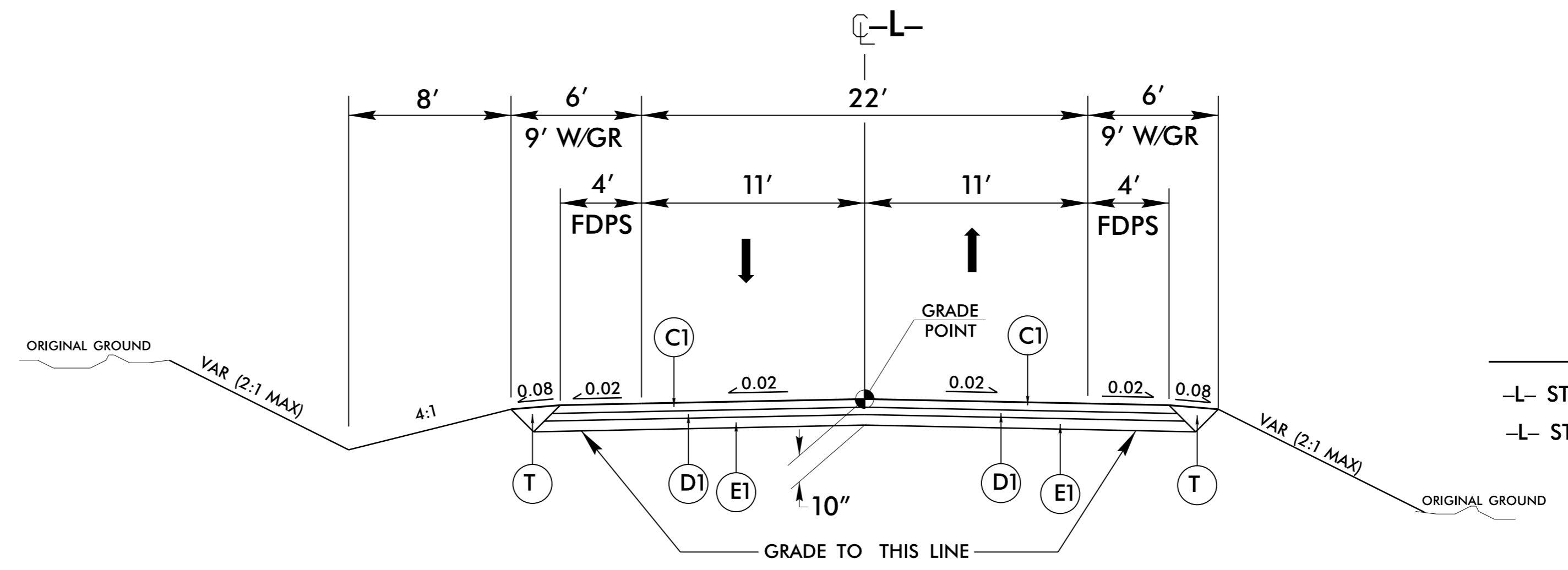
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

NOTE: TRANSITION FROM EXISTING TO TYPICAL SECTION NO. 1
 -L- STA. 12+00.00 TO -L- STA. 12+34.00
 -L- STA. 15+50.00 TO -L- STA. 16+00.00

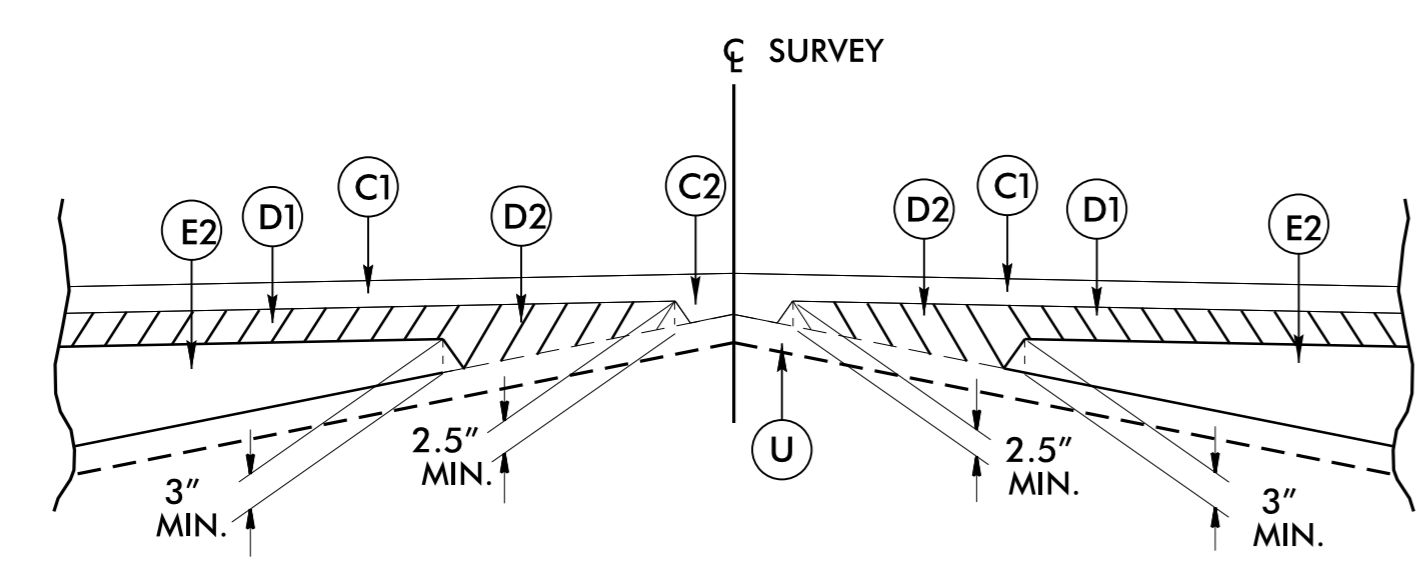
USE TYPICAL SECTION NO. 1
 -L- STA. 15+16.00 TO -L- STA. 15+50.00



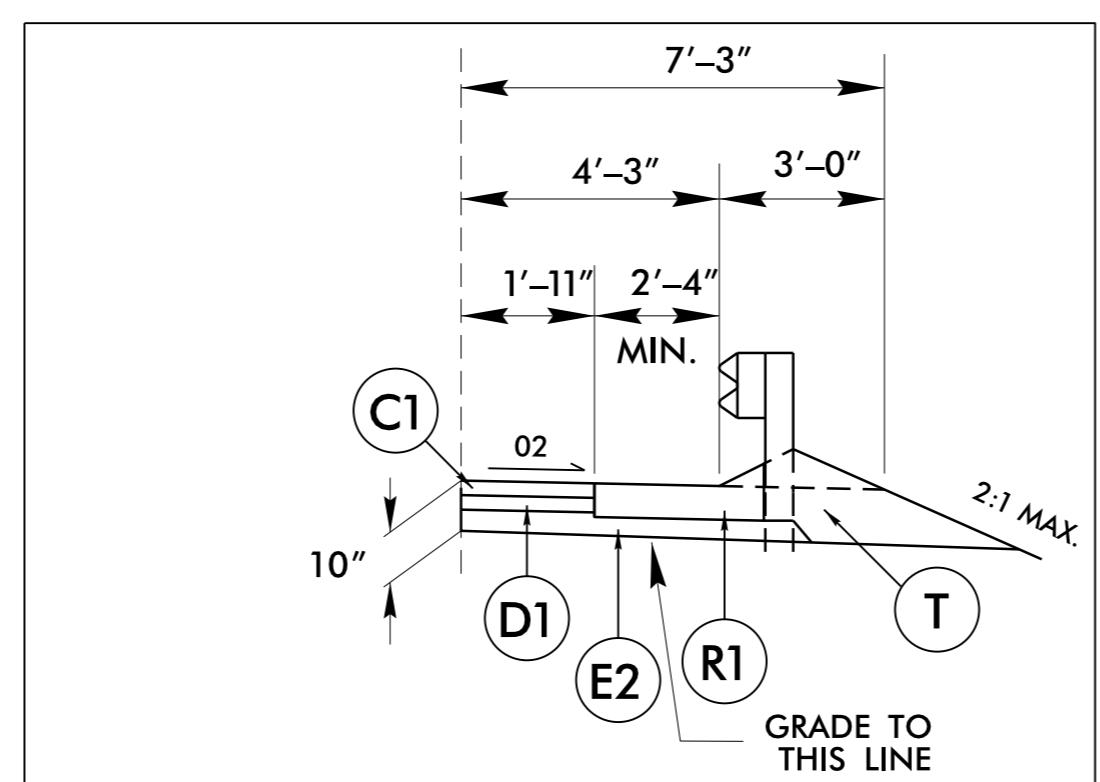
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2
 -L- STA. 12+34.00 TO STA. 14+01.88 (BEGIN BRIDGE)
 -L- STA. 14+74.13 (END BRIDGE) TO -L- STA. 15+16.00

SR 1148 (ANTHONY RD.) IS INCLUDED ON THE NC MULTIMODAL INVESTMENT NETWORK (NCMIN) AND IS AN ALTERNATE ROUTE /CONNECTOR ON THE BURLINGTON-GRAHAM MPO BIKE ROUTES



Detail Showing Method of Wedging



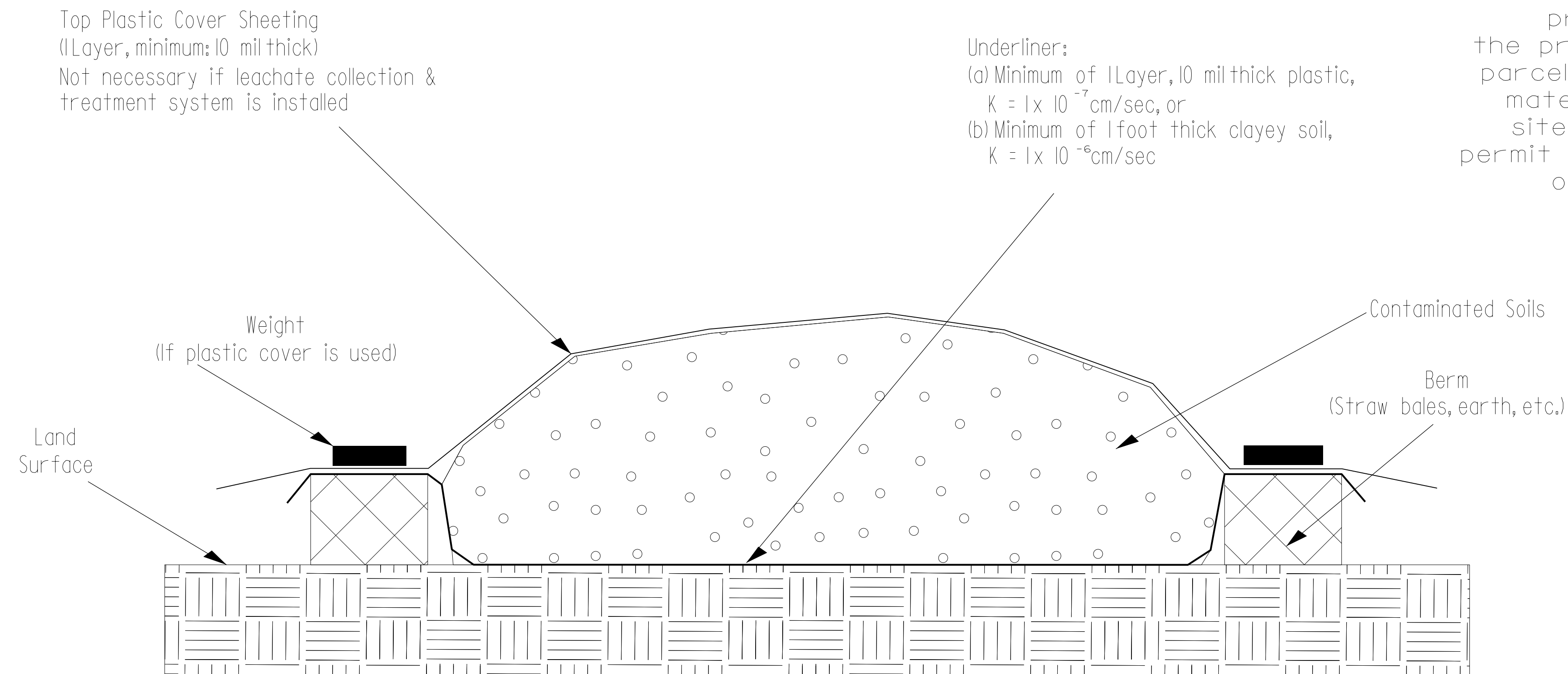
DETAIL SHOWING SHOULDER BERM GUTTER (SBG)

USE WITH TYPICAL SECTION NO. 2
 INSTALL SHOULDER BERM GUTTER (SBG) AS FOLLOWS:
 -L- STA 13+72.00 RT TO END APPR. SLAB
 -L- STA 13+72.00 LT TO END APPR. SLAB

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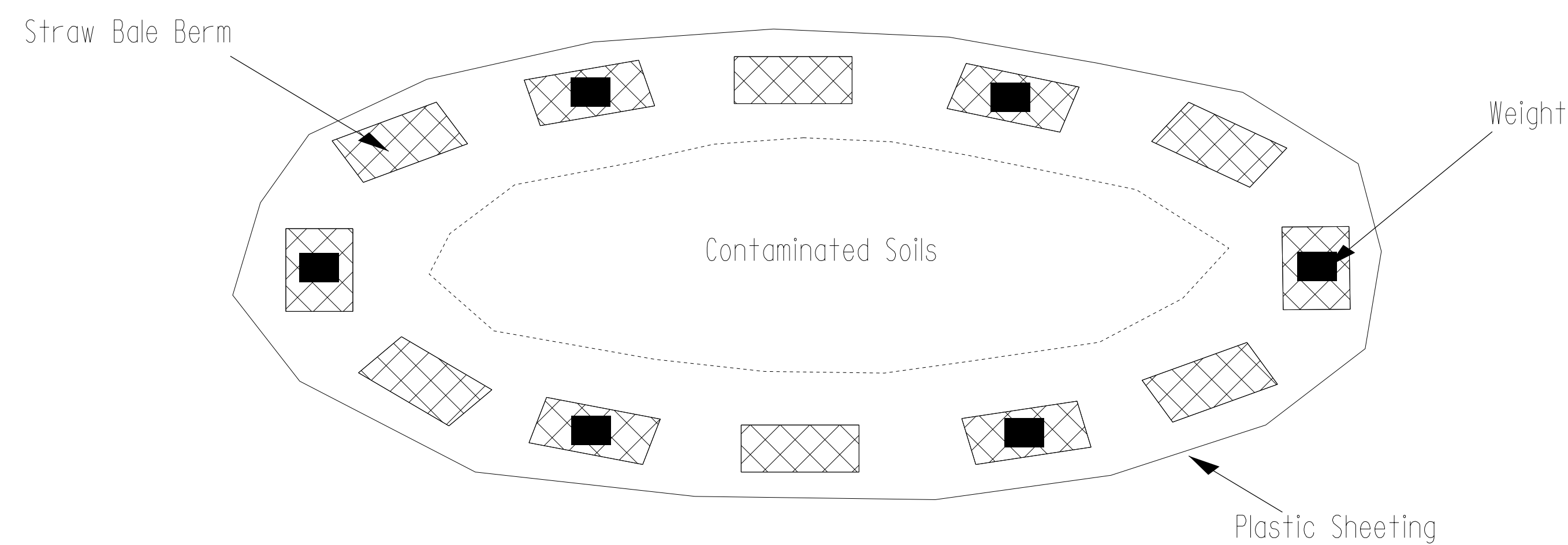
Detail for Temporary Containment of Contaminated Soil

Cross-Section View



NOTE:
The Contractor shall stockpile all contaminated soil excavated from a property in a location within the property boundaries of the source parcel. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDENR UST Section for off-site temporary storage.

Map View



PREPARED BY: _	DATE: _
REVIEWED BY: _	DATE: _

GEOTECHNICAL ENGINEERING UNIT

EASTERN REGIONAL OFFICE
 WESTERN REGIONAL OFFICE
 CONTRACT OFFICE

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STOCKPILE CONTAINMENT DETAIL

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1	-	-	3	-	-
2	-	-	4	-	-

12/06/07

COMPUTED BY: MRL	DATE: 6-29-2015
CHECKED BY: AKW	DATE: 7-07-2015

PROJECT REFERENCE NO.	SHEET NO.
B-5342	3G-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

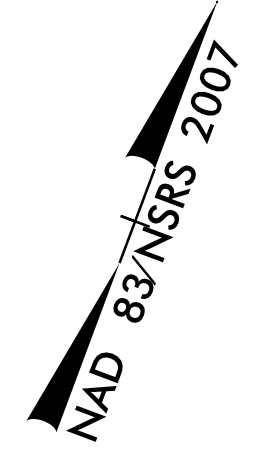
**SUMMARY OF AGGREGATE
SUBGRADE/STABILIZATION**

LINE	STATION	STATION	Aggregate Type ASU/AST	Aggregate Thickness INCHES	Shallow Undercut CY	Class IV Subgrade Stabilization TONS	Geotextile for Soil Stabilization SY	Stabilizer Aggregate TONS	Class IV Aggregate Stabilization TONS
CONTINGENCY			ASU	18	50	100	100		
			TOTAL CY/TONSSY		50	100	100		

*ASU = AGGREGATE SUBGRADE
*AST = AGGREGATE STABILIZATION

Note: Total square yards of Geotextile for Soil Stabilization is only the estimated quantity for ASU/AST and may only represent a portion of the geotextile quantity shown in the Item Sheets of the Proposal.

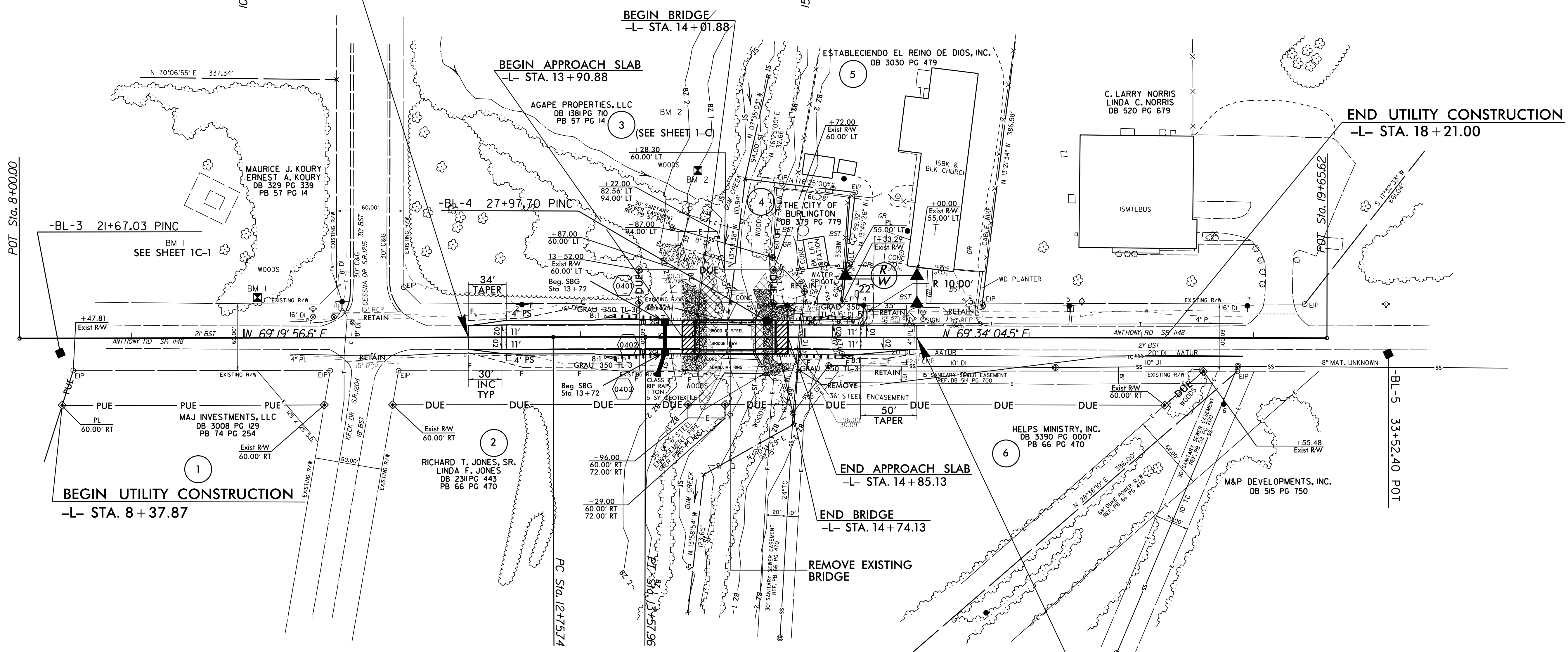
05 SEP 2015 09:21:05 B-5342-r.dwg sum.dgn



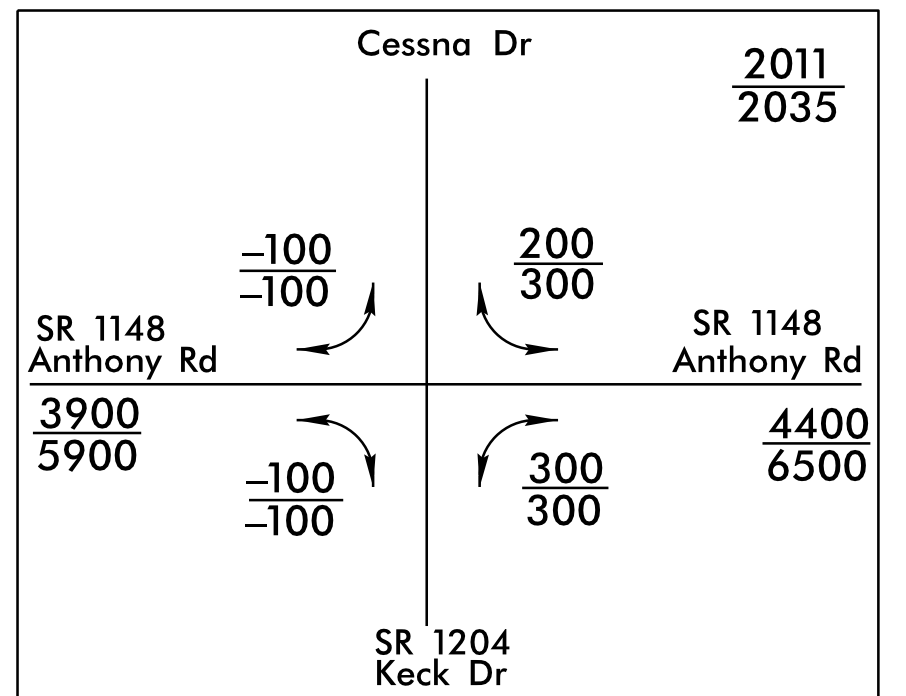
BEGIN TIP PROJECT B-5342

-L- STA. 12 + 00.00

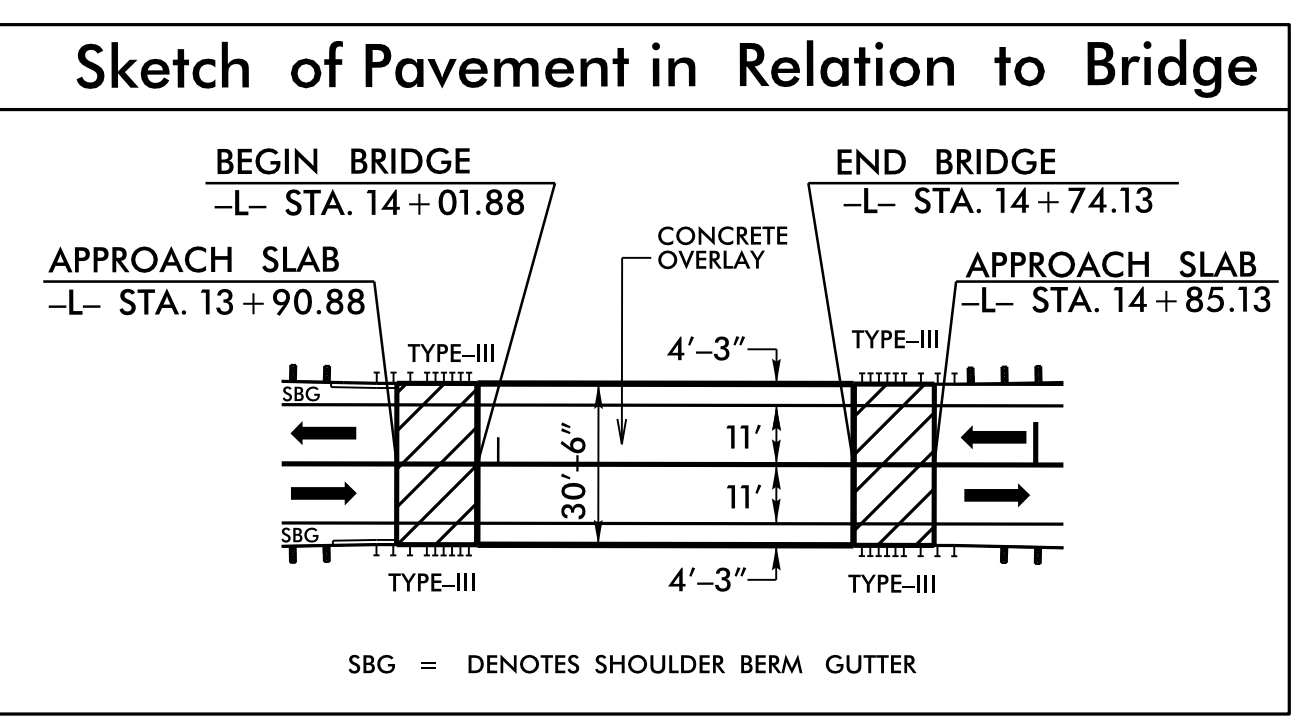
SEE SHEET 5 FOR PROFILE
SEE SHEETS S-1 THRU S-18 FOR STRUCTURE



REVISIONS



-L-
PI Sta 13+16.85
 $\Delta = 0'14" 08.0" (RT)$
 $D = 0'17" 11.3"$
 $L = 82.22'$
 $T = 41.1'$
 $R = 20,000.00'$



END TIP PROJECT B-5342

-L- STA. 16 + 00.00

8/17/99

13-OCT-2015 07:44 B5342-Rdy-psht4.dgn

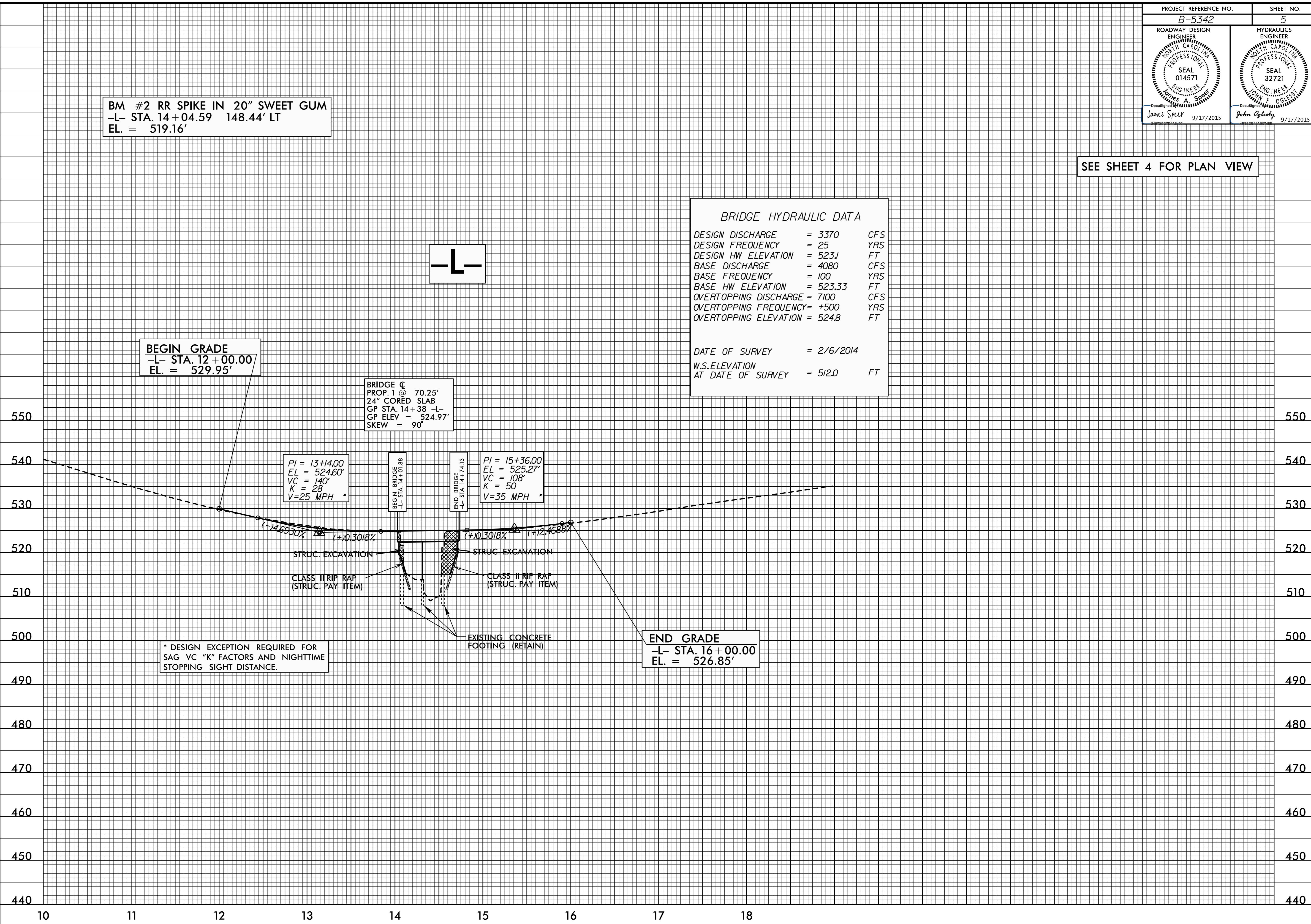
BM #2 RR SPIKE IN 20" SWEET GUM
-L- STA. 14+04.59 148.44' LT
EL. = 519.16'

SEE SHEET 4 FOR PLAN VIEW

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 3370	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 523.1	FT
BASE DISCHARGE	= 4080	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 523.33	FT
OVERTOPPING DISCHARGE	= 7100	CFS
OVERTOPPING FREQUENCY	= +500	YRS
OVERTOPPING ELEVATION	= 524.8	FT

DATE OF SURVEY	= 2/6/2014
W.S. ELEVATION AT DATE OF SURVEY	= 512.0 FT



BEGIN GRADE
-L- STA. 12+00.00
EL. = 529.95'

BRIDGE C
PROP. 1 @ 70.25'
24" CORED SLAB
GP STA. 14+38 -L-
GP ELEV = 524.97'
SKEW = 90°

PI = 13+14.00
EL = 524.60'
VC = 140'
K = 28
V = 25 MPH

PI = 15+36.00
EL = 525.27'
VC = 108'
K = 50
V = 35 MPH

* DESIGN EXCEPTION REQUIRED FOR SAG VC "K" FACTORS AND NIGHTTIME STOPPING SIGHT DISTANCE.

END GRADE
-L- STA. 16+00.00
EL. = 526.85'

51499

04-SEP-2015 07:29
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