GRADING
NHSX-061-3(57)--3H-58
LOUISA Co.

LETTING DATE
07/15/2014

IOWADOT
Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
LOUISA COUNTY
GRADING

130th St 2 miles S of IA 92 to Muscatine Co

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.15 of the Specifications.

REVISIONS

TOTAL
475
PROJECT IDENTIFICATION NUMBER
09-58-061-030
PROJECT NUMBER
NHSX-061-3(57)--3H-58
R.O.W. PROJECT NUMBER
NHSN-061-3(55)--2R-58
NHSN-061-3(55)--2R-58

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
A.3 - 5	GPS Machine Control Grading Limits Map
B Sheets	**Typical Cross Sections and Details**
B.1 - 6	Typical Cross Sections and Details
C Sheets	**Quantities and General Information**
C.1	Project Description
C.1	Estimated Project Quantities
C.2 - 3	Estimate Reference Information
C.3	Standard Road Plans
C.3	Index of Tabulations
C.4	Pollution Prevention Plan
C.5	General Notes
C.5 - 11	Tabulations
CS Sheets	**Soil Quantities and General Information**
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CS.3	Typical Detail - Overbuild
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Color Legend for Sheets D, E, F, & K
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* D.13 - 16	US 61 Northbound Tie
E Sheets	**Side Road Plan and Profile Sheets**
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* E.2	170th Street
* E.3 - 4	175th Street
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F Sheets	**Detour Plan and Profile Sheets**
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H Sheets	**Mainline Right-of-Way Sheets (Preliminary)**
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HE Sheets	**Side Road Right-of-Way Sheets (Preliminary)**
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HE.2	IA 92 (For Information Only)
HE.3	170th Street (For Information Only)
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HE.6	180th Street (For Information Only)
HE.7	Existing 61 (For Information Only)
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J Sheets	**Traffic Control and Staging Sheets**
* J.1	Traffic Control Plan and Staging Notes
* J.2	Traffic Control & Staging Legend & Symbol Info. Sheet
* J.3 - 4	Staging and Traffic Control - 145th Street
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* K.3 - 6	IA 92 Ramps A, B, C, & D - Plan and Profile Sheets
* K.7 - 8	US 61/170th St Interchange Layout
* K.9 - 12	170th St Ramps A, B, C, & D - Plan and Profile Sheets

MILEAGE SUMMARY

105-1
09-27-94

Div.	Location	Lin. Ft.	Miles
1	RURAL:		
	Sta. 756+39.00 to Sta. 1053+25.00	29,686.00	5.62
	Deduct Dual Bridges Sta. 856+52.82	194.00	0.04
	Deduct Dual Bridges Sta. 964+90.56	188.00	0.04
	Deduct Single Bridge Sta. 1037+58.94	176.33	0.04
	TOTAL:	29,127.67	5.5

INDEX OF SHEETS

No.	DESCRIPTION
MIT Sheets	**Wetland Sheets**
MIT.1	Stream Mitigation General Site Plan
MIT.2	Stream Mitigation Grading Plan
MIT.3 - 4	Stream Mitigation Typical Details
Q Sheets	**Soils Sheets**
* Q.1	Soils Legend & Symbol Information Sheet
* Q.2 - 23	Soils Sheets - US 61 Mainline
* Q.24 - 33	Soils Sheets - Side Roads
* Q.34 - 41	Soils Sheets - Ramps
* Q.42 - 45	Vertical Sand Drain Details
T Sheets	**Earthwork Quantity Sheets**
T.1 - X	Earthwork Quantity Sheets
V Sheets	**Bridge Situation Plans (Preliminary)**
V.1 - 4	IA 92 Bridge Situation Plans (For Information Only)
V.5 - 8	170th St Bridge Situation Plans (For Information Only)
V.9 - 10	DM&E RR Bridge Situation Plans (For Information Only)
W Sheets	**Mainline Cross Sections**
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W.2 - 120	US 61 Mainline
X Sheets	**Side Road and Detour Cross Sections**
X.1 - 18	145th Street
X.19 - 28	170th Street
X.29 - 55	175th Street
X.56	180th Street
X.201 - 205	Detour 905
X.206 - 230	Detour 985
Y Sheets	**Ramp Cross Sections**
Y.1 - 50	US 61/IA 92 - Ramps A, B, C, & D
Y.51 - 98	US 61/170th Street - Ramps A, B, C, & D
	* Color Plan Sheets

101-4
04-30-02

DESIGN DATA RURAL

2016	AADT	6136	V.P.D.
2036	AADT	7703	V.P.D.
2036	DHV	796	V.P.H.
TRUCKS		18	%
Total Design ESALs			

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

For Project Location Map
Refer to Sheet A.2

INDEX OF SEALS

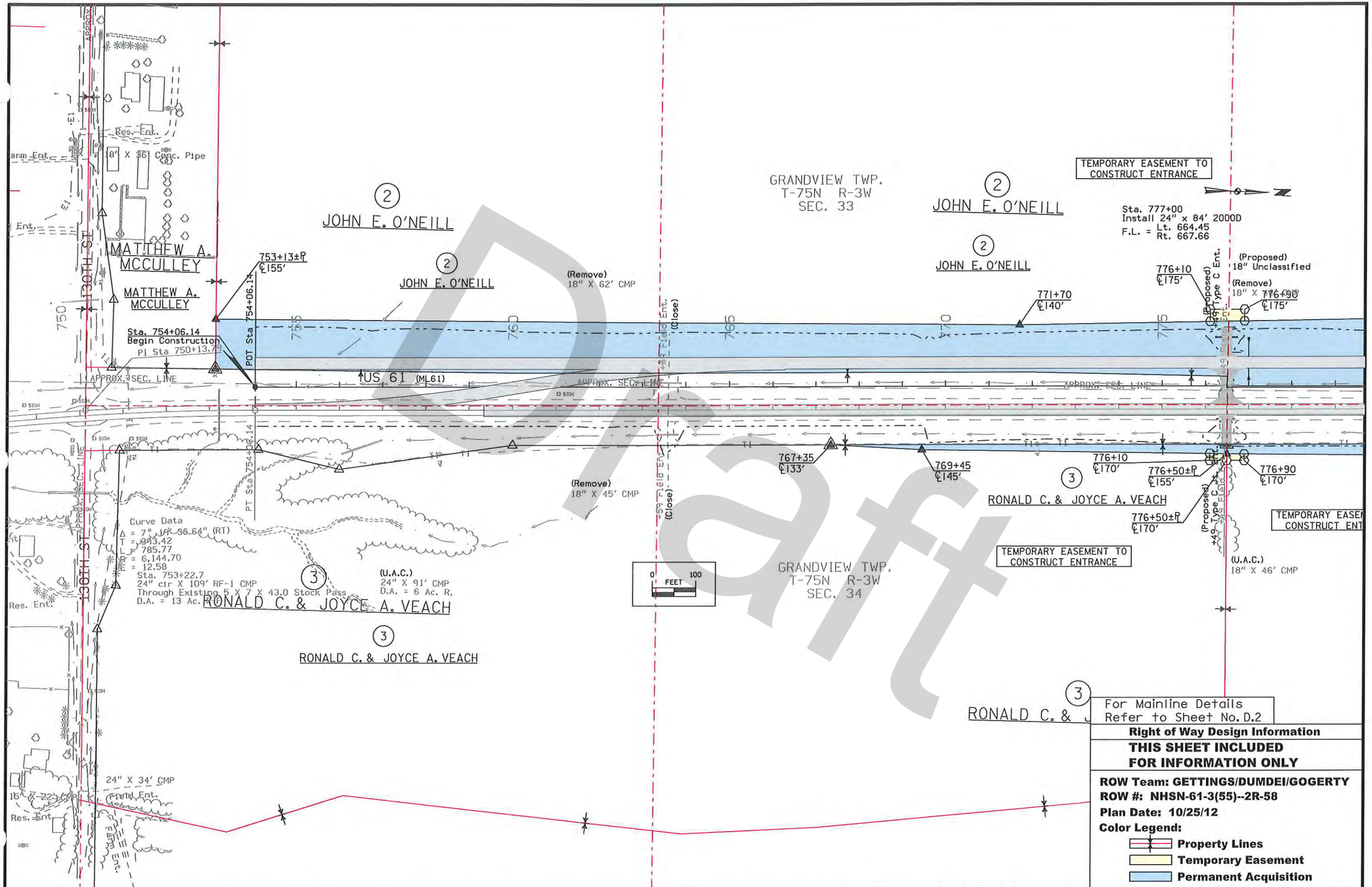
SHEET NO.	NAME	TYPE
A.1	Anne M. Murillo	Primary Signature Block
CS.1	Robert L. Stanley	Soils Signature Block
MIT.1	Chin-Ta Tsai	Wetland Signature Block

LICENSED PROFESSIONAL ENGINEER
ANNE M. MURILLO
20794
IOWA

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

ANNE M. MURILLO DATE
License Number: 20794
My license renewal date is December 31, 2014
Pages or sheets covered by this seal:
A.1-A.5, B.1-B.6, C.1-C.11, D.1-D.16, E.1-E.5, F.1-F.5, G.1-G.15, H.1-H.11, HE.1-HE.8, J.1-J.6, K.1-K.12, T.1-T.9, V.1-V.10, W.1-W.120, X.1-X.230, Y.1-Y.98

Draft
CHECK PLANS



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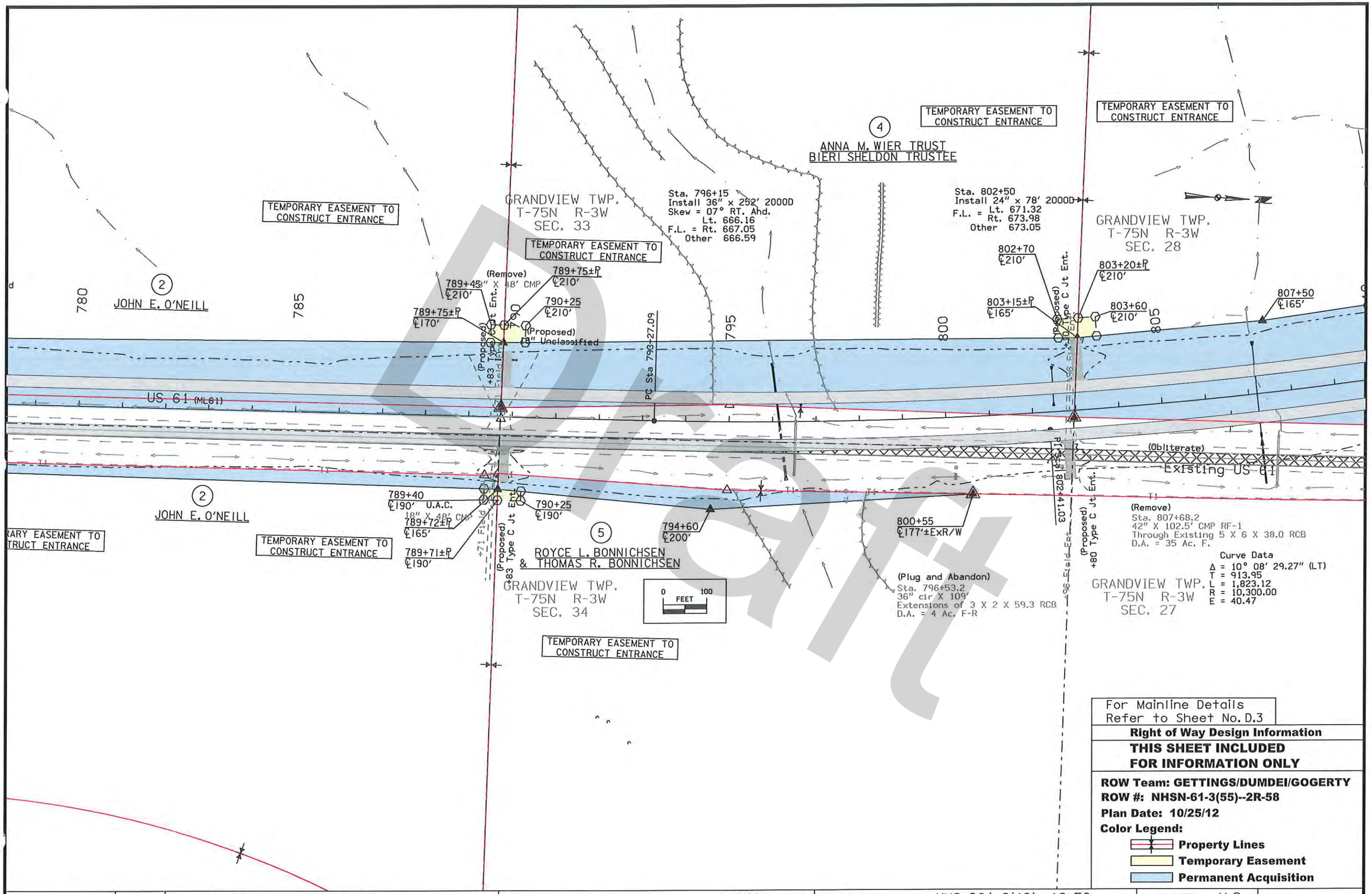

For Mainline Details
Refer to Sheet No. D.3

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 10/25/12
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

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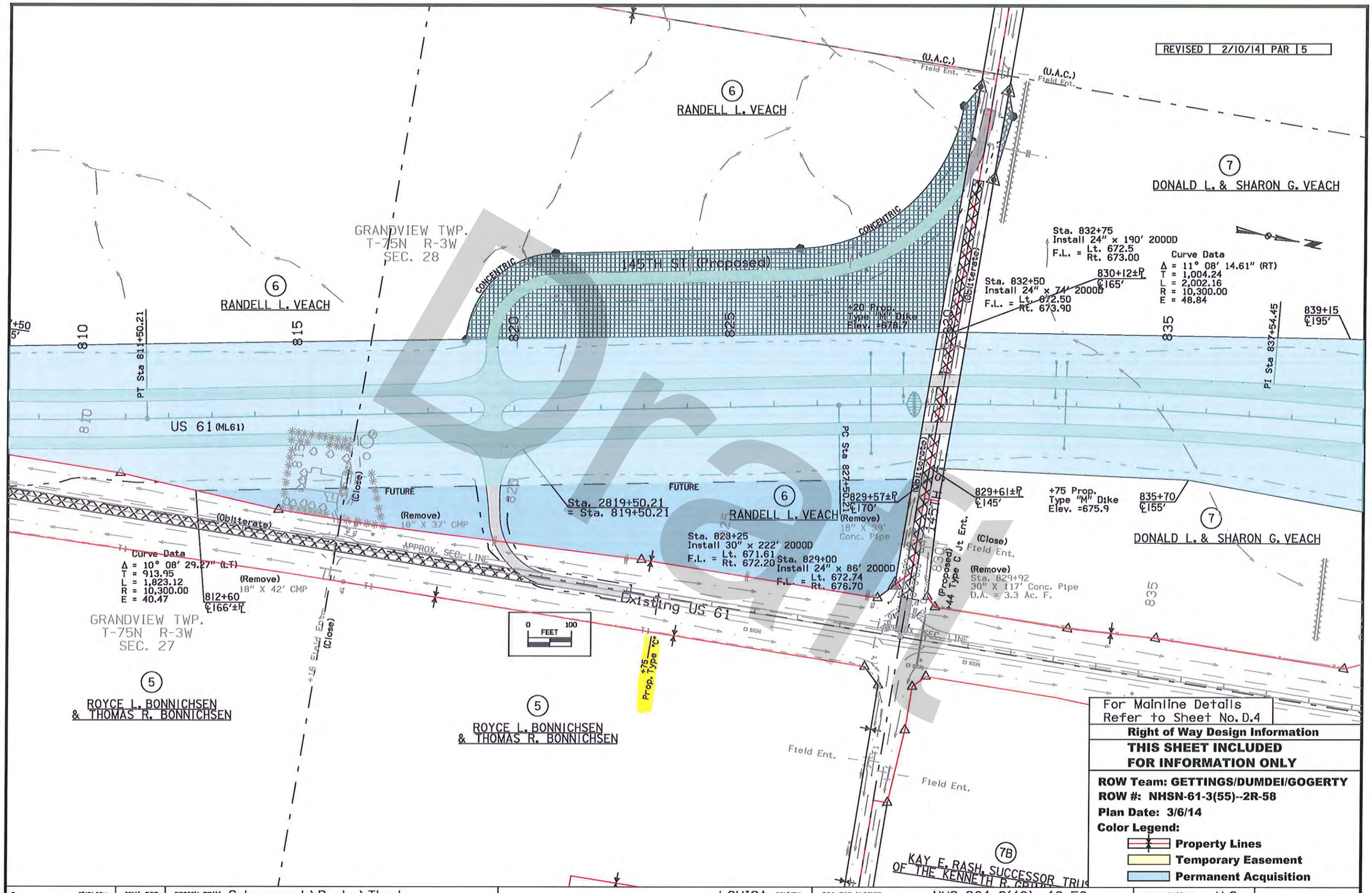

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REVISED	8/21/13	PAR	8A,8B,8E
REVISED	11/19/13	PAR	7C

7A
ANNA J. DAWSON

7
DONALD L. & SHARON G. VEACH

8
INVESTMENT REAL ESTATE LLC

GRANDVIEW TWP.
T-75N R-3W
SEC. 28

GRANDVIEW TWP.
T-75N R-3W
SEC. 21

Curve Data
Δ = 11° 08' 14.61" (RT)
T = 1,004.24
L = 2,002.16
R = 10,300.00
E = 48.84

Sta. 844+00
Install 78" x 336' 2000D
Skew = 10° LT. Ahd.
F.L. = Lt. 652.47
Rt. 653.81

843+16±SecLine
℄220'

848+50
℄265'

855+05
℄415'

506+15±

505

857+40
℄420'

Sta. 1556+90 Ramp A
Install 36" x 86' 2000D
Skew = 12° RT. Ahd.
F.L. = Lt. 659.00
Rt. 660.00

Sta. 1560+50 Ramp A
Install 36" 66' 2000D
Skew = 05° LT. Ahd.
F.L. = Lt. 660.10
Rt. 660.50

FUTURE

Sta. 857+25.83
Install 36" x 300' 3000D
Skew = 2.6° RT. Ahd.
F.L. = Lt. 661.27
Rt. 664.43

867+25
℄215'

Sta. 3555+90 Ramp C
Install 30" x 64' 2000D
Skew = 05° LT. Ahd.
F.L. = Lt. 661.24
Rt. 661.58

840 845 850 855 860 865

US 61 (ML61)

PT Sta 847+52.36

510
+20 Field Ent.
(Close)

(Remove)
Two 24" X
24' CMP

Sta. 855+84.09
Install 24" x 286' 3000D
Skew = 3.6° RT. Ahd.
F.L. = Lt. 662.25
Rt. 663.54

Sta. 510+38.38
= Sta. 856+52.82

843+04±SecLine
℄215'

847+70
℄255'

849+90
℄260'

Sta. 2556+17 Ramp B
Install 24" x 88' 2000D
Skew = 15° RT. Ahd.
F.L. = Lt. 664.54
Rt. 664.98

Sta. 860+40
Install 30" x 360' 3750D
F.L. = Lt. 661.25
Rt. 662.93

Sta. 841+75
Install 24" 110' 2000D
F.L. = Lt. 667.09
Rt. 663.22
Other 666.14

+27 Field Ent.

855+30±P
℄380'

Sta. 4557+30 Ramp D
Install 52" x 32" x92' 2000D
Skew = 07° LT. Ahd.
F.L. = Lt. 664.90
Rt. 666.00

Sta. 4560+40 Ramp D
Install 30" x 90' 2000D
F.L. = Lt. 663.73
Rt. 664.73

858+13±P
℄380'

861+80
℄360'

PI Sta 858+49

PI Sta 866+44.93

+52 Field Ent.

Existing US 61

For Detour Details
Refer to Sheet No. F.6

For Mainline Details
Refer to Sheet No. D.5

For Interchange Details
Refer to Sheet No. K1-K6

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 11/19/13
Color Legend:

- Property Lines
- Temporary Easement
- Permanent Acquisition

WILLIAM G. BEARD

7B

Curve Data
Δ = 0° 57' 34.51" (RT)
T = 300.00
L = 599.99
R = 35,824.44
E = 1.26

+27 Comm. Ent.

PC Sta 847+40.90

PT Sta 852+40.90

KAY E. RASH, SUCCESSOR TRUSTEE
OF THE KENNETH R. GRIMM REV. TRUST

+44 Comm. Ent.

8A
CARNER, INC.

8B
LOUISA COUNTY AREA
VIETNAM VETERANS

PC Sta 863+22.81

Curve Data
Δ = 2° 10' 42.82" (RT)
T = 321.23
L = 642.38
R = 16,894.55
E = 3.05

8E
KAREN J. SCHANTZ

+29 Comm. Ent.

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER H.4

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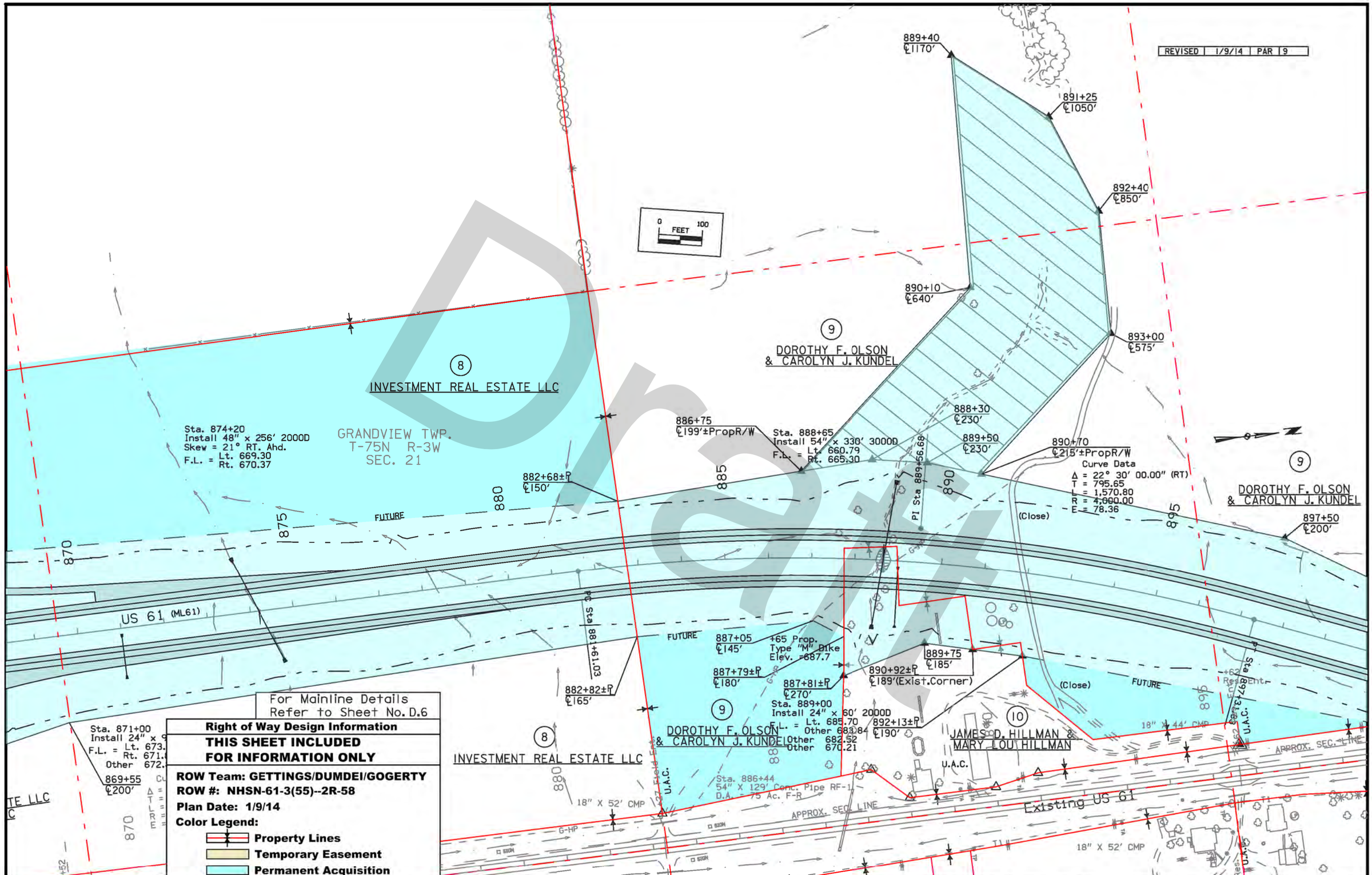

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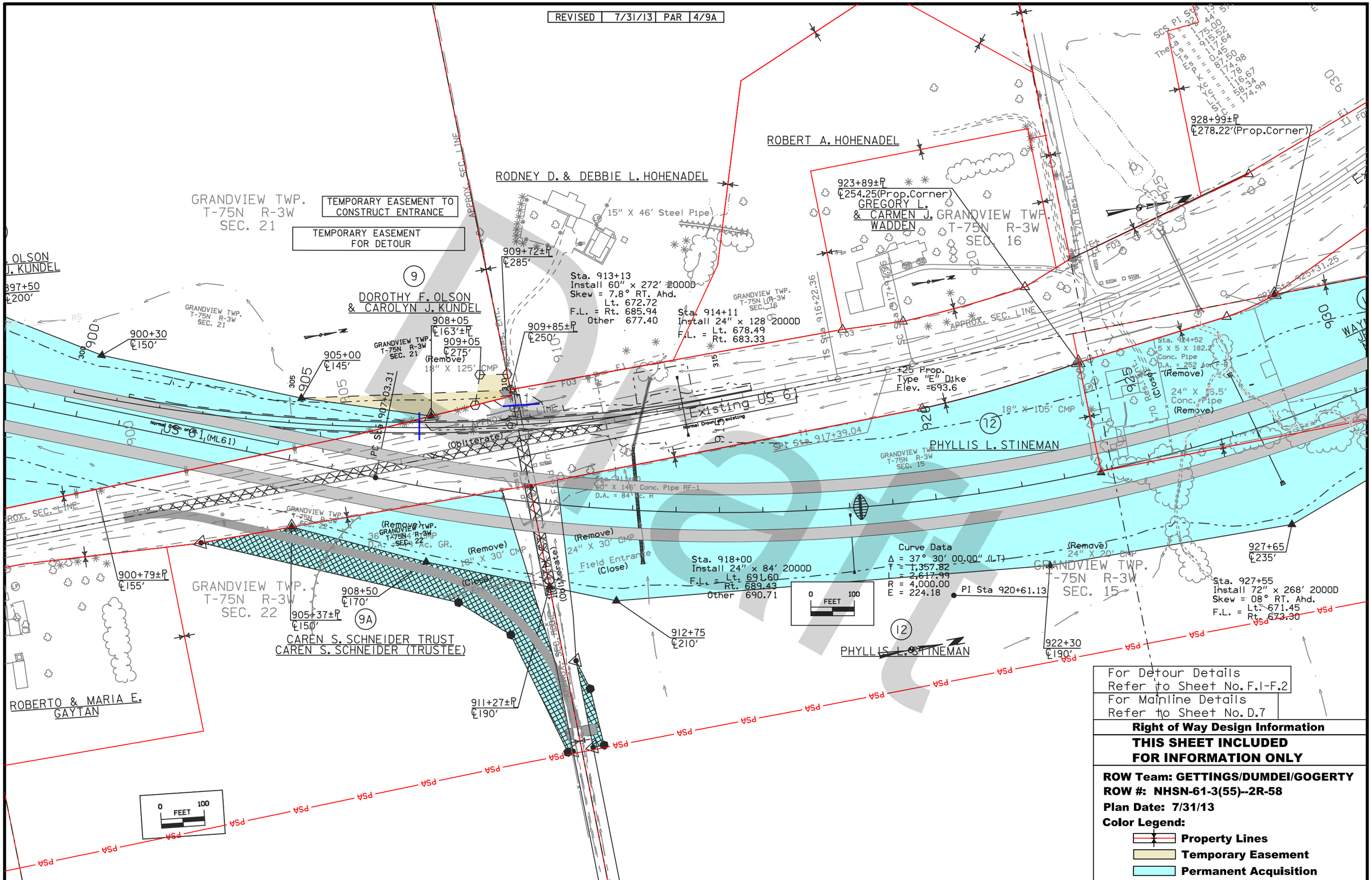

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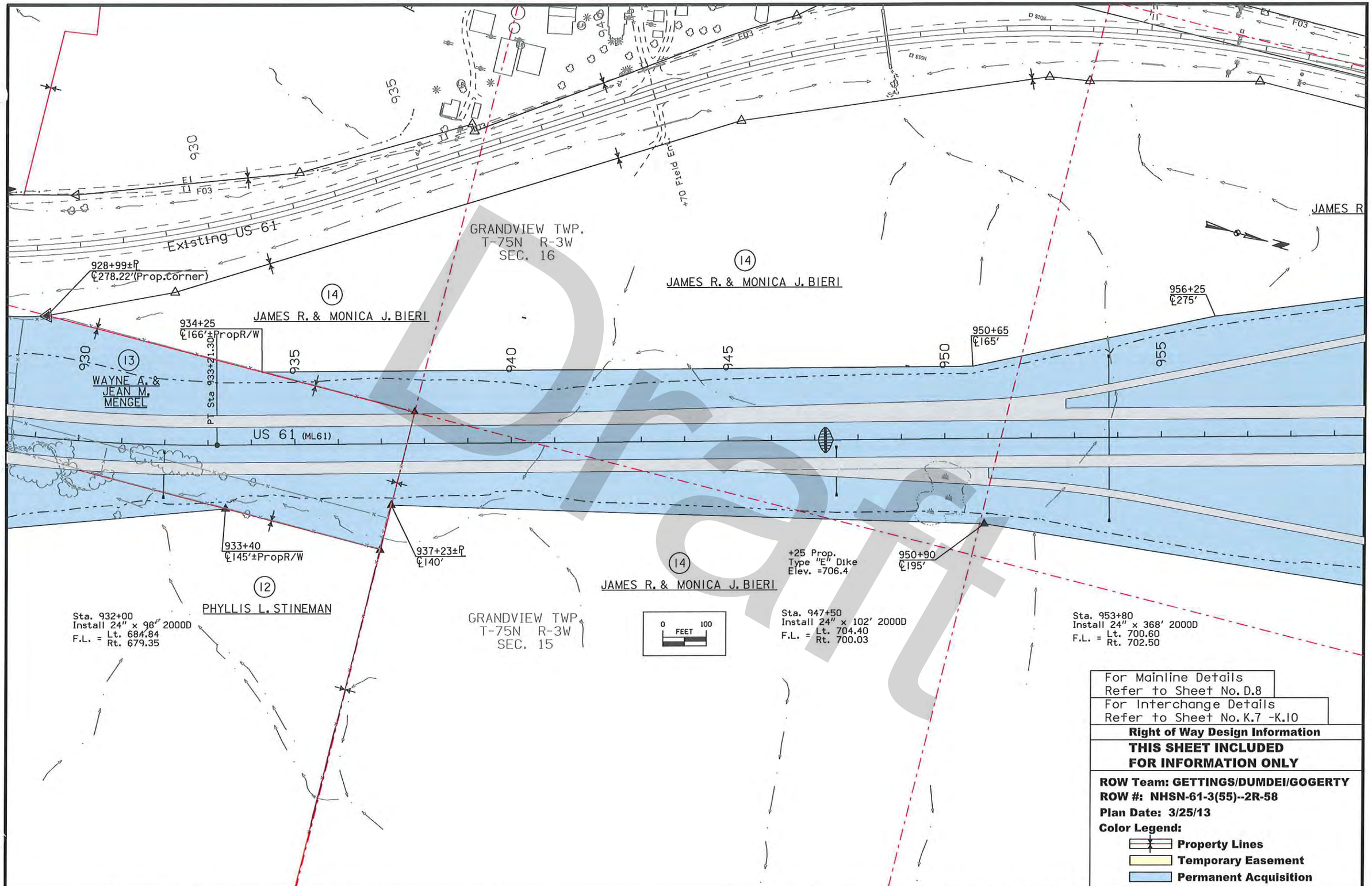

For Mainline Details
Refer to Sheet No. D.8

For Interchange Details
Refer to Sheet No. K.7 -K.10

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 3/25/13
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

Draft

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER H.7

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JAMES R. & MONICA J. BIERI (14)

Existing US 61

U.A.C. +49 School Ent. 3945

JOAN R. DECOOK TRUST (16)

LOUISA-MUSCATINE COMM SCHOOL DIST (14A)

967+00 ℄570'±R (Remove)

965+75 ℄602'±R (Remove)

963+05 ℄355'

965+15 ℄415'

GRANDVIEW TWP. T-75N R-3W SEC. 16

GRANDVIEW TWP. T-75N R-3W SEC. 9

Field Ent. (Close)

Sta. 400+86.04 Begin Construction

Sta. 5573+40 Ramp A
Install 36" x 64' 2000D
FUTURE F.L. = Lt. 695.60 Rt. 696.28

968+80 ℄350'

966+85 ℄400'

18" X 66' CMP (Remove)

WILMA BIERI (LE)
GAIL A. STELZNER, SANDRA E. BIERI,
SCOT A. BIERI AND DAVID J. BIERI (REM) (15)

US 61 (ML61)

Sta. 8964+89.27 R 2
= Sta. 964+90.56

FUTURE

Sta. 971+55
Install 36" x 412' 3000D
Skew = 45° LT. Ahd.
F.L. = Lt. 696.28 Rt. 696.00

STRAIGHT LINE

Sta. 6563+50 Ramp B
Install 44"x27" x 64' 2000D
F.L. = Lt. 700.10 Rt. 700.70

962+50 ℄390'

963+88±R ℄415'

964+70 ℄400'

963+17±R ℄690'

963+46±R ℄575'

964+30 ℄557'±PropR/W

Proposed Type C Jt. Ent.

GRANDVIEW TWP. T-75N R-3W SEC. 10

JAMES R. & MONICA J. BIERI (14)

0 100 FEET

CONCENTRIC

Approximate power line location Sta. 978+34

9983+69.50 PC ℄50'

978+15±R ℄175'

Proposed Type C Jt. Ent.

GRANDVIEW TWP. T-75N R-3W SEC. 9

978+80 ℄408'±R

979+11±R ℄195'

979+25±R ℄250.47'(Prop.Corner)

Sta. 986+35
Install 24" x 82' 2000D
F.L. = Lt. 691.29 Rt. 694.53

(Remove) 30" X 35' CMP

983+45 ℄330'

TEMPORARY EASEMENT FOR DETOUR

Sta. 986+54.68
Install 59"x36" x 204' 2000D
Skew = 20° LT. Ahd.
F.L. = Lt. 691.10 Rt. 692.37

Sta. 986+65.32
Install 59"x36" x 204' 2000D
Skew = 20° LT. Ahd.
F.L. = Lt. 691.10 Rt. 692.37

987+60 ℄187'±R

(Obliterate)

DETOUR DET61-985

US 61 (ML61)

DETOUR DET61-985

PC Sta. 988+00.38

LANNY L. & MYONG C. SEEBECK (17)

(Remove)
Sta. 986+15.3
59" X 36" 86' Conc. Arch
D.A. = 136 Ac. F-R

For Detour Details
Refer to Sheet No. F.3-F.4

For Mainline Details
Refer to Sheet No. D.9

For Interchange Details
Refer to Sheet No. K.7 -K.8

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 6/26/13
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

Draft

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER H.8

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TEMPORARY EASEMENT FOR DETOUR

(16) JOAN R. DECOOK TRUST

GRANDVIEW TWP. T-75N R-3W SEC. 9

992+75 ℄250′

996+10 ℄245′

996+35 ℄155′

Curve Data (SBL)
Δ = 13° 15′ 00.00″ (RT)
T = 545.89
L = 1,086.90
R = 4,700.00
E = 31.60

1000+55 ℄140′

1002+35 ℄160′

1002+90 ℄205′

1004+45 ℄160′

(Remove) Two 48″ X 48′ CMPs

1007+65 ℄140′

1009+95 ℄155′

Sta. 1009+60
Install 59″x36″ x 128′ 2000D
Skew = 35° LT. Ahd.
F.L. = Lt. 679.30
Rt. 680.43

Sta. 1009+72.21
Install 59″x36″ x 128′ 2000D
Skew = 35° LT. Ahd.
F.L. = Lt. 679.30
Rt. 680.43

Sta. 1018+67.51 = Sta. 201015+88.71

+38 Field Ent.

(Remove) 42″ X 56′ CMP

DETOUR (DE161985)

(Closed) +34 Field Ent.

US 61 (ML61)

Existing US 61

Pt. Sta 999+67.19

Pt. Sta 999+08.21

PC Sta 988+73.36

175TH ST

Curve Data (NBL)
Δ = 15 13′ 08.61″ (RT)
T = 621.93
L = 1,236.67
R = 4,700.00
E = 40.97

+25 Prop. Type "E" Dike Elev. =691.2

999+90±℄ ℄175′

991+92±℄ ℄165′

(Remove) 30″ X 41′ CMP D.A. = 13 Ac. GR.

1001+90 ℄200′

(Remove) 18″ X 41′ CMP

(Proposed) 10′ Type "C" Entrance

1002+50 ℄200′

1005+44±℄ ℄195′

1012+00 ℄225′

1012+10 ℄201′±℄

(20) DOLORES COLLINS

Ent. (U.A.G.)

(18) DAVID J. & JONI L. BIERI AND BIERI BROS FARM

(19) RANDY S. LANE

0 FEET 100

(20) DOLORES COLLINS

(Remove) Sta. 1007+04.8 59″ X 36″ 87′ Conc. Arch D.A. = 155 Ac. F-GR

Sta. 1011+90.00 Stop Grading & Paving (NBL) Begin Milling & Resurfacing (APPROX)

991+44±ExR/W ℄163.53(Exist.Corner)

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

For Detour Details Refer to Sheet No. F.4-F.5

For Mainline Details Refer to Sheet No. D.9-D.12

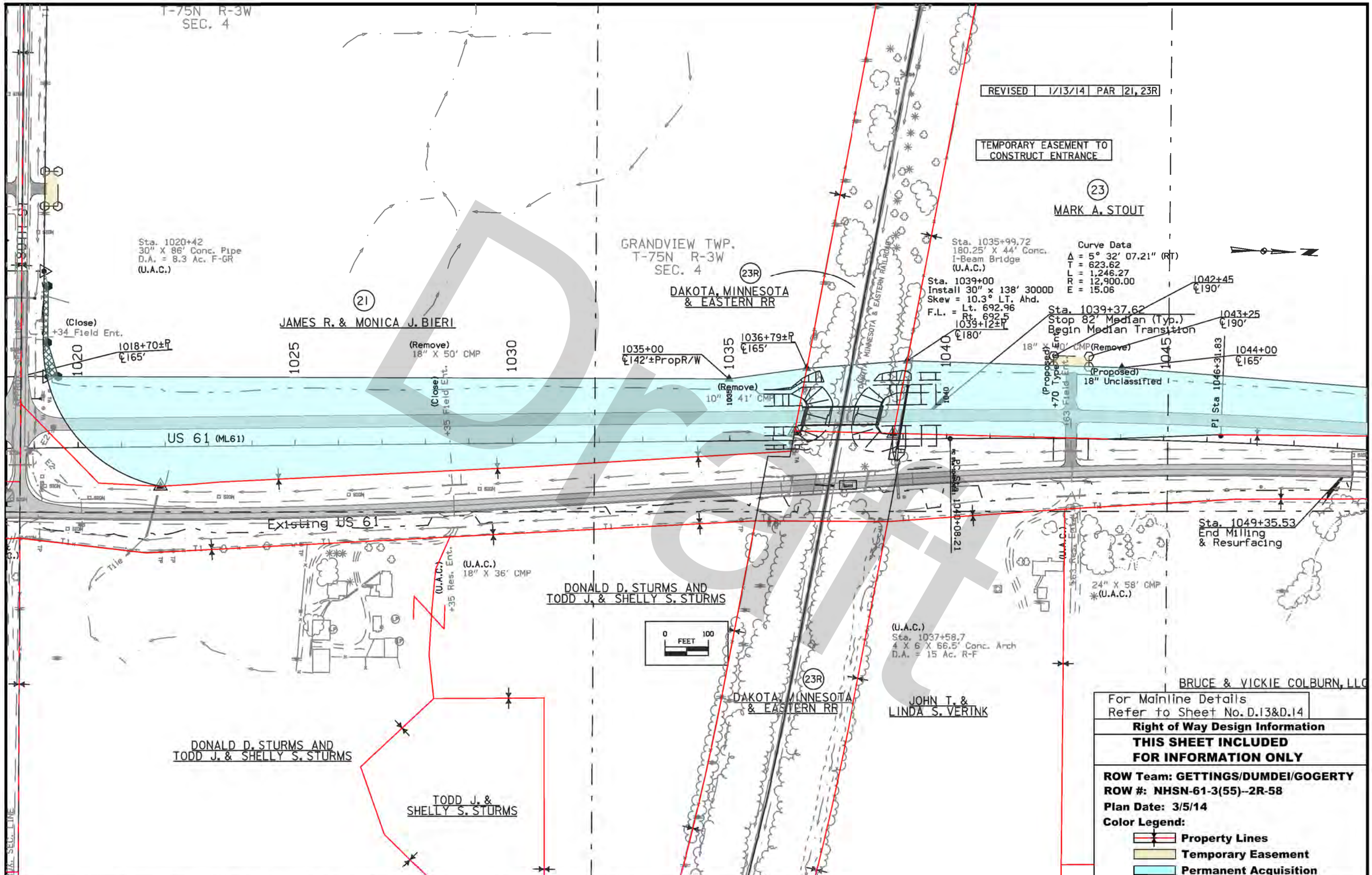
For Interchange Details Refer to Sheet No. K.8 -K.12

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 6/26/13
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

Draft



For Mainline Details
Refer to Sheet No. D.13&D.14

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 3/5/14
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

Draft

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER H.10

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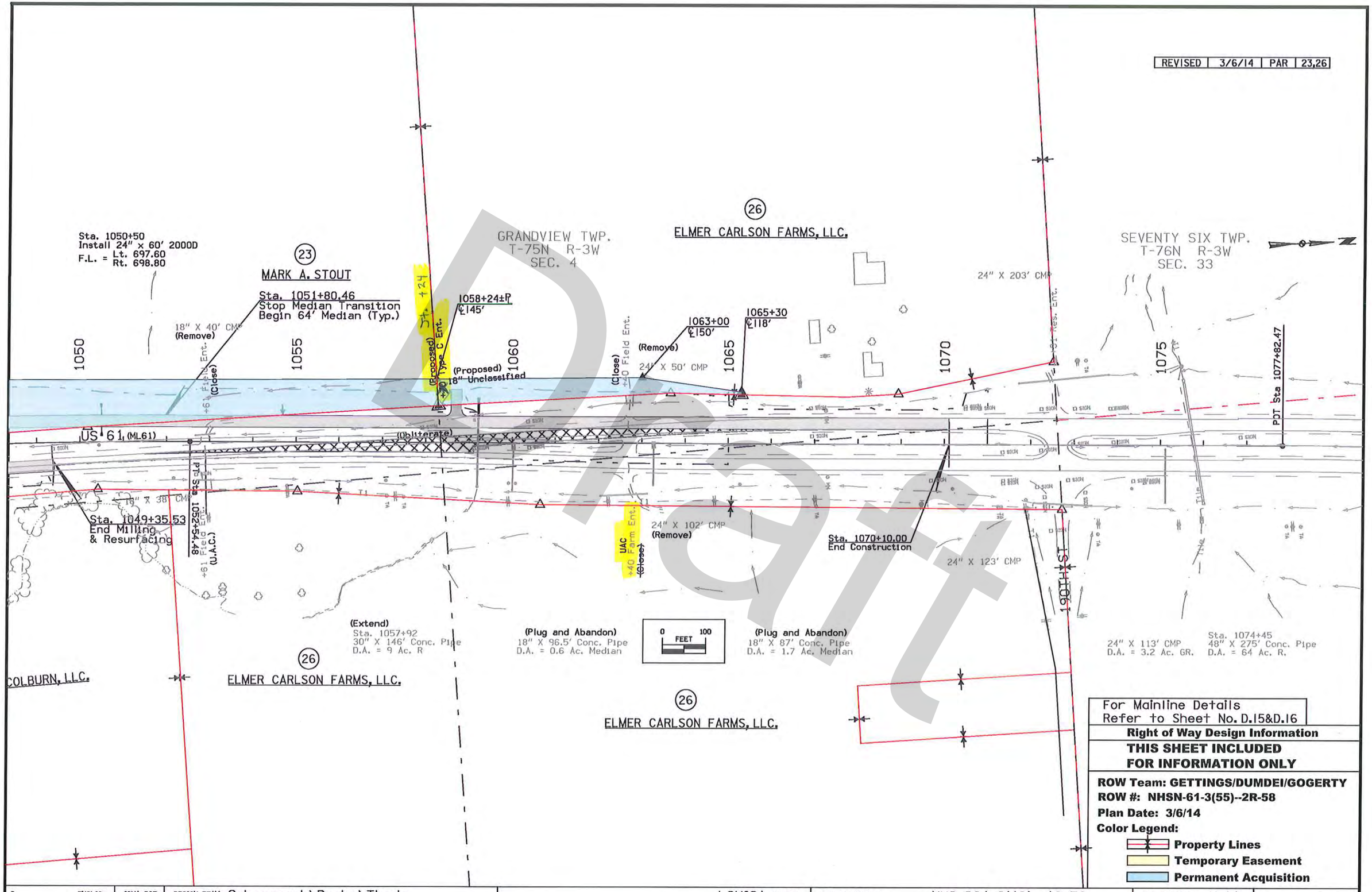

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REVISED | 2/10/14 | PAR | 5

7
DONALD L. & SHARON G. VEACH

5
ROYCE L. BONNICHSEN
& THOMAS R. BONNICHSEN

6
RANDELL L. VEACH

Sta. 2804+50
Install 30" x 30' 2000D
F.L. = Lt. 668.29
Rt. 667.54

2805+15±ExR/W
℄60'

PI Sta 2807+49.74

2803+80
℄55'

2803+25
℄36'±ExR/W

POT Sta 2800+47.26

Sta. 2803+74.91
Begin Granular

2803+74.91 PC
℄60'

Sta 2805+74.91

Sta 2809+99.97

2809+99.97 PT
℄60'

Curve Data
Δ = 79° 35' 07.06" (RT)
T = 374.83
L = 625.06
R = 450.00
E = 135.66

2803+25
℄30'±ExR/W

Sta. 2808+50
Install 44" x 27" x30' 2000D
F.L. = Lt. 671.00
Rt. 670.00

Curve Data
Δ = 90° 00' 00.00" (LT)
T = 150.00
L = 235.62
R = 150.00
E = 62.13

Sta 2815+64.59

2815+64.59 PC
℄60'

Sta. 2818+73.21
End Granular
Begin Paving

PT Sta 2818+00.21

Sta 2817+14.59

2817+88±PropR/W
℄60'

2817+14.59 PI
℄60'

ACQUIRE ACCESS CONTROL ON
S.R. FROM 2819+50.21 TO 2817+31

Sta. 2825+90.00
End Paving

+75
Prop. Type "C"

ACQUIRE ACCESS CONTROL ON
S.R. FROM 2819+50.21 TO 2821+67

PT Sta 2823+98.55

Curve Data
Δ = 79° 47' 07.06" (LT)
T = 125.39
L = 208.88
R = 150.00
E = 45.50

PI Sta 2823+15.06

PC Sta 2821+89.67

Sta. 2819+50.21
= Sta. 819+50.21

PT Sta 811+50.21

145th Street

Curve Data
Δ = 10° 08' 29.27" (LT)
T = 913.95
L = 1823.12
R = 10300.00
E = 40.47

CONCENTRIC

FUTURE

2830 2810 2825 2820 2815 815 810

For Side Road Details
Refer to Sheet No. E.1

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 3/6/14
Color Legend:
- Property Lines
- Temporary Easement
- Permanent Acquisition

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.1

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REVISED	8/21/13	PAR	8A,8B,8E
REVISED	11/19/13	PAR	7C
REVISED	3/3/14	PAR	7, 7A

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

ACQUIRE ACCESS CONTROL ON S.R. FROM 506+75 TO 497+70

Sta. 502+85
Install 24" x 84' 2000D
F.L. = Lt. 662.60
Rt. 661.94

Sta. 506+00
Install 42" x 110' 2000D
F.L. = Lt. 658.50
Rt. 661.00

7A
ANNA J. DAWSON

497+15
℄110'

501+35
℄110'

504+11±R
℄85'

POT Sta 502+49.00

Sta. 506+58
30" X 83' Conc. Pipe
D.A. = 35 Ac. GR

8
INVESTMENT REAL ESTATE LLC

GRANDVIEW TWP.
T-75N R-3W
SEC. 21

GRANDVIEW TWP.
T-75N R-3W
SEC. 22

8E
KAREN J. SCHANTZ

TEMPORARY EASEMENT FOR DETOUR

TEMPORARY EASEMENT FOR DETOUR

8B
LOUISA COUNTY AREA VIETNAM VETERANS

IA 92

8A
CARMER, INC.

RANDY M. & PEGGY A. GRIFFIN

519+20
℄99'±ExR/W

519+49±R
℄100'

519+85
℄95'

519+95
℄89'±ExR/W

POT Sta 524+65.67

+46 Field Entrance (U.A.C.)

Begin Paving
Sta. 508+75.00
Elev. 668.41

Sta. 499+40.00
Begin Paving

499+70
℄100'

498+95
℄50'

497+20
℄190'

502+95
℄190'

503+55
℄215'

(Remove)

DO NOT DISTURB SATELLITE DISH OR BUILDING

503+45
℄410'

504+15
℄410'

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

7
DONALD L. & SHARON G. VEACH

Sta. 510+38.38
Sta. 856+52.82

PT Sta 847+52.36

Begin Paving
Sta. 514+23
Elev. 680.5(UAC)

Sta. 519+23
End Paving

WILLIAM G. BEARD

ACQUIRE ACCESS CONTROL ON S.R. FROM 513+75 TO 519+75

+64 Res. Entrance (U.A.C.)

7B
KAY E. RASH, SUCCESSOR TRUSTEE OF THE KENNETH R. GRIMM REV. TRUST

PEGGY A. GRIFFIN

IA 92

For Detour Details Refer to Sheet No. F.6

For Side Road Details Refer to Sheet No. E.2

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 3/3/14
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.2

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16
JOAN R. DECOOK TRUST

14A
LOUISA-MUSCATINE
COMM SCHOOL DIST

ACQUIRE ACCESS CONTROL ON
S.R. FROM 8961+35 TO 3944+73

GRANDVIEW TWP.
T-75N R-3W
SEC. 9

3946+65±R
℄55'

3945+45
℄50'

3945+05
℄33'±ExR/W

Begin Grading
Sta. 3945+47.82
Elev. 701.74

3945+00
℄33'±ExR/W

Sta. 3945+47.82
Begin Paving

3945+40
℄55'

3946+64±ExR/W
℄60'

GRANDVIEW TWP.
T-75N R-3W
SEC. 16

14
JAMES R. & MONICA J. BIERI

15
WILMA BIERI (LE)
GAIL A. STELZNER, SANDRA E. BIERI,
SCOT A. BIERI AND DAVID J. BIERI (REM)

Sta. 8963+00
Install 24" x 88' 2000D
F.L. = Lt. 697.70
Rt. 698.15

FUTURE

STRAIGHT LINE

Begin Granlar

End Grading
Sta. 8970+20.00
Elev. 707.23

GRANDVIEW TWP.
T-75N R-3W
SEC. 16

Curve Data
Δ = 30° 47' 50.00" (LT)
T = 58.94
L = 115.03
R = 214.00
E = 7.97

8972+70 R 2
℄ ±L

TEMPORARY EASEMENT TO
CONSTRUCT ENTRANCE

ACQUIRE ACCESS CONTROL ON
S.R. FROM 8968+32 TO 8971+43.26

Sta. 8964+89
= Sta. 964+90

Sta. 8970+20.00 R 2
End Paving
Begin Granlar

8971+55 R 2
℄55'

8971+40 R 2
℄24'±PropR/W

14
JAMES R. & MONICA J. BIERI

Sta. 8966+75
Install 44"x27" x 70' 2000D
F.L. = Lt. 699.46
Rt. 699.51

14
JAMES R. & MONICA J. BIERI

Curve Data
Δ = 28° 47' 46.19" (RT)
T = 735.67
L = 1,440.24
R = 2,865.64
E = 62.92

VPI +26.800
Ely 707.87

170th Street

N

For Side Road Details
Refer to Sheet No. E.3

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 6/26/13
Color Legend:
- Property Lines
- Temporary Easement
- Permanent Acquisition

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.3

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(14)
R. & MONICA J. BIERI

(16)
JOAN R. DECOOK TRUST

18" X 42' CMP
D.A. = 2 Ac. GR.
(Remove)

10' X 27' CMP
(Remove)

Field Ent.

POT Sta. 964+44.77
is 15.90' Lt. of
Sta. 964+44.57
POT Sta. 3947+47.70

Existing US 61

Sta. 400+86.04
Begin Construction

30" X 35' CMP
(Remove)

30" X 35' CMP
(Remove)

Sta. 404+85.06
Begin Detour Profile Grade

FUTURE

18" X 66' CMP
(Remove)

DETOUR DET61-985

(Remove)
Sta. 986+15.3
59" X 36" 86' Conc. Arch
D.A. = 136 Ac. F-R

Sta. 985+15.3
59" X 36" 86' Conc. Arch
D.A. = 136 Ac. F-R

(Remove) CMP

15
WILMA BIERI (LE)
GAIL A. STELZNER, SANDRA E. BIERI,
SCOT A. BIERI AND DAVID J. BIERI (REM)

(ML61)

US 61 (ML61)

DETOUR DET61-985

Begin Grading
Sta. 9970+20.00
Elev. 706.35
Sta. 8964+89.27 R 2
= Sta. 964+90.56

GRANDVIEW TWP.
T-75N R-3W
SEC. 10

STRAIGHT LINE

FUTURE

PC Sta 8970+20.00

STRAIGHT LINE

CONCENTRIC

PC Sta 9983+68.82

9987+42.98 PT
℄50'

9986+50
℄70'

9986+02±R
℄50'

9985+94±R
℄70'

9983+69.50 PC
℄50'

TEMPORARY EASEMENT TO
CONSTRUCT ENTRANCE

9996+99.59 PC
℄50'

9998+95
℄55'

Curve Data
Δ = 105° 34' 00.97" (RT)
T = 281.77
L = 394.29
R = 214.00
E = 139.82

Curve Data
Δ = 14° 17' 30.00" (RT)
T = 188.95
L = 374.95
R = 1500.15
E = 11.74

17
LANNY L. & MYONG L.
SEEBECK

Sta. 9999+00
Install 30" x 38' 2000D
F.L. = Lt. 689.35
Rt. 690.05

GRANDVIEW TWP.
T-75N R-3W
SEC. 9

115th Street

18" X 41' CMP
D.A. = 13 Ac. GR.

(Remove)
30" X 41' CMP
D.A. = 13 Ac. GR.

(18)
DAVID J. & JONI L. BIERI
AND BIERI BROS FARM

(15)
WILMA BIERI (LE)
GAIL A. STELZNER, SANDRA E. BIERI,
SCOT A. BIERI AND DAVID J. BIERI (REM)

0 FEET 100

For Detour Details
Refer to Sheet No. F.3-F.4

For Side Road Details
Refer to Sheet No. E.4

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 6/26/13
Color Legend:
- Property Lines
- Temporary Easement
- Permanent Acquisition

Draft

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.4

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Sta. 1997+00 NB Tie
Install 24" x 68' 2000D
F.L. = Rt. 686.83

(18)
DAVID J. & JONI L. BIERI AND
BIERI BROS FARM

N

Begin Grading
Sta. 10001+25.00
Elev. 693.61

POT Sta 10004+10.88

10001+80
℄34'±ExR/W

Curve Data
Δ = 105° 34' 00.97" (RT)
T = 281.07
L = 394.29
R = 214.08
E = 99.13

Sta 10001+25.00
End Granular

10001+50
℄50'

10000+93.87 PT
℄50'

(17)
LANNY L. & MYONG C.
SEEBECK

0 FEET 100

175th Street

Curve Data
Δ = 14° 17' 30.00" (RT)
T = 188.05
L = 374.15
R = 1,500.00
E = 11.74

GRANDVIEW TWP.
T-75N R-3W
SEC. 9

For Side Road Details
Refer to Sheet No. E.5

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 10/24/12
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

Draft

GRANDVIEW TW
T-75N R-3W
SEC. 4

(21)

TEMPORARY EASEMENT TO CONSTRUCT ENTRANCE

JAMES R. & MONICA J. BIERI

201014+23±PropR/W
℄85′

201011+80
℄50′±ExR/W

201010+30
℄80′

201013+45
℄60′

201012+15
℄60′

Sta. 201012+43
24" x 50' Conc. Pipe
D.A. = 4 Ac.

Sta. 201012+43
Install 24" x xx' 2000D
F.L. = Lt. XX
Rt. XX

Sta. 201014+75
Install 24" x 86' 2000D
F.L. = Lt. 688.38
Rt. 687.89

Sta. 201016+58
18" X 50' Conc. Pipe
D.A. = 2 Ac.

201009+50
℄80′

(Proposed)
+90 Type C Ent.

201010

Sta. 201011+80.00
Begin Grade Pave
(Proposed)
10' Unclassified

(Close)
+34 Field Ent.

2020

201015

POT Sta. 201017+35.88

DONALD D. STU
TODD (U.A.C.) & SHELLY

(Proposed)
+90 Type C Ent.

(Proposed)
18' Unclassified

201009+50
℄85′

201010+30
℄85′

201011+10
℄50′±ExR/W

(Close)
+38 Field Ent.

0 FEET 50

201013+80
℄70′

201014+27±PropR/W
℄120′

ACQUIRE ACCESS CONTROL ON
S.R. FROM 201015+88.71 TO 201013+72

(16)

2015

1015

TEMPORARY EASEMENT TO
CONSTRUCT ENTRANCE

JOAN R. DECOOK TRUST

(20)

DOLORES COLLI

180th St

For Side Road Details
Refer to Sheet No. E.6

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 3/5/14
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.6

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REVISED	8/21/13	PAR	8A,8B,8E

T-75N R-3W
SEC. 28

FUTURE

US 61 (ML61)

Existing 61

Two 24" X 24' CMP

Sta. 857+25
Install 30" x 78' 2000D
F.L. = Lt. 668.66
Rt. 669.78

GRANDVIEW TWP.
T-75N R-3W
SEC. 28

GRANDVIEW TWP.
T-75N R-3W
SEC. 21

(7)
DONALD L. & SHARON G. VEACH

Sta. 856+37.17
= Sta. 516+73.30

Sta. 863+00.00
End Paving

(8)
INVESTMENT REAL ESTATE LLC

(SUR 61)

DETOUR
DET.EG1

Existing US 61

860+92±ℙ
℄85'
860+92±ℙ
℄90'

861+25
℄75'±ℙ

863+35
℄74'±ℙ

TEMPORARY EASEMENT
FOR DETOUR

TEMPORARY EASEMENT
FOR DETOUR

859+53±ℙ
℄90'

Sta. 851+25.16
Begin Paving

(7C)
WILLIAM
G. BEARD

(8A)
CARNER, INC.

(8E)
KAREN J. SCHANTZ

(7B)
KAY E. RASH, SUCCESSOR TRUSTEE
OF THE KENNETH R. GRIMM REV. TRUST

GRANDVIEW TWP.
T-75N R-3W
SEC. 27

GRANDVIEW TWP.
T-75N R-3W
SEC. 22

(8B)
LOUISA COUNTY AREA
VIETNAM VETERANS

PDT Sta 524+65.67

RANDY M. &
PEGGY A. GRIFFIN

Existing 61

For Detour Details
Refer to Sheet No. F.6

For Side Road Details
Refer to Sheet No. E.7

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 8/21/13
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

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C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.7

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RODNEY D. & DEBBIE L. HOHENADEL

9

DOROTHY F. OLSON
& CAROLYN J. KUNDEL

GRANDVIEW TWP.
T-75N R-3W
SEC. 15

GRANDVIEW TWP.
T-75N R-3W
SEC. 22

12

PHYLLIS L. STINEMAN

ANNA M. WIER TRUST
BIERI SHELDON TRUSTEE

ROBERT J. & MARIA L.
GAYTAN

CULTURAL SITE

PC Sta 7951+22.87

PC Sta 7900+34.00

PC Sta 7898+53.99

PC Sta 7901+46.48

PC Sta 7909+53.99

Sta 7909+54.99
(Close)

Sta 7911+87.74

Sta 263+39.09

Curve Data
Δ = 39° 16' 30"
D = 12° 30' 00"
L = 180.81

Sta 27.77" (LT)

7910+50.19(Exist.Corner)
℄51'±ExR/W

Sta. 7911+87.74
End Construction

7907+60
℄45'

7909+15
℄35'

7911+15
℄55'

(Proposed)
+00 Type C Ent.

Sta 7912+21.95

(Proposed)
18" Unclassified

7912+40
℄55'

7912+40
℄30'

7901+40
℄57'±R

Proposed Unclasified Pipe

Curve Data
Δ = 65° 46' 03.62" (RT)
T = 300.64
L = 533.76 (Proposed)
R = 465.00 18" Unclassified
E = 88.72

Curve Data
Δ = 24° 08' 17.33" (RT)
T = 99.42
L = 195.
R = 465.00
E = 10.51

Sta. 7907+60
Install xx Unclassified Pipe
F.L. = Lt. 684.78
Rt. 685.30

Sta. 7899+50.58
Begin Construction

Begin Grading
Sta. 7898+58.87
Elev. 701.34

Begin Grading
Sta. 7898+58.87
Elev. 701.34

0 FEET 100

0 FEET 100

For Side Road Details
Refer to Sheet No. E.12

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: GETTINGS/DUMDEI/GOGERTY
ROW #: NHSN-61-3(55)--2R-58
Plan Date: 6/19/13
Color Legend:

- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

C	ENGLISH	IOWA DOT	DESIGN TEAM Schoenrock\Drake\Thede	LOUISA COUNTY	PROJECT NUMBER NHS-061-3(48)--19-58	SHEET NUMBER HE.8

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SURVEY SYMBOLS

UTILITY LEGEND

PLAN VIEW COLOR LEGEND OF SOILS SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Purple (Halo)	(15)	Backslope Drains
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING	**Design Color No.**	
Brown, Light	(236)	Core Out

PROFILE VIEW COLOR LEGEND OF SOILS SHEETS

LINEWORK	Design Color No.	
Blue	(1)	Proposed Alignment, Stationing, and Alignment Annotation
Green	(2)	Existing Ground Line Profile
Green, Med	(227)	Class 10 Topsoil
Green, M.Light	(226)	Unsuitable A Topsoil
Green, Light	(225)	Unsuitable B Topsoil
Green, V.Light	(224)	Unsuitable C Topsoil
Orange	(6)	Loam
Brown, Dark	(238)	Class 10
Brown, Med	(237)	Sand
Red	(3)	Unsuitable A
Pink, Dark	(13)	Unsuitable B
Pink	(11)	Unsuitable C
Red	(3)	Shale
Red	(3)	Waste
Gray, Light	(48)	Broken and Weathered Rock
Gray, Med	(80)	Rock
Gray, V.Dark	(128)	Boulders

PATTERN AND SYMBOL LEGEND OF SOILS SHEETS

Soils Book No. J, K, L

Date(s) Drilled 2012 2013, 2014

- $-H_2O-$ Water
- DRY Dry
- Sample
- Plugged
- M Moisture
- Shelby
- Blow Count
- Dens. Core
- Treatment
- Sand Blanket
- Soil Remediation Area
- Select Soil
- Select Sand
- Shale
- Broken and Weathered Rock
- Rock
- Sandstone
- Unsuitable A Topsoil
- Unsuitable B Topsoil
- Unsuitable C Topsoil
- Unsuitable A
- Unsuitable B
- Unsuitable C
- Sandy Soil
- Boulders

- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Clearing & Grubbing Area
- Pavement Removal

RIGHT-OF-WAY LEGEND

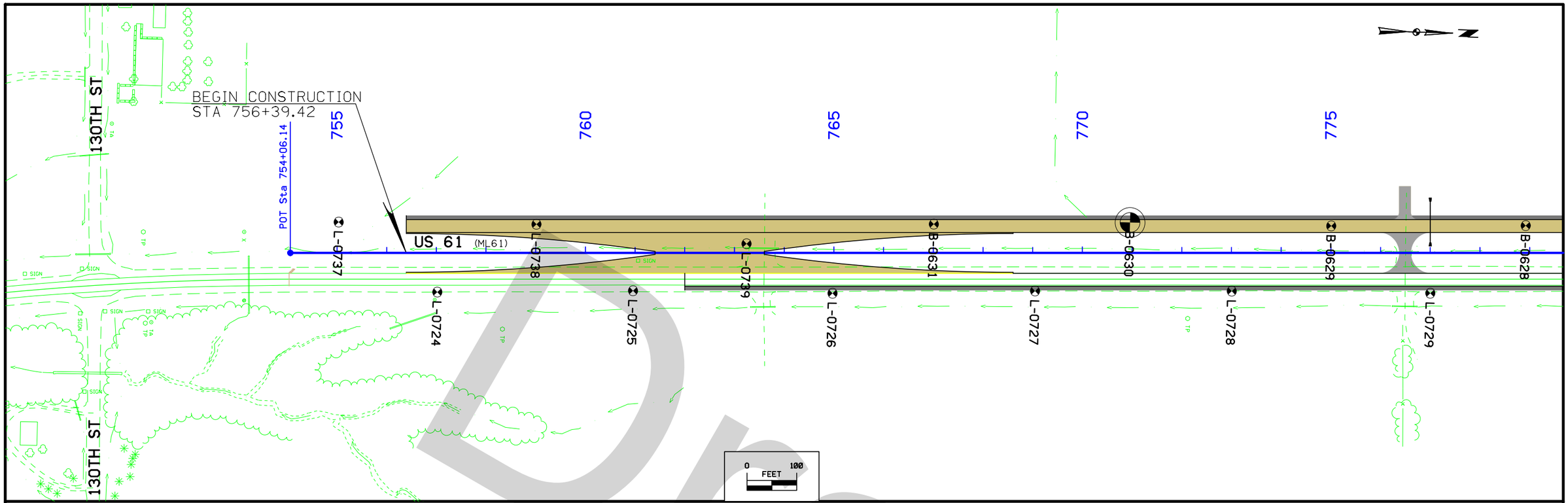
- Proposed Right-of-Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Borrow
- Easement (Temporary)
- Easement
- Excess
- A/C Access Control

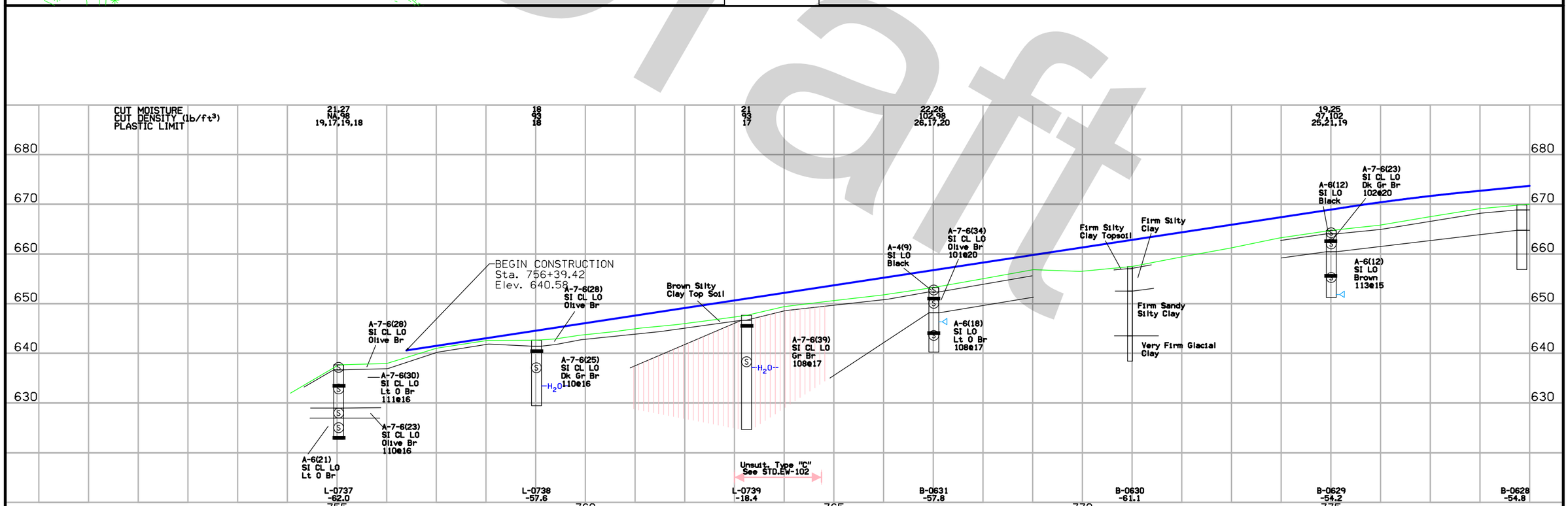
NOTE: Sounding and test boring data shown in the plans were accumulated for designing and estimating purposes. Their appearance on the plans does not constitute a guarantee that conditions other than those indicated will be encountered. Details and notes shown elsewhere shall be used for roadway and structure construction.

SOILS LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES Q & R)

Draft





ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.2	(SBL)

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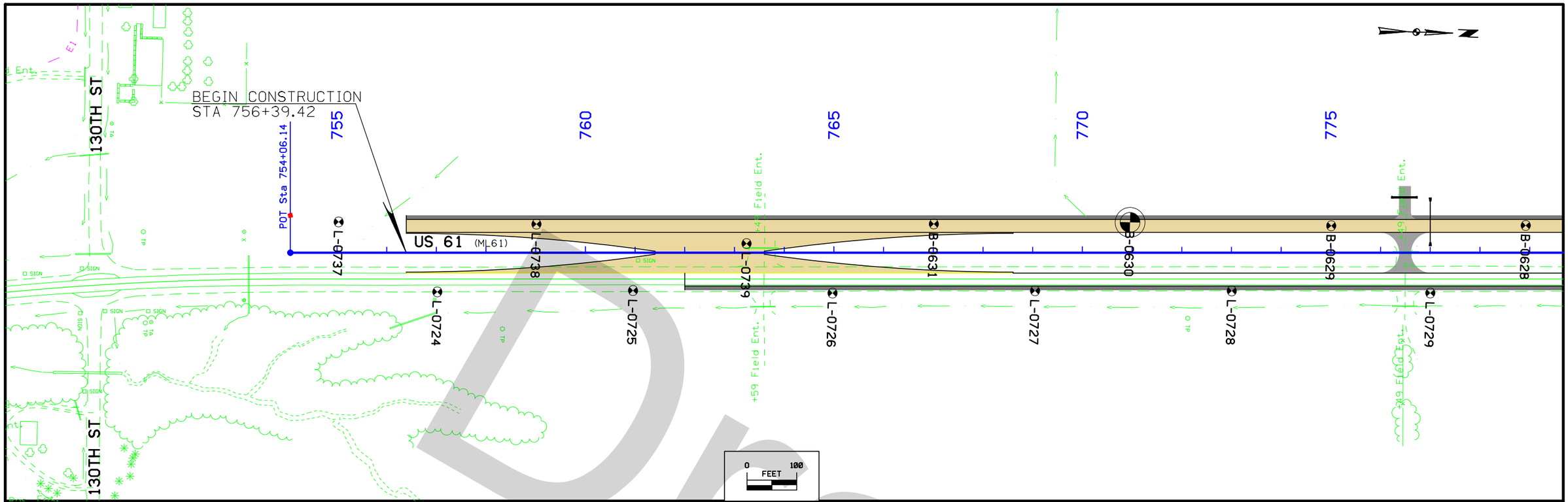

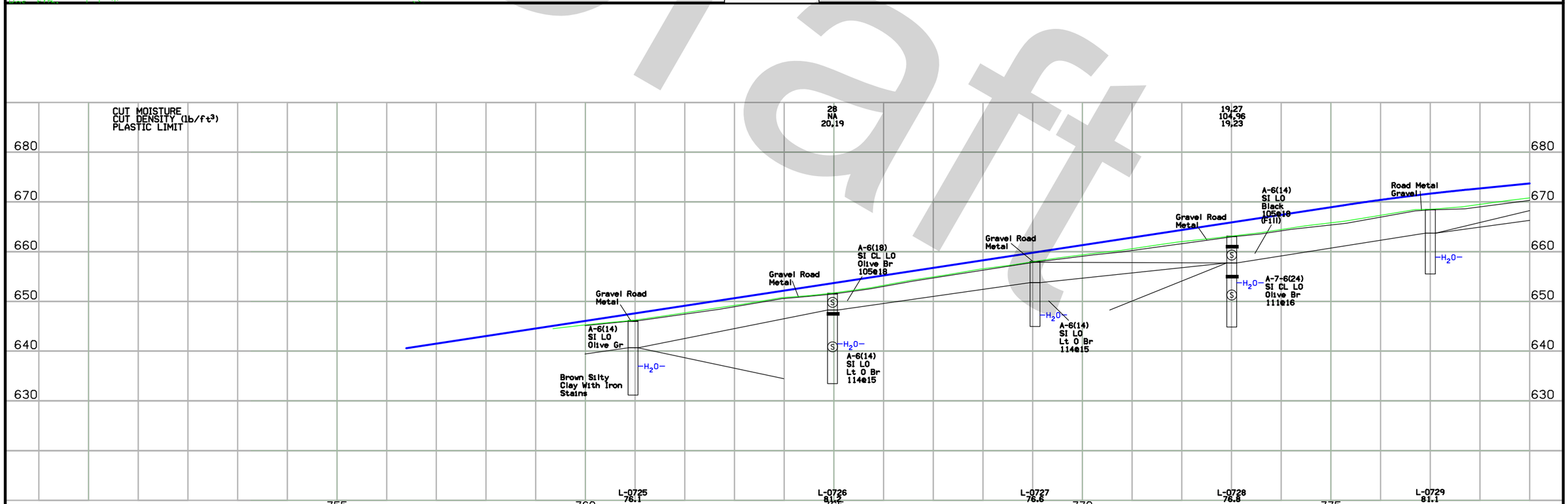

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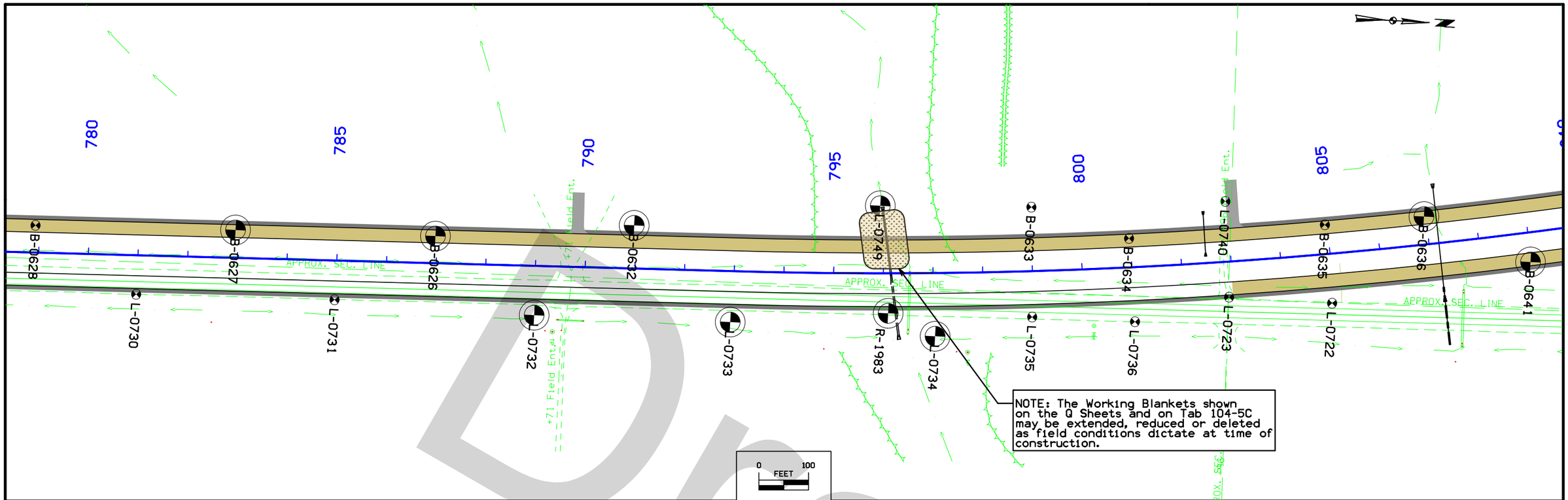
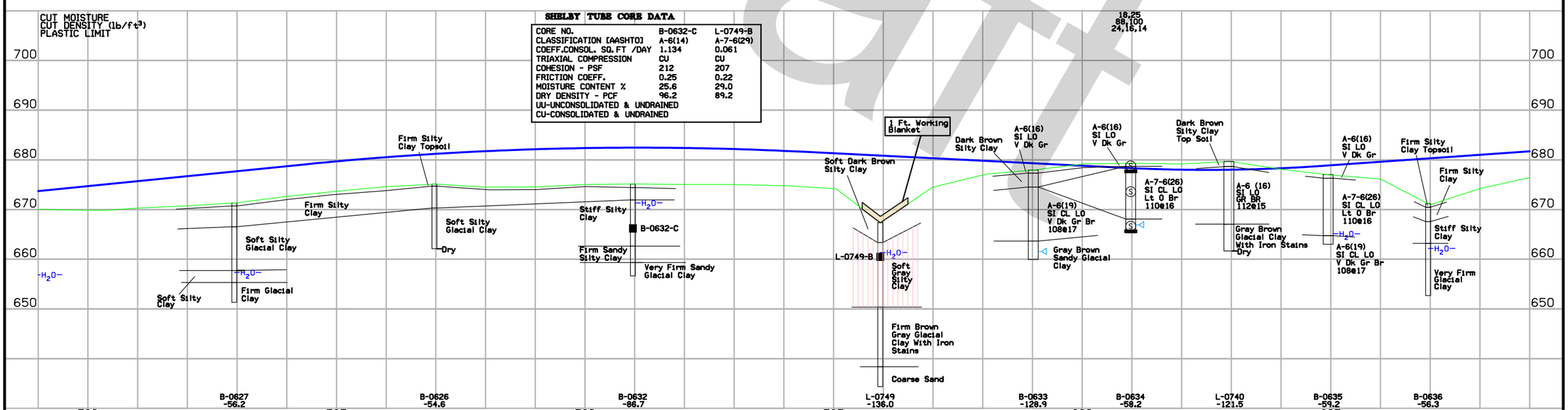
ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.3	(NBL)





SHELBY TUBE CORE DATA

CORE NO.	B-0632-C	L-0749-B
CLASSIFICATION [AASHTO]	A-6(14)	A-7-6(29)
COEFF.CONSOL. SQ.FT /DAY	1.134	0.061
TRIAXIAL COMPRESSION	CU	CU
COHESION - PSF	212	207
FRICTION COEFF.	0.25	0.22
MOISTURE CONTENT %	25.6	29.0
DRY DENSITY - PCF	96.2	89.2

UU-UNCONSOLIDATED & UNDRAINED
CU-CONSOLIDATED & UNDRAINED

18.25
88.100
24.16.14

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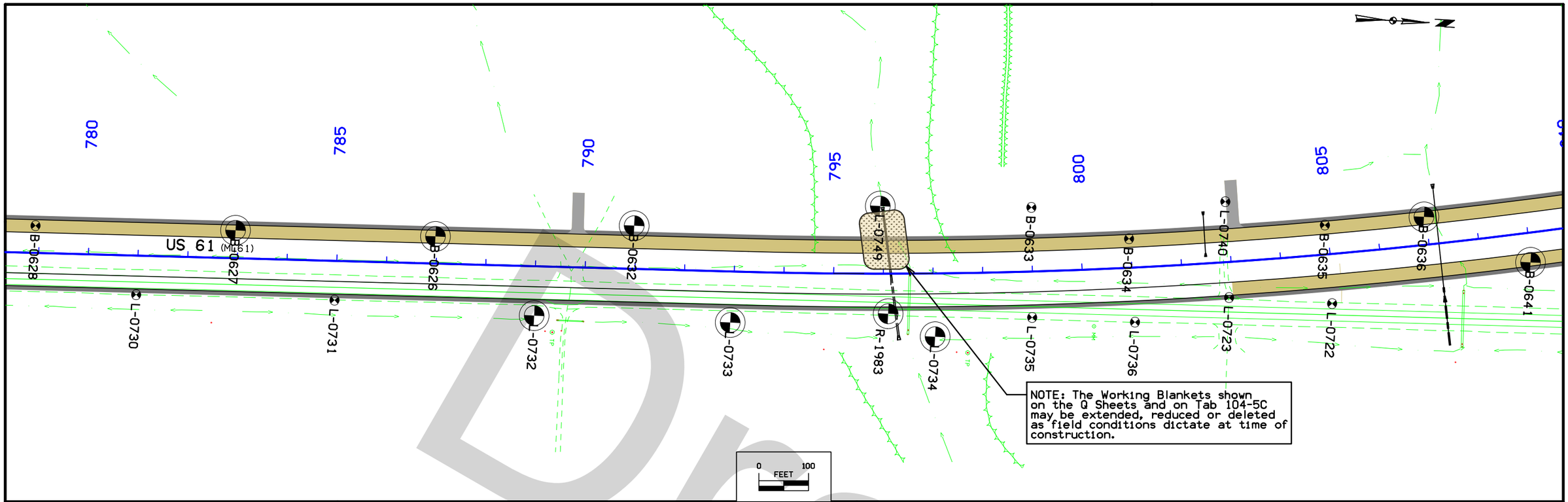
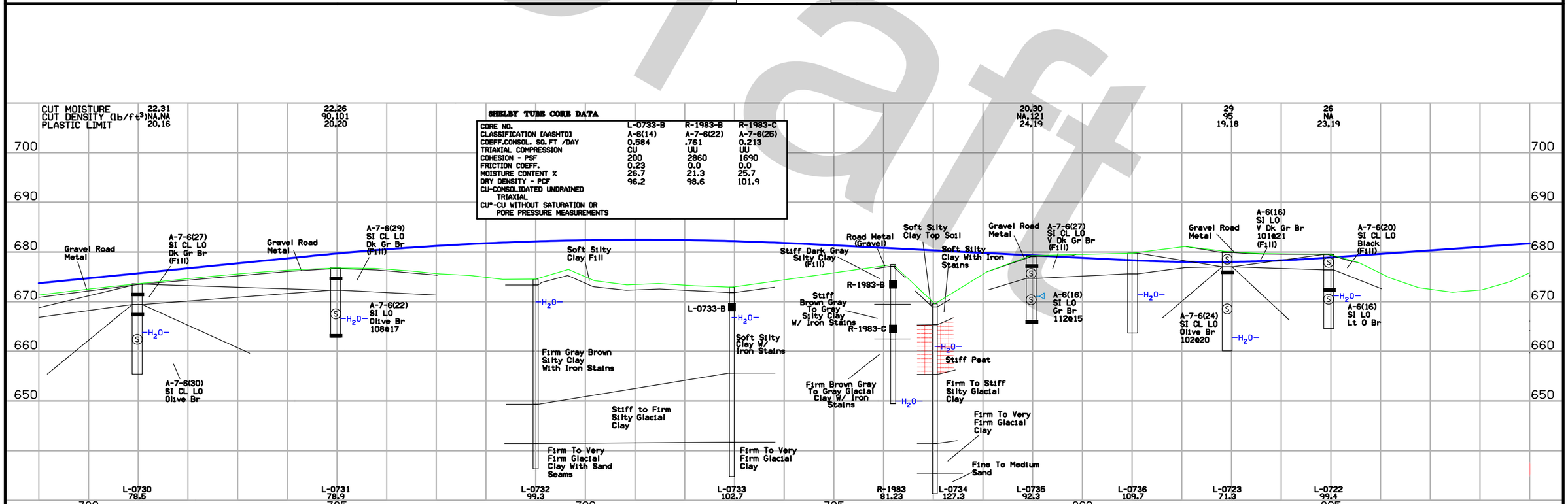
ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.4	(SBL)





SHELBY TUBE CORE DATA

CORE NO.	L-0733-B	R-1983-B	R-1983-C
CLASSIFICATION [AASHTO]	A-6(14)	A-7-6(22)	A-7-6(25)
COEFF.CONSOL. SQ.FT /DAY	0.584	.761	0.213
TRIAXIAL COMPRESSION	CU	UU	UU
COHESION - PSF	200	2860	1690
FRICTION COEFF.	0.23	0.0	0.0
MOISTURE CONTENT %	26.7	21.3	25.7
DRY DENSITY - PCF	96.2	98.6	101.9
CU-CONSOLIDATED UNDRAINED TRIAXIAL			
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS			

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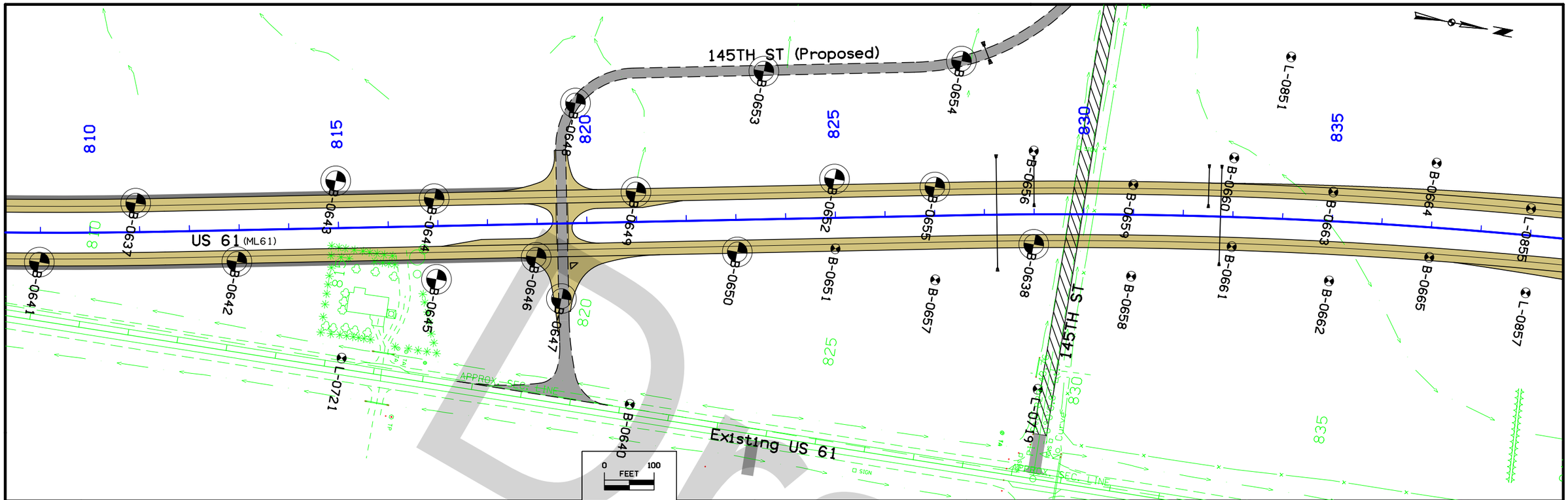
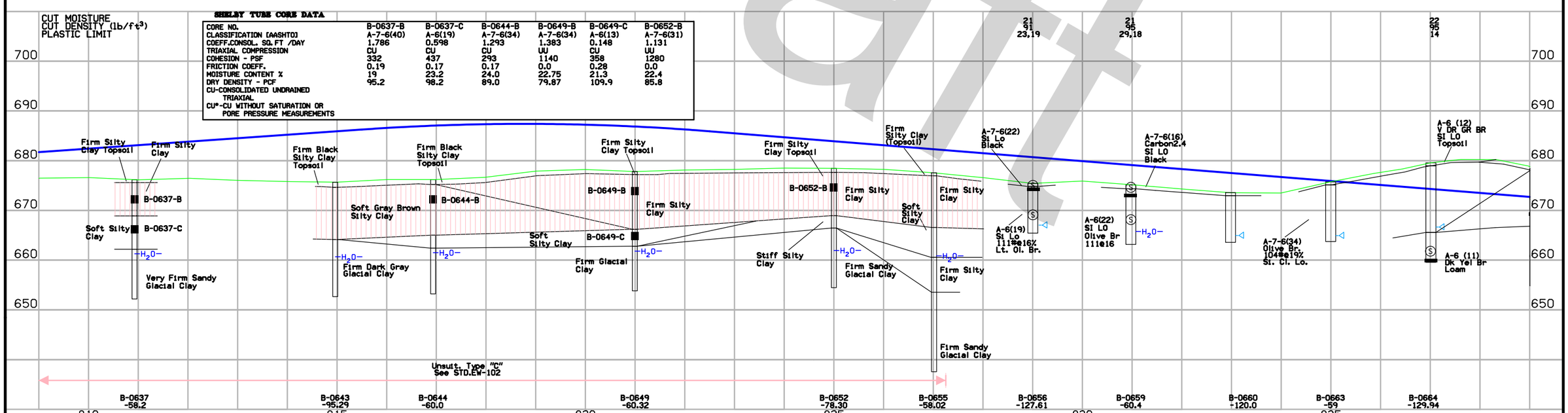
ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.5	(NBL)





ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.6	SBL

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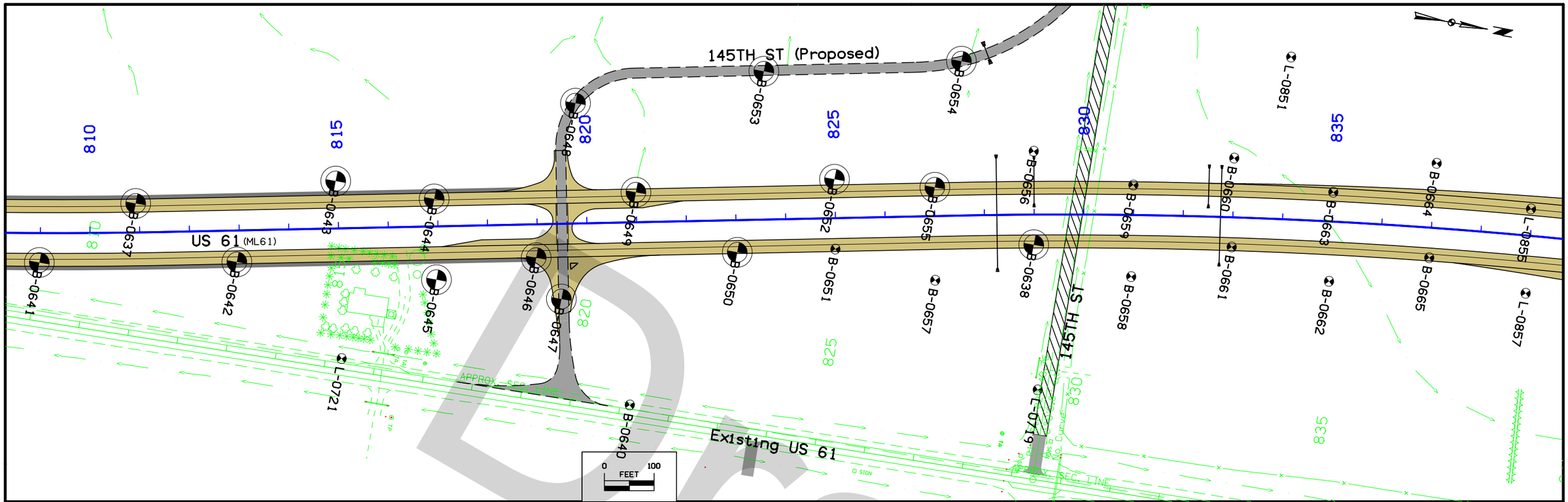

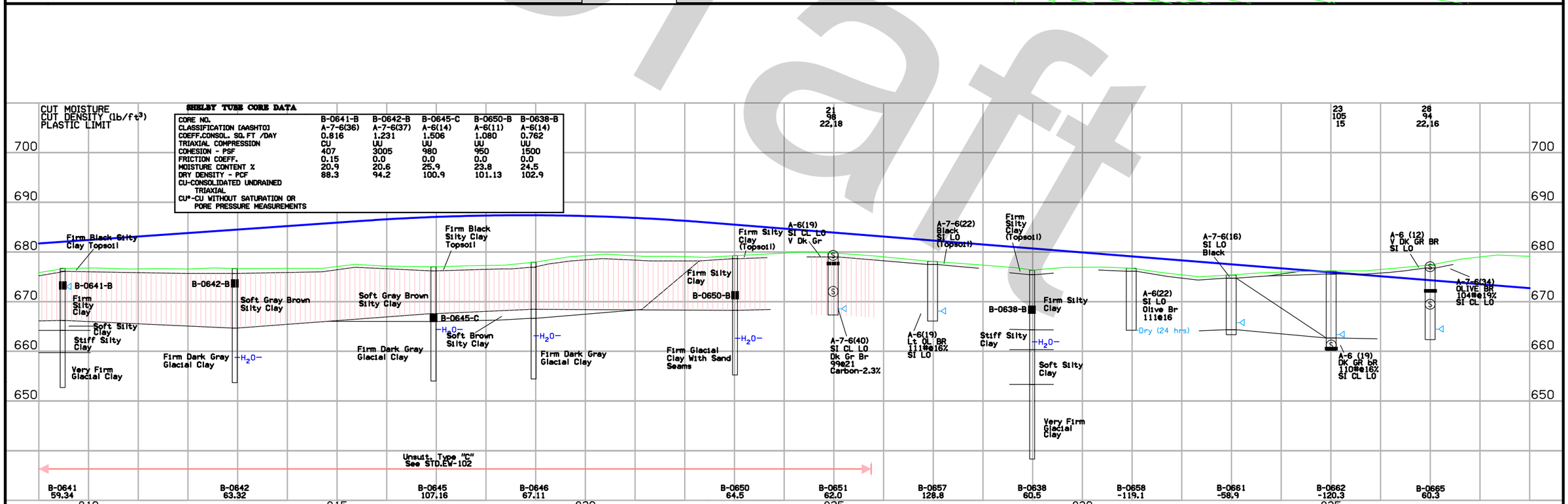

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.7	NBL

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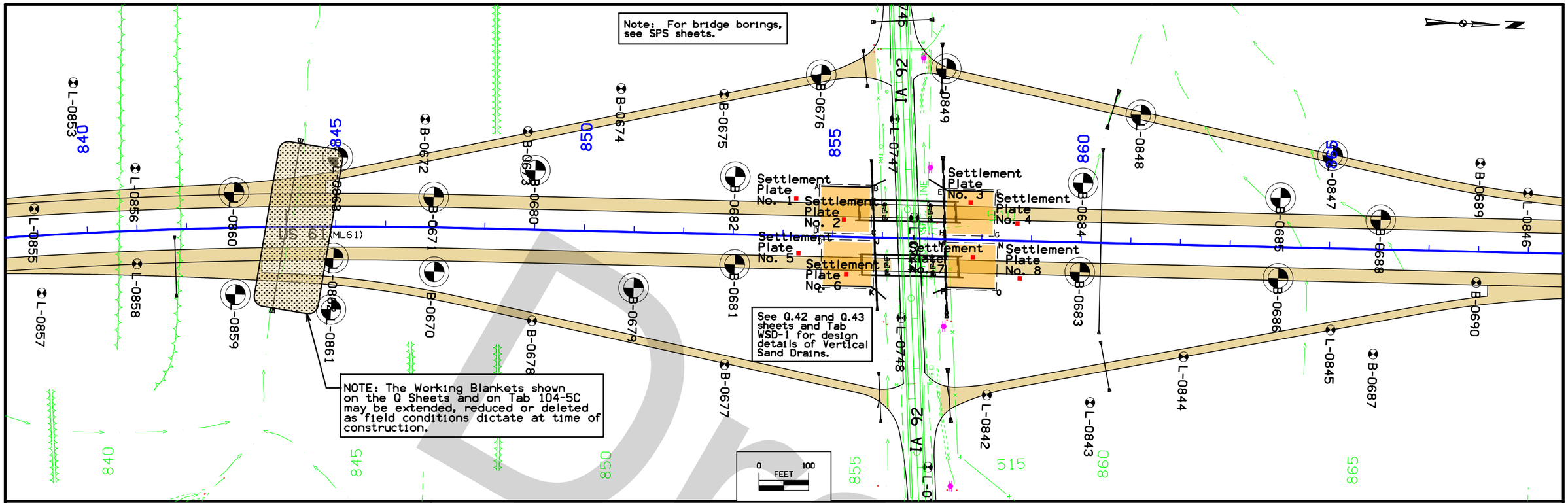

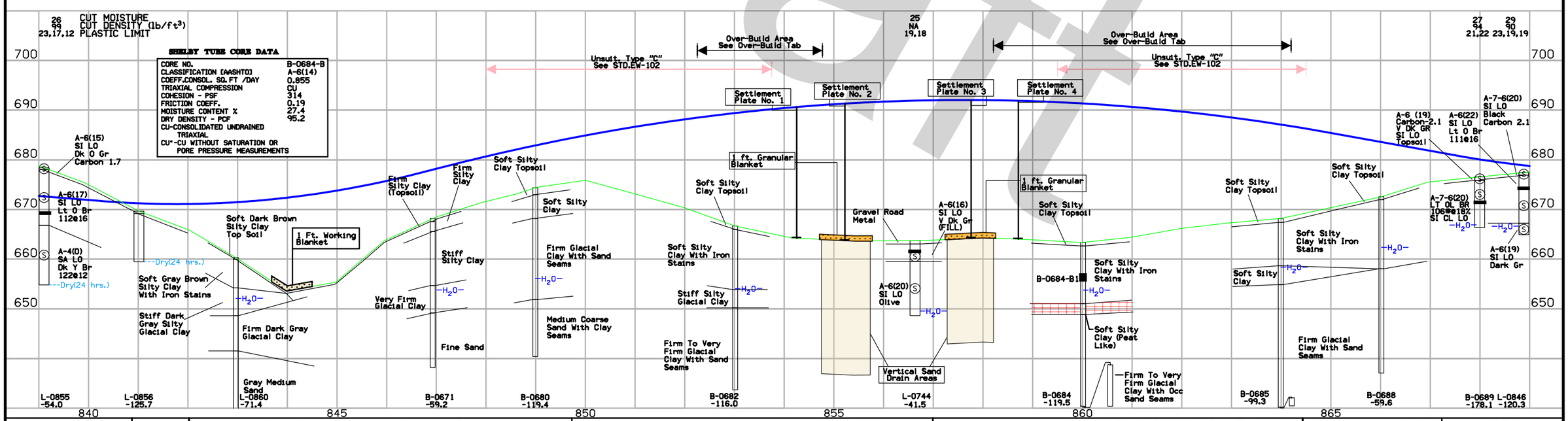

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.8	SBL

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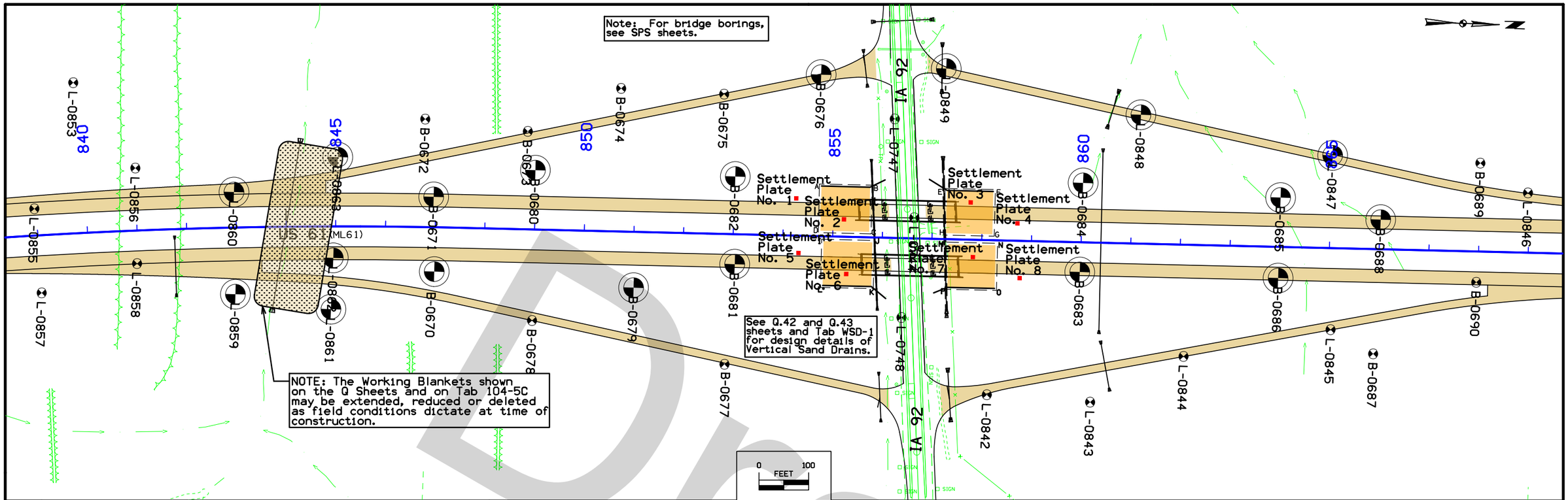
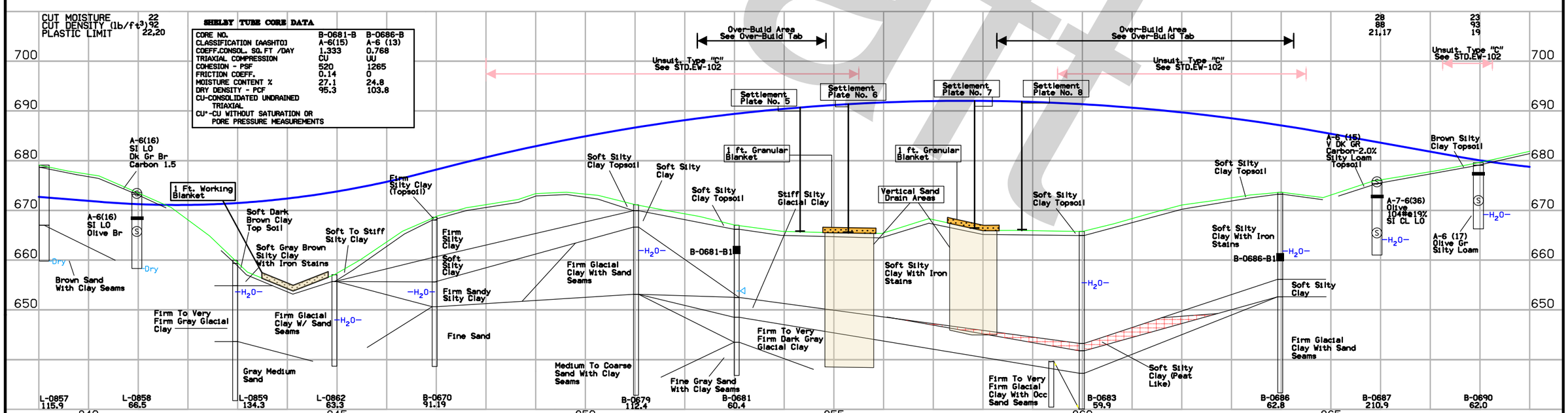


CUT MOISTURE	22	28	23
CUT DENSITY (lb/ft³)	92	88	93
PLASTIC LIMIT	22,20	21,17	19

SHELBY TUBE CORE DATA

CORE NO.	B-0681-B	B-0686-B
CLASSIFICATION [AASHTO]	A-6(15)	A-6 (13)
COEFF.CONSOL. SQ.FT /DAY	1.333	0.768
TRIAXIAL COMPRESSION	CU	UU
COHESION - PSF	520	1265
FRICTION COEFF.	0.14	0
MOISTURE CONTENT %	27.1	24.8
DRY DENSITY - PCF	95.3	103.8

CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS



ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.9	NBL

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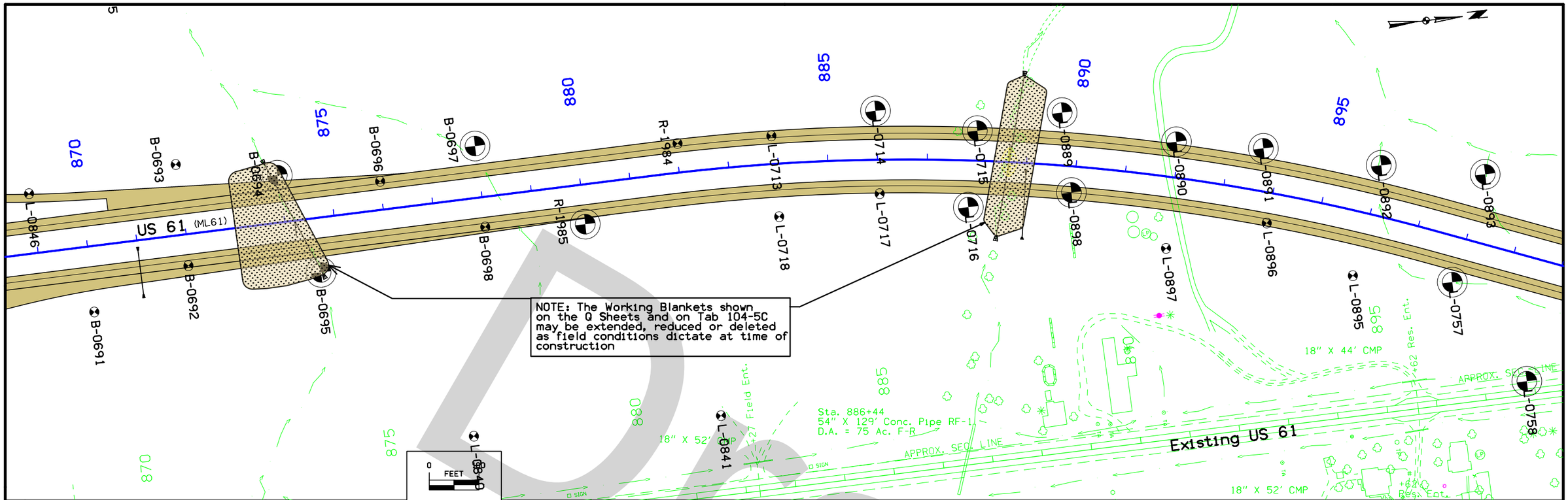
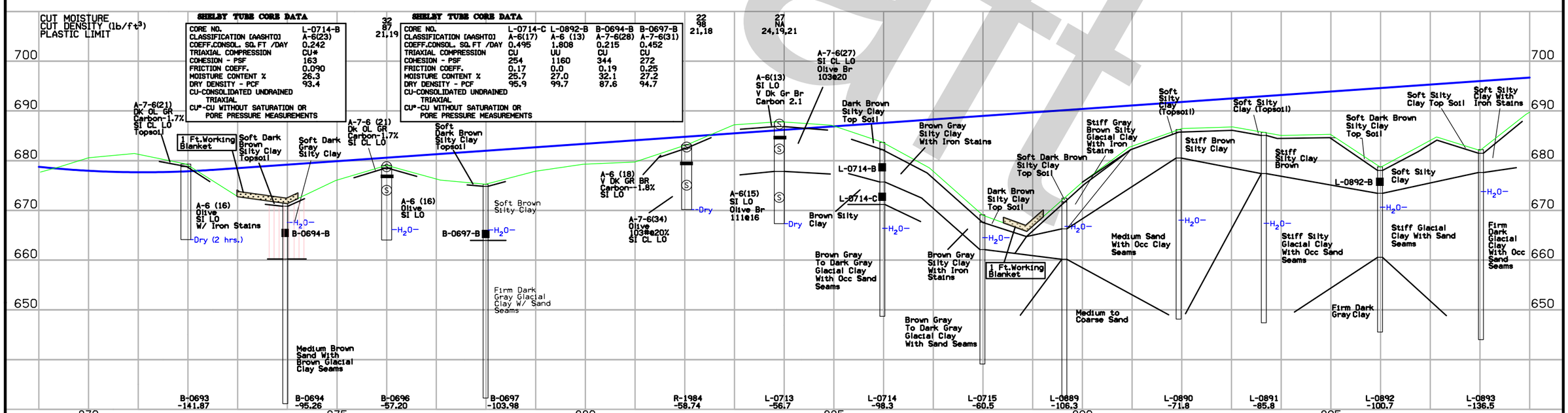
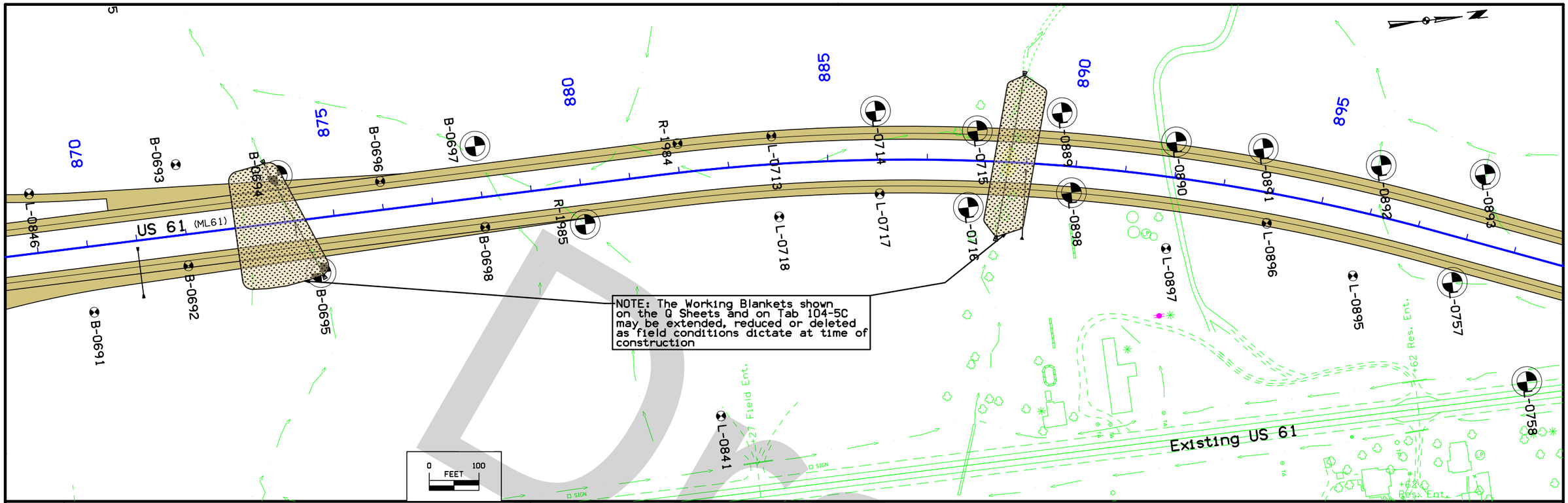
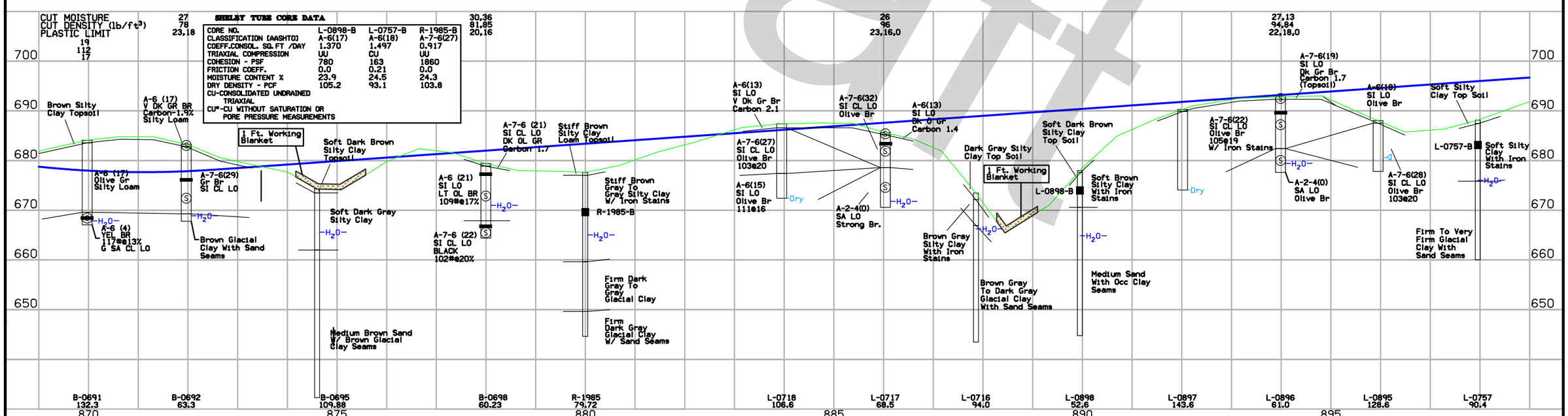




ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.10	SBL





ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.11	NBL

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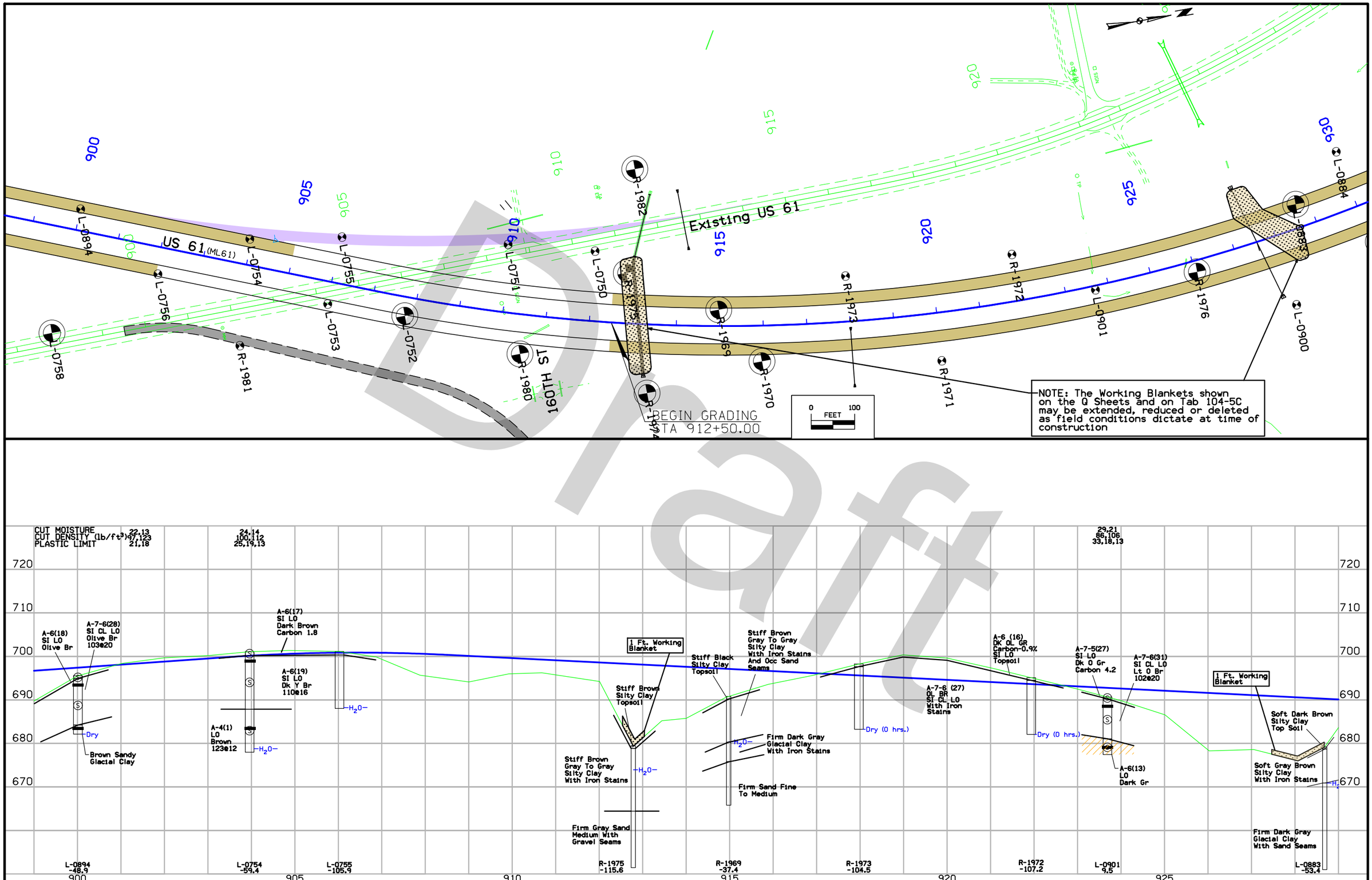

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.12	SBL

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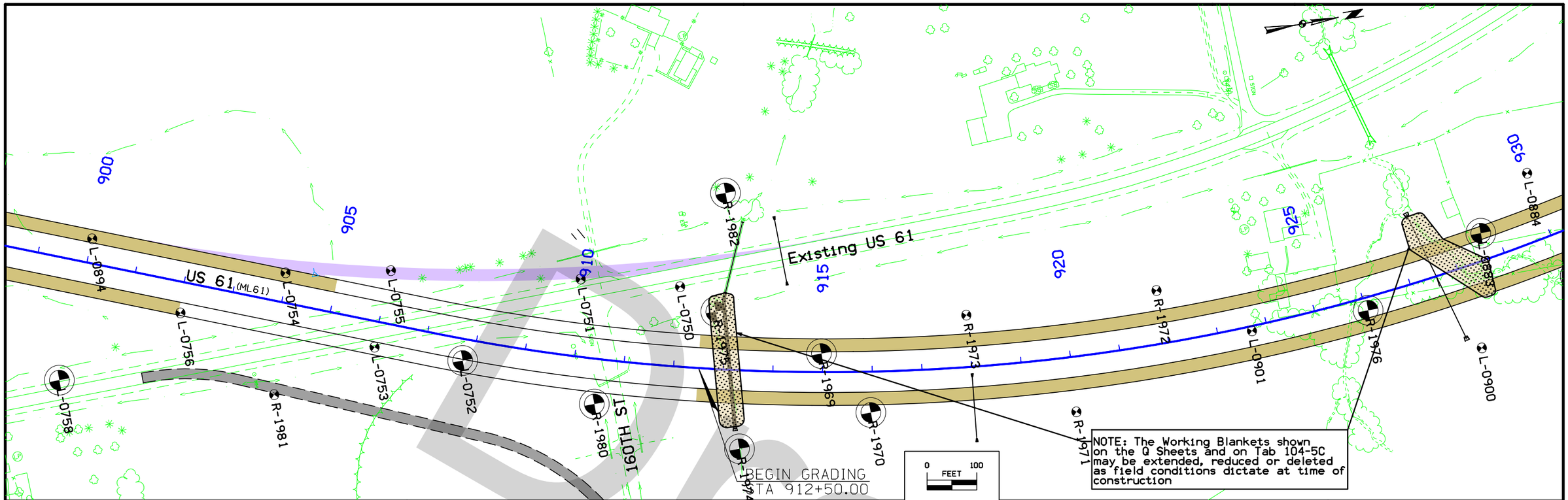

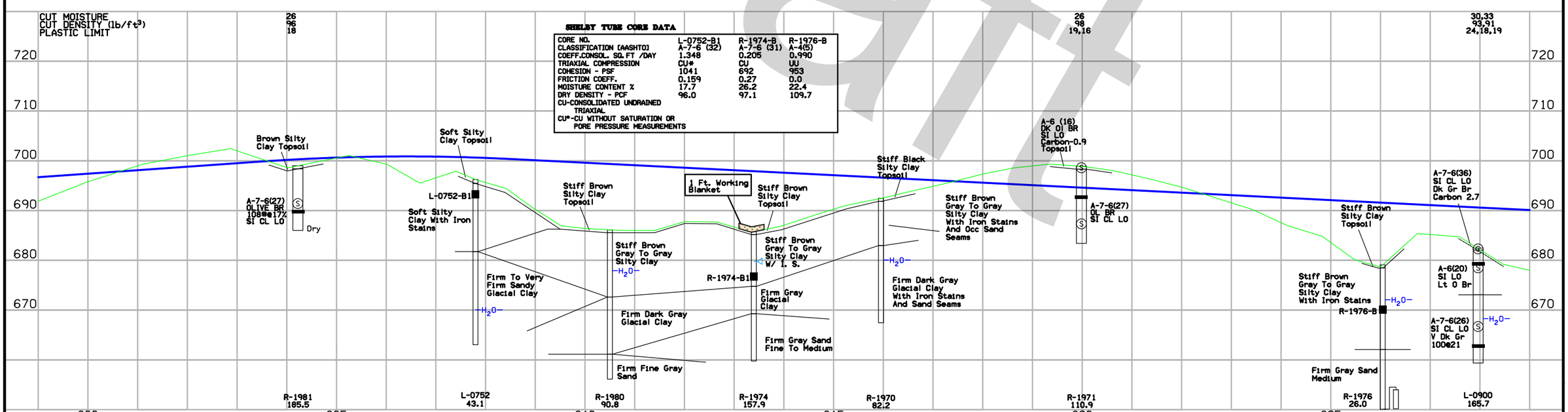

SHELBY TUBE CORE DATA

CORE NO.	L-0752-B1	R-1974-B	R-1976-B
CLASSIFICATION [AASHTO]	A-7-6 (32)	A-7-6 (31)	A-4(5)
COEFF.CONSOL. SQ.FT /DAY	1.348	0.205	0.990
TRIAXIAL COMPRESSION	CU*	CU	UU
COHESION - PSF	1041	692	953
FRICTION COEFF.	0.159	0.27	0.0
MOISTURE CONTENT %	17.7	26.2	22.4
DRY DENSITY - PCF	96.0	97.1	109.7

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.13	NBL

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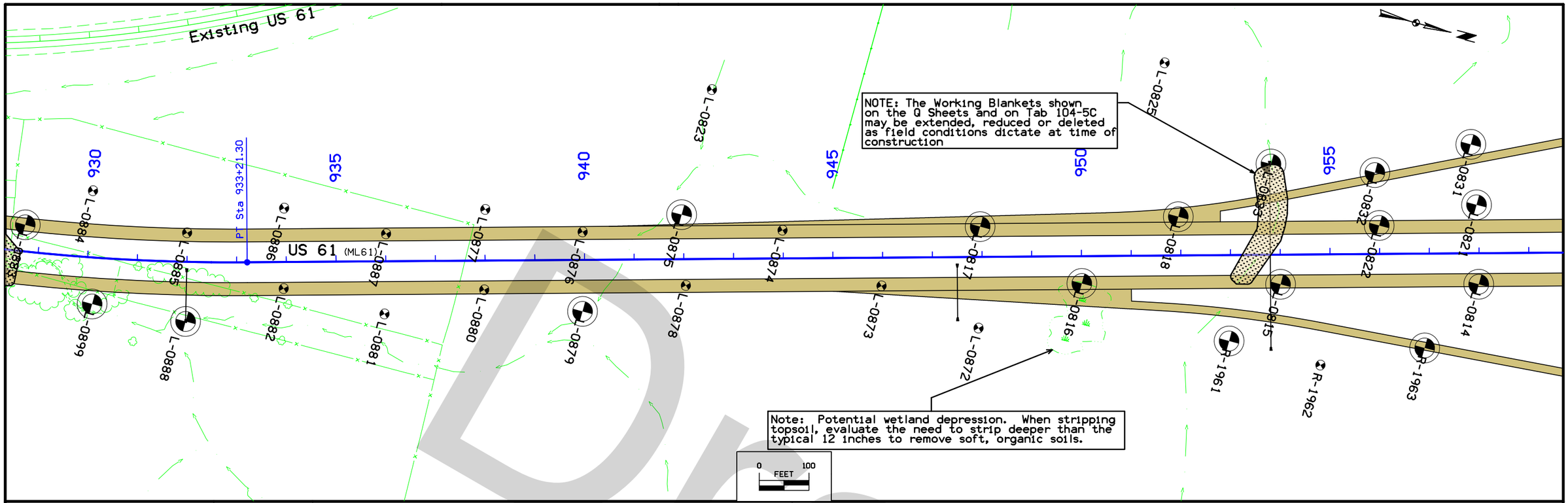

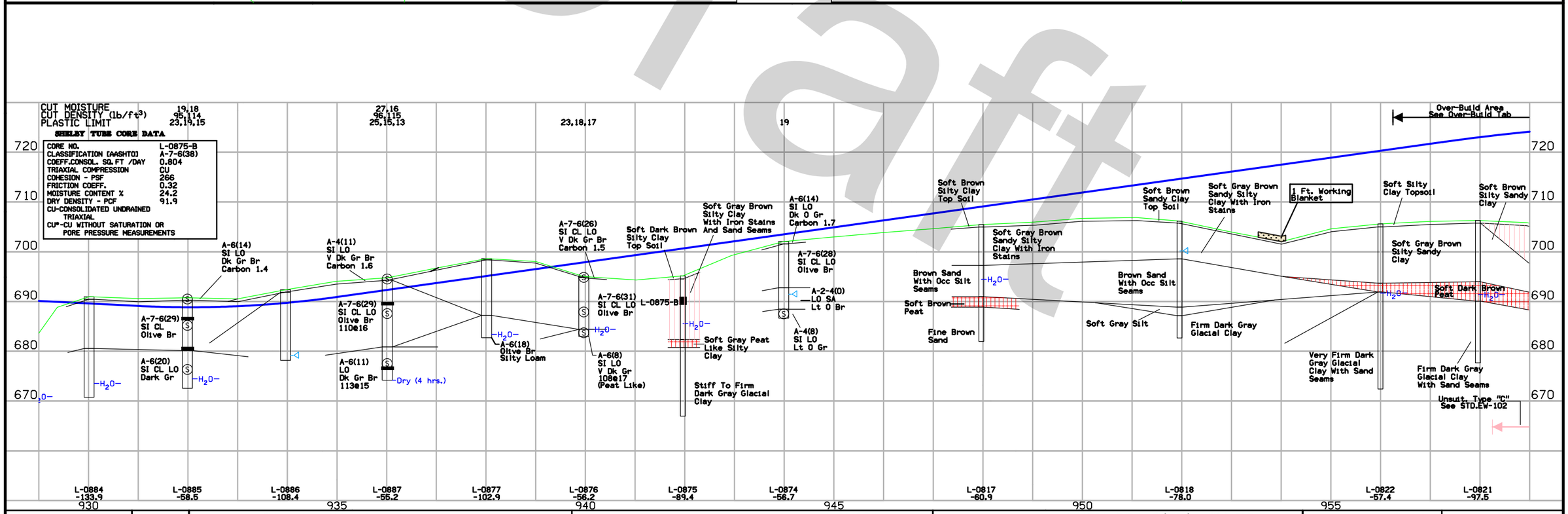

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.14	SBL

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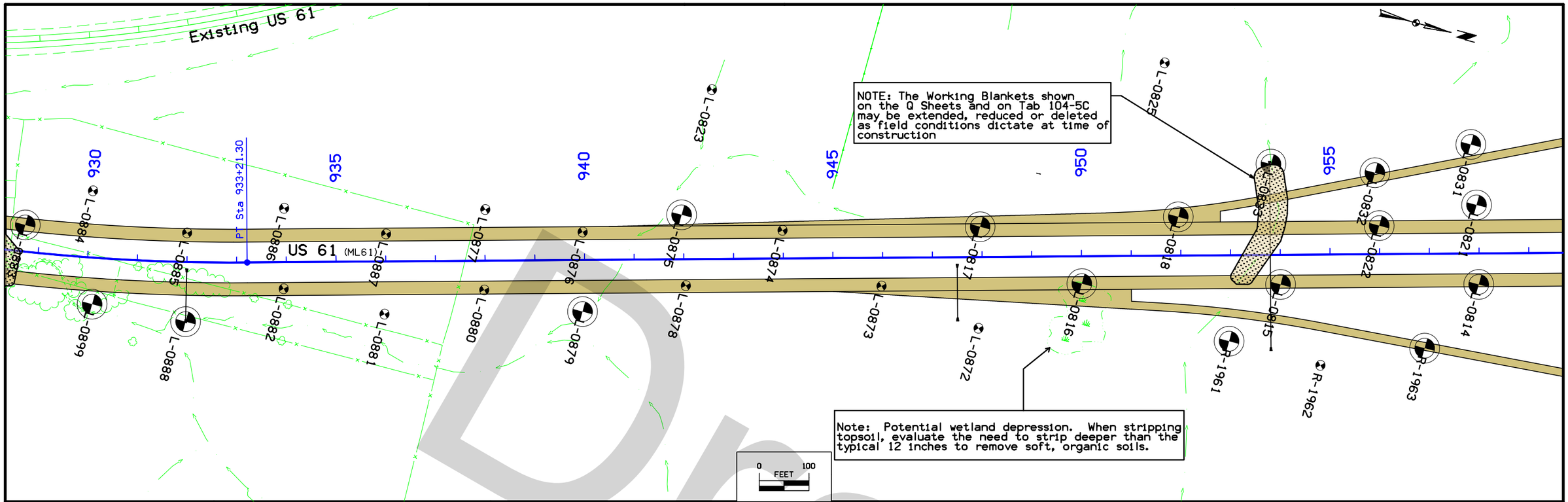

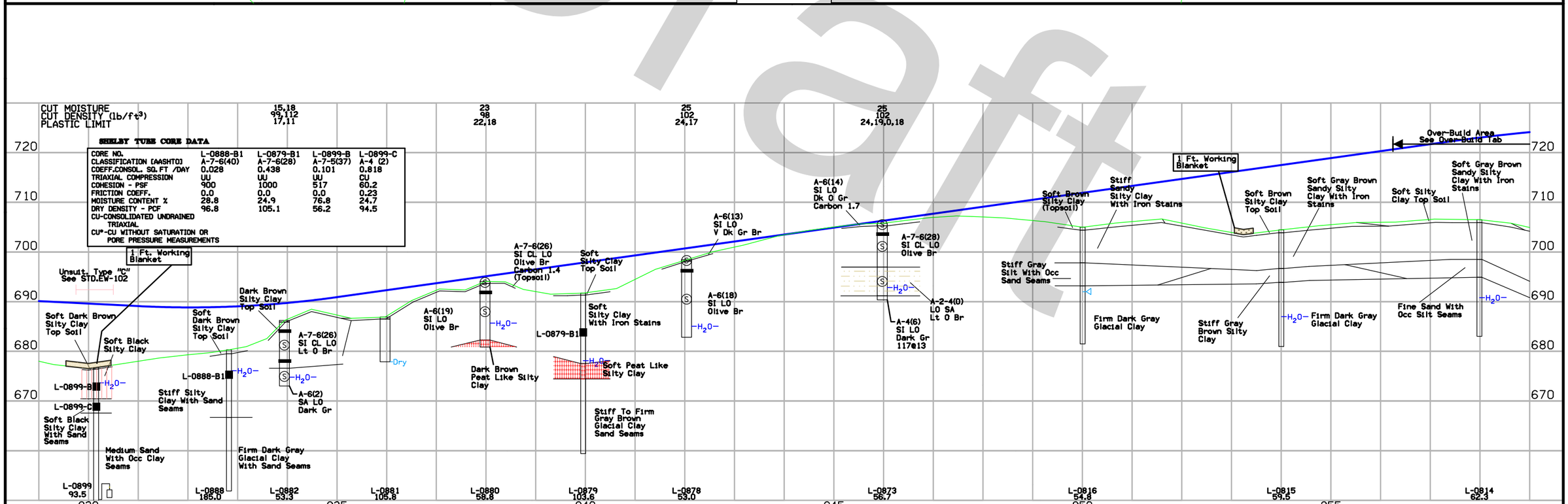

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.15	NBL

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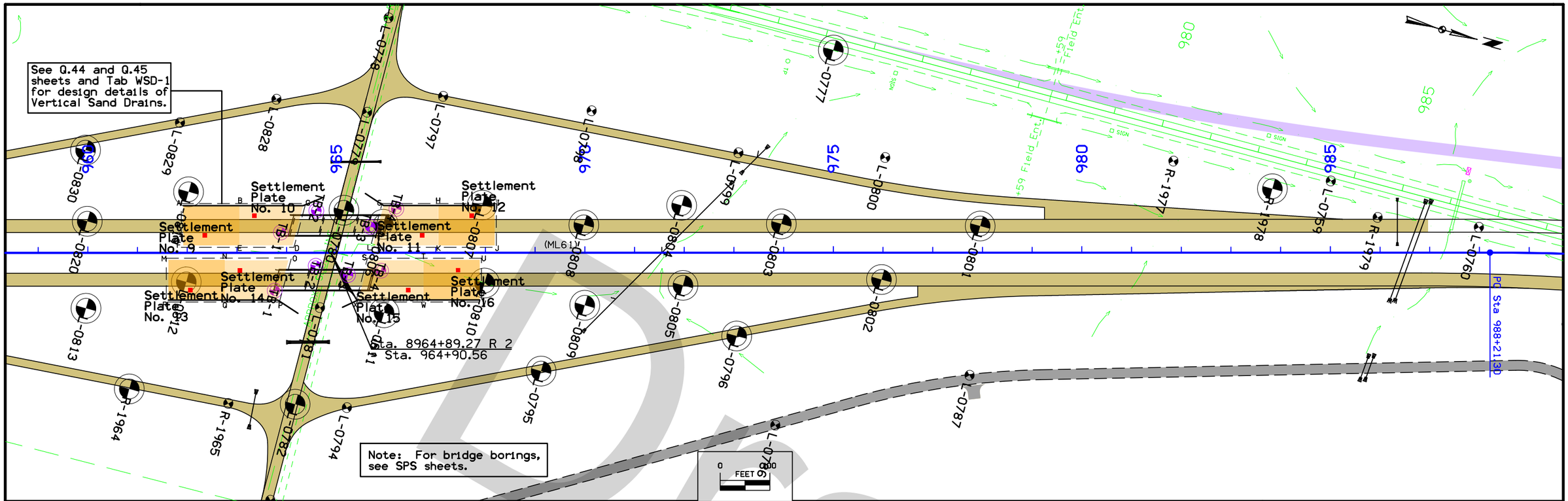

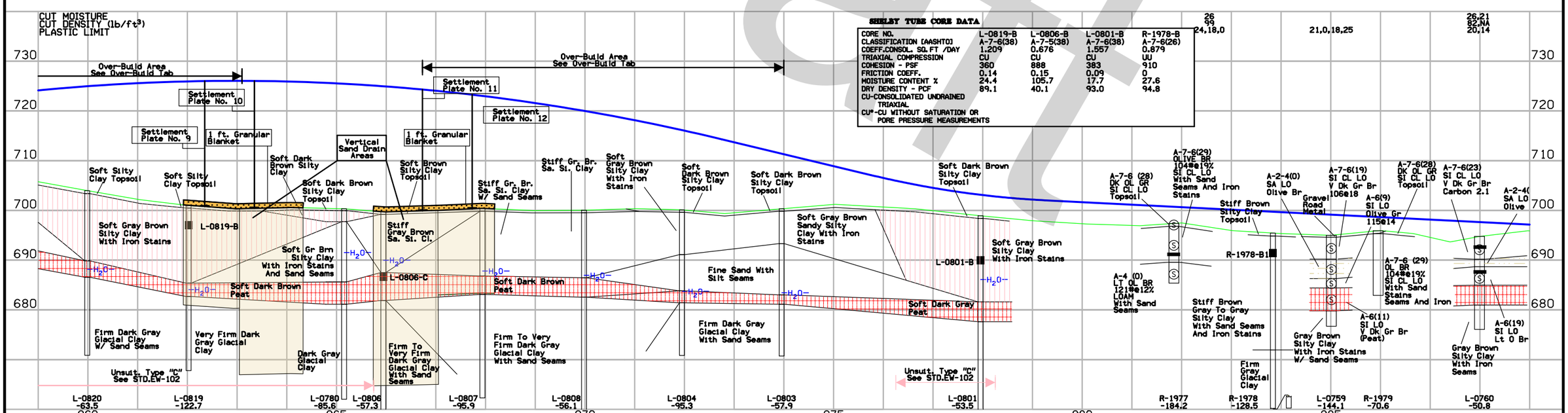

SHELBY TUBE CORE DATA

CORE NO.	L-0819-B	L-0806-B	L-0801-B	R-1978-B
CLASSIFICATION [AASHTO]	A-7-6(38)	A-7-5(38)	A-7-6(38)	A-7-6(26)
COEFF.CONSOL. SQ.FT /DAY	1.209	0.676	1.557	0.879
TRIAXIAL COMPRESSION	CU	CU	CU	UU
COHESION - PSF	360	888	383	910
FRICTION COEFF.	0.14	0.15	0.09	0
MOISTURE CONTENT %	24.4	105.7	17.7	27.6
DRY DENSITY - PCF	89.1	40.1	93.0	94.8

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

26
99
24,18,0

21,0,18,25

26,21
82,NA
20,14

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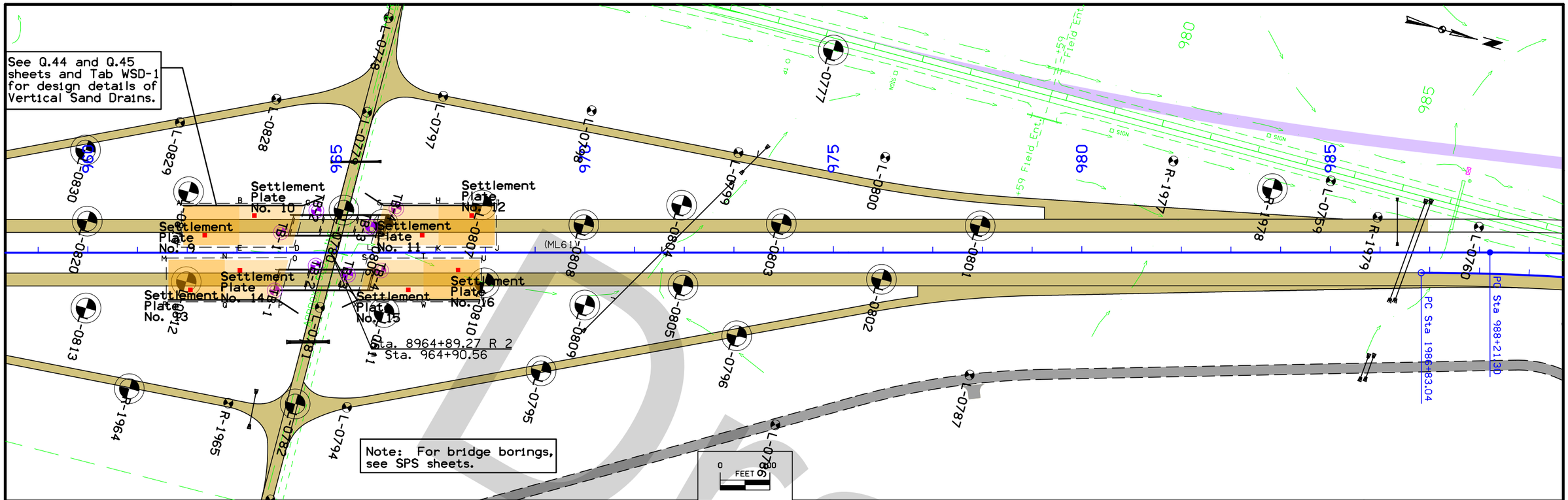
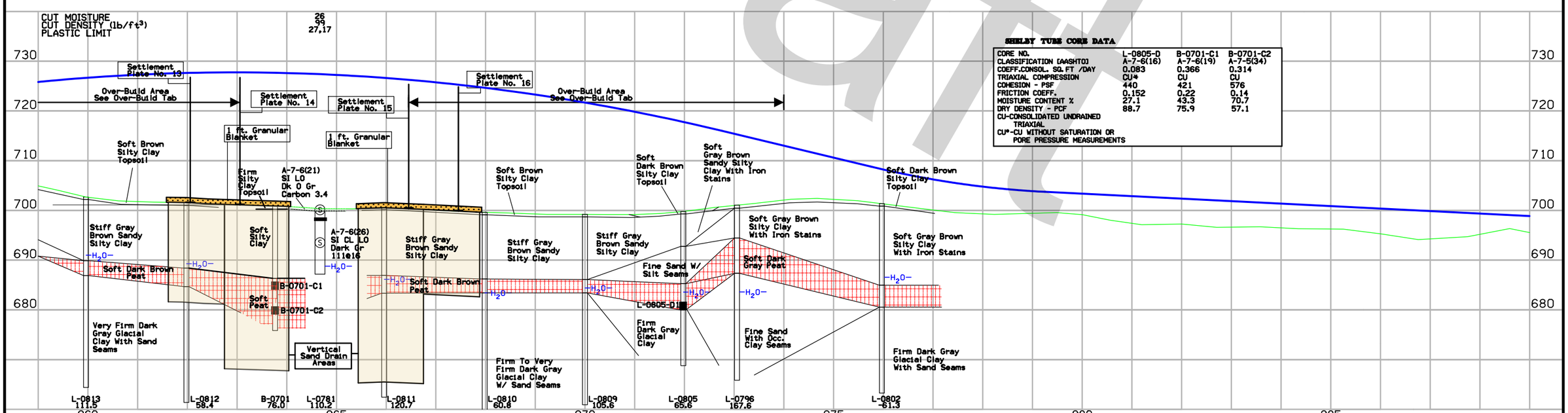
ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.16	SBL





SHELBY TUBE CORE DATA

CORE NO.	L-0805-D	B-0701-C1	B-0701-C2
CLASSIFICATION [AASHTO]	A-7-6(16)	A-7-6(19)	A-7-5(34)
COEFF.CONSOL. SQ.FT /DAY	0.083	0.366	0.314
TRIAXIAL COMPRESSION	CU*	CU	CU
COHESION - PSF	440	421	576
FRICTION COEFF.	0.152	0.22	0.14
MOISTURE CONTENT %	27.1	43.3	70.7
DRY DENSITY - PCF	88.7	75.9	57.1

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

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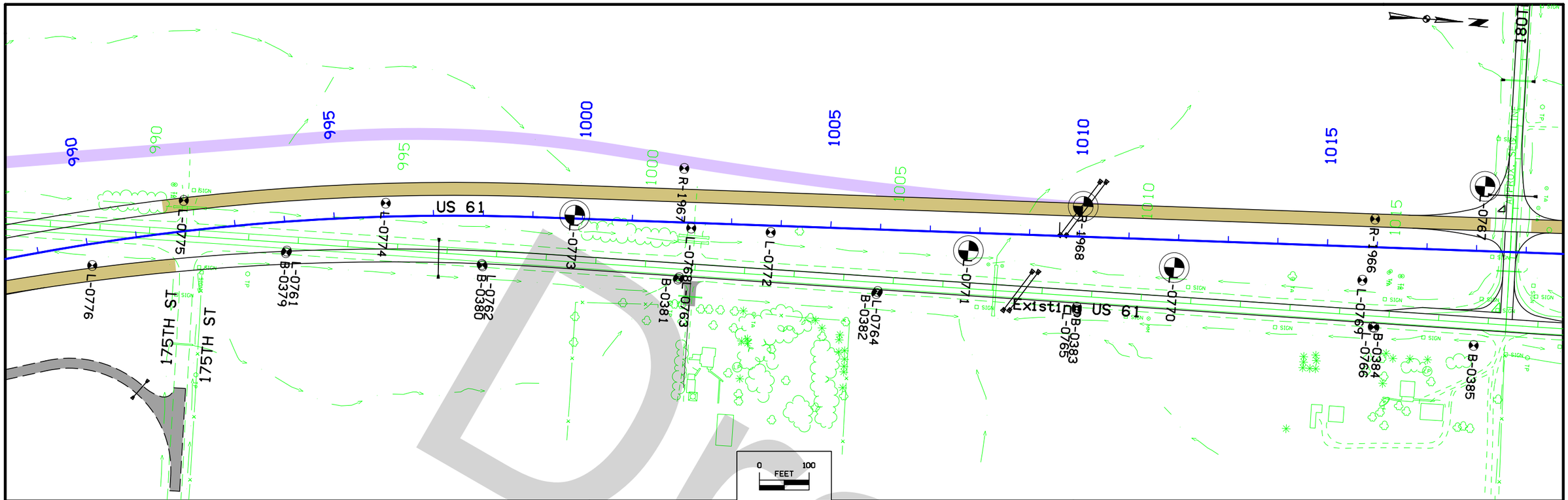

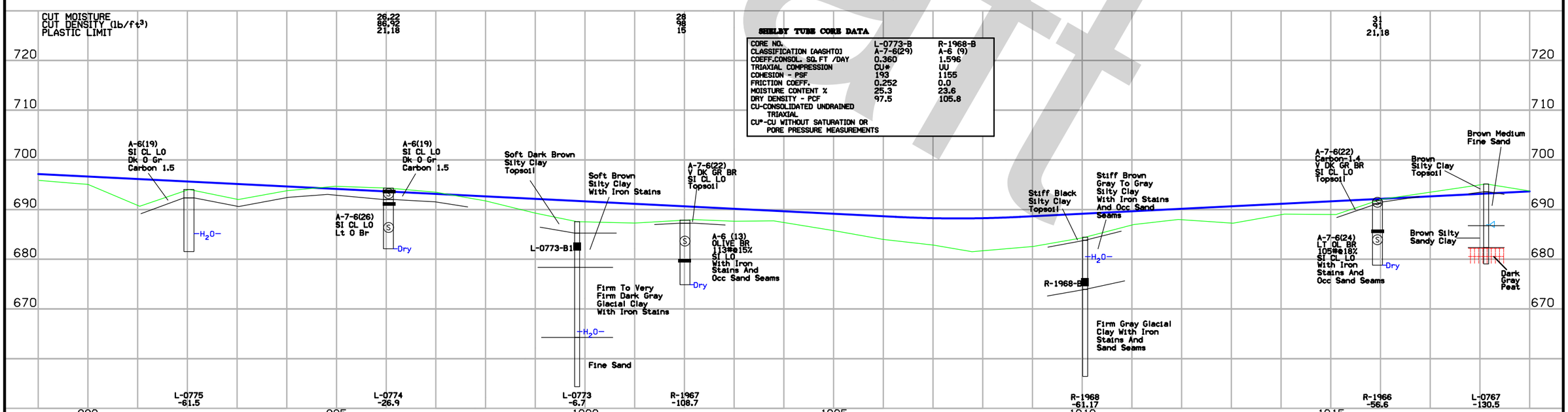

SHELBY TUBE CORE DATA

CORE NO.	L-0773-B	R-1968-B
CLASSIFICATION [AASHTO]	A-7-6(29)	A-6 (9)
COEFF.CONSOL. SQ.FT /DAY	0.360	1.596
TRIAXIAL COMPRESSION	CU*	UU
COHESION - PSF	193	1155
FRICTION COEFF.	0.252	0.0
MOISTURE CONTENT %	25.3	23.6
DRY DENSITY - PCF	97.5	105.8

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

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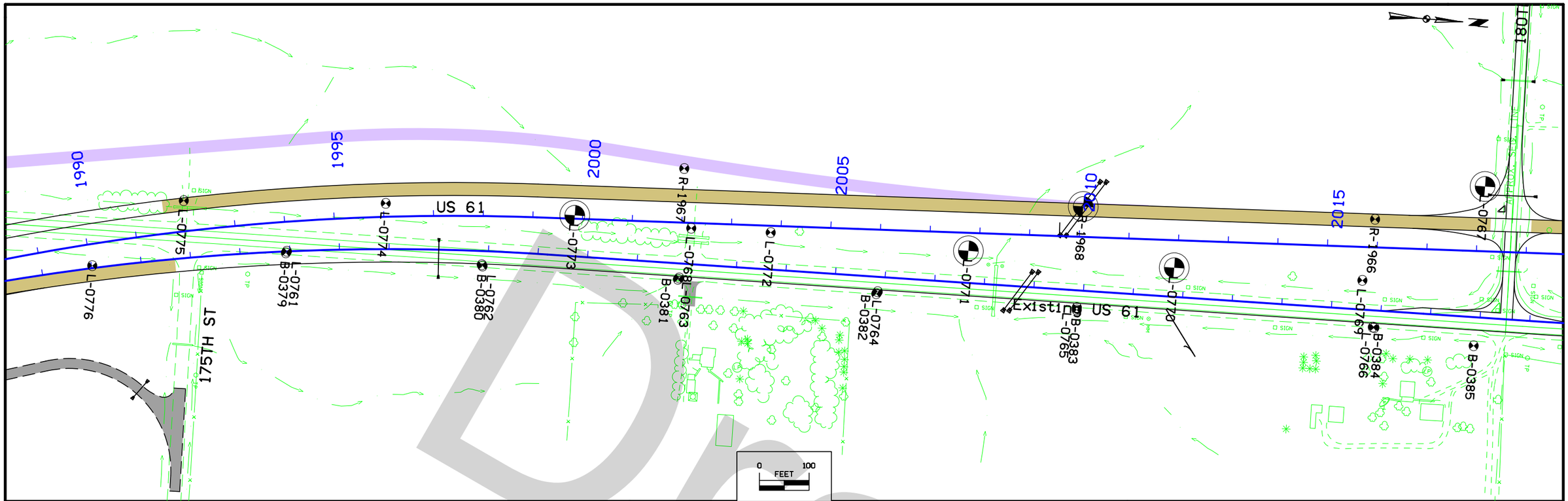
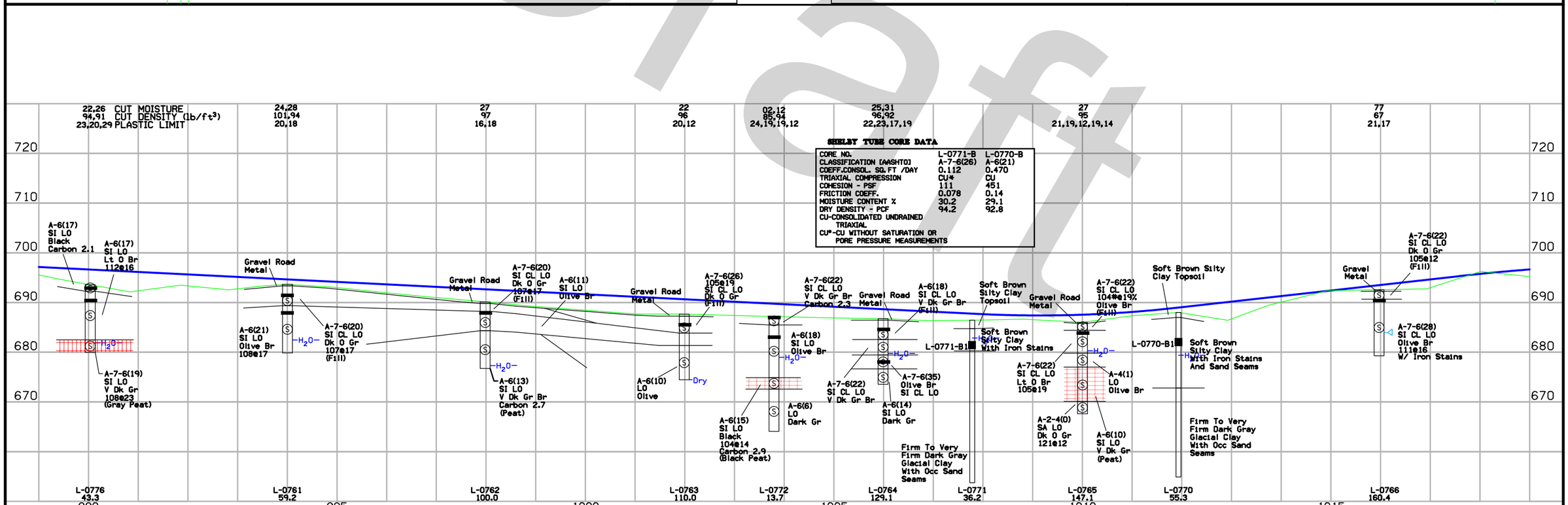
ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.18	SBL





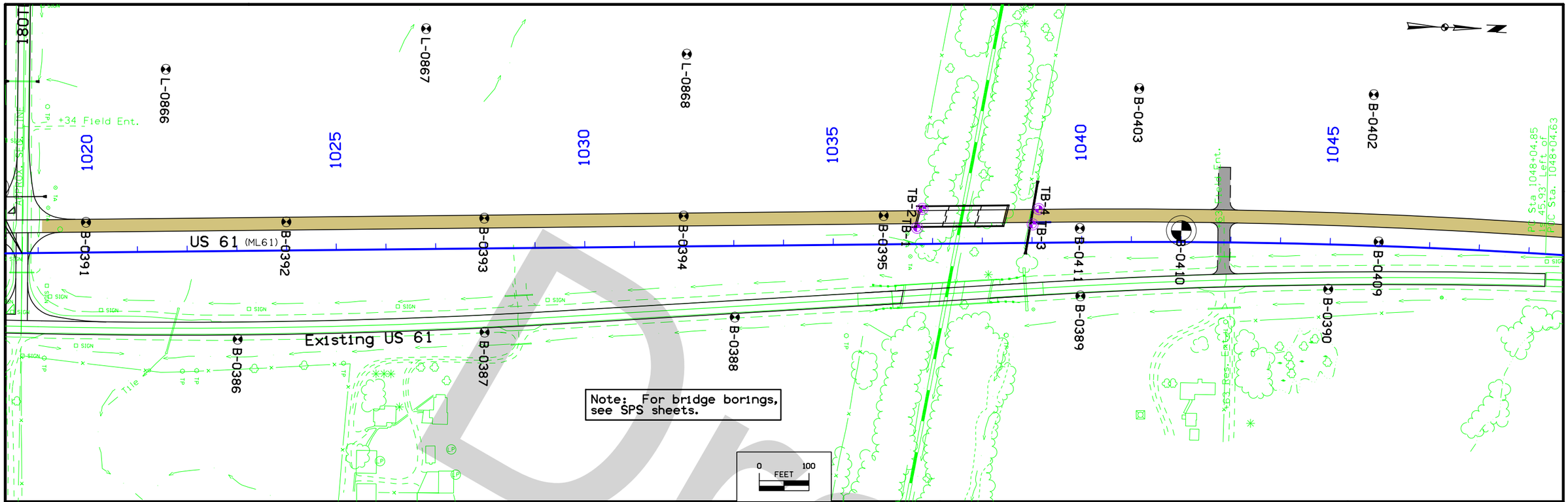
SHELBY TUBE CORE DATA

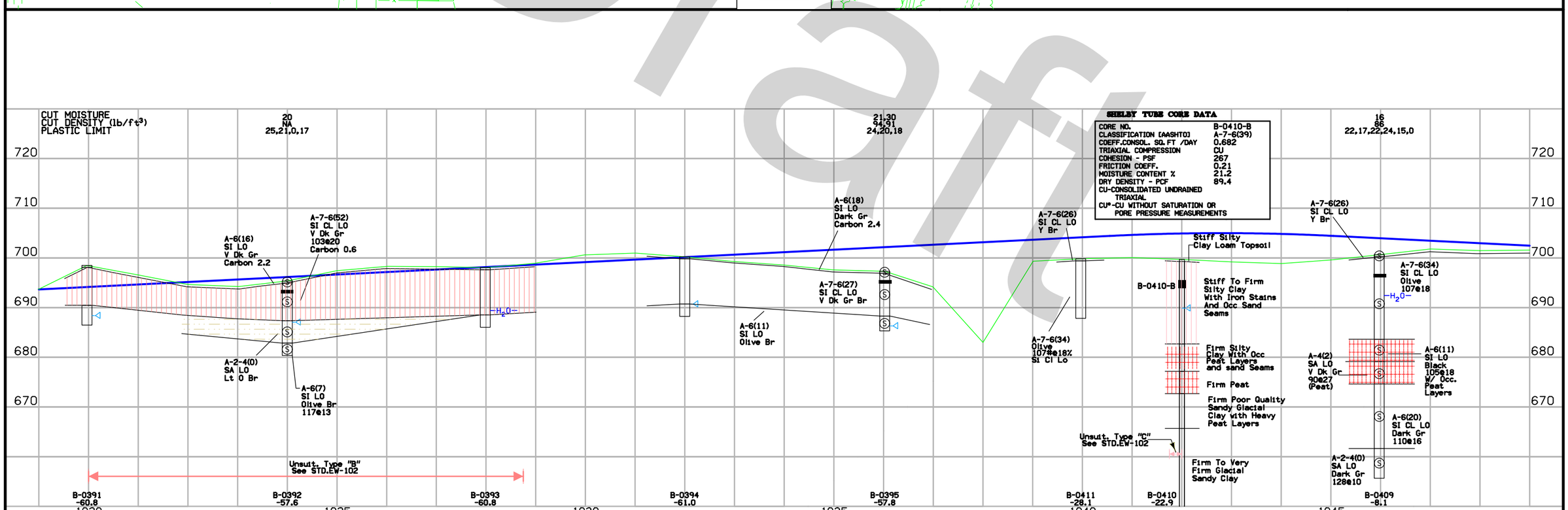
CORE NO.	L-0771-B	L-0770-B
CLASSIFICATION [AASHTO]	A-7-6(26)	A-6(21)
COEFF.CONSOL. SQ.FT /DAY	0.112	0.470
TRIAXIAL COMPRESSION	CU*	CU
COHESION - PSF	111	451
FRICTION COEFF.	0.078	0.14
MOISTURE CONTENT %	30.2	29.1
DRY DENSITY - PCF	94.2	92.8

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

Draft

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.19	NBL





SHELBY TUBE CORE DATA

CORE NO.	B-0410-B
CLASSIFICATION [AASHTO]	A-7-6(39)
COEFF.CONSOL. SQ.FT /DAY	0.682
TRIAXIAL COMPRESSION	CU
COHESION - PSF	267
FRICTION COEFF.	0.21
MOISTURE CONTENT %	21.2
DRY DENSITY - PCF	89.4

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.20	SBL

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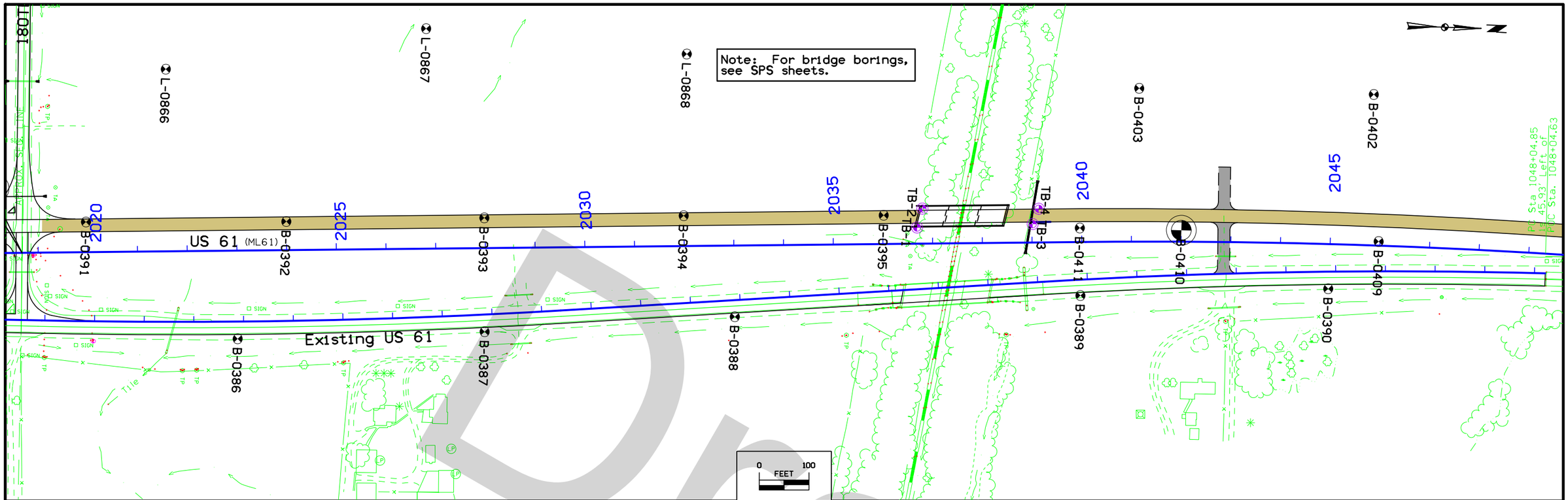

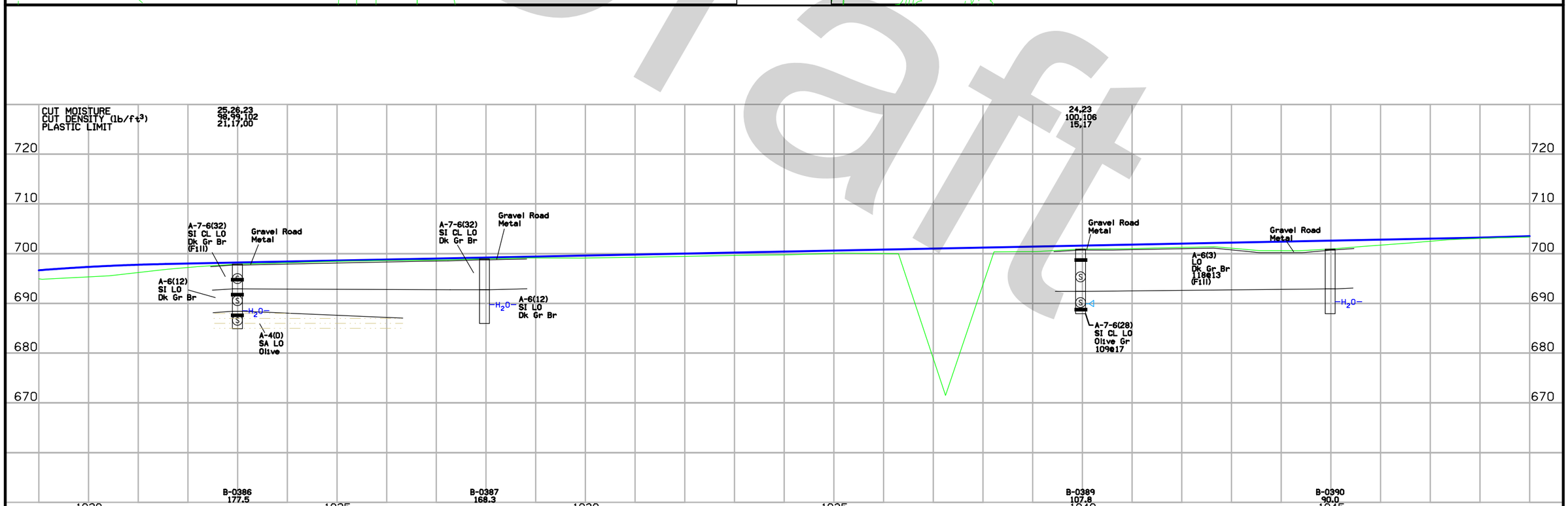

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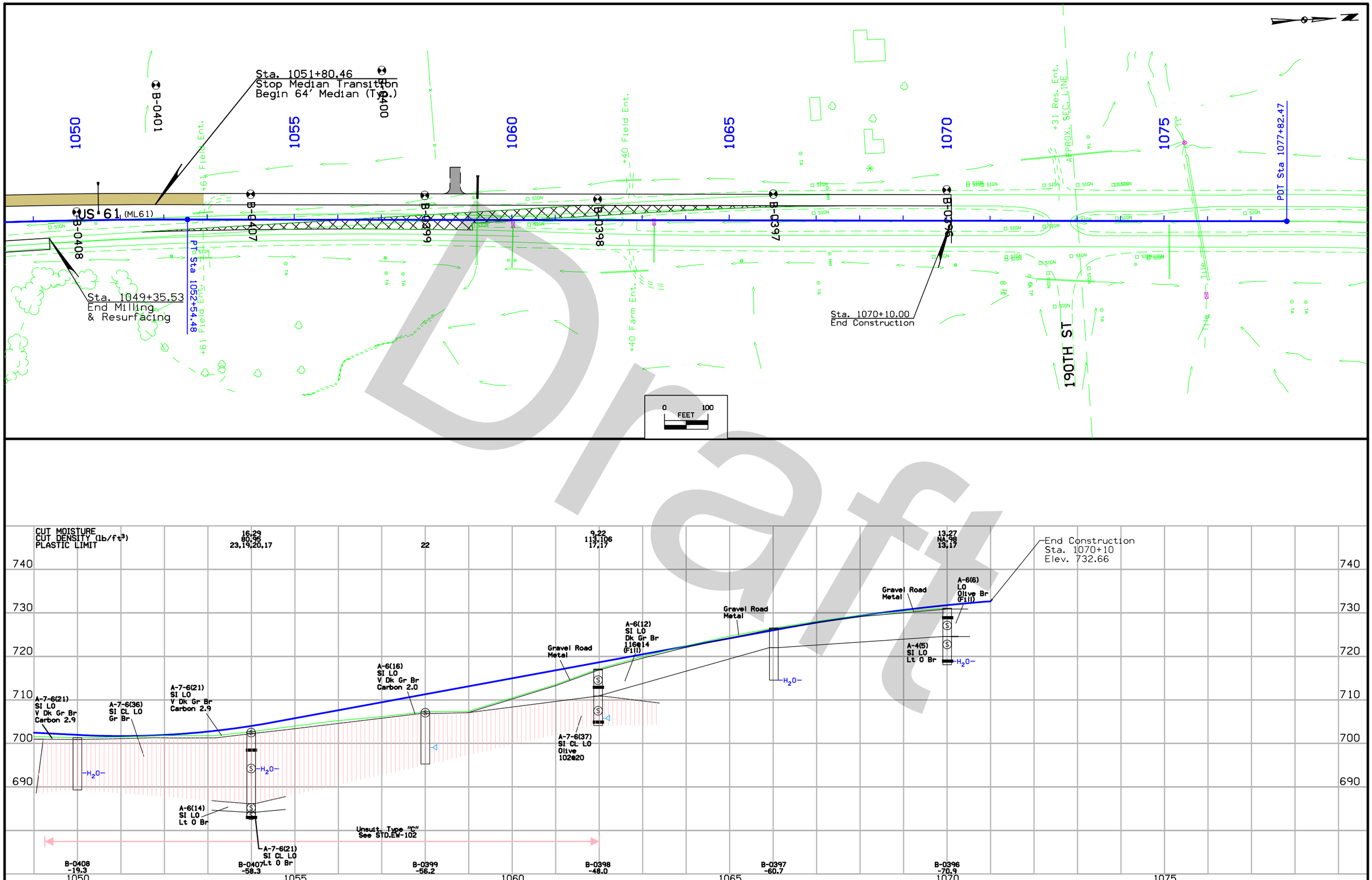

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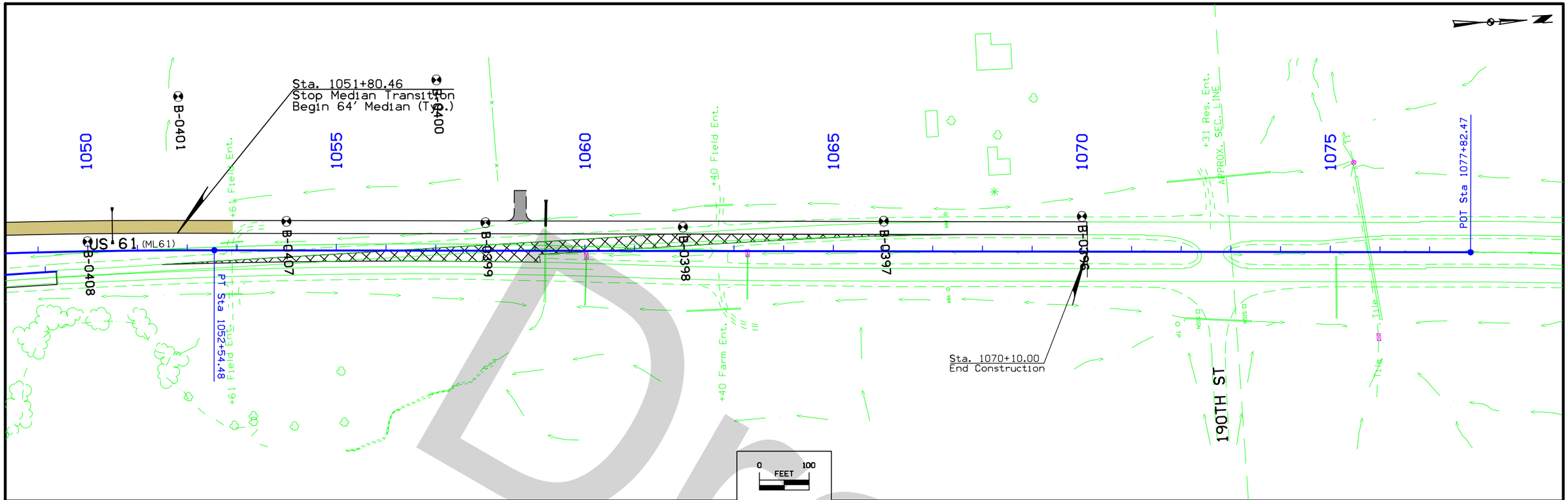

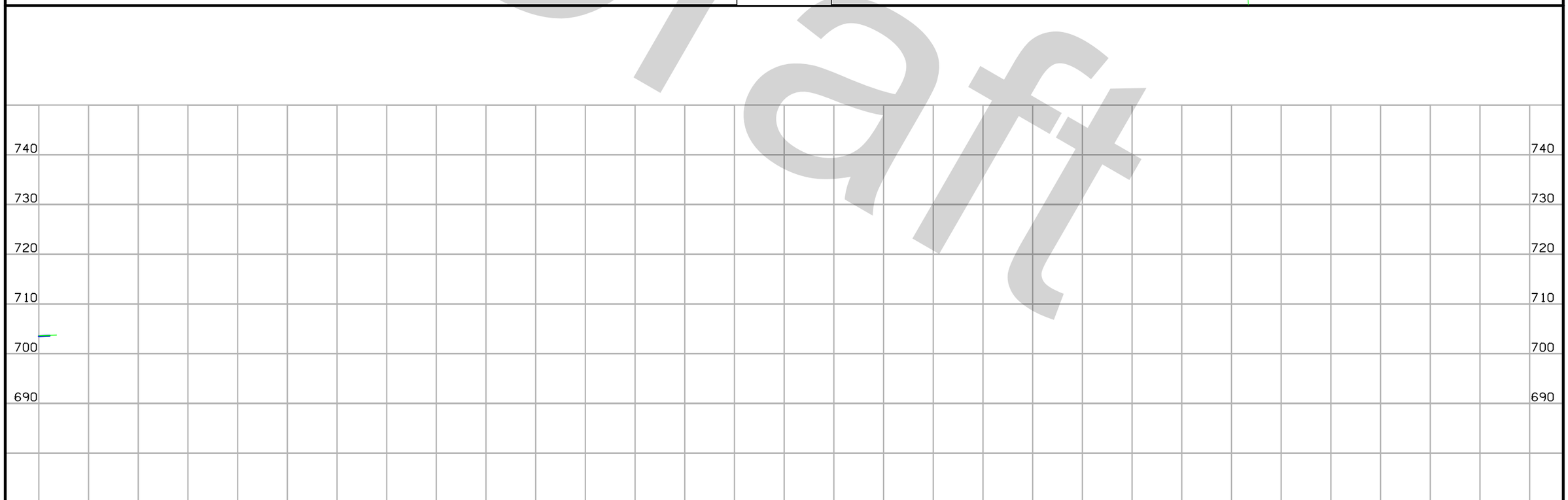

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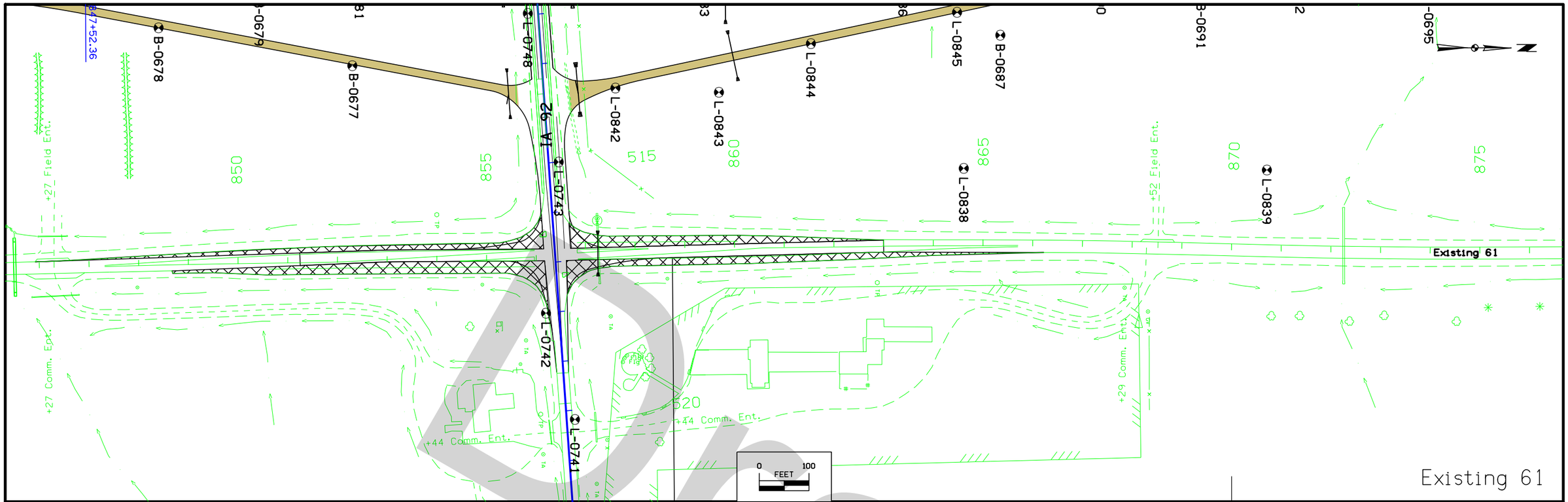

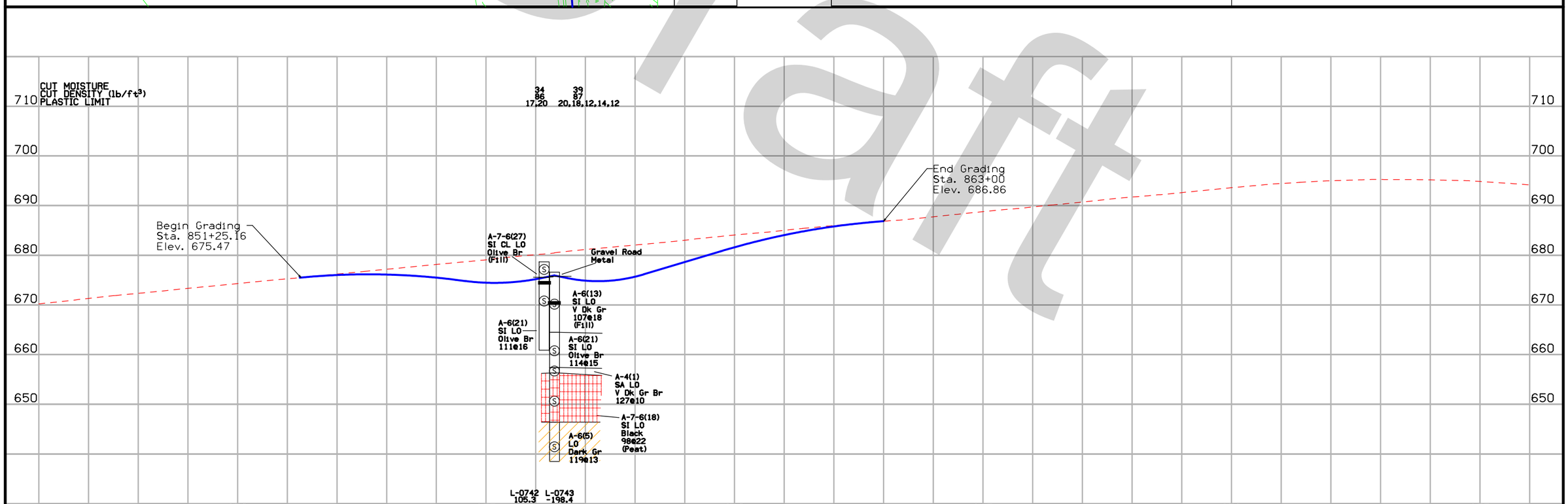

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.24	Existing 61

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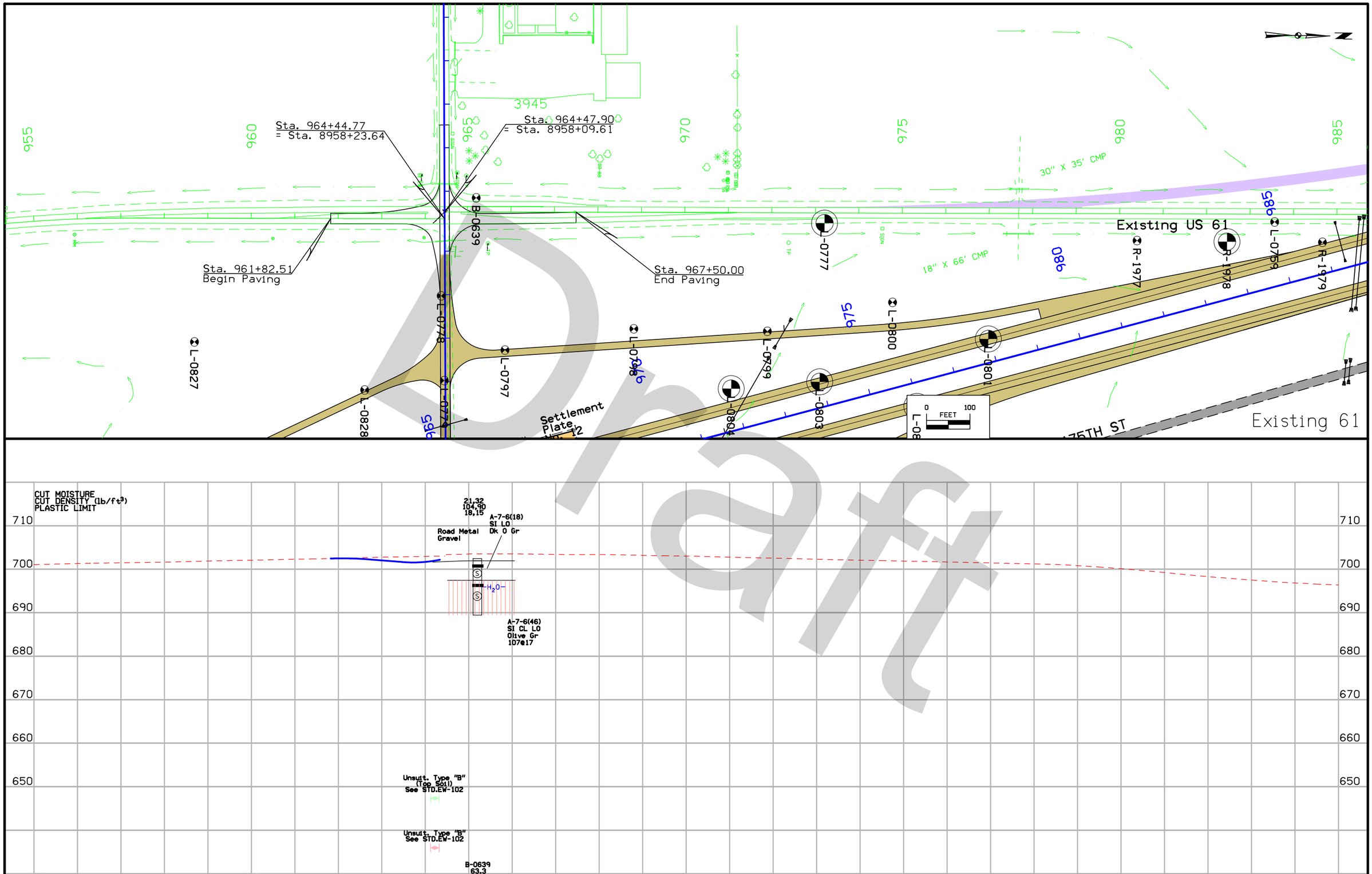

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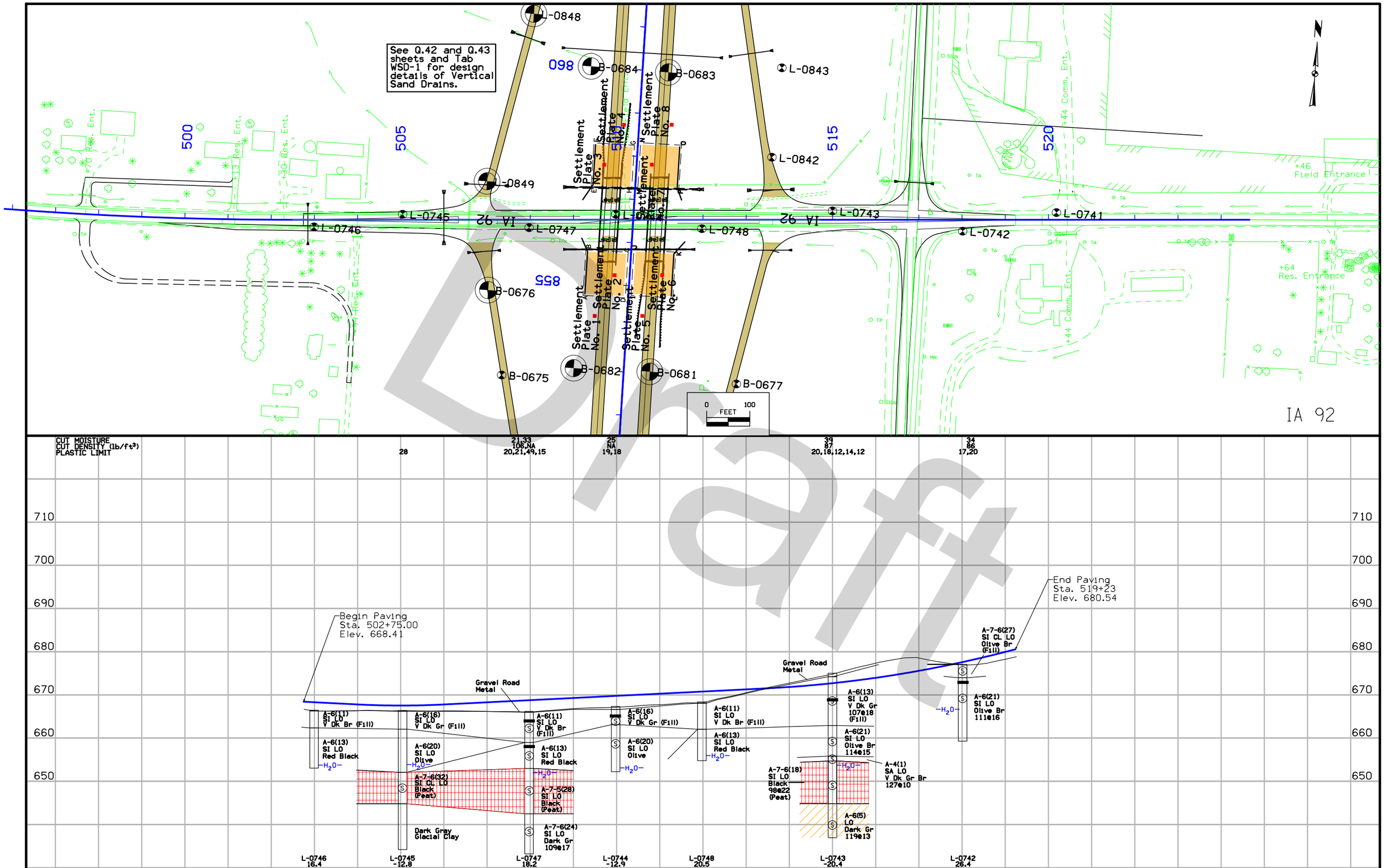

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.26	IA 92

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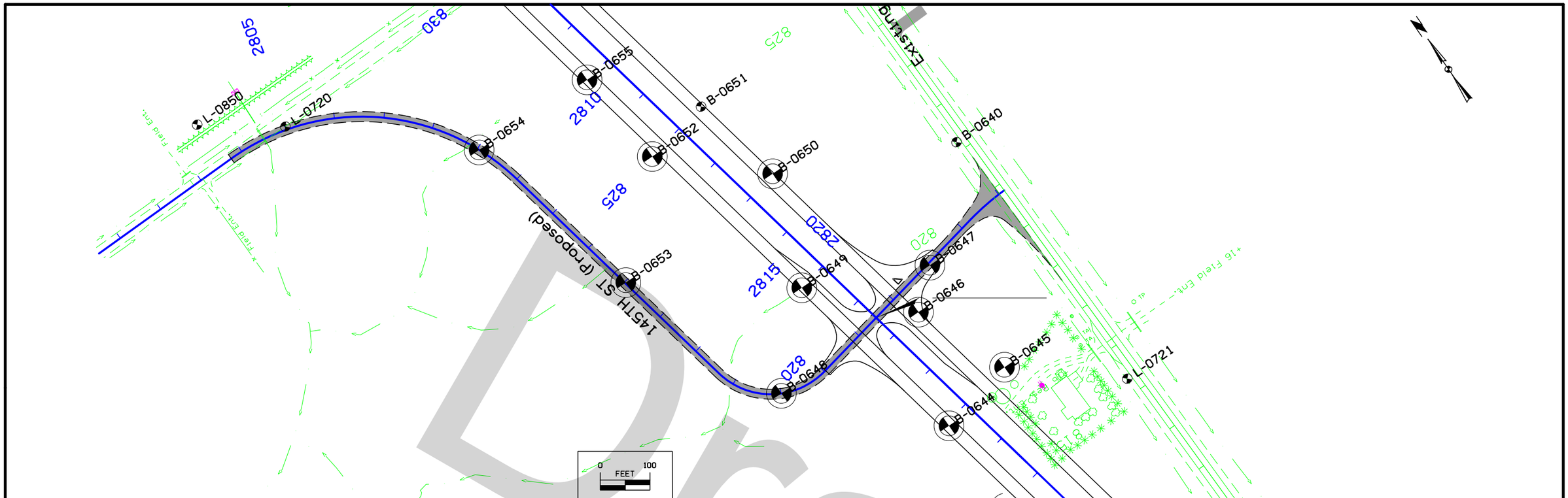
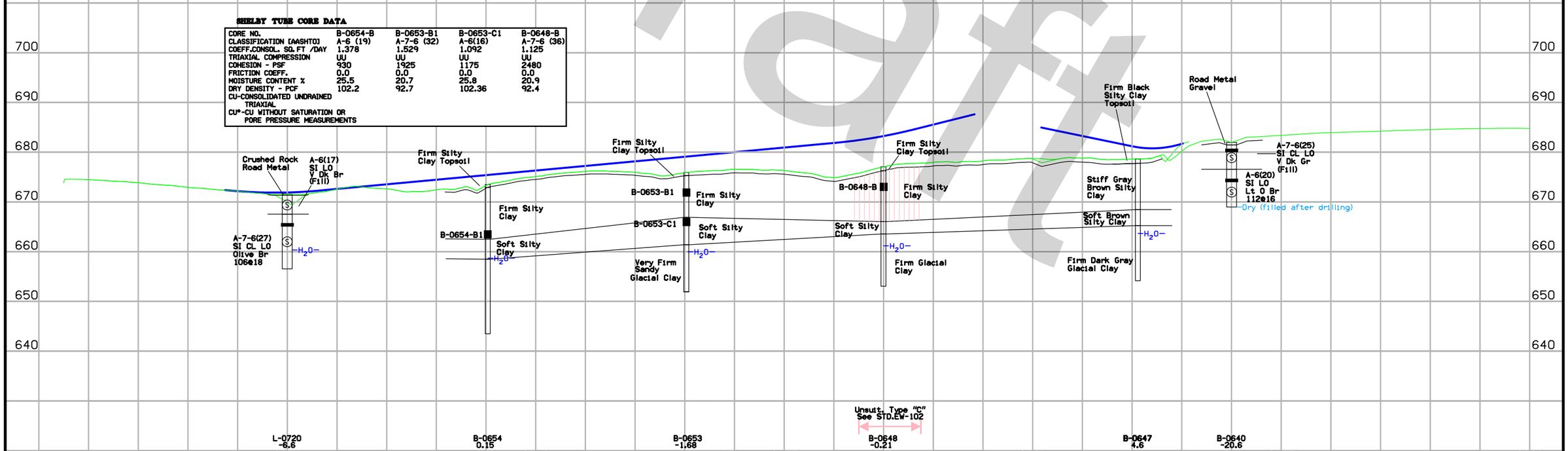


CUT MOISTURE	28			28.25
CUT DENSITY (lb/ft³)	NA			NA.101
PLASTIC LIMIT	18,19			19,19

SHELBY TUBE CORE DATA

CORE NO.	B-0654-B	B-0653-B1	B-0653-C1	B-0648-B
CLASSIFICATION [AASHTO]	A-6 (19)	A-7-6 (32)	A-6(16)	A-7-6 (36)
COEFF.CONSOL. SQ.FT /DAY	1.378	1.529	1.092	1.125
TRIAXIAL COMPRESSION	UU	UU	UU	UU
COHESION - PSF	930	1925	1175	2480
FRICTION COEFF.	0.0	0.0	0.0	0.0
MOISTURE CONTENT %	25.5	20.7	25.8	20.9
DRY DENSITY - PCF	102.2	92.7	102.36	92.4

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS



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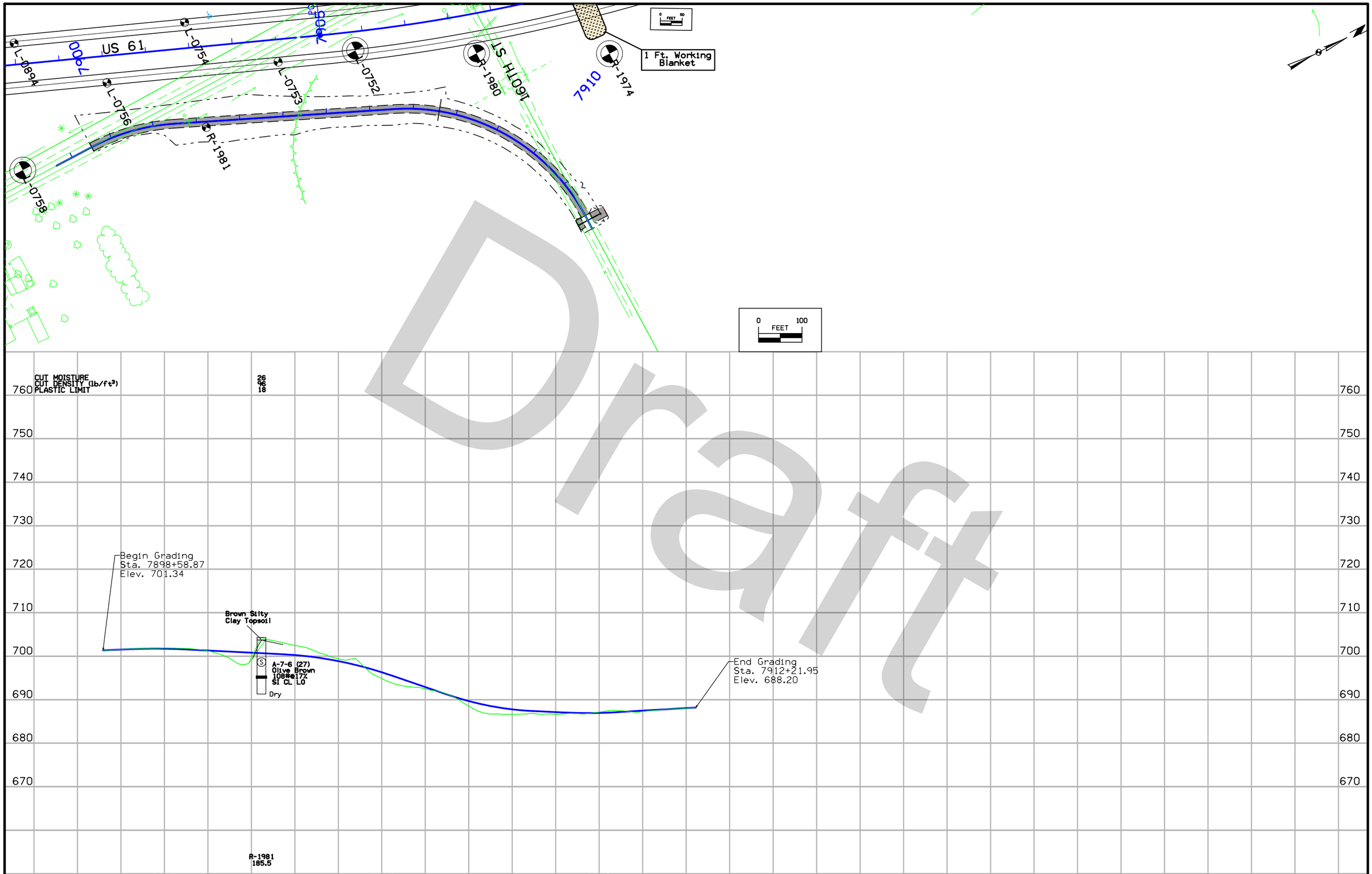

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ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.28

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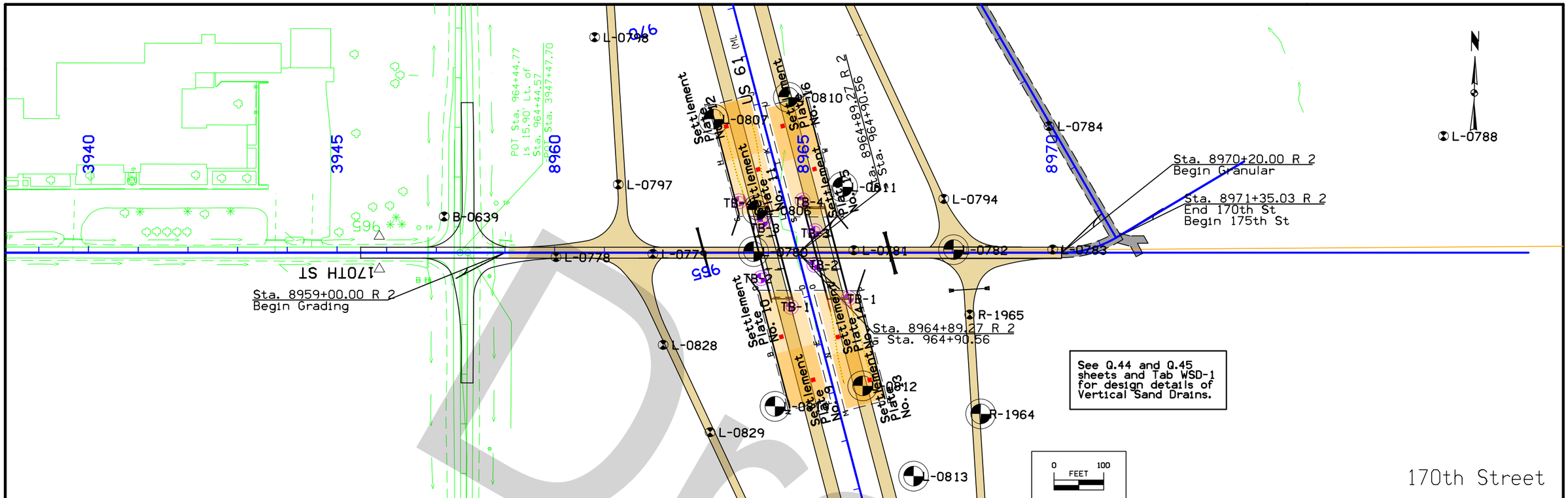
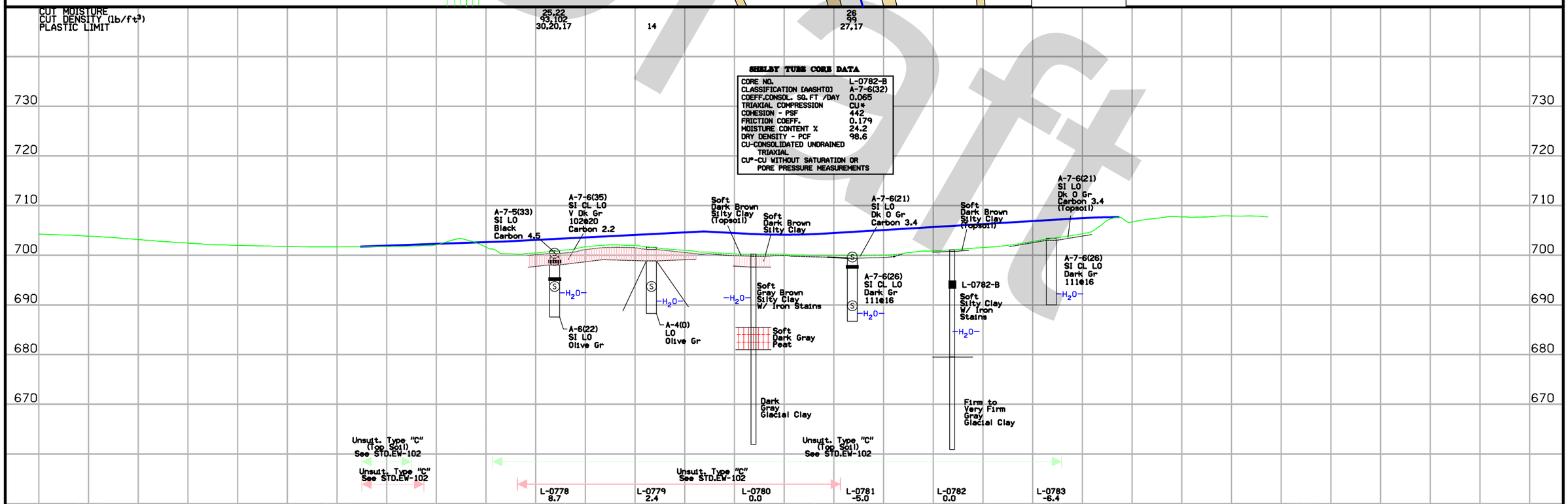




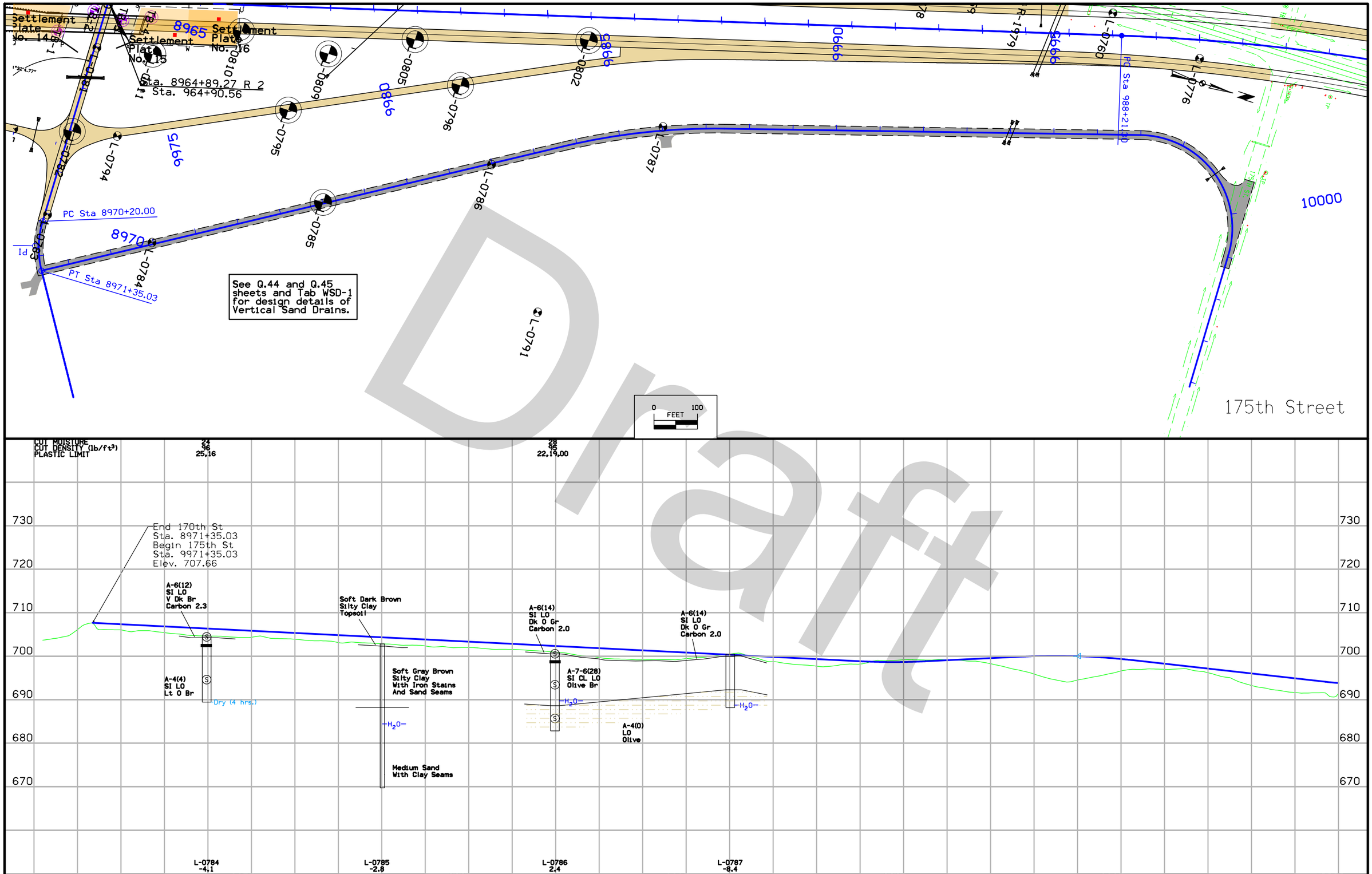
SHELBY TUBE CORE DATA

CORE NO.	L-0782-B
CLASSIFICATION [AASHTO]	A-7-6(32)
COEFF.CONSOL. SQ.FT /DAY	0.065
TRIAXIAL COMPRESSION	CU*
COHESION - PSF	442
FRICTION COEFF.	0.179
MOISTURE CONTENT %	24.2
DRY DENSITY - PCF	98.6

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS

Draft

ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.29



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ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.30	175th ST.

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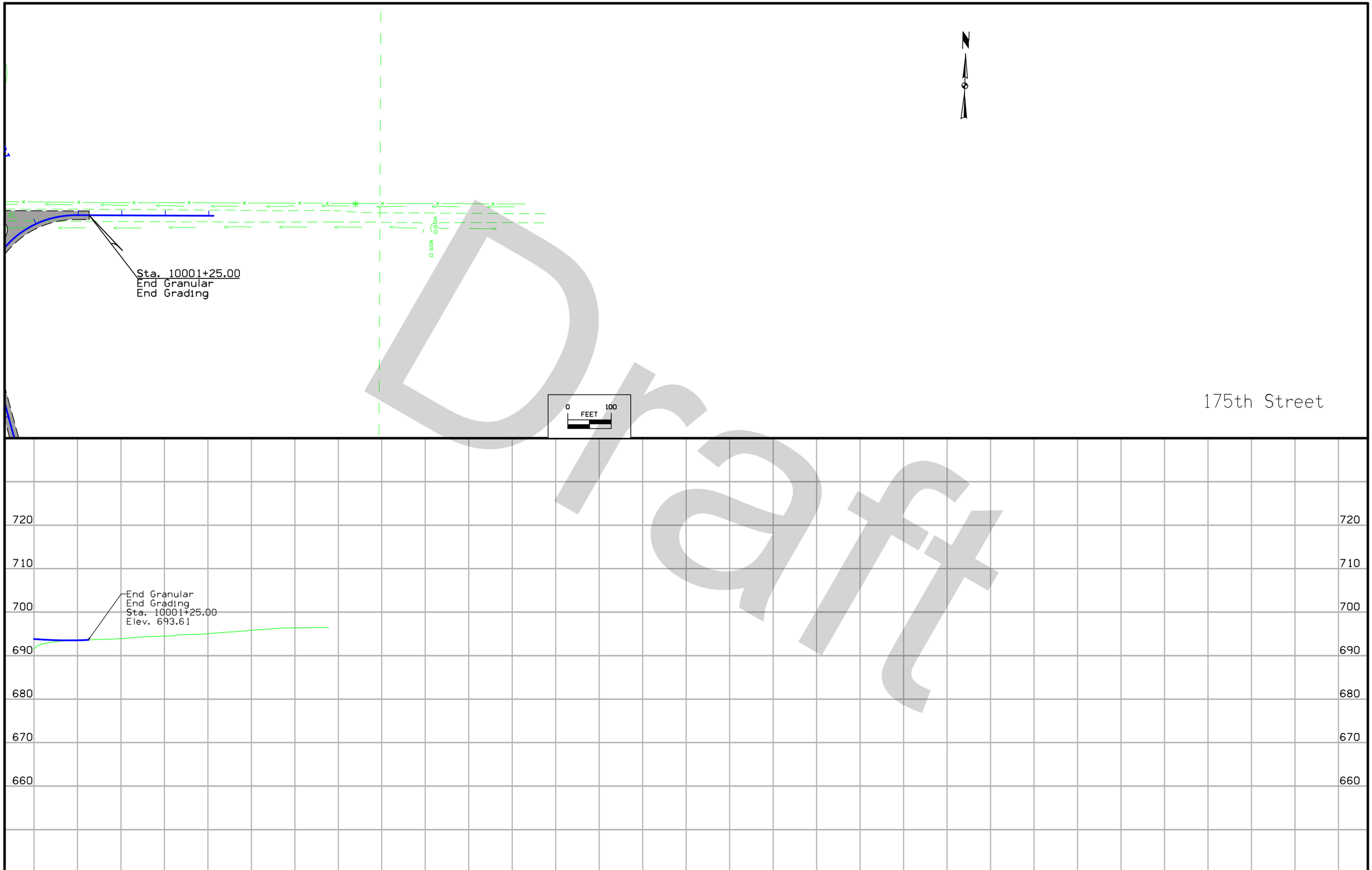

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C ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER	NHSX-061-3(57)--3H-58	SHEET NUMBER Q.31	175th ST.

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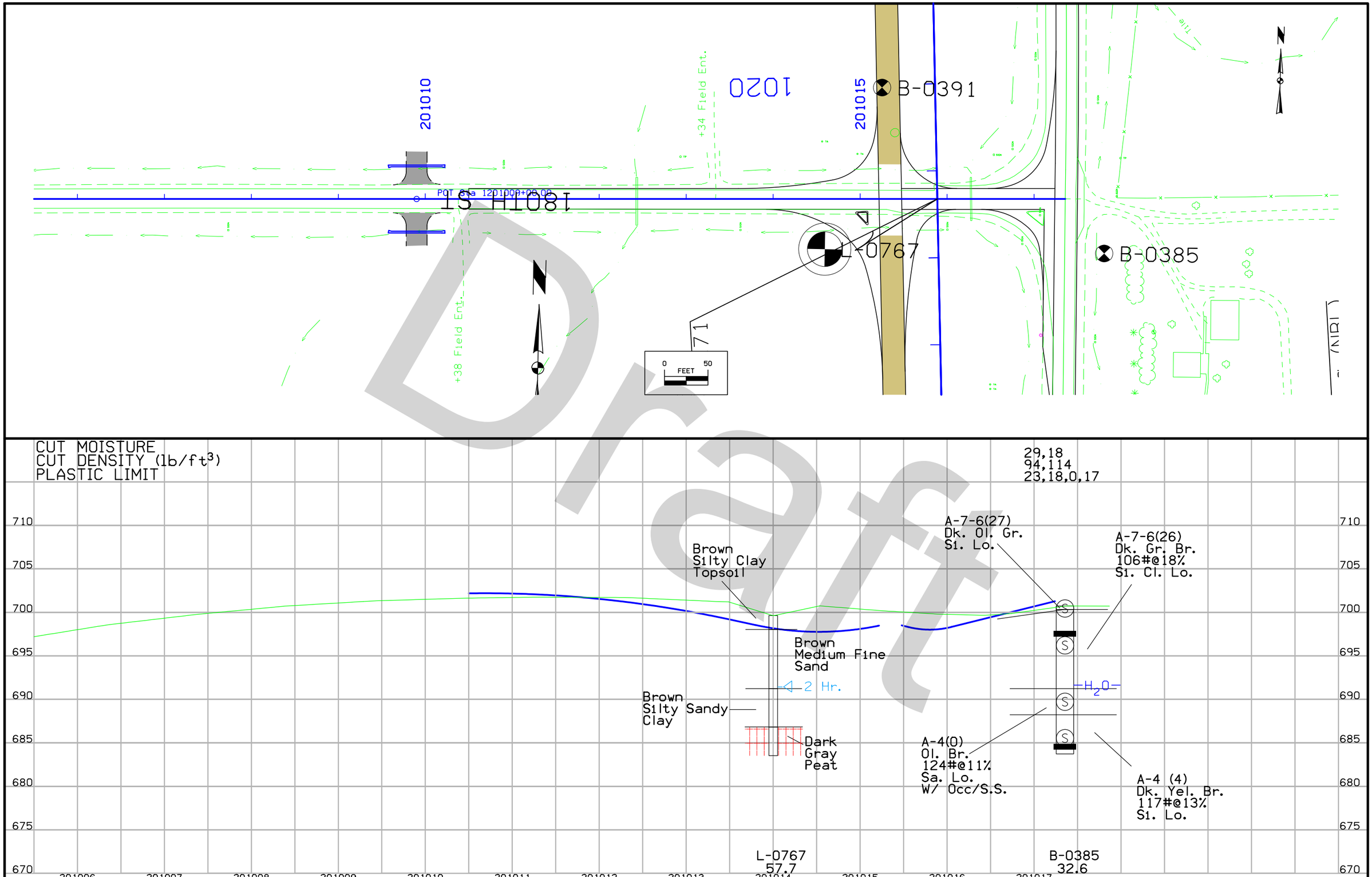

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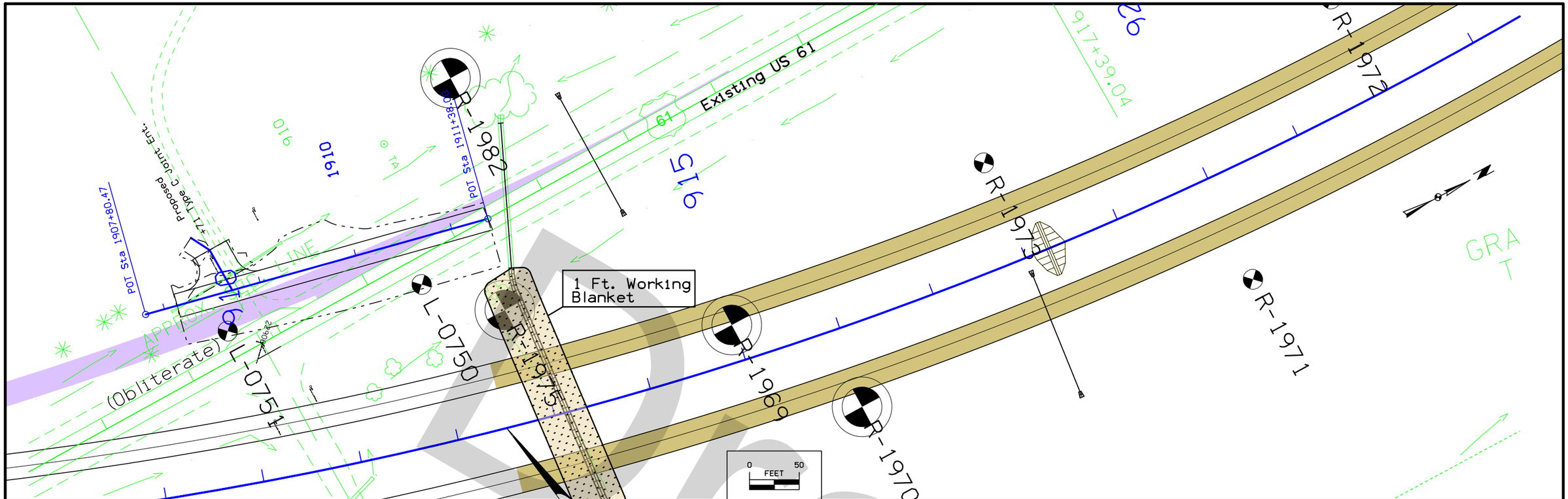
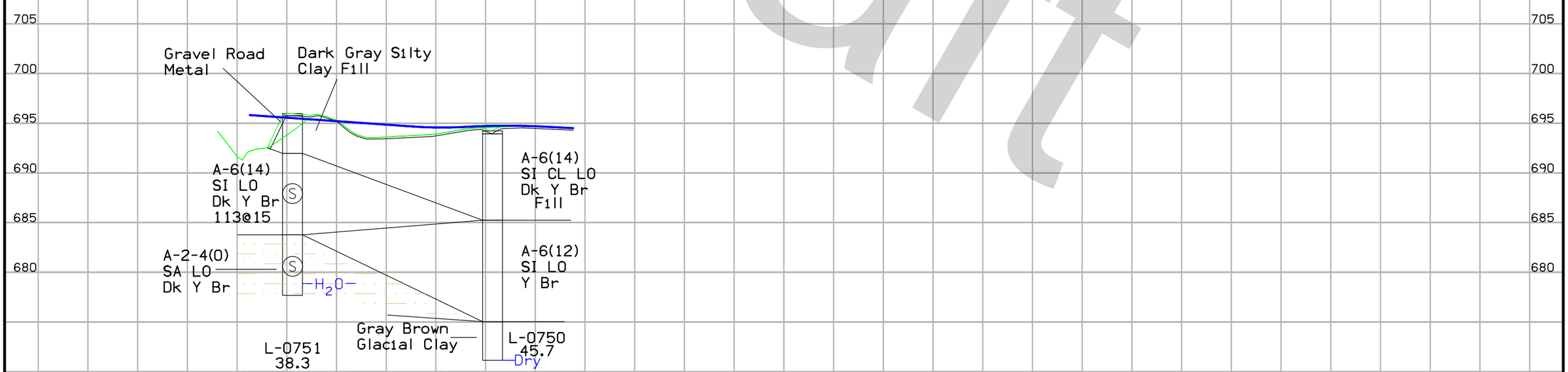


CUT MOISTURE
CUT DENSITY (lb/ft³) 19.00
PLASTIC LIMIT



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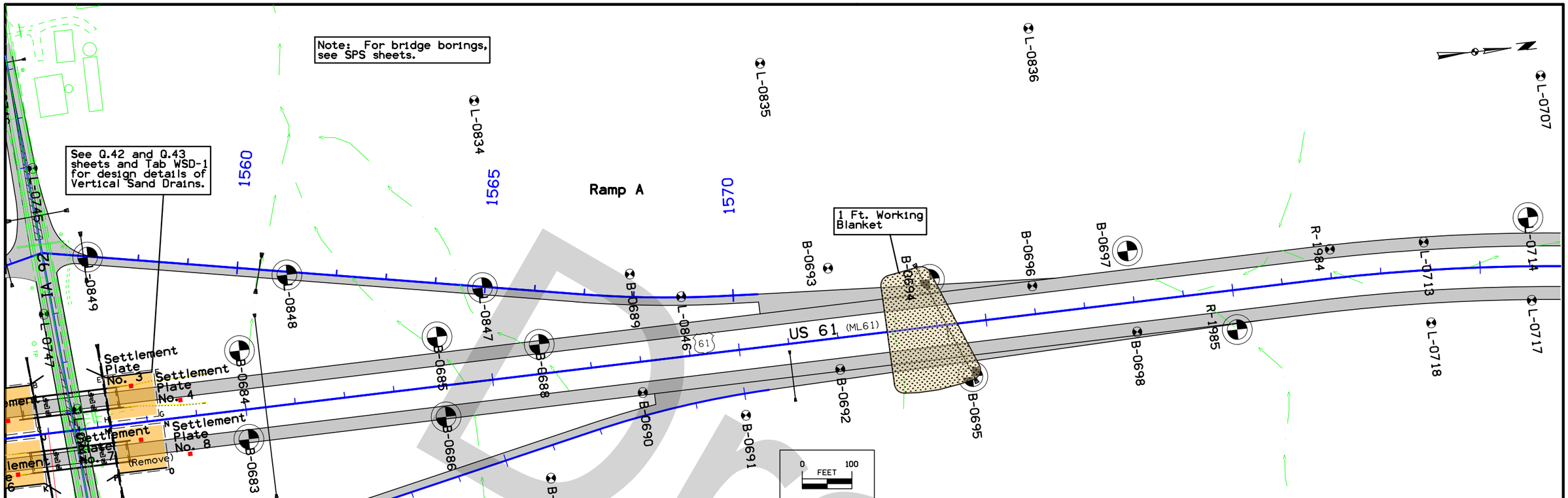


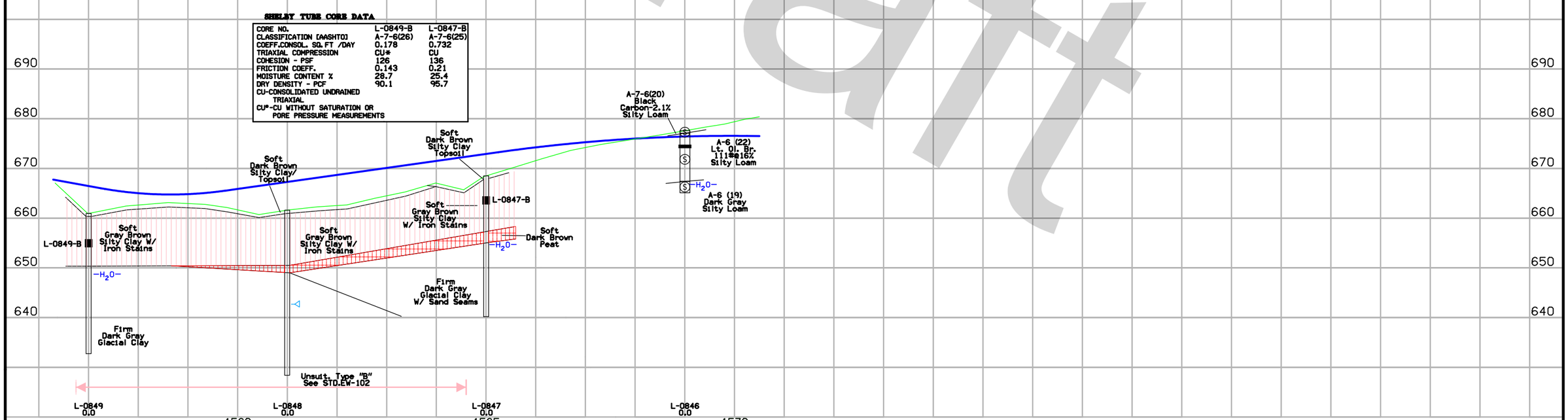
CUT MOISTURE
CUT DENSITY (lb/ft³)
PLASTIC LIMIT

23
50
23,19,19

SHELBY TUBE CORE DATA

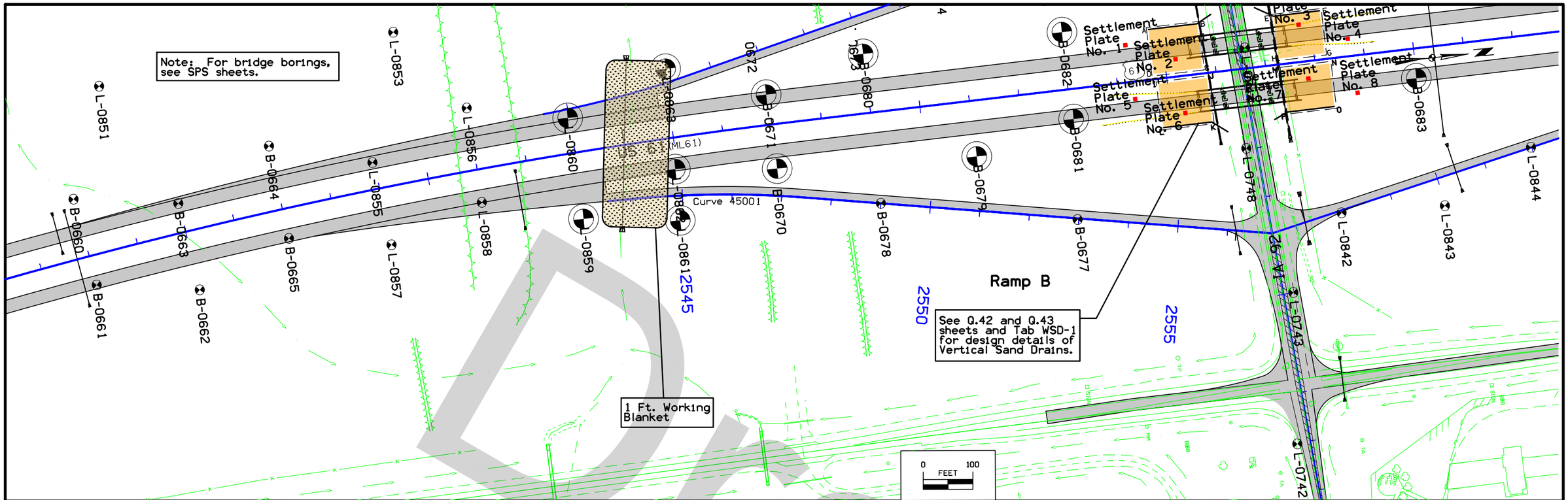
CORE NO.	L-0849-B	L-0847-B
CLASSIFICATION [AASHTO]	A-7-6(26)	A-7-6(25)
COEFF.CONSOL. SQ.FT /DAY	0.178	0.732
TRIAXIAL COMPRESSION	CU*	CU
COHESION - PSF	126	136
FRICTION COEFF.	0.143	0.21
MOISTURE CONTENT %	28.7	25.4
DRY DENSITY - PCF	90.1	95.7

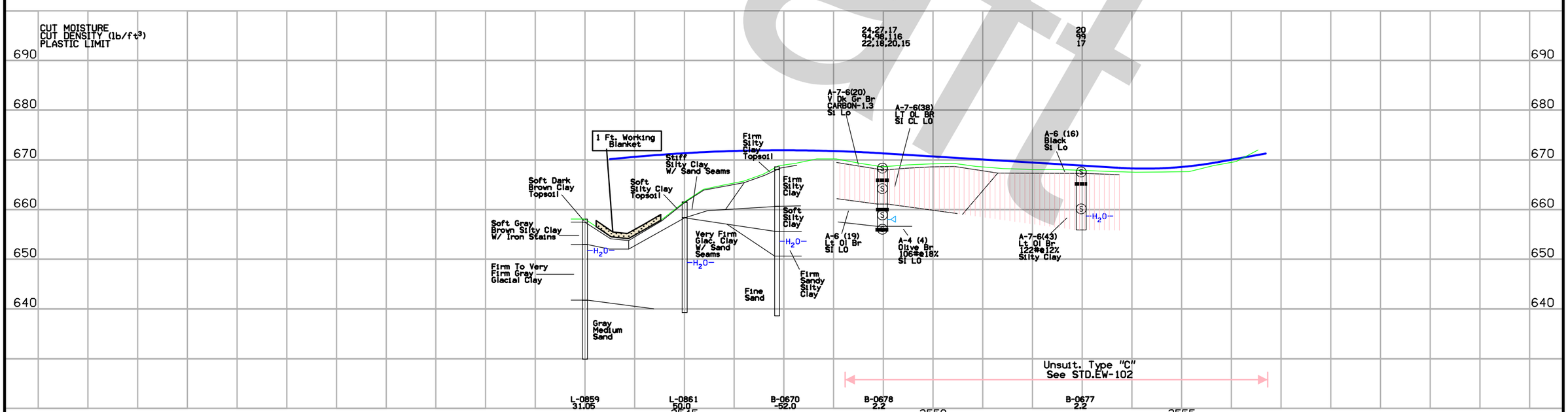
CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS



ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.34	Ramp A/IA 92

Draft





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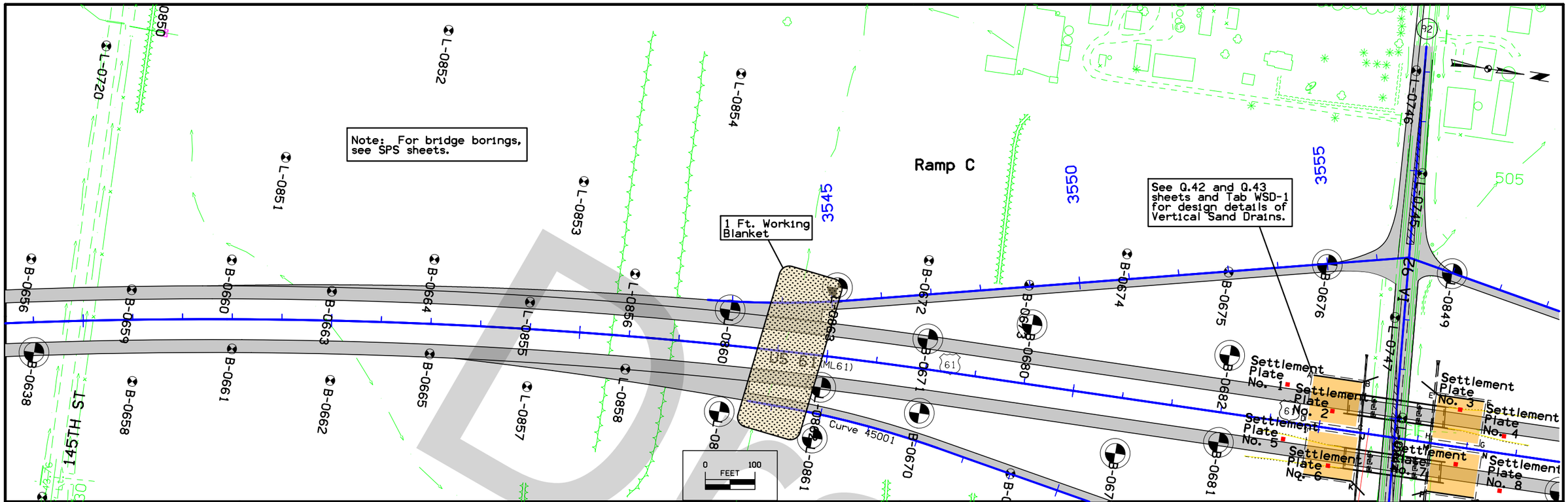

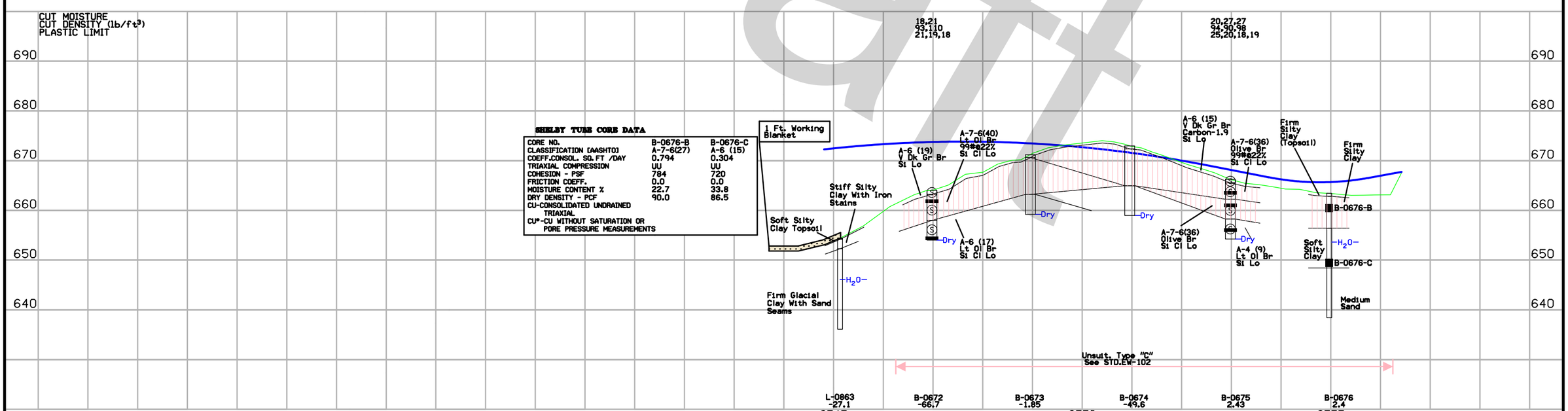

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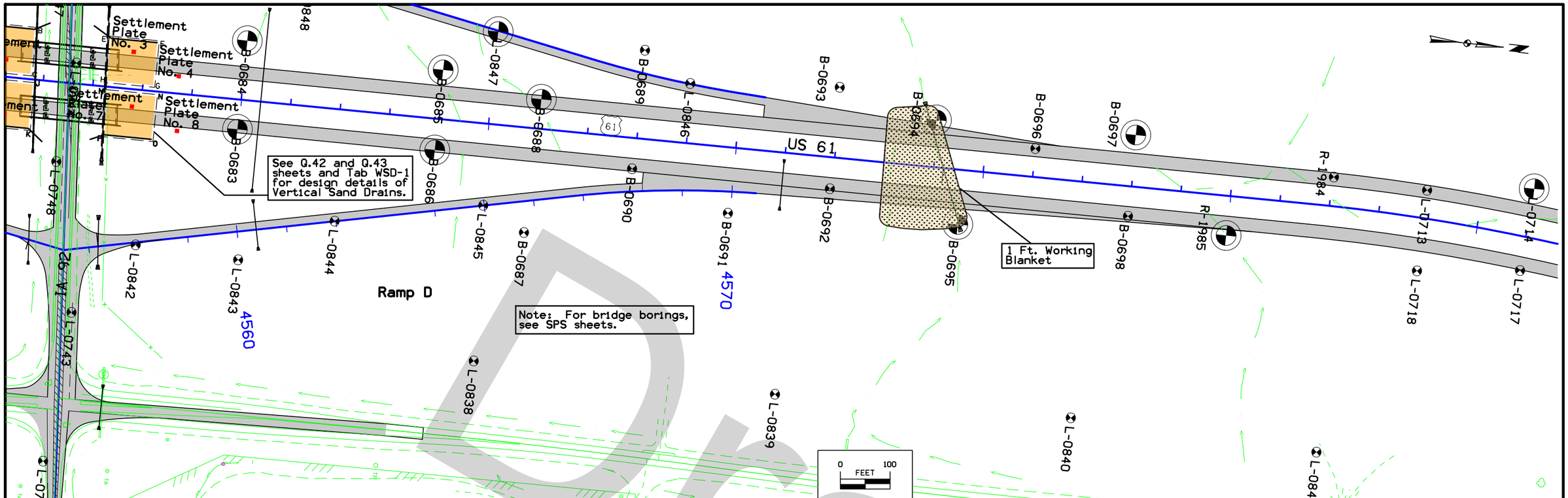


CUT MOISTURE	31	30
CUT DENSITY (lb/ft³)	91	92
PLASTIC LIMIT	22,17,19	22,16,15

Draft

Note: For bridge borings, see SPS sheets.

See Q.44 and Q.45 sheets and Tab WSD-1 for design details of Vertical Sand Drains.

Ramp A

Existing US 61

US 61

175TH ST

PC Sta 5575+46.52

PT Sta 5578+65.00

PI Sta 5577+05.97

PC Sta 988+21.30

PT Sta 993+67.19

Settlement Plate No. 10

Settlement Plate No. 11

Settlement Plate No. 12

Settlement Plate No. 14

Settlement Plate No. 15

Settlement Plate No. 16

B-0639

L-0828

L-0797

L-0798

L-0799

L-0800

L-0802

L-0803

L-0804

L-0805

L-0808

L-0810

L-0777

R-1977

L-0778

L-0759

R-1979

L-0760

L-0776

L-0775

B-0379

L-0761

8960

8965

5570

5575

9960

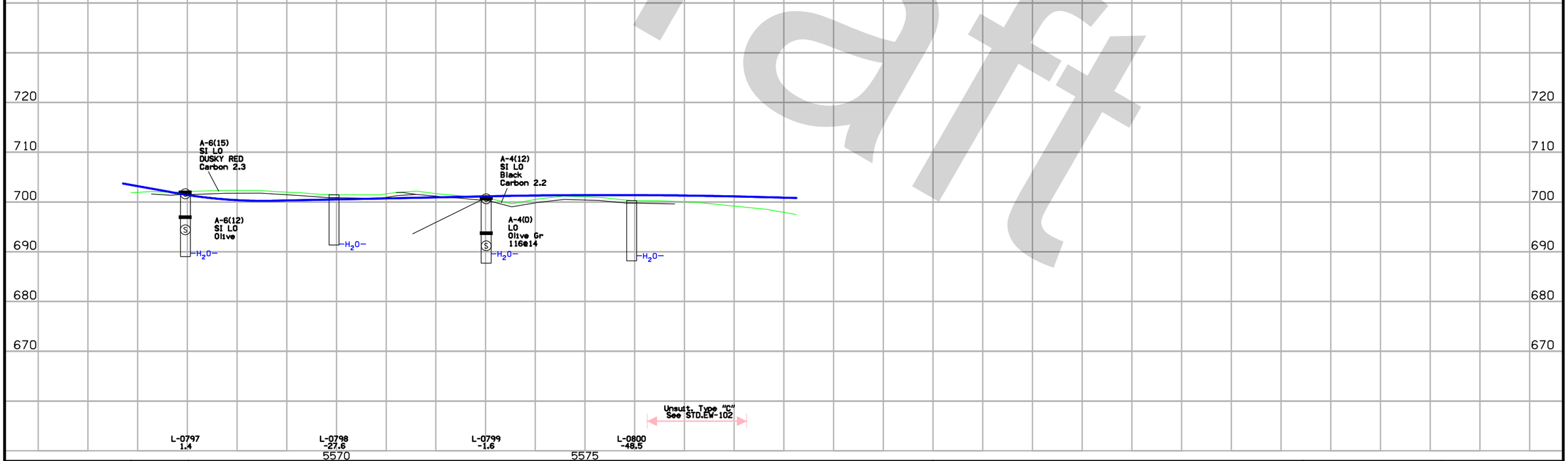
9965

10000

0 FEET 100

CUT MOISTURE 26.19
CUT DENSITY (lb/ft³) 92.95
PLASTIC LIMIT 23.15

20.24
93.100
26.00



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C	ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.38	Ramp A/170th

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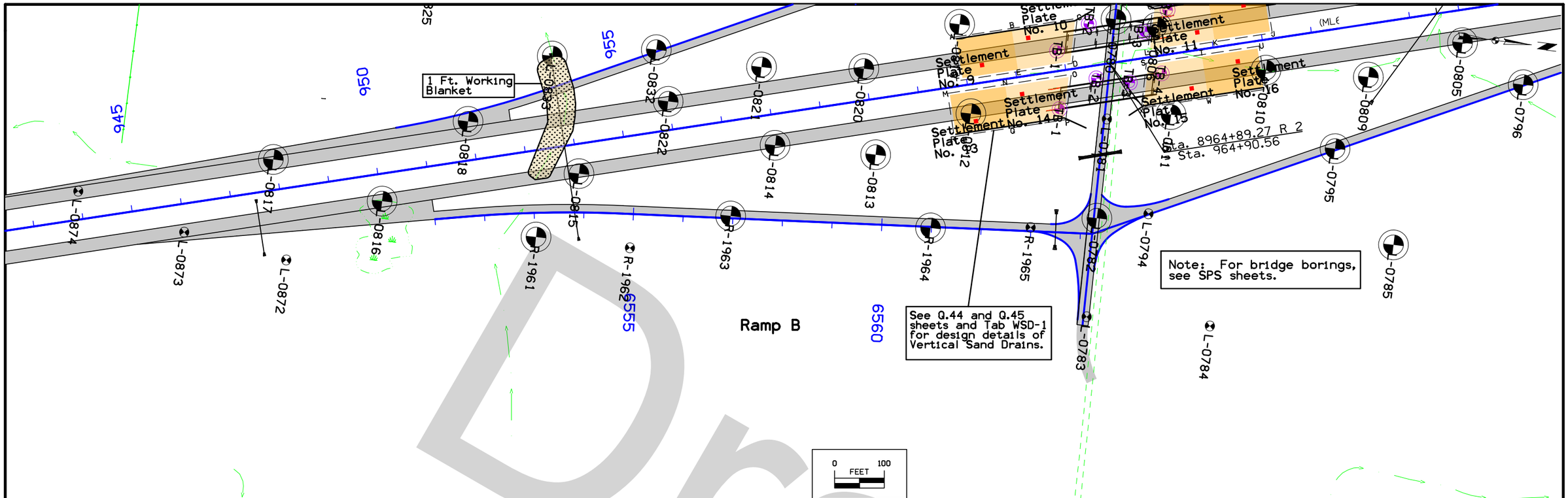
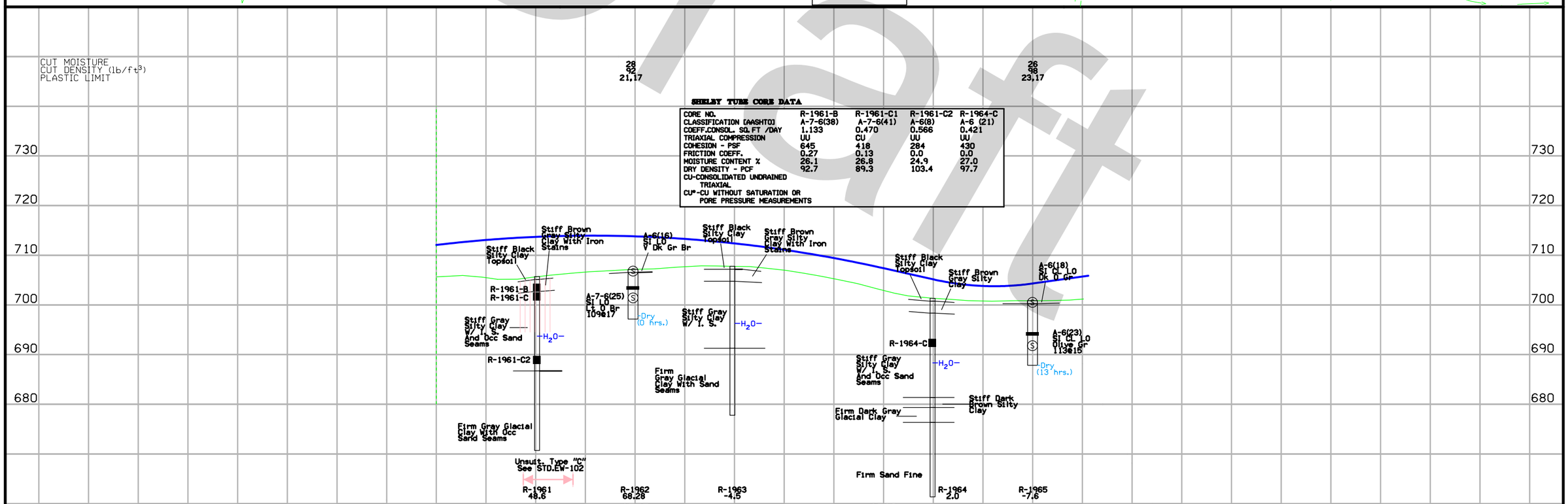


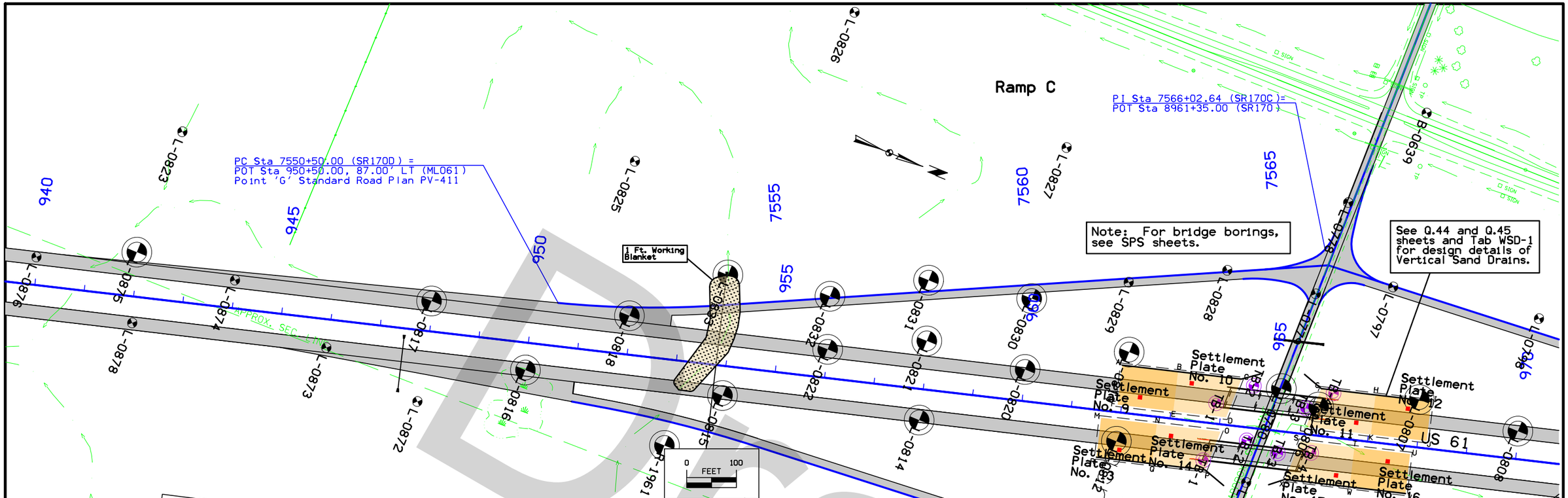


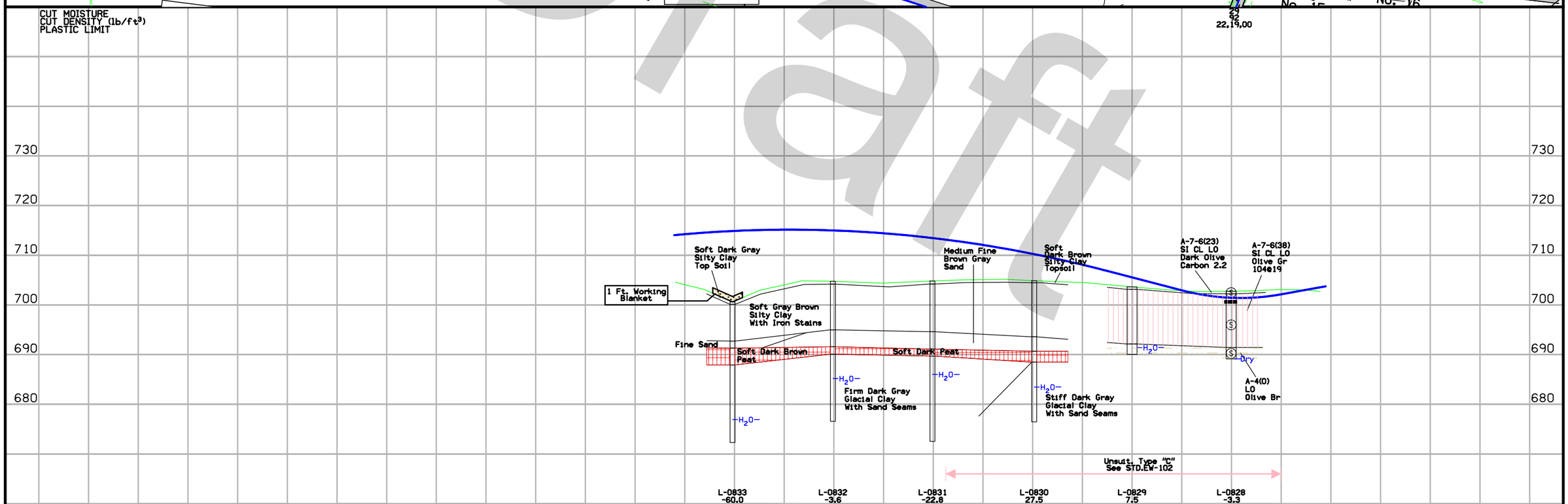
SHELBY TUBE CORE DATA

CORE NO.	R-1961-B	R-1961-C1	R-1961-C2	R-1964-C
CLASSIFICATION [AASHTO]	A-7-6(38)	A-7-6(41)	A-6(8)	A-6 (21)
COEFF.CONSOL. SQ.FT /DAY	1.133	0.470	0.566	0.421
TRIAXIAL COMPRESSION	UU	CU	UU	UU
COHESION - PSF	645	418	284	430
FRICTION COEFF.	0.27	0.13	0.0	0.0
MOISTURE CONTENT %	26.1	26.8	24.9	27.0
DRY DENSITY - PCF	92.7	89.3	103.4	97.7
CU-CONSOLIDATED UNDRAINED TRIAXIAL				
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS				

Draft

C	ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.39	Ramp B/170th





C	ENGLISH	IOWA DOT	DESIGN TEAM Stanley/Mueterthies	LOUISA COUNTY	PROJECT NUMBER NHSX-061-3(57)--3H-58	SHEET NUMBER Q.40	Ramp C/170th

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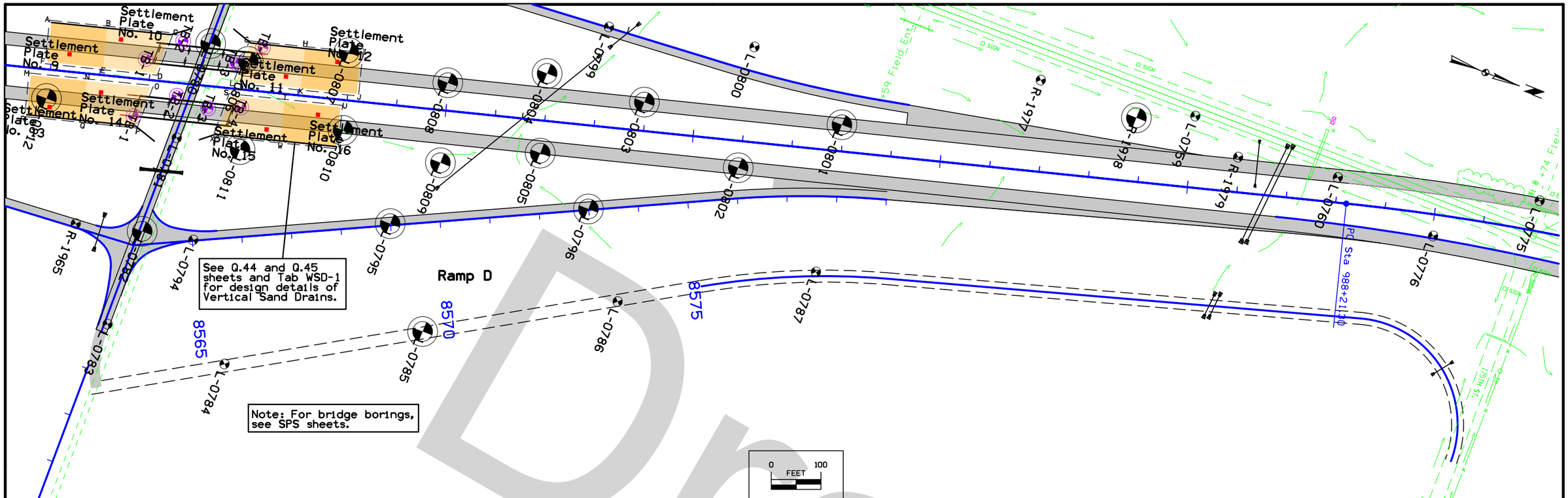
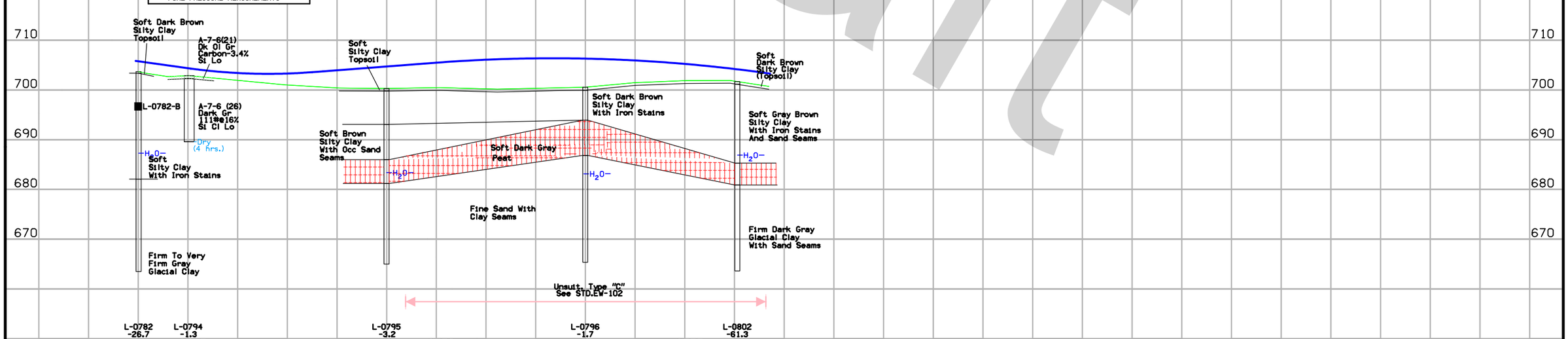


CUT MOISTURE
CUT DENSITY (lb/ft³)
PLASTIC LIMIT

SHELBY TUBE CORE DATA

CORE NO.	L-0782-B
CLASSIFICATION [AASHTO]	A-7-6(32)
COEFF.CONSOL. SQ.FT /DAY	0.065
TRIAXIAL COMPRESSION	CU*
COHESION - PSF	442
FRICTION COEFF.	0.179
MOISTURE CONTENT %	24.2
DRY DENSITY - PCF	98.6

CU-CONSOLIDATED UNDRAINED TRIAXIAL
CU*-CU WITHOUT SATURATION OR PORE PRESSURE MEASUREMENTS



Draft

The intention of the vertical sand drain design and the layout limits is that the US 61 paving will not occur until at least 365 calendar days after completion of embankment construction.

Sand drain auger holes shall be clean and free of auger cuttings and extend through the near surficial silty clay into the underlying medium sand and glacial clay soils. Approximate depths are shown in the design requirements table for each boundary area. Auger cuttings shall be removed from around the holes to prevent their re-entry into the holes during Granular Backfill (sand) placement. Granular Backfill for the drains shall meet IDOT Specification 4133, and may be loose dumped into the holes without compaction. Completed and cleaned auger holes shall be left open the shortest time possible when caving conditions exist. Holes that experience caving before being fully backfilled shall be re-augered to the elevation where the caved material has contaminated the vertical sand drain.

Granular Blanket Note

Install 1-foot thick Granular Blanket with horizontal subdrains. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. This grading shall be incidental to vertical sand drain installation. Blankets will be drained by RF-19A Type 2 subdrains, and RF-19F Type A (or similar) outlets.

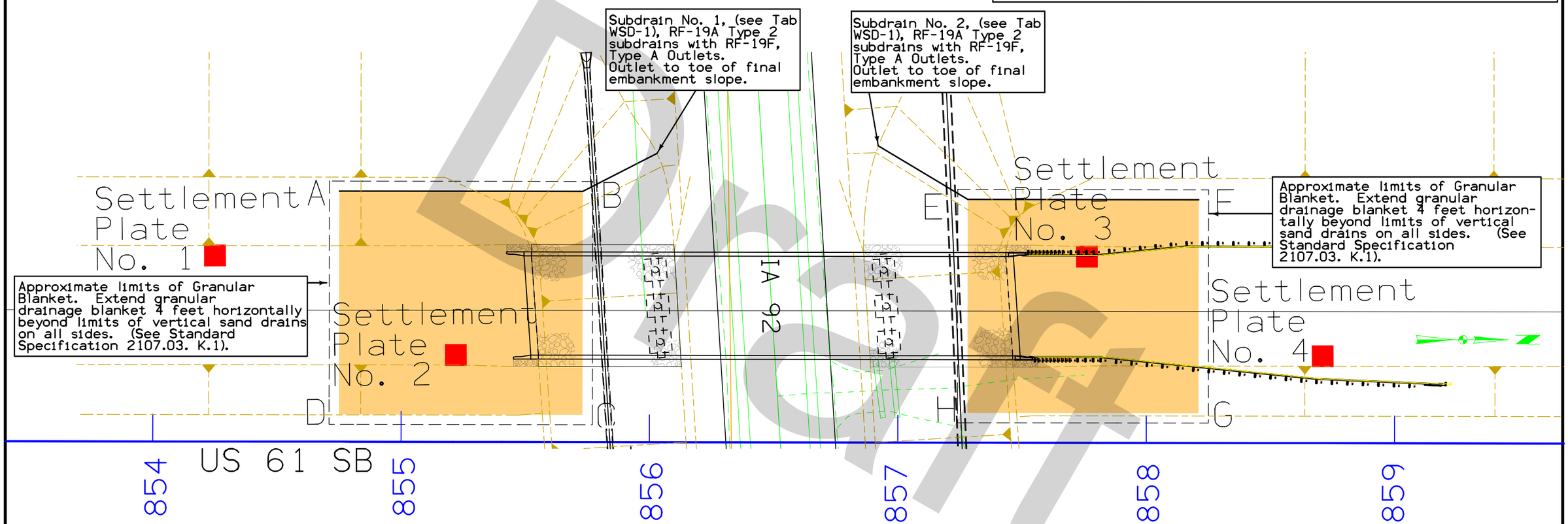
Note:
Sand Blankets, Vertical Sand Drains and Settlement Plates are not shown on cross sections.

Vertical Sand Drain Design Requirements

Layout Boundary	Boundary Area (sq ft)	Center-to-Center Spacing (ft)	Approx. Depth (ft)*	Approx. Number of Vertical Sand Drains
A-B-C-D	8820	12	27′	70
E-F-G-H	7998	12	21′	64

* Depth of sand drains will likely vary based on the design intent.

Granular Backfill quantity estimated for the Southbound bridge to be 261 cubic yards (441 Tons) for 134 Vertical Sand Drains. Quantity is calculated based on 20-inch diameter hole, plus an additional 10 percent to account for over-sized holes and spillage. (See Q.43 for northbound bridge vertical sand drain quantities).



Sand Drain Corner Points

Roadway	Corner	Station	Offset
SB	A	854+75	Lt. 101
	B	855+73	Lt. 101
	C	855+73	Lt. 11
	D	854+75	Lt. 11
	E	857+28	Lt. 98
	F	858+21	Lt. 98
	G	858+21	Lt. 12
	H	857+28	Lt. 12

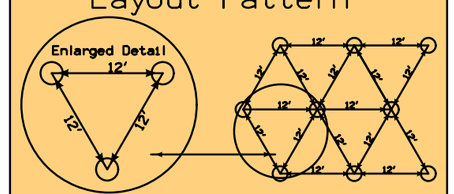
Settlement Plates

Roadway	Number	Station	Offset
SB	1	854+25	Lt. 75
	2	855+22	Lt. 35
	3	857+76	Lt. 75
	4	858+71	Lt. 35

Not To Scale

See Tab WSD-1 for all quantities associated with Vertical Sand Drains and Sand Blankets.

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

DRAFT

The intention of the vertical sand drain design and the layout limits is that the US 61 paving will not occur until at least 365 calendar days after completion of embankment construction.

Sand drain auger holes shall be clean and free of auger cuttings and extend through the near surficial silty clay into the underlying medium sand and glacial clay soils. Approximate depths are shown in the design requirements table for each boundary area. Auger cuttings shall be removed from around the holes to prevent their re-entry into the holes during Granular Backfill (sand) placement. Granular Backfill for the drains shall meet IDOT Specification 4133, and may be loose dumped into the holes without compaction. Completed and cleaned auger holes shall be left open the shortest time possible when caving conditions exist. Holes that experience caving before being fully backfilled shall be re-augered to the elevation where the caved material has contaminated the vertical sand drain.

Granular Blanket Note

Install 1-foot thick Granular Blanket with horizontal subdrains. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. This grading shall be incidental to vertical sand drain installation. Blankets will be drained by RF-19A Type 2 subdrains, and RF-19F Type A (or similar) outlets.

Note:
Sand Blankets, Vertical Sand Drains and Settlement Plates are not shown on cross sections.

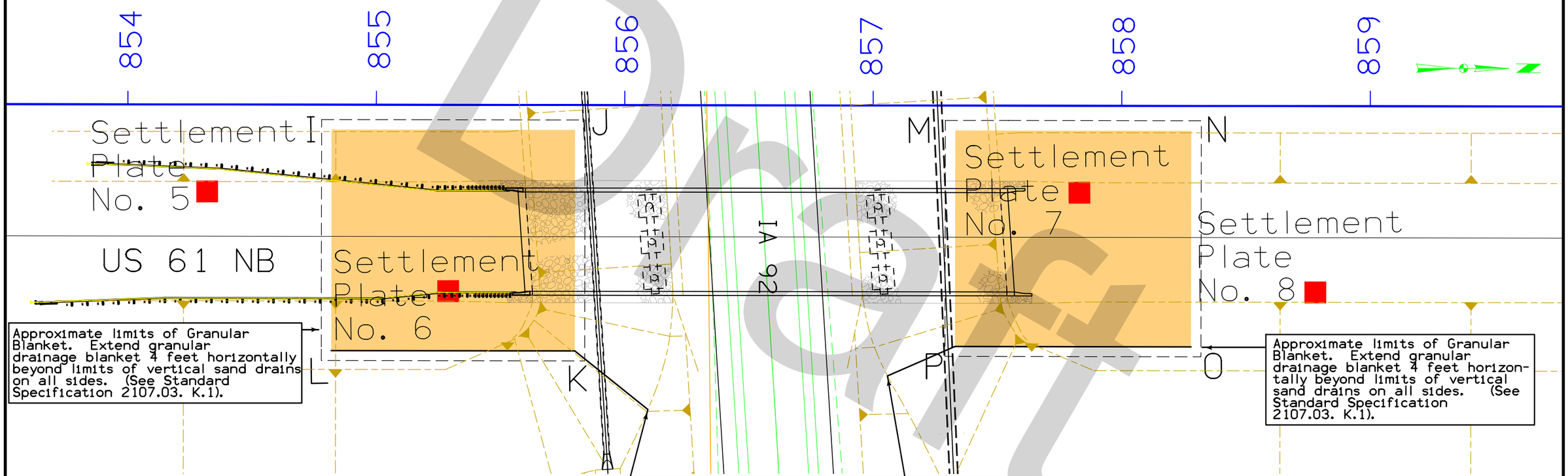
Vertical Sand Drain Design Requirements

Layout Boundary	Boundary Area (sq ft)	Center-to-Center Spacing (ft)	Approx. Depth (ft)*	Approx. Number of Vertical Sand Drains
I-J-K-L	8722	12	27′	69
M-N-O-P	8265	12	21′	66

* Depth of sand drains will likely vary based on the design intent.

Granular Backfill quantity estimated to be 262 cubic yards (443 Tons) for 135 Vertical Sand Drains. Quantity is calculated based on 20-inch diameter hole, plus an additional 10 percent to account for over-sized holes and spillage. (See Q.42 for southbound vertical sand drain quantities).

Not To Scale



Approximate limits of Granular Blanket. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. (See Standard Specification 2107.03. K.1).

Approximate limits of Granular Blanket. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. (See Standard Specification 2107.03. K.1).

Subdrain No. 3, (see Tab WSD-1), RF-19A Type 2 subdrains with RF-19F, Type A Outlets. Outlet to toe of final embankment slope.

Subdrain No. 4, (see Tab WSD-1), RF-19A Type 2 subdrains with RF-19F, Type A Outlets. Outlet to toe of final embankment slope.

Sand Drain Corner Points

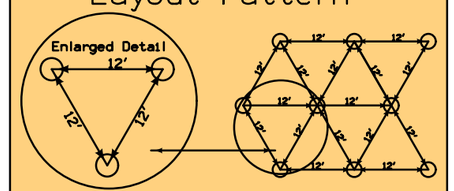
Roadway	Corner	Station	Offset
NB	I	854+82	Rt. 10
	J	855+80	Rt. 10
	K	855+80	Rt. 99
	L	854+82	Rt. 99
	M	857+33	Rt. 10
	N	858+28	Rt. 10
	O	858+28	Rt. 97
	P	857+33	Rt. 97

Settlement Plates

Roadway	Number	Station	Offset
NB	5	854+32	Rt. 35
	6	855+29	Rt. 75
	7	857+83	Rt. 35
	8	858+78	Rt. 75

See Tab WSD-1 for all quantities associated with Vertical Sand Drains and Sand Blankets.

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

The intention of the vertical sand drain design and the layout limits is that the US 61 paving will not occur until at least 365 calendar days after completion of embankment construction.

Sand drain auger holes shall be clean and free of auger cuttings and extend through the near surficial silty clay and peat into the underlying medium sand and glacial clay soils. Approximate depths are shown in the design requirements table for each boundary area. Auger cuttings shall be removed from around the holes to prevent their re-entry into the holes during Granular Backfill (sand) placement. Granular Backfill for the drains shall meet IDOT Specification 4133, and may be loose dumped into the holes without compaction. Completed and cleaned auger holes shall be left open the shortest time possible when caving conditions exist. Holes that experience caving before being fully backfilled shall be re-augered to the elevation where the caved material has contaminated the vertical sand drain.

Granular Blanket Note

Install 1-foot thick Granular Blanket with horizontal subdrains. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. This grading shall be incidental to vertical sand drain installation. Blankets will be drained by RF-19A Type 2 subdrains, and RF-19F Type A (or similar) outlets.

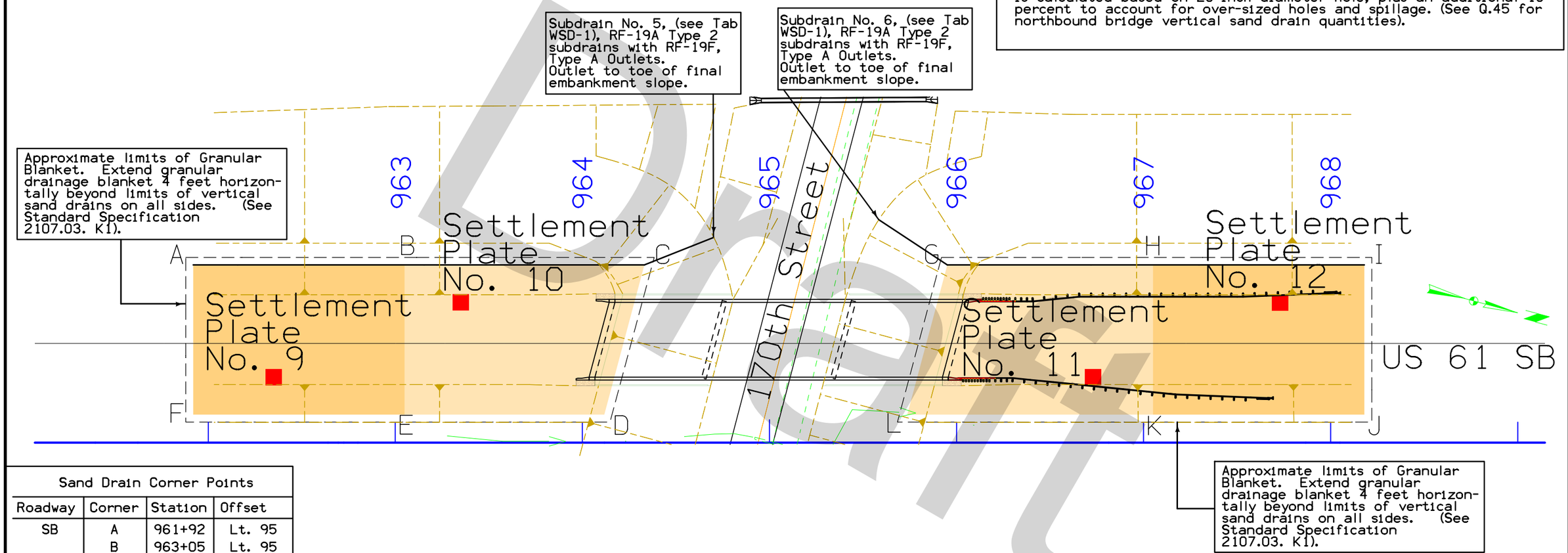
Note:
Sand Blankets, Vertical Sand Drains and Settlement Plates are not shown on cross sections.

Vertical Sand Drain Design Requirements

Layout Boundary	Boundary Area (sq ft)	Center-to-Center Spacing (ft)	Approx. Depth (ft)*	Approx. Number of Vertical Sand Drains
A-B-E-F	9040	18	20′	32
B-C-D-E	9400	15	33′	48
G-H-K-L	9640	15	35′	49
H-I-J-K	9040	18	17′	32

* Depth of sand drains will likely vary based on the design intent.

Granular Backfill quantity estimated for the Southbound bridge to be 398 cubic yards (672 Tons) for 161 Vertical Sand Drains. Quantity is calculated based on 20-inch diameter hole, plus an additional 10 percent to account for over-sized holes and spillage. (See Q.45 for northbound bridge vertical sand drain quantities).



Sand Drain Corner Points

Roadway	Corner	Station	Offset
SB	A	961+92	Lt. 95
	B	963+05	Lt. 95
	C	964+33	Lt. 95
	D	964+12	Lt. 15
	E	963+05	Lt. 15
	F	961+92	Lt. 15
	G	965+95	Lt. 95
	H	967+05	Lt. 95
	I	968+18	Lt. 95
	J	968+18	Lt. 15
	K	967+05	Lt. 15
	L	965+74	Lt. 15

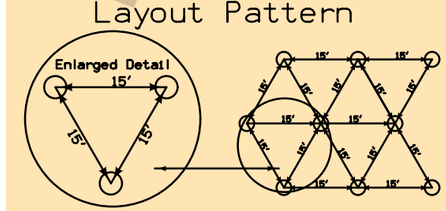
Settlement Plates

Roadway	Number	Station	Offset
SB	9	962+35	Lt. 35
	10	963+35	Lt. 75
	11	966+73	Lt. 35
	12	967+73	Lt. 75

Not To Scale

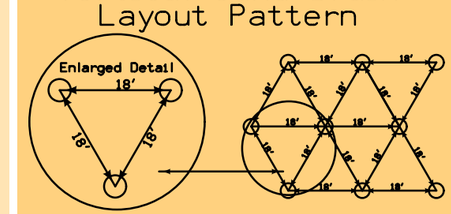
See Tab WSD-1 for all quantities associated with Vertical Sand Drains and Sand Blankets.

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

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The intention of the vertical sand drain design and the layout limits is that the US 61 paving will not occur until at least 365 calendar days after completion of embankment construction.

Sand drain auger holes shall be clean and free of auger cuttings and extend through the near surficial silty clay and peat into the underlying medium sand and glacial clay soils. Approximate depths are shown in the design requirements table for each boundary area. Auger cuttings shall be removed from around the holes to prevent their re-entry into the holes during Granular Backfill (sand) placement. Granular Backfill for the drains shall meet IDOT Specification 4133, and may be loose dumped into the holes without compaction. Completed and cleaned auger holes shall be left open the shortest time possible when caving conditions exist. Holes that experience caving before being fully backfilled shall be re-augered to the elevation where the caved material has contaminated the vertical sand drain.

Granular Blanket Note

Install 1-foot thick Granular Blanket with horizontal subdrains. Extend granular drainage blanket 4 feet horizontally beyond limits of vertical sand drains on all sides. This grading shall be incidental to vertical sand drain installation. Blankets will be drained by RF-19A Type 2 subdrains, and RF-19F Type A (or similar) outlets.

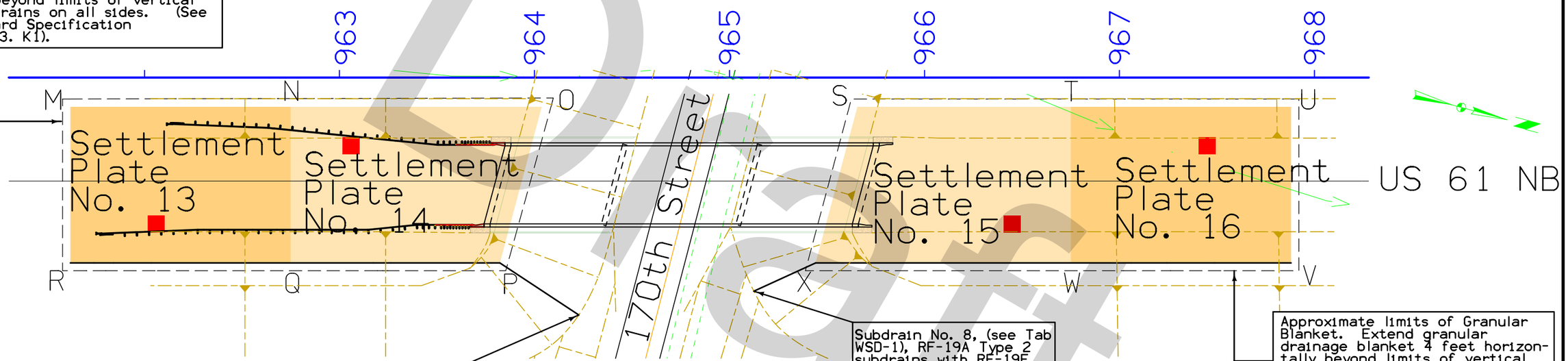
Note:
Sand Blankets, Vertical Sand Drains and Settlement Plates are not shown on cross sections.

Vertical Sand Drain Design Requirements

Layout Boundary	Boundary Area (sq ft)	Center-to-Center Spacing (ft)	Approx. Depth (ft)*	Approx. Number of Vertical Sand Drains
M-N-Q-R	9040	18	20′	32
N-O-P-Q	9440	15	33′	48
S-T-W-X	9600	15	35′	49
T-U-V-W	9040	18	17′	32

* Depth of sand drains will likely vary based on the design intent.

Granular Backfill quantity estimated for the Northbound bridge to be 398 cubic yards (672 Tons) for 161 Vertical Sand Drains. Quantity is calculated based on 20-inch diameter hole, plus an additional 10 percent to account for over-sized holes and spillage. (See Q.44 for southbound bridge vertical sand drain quantities).



Sand Drain Corner Points

Roadway	Corner	Station	Offset
NB	M	961+62	Rt. 15
	N	962+75	Rt. 15
	O	964+04	Rt. 15
	P	963+82	Rt. 95
	Q	962+75	Rt. 95
	R	961+62	Rt. 95
	S	965+66	Rt. 15
	T	966+75	Rt. 15
	U	967+88	Rt. 15
	V	967+88	Rt. 95
	W	966+75	Rt. 95
	X	965+44	Rt. 95

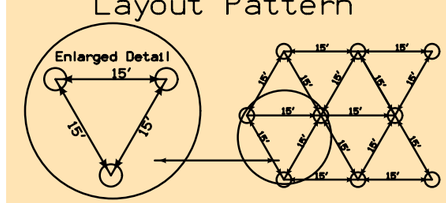
Settlement Plates

Roadway	Number	Station	Offset
NB	13	962+06	Rt. 75
	14	963+06	Rt. 35
	15	966+45	Rt. 75
	16	967+45	Rt. 35

Not To Scale

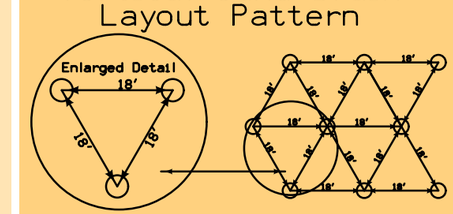
See Tab WSD-1 for all quantities associated with Vertical Sand Drains and Sand Blankets.

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

Vertical Sand Drain Layout Pattern



Vertical Sand Drain Minimum Diameter is 20″

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
756+50.00	491		491	491	3	4	4
757+00.00	592		592	592	3	4	4
757+50.00	619		619	619	37	48	48
758+00.00	557		557	557	87	113	113
758+50.00	469		469	469	150	195	195
759+00.00	416		416	416	198	257	257
759+50.00	378		378	378	218	283	283
760+00.00	357		357	357	270	351	351
760+50.00	333		333	333	315	410	410
761+00.00	355		355	355	380	494	494
761+50.00	347		347	347	417	542	542
762+00.00	303		303	303	405	527	527
762+50.00	407	7	400	407	499	649	649
763+00.00	405	27	378	405	410	533	533
763+50.00	299	49	250	299	258	335	335
764+00.00	310	66	244	310	298	387	387
764+50.00	314	37	277	314	321	417	417
765+00.00	299		299	299	347	451	451
765+50.00	286		286	286	364	473	473
766+00.00	280		280	280	356	463	463
766+50.00	257		257	257	333	433	433
767+00.00	232		232	232	321	417	417
767+50.00	226		226	226	299	389	389
768+00.00	230		230	230	236	307	307
768+50.00	184		184	184	199	259	259
769+00.00	149		149	149	277	360	360
769+50.00	179		179	179	423	550	550
770+00.00	203		203	203	525	683	683
770+50.00	225		225	225	558	725	725
771+00.00	248		248	248	561	729	729
771+50.00	276		276	276	542	705	705
772+00.00	284		284	284	517	672	672
772+50.00	284		284	284	493	641	641
773+00.00	297		297	297	450	585	585
773+50.00	306		306	306	394	512	512
774+00.00	312		312	312	360	468	468
774+50.00	350		350	350	387	503	503
775+00.00	386		386	386	438	569	569
775+50.00	382		382	382	471	612	612
776+00.00	379		379	379	462	601	601
776+50.00	387		387	387	432	562	562
777+00.00	426		426	426	402	523	523
777+50.00	456		456	456	359	467	467
778+00.00	471		471	471	344	447	447
778+50.00	477		477	477	358	465	465
779+00.00	437		437	437	415	540	540
779+50.00	389		389	389	515	670	670
780+00.00	351		351	351	608	790	790
780+50.00	326		326	326	670	871	871
781+00.00	310		310	310	733	953	953
781+50.00	299		299	299	793	1031	1031
782+00.00	248		248	248	770	1001	1001
782+50.00	194		194	194	756	983	983
783+00.00	194		194	194	779	1013	1013
783+50.00	201		201	201	767	997	997
784+00.00	203		203	203	755	982	982
784+50.00	206		206	206	759	987	987
785+00.00	219		219	219	752	978	978
785+50.00	247		247	247	752	978	978
786+00.00	274		274	274	784	1019	1019
786+50.00	270		270	270	782	1017	1017
787+00.00	267		267	267	803	1044	1044
787+50.00	264		264	264	891	1158	1158
788+00.00	252		252	252	969	1260	1260
788+50.00	257		257	257	1021	1327	1327
789+00.00							

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
789+00.00	276		276	276	1032	1342	1342
789+50.00	327		327	327	1034	1344	1344
790+00.00	363		363	363	1071	1392	1392
790+50.00	404		404	404	1062	1381	1381
791+00.00	449		449	449	1030	1339	1339
791+50.00	474		474	474	1041	1353	1353
792+00.00	521		521	521	1026	1334	1334
792+50.00	559		559	559	1012	1316	1316
793+00.00	573		573	573	1027	1335	1335
793+50.00	606		606	606	1015	1320	1320
794+00.00	667		667	667	978	1271	1271
794+50.00	664		664	664	984	1279	1279
795+00.00	453		453	453	1255	1632	1632
795+50.00	246		246	246	1786	2322	2322
796+00.00	237		237	237	2069	2690	2690
796+50.00	477		477	477	1699	2209	2209
797+00.00	726		726	726	940	1222	1222
797+50.00	827		827	827	320	416	416
798+00.00	1009		1009	1009	48	62	62
798+50.00	1204		1204	1204	1	1	1
799+00.00	1342		1342	1342	2	3	3
799+50.00	1449		1449	1449	2	3	3
800+00.00	1480		1480	1480	2	3	3
800+50.00	1519		1519	1519	2	3	3
801+00.00	1611		1611	1611	1	1	1
801+50.00	1603		1603	1603	1	1	1
802+00.00	1542		1542	1542	1	1	1
802+50.00	1594		1594	1594	4	5	5
803+00.00	1494		1494	1494	6	8	8
803+50.00	1227		1227	1227	6	8	8
804+00.00	1134		1134	1134	7	9	9
804+50.00	990		990	990	4	5	5
805+00.00	756		756	756	36	47	47
805+50.00	581		581	581	141	183	183
806+00.00	377		377	377	422	549	549
806+50.00	229		229	229	999	1299	1299
807+00.00	217		217	217	1362	1771	1771
807+50.00	299		299	299	1082	1407	1407
808+00.00	389		389	389	707	919	919
808+50.00	434	143	291	434	547	711	711
809+00.00	573	321	252	573	829	1078	1078
809+50.00	686	352	334	686	1219	1585	1585
810+00.00	695	368	327	695	1396	1815	1815
810+50.00	711	384	327	711	1607	2089	2089
811+00.00	715	384	331	715	1751	2276	2276
811+50.00	694	360	334	694	1878	2441	2441
812+00.00	645	313	332	645	1992	2590	2590
812+50.00	692	252	440	692	2253	2929	2929
813+00.00	643	205	438	643	2468	3208	3208
813+50.00	506	180	326	506	2548	3312	3312
814+00.00	473	149	324	473	2711	3524	3524
814+50.00	571	137	434	571	2951	3836	3836
815+00.00	720	173	547	720	3089	4016	4016
815+50.00	720	171	549	720	3186	4142	4142
816+00.00	637	94	543	637	3391	4408	4408
816+50.00	588	54	534	588	3524	4581	4581
817+00.00	581	50	531	581	3579	4653	4653
817+50.00	580	48	532	580	3572	4644	4644
818+00.00	498	39	459	498	3105	4037	4037
818+50.00	331	14	317	331	2259	2937	2937
819+00.00	236		236	236	1853	2409	2409
819+50.00	200		200	200	1709	2222	2222
820+00.00	255	31	224	255	1813	2357	2357
820+50.00	314	58	256	314	2065	2685	2685
821+00.00	422	140	282	422	2170	2821	2821
821+50.00							

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
821+50.00	574	247	327	574	2195	2854	2854
822+00.00	621	292	329	621	2046	2660	2660
822+50.00	683	352	331	683	1838	2389	2389
823+00.00	749	416	333	749	1582	2057	2057
823+50.00	816	481	335	816	1350	1755	1755
824+00.00	876	541	335	876	1136	1477	1477
824+50.00	957	566	391	957	1007	1309	1309
825+00.00	1028	580	448	1028	945	1229	1229
825+50.00	1038	405	633	1038	867	1127	1127
826+00.00	1014	215	799	1014	825	1073	1073
826+50.00	929	212	717	929	810	1053	1053
827+00.00	849	107	742	849	786	1022	1022
827+50.00	816		816	816	760	988	988
828+00.00	349		349	349	316	411	411
828+25.00	327		327	327	303	394	394
828+50.00	638		638	638	738	959	959
829+00.00	478		478	478	935	1216	1216
829+50.00	451		451	451	1031	1340	1340
830+00.00	488		488	488	777	1010	1010
830+50.00	498		498	498	560	728	728
831+00.00	520		520	520	506	658	658
831+50.00	477		477	477	530	689	689
832+00.00	434		434	434	564	733	733
832+50.00	448		448	448	424	551	551
833+00.00	533		533	533	209	272	272
833+50.00	674		674	674	99	129	129
834+00.00	847		847	847	48	62	62
834+50.00	1267		1267	1267	6	8	8
835+00.00	1848		1848	1848			
835+50.00	2400		2400	2400			
836+00.00	2891		2891	2891			
836+50.00	3352		3352	3352			
837+00.00	4022		4022	4022			
837+50.00	4782		4782	4782			
838+00.00	5301		5301	5301			
838+50.00	5386		5386	5386			
839+00.00	5065		5065	5065			
839+50.00	4598		4598	4598			
840+00.00	4084		4084	4084			
840+50.00	3201		3201	3201			
841+00.00	2039		2039	2039	126	164	164
841+50.00	1257		1257	1257	339	441	441
842+00.00	734		734	734	1352	1758	1758
842+50.00	344		344	344	3443	4476	4476
843+00.00	346		346	346	6128	7966	7966
843+50.00	373		373	373	7498	9747	9747
844+00.00	315		315	315	7480	9724	9724
844+50.00	94		94	94	4507	5859	5859
844+80.00	21		21	21	2501	3251	3251
845+00.00	231		231	231	4788	6224	6224
845+50.00	370		370	370	4048	5262	5262
846+00.00	390		390	390	3459	4497	4497
846+50.00	326		326	326	3086	4012	4012
847+00.00	259		259	259	2807	3649	3649
847+50.00	370		370	370	2792	3630	3630
848+00.00	432	43	389	432	2688	3494	3494
848+50.00	488	151	337	488	2559	3327	3327
849+00.00	650	297	353	650	2666	3466	3466
849+50.00	715	373	342	715	2985	3881	3881
850+00.00	762	408	354	762	3597	4676	4676
850+50.00	948	388	560	948	4714	6128	6128
851+00.00	1020	311	709	1020	5952	7738	7738
851+50.00	926	256	670	926	7042	9155	9155
852+00.00	860	175	685	860	8229	10698	10698
852+50.00	731	109	622	731	9362	12171	12171
853+00.00							

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
853+00.00	696	67	629	696	10438	13569	13569
853+50.00	753	44	709	753	11355	14762	14762
854+00.00	754	37	717	754	12035	15646	15646
854+50.00	761	36	725	761	12506	16258	16258
855+00.00	782	46	736	782	12867	16727	16727
855+50.00	13	1	12	13	357	464	464
855+51.40	19		19	19	1865	2425	2425
855+59.09	184		184	184	4684	6089	6089
855+84.09	191		191	191	1502	1953	1953
856+00.00	47		47	47	212	276	276
856+08.06							
TOTAL	151356	11762	139594	151356	310395	403526	403526
857							
856+98.40					5843	7596	7596
857+47.21	18		18	18	696	905	905
857+50.00	32		32	32	1252	1628	1628
857+54.89	307		307	307	11672	15174	15174
858+00.00	679		679	679	13244	17217	17217
858+50.00	775		775	775	13230	17199	17199
859+00.00	909	91	818	909	13265	17245	17245
859+50.00	866	189	677	866	12968	16858	16858
860+00.00	868	205	663	868	12442	16175	16175
860+50.00	906	184	722	906	11804	15345	15345
861+00.00	828	132	696	828	10975	14268	14268
861+50.00	656	105	551	656	10036	13047	13047
862+00.00	488	88	400	488	9015	11720	11720
862+50.00	439	68	371	439	8092	10520	10520
863+00.00	402	49	353	402	7276	9459	9459
863+50.00	415	30	385	415	6555	8522	8522
864+00.00	430	11	419	430	6055	7872	7872
864+50.00	328		328	328	5273	6855	6855
865+00.00	309		309	309	4194	5452	5452
865+50.00	322		322	322	3284	4269	4269
866+00.00	242		242	242	2358	3065	3065
866+50.00	211	3	208	211	1468	1908	1908
867+00.00	239	29	210	239	684	889	889
867+50.00	437	38	399	437	220	286	286
868+00.00	1543	11	1532	1543	53	69	69
868+50.00	2726		2726	2726			
869+00.00	3188		3188	3188			
869+50.00	3572		3572	3572			
870+00.00	4445		4445	4445			
870+50.00	5342		5342	5342			
871+00.00	5426		5426	5426			
871+50.00	4909		4909	4909			
872+00.00	3614		3614	3614			
872+50.00	2011		2011	2011	222	289	289
873+00.00	1244		1244	1244	594	772	772
873+50.00	995	1	994	995	1085	1411	1411
874+00.00	791	1	790	791	1663	2162	2162
874+50.00	721		721	721	1523	1980	1980
875+00.00	761		761	761	700	910	910
875+50.00	1116		1116	1116	146	190	190
876+00.00	1568		1568	1568	83	108	108
876+50.00	1702		1702	1702	213	277	277
877+00.00	1374		1374	1374	384	499	499
877+50.00	1009		1009	1009	704	915	915
878+00.00	758		758	758	1021	1327	1327
878+50.00	548		548	548	1114	1448	1448
879+00.00	457		457	457	1144	1487	1487
879+50.00	391		391	391	1129	1468	1468
880+00.00	333		333	333	1026	1334	1334
880+50.00	316		316	316	814	1058	1058
881+00.00	415		415	415	494	642	642
881+50.00	681		681	681	201	261	261
882+00.00							

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
882+00.00	1083		1083	1083	42	55	55
882+50.00	1814		1814	1814			
883+00.00	2370		2370	2370	1	1	1
883+50.00	2400		2400	2400	1	1	1
884+00.00	2307		2307	2307	1	1	1
884+50.00	2040		2040	2040	4	5	5
885+00.00	1657		1657	1657	102	133	133
885+50.00	1132		1132	1132	414	538	538
886+00.00	704		704	704	1016	1321	1321
886+50.00	583		583	583	2082	2707	2707
887+00.00	602		602	602	3901	5071	5071
887+50.00	827		827	827	6706	8718	8718
888+00.00	828		828	828	9783	12718	12718
888+50.00	723		723	723	10260	13338	13338
889+00.00	632		632	632	8422	10949	10949
889+50.00	403		403	403	5928	7706	7706
890+00.00	571		571	571	3485	4531	4531
890+50.00	885		885	885	2098	2727	2727
891+00.00	1102		1102	1102	1279	1663	1663
891+50.00	1461		1461	1461	859	1117	1117
892+00.00	1829		1829	1829	651	846	846
892+50.00	2055		2055	2055	581	755	755
893+00.00	2054		2054	2054	641	833	833
893+50.00	1918		1918	1918	746	970	970
894+00.00	1837		1837	1837	800	1040	1040
894+50.00	1700		1700	1700	949	1234	1234
895+00.00	1267		1267	1267	1792	2330	2330
895+50.00	799		799	799	3268	4248	4248
896+00.00	591		591	591	3840	4992	4992
896+50.00	520		520	520	3078	4001	4001
897+00.00	479		479	479	2250	2925	2925
897+50.00	482		482	482	1991	2588	2588
898+00.00	480		480	480	1914	2488	2488
898+50.00	447		447	447	1432	1862	1862
899+00.00	513		513	513	748	972	972
899+50.00	713		713	713	256	333	333
900+00.00	1091		1091	1091	29	38	38
900+50.00	1596		1596	1596	1	1	1
901+00.00	2041		2041	2041			
901+50.00	2248		2248	2248			
902+00.00	1792		1792	1792	1	1	1
902+50.00	1303		1303	1303	1	1	1
903+00.00	1274		1274	1274	1	1	1
903+50.00	1242		1242	1242	1	1	1
904+00.00	1173		1173	1173	1	1	1
904+50.00	1031		1031	1031	3	4	4
905+00.00	870		870	870	20	26	26
905+50.00							
TOTAL	120531	1235	119296	120531	267593	347872	347872
GRAND	271887	12997	258890	271887	577988	751398	751398

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE B CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
915+00.00	1154			1154	1154	1538	1999	1999
915+50.00	1273			1273	1273	854	1110	1110
916+00.00	1459			1459	1459	387	503	503
916+50.00	1770			1770	1770	136	177	177
917+00.00	2239			2239	2239	26	34	34
917+50.00	2817			2817	2817			
918+00.00	3384			3384	3384			
918+50.00	3837			3837	3837			
919+00.00	4297			4297	4297			
919+50.00	4612			4612	4612			
920+00.00	4556			4556	4556			
920+50.00	4300			4300	4300			
921+00.00	3961			3961	3961			
921+50.00	3570			3570	3570			
922+00.00	3117			3117	3117	3	4	4
922+50.00	2723			2723	2723	45	59	59
923+00.00	2363		189	2174	2363	200	260	260
923+50.00	2109		381	1728	2109	519	675	675
924+00.00	1993		192	1801	1993	958	1245	1245
924+50.00	1869			1869	1869	1654	2150	2150
925+00.00	1732			1732	1732	2797	3636	3636
925+50.00	1689			1689	1689	3579	4653	4653
926+00.00	2122			2122	2122	3530	4589	4589
926+50.00	2668			2668	2668	2979	3873	3873
927+00.00	2896			2896	2896	3013	3917	3917
927+50.00	2589			2589	2589	3664	4763	4763
928+00.00	2075			2075	2075	3849	5004	5004
928+50.00	1954			1954	1954	3520	4576	4576
929+00.00	2086			2086	2086	2827	3675	3675
929+50.00	2932	641		2291	2932	2689	3496	3496
930+00.00	3085	680		2405	3085	2056	2673	2673
930+50.00	2399	39		2360	2399	1157	1504	1504
931+00.00	2089			2089	2089	1188	1544	1544
931+50.00	1837			1837	1837	1139	1481	1481
932+00.00	1812			1812	1812	903	1174	1174
932+50.00	1861			1861	1861	605	787	787
933+00.00	1812			1812	1812	445	579	579
933+50.00	1754			1754	1754	365	475	475
934+00.00	1875			1875	1875	167	217	217
934+50.00	2071			2071	2071	47	61	61
935+00.00	2117			2117	2117	105	137	137
935+50.00	2099			2099	2099	111	144	144
936+00.00	2249			2249	2249	32	42	42
936+50.00	2485			2485	2485			
937+00.00	2571			2571	2571	2	3	3
937+50.00	2440			2440	2440	5	7	7
938+00.00	2307			2307	2307	21	27	27
938+50.00	1934			1934	1934	159	207	207
939+00.00	1336			1336	1336	434	564	564
939+50.00	979			979	979	715	930	930
940+00.00	774			774	774	1005	1307	1307
940+50.00	606			606	606	1180	1534	1534
941+00.00	609			609	609	1030	1339	1339
941+50.00	770		27	743	770	665	865	865
942+00.00	939		27	912	939	335	436	436
942+50.00	1108			1108	1108	131	170	170
943+00.00	1312			1312	1312	37	48	48
943+50.00	1581			1581	1581	7	9	9
944+00.00	1787			1787	1787			
944+50.00	1835			1835	1835	7	9	9
945+00.00	1801			1801	1801	30	39	39
945+50.00	1718			1718	1718	50	65	65
946+00.00	1608			1608	1608	67	87	87
946+50.00	1507			1507	1507	110	143	143
947+00.00	1379			1379	1379	172	224	224
947+50.00	1208			1208	1208	262	341	341
948+00.00	1026			1026	1026	421	547	547
948+50.00	857			857	857	649	844	844
949+00.00	708			708	708	1000	1300	1300
949+50.00	637			637	637	1448	1882	1882
950+00.00	611			611	611	1808	2350	2350
950+50.00	596			596	596	2021	2627	2627
951+00.00	541			541	541	2029	2638	2638
951+50.00	428			428	428	2201	2861	2861
952+00.00	391			391	391	2865	3725	3725
952+50.00	120			120	120	2084	2709	2709
952+80.00	35			35	35	1429	1858	1858
953+00.00	177			177	177	3744	4867	4867
953+50.00	203			203	203	4220	5486	5486
954+00.00	232			232	232	4515	5870	5870
954+50.00	243			243	243	4637	6028	6028
955+00.00	254			254	254	4748	6172	6172
955+50.00	263			263	263	4964	6453	6453
956+00.00	276			276	276	5272	6854	6854
956+50.00	293			293	293	5568	7238	7238
957+00.00	317			317	317	5837	7588	7588
957+50.00	334			334	334	6134	7974	7974
958+00.00	340			340	340	6571	8542	8542
958+50.00	355		2	353	355	7195	9354	9354
959+00.00	369		11	358	369	7972	10364	10364
959+50.00	369		22	347	369	8786	11422	11422
960+00.00	369		30	339	369	9518	12373	12373
960+50.00	372		32	340	372	10124	13161	13161
961+00.00	369		22	347	369	10695	13904	13904
961+50.00	399		11	388	399	11262	14641	14641
962+00.00	402		10	392	402	11634	15124	15124
962+50.00	376		15	361	376	11811	15354	15354
963+00.00	385		20	365	385	11798	15337	15337
963+50.00	350		41	309	350	10420	13546	13546
964+00.00	14		2	12	14	643	836	836
964+03.63	111			111	111	4904	6375	6375
964+50.00								
TOTAL 912B	154922	1360	1034	152528	154922	244438	317774	317774
965+50.00								
965+76.81	126		54	72	126	3803	4944	4944
966+00.00	96			96	96	4441	5773	5773
966+06.28	32			32	32	1329	1728	1728
966+50.00	289			289	289	9609	12492	12492
967+00.00	490			490	490	10967	14257	14257
967+50.00	504			504	504	10718	13933	13933
968+00.00	558			558	558	10401	13521	13521
968+50.00	591			591	591	9951	12936	12936
969+00.00	571			571	571	9524	12381	12381
969+50.00	546			546	546	9168	11918	11918
970+00.00	493			493	493	8678	11281	11281
970+50.00	457			457	457	8110	10543	10543
971+00.00	456			456	456	7516	9771	9771
971+50.00	254			254	254	6845	8899	8899
972+00.00	177			177	177	6302	8193	8193
972+50.00	297			297	297	5808	7550	7550
973+00.00	278			278	278	5074	6596	6596
973+50.00	259			259	259	4272	5554	5554
974+00.00	254			254	254	3481	4525	4525
974+50.00	249			249	249	2742	3565	3565
975+00.00	235			235	235	2121	2757	2757
975+50.00	217			217	217	1638	2129	2129
976+00.00	202			202	202	1257	1634	1634
976+50.00	191			191	191	986	1282	1282
976+70.00	88			88	88	340	442	442
977+00.00	217			217	217	512	666	666

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE B CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
977+00.00	435			435	435	810	1053	1053
977+50.00	392			392	392	659	857	857
978+00.00	388			388	388	488	634	634
978+50.00	392			392	392	368	478	478
979+00.00	501			501	501	397	516	516
979+50.00	611			611	611	408	530	530
980+00.00	579			579	579	458	595	595
980+50.00	565			565	565	616	801	801
981+00.00	620			620	620	703	914	914
981+50.00	669			669	669	694	902	902
982+00.00	656			656	656	692	900	900
982+50.00	632			632	632	680	884	884
983+00.00	623			623	623	627	815	815
983+50.00	595			595	595	570	741	741
984+00.00	541			541	541	530	689	689
984+50.00	506			506	506	465	605	605
985+00.00	255			255	255	192	250	250
985+25.00								
TOTAL	17087	0	54	17033	17087	154950	201434	201434
1006A								
1000+00.00	191			191	191	349	454	454
1000+50.00	255			255	255	248	322	322
1001+00.00	486			486	486	83	108	108
1001+50.00	908			908	908	2	3	3
1002+00.00	1226			1226	1226	5	7	7
1002+50.00	1340			1340	1340	5	7	7
1003+00.00	1401			1401	1401	3	4	4
1003+50.00	1419			1419	1419	3	4	4
1004+00.00	1356			1356	1356	3	4	4
1004+50.00	1237			1237	1237	95	124	124
1005+00.00	1048			1048	1048	168	218	218
1005+50.00	817			817	817	172	224	224
1006+00.00	612			612	612	259	337	337
1006+50.00	462			462	462	421	547	547
1007+00.00	357			357	357	571	742	742
1007+50.00	332			332	332	737	958	958
1008+00.00	366			366	366	965	1255	1255
1008+50.00	367			367	367	1079	1403	1403
1009+00.00	420			420	420	1082	1407	1407
1009+50.00	471			471	471	1075	1398	1398
1010+00.00	523			523	523	1010	1313	1313
1010+50.00	645			645	645	862	1121	1121
1011+00.00	781			781	781	784	1019	1019
1011+50.00	832			832	832	831	1080	1080
1012+00.00	806			806	806	831	1080	1080
1012+50.00	803			803	803	818	1063	1063
1013+00.00	831			831	831	717	932	932
1013+50.00	941			941	941	476	619	619
1014+00.00	1068			1068	1068	269	350	350
1014+50.00	1210			1210	1210	192	250	250
1015+00.00	1446			1446	1446	120	156	156
1015+50.00	1799			1799	1799	19	25	25
1016+00.00	2098			2098	2098	1	1	1
1016+50.00	2231			2231	2231			
1017+00.00	2382			2382	2382			
1017+50.00								
TOTAL	33467	0	0	33467	33467	14255	18535	18535
1006B								
1020+00.00	2757	2469		288	2757	77	100	100
1020+50.00	2321	2089		232	2321	1	1	1
1021+00.00	1859	1622		237	1859	1	1	1
1021+50.00	1419	1211		208	1419			
1022+00.00	940	790		150	940			
1022+50.00	632	520		112	632			
1023+00.00	619	506		113	619			
1023+50.00								

STATION	TOTAL CUT	UNSUIT TYPE B CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
1024+00.00	711	596		115	711			
1024+50.00	903	784		119	903			
1025+00.00	1124	1006		118	1124			
1025+50.00	1265	1146		119	1265			
1026+00.00	1289	1168		121	1289			
1026+50.00	1228	1109		119	1228	1	1	1
1027+00.00	1522	1376		146	1522			
1027+50.00	2240	2062		178	2240	430	559	559
1028+00.00	2144	1965		179	2144	431	560	560
1028+50.00	1708	1522		186	1708	1	1	1
1029+00.00	1777	776		1001	1777	1	1	1
1029+50.00	1884			1884	1884	1	1	1
1030+00.00	1998			1998	1998	1	1	1
1030+50.00	2028			2028	2028	1	1	1
1031+00.00	1948			1948	1948	1	1	1
1031+50.00	1771			1771	1771	1	1	1
1032+00.00	1552			1552	1552	1	1	1
1032+50.00	1336			1336	1336	1	1	1
1033+00.00	1141			1141	1141	1	1	1
1033+50.00	968			968	968	1	1	1
1034+00.00	816			816	816	22	29	29
1034+50.00	672			672	672	91	118	118
1035+00.00	571			571	571	208	270	270
1035+50.00	511			511	511	323	420	420
1036+00.00	488			488	488	393	511	511
1036+50.00	363			363	363	315	410	410
TOTAL								
1037	44505	22717	0	21788	44505	2304	2991	2991
1038+50.00								
1039+00.00	785			785	785	180	234	234
1039+50.00	702			702	702	333	433	433
1040+00.00	614			614	614	335	436	436
1040+50.00	625			625	625	361	469	469
1041+00.00	648			648	648	370	481	481
1041+50.00	636			636	636	413	537	537
1042+00.00	604		228	376	604	468	608	608
1042+50.00	566		228	338	566	518	673	673
1043+00.00	556			556	556	552	718	718
1043+50.00	497			497	497	604	785	785
1044+00.00	413			413	413	619	805	805
1044+50.00	392			392	392	543	706	706
1045+00.00	381			381	381	441	573	573
1045+50.00	385			385	385	330	429	429
1046+00.00	381			381	381	233	303	303
1046+50.00	383			383	383	158	205	205
1047+00.00	424			424	424	85	111	111
1047+50.00	497			497	497	25	33	33
1048+00.00	571			571	571	1	1	1
1048+50.00	622			622	622	1	1	1
1049+00.00	677			677	677			
1049+50.00	686		284	402	686	2	3	3
1050+00.00	629		536	93	629	4	5	5
1050+50.00	557		469	88	557	2	3	3
1051+00.00	511		426	85	511	1	1	1
1051+50.00	461		379	82	461	1	1	1
1052+00.00	401		318	83	401	1	1	1
1052+50.00	458		368	90	458	1	1	1
1053+00.00	571		424	147	571	9	12	12
1053+25.00	266		188	78	266	7	9	9
TOTAL								
GRAND	15899	0	3848	12051	15899	6598	8577	8577
	265880	24077	4936	236867	265880	422545	549311	549311

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
1556+75.00	8		8	8	146	190	190
1556+90.00	20	4	16	20	108	140	140
1557+00.00	211	91	120	211	385	501	501
1557+50.00	248	139	109	248	159	207	207
1558+00.00	238	137	101	238	65	85	85
1558+50.00	225	128	97	225	40	52	52
1559+00.00	187	92	95	187	95	124	124
1559+50.00	139	46	93	139	242	315	315
1560+00.00	67	13	54	67	378	491	491
1560+45.00	7	1	6	7	54	70	70
1560+50.00	116	14	102	116	578	751	751
1561+00.00	113	10	103	113	605	787	787
1561+50.00	119	11	108	119	637	828	828
1562+00.00	121	14	107	121	649	844	844
1562+50.00	112	10	102	112	622	809	809
1563+00.00	105	7	98	105	538	699	699
1563+50.00	115	8	107	115	429	558	558
1564+00.00	109	4	105	109	480	624	624
1564+50.00	89	4	85	89	475	618	618
1565+00.00	97	16	81	97	302	393	393
1565+50.00	122	12	110	122	184	239	239
1566+00.00	186		186	186	68	88	88
1566+50.00	236		236	236	6	8	8
1567+00.00	277		277	277			
1567+50.00	369		369	369			
1568+00.00	464		464	464			
1568+50.00	563		563	563			
1569+00.00	677		677	677			
1569+50.00	805		805	805			
1570+00.00	962		962	962			
1570+50.00							
TOTAL	7107	761	6346	7107	7245	9421	9421
92B							
2543+50.00	82		82	82	1186	1542	1542
2544+00.00	90		90	90	2080	2704	2704
2544+50.00	218		218	218	1602	2083	2083
2545+00.00	437		437	437	1147	1491	1491
2545+50.00	588		588	588	810	1053	1053
2546+00.00	638		638	638	561	729	729
2546+50.00	613		613	613	341	443	443
2547+00.00	550		550	550	162	211	211
2547+50.00	443		443	443	92	120	120
2548+00.00	323	80	243	323	84	109	109
2548+50.00	202	100	102	202	99	129	129
2549+00.00	518	419	99	518	459	597	597
2549+50.00	511	412	99	511	412	536	536
2550+00.00	137	40	97	137	10	13	13
2550+50.00	184	82	102	184	8	10	10
2551+00.00	204	99	105	204	23	30	30
2551+50.00	197	91	106	197	24	31	31
2552+00.00	226	119	107	226	9	12	12
2552+50.00	253	145	108	253	1	1	1
2553+00.00	259	150	109	259			
2553+50.00	277	170	107	277			
2554+00.00	296	187	109	296			
2554+50.00	313	199	114	313	4	5	5
2555+00.00	387	263	124	387	4	5	5
2555+50.00	586	446	140	586	1	1	1
2556+00.00	311	242	69	311	8	10	10
2556+25.00							
TOTAL	8843	3244	5599	8843	9127	11865	11865
92C							
3545+00.00	23		23	23	3063	3982	3982
3545+50.00	41		41	41	2164	2813	2813
3546+00.00	108	13	95	108	1493	1941	1941
3546+50.00	185	30	155	185	1074	1396	1396
3547+00.00	175	36	139	175	733	953	953
3547+50.00	146	28	118	146	509	662	662
3548+00.00	169	53	116	169	299	389	389
3548+50.00	167	66	101	167	117	152	152
3549+00.00	236	149	87	236	31	40	40
3549+50.00	666	559	107	666			
3550+00.00	1067	934	133	1067			
3550+50.00	1104	966	138	1104			
3551+00.00	996	855	141	996			
3551+50.00	795	655	140	795			
3552+00.00	556	419	137	556			
3552+50.00	370	231	139	370	34	44	44
3553+00.00	265	137	128	265	66	86	86
3553+50.00	221	108	113	221	58	75	75
3554+00.00	210	99	111	210	61	79	79
3554+50.00	202	89	113	202	94	122	122
3555+00.00	198	68	130	198	173	225	225
3555+50.00	183	48	135	183	238	309	309
3555+90.00	51	11	40	51	77	100	100
3556+00.00							
TOTAL	8134	5554	2580	8134	10284	13368	13368
92D							
4557+00.00	112	50	62	112	60	78	78
4557+20.00	223	139	84	223	8	10	10
4557+50.00	476	345	131	476	2	3	3
4558+00.00	536	410	126	536			
4558+50.00	621	487	134	621			
4559+00.00	714	571	143	714			
4559+50.00	895	720	175	895	17	22	22
4560+00.00	917	756	161	917	32	42	42
4560+40.00	217	183	34	217	10	13	13
4560+50.00	976	826	150	976	53	69	69
4561+00.00	1038	886	152	1038	68	88	88
4561+50.00	1097	940	157	1097	84	109	109
4562+00.00	1175	1014	161	1175	84	109	109
4562+50.00	1217	1057	160	1217	76	99	99
4563+00.00	1251	1080	171	1251	76	99	99
4563+50.00	1254	1072	182	1254	75	98	98
4564+00.00	1111	943	168	1111	161	209	209
4564+50.00	1048	886	162	1048	200	260	260
4565+00.00	1110	945	165	1110	116	151	151
4565+50.00	1127	969	158	1127	57	74	74
4566+00.00	1190	1036	154	1190	15	20	20
4566+50.00	1262	1114	148	1262			
4567+00.00	1302	1161	141	1302			
4567+50.00	1351	1220	131	1351			
4568+00.00							
TOTAL	22220	18810	3410	22220	1194	1553	1553
170A							
5566+41.10	102		102	102			
5566+50.00	606		606	606			
5567+00.00	687		687	687			
5567+50.00	749		749	749			
5568+00.00	796		796	796			
5568+50.00	802		802	802			
5569+00.00	754		754	754			
5569+50.00	697		697	697			
5570+00.00	682		682	682			
5570+50.00	717		717	717			
5571+00.00	803		803	803			
5571+50.00	836		836	836			
5572+00.00	777		777	777			
5572+50.00	598		598	598			
5573+00.00	390		390	390	32	42	42
5573+50.00							

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
5573+50.00	347		347	347	32	42	42
5574+00.00	440		440	440			
5574+50.00	513		513	513			
5575+00.00	505		505	505			
5575+50.00	462		462	462	1	1	1
5576+00.00	424	154	270	424	16	21	21
5576+50.00	420	305	115	420	40	52	52
5577+00.00	401	306	95	401	38	49	49
5577+50.00	377	290	87	377	64	83	83
5578+00.00	340	136	204	340	126	164	164
5578+50.00	287		287	287	183	238	238
5579+00.00							
TOTAL	14512	1191	13321	14512	532	692	692
170B							
6551+00.00	170		170	170	631	820	820
6551+50.00	183		183	183	720	936	936
6552+00.00	189		189	189	885	1151	1151
6552+50.00	211	54	157	211	983	1278	1278
6553+00.00	250	125	125	250	954	1240	1240
6553+50.00	155	45	110	155	545	709	709
6553+81.57	97		97	97	306	398	398
6554+00.00	267		267	267	801	1041	1041
6554+50.00	282		282	282	765	995	995
6555+00.00	297		297	297	711	924	924
6555+50.00	317		317	317	638	829	829
6556+00.00	396		396	396	591	768	768
6556+50.00	416		416	416	485	631	631
6557+00.00	402		402	402	401	521	521
6557+50.00	322		322	322	316	411	411
6558+00.00	340		340	340	301	391	391
6558+50.00	364		364	364	337	438	438
6559+00.00	287		287	287	341	443	443
6559+50.00	188		188	188	321	417	417
6560+00.00	83		83	83	286	372	372
6560+50.00	79		79	79	284	369	369
6561+00.00	101		101	101	262	341	341
6561+50.00	100		100	100	216	281	281
6562+00.00	70		70	70	163	212	212
6562+50.00	76		76	76	190	247	247
6563+00.00	64		64	64	204	265	265
6563+39.95	19		19	19	63	82	82
6563+50.00							
TOTAL	5725	224	5501	5725	12700	16510	16510
170C							
7552+78.66	75		75	75	593	771	771
7553+00.00	175		175	175	1679	2183	2183
7553+50.00	57		57	57	1253	1629	1629
7553+82.14	23		23	23	765	995	995
7554+00.00	134		134	134	2016	2621	2621
7554+50.00	198		198	198	1651	2146	2146
7555+00.00	238		238	238	1471	1912	1912
7555+50.00	241		241	241	1438	1869	1869
7556+00.00	233		233	233	1437	1868	1868
7556+50.00	230		230	230	1400	1820	1820
7557+00.00	227		227	227	1300	1690	1690
7557+50.00	235		235	235	1163	1512	1512
7558+00.00	230	35	195	230	1021	1327	1327
7558+50.00	213	68	145	213	885	1151	1151
7559+00.00	207	67	140	207	767	997	997
7559+50.00	187	75	112	187	625	813	813
7560+00.00	211	105	106	211	474	616	616
7560+50.00	256	133	123	256	337	438	438
7561+00.00	260	143	117	260	218	283	283
7561+50.00	280	164	116	280	121	157	157
7562+00.00	309	200	109	309	38	49	49
7562+50.00							

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
7563+00.00	404	315	89	404			
7563+50.00	487	399	88	487			
7564+00.00	576	485	91	576			
7564+50.00	660	554	106	660			
7565+00.00	592	266	326	592			
7565+45.16							
TOTAL	7285	3261	4024	7285	20654	26850	26850
170D							
8564+41.41	37	12	25	37	24	31	31
8564+50.00	299	133	166	299	120	156	156
8565+00.00	361	126	235	361	35	46	46
8565+50.00	331	62	269	331	29	38	38
8566+00.00	262		262	262	62	81	81
8566+50.00	221		221	221	99	129	129
8567+00.00	207		207	207	150	195	195
8567+50.00	201		201	201	218	283	283
8568+00.00	201		201	201	290	377	377
8568+50.00	206		206	206	344	447	447
8569+00.00	217		217	217	401	521	521
8569+50.00	208		208	208	467	607	607
8570+00.00	187		187	187	537	698	698
8570+50.00	192		192	192	620	806	806
8571+00.00	190		190	190	623	810	810
8571+50.00	190		190	190	622	809	809
8572+00.00	204		204	204	640	832	832
8572+50.00	213		213	213	602	783	783
8573+00.00	220		220	220	532	692	692
8573+50.00	235		235	235	426	554	554
8574+00.00	250		250	250	317	412	412
8574+50.00	262		262	262	240	312	312
8575+00.00	286		286	286	189	246	246
8575+50.00	304		304	304	152	198	198
8576+00.00	316		316	316	150	195	195
8576+50.00							
TOTAL	5800	333	5467	5800	7889	10258	10258
GRAND	79626	33378	46248	79626	69625	90517	90517

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
145THA							
2803+74.91							
2803+75.00	44		44	44	28	36	36
2804+00.00	85		85	85	91	118	118
2804+50.00	121		121	121	111	144	144
2805+00.00	175		175	175	77	100	100
2805+50.00	246		246	246	72	94	94
2806+00.00	290		290	290	89	116	116
2806+50.00	246		246	246	122	159	159
2807+00.00	156		156	156	147	191	191
2807+50.00	115		115	115	145	189	189
2808+00.00	153		153	153	149	194	194
2808+50.00	187		187	187	149	194	194
2809+00.00	242		242	242	129	168	168
2809+50.00	321		321	321	98	127	127
2810+00.00	372		372	372	83	108	108
2810+50.00	392		392	392	83	108	108
2811+00.00	386		386	386	100	130	130
2811+50.00	344		344	344	141	183	183
2812+00.00	287		287	287	208	270	270
2812+50.00	332		332	332	294	382	382
2813+00.00	357		357	357	293	381	381
2813+50.00	315		315	315	254	330	330
2814+00.00	305		305	305	287	373	373
2814+50.00	268		268	268	346	450	450
2815+00.00	215		215	215	436	567	567
2815+50.00	161		161	161	560	728	728
2816+00.00	147	23	124	147	611	794	794
2816+50.00	192	55	137	192	589	766	766
2817+00.00	308	41	267	308	680	884	884
2817+50.00	319	10	309	319	771	1002	1002
2818+00.00	180		180	180	847	1101	1101
2818+50.00	38		38	38	610	793	793
2818+83.21							
TOTAL	7299	129	7170	7299	8600	11180	11180
145THB							
2820+17.21							
2820+25.00	37		37	37	77	100	100
2820+50.00	218		218	218	232	302	302
2821+00.00	373		373	373	370	481	481
2821+50.00	230		230	230	311	404	404
2822+00.00	121		121	121	269	350	350
2822+50.00	127		127	127	223	290	290
2823+00.00	63		63	63	112	146	146
TOTAL	1169	0	1169	1169	1594	2073	2073
170TH							
8959+00.00	148	69	79	148	213	277	277
8959+50.00	108	65	43	108	164	213	213
8960+00.00	136	94	42	136	125	163	163
8960+50.00	99	65	34	99	72	94	94
8961+00.00	41	15	26	41	42	55	55
8961+50.00	36	13	23	36	51	66	66
8962+00.00	213	155	58	213	174	226	226
8962+50.00	191	148	43	191	156	203	203
8962+75.00	228	180	48	228	226	294	294
8963+00.00	465	364	101	465	531	690	690
8963+50.00	933	855	78	933	1074	1396	1396
8964+00.00	814	743	71	814	1006	1308	1308
8964+50.00	139	72	67	139	371	482	482
8965+00.00	231	177	54	231	479	623	623
8965+50.00	217	189	28	217	469	610	610
8966+00.00	110	96	14	110	367	477	477
8966+50.00	126	101	25	126	379	493	493
8967+00.00	132	102	30	132	377	490	490
8967+50.00	73	57	16	73	256	333	333
8968+00.00	15	15		15	142	185	185
8968+50.00	16	16		16	141	183	183
8969+00.00	65	31	34	65	140	182	182
8969+50.00	125	46	79	125	127	165	165
8970+00.00	99	23	76	99	144	187	187
8970+50.00	61		61	61	128	166	166
8971+00.00	55		55	55	35	46	46
8971+35.03							
TOTAL	4876	3691	1185	4876	7389	9607	9607
175TH							
9971+35.03	50		50	50	9	12	12
9971+50.00	75		75	75	31	40	40
9971+75.00	60		60	60	30	39	39
9972+00.00	123		123	123	55	72	72
9972+50.00	123		123	123	58	75	75
9973+00.00	102		102	102	73	95	95
9973+50.00	87		87	87	82	107	107
9974+00.00	84		84	84	81	105	105
9974+50.00	92		92	92	74	96	96
9975+00.00	98		98	98	69	90	90
9975+50.00	95		95	95	68	88	88
9976+00.00	94		94	94	67	87	87
9976+50.00	86		86	86	75	98	98
9977+00.00	82		82	82	74	96	96
9977+50.00	83		83	83	68	88	88
9978+00.00	78		78	78	72	94	94
9978+50.00	76		76	76	71	92	92
9979+00.00	77		77	77	69	90	90
9979+50.00	83		83	83	64	83	83
9980+00.00	84		84	84	62	81	81
9980+50.00	85		85	85	61	79	79
9981+00.00	88		88	88	57	74	74
9981+50.00	82		82	82	61	79	79
9982+00.00	62		62	62	77	100	100
9982+50.00	38		38	38	102	133	133
9983+00.00	25		25	25	116	151	151
9983+50.00	26		26	26	116	151	151
9984+00.00	36		36	36	103	134	134
9984+50.00	55		55	55	80	104	104
9985+00.00	92		92	92	46	60	60
9985+50.00	156		156	156	13	17	17
9986+00.00	170		170	170	2	3	3
9986+50.00	113		113	113	25	33	33
9987+00.00	66		66	66	57	74	74
9987+50.00	46		46	46	74	96	96
9988+00.00	59		59	59	62	81	81
9988+50.00	91		91	91	34	44	44
9989+00.00	158		158	158	10	13	13
9989+50.00	235		235	235			
9990+00.00	263		263	263			
9990+50.00	276		276	276			
9991+00.00	278		278	278	6	8	8
9991+50.00	242		242	242	37	48	48
9992+00.00	175		175	175	109	142	142
9992+50.00	105		105	105	213	277	277
9993+00.00	47		47	47	341	443	443
9993+50.00	22		22	22	404	525	525
9994+00.00	43		43	43	335	436	436
9994+50.00	91		91	91	212	276	276
9995+00.00	123		123	123	121	157	157
9995+50.00	145		145	145	75	98	98
9996+00.00	204		204	204	39	51	51
9996+50.00	245		245	245	29	38	38
9997+00.00	226		226	226	54	70	70
9997+50.00							

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TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
9997+50.00	168		168	168	112	146	146
9998+00.00	123		123	123	168	218	218
9998+50.00	131		131	131	188	244	244
9999+00.00	97		97	97	232	302	302
9999+50.00	50		50	50	208	270	270
10000+00.00	37		37	37	98	127	127
10000+50.00	43		43	43	42	55	55
10001+00.00	34		34	34	15	20	20
10001+25.00							
TOTAL	6583	0	6583	6583	5386	7005	7005
DET905							
301+26.75	196		196	196	1	1	1
301+50.00	450		450	450	3	4	4
302+00.00	449		449	449	3	4	4
302+50.00	394		394	394	3	4	4
303+00.00	324		324	324	1	1	1
303+50.00	277		277	277	1	1	1
304+00.00	252		252	252	1	1	1
304+50.00	273		273	273	1	1	1
305+00.00	331		331	331	4	5	5
305+50.00	395		395	395	3	4	4
306+00.00	510		510	510	1	1	1
306+50.00	592		592	592	7	9	9
307+00.00							
TOTAL	4443	0	4443	4443	29	36	36
DET985							
406+25.00	62		62	62	10	13	13
406+50.00	131		131	131	49	64	64
407+00.00	139		139	139	74	96	96
407+50.00	170		170	170	96	125	125
408+00.00	177		177	177	107	139	139
408+50.00	169		169	169	122	159	159
409+00.00	153		153	153	147	191	191
409+50.00	132		132	132	178	231	231
410+00.00	126		126	126	229	298	298
410+50.00	145		145	145	271	352	352
411+00.00	172		172	172	274	356	356
411+50.00	199		199	199	239	311	311
412+00.00	241		241	241	194	252	252
412+50.00	231		231	231	182	237	237
413+00.00	176		176	176	211	274	274
413+50.00	156		156	156	224	291	291
414+00.00	190		190	190	128	166	166
414+50.00	467		467	467	23	30	30
415+00.00	908		908	908	4	5	5
415+50.00	1141		1141	1141	4	5	5
416+00.00	1159		1159	1159	5	7	7
416+50.00	1103		1103	1103	5	7	7
417+00.00	1020		1020	1020	6	8	8
417+50.00	940		940	940	6	8	8
418+00.00	918		918	918	5	7	7
418+50.00	984		984	984	5	7	7
419+00.00	1030		1030	1030	5	7	7
419+50.00	943		943	943	5	7	7
420+00.00	738		738	738	8	10	10
420+50.00	575		575	575	36	47	47
421+00.00	545		545	545	53	69	69
421+50.00	606		606	606	32	42	42
422+00.00	722		722	722	12	16	16
422+50.00	769		769	769	5	7	7
423+00.00	667		667	667	15	20	20
423+50.00	504		504	504	48	62	62
424+00.00	362		362	362	121	157	157
424+50.00	260		260	260	223	290	290
425+00.00	200		200	200	301	391	391
425+50.00							

STATION	TOTAL CUT	UNSUIT TYPE C CUT	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 30% SHRINK	TOTAL FILL WITH SHRINK
425+50.00	184		184	184	317	412	412
426+00.00	192		192	192	289	376	376
426+50.00	214		214	214	255	332	332
427+00.00	271		271	271	191	248	248
427+50.00	388		388	388	75	98	98
428+00.00	649		649	649	6	8	8
428+50.00	963		963	963	6	8	8
429+00.00	1135		1135	1135	6	8	8
429+50.00	1160		1160	1160	6	8	8
430+00.00	1114		1114	1114	5	7	7
430+50.00	1046		1046	1046	6	8	8
431+00.00	948		948	948	6	8	8
431+50.00	789		789	789	6	8	8
432+00.00	605		605	605	4	5	5
432+50.00	428		428	428	6	8	8
433+00.00	337		337	337	6	8	8
433+50.00	325		325	325	3	4	4
434+00.00	314		314	314	3	4	4
434+50.00	323		323	323	3	4	4
435+00.00	372		372	372	3	4	4
435+50.00	477		477	477	3	4	4
436+00.00	401		401	401	3	4	4
436+50.00	275		275	275	3	4	4
437+00.00	279		279	279	2	3	3
437+50.00	237		237	237	1	1	1
438+00.00							
TOTAL	32756	0	32756	32756	4876	6346	6346
GRAND	57126	3820	53306	57126	27874	36247	36247

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