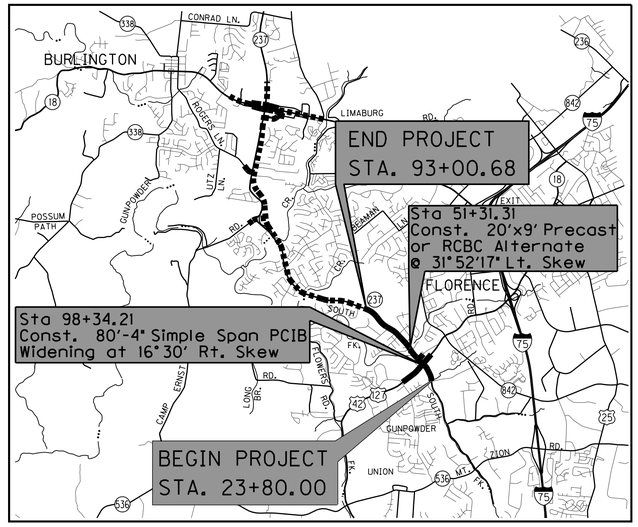
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R1

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT
KY 237
PLEASANT VALLEY ROAD – CAMP ERNST ROAD
SECTION 1
FD52 008 0237 001–004
ARRA 8200(009)

THIS PROJECT IS OFF THE NH SYSTEM

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT



4000 0 4000 8000

GRAPHIC SCALE IN FEET

LAYOUT MAP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
R1	LAYOUT SHEET
R2 - R2k	TYPICAL SECTIONS- SUMMARY OF QUANTITIES
R3 - R26	PLAN AND PROFILE SHEETS
R27 - R30	RIGHT OF WAY SUMMARY SHEETS
R31 - R43	RIGHT OF WAY DETAIL & STRIP MAP SHEETS
R44 - R67	DETAIL SHEETS
R68 - R90	MAINTENANCE OF TRAFFIC SHEETS
R91 - R102	EROSION CONTROL SHEETS
R103 - R106	COORDINATE CONTROL SHEETS
R107 - R115	SOIL PROFILE SHEETS
R116 - R127	PIPE DRAINAGE SHEETS
R128 - R131	ARCH STRUCTURE DETAIL PLANS
S1 - S	STRUCTURE PLANS
T1 - T15	SIGNAL PLANS
T16 - T28	SIGNING PLANS
X1 - X83	CROSS SECTIONS

SHEETS NOT INCLUDED IN TOTAL SHEETS:
R2a - R2k

TOTAL SHEETS

(R) ROADWAY	131
(S) STRUCTURE	
(T) TRAFFIC	28
(U) UTILITY	
(X) CROSS SECTION	83

STANDARD DRAWINGS

NUMBER		
RBB-001-0	RDB-272-06	RDX-225
RBC-001-09	RDB-273-05	RDX-230
RBC-002-01	RDB-280-05	RFC-001-07
RBC-003-07	RDB-281-02	RFG-005-05
RBE-100-09	RDB-282-03	RGS-001-06
RBI-001-09	RDB-283-03	RGS-002-05
RBI-002-06	RDB-320-05	RGX-001-05
RBI-004-03	RDB-400-04	RGX-002-08
RBR-001-11	RDB-410-05	RGX-005-05
RBR-005-10	RDB-420-04	RGX-010-03
RBR-010-05	RDD-040-04	RGX-040
RBR-015-04	RDH-020-03	RGX-200
RBR-016-04	RDH-030-03	RPM-010-05
RBR-020-03	RDH-050-02	RPM-011-05
RDB-003-07	RDH-110-02	RPM-100-09
RDB-011-07	RDH-210-03	RPM-110-05
RDB-013-06	RDH-310-04	RPM-120-06
RDB-014-05	RDI-004-03	RPM-160-03
RDB-015-03	RDI-011-02	RPM-170-06
RDB-016-02	RDI-020-08	TPM-115-01
RDB-017-02	RDI-025-04	TPM-140-01
RDB-018-03	RDM-100-02	TPM-145-01
RDB-019-03	RDP-001-05	TTC-100-01
RDB-105-05	RDP-005-04	TTD-110-01
RDB-106-04	RDP-006-03	TTD-120
RDB-150-01	RDP-010-08	TTD-125
RDB-160-01	RDX-005-02	TTS-105-01
RDB-270-08	RDX-210-02	TTS-115-01
RDB-271-04	RDX-220-04	

TOTAL STANDARD DRAWINGS = 86

DESIGN CRITERIA

CLASS OF HIGHWAY	URBAN COLLECTOR
TYPE OF TERRAIN	ROLLING
DESIGN SPEED	45 MPH
REQUIRED NPSD	395'
REQUIRED PSD	N/A
LEVEL OF SERVICE	N/A
ADT PRESENT (2010)	14,110
ADT FUTURE (2030)	27,000
DHV	
D %	
T %	

GEOGRAPHIC COORDINATES

LATITUDE 38 DEGREES 58 MINUTES 41 SECONDS NORTH
LONGITUDE 84 DEGREES 40 MINUTES 07 SECONDS WEST

DESIGNED

% RESTRICTED SD
LEVEL OF SERVICE
MAX. DISTANCE W/O PASSING

KY 237 SECTION 1 PRACTICAL SOLUTIONS	US 42		
LENGTH 6,920.68 LIN. FT. 1.310 MILES	LENGTH 2,061.15 LIN. FT. 0.390 MILES	LENGTH LIN. FT. MILES	LENGTH LIN. FT. MILES
ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.
NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED
RAILROAD CROSSINGS NO. LIN. FT.	RAILROAD CROSSINGS NO. 0 LIN. FT.	RAILROAD CROSSINGS NO. LIN. FT.	RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES LIN. FT.	BRIDGES 1 WIDENING 0 LIN. FT.	BRIDGES LIN. FT.	BRIDGES LIN. FT.

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

BOONE

ITEM NO. 6-8001.10
PROJECT KY 237 SECTION 1 (RIDGEVIEW DRIVE TO ROSE PETAL DR.)
NUMBER: FD52 008 0237 001-004 ARRA 8200(009)
LETTING DATE:

RECOMMENDED BY PROJECT MANAGER DATE

PLAN APPROVED STATE HIGHWAY ENGINEER DATE

GRESHAM, SMITH AND PARTNERS
101 SOUTH 5TH STREET, SUITE 1400
LOUISVILLE, KENTUCKY 40202
TELEPHONE: (502) 627-8900

SIGNED:

DATE:

DATE | NO. SETS | RECORD PLANS / CONSTRUCTION PLANS

REVIEWED BY DIVISION OF CONSTRUCTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sl
DD-MMM-YYYY HH:MM

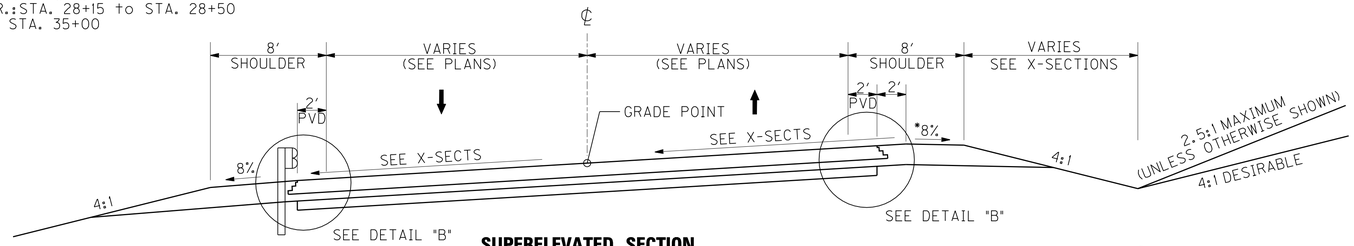
VENDERS NAME
1-92
FORM NO. 1

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2

TYPICAL SECTION

KY 237
RURAL SECTION
STA. 23+80 TO STA. 35+00

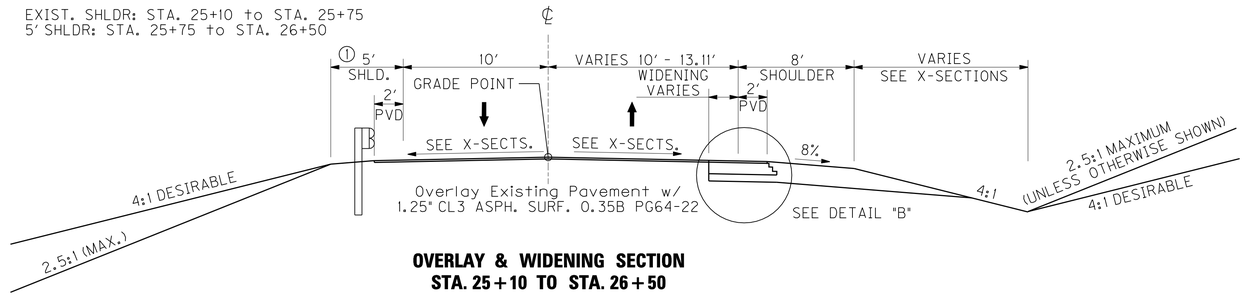
5' SHLDR: STA. 26+50 to STA. 28+15
TRANSITION 5' TO 8' SHLDR.: STA. 28+15 to STA. 28+50
8' SHLDR.: STA. 28+50 to STA. 35+00



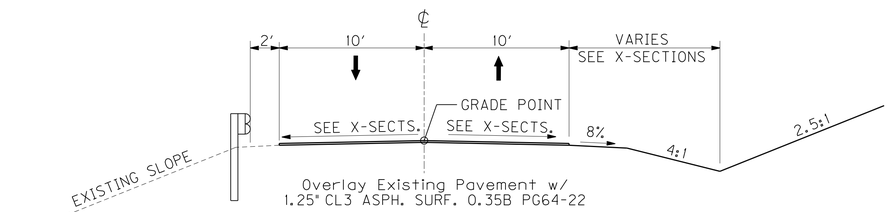
SUPERELEVATED SECTION
STA. 26+50 TO STA. 35+00

*Algebraic difference in rate of cross-slope is not to exceed 12%

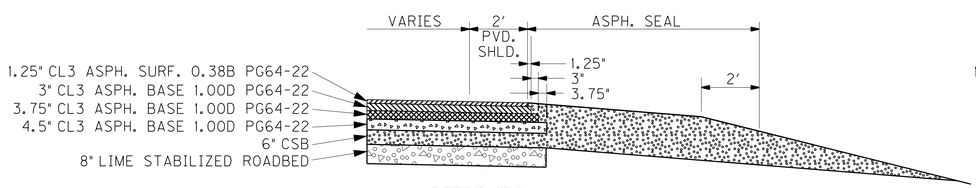
EXIST. SHLDR: STA. 25+10 to STA. 25+75
5' SHLDR: STA. 25+75 to STA. 26+50



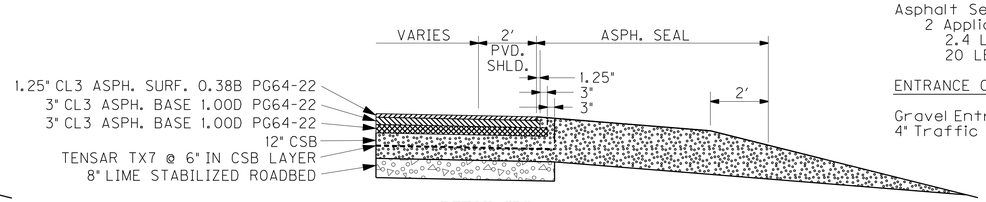
OVERLAY & WIDENING SECTION
STA. 25+10 TO STA. 26+50



OVERLAY SECTION
STA. 23+80 TO STA. 25+10



DETAIL "B"
PAVEMENT ALT. NO. 1
N.T.S.



DETAIL "B"
PAVEMENT ALT. NO. 2
N.T.S.

① WIDEN SHOULDER 3' FOR GUARDRAIL (SEE PLANS)

NOTE: PAVEMENT DESIGN ALTERNATE STATION LIMITS

PAVEMENT DESIGN ALTERNATE NO. 1

KY 237 STA. 23+80 TO STA. 93+00.68

PAVEMENT DESIGN ALTERNATE NO. 2

KY 237 STA. 23+80 TO STA. 55+93.01

KY 237 STA. 55+93.01 TO STA. 63+33.62 (W/O TRIAXIAL TX7) CENTRAL OFFICE TEST AREA

KY 237 STA. 63+33.62 TO STA. 93+00.68 (UTILIZE ALT. NO. 1)

PAVEMENT DESIGN ALTERNATE NO. 1

KY 237

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

Asphalt Seal on Full Depth CSB Shoulders
2 Applications of:
2.4 LB/SY Emulsified Asphalt RS-2
20 LB/SY Asphalt Seal Aggregate (No. 8 or 9M)

ENTRANCE CONSTRUCTION

Gravel Entrances:
4" Traffic Bound Base

PAVEMENT DESIGN ALTERNATE NO. 2

KY 237

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
TENSAR TX 7
6" Crushed Stone Base
3" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
6" Crushed Stone Base
TENSAR TX 7
6" Crushed Stone Base
3" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

Asphalt Seal on Full Depth CSB Shoulders
2 Applications of:
2.4 LB/SY Emulsified Asphalt RS-2
20 LB/SY Asphalt Seal Aggregate (No. 8 or 9M)

ENTRANCE CONSTRUCTION

Gravel Entrances:
4" Traffic Bound Base

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

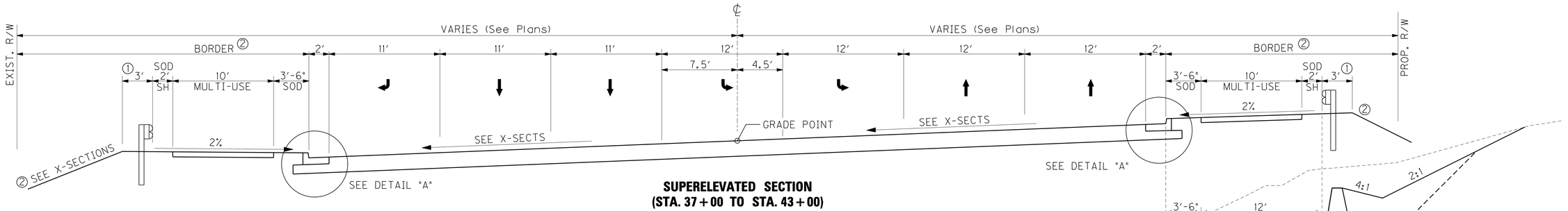
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2a

TYPICAL SECTION

KY 237 PRACTICAL SOLUTIONS
STA. 35+00 TO STA. STA. 43+00

① WIDEN SHOULDER 3' FOR GUARDRAIL (SEE PLANS)

② SEE CROSS-SECTIONS FOR BORDER SLOPES AND BORDER SLOPE TRANSITIONS AND LIMITS OUTSIDE SHOULDER AREAS.



SUPERELEVATED SECTION
(STA. 37+00 TO STA. 43+00)

FROM STA. 38+88.41 TO STA. 43+00
LANES AND LANE WIDTHS TRANSITION (SEE PLANS)
TOTAL WIDTH REMAINS CONSTANT

STA. 39+20 TO STA. 40+70

PAVEMENT DESIGN ALTERNATE NO. 1

KY 237 & APPROACH ROADS

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter

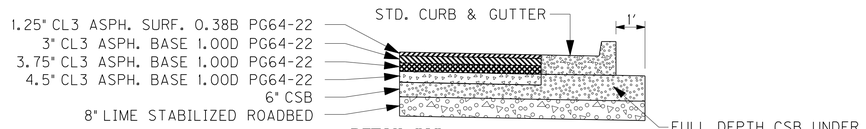
PAVEMENT DESIGN ALTERNATE NO. 2

KY 237 & APPROACH ROADS

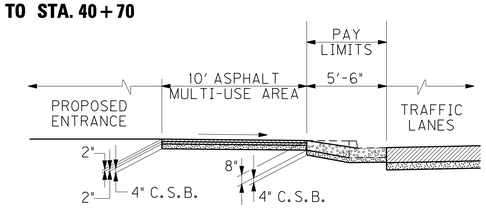
ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
TENSAR TX 7
6" Crushed Stone Base
3" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter



DETAIL "A"
PAVEMENT ALT. NO. 1
N.T.S.



NOTE: PAVEMENT DESIGN ALTERNATE STATION LIMITS

PAVEMENT DESIGN ALTERNATE NO. 1

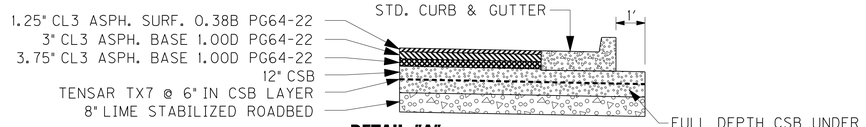
KY 237 STA. 23+80 TO STA. 93+00.68

PAVEMENT DESIGN ALTERNATE NO. 2

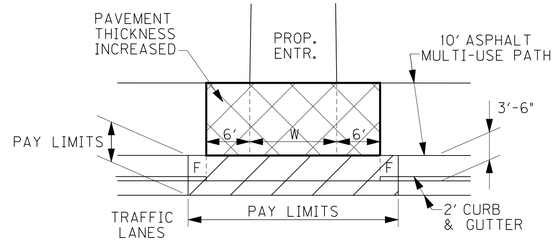
KY 237 STA. 23+80 TO STA. 55+93.01

KY 237 STA. 55+93.01 TO STA. 63+33.62 (W/O TRIAXIAL TX7)
CENTRAL OFFICE TEST AREA

KY 237 STA. 63+33.62 TO STA. 93+00.68 (UTILIZE ALT. NO. 1)



DETAIL "A"
PAVEMENT ALT. NO. 2
N.T.S.



F = 2.5' FOR ALL RESIDENTIAL ENTRANCES

DETAIL "C"
MODIFIED CONCRETE ENTRANCE
PAVEMENT W/MULTI-USE PATH
N.T.S.

ENTRANCE CONSTRUCTION

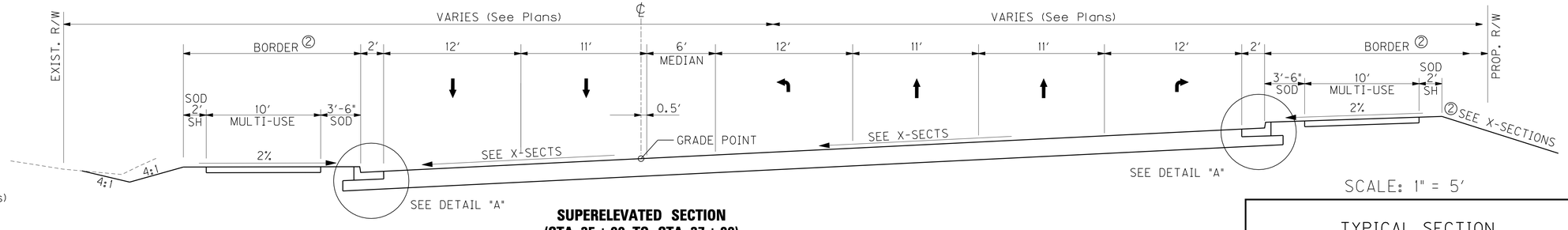
Commercial Asphalt Entrances:
6" Crushed Stone Base
2" CL3 Asphalt Base 1.00D PG64-22
2" CL3 Asphalt Surface 0.38B PG64-22

Residential Asphalt Entrances:
4" Crushed Stone Base
2" CL3 Asphalt Base 1.00D PG64-22
2" CL3 Asphalt Surface 0.38B PG64-22

MULTI-USE PATH

4" Crushed Stone Base
2" CL3 Asphalt Surface 0.38B PG64-22

UNDER ENTRANCES (See Detail "C" for Limits)
4" Crushed Stone Base
2" CL3 Asphalt Base 1.00D PG64-22
2" CL3 Asphalt Surface 0.38B PG64-22



SUPERELEVATED SECTION
(STA. 35+00 TO STA. 37+00)

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2b

TYPICAL SECTION

KY 237
PRACTICAL SOLUTIONS
STA. 43+00 TO STA. 93+00.68

PAVEMENT DESIGN ALTERNATE NO. 1

KY 237 & APPROACH ROADS

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

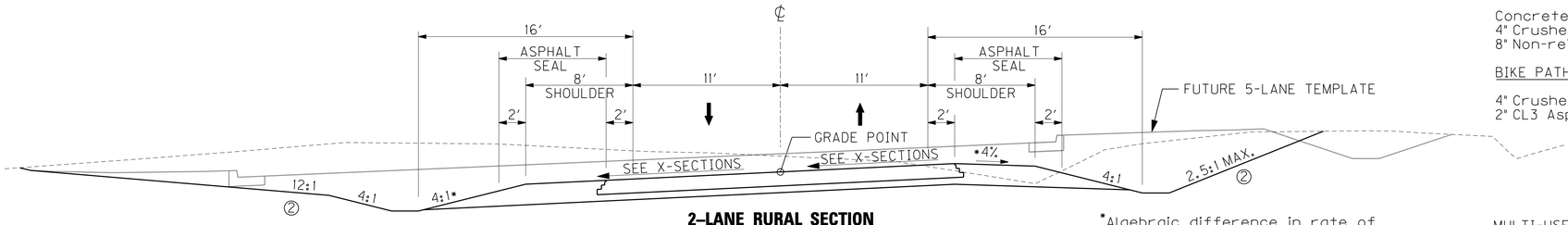
SHOULDERS
Standard Curb & Gutter

RURAL SHOULDERS
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

Asphalt Seal on Full Depth CSB Shoulders
2 Applications of:
2.4 LB/SY Emulsified Asphalt RS-2
20 LB/SY Asphalt Seal Aggregate (No. 8 or 9M)

① WIDEN SHOULDER 3' FOR GUARDRAIL (SEE PLANS)

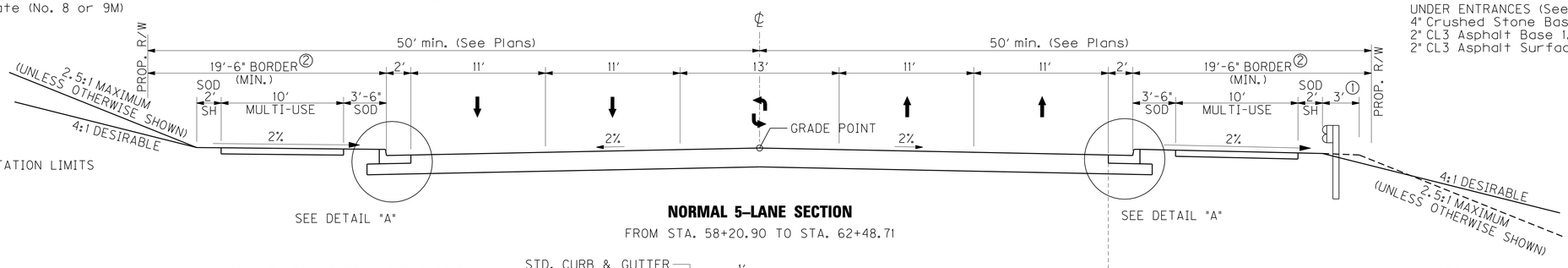
② SEE CROSS-SECTIONS FOR BORDER SLOPES AND BORDER SLOPE TRANSITIONS.



2–LANE RURAL SECTION
FROM STA. 73+00 TO STA. 93+00.68
(NOTE: FROM 73+00 TO 75+92.50 TAPERS TO 2-LANE ROADWAY)

*Algebraic difference in rate of cross-slope is not to exceed 8%

*STA. 76+50 TO STA. 81+00
GRADE AT 4% TO EXISTING DITCH



NORMAL 5–LANE SECTION
FROM STA. 58+20.90 TO STA. 62+48.71

NOTE: PAVEMENT DESIGN ALTERNATE STATION LIMITS

PAVEMENT DESIGN ALTERNATE NO. 1

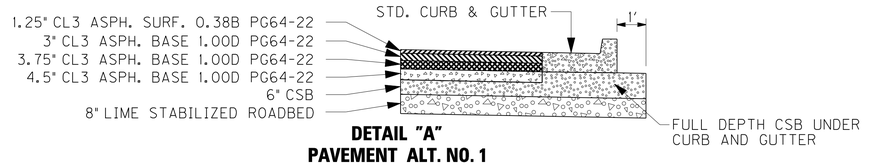
KY 237 STA. 23+80 TO STA. 93+00.68

PAVEMENT DESIGN ALTERNATE NO. 2

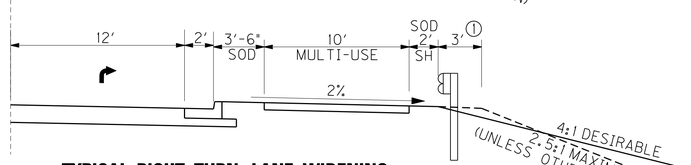
KY 237 STA. 23+80 TO STA. 55+93.01

KY 237 STA. 55+93.01 TO STA. 63+33.62 (W/O TRIAXIAL TX7)
CENTRAL OFFICE TEST AREA

KY 237 STA. 63+33.62 TO STA. 93+00.68 (UTILIZE ALT. NO. 1)



DETAIL "A"
PAVEMENT ALT. NO. 1
N.T.S.



TYPICAL RIGHT TURN LANE WIDENING

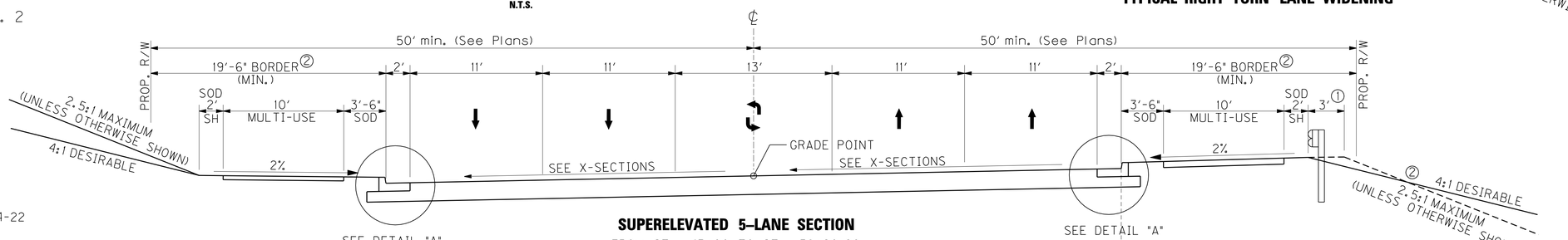
PAVEMENT DESIGN ALTERNATE NO. 2

KY 237 & APPROACH ROADS

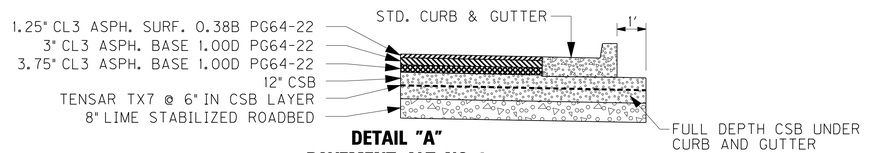
ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
TENSAR TX 7
6" Crushed Stone Base
3" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

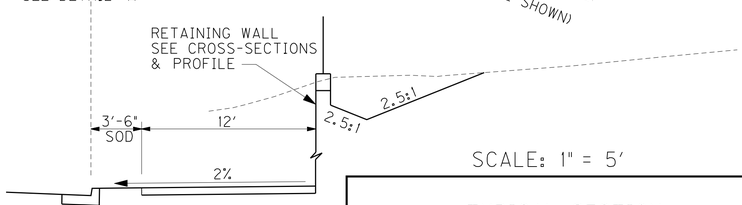
SHOULDERS
Standard Curb & Gutter



SUPERELEVATED 5–LANE SECTION
FROM STA. 43+00 TO STA. 58+20.90
& STA. 62+48.71 TO STA. 73+00



DETAIL "A"
PAVEMENT ALT. NO. 2
N.T.S.



RT. STA. 43+00 TO STA. 47+25

ENTRANCE CONSTRUCTION

Gravel Entrances:
4" Traffic Bound Base

Residential Asphalt Entrances:
4" Crushed Stone Base
2" CL3 Asphalt Base 1.00D PG64-22
2" CL3 Asphalt Surface 0.38B PG64-22

Concrete Entrances:
4" Crushed Stone Base
8" Non-reinforced JPC Pavement

BIKE PATH

4" Crushed Stone Base
2" CL3 Asphalt Surface 0.38B PG64-22

MULTI-USE PATH

4" Crushed Stone Base
2" CL3 Asphalt Surface 0.38B PG64-22

UNDER ENTRANCES (See Detail "C" for Limits)
4" Crushed Stone Base
2" CL3 Asphalt Base 1.00D PG64-22
2" CL3 Asphalt Surface 0.38B PG64-22

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

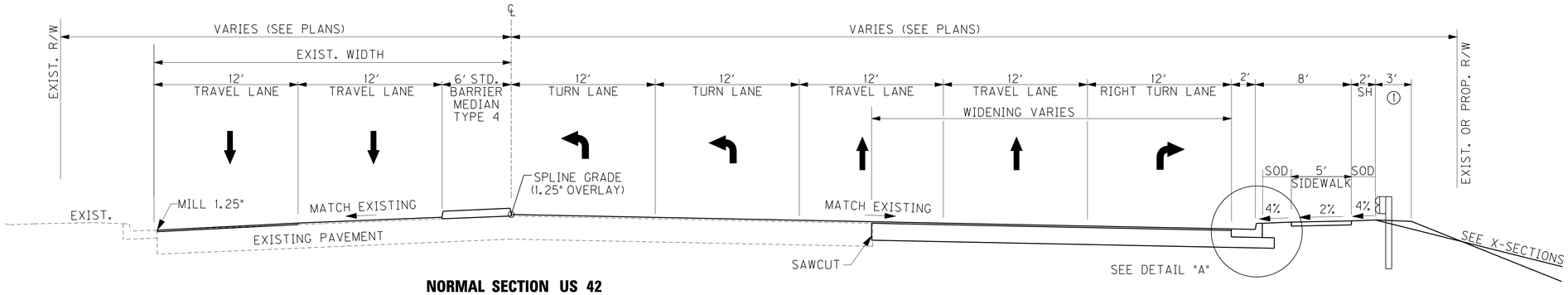
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2c

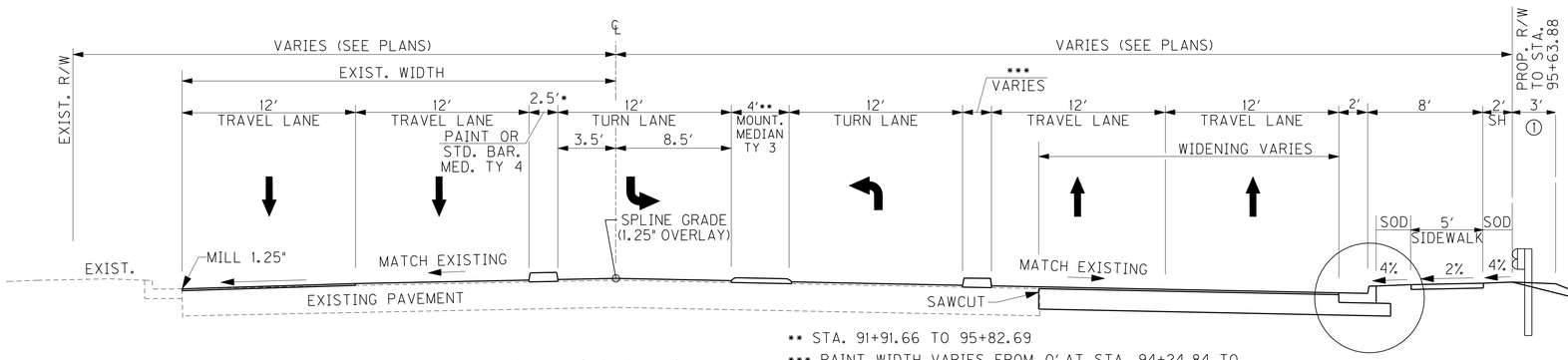
TYPICAL SECTION

U.S. 42

① WIDEN SHOULDER 3' FOR GUARDRAIL (SEE PLANS)



NORMAL SECTION US 42
STA. 97+14.23 TO STA. 98+76.72 (BRIDGE END)



*STA. 93+58 TO 94+00 STD. BAR. TY 4
STA. 94+00 TO 95+19 PAINT

** STA. 91+91.66 TO 95+82.69

*** PAINT WIDTH VARIES FROM 0' AT STA. 94+24.84 TO 2.5' AT STA. 95+36.12. 2.5' STD. MED. BAR. TY 4 FROM STA. 95+36.12 TO 95+93.61. WIDTH AND LOCATION OF STD. MED. BAR TY 4 VARIES FROM STA. 95+93.61 TO 97+14.23 (SEE PLANS).

NORMAL SECTION US 42
STA. 93+58 TO STA. 97+14.23

PAVEMENT DESIGN FOR OVERLAY, REPLACEMENT, AND WIDENING

US 42

ROADBED PREPARATION FOR WIDENING
8" Crushed Aggregate Size No. 2
Fabric - Geotextile Type III

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter

APPROACH ROADS

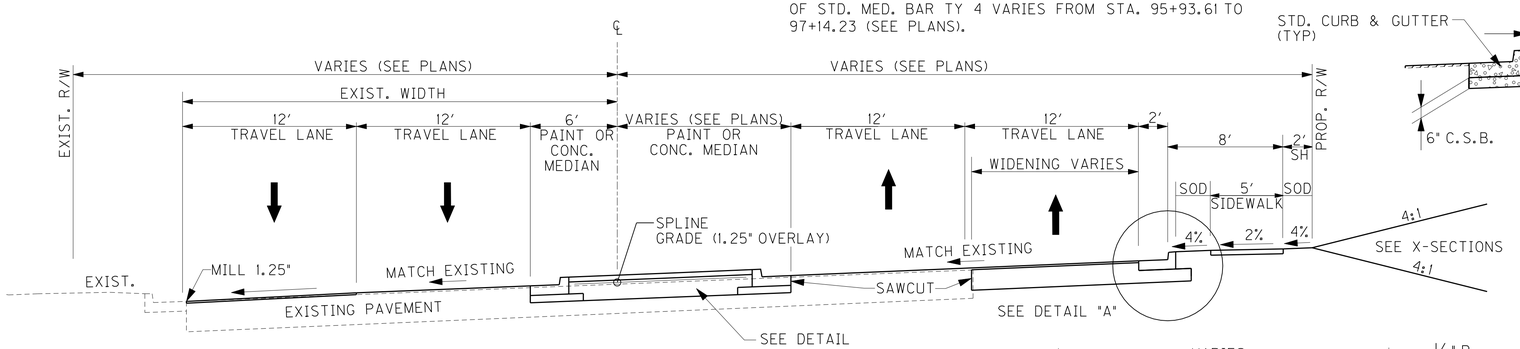
ROADBED PREPARATION
8" Crushed Aggregate Size No. 2
Fabric - Geotextile Type III

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

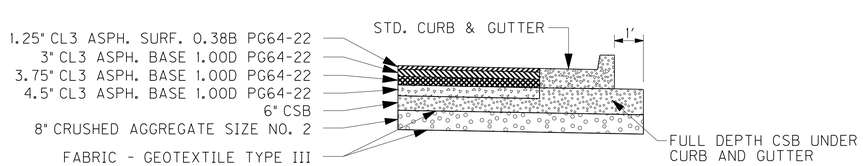
SHOULDERS
Standard Curb & Gutter

OVERLAY

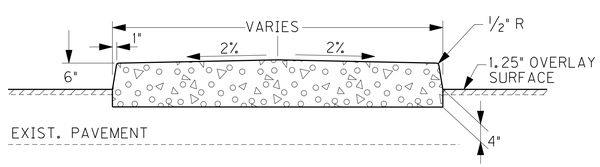
1.25" CL3 Asphalt Surface 0.38B PG64-22



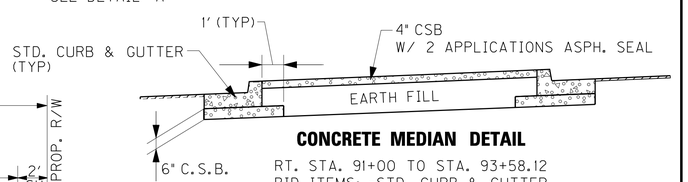
SUPERELEVATED SECTION US 42
STA. 85+78.85 TO STA. 93+58



DETAIL "A"
N.T.S.



RAISED ISLAND DETAIL
RT. STA. 88+09 TO STA. 88+23 US 42
RT. STA. 104+25 TO STA. 104+63 US 42
BID ITEM: -CLASS "A" CONCRETE



CONCRETE MEDIAN DETAIL
RT. STA. 91+00 TO STA. 93+58.12
BID ITEMS: -STD. CURB & GUTTER
-C.S.B.
-2 APPLICATIONS ASPH. SEAL
-EARTHWORK (MATERIAL & EXCAV. INCIDENTIAL)

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: SD
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

TYPICAL SECTION

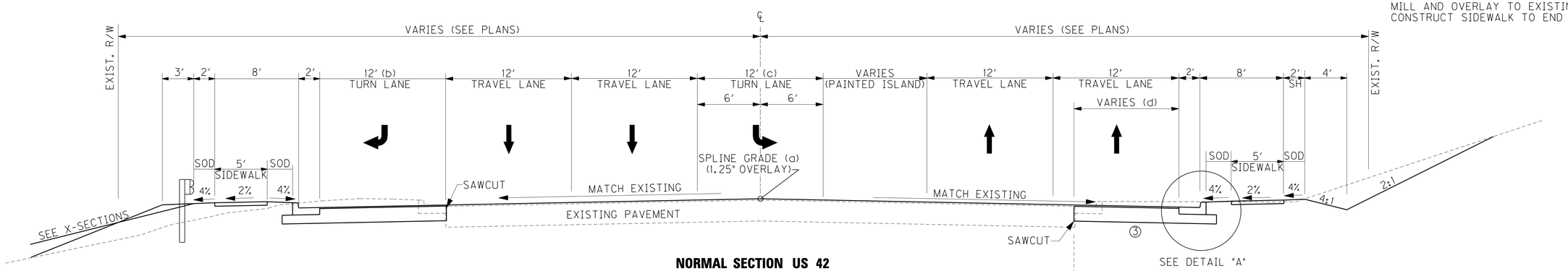
U.S. 42

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2d

① WIDEN SHOULDER 3' FOR GUARDRAIL (SEE PLANS)

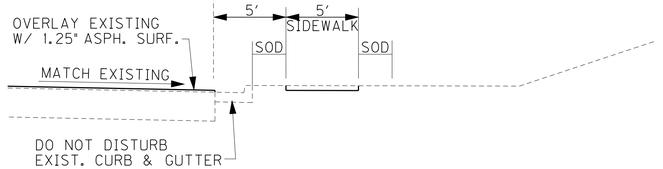
② SEE CROSS-SECTIONS FOR BORDER SLOPES AND BORDER SLOPE TRANSITIONS.

③ WIDENING ENDS AT MEL'S LANE (APPROX. STA. 104+50) FROM MEL'S LANE TO END OF PROJECT (STA. 106+40), MILL AND OVERLAY TO EXISTING GUTTER; CONSTRUCT SIDEWALK TO END OF CONSTRUCTION.



NORMAL SECTION US 42
STA. 100+94 TO STA. 106+40 LT. (104+63.50 RT.)

(a) PROFILE GRADE W/ 2% CROSS SLOPE FROM STA. 100+94 TO 101+32. SPLINE GRADE FROM STA. 101+32 TO 106+40 MATCHING EXISTING CROSS SLOPE.
(b) VARIES FROM 12' AT STA. 105+36.07 TO 0' AT STA. 106+32.13.
(c) VARIES FROM 12' AT STA. 103+67.77 TO 0' AT STA. 105+48.37.
(d) VARIABLE WIDTH WIDENING ENDS AT STA. 105+06.74.



RT. STA. 105+06.74 TO STA. 106+40.00
(NORTH MEL'S LANE)

PAVEMENT DESIGN FOR OVERLAY, REPLACEMENT, AND WIDENING

US 42

ROADBED PREPARATION FOR WIDENING
8" Crushed Aggregate Size No. 2
Fabric - Geotextile Type III

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter

APPROACH ROADS

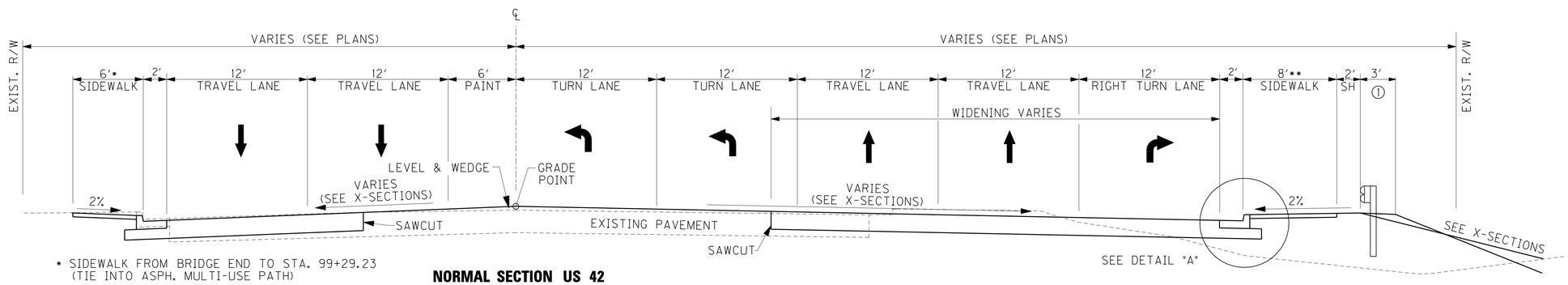
ROADBED PREPARATION
8" Crushed Aggregate Size No. 2
Fabric - Geotextile Type III

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter

OVERLAY

1.25" CL3 Asphalt Surface 0.38B PG64-22

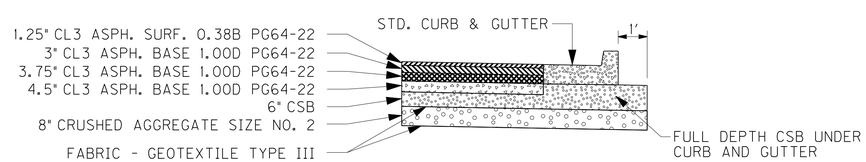


* SIDEWALK FROM BRIDGE END TO STA. 99+29.23 (TIE INTO ASPH. MULTI-USE PATH)

NORMAL SECTION US 42
STA. 98+76.72 (BRIDGE END) TO STA. 99+58

STA. 98+76.72 TO STA. 99+00
OVERLAY TRANSITIONS TO PROFILE GRADE

**SIDEWALK FROM BRIDGE END TO STA. 99+41.16 (TIE INTO ASPH. MULTI-USE PATH)



DETAIL "A"
N.T.S.

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$

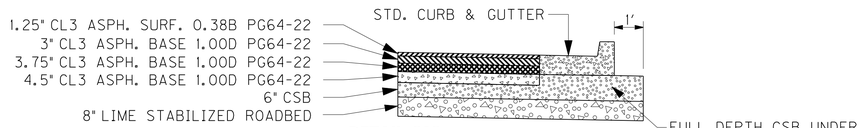
Cell Library: roadway.cel
Cell Name: SD
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

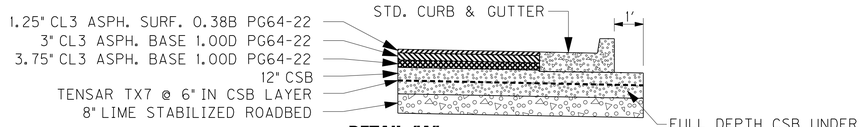
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2e

TYPICAL SECTION

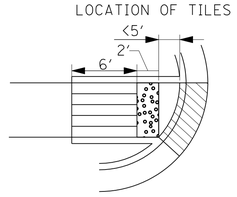
OLD TOLL ROAD
TYPICAL SECTION DETAILS

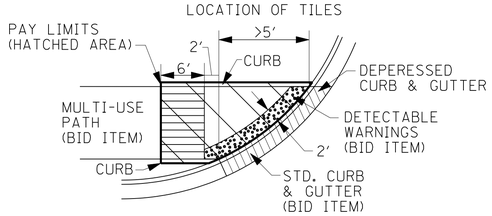


DETAIL "A"
PAVEMENT ALT. NO. 1
N.T.S.



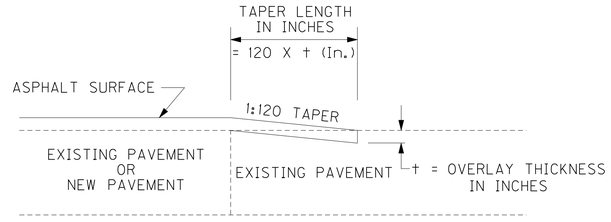
DETAIL "A"
PAVEMENT ALT. NO. 2
N.T.S.





SIDEWALK RAMPS
N.T.S.

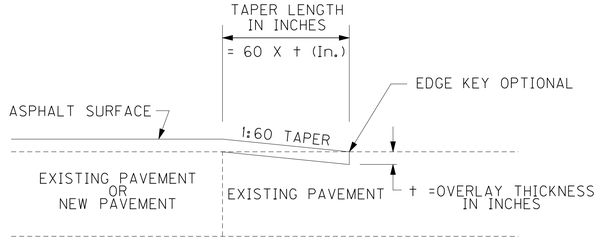
SIDEWALK RAMPS SHALL BE PAID PER S.Y. OF 4" CONC. SIDEWALK



TAPERING OF OVERLAYS ON LOW SPEED FACILITIES

KEY-IN FOR APPROACH ROADS

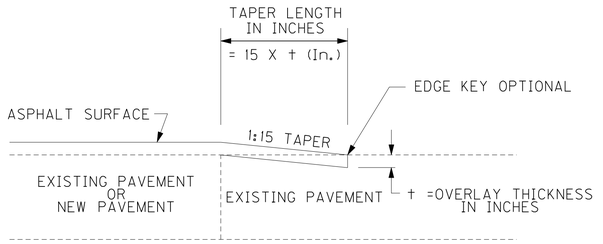
WORK UNDER THIS ITEM SHALL BE INCIDENTAL TO PAVEMENT CONSTRUCTION AND INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED BELOW AND SHALL INCLUDE ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE ASPHALT MATERIAL REMOVED.



TAPER FOR APPROACH ROADS

KEY-IN FOR RESIDENTIAL ENTRANCES

WORK UNDER THIS ITEM SHALL BE INCIDENTAL TO PAVEMENT CONSTRUCTION AND INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED BELOW AND SHALL INCLUDE ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE ASPHALT MATERIAL REMOVED.



TAPERING FOR ENTRANCES

PAVEMENT DESIGN ALTERNATE NO. 1

OLD TOLL ROAD

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
6" Crushed Stone Base
4.5" CL3 Asphalt Base 1.00D PG64-22
3.75" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter

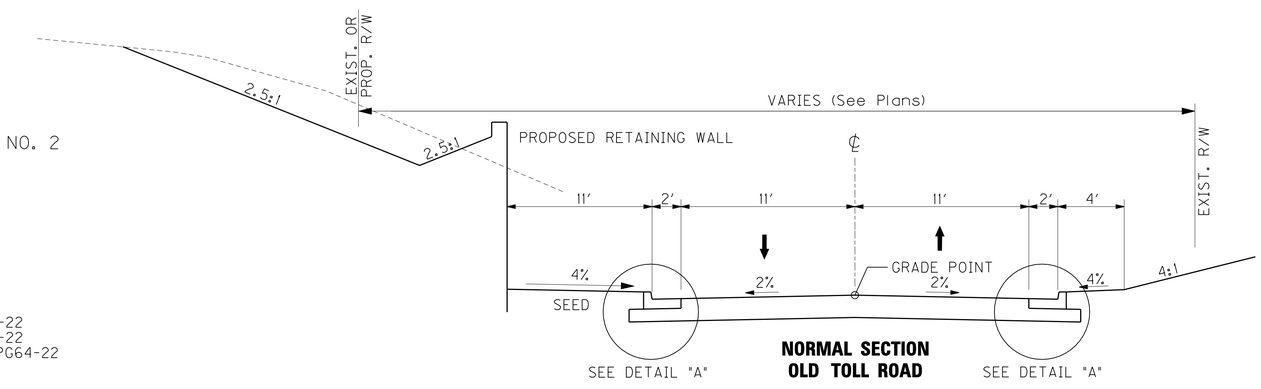
PAVEMENT DESIGN ALTERNATE NO. 2

OLD TOLL ROAD

ROADBED PREPARATION
8" Lime Stabilized Roadbed
6% Lime (103 LBS/CF)
Asphalt Curing Seal (2.0 LB/SY)
Sand for Blotter (5.0 LB/SY)

TRAFFIC LANES
12" Crushed Stone Base
3" CL3 Asphalt Base 1.00D PG64-22
3" CL3 Asphalt Base 1.00D PG64-22
1.25" CL3 Asphalt Surface 0.38B PG64-22

SHOULDERS
Standard Curb & Gutter



NORMAL SECTION
OLD TOLL ROAD

SCALE: 1" = 5'

TYPICAL SECTION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2f

PAVING AREAS

ITEM CODE	INCHES	ITEM	KY 237 ALT. NO. 1	US 42	OLD TOLL ROAD ALT. NO. 1		TOTAL ALT. NO. 1		KY 237 ALT. NO. 2	US 42	OLD TOLL ROAD ALT. NO. 2		TOTAL ALT. NO. 2
			SQUARE YARDS										
		TRAFFIC LANES											
13	8	LIME STABILIZED ROADBED	40,745	0	1,020		41,765		40,745	0	1,020		41,765
78	8	CRUSHED AGGREGATE SIZE NO 2	0	3,000	0		3,000		0	3,000	0		3,000
3	6	CSB	40,745	3,000	1,020		44,765		12,228	3,000	0		15,228
3	12	CSB	0	0	0		0		28,517	0	1,020		29,537
	-	TENSAR TX7	0	0	0		0		23,223	0	1,020		24,243
214	4.5	CL3 ASPH BASE 1.00D PG64-22	40,745	3,000	1,020		44,765		12,228	3,000	0		15,228
214	3.75	CL3 ASPH BASE 1.00D PG64-22	40,745	3,000	1,020		44,765		12,228	3,000	0		15,228
214	3	CL3 ASPH BASE 1.00D PG64-22	40,745	3,000	1,020		44,765		69,262	3,000	2,040		74,302
388	1.25	CL3 ASPH SURF 0.38B PG64-22	40,745	14,487	1,020		56,252		40,745	14,487	1,020		56,252
		SHOULDERS											
13	8	LIME STABILIZED ROADBED	4,818	0	367		5,185		4,818	0	367		5,185
78	8	CRUSHED AGGREGATE SIZE NO 2	0	853	0		853		0	853	0		853
3	10.5	CSB UNDER CURB	3,070	853	367		4,290		803	853	0		1,656
3	11.25	CSB UNDER CURB	0	0	0		0		2,267	0	367		2,634
3	6	CSB (6" AVG DEPTH)	21,229	0	0		21,229		14,523	0	0		14,523
3	12	CSB (12" AVG DEPTH)	0	0	0		0		3,891	0	0		3,891
	-	TENSAR TX7	0	0	0		0		2,824	0	367		3,191
100		ASPHALT SEAL AGGREGATE	5,197	0	0		5,197		5,197	0	0		5,197
214	4.5	CL3 ASPH BASE 1.00D PG64-22	1,748	0	0		1,748		1,178	0	0		1,178
214	3.75	CL3 ASPH BASE 1.00D PG64-22	1,542	0	0		1,542		1,039	0	0		1,039
214	3	CL3 ASPH BASE 1.00D PG64-22	1,377	0	0		1,377		1,881	0	0		1,881
291		EMULSIFIED ASPHALT RS-2	5,197	0	0		5,197		5,197	0	0		5,197
388	1.25	CL3 ASPH SURF 0.38B PG64-22	1,308	0	0		1,308		1,308	0	0		1,308
		MULTI-USE PATH											
3	4	CSB	7,539	0	0		7,539		7,539	0	0		7,539
214	2	CL3 ASPH BASE 1.00D PG64-22	413	0	0		413		413	0	0		413
388	2	CL3 ASPH SURF 0.38B PG64-22	7,539	0	0		7,539		7,539	0	0		7,539
		MEDIANS & BIKE PATH											
3	4	CSB	24	576	0		600		24	576	0		600
3	6	CSB	0	216	0		216		0	216	0		216
100		ASPHALT SEAL AGGREGATE	0	576	0		576		0	576	0		576
291		EMULSIFIED ASPHALT RS-2	0	576	0		576		0	576	0		576
388	2	CL3 ASPH SURF 0.38B PG64-22	24	0	0		24		24	0	0		24
		ENTRANCES											
20	4	TRAFFIC BOUND BASE	778	0	0		778		778	0	0		778
3	6	CSB	74	74	0		148		74	74	0		148
3	4	CSB	308	0	0		308		308	0	0		308
214	2	CL3 ASPH BASE 1.00D PG64-22	382	74	0		456		382	74	0		456
2101		CEM CONC ENT PAVEMENT-8 INCH	271	0	0		271		271	0	0		271
2084		JPC PAVEMENT-8 INCH	770	0	0		770		770	0	0		770
388	2	CL3 ASPH SURF 0.38B PG64-22	382	74	0		456		382	74	0		456

ALL ASHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.

② ESTIMATED AT 100 LBS. PER SQ. YD. PER INCH OF DEPTH.

③ 2 APPLICATIONS APPLIED AT 20 LB/SY

④ 2 APPLICATIONS APPLIED AT 2.4 LB/SY

⑤ ESTIMATED AT 2.0 LBS. PER SQ. YD.

⑥ ESTIMATED AT 5.0 LBS. PER SQ. YD.

⑦ ESTIMATED AT 6% AREA @ 103 LBS/CF

⑧ TOTAL INCLUDES 6 TONS FROM PERFORATED PIPE DRAINAGE SUMMARY

PAVING SUMMARY
PAVEMENT DESIGN ALTERNATE NO. 1

ITEM CODE	ITEM	UNIT	KY 237 ALT. NO. 1	US 42	OLD TOLL ROAD ALT. NO. 1	* MOT		TOTAL PROJECT ALT. NO. 1	
1	D.G.A.* ①	TON	0	0	0	219		219	
3	CRUSHED STONE BASE ①	TON	25,070	1,783	573	0		27,426	
13	LIME STABILIZED ROADBED	SY	45,563	0	1,387	0		46,950	
14	LIME ⑦	TON	845	0	26	0		871	
20	TRAFFIC BOUND BASE ②	TON	156	0	0	0		156	
78	CRUSHED AGGREGATE SIZE NO. 2 ①	TON	0	1,772	0	0		1,778	⑧
100	ASPHALT SEAL AGGREGATE ③	TON	103.9	11.5	0.0	0.0		115.4	
190	LEVELING & WEDGING PG64-22	TON	0	19	0	0		19	
214	CL3 ASPH BASE 1.00D PG64-22	TON	26,276	1,864	631	0		28,771	
291	EMULSIFIED ASPHALT RS-2 ④	TON	12.5	1.4	0	0		13.9	
358	ASPHALT CURING SEAL ⑤	TON	46	0	1	0		47.0	
2075	JPC PAVEMENT-6 INCH	SQYD	770	0	0	0		770	
2101	CEM CONC ENT PAVEMENT-8 INCH	SQYD	271	0	0	0		271	
2677	ASPH PAVE MILLING & TEXTURING	TON	0	64	0	0		64	
2702	SAND FOR BLOTTER ⑥	TON	114	0	3	0		117	
388	CL3 ASPH SURF 0.38B PG64-22	TON	3,765	1,004	70	0		4,839	

PAVING SUMMARY
PAVEMENT DESIGN ALTERNATE NO. 2

ITEM CODE	ITEM	UNIT	KY 237 ALT. NO. 2	US 42	OLD TOLL ROAD ALT. NO. 2	* MOT		TOTAL PROJECT ALT. NO. 2	
1	D.G.A.* ①	TON	0	0	0	219		219	
3	CRUSHED STONE BASE ①	TON	35,378	1,783	941	0		38,102	
13	LIME STABILIZED ROADBED	SY	45,563	0	1,387	0		46,950	
14	LIME ⑦	TON	845	0	26	0		871	
20	TRAFFIC BOUND BASE ②	TON	156	0	0	0		156	
78	CRUSHED AGGREGATE SIZE NO. 2 ①	TON	0	1,772	0	0		1,778	⑧
100	ASPHALT SEAL AGGREGATE ③	TON	103.9	11.5	0.0	0.0		115.4	
190	LEVELING & WEDGING PG64-22	TON	0	19	0	0		19	
214	CL3 ASPH BASE 1.00D PG64-22	TON	17,880	1,864	337	0		20,081	
291	EMULSIFIED ASPHALT RS-2 ④	TON	12.5	1.4	0	0		13.9	
358	ASPHALT CURING SEAL ⑤	TON	46	0	1	0		47.0	
2075	JPC PAVEMENT-6 INCH	SQYD	770	0	0	0		770	
2101	CEM CONC ENT PAVEMENT-8 INCH	SQYD	271	0	0	0		271	
2677	ASPH PAVE MILLING & TEXTURING	TON	0	64	0	0		64	
2702	SAND FOR BLOTTER ⑥	TON	114	0	3	0		117	
388	CL3 ASPH SURF 0.38B PG64-22	TON	3,765	1,004	70	0		4,839	
	TENSAR TX 7	SQYD	26,047	0	1,387	0		27,434	

NOTES

ALL STREET APPROACH PAVEMENT QUANTITIES ARE INCLUDED IN MAINLINE.

*USE D.G.A. FOR PAVEMENT EDGE DROP OFF AND MAINTAINING DRIVEWAYS WHEN NEEDED DURING MAINTENANCE OF TRAFFIC.

PAVING AREAS AND SUMMARY

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY _____ DATE _____
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E-SHEET NAME:

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2g

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	ENTRANCE PIPE	CULVERT PIPE					STORM SEWER PIPE																														REMARKS
					15"	18"	24"		60"		15"	18"	24"	36"	42"																																		
ITEM CODE					440	462	464		472		521	522	524	528	529																																				
UNIT TO BID			FT		LIN FT	LINEAR FEET					LINEAR FEET																																							
KY 237																																																
R3	25+88			M	36																																											
R3	28+73			M	32																																											
R5	31+35.83	8°56'55" Rt.	10	M								164																1																			2.86		1-18" U HEADWALL
R5	36+19.20	7°23'04" Lt.	2	M								151									1					1																			0.93	8	1-18" S&F HEADWALL
R5	38+00.97	5°57'02" Rt.	10	M										208																															2.15	182	1-36" PIPE CULVERT HDWL
R7	39+15.00		2	M							131										1																											
R7	40+49.09		2	M							137										1																											
R7	40+85.00		2	M							65															1																					
R7	41+50.22		2	M							47																								1												
R7	41+90.00		2.5	M							56	30		90	24						1												1										61			2.68	215	1-42" PIPE CULVERT HDWL
R7	42+17.09		3	M							53																						1														
R7	42+50.00		2	M																	1																											
R7	42+70.00		2.5	M																		1																										
R7	42+91.26		4.5	M							37																																			0.75	7	1-15" S&F HEADWALL
R7	43+96.53		1.5	M							103																																				
R7	47+19.00		10	M							68																										1											
R7	47+89.63		3	M							84										1																											
R9	48+80.00		2.5	M								122									1																											
R9	50+05.70		4	M							39	34									1																									2.86		18" U HEADWALL (MOD.)
R9	51+90.00		2	M								119	103								1																											
R9	53+12.64		2	M								112									1																											
R9	54+31.20	0°25'11" Lt.	2.5	M							165	100									1																	1									
R9	54+78.57		2.5	M																																	1										
R9	55+55.00		2.5	M							223										1																											
R11	57+80.70		2.5	M							225										2																											
R11	59+45.70		1.5	M							323										2																											
R11	62+08.70		1.5	M							366										2																											
R11	65+03.26		3.5	M																	1																											
R11	65+26.00			M	8																																										
R13	67+95.70		2.5	M							169										1																											
R13	68+72.59	17°46'32" Lt.	19	M		4	184													1																									4		1.35	8	1-OUTLET STRCT. 1-24" S&F HDWL
R13	69+52.50	26°57'46" Rt.	4	M							192	114									1																										0.93	8	1-18" S&F HEADWALL
R13	70+32.64		2	M							38									1																	1									
R13	71+65.71		2.5	M																	1																	1									
R15	80+00.00			M	53																																										
R15	83+59.21	4°20'59" Rt.	19.5	M					195																																			109			9.22	687	2-60" PIPE CULV HDWL
R17	85+00.00			M	34																																						20					
R17	88+38.00			M	42																																										
R17	91+65.00	2°53'32" Lt.	1.5	M		21																																								
KY 237 & SHEET TOTAL					205	25	184		195		2,521	946	103	298	24				1	1	22	0	1	0	0	0	2	1	3	1	1	2			202	0	0	23.73	1,115	

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KY 237 SECTION 1
DRAINAGE SUMMARY
SHEET 1 OF 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2h

PIPE DRAINAGE SUMMARY

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	ENTRANCE PIPE	CULVERT PIPE					STORM SEWER PIPE						METAL END SECTION TYPE 1-15 INCH	18" S & F BOX INLET-OUTLET	CURB BOX INLET TYPE A	CURB BOX INLET TYPE A MODIFIED	CURB BOX INLET TYPE B	CURB BOX INLET TYPE B MODIFIED	CURB BOX INLET TYPE F	CURB BOX INLET TYPE F MODIFIED	DROP BOX INLET TYPE 3	DROP BOX INLET TYPE 3 (SAG)	DROP BOX INLET TYPE 11	DROP BOX INLET TYPE 11 MODIFIED	DROP BOX INLET TYPE 13G	DROB BOX INLET TYPE 13S			CHANNEL LINING CLASS III	JUNCTION BOX TYPE BI		CONCRETE CLASS "A"	STEEL REINFORCEMENT	REMARKS
					15"	18"	24"		60"		15"	18"	24"	36"	42"																								
ITEM CODE					440	462	464		472		521	522	524	528	529		1370	1451	1456	1459	1480	21546ED	1487	23643EC	1496	23644EC	1544	1545	1559	1568			2484	4811		8100	8150	
UNIT TO BID			FT		LIN FT	LINEAR FEET					LINEAR FEET						EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH			TONS	EACH		CY	LBS	
US 42																																						
R19	86+22.60	02°18'46" Lt.	1	M							4									1																		
R19	87+34.63	17°55'33" Rt.	1	M							4									1																		
R19	93+33.87	0°45'58" Rt.	1	M							55												1												1			
R21	95+25.00		2.5	M							46																		1								
R21	95+73.26		1.5	M							59	46																	1								
R21	96+33.29		1.5	M																				1													
R21	97+60.00		4	M							36								1																0.75	7	1-15" S&F HDWL
R21	98+75.00		5	M							42								1																0.75	7	1-15" S&F HDWL
R21	101+07.05		1.5	M							55			232							1					1										
R21	101+22.46		3	M							60								1							1										
R21	103+60.79	21°24'35" Lt.	5	M										17							1	1														
R23	105+61.37		1.5	M								9							1																		
	US 42 TOTAL										361	55		249					4	2	2	1	1	1			2		2				1		1.50	14	
OLD TOLL ROAD																																						
R25	51+22.67		2.5	M							24		213						1		1																
R25	52+59.60		2	M							333	24							1		1					1									2.40	24	2-15" S&P HEADWALL
OLD TOLL TOTAL											357	24	213						2		2					1									2.40	24	
SHEET TOTAL					0	0	0		0		718	79	213	249	0		0	0	6	2	4	1	1	1	0	1	2	0	2	0			0	1		3.90	38	
PROJECT TOTAL					205	25	184		195		3,239	1,025	316	547	24		1	1	28	2	5	1	1	1	2	2	5	1	3	2			202 ①	1		27.63 ①	1,153	

① QUANTITIES CARRIED OVER TO THE GENERAL SUMMARY SHEET.

KY 237 SECTION 1
DRAINAGE SUMMARY
SHEET 2 OF 2

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PERFORATED PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R21

MILEPOST OR STATIONS	PERFORATED PIPE 4" (2)	NON-PERFORATED PIPE 4" (2)	PERFORATED PIPE HEADWALL, TYPE 1 - 4" (2)	PERFORATED PIPE HEADWALL, TYPE 2 - 4" (2)	PERFORATED PIPE HEADWALL, TYPE 3 - 4" (2)	CRUSHED AGGREGATE SIZE NO. 2 (1)				
ITEM CODE	1000	1010	1020	1024	1028	78				
UNIT TO BID ON	LIN FEET	LIN FEET	EACH	EACH	EACH	TON				
STA. 36+49.12 - SUBGRADE DRAINAGE - SAG (4)	96	8								
STA. 38+00 - TRANSVERSE BENCHING	116	8	1			1				
STA. 41+88.65 - SUBGRADE DRAINAGE - SAG	108	8	1			1				
STA. 49+28.73 - SUBGRADE DRAINAGE - SAG (4)	64	8								
STA. 55+00 - TRANSVERSE BENCHING (4)	68	8								
STA. 66+20 - TRANSVERSE BENCHING	96	8			1	1				
STA. 70+30 - TRANSVERSE BENCHING (4)	74	8								
STA. 80+50 - TRANSVERSE BENCHING	64	8			1	1				
STA. 82+68.74 - SUBGRADE DRAINAGE - SAG	66	8		1		1				
STA. 86+50 - TRANSVERSE BENCHING	76	8			1	1				
TOTAL PROJECT	(3) 828	(3) 80	2	1	3	6				

MILEPOST OR STATIONS										
ITEM CODE										
UNIT TO BID ON										

(1) TOTALS CARRIED OVER TO THE PAVING SUMMARY SHEET.
(2) TOTALS CARRIED OVER TO THE GENERAL SUMMARY SHEET.
(3) FABRIC GEOTEXTILE TYPE III USED FOR UNDERDRAINS IS INCIDENTAL TO PERFORATED PIPE.
(4) TIE PERFORATED PIPE TO PROPOSED DRAINAGE BOX / CROSSDRAIN.

PERFORATED PIPE DRAINAGE SUMMARY

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

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E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2j

GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	KY 237	US 42	OLD TOLL ROAD	SECTION 1 TOTALS	
1000	PERFORATED PIPE-4 INCH	LF	828	0	0	828	(11)
1010	NON-PERFORATED PIPE-4 IN	LF	80	0	0	80	(11)
1020	PERF PIPE HEADWALL TY 1 - 4 IN	EACH	2	0	0	2	(11)
1024	PERF. PIPE HEADWALL TY 2 - 4 IN	EACH	1	0	0	1	(11)
1028	PERF. PIPE HEADWALL TY 3 - 4 IN	EACH	3	0	0	3	(11)
1810	STANDARD CURB AND GUTTER	LF	7,470	2,652	426	10,548	
1921	STANDARD BARRIER MEDIAN TYPE 4	SQYD	0	287	0	287	
1923	STANDARD BARRIER MEDIAN TYPE 5	SQYD	150	0	0	150	
1939	MOUNTABLE MEDIAN TYPE 3	SQYD	0	83	0	83	
2091	REMOVE PAVEMENT	SQYD	3,386	0	195	3,581	
2159	TEMPORARY DITCH	LF	6,921	2,079	1,232	10,232	
2200	ROADWAY EXCAVATION	CUYD	181,311	3,329	2,525	187,165	
2203	STRUCTURE EXCAV-UNCLASSIFIED	CUYD	347	0	0	347	
2242	WATER	MGAL	262	78	0	340	(2)
2274	FENCE-6 FT CHAIN LINK	LF	330	0	0	330	
2287	DBL. VEHICULAR CHAIN LINK GATE	EACH	1	0	0	1	
2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	2,280.5	519.5	0	2,800	
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	10	1	0	11	
2363	GUARDRAIL CONNECTOR TO BRIDGE END TY A	EACH	1	2	0	3	
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	1	1	0	2	
2381	REMOVE GUARDRAIL	LF	700	0	0	700	
2391	GUARDRAIL END TREATMENT TYPE 4A	EACH	3	1	0	4	
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	57	19	5	81	
2432	WITNESS POST	EACH	2	1	0	3	
2484	CHANNEL LINING CLASS III	TON	11	0	0	213	(6)
2545	CLEARING AND GRUBBING	LS				1	(1)
2555	CONCRETE-CLASS B	CUYD	111	0	0	111	
2562	SIGNS	SQFT	948	581	0	1,629	(8)
2568	MOBILIZATION	LS				1	
2569	DEMOBILIZATION	LS				1	
2585	EDGE KEY	LF	40	120	21	181	
2598	FABRIC-GEOTEXTILE TYPE III	SQYD	0	7,926	0	7,926	(12)
2600	FABRIC GEOTEXTILE TY IV FOR PIPE	SQYD	16,142	2,083	1,862	20,087	(7)
2650	MAINTAIN & CONTROL TRAFFIC	LS				1	
2655	CROSSOVER (STA. 48+02)	LS				1	
2655	CROSSOVER (STA. 73+41)	LS				1	
2655	CROSSOVER (STA. 85+09)	LS				1	
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	4	2	0	6	
2676	MOBILIZATION FOR MILLING & TEXTURING	LS				1	
2690	SAFELOADING	CUYD	0	3	0	3	
2701	TEMPORARY SILT FENCE	LF	6,921	2,079	1,232	10,232	
2703	SILT TRAP TYPE A - ALT 1	EACH	33	3	1	37	
2703	SILT TRAP TYPE A - ALT 2	EACH	33	3	1	37	
2704	SILT TRAP TYPE B	EACH	33	3	1	37	
2705	SILT TRAP TYPE C	EACH	33	3	1	37	
2706	CLEAN SILT TRAP TYPE A - ALT 1	EACH	198	18	6	222	(9)
2706	CLEAN SILT TRAP TYPE A - ALT 2	EACH	198	18	6	222	(9)
2707	CLEAN SILT TRAP TYPE B	EACH	198	18	6	222	(9)
2708	CLEAN SILT TRAP TYPE C	EACH	198	18	6	222	(9)
2709	CLEAN TEMPORARY SILT FENCE	LF	6,921	2,079	1,232	10,232	
2720	SIDEWALK-4 INCH CONCRETE	SQYD	488	1,193	0	1,681	
2726	STAKING	LS				1	
2775	FLASHING ARROW	EACH	2	2	0	4	
2894	CRASH CUSHION TYPE 6T	EACH	4	2	0	6	
3171	CONCRETE BARRIER WALL TYPE 9T	LF	645	140	0	785	

ITEM	DESCRIPTION	UNIT	KY 237	US 42	OLD TOLL ROAD	SECTION 1 TOTALS	
5950	EROSION CONTROL BLANKET	SQYD	5,501	162	94	5,757	
5952	TEMPORARY MULCH	SQYD	159,430	12,923	4,888	180,822	(10)
5953	TEMP SEEDING AND PROTECTION	SQYD	159,430	12,923	4,888	180,822	(10)
5966	TOPDRESSING FERTILIZER	TON	0.92	0.07	0.03	1.04	(10)
5985	SEEDING AND PROTECTION	SQYD	159,430	12,923	4,888	180,822	(10)
5989	SPECIAL SEEDING CROWN VETCH (P57)	SQYD	762	0	0	762	
5990	SODDING	SQYD	5,906	915	0	6,821	
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	16,580	20,779	820	38,179	
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	34,859	12,586	1,655	49,100	
6565	PAVE MARKING-THERMO X-WALK-6 INCH	LF	462	239	0	701	
6568	PAVE MARKING-THERMO STOP BAR-24IN	LF	213	194	14	421	
6570	PAVE MARKING-PAINT CROSS-HATCH	SQFT	36,759	13,335	35	50,129	
6572	PAVE MARKING-DOTTED LANE EXTEN	LF	234	123	0	357	
6574	PAVE MARKING-PRE THERM CURV ARROW	EACH	27	15	0	42	
6576	PAVE MARKING-PREF THERMO ONLY	EACH	2	0	0	2	
6589	PAVEMENT MARKER TYPE V-MW	EACH	172	91	0	263	
6591	PAVEMENT MARKER TYPE V-BY	EACH	252	110	10	372	
8100	CONCRETE-CLASS A	CUYD	0	17.70	0	45.33	(13)
10020NS	FUEL ADJUSTMENT	DOLL				92,628	
10030NS	ASPHALT ADJUSTMENT	DOLL				81,019	
20094ES835	TEMPORARY RELOCATION OF SIGNAL HEAD	EACH	6	6	0	12	
20224NN	GAS UTILITY COORDINATION	LS				1	
20456NS835	INSTALL TEMP. VIDEO CAMERA	EACH	2	2	0	4	
20550ND	SAWCUT PAVEMENT	LF	140	2,649	0	2,789	
23274EN11F	TURF REINFORCEMENT MAT 1	SQYD	2,093	0	0	2,093	
23131ER701	PIPELINE VIDEO INSPECTION	LF	0	0	0	2,784	
23158ES505	DETECTABLE WARNINGS (YELLOW)	SQFT	628	130	0	758	
23609ED	HYDRAULIC CONTROL STRUCTURE	LS				1	
23626EC	DETENTION BASIN	LS				1	
23645EC	RECONSTRUCT MH W/WATER TIGHT LID	EACH	2	0	0	2	

EROSION CONTROL ITEMS BASED ON THE FOLLOWING:

2703	SILT TRAP TYPE "A" -ALT. 1	ONE PER ACRE DISTURBED
2703	SILT TRAP TYPE "A" - ALT. 2	ONE PER ACRE DISTURBED
2704	SILT TRAP TYPE "B"	ONE PER ACRE DISTURBED
2705	SILT TRAP TYPE "C"	ONE PER ACRE DISTURBED
2706	CLEAN SILT TRAP TYPE "A" - ALT. 1	THREE TIMES PER CONSTRUCTION SEASON PER TRAP
2706	CLEAN SILT TRAP TYPE "A" - ALT. 2	THREE TIMES PER CONSTRUCTION SEASON PER TRAP
2707	CLEAN SILT TRAP TYPE "B"	THREE TIMES PER CONSTRUCTION SEASON PER TRAP
2708	CLEAN SILT TRAP TYPE "C"	THREE TIMES PER CONSTRUCTION SEASON PER TRAP
2701	TEMPORARY SILT FENCE	LINEAR FEET EQUAL TO LENGTH OF PROJECT
2709	CLEAN TEMPORARY SILT FENCE	ONCE
5952	TEMPORARY MULCH	SQUARE YARDS TO COVER ENTIRE DISTURBED AREA ONCE
2159	TEMPORARY DITCH	LINEAR FEET EQUAL TO LENGTH OF PROJECT
5966	TOP DRESSING FERTILZER	TONS OF 20-10-10 FERTILIZER TO COVER THE ENTIRE SEEDED & PROTECTED AREA AT THE RATE OF 11.5 LBS PER 1000 SF
5985	SEEDING & PROTECTION	SQUARE YARDS DISTURBED AREA ONCE - PERMANENTLY STABILIZED AREA
5953	TEMPORARY SEEDING & PROTECTION	SQUARE YARDS EQUAL TO ENTIRE DISTURBED AREA
	SPECIAL SEEDING ON SLOPES >3:1	SQUARE YARDS TO COVER AREAS 3:1 AND STEEPER

FOR ITEMS NOT LISTED ABOVE, SEE PLAN CONSTRUCTION NOTES.

NOTES:

(1) APPROXIMATELY 3.7 ACRES

(2) FOR CONTROLLING DUST CAUSED BY MAINTAINING TRAFFIC ONLY (200 MGAL/MILE)

(3) EARTHWORK

EXCAVATION
127,560 C.Y. COM FROM CROSS SECTIONS
40,730 C.Y. RDZ (4)
14,200 C.Y. TRANSVERSE BENCHING (4)
4,675 C.Y. EMB. FOUND. BENCHING (4)
187,165 C.Y. TOTAL

EMBANKMENT
44,767 C.Y. EMB FROM CROSS SECTIONS
3,510 C.Y. REFILL (5)
14,200 C.Y. TRANSVERSE BENCHING (4)
4,675 C.Y. EMB. FOUND. BENCHING (4)
67,152 C.Y. TOTAL

ESTIMATE FOR EARTHWORK CALCULATIONS FOR DESIGN ONLY. COMMON IS CONSIDERED THE AREA ABOVE THE RDZ LINE AS SHOWN ON THE CROSS-SECTIONS. THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

(4) SEE GEOTECHNICAL REPORT FOR LOCATIONS.

(5) THIS VALUE PROVIDES FOR 1' OF UNDERCUT IN SHALE AREAS. SEE GEOTECHNICAL REPORT NOTE NO. 14. SEE CROSS-SECTIONS FOR LOCATIONS.

(6) TOTAL INCLUDES 202 TONS FROM PIPE DRAINAGE SUMMARY SHEET

(7) FOR WRAPPING PIPE TRENCH BACKFILL

(8) TOTAL INCLUDES 100 SF FOR ARRA SIGNAGE

(9) ASSUME CONSTRUCTION PERIOD OF 2 SEASONS.

(10) TOTAL INCLUDES ADDITIONAL AREA OF 3,581 SY FOR SEEDING & PROTECTING AREAS OF PAVEMENT REMOVAL

(11) QUANTITIES FROM PERFORATED PIPE DRAINAGE SUMMARY

(12) FOR WRAPPING CRUSHED AGGREGATE SIZE NO. 2 FOR ROADBED STABILIZATION

(13) TOTAL INCLUDES 27.63 CU YDS FROM PIPE DRAINAGE SUMMARY

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

GENERAL SUMMARY

PREPARED BY ____ DATE ____
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E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R2k

GENERAL NOTES

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "KENTUCKY TRANSPORTATION CABINET/DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", STANDARD DRAWINGS, MANUALS, GUIDELINES, AND M.U.T.C.D., LATEST EDITIONS, UNLESS OTHERWISE NOTED IN THESE PLANS.

CONTROL OF WORK

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AND COOPERATE WITH OTHER CONTRACTORS, E.G. PUBLIC UTILITY COMPANIES, SO THAT INTERFERENCE WITH SUCH OTHER WORK WILL BE REDUCED TO A MINIMUM.

UTILITIES (HAZARDOUS OR FLAMMABLE MATERIALS)

THE CONTRACTOR IS ADVISED TO EXERCISE CAUTION IN HIS OPERATIONS IN AREAS WHERE PLANS INDICATE THE PRESENCE OF A GAS LINE OR OTHER LINES CARRYING HAZARDOUS MATERIAL.

NOTICE - CAUTION - CLASSIFICATION

WITHOUT REGARD TO THE MATERIALS ENCOUNTERED, ALL ROADWAY AND DRAINAGE EXCAVATION SHALL BE UNCLASSIFIED AND SHALL BE DESIGNATED AS "ROADWAY EXCAVATION", IT SHALL BE DISTINCTLY UNDERSTOOD THAT ANY REFERENCE TO ROCK, EARTH, OR ANY OTHER MATERIAL ON THE PLANS OR CROSS-SECTIONS, WHETHER IN NUMBERS, WORDS, LETTERS OR LINES, IS SOLELY FOR THE DEPARTMENT'S INFORMATION AND IS NOT TO BE TAKEN AS AN INDICATION OF CLASSIFIED EXCAVATION OR THE QUANTITY OF EITHER ROCK, EARTH OR ANY OTHER MATERIAL INVOLVED. THE BIDDER MUST DRAW HIS OWN CONCLUSION AS TO THE CONDITIONS TO BE ENCOUNTERED. THE DEPARTMENT DOES NOT GIVE ANY GUARANTEE AS TO THE ACCURACY OF THE DATA AND NO CLAIM WILL BE CONSIDERED FOR ADDITIONAL COMPENSATION IF THE MATERIALS ENCOUNTERED ARE NOT IN ACCORD WITH THE CLASSIFICATION SHOWN.

GUARDRAIL

CONTRACTOR SHALL INSPECT GUARDRAIL INSTALLED AT STORM PIPES FOR CONFLICTS. ALL GUARDRAIL REMOVED SHALL BE SENT TO THE BAILEY BRIDGE LOT IN FRANKFORT, KY.

PAVEMENT MARKERS TYPE V

RAISED PAVEMENT MARKERS TYPE V SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 712 OF THE STANDARD SPECIFICATIONS ON KY 237 AND US 42.

PAVEMENT SAWING

WHEN CONSTRUCTING CONCRETE ISLANDS OR CURB IN PAVEMENT OVERLAY AREAS, SAW EXISTING ASPHALT TO MINIMIZE DAMAGE TO EXISTING PAVEMENT. THIS WORK CONSISTS OF MAKING A CLEAN CUT THROUGH THE EXISTING ASPHALT PAVEMENT TO THE DEPTH NEEDED FOR NEW DESIGN. WORK ALSO INCLUDES FULL-DEPTH REMOVAL OF ALL MATERIALS. SAWCUTTING FOR THIS PURPOSE WILL BE CONSIDERED INCIDENTAL TO THE BID ITEM FOR CONCRETE ISLANDS OR CURB.

GAS UTILITY COORDINATION

A "GAS UTILITY COORDINATION" ITEM IS SHOWN ON THE GENERAL SUMMARY SHEET AND HAS BEEN ESTABLISHED IN THE ROAD CONTRACT FOR CONSIDERATION BY THE ROAD CONTRACTOR. THIS ITEM IS PROVIDED, IF NEEDED, AS COMPENSATION FOR ANY ADDITIONAL COORDINATION TO ACCOMMODATE THE INCLUSION OF GAS UTILITY WORK WITH THE ROADWAY CONSTRUCTION. THE ROAD CONTRACTOR CAN FREELY BID THIS ITEM.

SEEDING AND PROTECTION

CONSTRUCT PERMANENT SEEDING ACCORDING TO 2008 SPECIFICATIONS USING MIXTURE TYPE II. DO NOT USE CROWN VETCH AS INDICATED IN THE SPECIFICATIONS ON THOSE AREAS HAVING A SLOPES OF 3:1 OR GREATER AND/OR ROCKY SOIL, BUT USE SEED MIXTURE TYPE II. AS AN EXCEPTION, WITHIN THE LIMITS OF PARCEL 57, USE CROWN VETCH.

SODDING

SODDING QUANTITIES AS SHOWN ON PLANS INCLUDE ALL AREAS INDICATED ON TYPICAL SECTIONS AS SODDED.

CONCRETE

ENSURE CLASS "A" CONCRETE IS USED THROUGHOUT, EXCEPT FOR GRAVITY WALL AS INDICATED ON PLANS AS CLASS "B".

N.G.S. (U.S.G.S.) BENCH MARKS

DO NOT DISTURB N.G.S. (U.S.G.S.) BENCH MARKS IN ANY MANNER UNLESS DIRECTED BY THE ENGINEER.

BEFORE YOU DIG

CALL 1-800-752-6007 TOLL FREE A MINIMUM OF TWO AND NO MORE THAN TEN BUSINESS DAYS PRIOR TO EXCAVATION FOR INFORMATION ON THE LOCATION OF EXISTING UNDER-GROUND UTILITIES WHICH SUBSCRIBE TO THE BEFORE-U-DIG (BUD) SERVICE. COORDINATE EXCAVATION WITH ALL UTILITY OWNERS, INCLUDING THOSE WHO DO NOT SUBSCRIBE TO BUD. SHOW ALL UTILITIES AND A CONTACT PERSON FOR EACH COMPANY ON SHEET NO. 3 OF THE PLANS.

DEPARTMENT OF THE ARMY PERMIT AND WATER QUALITY CERTIFICATION APPROVALS

A DEPARTMENT OF THE ARMY (DA) PERMIT, WHICH MAY REQUIRE APPROVAL OF A STATE WATER QUALITY CERTIFICATION FROM THE KENTUCKY DIVISION OF WATER, REGULATES THIS PROJECT AT ONE OR MORE LOCATIONS. PERFORM ALL APPLICABLE WORK IN COMPLIANCE WITH THE CONDITIONS STATED IN THE DA PERMIT AND THE APPROVED WATER QUALITY CERTIFICATION. POST A COPY OF THE DA PERMIT AND THE WATER QUALITY CERTIFICATION IN A CONSPICUOUS PLACE AT THE PROJECT SITE. IF A DA PERMIT OR WATER QUALITY CERTIFICATION APPROVAL IS PENDING, DO NOT WORK IN OR DISTURB THE DESIGNATED AREA(S) UNTIL OBTAINING THE APPROPRIATE APPROVAL(S). REFER TO NOTICE(S) CONTAINED IN THE CONTRACT BID PROPOSAL FOR DESIGNATED AREA(S) WHERE WORK IS PROHIBITED BY THE ABSENCE OF APPROVAL.

LIME STABILIZED ROADBED

STABILIZE THE TOP 8 INCHES OF THE FINISHED ROADBED WITH LIME IN ACCORDANCE WITH SECTION 208 OF THE STANDARD SPECIFICATIONS. USE SELECTED SOILS, HAVING A MINIMUM C.B.R. VALUE OF 3 FOR THIS PURPOSE.

THE LIME CONTENT IS 6 PERCENT BY WEIGHT, AND THE ESTIMATED PLAN QUANTITY USES AN AVERAGE DRY DENSITY OF 103 LBS/CUBIC FEET. HOWEVER, ADJUST THE QUANTITY AFTER CONSTRUCTING THE ROADBED AND SUBMITTING THE SAMPLES FOR TESTING. THIS TAKES APPROXIMATELY TWO WEEKS.

ASPHALT PAVEMENT RIDE QUALITY

PAVEMENT RIDEABILITY REQUIREMENTS, IN ACCORDANCE WITH SECTION 410 OF THE STANDARD SPECIFICATIONS, SHALL APPLY ON THIS PROJECT. CATEGORY B SHALL APPLY.

COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED FOR DRIVING LANES AND RAMPS AT ONE INCH (25 MM) OR GREATER ON THIS PROJECT BY OPTION A ACCORDING TO SUBSECTIONS 402 AND 403 OF THE CURRENT STANDARD SPECIFICATIONS. USE JOINT CORES AS DESCRIBED IN SUBSECTION 402.03.02 FOR SURFACE MIXTURES ONLY. WILL ACCEPT THE COMPACTION OF ALL OTHER ASPHALT MIXTURES BY OPTION B.

EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED ELSEWHERE IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT (PER METER) FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-3670

EXISTING LANDSCAPE MATERIAL

DO NOT DISTURB LANDSCAPE PLANTS UNLESS ABSOLUTELY NECESSARY.

DO NOT TO DISTURB ANY PLANTS WITHOUT PRIOR APPROVAL OF THE PROJECT ENGINEER.

THE PROJECT ENGINEER SHALL NOTIFY THE DISTRICT AGRONOMIST FOR POSSIBLE DEPARTMENT SALVAGE OF ANY PLANTS NEEDING REMOVAL.

SPECIAL NOTES FOR
Acceptance of JPC Pavement Thickness
Boring and Jacking Steel Pipe without Carrier Pipe
Turf Reinforcement Mat

PORTABLE VARIABLE MESSAGE SIGNS

FURNISH, INSTALL, OPERATE, AND MAINTAIN VARIABLE MESSAGE SIGNS AT THE LOCATIONS DESIGNATED BY THE ENGINEER IN ACCORDANCE WITH THE PROJECT ENGINEER AND "KENTUCKY 2008 STANDARD SPECIFICATIONS" SPECIAL NOTE 1J WHEN IN AGREEMENT WITH THE PROJECT ENGINEER. CONTRACTOR SHALL TAKE OWNERSHIP OF MESSAGE SIGNS AT PROJECT COMPLETION.

DETECTABLE WARNINGS FOR SIDEWALK RAMPS

DETECTABLE WARNINGS AT ALL SIDEWALK RAMPS WILL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AND WILL BE YELLOW IN COLOR.

EROSION CONTROL ITEMS

EROSION CONTROL BLANKET QUANTITY AS SHOWN ON PLANS HAS BEEN CALCULATED TO 1' DEPTH OF PROTECTION.
TURF REINFORCEMENT MAT QUANTITY AS SHOWN ON PLANS HAS BEEN CALCULATED TO 2' DEPTH OF PROTECTION.

ENTRANCES

ALL ENTRANCES BETWEEN STA. 83+98.33 TO 93+00.68 WILL BE OF ASPHALT DESIGN REGARDLESS OF EXISTING DRIVEWAY TYPE. THESE ARE LONG-TERM TEMPORARY ENTRANCES.

FABRIC GEOTEXTILE TYPE IV FOR PIPE

FABRIC GEOTEXTILE TYPE IV FOR PIPE WILL BE USED FOR TRENCH LINING AND WILL BE BID AT THE CONTRACT UNIT PRICE PER SQUARE YARD.

FABRIC - GEOTEXTILE TYPE III

FABRIC - GEOTEXTILE TYPE III WILL BE USED FOR WRAPPING CRUSHED AGGREGATE FOR ROADBED STABILIZATION ON US 42. MATERIAL SHALL BE COMPLETELY ENCASED WITHIN THE FABRIC AND FABRIC WILL BE BID AT THE CONTRACT UNIT PRICE PER SQUARE YARD.

REMOVE PAVEMENT & BASE

THIS ITEM SHALL CONSIST OF REMOVING EXISTING PAVEMENT AND BASE COURSES TO A TOTAL DEPTH OF NO MORE THAN 12 INCHES AND RESHAPING GROUND TO THE ACCEPTANCE OF THE ENGINEER. THIS ITEM SHALL INCLUDE ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE PAVEMENT AND BASE REMOVAL & RESHAPING TO THE SATISFACTION OF THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY ITEMS NECESSARY TO COMPLETE THIS WORK. AREAS ARE INCLUDED IN "SEEDING & PROTECTION" QUANTITY.

PERFORATED PIPE

4" PERFORATED AND NON-PERFORATED PIPE UTILIZED FOR SUBGRADE UNDERDRAINS AS DESIGNATED IN THE *GEOTECHNICAL ENGINEERING ROADWAY REPORT* WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT. GEOTEXTILE FABRIC USED FOR UNDERDRAINS IS INCIDENTAL TO PERFORATED PIPE.

CONSTRUCTION OF OLD TOLL ROAD AND PARCEL 22 SPECIAL CONSIDERATIONS

NO CONSTRUCTION MATERIALS OR EQUIPMENT WILL BE STORED ON PARCEL 22. TEMPORARY FENCING WILL BE PLACED AROUND ALL CONSTRUCTION.
DURING CONSTRUCTION OF THE RETAINING WALL ON PARCEL 22, THE CONTRACTOR WILL MINIMIZE IMPACTS TO THE CHURCH PARKING LOT AS THE LOT IS USED DAILY BY A BUSINESS (DAYCARE). ALL GRADE AND DRAIN WORK IN THE PARKING LOT MUST BE COMPLETED IN 30 DAYS.
DURING CONSTRUCTION OF OLD TOLL ROAD, THE CONTRACTOR MAY CLOSE THE ACCESS AT KY 237; HOWEVER, OPERATIONS MUST ALLOW ACCESS TO THE RESIDENCES AND BUSINESSES AT ALL TIMES AND BE DONE EFFICIENTLY TO ALLOW FOR MINIMAL CLOSURE TIME.
PAVING OF THE CHURCH PARKING LOT AND GUARDRAIL INSTALLATION SHALL BE BY OTHERS AND NOT A PART OF THE CONTRACT FOR KY 237/US 42/OLD TOLL ROAD IMPROVEMENTS.

EXISTING LANE MARKINGS

EXISTING LANE MARKINGS SHALL BE REMOVED BY GRINDING (WATER METHOD) AND REMOVAL WILL BE INCIDENTAL TO THE BID ITEM FOR TEMPORARY STRIPING.

GRAVITY WALL STA. 39+20 TO STA. 40+70

THE FACE OF THE PROPOSED GRAVITY WALL SHALL HAVE AN AESTHETIC TREATMENT USING CONCRETE FORM-LINER "SYMONS 1508" OR EQUIVALENT.

RECONSTRUCTING MANHOLES WITH WATERTIGHT LIDS

ALL MANHOLES TO BE RECONSTRUCTED USING WATERTIGHT LIDS SHALL USE "NEENAH R-1916-F WATERTIGHT MANHOLE FRAME WITH GASKET & BOLTED LID", SEE SANITATION DISTRICT NO. 1, STANDARD DRAWING NO. 112.

GENERAL NOTES

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R3

R/W REV. NO. 4, AUG. 30, 2007

CONVENTIONAL SIGNS

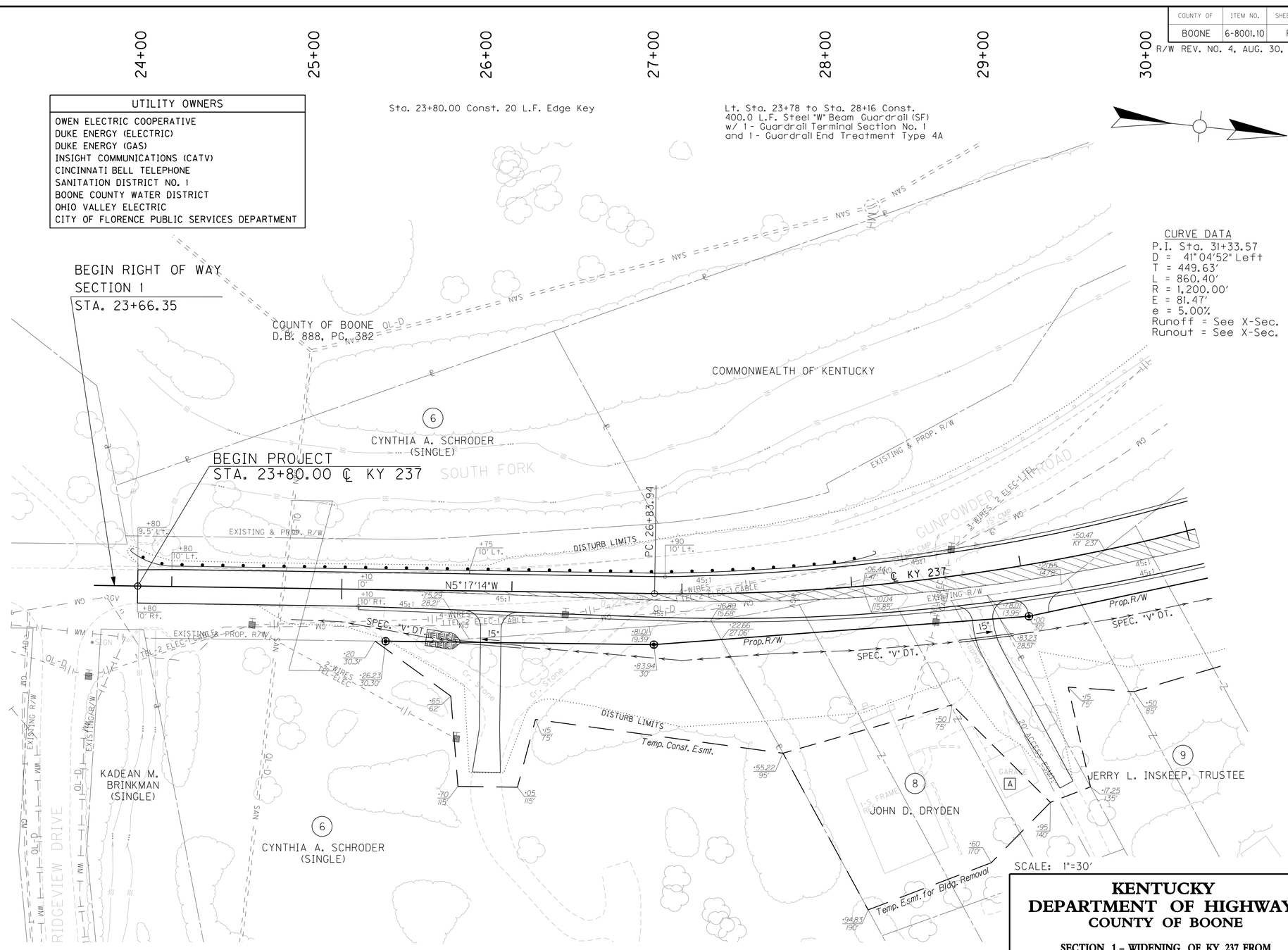
SURVEY LINE
GRADE LINE
GROUND LINE
COUNTY LINE
CORPORATE LIMITS
EXIST. PROPERTY LINE
EXIST. RIGHT OF WAY & PROPERTY LINE
PROPOSED RIGHT OF WAY
RIGHT OF WAY MONUMENT
BENCH MARK
EXISTING R/W MARKER
RIGHT OF WAY MONUMENT EXISTING/PROPOSED
UTILITY TEST HOLE
EXISTING ROAD
RAILROAD
FENCE (CONTROLLED ACCESS)
FENCE (EXCEPT STONE AND HEDGE)
TREE LINE
TREES
PIPE CULVERT
CULVERT
BRIDGE
BUILDINGS
GUARDRAIL

	EXISTING	PROPOSED
LIGHTING POLE		
POWER POLE		
JOINT POWER & TELEPHONE POLE		
TELEPHONE & TELEGRAPH POLE		
ANCHOR, POWER OR TELEPHONE		
STUB POWER		
STUB TELEPHONE		
WATER MAIN	WM	6" WM
GAS MAIN	GM	6" GM
TELEPHONE DUCT	T	T
ELECTRIC DUCT	E	E
DIRECT BURIAL TV CABLE	TV	TV
SANITARY SEWER (WITH MANHOLE)	SAN	SAN
STORM SEWER (WITH MANHOLE)	STORM	STORM
DIRECT BURIAL ELECTRIC CABLE	E	E
DIRECT BURIAL TELEPHONE CABLE	T	T
OVERHEAD WIRE		
TRAFFIC LIGHTS		
ELECTRIC MANHOLE	EMH	EMH
TELEPHONE MANHOLE	TMH	TMH

STONE FENCE
HEDGE FENCE
SWAMP OR MARSH
SPRINGS
SINKHOLE
QUARRY SITE
BLUE LINE STREAM
INTERMITTENT STREAM OR DITCH
LAKES OR PONDS
REGULATED FLOODWAY
NORTH POINT

DO NOT REMOVE	DNR
DO NOT DISTURB	DND
EROSION CONTROL BLANKET	ECB
TURF REINFORCEMENT MAT	TRM
SYNTHETIC MAT	
PROPOSED CONCRETE SURFACE	
CHANNEL LINING	

UTILITY OWNERS
OWEN ELECTRIC COOPERATIVE
DUKE ENERGY (ELECTRIC)
DUKE ENERGY (GAS)
INSIGHT COMMUNICATIONS (CATV)
CINCINNATI BELL TELEPHONE
SANITATION DISTRICT NO. 1
BOONE COUNTY WATER DISTRICT
OHIO VALLEY ELECTRIC
CITY OF FLORENCE PUBLIC SERVICES DEPARTMENT



CURVE DATA
P.I. Sta. 31+33.57
D = 41°04'52" Left
T = 449.63'
L = 860.40'
R = 1,200.00'
E = 81.47'
e = 5.00%
Runoff = See X-Sec.
Runout = See X-Sec.

A GARAGE IS TO REMAIN.

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 24+71 to 25+50	Spec. "V"	55 SY ECB
Rt. 25+50 to 25+70	Spec. "V"	19 SY TRM
Rt. 26+06 to 28+58	Spec. "V"	176 SY ECB
Rt. 28+90 to 30+00	Spec. "V"	77 SY ECB

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	ENTRANCE PIPE
Rt. 25+88	12'	0 S.Y. - N/A	132 S.Y. - T.B.B.	36 L.F.- 15".
Rt. 28+73	12'	0 S.Y. - N/A	151 S.Y. - T.B.B.	32 L.F.- 15".
Rt. 29+06	12'	0 S.Y. - N/A	14 S.Y. - T.B.B.	0 L.F.- N/A

KENTUCKY DEPARTMENT OF HIGHWAYS
COUNTY OF BOONE

SECTION 1 - WIDENING OF KY 237 FROM
PROJECT RIDGEVIEW DRIVE TO ROSE PETAL DRIVE
NUMBERS FD52 008 0237 001-004
ARRA 8200(009)

20____ BY _____
T.E.B.M. FOR PRE-CONSTRUCTION

KY 237 STA. 23+80 TO STA. 30+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: spl
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R4

DATUM

832 830 828 826 824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794 792 790 788 786 784 782 780 778 776

DATUM

830 828 826 824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794 792 790 788 786 784 782 780

BEGIN PROJECT
STA. 23+80 ℄ KY237

SPLINE GRADE
(1.25" OVERLAY)

Existing Ground

Proposed Grade

PVI STA.26+00.00
Elev 804.84

PVI STA.27+20.00
Elev 810.03

PVC STA.26+70.00
Elev 807.87

PVT STA.27+70.00
Elev 809.62

HP 27+54.03
Elev 809.68

VC = 100'
SD = 179'

4.32%

-0.82%

Sp. "V" @ 3.11%

Sp. "V" @ 5.36%

5.16%

5.20%

Sp. "V" D+. @ 0.55%

Sp. "V" D+. @ 0.70%

Sp. "V" D+. @ 0.70%

36 L.F. 15" Pipe @ 3.11%

32 L.F. V5" Pipe @ 0.68%

+71 Rt
796.00

+00 Rt
797.58

+50 Rt
800.20

+70 Rt
801.25

+06 Rt
802.37

+54 Rt
807.05

+00 Rt
806.79

+58 Rt
806.37

+90 Rt
806.15

Sta. 29+38
Low Wire
Elev. 819.45

794.30 794.40 | 795.63 795.73 | 798.69 798.79 | 802.22 802.32 | 804.73 804.84 | 806.72 807.00 | 808.65 808.93 | 808.35 809.68 | 808.12 809.37 | 807.26 808.96

807.03 808.55 | 812.17 808.14 | 814.21 807.73

23+50 24+00 24+50 25+00 25+50 26+00 26+50 27+00 27+50 28+00 28+50

29+00 29+50 30+00

KY 237

Earthwork Quantities
Sta. 23+80 to 30+00

Emb Bench	=	0
Com	= " = " =	7,104
RDZ		0
Emb		473
Refill		0

SCALE:
H: 1" = 30'
V: 1" = 3'

KY 237 STA. 23+80 TO STA. 30+00

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 4

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R5

R/W REV. NO. 17, SEPT. 4, 2009

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Lt. 31+54 to 34+00	2' F.B	279 SY ECB
Lt. 34+00 to 35+50	Spec. "V"	170 SY ECB
Lt. 35+50 to 36+00	Spec. "V"	89 SY TRM

△ KY 237-317
KYTC MONUMENT SET
ALONG KY 237
STA. 30+39.61, 117.80' LT.
ELEV. 791.26

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
23002	18" U HDWL	----	786.42
0002	CBI TYPE A-6-2	801.57	796.37
0008	18" S&F HDWL	----	796.24
1007	36" CLVRT. HDWL.	----	784.70

US 42 STORM SEWER DATA SHOWN ON SHEET R21

Lt. Sta. 35+00 to Sta. 39+00 Const.
343 S.Y. 10' Asph. Multi-Use Path

Lt. Sta. 35+00 to Rt. US 42 Sta. 99+41.16
Const. 182 L.F. of Std. Curb and Gutter

Lt. US 42 Sta 99+29.23 to Lt. Sta. 39+00
Const. 160 L.F. of Std. Curb and Gutter

△KY 237-316
KYTC MONUMENT SET
ALONG KY 237
STA. 38+74.84, 34.37' LT.
ELEV. 798.63

Lt. Sta 38+35 to Sta. 39+00
Remove 103 S.Y. Asphalt Pavement & Base

Lt. Sta. 38+35 to Sta. 39+00
Remove 66 L.F. Guardrail

Lt. Sta 31+63 to Sta. 36+54
Remove 1,440 S.Y. Asphalt Pavement & Base

Lt. Sta 35+00 to US 42 Sta. 99+41.16
Const. 93 S.Y. Sodding

Lt. US 42 Sta 99+29.23 to Sta. 39+00
Const. 68 S.Y. Sodding

Lt. Sta. 30+00 to Sta. 39+00 Const.
12 S.Y. 4" Conc. Sidewalk w/ 27 S.F.
Detectable Warnings (yellow)

Lt. Sta 37+71 to Sta. 39+00
Const. 159 L.F. Steel "W" Beam Guardrail (SF). Tie into US 42 exist. guardrail.

Lt. Sta. 31+58 to Sta. 36+54
Remove 462.5 L.F. Guardrail

CURVE DATA
P.I. Sta. 31+33.57
D = 41°04'52" Left
T = 449.63'
L = 860.40'
R = 1,200.00'
E = 81.47'
e = 5.00%
Runoff = See X-Sec.
Runout = See X-Sec.

NOTE: RECONSTRUCT MH2301 & MH2302 WITH WATER TIGHT LID (USE NEENAH R-1916-F SEE SANITATION DISTRICT NO. 1, STD. DWG. 112)

STA. 37+38.33 ℄ KY 237 =
STA. 100+20.05 ℄ US 42

COUNTY OF BOONE
D.B. 888, PG. 382

COMMONWEALTH OF KENTUCKY

(134) ERPS INC.

BURNETT MANAGEMENT COMPANY, LLC

(12) SHERRY A. MORGAN
JAMES L. MORGAN (HUSB.)

(13) ACG GUNPOWDER, LLC

(14) (14F) GUNPOWDER PROPERTIES, LLC

(9) JERRY L. INSKEEP, TRUSTEE

(138) CP & TS, LLC

(16) RAMI H. NWAISSER (1/2 INT.)
CYNTHIA M. NWAISSER (WF.)
WILLIAM S. FAR (1/2 INT.)
HALA H. FAR (WF.)

SOUTH FORK

KY-237 GUNPOWDER ROAD

℄ KY 237

℄ US 42

EXISTING & PROP. R/W

EX PIPE TO REMAIN

DISTURB LIMITS

SPEC. "V" DT.

2' F.B DT.

CH. LIN. CL III

10' MULTI-USE PATH

STD. CURB & GUTTER

Grade to inlet

Prop.R/W

Temp. Const. Esmt.

Perm. Drain. Esmt.

Perm. San. Sewer Esmt.

Perm. Water Main Esmt.

EXISTING R/W

PROPOSED R/W

PT 31+33.57

N5°17'14"W

N46°22'05"W

N40°23'45"E

KY 237-317

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT
Rt. 31+50	12'	0 S.Y. - N/A	25 S.Y. - T.B.B.

Rt. Sta. 30+00 to Sta. 39+00 Const.
12 S.Y. 4" Conc. Sidewalk w/ 27 S.F.
Detectable Warnings (yellow)

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 30+00 to 36+32	Spec. "V"	442 SY ECB

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
23001	DBI TYPE 3 (SAG)	802.97	799.33
0001	DBI TYPE 3	800.80	797.57

US 42 STORM SEWER DATA SHOWN ON SHEET R21

Rt. Sta. 35+00 to Sta. 39+00 Const.
339 S.Y. 10' Asph. Multi-Use Path

Rt. Sta. 35+00 to Rt. US 42 Sta. 101+15.52
Const. 221 L.F. of Std. Curb and Gutter

Lt. US 42 Sta. 101+21.16 to Rt. Sta. 39+00
Const. 133 L.F. of Std. Curb and Gutter

Rt. Sta 35+00 to Rt. US 42 Sta. 101+15.52
Const. 114 S.Y. Sodding

Lt. US 42 Sta 101+21.16 to Sta. 39+00
Const. 69 S.Y. Sodding

Lt. US 42 Sta. 101+21.16 to Rt. Sta. 39+00
Const. 125.5 L.F. Steel "W" Beam Guardrail (SF)

SCALE: 1"=30'

KY 237 STA. 30+00 TO STA. 39+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R6

R/W REV. NO. 6, OCT. 12, 2007

DATUM

828 826 824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794 792 790 788 786 784 782 780 778 776 774 772

STA. 37+38.33 ℄ KY 237 =
STA. 100+20.05 ℄ US 42

Existing Ground

Proposed Grade

Sta. 34+98
Low Wire
Elev. 817.89

Sta. 36+77
Low Wire
Elev. 818.56

+00 Lt
796.24
(Plotted 20'
Above Datum)

26 L.F.
18" Pipe
@ 0.50%

18" Pipe

I.E. 796.37
(Plotted 20'
Above Datum)

#0002
Sta. 36+15.53, 28.69' LT
C.B.I. Type A-6-2
F.L. 801.57
(Plotted 20' Above Datum)

-0.821%

+54.11 Lt
786.42
(Plotted 20'
Above Datum)

+15.96 Lt
785.12
(Plotted 20'
Above Datum)

+00 Lt
789.21
(Plotted 20'
Above Datum)

+50 Lt
790.29
(Plotted 20'
Above Datum)

+50 Lt
792.22
(Plotted 20'
Above Datum)

Sp. "V" @ 2.29%

Sp. "V" @ 2.00%

2' F.B. @ 2.43%

2' F.B. @ 2.30%

7.88%

+50 Rt
805.00

2.43%

2.51%

1.30%

+00 Rt
803.70

+55 Rt
803.33

18" Pipe
I.E. 799.33

Sp. "V" @ 0.50%

#2001
Sta. 31+27.38, 57.67' Rt.
D.B.I. Type 3 (SAG)
T/G 802.97

PVC STA. 36+02.50
Elev 802.78

LP 36+49.12
Elev 802.59

PVT STA. 36+77.50
Elev 802.66

#0007
Sta. 101+22.46 (U.S. 42), 48.00' Rt.
C.B.I. Type A-4-2
F.L. 807.87

PVI STA. 37+38.33
Elev 803.87

PVI STA. 37+85.33
Elev 802.93

I.E. 803.00

15 L.F.
15" Pipe
@ 3.35%

I.E. 803.50

VC = 75

-2.18%

-2.0%

-2.0%

See
Development
Sheet

36" Pipe

-2.333%

Subgrade

I.E. 800.00

+31.58 Rt
800.80
18" Pipe

I.E. 797.57

35 L.F. 15" Pipe @ 0.18%

#0001
Sta. 36+31.58, 96.66 Rt.
D.B.I. Type 3
T/G 800.80

PVI STA. 36+40.00
Elev 802.47

#0006
Sta. 101+18.02 (US 42), 65.66' Rt.
D.B.I. Type 11
T/G 807.49

Transverse
Bench

36" Pipe

#1005
Sta. 101+07.05
102.00' LT.
D.B.I. Type 11
T/G 794.50

55 L.F. of 15"
Pipe @ 0.92%

I.E. 791.00

I.E. 791.50

#1004
Sta. 101+07.05 (US 42), 46.20' Lt.
C.B.I. Type B-36-2
F.L. 806.61

KY 237	
Earthwork Quantities Sta. 30+00 to 39+00	
Emb Bench	= 578
Com	" " 38,460
RDZ	" " 16,188
Emb	" " 2,191
Refill	" " 1,035

SCALE:
H: 1" = 30'
V: 1" = 3'

814.21	812.25	807.53	804.01	809.29	813.46	813.80	816.53	817.18	817.77	816.49	816.32	813.74	811.10	803.38	803.70	802.75	791.85	795.15
807.73	807.32	806.91	806.49	806.08	805.67	805.26	804.85	804.44	804.03	803.62	803.21	802.80	802.59	803.11	803.64	802.59	801.43	800.26

30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50 36+00 36+50 37+00 37+50

38+00 38+50 39+00

KY 237 STA. 30+00 TO STA. 39+00

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

VENDOR'S NAME
I-92
FORM NO. 4

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R7

R/W REV. NO. 17, SEPT. 4, 2009

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

Lt. Sta. 39+00 to Sta. 42+28.5
Const. 328.5 L.F. Steel "W" Beam Guardrail (SF). Tie into existing.

Lt. Sta 39+00 to Sta. 40+53
Remove 114 SY Asphalt Pavement & Base

Lt. Sta. 39+00 to Sta. 48+00 Const. 916 S.Y. 10' Asph. Multi-Use Path

Lt. Sta. 39+00 to Sta. 40+69
Remove 171.5 L.F. Guardrail

Lt. Sta. 39+00 to Sta. 48+00 Const. 942 L.F. of Std. Curb and Gutter

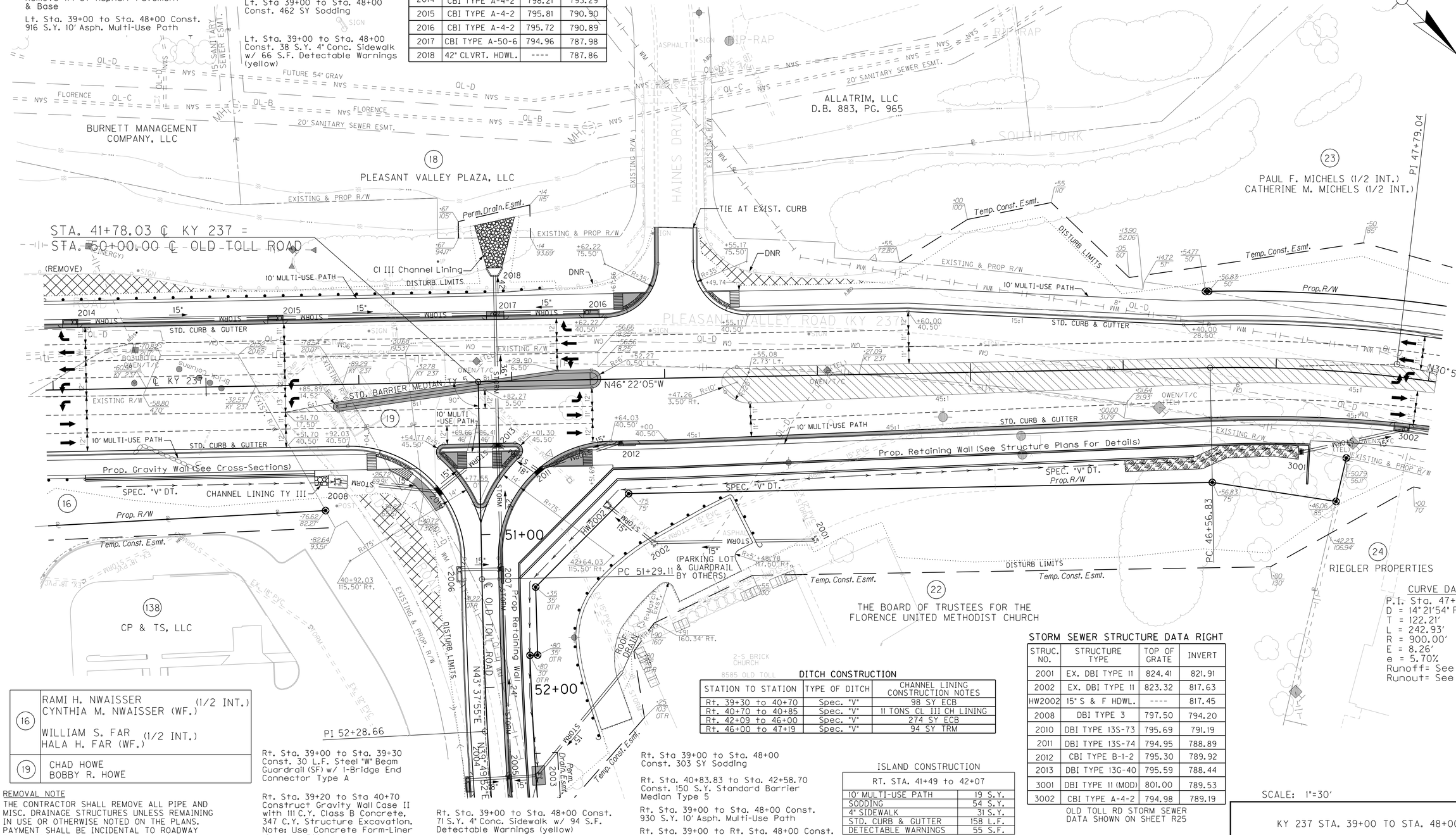
Lt. Sta 39+00 to Sta. 48+00
Const. 462 SY Sodding

Lt. Sta. 39+00 to Sta. 48+00 Const. 38 S.Y. 4" Conc. Sidewalk w/ 66 S.F. Detectable Warnings (yellow)

Lt. Sta 42+23 to Sta. 44+40
Remove 71 SY Asphalt Pavement & Base

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
2014	CBI TYPE A-4-2	798.21	793.29
2015	CBI TYPE A-4-2	795.81	790.90
2016	CBI TYPE A-4-2	795.72	790.89
2017	CBI TYPE A-50-6	794.96	787.98
2018	42" CLVRT. HDWL.	----	787.86



16	RAMI H. NWAISSER (1/2 INT.) CYNTHIA M. NWAISSER (WF.) WILLIAM S. FAR (1/2 INT.) HALA H. FAR (WF.)
19	CHAD HOWE BOBBY R. HOWE

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Rt. Sta. 39+00 to Sta. 39+30
Const. 30 L.F. Steel "W" Beam Guardrail (SF) w/ 1-Bridge End Connector Type A

Rt. Sta. 39+20 to Sta 40+70
Construct Gravity Wall Case II with 111 C.Y. Class B Concrete, 347 C.Y. Structure Excavation.
Note: Use Concrete Form-Liner "Symons 1508 Jan" or equivalent.

Rt. Sta. 39+00 to Sta. 48+00 Const. 71 S.Y. 4" Conc. Sidewalk w/ 94 S.F. Detectable Warnings (yellow)

Rt. Sta 39+00 to Sta. 48+00
Const. 303 SY Sodding

Rt. Sta. 40+83.83 to Sta. 42+58.70
Const. 150 S.Y. Standard Barrier Median Type 5

Rt. Sta. 39+00 to Sta. 48+00 Const. 930 S.Y. 10' Asph. Multi-Use Path

Rt. Sta. 39+00 to Rt. Sta. 48+00 Const. 932 L.F. of Std. Curb and Gutter

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 39+30 to 40+70	Spec. "V"	98 SY ECB
Rt. 40+70 to 40+85	Spec. "V"	11 TONS CL III CH LINING
Rt. 42+09 to 46+00	Spec. "V"	274 SY ECB
Rt. 46+00 to 47+19	Spec. "V"	94 SY TRM

ISLAND CONSTRUCTION

RT. STA. 41+49 to 42+07	
10' MULTI-USE PATH	19 S.Y.
SODDING	54 S.Y.
4" SIDEWALK	31 S.Y.
STD. CURB & GUTTER	158 L.F.
DETECTABLE WARNINGS	55 S.F.

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
2001	EX. DBI TYPE 11	824.41	821.91
2002	EX. DBI TYPE 11	823.32	817.63
HW2002	15" S & F HDWL.	----	817.45
2008	DBI TYPE 3	797.50	794.20
2010	DBI TYPE 13S-73	795.69	791.19
2011	DBI TYPE 13S-74	794.95	788.89
2012	CBI TYPE B-1-2	795.30	789.92
2013	DBI TYPE 13G-40	795.59	788.44
3001	DBI TYPE 11 (MOD)	801.00	789.53
3002	CBI TYPE A-4-2	794.98	789.19

OLD TOLL RD STORM SEWER DATA SHOWN ON SHEET R25

CURVE DATA
P.I. Sta. 47+79.04
D = 14° 21' 54" Right
T = 122.21'
L = 242.93'
R = 900.00'
E = 8.26'
e = 5.70%
Runoff= See X-Sec.
Runout= See X-Sec

SCALE: 1"=30'

KY 237 STA. 39+00 TO STA. 48+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R8

DATUM: 826, 824, 822, 820, 818, 816, 814, 812, 810, 808, 806, 804, 802, 800, 798, 796, 794, 792, 790, 788, 786, 784, 782, 780, 778, 776, 774, 772, 770

Sta. 39+40
Low Wire
Elev. 822.78

#2014
Sta. 39+15.00, 42.50' Lt.
C.B.I. Type A-4-2
F.L. 798.21

I.E. 793.29
(Plotted 15' Above Datum)

PVC STA. 39+20.00
Elev 799.79

131 L.F. of 15" Pipe @ 1.82%

Prop. Gravity Wall (See Cross-Sections)

Sta. 40+47
Low Wire
Elev. 812.12

#2015
Sta. 40+49.09 42.50' Lt.
C.B.I. Type A-4-2
F.L. 795.81

I.E. 790.90
(Plotted 15' Above Datum)

137 L.F. of 15" Pipe @ 2.13%

Sp. "V" Dt. @ -3.10%
+30 Rt
807.14
+50 Rt
806.46
Sp. "V" Dt. @ -3.40%
+00 Rt
804.91
+70 Rt
803.14
Sp. "V" Dt. @ -2.64%
+50 Rt
803.59
Sp. "V" Dt. @ -2.25%

#2017
Sta. 41+90.00 42.50' Lt.
C.B.I. Type A-50-6
F.L. 794.96

TURNING POINT (SEE OLD TOLL ROAD)

42" Pipe
36" Pipe

56 L.F. of 15" Pipe @ 5.71%

I.E. 790.89
(Plotted 15' Above Datum)

I.E. 787.98
(Plotted 15' Above Datum)

#2016
Sta. 42+50.00 42.50' LT.
C.B.I. Type A-4-2
F.L. 795.72

Haines Drive Lt.

Turning Point
(See Old Toll Profile)

#HW2002
Sta. 42+62.21, 83.36' Rt.
15" S & F Hdwl.

#2002
Sta. 42+91.26 107.93' Rt.
EX. D.B.I. Type 11
T/G 823.32

Prop. Retaining Wall (See Structure Plans For Details)

EX. D.B.I. Type 11
T/G 824.41

Sp. "V" Dt. @ 4.50%
+09 Rt
815.48
Sp. "V" Dt. @ 2.15%
+59.50 Rt
817.44
Sp. "V" Dt. @ 4.00%
+68 Rt
818.01
+50 Rt
821.30
Sp. "V" Dt. @ 1.84%
I.E. 821.91
+20 Rt
822.59

103 L.F. of 15" Pipe @ 4.14%

I.E. 817.63

37 L.F. of 15" Pipe @ 0.50%

Sp. "V" Dt. @ 1.05%

+00 Rt
820.70

Prop. Retaining Wall (See Structure Plans For Details)
Sp. "V" Dt. @ 17.04%

+50 Rt
812.18

Sp. "V" Dt. @ 17.13%

+00 Rt
804.05
Sp. "V" Dt. @ 17.01%

#3001
Sta. 47+19.00, 54.13' Rt.
D.B.I. Type 11 (Mod)
T/G 801.00

PVC STA. 48+00.00
Elev 796.63

Existing Ground

PVI STA. 46+00.00
Elev 799.56

Proposed Grade

-2.333%
0.793%
-1.465%

LP 41+88.65
Elev 796.66

#2008
Sta. 40+85.00 63.50' Rt.
D.B.I. Type 3
T/G 797.50

#2010
Sta. 41+50.22, 71.42' Rt.
D.B.I. Type 13 S-73
T/G 795.69

TURNING POINT (SEES STRUCTURE PLANS)

PVT STA. 42+80.00
Elev 797.02

#2012
Sta. 42+70.00 40.50' Rt.
C.B.I. Type B-1-2
F.L. 795.30

#3002
Sta. 47+89.63, 31.62' Rt
C.B.I. Type A-4-2
F.L. 794.98

68 L.F. of 15" Pipe @ 0.50%

I.E. 789.53
I.E. 789.19

VC = 360'
SD = 554'

709.15' SD
-1.0%

I.E. 794.20

65 L.F. of 15" Pipe @ 4.68%

I.E. 791.19

36" Pipe
24" Pipe
30 L.F. of 18" Pipe @ 1.54%

47 L.F. of 15" Pipe @ 5.91%

I.E. 788.44

53 L.F. of 15" Pipe @ 1.95%

I.E. 789.92
I.E. 788.89

PVI STA. 41+00.00
Elev 795.59

#2013
Sta. 41+90.00 42.50' Rt.
D.B.I. 13 G-40
T/G 795.59

#2011
Sta. 42+17.09, 59.60' Rt.
D.B.I. Type 13 S-74
T/G 794.95

PVC STA. 44+25.00
Elev. 798.17

HP 45+47.95
Elev 798.66

VC = 350'
SD = 469'

PVT STA. 47+75.00
Elev 797.00

STA. 41+78.03 ℄ KY 237 =
STA. 50+00.00 ℄ OLD TOLL ROAD

KY 237	
Earthwork Quantities Sta. 39+00 to 48+00	
Emb Bench	= 0
Com	" = 13,312
RDZ	" = 20,698
Emb	" 920
Refill	" 1,500

SCALE:
H: 1" = 30'
V: 1" = 3'

39+00	39+50	40+00	40+50	41+00	41+50	42+00	42+50	43+00	43+50	44+00	44+50	45+00	45+50	46+00	46+50	47+00	47+50	48+00
795.15 / 800.26	799.50 / 799.13	795.53 / 798.20	796.05 / 797.49	795.93 / 797.00	794.30 / 796.72	799.73 / 796.67	802.67 / 796.82	803.78 / 797.18	805.84 / 797.58	809.75 / 797.97	811.84 / 798.35	810.38 / 798.59	806.97 / 798.66	801.18 / 798.57	797.80 / 798.32	797.64 / 797.91	797.43 / 797.34	796.21 / 796.63

KY 237 STA. 39+00 TO STA. 48+00

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 4

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R9

R/W REV. NO. 13, JUNE 19, 2009

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	2" ASPH. BASE FOR MULTI USE PATH
Lt. 48+40	12'	18 S.Y.	81 S.Y. - T.B.B.	27 S.Y.

Lt. Sta. 48+51 to Sta. 52+16 Const.
Const. 312.5 L.F. Steel "W" Beam Guardrail (SF)
w/ 1 - Terminal Section No. 1 &
1 - End Treatment Type 1

Lt. Sta. 52+20 to Sta. 52+45 Const.
24 S.Y. Asphalt Surface for Bike Path

Lt. Sta. 48+00 to Sta. 57+00 Const.
910 S.Y. 10' Asph. Multi-Use Path

Lt. Sta 48+00 to Sta. 57+00
Const. 448 SY Sodding

Lt. Sta. 48+00 to Sta. 57+00 Const.
960 L.F. Std. Curb and Gutter

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
4008	CBI TYPE A-4-2	816.36	811.10
4011	CBI TYPE A-6-2	808.51	803.22
4012	CBI TYPE A-6-2	802.55	797.28
4013	CBI TYPE A-6-2	798.90	793.58
4014	ARCH WINGWALL	----	780.50

Lt. Sta. 48+00 to Sta. 57+00 Const.
45 S.Y. 4" Conc. Sidewalk w/ 66 S.F.
Detectable Warnings (yellow)

CURVE DATA
P.I. Sta. 54+16.34
D = 12°36'53" Left
T = 132.64'
L = 264.20'
R = 1,200.00'
E = 7.31'
e = 5.00%
Runoff= See X-Sec.
Runout= See X-Sec.

(34) VIRGIL REYNOLDS
CAROL L. REYNOLDS (WF.)

(23) PAUL F. MICHELS (1/2 INT.)
CATHERINE M. MICHELS (1/2 INT.)

20' X 9' CULVERT
FLOOD EVALUATION DATA
Q_{100} = 2562 cfs HW_{100} = 793.43
Q_{50} = 2175 cfs HW_{50} = 791.04
Q_{25} = 1809 cfs HW_{25} = 789.11

(27) BROOKSIDE MANAGEMENT, LLC (50% INT.)
RUSSELL DEVELOPMENT, LLC (29% INT.)
BAK BROOKSIDE, LLC (21% INT.)

REPLACE EXIST. CURB IN SAME LOCATION (TYP)

PLEASANT VALLEY ROAD (KY 237)

(24) RIEGLER PROPERTIES

(26) D.B.S. DEVELOPMENT CORPORATION

(28) RICHARD M. ROGERS
CATHERINE A. ROGERS (WF.)

(29) GARY R. WILLIAMS
LAURENE R. WILLIAMS (WF)

(32) MACK L. McCANN, TRUSTEE

MACK L. MCCANN
MARY T. ROSS

CURVE DATA
P.I. Sta. 47+79.04
D = 14°21'54" Right
T = 122.21'
L = 242.93'
R = 900.00'
E = 8.26'
e = 5.70%
Runoff= See X-Sec.
Runout= See X-Sec

Rt. Sta. 49+73 to Sta. 52+63 Const.
300 L.F. Steel "W" Beam Guardrail (SF)
w/ 2 - Guardrail Terminal Section No. 1

Rt. Sta. 48+00 to Sta. 57+00 Const.
114 S.Y. 4" Conc. Sidewalk w/ 125 S.F.
Detectable Warnings (yellow)

Rt. Sta. 52+81 to Sta. 54+07 Const.
150 L.F. Steel "W" Beam Guardrail (SF)
w/ 2 - Guardrail Terminal Section No. 1

Rt.Sta. 48+00 to Sta. 57+00 Const.
825 S.Y. 10' Asph. Multi-Use Path

Rt. Sta 48+00 to Sta. 57+00
Const. 423 SY Sodding

Rt. Sta. 48+00 to Sta. 57+00 Const.
869 L.F. of Std. Curb and Gutter

△ KY 237-315
KYTC MONUMENT SET
ALONG KY 237
STA. 52+95.46, 58.03' RT.
ELEV. 800.92

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
3003	CBI TYPE A-6-6	794.12	788.77
3004	CBI TYPE A-6-2	795.27	788.16
3005	EX. CBI TYPE F	794.74	790.74
3006	EX. CBI TYPE F	794.82	790.60
3007	18" U HDWL (MOD)	----	787.99
4009	DBI TYPE 11	812.91	809.41
4010	DBI TYPE 11	810.00	805.00

RESIDENTIAL SODDING

PARCEL NO.	QUANTITY (SY)
28	310
29	141
32	55

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 50+07 to 51+00	SPEC. 2' F.B.	75 SY ECB
Rt. 51+00 to 51+80	SPEC. 2' F.B.	116 SY TRM
Rt. 54+79 to 56+00	SPEC. 2' F.B.	125 SY ECB

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	2" ASPH. BASE FOR MULTI USE PATH
Rt. 52+71	12'	18 S.Y.	131 S.Y. - T.B.B.	27 S.Y.
Rt. 54+15	12'	18 S.Y.	30 S.Y. - CONCRETE	27 S.Y.
Rt. 54+67	12'	18 S.Y.	39 S.Y. - CONCRETE	27 S.Y.

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

SCALE: 1"=30'

KY 237 STA. 48+00 TO STA. 57+00

GRESHAM SMITH & PARTNERS
PREPARED BY DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R10

PVC STA.48+00.00
Elev 796.63

Sta. 49+52
Low Wire
Elev. 811.60

#3005
Sta. 49+35.84, 67.75' Rt
C.B.I. Type F
T/G 794.74
(Plotted 10' Above Datum)

#3006
Sta. 49+66.70, 66.41' Rt
Ex. C.B.I. Type F
T/G 794.80
(Plotted 10' Above Datum)

#3007
Sta. 50+06.40, 67.60' Rt.
18" U-Hdwl (Mod.)

Ex. 15" Pipe @ 6.13%

Ex. 18" Pipe @ 6.13%

18" Pipe

I.E. 790.74
(Plotted 10' Above Datum)

I.E. 790.60
(Plotted 10' Above Datum)

I.E. 787.99
(Plotted 10' Above Datum)

+07 Rt
787.99
(Plotted 10' Above Datum)

Sp. 2' F.B. Dt. @ 0.50%

#4014
Sta. 50+96.92, 78.87' Lt.
Tie to Arch Hdwl.

I.E.=780.50
(Plotted 10' Above Datum)

103 L.F. of 24" Pipe @ 12.14%

VC = 700'
SD = 396'

#4013
Sta. 51+90.00, 30.50' Lt
C.B.I. Type A-6-2
F.L. 798.90
(Plotted 10' Above Datum)

119 L.F. of 18" Pipe @ 3.12%

I.E.=793.58
(Plotted 10' Above Datum)

Quiet Creek Drive Lt.

+00 Rt
787.55
(Plotted 10' Above Datum)

Sp. 2' F.B. Dt. @ 8.99%

+50 Rt
782.31
(Plotted 10' Above Datum)

6.500%

-1.465%

2' F.B. Dt. @ 10.93%

+80 Rt
779.09
(Plotted 10' Above Datum)

PVI STA.51+50.00
Elev 791.50

#3003
Sta. 48+80.00, 30.50' Rt
C.B.I. Type A-6-6
F.L. 794.12

#3004
Sta. 50+05.70, 30.50' Rt
C.B.I. Type A-6-2
F.L. 795.27

84 L.F. of 15" Pipe @ 0.50%

122 L.F. of 18" Pipe @ 0.50%

18" Pipe

I.E. 788.77

I.E. 788.16

LP 49+28.73
Elev 795.69

Lendale Drive Rt.

20'x9' Culvert

20' X 9' CULVERT
FLOOD EVALUATION DATA

Q_{100} = 2562 cfs	HW_{100} = 793.43
Q_{50} = 2175 cfs	HW_{50} = 791.04
Q_{25} = 1809 cfs	HW_{25} = 789.11

Sta. 53+00
Low Wire
Elev. 818.01
(Plotted 10' Above Datum)

#4012
Sta. 53+12.64, 30.50' Lt
C.B.I. Type A-6-2
F.L. 802.55
(Plotted 10' Above Datum)

#4011
Sta. 54+30.70, 30.50' Lt
C.B.I. Type A-6-2
F.L. 808.51
(Plotted 10' Above Datum)

PVT STA.55+00.00
Elev 814.25

#4008
Sta. 55+55.00, 30.50' Lt
C.B.I. Type A-4-2
F.L. 816.36
(Plotted 10' Above Datum)

Sta. 56+38
Low Wire
Elev. 836.84

Sta. 56+78
Low Wire
Elev. 846.54
(Plotted 10' Below datum)

Valley Circle Drive Rt.

223 L.F. of 15" Pipe @ 6.59%

6.500%

I.E.=811.10
(Plotted 10' Above Datum)

118 L.F. of 15" Pipe @ 6.76%

Subgrade

18" Pipe

I.E.=803.22
(Plotted 10' Above Datum)

vc = 700'
SD = 396'

112 L.F. of 18" Pipe @ 5.31%

119 L.F. of 18" Pipe @ 3.12%

I.E.=797.28
(Plotted 10' Above Datum)

Existing Ground

Proposed Grade

#4009
Sta. 54+78.57, 71.05' Rt
D.B.I. Type III
T/G 812.91
(Plotted 10' Below Datum)

#4010
Sta. 54+32.06, 69.13' Rt
D.B.I. Type III
T/G 810.00
(Plotted 10' Below Datum)

+00 Rt
821.38 (Plotted 10' Below Datum)

Sp. 2' F.B. Dt. @ 7.31%

Sp. 2' F.B. Dt. @ 6.58%

+50 Rt
817.67
(Plotted 10' Below Datum)

Transverse Bench

+00 Rt
814.20 (Plotted 10' Below Datum)

Sp. 2' F.B. Dt. @ 5.69%

47 L.F. of 15" Pipe @ 9.40%

I.E.=809.41
(Plotted 10' Below Datum)

I.E.=805.00
(Plotted 10' Below Datum)

18" Pipe

KY 237

Earthwork Quantities
Sta. 48+00 to 57+00

Emb Bench	=	*1,040*
Com	=	*8,175*
RDZ	=	*1,025*
Emb	=	*11,244*
Refill	=	*233*

SCALE:
H: 1" = 30'
V: 1" = 3'

| | | |

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R11

R/W REV. NO. 14, JUN. 30, 2009

57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
4001	CBI TYPE A-4-6	858.59	854.99
4003	CBI TYPE A-4-2	853.63	847.52
4005	CBI TYPE A-4-2	842.01	835.90
4007	CBI TYPE A-4-2	831.89	825.78

Lt. Sta. 57+00 to Sta. 66+00 Const.
894 S.Y. 10' Asph. Multi-Use Path

Lt. Sta. 57+00 to Sta. 66+00 Const.
887 L.F. Std. Curb and Gutter

Lt. Sta. 57+00 to Sta. 66+00 Const.
71 S.Y. 4" Conc. Sidewalk w/ 77 S.F. Detectable Warnings (yellow)

Lt. Sta 57+00 to Sta. 66+00 Const. 486 SY Sodding

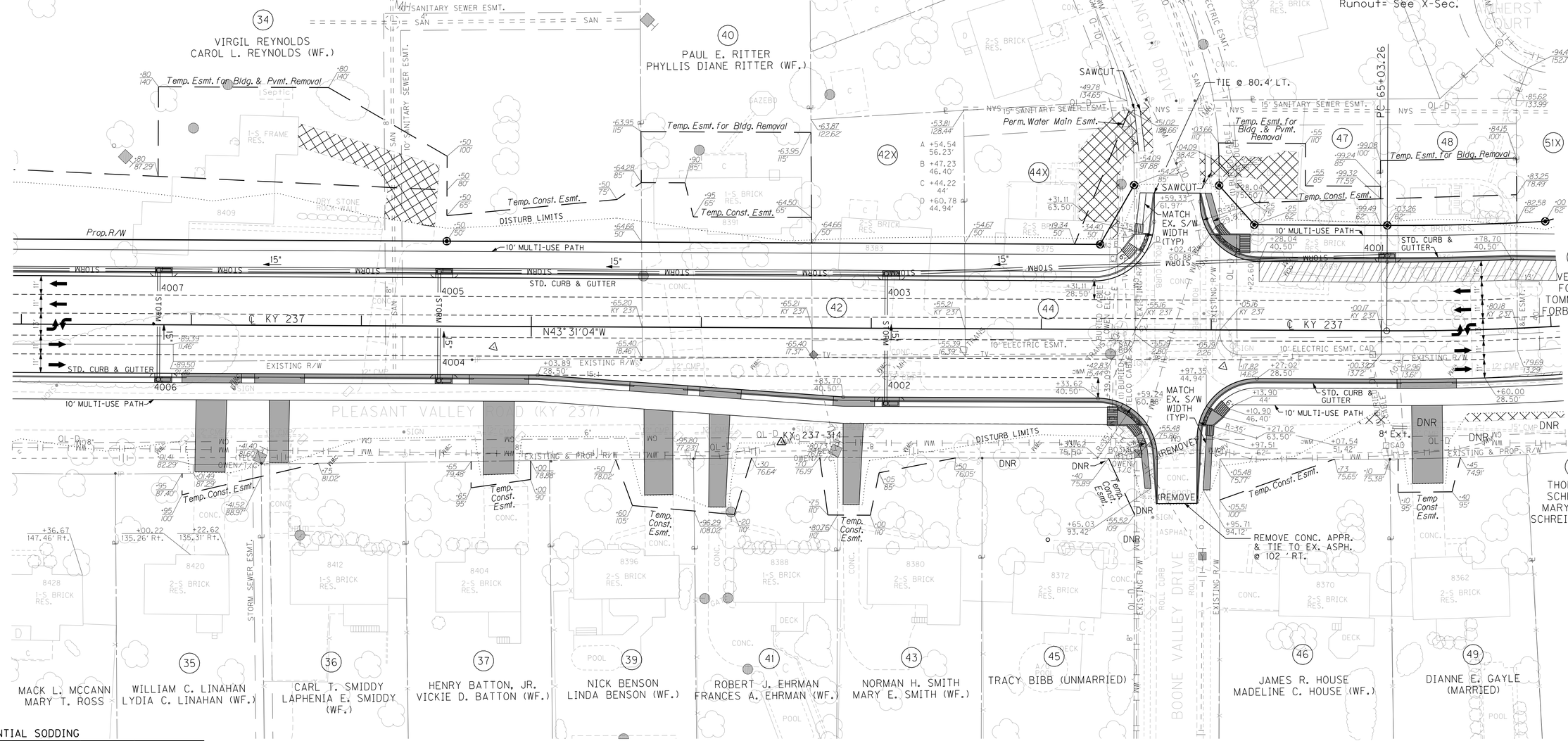
Lt. Sta. 58+62 to Sta. 59+46
Remove 212 S.Y. Concrete Pavement & Base

(42)	ROSE MARY KAHMANN FAMILY TRUST DTD. DECEMBER 5, 1994	(47)	B.O.L.D. HOMES, INC.
(44)	PHILLIP RHEA ROLLINS CHARLOTTE JUNE ROLLINS (WF.)	(48)	WILLIAM H. POYNTER, JR.

Lt. Sta. 63+22 to Sta. 63+65
Remove 198 S.Y. Concrete Pavement & Base

Lt. Sta. 63+92 to Sta. 64+51
Remove 108 S.Y. Concrete Pavement & Base

CURVE DATA
P.I. Sta. 67+38.83
D = 16°45'05" Left
T = 235.57'
L = 467.79'
R = 1,600.00'
E = 17.25'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.



RESIDENTIAL SODDING

PARCEL NO.	QUANTITY (SY)	PARCEL NO.	QUANTITY (SY)
35•	484	43	143
36	209	45	80
37	159	46	234
39	191	49	96
41	161	•INCLUDES ADJ. PARCEL	

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	2" ASPH. BASE FOR MULTI USE PATH	ENTRANCE PIPE
Rt. 58+12	18'	22 S.Y.	85 S.Y. - CONCRETE	34 S.Y.	0' L.F. - N/A
Rt. 58+52	12'	18 S.Y.	48 S.Y. - CONCRETE	28 S.Y.	0' L.F. - N/A
Rt. 59+82	18'	22 S.Y.	85 S.Y. - CONCRETE	34 S.Y.	0' L.F. - N/A
Rt. 60+76	17'	21 S.Y.	93 S.Y. - CONCRETE	33 S.Y.	0' L.F. - N/A
Rt. 61+10	12'	15 S.Y.	67 S.Y. - CONCRETE	22 S.Y.	0' L.F. - N/A
Rt. 61+89	12'	15 S.Y.	57 S.Y. - CONCRETE	22 S.Y.	0' L.F. - N/A
Rt. 65+26	18'	22 S.Y.	91 S.Y. - CONCRETE	34 S.Y.	8' L.F. - 15"

Rt. Sta. 57+00 to Sta. 66+00 Const.
77 S.Y. 4" Conc. Sidewalk w/ 59 S.F. Detectable Warnings (yellow)

Rt.Sta. 57+00 to Sta. 66+00 Const.
919 S.Y. 10' Asph. Multi-Use Path

△ KY 237-314
KYTC MONUMENT SET
ALONG KY 237
STA. 61+47.39, 67.28' RT.
ELEV. 854.92

Rt. Sta 57+00 to Sta. 66+00
Const. 408 SY Sodding

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
4002	CBI TYPE A-4-2	853.39	848.28
4004	CBI TYPE A-4-2	842.01	836.90
4006	CBI TYPE A-4-2	832.20	827.15

Rt. Sta. 57+00 to Sta. 66+00 Const.
766 L.F. Std. Curb and Gutter

Rt. Sta. 64+84 to Sta. 66+00
Remove 35 S.Y. Asphalt Pavement & Base

SCALE: 1"=30'

KY 237 STA. 57+00 TO STA. 66+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R12

DATUM: 872, 870, 868, 866, 864, 862, 860, 858, 856, 854, 852, 850, 848, 846, 844, 842, 840, 838, 836, 834, 832, 830, 828, 826, 824, 822, 820, 818, 816

Sta. 61+74
Low Wire
Elev. 874.42

PVI STA. 62+50.00
Elev 863.00

Sta. 63+80
Low Wire
Elev. 879.10
(Plotted 10' below datum)

Wellington Drive Lt.

#4001
Sta. 65+03.26, 42.50' Lt
C.B.I. Type A-4-6
F.L. 858.59

0.522%

#4003
Sta. 62+08.70, 30.50' Lt
C.B.I. Type A-4-2
F.L. 853.63

6.500%

Existing Ground

Subgrade

Transverse Bench

I.E. = 854.99

VC = 850'
SD = 401'

#4005
Sta. 59+45.70, 30.50' Lt
C.B.I. Type A-4-2
F.L. 842.01

15" Pipe

Proposed Grade

I.E.=847.52

292 L.F. of 15" Pipe @ 2.56%

Boone Valley Drive Rt.

280 L.F. of 15" Pipe @ 4.47%

#4007
Sta. 57+80.70, 30.50' Lt
C.B.I. Type A-4-2
F.L. 831.89

15" Pipe

I.E.=835.90

PVC STA. 58+25.00
Elev 835.38

162 L.F. of 15" Pipe @ 6.25%

223 L.F. of 15" Pipe @ 6.59%

15" Pipe

I.E.=825.78

KY 237		
Earthwork Quantities Sta. 57+00 to 66+00		
Emb Bench	=	0
Com	= " =	20,230
RDZ	= " =	1,260
Emb	= " =	118
Refill	= " =	492

SCALE:
H: 1" = 30'
V: 1" = 3'

	57+00	57+50	58+00	58+50	59+00	59+50	60+00	60+50	61+00	61+50	62+00	62+50	63+00	63+50	64+00	64+50	65+00	65+50	66+00
	843.12	844.79	844.11	843.70	844.33	847.66	851.17	854.05	854.19	854.90	857.56	859.06	860.40	860.22	859.61	861.75	861.84	861.69	861.21
	821.25	830.50	833.75	836.98	840.02	842.86	845.49	847.91	850.13	852.14	853.95	855.54	856.93	858.12	859.10	859.87	860.43	860.79	860.95

KY 237 STA. 57+00 TO STA. 66+00

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Libraries: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 4

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R13

R/W REV. NO. 15, JULY 17, 2009

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00

Lt. Sta. 67+12 to Sta. 69+38 Const.
150 L.F. Steel "W" Beam Guardrail (SF)
w/ 2 - Guardrail End Treatment Type 4A

Lt. Sta. 66+00 to Sta. 75+00 Const.
17 S.Y. 4" Conc. Sidewalk w/ 32 S.F.
Detectable Warnings (yellow)

Lt. Sta. 66+00 to Sta. 75+00 Const.
617 L.F. Std. Curb and Gutter

Lt. Sta. 66+00 to Sta. 75+00 Const.
665 S.Y. 10' Asph. Multi-Use Path

Lt. Sta 66+00 to Sta. 73+00
Const. 367 SY Sodding

CURVE DATA
P.I. Sta. 67+38.83
D = 16°45'05" Left
T = 235.57'
L = 467.79'
R = 1,600.00'
E = 17.25'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
5002	CBI TYPE A-4-6	857.62	852.50
5003	CBI TYPE A-6-6	857.89	850.65
5004	CBI TYPE A-4-2	858.82	853.57
5023	24" S&F HDWL	----	839.56

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Lt. 73+00 to 74+50	NORMAL 2' F.B.	170 SY ECB
Lt. 74+50 to 75+00	SPEC. 2' F.B.	57 SY ECB

JOHN W. FISHER
REBECCA J. FISHER (WF.)

VERN V. FORBES
TOMMIE ANN FORBES (WF.)

GARY BLACKSHIRE
PAULA BLACKSHIRE (WF.)

ROBERT W. COLLETT
GERTRUDE ANN COLLETT (WF.)

THOMAS J. SCHREIBER
MARY ELLEN SCHREIBER (WF.)

CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

CHARLES M. ROLFSEN
CHERIE A. KESSLER-ROLFSEN (WF)

CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

CURVE DATA
P.I. Sta. 77+31.31
D = 22°00'59" Right
T = 311.24'
L = 614.81'
R = 1,600.00'
E = 29.99'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

#5021
SEE DETENTION BASIN
OUTLET STRUCTURE DETAIL

TIE ASPH. TO EXIST. @ 80' LT.

Sta. 73+00 to Sta. 75+03 Const.
762 S.Y. Crown Vetch on slopes
for Parcel 57

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Rt. Sta 66+00 to Sta. 66+59
Remove 19 S.Y. Asphalt Pavement
& Base

Rt. Sta 66+00 to Sta. 73+00
Const. 348 SY Sodding

Rt.Sta. 66+00 to Sta. 75+00 Const.
788 S.Y. 10' Asph. Multi-Use Path

Rt. Sta. 66+88 to Sta. 70+06 Const.
337.5 L.F. Steel "W" Beam Guardrail (SF)
w/ 2 - Guardrail Terminal Section No. 1

Rt. Sta. 66+00 to Sta. 75+00 Const.
605 L.F. Std. Curb and Gutter

Rt. Sta. 68+40 to Sta. 69+27
Const. 330 L.F. 6' Chain Link Fence &
1-6' Chain Link Gate - 10' wide

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 70+33 to 71+50	SPEC. "V"	107 SY ECB
Rt. 73+00 to 75+00	NORMAL 2' F.B.	227 SY ECB
Rt. 73+00 to 75+00	SPEC. 2' F.B.	196 SY ECB

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	2" ASPH. BASE FOR MULTI USE PATH
Rt. 66+75	21'	24 S.Y.	70 S.Y. - CONC.	37 S.Y.
Rt. 70+14	12'	18 S.Y.	40 S.Y. - CONC.	27 S.Y.
Rt. 72+66	12'	22 S.Y.	129 S.Y. - T.B.B.	34 S.Y.

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
5001	DBI TYPE 11	857.23	854.23
5020	METAL END SECT. TYPE 1-15"	----	854.04
5021	OUTLET STRUCTURE	847.00	841.41
5022	18" S&F BOX I/O HDWL	----	841.44
5025	18" S&F HDWL.	----	849.02

SCALE: 1"=30'

KY 237 STA. 66+00 TO STA. 75+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$

Cell Library: roadway.cel
Cell Name: sp DD-MMM-YYYY HH:MM

VENDOR'S NAME 1-92 FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R14

HP 66+11.87
Elev 860.95

-0.522%

Subgrade

Proposed Grade

Transverse Bench

VC = 850'
SD = 401'

PVT STA 66+75.00
Elev 860.79

#5004
Sta. 67+95.70, 30.50' Lt
C.B.I. Type A-4-2
F.L. 858.82

I.E.=853.57

169 L.F. of 15" Pipe @ 1.73%

#5003
Sta. 69+71.04, 30.50' Lt
C.B.I. Type A-6-6
F.L. 857.89

18" Pipe

#5020
Sta 69+94.26, 67.40' Rt,
15" Metal End Section Type 1
I.E. 854.04

38 L.F. of 15" Pipe @ 0.50%

I.E.=854.23

I.E.=854.04

Transverse Bench

Sp. "V" D†. @ 0.65%

#5001
Sta. 70+32.64, 62.90' Rt
D.I. Type 11
T/G=857.23

+50 Rt
858.01

192 L.F. of 15" Pipe @ 0.96%

I.E.=852.50

Existing Ground

I.E.=850.65

24" Pipe

#5002
Sta. 71+65.70, 30.50' Lt
C.B.I. Type A-4-6
F.L. 857.62

Valley View Drive Lt†.

-0.522%

PVC STA 73+00.00
Elev 857.53

+00 Rt
856.05

Sp. 2' F.B. D†. @ 1.18%

+50 Rt
855.46

Sp. 2' F.B. D†. @ 2.04%

+00 Rt
854.44

Sp. 2' F.B. D†. @ 1.92%

+50 Rt
853.50

Sp. 2' F.B. D†. @ 1.91%

Sp. 2' F.B. D†. @ 1.99%

+50 Lt
854.34

+00 Lt
853.36

+00 Rt
852.54

VC = 500'
SD = 408'

24" PIPE
FLOOD EVALUATION DATA
Q_{25}=34.0 cfs HW=847.74
Q_{25}=28.1 cfs HW=847.37

KY 237		
Earthwork Quantities Sta. 66+00 to 75+00		
Emb Bench	=	1,390
Com	" "	7,512
RDZ	" "	0
Emb	" "	8,999
Refill	" "	0

SCALE:
H: 1" = 30'
V: 1" = 3'

	66+00	66+50	67+00	67+50	68+00	68+50	69+00	69+50	70+00	70+50	71+00	71+50	72+00	72+50	73+00	73+50	74+00	74+50	75+00
DATUM	861.21	858.91	856.41	850.48	848.68	845.01	845.56	851.64	856.78	858.52	859.13	859.13	858.80	858.64	858.00	858.24	857.41	857.04	854.13
	860.95	860.89	860.66	860.40	860.14	859.87	859.61	859.35	859.09	858.83	858.57	858.31	858.05	857.79	857.53	857.17	856.61	855.85	854.89

KY 237 STA. 66+00 TO STA. 75+00

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 4

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R15

R/W REV. NO. 16, AUG. 26, 2009

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	ENTRANCE PIPE
Lt. 75+12.3	28'	0 S.Y.	53 S.Y. - ASPHALT	0 L.F.- N/A
Lt. 80+00	20'	0 S.Y.	179 S.Y. - ASPHALT	53 L.F.- 15"

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Lt. 75+50 to 76+50	SPEC. 2' F.B.	113 SY ECB
Lt. 81+00 to 82+00	SPEC. 2' F.B.	98 SY ECB
Lt. 83+76 to 84+00	2' F.B. SURF.	30 SY TRM

Lt. Sta. 75+50 to Sta. 79+08
Remove 813 S.Y. Asphalt Pavement & Base

Lt. Sta. 81+44 Const.
25 L.F. Steel "W" Beam Guardrail (SF)
w/ 2 Teminal Sections No. 1

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
5018	60" Pipe Culv Hdwl	----	805.84

(58) ROBERT W. COLLETT
GERTRUDE A. COLLETT

THOMAS SCHUMER
SHELLEY J. SCHUMER (WF.)

RONALD JOE RICE
VIRGINIA RICE

JACK STEELE
ALPHA STEELE

PC STA. 83+98.33 ℄ KY 237=
POT STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

(79) (79F) RICHARD L. O'DANIEL
LORI O'DANIEL (WF.)

FLOOD EVALUATION DATA
Q_{100}=328 cfs HW_{100}=820.83
Q_{25}=272 cfs HW_{25}=818.25

PI 77+31.31

ROAD KY 237

EXISTING & PROP. R/W

DISTURB LIMITS

EXISTING R/W

FUTURE BUILD

Temp. Const. Esmt.

Prop.R/W

Perm. Drain Esmt.

Perm. Water Main Esmt.

EX. WATER MAIN ESMT.

SPEC. 2' F.B. DT.

NORMAL 2' F.B. DT.

2' F.B. SURF. DT.

℄ KY 237

N60°16'09"W

N38°15'10"W

5018

O.E.805.84

I.E.808.85

5019

PT 80+34.88

CURVE DATA
P.I. Sta. 77+31.31
D = 22°00'59" Right
T = 311.24'
L = 614.81'
R = 1,600.00'
E = 29.99'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

(57) CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

(59) REHKAMP FARMS, INC.

(75)	GEORGE REHKAMP, JR. DOROTHY M. REHKAMP (WF)
(81)	GREGORY F. BULMER BARBARA BULMER (WF.)

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
5019	60" Pipe Culv Hdwl	----	808.85

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 75+00 to 77+50	SPEC. 2' F.B.	244 SY ECB
Rt. 77+50 to 82+00	SPEC. 2' F.B.	640 SY TRM
Rt. 82+00 to 84+00	2' F.B. SURF.	313 SY TRM
Rt. 75+00 to 80+00	NORMAL 2' F.B.	567 SY ECB
Rt. 80+00 to 80+50	SPEC. 2' F.B.	57 SY ECB

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

SCALE: 1"=30'

KY 237 STA. 75+00 TO STA. 83+98.33
PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO 84+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$

VENDORS NAME I-92 FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R16

PVI STA. 75+50.00
Elev 856.22

-0.522%

+00 L+
851.60

+50 L+
852.60

+50 L+
849.49

EX 12" PIPE

-4.514%

Sp. 2' F.B. Dt. @ 2.40%

Sp. 2' F.B. Dt. @ 2.00%

Sp. 2' F.B. Dt. @ 2.81%

Sp. 2' F.B. Dt. @ 4.06%

Sp. 2' F.B. Dt. @ 3.21%

Sp. 2' F.B. Dt. @ 3.64%

Sp. 2' F.B. Dt. @ 4.05%

Sp. 2' F.B. Dt. @ 4.47%

Sp. 2' F.B. Dt. @ 4.65%

Sp. 2' F.B. Dt. @ 4.68%

Sp. 2' F.B. Dt. @ 4.65%

Sp. 2' F.B. Dt. @ 4.63%

Sp. 2' F.B. Dt. @ 3.95%

Sp. 2' F.B. Dt. @ 4.60%

Sp. 2' F.B. Dt. @ 3.29%

Sp. 2' F.B. Dt. @ 3.26%

Sp. 2' F.B. Dt. @ 3.22%

Sp. 2' F.B. Dt. @ 0.88%

+00 R+
852.54

+50 R+
851.38

+00 R+
850.02

+50 R+
848.47

+00 R+
846.71

+50 R+
844.75

+00 R+
842.59

+50 R+
840.34

+00 R+
838.08

+50 R+
835.83

+00 R+
833.61

+00 R+
833.59

+50 R+
831.34

+50 R+
828.04

+00 R+
826.39

+00 L+
826.36

+50 L+
823.75

+00 L+
823.31

+50 R+
821.30

+00 R+
815.06

+00 R+
809.70

+50
809.26

Proposed Grade

Existing Ground

Subgrade

Transverse Bench

PVC STA. 79+07.50
Elev 840.08

PVT STA. 78+00.00
Elev 844.94

VC = 500'
SD = 408'

Sta. 79+85
Low Wire
Elev. 852.38

+75 Lt
834.35
(Platted 15'
Above Datum)

53 L.F. of 15" Pipe
@ 5.42%

+25 Lt
831.51
(Platted 15'
Above Datum)

+00 Lt
813.35
(Plotted 35'
Above Datum)

+76 Lt
808.60
(Plotted 35'
Above Datum)

2' F.B. Surf. Dt. @ 18.30%

STA. 83+98.33 ℄ KY 237 =
STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

VC = 725'
SD = 367'

LP 82+68.74
Elev 831.93

PVI STA. 83+98.33
Elev 832.98

1.620%

4.546%

2' F.B. Surf. Dt. @ 10.07%

2' F.B. Surf. Dt. @ 11.83%

2' F.B. Surf. Dt. @ 11.07%

60" Pipe

2' F.B. Surf. Dt. @ 0.88%

PVI STA. 82+70.00
Elev 823.72

KY 237	
Earthwork Quantities Sta. 75+00 to 84+00	
Emb Bench	= *780*
Com	= " " *24,005*
RDZ	= " " *322*
Emb	= " " *13,591*
Refill	= " " *118*

60" PIPE
FLOOD EVALUATION DATA

Q_{25}=328 cfs HW$_{25}$=820.83

Q_{50}=272 cfs HW$_{50}$=818.25

SCALE:
H: 1" = 30'
V: 1" = 3'

75+00	75+50	76+00	76+50	77+00	77+50	78+00	78+50	79+00	79+50	80+00	80+50	81+00	81+50	82+00	82+50
854.13 / 854.89	855.96 / 853.73	857.38 / 852.37	857.40 / 850.81	856.34 / 849.05	854.63 / 847.10	848.78 / 844.94	850.94 / 842.68	850.18 / 840.42	847.16 / 838.28	842.15 / 836.44	835.23 / 834.92	828.57 / 833.71	830.18 / 832.81	824.70 / 832.23	818.11 / 831.95

83+00	83+50	84+00
810.42 / 831.99	816.03 / 832.34	824.20 / 833.01

KY 237 STA. 75+00 TO STA. 83+98.33
PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO STA. 84+00

DATUM

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

VENDORS NAME
I-92
FORM NO. 4

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R17

R/W REV. NO. 16, AUG. 26, 2009

84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	ENTRANCE PIPE
Lt. 85+00	12'	0 S.Y.	100 S.Y. - ASPHALT	34 L.F.- 15"
Lt. 91+08	16'	0 S.Y.	78 S.Y. - T.B.B.	0 L.F.- N/A

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Lt. 84+00 to 84+96	2' F.B. SURF.	131 SY TRM
Lt. 85+46 to 85+98	2' F.B. SURF.	59 SY ECB
Lt. 85+98 to 87+00	SPEC. 2' F.B.	116 SY ECB
Lt. 87+00 to 89+75	NORMAL 2' F.B.	312 SY ECB

Lt. Sta. 88+95 to Sta. 89+34
Remove 230 S.Y. Conc. Pavement & Base

Sta. 93+00.68 Const. 20 L.F. Edge Key

CURVE DATA
PRACTICAL SOLUTIONS
P.I. Sta. 89+05.09
D = 36°06'54" Left
T = 423.84'
L = 819.42'
R = 1,300.00'
E = 67.35'
e = 4.80%
Runoff = See X-Sec.
Runout = See X-Sec.

PC STA. 83+98.33 ℄ KY 237=
POT STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

END PROJECT
P.T. STA. 93+00.68
℄ PRACTICAL SOLUTIONS TIE-IN

79 79F
RICHARD L. O'DANIEL
LORI O'DANIEL (WF.)

85
DONALD J. NAU
MELINDA CROSS NAU (WF.)

87
WILLIAM G. REHKAMP
GERALYN M. REHKAMP (WF.)

82
EILEEN M. MESSER

75
GEORGE REHKAMP, JR
DOROTHY M. REHKAMP (WF.)

83
GREGORY SPEERY
JEANNE REHKAMP SPEERY (WF)

81
GREGORY F. BULMER
BARBARA BULMER (WF.)

84
JEROME BRESSLER
DIANNE REHKAMP BRESSLER (WF.)

86
KAREN MENKE (SINGLE)

80
GEORGE REHKAMP, JR
DOROTHY M. REHKAMP (WF.)

59
REHKAMP FARMS, INC.

Perm. Drain. Esmt.
Prop. R/W
2' F.B. SURF. DT.
Temp. Const. Esmt.
Perm. Water Main Esmt.
30' UTILITY ESMT.
EXISTING R/W
℄ KY 237
PC 84+81.26
FUTURE BUILD
DISTURB LIMITS
SPEC. 2' F.B. DT.
NORMAL 2' F.B. DT.
℄ PRACTICAL SOLUTIONS TIE-IN
Temp. Esmt. for Bldg. & Pvmt. Removal
Temp. Const. Esmt.
DND
LATERALS
SEPTIC TANK
DECK
1-S FRAME RES. 8133
CHANNEL LINING
Prop. R/W
O.E. 849.01
I.E. 849.82
FUTURE BUILD
N38°15'10"W
O.E. 846.22
I.E. 848.30
N14°29'04"W
EXISTING & PROP. R/W
Pl 89+05.09
Pl 93+33.77
LANDLOCKED
8142 2-S BRICK RES.
8128 1-S BRICK RES.
PRIVATE ACCESS ESMT.
SILO
SHED
BARN
CR. STONE
OWEN ELEC
OWEN/T/C
CONC.

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 84+00 to 85+53	2' F.B. SURF.	265 SY TRM
Rt. 85+53 to 86+50	SPEC. 2' F.B.	110 SY ECB
Rt. 86+50 to 87+50	NORMAL 2' F.B.	113 SY ECB
Rt. 87+50 to 88+19	SPEC. 2' F.B.	78 SY ECB
Rt. 88+59 to 89+00	SPEC. 2' F.B.	46 SY ECB
Rt. 89+00 to 90+00	NORMAL 2' F.B.	113 SY ECB

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

ENTRANCES

STATION	WIDTH	CEM. CONC. ENT. PVMT. - 8"	ENTRANCE PAVEMENT	ENTRANCE PIPE
Rt. 88+38	12'	0 S.Y.	65 S.Y. - CONCRETE	42 L.F.- 15"
Rt. 90+15	12'	0 S.Y.	37 S.Y. - T.B.B.	0 L.F.- N/A
Rt. 91+13	36'	0 S.Y.	50 S.Y. - ASPHALT	0 L.F.- N/A

Lt. Sta. 88+76 to Sta. 89+79
Remove 43 S.Y. Asphalt Pavement & Base

SCALE: 1"=30'

PRACTICAL SOLUTIONS TIE-IN
STA. 84+00 TO STA. 93+00

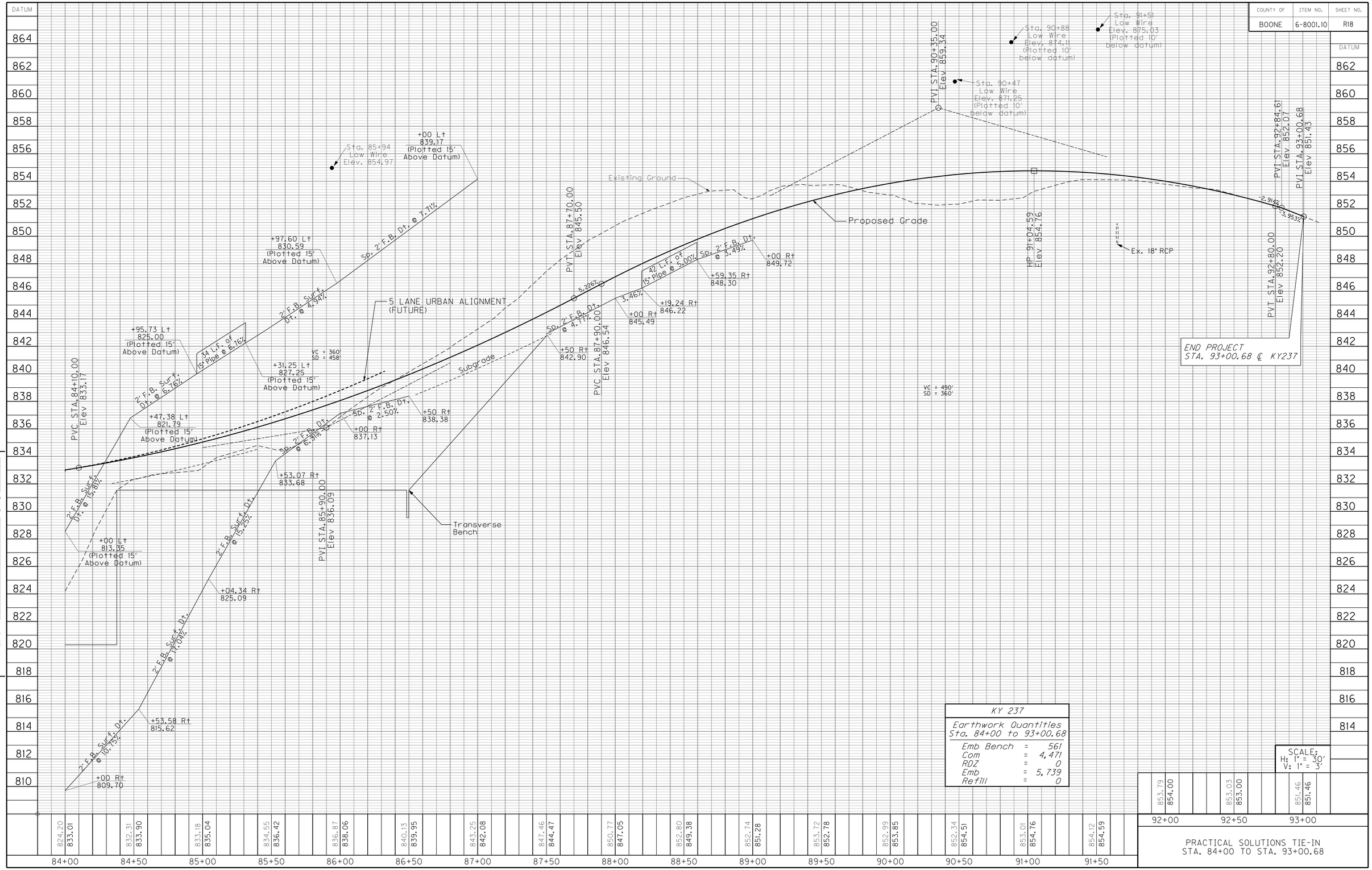
$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R18



KY 237

Earthwork Quantities
Sta. 84+00 to 93+00.68

Emb Bench	=	561
Com	=	4,471
RDZ	=	0
Emb	=	5,739
Refill	=	0

SCALE:
H: 1" = 30'
V: 1" = 3'

PRACTICAL SOLUTIONS TIE-IN
STA. 84+00 TO STA. 93+00.68

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 4

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R19

R/W REV. NO. 16, AUG. 26, 2009

86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00 94+00 95+00

FRANK J. SCHWARTZ
VIRGINIA T. SCHWARTZ (WF.)

CURVE DATA
P.I. Sta. 91+87.00
D = 12°17'13" Left
T = 206.24'
L = 410.90'
R = 1,916.05'
E = 11.07'
e = Match Existing
Runoff = Match Existing
Runout = Match Existing

CONC. ISLAND DETAIL

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
MH0001	JB TYPE BI	812.20	808.57

Lt. Sta. 93+58.12 to Sta. 94+01.25
Const. 12 S.Y. Standard Barrier
Median Type 4

Sta. 91+00 to Sta. 93+58.12 Const. median using 541 L.F. of Std. Curb and Gutter & 576 S.Y. 4" C.S.B. w/ 2 applications of Asphalt Seal. (See Detail on Typical Sections.)
Taper concrete gutter into Std. Barrier Median as shown, incidental to construction of Std. Curb & Gutter.

8620
PARKING
8635 HAINES DR.
UNITED DAIRY FARMERS, INC.
ASH FAMILY PROPERTIES, LLC
EVERGREEN PLAZA (US 42 & 127)
N52°40'59"E
EXISTING & PROPOSED R/W
PC 89+80.76
PT 93+91.66
MH0001
DISTURB LIMITS
STD. BAR. MED TY 4
MOUNTABLE MEDIAN TY 3
N40°23'45"E
STD. CURB & GUTTER
EXISTING R/W
OLD EXIST. R/W
Prop.R/W
OLD TEMP.CONST.ESMT.
Temp. Const. Esmt.
5' CONC. SIDEWALK
TIE TO EX. SIDEWALK
TIE CURB @ EX. INLET
TIE NEW RAMP TO EX. SIDEWALK
TIE TO EXIST. CURB (TYP)
TIE TO EXIST. SIDEWALK
EXIST. SIDEWALK TO REMAIN
15' ELECTRIC ESMT.
15' GAS MAIN ESMT.
20' UTILITY & SIDEWALK ESMT.
20' STORM SEWER, SIDEWALK & UTILITY ESMT.
RIP-RAP
SIGN
BEGIN CONSTRUCTION
STA. 85+78.85 ℄ US 42
SKEETS WAY
CAVALRY DRIVE
PORTAGE TRAIL
Advance Auto Parts
7,000 SF
33 PARKING SPACES

(130) MH REAL ESTATE
(132) (132F) SKEETS, LLC
(133) A&K ENTERPRISE, INC.
(135) A&K ENTERPRISE, INC.

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
0015	CBI TYPE A-4-2 (MOD)	847.12	843.57
0016	CBI TYPE A-4-2 (MOD)	843.77	840.07
0017	CBI TYPE F	814.62	808.96

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Sta. 85+78.85 Const. 60 L.F. Edge Key

Rt. Sta. 85+78.85 to Sta. 95+00 Const. 901 L.F. of Std. Curb and Gutter

Rt. Sta. 88+09 to Sta. 88+23 Const. raised island using 3.3 C.Y. Class "A" Concrete (See Detail on Typ. Sections)

Rt. Sta 86+50 to Sta. 95+00 Const. 469 S.Y. Sodding

Rt. Sta. 93+91.66 to Sta. 95+00 Const. 46 S.Y. Mountable Median Type 3

Rt. Sta. 86+50 to Sta. 93+84 Const. 401 S.Y. 4" Conc. Sidewalk w/ 54 S.F. Detectable Warnings (yellow)

SCALE: 1"=30'

US 42 STA. 85+78.85 TO STA. 95+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$ $DATE$ $TIME$
Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R20

R/W REV. NO. 6, OCT. 12, 2007

DATUM

850 848 846 844 842 840 838 836 834 832 830 828 826 824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794

Ex. 15" Pipe

Ex. 15" Pipe

BEGIN CONSTRUCTION
STA. 85+78.85 ℄ US 42

Ex. 12" Pipe Rt.

I.E. 837.26

I.E. 836.64

I.E. 835.97

SPLINE GRADE
(1.25" OVERLAY)

Existing Ground

Portage Trail Rt.

15" Pipe

848.79	846.93	844.99	842.87	840.86	838.60	836.18	833.76	831.25	828.57	825.84	823.10	820.50	817.82	815.35	812.69
848.80	846.99	845.10	843.03	840.97	838.70	836.29	833.87	831.35	828.68	825.94	823.21	820.61	817.92	815.45	812.80

86+00 86+50 87+00 87+50 88+00 88+50 89+00 89+50 90+00 90+50 91+00 91+50 92+00 92+50 93+00 93+50

810.14	807.70	805.66
810.25	807.81	805.76

94+00 94+50 95+00

US 42 Sta. 85+78.85 to Sta. 95+00

US 42

Earthwork Quantities
Sta. 85+78.85 to 95+00

Emb Bench	=	*0*
Com	=	*796*
RDZ	=	*0*
Emb	=	*164*
Refill	=	*0*

SCALE:
H: 1" = 30'
V: 1" = 3'

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 4

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R21

R/W REV. NO. 17, SEPT. 4, 2009

95+00 96+00 97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
1003	CBI TYPE B-44-2	819.04	809.51
1004	CBI TYPE B-36-2	806.61	791.00
1005	DBI TYPE 11	794.50	791.50

KY 237 STORM SEWER DATA SHOWN ON SHEET R5

Lt. Sta. 97+67 to bridge end Const. 26 S.Y. 4" Conc. Sidewalk to replace existing

Lt. Sta. 98+78.6 to bridge end Const. 23 L.F. of Std. Curb and Gutter

Lt. Sta 95+00 to Sta. 99+29.23 Const. 17 S.Y. Sodding

Lt. Sta 101+21.16 to Sta. 103+81 Const. 123 S.Y. Sodding

Bridge end to Lt. Sta. 99+29.23 Const. 25 S.Y. 4" Conc. Sidewalk

Bridge end to Lt. Sta. 99+29.23 Const. 43 L.F. Std. Curb & Gutter

Lt. Sta. 101+21 to Sta. 103+69 Const. 257 L.F. Steel "W" Beam Guardrail (SF) & 1 Term. Section No. 1

Lt. Sta. 97+67 to Sta. 104+00 Const. 144 S.Y. 4" Conc. Sidewalk w/ 10 S.F. Detectable Warnings (yellow)

Lt. Sta. 101+21.16 to Sta. 104+00 Const. 260 L.F. of Std. Curb and Gutter

STA. 100+20.05 ℄ US 42 =
STA. 37+38.33 ℄ KY 237

℄ US 42

℄ KY 237

N40°23'45"E

HAINES DRIVE

8660 HAINES DR.

UNITED DAIRY FARMERS, INC.

BURNETT MANAGEMENT COMPANY, LLC

CP & TS, LLC

(16) RAMI H. NWAISSER (1/2 INT.)
CYNTHIA M. NWAISSER (WF.)
WILLIAM S. FAR (1/2 INT.)
HALA H. FAR (WF.)

CONTRACTOR NOTE:
LOCATION OF PROPOSED ENTRANCE LT. STA. 104+00 BASED ON DEVELOPMENT PLANS & SUBJECT TO CHANGE. CONTRACTOR TO USE SIMILAR DESIGN AND TIE INTO EXISTING ENTRANCE IF ENTRANCE HAS BEEN CONSTRUCTED PRIOR TO CONSTRUCTION OF US 42.

Lt. Sta. 104+00 Const. Comm. Entr. using 74 S.Y. Asph. Entr. Pavement.

GRADE TO INLET

5' CONC. SIDEWALK

EXISTING & PROPOSED R/W

STD. CURB & GUTTER

TIE TO EX. SIDEWALK

REPLACE EX. SIDEWALK

STD. BAR. MED TY 4

MOUNTABLE MEDIAN TY 3

DISTURB LIMITS

Temp.Const. Esmt.

Prop.R/W

EXISTING R/W

EXIST. & PROP. R/W

20' WATER MAIN ESMT.

20' STORM SEWER ESMT.

15' ELECTRIC ESMT.

15' DRAINAGE ESMT.

15' JOINT UTILITY ESMT.

20' SANITARY SEWER ESMT.

Perm. Water Main Esmt.

Perm. Drain. Esmt.

Perm. San. Sewer Esmt.

Spec. "V" Dt.

8' CONC. SIDEWALK

6' CONC. SIDEWALK

(135) A&K ENTERPRISE, INC.

(134) ERPS, INC.

(14) (14F) GUNPOWDER PROPERTIES, LLC

(138) CP & TS, LLC

(136)

BRIDGE FLOOD EVALUATION DATA
Q_{100} = 5144 cfs HW_{100} = 791.67
Q_{50} = 4380 cfs HW_{50} = 790.51

PT 35+44.34

COMMONWEALTH OF KENTUCKY

Rt. Sta. 96+25 to Sta. 97+73.18 Const. 125.0 L.F. Steel "W" Beam Guardrail (SF) w/ 1 - Bridge End Connector Type A & 1 - End Treatment Type 4A

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Rt. Sta. 98+54 to Sta. 99+69 Const. 87.5 L.F. Steel "W" Beam Guardrail (SF) w/ 1 - Bridge End Connector Type A & 1 - Guardrail End Treatment Type 1

Rt. Sta. 95+00 to Sta. 99+41.16 Const. 222 S.Y. 4" Conc. Sidewalk

Rt. Sta. 95+00 to Sta. 95+82.69 Const. 37 S.Y. Mountable Median Type 3

Rt. Sta. 95+36.12 to Sta. 98+80.67 Const. 275 S.Y. Standard Barrier Median Type 4

Sta. 97+77 Const. 3 C.Y. Safeloading

Rt. Sta. 95+00 to Sta. 99+41.16 Const. 339 L.F. Std. Curb and Gutter

Rt. Sta 95+00 to Sta. 99+41.16 Const. 153 S.Y. Sodding

Rt. Sta 101+15.52 to Sta. 104+00 Const. 136 S.Y. Sodding

DITCH CONSTRUCTION

STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Rt. 101+18 to 103+50	Spec. "V"	162 SY ECB

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
0003	CBI TYPE A-4-2	799.79	791.80
0004	CBI TYPE A-4-6	798.89	794.25
0005	CBI TYPE 13G-3	803.48	797.89
0006	DBI TYPE 11	807.49	803.00
0007	CBI TYPE A-4-2	807.87	803.50
0011	15" S&F HDWL	----	786.33
0012	15" S&F HDWL	----	789.20
0018	DBI TYPE 13G-3	805.14	799.57
1002	CBI TYPE B-44-2 (MOD)	820.68	811.53

KY 237 STORM SEWER DATA SHOWN ON SHEET R5

Rt. Sta. 101+15.52 to Sta. 104+00 Const. 266 L.F. Std. Curb and Gutter

Rt. Sta. 95+00 to Sta. 104+00 Const. 157 S.Y. 4" Conc. Sidewalk w/ 23 S.F. Detectable Warnings (yellow)

SCALE: 1"=30'

US 42 STA. 95+00 TO STA. 104+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME I-92 FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R22

R/W REV. NO. 6, OCT. 12, 2007

TRANSITION BRIGE OVERLAY TO PROFILE GRADE

PROFILE GRADE

BEGIN SPLINE GRADE (1.25" OVERLAY)

STA. 100+20.05 ℄ US 42 = STA. 37+38.33 ℄ KY 237

VC = 220'
SD = 261'

END SPLINE GRADE (1.25" OVERLAY)
EXISTING BRIDGE

PVC STA.98+80.00
Elev 801.07

PVCC STA.100+00.00
Elev 803.26

PVT STA.101+00.00
Elev 807.26

PVT STA.101+32.00
Elev 808.92

SPLINE GRADE (1.25" OVERLAY)

Proposed Grade

Existing Ground

5.184%

0.837%

5.184%

0.837%

#0018
Sta. 95+25.00, 12.50' Rt.
D.B.I. Type 13C-3
T/G 805.14

#0005
Sta. 95+73.26, 12.50' Rt.
D.B.I. Type 13C-3
T/G 803.48

#0013
Sta. 96+33.29, 4.90' Rt.
C.B.I. Type F (Mod.)
F.L. 802.08

Haines Drive Lt.

#0004
Sta. 97+60.00, 62.00' Rt.
C.B.I. Type A-4-6
F.L. 798.89

#1004
Sta. 101+07.05, 46.20' Lt.
C.B.I. Type B-36-2
F.L. 806.61

#1003
Sta. 103+43.27, 44.00' Lt.
C.B.I Type B-44-2
F.L. 819.04

18" Pipe
46 L.F. of 15" Pipe @ 3.63%
I.E. 799.57
I.E. 797.89

59 L.F. of 15" Pipe @ 0.50%
I.E. 798.18

36 L.F. of 15" Pipe @ 14.19%

I.E. 794.25

I.E. 789.20

#0012
Sta. 97+37.65, 92.90' Rt.
15" S&F HDWL.

#1007
Sta. 98+13.84 (KY 237), 123.5' Lt.
36" PIPE CULVERT HEADWALL

I.E. 784.70

208 L.F. of 36" Pipe @ 3.03%

15" Pipe
I.E. 791.00

I.E. 800.00

232 L.F. of 36" Pipe @ 4.10%

36" Pipe
809.60

Ex. 36" Pipe

I.E. 809.51

Sp. "V" @ 5.04%

Sp. "V" @ 5.33%

Sp. "V" @ 4.84%

+50 Rt
819.35
(Plotted 20' Below Datum)

+00 Rt
816.83
(Plotted 20' Below Datum)

+00 Rt
811.50
(Plotted 20' Below Datum)

+18.02 Rt
807.49
(Plotted 20' Below Datum)

BRIDGE
FLOOD EVALUATION DATA
Q_{50}=5144 cfs HW_{50}=791.67
Q_{25}=4380 cfs HW_{25}=790.51

US 42

Earthwork Quantities
Sta. 95+00 to 104+00

Emb Bench	=	*326*
Com	=	*1,847*
RDZ	=	*0*
Emb	=	*1,290*
Refill	=	*0*

SCALE:
H: 1" = 30'
V: 1" = 3'

| | | |

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R23

R/W REV. NO. 13, JUNE 19, 2009

104+00 105+00 106+00

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
1006	CBI Type A-6-2	830.51	826.20

Lt. Sta. 104+00 to Sta. 106+40 Const.
241 L.F. of Std. Curb and Gutter

Lt. Sta. 104+00 to Sta. 106+40 Const.
124 S.Y. 4" Conc. Sidewalk w/ 23 S.F.
Detectable Warnings (yellow)

Sta. 106+40.00 Const. 60 L.F. Edge Key

Lt. Sta 104+00 to Sta. 106+40
Const. 108 S.Y. Sodding

CONTRACTOR NOTE:
LOCATION OF PROPOSED ENTRANCE LT. STA. 104+00 BASED ON DEVELOPMENT PLANS & SUBJECT TO CHANGE. CONTRACTOR TO USE SIMILAR DESIGN AND TIE INTO EXISTING ENTRANCE IF ENTRANCE HAS BEEN CONSTRUCTED PRIOR TO CONSTRUCTION OF US 42.

(136) PLEASANT VALLEY COMMONS, LLC

(137) SIMPSON PROPERTIES, LLC

TOLL ROAD PROPERTIES, LLC

PEOPLES BANK OF NORTHERN KENTUCKY
D.B. 758, PG. 197

DONALD C. JACKMAN
RACHEL M. JACKMAN (WF.)
D.B. 301, PG. 287

RONALD HAARMAN
CARRIE HAARMAN (WF.)
D.B. 655, PG. 67

AUTOZONE, INC.
D.B. 582, PG. 24

8534 8530 US 42 8526 US 42 8522

20' PRIVATE STORM SEWER ESMT.
20' STORM SEWER ESMT.
EXISTING R/W
HARVEY QUAST DRIVE
ASPHALT PARKING
PARKING
GATE
SIGN (DNR)
DISTURB LIMITS
Temp. Esmt.
5' CONC. SIDEWALK
STD. CURB & GUTTER
EXISTING & PROPOSED R/W
END CONSTRUCTION
STA. 106+57.61 ℄ US 42
END OVERLAY
STA. 106+40.00 ℄ US 42
℄ US 42 15:1
N40° 23'45"E
TIE TO EXIST. CURB
TIE TO EXIST. SIDEWALK
EXIST. EOP
DND
5' CONC. SIDEWALK
DISTURB LIMITS
Prop. R/W
Temp. Esmt.
OVERLAY TO EXIST. CONC. GUTTER
US 42 & 127
EVERGREEN PLAZA

(14) GUNPOWDER PROPERTIES, LLC

GUNPOWDER PROPERTIES
D.B. 877, PG. 383

KEYBANK NATIONAL ASSOCIATION
D.B. 883, PG. 649

KINGDOM PROPERTIES, LLC
D.B. 894, PG. 189

8529

MEL'S LANE
BEECHWOOD LANE

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Rt. Sta. 104+00 to Sta. 104+25 Const.
38 L.F. Std. Curb and Gutter

Rt. Sta. 104+00 to Sta. 106+57.61 Const.
94 S.Y. 4" Concrete Sidewalk w/ 20 S.F.
Detectable Warnings (yellow)

Rt. Sta 104+00 to Sta. 106+40
Const. 77 S.Y. Sodding

Rt. Sta. 104+25 to Sta. 104+63 Const.
raised island using 14.4 C.Y. Class "A" Concrete
(See Detail on Typical Sections)

SCALE: 1"=30'

US 42 STA. 104+00 TO STA. 106+40.00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

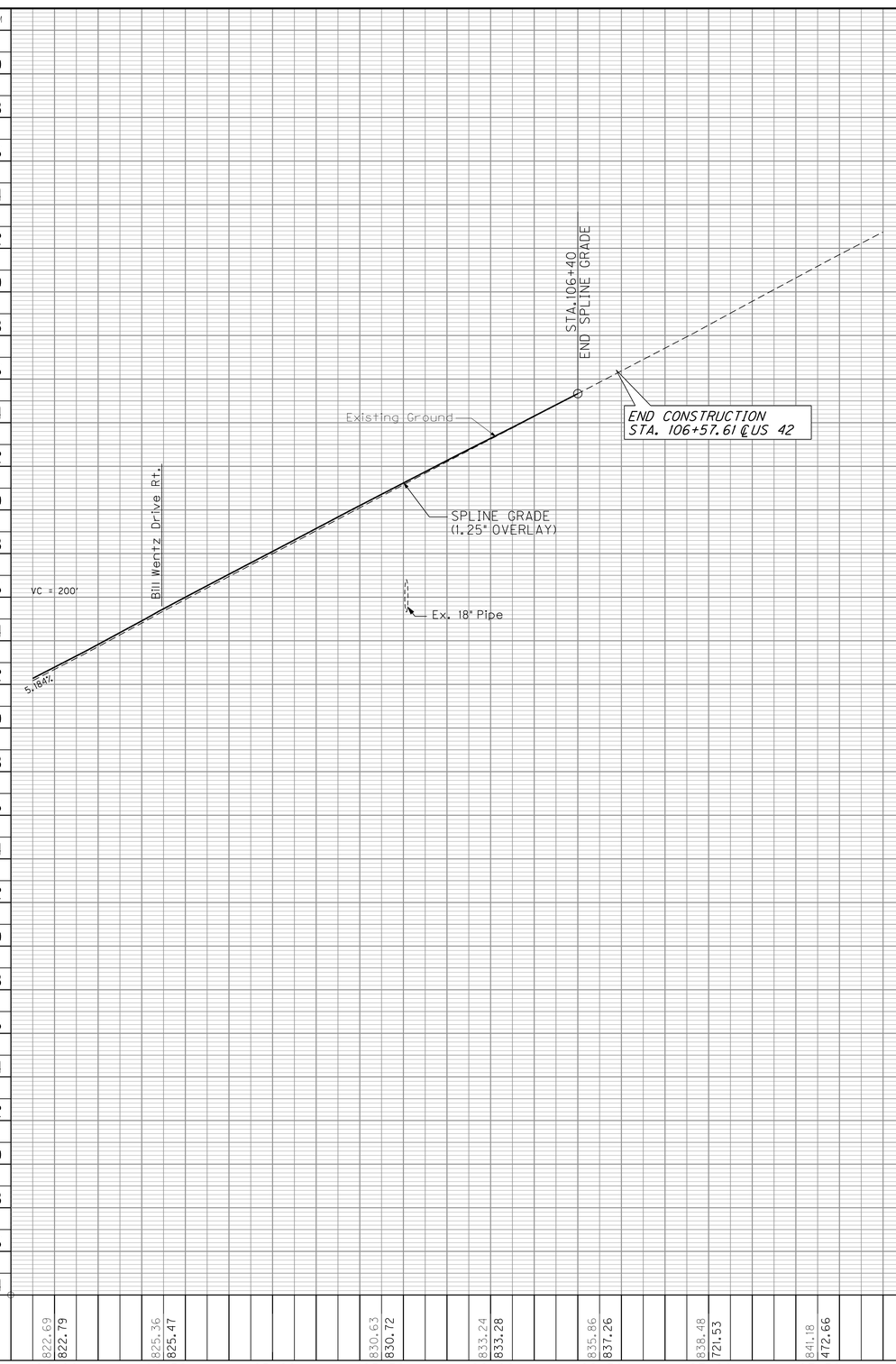
Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R24

R/W REV. NO. 6, OCT. 12, 2007

DATUM

850 848 846 844 842 840 838 836 834 832 830 828 826 824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794



822.69 822.79 | 825.36 825.47 | 830.63 830.72 | 833.24 833.28 | 835.86 837.26 | 838.48 721.53 | 841.18 472.66 | 843.82 223.80

104+00 104+50 105+00 105+50 106+00 106+50 107+00 107+50 108+00

US 42		
Earthwork Quantities Sta. 104+00 to 106+40		
Emb Bench	=	0
Com	=	360
RDZ	=	0
Emb	=	3
Refill	=	0

SCALE:
H: 1" = 30'
V: 1" = 3'

US 42 Sta. 104+00 to Sta. 106+40

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 4

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R25

R/W REV. NO. 17, SEPT. 4, 2009

(23)	PAUL F. MICHELS (1/2 INT.) CATHERINE M. MICHELS (1/2 INT.)

51+00 52+00 53+00 54+00

DITCH CONSTRUCTION

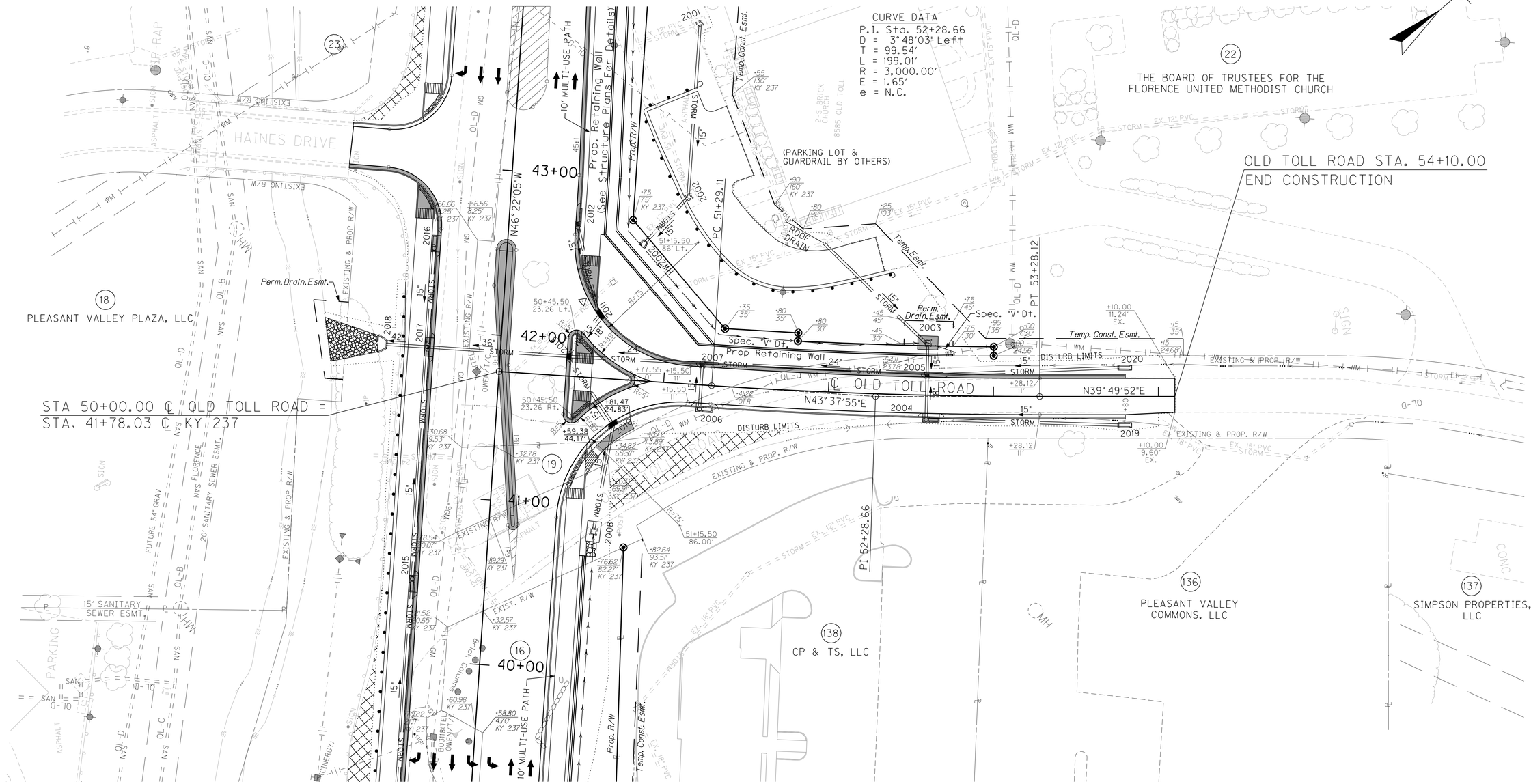
STATION TO STATION	TYPE OF DITCH	CHANNEL LINING CONSTRUCTION NOTES
Lt. 51+21 to 52+77	Spec. "V"	94 SY ECB

Lt. Sta. 51+15.5 to Sta. 53+80 Const.
212 L.F. Std. Curb and Gutter

STORM SEWER STRUCTURE DATA LEFT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
2003	DBI TYPE 3 (SAG)	813.33	805.33
2005	CBI TYPE B-12-2	808.19	803.07
2007	CBI TYPE B-12-2	798.40	792.67
2020	15" S.& P. HDWL.	------	814.50

KY 237 STORM SEWER DATA SHOWN ON SHEET R7



(16)	RAMI H. NWAISSER (1/2 INT.) CYNTHIA M. NWAISSER (WF.) WILLIAM S. FAR (1/2 INT.) HALA H. FAR (WF.)
(19)	CHAD HOWE BOBBY R. HOWE

REMOVAL NOTE
THE CONTRACTOR SHALL REMOVE ALL PIPE AND MISC. DRAINAGE STRUCTURES UNLESS REMAINING IN USE OR OTHERWISE NOTED ON THE PLANS. PAYMENT SHALL BE INCIDENTAL TO ROADWAY EXCAVATION.

Rt. Sta. 50+73 to Sta 51+82
Remove 195 SY Asphalt Pavement & Base

Rt. Sta. 51+15.5 to Sta. 53+80 Const.
214 L.F. Std. Curb and Gutter

Sta. 54+10.00 Const. 21 L.F. Edge Key

STORM SEWER STRUCTURE DATA RIGHT

STRUC. NO.	STRUCTURE TYPE	TOP OF GRATE	INVERT
2004	CBI TYPE A-6-2	808.19	803.21
2006	CBI TYPE A-4-2	798.40	793.41
2019	15" S & P HDWL.	------	814.50

KY 237 STORM SEWER DATA SHOWN ON SHEET R7

SCALE: 1"=30'

OLD TOLL ROAD STA. 50+00 TO STA. 54+10

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R26

DATUM

824 822 820 818 816 814 812 810 808 806 804 802 800 798 796 794 792 790 788

Sta. 51+93.18, 90.00' Lt.
Ex. Junction Box

I.E. 823.84

86 L.F. of 15" Pipe @ 15.10%

#2003
Sta. 52+59.60 31.79' Lt.
C.B.I. Type 3 (Sag)
F.L. 813.33 (Plotted 5' Above Datum)

STA. 50+00.00 ℄ OLD TOLL ROAD =
STA. 41+78.03 ℄ KY 237

END CONSTRUCTION
OLD TOLL STA. 54+10.00

+21
815.48
(Plotted 5' Above Datum)

+07 Lt.
814.12
(Plotted 5' Above Datum)

+77 Lt.
813.50
(Plotted 5' Above Datum)

Sp. V Dt. @ 1.61%

Sp. V Dt. @ 1.52%

Sp. V Dt. @ 0.94%

Prop Retaining Wall
(See Structure Plans For Details)

15" Pipe
I.E. 810.83
(Plotted 5' Above Datum)

PVI STA.53+85.00
Elev 817.53

Existing Ground

6.17%

7.23%

Turning Point (See KY 237)

Turning Point (See Plan)

PVC STA.50+48.00
Elev 795.56

PVCC STA.50+85.00
Elev 796.58

PVT STA.51+48.00
Elev 800.37

Proposed Grade

VC = 100'
SD = 110'

#2007
Sta. 51+22.67 13.00' Lt.
C.B.I. Type B-12-2
F.L. 798.40

15" Pipe
I.E. 805.33
(Plotted 5' Above Datum)

#2005
Sta. 52+59.60 13.00' Lt.
C.B.I. Type B-12-2
F.L. 808.19

PVC STA.53+60.00
Elev 815.72

#2020
Sta. 53+75.42 17.5' Lt.
15" S. & P Hdwl.

I.E. 814.50

VC = 50'
SD = 1039'

PVT STA.54+10.00
Elev 819.07

PVI STA.54+48.89
Elev 821.48

18" Pipe

15" Pipe
I.E. 803.07

115 L.F. of 15" Pipe @ 9.98%

-2.31%

PVI STA.50+00.00
Elev 796.67

#2013
(See KY237 Profile)

134 L.F. of 24" Pipe @ 7.74%

#2019
Sta. 53+75.42 17.5' Rt.
15" S. & P Hdwl.

I.E. 814.50
(Plotted 10' Below Datum)

115 L.F. of 15" Pipe @ 9.94%

18" Pipe

15" Pipe
I.E. 792.67

79 L.F. of 24" Pipe @ 5.38%

#2004
Sta. 52+59.60 13.00' Rt.
C.B.I. Type A-6-2
F.L. 808.19

I.E. 803.21
(Plotted 10' Below Datum)

18" Pipe

15" Pipe

I.E. 7988.44

PVI STA.50+85.00
Elev 795.81

796.6	805.7	809.4	803.8	806.38	809.39	812.39	815.42	818.47	821.54
796.67	795.47	797.34	800.52	804.14	807.76	811.38	815.00	818.45	

50+00 50+50 51+00 51+50 52+00 52+50 53+00 53+50 54+00 54+50 55+00

OLD TOLL ROAD

Earthwork Quantities
Sta. 50+00 to 54+10

Emb Bench	=	*0*
Com	=	*1,288*
RDZ	=	*1,237*
Emb	=	*35*
Refill	=	*132*

SCALE:
H: 1" = 30'
V: 1" = 3'

OLD TOLL ROAD STA. 50+00 TO STA. 54+10

PREPARED BY GRESHAM SMITH & PARTNERS $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: spp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 4

RIGHT OF WAY SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R27

R/W REV. NO. 15, JULY 17, 2009

PARCEL NO.	NAME	SHEET NUMBER	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SOURCE OF TITLE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS AFFECTED BY PROJECT		REMARKS
							PERMANENT	TEMPORARY	LEFT		RIGHT							YES	NO	YES	NO	
			ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.						
1-5	NOT USED																				X	
6	CYNTHIA A. SCHRODER (SINGLE)	R3, R39, R55	8.194		0.026	1,139		11,440	0.528		7.640				8.168		DB 796, PG 581				X	
7	NOT USED																				X	
8	JOHN D. DRYDEN	R3, R39, R55	0.659	28,708	0.055	2,380		22,489							0.604	26,328	DB 519, PG 64				X	
9	JERRY L. INSKEEP, TRUSTEE	R3, R5, R39, R40, R55	7.935		0.309	13,444	609	12,447							7.612		DB 14, PG 308; DB 840, PG 274				X	THE GALLAGHER-INSKEEP TRUST U/A DTD. JUNE 14, 2000
10	NOT USED																					
11	NOT USED																					
12	SHERRY A. MORGAN JAMES L. MORGAN (HUSB.)	R5, R40, R55	5.314		0.823	35,847	130	16,819							4.488		DB 195, PG 283; DB 529, PG 25; HB 14, PG 296; PB 1, PG 102			X		
13	ACG GUNPOWDER, LLC	R5, R40, R55	1.260		0.359	15,657		10,305							0.901	39,229	DB 937, PG 484; PB 1, PG 102			X		
14	GUNPOWDER PROPERTIES, LLC	R5, R29, R31, R40, R52, R53, R55	9.791		0.405	17,642	1,255 SF (D)	23,520							9.357		DB 877 PG 383				X	
14F	GUNPOWDER PROPERTIES, LLC	R5, R29, R31, R40, R52, R53, R55	9.357				0.077 AC (S) 0.100 AC (W)								9.357		DB 877 PG 383				X	
15	NOT USED																					
16	RAMI H. NWAISSER, (1/2 INT.) CYNTHIA M. NWAISSER (WF.) WILLIAM S. FAR, (1/2 INT.) HALA H. FAR (WF.)	R5, R7, R29, R33, R40, R41, R52, R54, R55	0.519	22,600	0.519	22,600									0	0	DB 664, PG 61; PG 61; PB 1, PG 74; HB 15, PG 214				X	
17	NOT USED																					
18	PLEASANT VALLEY PLAZA, LLC	R7, R33, R41, R54, R55	1.571				756								1.554		DB 939, PG 339				X	
19	CHAD HOWE BOBBY R. HOWE	R7, R33, R41, R54, R55	0.067	2,920	0.067	2,920									0	0	DB 868, PG 864					
20	NOT USED																					
21	NOT USED																					
22	THE BOARD OF TRUSTEES FOR THE FLORENCE UNITED METHODIST CHURCH	R7, R33, R41, R54, R55	9.224			48,524	445	37,233							8.100		DB 467, PG 58				X	
23	PAUL F. MICHELS (1/2 INT.), CATHERINE M. MICHELS (1/2 INT.)	R7, R9, R33, R41, R42 R54, R55	3.087		0.386	16,826		19,744							2.701		DB 774, PG 617; PG 764, PG 136				X	
24	RIEGLER PROPERTIES	R7, R9, R41, R42, R55	1.99				6,203 SF (D) 0.081 AC.(W)	2,248							1.848		DB 312, PG 46				X	
25	NOT USED																					
26	D.B.S. DEVELOPMENT CORPORATION	R9, R42, R55	1.648				4,146 SF (D) 0.046 AC.(W)	2,379							1.553		DB 204, PG 299; PB 11, PG 45				X	
27	BROOKSIDE MANAGEMENT, LLC (50% INT) RUSSELL DEVELOPMENT, LLC (29% INT.) BAK BROOKSIDE, LLC (21% INT.)	R9, R42, R55	14.300		0.659	28,720	0.043 ACRE (W)	17,633							13.641		DB 909, PG 937; DB 845, PG 660				X	
28	RICHARD M. ROGERS CATHERINE A ROGERS (WF.)	R9, R42, R55	1.002					1,943							1.002		DB 348, PG 255; DB 350, PG 43; PB 11, PG 45				X	
29	GARY R. WILLIAMS LAURENE R. WILLIAMS (WF.)	R9, R42, R55	0.448	19,494				1,020							0.448	19,494	DB 431, PG 25				X	
30	NOT USED																					
31	NOT USED																					

NOTE: PERMANENT R/W ACQUIRED + PERMANENT EASEMENT (DRAINAGE ONLY) + AREA SEVERED = TOTAL AREA OF TRACT.

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

PS = PLAT SIDE
PC = PLAT CAB
PB = PLAT BOOK

* PARTIALLY CONSTRUCTED FROM US 42 R/W PLANS

** PARTIALLY CONSTRUCTED FROM KY237 R/W PLANS

EASEMENT TYPES

PERMANANT

D = DRAINAGE
A = ACCESS
S = SEWER LINE
W = WATER LINE
T = TELEPHONE LINE
G = GAS LINE
E = ELECTRIC LINE
V = CATV LINE

TEMPORARY

SL = SLOPE / DITCH
MT = MAINTENANCE OF TRAFFIC
EC = EROSION CONTROL
BW = BORROW / WASTE SITE
SR = STRUCTURE REMOVAL
RU = RELOCATED UTILITIES
MC = MISCELLANEOUS CONSTRUCTION

BUILDINGS ACQUIRED CODE

C - COMMERICAL
R - RESIDENTIAL
F - FARM
ST - STORAGE

TYPE SEWER SYSTEM

1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

RIGHT OF WAY SUMMARY

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R28

R/W REV. NO. 15, JULY 17, 2009

RIGHT OF WAY SUMMARY

PARCEL NO.	NAME	SHEET NUMBER	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SOURCE OF TITLE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS AFFECTED BY PROJECT		REMARKS
							PERMANENT	TEMPORARY	LEFT		RIGHT							YES	NO	YES	NO	
			ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.						
32	MACK L. McCANN, TRUSTEE	R9, R42, R55	0.451	19,625				127							0.451	19,625	DB 888, PG 628; PB 11, PG 45				X	THE BARBARA ANN DEAKINS IRREVOCABLE TRUST
33	NOT USED																					
34	VIRGIL REYNOLDS ** CAROL L. REYNOLDS (WF.)	R9, R11, R42, R43, R55	2.725		0.620	27,021		21,023							2.105		DB 291, PG 118			X		R
35	WILLIAM C. LINAHAN LYDIA C. LINAHAN (WF.)	R11, R43, R55	0.391	17,018				548							0.391	17,018	DB 496, PG 68; PB 11, PG 45				X	
36	CARL T. SMIDDY LAPHENIA E. SMIDDY (WF.)	R11, R43, R55	0.389	16,962				124							0.389	16,962	DB 874, PG 753; PB 11, PG 45				X	
37	HENRY BATTON, JR. VICKIE D. BATTON (WF.)	R11, R43, R55	0.389	16,962				466							0.389	16,962	DB 433, PG 187; PB 11, PG 45				X	
38	NOT USED																					
39	NICK BENSON LINDA BENSON (WF.)	R11, R43, R55	0.389	16,962				1,180							0.389	16,962	DB 214, PG 182; PB 11, PG 45				X	
40	PAUL E. RITTER ** PHYLLIS DIANE RITTER (WF.)	R11, R43, R55	0.689	30,000	0.156	6,792		6,500							0.533	23,208	DB 361, PG 256			X		R
41	ROBERT J. EHRMAN FRANCES A. EHRMAN (WF.)	R11, R43, R55	0.383	16,683				1,211							0.383	16,683	DB 214, PG 291; PB 11, PG 45				X	
42	ROSE MARY KAHMANN FAMILY TRUST DTD. DEC 5, 1994	R11, R43, R55	0.294	12,818	0.138	6,020							0.156	6,798	0.000	0.000	DB 832, PG 279; PB 20, PG 48			X		PAUL J. KAHMANN, SR., TRUSTEE; JANET KEGLEY, TRUSTEE R
43	NORMAN H. SMITH MARY E. SMITH (WF.)	R11, R43, R55	0.388	16,908				958							0.388	16,908	DB 214, PG 256; PB 11, PG 45				X	
44	PHILLIP RHEA ROLLINS CHARLOTTE JUNE ROLLINS (WF.)	R11, R43, R55	0.337	14,662	0.158	6,901	0.026 ACRE (W)						0.178	7,761	0.000	0.000	DB 398, PG 171; PB 20, PG 48			X		R
45	TRACY BIBB (UNMARRIED)	R11, R43, R55	0.407	17,747				256							0.407	17,747	DB 908, PG 511; PB 11, PG 45				X	
46	JAMES R. HOUSE MADELINE C. HOUSE (WF.)	R11, R43, R55	0.456	19,856				818							0.456	19,856	DB 265, PG 238; PB 11, PG 45				X	
47	B.O.L.D. HOMES, INC.	R11, R43, R55	0.327	14,254	0.171	7,446		3,223							0.156	6,808	DB 409, PG 162; PB 20, PG 48			X		R
48	WILLIAM H. POYNTER, JR.	R11, R43, R55	0.295	12,849	0.138	6,024		3,069							0.157	6,825	DB 861, PG 332; PS 50B			X		R
49	DIANNE E. GAYLE (MARRIED)	R11, R43, R55	0.379	16,520				677							0.379	16,520	DB 848, PG 411; PS 50B				X	
50	NOT USED																					
51	VERN V. FORBES TOMMIE ANN FORBES (WF.)	R11, R13, R43, R44, R55	0.745	32,465	0.512	22,321							0.233	10,144	0.000	0.000	DB 702, PG 152; PS 50B			X		R
52	JOHN W. FISHER REBECCA J. FISHER (WF.)	R13, R44, R55	0.367	15,998	0.003	116									0.365	15,882	DB 819, PG 60; PS 170A				X	KENSINGTON PLACE PLAT 170A, LOT 82A
53	THOMAS J. SCHREIBER MARY ELLEN SCHEIBER (WF.)	R11, R13, R43, R44, R55	2.939		0.015	656	2607								2.864		DB 217, PG 251; DB 230, PG 182; PB 11, PG 45				X	
54	GARY BLACKSHIRE PAULA BLACKSHIRE (WF.)	R13, R44, R55	2.204		0.545	23,748		3,474							1.659		DB 710, PG 74; PB 19, PG 48				X	USE TOTAL TRACT SUBMITTED
55	CHARLES F. ROLFSEN ** GLORIA ROLFSEN (WF.)	R13, R44, R55	5.202		0.010	440	1467	1,962							5.158		DB 154, PG 536				X	
56	CHARLES M. ROLFSEN ** CHERIE A. KESSLER-ROLFSEN (WF.)	R13, R44, R55	2.923					3,858							2.923		DB 849, PG 256				X	
57	CHARLES F. ROLFSEN ** GLORIA ROLFSEN (WF.)	R13, R15, R44, R45, R55	2.081		0.037	1,604		11,285							2.044		DB 154, PG 536				X	
58	ROBERT W. COLLETT ** GERTRUDE ANN COLLETT (WF.)	R13, R15, R44, R45, R55	4.033		0.152	6,615	190	6,017							3.877		DB 198, PG 464				X	
59	REHKAMP FARMS, INC.	R13, R15, R17, R19, R21, R44 R45, R46, R47, R48, R55	165.572		5.098	222,077	27,654	12,012							159.839		DB 253, PG 36			X		ST
60-74	NOT USED																					
75	GEORGE REHKAMP, JR. DOROTHY M. REHKAMP (WF.)	R15, R45, R46, R55	0.333	14,508	0.122	5,309									0.211	9,199	DB 188, PG 747				X	LANDLOCKED SEE ALSO PARCEL 80
76	NOT USED																					
77-78	NOT USED																					

NOTE: PERMANENT R/W ACQUIRED + PERMANENT EASEMENT (DRAINAGE ONLY) + AREA SEVERED = TOTAL AREA OF TRACT.

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

PS = PLAT SIDE
PC = PLAT CAB
PB = PLAT BOOK

• PARTIALLY CONSTRUCTED FROM US 42 R/W PLANS
•• PARTIALLY CONSTRUCTED FROM KY237 R/W PLANS

EASEMENT TYPES

PERMANANT
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W = WATER LINE
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V = CATV LINE

TEMPORARY
SL = SLOPE / DITCH
MT = MAINTENANCE OF TRAFFIC
EC = EROSION CONTROL
BW = BORROW / WASTE SITE
SR = STRUCTURE REMOVAL
RU = RELOCATED UTILITIES
MC = MISCELLANEOUS CONSTRUCTION

BUILDINGS ACQUIRED CODE
C - COMMERICAL
R - RESIDENTIAL
F - FARM
ST - STORAGE

TYPE SEWER SYSTEM
1. PRIVATE - INDIVIDUAL
2. PRIVATE - MULTI PARTY
3. PUBLIC
4. NONE
5. NOT APPLICABLE

RIGHT OF WAY SUMMARY

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
V-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R29

R/W REV. NO. 17, SEPT. 4, 2009

RIGHT OF WAY SUMMARY

PARCEL NO.	NAME	SHEET NUMBER	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SOURCE OF TITLE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS AFFECTED BY PROJECT		REMARKS
							PERMANENT	TEMPORARY	LEFT		RIGHT							YES	NO	YES	NO	
			ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.						
79	RICHARD L. O'DANIEL ** LORI O'DANIEL (WF.)	R15, R17, R45, R46, R55	4.848		0.146	6,341	2,764	3,721							4.639		DB 658, PG 89				X	
79F	RICHARD L. O'DANIEL ** LORI O'DANIEL (WF.)	R15, R17, R45, R46, R55	4.639				0.069 AC. (W)								4.639		DB 658, PG 89				X	FOR ACQUISTION OF PERMANENT WATER MAIN ESMTS.
80	GEORGE REHKAMP, JR. ** DOROTHY M. REHKAMP (WF.)	R17, R46, R55	39.595					2,498							39.595		DB 188, PG 747				X	SEE ALSO PARCEL 75
81	GREGORY F. BULMER BARBARA BULMER (WF.)	R15, R17, R45, R46, R55	3.390		0.174	7,578									3.216		DB 362, PG 320; PB 21, PG 4				X	
82	EILEEN M. MESSER	R17, R46, R55	1.640		0.016	678									1.624		DB 630, PG 191; PB 21, PG 4				X	
83	GREGORY SPEERY JEANNE REHKAMP SPEERY (WF.)	R17, R46, R55	1.810		0.014	598									1.796		DB 825, PG 624; PB 21, PG 4				X	
84	JEROME BRESSLER DIANNE REHKAMP BRESSLER (WF.)	R17, R46, R55	2.550		0.050	2,161		4,162							2.500		DB 347, PG 168; PB 21, PG 4				X	
85	DONALD J. NAU ** MELINDA CROSS NAU (WF.)	R17, R46, R55	4.377		0.740	32,246	0.051 ACRE (W)	16,663							3.637		DB 450, PG 84			X		R
86	KAREN MENKE (SINGLE)	R17, R46, R55	2.400					116							2.400		O.C. 882, PG 459; PB 21, PG 4				X	
87	WILLIAM G. REHKAMP ** GERALYN M. REHKAMP (WF.)	R17, R19, R46, R47, R55	3.996		0.195	8,487		4,811							3.801		DB 358, PG 83			X		ST
88	KARREN J. ESTES **	R19, R47, R55	3.213		0.010	427		5,133							3.203		DB 990, PG 145				X	
89	DAVID HINTON MITZI HINTON (WF.)	R19, R47, R55	0.629	27,420				2,438							0.629	27,420	DB 860, PG 228; PS 134B				X	
90	NOT USED																					
91	BARRY C. VOGELPOHL KIMBERLY R. VOGELPOHL (WF.)	R19, R47, R55	0.623	27,123				1,751							0.623	27,123	O.C. 799, PG 390				X	
92	JAMES M. SANDERS CAROL S. SANDERS (WF.)	R19, R47, R55	0.924	40,237	0.019	817	1,650 SF (D) 0.047 AC.(W)	954							0.867	37,770	DB 874, PG 556; PS 13B				X	
93	PAUL J. KAHMANN DEVELOPER, INC.	R19, R21, R47, R48, R55	1.032		0.019	810	1,339 SF (D) 0.081 AC.(W)	2,600							0.983	42,805	DB 352, PG 288; PS 13B				X	
94	NOT USED																					
95	MARK KREIDLER ** LINDA KREIDLER (WF.)	R21, R48, R55	1.520		1.520										0	0	DB 242, PG 319				X	R, F
96	RONALD EDGINGTON (MARRIED)	R21, R48, R55	0.750	32,668				752							0.750	32,668	DB 873, PG 277; PS 13B				X	
96F	LARRY C. WEST, JR. JANE ASHCRAFT-WEST (WF.)	R21, R48, R55	0.750	32,668			0.003 ACRE (W)								0.750	32,668	DB 958, PG 618				X	
97	CHAROLETTE PETREY	R21, R48, R55	0.746	32,499	0.009	382		1,468							0.737	32,117	DB 883, PG 46; PS 13B				X	
98	GEORGE REHKAMP, JR. ** DOROTHY M. REHKAMP (WF.)	R21, R48, R55	1.301		0.144	6,257	120	16,926							1.155		DB 188, PG 747				X	
99	EUGENE DOOLIN BETTY DOOLIN (WF.)	R21, R48, R55	1.173		0.027	1,170		5,978							1.146		DB 685, PG 62; PS 13B				X	WANETTA S. GILES (LEASEE OF 7963)
100	NOT USED																					
101	NOT USED																					
102	KENNETH W. MILLER PAULA MILLER (WF.)	R21, R48, R55	0.460	20,028		802		1,714							0.441	19,226	DB 865, PG 50; PS 20A				X	
103	MARY ANN L. BOH (UNMARRIED) (60% INT.) ** GERALYN REHKAMP (MARRIED) (40% INT.)	R21, R48, R55	47.137		0.113	4,929		4,107							47.024		DB 850, PG 421, DB 641, PG 140 DB 641, PG 137				X	
104	MARY ANN L. BOH, TRUSTEE	R21, R23, R48, R49, R55	18.237		0.215	9,358		4,936							18.022		DB 641, PG 145; DB 654, PG 259				X	TRUST B ESTABLISHED UNDER TRUST AGREEMENT OF WILLIAM H. BOH DTD. 1-21-91, AS AMENDED BY FIRST AMENDMENT TO TRUST AGREEMENT DTD. 7-10-91*
105	VILMOS KOSSUTHI GEORGINA GARAMY (WF.) (1/2 INT.) STEFANIA GARAMY (WIDOW) (1/2 INT.)	R21, R23, R48, R49, R55	0.577	25,122	0.005	210		1,920							0.572	24,912	DB 478, PG 228; PS 20A				X	
106	FREEMAN THOMAS RILEY LINDA N. RILEY (WF.)	R23, R49, R55	0.709	30,901				1,782							0.709	30,901	DB 595, PG 197; PS 59B				X	
107	LOWELL MEEK LORETTA MEEK (WF.)	R23, R49, R55	1.000		0.155	6,744	282	2,925							0.839	36,534	DB 246, PG 228, PB 12, PG 47				X	

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TEMPORARY

SL = SLOPE / DITCH
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RIGHT OF WAY SUMMARY

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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Cell Name: sp
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VENDORS NAME
V-92
FORM NO. 2

RIGHT OF WAY SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R30

R/W REV. NO. 17, SEPT. 4, 2009

PARCEL NO.	NAME	SHEET NUMBER	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SOURCE OF TITLE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS AFFECTED BY PROJECT		REMARKS
							PERMANENT	TEMPORARY	LEFT		RIGHT							YES	NO	YES	NO	
			ACRES	SQ. FT.	ACRES	SQ. FT.	SQ. FT.	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.	ACRES	SQ. FT.						
108	STANLEY HALL (MARRIED)	R23, R49, R55	0.464	20,215				1,454							0.464	20,215	DB 874, PG 913				X	
109	JAMES ROY CALDWELL KAREN DIANE CALDWELL (WF.)	R23, R49, R55	1.148		0.131	5,708	193	2,399							1.012		DB 367, PG 195; PB 12, PG 47				X	
110	NOT USED																					
111	JAMES R. BAKER **	R23, R49, R55	1.135					3,533							1.135		DB 351, PG 21				X	
112	MARK P. HILGER MARGO A. HILGER (WF.)	R23, R49, R55	1.010		0.141	6,150		1,047							0.869	37,846	DB 556, PG 35; PB 12, PG 47				X	
113	ROBERT BROCK ** JUDY BROCK (WF.)	R23, R49, R55	1.000					1,848							1.000		DB 329, PG 190				X	
114	STEVEN M. COLANGELO	R23, R49, R55	4.000		0.023	991		277							3.977		DB 631, PG 187; PB 12, PG 47				X	
115	JOSEPH A. KLUESENER RUTH E. KLUESENER (WF.)	R23, R49, R55	4.000		0.023	994		332							3.977		DB 329, PG 198; PB 12, PG 47				X	
116	CHARLES E. McQUILLAN CYNTHIA A. McQUILLAN (WF.)	R23, R49, R55	1.200		0.141	6,147		1,555							1.059		DB 392, PG 112; PB 12, PG 47				X	
117	JACOB M. VANBRANDWIJK PENNY K. VANBRANDWIJK (WF.)	R23, R25, R49, R50, R55	0.510	22,202				944							0.510	22,202	DB 834, PG 570; PS 41B				X	
118	WAYNE GRIFFITH LINDA GRIFFITH (WF.)	R23, R25, R49, R50, R55	3.380		0.155	6,739		2,444							3.225		DB 305, PG 267; PB 12, PG 47				X	
119	JOHN P. LUSK LAURA S. LUSK (WF.)	R25, R50, R55	1.855		0.140	6,120		3,198							1.715		DB 872, PG 375; PB 12, PG 47				X	
120	NOT USED																					
121	ROBERT REID GILLISPIE AMY J. GILLISPIE (WF.)	R25, R50, R55	0.559	24,356				3,236							0.559	24,356	DB 820, PG 632; PS 41B				X	
122	THOMAS J. ZINN (SINGLE) **	R25, R50, R55	5.193		0.714	31,082	3,718	3,035							4.394		DB 385, PG 283				X	
123	JAMES E. FOSSITT ** MARY L. FOSSITT (WF.)	R25, R50, R55	3.330				564	6,400							3.317		DB 369, PG 155				X	
124-129																						
130	MH REAL ESTATE **	R27, R51, R55	1.171		0.015	675		2,823							1.156		DB 949, PG 691				X	
131	NOT USED																					
132	SKEETS, LLC **	R27, R51, R55	1.182		0.086	3,734		2,357							1.096		DB 663, PG 214				X	
132F	SKEETS, LLC **	R27, R51, R55	1.096		0.001	52		1,309							1.095		DB 663, PG 214				X	FOR ACQUISTION OF ADD'L. TEMPORARY ESMT.
133	A&K ENTERPRISE, INC. **	R27, R51, R55	1.081		0.084	3,662		5,358							0.997		DB 432, PG 210; PC 5, PG 376				X	
134	ERPS INC. **	R5, R27, R29, R40, R51, R52, R55	0.888	38,674	0.176	7,675									0.712	30,999	DB 432, PG 210				X	
135	A&K ENTERPRISE, INC.	R27, R29, R38, R51, R52, R55	1.305		0.163	7,103		1,551							1.142		DB 432, PG 210; PC 5, PG 376				X	
136	PLEASANT VALLEY COMMONS, LLC **	R5, R7, R29, R31, R33, R38, R40, R41, R52, R53, R54, R55	1.932					4,097							1.932		DB 952, PG 189; PB 1, PG 74				X	SELL-OFF DB 966, PG 444
137	SIMPSON PROPERTIES, LLC	R31, R53, R54, R55	0.969	42,215				416							0.969	42,215	DB 879, PG 510; PC 4, PG 222				X	
138	CP & TS, LLC		1.569					7,304							1.569		DB 966, PG 444; PC 5, PG 531				X	

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•• PARTIALLY CONSTRUCTED FROM KY237 R/W PLANS

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TEMPORARY

SL = SLOPE / DITCH
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3. PUBLIC
4. NONE
5. NOT APPLICABLE

RIGHT OF WAY SUMMARY

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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VENDORS NAME
V-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R31

R/W REV. NO. 4, AUG. 30, 2007

24+00 25+00 26+00 27+00 28+00 29+00 30+00

CURVE DATA
P.I. Sta. 31+33.57
D = 41°04'52" Left
T = 449.63'
L = 860.40'
R = 1,200.00'
E = 81.47'
e = 5.00%
Runoff = See X-Sec.
Runout = See X-Sec.

COUNTY OF BOONE
D.B. 888, PG. 382

COMMONWEALTH OF KENTUCKY

6
CYNTHIA A. SCHRODER
(SINGLE)

BEGIN RIGHT OF WAY
SECTION 1
STA. 23+66.35

BEGIN PROJECT
STA. 23+80.00 ℄ KY 237

EXISTING & PROP. R/W

EXISTING & PROP. R/W

GUNPOWDER ROAD

PC 26+83.94

℄ KY 237

N5°17'14"W

Arc = 36.46'
R = 602.96'
CH = 36.45'
N11°51'24"W

Arc = 91.46'
R = 602.96'
CH = 91.37'
N17°56'03"W

Arc = 493.13'
R = 602.96'
CH = 491.41'
N7°43'27"W

N10°03'27"W - 106.09'

S5°23'48"E - 157.71'

S10°26'43"E
39.75'

S10°26'43"E - 164.18'

N64°37'07"E
14.83'

N14°30'43"W - 68.88'

N14°30'43"W
44.11'

S18°11'16"E - 240.36'

N44°20'19"W - 206.41'

EXISTING R/W

Prop. R/W

S10°26'43"E
17.23

EXISTING R/W

EXISTING R/W

RIDGEVIEW DRIVE

KADEAN M.
BRINKMAN
(SINGLE)

6
CYNTHIA A. SCHRODER
(SINGLE)

Temp. Const. Esmt.

Temp. Const. Esmt.

20' ACCESS ESMT.

8
JOHN D. DRYDEN

9
JERRY L. INSKEEP, TRUSTEE

Temp. Esmt. for Bldg. Removal

a. N55°21'17"E - 12.86'
b. N55°32'04"E - 15.54'

SCALE: 1"=30'

KY 237 STA. 23+80 TO STA. 30+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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$TIME$

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Cell Name: SD
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VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R32

R/W REV. NO. 17, SEPT. 4, 2009

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

CURVE DATA
P.I. Sta. 31+33.57
D = 41°04'52" Left
T = 449.63'
L = 860.40'
R = 1,200.00'
E = 81.47'
e = 5.00%
Runoff = See X-Sec.
Runout = See X-Sec.

(134) ERPS INC.

COUNTY OF BOONE
D.B. 888, PG. 382

COMMONWEALTH OF KENTUCKY

EXISTING & PROP. R/W

EXIST. & PROP. R/W

GUNPOWDER ROAD

℄ US 42

PLEASANT VALLEY ROAD (KY 237)

KY 237 ℄ STA. 37+38.33 =
US 42 ℄ STA. 100+20.05

℄ KY 237

EXIST. & PROP. R/W

EXIST. & PROP. R/W

Arc = 82.68'
R = 602.96'
CH = 82.62'
N39°47'25"W

N43°43'08"W - 119.18'

N19°23'51"W - 51.92'

N46°05'56"W 41.19'

N37°28'49"W 33.24'

N20°09'23"E 24.76'

N10°43'21"W 15.01'

EXISTING R/W

N10°43'21"W - 90.71'

PT 35+44.34

N44°20'19"W - 206.41'

N54°40'19"E - 110.28'

N54°40'41"E - 150.03'

N54°40'41"E 137.49'

N33°36'40"W 17.30'

N51°50'57"E - 74.60'

S18°11'16"E - 240.36'
Prop.R/W

N5°17'14"W

S18°11'16"E - 70.45'

Temp. Const. Esmt.

N46°22'05"W

S32°24'12"E - 184.48'

S32°24'12"E 101.32'

S46°22'05"E - 124.09'

S32°24'12"E 9.71'

PI 31+33.57

Perm. Drain. Esmt.

Perm. San. Sewer Esmt.

Perm. Water Main Esmt.

Perm. Drain. Esmt.

N50°46'15"W 127.91'

S31°26'14"E 77.62'

S30°25'32"W 90.03'

N40°25'55"E 291.43'

N40°23'45"E

EVERGREEN PLAZA (US 42 & US 127)

℄ US 42

N45°52'09"W - 158.04'

93°14'09"

86°45'51"

S39°27'20"W - 88.85'

Prop.R/W

S48°25'24"E - 269.55'

Temp.Const.Esmt.

S40°04'07"W 175.00'

(9) JERRY L. INSKEEP, TRUSTEE

(12) SHERRY A. MORGAN
JAMES L. MORGAN (HUSB.)

(13) ACG GUNPOWDER, LLC

(14) (14F) GUNPOWDER PROPERTIES, LLC

(16) RAMI H. NWAISSER (1/2 INT.)
CYNTHIA M. NWAISSER (WF.)
WILLIAM S. FAR
HALA H. FAR (WF.) (1/2 INT.)

(138) CP & TS, LLC

HOUSTON SANITARY SEWER ESMT.

a. N18°11'16"W - 19.18'
b. N54°40'19"E - 27.69'
c. S26°27'57"E - 23.56'
d. S64°07'52"W - 30.13'
e. N18°11'16"W - 6.96'
f. N62°56'15"E - 26.36'
g. S26°27'57"E - 2.90'

Perm. San. Sewer Esmt.
l. N23°15'00"W - 139.10'
m. N39°51'38"E - 22.42'
n. S23°15'00"E - 196.09'
o. N46°22'05"W - 50.94'

Perm. Drain. Esmt.
h. N31°26'14"W - 56.92'
i. N30°25'32"E - 15.41'
j. S46°22'05"E - 58.52'
k. S43°37'55"W - 29.67'

Perm. Water Main Esmt.
p. N26°36'38"E - 8.38'
q. N4°06'38"E - 70.19'
r. N6°06'38"E - 21.16'
s. N11°21'38"E - 28.69'
t. N40°04'07"E - 51.81'
u. S11°21'38"W - 74.52'
v. S6°06'38"W - 18.84'
w. S4°06'38"W - 73.81'
x. S26°36'38"W - 22.97'
y. S37°51'38"W - 1.69'
z. N31°26'14"W - 23.18'

Perm. Water Main Esmt.
aa. N31°26'14"W - 48.31'
bb. N30°25'32"E - 43.73'
cc. S6°21'21"E - 72.92'
dd. S37°51'38"W - 8.18'

SCALE: 1"=30'

KY 237 STA. 30+00 TO STA. 39+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R33

R/W REV. NO. 17, SEPT. 4, 2009

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

15' SANITARY SEWER ESMT.

20' SANITARY SEWER ESMT.

BURNETT MANAGEMENT COMPANY, LLC

(18)

PLEASANT VALLEY PLAZA, LLC

EXISTING & PROP R/W

N58°22'47"W 48.05'

Perm. Drain. Esmt.

S43°37'55"W 10.83'

N43°37'55"E 21.31'

47.00' S45°46'58"E

EXISTING R/W

HANES DRIVE

EXISTING R/W

20' SANITARY SEWER ESMT.

ALLATRIM, LLC
D.B. 883, PG. 965

(23)

PAUL F. MICHELS (1/2 INT.)
CATHERINE M. MICHELS (1/2 INT.)

PI 47+79.04

Temp. Const. Esmt.

EXISTING & PROP R/W

Temp. Const. Esmt.

Prop.R/W

Arc = 256.42', R = 950.00'
CH = 255.64', N38°38'08"W

N46°22'40"W 2.06'

Arc = 320.61', R = 2,332.00'
CH = 320.36', S32°01'21"E

STA. 41+90.26 ℄ KY 237 =
STA. 50+00.00 ℄ OLD TOLL ROAD

PLEASANT VALLEY ROAD (KY 237)

S68°32'48"W 28.52'

N45°46'55"W 50.70'

N45°46'58"W 52.14'

EXISTING R/W N45°46'58"W - 125.99'

N44°12'21"E 10.00'

℄ KY 237

N46° 22'05"W

Arc = 346.74', R = 2,252.00'
CH = 346.40', N41°22'16"W

N30° 54'11"W

N45°52'09"W 158.04'

EXISTING R/W

EXISTING R/W

N15°27'59"E - 116.74'

S15°27'59"W - 102.06'

N37°29'52"E - 93.96'

90°

℄ OLD TOLL ROAD

N53°03'53"E 10.00'

Arc = 147.65', R = 2,242.00'
CH = 147.62', N35°04'25"W

EXISTING & PROP R/W

(19)

RAMI H. NWAISSER (1/2 INT.)
CYNTHIA M. NWAISSER (WF.)

WILLIAM S. FAR (1/2 INT.)
HALA H. FAR (WF.)

S7°43'32"01"E 9.19'

S48°25'24"E - 269.55'
Prop.R/W
Temp. Const. Esmt.

S8°18'17"W 10.19'

Arc = 192.59'
R = 350.00'
CH = 190.17'
S04°04'06"W

S46°22'05"E - 381.83'

Prop.R/W

S36°31'16"E - 81.87'

N38°22'29"E 29.21'

51+00

N89°35'09"E 86.20'

PC 51+29.11

PC 46+56.83

(22)

THE BOARD OF TRUSTEES FOR THE FLORENCE UNITED METHODIST CHURCH

Temp. Const. Esmt.

Temp. Const. Esmt.

(24)

RIEGLER PROPERTIES

(138)

CP & TS, LLC

EXISTING & PROP. R/W

OLD TOLL ROAD

N43°37'55"E

PI 52+28.66

S41°20'24"E 5.00'

Arc = 118.80'
R = 2,970.00'
CH = 118.79'
N41°30'51"E

Temp. Const. Esmt.

52+00

CURVE DATA
P.I. Sta. 52+40.15
D = 4°54'02.54" Left
T = 128.38'
L = 256.60'
R = 3,000.00'
E = 2.75'
e = 0.00%

CURVE DATA
P.I. Sta. 47+79.04
D = 15°27'54" Right
T = 122.21'
L = 242.93'
R = 900.00'
E = 8.26'
e = 5.00%
Runoff= See X-Sec.
Runout= See X-Sec

SCALE: 1"=30'

(19) CHAD HOWE
BOBBY R. HOWE

KY 237 STA. 39+00 TO STA. 48+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

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DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R34

R/W REV. NO. 13, JUNE 19, 2009

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

CURVE DATA
P.I. Sta. 54+16.34
D = 12°36'53" Left
T = 132.64'
L = 264.20'
R = 1,200.00'
E = 7.31'
e = 5.00%
Runoff= See X-Sec.
Runout= See X-Sec.

(23)
PAUL F. MICHELS (1/2 INT.)
CATHERINE M. MICHELS (1/2 INT.)

(27)
BROOKSIDE MANAGEMENT, LLC (50% INT.)
RUSSELL DEVELOPMENT, LLC (29% INT.)
BAK BROOKSIDE, LLC (21% INT.)

(34)
VIRGIL REYNOLDS
CAROL L. REYNOLDS (WF.)

Perm. Water Main Esmt.
a. S43°00'00"W - 25.04'
b. S2°00'00"E - 40.35'
c. S27°09'46"W - 41.04'
d. N2°00'00"W - 84.47'
e. N43°00'00"E - 36.36'
f. N54°15'00"E - 2.31'
g. Arc = 20.26', R = 1,150.00'
CH = 20.26', S3°49'10"E

20' SANITARY SEWER, WALK-WAY AND ACCESS ESMT.
20' WATER MAIN ESMT.
30' CEMETERY ESMT.
5' CEMETERY ACCESS ESMT.
Temp. Const. Esmt.
Perm. Water Main Esmt.
Prop. R/W
EXISTING R/W
EXISTING & PROP. R/W
PC 52+83.70
PT 55+47.90
PI 54+16.34
Arc = 253.19', R = 1,150.00'
CH = 252.68', N37°12'38"W
Arc = 458.27', R = 1,870.00'
CH = 457.12', S35°06'23"E
N30°54'11"W 103.70'
N30°54'11"W 50.24'
N63°48'32"W - 101.24'
N34°43'02"W 28.50'
N34°43'02"W 46.66'
N9°41'54"E - 92.20'
N11°44'15"E - 125.96'
N43°31'04"W - 115.06'
N43°31'04"W - 401.70'
N43°34'30"E 61.97'
S28°05'00"E 182.14'
S28°05'00"E - 60.18'
N30°54'11"W
N43°31'04"W
Arc = 320.61', R = 2,332.00'
CH = 320.36', S32°01'21"E
℄ KY 237
PLEASANT VALLEY ROAD (KY 237)

CURVE DATA
P.I. Sta. 47+79.04
D = 15°27'54" Right
T = 122.21'
L = 242.93'
R = 900.00'
E = 8.26'
e = 5.00%
Runoff= See X-Sec.
Runout= See X-Sec.

(24)
RIEGLER PROPERTIES

PT 48+99.76
Arc = 31.39'
R = 100.00'
CH = 31.27'
S47°07'35"W
LENDALE DRIVE

Perm. Water Main Esmt.
j. N28°05'00"W - 17.67'
k. N19°15'59"E - 16.52'
l. N25°34'27"W - 36.06'
m. N23°34'27"W - 101.66'
n. N48°04'27"W - 4.59'
o. N44°57'06"E - 20.03'
p. S48°04'27"E - 7.87'
q. S23°34'27"E - 105.66'
r. S25°34'27"E - 43.97'
s. S19°15'59"W - 26.04'
t. Arc = 12.80', R = 100.00'
CH = 12.79', S52°27'11"W

Perm. Drainage Esmt.
S23°15'23"E 170.63'
S23°15'23"E 17.25'
S45°38'48"E - 98.23'

(24)
RIEGLER PROPERTIES

(26)
D.B.S. DEVELOPMENT CORPORATION

Perm. Water Main Esmt.
u. N59°05'39"E - 2.82'
v. S57°23'04"E - 33.73'
w. S48°04'27"E - 107.31'
x. N48°04'27"W - 58.96'
y. Arc = 53.66', R = 1,960.00'
CH = 53.66', N28°53'19"W
z. Arc = 27.65', R = 1,945.00'
CH = 27.65', N30°04'09"W

Arc = 54.30'
R = 1,960.00'
CH = 54.30'
N28°52'46"W
h. S59°06'46"W 15.00'
i. Arc = 8.38'
R = 1,945.00'
CH = 8.38'
N29°47'07"W
N59°05'39"E 32.42'
N28°05'00"W 164.41'
N28°05'00"W 60.91'
N44°57'06"E 46.62'
ACCESS ESMT.

(28)
RICHARD M. ROGERS
CATHERINE A. ROGERS (WF.)

(29)
GARY R. WILLIAMS
LAURENE R. WILLIAMS (WF)

(32)
MACK L. McCANN, TRUSTEE

VALLEY CIRCLE DRIVE

MACK L. MCCANN
MARY T. ROSS

SCALE: 1"=30'

KY 237 STA. 48+00 TO STA. 57+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

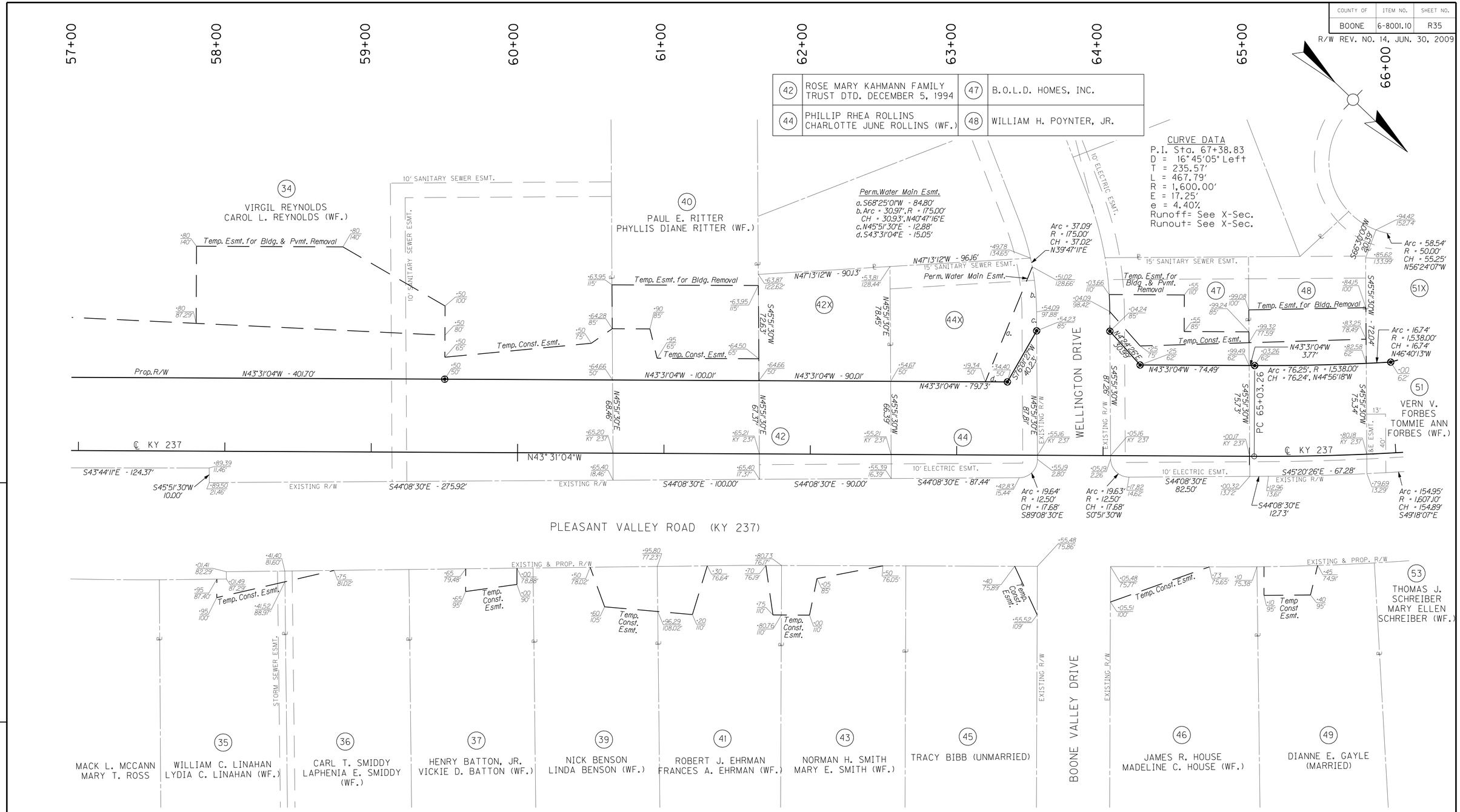
$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: SD
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R35

R/W REV. NO. 14, JUN. 30, 2009



51	VERN V. FORBES TOMMIE ANN FORBES (WF.)
53	THOMAS J. SCHREIBER MARY ELLEN SCHREIBER (WF.)

SCALE: 1"=30'

KY 237 STA. 57+00 TO STA. 66+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R36

R/W REV. NO. 15, JULY 17, 2009

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00

AMHERST COURT

Arc = 58.54'
R = 50.00'
CH = 55.25'
N56°24'07"W

N01°01'ZE 54.11'

52
JOHN W. FISHER
REBECCA J. FISHER (WF.)

N41°30'01"W 120.90'

51X

51

VERN V. FORBES
TOMMIE ANN FORBES (WF.)

Prop.R/W
N60°13'45"W - 212.35'

N60°13'45"W 27.64'

S41°30'01"E 26.17'

N60°13'45"W 18.82'

N48°29'59"E 8.87'

Prop.R/W
N31°01'51"W - 108.49'

Temp. Const. Esmt.

PT 69+71.04

N60°16'09"W - 228.96'

54
GARY BLACKSHIRE
PAULA BLACKSHIRE (WF.)

EXISTING R/W

VALLEY VIEW DRIVE

EXISTING R/W

Arc = 25.81'
R = 598.00'
CH = 25.80'
N25°59'04"E

S17°29'56"W 34.85'

N24°44'53"E 37.76'

S67°57'37"E 47.79'

Arc = 25.46'
R = 548.00'
CH = 25.46'
S26°04'45"W

S24°44'53"W 35.39'

58
ROBERT W. COLLETT
GERTRUDE ANN COLLETT (WF.)

l. S32°03'22"W - 13.00'
j. N57°42'40"W - 13.61'
k. N23°26'35"E - 13.17'
l. Arc = 15.58', R = 1,662.00'
CH = 15.58', S57°40'31"E

Temp. Const. Esmt.

NI3°29'35"W - 24.70'

Prop.R/W
N60°16'09"W - 130.06'

Perm. Drain. Esmt.

Arc = 133.87', R = 1,662.00'
CH = 133.83', N57°57'42"W

S67°57'37"E - 278.52'

℄ KY 237

N38°16'12"E 10.00'

Arc = 154.95', R = 1,607.10'
CH = 154.89', S49°18'07"E

N43°31'04"W

Arc = 90.76', R = 1,597.10'
CH = 90.75', S53°21'29"E

N48°29'59"E - 95.44'
S48°29'59"W - 104.31'

EXISTING R/W

Arc = 260.11', R = 1,597.10'
CH = 259.82', S59°39'06"E

S25°40'57"W 5.00'

Arc = 97.16', R = 1,602.10'
CH = 97.15', S66°03'16"E

N60°16'09"W

N67°57'37"W - 151.02'

N11°32'25"E 22.56'

N67°57'37"W 190.24'

S60°16'09"E - 95.31'

Arc = 61.41'
R = 1,550.00'
CH = 61.41'
S59°08'03"E

59

PC 74+20.06

PI 67+38.83

PLEASANT VALLEY ROAD (KY 237)

EXISTING & PROPOSED R/W

EXISTING & PROP. R/W

Temp. Const. Esmt.

Temp. Const. Esmt.

Arc = 15.82'
R = 1,682.10'
CH = 15.82'
N55°39'03"W

Prop.R/W

S65°58'56"E - 108.31'
Perm. Drain. Esmt.

N25°19'55"E - 70.89'

N37°22'47"E - 70.13'

Temp. Const. Esmt.

a. Arc = 53.21', R = 1,682.10'
CH = 53.21', N56°49'35"W
b. N25°19'55"E - 12.15'
c. S57°16'39"E - 55.06'
d. S34°03'55"W - 12.47'
e. Arc = 26.43', R = 1,677.10'
CH = 26.43', N58°09'48"W
f. N31°22'47"E - 17.46'
g. N57°16'39"W - 24.62'
h. S25°19'55"W - 17.18'

S57°54'15"E 10.51'

S57°54'15"E 17.15'

53
THOMAS J. SCHREIBER
MARY ELLEN SCHREIBER (WF.)

55
CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

56
CHARLES M. ROLFSEN
CHERIE A. KESSLER-ROLFSEN (WF)

57
CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

CURVE DATA
P.I. Sta. 67+38.83
D = 16°45'05" Left
T = 235.57'
L = 467.79'
R = 1,600.00'
E = 17.25'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

CURVE DATA
P.I. Sta. 77+31.31
D = 22°00'59" Right
T = 311.24'
L = 614.81'
R = 1,600.00'
E = 29.99'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

59 REHKAMP FARMS, INC.

SCALE: 1"=30'

KY 237 STA. 66+00 TO STA. 75+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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Cell Library: roadway.cel
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DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R37

R/W REV. NO. 16, AUG. 26, 2009

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00

THOMAS SCHUMER
SHELLEY J. SCHUMER (WF.)

RONALD JOE RICE
VIRGINIA RICE

JACK STEELE
ALPHA STEELE

(79) (79F)
RICHARD L. O'DANIEL
LORI O'DANIEL (WF.)

(58)
ROBERT W. COLLETT
GERTRUDE A. COLLETT

PI 77+31.31

EXISTING & PROP. R/W

PLEASANT VALLEY ROAD (KY 237)

EXISTING R/W

Arc = 444.00', R = 676.30'
CH = 436.07', N48°17'09"W

Temp. Const. Esmt.

·18.37
79.48'

·48.94
62'

Perm. Drain Esmt.
·98
75'
·00
62'

Prop. R/W

S67°51'37"E
218.52'

Arc = 133.87', R = 1,662.00
CH = 133.83', N57°57'42"W

N60°16'09"W

·61.75
14.05'

·1110
KY 237

N67°57'37"W - 190.24'

·75.43
28.85'

S11°32'25"W - 81.41'

·83.46
50'

·05.48
105'

·07.57
110.02'

·16.21
130.32'

Prop. R/W

Temp. Const. Esmt.

S51°24'11"E - 464.74'

·00
80'

·00
95'

PT 80+34.88

·91.27
46.33'

N60°31'19"E
15.00'

·88.98
31.50'

L = 59.03', R = 661.30'
CH = 59.01', N33°27'43"W

·47.79
26.57'

N24°50'37"W - 166.84'

·59.25
KY 237

N38°15'10"W

·10.07
12.12'

N24°50'37"W - 83.35'

·91.15
31.45'

N24°50'37"W
74.58'

N20°08'22"E - 151.58'

S65°09'23"W
38.36'

·82.25
68.76'

S21°28'39"W
81.90'

Temp. Const. Esmt.

Prop. R/W

S26°01'29"E - 305.18'

·00
145'

S40°40'36"E - 89.60'

Prop. R/W

·89.52
141.21'

S40°40'36"E
32.41'

Perm. Water Main Esmt.
a. S24°18'39"E - 4.29'
b. S36°47'41"E - 17.43'
c. N59°17'41"W - 67.15'
d. N9°55'53"W - 20.52'
e. S53°15'34"E - 61.23'

·49.47
160'

Perm. Drain Esmt.

·95
160'

Perm. Water Main Esmt.

N38°15'10"W
45.53'

·81.81
134.73'

N43°49'33"E
35.34'

S65°09'23"W
53.27'

·36.56
110.18'

·19.13
110.62'

EX. WATER MAIN ESMT.

EXISTING R/W

Prop. R/W

N53°15'34"W - 103.40'

·00
98.23'

·40.72
109.15'

·37.11
108.18'

S24°50'37"E - 196.08

·00
125'

S53°15'34"E
64.97'

PC STA. 83+98.33 ℄ KY 237=
POT STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

℄ KY 237

(57)
CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF.)

(59)
REHKAMP FARMS, INC.

(75)
GEORGE REHKAMP, JR.
DOROTHY M. REHKAMP (WF)

(81)
GREGORY F. BULMER
BARBARA BULMER (WF.)

CURVE DATA
P.I. Sta. 77+31.31
D = 22°00'59" Right
T = 311.24'
L = 614.81'
R = 1,600.00'
E = 29.99'
e = 4.40%
Runoff= See X-Sec.
Runout= See X-Sec.

SCALE: 1"=30'

KY 237 STA. 75+00 TO STA. 84+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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Cell Library: roadway.cel
Cell Name: SP
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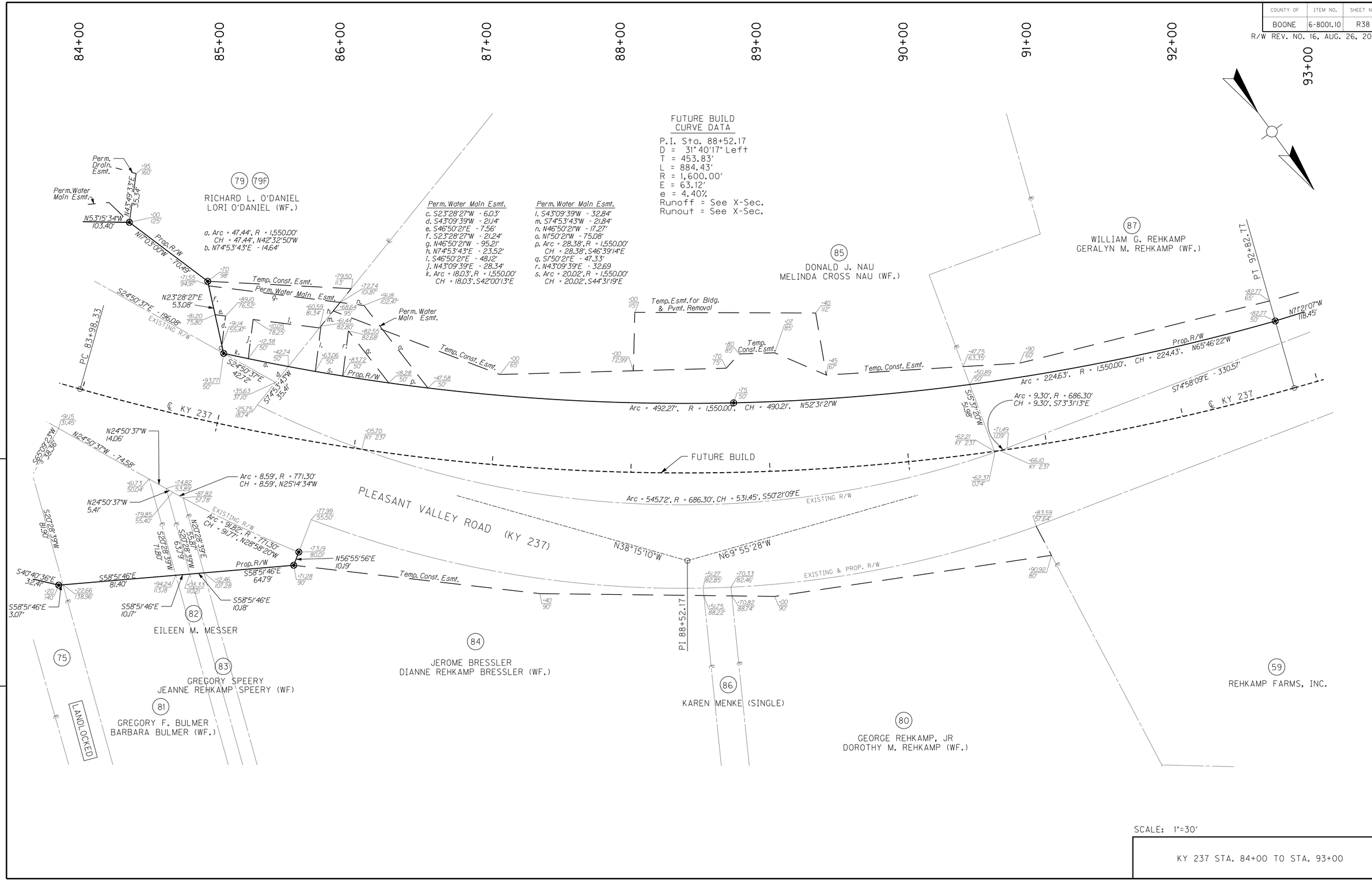
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R38

R/W REV. NO. 16, AUG. 26, 2009



SCALE: 1"=30'

KY 237 STA. 84+00 TO STA. 93+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R39

R/W REV. NO. 16, AUG. 26, 2009

86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00 94+00 95+00

FRANK J. SCHWARTZ
VIRGINIA T. SCHWARTZ (WF.)

CURVE DATA
P.I. Sta. 91+87.00
D = 12°17'13" Left
T = 206.24'
L = 410.90'
R = 1916.05'
E = 11.07'
e = Match Existing

UNITED DAIRY FARMERS, INC.

ASH FAMILY PROPERTIES, LLC

15' ELECTRIC ESMT.

PC 89+80.76

PT 93+91.66

EXISTING & PROPOSED R/W

EVERGREEN PLAZA (US 42 & US 127)

℄ US 42

N40° 23' 45"E

N52° 40' 59"E

L = 25.59'
R = 20.00'
CH = 23.88'
S0°39'37"E

L = 27.92'
R = 20.00'
CH = 25.71'
N2°40'53"E

OLD EXIST. R/W

N52°42'19"E 134.46'

L = 122.23'
R = 1,951.86'
CH = 122.21'
N50°54'18"E

S40°49'54"E
11.56'

S48°46'55"W
11.09'

L = 219.26'
R = 1,951.86'
CH = 219.14'
N45°53'57"E

L = 30.46'
R = 20.00'
CH = 27.60'
N4°36'04"W

N40°26'55"E - 252.01'

20' WATER MAIN ESMT.

EXISTING R/W

WATER MAIN ESMT.

Prop. R/W

S4°22'07"W - 177.05'

Temp. Const. Esmt.

15' GAS MAIN ESMT.

S8°07'25"E
39.73'

N52°42'19"E - 133.46'

Prop. R/W
S53°57'22"W - 89.64'

Temp. Const. Esmt.

N37°17'41"W
2.67'

BEGIN CONSTRUCTION
STA. 85+78.85 ℄ US 42

a. L = 28.11'
R = 20.00'
CH = 25.85'
S77°35'34"E
b. S37°19'23"E - 3.65'
c. S89°35'08"W - 31.48'
d. S52°27'41"W - 35.38'

S54°06'54"W - 120.04'
Prop. R/W

S13°45'56"W
22.29'

OLD TEMP. CONST. ESMT.

S52°35'11"W - 123.25'

Temp. Const. Esmt.

e. N52°42'19"E - 0.21'
f. N37°19'23"W - 4.57'
g. S37°19'23"E - 5.20'
h. S54°35'30"W - 2.48'

Prop. R/W

S5°35'20"E
39.96'

S48°14'07"E
23.49'

g. L = 29.40'
R = 20.00'
CH = 26.82'
N89°39'18"E

h. L = 210.20'
R = 1,975.00'
CH = 210.10'
S47°17'00"W

i. L = 9.01'
R = 1,951.86'
CH = 9.01'
N40°34'52"E

j. N48°14'07"W
28.47'

Pi 91+81.00

20' UTILITY & SIDEWALK ESMT.

20' STORM SEWER, SIDEWALK, & UTILITY ESMT.

PORTAGE TRAIL

20' UTILITY & SIDEWALK ESMT.

EXISTING R/W

EXISTING R/W

(130) MH REAL ESTATE

(132) (132F) SKEETS, LLC

(133) A&K ENTERPRISE, INC.

(135) A&K ENTERPRISE, INC.

SCALE: 1"=30'

US 42 STA. 85+78.85 TO STA. 95+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R40

R/W REV. NO. 17, SEPT. 4, 2009

95+00 96+00 97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00

UNITED DAIRY FARMERS, INC.

EXISTING R/W

HANES DRIVE

EXISTING R/W

BURNETT MANAGEMENT COMPANY, LLC

EXIST. & PROP. R/W

PLEASANT VALLEY ROAD (KY 237)

S68°32'48"W 28.52'

·58.80 4.10' KY 237

·60.98 KY 237

EXISTING R/W

39

N46° 22'05"W

N45°52'09"W - 158.04'

16

S48°25'24"E - 269.55'

Temp. Const. Esmt.

Prop. R/W

16	RAMI H. NWAISSER (1/2 INT.) CYNTHIA M. NWAISSER (WF.) WILLIAM S. FAR (1/2 INT.) HALA H. FAR (WF.)

(138) CP & TS, LLC

(136) PLEASANT VALLEY COMMONS, LLC

·50 90'

Temp. Const. Esmt.

·24.50 75.90'

·00.77 3.32' KY 237

·15.73 63.62'

·32.03 83.27'

·21.93 60.98'

·31.35 80.69'

38

S39°27'20"W - 88.85'

EXISTING & PROPOSED R/W

STA. 100+20.05 ℄ US 42 =
STA. 37+38.33 ℄ KY 237

EVERGREEN PLAZA (US 42 & US 127)

℄ US 42

93°14'9"

86°45'51"

N40° 23'45"E

86°45'51"

93°14'9"

℄ US 42

·41.76 42.05'

·48.94 42.15'

EXISTING R/W

N40°26'55"E - 252.01'

N40°26'55"E - 107.19'

S41°22'07"W - 177.05'

·63.88 63'

·00 61.92'

·00 70'

S63°07'02"W Prop. R/W - 83.06'

Temp. Const. Esmt.

S63°07'02"W - 64.52'

S49°18'07"E - 53.05'

S49°33'06"E - 78.00'

·40.49 95.08'

S40°33'55"W 48.87' Prop. R/W

·00 120'

·48.87 120.14'

(135) A&K ENTERPRISE, INC.

(134) ERPS, INC.

EXIST. & PROP. R/W

COMMONWEALTH OF KENTUCKY

37

·99.10 58.18'

EXISTING R/W

N40°26'55"E - 297.43'

·00 53'

Prop. R/W

S40°04'07"W - 175.00'

·73.36 42.72'

L 67.83'
R 5000'
LC 67.75'
N7°09'06"E

S7°47'06"W Prop. R/W - 56.01'

·75 95'

·75 52'

·50 63'

·75 65'

·90 75'

Temp. Const. Esmt.

Perm. Water Main Esmt.

Perm. Water Main Esmt.

Perm. Drain. Esmt.

Perm. San. Sewer Esmt.

Temp. Const. Esmt.

(14) (14F) GUNPOWDER PROPERTIES, LLC

36

GUNPOWDER ROAD (KY 237)

N5°50'57"E - 74.60'

N33°36'40"W 17.30'

PT 35+44.34

EXISTING R/W

N10°43'2"W - 90.71'

N50°46'15"W - 127.91'

S46°22'05"E - 124.09'

SCALE: 1"=30'

US 42 STA. 95+00 TO STA. 104+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
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DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R41

R/W REV. NO. 13, JUNE 19, 2009

104+00

105+00

106+00

(136)
PLEASANT VALLEY COMMONS, LLC

(137)
SIMPSON PROPERTIES, LLC

TOLL ROAD PROPERTIES, LLC

EXISTING R/W

Temp. Esmt.

-88.00
62.27'

-40
58'

-88.11
52.92'

-40
51.34'

EXISTING & PROPOSED R/W

HARVEY QUAST DRIVE

EXISTING R/W

DONALD C. JACKMAN
RACHEL M. JACKMAN (WF.)
D.B. 301, PG. 287

PEOPLES BANK OF NORTHERN KENTUCKY
D.B. 758, PG. 197

RONALD HAARMAN
CARRIE HAARMAN (WF.)
D.B. 655, PG. 67

AUTOZONE, INC.
D.B. 582, PG. 24

EXISTING R/W

END CONSTRUCTION
STA. 106+57.61 ℄ US 42

N40°23'45"E

℄ US 42

EVERGREEN PLAZA (US 42 & US 127)

L 67.83'
R 50.00'
LC 62.15'
N79°09'06"E

Prop. R/W

Temp Esmt.

-22.29
82'

S72°47'06"W
56.01'

EXISTING & PROPOSED R/W

(14)
GUNPOWDER PROPERTIES, LLC

BILL WENTZ DRIVE

GUNPOWDER PROPERTIES
D.B. 877, PG. 383

KEYBANK NATIONAL ASSOCIATION
D.B. 883. PG. 649

BEECHWOOD LANE

KINGDOM PROPERTIES, LLC
D.B. 894, PG. 189

SCALE: 1"=30'

US 42 STA. 104+00 TO STA. 106+40

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: SD
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R42

R/W REV. NO. 17, SEPT. 4, 2009

(23)	PAUL F. MICHELS (1/2 INT.) CATHERINE M. MICHELS (1/2 INT.)

51+00 52+00 53+00 54+00

23

EXISTING R/W

HAINES DRIVE

EXISTING R/W

EXISTING & PROP. R/W

18

PLEASANT VALLEY PLAZA, LLC

Perm. Drain. Esmt.

43+00

42+00

Arc = 346.74', R = 2,252.00'
CH = 346.40', N41°22'16"W

N46° 22'05"W

N41°12'27"E - 101.00'

EXISTING R/W

N45°46'58"W - 125.99'

STA 50+00.00 ℄ OLD TOLL ROAD =
STA. 41+78.03 ℄ KY 237

90°

a. S74°32'01"E 9.19'
b. S8°18'17"W 10.19'

N37°29'52"E - 93.96'

41+00

N45°46'58"W - 52.14'

S15°27'59"W - 102.06'

EXISTING R/W

N15°27'59"E - 116.74'

EXIST. R/W

40+00

N45°46'55"W 50.70'

S65°37'28"W 28.52'

N45°52'05"W 158.04'

℄ KY 237

PLEASANT VALLEY ROAD (KY 237)

EXISTING & PROP. R/W

BURNETT MANAGEMENT COMPANY, LLC

16

Prop. R/W

S48°25'24"E - 269.55'

Temp. Const. Esmt.

S46°22'05"E - 381.83'

Prop. R/W

PC 51+29.11

N89°35'09"E - 86.20'

Temp. Const. Esmt.

CURVE DATA
P.I. Sta. 52+28.66
D = 3°48'03" Left
T = 99.54'
L = 199.01'
R = 3,000.00'
E = 1.65'
e = N.C.

c. N48°34'53"W - 15.00'
d. N41°07'56"E - 29.55'
e. S49°09'16"E - 15.00'
f. Arc = 29.70', R = 2,970.00'
CH = 29.70', S41°07'56"W

Arc = 118.80', R = 2,970.00'
CH = 118.79', N41°30'51"E

N43°05'23"E 44.47'

S47°20'24"E 5.00'

Perm. Drain. Esmt.

S49°37'56"E - 5.44'

S39°49'56"W 45.53'

PT 53+28.12

Temp. Const. Esmt.

℄ OLD TOLL ROAD

N43° 37'55"E

Arc = 192.59', R = 350.00'
CH = 190.17', S24°04'06"W

N39° 49'52"E

OLD TOLL ROAD STA. 54+10.00
END CONSTRUCTION

EXISTING & PROP. R/W

PI 52+28.66

22

THE BOARD OF TRUSTEES FOR THE
FLORENCE UNITED METHODIST CHURCH

138

CP & TS, LLC

136

PLEASANT VALLEY COMMONS, LLC

137

SIMPSON PROPERTIES, LLC

(16)	RAMI H. NWAISSER (1/2 INT.) CYNTHIA M. NWAISSER (WF.) WILLIAM S. FAR (1/2 INT.) HALA H. FAR (WF.)
(19)	CHAD HOWE BOBBY R. HOWE

SCALE: 1"=30'

OLD TOLL ROAD STA. 50+00 TO STA. 54+10

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
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DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R43

R/W REV. NO. 17, SEPT. 4, 2009

6 CYNTHIA A. SCHRODER (SINGLE)

8 JOHN D. DRYDEN

9 JERRY L. INSKEEP, TRUSTEE

12 SHERRY A. MORGAN
JAMES L. MORGAN (HUSB)

13 ACG GUNPOWDER, LLC
REMAINDER LANDLOCKED

14F 14 GUNPOWDER PROPERTIES, LLC

16 RAMI H. NWAISSER
CYNTHIA M. NWAISSER (WF) (1/2 INT.)
WILLIAM S. FAR
HALA H. FAR (WF) (1/2 INT.)

18 PLEASANT VALLEY PLAZA, LLC

19 CHAD HOWE
BOBBY R. HOWE

22 THE BOARD OF TRUSTEES OF THE
FLORENCE UNITED METHODIST CHURCH

23 PAUL F. MICHELS (1/2 INT.)
CATHERINE M. MICHELS (1/2 INT.)

24 RIEGLER PROPERTIES

26 D.B.S. DEVELOPMENT CORPORATION

27 BROOKSIDE MANAGEMENT, LLC (50% INT.)
RUSSELL DEVELOPMENT, LLC (29% INT.)
BAK BROOKSIEDE, LLC (21% INT.)

28 RICHARD M. ROGERS
CATHERINE A. ROGERS (WF)

29 GARY R. WILLIAMS
LAURENE R. WILLIAMS (WF)

32 MACK L. McCANN, TRUSTEE

34 VIRGIL REYNOLDS
CAROL L. REYNOLDS (WF)

35 WILLIAM C. LINAHAN
LYDIA C. LINAHAN (WF)

36 CARL T. SMIDDY
LAPHENIA E. SMIDDY (WF)

37 HENRY BATTON, JR.
VICKIE D. BATTON (WF)

39 NICK BENSON
LINDA BENSON (WF)

40 PAUL E. RITTER
PHYLLIS DIANE RITTER (WF)

41 ROBERT J. EHRMAN
FRANCES A. EHRMAN (WF)

42X 42 ROSE MARY KAHMANN
FAMILY TRUST DTD. DEC. 5, 1994

43 NORMAN H. SMITH
MARY E. SMITH (WF)

44X 44 PHILLIP RHEA ROLLINS
CHARLOTTE JUNE ROLLINS (WF)

45 TRACY BIBB (UNMARRIED)

46 JAMES R. HOUSE
MADELINE C. HOUSE (WF)

47 B.O.L.D. HOMES, INC.

48 WILLIAM H. POYNTER, JR.

49 DIANNE E. GAYLE (MARRIED)

51X 51 VERN V. FORBES
TOMMIE ANN FORBES (WF)

52 JOHN W. FISHER
REBECCA J. FISHER (WF.)

53 THOMAS J. SCHREIBER
MARY ELLEN SCHREIBER (WF)

54 GARY BLACKSHIRE
PAULA BLACKSHIRE (WF)

55 CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF)

56 CHARLES M. ROLFSEN
CHERIE A. KESSLER-ROLFSEN (WF)

57 CHARLES F. ROLFSEN
GLORIA ROLFSEN (WF)

58 ROBERT W. COLLETT
GERTRUDE ANN COLLETT (WF)

59 REHKAMP FARMS, INC.

75 GEORGE REHKAMP, JR.
DOROTHY M. REHKAMP (WF)
REMAINDER LANDLOCKED

79F 79 RICHARD L. O'DANIEL
LORI O'DANIEL (WF)

80 GEORGE REHKAMP, JR.
DOROTHY M. REHKAMP (WF)

81 GREGORY F. BULMER
BARBARA BULMER (WF)

82 EILEEN M. MESSER

83 GREGORY SPEERY
JEANNE REHKAMP SPEERY (WF)

84 JEROME BRESSLER
DIANNE REHKAMP BRESSLER (WF)

85 DONALD J. NAU
MELINDA CROSS NAU (WF)

86 KAREN MENKE (SINGLE)

87 WILLIAM G. REHKAMP
GERALYN M. REHKAMP (WF)

88 KARREN J. ESTES

89 DAVID HINTON
MITZI HINTON (WF)

91 BARRY C. VOGELPOHL
KIMBERLY R. VOGELPOHL (WF)

92 JAMES M. SANDERS
CAROL S. SANDERS (WF)

93 PAUL J. KAHMANN DEVELOPER, INC.

95 MARK KREIDLER
LINDA KREIDLER (WF)

96 RONALD EDGINGTON (MARRIED)

96F LARRY C. WEST, JR.
JANE ASHCRAFT-WEST (WF.)

97 CHAROLETTE PETREY

98 GEORGE REHKAMP, JR
DOROTHY M. REHKAMP (WF.)

99 EUGENE DOOLIN
BETTY DOOLIN (WF)

102 KENNETH W. MILLER
PAULA MILLER (WF)

103 MARY ANN L. BOH (UNMARRIED) (60% INT.)
GERALYN REHKAMP (MARRIED) (40% INT.)

104 MARY ANN L. BOH, TRUSTEE

105 VILMOS KOSSUTHI (1/2 INT.)
GEORGINA GARAMY (WF)
STEFANIA GARAMY (WIDOW) (1/2 INT.)

106 FREEMAN THOMAS RILEY
LINDA N. RILEY (WF)

107 LOWELL MEEK
LORETTA MEEK (WF)

KY237 STA. 23+66.35
BEGIN SECTION 1 RIGHT OF WAY

KY237 STA. 127+58.91
END SECTION 1 RIGHT OF WAY

NOTE:
ROADWAY CONTRACT
ENDS AT STA. 93+00.68

MATCHLINE

MATCHLINE

SKEETS WAY
PORTAGE TRL.
HAINES DR.
RIDGEVIEW DR.
BILL WENTZ DR.
OLD PIKE RD.
BEECHWOOD LN.
HARVEY QUAST DR.
LENDALE DR.
VALLEY CIRCLE DR.
WELLINGTON DR.
AMHERST CT.
BOONE VALLEY DR.
VALLEY VIEW DR.
WOODCREEK DR.
LILAC DRIVE
ROSE PETAL DR.
EX. R/W

(a) Prop.R/W
(b) Perm.Drain.Esmt.
(c) Temp. Const. Esmt.
(d) Temp. Esmt. for Bldg. Removal
(e) Perm.Utility Esmt.

108 STANLEY HALL (MARRIED)

109 JAMES ROY CALDWELL
KAREN DIANE CALDWELL (WF)

111 JAMES R. BAKER

112 MARK P. HILGER
MARGO A. HILGER (WF)

113 ROBERT BROCK
JUDY BROCK (WF)

114 STEVEN M. COLANGELO

115 JOSEPH A. KLUESENER
RUTH E. KLUESENER (WF)

116 CHARLES E. McQUILLAN
CYNTHIA A. McQUILLAN

117 JACOB M. VANBRANDWIJK
PENNY K. VANBRANDWIJK (WF)

118 WAYNE GRIFFITH
LINDA GRIFFITH (WF)

119 JOHN P. LUSK
LAURA S. LUSK (WF)

121 ROBERT REID GILLISPIE
AMY J. GILLISPIE (WF)

122 THOMAS J. ZINN (SINGLE)

123 JAMES E. FOSSITT
MARY L. FOSSITT (WF)

130 MH REAL ESTATE

132F 132 SKEETS, LLC

133 A&K ENTERPRISE, INC.

134 ERPS INC.

135 A&K ENTERPRISE, INC.

136 PLEASANT VALLEY COMMONS, LLC

137 SIMPSON PROPERTIES, LLC

138 CP & TS, LLC

SCALE: 1"=300'

RIGHT OF WAY STRIP MAP

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R44

24+00 25+00 26+00 27+00 28+00 29+00 30+00

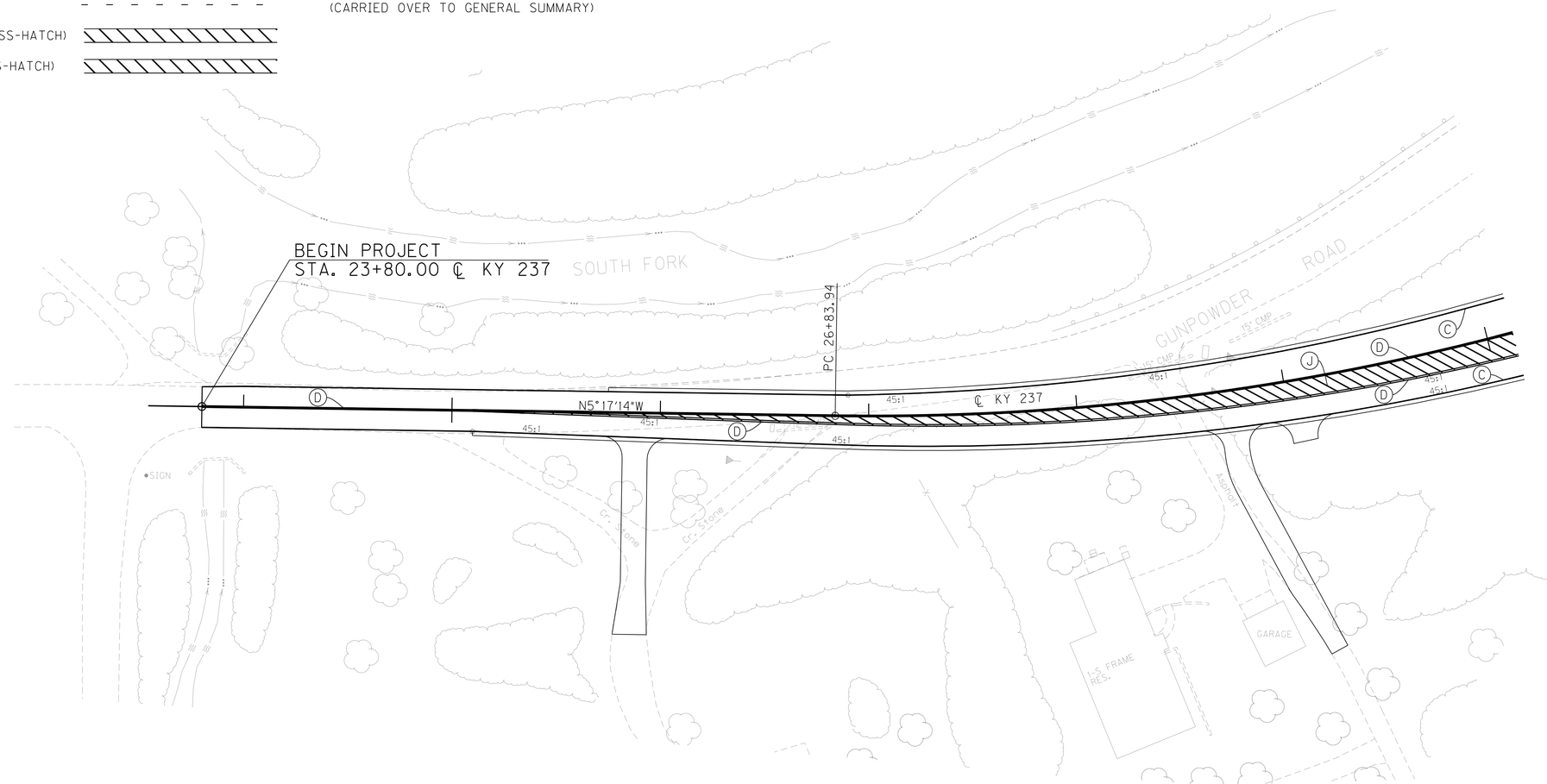
STRIPING LEGEND

- (A) 4" SOLID AND 4" SKIP, YELLOW
- (B) 4" SKIP, WHITE
- (C) 4" SOLID, WHITE
- (D) DOUBLE 4" SOLID, YELLOW
- (E) 24" STOP BAR
- (F) 6" SOLID, WHITE (CROSSWALK)
- (G) 6" SOLID, WHITE (CHEVRON 4' Off.)
- (H) 4" SOLID, YELLOW
- (I) 4" DOTTED, WHITE
- (J) 6" SOLID, YELLOW (CROSS-HATCH)
- (K) 6" SOLID, WHITE (CROSS-HATCH)

PERMANENT STRIPING LEGEND & QUANTITIES

ROADWAY	6514 4" YELLOW SOLID - SKIP	6514 4" WHITE SKIP LINE	6514 4" WHITE SINGLE SOLID	6514 4" YELLOW DOUBLE SOLID	6568 THERMO 24" STOP BAR	6565 THERMO 6" CROSSWALK	6570 6" CHEVRON	6514 4" YELLOW SINGLE SOLID	6572 4" WHITE DOTTED LINE	6570 6" YELLOW CROSS HATCHING	6570 6" WHITE CROSS HATCHING	6574 TURNING ARROWS	6576 WORD "ONLY"	6589 PVMT MKR TY V-MW	6591 PVMT MKR TY V-BY
SYMBOL	A	B	C	D	E	F	G	H	I	J	K		ONLY	NOT SHOWN ONLY ESTIMATED	NOT SHOWN ONLY ESTIMATED
KY 237	4,860	1,380	15,928	12,318	213	462	0	373	234	22,131	14,628	27	2	172	252
US 42	0	920	5,693	4,244	194	239	414	1,729	123	12,921	0	15	0	91	110
OLD TOLL ROAD	0	0	825	726	14	0	0	104	0	35	0	0	0	0	10
TOTALS	4,860 LF *	2,300 LF *	22,446 LF	17,288 LF *	421 LF	701 LF	414 SF	2,206 LF	357 LF	35,087 SF	14,628 SF	42 EA	2 EA	263 EA	372 EA

*TOTALS INCLUDE ACTUAL LINEAR FEET OF PAINT REQUIRED FOR EACH ITEM (CARRIED OVER TO GENERAL SUMMARY)



SCALE 1" = 30'

KY 237 STA. 23+80 TO STA. 30+00
STRIPING PLANS

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R45

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

SOUTH FORK

KY-237 GUNPOWDER ROAD

℄ KY 237

℄ US 42

PT 35+44.34

PI 31+33.57

STA. 37+38.33 ℄ KY 237 =
STA. 100+20.05 ℄ US 42

STRIPING LEGEND

(A)	4" SOLID AND 4" SKIP, YELLOW	
(B)	4" SKIP, WHITE	
(C)	4" SOLID, WHITE	
(D)	DOUBLE 4" SOLID, YELLOW	
(E)	24" STOP BAR	
(F)	6" SOLID, WHITE (CROSSWALK)	
(G)	6" SOLID, WHITE (CHEVRON 4' Off.)	
(H)	4" SOLID, YELLOW	
(I)	4" DOTTED, WHITE	
(J)	6" SOLID, YELLOW (CROSS-HATCH)	
(K)	6" SOLID, WHITE (CROSS-HATCH)	

SCALE: 1"=30'

KY 237 STA. 30+00 TO STA. 39+00
STRIPING PLAN

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R46

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

STA. 41+78.03 ℄ KY 237 =
STA. 50+00.00 ℄ OLD TOLL RD.

HAINES DRIVE

SOUTH FORK

PI 47+79.04

PLEASANT VALLEY ROAD (KY 237)

℄ KY 237

N46°22'05"W

Prop. Gravity Wall (See Cross-Sections)

Prop. Retaining Wall (See Structure Plans For Details)

OLD TOLL ROAD

PC 46+56.83

PC 51+29.11

Prop Retaining Wall

N43°37'55"E

PI 52+28.66

ASPHALT

2-S BRICK CHURCH
8585 OLD TOLL

EX 4" PVC ROOF DRAIN

EX 12" CMP

EX 18" PVC

EX 15" PVC

EX 24" CMP

STRIPING LEGEND

(A)	4" SOLID AND 4" SKIP, YELLOW	
(B)	4" SKIP, WHITE	
(C)	4" SOLID, WHITE	
(D)	DOUBLE 4" SOLID, YELLOW	
(E)	24" STOP BAR	
(F)	6" SOLID, WHITE (CROSSWALK)	
(G)	6" SOLID, WHITE (CHEVRON 4' Off.)	
(H)	4" SOLID, YELLOW	
(I)	4" DOTTED, WHITE	
(J)	6" SOLID, YELLOW (CROSS-HATCH)	
(K)	6" SOLID, WHITE (CROSS-HATCH)	

SCALE 1" = 30'

KY 237 STA. 39+00 TO STA. 48+00
STRIPING PLAN

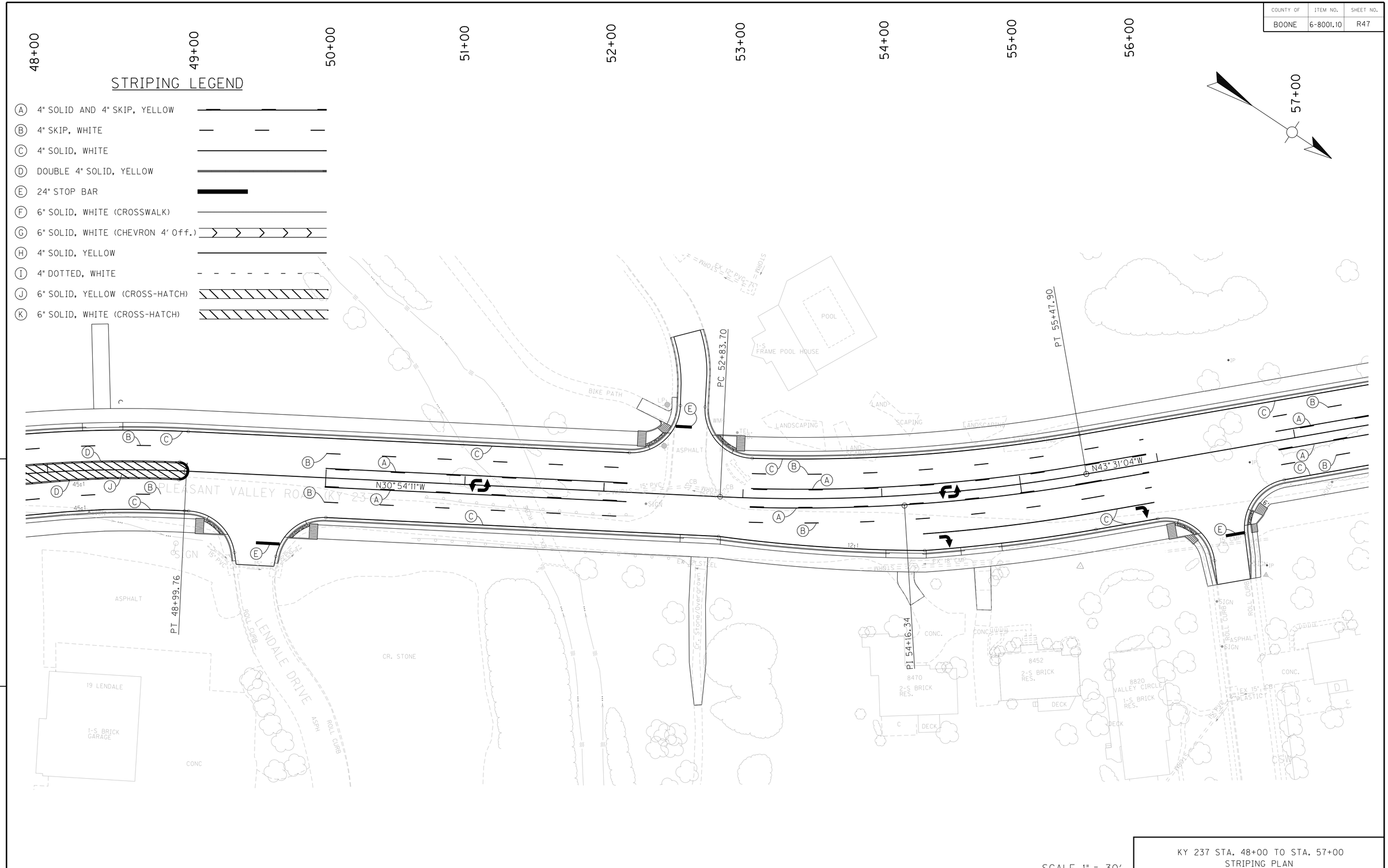
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R47



SCALE 1" = 30'

KY 237 STA. 48+00 TO STA. 57+00
STRIPING PLAN

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

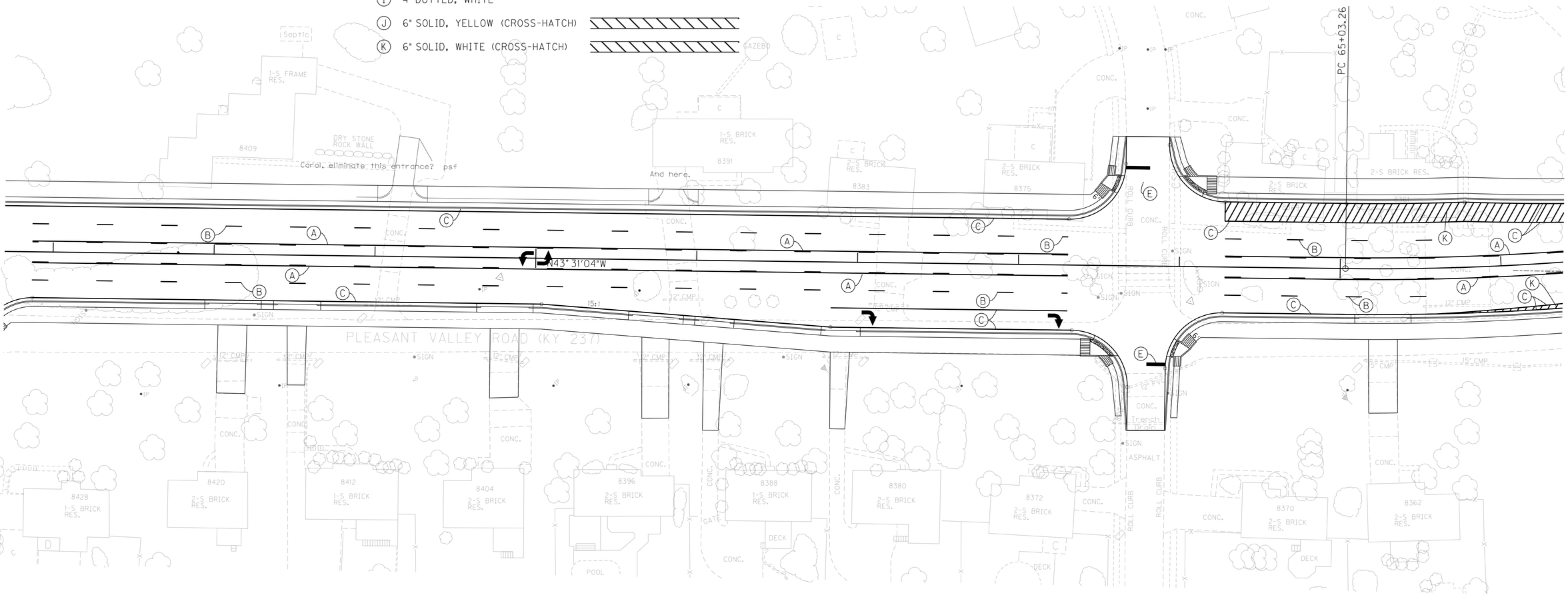
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R48

57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00

STRIPING LEGEND

- (A) 4" SOLID AND 4" SKIP, YELLOW
- (B) 4" SKIP, WHITE
- (C) 4" SOLID, WHITE
- (D) DOUBLE 4" SOLID, YELLOW
- (E) 24" STOP BAR
- (F) 6" SOLID, WHITE (CROSSWALK)
- (G) 6" SOLID, WHITE (CHEVRON 4' Off.)
- (H) 4" SOLID, YELLOW
- (I) 4" DOTTED, WHITE
- (J) 6" SOLID, YELLOW (CROSS-HATCH)
- (K) 6" SOLID, WHITE (CROSS-HATCH)



$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

SCALE 1" = 30'

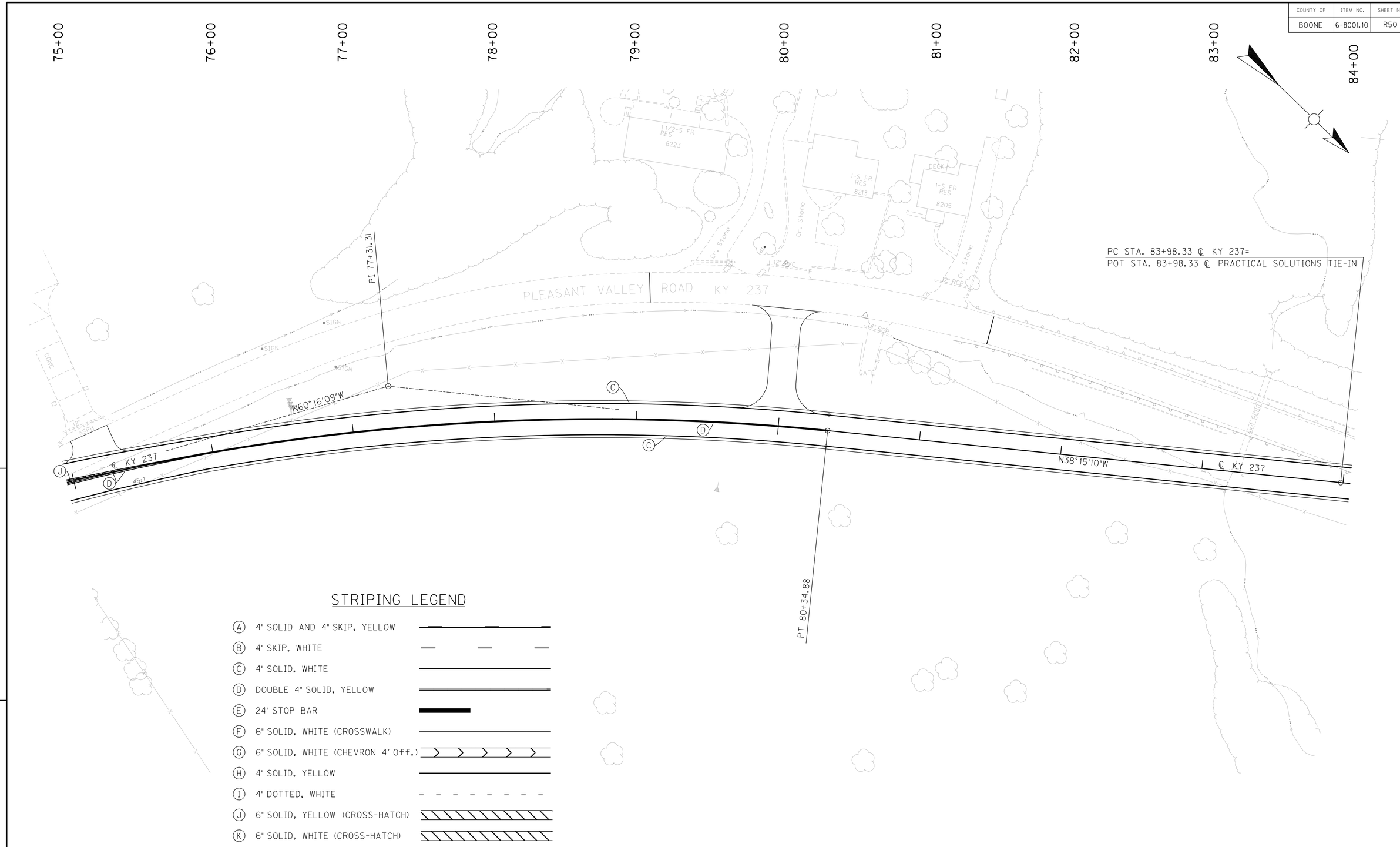
KY 237 STA. 57+00 TO STA. 66+00
STRIPING PLAN

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R49

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00

CONC. 1-S BRICK RES. CONC. AMHERST COURT CONC. 14 AMHERST CT. 2-S BRICK RES. CONC. 10 AMHERST CT. 2-S BRICK RES. STORM = = =

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R50



SCALE: 1"=30'

KY 237 STA. 75+00 TO STA. 83+98.33
KY 237 PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO STA. 84+00
STRIPING PLAN

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R51

84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00

PC STA. 83+98.33 ℄ KY 237=
POT STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

END PROJECT
PT STA. 93+00.68
℄ PRACTICAL SOLUTIONS TIE-IN

PC 84+81.26

PT 93+00.68

℄ KY 237

PI 89+05.09

N38°15'10"W

N74°22'04"W

PLEASANT VALLEY ROAD (KY 237)

CONC

SHED

SHED

DECK

GARAGE

1-S FRAME RES. 8133

CONC

ASPHALT

BARN

ASPHALT

15" CMP

15" CMP

15" CMP CONC.

CR. STONE

CR. STONE

SHED

GRAV

SILO

8128 1-S BRICK RES.

CR. STONE

CONC.

STRIPING LEGEND

(A)	4" SOLID AND 4" SKIP, YELLOW	
(B)	4" SKIP, WHITE	
(C)	4" SOLID, WHITE	
(D)	DOUBLE 4" SOLID, YELLOW	
(E)	24" STOP BAR	
(F)	6" SOLID, WHITE (CROSSWALK)	
(G)	6" SOLID, WHITE (CHEVRON 4' Off.)	
(H)	4" SOLID, YELLOW	
(I)	4" DOTTED, WHITE	
(J)	6" SOLID, YELLOW (CROSS-HATCH)	
(K)	6" SOLID, WHITE (CROSS-HATCH)	

SCALE: 1"=30'

KY 237 PRACTICAL SOLUTIONS TIE-IN
STA. 84+00 TO STA. 93+00.68
STRIPING PLAN

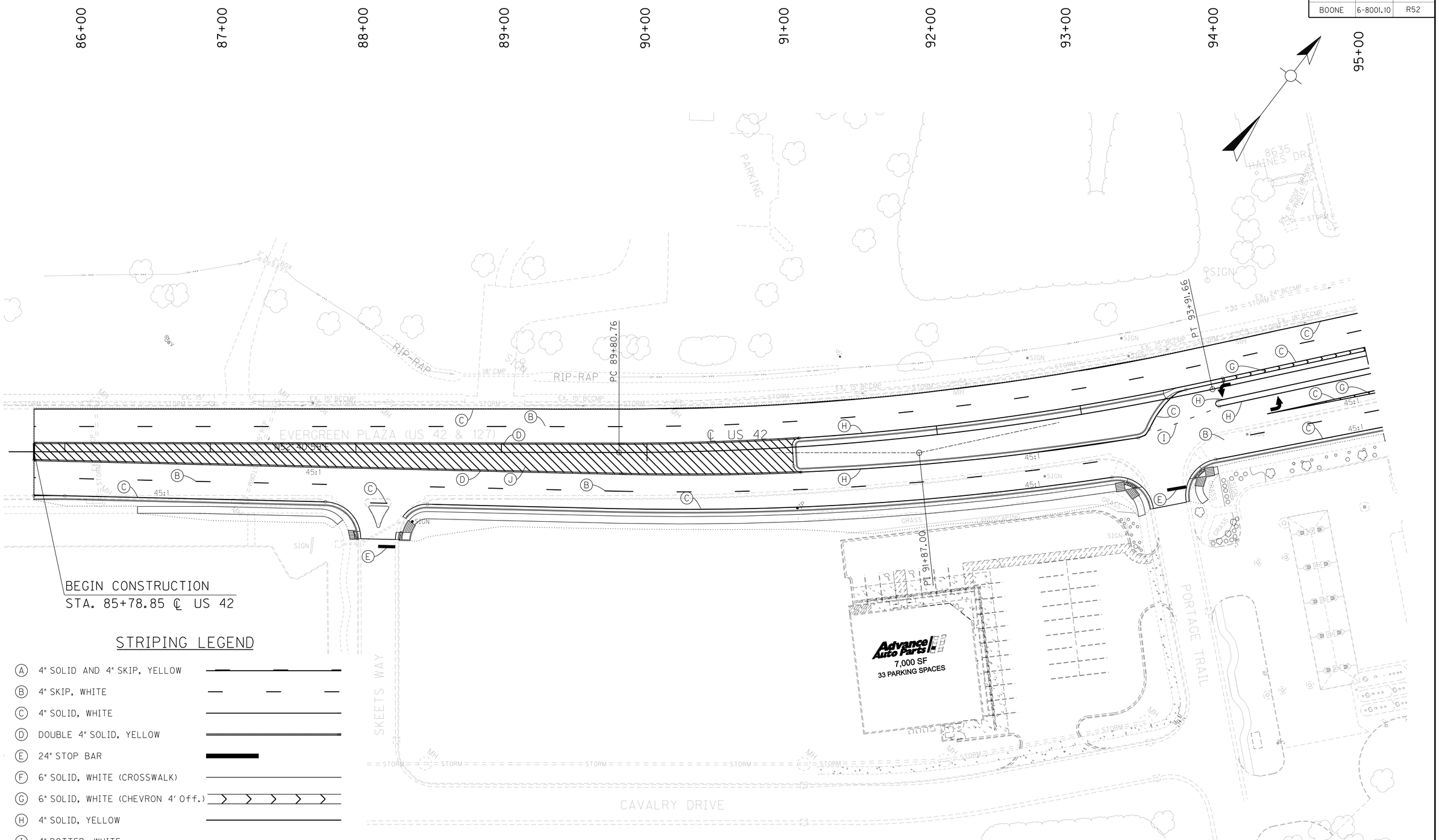
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R52



BEGIN CONSTRUCTION
STA. 85+78.85 ℄ US 42

STRIPING LEGEND

- (A) 4" SOLID AND 4" SKIP, YELLOW
- (B) 4" SKIP, WHITE
- (C) 4" SOLID, WHITE
- (D) DOUBLE 4" SOLID, YELLOW
- (E) 24" STOP BAR
- (F) 6" SOLID, WHITE (CROSSWALK)
- (G) 6" SOLID, WHITE (CHEVRON 4' Off.)
- (H) 4" SOLID, YELLOW
- (I) 4" DOTTED, WHITE
- (J) 6" SOLID, YELLOW (CROSS-HATCH)
- (K) 6" SOLID, WHITE (CROSS-HATCH)

SCALE: 1"=30'

US 42 STA. 85+78.85 TO STA. 95+00
STRIPING PLANS

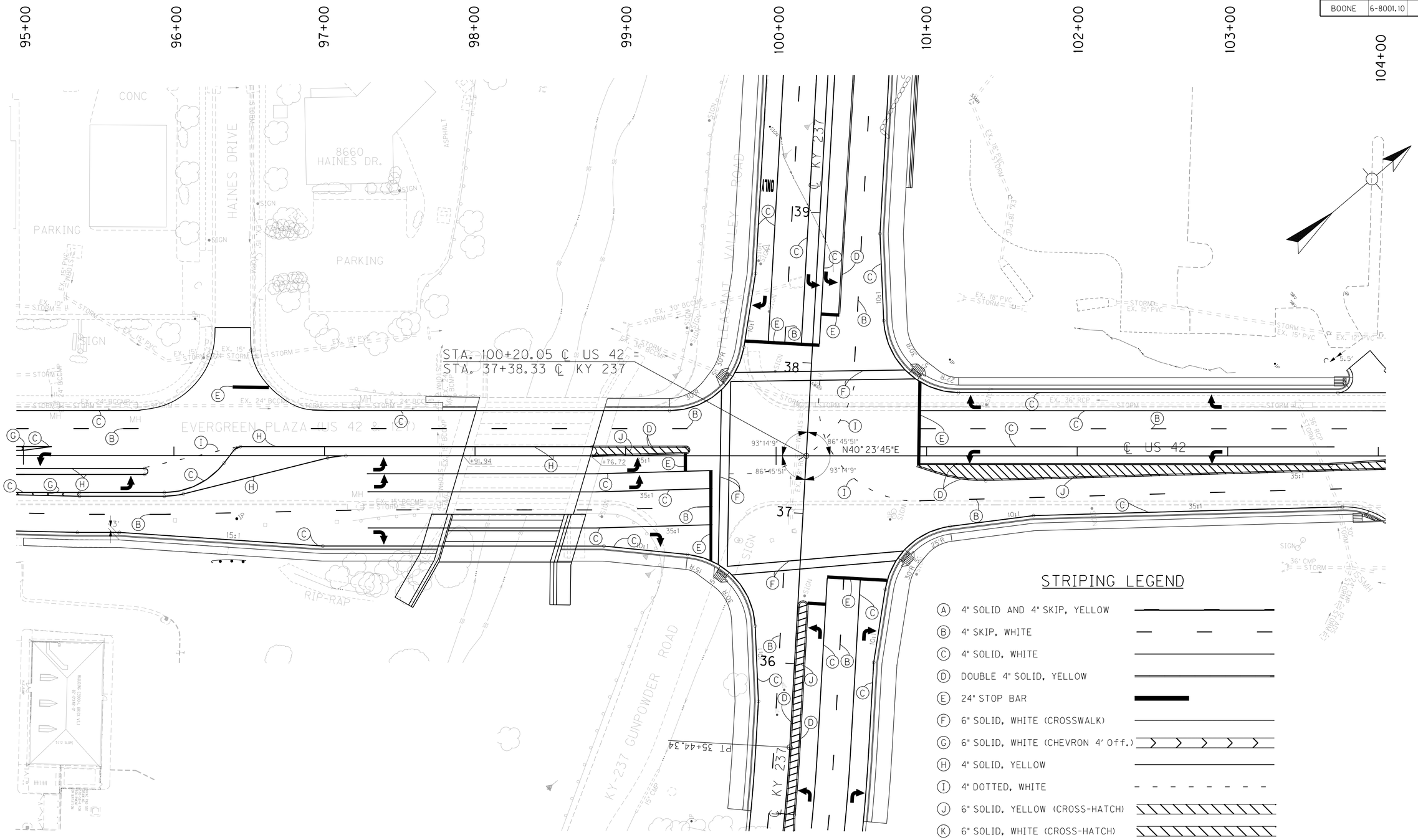
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R53



STRIPING LEGEND

- (A) 4" SOLID AND 4" SKIP, YELLOW
- (B) 4" SKIP, WHITE
- (C) 4" SOLID, WHITE
- (D) DOUBLE 4" SOLID, YELLOW
- (E) 24" STOP BAR
- (F) 6" SOLID, WHITE (CROSSWALK)
- (G) 6" SOLID, WHITE (CHEVRON 4' Off.)
- (H) 4" SOLID, YELLOW
- (I) 4" DOTTED, WHITE
- (J) 6" SOLID, YELLOW (CROSS-HATCH)
- (K) 6" SOLID, WHITE (CROSS-HATCH)

SCALE: 1"=30'

US 42 STA. 95+00 TO STA. 104+00
STRIPING PLANS

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R54

104+00

105+00

106+00

END CONSTRUCTION
STA. 106+57.61 ℄ US 42

END OVERLAY
STA. 106+40.00 ℄ US 42

℄ US 42

15:1

STRIPING LEGEND

(A)	4" SOLID AND 4" SKIP, YELLOW	
(B)	4" SKIP, WHITE	
(C)	4" SOLID, WHITE	
(D)	DOUBLE 4" SOLID, YELLOW	
(E)	24" STOP BAR	
(F)	6" SOLID, WHITE (CROSSWALK)	
(G)	6" SOLID, WHITE (CHEVRON 4' Off.)	
(H)	4" SOLID, YELLOW	
(I)	4" DOTTED, WHITE	
(J)	6" SOLID, YELLOW (CROSS-HATCH)	
(K)	6" SOLID, WHITE (CROSS-HATCH)	

McDonald's
8530 US 42
8534
ASPHALT PARKING
HARVEY QUAST DRIVE
8526 US 42
8522
CONC
POOL
GATE
MH
US 42 & 127
EVERGREEN PLAZA
8529
MEL'S LANE
BEECHWOOD LANE
SIGN
12" PVC STORM
15" PVC STORM
18" CMP STORM
18" RCP STORM
24" BCCMP
36" CMP
30" CMP
12" ADS
24" CMP
EX. 15" BCCMP
EX. 18" RCP
EX. 24" BCCMP
EX. 30" CMP
EX. 18" CMP
EX. 12" CMP
EX. JB

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

SCALE: 1"=30'

US 42 STA. 104+00 TO STA. 106+00
STRIPING PLANS

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R55

STA. 37+38.33 ℄ KY 237 =
STA. 100+20.05 ℄ US 42

99+00

101+00

39

37

36

ADD'L STATIONS/OFFSETS

46	+75 29.50′	50	+75 36.01′
47	+50 29.50′	51	+50 21.32′
48	+25 29.50′	52	+25 18.00′
49	+00 31.53′	53	+00 18.00′

ADD'L STATIONS/OFFSETS

63	+75 30.00′	67	+75 30.00′
64	+50 30.00′	68	+00 41.32′
65	+25 30.00′	69	+25 29.97′
66	+00 30.00′	70	+50 28.50′
		71	+75 28.50′

ADD'L STATIONS/OFFSETS

11	+00 47.44′	17	+25 10.96′
12	+25 46.72′	18	+00 10.50′
13	+50 46.01′	19	+73.68 10.50′
14	+77.52 62.64′	20	+50 10.50′
16	+50 18.74′		

ADD'L STATIONS/OFFSETS

31	+50 41.07′	35	+25 29.05′
32	+71.10 57.29′	36	+50 28.29′
33	+79.83 48.02′	37	+75 27.57′
34	+00 35.09′		

N46°22′05"W

N40°23′45"E

℄ US 42

℄ KY 237

86°45′51"

93°14′09"

PT 35+44.34

PLAN SCALE:
1" = 20′

GRADE SCALE:
1" = 20′ HORIZ.
1" = 2′ VERT.

KY 237 @ US 42 INTERSECTION
SUPERELEVATION DEVELOPMENT SHEET

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
1-92
FORM NO. 6

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R56

STA. 50+00 ℄ OLD TOLL RD.
STA. 41+90.26 ℄ KY 237=

51+00
52+00
PC 51+29.11
PI 52+28.66

P.I. Sta. 52+28.66
D = 3°48'03" Left
T = 99.54'
L = 199.01'
R = 3,000.00'
E = 1.65'
e = N.C.

Prop. Retaining Wall
75' R
42+64.03
115.50' RT.
40+92.03
115.50' RT.
50+79.46
20.23'
51+02.20
12.19'
50+61.64
33.80'
51+02.02
12.19'
+34.66
53.79'
+22.21
46.84'
+29.41
48.97'
+11.84
61.64'
+00
40.50'
+75
40.50'
+50.24
41.78'
+00
40.92'
+75
40.50'
+50
40.50'
+25
40.50'
+00
40.50'
Prop. Gravity Wall

51+25.00 11.00'
51+50.00 11.00'
51+75.00 11.00'
52+00.00 11.00'

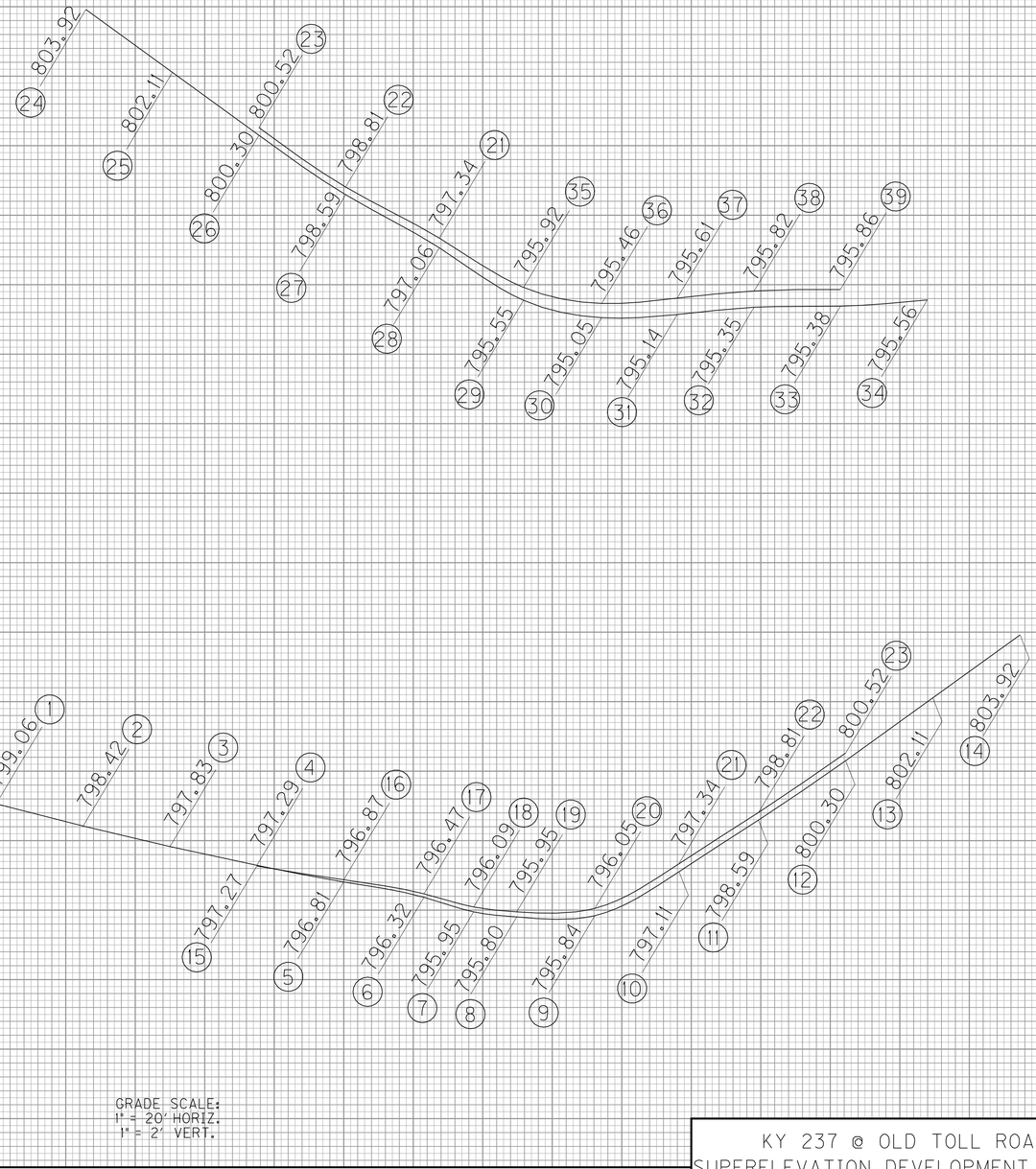
MEDIAN LOCATIONS & ELEVATIONS

A	+00	2.76' LT. 796.55
B	+25	5.89' LT. 796.52
C	+86.26	17.50' RT. 797.10
D	+00	15.78' RT. 796.93
E	+25	12.66' RT. 796.70
F	+00	9.53' RT. 796.56
G	+75	6.41' RT. 796.52
H	+00	5.50' RT. 796.52

ADD'L STATIONS/OFFSETS

15	+75 28.50'	35	50+72.73 7.95'
16	+00 28.50'	36	+02.09 51.59'
17	+25 32.83'	37	+25 35.52'
18	+42.62 42.27'	38	+50 28.50'
19	50+51.59 24.06'	39	+75 28.50'
20	50+72.73 7.95'		
21	51+00.00 0.00'		
22	51+25.00 0.00'		
23	51+50.00 0.00'		

PLAN SCALE:
1" = 20'



GRADE SCALE:
1" = 20' HORIZ.
1" = 2' VERT.

KY 237 @ OLD TOLL ROAD
SUPERELEVATION DEVELOPMENT SHEET

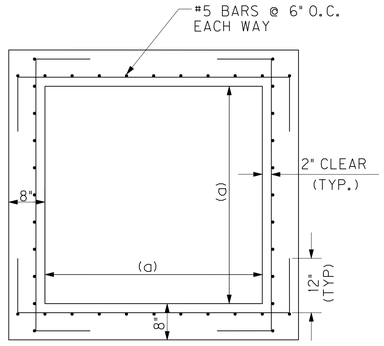
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

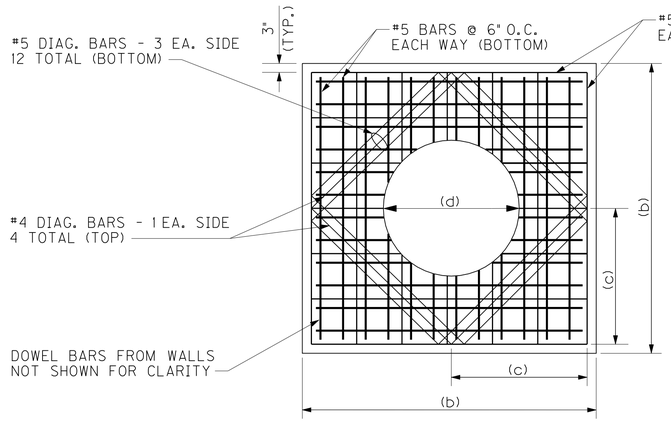
VENDORS NAME
I-92
FORM NO. 6

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM

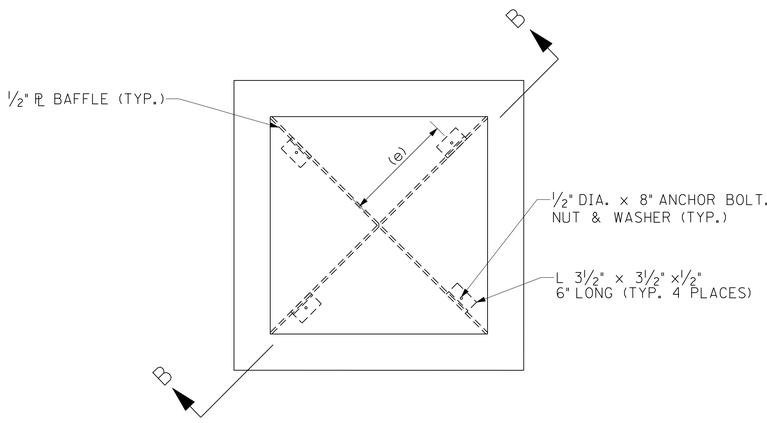
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R57



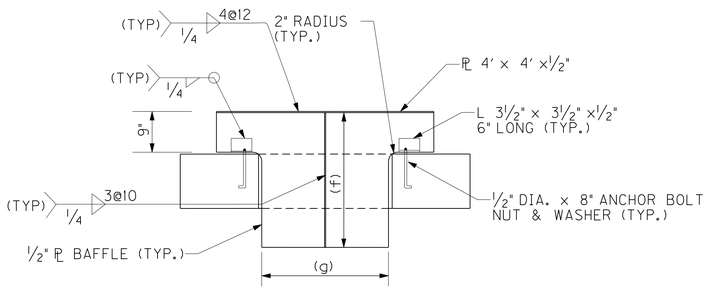
SECTION A - A



TOP SLAB REINFORCING DETAIL



ANTI-VORTEX BAFFLE PLAN



SECTION B - B
ANTI-VORTEX BAFFLE DETAIL

OUTLET STRUCTURE NOTES:

1. REINFORCED CONCRETE SHALL BE 4500 P.S.I. WITH 5% +/- 1% ENTRAINED AIR. ALL REINFORCING STEEL SHALL BE GRADE 60 DEFORMED BAR.

2. FABRICATION, BENDING, AND LAPS FOR ALL REINFORCED STEEL SHALL BE PER LATEST ACI REQUIREMENTS.

3. PROVIDE WATER STOPS AT ALL JOINTS; SPLICE WHERE REQUIRED.

4. ALL PLATES AND ANGLES SHALL BE CARBON GRADE STEEL CONFORMING TO ASTM A36M AND ASTM A6M.

5. NUTS SHALL BE CARBON STEEL, HEAVY HEX CONFORMING TO ASTM A563, GRADE C. NUTS SHALL BE HOT DIP GALVANIZED PER ASTM A153, CLASS C.

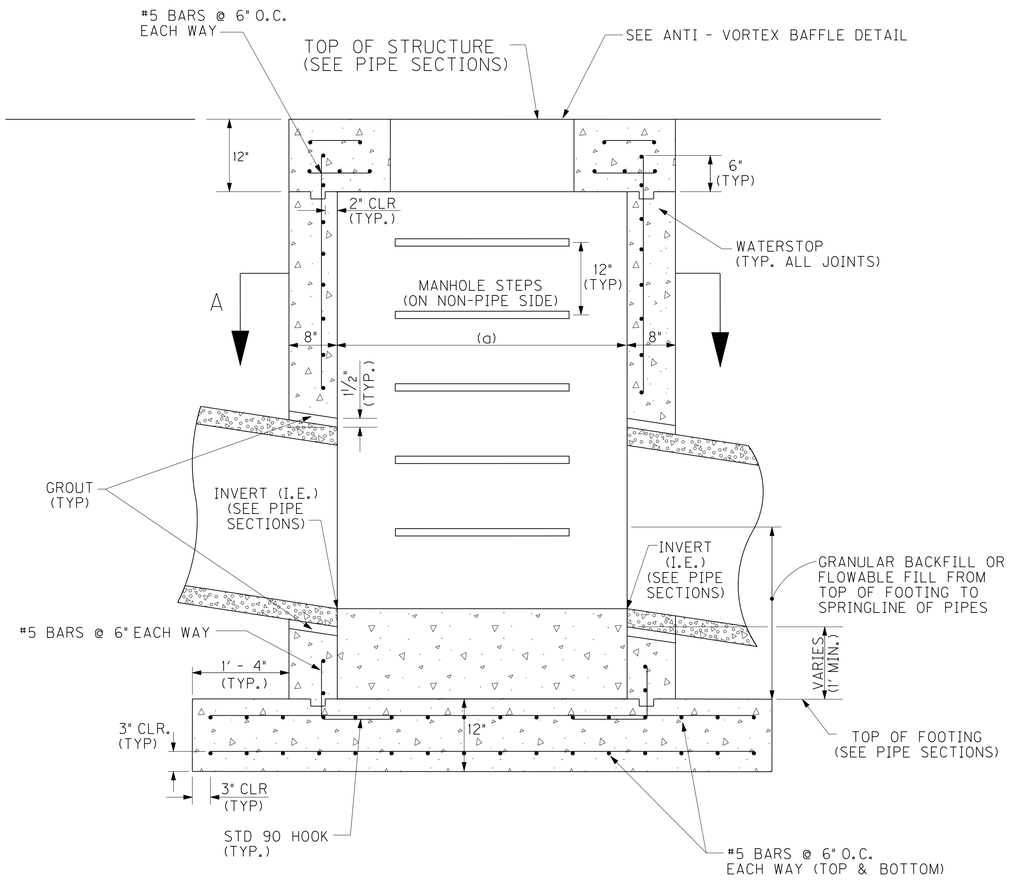
6. WASHERS SHALL CONFORM TO ASTM F844. WASHERS SHALL BE HOT DIP GALVANIZED PER ASTM A153, CLASS C.

7. ANCHOR BOLTS SHALL CONFORM TO ASTM A36M AND GALVANIZED IN ACCORDANCE TO ASTM A153, CLASS C.

8. ALL WELDING AND FABRICATION OF THE ANTI VORTEX BAFFLE ASSEMBLY SHALL BE COMPLETED IN SHOP AND ALL COMPONENTS HOT DIP GALVANIZED PER ASTM A123, ASTM A153 OR ASTM A653 AS APPLICABLE PRIOR TO ERECTION IN THE FIELD. ALL WELDING SHALL BE PER AWS D1.1.

OUTLET STRUCTURE DIMENSION TABLE

STATION	(a)	(b)	(c)	(d)	(e)	(f)	(g)
68+99.63	4'-0"	5'-4"	2'-8"	30"	2'-0"	2'-6"	2'-4"



DANGER
HIGH WATER
DURING-AFTER RAIN STORM
DROWNING HAZARD
KEEP OUT

36" X 24" WARNING SIGN

3" and 2" red and black reflective lettering on white sign. Use Type 2 posts. Construct according to KYTC Std. Specifications. Payment shall be incidental to Outlet Structure.

DETENTION BASIN
OUTLET STRUCTURE DETAILS

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

PREPARED BY: GRESHAM SMITH & PARTNERS DATE: $DATE$
PROJECT: 2009 contract plans and proposal\ CHECKED BY: DATE:
APPROVED BY: DATE:

USER: fackiep
DATE: 9/18/2009 8:38:02 AM
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CELL LIBRARY: c:\projects\Broadway\Sheets\Sect1\06-R05700DS.dgn
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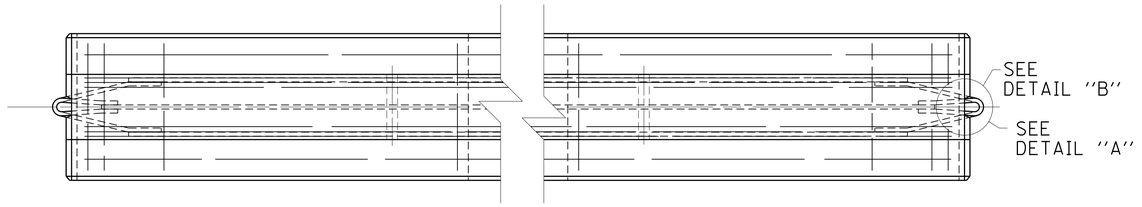
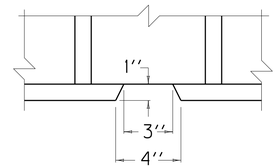
FORM No. VENDOR NAME: $SHEETS$ $DATE$ $TIME$

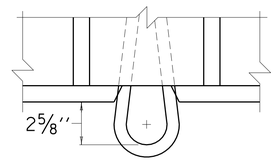
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R58



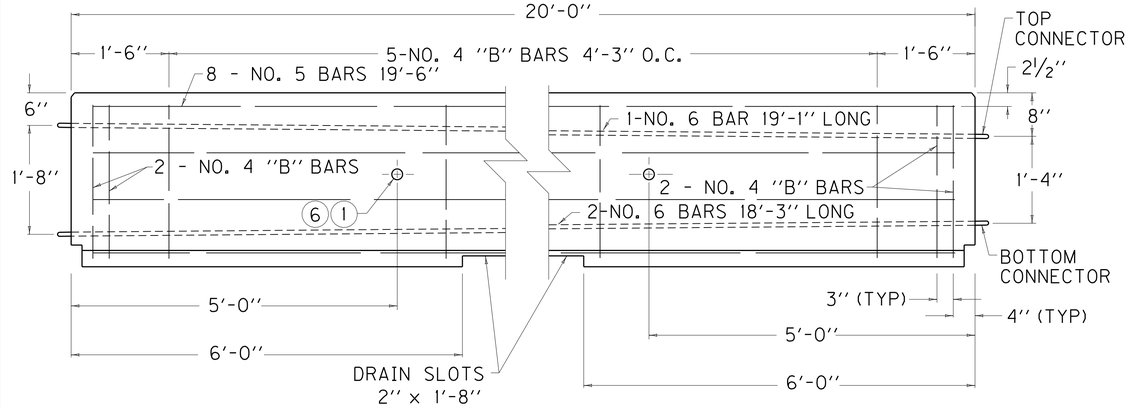
PLAN VIEW



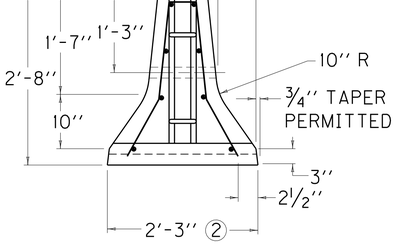
DETAIL "A"



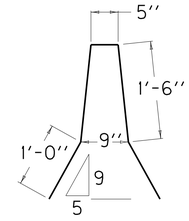
DETAIL "B"



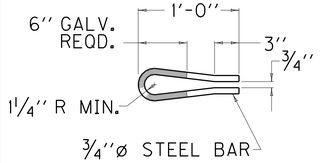
ELEVATION VIEW



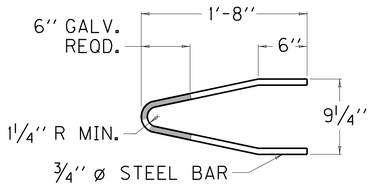
RIGHT ELEVATION VIEW



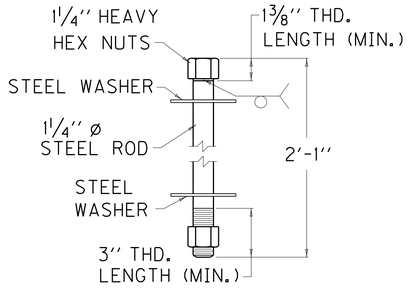
DETAIL OF "B" BAR



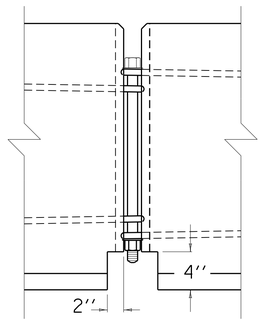
TOP CONNECTOR
(HOT DIP GALVANIZE AFTER FORMING)



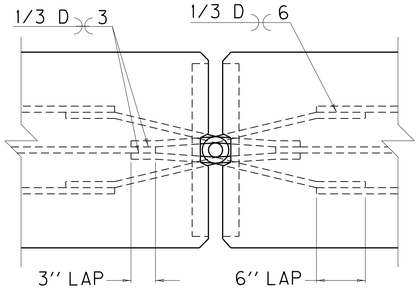
BOTTOM CONNECTOR
(HOT DIP GALVANIZE AFTER FORMING)



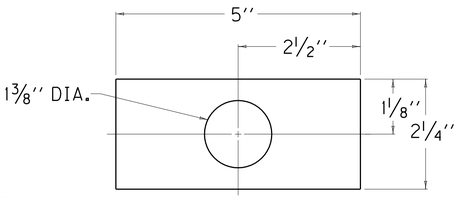
CONNECTOR PIN



ELEVATION OF CONNECTON DETAIL



PLAN OF CONNECTION DETAIL



½" THICK STEEL WASHER

~ NOTES ~

BID ITEM AND UNIT TO BID:

CONC. BARRIER WALL TYPE 9T - LIN. FT.

(1) 2" DIA. LIFTING HOLE - 2 REQUIRED EACH SECTION. FORMED WITH 2" P.V.C. PIPE OR EQUAL.

(2) TAPER NOT INCLUDED IN BASE WIDTH.

3. SHOP DRAWINGS SHALL BE APPROVED PRIOR TO MANUFACTURE.

(4) BASED ON 150 LBS./CU. FT.

5. PLACE ALL STEEL REINFORCEMENT A CLEAR DISTANCE OF 2" MIN. FROM OUTSIDE FACE OF WALL, EXCEPT WHERE SHOWN OTHERWISE.

(6) LIFTING BARS SHALL BE REQUIRED TO PREVENT SPALLING OF CONCRETE AROUND HOLES.

7. PREVIOUS WALL MANUFACTURED ACCORDING TO STANDARD DRAWING RBM-115-07 MAY STILL BE USED. ANY NEW BARRIER WALL TYPE 9T MANUFACTURED SHALL COMPLY TO THIS STANDARD DRAWING.

8. A PERMISSABLE ALTERNATE FOR THE PIN AND LOOP CONNECTOR IS JJ HOOK MANUFACTURED BY EASI-SET INDUSTRIES OUT OF MIDLAND, VA. SEE MANUFACTURER'S SHOP DRAWINGS FOR DETAILS ON JJ HOOK CONNECTOR AND RECOMMENDED REINFORCEMENT. THE BARRIER WALL'S SHAPE, LENGTH, DRAIN SLOT DIMENSIONS AND LOCATIONS SHALL MATCH THIS DRAWINGS CURRENT DIMENSIONS. (1) (6)

APPROXIMATE QUANTITIES

20'		
REINF.	CONC.	WEIGHT (4)
LBS.	CU. YD./FT.	TONS
195	0.12	5.0

FOR TEMPORARY USE ONLY

KENTUCKY DEPARTMENT OF HIGHWAYS

CONCRETE BARRIER WALL TYPE 9T (TEMPORARY)

APPROVED _____ TEBM DIVISION OF DESIGN 04-15-08 DATE

004

DETAIL SHEET
CONCRETE BARRIER WALL TYPE 9T
(TEMPORARY)

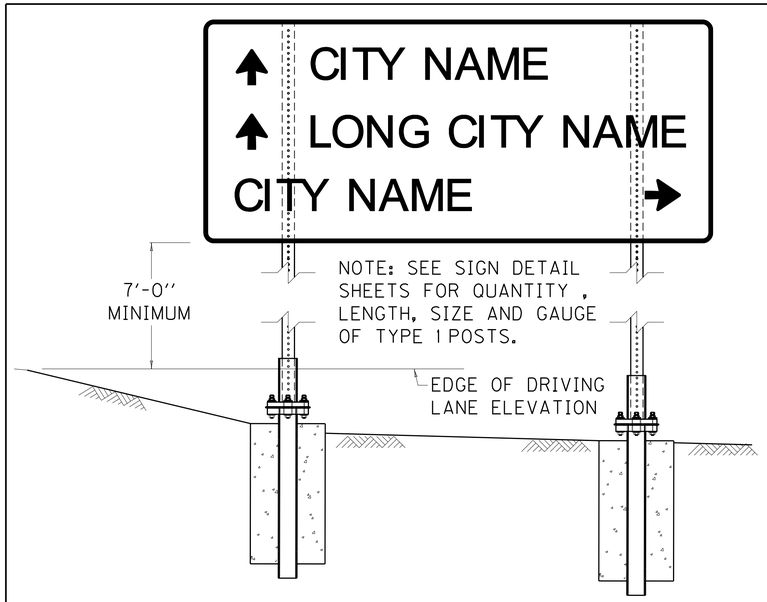
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: Sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R59



TYPICAL SHEETING SIGN BREAKAWAY SUPPORT INSTALLATION

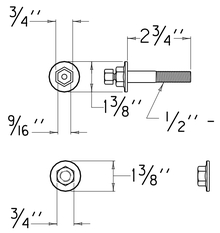
NOTES

1. AUGER AN 18" DIA. HOLE BY 42" DEEP AT THE PREDETERMINED LOCATION.
2. TAP THE BOTTOM OF THE 48" BASE STUB INTO THE SOIL IN THE BOTTOM OF THE HOLE WITH THE BASE PLUMB AND SQUARED UP WITH THE ROADWAY , MAKING SURE THE POINT OF THE PLATE IS FACING ONCOMING TRAFFIC. (THIS SERVES TO STABILIZE THE BASE WHILE POURING THE CONCRETE AS WELL AS TO ALLOW FOR WATER DRAINAGE BELOW THE CONCRETE FOOTING.)
3. DEPTH OF IMBEDMENT TO LEAVE 2½" FROM THE GRADE TO THE TOP OF THE BASE.
4. ALLOW CONCRETE TO CURE AT LEAST 5 DAYS BEFORE ERECTING SIGN.
5. PLACE 1 EACH TEFLON COATED WASHER SHIM ON EACH OF THE 3 NOTCHED POINTS, WITH THE OPEN SIDE FACING TOWARDS THE CENTER OF THE TRIANGLE.
6. PLACE TOP POST RECIEVER SO THAT THE SIGN POST IS IN CORRECT POSITION FOR SIGN VISIBILITY, ON TO THE BASE AND WASHER SHIMS.
7. PLACE 1 EACH ½" WASHER ONTO TORQUE FREE BOLT AND PLACE IN EACH NOTCHED POINT OF THE TRIANGLE. PUSH EACH TEFLON COATED WASHER SHIM AGAINST THE SHANK OF EACH BOLT AND FINGER TIGHTEN ½" FLANGED LOCK NUT.
8. FULLY TIGHTEN , THEN LOOSEN , ALL THREE TORQUE FREE BOLTS USING THE LARGER ¾" HEX HEAD. COMPLETE BY TIGHTENING EACH BOLT USING THE SMALLER 9/16" HEX HEAD UNTIL IT TWIST OFF.

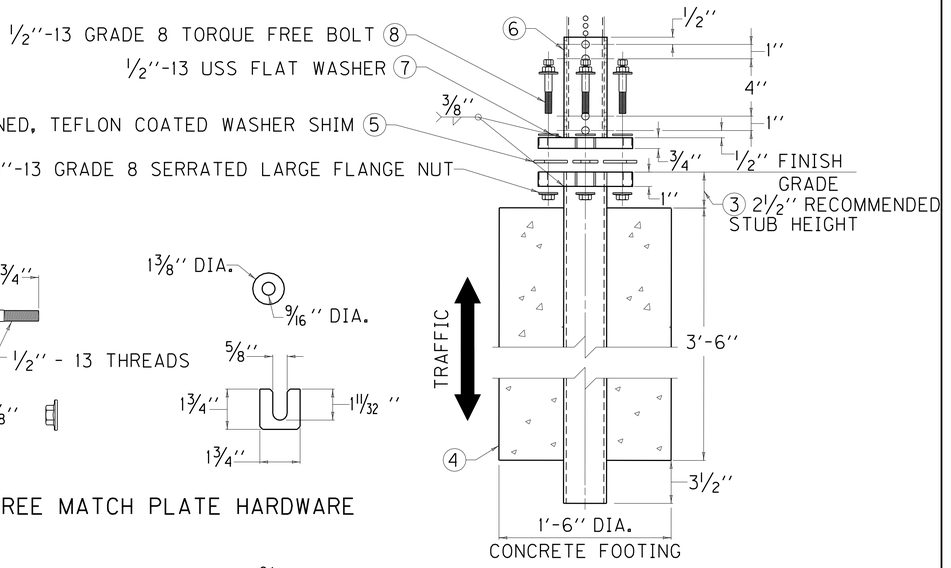
   NOTE : SECONDARY HEAD WILL TWIST OFF AT DESIRED TORQUE LEVEL TO MEET FEDERAL COMPLIANCE.
9. INSERT SIGN SUPPORT INTO THE TUBULAR PORTION OF THE TOP POST RECIEVER AND SECURE WITH 3 EACH ⅜"- 16 x 3½" GRADE 8 FLANGED SHOULDER BOLTS AND FLANGED NUTS.

   NOTE: WHERE HIGHER WINDLOAD IS DESIRED, INSERT THE NEXT SIZE SMALLER SQUARE POST INSIDE BOTTOM OF MAIN UPRIGHT POST.

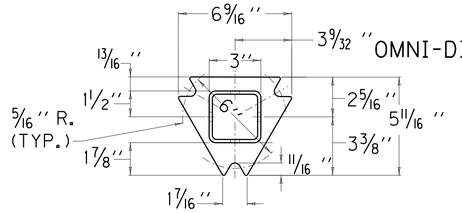
   NOTE: ON MULTI-LEG INSTALLATIONS, BE SURE THAT ALL ANCHORS ARE SQUARED AND LINED UP WITH EACH OTHER.
10. TYPE D BREAKAWAY SIGN SUPPORT SYSTEMS FOR THE TYPE I POSTS SHALL BE SELECTED FROM THE KENTUCKY DEPARTMENT OF HIGHWAYS APPROVED MATERIALS LIST. OR AN APPROVED EQUAL. ACCEPTABLE ALTERNATES SHALL BE APPROVED BY THE DIVISION OF HIGHWAY DESIGN AND FHWA , PRIOR TO INSTALLATION.



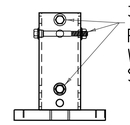
TORQUE FREE MATCH PLATE HARDWARE



TYPE "D" SUPPORT



OMNI-DIRECTIONAL BREAK-A-WAY FOR TYPE I POSTS

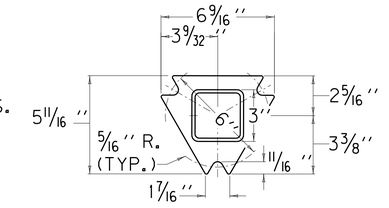


⅜" - 16 x 3½" GRADE 8 FLANGED SHOULDER BOLT WITH ⅜"-16 GRADE 8 SER. FLANGE NUT (9)

MATERIALS: TUBE RECEIVER - 3" x 3" x 7 GA. ASTM A500
ASTM A500 GRADE B TUBE PLATE - ASTM A572 GRADE 50

TOP POST RECEIVER / FOR 2½" SQUARE POST

2¼" x 12 GA. MAYBE INSERTED INTO
2½" X 12 GA. FOR ADDITIONAL WINDLOAD



BOTTOM BASE CONCRETE STUB (2)

MATERIALS : TUBE - 3"X 3" X 7 GA. ASTM A500
GRADE B TUBE PLATE - ASTM A572 GRADE 50

KENTUCKY DEPARTMENT OF HIGHWAYS

TYPE D BREAKAWAY SIGN SUPPORT

APPROVED _____ TEBM DIVISION OF DESIGN — 04-15-08 DATE

005

DETAIL SHEET
TYPE D BREAKAWAY SIGN SUPPORT

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R60

PIPE DIA. (IN)	PIPE TYPE	CIRCULAR PIPE COVER HEIGHTS IN FEET					
		2-5	5-10	10-15	15-20	20-25	25-30
12 & 15	2⅔''×½'' CSPHS (1)	16 GA.					
	2⅔''×½'' CSPLS (1)	16 GA.					
	2⅔''×½'' CAPHS	16 GA.					
	PVC	SMOOTH WALL (SOLID WALL)					
	HDPE					FF	
	RCP (11)						
18	2⅔''×½'' CSPHS (1)	16 GA.					
	2⅔''×½'' CSPLS (1)	16 GA.					
	2⅔''×½'' CAPHS	16 GA.					
	SRS (1)	16 GA.					
	SRA	16 GA.					
	PVC	RIBBED (PROFILE WALL)					
	HDPE					FF	
	RCP (11)						

PIPE DIA. (IN)	PIPE TYPE	CIRCULAR PIPE COVER HEIGHTS IN FEET											
		2-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65
21	2⅔''×½'' CSPHS (1)	16 GA.												
	2⅔''×½'' CSPLS (1)	16 GA.					10 GA.							
	2⅔''×½'' CAPHS	16 GA.												
	SRS (1)	16 GA.												
	SRA	16 GA.				14 GA.								
	PVC	RIBBED (PROFILE WALL)												
	HDPE					FF								
	RCP (11)													
24 (6)	2⅔''×½'' CSPHS (1)	16 GA.												14 GA.
	2⅔''×½'' CSPLS (1)	16 GA.					10 GA.							
	2⅔''×½'' CAPHS	16 GA.								14 GA.				12 GA.
	SRS (1)	16 GA.							14 GA.					12 GA.
	SRA	16 GA.				14 GA.		12 GA.				10 GA.		
	PVC	RIBBED (PROFILE WALL)												
	HDPE					FF								
	RCP (11)													

NOTES

(1) GAGES FOR CORRUGATED STEEL PIPE ITEMS SHOWN ARE BASED ON ALUMINUM-COATED TYPE 2 STEEL AS PER AASHTO M-274. ALUMINUM COATED TYPE 2 STEEL IS ONLY PERMITTED IN Ph RANGES OF 5 TO 9

2. WHEN CORRUGATED STEEL PIPE IS ZINC COATED (GALVANIZED) THE GAGE SHALL BE ONE GAGE HEAVIER THAN SHOWN IN THE TABLES.
3. CSP, CAP, SRS AND SRA ARE SHOWN IN GAGE.
4. MAXIMUM COVER HEIGHT MEASURED FROM TOP OF PIPE TO SUBGRADE ELEVATION SHALL GOVERN GAGE OF PIPE TO BE USED FOR ENTIRE LENGTH OF PIPE INSTALLATION.
5. MINIMUM COVER HEIGHTS FOR PIPE SHALL BE 2 FEET. GAGE OF PIPE FOR COVER HEIGHTS LESS THAN 2 FEET SHALL BE THAT SHOWN FOR COVER HEIGHTS OF 30 FEET (SEE STD. SPECIFICATIONS FOR BACKFILL). HDPE AND PVC SHALL NOT BE PERMITTED FOR COVER HEIGHTS LESS THAN 2 FEET.

(6) 24'' DIA. PIPE IS MINIMUM SIZE FOR COVER HEIGHTS FROM 30 FEET TO 65 FEET.

7. MINIMUM COVER HEIGHT FOR ENTRANCE PIPE SHALL BE 0.5 FEET.
8. GAGE OF ENTRANCE PIPE FOR COVER HEIGHTS LESS THAN 2 FEET SHALL MEET THE FOLLOWING REQUIREMENTS:
   a. GAGE OF CSP SHALL BE THAT SHOWN FOR HEIGHTS OF 30 FEET.
   b. GAGE OF CAP SHALL BE ONE GAGE HEAVIER THAN SHOWN IN THE TABLE.
9. ALL CIRCULAR STRUCTURAL PLATE SHALL BE 5% VERTICALLY ELONGATED.
10. SEE CURRENT STANDARD DRAWING RDI-035 FOR COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PIPE.

(11) SEE DETAIL SHEET ''PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER REINFORCED CONC. PIPE'' AND DETAIL SHEET ''PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE'' FOR RCP COVER HEIGHT AND BEDDING REQUIREMENTS.

LEGEND

CSPHS: CORRUGATED STEEL PIPE WITH HELICAL LOCK SEAM OR HELICAL WELDED SEAM (HELICAL CORR.)
CSPLS: CORRUGATED STEEL PIPE WITH LONGITUDINAL RIVETED OR SPOT WELDED SEAM (ANNULAR CORR.)
CAPHS: CORRUGATED ALUMINUM ALLOY PIPE WITH HELICAL LOCK SEAM (HELICAL CORR.)
HDPE: HIGH DENSITY POLYETHYLENE PIPE
PVC: POLYVINYL CHLORIDE
SRS: SPIRAL RIB STEEL
SRA: SPIRAL RIB ALUMINUM
RCP: CIRCULAR REINFORCED CONCRETE PIPE
FF: FLOWABLE FILL REQUIRED

12'' PIPE - 24'' PIPE

KENTUCKY DEPARTMENT OF HIGHWAYS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS

APPROVED _____ TERM, DIVISION OF DESIGN 04-25-08 DATE

009

SHEET 1 OF 8

DETAIL SHEET
CULVERT, ENTRANCE & STORM SEWER
PIPE TYPES & COVER HEIGHTS

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R61

PIPE DIA. (IN)	PIPE TYPE	CIRCULAR PIPE COVER HEIGHTS IN FEET (3)												
		2-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65
27 & 30 (8)	2⅔″×½″ CSPHS (1)	16 GA.								14 GA.			12 GA.	
	2⅔″×½″ CSPLS (1)	16 GA.				12 GA.								
	2⅔″×½″ CAPHS	14 GA.								12 GA.			10 GA.	
	SRS (1)	16 GA.						14 GA.		12 GA.				
	SRA	16 GA.			14 GA.		12 GA.		10 GA.					
	PVC	RIBBED (PROFILE WALL)												
	HDPE					FF								
	RCP (10)													
36	2⅔″×½″ CSPHS (1)	14 GA.									12 GA.			10 GA.
	2⅔″×½″ CSPLS (1)	14 GA.		12 GA.		10 GA.								
	2⅔″×½″ CAPHS	14 GA.						12 GA.			10 GA.			8 GA.
	SRS (1)	14 GA.							12 GA.					
	SRA	14 GA.			12 GA.		10 GA.							
	PVC	RIBBED (PROFILE WALL)												
	HDPE					FF								
	RCP (10)													
42	2⅔″×½″ CSPHS (1)	14 GA.								12 GA.			10 GA.	
	2⅔″×½″ CSPLS (1)	14 GA.				12 GA.			10 GA.					
	2⅔″×½″ CAPHS	12 GA.								10 GA.		8 GA.		
	SRS (1)	14 GA.						12 GA.						
	SRA	12 GA.					10 GA.							
	PVC	RIBBED (PROFILE WALL)												
	HDPE													
	RCP (10)													
		2-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65

NOTES

(1) GAGES FOR CORRUGATED STEEL PIPE ITEMS SHOWN ARE BASED ON ALUMINUM-COATED TYPE 2 STEEL AS PER AASHTO M-274. ALUMINUM COATED TYPE 2 STEEL IS ONLY PERMITTED IN Ph RANGES OF 5 TO 9.

2. WHEN CORRUGATED STEEL PIPE IS ZINC COATED (GALVANIZED) THE GAGE SHALL BE ONE GAGE HEAVIER THAN SHOWN IN THE TABLES.

(3) SEE CURRENT STANDARD DRAWING RDI-001 FOR EXPLANATION OF COVER HEIGHTS LESS THAN 2 FEET.

4. CSP, CAP, SRS AND SRA ARE SHOWN IN GAGE.

5. MAXIMUM COVER HEIGHT MEASURED FROM TOP OF PIPE TO SUB GRADE ELEVATION SHALL GOVERN GAGE OF PIPE TO BE USED FOR ENTIRE LENGTH OF PIPE INSTALLATION.

6. MINIMUM COVER HEIGHT FOR ENTRANCE PIPE SHALL BE 0.5 FEET.

7. ALL CIRCULAR STRUCTURAL PLATE SHALL BE 5% VERTICALLY ELONGATED.

(8) ENTRANCE PIPE GREATER THAN 30″ DIA. SHALL BE CULVERT PIPE.

9. SEE CURRENT STANDARD DRAWING RDI-035 FOR COATINGS, LININGS AND PAVINGS FOR NON-STRUCTURAL PIPE.

LEGEND

CSPHS: CORRUGATED STEEL PIPE WITH HELICAL LOCK SEAM OR HELICAL WELDED SEAM (HELICAL CORR.)

CSPLS: CORRUGATED STEEL PIPE WITH LONGITUDINAL RIVETED OR SPOT WELDED SEAM (ANNULAR CORR.)

CAPHS: CORRUGATED ALUMINUM ALLOY PIPE WITH HELICAL LOCK SEAM (HELICAL CORR.)

HDPE: HIGH DENSITY POLYETHYLENE PIPE

PVC: POLYVINYL CHLORIDE

SRS: SPIRAL RIB STEEL

SRA: SPIRAL RIB ALUMINUM

RCP: CIRCULAR REINFORCED CONCRETE PIPE

FF: FLOWABLE FILL REQUIRED

NOTES CONTINUED

(10) SEE DETAIL SHEET ″PIPE BEDDING FOR CULVERTS, ENTRANCE, AND STORM SEWER REINFORCED CONC. PIPE″ AND DETAIL SHEET ″PIPE BEDDING TRENCH CONDITION REINFORCED CONC. PIPE″ FOR RCP COVER HEIGHT AND BEDDING REQUIREMENTS.

27″ PIPE - 42″ PIPE

KENTUCKY DEPARTMENT OF HIGHWAYS

CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS

APPROVED _____ TERM, DIVISION OF DESIGN 04-25-08 DATE

010

DETAIL SHEET
CULVERT, ENTRANCE & STORM SEWER
PIPE TYPES & COVER HEIGHTS

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

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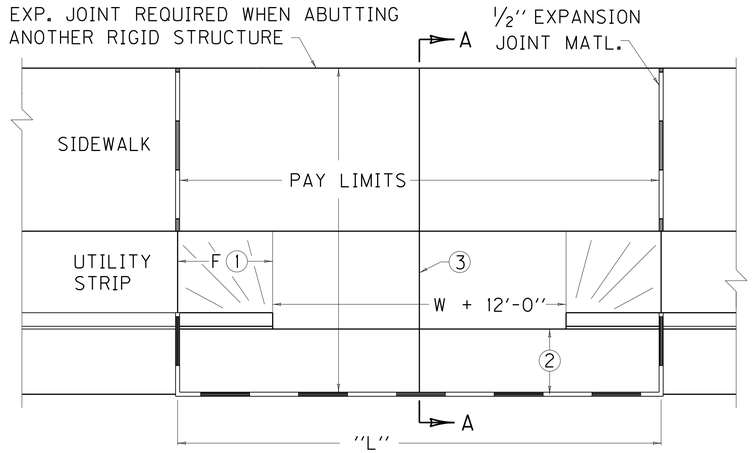
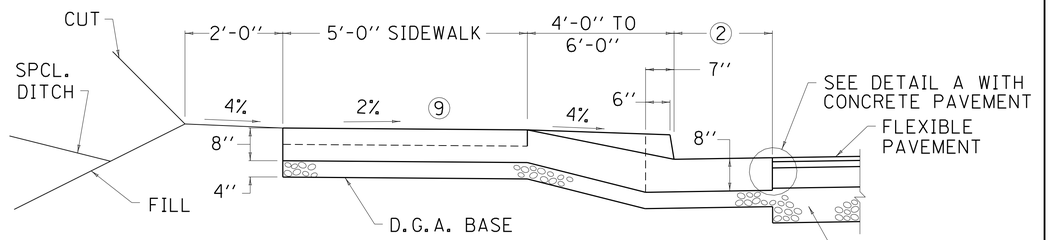
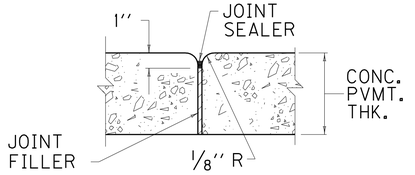
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R62



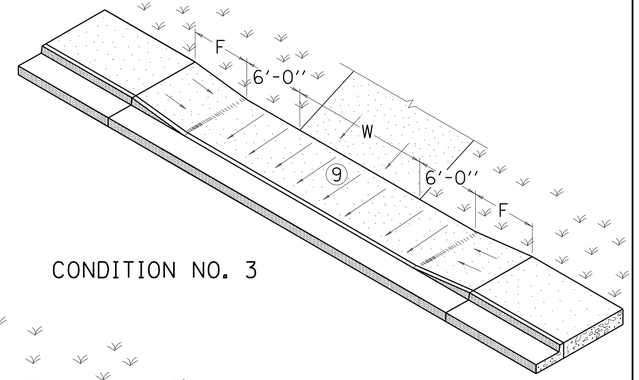
PLAN VIEW



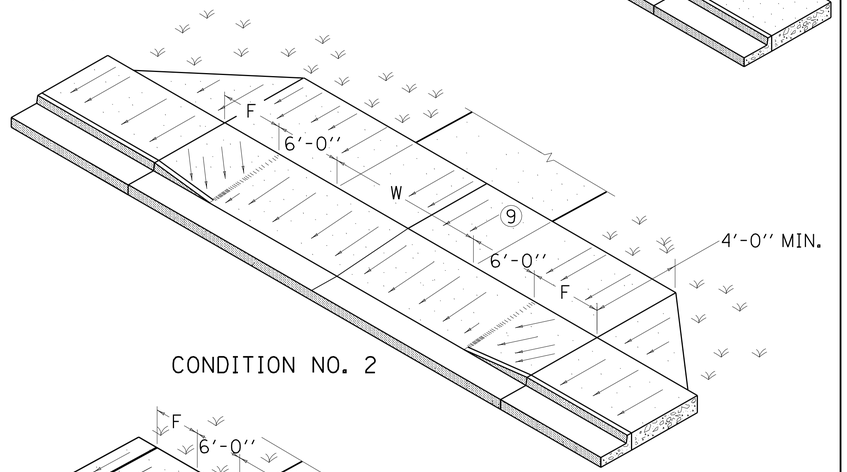
SECTION A-A CONDITION NO. 1



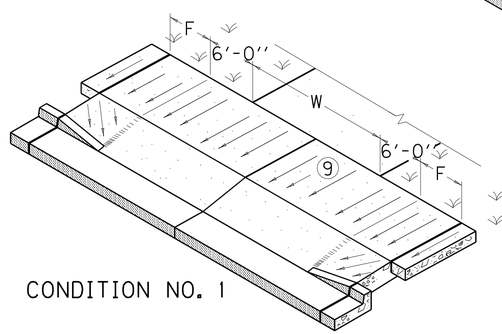
DETAIL A



CONDITION NO. 3



CONDITION NO. 2



CONDITION NO. 1

~ NOTES ~

(1) FOR WIDTH W AND F:
RESIDENTIAL - MINIMUM W = 12'-0'', MAXIMUM W = 24'-0''; MINIMUM F = 2'-6'', MAXIMUM F = 10'-0''
COMMERCIAL - MINIMUM W = 24'-0'', MAXIMUM W = 36'-0''; F = 10'-0''
WHEN MORE THAN 2 LANES ARE REQUIRED, 36'-0'' WIDTH MAY BE INCREASED TO RELIEVE INTERFERENCE BETWEEN ENTERING AND EXITING TRAFFIC. AT THE ENGINEER'S DISCRETION RADIAL RETURNS MAY BE USED ON ENTRANCES. SOME APPLICABLE CASES ARE THE FOLLOWING:

a. ON ENTRANCES EXPECTED TO CARRY HIGH VOLUMES OF TRAFFIC.
b. WHEN ENTRANCE WIDTH IS GREATER THAN 36'.
c. WHEN THE HIGHWAY HAS A POSTED OR OPERATING SPEED OVER 40 MPH.
d. ON A RURAL SECTION WHERE A FLUSH SHOULDER EXISTS.
e. WHERE AN EXCLUSIVE RIGHT TURN LANE IS USED.

(2) 1'-0'' OR 2'-0'' WITH CONCRETE PAVEMENT, 2'-0'' WITH FLEXIBLE PAVEMENT

(3) WHEN ''L'' DIMENSION IS GREATER THAN 15'-0'' A SAWED AND SEALED JOINT, 1 1/2'' DEEP AND 1/4'' WIDE SHALL BE PLACED AT THE CENTER OF THE ''L'' DIMENSION. WIDE ENTRANCES REQUIRE ADDITIONAL JOINTS, SPACING SHALL NOT EXCEED 15'-0'' O.C.

4. CLASS ''A'' CONCRETE OR JOINTED PLAIN CONCRETE PAVEMENT SHALL BE USED IN THE ENTRANCE PAVEMENT.
5. THE ENTRANCE PAVEMENT SHALL RECEIVE A BROOM FINISH AND SHALL BE CURED THE SAME AS THE MAINLINE PAVEMENT AND/OR SIDEWALK.
6. THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ''CONC. ENT. PAVEMENT-8 INCH (CODE NO. 2101)'' SHALL INCLUDE CLASS ''A'' CONCRETE AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK. D.G.A. AND DETECTABLE WARNINGS SHALL BE SEPARATE BID ITEMS.
7. USE CONDITION NO. 2 OR NO. 3 WHEN LITTLE OR NO UTILITY STRIP IS PROVIDED, AND INCORPORATE FEATURES OF OTHER DESIGNS SHOWN WHERE NOT IN CONFLICT.
8. PROVIDED THAT ADA GUIDELINES SHOWN IN NOTES (9) AND 10 ARE FOLLOWED, THE ENGINEER MAY MODIFY THE DESIGN TO BETTER FIT EXISTING CONDITIONS.

(9) 2% CROSS SLOPE MAXIMUM ON SIDEWALK. IF CONDITIONS WARRANT, SIDEWALK MAY BE SLOPED 2% AWAY FROM ROADWAY.

10. SIDEWALKS SHOULD BE DESIGNED WITH A MAX. GRADE OF 5% . WHERE A SIDEWALK RUNS ALONG A STEEP ROADWAY, THE SIDEWALK GRADE MAY EXCEED 5% IF IT FOLLOWS THE GRADE OF THE ROADWAY.
11. COMMERCIAL DRIVEWAYS WITH TRAFFIC CONTROL DEVICES REQUIRE ADA SIDEWALK TREATMENTS WITH DETECTABLE WARNINGS.

USE WITH CUR. STD. DWG. RGX-040

KENTUCKY DEPARTMENT OF HIGHWAYS

CONCRETE ENTRANCE PAVEMENT AND SIDEWALK

APPROVED _____ 03-13-09
FOR DIRECTOR OF HIGHWAY DESIGN — DATE

012

DETAIL SHEET
CONCRETE ENTRANCE PAVEMENT & SIDEWALK

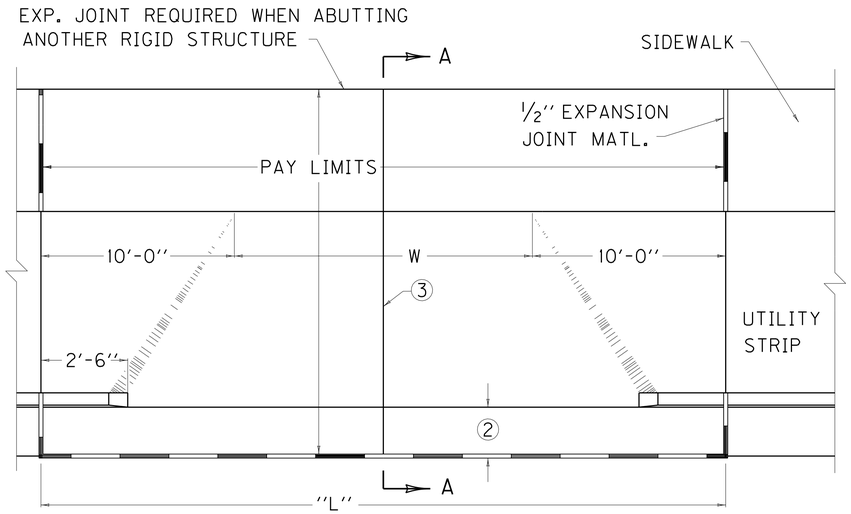
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

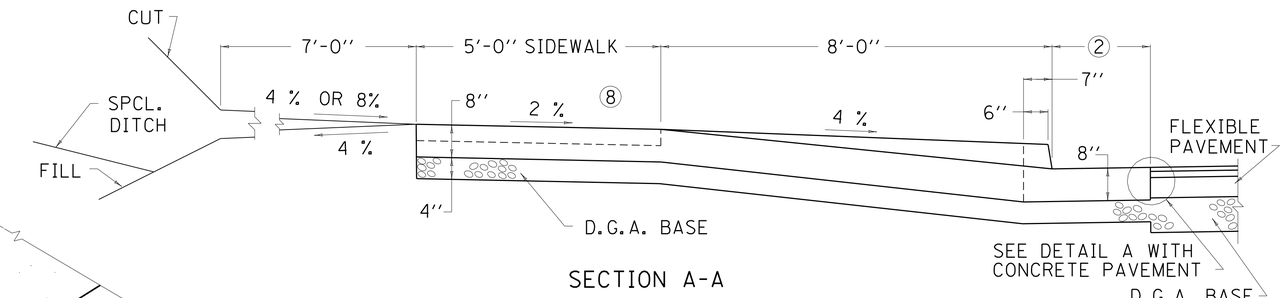
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R63



PLAN VIEW

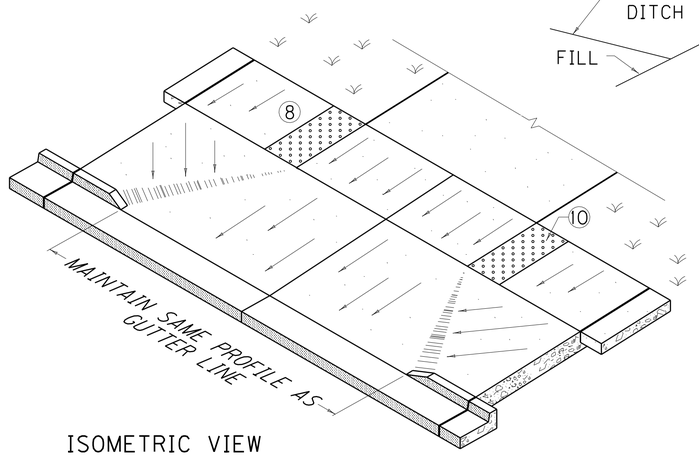
~ NOTES ~

1. FOR WIDTH W:
   COMMERCIAL - MINIMUM W = 24'-0'', MAXIMUM W = 36'-0''
   WHEN MORE THAN 2 LANES ARE REQUIRED, 36'-0'' WIDTH MAY BE INCREASED TO RELIEVE INTERFERENCE BETWEEN ENTERING AND EXITING TRAFFIC. AT THE ENGINEER'S DISCRETION RADIAL RETURNS MAY BE USED ON ENTRANCES. SOME APPLICABLE CASES ARE THE FOLLOWING:
   a. ON ENTRANCES EXPECTED TO CARRY HIGH VOLUMES OF TRAFFIC.
   b. WHEN ENTRANCE WIDTH IS GREATER THAN 36'.
   c. WHEN THE HIGHWAY HAS A POSTED OR OPERATING SPEED OVER 40 MPH.
   d. ON A RURAL SECTION WHERE A FLUSH SHOULDER EXISTS.
   e. WHERE AN EXCLUSIVE RIGHT TURN LANE IS USED.
2. 1'-0'' OR 2'-0'' WITH CONCRETE PAVEMENT, 2'-0'' WITH FLEXIBLE PAVEMENT.
3. WHEN ''L'' DIMENSION IS GREATER THAN 15'-0'' A SAWED AND SEALED JOINT, 1 1/2'' DEEP AND 1/4'' WIDE SHALL BE PLACED AT THE CENTER OF THE ''L'' DIMENSION. WIDE ENTRANCES REQUIRE ADDITIONAL JOINTS, SPACING SHALL NOT EXCEED 15'-0'' O.C.
4. CLASS ''A'' CONCRETE OR JOINTED PLAIN CONCRETE PAVEMENT SHALL BE USED IN THE ENTRANCE PAVEMENT.
5. THE ENTRANCE PAVEMENT SHALL RECEIVE A BROOM FINISH AND SHALL BE CURED THE SAME AS THE MAINLINE PAVEMENT AND/OR SIDEWALK.
6. THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ''CONC. ENT. PAVEMENT-8 INCH (CODE NO. 2101)'' SHALL INCLUDE CLASS ''A'' CONCRETE AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK. D.G.A. AND DETECTABLE WARNINGS SHALL BE SEPARATE BID ITEMS.
7. PROVIDING THAT ADA GUIDELINES SHOWN IN NOTE (8) AND 9 ARE FOLLOWED, THE ENGINEER MAY MODIFY THE DESIGN TO BETTER FIT EXISTING CONDITIONS.
8. 2% CROSS SLOPE MAXIMUM ON SIDEWALK.
9. SIDEWALKS SHOULD BE DESIGNED WITH A MAX. GRADE OF FIVE PERCENT. WHERE A SIDEWALK RUNS ALONG A STEEP ROADWAY, THE SIDEWALK GRADE MAY EXCEED FIVE PERCENT IF IT FOLLOWS THE GRADE OF THE ROADWAY.
10. COMMERCIAL DRIVEWAYS WITH TRAFFIC CONTROL DEVICES REQUIRE ADA SIDEWALK TREATMENTS WITH DETECTABLE WARNINGS.

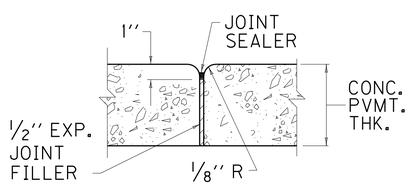


SECTION A-A

USE WITH CUR. STD. DWG. RGX-040



ISOMETRIC VIEW



DETAIL A

KENTUCKY
DEPARTMENT OF HIGHWAYS

CONCRETE
ENTRANCE PAVEMENT
AND SIDEWALK

APPROVED _____ 03-13-09
FOR DIVISION OF HIGHWAY DESIGN — DATE

013

DETAIL SHEET
CONCRETE ENTRANCE PAVEMENT & SIDEWALK

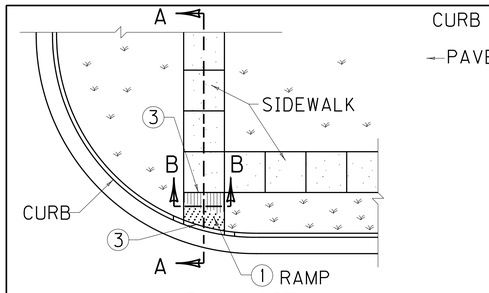
$FILE$
$DATE$
$TIME$

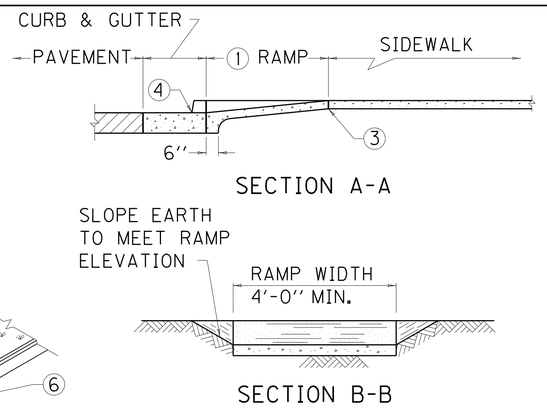
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: SD
DD-MMM-YYYY HH:MM

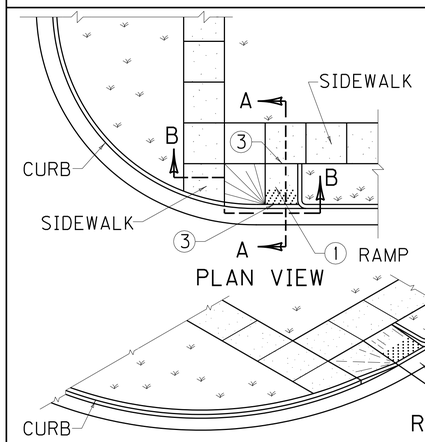
VENDORS NAME
I-92
FORM NO. 2

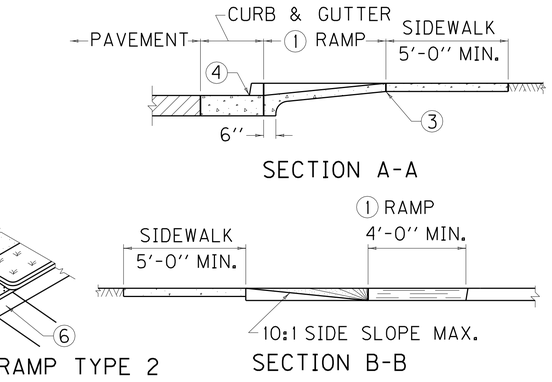
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R64



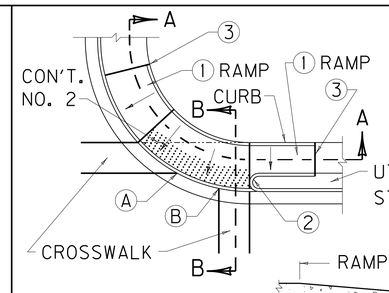


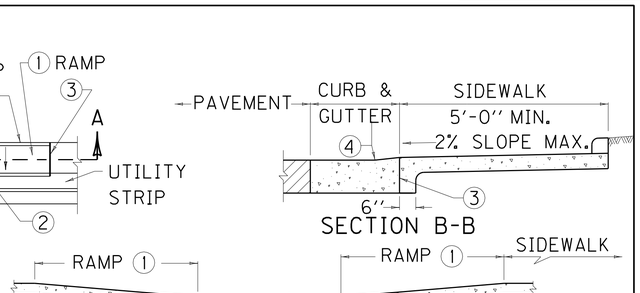
RAMP TYPE 1



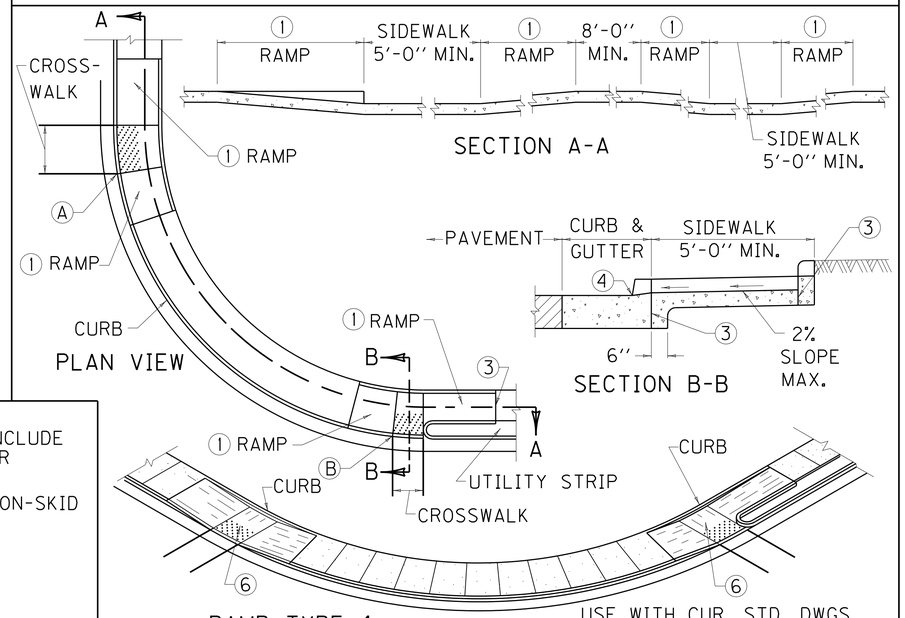


RAMP TYPE 2





CONDITION NO. 1 RAMP TYPE 3 CONDITION NO. 2



RAMP TYPE 4 USE WITH CUR. STD. DWGS. RGX-040 AND RPM-160

NOTES

RAMPS SHALL BE PAID PER SQ. YARD OF 4'' CONC. SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, CURB BEHIND RAMP AND LANDING, AND INCIDENTALS NECESSARY FOR CONSTRUCTION.

THE RAMP SHALL BE CONSTRUCTED OF CLASS ''A'' CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.

THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.

RAMPS SHOULD BE LOCATED WITHIN MARKED LIMITS OF CROSSWALKS.

USE RAMP TYPE 3 WHEN POINT A TO B IS LESS THAN 20 FEET.

USE RAMP TYPE 4 WHEN POINT A TO B IS 20 FEET OR MORE.

(1) CURB RAMP GRADE SHALL NOT EXCEED 12:1, CROSS SLOPE SHALL NOT EXCEED 2%. ON RETROFIT CURB RAMPS, GRADES OF 12.5% for 2'-0'' OR 10% FOR 5'-0'' ARE PERMISSABLE.

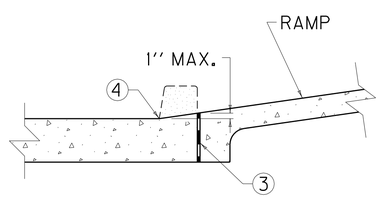
(2) CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4 FEET OR GREATER. FOR UTILITY STRIPS LESS THAN 4 FEET, THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.

(3) 1/2'' EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.

(4) NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1'' IN HEIGHT. RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

5. ALL SIDEWALK RAMPS REQUIRE DETECTABLE WARNINGS.

(6) LANDINGS WILL PROVIDE A LEVEL AREA (LESS THAN 2% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4 FOOT SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.



DROP CURB FOR RAMP

KENTUCKY
DEPARTMENT OF HIGHWAYS

SIDEWALK
RAMPS

APPROVED _____ DIRECTOR, DIVISION OF HIGHWAY DESIGN — 12-16-08 DATE

014

DETAIL SHEET
SIDEWALK RAMPS

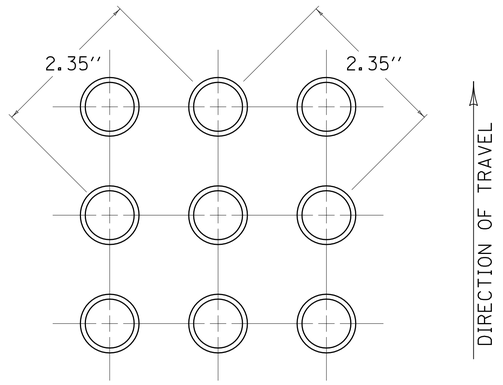
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

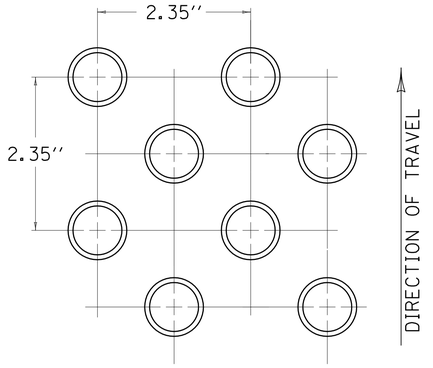
VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

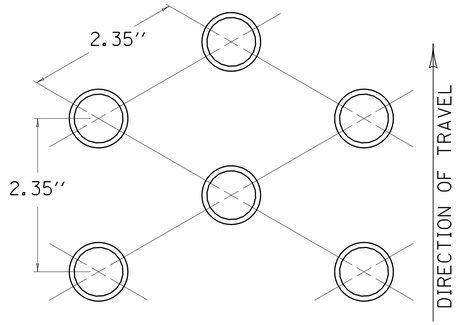
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R65



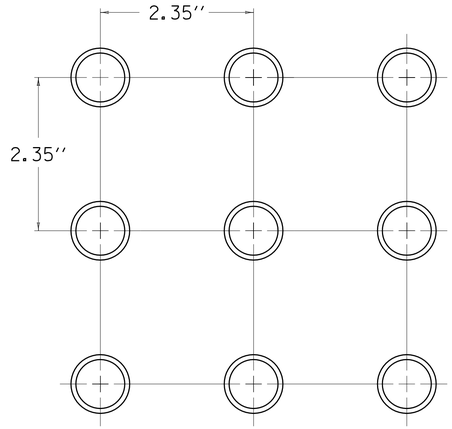
SQUARE PATTERN (PARALLEL ALIGNMENT)



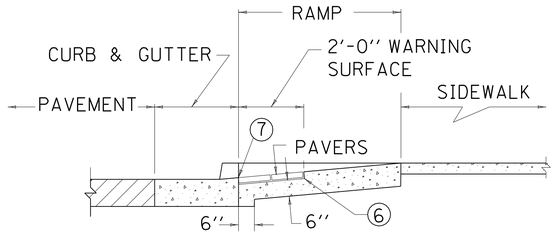
SQUARE PATTERN (DIAGONAL ALIGNMENT)



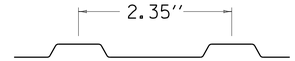
TRIANGULAR PATTERN

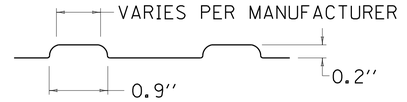


SQUARE PATTERN



TYPICAL DETECTABLE WARNING INSTALLATION





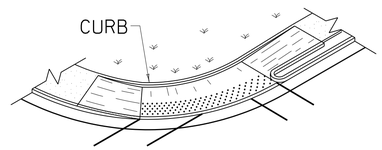
DETECTABLE WARNINGS PROFILE

NOTES

BID ITEM AND UNIT TO BID.
DETECTABLE WARNINGS - SQ. FT.

1. LANDINGS WILL PROVIDE A LEVEL AREA (LESS THAN 2% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4 FOOT SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.
2. ALL SIDEWALK RAMPS REQUIRE DETECTABLE WARNINGS.
3. COMMERCIAL DRIVEWAYS WITH TRAFFIC CONTROL DEVICES REQUIRE ADA SIDEWALK TREATMENTS WITH DETECTABLE WARNINGS.
4. PAVERS SHALL BE CONCRETE WITH A MINIMUM THICKNESS OF 2''.
5. PAVERS SHALL BE A COLOR HOMOGENOUS THROUGHOUT THE PAVER, THAT COLOR SHALL CONTRAST VISUALLY WITH THE ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE DEPARTMENT WILL ALLOW EITHER YELLOW OR RED AS COLORS.

⑥ PAVERS TO BE SET IN MORTAR.
⑦ DETECTABLE WARNING SURFACE BEGINS AT BACK OF CURB.



TYPICAL PLACEMENT
PARALLEL CURB RAMPS

USE WITH CUR. STD. DWGS.
RPM-160 AND RPM-170

KENTUCKY
DEPARTMENT OF HIGHWAYS

DETECTABLE
WARNINGS

APPROVED _____ TEAM DIVISION OF HIGHWAY DESIGN 03-13-09 DATE

015

DETAIL SHEET
DETECTABLE WARNINGS

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

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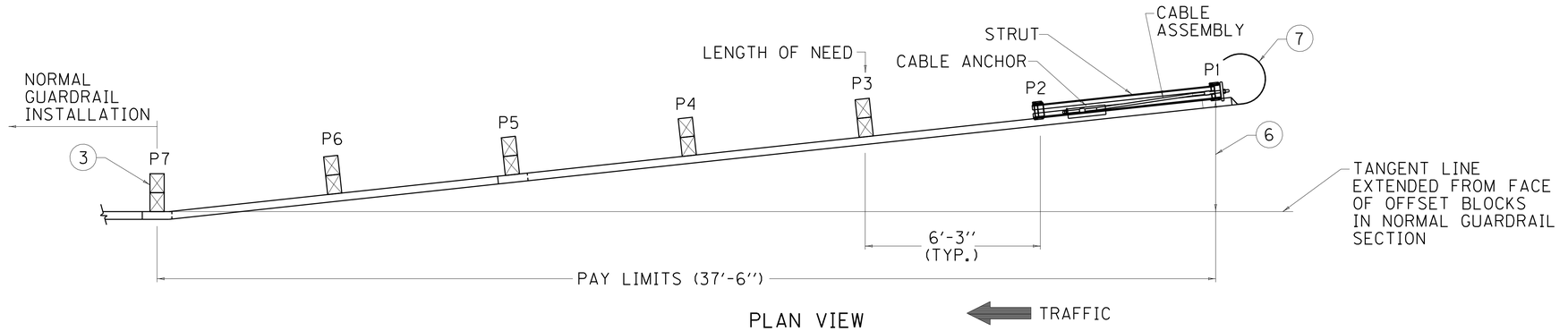
Cell Name: sp
DD-MMM-YYYY HH:MM

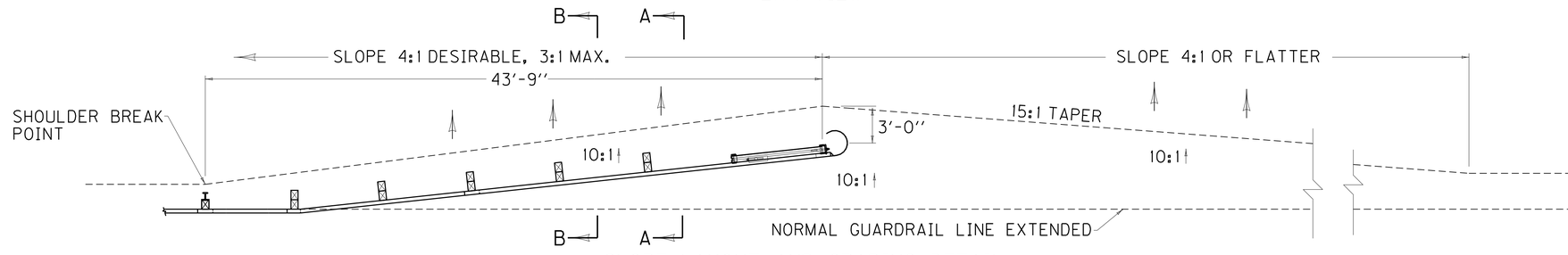
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R66

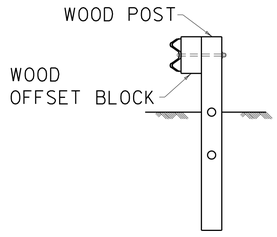


PLAN VIEW

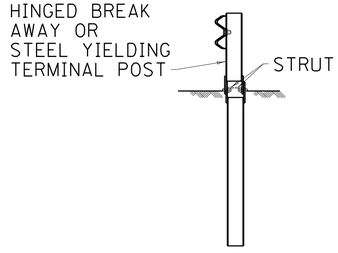
TRAFFIC



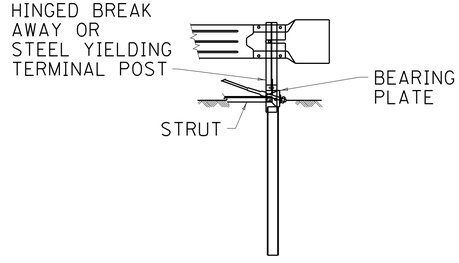
SLOPE LAYOUT AND GRADING DETAIL



SECTION B-B
(POSTS P3 THRU P7)



SECTION A-A
(POST P2)



ENLARGED VIEW P1

1. BID ITEMS AND UNIT TO BID:
   A. GUARDRAIL END TREATMENT TYPE 4A - EACH
   B. MATERIAL USED TO CONSTRUCT WIDENING SHALL BE BID AS ROADWAY OR BORROW EXCAVATION OR EMBANKMENT-IN-PLACE AT THE CONTRACT UNIT PRICE PER CUBIC YARD.
2. INTENDED USE: AREAS WITH ADEQUATE VEHICLE RECOVERY ZONE BEHIND GUARDRAIL.
3. POST P7 SHALL BE A CRT BREAKAWAY WOOD POST.
4. GUARDRAIL END TREATMENT TYPE 4A IS A PATENTED (ONE SOURCE) PRODUCT MANUFACTURED BY TRINITY INDUSTRIES, INC. OF DALLAS, TX. OR ROAD SYSTEMS, INC. OF BIG SPRING, TX.
5. THE MANUFACTURER SHALL FURNISH TWO (2) SETS OF SHOP PLANS TO THE CONTRACTOR WITH EACH INSTALLATION.
6. SYSTEM OFFSET OF 4'-0'' SHALL BE MEASURED FROM FACE OF OFFSET BLOCK AT NORMAL GUARDRAIL SECTION TO FACE OF POST AT P1.
7. OBJECT MARKER TYPE 3 (SEE CURRENT MUTCD MANUAL FOR DETAILS).

KENTUCKY
DEPARTMENT OF HIGHWAYS

GUARDRAIL
END TREATMENT
TYPE 4A

APPROVED _____ DIRECTOR, DIVISION OF DESIGN 03-13-09 DATE

020

DETAIL SHEET
GUARDRAIL END TREATMENT TYPE 4A

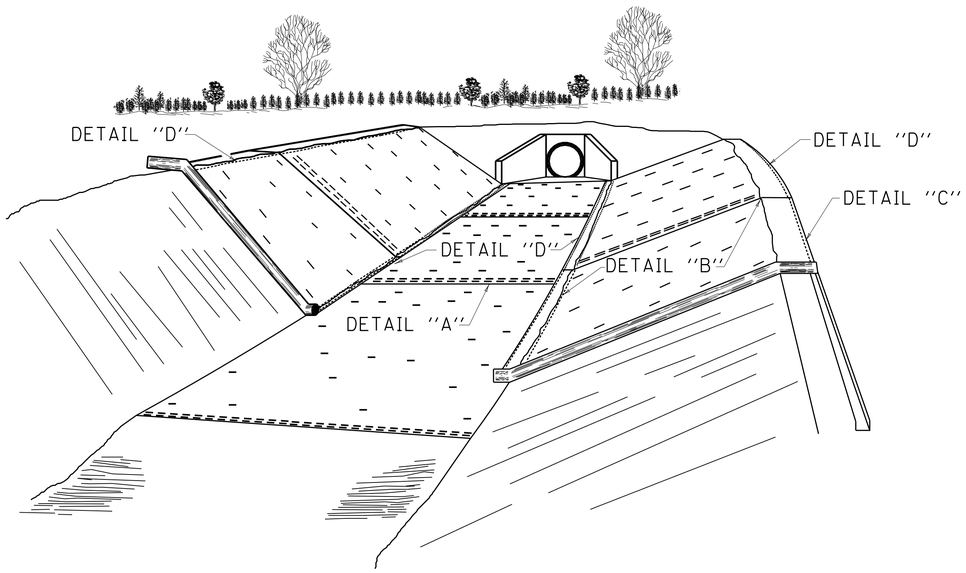
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

$FILE$
$DATE$
$TIME$

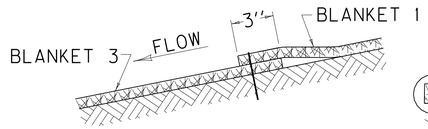
VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

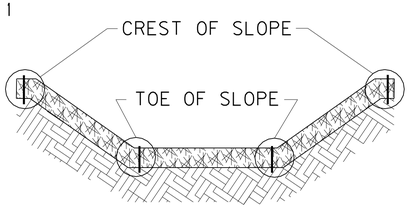
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R67



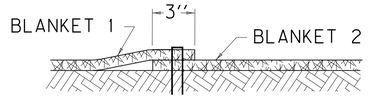
TURF MAT
CHANNEL INSTALLATION



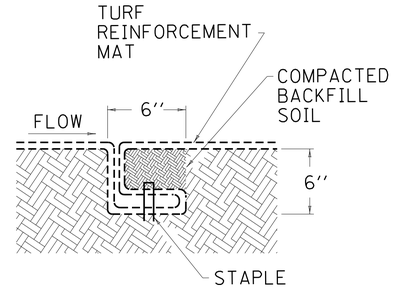
PROFILE VIEW
DETAIL ''A''



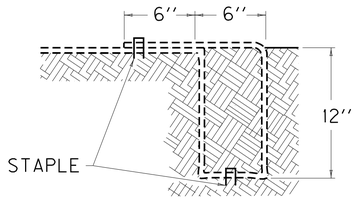
CRITICAL POINTS
DETAIL ''D''



CROSS SECTION VIEW
DETAIL ''B''



CHANNEL CHECK SLOT (3)



PROFILE VIEW
DETAIL ''C''

NOTES

1. CONSTRUCT A 6'' X 12'' ANCHOR TRENCH AT THE BEGINNING OF THE CHANNEL. LINE THE ANCHOR TRENCH WITH TURF REINFORCING MAT LEAVING 12'' EXTENDING PAST THE ANCHOR TRENCH. FASTEN THE MAT MATERIAL INTO THE ANCHOR TRENCH ON 12'' CENTERS BACKFILL THE TRENCH WITH TOPSOIL AND COMPACT. COVER THE AREA WITH THE REMAINING 12'' OF THE MAT'S TERMINAL END LEAVING 6'' TO OVERLAP THE TURF REINFORCING MAT. SECURE THE 6'' OVERLAP WITH STAPLES ON 12'' CENTERS.
2. UNROLL THE MAT PARALLEL TO THE PRIMARY DIRECTION OF WATER FLOW AND PLACE IN DIRECT CONTACT WITH THE SOIL SURFACE. DO NOT STRETCH OR ALLOW THE MATERIAL TO BRIDGE OVER SURFACE INCONSISTENCIES.

(3) EXCAVATE 6'' X 6'' CHECK SLOTS EVERY 25' ALONG THE LENGTH OF THE CHANNEL. LINE THE SIDE AND BOTTOM OF THE SLOT WITH THE MAT AND THEN PULL BACK OVER. FASTEN WITH STAPLES ON 12'' CENTERS. FILL THE CHECK SLOT WITH TOPSOIL, COMPACT, AND CONTINUE UNROLLING MAT DOWN THE CHANNEL.

4. CONTINUE UNROLLING THE MAT DOWNSTREAM OVER THE COMPACTED SLOT TO NEXT CHECK SLOT OR TERMINAL ANCHOR TRENCH. IF MORE THAN ONE SECTION OF MAT IS USED OVERLAP UPSTREAM MATS OVER TOP OF THE DOWNSTREAM MAT 3'' AND SECURE STAPLES ON 12'' CENTERS.
5. SECURE MATS WHILE UNROLLING ON SIDESLOPES AND CHANNEL BOTTOMS WITH STAPLES AT A FREQUENCY THE TABLE INDICATES. USE STAPLES HAVING SUFFICIENT GROUND PENETRATION TO RESIST PULLOUT. INCREASE ANCHORING FREQUENCY AS DIRECTED BY THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE.
6. APPLY SEEDING AND PROTECTION ACCORDING TO SECTION 212.03.03 USING SEED MIX TYPE I. DIRECTLY AFTER APPLYING SEEDING AND TREATMENTS IN 212.03.03, BUT BEFORE APPLYING MULCHING OR HYDROMULCHING: INFILL THE VOID SPACES IN THE MAT WITH 1/2'' OF TOPSOIL. TOPSOIL IS THE SOIL PROFILE DEFINED TECHNICALLY AS ''A'' HORIZON BY THE SOIL SCIENCE SOCIETY OF AMERICA. USE LOOSE, FRIABLE TOPSOIL THAT IS FREE OF STONES 1'' OR GREATER IN OVERALL DIMENSIONS, ADMIXTURE OF SUBSOIL, REFUSE, STUMPS, ROOTS, BRUSH, WEEDS AND OTHER MATERIALS THAT PREVENT THE FORMATION OF A SUITABLE SEED BED. DO NOT USE TOPSOIL FROM SITES HAVING JOHNSON GRASS, CANADA THISTLE, QUACK GRASS, NODDING THISTLE OR EXCESSIVE AMOUNTS OF WEEDS OR THEIR RHIZOMES.

SLOPE GRADE	ANCHORING FREQUENCY
UP TO 2H:1V	1.5 ANCHORS/SQUARD YARD
2H:1V TO 1H:1V	2.0 ANCHORS/SQUARE YARD
STEEPER THAN 1H:1V AND CHANNEL BOTTOMS	3.0 ANCHORS/SQUARE YARD

KENTUCKY
DEPARTMENT OF HIGHWAYS

TURF MAT
CHANNEL
INSTALLATION

SUBMITTED _____ 05-20-09
DIRECTOR, DIVISION OF HIGHWAY DESIGN — DATE

022

DETAIL SHEET
TURF MAT CHANNEL INSTALLATION

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

$FILE$
$DATE$
$TIME$

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I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R68

24+00 25+00 26+00 27+00 28+00 29+00 30+00

MAINTENANCE OF TRAFFIC GENERAL NOTES

CONSTRUCTION OF THE IMPROVEMENTS WITHIN SECTION 1 WILL BE ACCOMPLISHED IN THREE (3) PHASES UNDER TRAFFIC. A DESIGN SPEED OF 35 MPH SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE SHOWN ON THE PLANS AND SIGNED ACCORDINGLY; MINIMUM 35:1 TAPERS FOR ALL DETOURS AND CROSSOVERS.
ON KY 237 THE CONTRACTOR SHALL MAINTAIN A TWO-LANE TRAVELED WAY WITH A MINIMUM LANE WIDTH OF 10 FEET DURING NON-WORKING HOURS AND PEAK TRAVEL PERIODS. HOWEVER, ONE-WAY TRAFFIC MAY BE ALLOWED AT THE FOLLOWING TIMES:
BETWEEN 9:00 AM AND 3:30 PM, MONDAY THRU FRIDAY
BETWEEN 6:00 PM AND 6:00 AM, MONDAY THRU FRIDAY
BETWEEN 6:00 PM FRIDAY AND 6:00 AM MONDAY

LANE CLOSURES ARE ALLOWED PROVIDED THAT ADEQUATE SIGNING AND FLAGPERSONS ARE AT THE LOCATION. LANE CLOSURES ARE PROHIBITED ON THE FOLLOWING HOLIDAYS:

NEW YEARS DAY	THANKSGIVING DAY
MEMORIAL DAY	CHRISTMAS EVE
FOURTH OF JULY	CHRISTMAS DAY
LABOR DAY	

FLAGGERS WILL NOT BE PERMITTED DURING THE HOURS OF 6:00 AM AND 9:00 AM EXCEPT AT THE ENGINEER'S DISCRETION.

TRAFFIC IS TO BE KEPT SEPARATE FROM THE WORK AREAS BY USING BARRELS OR TEMPORARY BARRIERS.

PHASE 3 CONSISTS OF FINAL SURFACE COURSE AND RAISED MEDIAN CONSTRUCTION. SEE PHASING PLANS FOR CONSTRUCTION DETAILS FOR EACH PHASE.

THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNAL LOOPS TO BE UTILIZED DURING PHASE 1 CONSTRUCTION. CONTRACTOR SHALL REFER TO TRAFFIC CONTROL SHEETS FOR INFORMATION REGARDING TEMPORARY SIGNALS. VIDEO CAMERAS WILL BE UTILIZED AND NOT TEMPORARY LOOPS.

IN THE CASE OF US 42, A FOUR-LANE TRAVELED WAY AS WELL AS EXCLUSIVE LEFTS AT KY 237 WITH MINIMUM LANE WIDTH OF 10 FEET IS TO BE MAINTAINED DURING PEAK TRAVEL PERIODS AND DURING NIGHT HOURS. LANE REDUCTIONS MAY OCCUR DURING SAME TIMES LISTED ABOVE FOR KY 237. CLOSURES IN THIS AREA WILL HAVE COST DISINCENTIVES IF LANES ARE NOT OPEN BY PEAK HOURS. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN TRAFFIC ON US 42 BY COMPLETING CONSTRUCTION ON THE SOUTH SIDE OF US 42 PRIOR TO BEGINNING CONSTRUCTION ON THE NORTH SIDE.

EXISTING PAVEMENT OVERLAY SHALL OCCUR DURING THE ALLOWED PERIODS FOR ONE-WAY TRAFFIC. CULVERTS AND UTILITY CROSSINGS WHERE CONSTRUCTION IS NOT FEASIBLE DURING TWO-WAY TRAFFIC MAY ALSO BE CONSTRUCTED AT THIS TIME.

ACCESS TO OLD TOLL ROAD AT KY 237 SHALL BE CLOSED DURING PHASE 1 CONSTRUCTION. ACCESS TO OLD TOLL ROAD AT US 42 SHALL REMAIN OPEN; HOWEVER, OPERATIONS MUST ALLOW ACCESS TO THE RESIDENCES AND BUSINESSES AT ALL TIMES AND BE DONE EFFICIENTLY TO ALLOW FOR MINIMAL CLOSURE TIME.

VALLEY CIRCLE DRIVE AND BOONE VALLEY DRIVE MAY EACH BE CLOSED FOR 30 DAYS; HOWEVER, NOT AT THE SAME TIME, WITH A PENALTY OF $2000/DAY IF NOT REOPENED WITHIN THE TIME LIMIT.

INITIAL LANE STRIPING AND RESTRIPING MUST BE DONE AT NIGHT. GRINDING WITH WATER SHALL BE USED TO REMOVE OLD PAINT. IN ORDER TO INSTALL TRAFFIC CONTROL, TRAFFIC MAY BE REDUCED TO ONE LANE.

PAVEMENT DROP-OFF
DIFFERENCE IN ELEVATION FOR TRAVEL LANES

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

- LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.
- TWO TO FOUR INCHES - FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE DROP-OFF, THEN DRUMS, PANEL, OR BARRICADES MAY BE USED. IF THE DROP OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR DGA MATERIAL USED FOR WEDGING AND IS INCLUDED ON THE PAVEMENT SUMMARY SHEET.

THE CONTRACTOR SHALL BE AWARE OF EMERGENCY VEHICLES AND SCHOOL SCHEDULES AND COORDINATE WITH THE PROPER AUTHORITIES TO MINIMIZE ANY IMPACTS DURING CONSTRUCTION AND IN NO WAY HINDER THE PASSING OF EMERGENCY VEHICLES AND/OR BUSES ON OFFICIAL BUSINESS.

THE CONTRACTOR HAS AN OBLIGATION TO NOTIFY RESIDENTS OF ENTRANCE CLOSURES AND TO NOTIFY RESIDENTS, SCHOOLS AND POSTAL AUTHORITIES OF ANY ROAD CLOSURES. REASONABLE INGRESS AND EGRESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

ACCESS TO FIRE HYDRANTS SHALL BE MAINTAINED AT ALL TIMES. MAILBOXES, AND ACCESS TO, BY THE POSTAL SERVICE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

PHASE 1

Contractor shall maintain 20' travel way width during construction.

Install 35 MPH speed limit signs in both directions and all other required road work signs according to the MUTCD.

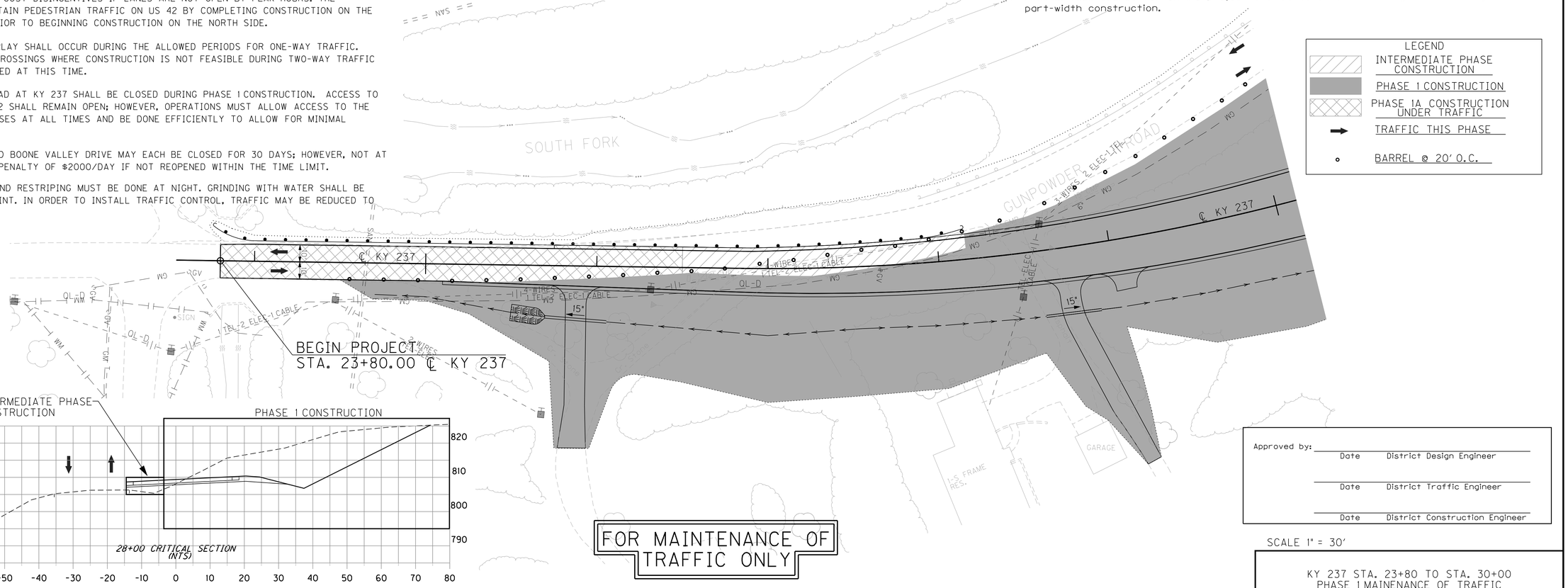
During Phase 1 construction proposed slopes can be varied (3:1 max) to accomidate traffic. Slopes to be constructed to final grade during Phase 2 construction.

PRIORITY - Construct Old Toll Road as quickly as possible in order to minimize disturbance to residents and the church. Old Toll Road will be closed at KY 237. Access for residents and business will be maintained from US 42.

Overnight/Offpeak Hour construction areas may include the following:
-Tie-ins: Begin project to Sta. 28+20 and Sta. 90+50 to End of project.
-US 42 in areas that require reduction in number of travel lanes.
-Bore and jack of the 60" crossing pipe (83+59 KY 237).
-Crossing pipes at Stations 38+01, 41+89, 68+72, and 69+52.5.
-Crossovers at Stations 46+00, 71+00, and 83+70.

Stripe temporary lanes for Phase 2 work, adjust signal heads for lane configuration, and shift traffic.

Final surface course for entire project shall be constructed during Phase 3 using part-width construction.



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I-92
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COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R69

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00

35+50 CRITICAL SECTION (NTS)

SOUTH FORK

KY-237 GUNPOWDER ROAD

PLEASANT VALLEY

ADJUST SLOPES DURING PHASE 1 CONSTRUCTION TO ACCOMODATE TRAFFIC. CONSTRUCT SLOPES TO FINAL GRADE DURING PHASE 2 CONSTRUCTION.

REMOVE PRIOR TO PHASE 2

INSTALL DROP SIGNAL POLE, TEMPORARY VIDEO CAMERA, PED DETECTOR, AND BUTTON (SEE SIGNAL PLANS)

REMOVE PRIOR TO PHASE 2

MAINTAIN EXISTING SIGNAL

INSTALL PROP SIGNAL POLE, CONTROLLER, CABINET, TEMPORARY VIDEO CAMERA AND 4-2" CONDUIT FROM CONTROLLER TO POLE (SEE SIGNAL PLANS)

INSTALL PROP SIGNAL POLE, (2) TEMPORARY VIDEO CAMERAS, PED DETECTOR AND BUTTON (SEE SIGNAL PLANS)

INSTALL PROP SIGNAL POLE, TEMPORARY VIDEO CAMERA, PED DETECTOR, AND BUTTON (SEE SIGNAL PLANS)

MAINTAIN EXISTING SIGNAL OPERATION

INSTALL PROP SIGNAL POLE, (2) TEMPORARY VIDEO CAMERAS, PED DETECTOR AND BUTTON (SEE SIGNAL PLANS)

INSTALL PROP SIGNAL POLE, CONTROLLER, CABINET, TEMPORARY VIDEO CAMERA AND 4-2" CONDUIT FROM CONTROLLER TO POLE (SEE SIGNAL PLANS)

N.T.S.

LEGEND

- PHASE 1 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

TRAFFIC SIGNAL CONSTRUCTION AND OPERATION

① The contractor shall maintain existing traffic signal at KY 237 and US 42 during phase 1 construction. During which time the contractor shall minimize disturbance to existing signal equipment and assumes responsibility for the replacement of and cost associated with any such damage caused by construction. Partial construction of proposed signal shall take place during phase 1 (as shown on this sheet). Refer to signal plan sheet for proposed signal equipment locations.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 30+00 TO STA. 39+00
PHASE 1 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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VENDORS NAME
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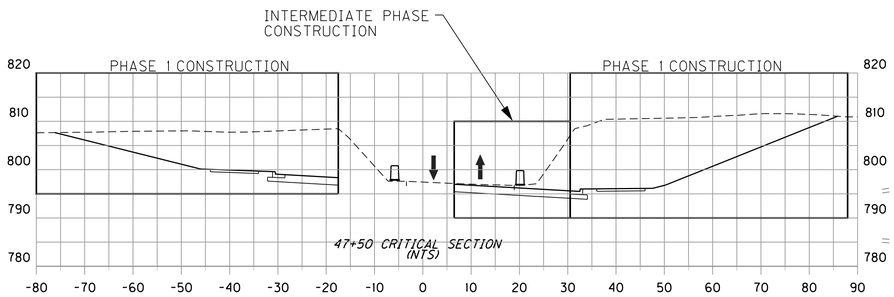
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R70

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00



CLOSE OLD TOLL ROAD. MAINTAIN ACCESS OFF US 42.

CONSTRUCT BOTTOM PHASE ONLY (THIS PHASE). COVER WITH STEEL PLATE TO MAINTAIN TRAFFIC

TEMPORARY PAVEMENT CONSTRUCT MEDIAN DURING PHASE 3 OF CONSTRUCTION

CONTRACTOR SHALL MAINTAIN ACCESS TO PROPERTY.

CONTRACTOR SHALL BLOCK ENTRANCE

Prop. Gravity Wall (See Cross-Sections)

Prop. Retaining Wall (See Structure Plans For Details)

Prop Retaining Wall 24"

PLEASANT VALLEY ROAD (KY 237)

℄ KY 237

OLD TOLL ROAD

HAINES DRIVE

SOUTH FORK

RIP-RAP

1-S FRAME GARAGE

2-S BRICK CHURCH
8585 OLD TOLL

LEGEND

- TEMPORARY PAVEMENT
- INTERMEDIATE PHASE CONSTRUCTION
- PHASE 1 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

FOR MAINTENANCE OF TRAFFIC ONLY

KY 237 STA. 39+00 TO STA. 48+00
PHASE 1 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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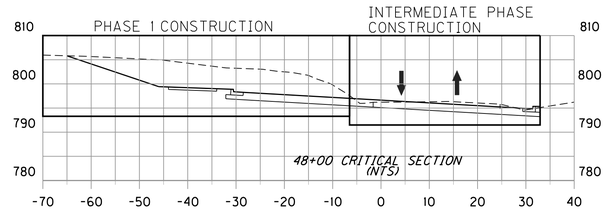
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R71

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00



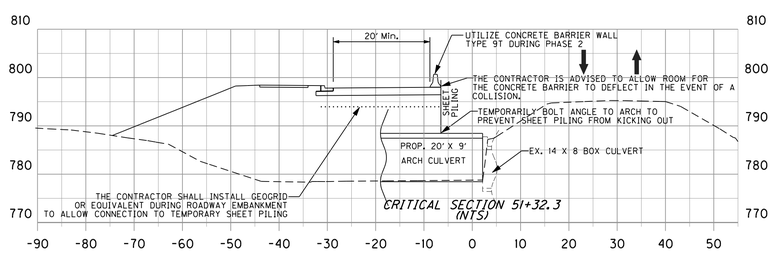
THE CONTRACTOR SHALL MAINTAIN ACCESS.

EXISTING CULVERT TO DRAIN INTO SECTION OF PROPOSED CULVERT BEING CONSTRUCTED DURING THIS PHASE

THE CONTRACTOR SHALL UTILIZE EXISTING GUARDRAIL.

ADJUST SLOPES DURING PHASE 1 CONSTRUCTION TO ACCOMODATE TRAFFIC. CONSTRUCT SLOPES TO FINAL GRADE DURING PHASE 2 CONSTRUCTION.

CAP PIPE



LEGEND

- INTERMEDIATE PHASE CONSTRUCTION
- PHASE 1 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 48+00 TO STA. 57+00
PHASE 1 MAINTENANCE OF TRAFFIC

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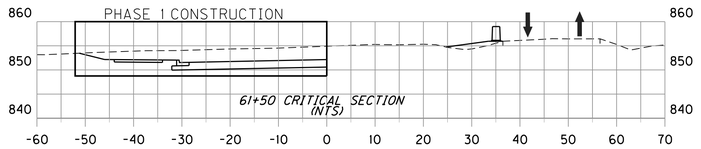
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R72

57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00



THE CONTRACTOR SHALL MAINTAIN ACCESS.

CONSTRUCT BOTTOM PHASE ONLY (THIS PHASE)

CONSTRUCT BOTTOM PHASE ONLY (THIS PHASE)

TEMPORARILY CAP PIPE

ADJUST SLOPES DURING PHASE 1 CONSTRUCTION TO ACCOMODATE TRAFFIC. CONSTRUCT SLOPES TO FINAL GRADE DURING PHASE 2 CONSTRUCTION.

PLEASANT VALLEY ROAD (KY 237)

WELLINGTON DRIVE

AMHERST COURT

BOONE VALLEY DRIVE

KY 237

LEGEND

PHASE 1 CONSTRUCTION

TRAFFIC THIS PHASE

BARREL @ 20' O.C.

SCALE: 1"=30'

FOR MAINTENANCE OF TRAFFIC ONLY

KY 237 STA. 57+00 TO STA. 66+00
PHASE 1 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

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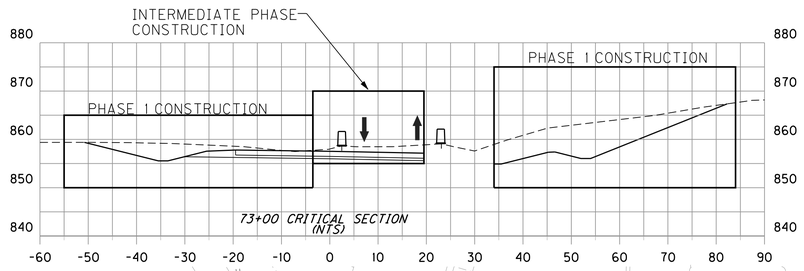
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R73

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00



73+00 CRITICAL SECTION (NTS)

LEGEND

- INTERMEDIATE PHASE CONSTRUCTION
- PHASE I CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

FOR MAINTENANCE OF TRAFFIC ONLY

KY 237 STA. 66+00 TO STA. 75+00
PHASE I MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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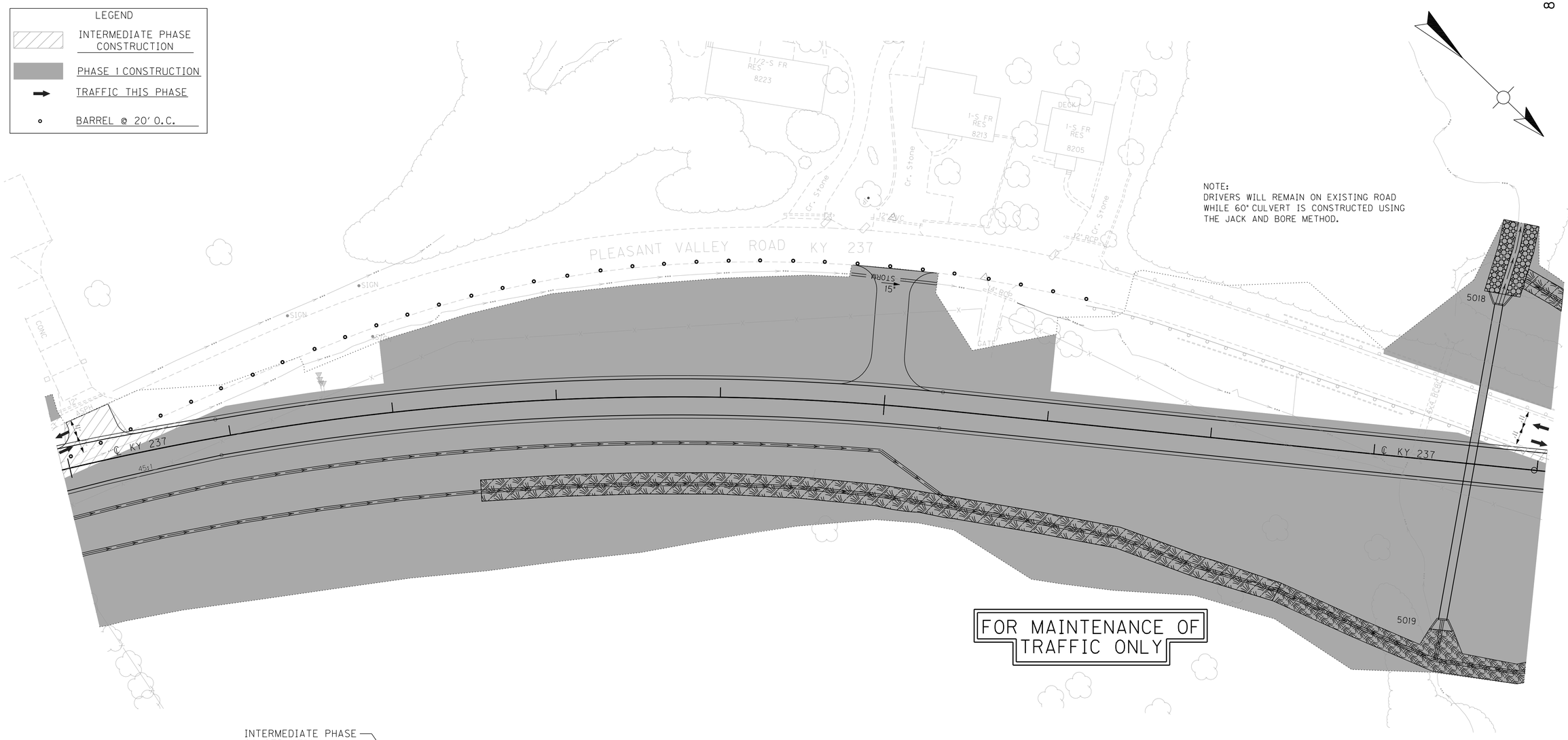
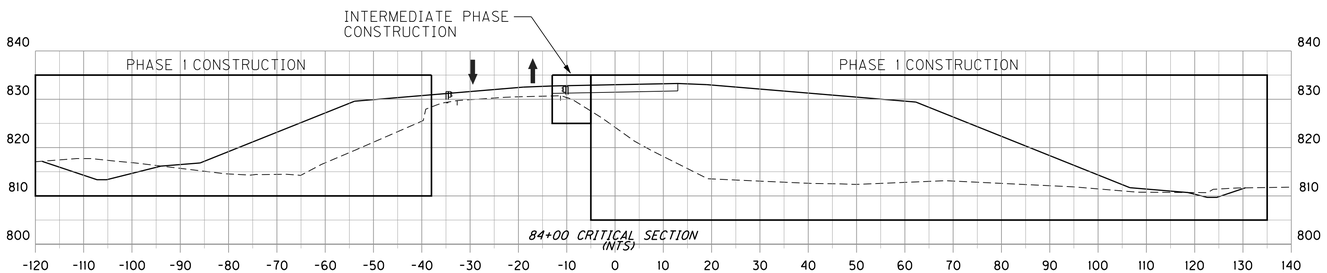
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R74

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00

LEGEND

- INTERMEDIATE PHASE CONSTRUCTION
- PHASE 1 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.





SCALE: 1"=30'

KY 237 STA. 75+00 TO STA. 83+98.33
PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO STA. 84+00
PHASE 1 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

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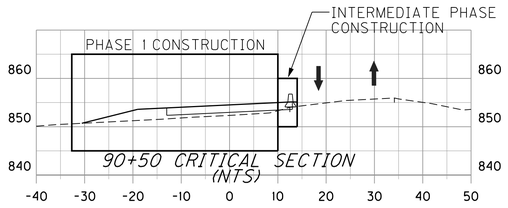
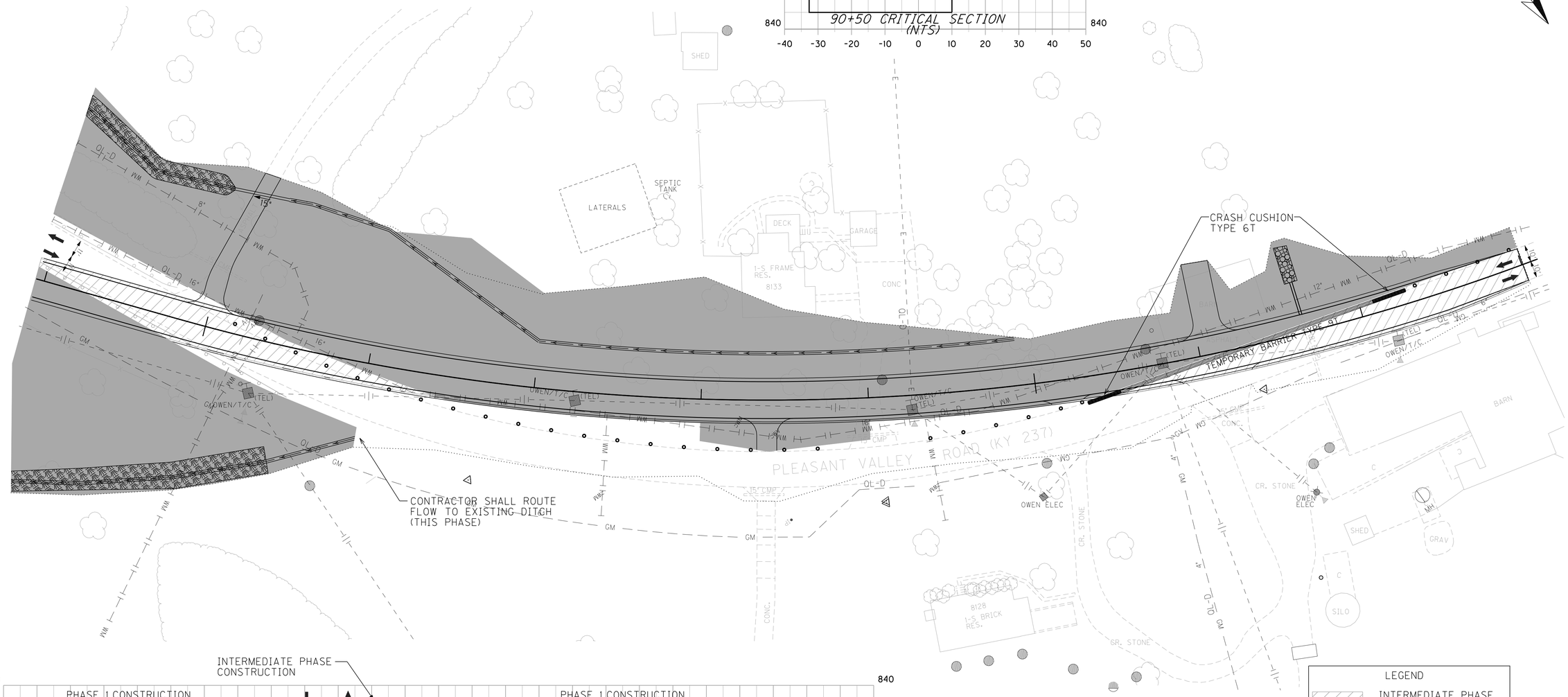
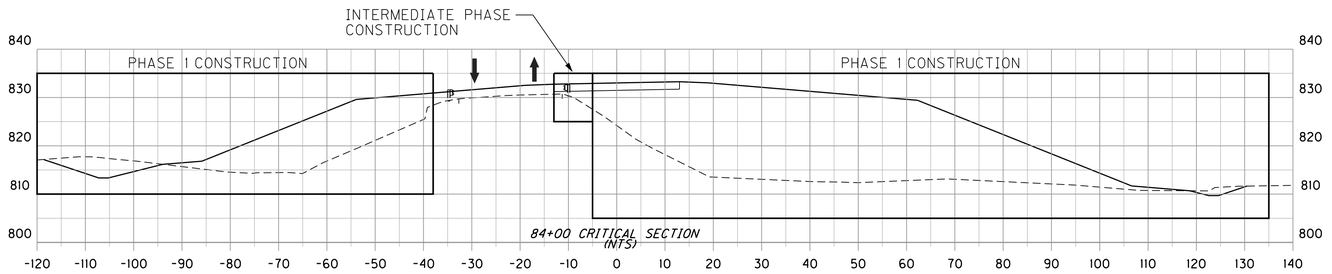
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R75

84+00 85+00 86+00 87+00 88+00 89+00 90+00 91+00 92+00 93+00







FOR MAINTENANCE OF TRAFFIC ONLY

LEGEND

- INTERMEDIATE PHASE CONSTRUCTION
- PHASE 1 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

PRACTICAL SOLUTIONS TIE-IN
STA. 84+00 TO STA. 93+00.68
PHASE 1 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

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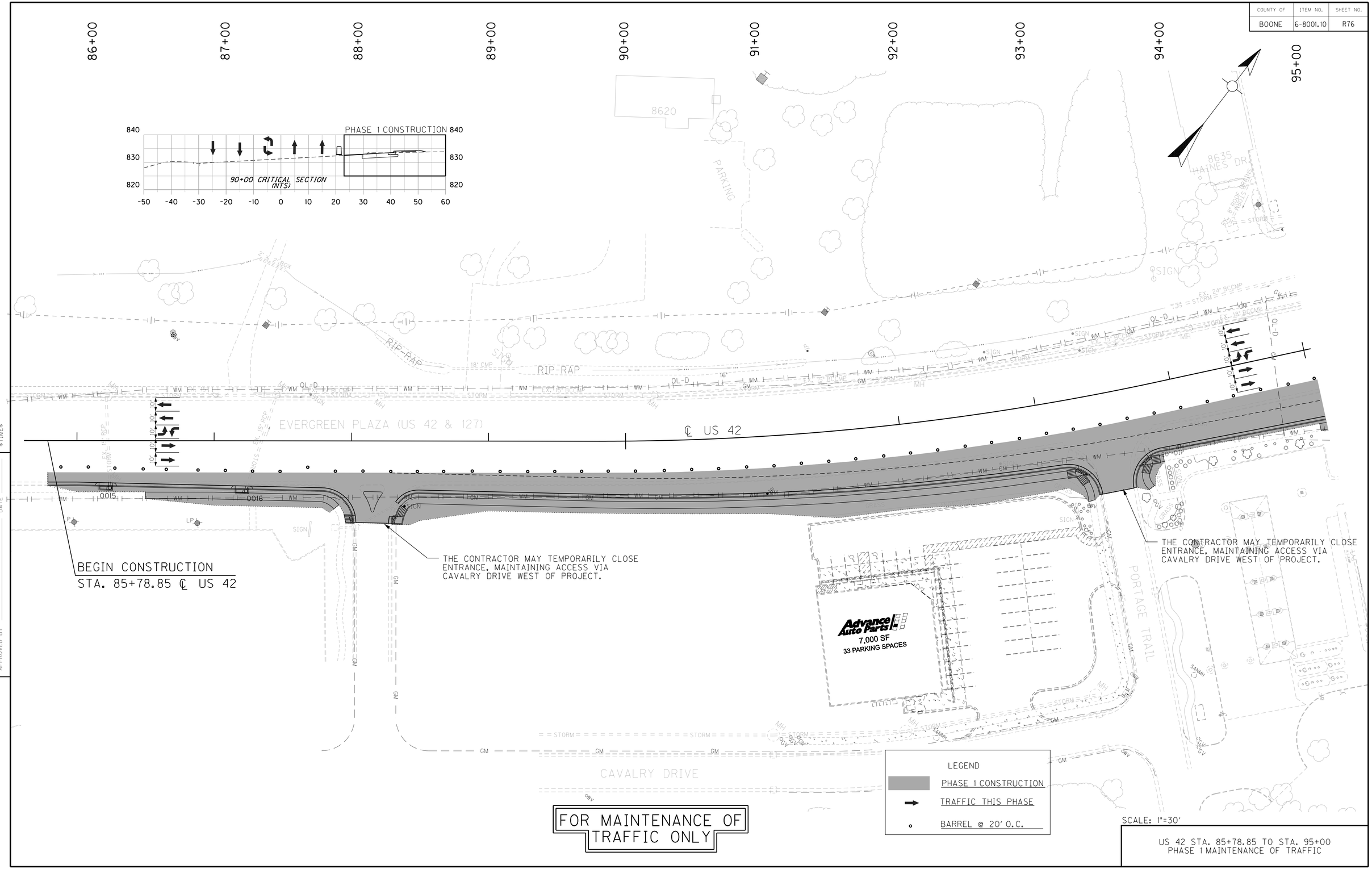
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R76



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

US 42 STA. 85+78.85 TO STA. 95+00
PHASE 1 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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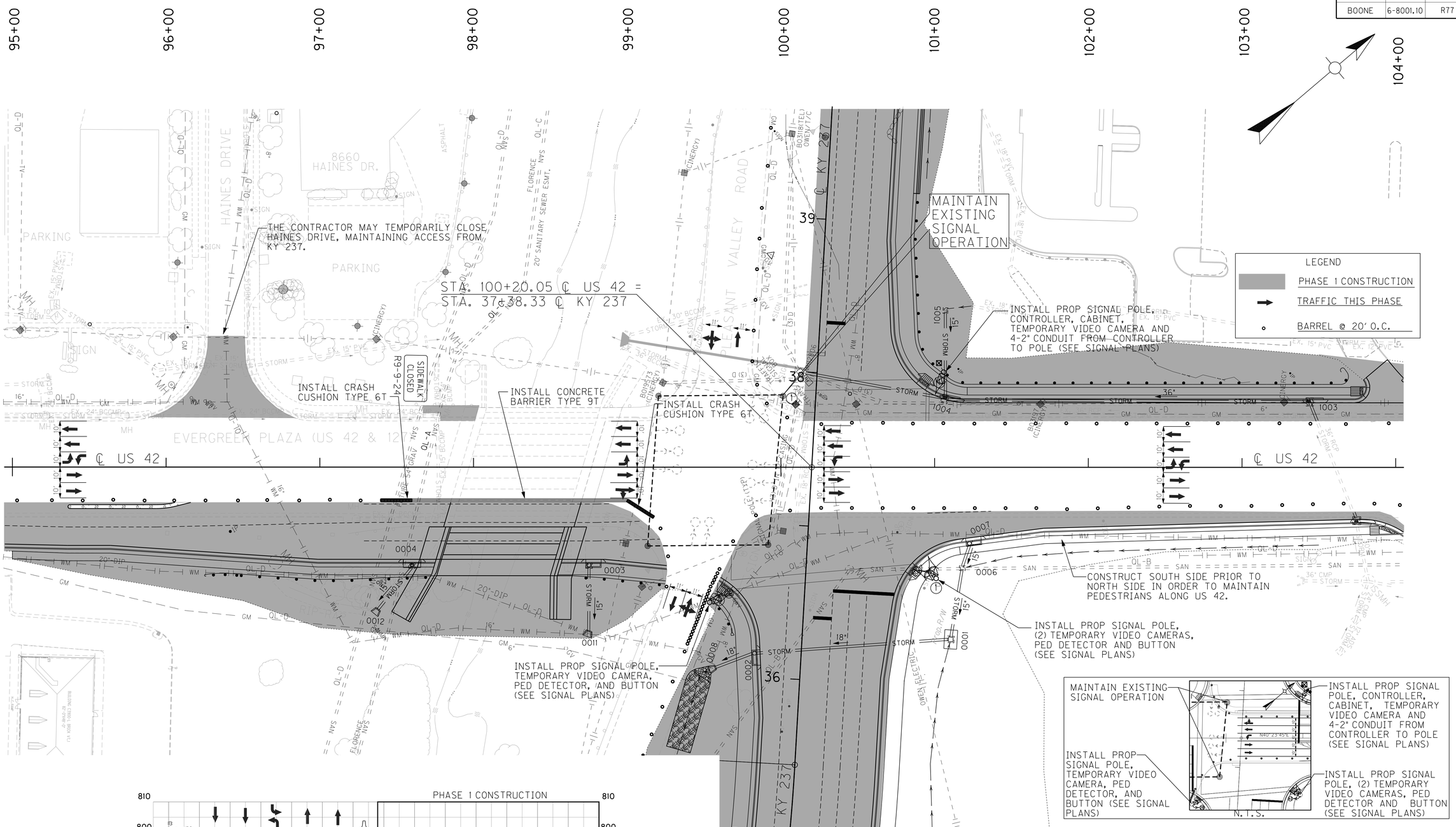
VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R77



TRAFFIC SIGNAL CONSTRUCTION AND OPERATION

FOR MAINTENANCE OF TRAFFIC ONLY

① The contractor shall maintain existing traffic signal at KY 237 and US 42 during phase 1 construction. During which time the contractor shall minimize disturbance to existing signal equipment and assumes responsibility for the replacement of and cost associated with any such damage caused by construction. Partial construction of proposed signal shall take place during phase 1 (as shown on this sheet). Refer to signal plan sheet for proposed signal equipment locations.

SCALE: 1"=30'

US 42 STA. 95+00 TO STA. 104+00
PHASE 1 MAINTENANCE OF TRAFFIC

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COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R78

104+00 105+00 106+00

SIDEWALK CLOSED R9-9-24

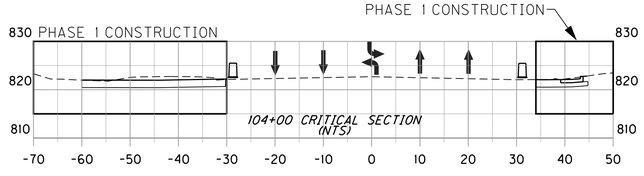
SIDEWALK CLOSED R9-9-24 AHEAD R3-17a

END CONSTRUCTION
STA. 106+57.61 ℄ US 42

℄ US 42

McDonald's
8530 US 42
8534
8526 US 42
8522
8529
ASPHALT PARKING
HARVEY QUAST DRIVE
MEL'S LANE
BEECHWOOD LANE
US 42 & 127
EVERGREEN PLAZA
CONC
POOL
GATE
PARKING
SIGN
MH

PHASE 1 CONSTRUCTION



LEGEND

PHASE 1 CONSTRUCTION

TRAFFIC THIS PHASE

BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

US 42 STA. 104+00 TO STA. 106+40.00
PHASE 1 MAINTENANCE OF TRAFFIC

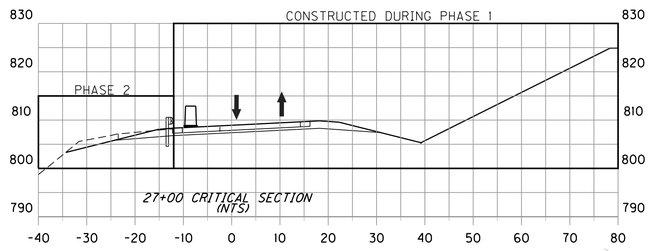
$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R79



PHASE 2

Contractor shall maintain 20'travel way width during the construction.

Install 35 MPH speed limit signs in both directions and all other required road work signs according to the MUTCD.

PRIORITY - Completion of US 42 and the intersection of US 42 and KY 237 to minimize delays and disruption to businesses. The Contractor shall not at any time open US 42 in the vicinity of Portage Trail and Haines Drive as full access to these roads until such time that the raised medians in the vicinity are constructed.

PRIORITY - Comepletion of intermediate phase construction to minimize traffic delays.

Proposed signal at US 42 and KY 237 shall be constructed during Phase 2 and fully operational during Phase 3 construction.

Stripe lanes prior to Phase 3 construction as permitted by construction.

The following work, as indicated to be constructed in Phase 3, may be constructed in Phase 2 during off-peak hours as deemed reasonable by the contractor and approved by the resident Engineer:

-Raised medians on US 42 and KY 237.

LEGEND

- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE 1" = 30'

FOR MAINTENANCE OF TRAFFIC ONLY

KY 237 STA. 23+80 TO STA. 30+00
PHASE 2 MAINENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

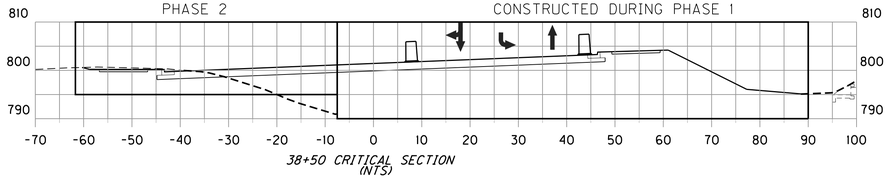
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R80

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00



38+50 CRITICAL SECTION
(NTS)

LEGEND

- PED DETECTOR AND BUTTON
- VIDEO DETECTOR
- SIGNAL HEAD
- SIGNAL POLE
- CONTROLLER

TRAFFIC SIGNAL CONSTRUCTION AND OPERATION

1. The contractor shall utilize partial proposed traffic signal at KY 237 and US 42 during Phase 2 construction (as shown on this sheet). During which time the contractor shall minimize disturbance to any signal equipment in use and assumes responsibility for the replacement of and cost associated with any such damage caused by construction. After Phase I construction, disable traffic signal at existing intersection and enable traffic signal at new intersection using existing and proposed poles. Remove existing signal equipment not being utilized during Phase 2 construction. Contractor shall maintain pedestrian traffic and temporarily adjust signal heads to align with temporary lane configuration (Refer to proposed signal plan sheet for signal head types). All proposed signal wire shall be in place with all slack looped at a signal head. All proposed messenger wire shall be in place with all slack looped at existing signal pole.
2. Temporary video detection shall be used during Phase 2 construction along KY 237 and for left turn lanes on US 42. Contractor shall install video cameras provided by Department.

LEGEND

- REMOVE EXISTING PAVEMENT
- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 30+00 TO STA. 39+00
PHASE 2 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R81

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

LEGEND

- REMOVE EXISTING PAVEMENT
- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

CONSTRUCT TOP PHASE ONLY (THIS PHASE)

THE CONTRACTOR SHALL MAINTAIN ACCESS

TEMPORARY PAVEMENT CONSTRUCTED IN PHASE 1. CONSTRUCT RAISED MEDIAN IN PHASE 3.

Prop. Gravity Wall (See Cross-Sections)

Prop. Retaining Wall (See Structure Plans For Details)

Prop Retaining Wall

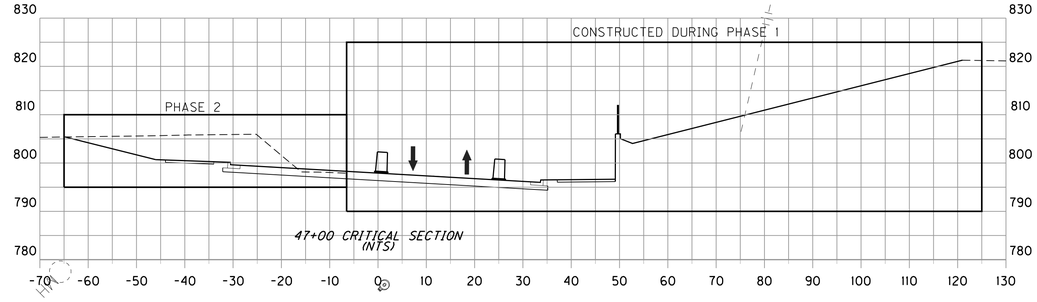
℄ KY 237

HAINES DRIVE

SOUTH FORK

RIP-RAP

2-S BRICK CHURCH
8585 OLD TOLL



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 39+00 TO STA. 48+00
PHASE 2 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

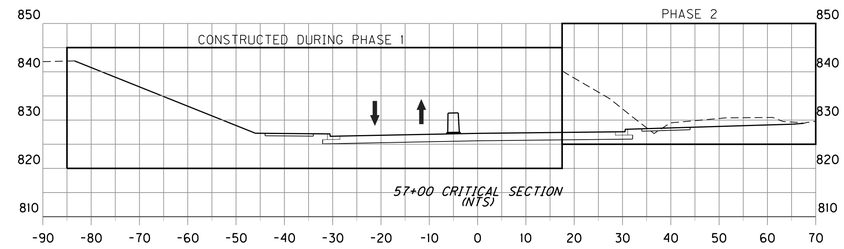
$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Names: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R82

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00



INSTALL CONCRETE BARRIER TYPE 9T
INSTALL CRASH CUSHION TYPE 6T
INSTALL CRASH CUSHION TYPE 6T
4014
24" STORM
18" STORM
4013
4012
18" STORM
4011
15" STORM
4008
15" STORM
18" STORM
4009
4010
15" STORM
3003
3004
3007
Ex. 3005
Ex. 3006
CONTRACTOR SHALL MAINTAIN ACCESS
CONTRACTOR SHALL MAINTAIN ACCESS
QUIET CREEK DRIVE
LENDALE DRIVE
FLORENCE
OWEN
ASPHALT
CR. STONE
CONC.
POOL
1-S FRAME POOL HOUSE
19 LENDALE
1-S BRICK GARAGE
8470 2-S BRICK RES.
8452 2-S BRICK RES.
8820 VALLEY CIRCLE 1-S BRICK RES.
DECK
SIGN
1-WIRE SERVICE
EX 15" PLASTIC
12" F.M.
SAN
STORM
OL-D
OL-C
GM
WM
SAN
FUTURE 36" GRAV.
BIKE PATH
OWEN/T/C
(TEL)
TEL CONC. BOX
ROLL CURB
ASPH
CONC
TR
HW
6' SCV
8' SCV
10' SCV
18" CMP CULVERT
C KY 237
C KY 237 OWEN

LEGEND

PHASE 2 CONSTRUCTION

TRAFFIC THIS PHASE

BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 48+00 TO STA. 57+00
PHASE 2 MAINTENANCE OF TRAFFIC

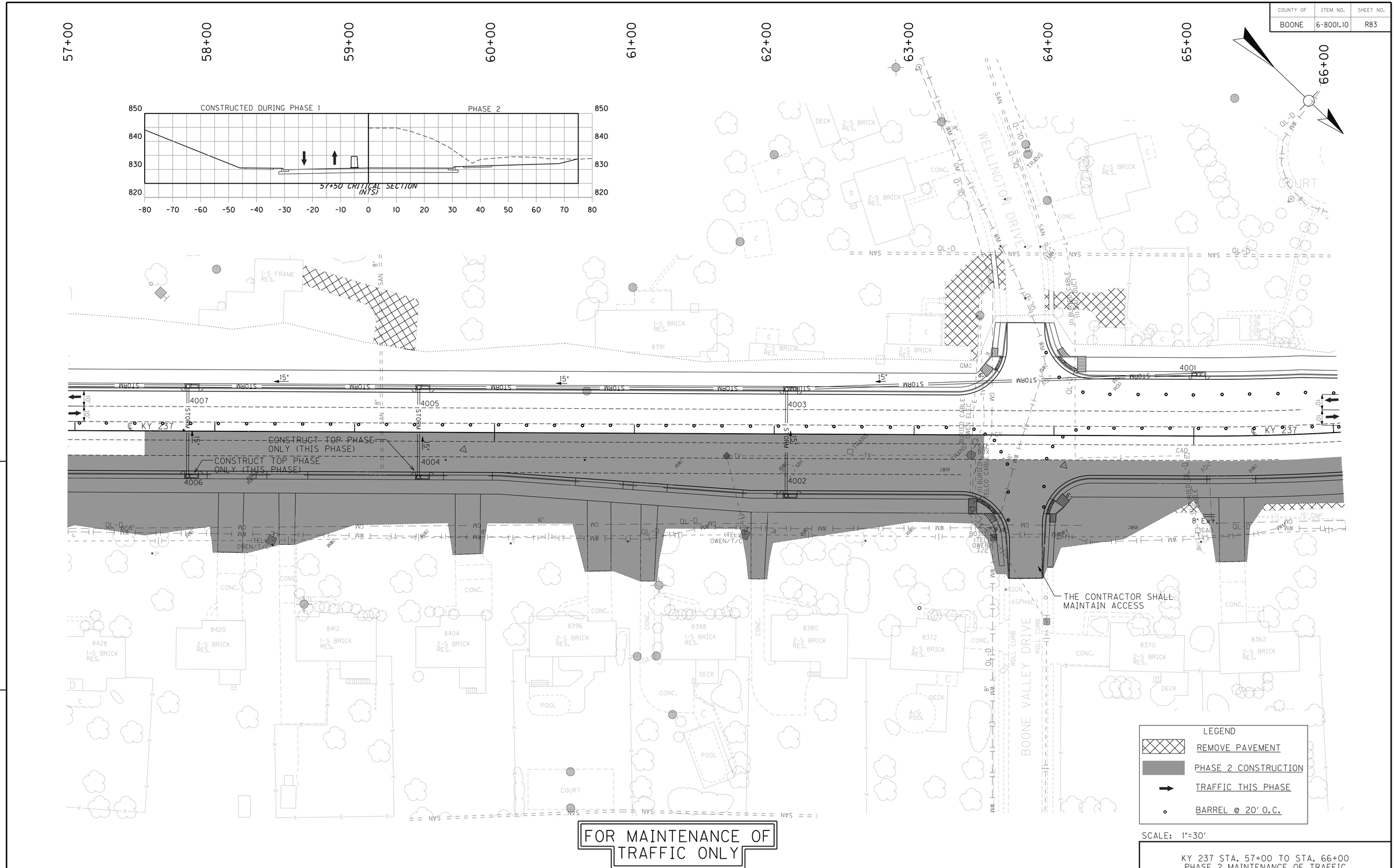
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R83



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

KY 237 STA. 57+00 TO STA. 66+00
PHASE 2 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

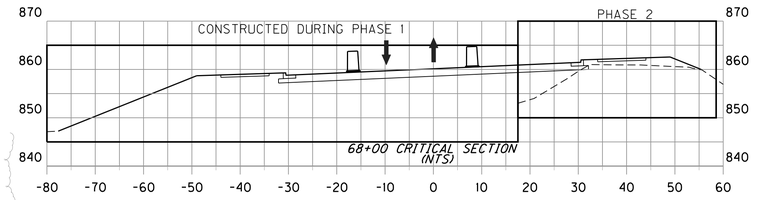
$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R84

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00



FOR MAINTENANCE OF TRAFFIC ONLY

LEGEND

- REMOVE PAVEMENT
- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

KY 237 STA. 66+00 TO STA. 75+00
PHASE 2 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R85

75+00 76+00 77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00

LEGEND

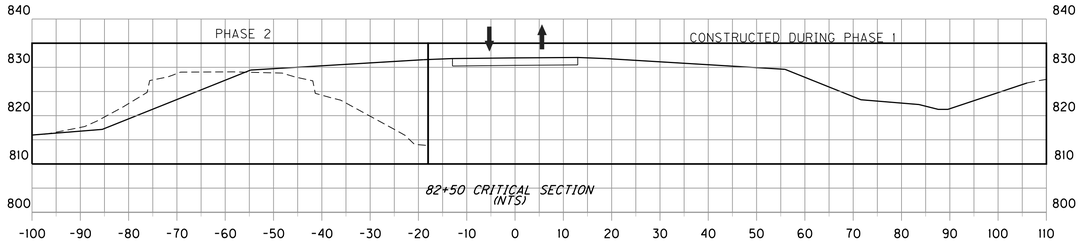
- REMOVE PAVEMENT
- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

ROAD KY 237

INSTALL CRASH CUSHION TYPE 6T

INSTALL CONCRETE BARRIER TYPE 9T

FOR MAINTENANCE OF TRAFFIC ONLY



SCALE: 1"=30'

KY 237 STA. 75+00 TO STA. 83+98.33
PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO STA. 84+00
PHASE 2 MAINTENANCE OF TRAFFIC

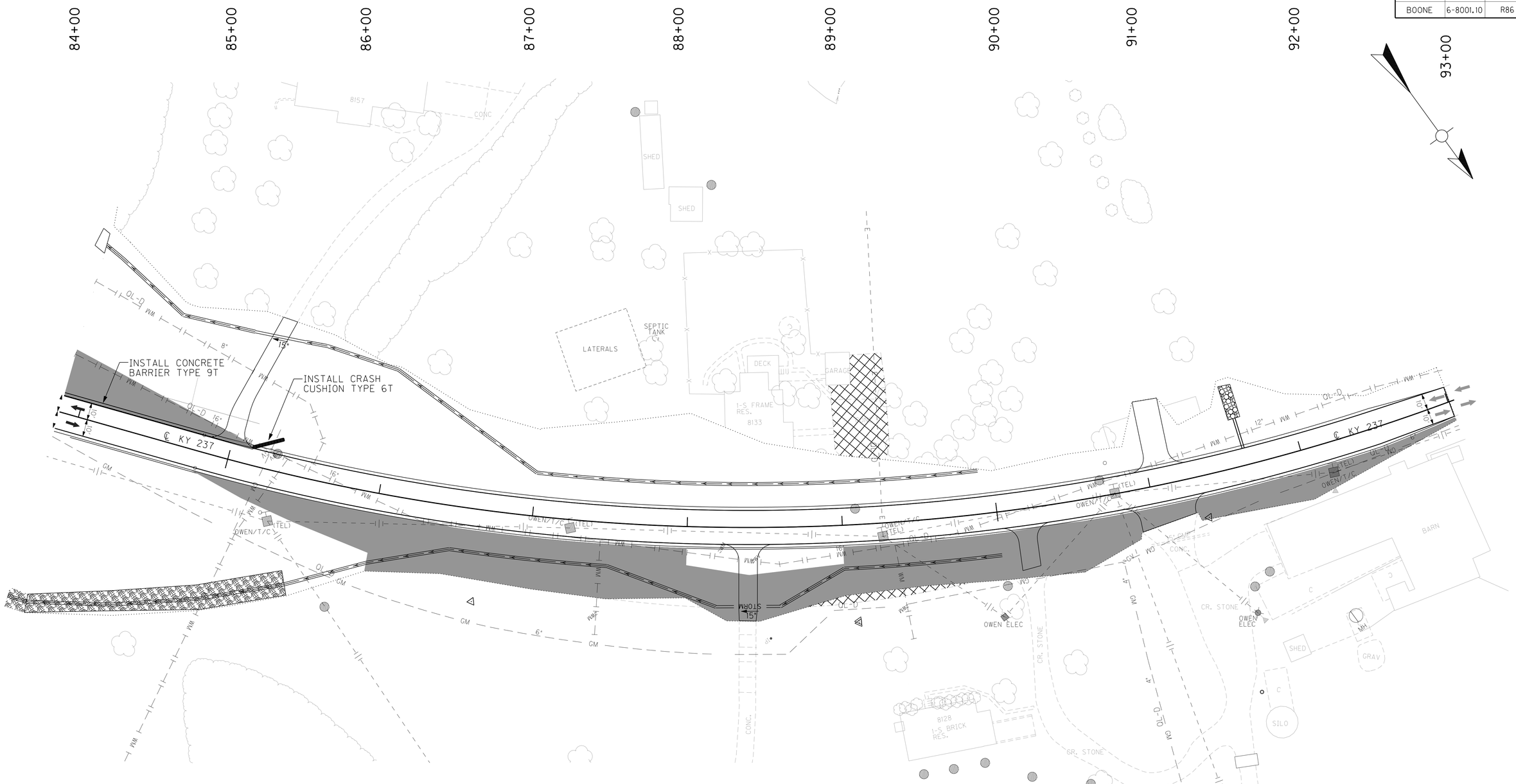
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

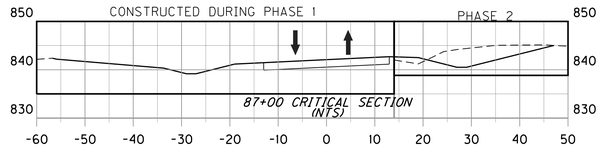
$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R86





LEGEND

- REMOVE PAVEMENT
- PHASE 2 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

FOR MAINTENANCE OF TRAFFIC ONLY

PRACTICAL SOLUTIONS TIE-IN
STA. 84+00 TO STA. 93+00.68
PHASE 2 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R87

39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

PHASE 3

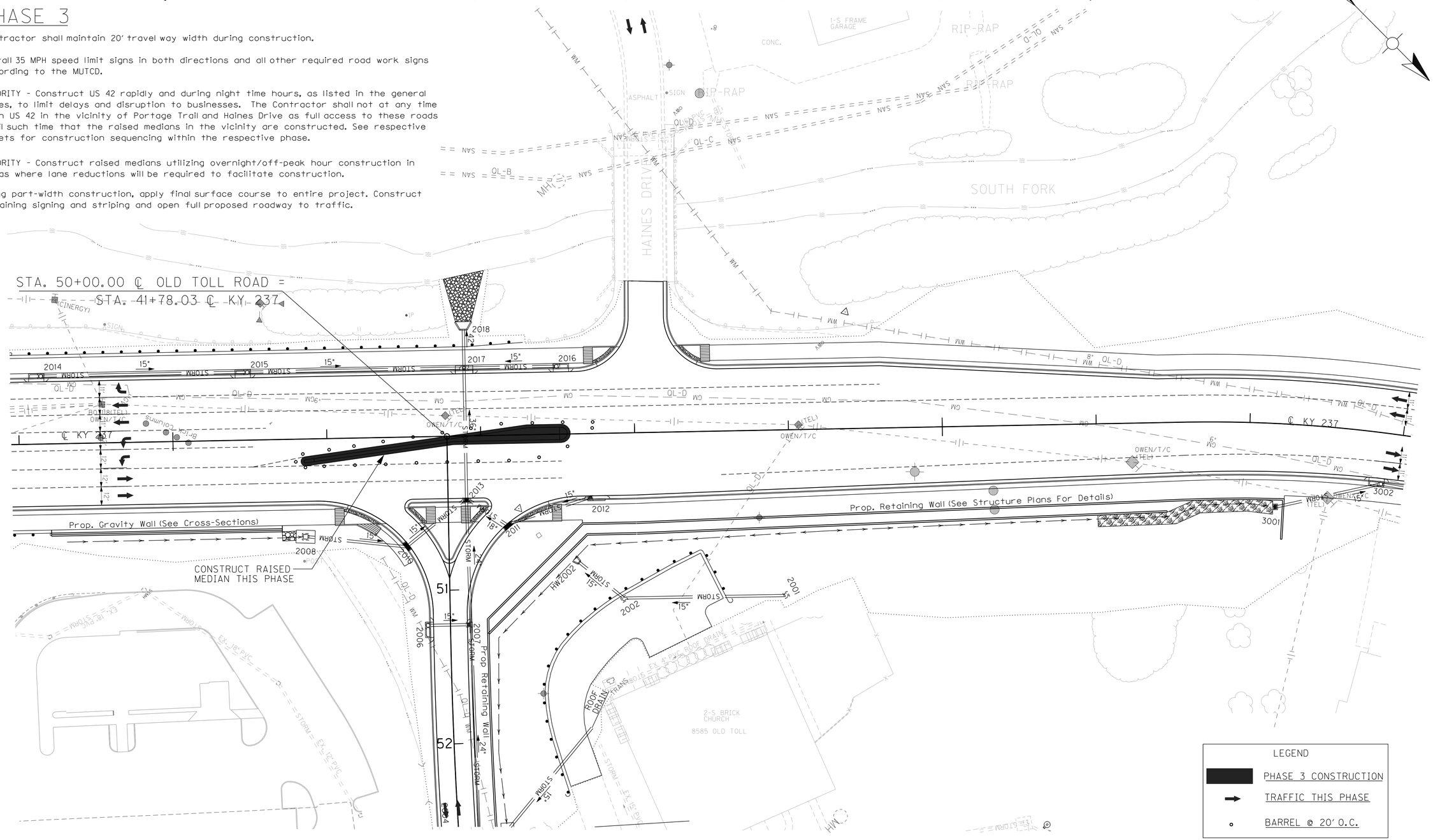
Contractor shall maintain 20' travel way width during construction.

Install 35 MPH speed limit signs in both directions and all other required road work signs according to the MUTCD.

PRIORITY - Construct US 42 rapidly and during night time hours, as listed in the general notes, to limit delays and disruption to businesses. The Contractor shall not at any time open US 42 in the vicinity of Portage Trail and Haines Drive as full access to these roads until such time that the raised medians in the vicinity are constructed. See respective sheets for construction sequencing within the respective phase.

PRIORITY - Construct raised medians utilizing overnight/off-peak hour construction in areas where lane reductions will be required to facilitate construction.

Using part-width construction, apply final surface course to entire project. Construct remaining signing and striping and open full proposed roadway to traffic.



FOR MAINTENANCE OF TRAFFIC ONLY

LEGEND

- PHASE 3 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

SCALE: 1"=30'

KY 237 STA. 39+00 TO STA. 48+00
PHASE 3 MAINTENANCE OF TRAFFIC

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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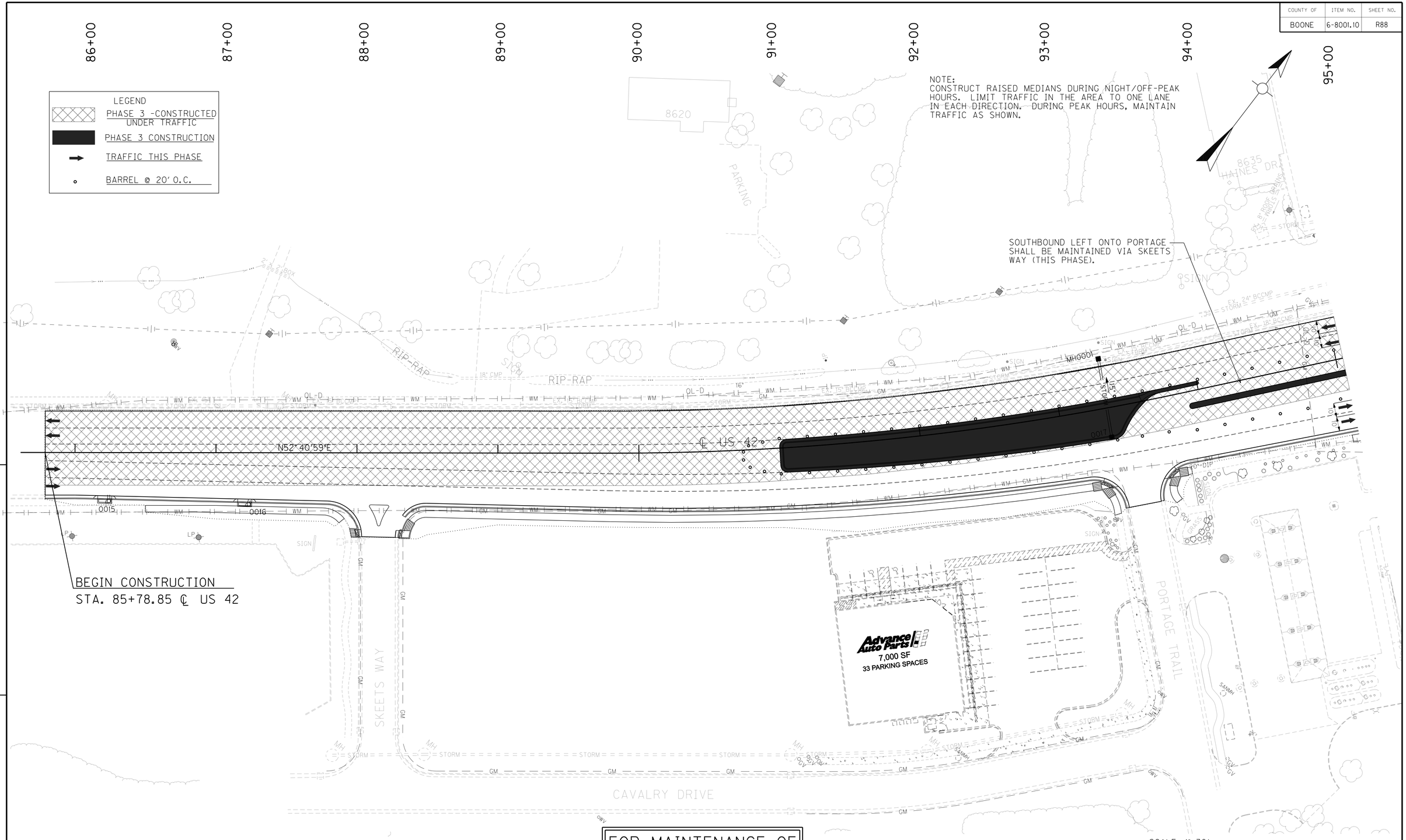
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R88



FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

US 42 STA. 85+78.85 TO STA. 95+00
PHASE 3 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R89

95+00 96+00 97+00 98+00 99+00 100+00 101+00 102+00 103+00 104+00

NOTE:
CONSTRUCT RAISED MEDIANS DURING NIGHT/OFF-PEAK HOURS. LIMIT TRAFFIC IN THE AREA TO ONE LANE IN EACH DIRECTION. DURING PEAK HOURS, MAINTAIN TRAFFIC AS SHOWN.

STA. 100+20.05 ℄ US 42 =
STA. 37+38.33 ℄ KY 237

℄ US 42

℄ KY 237

N40°23'45"E

LEFT TURN TO HAINES CLOSED
THIS PHASE MAINTAIN ACCESS
OFF KY 237.

8660 HAINES DR.

HAINES DRIVE

KY-237 GUNPOWDER ROAD

FLORENCE 20" SANITARY SEWER ESMT.

OWEN ELECTRIC

LEGEND

- PHASE 3 -CONSTRUCTED UNDER TRAFFIC
- PHASE 3 CONSTRUCTION
- TRAFFIC THIS PHASE
- BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

US 42 STA. 95+00 TO STA. 104+00
PHASE 3 MAINTENANCE OF TRAFFIC

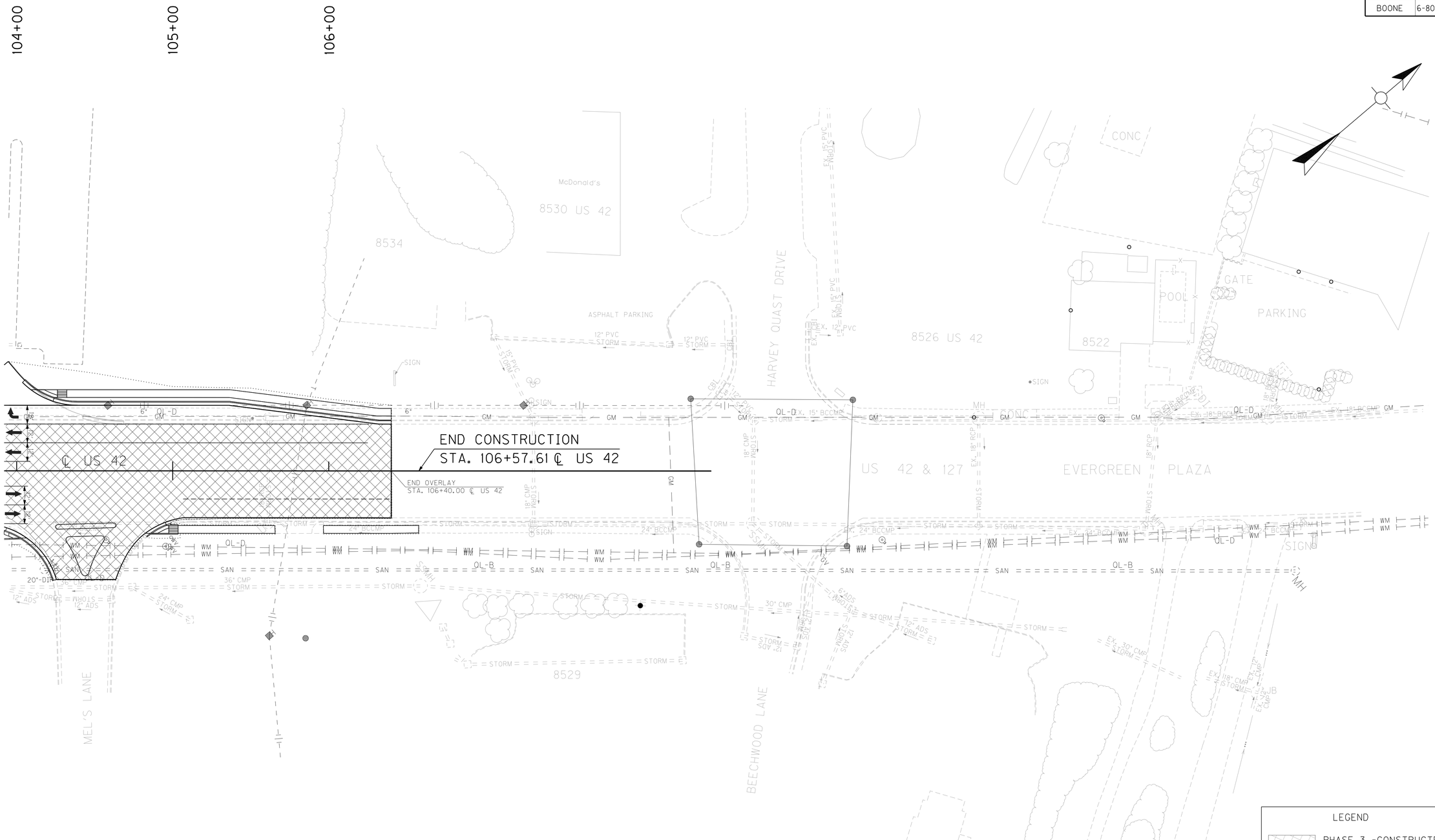
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: SP
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R90



LEGEND

PHASE 3 -CONSTRUCTED UNDER TRAFFIC

TRAFFIC THIS PHASE

BARREL @ 20' O.C.

FOR MAINTENANCE OF TRAFFIC ONLY

SCALE: 1"=30'

US 42 STA. 104+00 TO STA. 106+40.00
PHASE 3 MAINTENANCE OF TRAFFIC

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R91

EROSION CONTROL NOTES

ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN. THE REQUIRED VOLUME AT EACH ADDED SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:

- UPGRADIENT AREAS NOT DISTURBED (ACRES).
- UPGRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH.(ACRES).
- THE USE OF TEMPORARY MULCH IS ENCOURAGED.
- UPGRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
- UPGRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT TRAPS (ACRES).

THE EROSION CONTROL PLAN SHALL BE ANNOTATED AS THE WORK PROCEEDS BY THE CONTRACTOR TO DETAIL THE SELECTION OF EACH EROSION CONTROL DEVICE USED AND THE VOLUME PROVIDED BY EACH SILT TRAP IN ACCORDANCE WITH THE DOCUMENTATION PROCEDURES ESTABLISHED BY THE DIVISION OF CONSTRUCTION.

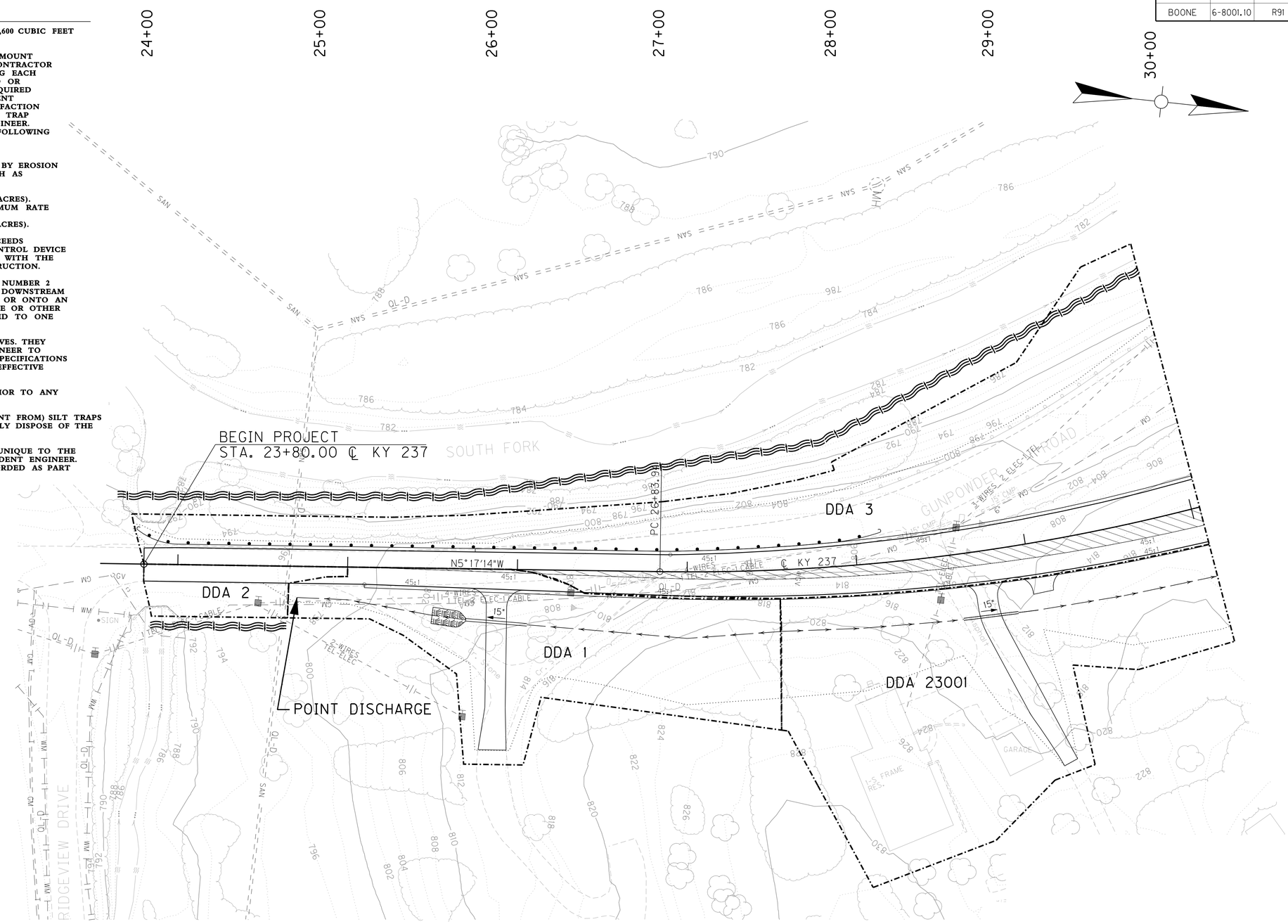
IF A SILT BASIN IS NOT USED THEN ONE SILT TRAP TYPE A, ALTERNATE NUMBER 2 OR SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE MOST REMOTE DOWNSTREAM COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOW EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED OR THE OVERLAND FLOW MAY BE DIVERTED TO ONE OF THE FOREMENTED SILT BASIN OR TRAPS.

THE EROSION CONTROL PLANS DO NOT CONSTITUTE A BMP BY THEMSELVES. THEY PROVIDE A STARTING POINT FOR THE CONTRACTOR AND RESIDENT ENGINEER TO DEVELOP THE BMP ACCORDING TO SECTION 213.03.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE SUPPLEMENTAL SPECS EFFECTIVE WITH THE OCTOBER, 2004 LETTING.

EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER THEY BECOME ONE-HALF FULL AND PROPERLY DISPOSE OF THE MATERIAL AT SITES APPROVED BY THE RESIDENT ENGINEER.

EROSION CONTROL MEASURES EMPLOYED BY THE CONTRACTOR WILL BE UNIQUE TO THE PROJECT AND WORK CONDITIONS AND SHALL BE APPROVED BY THE RESIDENT ENGINEER. THE DEVELOPMENT AND UTILIZATION OF THESE MEASURES WILL BE RECORDED AS PART OF THE BMP, KEPT ON SITE, AND AVAILABLE FOR PUBLIC INSPECTION.



DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 1	0.43	1,548
DDA 2	0.06	216
DDA 3	2.19	7,884
DDA 23001	0.91	3,276

EROSION CONTROL LEGEND

DISTURBED DRAINAGE AREA

OVERLAND SHEET FLOW

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 23+80 TO STA. 30+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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Cell Library: roadway.cel
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DD-MMM-YYYY HH:MM

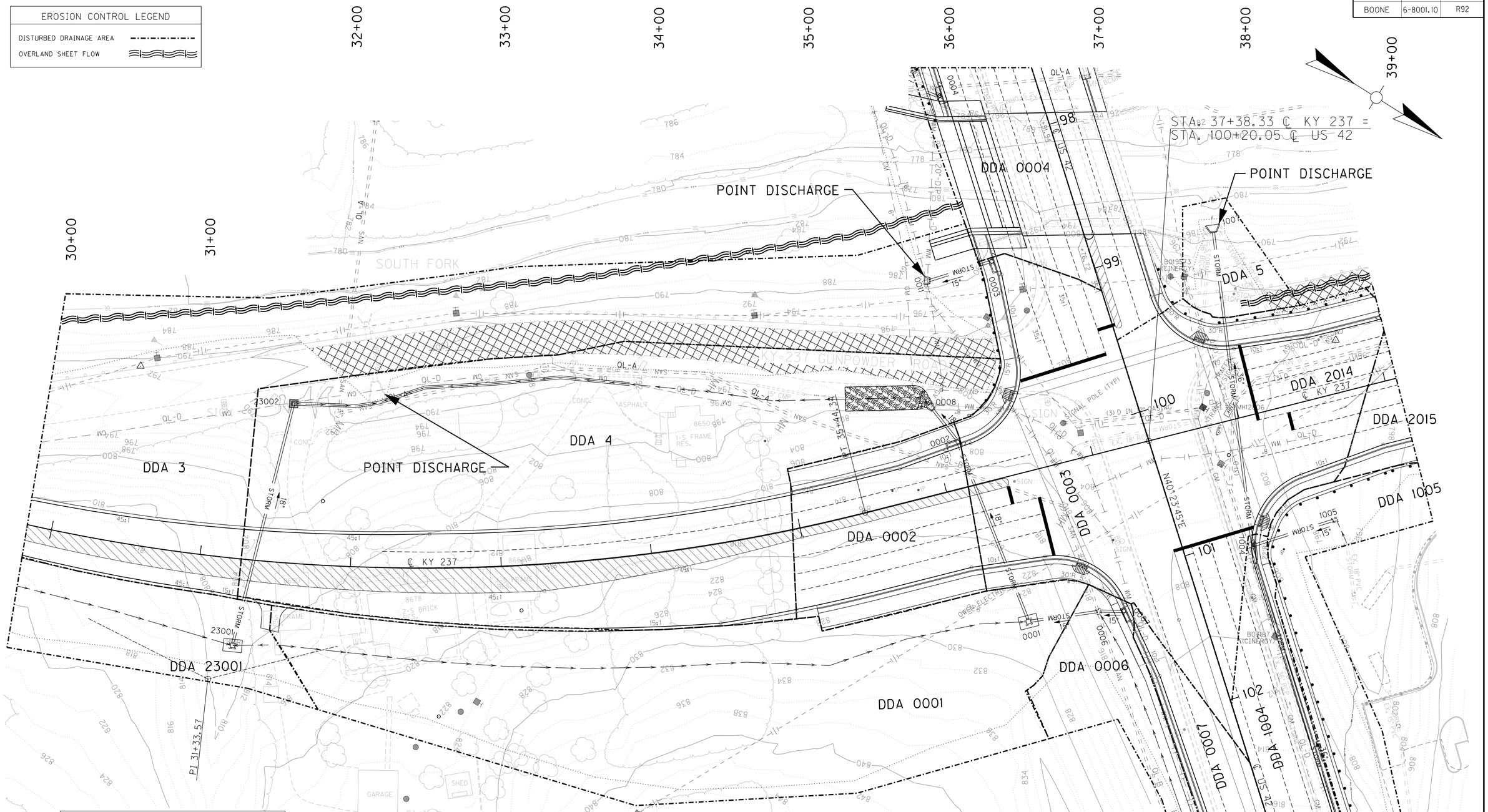
VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R92

EROSION CONTROL LEGEND

DISTURBED DRAINAGE AREA

OVERLAND SHEET FLOW



DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 4	1.61	5,796
DDA 5	0.99	3,564
DDA 0006	0.20	720
DDA 0001	1.17	4,212
DDA 0002	0.31	1,116
DDA 0003	0.60	2,160
DDA 0004	0.59	2,124
DDA 1005	0.42	1,512
DDA 2014	0.52	1,872

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 30+00 TO STA. 39+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R93

EROSION CONTROL LEGEND

DISTURBED DRAINAGE AREA

OVERLAND SHEET FLOW

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

39+00 40+00

POINT DISCHARGE

STA. 41+78.03 ℄ KY 237 =
STA. 50+00.00 ℄ OLD TOLL ROAD

PLEASANT VALLEY ROAD (KY 237)

℄ KY 237

HAINES DRIVE

SOUTH FORK

RIP RAP

DDA 6

DDA 2014

DDA 2015

DDA 2016

DDA 2017

DDA 2013

DDA 2011

DDA 2012

DDA 3002

DDA 2010

DDA 1005

DDA 2008

DDA 2006

DDA 2007

DDA 2004

DDA 2003

DDA 2002

DDA 2001

DDA 3001

Prop. Gravity Wall (See Cross-Sections)

Prop. Retaining Wall (See Structure Plans For Details)

2007 Prop Retaining Wall 24" STORM

PI 47+79.04

PC 46+56.83

PC 51+29.11

PI 52+28.66

N46° 22'05"W

N30° 54'11"W

51+00

52+00

2-S BRICK CHURCH
8585 OLD TOLL

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 6	0.21	756
DDA 2008	0.18	648
DDA 2010	0.21	756
DDA 2011	0.20	720
DDA 2012	0.46	1,656
DDA 2013	0.06	216
DDA 2015	0.38	1,368
DDA 2016	0.35	1,260
DDA 2017	0.37	1,332
DDA 3001	0.48	1,728
DDA 3002	0.72	2,592

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 39+00 TO STA. 48+00

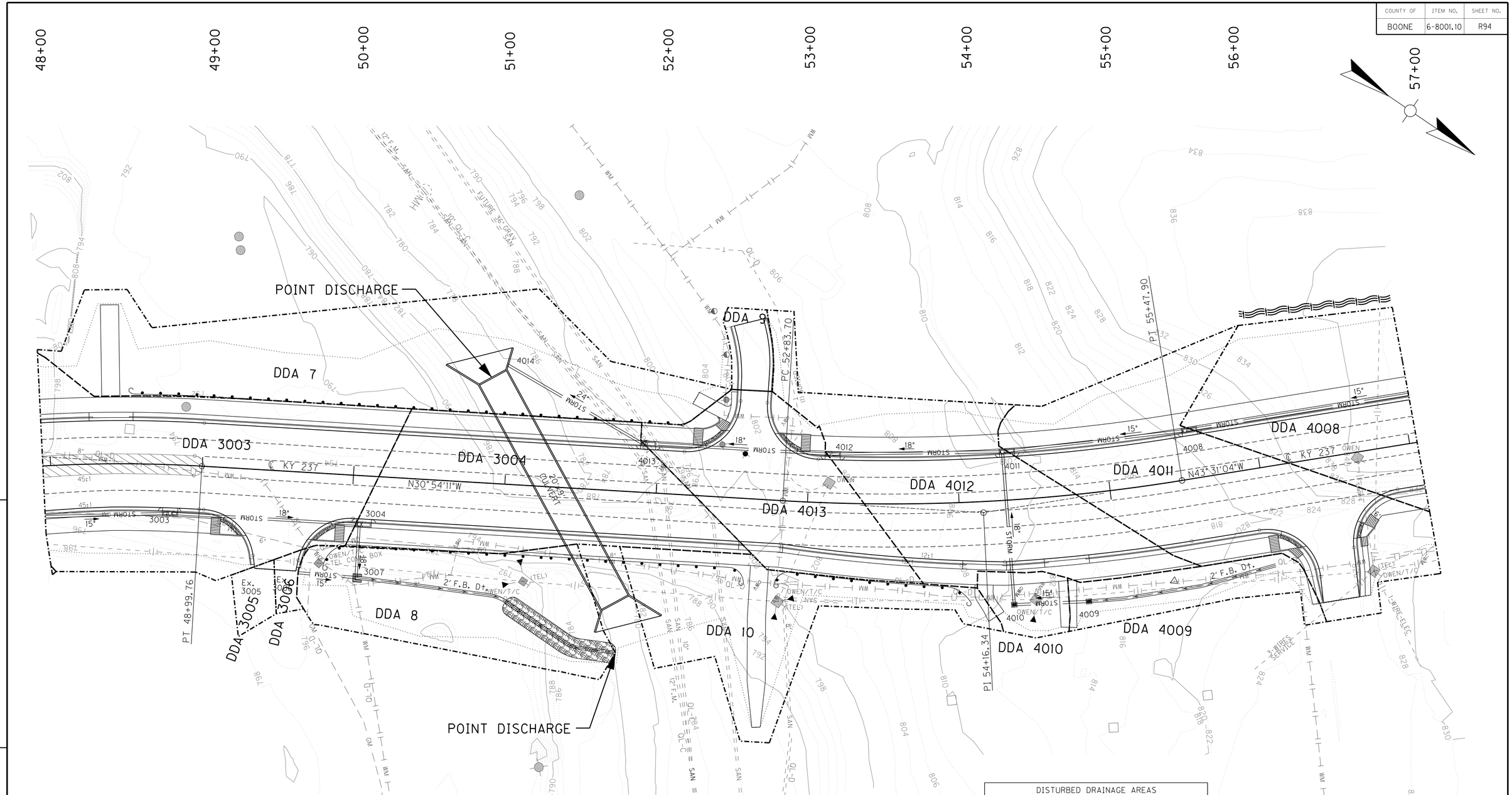
$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R94



DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 7	0.57	2,052
DDA 8	0.30	1,080
DDA 9	0.04	144
DDA 10	0.28	1,008
DDA 3003	0.60	2,160
DDA 3004	0.41	1,476
DDA 3005	0.02	72
DDA 3006	0.01	36
DDA 4008	0.68	2,448
DDA 4009	0.12	432
DDA 4010	0.05	180
DDA 4011	0.55	1,512
DDA 4012	0.42	1,296
DDA 4013	0.28	1,008

EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	-·-·-·-
OVERLAND SHEET FLOW	

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 48+00 TO STA. 57+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

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DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R95

57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00

DDA 11 DDA 12 DDA 13 DDA 14 DDA 15 DDA 16 DDA 17 DDA 18

DDA 4008 DDA 4007 DDA 4006 DDA 4005 DDA 4004 DDA 4003 DDA 4002 DDA 4001

Carol, eliminate this entrance? psf

And here.

PLEASANT VALLEY ROAD (KY 237)

℄ KY 237

N43°34'04"W

PC 65+03.26

ATHERST COURT

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 11	0.19	684
DDA 12	0.17	612
DDA 13	0.16	576
DDA 14	0.19	684
DDA 15	0.06	216
DDA 16	0.07	252
DDA 17	0.61	2,196
DDA 18	0.21	756
DDA 4001	0.49	1,764
DDA 4002	0.46	1,656
DDA 4003	0.15	540
DDA 4004	0.53	1,908
DDA 4005	0.33	1,188
DDA 4006	0.31	1,116
DDA 4007	0.32	1,152

EROSION CONTROL LEGEND

DISTURBED DRAINAGE AREA

OVERLAND SHEET FLOW

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 57+00 TO STA. 66+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
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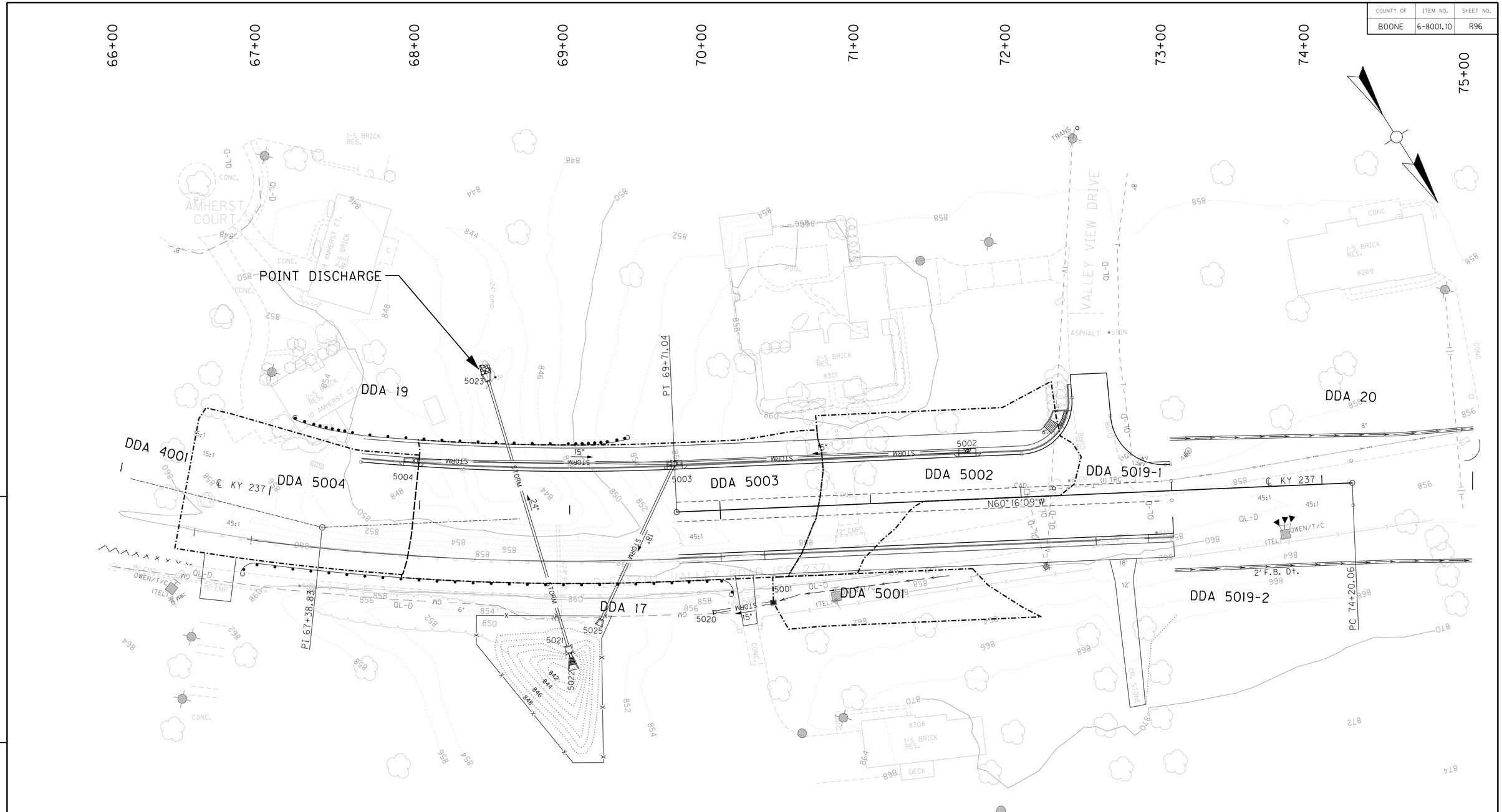
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R96



DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 19	0.35	1,260
DDA 20	3.78	13,608
DDA 5001	0.12	432
DDA 5002	0.29	1,044
DDA 5003	0.56	2,016
DDA 5004	0.30	1,080
DDA 5019-1	1.42	5,112
DDA 5019-2	1.22	4,392

EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 66+00 TO STA. 75+00

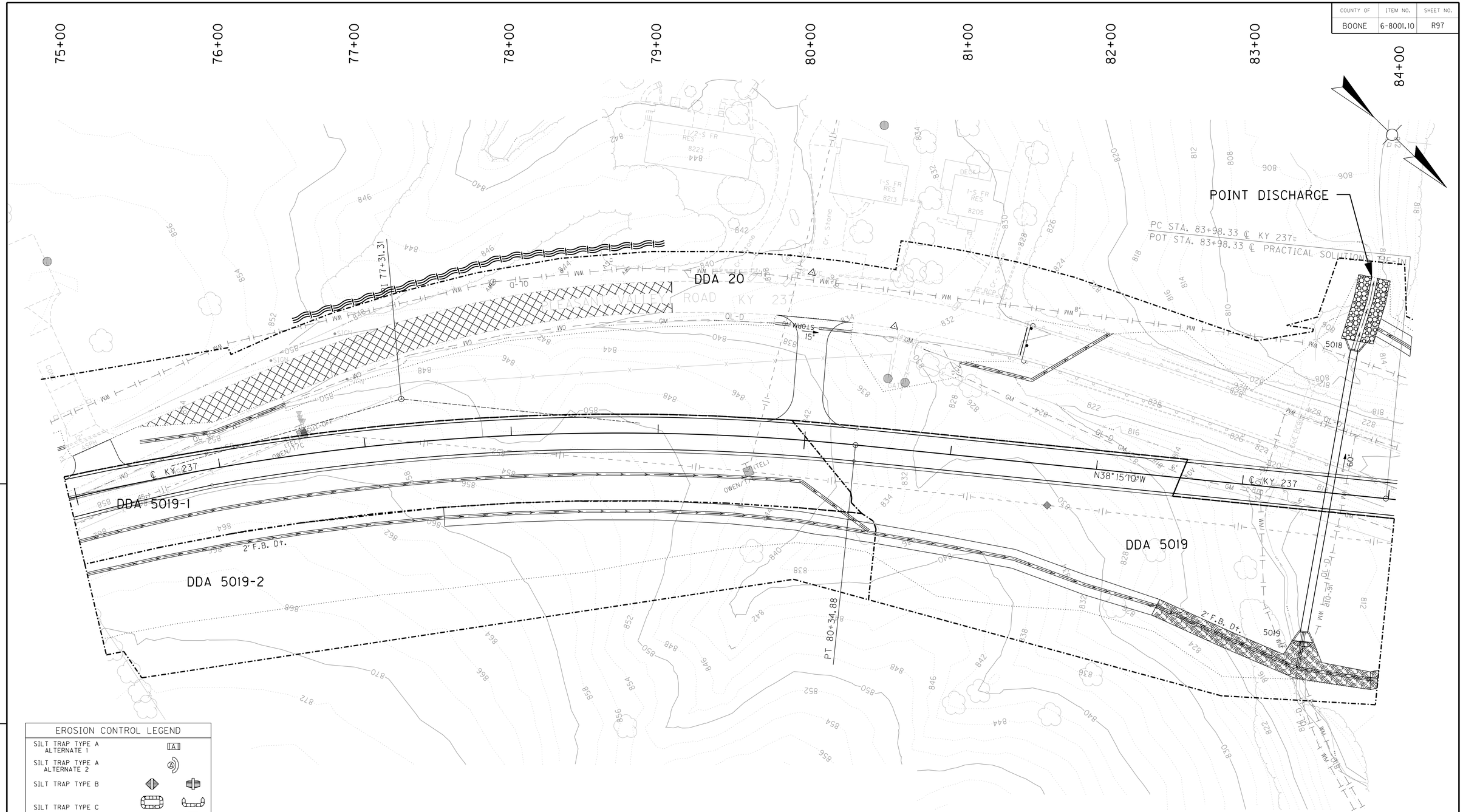
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R97



EROSION CONTROL LEGEND	
SILT TRAP TYPE A ALTERNATE 1	A
SILT TRAP TYPE A ALTERNATE 2	
SILT TRAP TYPE B	
SILT TRAP TYPE C	
SILT FENCE	SF
TEMPORARY SILT DITCH	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	
PROPOSED R/W	
PROPOSED EASEMENT	

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 5019	2.31	8,316

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 75+00 TO STA. 84+00

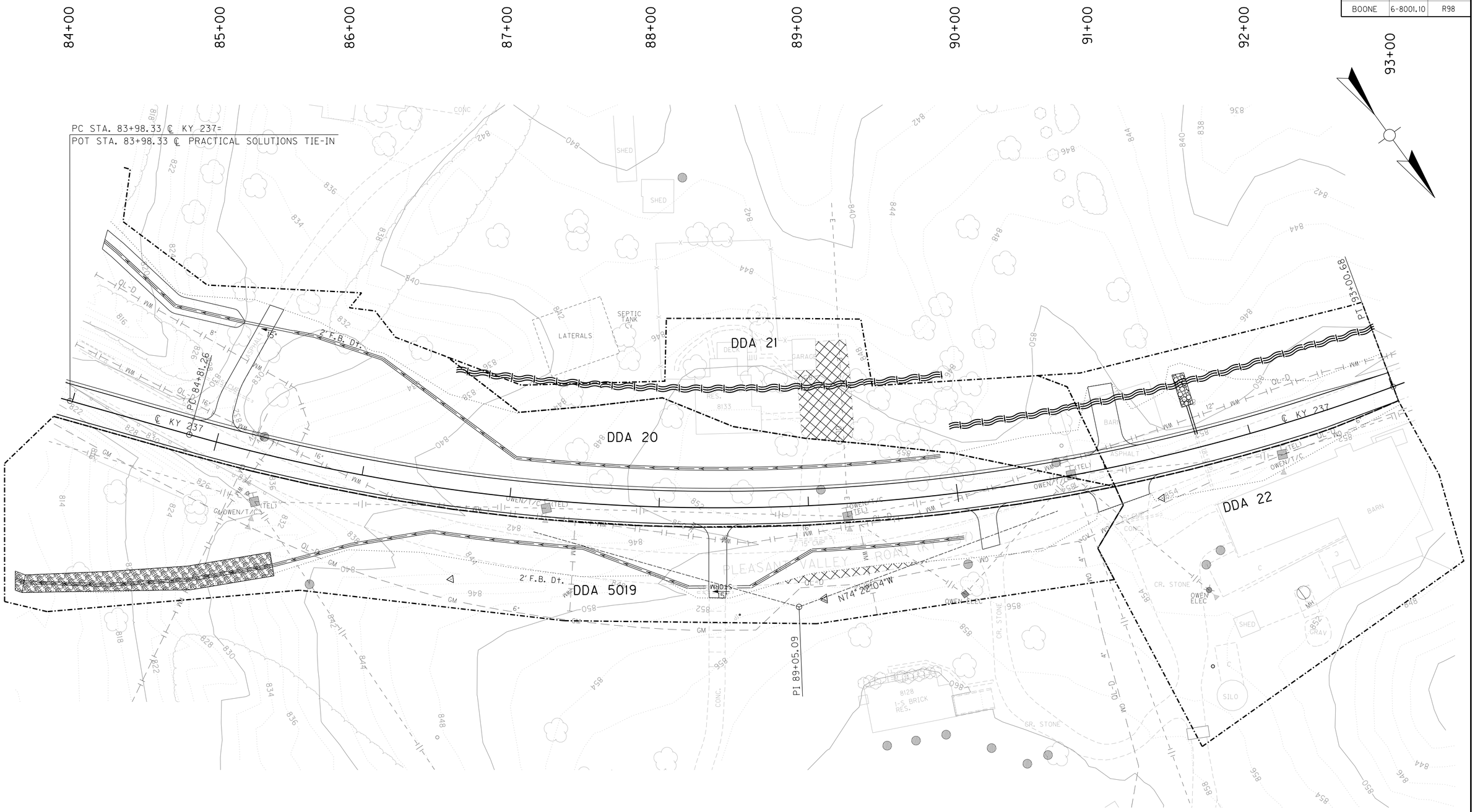
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R98



EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	-·-·-·-
OVERLAND SHEET FLOW	

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 21	0.45	1,620
DDA 22	0.73	2,628

SCALE: 1"=30'

EROSION CONTROL SHEET
KY 237 STA. 84+00 TO 83+98.33
PRACTICAL SOLUTIONS TIE-IN
STA. 83+98.33 TO STA. 93+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

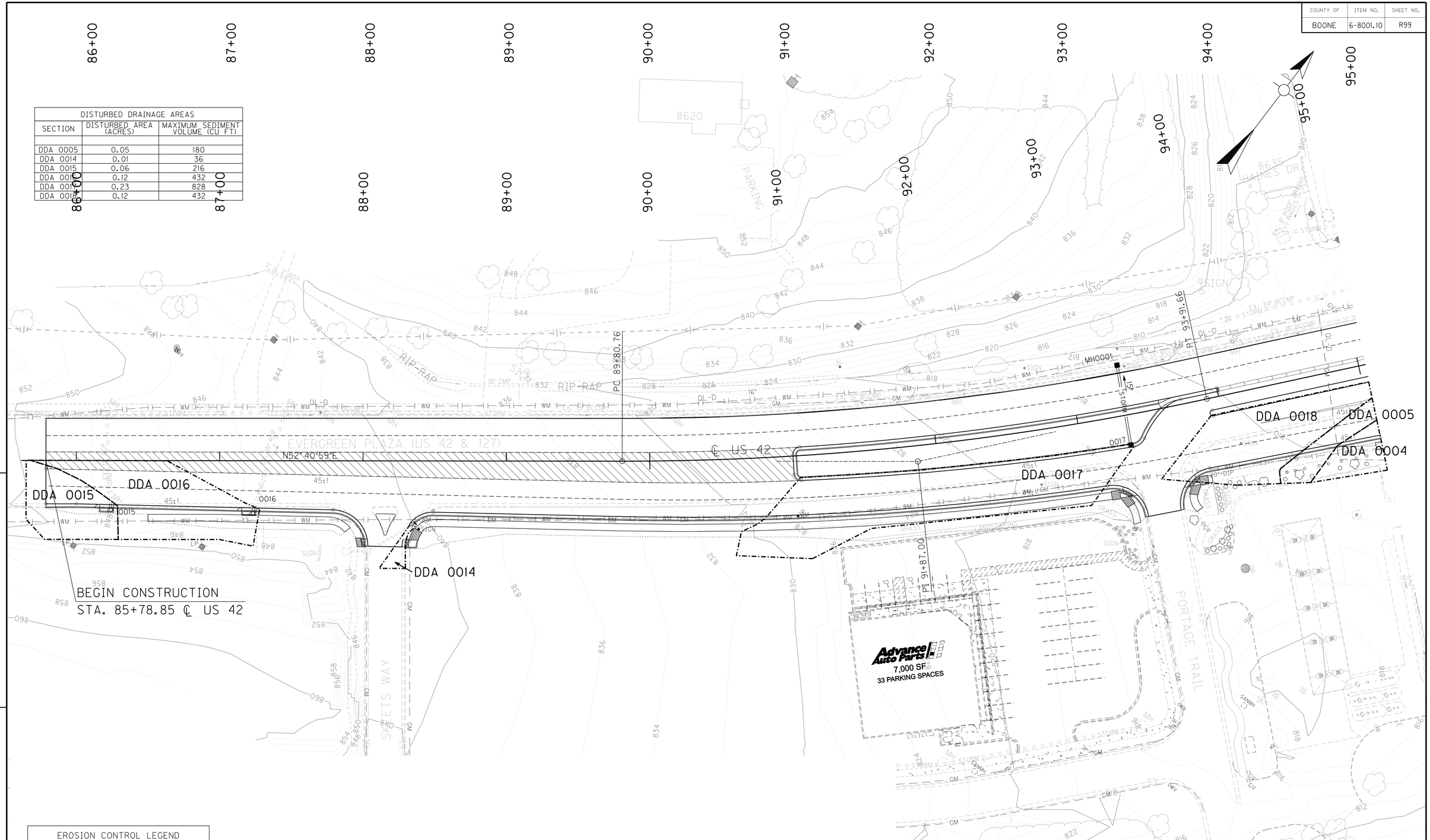
$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R99

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 0005	0.05	180
DDA 0014	0.01	36
DDA 0015	0.06	216
DDA 0016	0.12	432
DDA 0017	0.23	828
DDA 0018	0.12	432



EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	

SCALE: 1"=30'

EROSION CONTROL SHEET
US 42 STA. 85+78.85 TO STA. 95+00

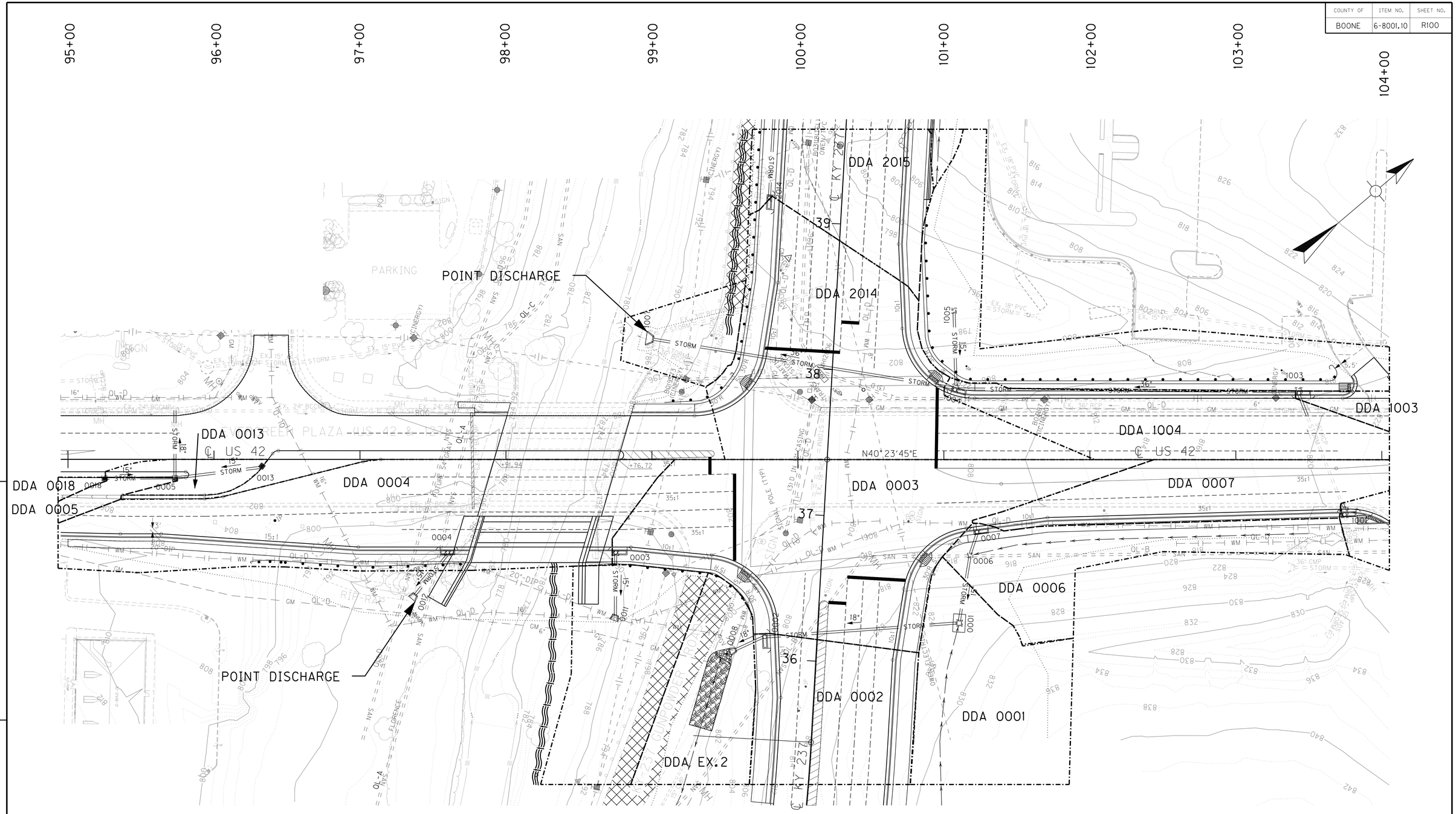
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R100



EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 0006	0.22	792
DDA 0007	0.23	828
DDA 0013	0.04	144
DDA 1004	0.27	972

SCALE: 1"=30'

EROSION CONTROL SHEET
US 42 STA. 95+00 TO STA. 104+00

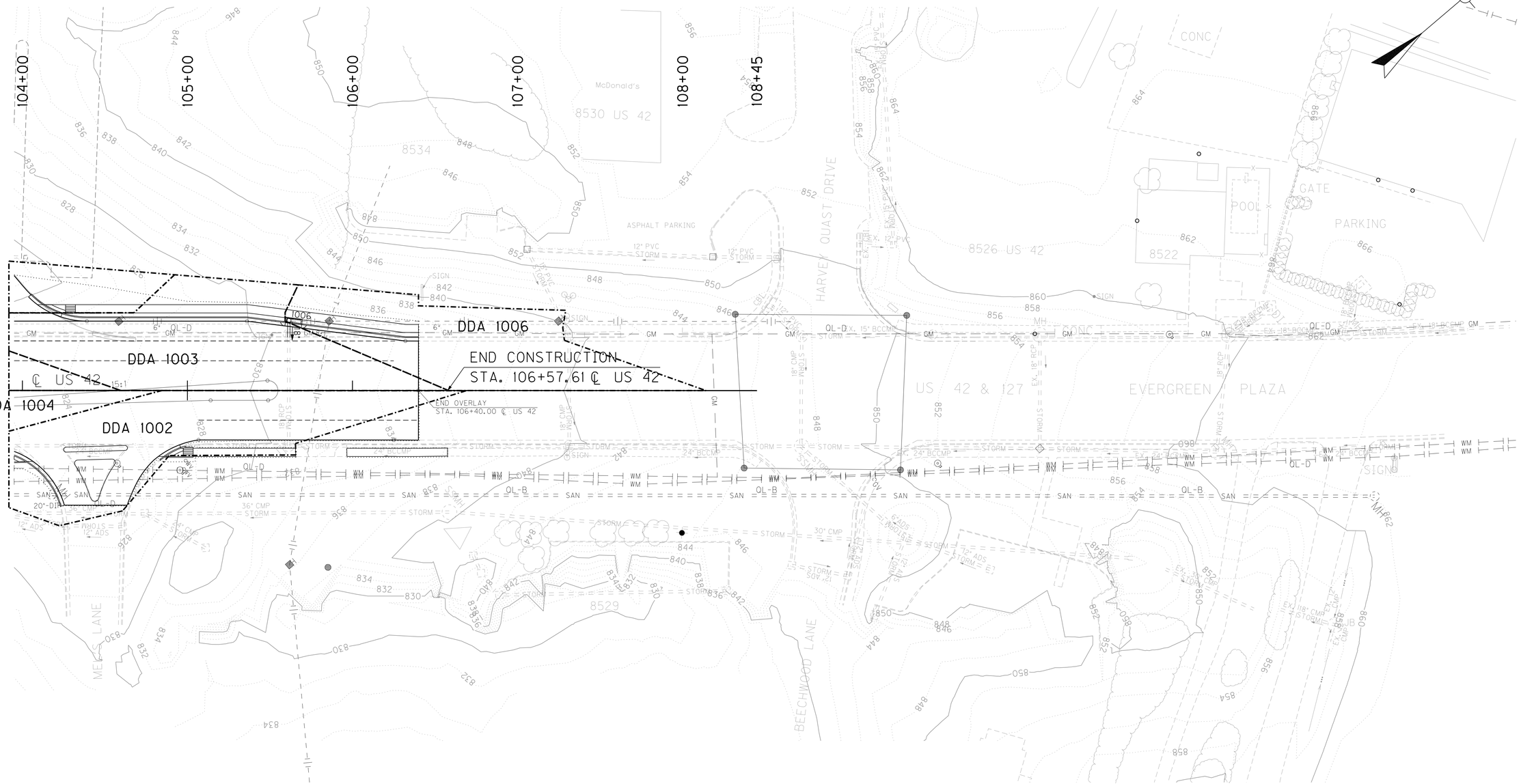
PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

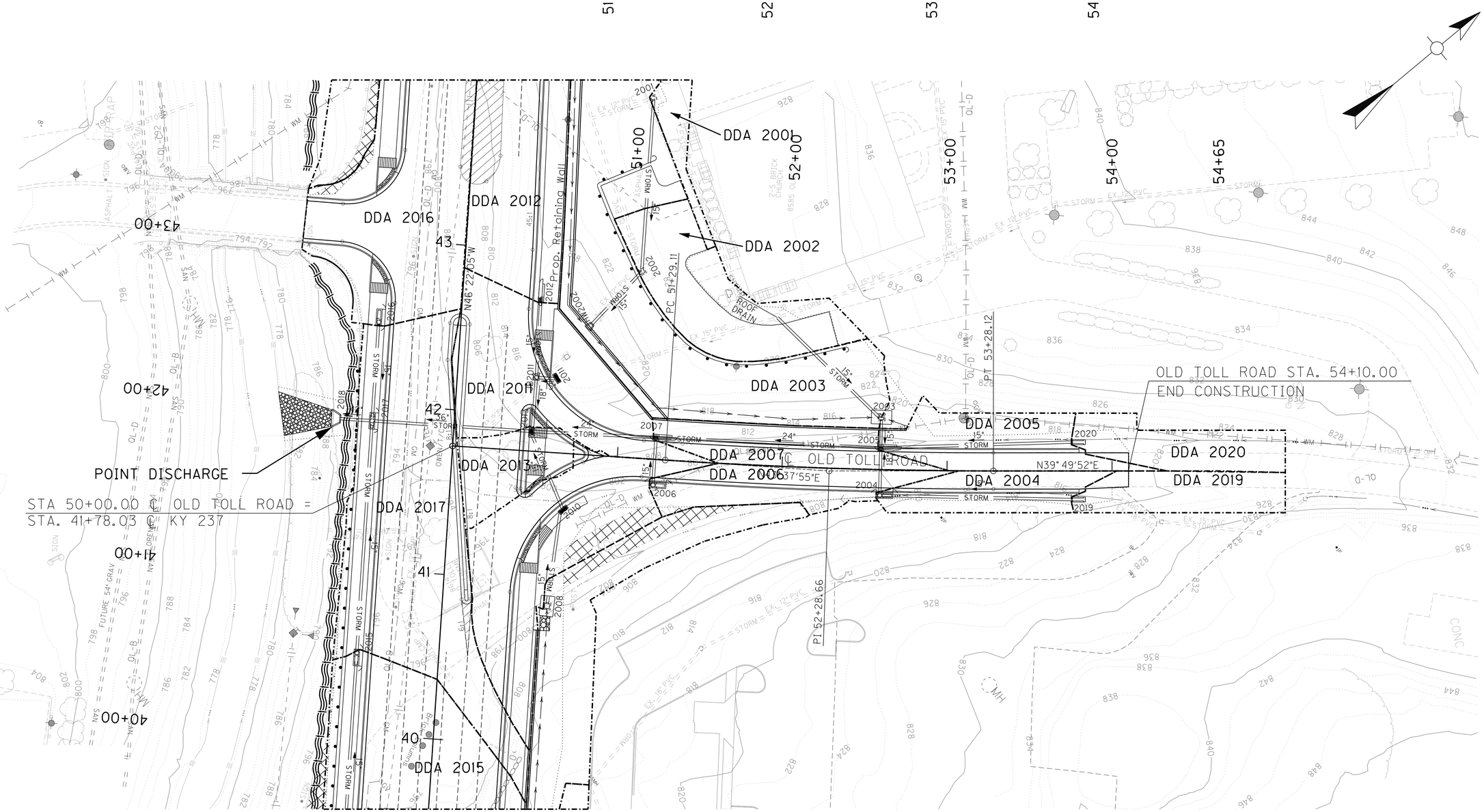
Cell Library: roadway.cel
Cell Name: sp
DD-MMM-YYYY HH:MM

VENDORS NAME
1-92
FORM NO. 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R101


104+00
105+00
106+00
107+00
108+00
108+45
DDA 1006
DDA 1003
DDA 1004
DDA 1002
END CONSTRUCTION
STA. 106+57.61 ℄ US 42
END OVERLAY
STA. 106+40.00 ℄ US 42
℄ US 42
15:1
McDonald's
8530 US 42
8534
8526 US 42
8522
8529
ASPHALT PARKING
HARVEY QUAST DRIVE
MEARS LANE
BEECHWOOD LANE
US 42 & 127
EVERGREEN PLAZA
POOL
GATE
PARKING
CONC
SIGN
MH
OL-D
OL-B
GM
WM
SAN
STORM
12" PVC STORM
18" CMP STORM
24" BCCMP
30" CMP
36" CMP
12" ADS
20'-DI
6' OL-D
EX. 15" BCCMP STORM
EX. 18" RCP STORM
EX. 24" BCCMP STORM
EX. 18" BCCMP GM
EX. 12" CMP STORM
EX. 18" CMP STORM
EX. 30" CMP STORM
EX. 36" CMP STORM
EX. 12" ADS STORM
EX. 18" ADS STORM
EX. 24" ADS STORM
EX. 30" ADS STORM
EX. 36" ADS STORM
EX. 12" PVC STORM
EX. 18" PVC STORM
EX. 24" PVC STORM
EX. 30" PVC STORM
EX. 36" PVC STORM
EX. 12" CMP
EX. 18" CMP
EX. 24" CMP
EX. 30" CMP
EX. 36" CMP
EX. 12" ADS
EX. 18" ADS
EX. 24" ADS
EX. 30" ADS
EX. 36" ADS
EX. 12" PVC
EX. 18" PVC
EX. 24" PVC
EX. 30" PVC
EX. 36" PVC
EX. 18" RCP
EX. 24" RCP
EX. 30" RCP
EX. 36" RCP
EX. 18" CMP STORM
EX. 24" CMP STORM
EX. 30" CMP STORM
EX. 36" CMP STORM
EX. 18" ADS STORM
EX. 24" ADS STORM
EX. 30" ADS STORM
EX. 36" ADS STORM
EX. 18" PVC STORM
EX. 24" PVC STORM
EX. 30" PVC STORM
EX. 36" PVC STORM
EX. 18" CMP
EX. 24" CMP
EX. 30" CMP
EX. 36" CMP
EX. 18" ADS
EX. 24" ADS
EX. 30" ADS
EX. 36" ADS

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R102



EROSION CONTROL LEGEND	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	

DISTURBED DRAINAGE AREAS		
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 2001	0.03	108
DDA 2002	0.15	540
DDA 2003	0.37	1,332
DDA 2004	0.07	252
DDA 2005	0.09	324
DDA 2006	0.08	288
DDA 2007	0.08	288
DDA 2019	0.07	252
DDA 2020	0.07	252

SCALE: 1"=30'

EROSION CONTROL SHEET
OLD TOLL ROAD STA. 50+00 TO STA. 54+10

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

Cell Library: roadway.cel
Cell Names: sp
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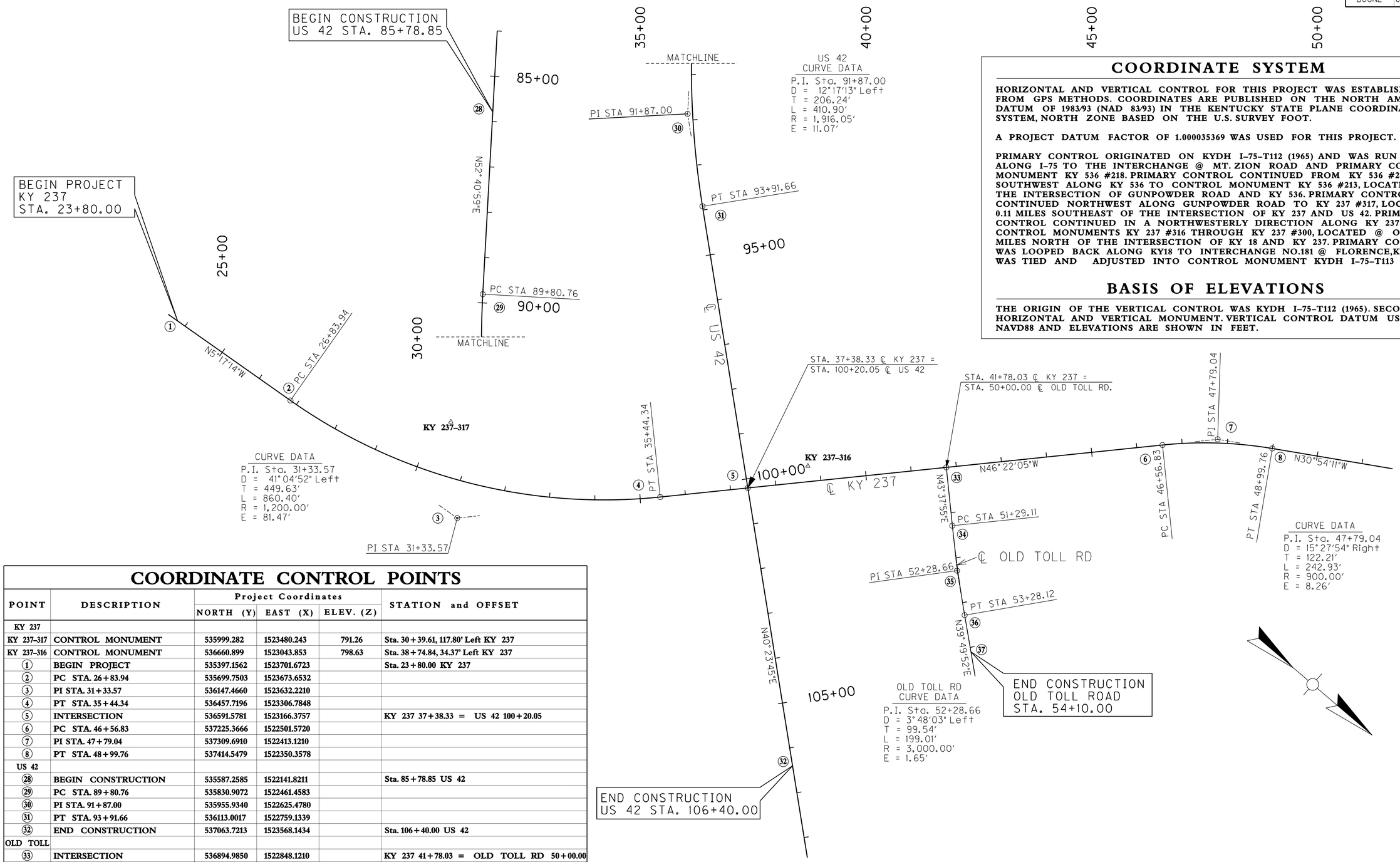
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R103



US 42
CURVE DATA
P.I. Sta. 91+87.00
D = 12°17'13" Left
T = 206.24'
L = 410.90'
R = 1,916.05'
E = 11.07'

CURVE DATA
P.I. Sta. 31+33.57
D = 41°04'52" Left
T = 449.63'
L = 860.40'
R = 1,200.00'
E = 81.47'

OLD TOLL RD
CURVE DATA
P.I. Sta. 52+28.66
D = 3°48'03" Left
T = 99.54'
L = 199.01'
R = 3,000.00'
E = 1.65'

CURVE DATA
P.I. Sta. 47+79.04
D = 15°27'54" Right
T = 122.21'
L = 242.93'
R = 900.00'
E = 8.26'

COORDINATE SYSTEM

HORIZONTAL AND VERTICAL CONTROL FOR THIS PROJECT WAS ESTABLISHED FROM GPS METHODS. COORDINATES ARE PUBLISHED ON THE NORTH AMERICAN DATUM OF 1983/93 (NAD 83/93) IN THE KENTUCKY STATE PLANE COORDINATES SYSTEM, NORTH ZONE BASED ON THE U.S. SURVEY FOOT.

A PROJECT DATUM FACTOR OF 1.000035369 WAS USED FOR THIS PROJECT.

PRIMARY CONTROL ORIGINATED ON KYDH I-75-T112 (1965) AND WAS RUN SOUTH ALONG I-75 TO THE INTERCHANGE @ MT. ZION ROAD AND PRIMARY CONTROL MONUMENT KY 536 #218. PRIMARY CONTROL CONTINUED FROM KY 536 #218 SOUTHWEST ALONG KY 536 TO CONTROL MONUMENT KY 536 #213, LOCATED @ THE INTERSECTION OF GUNPOWDER ROAD AND KY 536. PRIMARY CONTROL CONTINUED NORTHWEST ALONG GUNPOWDER ROAD TO KY 237 #317, LOCATED 0.11 MILES SOUTHEAST OF THE INTERSECTION OF KY 237 AND US 42. PRIMARY CONTROL CONTINUED IN A NORTHWESTERLY DIRECTION ALONG KY 237 THROUGH CONTROL MONUMENTS KY 237 #316 THROUGH KY 237 #300, LOCATED @ 0.23 MILES NORTH OF THE INTERSECTION OF KY 18 AND KY 237. PRIMARY CONTROL WAS LOOPED BACK ALONG KY18 TO INTERCHANGE NO.181 @ FLORENCE,KY. AND WAS TIED AND ADJUSTED INTO CONTROL MONUMENT KYDH I-75-T113 (1965).

BASIS OF ELEVATIONS

THE ORIGIN OF THE VERTICAL CONTROL WAS KYDH I-75-T112 (1965). SECOND ORDER HORIZONTAL AND VERTICAL MONUMENT. VERTICAL CONTROL DATUM USED WAS NAVD88 AND ELEVATIONS ARE SHOWN IN FEET.

COORDINATE CONTROL POINTS

POINT	DESCRIPTION	Project Coordinates			STATION and OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)	
KY 237					
KY 237-317	CONTROL MONUMENT	535999.282	1523480.243	791.26	Sta. 30+39.61, 117.80' Left KY 237
KY 237-316	CONTROL MONUMENT	536660.899	1523043.853	798.63	Sta. 38+74.84, 34.37' Left KY 237
①	BEGIN PROJECT	535397.1562	1523701.6723		Sta. 23+80.00 KY 237
②	PC STA. 26+83.94	535699.7503	1523673.6532		
③	PI STA. 31+33.57	536147.4660	1523632.2210		
④	PT STA. 35+44.34	536457.7196	1523306.7848		
⑤	INTERSECTION	536591.5781	1523166.3757		KY 237 37+38.33 = US 42 100+20.05
⑥	PC STA. 46+56.83	537225.3666	1522501.5720		
⑦	PI STA. 47+79.04	537309.6910	1522413.1210		
⑧	PT STA. 48+99.76	537414.5479	1522350.3578		
US 42					
㉘	BEGIN CONSTRUCTION	535587.2585	1522141.8211		Sta. 85+78.85 US 42
㉙	PC STA. 89+80.76	535830.9072	1522461.4583		
㉚	PI STA. 91+87.00	535955.9340	1522625.4780		
㉛	PT STA. 93+91.66	536113.0017	1522759.1339		
㉜	END CONSTRUCTION	537063.7213	1523568.1434		Sta. 106+40.00 US 42
OLD TOLL					
㉝	INTERSECTION	536894.9850	1522848.1210		KY 237 41+78.03 = OLD TOLL RD 50+00.00
㉞	PC STA. 51+29.11	536988.4367	1522937.2129		
㉟	PI STA. 52+28.66	537060.4830	1523005.8980		
㊱	PT STA. 53+28.12	537136.9238	1523069.6563		
㊲	END CONSTRUCTION	537199.8004	1523122.1009		Sta. 54+10.00 OLD TOLL RD

SCALE: 1"=100'

COORDINATE CONTROL SHEET
KY 237 STA. 23+80 TO STA. 52+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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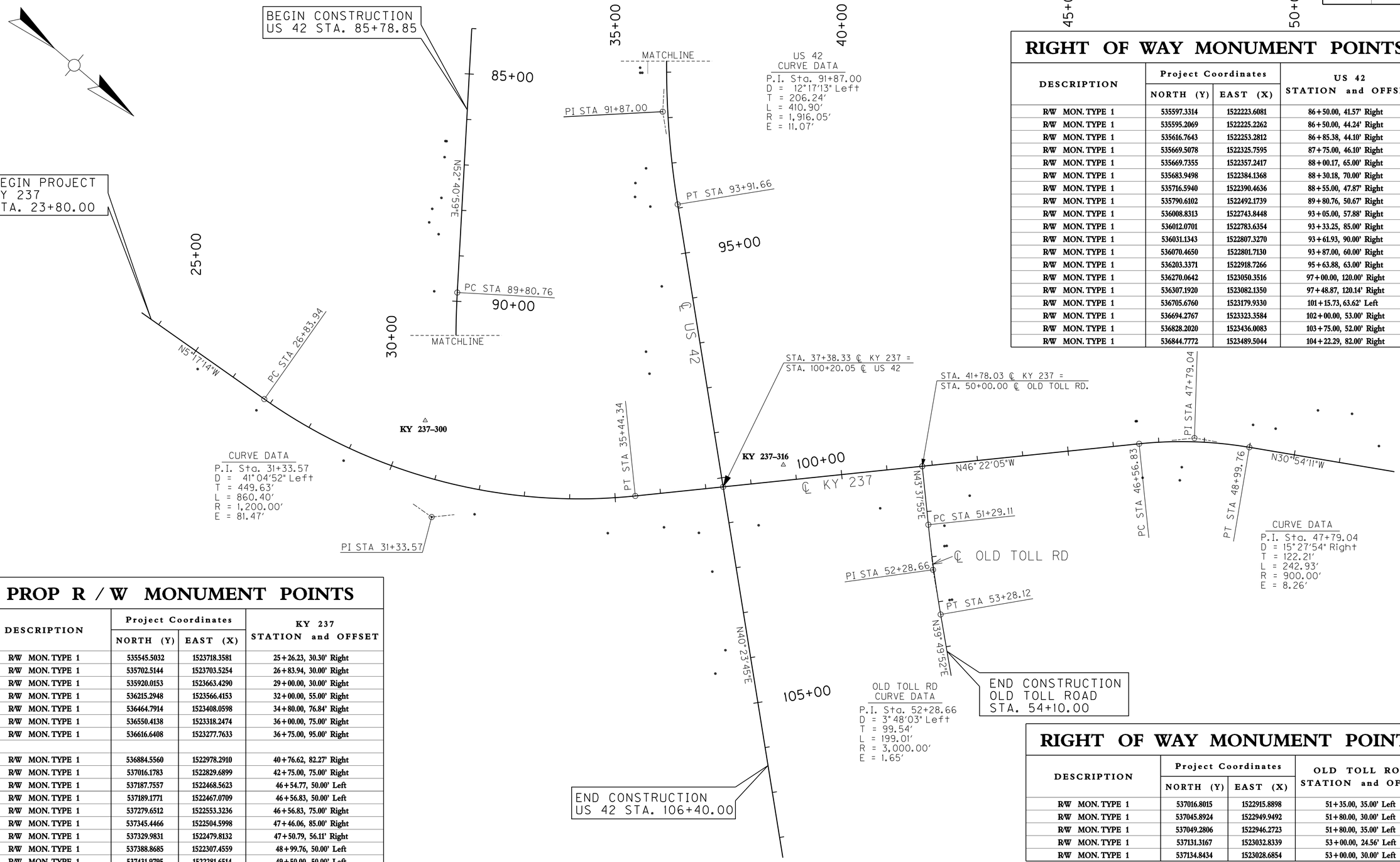
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME Cell Library: roadway.cel
I-92 Cell Name: SP
FORM NO. 2 DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R104



RIGHT OF WAY MONUMENT POINTS

DESCRIPTION	Project Coordinates		US 42 STATION and OFFSET
	NORTH (Y)	EAST (X)	
R/W MON. TYPE 1	535597.3314	1522223.6081	86+50.00, 41.57' Right
R/W MON. TYPE 1	535595.2069	1522225.2262	86+50.00, 44.24' Right
R/W MON. TYPE 1	535616.7643	1522253.2812	86+85.38, 44.10' Right
R/W MON. TYPE 1	535669.5078	1522325.7595	87+75.00, 46.10' Right
R/W MON. TYPE 1	535669.7355	1522357.2417	88+00.17, 65.00' Right
R/W MON. TYPE 1	535683.9498	1522384.1368	88+30.18, 70.00' Right
R/W MON. TYPE 1	535716.5940	1522390.4636	88+55.00, 47.87' Right
R/W MON. TYPE 1	535790.6102	1522492.1739	89+80.76, 50.67' Right
R/W MON. TYPE 1	536008.8313	1522743.8448	93+05.00, 57.88' Right
R/W MON. TYPE 1	536012.0701	1522783.6354	93+33.25, 85.00' Right
R/W MON. TYPE 1	536031.1343	1522807.3270	93+61.93, 90.00' Right
R/W MON. TYPE 1	536070.4650	1522801.7130	93+87.00, 60.00' Right
R/W MON. TYPE 1	536203.3371	1522918.7266	95+63.88, 63.00' Right
R/W MON. TYPE 1	536270.0642	1523050.3516	97+00.00, 120.00' Right
R/W MON. TYPE 1	536307.1920	1523082.1350	97+48.87, 120.14' Right
R/W MON. TYPE 1	536705.6760	1523179.9330	101+15.73, 63.62' Left
R/W MON. TYPE 1	536694.2767	1523323.3584	102+00.00, 53.00' Right
R/W MON. TYPE 1	536828.2020	1523436.0083	103+75.00, 52.00' Right
R/W MON. TYPE 1	536844.7772	1523489.5044	104+22.29, 82.00' Right

PROP R / W MONUMENT POINTS

DESCRIPTION	Project Coordinates		KY 237 STATION and OFFSET
	NORTH (Y)	EAST (X)	
R/W MON. TYPE 1	535545.5032	1523718.3581	25+26.23, 30.30' Right
R/W MON. TYPE 1	535702.5144	1523703.5254	26+83.94, 30.00' Right
R/W MON. TYPE 1	535920.0153	1523663.4290	29+00.00, 30.00' Right
R/W MON. TYPE 1	536215.2948	1523566.4153	32+00.00, 55.00' Right
R/W MON. TYPE 1	536464.7914	1523408.0598	34+80.00, 76.84' Right
R/W MON. TYPE 1	536550.4138	1523318.2474	36+00.00, 75.00' Right
R/W MON. TYPE 1	536616.6408	1523277.7633	36+75.00, 95.00' Right
R/W MON. TYPE 1	536884.5560	1522978.2910	40+76.62, 82.27' Right
R/W MON. TYPE 1	537016.1783	1522829.6899	42+75.00, 75.00' Right
R/W MON. TYPE 1	537187.7557	1522468.5623	46+54.77, 50.00' Left
R/W MON. TYPE 1	537189.1771	1522467.0709	46+56.83, 50.00' Left
R/W MON. TYPE 1	537279.6512	1522553.3236	46+56.83, 75.00' Right
R/W MON. TYPE 1	537345.4466	1522504.5998	47+46.06, 85.00' Right
R/W MON. TYPE 1	537329.9831	1522479.8132	47+50.79, 56.11' Right
R/W MON. TYPE 1	537388.8685	1522307.4559	48+99.76, 50.00' Left
R/W MON. TYPE 1	537431.9795	1522281.6514	49+50.00, 50.00' Left
R/W MON. TYPE 1	537476.6641	1522190.8052	50+35.00, 105.00' Left
R/W MON. TYPE 1	537538.4490	1522147.9960	51+10.00, 110.00' Left
R/W MON. TYPE 1	537629.3268	1522163.5271	51+80.00, 50.00' Left

RIGHT OF WAY MONUMENT POINTS

DESCRIPTION	Project Coordinates		OLD TOLL ROAD STATION and OFFSET
	NORTH (Y)	EAST (X)	
R/W MON. TYPE 1	537016.8015	1522915.8898	51+35.00, 35.00' Left
R/W MON. TYPE 1	537045.8924	1522949.9492	51+80.00, 30.00' Left
R/W MON. TYPE 1	537049.2806	1522946.2723	51+80.00, 35.00' Left
R/W MON. TYPE 1	537131.3167	1523032.8339	53+00.00, 24.56' Left
R/W MON. TYPE 1	537134.8434	1523028.6854	53+00.00, 30.00' Left

SCALE: 1"=100'

COORDINATE CONTROL SHEET
KY 237 STA. 23+80 TO STA. 52+00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 2

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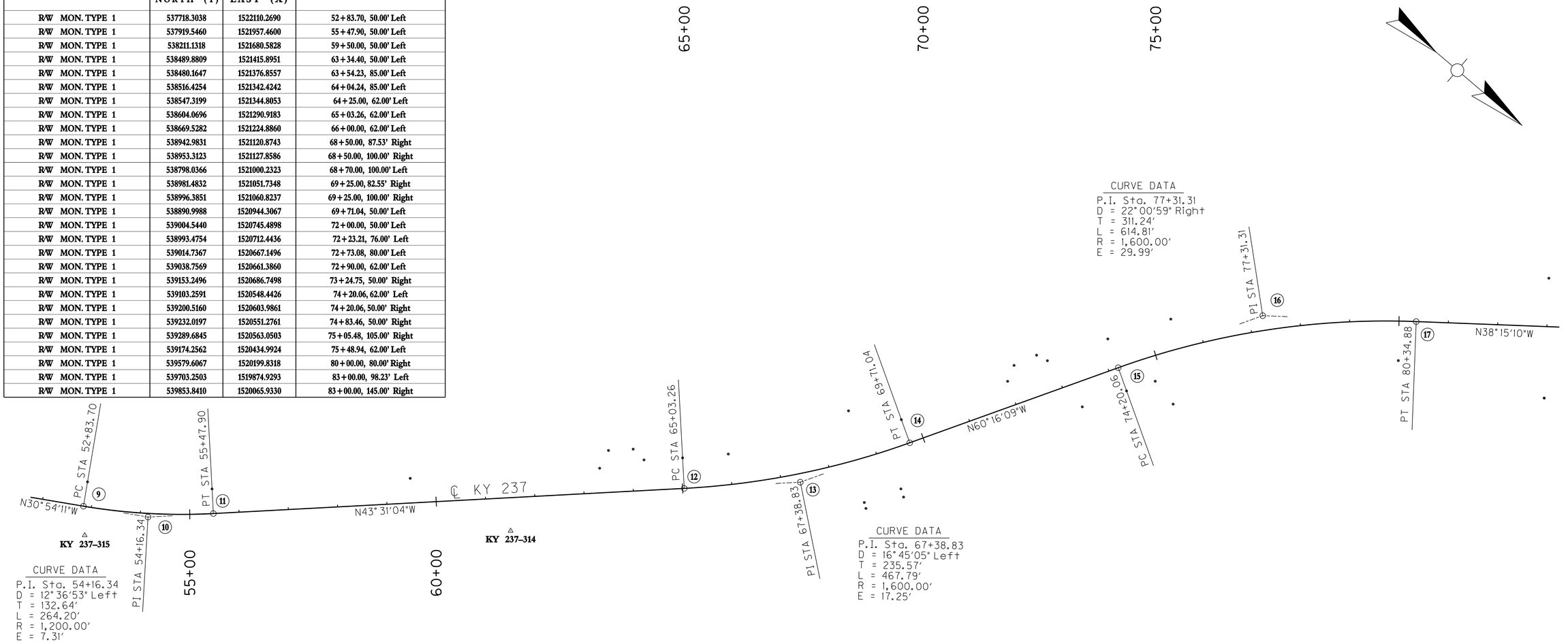
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R105

PROP R / W MONUMENT POINTS

DESCRIPTION	Project Coordinates		KY 237 STATION and OFFSET
	NORTH (Y)	EAST (X)	
R/W MON. TYPE 1	537718.3038	1522110.2690	52+83.70, 50.00' Left
R/W MON. TYPE 1	537919.5460	1521957.4600	55+47.90, 50.00' Left
R/W MON. TYPE 1	538211.1318	1521680.5828	59+50.00, 50.00' Left
R/W MON. TYPE 1	538489.8809	1521415.8951	63+34.40, 50.00' Left
R/W MON. TYPE 1	538480.1647	1521376.8557	63+54.23, 85.00' Left
R/W MON. TYPE 1	538516.4254	1521342.4242	64+04.24, 85.00' Left
R/W MON. TYPE 1	538547.3199	1521344.8053	64+25.00, 62.00' Left
R/W MON. TYPE 1	538604.0696	1521290.9183	65+03.26, 62.00' Left
R/W MON. TYPE 1	538669.5282	1521224.8860	66+00.00, 62.00' Left
R/W MON. TYPE 1	538942.9831	1521120.8743	68+50.00, 87.53' Right
R/W MON. TYPE 1	538953.3123	1521127.8586	68+50.00, 100.00' Right
R/W MON. TYPE 1	538798.0366	1521000.2323	68+70.00, 100.00' Left
R/W MON. TYPE 1	538981.4832	1521051.7348	69+25.00, 82.55' Right
R/W MON. TYPE 1	538996.3851	1521060.8237	69+25.00, 100.00' Right
R/W MON. TYPE 1	538890.9988	1520944.3067	69+71.04, 50.00' Left
R/W MON. TYPE 1	539004.5440	1520745.4898	72+00.00, 50.00' Left
R/W MON. TYPE 1	538993.4754	1520712.4436	72+23.21, 76.00' Left
R/W MON. TYPE 1	539014.7367	1520667.1496	72+73.08, 80.00' Left
R/W MON. TYPE 1	539038.7569	1520661.3860	72+90.00, 62.00' Left
R/W MON. TYPE 1	539153.2496	1520686.7498	73+24.75, 50.00' Right
R/W MON. TYPE 1	539103.2591	1520548.4426	74+20.06, 62.00' Left
R/W MON. TYPE 1	539200.5160	1520603.9861	74+20.06, 50.00' Right
R/W MON. TYPE 1	539232.0197	1520551.2761	74+83.46, 50.00' Right
R/W MON. TYPE 1	539289.6845	1520563.0503	75+05.48, 105.00' Right
R/W MON. TYPE 1	539174.2562	1520434.9924	75+48.94, 62.00' Left
R/W MON. TYPE 1	539579.6067	1520199.8318	80+00.00, 80.00' Right
R/W MON. TYPE 1	539703.2503	1519874.9293	83+00.00, 98.23' Left
R/W MON. TYPE 1	539853.8410	1520065.9330	83+00.00, 145.00' Right



COORDINATE CONTROL POINTS

POINT	DESCRIPTION	Project Coordinates			STATION and OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)	
KY 237					
KY 237-315	CONTROL MONUMENT	537784.338	1522196.574	800.92	Sta. 52+95.46, 58.03' Right KY 237
KY 237-314	CONTROL MONUMENT	538435.029	1521629.709	854.92	Sta. 61+47.39, 67.28' Right KY 237
⑨	PC STA. 52+83.70	537743.9829	1522153.1710		
⑩	PI STA. 54+16.34	537857.7910	1522085.0500		
⑪	PT STA. 55+47.90	537953.9745	1521993.7183		
⑫	PC STA. 65+03.26	538646.7616	1521335.8782		
⑬	PI STA. 67+38.83	538817.5900	1521173.6670		
⑭	PT STA. 69+71.04	538934.4169	1520969.1034		
⑮	PC STA. 74+20.06	539157.0974	1520579.1900		
⑯	PI STA. 77+31.31	539311.4520	1520308.9160		
⑰	PT STA. 80+34.88	539555.8681	1520116.2140		

SCALE: 1"=100'

COORDINATE CONTROL SHEET
KY 237 STA. 52+00 TO STA. 83+00

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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VENDORS NAME
I-92
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COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R106

85+00

90+00

95+00

PC STA. 83+98.33 ℄ KY 237=
POT STA. 83+98.33 ℄ PRACTICAL SOLUTIONS TIE-IN

N38°15'10"W

PC STA. 84+81.26

18

19

℄ KY 237

20

PI STA. 89+05.09

END PROJECT
PT STA. 93+00.68
℄ PRACTICAL SOLUTIONS TIE-IN

21

N74°22'04"W

℄ KY 237 FUTURE BUILD
(FOR INFORMATION ONLY)

END PROJECT
KY 237
STA. 93+00.68

CURVE DATA
P.I. Sta. 89+05.09
D = 36°06'54" Left
T = 423.84'
L = 819.42'
R = 1,300.00'
E = 67.35'

COORDINATE CONTROL POINTS

POINT	DESCRIPTION	Project Coordinates			STATION and OFFSET
		NORTH (Y)	EAST (X)	ELEV. (Z)	
KY 237					
18	PC STA. 83+98.33 / POT STA. 83+98.33	539841.2870	1519891.1847		
19	PC STA. 84+81.26	539906.4042	1519839.8457		
20	PI STA. 89+05.09	540239.2379	1519577.4340		
21	PT STA. 93+00.68	540353.4458	1519169.2739		

RIGHT OF WAY MONUMENT POINTS

DESCRIPTION	Project Coordinates		KY 237 STATION and OFFSET
	NORTH (Y)	EAST (X)	
R/W MON. TYPE 1	539703.2503	1519874.9293	83+00.00, 98.23' Left
R/W MON. TYPE 1	539853.8410	1520065.9330	83+00.00, 145.00' Right
R/W MON. TYPE 1	539765.1009	1519792.0724	84+00.00, 125.00' Left
R/W MON. TYPE 1	539946.3690	1519986.4120	84+20.00, 140.00' Right
R/W MON. TYPE 1	539832.4928	1519771.4045	84+70.00, 98.00' Left
R/W MON. TYPE 1	539881.1824	1519792.5492	84+93.77, 50.00' Left
R/W MON. TYPE 1	540034.0727	1519841.2374	85+71.28, 90.00' Right
R/W MON. TYPE 1	540028.5129	1519832.6982	85+73.19, 80.01' Right
R/W MON. TYPE 1	540125.3389	1519516.6163	88+75.00, 50.00' Left
R/W MON. TYPE 1	540306.4958	1519166.7816	92+82.77, 50.00' Left

NOTE: STATION AND OFFSET ARE FROM THE FUTURE BUILD CENTERLINE.

SCALE: 1"=100'

COORDINATE CONTROL SHEET
KY 237 STA. 83+00 TO STA. 83+98.33
PRACTICAL SOLUTION TIE-IN
STA. 83+98.33 TO STA. 93+00.68

$FILE$
$DATE$
$TIME$

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

VENDORS NAME
I-92
FORM NO. 2

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GEOTECHNICAL SYMBOLS

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R107

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

AASHTO Classification of Soils and Soil-Aggregate Mixtures

General Classification	Granular Materials (35% or less passing 0.075 mm)							Silt-Clay Materials (More than 35% passing 0.075 mm)			
Group Classification	A-1		A-3	A-2				A-4	A-5	A-6	A-7
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5 A-7-6
Sieve Analysis, Percent Passing											
2.00 mm (No. 10)	50 max	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
0.425 mm (No. 40)	30 max	50 max	51 min	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
0.075 mm (No. 200)	15 max	25 max	10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min
Characteristics of Fraction Passing 0.425 mm (No. 40)											
Liquid Limit	- - -		- - -	40 max	41 min	40 max	41 min	40 max	41 min	40 max	41 min
Plasticity Index	6 max		N.P.	10 max	10 max	11 min	11 min	10 max	10 max	11 min	11 min

Unified Soil Classifications

MAJOR DIVISIONS		SYMBOL		NAME
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW		Well-graded gravels or gravel-sand mixtures, little or no fines.
		GP		Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GM		Silty gravels, gravel-sand-silt mixtures.
		GC		Clayey gravels, gravel-sand-clay mixtures.
	SAND AND SANDY SOILS	SW		Well graded sands or gravelly sands, little or no fines.
		SP		Poorly graded sands or gravelly sands, little or no fines.
		SM		Silty sands, sand-silt mixtures.
		SC		Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS	SILTS AND CLAYS LL IS LESS THAN 50	ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays silty clays, lean clays.
	SILTS AND CLAYS LL IS GREATER THAN 50	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
		CH		Inorganic clays of high plasticity, fat clays.
UNCLASSIFIED MATERIAL		NONE		Non-classified material (i.e. overburden, pavement, slag, etc.) Include visual description.

AI	Activity Index
LI	Liquidity Index
S+C	Silt + Clay (% finer than No.200 Sieve)
◯	Rockline Soundings
◒	Disturbed Sample Boring
◎	Undisturbed Sample Boring
◉	Undisturbed Sample Boring & Rock Core
●	Rock Core
⊹	Slope Inclinometer Installation
	typical applications: ◯ ◒ ◎ ◉ ●
OW	Observation Well
➡	Approximate Footing Elevation
▼ (Date)	Water Elevation
VS (psf)	Field Vane Shear Strength
▮	Thin-walled Tube Sample
<	Standard Penetration Test Sample
N	Penetration Resistance
Qu (psf)	Unconfined Compressive Strength
UU (psf)	Unconsolidated Undrained Triaxial Strength
w%	Moisture Content
KY RQD	Rock Quality Designation (Kentucky Method)
STD RQD	Rock Quality Designation (Standard Method)
SDI(JS)	Slake Durability Index (Jar Slake Test)
REC	Core Recovery
∅	Angle of Internal Friction (Total Stress)
$\overline{\emptyset}$	Angle of Internal Friction (Effective Stress)
c (psf)	Cohesion (Total Stress)
$\overline{c}$ (psf)	Cohesion (Effective Stress)
♂ (pcf)	Total Unit Weight
RDZ	Rock Disintegration Zone
OB	Overburden Bench
IB	Intermediate Bench
R	Refusal
NR	Refusal Not Encountered

LIMESTONE

SANDSTONE

DURABLE SHALE (SDI ≥ 95)

NONDURABLE SHALE (SDI < 95)

COAL

TALUS, MINE WASTE, FILL MATERIAL, BOULDERS, & ETC.

GRANULAR EMBANKMENT

STRUCTURE GRANULAR BACKFILL

SLOPE PROTECTION

GEOTECHNICAL SYMBOL SHEET

USER: fackler
DATE: 9/18/2009 8:44:29 AM
FILE NAME: p:\21444\t\sheets\sect1\06-8001.10\contract plans and proposal\contract plan set\roadway\R107000GT.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R108

GEOTECHNICAL NOTES

1). In accordance with Section 206 of the current Standard Specifications, the moisture content of embankment material shall not vary from the optimum moisture content as determined by KM 64-511 by more than +2 percent or less than -2 percent. This moisture content requirement shall have equal weight with the density requirement when determining the acceptability of embankment construction. Refer to the Family of Curves for moisture/density correlation.

2). All soils, whether from roadway or borrow, may require manipulation to obtain proper moisture content prior to compaction. Direct payment shall not be permitted for rehandling, hauling, stockpiling, and/or manipulating soils.

3). Excavation of surface ditches and channel changes adjacent to embankment areas shall be performed prior to the placement of the adjacent embankments. The material excavated for the channel changes and surface ditches is suitable for embankment construction if dried to proper moisture content in accordance with Section 206 of the current Standard Specifications.

4). The contractor is responsible for conducting any operations necessary to excavate the cut areas to the required typical section. These operations shall be incidental to the roadway price.

5). Some of the soil horizons and slopes on the project are subject to erosion. Necessary procedures in accordance with Sections 212 and 213 of the current Standard Specifications shall be followed on construction.

6). All embankment construction using non-durable shale will be in accordance with Section 206 of the current Standard Specifications for Road and Bridge Construction, Embankments Principally of Non-Durable Shale.

7). Embankments, measured vertically from the toe of the slope to roadway grade except where noted otherwise, shall be constructed on 2:1 or flatter slopes for under 35 ft, 2½:1 or flatter for slopes from 35 to 55 ft, and 3:1 or flatter for slopes over 55 ft.

8). The contractor shall construct foundation embankment benches and transverse benches as indicated on the plans and/or as directed by the Engineer, prior to placement of embankments in areas requiring such benches.

9). Foundation embankment benches shall be placed in accordance with Standard Drawing RGX-010 at the locations listed below and/or as directed by the Engineer.

KY 237	US 42
Station 50+25 to 52+75	Station 96+75 to 97+75
Station 66+75 to 69+75	
Station 83+25 to 85+25	

10). Transverse benching and/or perforated pipe underdrains shall be installed at the following approximate locations and any others designated by the Engineer. Contrary to Standard Drawing RDP-006, transverse benches and perforated pipe underdrains shall be placed on both the upgrade and downgrade cut to fill transitions.

Station 38+00	Station 80+50
Station 55+00	Station 86+50
Station 66+20	Station 97+50
Station 70+30	Station 103+00

11). Perforated pipe for subgrade drainage shall be placed in vertical sags in accordance with RDP-005 at the following approximate locations and/or where designated by the Engineer.

Station 41+98
Station 49+23
Station 82+73
Station 102+12

12). The contractor shall conduct grading operations in such a manner that soil (free of rock larger than 4 inches and shale) from roadway excavation be stockpiled separately or otherwise manipulated so that ample quantities are available for a chemically stabilized roadbed meeting the specifications in Section 208 of the current Standard Specifications for Road and Bridge Construction. No direct payment will be allowed for such necessary manipulating as stockpiling, hauling and/or handling the material.

13). In areas where the chemical stabilization is not feasible (such as crossovers, tie-ins, etc.) a one foot rock roadbed will be required consisting of Granular Embankment in accordance with the current edition of Section 805 of the Standard Specifications for Road and Bridge Construction, and the material shall be classified as non-erodible. The Granular Embankment shall be wrapped with Geotextile Fabric, Type IV in accordance with Section 214 & 843 of the Standard Specifications will be required beneath the roadway template. The platform shall extend from shoulder to shoulder in the fills and ditch line to ditch line in the cuts to assure positive drainage. The actual locations will be determined by the Engineer during construction. For purpose of calculating quantities, assume 1000 linear feet of roadway for this treatment.

14). Where shale bedrock is encountered at the roadbed grade the roadbed shall be undercut 1 foot below the required grade and the limits of the roadbed shall extend the roadway excavation to the ditch lines, as specified in Section 204 of the current Standard Specifications for Road and Bridge Construction, in areas where shale is considered common excavation at the roadway grade, as directed by the Engineer. The refill shall be constructed with soil for chemical stabilization as specified in Section 208 of the Standard Specifications for Road and Bridge Construction, current edition. The excavation and replacement of this material is incidental to the unit bid price for roadway excavation or embankment-in-place.

15). Shale (above or below the RDZ, durable or nondurable) cannot be used in the subgrade.

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

BOONE

SECTION 1 - WIDENING OF KY 237 FROM RIDGEVIEW DRIVE TO ROSE PETAL DRIVE

PROJECT NUMBERS: **FD52 008 0237 001-004**
ARRA 8200(009)

GEOTECHNICAL NOTE SHEET

USER: fackler
DATE: 9/18/2009 8:44:34 AM
FILE NAME: p:\21444\t\sheets\sect1\06-8001.10\contract plans and proposal\contract plan set\roadway\R10800GT.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R109

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Field Drilling and Sampling were performed in AUGUST, 20 03.

Detailed data and interpretation of subsurface conditions encountered in individual borings are shown on the soil profile. Soil and rock strata discriptions and indicated boundaries are based on engineering interpretation of available subsurface information obtained at selected locations, and may not necessarily reflect the actual variation in subsurface conditions between borings and samples.

The observed water levels and/or subsurface conditions indicated on the soil profile are as recorded at the time of exploration. These water levels and/or subsurface conditions may vary considerable with time, according to the prevailing climate, rainfall or other factors and are otherwise dependent on the duration of and methods used in the exploration program.

Selected rock cores and all applicable drill logs, are stored at the Division of Materials in Frankfort and are available for inspection on request. Contact the Division of Materials, Geotechnical Branch for availability information and to schedule an inspection.

NOTICE - Without regard to the materials encountered, all roadway and drainage excavation shall be unclassified and shall be designated as Roadway Excavation. It shall be distinctly understood that any reference to rock, earth or any other materials on the plans or cross sections whether in numbers, words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth or any other material involved.

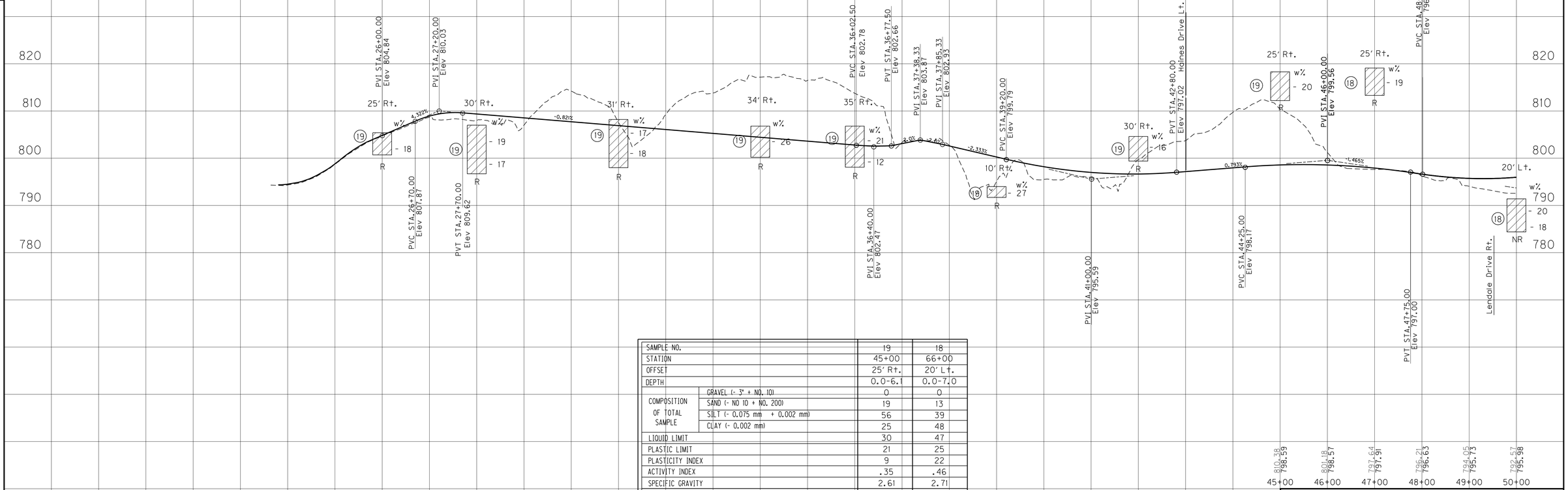
The bidder must draw his own conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation when the materials encountered are not in accord with the classification shown

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 38+00

REFER TO CUT STABILITY SHEET FOR STATION 35+00

REFER TO GEOTECHNICAL NOTE NUMBER 11 FOR STATION 49+23

REFER TO GEOTECHNICAL NOTE NUMBER 11 FOR STATION 41+98



SAMPLE NO.		19	18
STATION		45+00	66+00
OFFSET		25' Rt.	20' Lt.
DEPTH		0.0-6.1	0.0-7.0
COMPOSITION OF TOTAL SAMPLE	GRAVEL (- 3" + NO. 10)	0	0
	SAND (- NO 10 + NO. 200)	19	13
	SILT (- 0.075 mm + 0.002 mm)	56	39
	CLAY (- 0.002 mm)	25	48
LIQUID LIMIT		30	47
PLASTIC LIMIT		21	25
PLASTICITY INDEX		9	22
ACTIVITY INDEX		.35	.46
SPECIFIC GRAVITY		2.61	2.71
AASHTO CLASSIFICATION		A-4(6)	A-7-6(21)
UNIFIED CLASSIFICATION		CL	CL
CALIFORNIA BEARING RATIO		4.5	1.7
MAXIMUM DRY DENSITY (pcf)		108	100
OPTIMUM MOISTURE (%)		16	23
% +4.75mm MATERIAL IN CBR & MOISTURE-DENSITY TESTS		-	-

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

BOONE

SECTION 1 - WIDENING OF KY 237 FROM RIDGEVIEW DRIVE TO ROSE PETAL DRIVE

PROJECT NUMBERS:
FD52 008 0237 001-004
ARRA 8200(009)

SOIL PROFILE, KY 237
STA. 24+00 TO 50+00

USER: fackiep
DATE: 9/18/2009 8:44:43 AM
FILE NAME: p:\21444\t\sheets\sect\06-8001.10\contract plans and proposal\contract plan set\roadway\R109006T.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R110

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 55+00

REFER TO CUT STABILITY SHEET FOR STATION 60+00

REFER TO GEOTECHNICAL NOTE NUMBER 9 FOR STATION 66+75 to 69+75

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 70+30

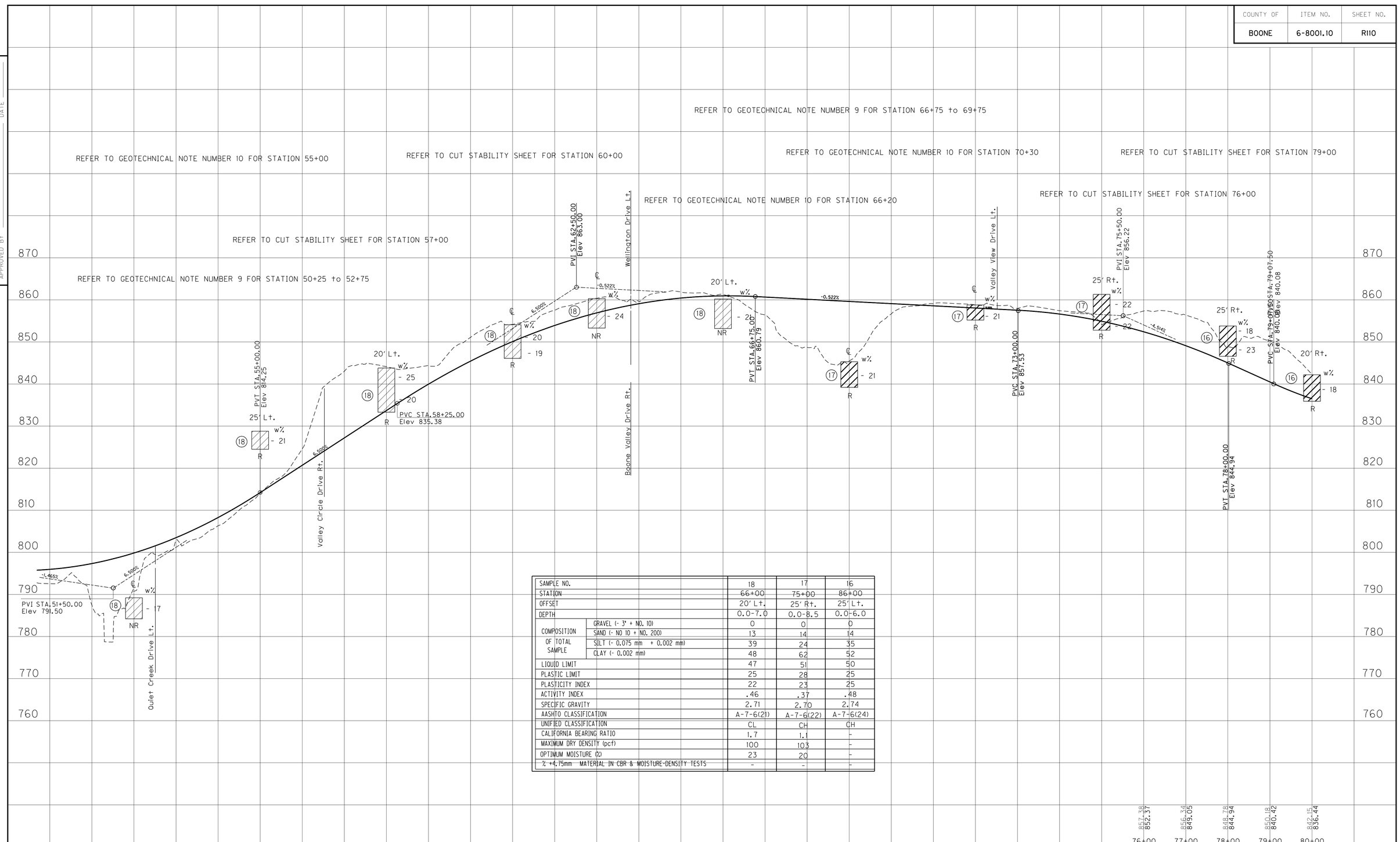
REFER TO CUT STABILITY SHEET FOR STATION 79+00

REFER TO CUT STABILITY SHEET FOR STATION 57+00

REFER TO GEOTECHNICAL NOTE NUMBER 9 FOR STATION 50+25 to 52+75

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 66+20

REFER TO CUT STABILITY SHEET FOR STATION 76+00



SAMPLE NO.		18	17	16
STATION		66+00	75+00	86+00
OFFSET		20' Lt.	25' Rt.	25' Lt.
DEPTH		0.0-7.0	0.0-8.5	0.0-6.0
COMPOSITION OF TOTAL SAMPLE	GRAVEL (- 3" + NO. 10)	0	0	0
	SAND (- NO 10 + NO. 200)	13	14	14
	SILT (- 0.075 mm + 0.002 mm)	39	24	35
	CLAY (- 0.002 mm)	48	62	52
LIQUID LIMIT		47	51	50
PLASTIC LIMIT		25	28	25
PLASTICITY INDEX		22	23	25
ACTIVITY INDEX		.46	.37	.48
SPECIFIC GRAVITY		2.71	2.70	2.74
AASHTO CLASSIFICATION		A-7-6(21)	A-7-6(22)	A-7-6(24)
UNIFIED CLASSIFICATION		CL	CH	CH
CALIFORNIA BEARING RATIO		1.7	1.1	-
MAXIMUM DRY DENSITY (pcf)		100	103	-
OPTIMUM MOISTURE (%)		23	20	-
% +4.75mm MATERIAL IN CBR & MOISTURE-DENSITY TESTS		-	-	-

SOIL PROFILE, KY 237
STA. 50+00 TO 80+00

USER: fackiep
DATE: 9/18/2009 8:44:50 AM
FILE NAME: p:\2144\t\sheets\sect\06-8001.10\contract plans and proposal\contract plan set\roadway\R110000T.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R111

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

REFER TO GEOTECHNICAL NOTE NUMBER 11 FOR STATION 82+73

REFER TO EMBANKMENT STABILITY SHEET FOR STATION 84+00

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 86+50

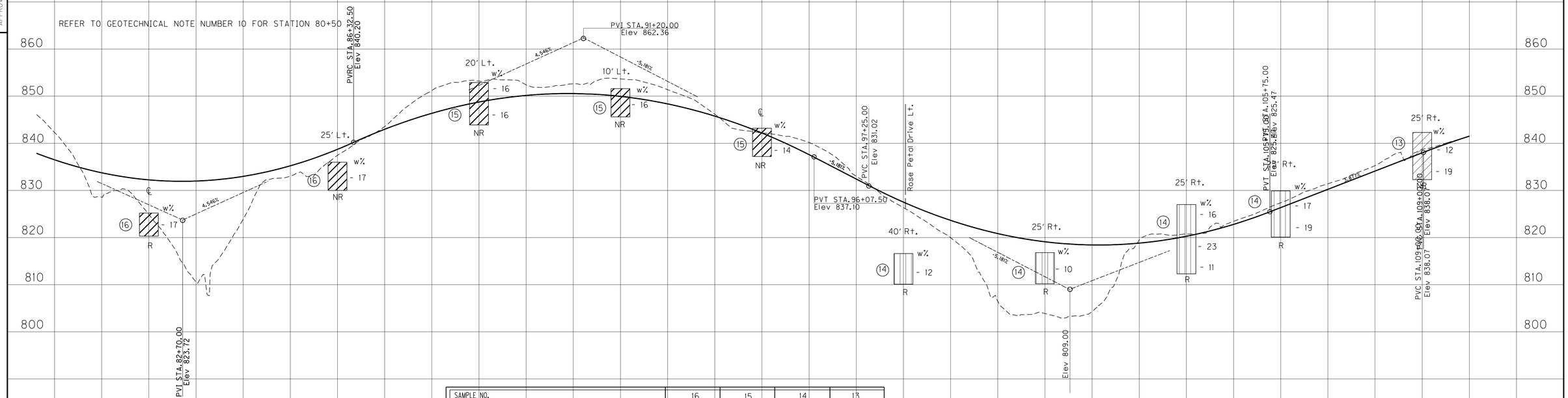
REFER TO GEOTECHNICAL NOTE NUMBER 9 FOR STATION 83+25 to 85+25

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 80+50

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 103+00

REFER TO GEOTECHNICAL NOTE NUMBER 10 FOR STATION 97+ 50

REFER TO GEOTECHNICAL NOTE NUMBER 11 FOR STATION 102+12



SAMPLE NO.		16	15	14	13
STATION		86+00	95+00	106+00	112+00
OFFSET		25' Lt.	℄	25' Rt.	℄
DEPTH		0.0-6.0	0.0-6.0	0.0-9.8	0.0-7.0
COMPOSITION OF TOTAL SAMPLE	GRAVEL (- 3" + NO. 10)	0	0	4	0
	SAND (- NO 10 + NO. 200)	14	13	10	16
	SILT (- 0.075 mm + 0.002 mm)	35	34	37	45
	CLAY (- 0.002 mm)	52	53	49	40
LIQUID LIMIT		50	51	48	39
PLASTIC LIMIT		25	25	28	22
PLASTICITY INDEX		25	26	20	17
ACTIVITY INDEX		.48	.49	.41	.42
SPECIFIC GRAVITY		2.74	2.72	2.76	2.71
AASHTO CLASSIFICATION		A-7-6(24)	A-7-6(25)	A-7-6(19)	A-6(15)
UNIFIED CLASSIFICATION		CH	CH	ML	CL
CALIFORNIA BEARING RATIO		-	1.4	1.1	3.8
MAXIMUM DRY DENSITY (pcf)		-	99	99	105
OPTIMUM MOISTURE (%)		-	22	25	20
% +4.75mm MATERIAL IN CBR & MOISTURE-DENSITY TESTS		-	-	-	-

80+00	81+00	82+00	83+00	84+00	85+00	86+00	87+00	88+00	89+00	90+00	91+00	92+00	93+00	94+00	95+00	96+00	97+00	98+00	99+00	100+00	101+00	102+00	103+00	104+00	105+00
842.15	838.67	824.70	810.42	824.20	833.09	837.67	843.68	851.31	853.17	852.31	852.61	853.64	851.31	846.02	842.16	840.10	832.86	826.73	819.80	806.07	803.83	804.48	810.87	820.73	823.53
836.44	833.71	832.23	831.99	833.01	835.27	838.79	843.04	846.41	848.79	850.17	850.55	849.93	848.32	845.71	842.10	837.49	832.31	827.43	823.58	820.80	819.08	818.43	818.84	820.32	822.86

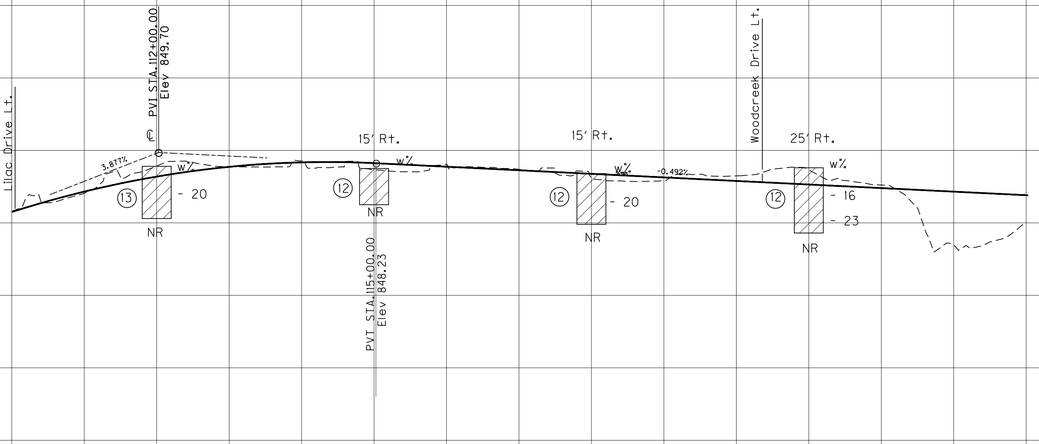
106+00	107+00	108+00	109+00	110+00
827.45	831.48	835.38	838.78	841.69
826.44	830.32	834.19	838.07	841.58

SOIL PROFILE, KY 237
STA. 80+00 TO 110+00

USER: fackiep
DATE: 9/18/2009 8:44:54 AM
FILE NAME: p:\21444\t\sheets\sect1\06-8001.10\contract plans and proposal\contract plan sheet\roadway\R111006T.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R112

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____



SAMPLE NO.		13	12
STATION		112+00	127+00
OFFSET		℄	20' Lt.
DEPTH		0.0-7.0	0.0-9.0
COMPOSITION OF TOTAL SAMPLE	GRAVEL (- 3" + NO. 10)	0	0
	SAND (- NO 10 + NO. 200)	16	19
	SILT (- 0.075 mm + 0.002 mm)	45	35
	CLAY (- 0.002 mm)	40	46
LIQUID LIMIT		39	43
PLASTIC LIMIT		22	23
PLASTICITY INDEX		17	20
ACTIVITY INDEX		.42	.44
SPECIFIC GRAVITY		2.71	2.65
AASHTO CLASSIFICATION		A-6(15)	A-7-6(16)
UNIFIED CLASSIFICATION		CL	CL
CALIFORNIA BEARING RATIO		3.8	1.0
MAXIMUM DRY DENSITY (pcf)		105	103
OPTIMUM MOISTURE (%)		20	21
% +4.75mm MATERIAL IN CBR & MOISTURE-DENSITY TESTS		-	-

841.69	844.18	847.93	847.75	848.53	847.29	847.59	847.36	846.03	845.85	846.50	847.14	845.20	836.65
841.58	844.37	846.42	847.75	848.35	848.23	847.73	847.24	846.75	846.26	845.77	845.28	844.78	844.29
110+00	111+00	112+00	113+00	114+00	115+00	116+00	117+00	118+00	119+00	120+00	121+00	122+00	123+00

SOIL PROFILE, KY 237
STA. 110+00 TO 123+00

USER: fackiep
DATE: 9/18/2009 8:44:59 AM
FILE NAME: p:\21444\t\sheets\sect1\06-8001.10\contract plans and proposal\contract plan set\roadway\R11200GT.dgn
E-SHEET NAME:

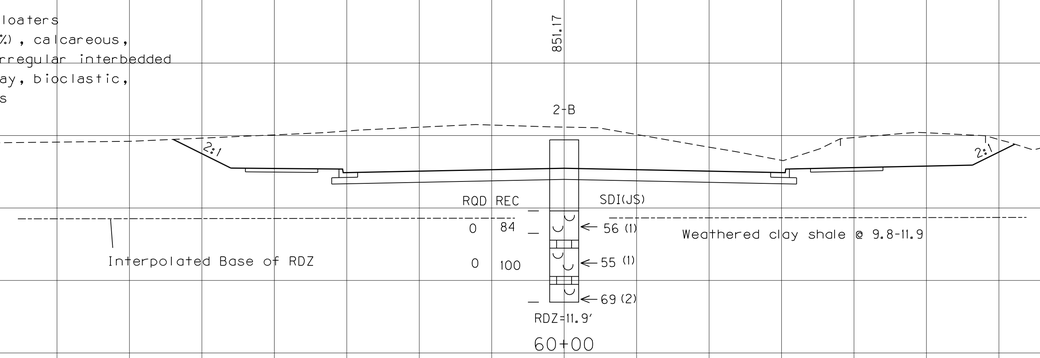
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R113

PREPARED BY ____ DATE ____
CHECKED BY ____ DATE ____
APPROVED BY ____ DATE ____

2-B
Core Log Sta. 60+00, Centerline
Elev. 849.4-839.6 Overburden w/limestone floaters
839.6-827.0 Shale : gray, clayey (75%), calcareous, fossiliferous, w/wavey-irregular interbedded Limestone (25%) light gray, bioclastic, occasionally argillaceous

Additional Rockline Soundings

Station	Offset	Depth to Refusal
61+00	℄	8.0'
63+00	℄	7.0' NR



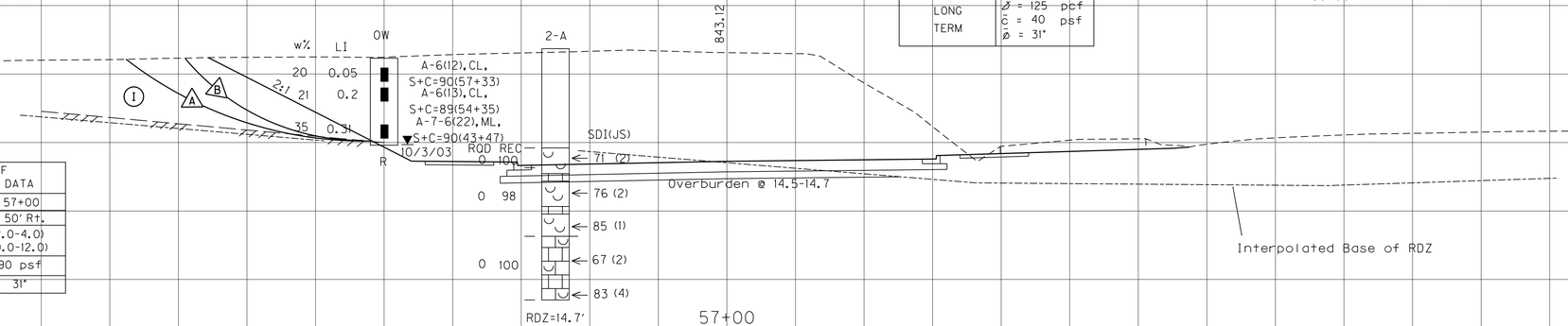
Cut Limits from Sta. 55+00 to Sta. 63+50
2-A
Core Log Sta. 57+00, 25' Lt.
Elev. 842.7-828.2 Overburden
828.2-815.3 Shale : (75%) gray, clayey, calcareous, fossiliferous, w/Limestone interbeds (25%) light gray, bioclastic, occasionally argillaceous
815.3-806.0 Limestone : grays, argillaceous, coarse bioclastic w/many wavy-nodular bedding, w/numerous fossiliferous shale partings & zones, gray, calcareous

FACTORS OF SAFETY		
INTERMEDIATE TERM	A	2.8
LONG TERM	B	1.7

ASSUMED SOIL STRENGTH PARAMETERS	
SOIL	I
INTERMEDIATE TERM	∅ = 125 pcf c = 200 psf ø = 30°
LONG TERM	∅ = 125 pcf c = 40 psf ø = 31°

Additional Rockline Soundings

Station	Offset	Depth to Refusal
56+00	25.0' Lt.	4.3'
58+00	20.0' Lt.	10.5'

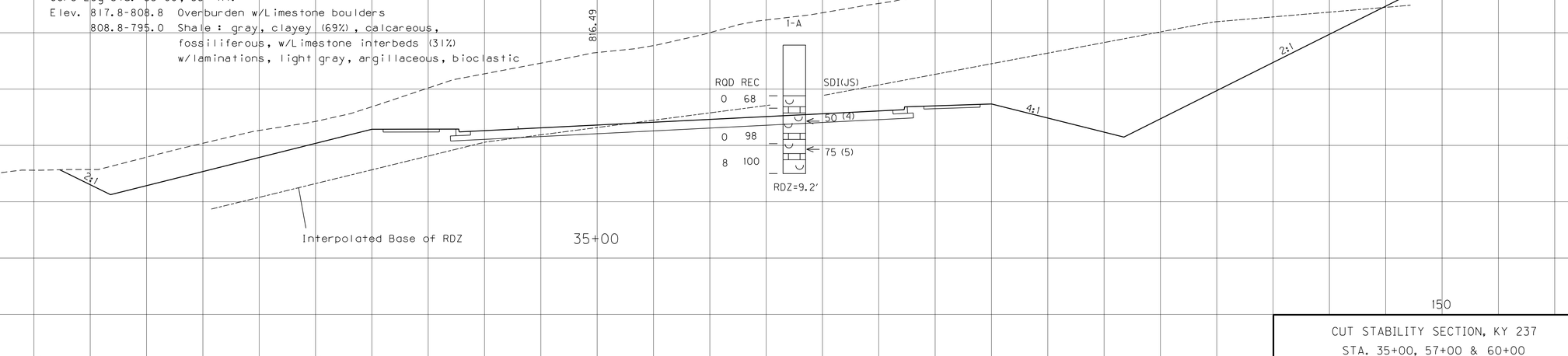


SUMMARY OF TRIAXIAL TEST DATA	
STATION	57+00
OFFSET	50' Rt.
DEPTH	(2.0-4.0) (10.0-12.0)
c̄	290 psf
ø	31°

Additional Rockline Soundings

Station	Offset	Depth to Refusal
26+00	25.0' Rt.	4.7'
28+00	30.0' Rt.	10.3'
31+00	25.0' Rt.	10.2'
34+00	35.0' Rt.	6.7'
36+00	35.0' Rt.	8.7'

Cut Limits from Sta. 25+50 to Sta. 37+00
1-A
Core Log Sta. 35+00, 35' Rt.
Elev. 817.8-808.8 Overburden w/Limestone boulders
808.8-795.0 Shale : gray, clayey (69%), calcareous, fossiliferous, w/Limestone interbeds (31%) w/laminations, light gray, argillaceous, bioclastic



CUT STABILITY SECTION, KY 237
STA. 35+00, 57+00 & 60+00

USER: fackiep
DATE: 9/18/2009 8:45:01 AM
FILE NAME: p:\21444\t\sheets\sect\06-8001.10\contract plans and proposal\contract plan set\roadway\RII300GT.dgn
E-SHEET NAME:

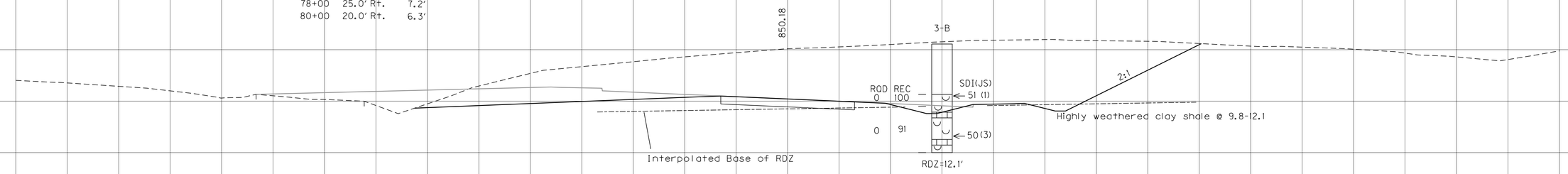
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R114

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

Additional Rockline Soundings

Station	Offset	Depth to Refusal
78+00	25.0' Rt.	7.2'
80+00	20.0' Rt.	6.3'

3-B
Core Log Sta. 79+00, 30' Rt.
Elev. 851.1-841.3 Overburden w/Limestone floaters
841.3-830.0 Shale : (73%) gray, clayey, calcareous, fossiliferous w/occasional wavy-irregular & interbedded Limestone (27%) light gray, bioclastic, w/argillaceous zones



79+00

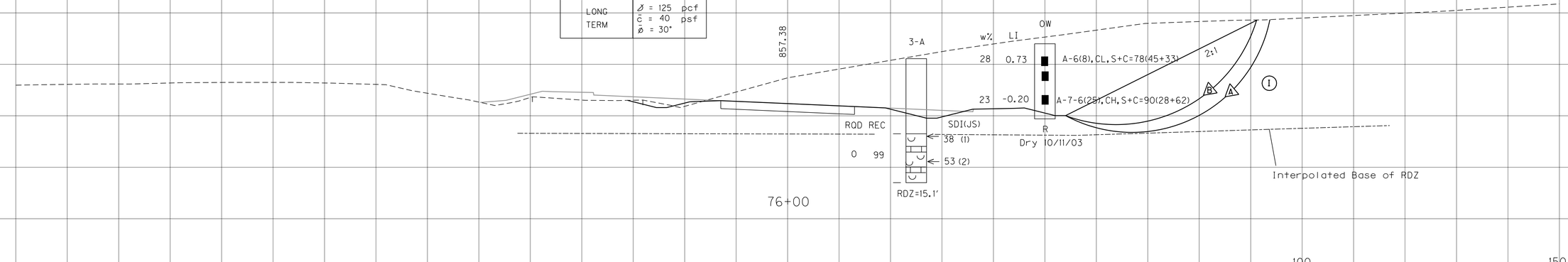
Additional Rockline Soundings

Station	Offset	Depth to Refusal
72+00	℄	3.6'
75+00	25.0' Rt.	8.5'

ASSUMED SOIL STRENGTH PARAMETERS	
SOIL	I
INTERMEDIATE TERM	γ = 125 pcf c = 200 psf ϕ = 30°
LONG TERM	γ = 125 pcf c = 40 psf ϕ = 30°

FACTORS OF SAFETY		
INTERMEDIATE TERM	A	2.3
LONG TERM	B	1.6

Cut Limits from Sta. 72+00 to Sta. 81+00
3-A
Core Log Sta. 76+00, 25' Rt.
Elev. 861.1-846.5 Overburden w/Limestone floaters
846.5-837.0 Shale : gray, (77%), clayey, calcareous, w/wavy-irregular & interbedded Limestone (23%) light gray, bioclastic, occasionally argillaceous



76+00

150 100 50 0 50 100 150

CUT STABILITY SECTION, KY 237
STA. 76+00 & 79+00

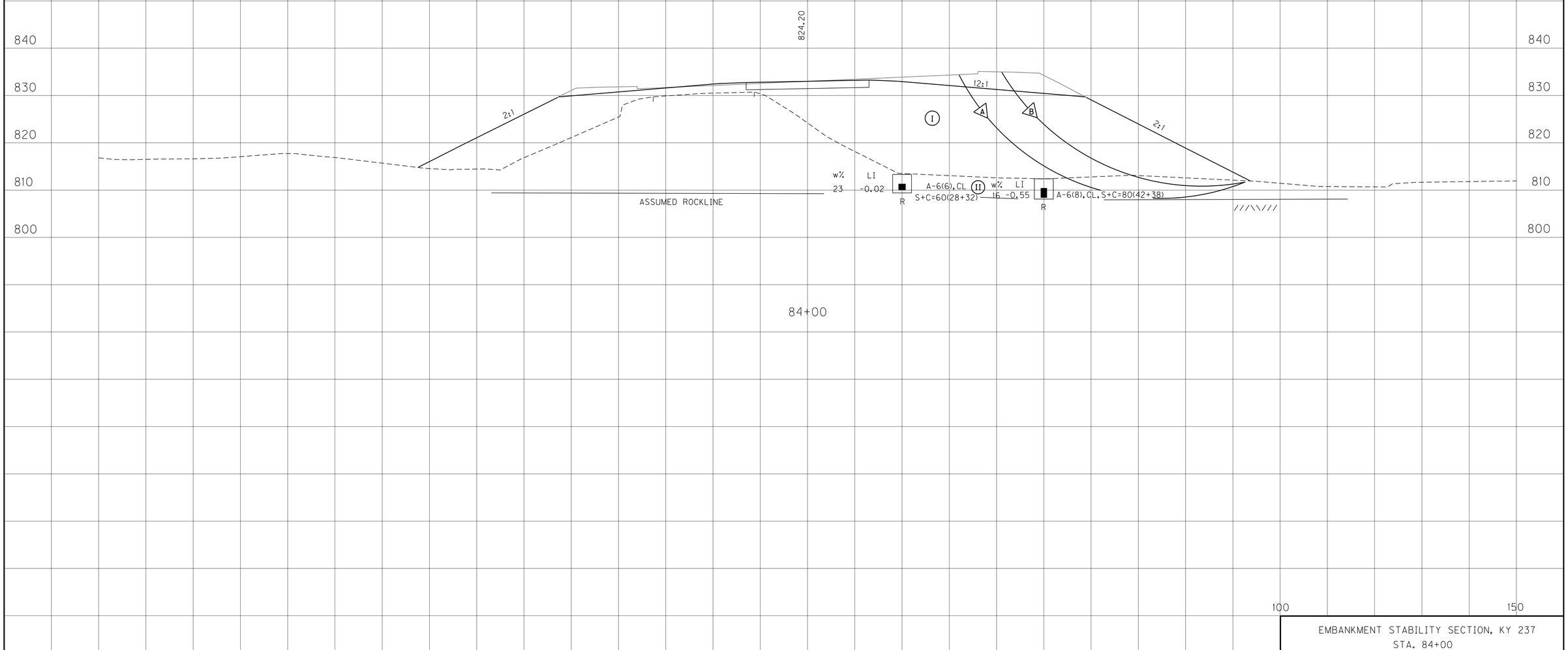
USER: fackiep
DATE: 9/18/2009 8:45:05 AM
FILE NAME: p:\21444\t\sheets\sect1\06-8001.10\contract plans and proposal\contract plan set\roadway\R1140GT.dgn
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R115

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
APPROVED BY _____ DATE _____

FACTORS OF SAFETY		
SHORT TERM	A	2.9
LONG TERM	B	1.5

ASSUMED SOIL STRENGTH PARAMETERS		
SOIL	I	II
SHORT TERM	γ = 125 pcf c = 1500 psf ϕ = 0°	γ = 125 pcf c = 1250 psf ϕ = 0°
LONG TERM	γ = 125 pcf $\bar{c}$ = 200 psf $\bar{\phi}$ = 20°	γ = 125 pcf $\bar{c}$ = 250 psf $\bar{\phi}$ = 25°



EMBANKMENT STABILITY SECTION, KY 237
STA. 84+00

USER: facklep
DATE: 9/18/2009 8:45:08 AM
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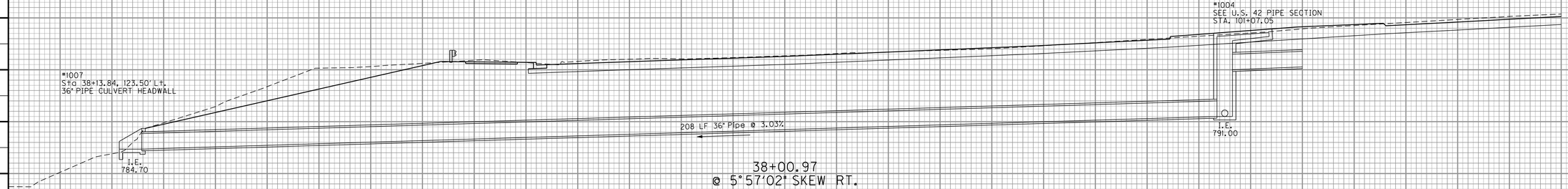
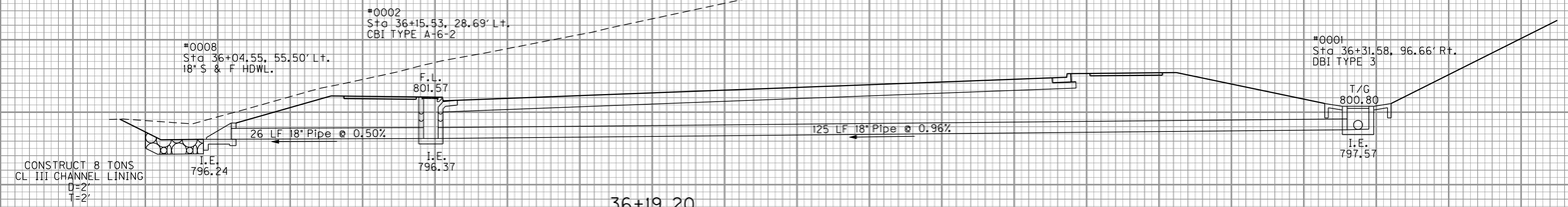
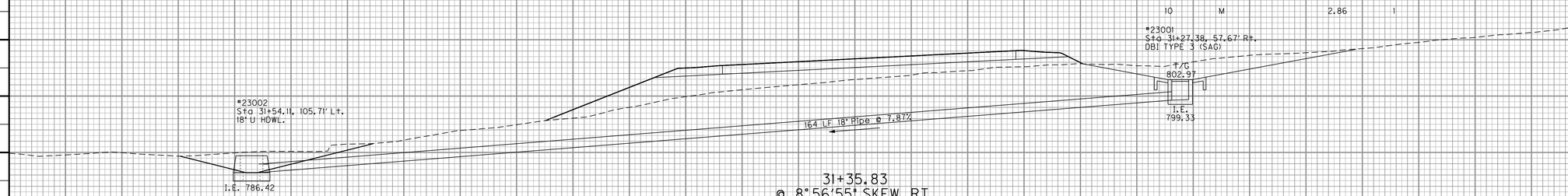
E-SHEET NAME:

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R116

	CLASS III CHANNEL LINER TONS	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL LB.	CLASS A CONCRETE C.Y.	D.B.I. TYPE 3 EACH	C.B.I. TYPE A EA.	36" PIPE CULVERT HDWL. EACH	36" STORM PIPE L.F.	18" U HDWL. EACH	18" S & F HDWL. EACH	18" STORM PIPE L.F.
		10	M	182	2.15			1	208			
	8	2	M	8	0.93	1	1				1	151
		10	M		2.86	1				1		164







SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 31+35.83 to STA. 38+00.97

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 6

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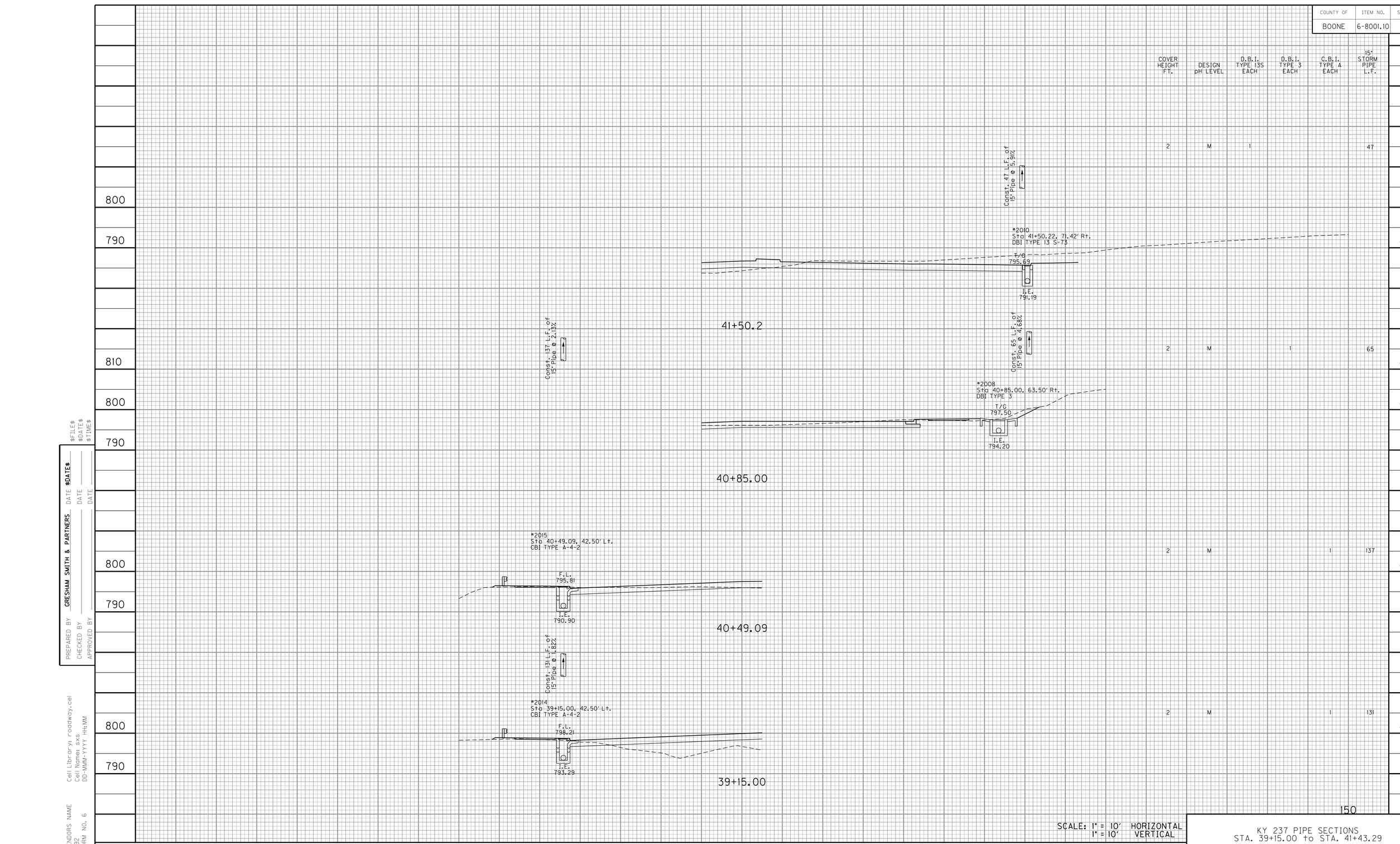
Cell Name: 3x5
DD-MMM-YYYY HH:MM

150 100 50 ℄ 50 100 150

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R117

	COVER HEIGHT FT.	DESIGN DH LEVEL	D.B.I. TYPE 13S EACH	D.B.I. TYPE 3 EACH	C.B.I. TYPE A EACH	15" STORM PIPE L.F.
	2	M	1			47
	2	M		1		65
	2	M			1	137
	2	M			1	131



SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 39+15.00 to STA. 41+43.29

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
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Cell Library: roadway.cel
Cell Name: sxs
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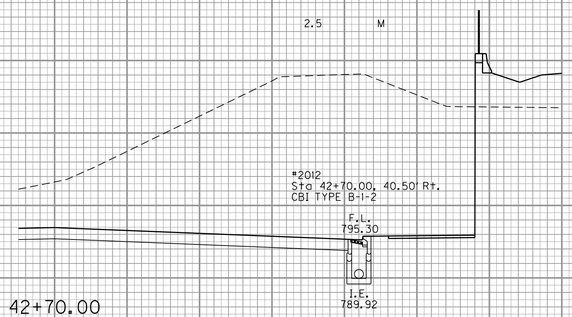
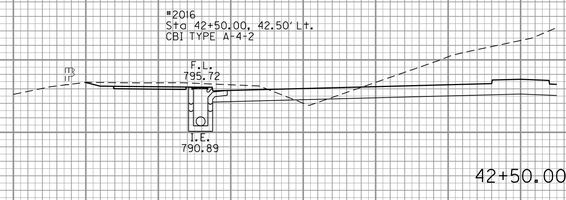
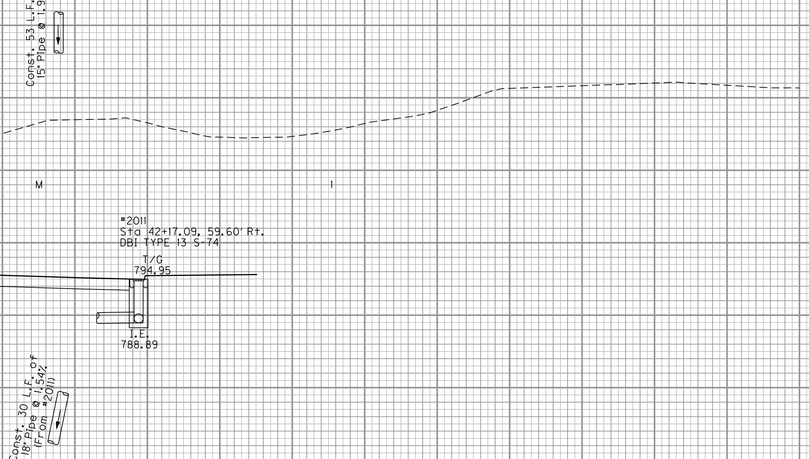
VENDORS NAME
I-92
FORM NO. 6

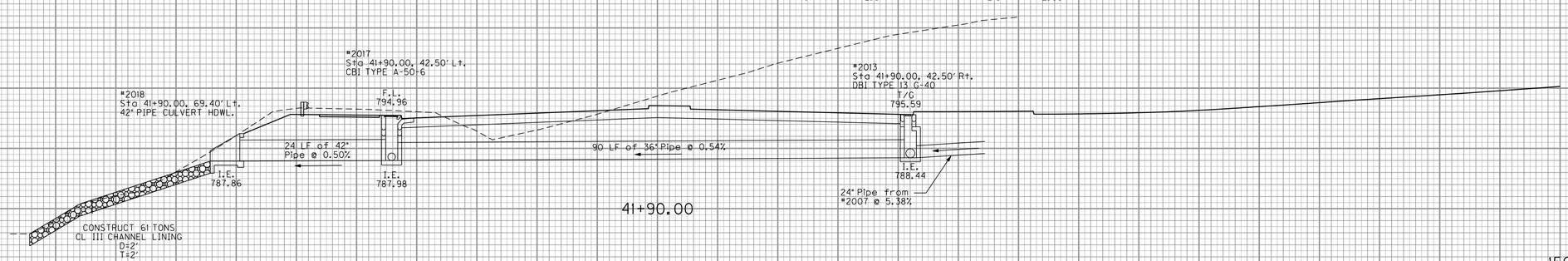
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R118

CLASS III CHANNEL LINER TONS	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL Lb.	CLASS A CONCRETE C.Y.	D.B.I. TYPE 13G EACH	D.B.I. TYPE 13S EACH	C.B.I. TYPE B EACH	C.B.I. TYPE A EACH	42" PIPE CULVERT HDWL. EACH	42" STORM PIPE L.F.	36" STORM PIPE L.F.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
	2.5	M					1						
	2	M						1					
61	2.5	M	215	2.68	1		1	1	24	90	30	56	
	3	M			1								53









SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 41+90.00 to STA. 42+70.00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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$DATE$
$TIME$

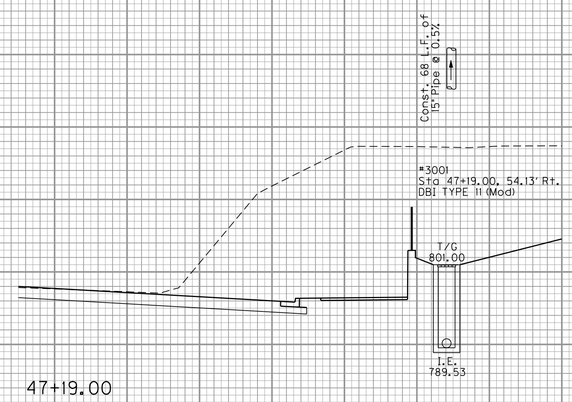
Cell Library: roadway.cel
Cell Name: 3x5
DD-MMM-YYYY HH:MM

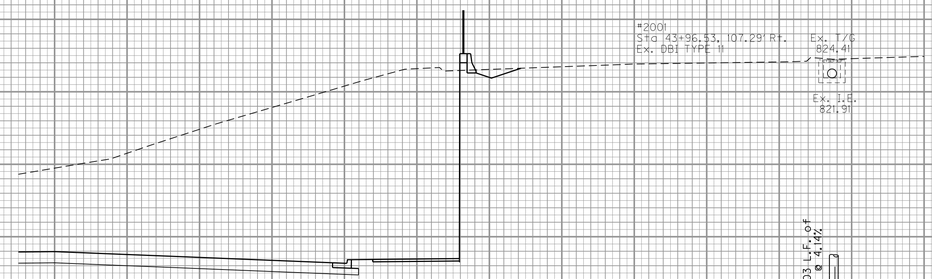
VENDORS NAME
I-92
FORM NO. 6

150 100 50 ℄ 50 100 150

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R119

REINFORCING STEEL LB.	CLASS A CONCRETE C.Y.	COVER HEIGHT FT.	DESIGN pH LEVEL	D.B.I. TYPE II (Mod) EACH	15" STORM PIPE L.F.
		10	M	1	68
		1.5	M		103
		7	0.75	4.5	M	37





SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 42+91.26 to STA. 47+19.00

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

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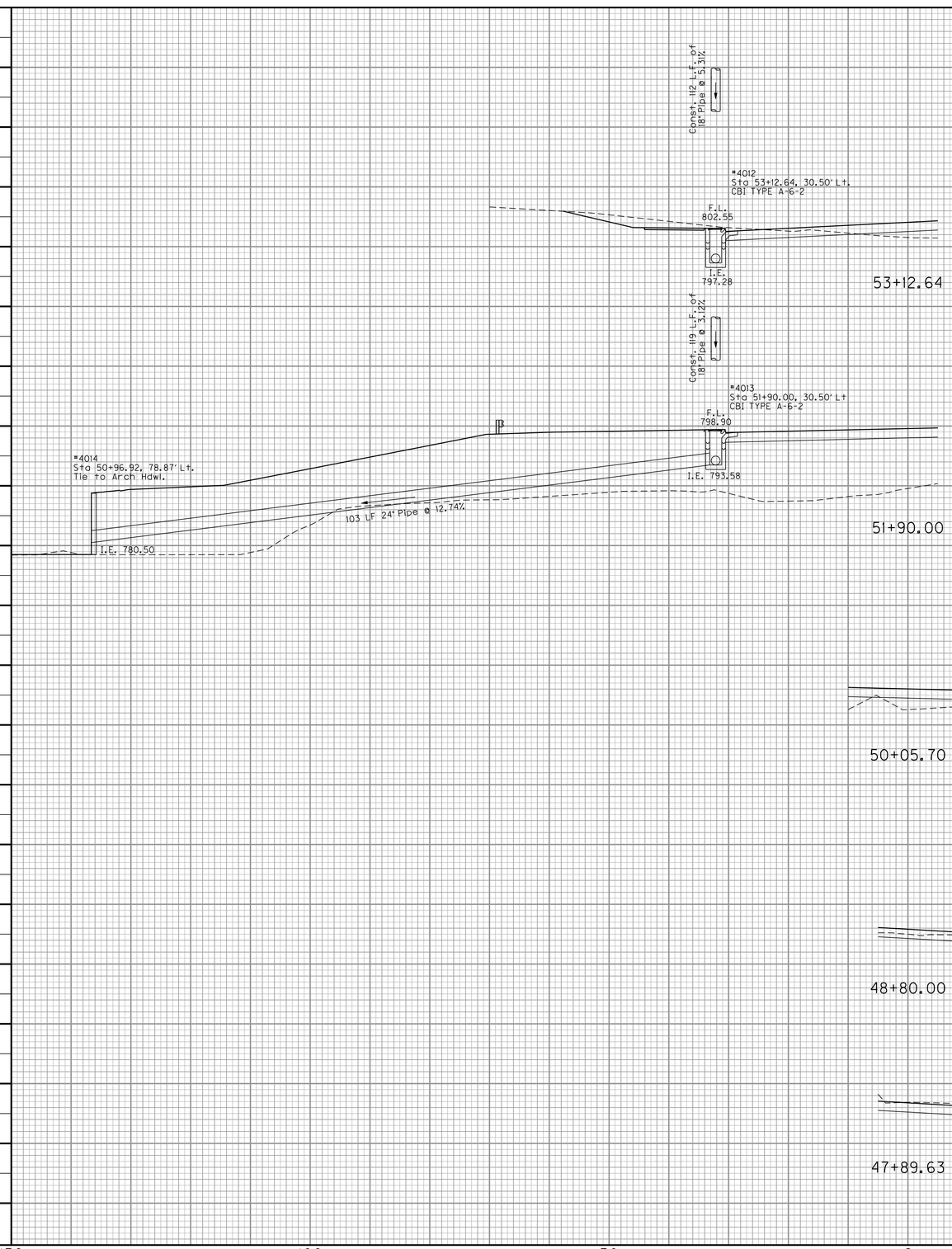
$DATE$
$TIME$

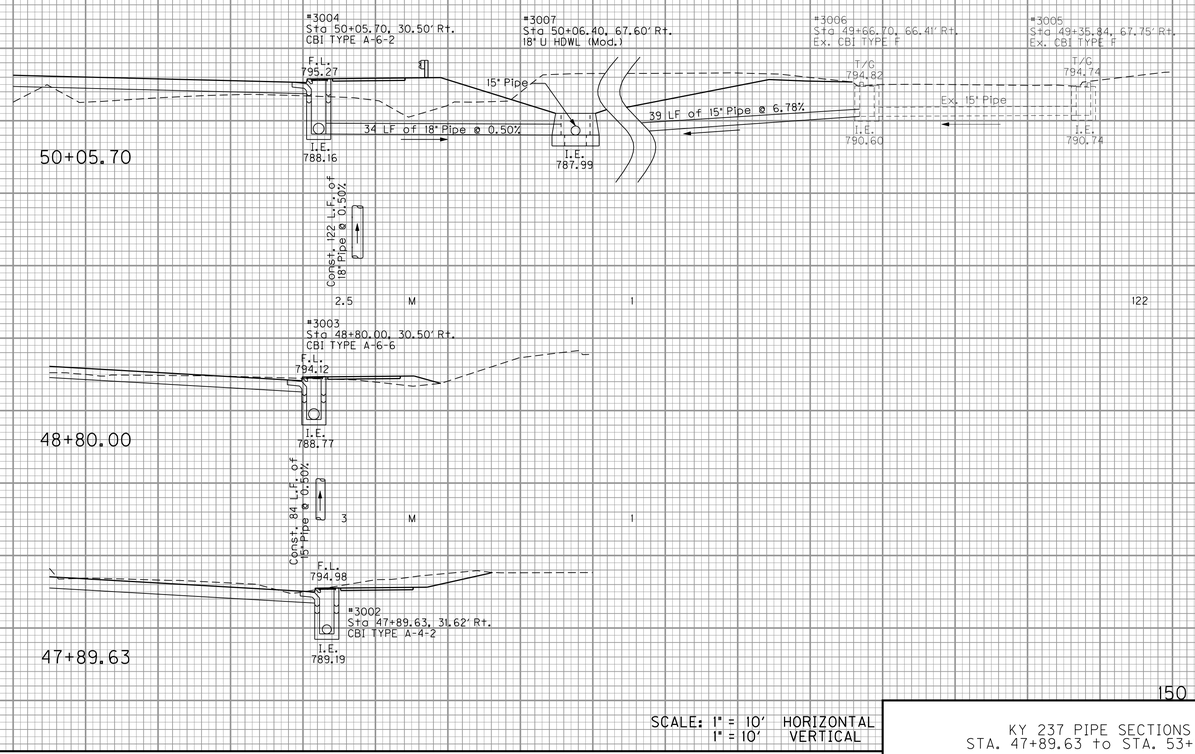
VENDORS NAME
I-92
FORM NO. 6

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R120

	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL Lb.	CLASS A CONCRETE C.Y.	C.B.I. TYPE A EA.	C.B.I. TYPE F EA.	18" U HDWL. EACH	24" S & F HDWL. EACH	24" STANDARD HDWL. EACH	24" CULVERT PIPE L.F.	24" STORM PIPE L.F.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
#4012	2	M			1							112	
#4013	2	M			1						103	119	
#4014	4	M		2.86	1		1					34	39
#3004	2.5	M			1							122	
#3003	3	M			1								84





SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 47+89.63 to STA. 53+12.64

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

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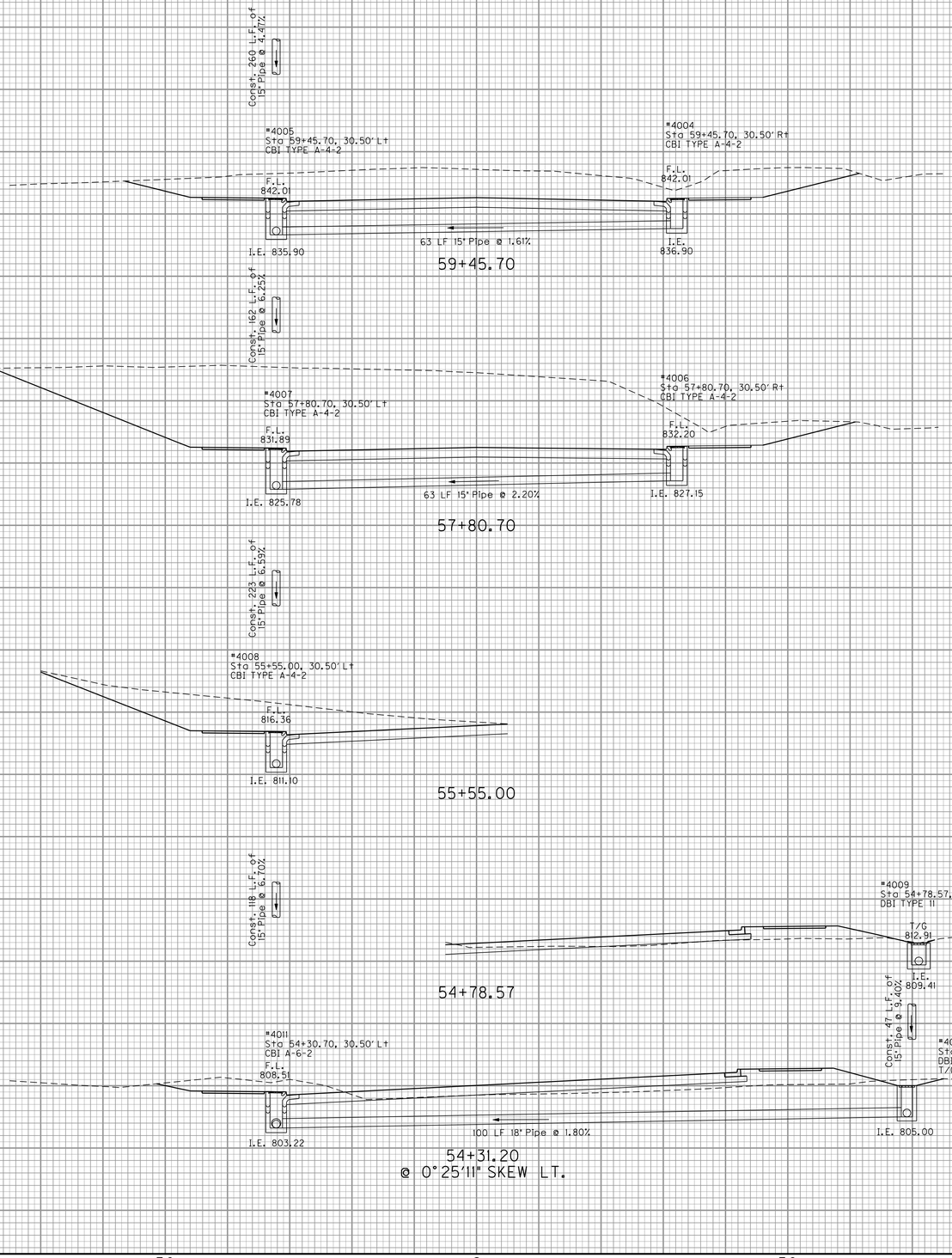
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R121



	COVER HEIGHT FT.	DESIGN pH LEVEL	D.B.I. TYPE II EACH	C.B.I. TYPE A EA.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
#4005	1.5	M		2		323
#4007	2.5	M		2		225
#4008	2.5	M		1		223
#4009	2.5	M	1			
#4010	2.5	M	1	1	100	165

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 54+31.20 to STA. 59+45.70

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150 100 50 ℄ 50 100 150

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R122

	CL III CHANNEL LINING TONS	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL LB.	CLASS A CONCRETE C.Y.	C.B.I. TYPE A EA.	OUTLET STRUCTURE EACH	18" BOX INLET-OUTLET EACH	24" S&F. HDWL. EACH	18" S&F. HDWL. EACH	15" S&F. HDWL. EACH	18" CULVERT PIPE L.F.	24" CULVERT PIPE L.F.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
*5003 Sta 69+71.04, 30.50' Lt. CBI TYPE A-6-6		4	M	8	0.93	1				1				114	192
69+52.50 @ 26°57'46" SKEW RT.		4	19	M	8	1.35	1	1	1				4		184
68+72.59 @ 17°46'32" SKEW LT.															
*5004 Sta 67+95.70, 30.50' Lt. CBI TYPE A-4-2		2.5	M			1									169
67+95.70															
*4001 Sta 65+03.26, 42.50' Lt CBI TYPE A-4-6		3.5	M			1									
65+03.26															
*4003 Sta 62+08.70, 30.50' Lt CBI TYPE A-4-2		1.5	M			2									366
*4002 Sta 62+08.70, 42.50' Rt CBI TYPE A-4-2															
62+08.70															

Const. 192 L.F. of 15" Pipe @ 0.96%

*5003
Sta 69+71.04, 30.50' Lt.
CBI TYPE A-6-6
F.L. 857.89
I.E. 850.65

114 LF of 18" Pipe @ 1.45%

*5025
Sta 69+20.04, 70.45' Rt.
18" S&F HDWL.
I.E. 849.02

69+52.50
@ 26°57'46" SKEW RT.

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER ELEV (ft)
DESIGN	25	28.1	847.37
CHECK	100	34.0	847.74

15" Pipe

*5021
Sta 68+99.63, 89.89' Rt.
OUTLET STRUCTURE

*5022
Sta 69+01.16, 95.57' Rt.
18" S & F BOX INLET-OUTLET
TOP STR 847.00
12:1
TOP FTG 839.00
I.E. 841.41
I.E. 841.44

*5023
Sta 68+42.58, 87.79' Lt.
24" S&F HDWL.
I.E. 839.56

184 LF of 24" Pipe @ 1.00%

CONSTRUCT 4 TONS
CL III CHANNEL LINING
D=2'
T=2'

4 LF of 18" Pipe @ .90%

Const. 168 L.F. of 15" Pipe @ 1.13%

68+72.59
@ 17°46'32" SKEW LT.

*5004
Sta 67+95.70, 30.50' Lt.
CBI TYPE A-4-2
F.L. 858.82
I.E. 853.57

67+95.70

*4001
Sta 65+03.26, 42.50' Lt
CBI TYPE A-4-6
F.L. 858.59
I.E. 854.99

65+03.26

Const. 282 L.F. of 15" Pipe @ 2.56%

*4003
Sta 62+08.70, 30.50' Lt
CBI TYPE A-4-2
F.L. 853.63
I.E. 847.52

74 LF 15" Pipe @ 1.02%

*4002
Sta 62+08.70, 42.50' Rt
CBI TYPE A-4-2
F.L. 853.39
I.E. 848.28

62+08.70

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

KY 237 PIPE SECTIONS
STA. 62+08.70 to STA. 69+70.70

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860 850 840

150 100 50 ℄ 50 100 150

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R123

	CLASS III CHANNEL LINER TONS	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL Lb.	CLASS A CONCRETE C.Y.	D.B.I. TYPE II EACH	C.B.I. TYPE A EA.	15" METAL END SECTION TYPE 1	60" CULVERT PIPE L.F.	18" CULVERT PIPE L.F.	15" STORM PIPE L.F.
91+65.00 (PRACTICAL SOLUTIONS TIE-IN) @ 2°53'32" SKEW LT.	20	1.5	M							21	
83+59.21 @ 4°20'59" SKEW RT.	109	19.5	M	687	9.22				195		
71+65.71		2.5	M				1				
70+32.64		2	M			1	1				38

CONSTRUCT 20 TONS
CL III CHANNEL LINING
D=1'
T=2'

I.E. 849.01

21 LF of 18" Pipe @ 1.54%

Ex. 18" RCP @ 1.33%

I.E. 849.28

I.E. 849.82

91+65.00 (PRACTICAL SOLUTIONS TIE-IN)
@ 2°53'32" SKEW LT.

FLOOD DATA			
	STORM (YR)	RUNOFF (cfs)	HEADWATER ELEV (ft)
DESIGN	25	272.0	818.25
CHECK	100	328.0	820.83

*5018
Sta 83+66.67, 98.0' Lt.
60" PIPE CULVERT HDWL.

CONSTRUCT 109 TONS
CL III CHANNEL LINING
D=3'
T=2'

I.E. 805.84

195 LF of 60" Pipe @ 1.54%

*5019
Sta 83+51.88, 96.4' Rt.
60" PIPE CULVERT HDWL.

I.E. 808.85

83+75.62, 149.04' Lt.
Begin 4' F.B. Dt.
Elev. 805.23

83+66.67, 98.02' Lt.
End 4' F.B. Dt.
Elev. 805.84

83+59.21
@ 4°20'59" SKEW RT.

*5002
Sta 71+65.70, 30.50' Lt.
CBI TYPE A-4-6

F.L. 857.62

I.E. 852.50

71+65.71

*5001
Sta 70+32.64, 62.9' Rt.
DBI TYPE II

T/G 857.23

I.E. 854.23

Const. 38 L.F. of 15" Pipe @ 0.50%

70+32.64

*5020
Sta 69+94.26, 67.40' Rt.
15" Metal End Section Type 1
I.E. 854.04

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

PIPE SECTIONS
KY 237 STA. 70+32.64 to STA. 83+59.21
PRACTICAL SOLUTIONS TIE-IN STA. 91+65.00

$FILE$
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870 860 850 840 830 820 810 800 860 850 860 850 150 100 50 ℄ 50 100

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R124

	COVER HEIGHT FT.	DESIGN pH LEVEL	JB TYPE B EACH	C.B.I. TYPE F MODIFIED EA.	C.B.I. TYPE F EACH	D.B.I. TYPE 13G EACH	C.B.I. TYPE A MODIFIED EACH	15" STORM PIPE L.F.	12" STORM PIPE L.F.
#0018	2.5	M				1		46	
#0017	1	M	1		1			55	
#0016	1	M					1	4	
#0015	1	M					1	4	

Const. 46 L.F. of 15" Pipe @ 3.63%

#0018
Sta 95+25.00, 12.5' Rt.
DBI TYPE 13G-3
T/G 805.14
I.E. 799.57

95+25.00

#0017
Sta 93+33.60, 20.6' Rt.
CBI TYPE F
T/G 814.62
MH0001
Sta 93+34.34, 35.4' Lt.
JUNCTION BOX TYPE BI
RIM 812.20
55 LF 15" Pipe @ 0.72%
I.E. 808.57
I.E. 808.96

93+33.87
@ 0°45'58" SKEW RT.

#0016
Sta 87+23.32, 34.9' Rt.
CBI TYPE A-4-2 (Mod.)
EX. CBI TYPE A
Sta 87+45.47, 33.5' Rt.
(DND)
EX. I.E. 838.05
EX. 15" PIPE
EX. CBI TYPE A
Sta 87+24.20, 32.2' Rt.
(REMOVE)
F.L. 843.77
EX. I.E. 839.73
I.E. 840.07
4 LF 15" Pipe @ 2.65%

87+34.63
@ 17°55'33" SKEW RT.

#0015
Sta 86+23.93, 32.74' Rt.
CBI TYPE A-4-2 (Mod.)
EX. CBI TYPE A
Sta 86+21.27, 33' Lt
(DND) F.L. 847.86
EX. I.E. 842.84
EX. 15" PIPE
EX. CBI TYPE A
Sta 86+23.50, 33.39' Rt.
(REMOVE)
F.L. 847.12
EX. I.E. 843.56
I.E. 843.57
4 LF 15" Pipe @ 1.07%

86+22.60
2°18'46" SKEW LT.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

US 42 PIPE SECTIONS
STA. 86+22.60 to STA. 95+25.00

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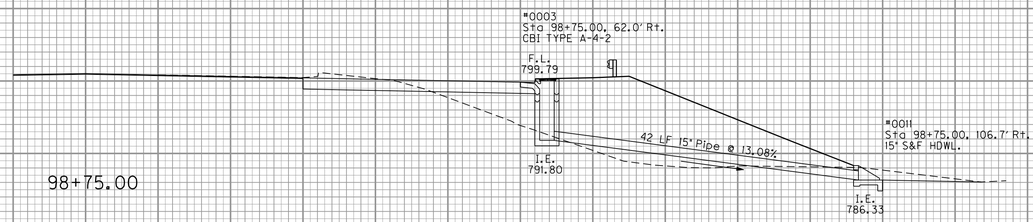
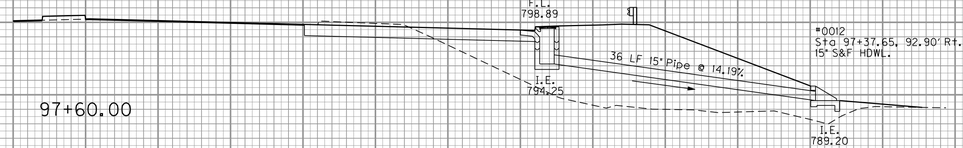
810 800 820 810 850 840 850 840

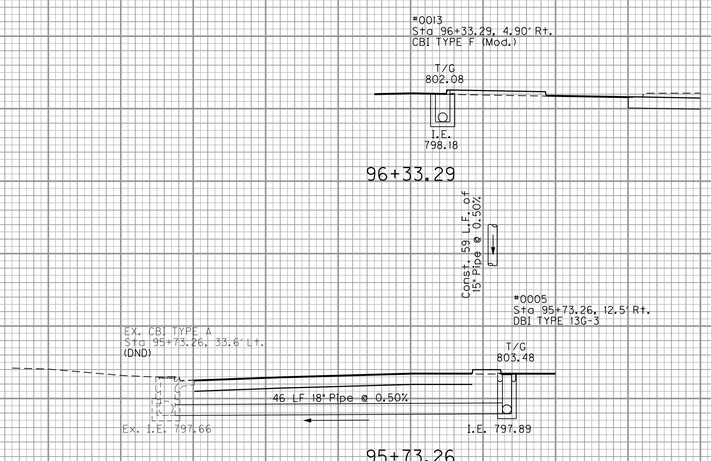
150 100 50 ℄ 50 100 150

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R125

	COVER HEIGHT FT.	DESIGN pH LEVEL	REINFORCING STEEL LB.	CLASS A CONCRETE C.Y.	C.B.I. TYPE F MODIFIED EA.	D.B.I. TYPE 13G EACH	C.B.I. TYPE A EACH	15" S & F HDWL. EACH	18" STORM PIPE L.F.	15" STORM PIPE L.F.
	5	M	7	0.75			1	1		42
	4	M	7	0.75			1	1		36
	1.5	M				1			46	59







SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

US 42 PIPE SECTIONS
STA. 95+73.30 to STA. 98+75.20

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COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R126

	COVER HEIGHT FT.	DESIGN pH LEVEL	D.B.I. TYPE II EACH	C.B.I. TYPE A EA.	C.B.I. TYPE B EA.	C.B.I. TYPE B MODIFIED EA.	36" STORM PIPE L.F.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
#1006	1.5	M		1				9	
#1003	5	M			1	1	17		
#1002									
#0007	3	M	1	1					60
#0006									
#0001	1.5	M	1		1		232		55
#1004									
#1005									

#1006
Sta 105+61.37, 40.9' Lt.
CBI TYPE A-6-2
F.L. 830.51
EX. CBI TYPE A
Sta 105+61.37, 32.3' Lt.
(REMOVE)
Ex. 18" Pipe (DND)
I.E. 826.20
9 LF 18" Pipe @ 1.56%

105+61.37

#1003
Sta 103+43.27, 44.0' Lt.
CBI TYPE B-44-2
F.L. 819.04
EX. CBI TYPE A
Sta 103+47.12, 32.3' Lt.
(REMOVE)
Ex. 36" Pipe
I.E. 809.51
Ex. I.E. 809.78
13 LF 36" Pipe @ 2.48%
I.E. 809.60

#1002
Sta 103+74.44, 35.90' Rt.
CBI TYPE B-44-2 (Mod.)
EX. CBI TYPE A
Sta 103+73.97, 33.6' Lt.
(REMOVE)
F.L. 820.68
4 LF 36" Pipe @ 2.48%
Ex. 30" Pipe
I.E. 811.53

103+60.79
@ 21°24'35" SKEW LT.

Const. 232 LF of 36" Pipe @ 4.10%

#0007
Sta 101+22.46, 48.00' Rt.
CBI TYPE A-4-2
F.L. 807.87
I.E. 803.50
15 LF of 15" Pipe @ 3.35%

#0006
Sta 101+18.02, 65.66' Rt.
DBI TYPE II
T/G 807.49
I.E. 803.00
45 LF of 15" Pipe @ 12.18%

#0001
SEE KY 237 PIPE SECTION
STA. 36+19.20
@ 7° 23'04" SKEW LT.
18" Pipe

101+22.46

#1004
Sta 101+07.05, 46.2' Lt.
CBI TYPE B-36-2
F.L. 806.61
I.E. 800.00
55 LF 15" Pipe @ 0.92%
I.E. 791.50
I.E. 791.00
36" Pipe @ 3.03%
SEE KY 237 PIPE SECTION
STA. 38+00.97

#1005
Sta 101+07.05, 102.00' Lt.
DBI TYPE II
T/G 794.50

101+07.05

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

US 42 PIPE SECTIONS
STA. 101+07.05 to STA. 105+61.40

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830 820 810 800 790

150 100 50 ℄ 50 100

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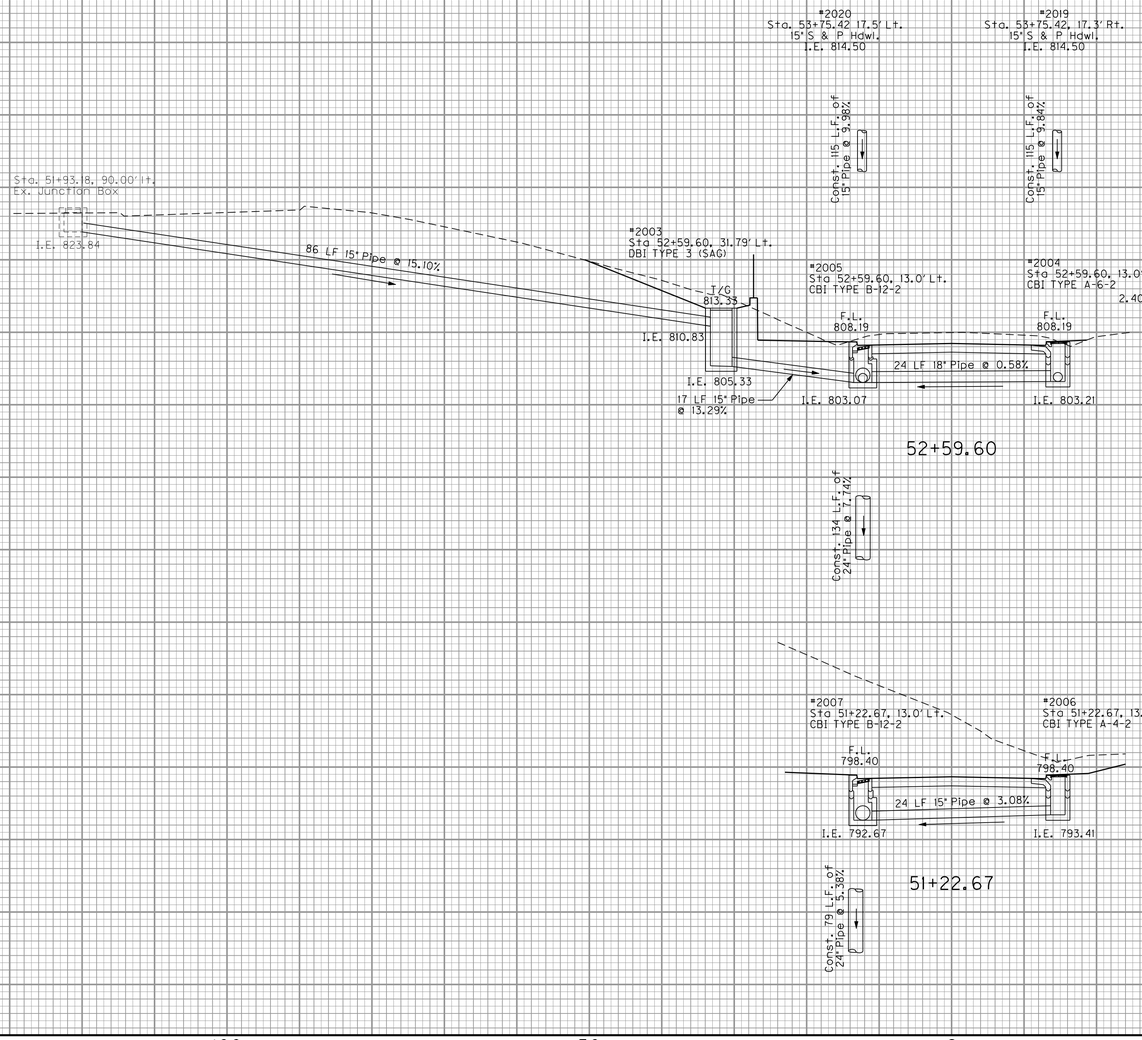
BOONE	6-8001.10	R127

	CLASS A CONCRETE C.Y.	REINFORCING STEEL LB.	COVER HEIGHT FT.	DESIGN pH LEVEL	D.B.I. TYPE 3 EACH	C.B.I. TYPE B EACH	C.B.I. TYPE A EA.	15" S & P HDWL. EACH	24" CULVERT PIPE L.F.	24" STORM PIPE L.F.	18" BOX INLET-OUTLET EACH	18" CULVERT PIPE L.F.	18" STORM PIPE L.F.	15" STORM PIPE L.F.
*2004 Sta 52+59.60, 13.0' Rt. CBI TYPE A-6-2	2.40	24	2	M	1	1	1	2					24	333
*2006 Sta 51+22.67, 13.0' Rt. CBI TYPE A-4-2	2.5	M	1	1						213				24



SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

OLD TOLL ROAD PIPE SECTIONS
STA. 51+22.70 to STA. 52+59.60

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$DATE$
$TIME$

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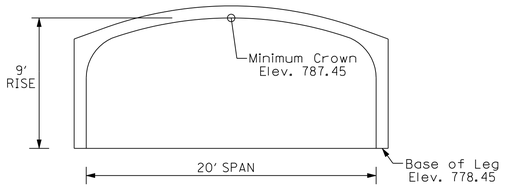
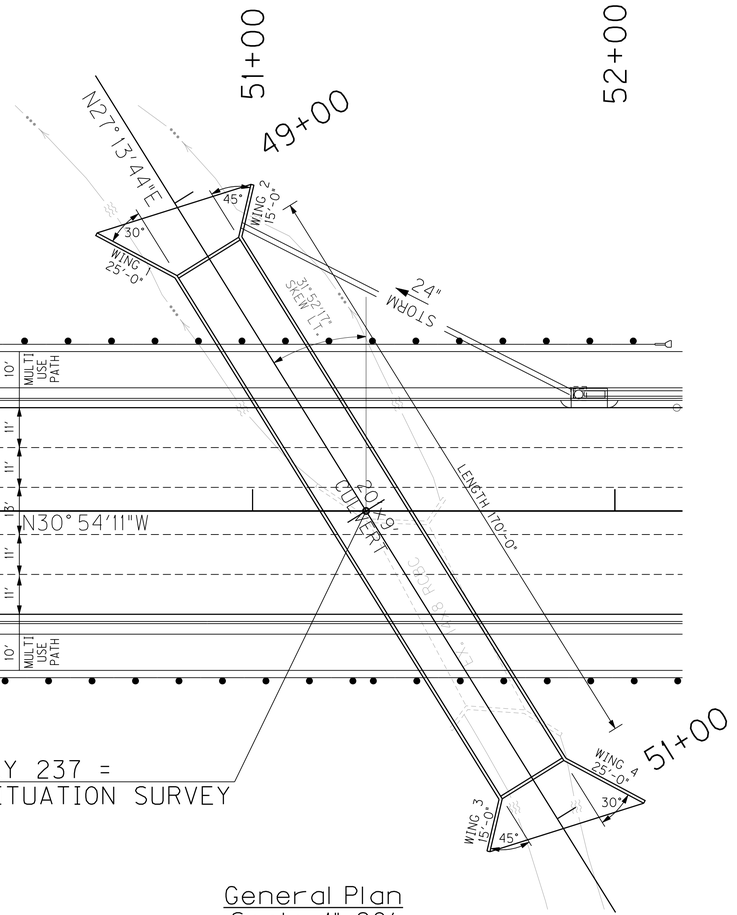
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R128



Culvert Section
Scale 1"=5'



STA. 51+31.31 ℄ KY 237 =
STA. 50+00 ℄ SITUATION SURVEY

General Plan
Scale 1"=20'

OTHER ACCEPTABLE ALTERNATES AS SHOWN IN THE "APPROVED LIST FOR 3-SIDED CULVERTS":

CONSPAN, 20' SPAN x 9' RISE, LISTED FLOW AREA 165 SQUARE FEET

GENERAL NOTES

1. DIMENSIONS AND ELEVATIONS SHOWN ARE APPROXIMATE AND INTENDED TO CONVEY ENOUGH INFORMATION TO DEVELOP DETAIL STRUCTURAL DRAWINGS, AND BIDDING DOCUMENTS. IF CONTRACTOR DESIRES TO MODIFY THIS LAYOUT, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
2. IF A LISTED ALTERNATE IS USED, CROWN ELEVATIONS MUST BE EQUAL TO OR GREATER THAN THE MINIMUM CROWN ELEVATION SHOWN HERE. IF MODIFICATIONS TO THE LAYOUT DUE TO SELECTION OF AN ALTERNATE STRUCTURE ARE REQUIRED, NO PAYMENT ADJUSTMENTS WILL BE ALLOWED.
3. ALL WORK TO CONSTRUCT THE 3-SIDED CULVERT IS PAID FOR UNDER THE BID ITEMS "3-SIDED CULVERT" AND "FOUNDATION PREPARATION." "3-SIDED CULVERT" IS A LINEAR FOOT BID ITEM THAT COVERS ALL WORK TO CONSTRUCT THE CULVERT THAT IS NOT COVERED UNDER "FOUNDATION PREPARATION". THIS INCLUDES LABOR AND MATERIALS TO CONSTRUCT FOUNDATIONS, CULVERT SECTIONS, WING WALLS, PARAPET WALLS (ALSO REFERRED TO AS HEADWALLS), JOINT SEALING, AND STRUCTURE DRAINAGE APPURTENANCES. AS PER SECTION 603 OF THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "STRUCTURE EXCAVATION SOLID ROCK" WILL BE MEASURED AND PAID FOR AS NEEDED. GUARDRAIL WILL ALSO BE MEASURED AND PAID FOR SEPARATELY.
4. ALL COMPONENTS MUST BE DESIGNED TO MEET STRUCTURAL REQUIREMENTS AS SET FORTH FOR EARTH, DEAD, AND HL-93 LIVE LOAD IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, WITH INTERIMS. ALL DESIGNS SUBMITTED FOR CONSIDERATION MUST BE PERFORMED AND STAMPED BY A QUALIFIED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF KENTUCKY.
5. ALL FOUNDATION DESIGNS MUST BE IN ACCORDANCE WITH THE APPROPRIATE PROJECT GEOTECHNICAL INVESTIGATION.
6. ALL MATERIALS USED MUST BE IN CONFORMANCE WITH KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE KYTC LIST OF APPROVED MATERIALS, AND ALL APPLICABLE ASTM AND AASHTO STANDARDS.
7. ALL PRECAST COMPONENTS SHALL BE MANUFACTURED BY A FABRICATOR APPROVED BY KYTC AND BE IN STRICT COMPLIANCE WITH SECTION 605 OF THE KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
8. COMPLY WITH SECTION 106.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION BUY AMERICAN REQUIREMENT.
9. IN ACCORDANCE WITH SECTION 611 OF KYTC STANDARD SPECIFICATIONS FOR ROAD A BRIDGE CONSTRUCTION, WEEP HOLES WILL BE REQUIRED FOR THESE STRUCTURES.
10. 3-SIDED STRUCTURES THAT REQUIRE SPECIAL BACKFILL CONTRARY TO KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WILL REQUIRE A CERTIFICATION LETTER STATING THAT THE BACKFILL WAS CONSTRUCTED PROPERLY. THE LETTER WILL BE SIGNED BY THE CONTRACTOR AND THE MANUFACTURER OF THE 3-SIDED STRUCTURE AND WILL BE SUBMITTED TO THE RESIDENT ENGINEER.
11. THE MANUFACTURER OR SUPPLIER MUST PROVIDE 6 COPIES OF DETAILED SHOP DRAWINGS FOR FINAL APPROVAL FOR USE ON THIS PROJECT. BACKFILL REQUIREMENTS AND ANY SPECIFICATIONS THAT ARE CONTRARY TO THE KYTC STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHOULD BE SUPPLIED AS WELL. INCLUDE ONE SET OF STRUCTURAL DESIGN CALCULATIONS FOR REVIEW AND ARCHIVAL PURPOSES. THIS INFORMATION WILL BE SUBMITTED TO THE DIVISION OF CONSTRUCTION. ALLOW 4 WEEKS TIME FOR REVIEW OF THIS MATERIAL.

ATTACHED GUARDRAIL NOTES

WHEN IT BECOMES NECESSARY TO ATTACH GUARDRAIL DIRECTLY TO THESE STRUCTURES, THE FOLLOWING REQUIREMENTS MUST BE MET:

1. GUARDRAIL CONFIGURATION ACROSS THE STRUCTURE WILL BE IN ACCORDANCE WITH KYTC "RAILING SYSTEM TYPE II" AS SHOWN IN STANDARD DRAWING BDP 005.
2. WHEN MOUNTING POSTS TO THE TOP OF A STRUCTURE, ANCHOR PLATES WILL BE USED AS SHOWN IN RBR-015.
3. CALCULATIONS WILL BE PROVIDED SHOWING THAT THE GUARDRAIL POSTS WILL FAIL BEFORE ALL CONNECTIONS BETWEEN THE PRECAST COMPONENTS BELOW THE GUARDRAIL POSTS AND THE CULVERT SECTIONS.
4. ALL GUARDRAIL TRANSITIONS FROM THE NORMAL ROADWAY GUARDRAIL TO THE STRUCTURE GUARDRAIL WILL BE IN ACCORDANCE WITH STANDARD DRAWING BHS 007.

20'x9' Arch Situation Sta. 51+31.31
Sk. 31°52'17" Lt.

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$DATE$
$TIME$

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APPROVED BY DATE

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VENDORS NAME
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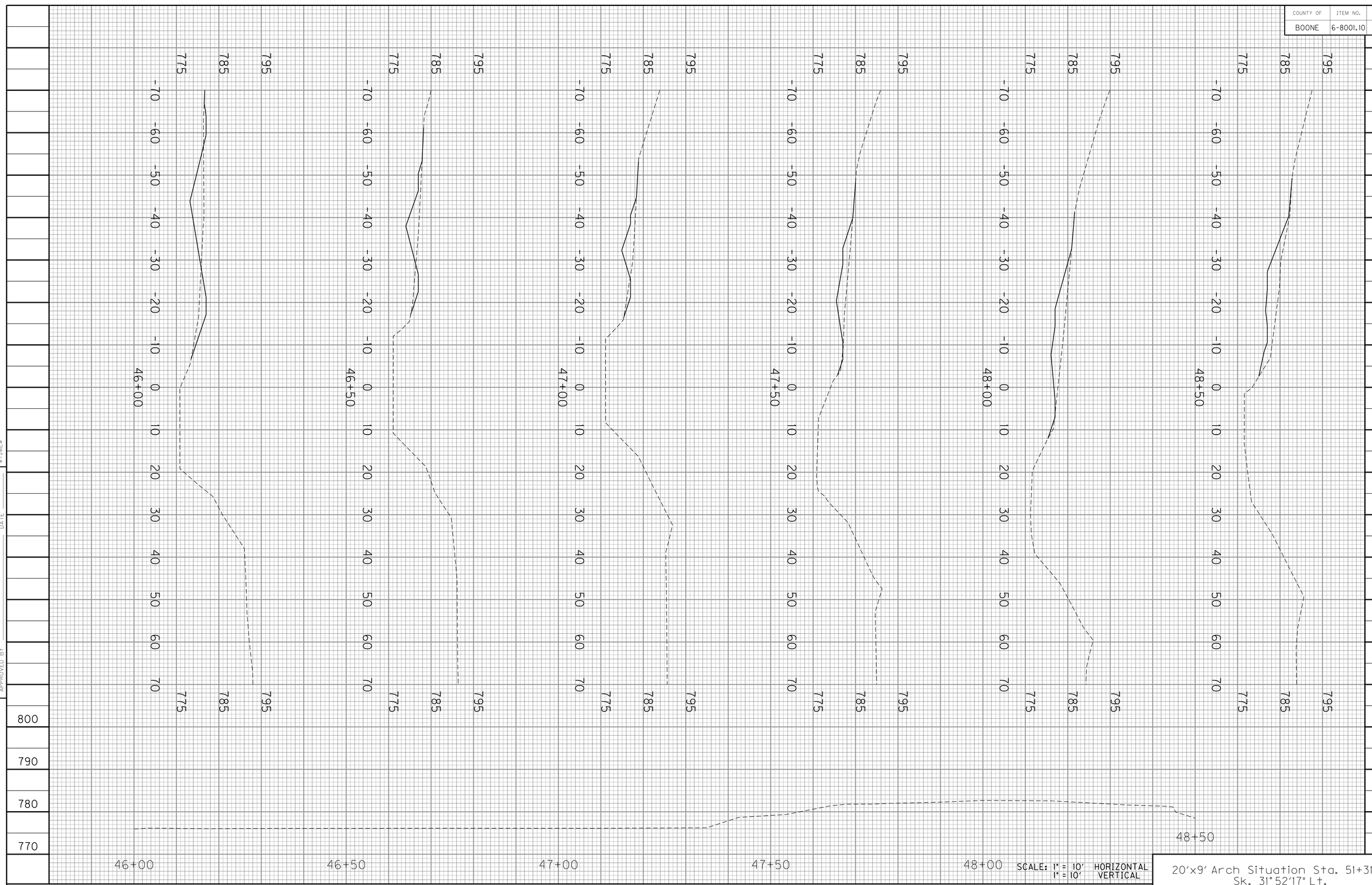
COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R129



SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

20'x9' Arch Situation Sta. 51+31.31
Sk. 31°52'17" Lt.

PREPARED BY GRESHAM SMITH & PARTNERS DATE $DATE$
CHECKED BY DATE
APPROVED BY DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 6

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM

COUNTY OF	ITEM NO.	SHEET NO.
BOONE	6-8001.10	R130

PREPARED BY	GRESHAM SMITH & PARTNERS	DATE $DATE$
CHECKED BY		DATE
APPROVED BY		DATE

$FILE$
$DATE$
$TIME$

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM

VENDORS NAME
I-92
FORM NO. 6

FLOOD EVALUATION DATA
Q_{100}=2562 cfs HW_{100}=793.43
Q_{25}=1809 cfs HW_{25}=789.11

20'x9' Arch @ 0.0%

I.E. 778.45

I.E. 778.45

49+00 49+50 50+00 50+50 51+00 51+50

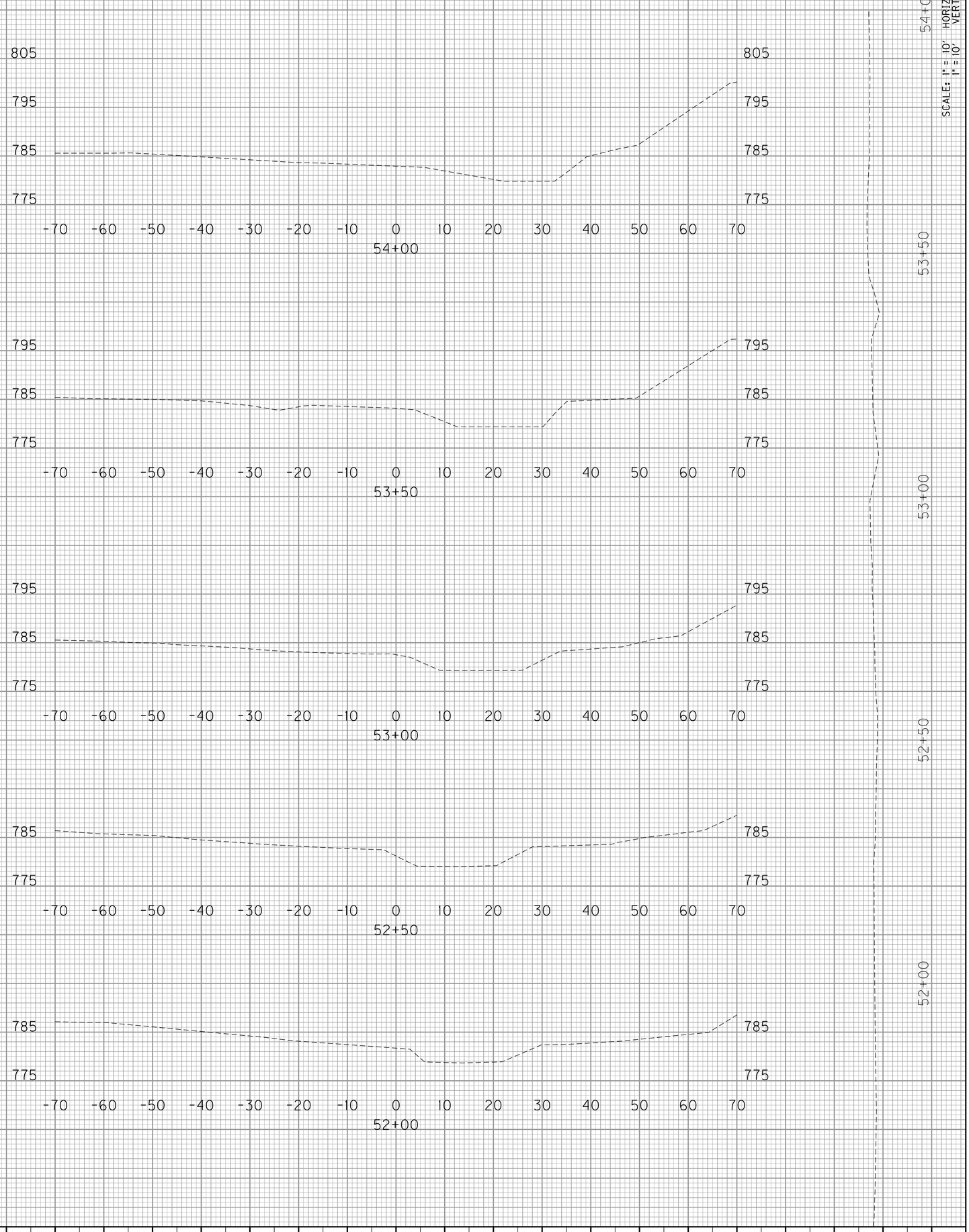
SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

20'x9' Arch Situation Sta. 51+31.31
Sk. 31°52'17" Lt.

COUNTY OF	ITEM No.	SHEET NO.
BOONE	6-8001.10	R131

20'x9' Arch Situation Sta. 51+31.31
Sk. 31°52'17" Lt.

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL



SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

PREPARED BY	CRESHAM SMITH & PARTNERS	DATE $DATE$
CHECKED BY		DATE
APPROVED BY		DATE

$FILE$
$DATE$
$TIME$

VENDORS NAME
I-92
FORM NO. 6

Cell Library: roadway.cel
Cell Name: sxs
DD-MMM-YYYY HH:MM