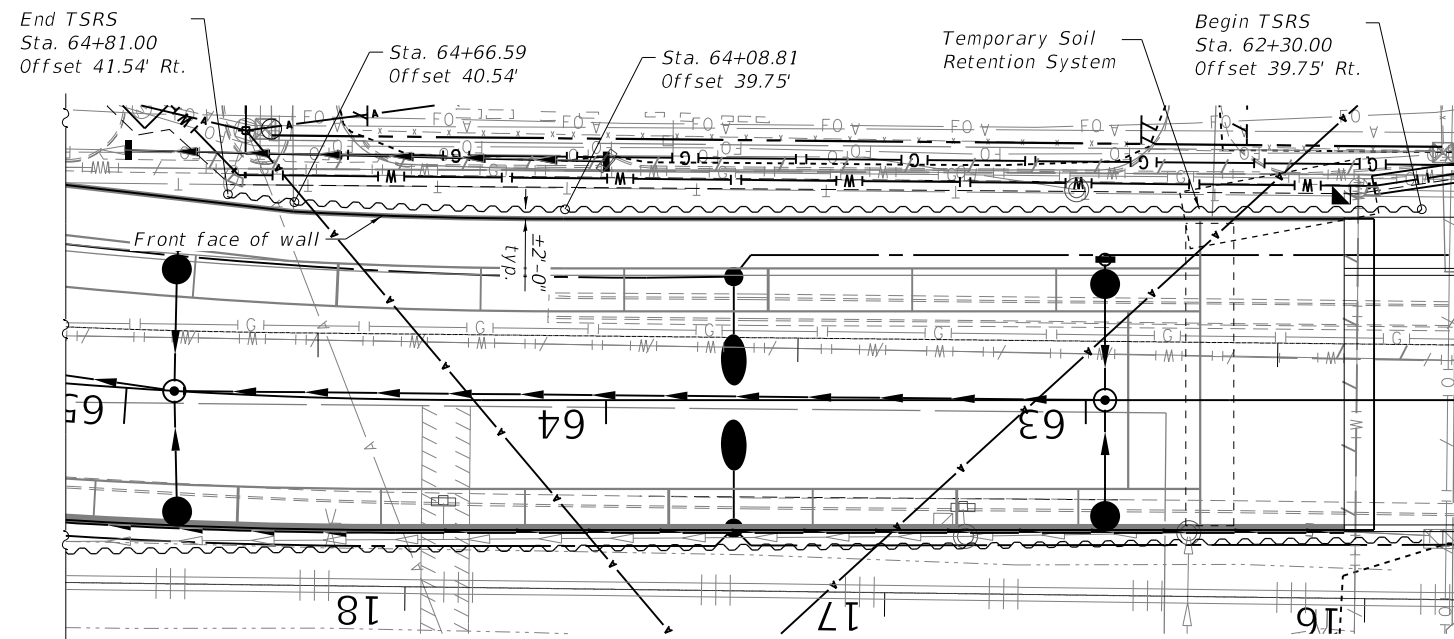
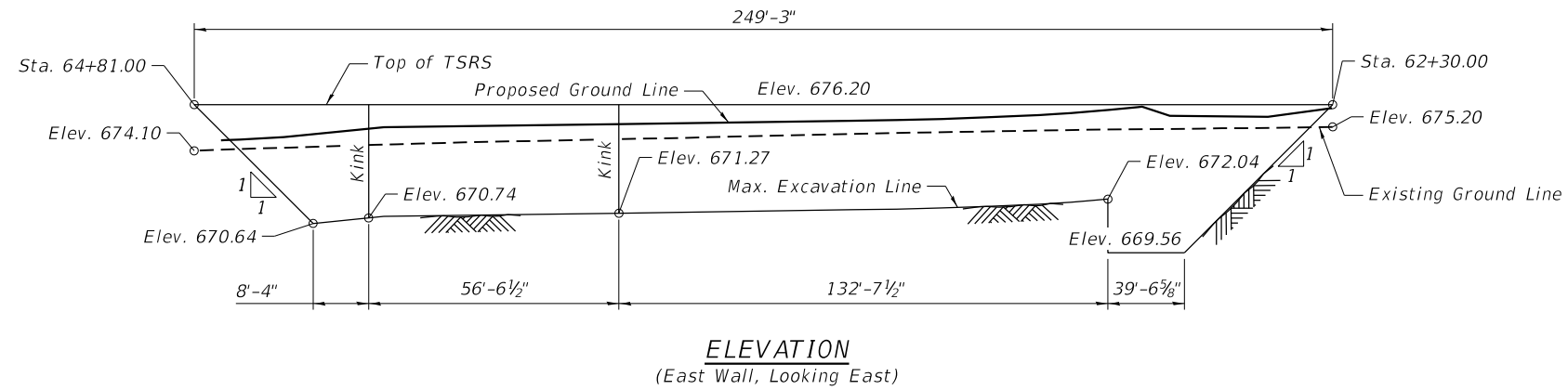


Notes:

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
2. Horizontal dimensions and grounds slopes are shown along the Temporary Soil Retention System unless noted otherwise.
3. The Contractor is alerted to the presence of underground utilities under the proposed Temporary Soil Retention System. These utilities may need to be kept in service during construction of the retaining wall. See drainage and utility plans.



BILL OF MATERIAL

| Item | Unit | Quantity |
|---------------------------------|---------|----------|
| Temporary Soil Retention System | Sq. Ft. | 1,243 |

MODEL: Sheet
FILE NAME: pw:\aecom-na-pw-bentley.com\AECOM_D5116_NA\Documents\60603202-Brush_College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE_Walls_Sheets\60603202_058-W004_07_TSRS - 2.dgn



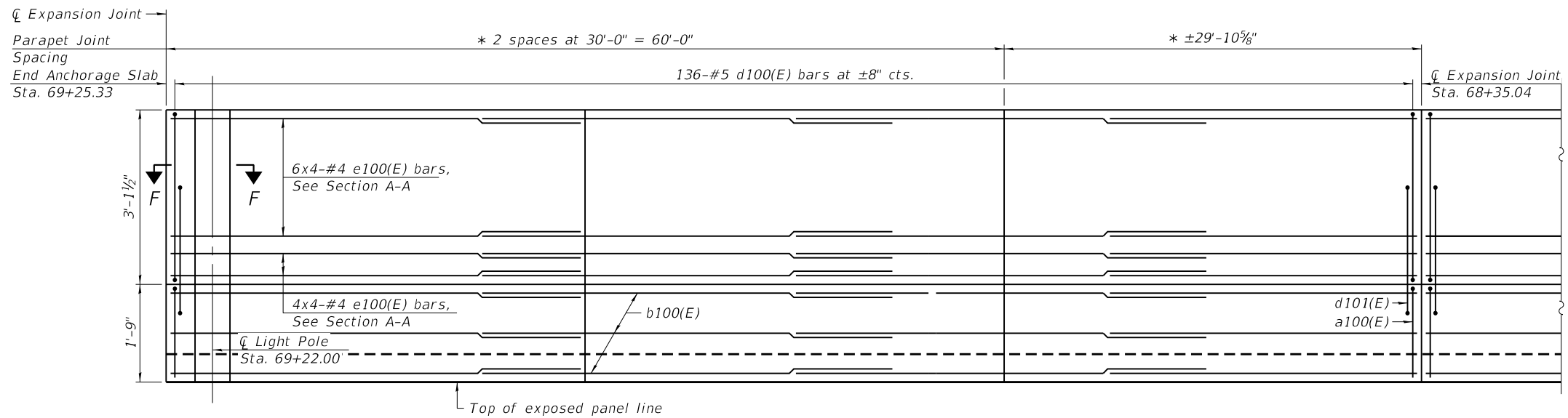
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| 60603202_058-W004_07_TSRS - 2.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 40,000' / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SOIL RETENTION SYSTEM
STRUCTURE NO. 058-W004**

SHEET SB-7 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 601 |
| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |



OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

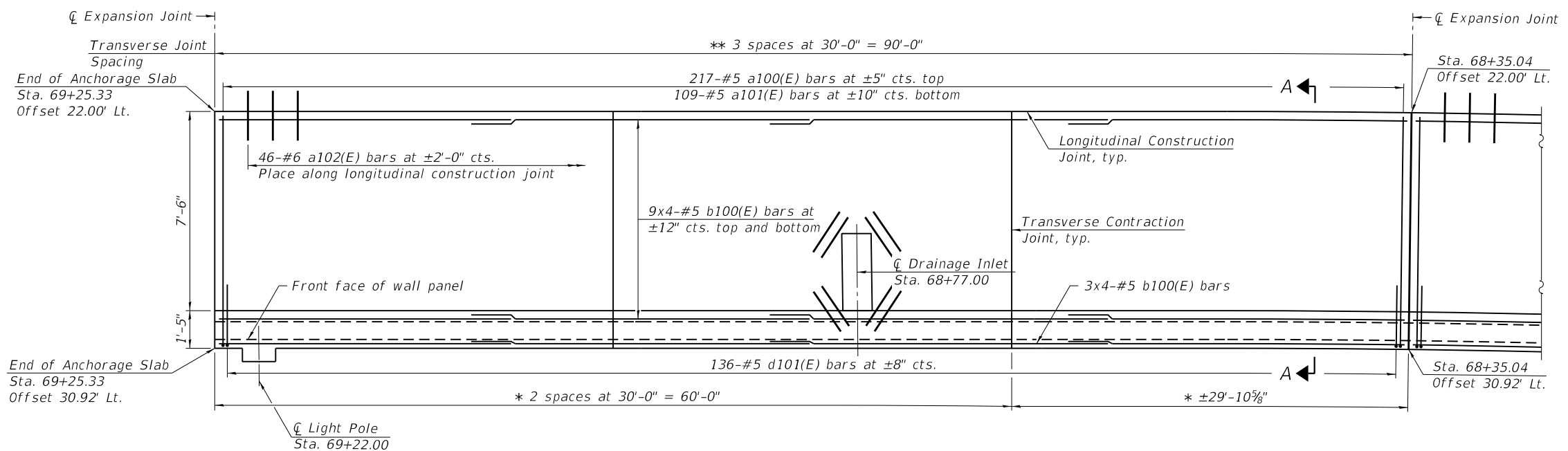
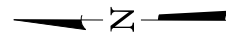
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section A-A see sheet SB-24 and for Section F-F see SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)

MODEL: Sheet
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| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_08_Moment_Slab - W1.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

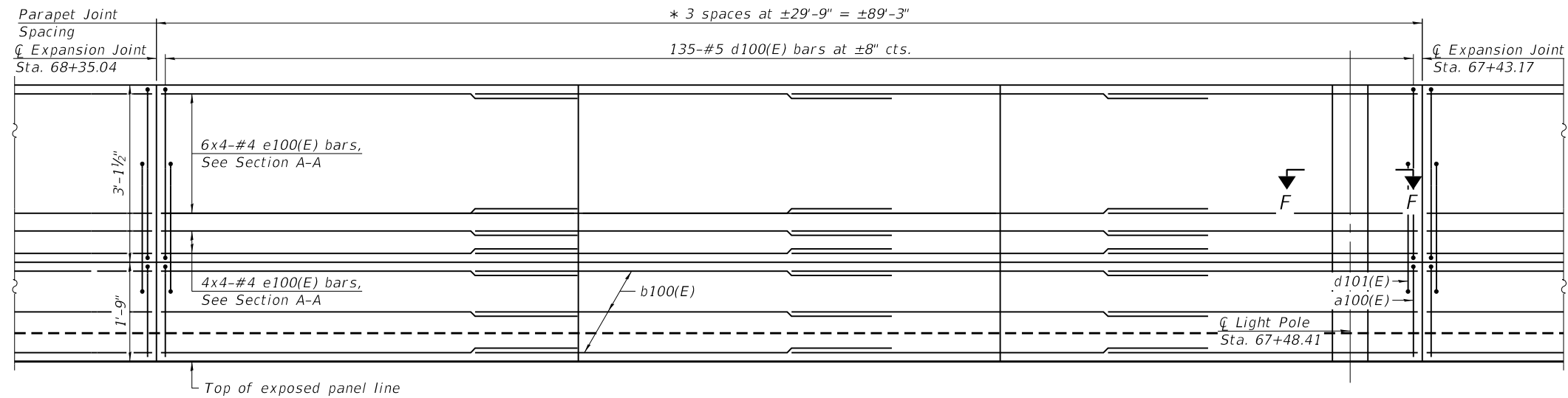
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ANCHORAGE SLAB (1 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-8 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 602 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

MODEL: Sheet
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 4/5/2023 12:34:24 PM



OUTSIDE ELEVATION OF WEST PARAPET
 (West Anchorage Slab)

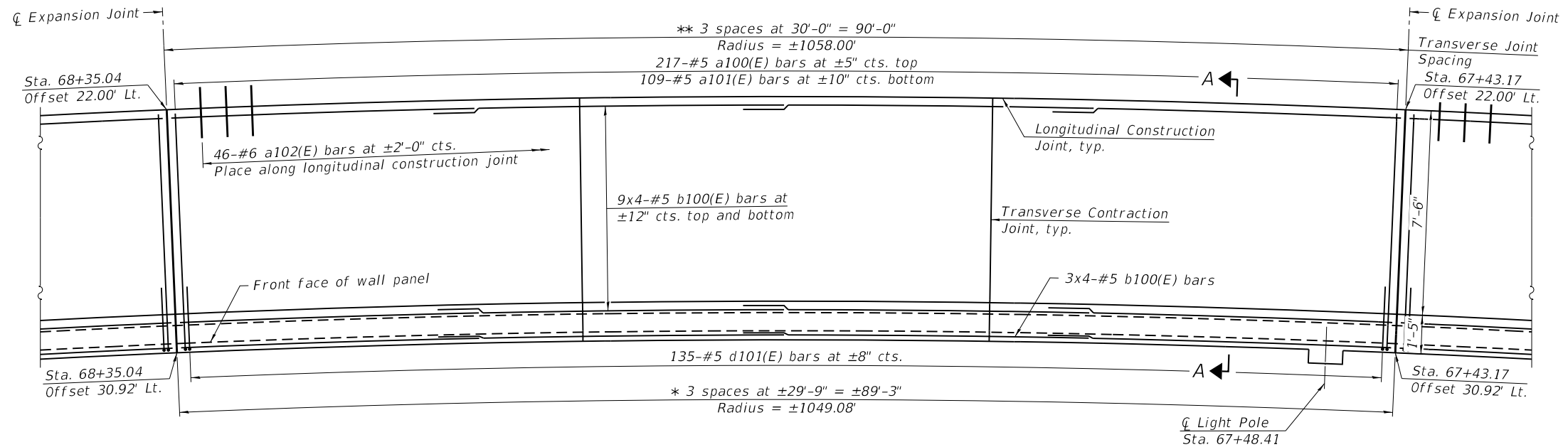
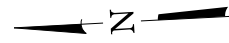
Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section A-A see sheet SB-24 and for Section F-F see SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP

#4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
 (West Anchorage Slab)



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_09_Moment Slab - W2.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

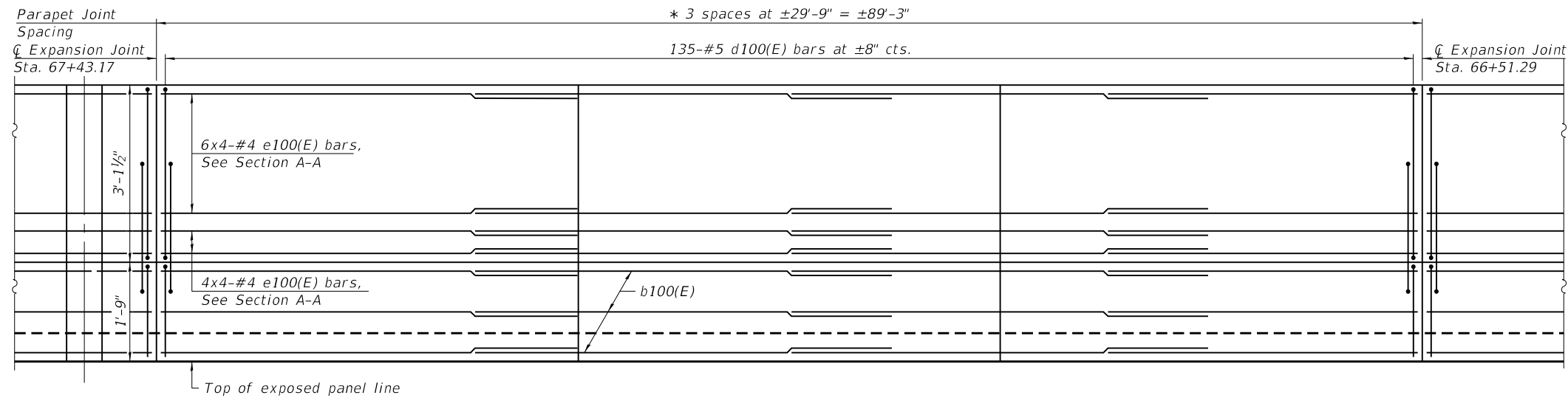
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST ANCHORAGE SLAB (2 OF 7)
 STRUCTURE NO. 058-W004

SHEET SB-9 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 603 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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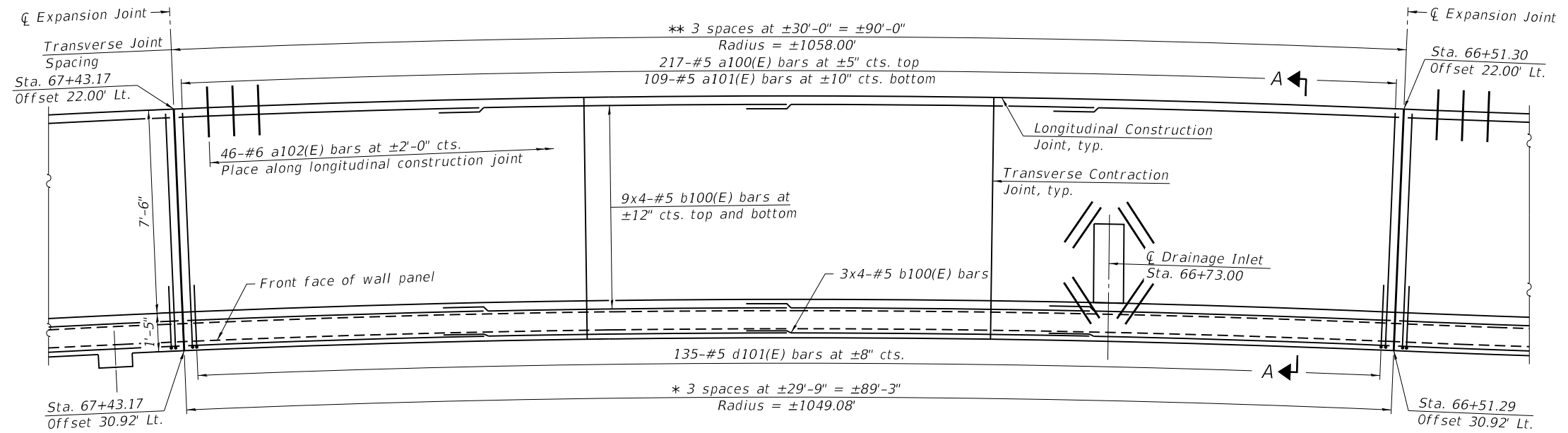
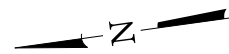


OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

- Notes:
1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
 2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
 3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
 4. Stations and offsets are measured from \square Brush College Road.
 5. For Section A-A see sheet SB-24.
 6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
 7. For light pole and junction box details, see Electrical Plans.
 8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)



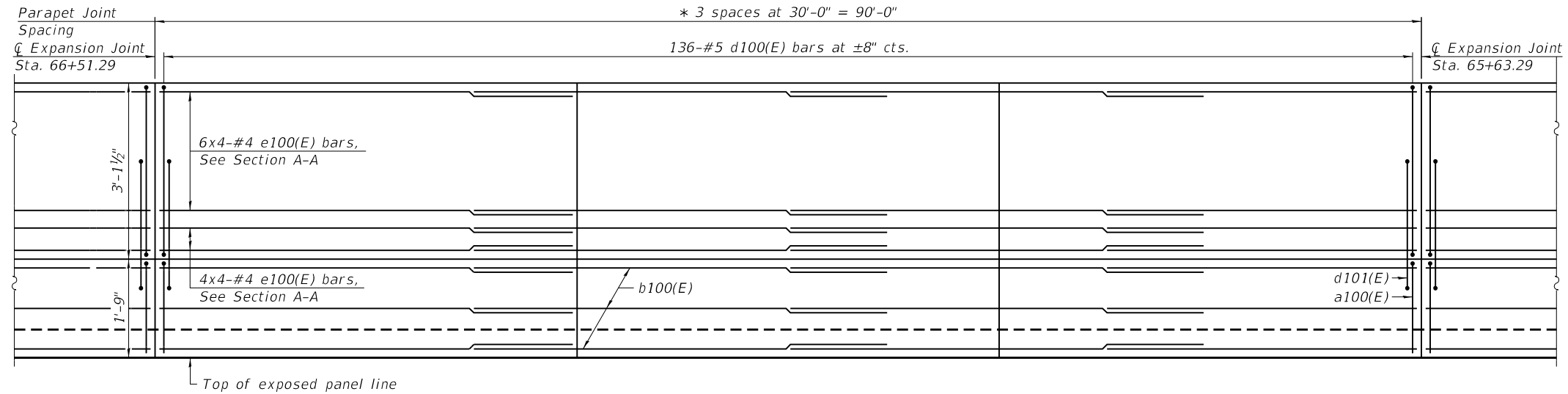
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| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ANCHORAGE SLAB (3 OF 7)
STRUCTURE NO. 058-W004

SHEET SB-10 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 604 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

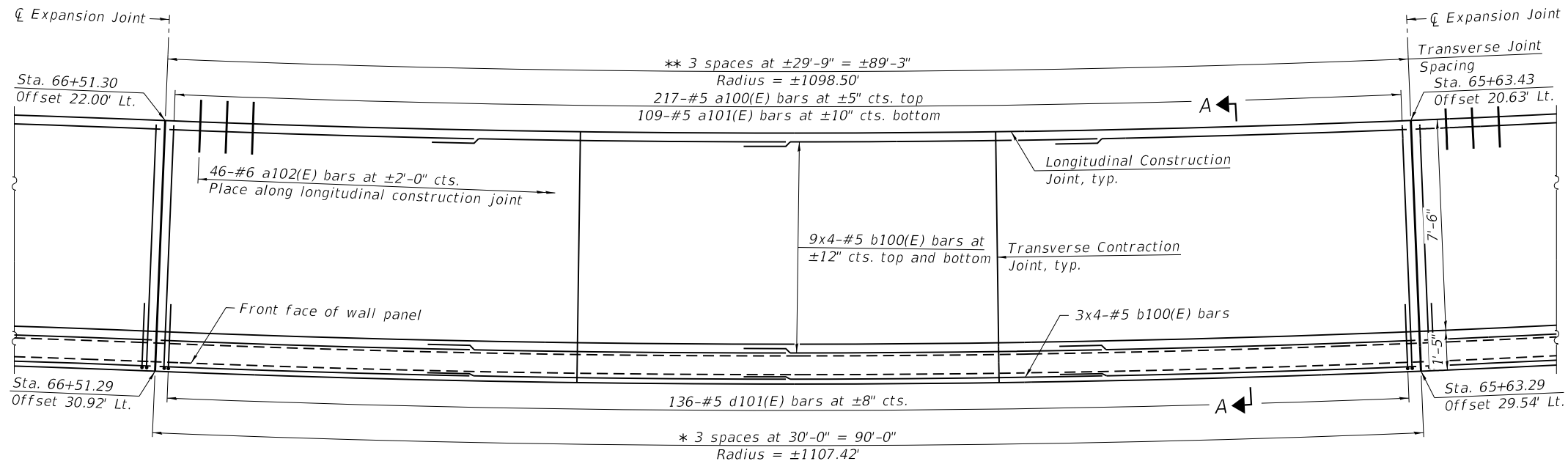
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from \square Brush College Road.
5. For Section A-A see sheet SB-24.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)

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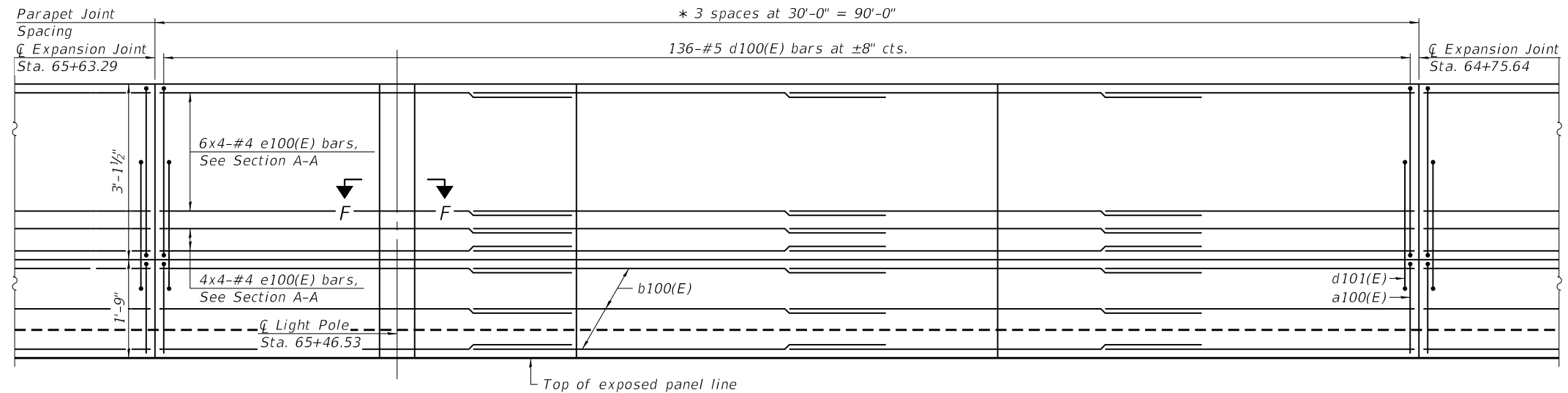
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| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ANCHORAGE SLAB (4 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-11 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 605 |
| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |



OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

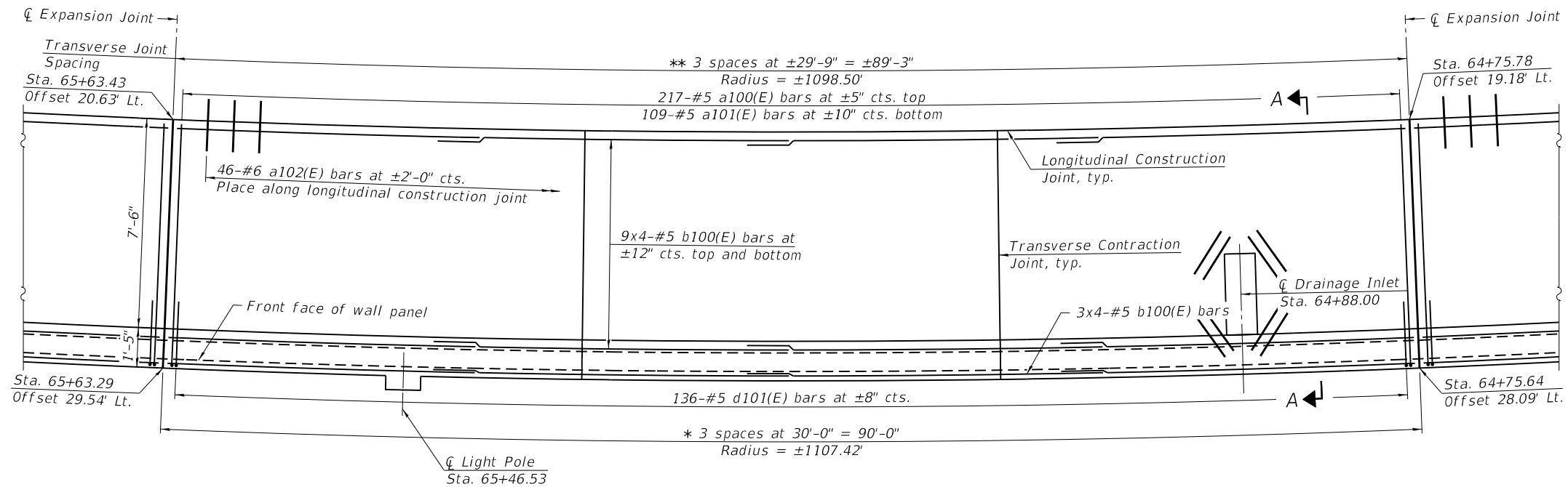
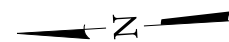
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section A-A see sheet SB-24 and for Section F-F see SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)

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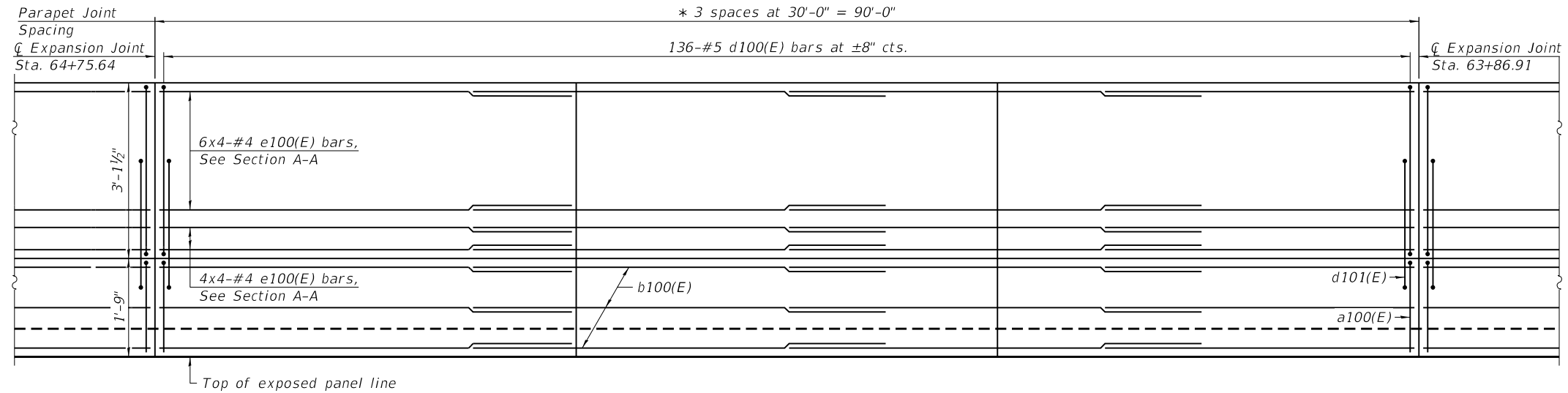
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| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ANCHORAGE SLAB (5 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-12 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 606 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |



OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

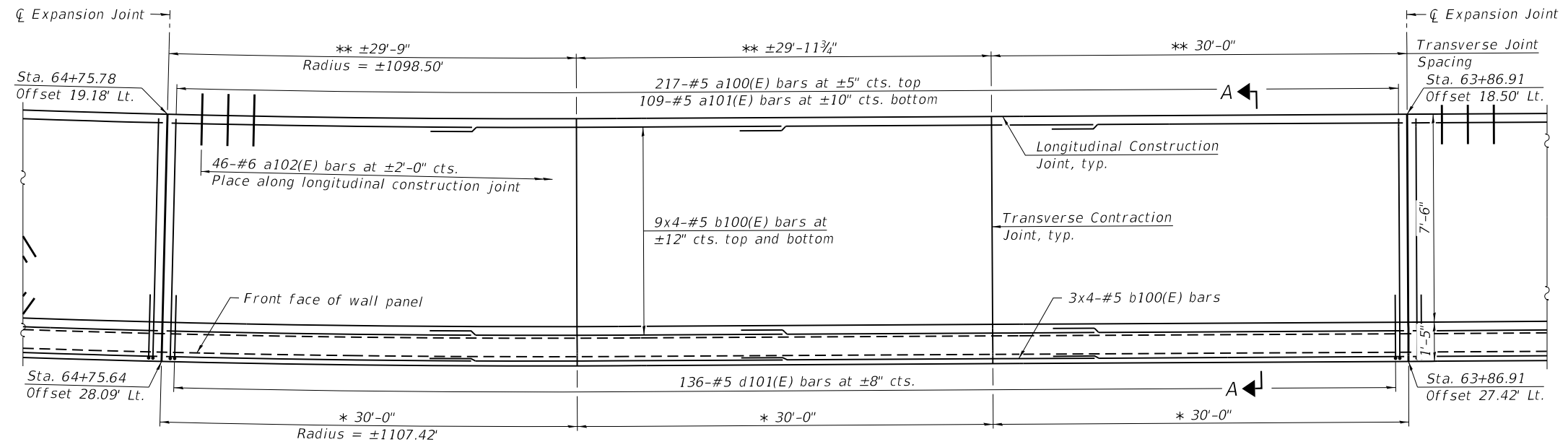
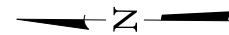
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from \square Brush College Road.
5. For Section A-A see sheet SB-24.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)

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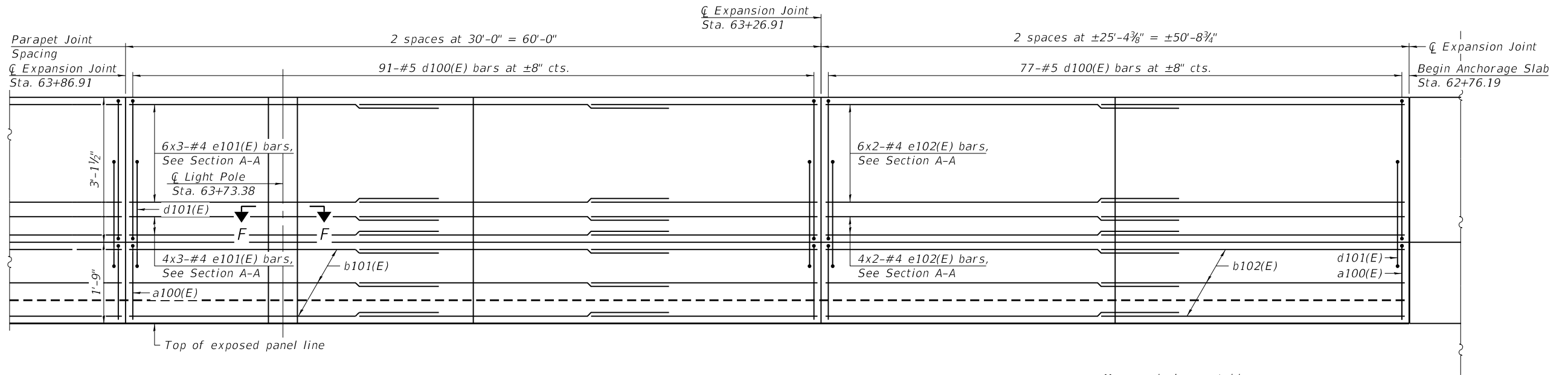
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| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ANCHORAGE SLAB (6 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-13 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 607 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



OUTSIDE ELEVATION OF WEST PARAPET
(West Anchorage Slab)

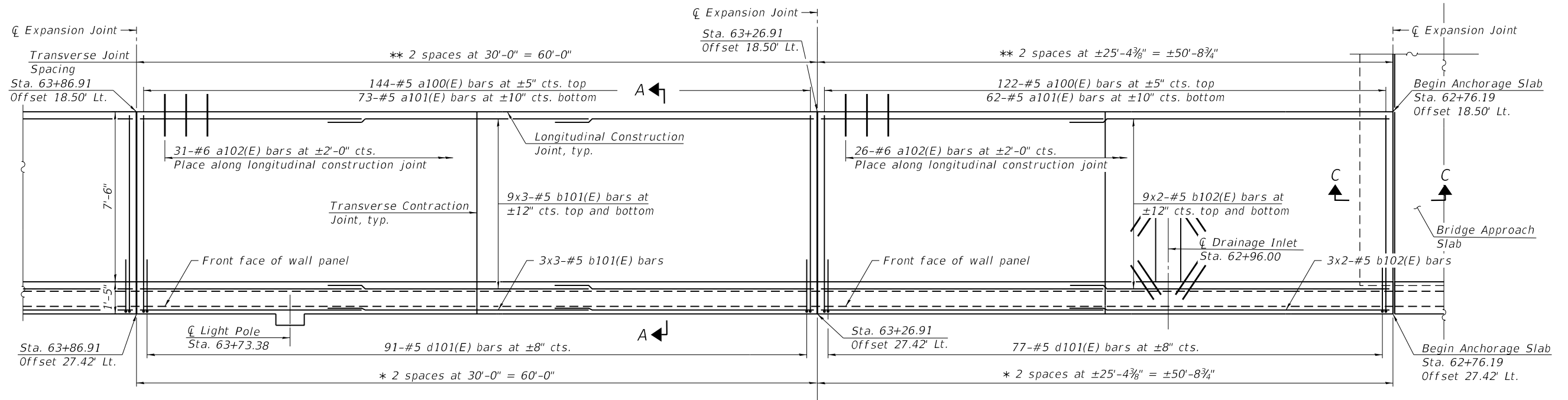
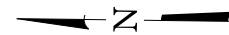
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Sections A-A and C-C see sheet SB-24 and for Section F-F see sheet SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(West Anchorage Slab)

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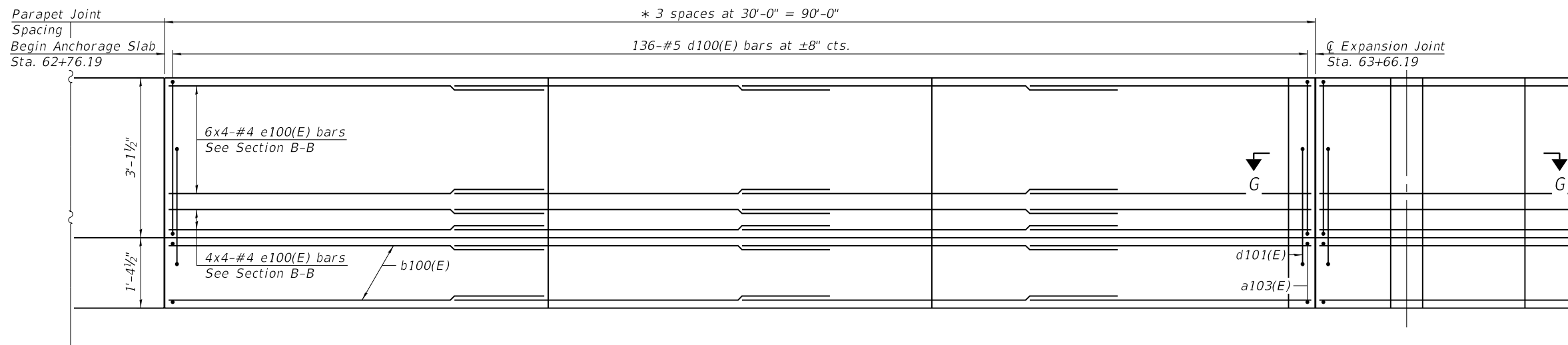
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| PLOT SCALE = 10:0.0000 " = 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ANCHORAGE SLAB (7 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-14 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 608 |
| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |



OUTSIDE ELEVATION OF EAST PARAPET
(East Anchorage Slab)

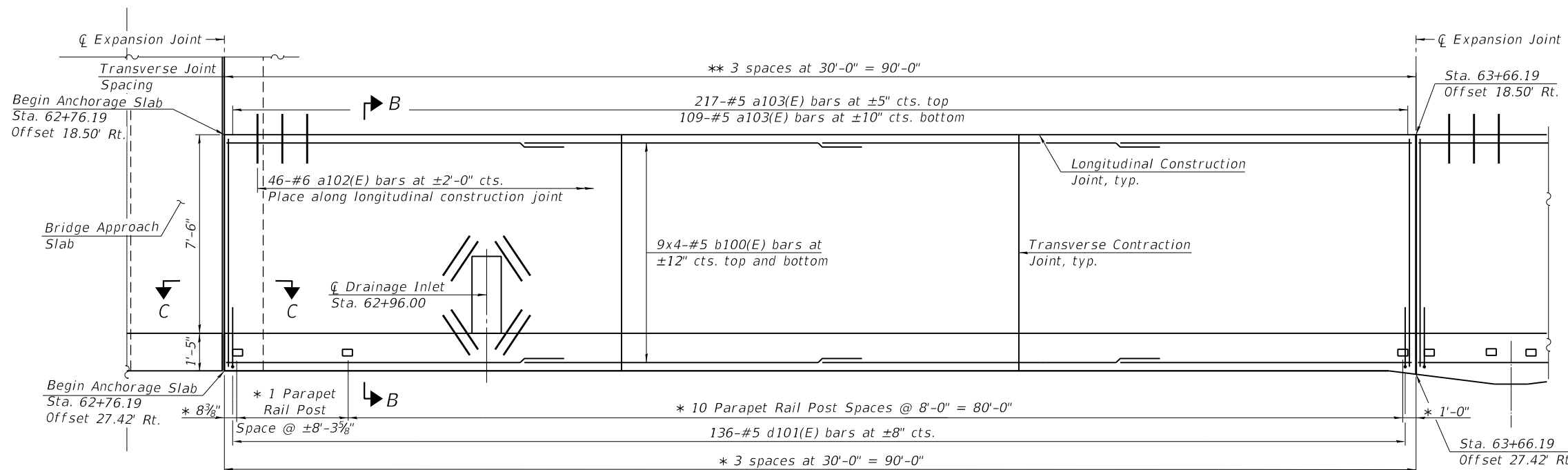
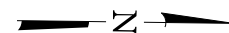
* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Sections B-B and C-C see sheet SB-24 and for Section G-G see sheet SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(East Anchorage Slab)

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| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
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| PLOT DATE = | CHECKED - MDC | REVISED - |

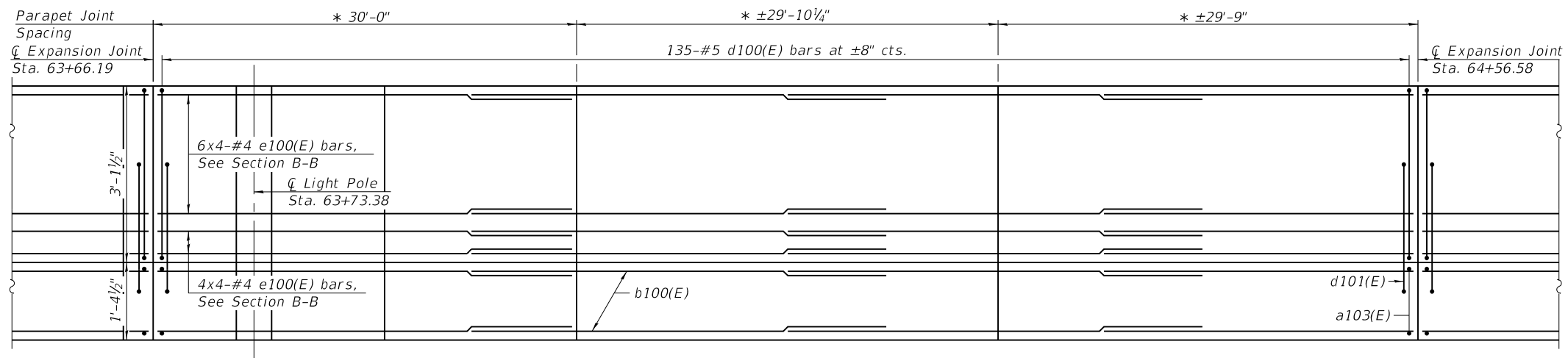
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ANCHORAGE SLAB (1 OF 7)
STRUCTURE NO. 058-W004

SHEET SB-15 OF SB-35 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 609 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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 4/5/2023 12:35:15 PM



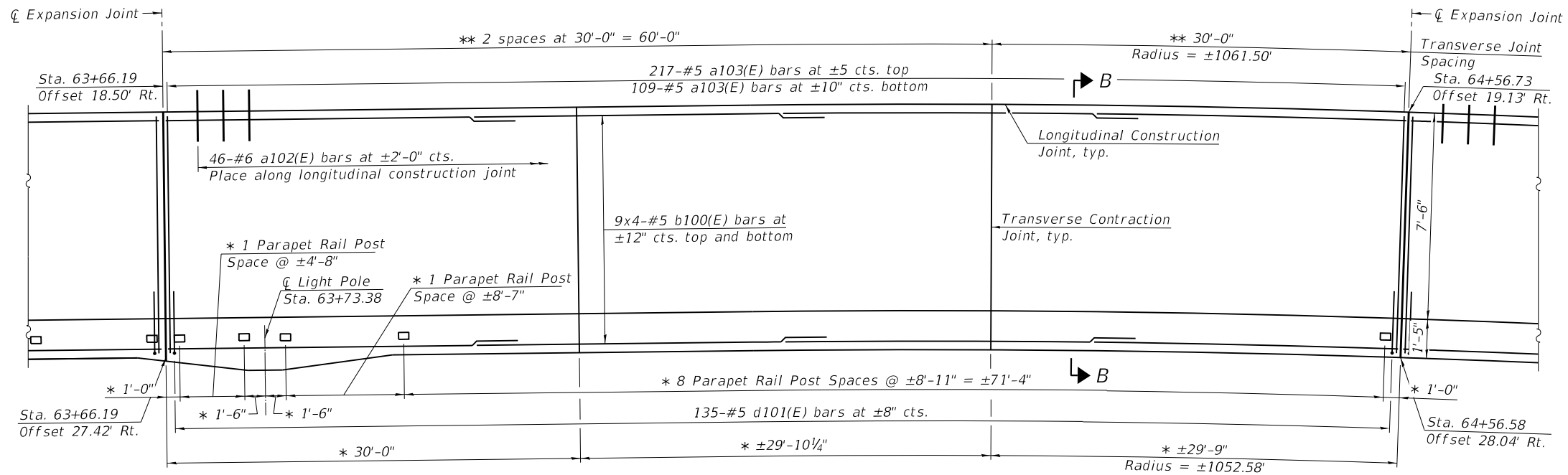
OUTSIDE ELEVATION OF EAST PARAPET
(East Anchorage Slab)

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
 #4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
(East Anchorage Slab)



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_16_Moment_Slab - E2.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

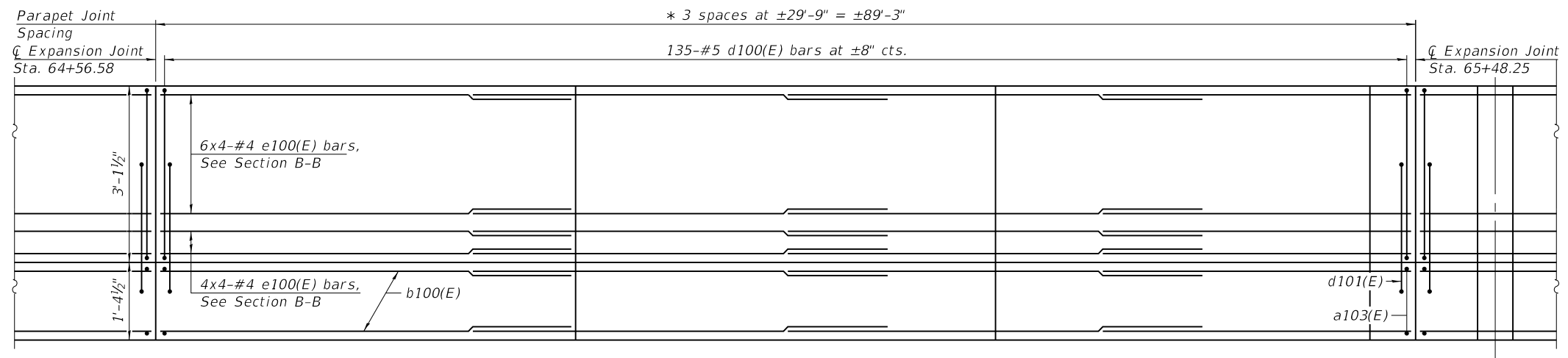
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ANCHORAGE SLAB (2 OF 7)
STRUCTURE NO. 058-W004**

SHEET SB-16 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 610 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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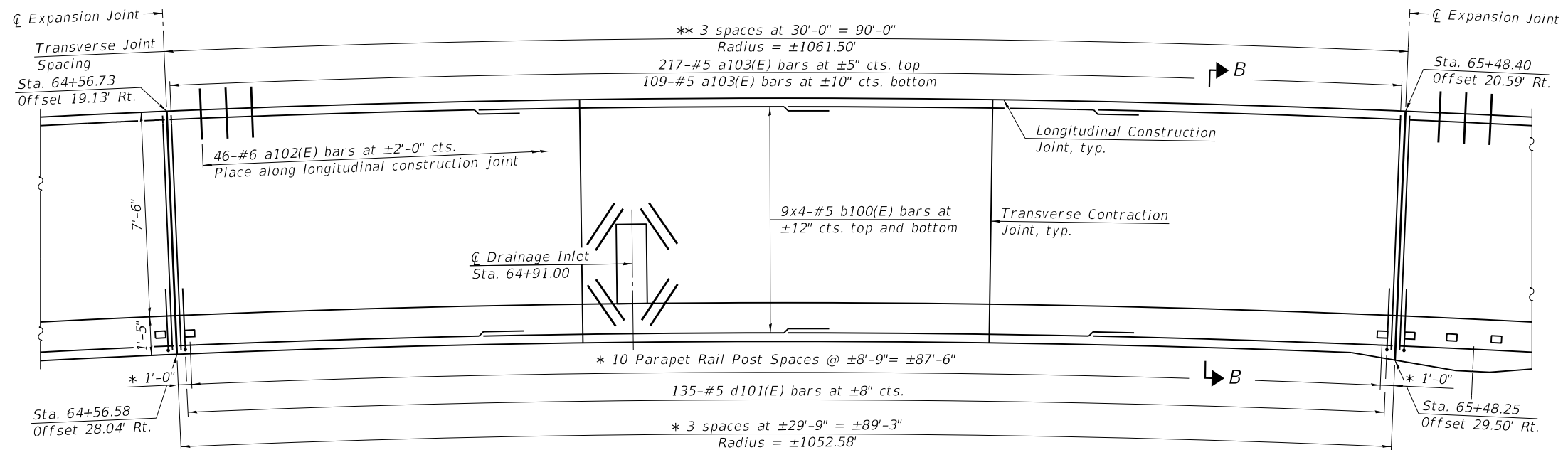
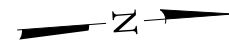
OUTSIDE ELEVATION OF EAST PARAPET
(East Anchorage Slab)

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
#4 Bar = 2'-8"
#5 Bar = 3'-4"



PLAN
(East Anchorage Slab)

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

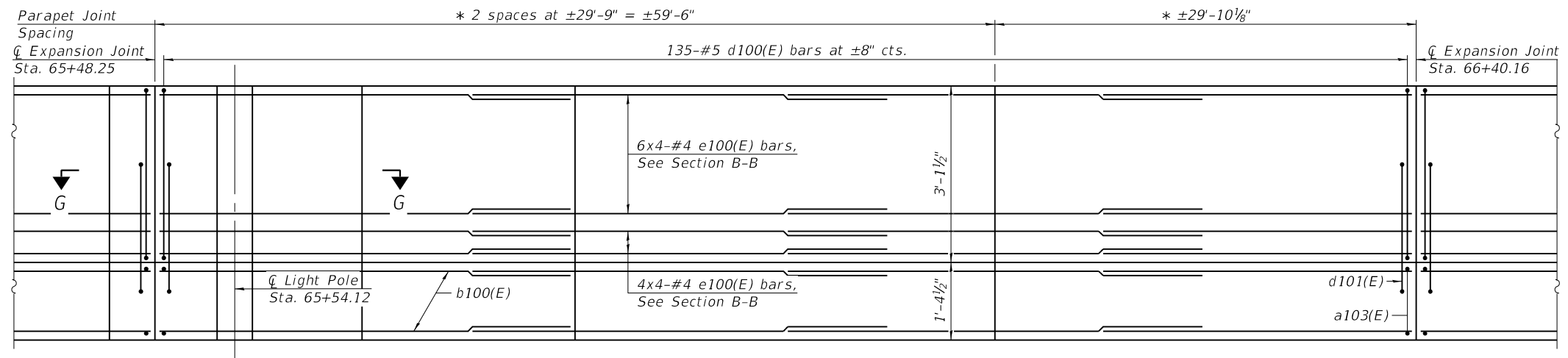
**EAST ANCHORAGE SLAB (3 OF 7)
STRUCTURE NO. 058-W004**

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 611 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET SB-17 OF SB-35 SHEETS

| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_17_Moment_Slab - E3.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

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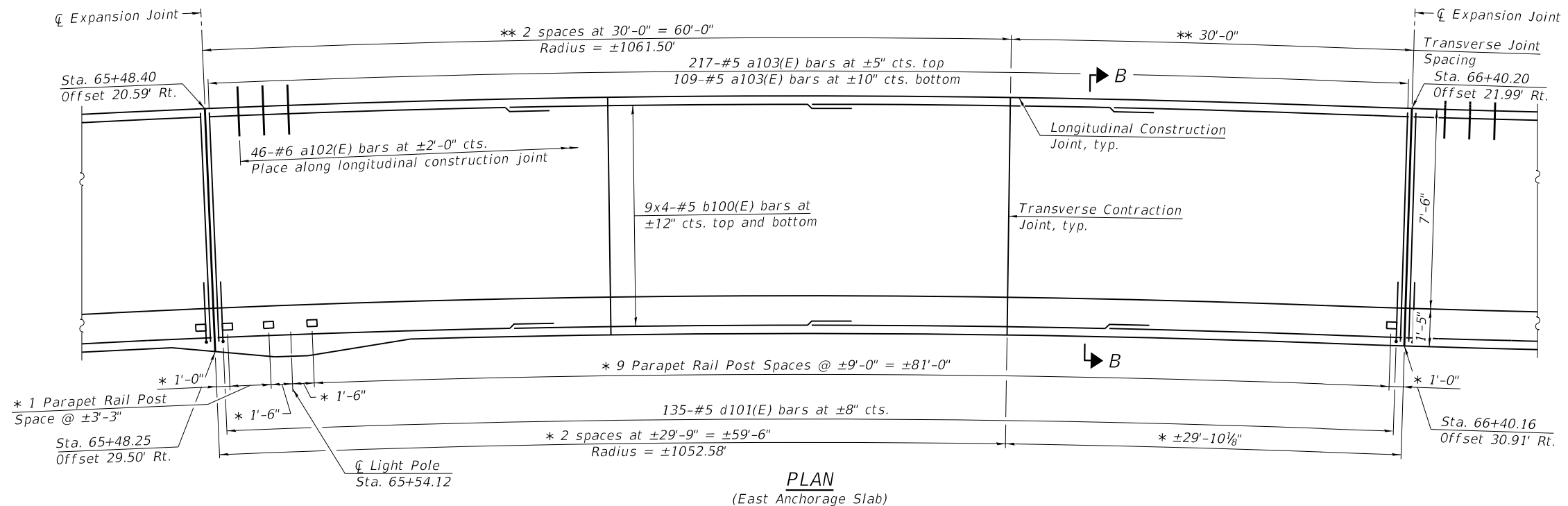
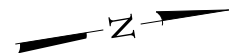
OUTSIDE ELEVATION OF EAST PARAPET
 (East Anchorage Slab)

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24 and for Section G-G see sheet SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
 #4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
 (East Anchorage Slab)



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_18_Moment Slab - E4.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

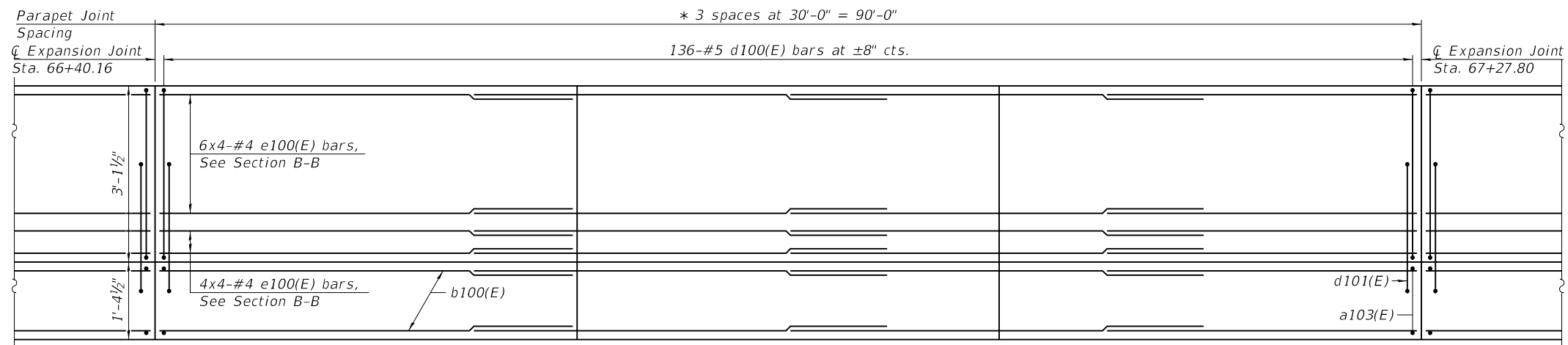
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ANCHORAGE SLAB (4 OF 7)
STRUCTURE NO. 058-W004

SHEET SB-18 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 612 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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OUTSIDE ELEVATION OF EAST PARAPET
 (East Anchorage Slab)

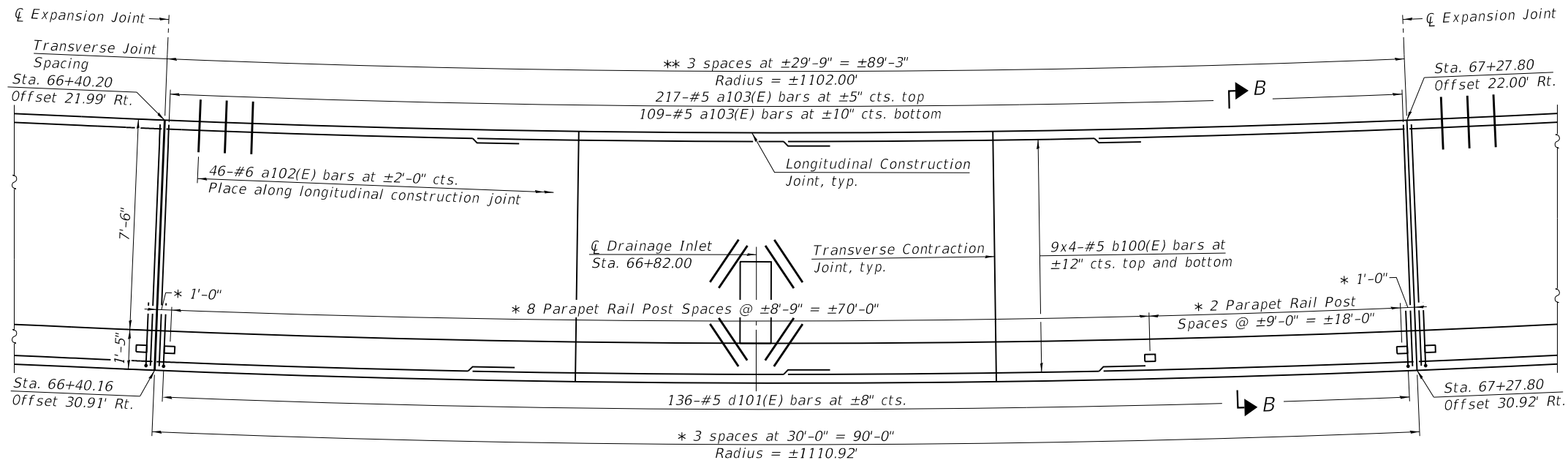
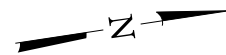
Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP

#4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
 (East Anchorage Slab)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ANCHORAGE SLAB (5 OF 7)
STRUCTURE NO. 058-W004

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 613 |
| CONTRACT NO. 95893 | | | | |

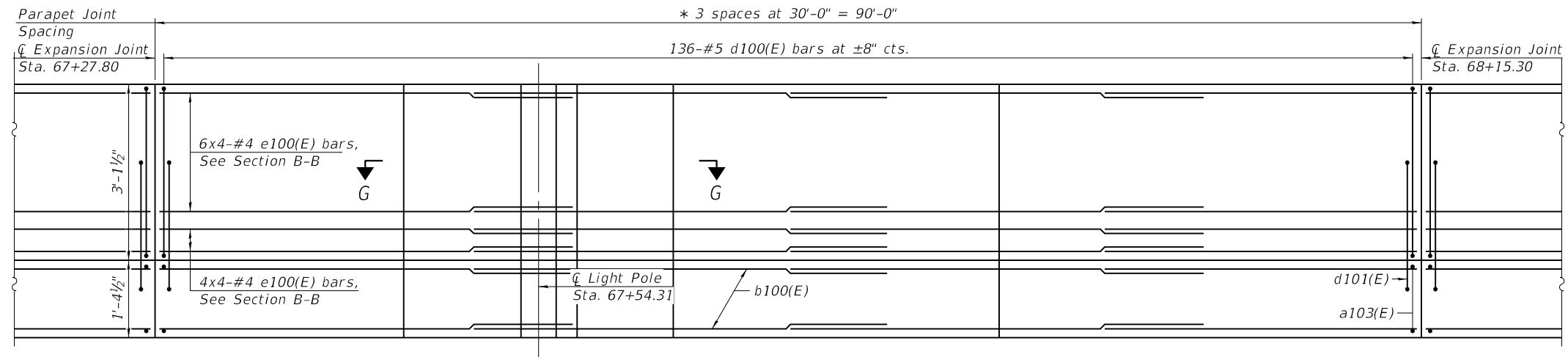
SHEET SB-19 OF SB-35 SHEETS

ILLINOIS FED. AID PROJECT



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 00603202_058-W004_19_Moment Slab - E5.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

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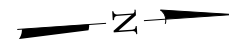


OUTSIDE ELEVATION OF EAST PARAPET
 (East Anchorage Slab)

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

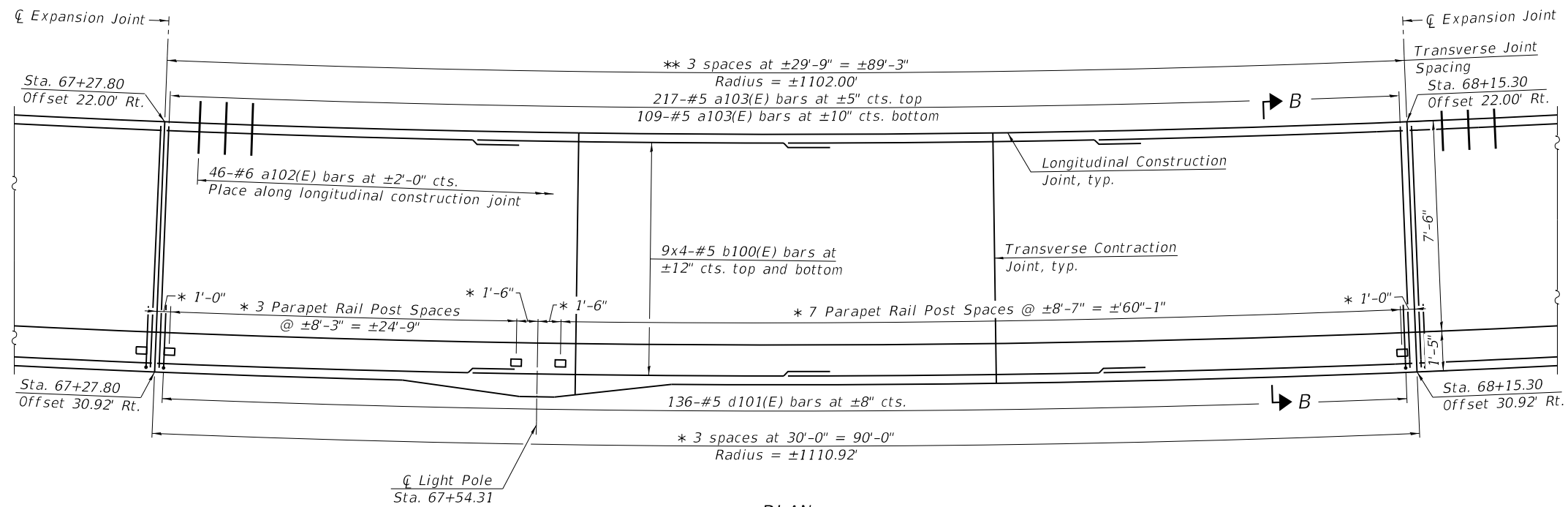
Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24 and for Section G-G see sheet SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.



MINIMUM BAR LAP

#4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
 (East Anchorage Slab)

**EAST ANCHORAGE SLAB (6 OF 7)
 STRUCTURE NO. 058-W004**

SHEET SB-20 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 614 |
| CONTRACT NO. 95893 | | | | |

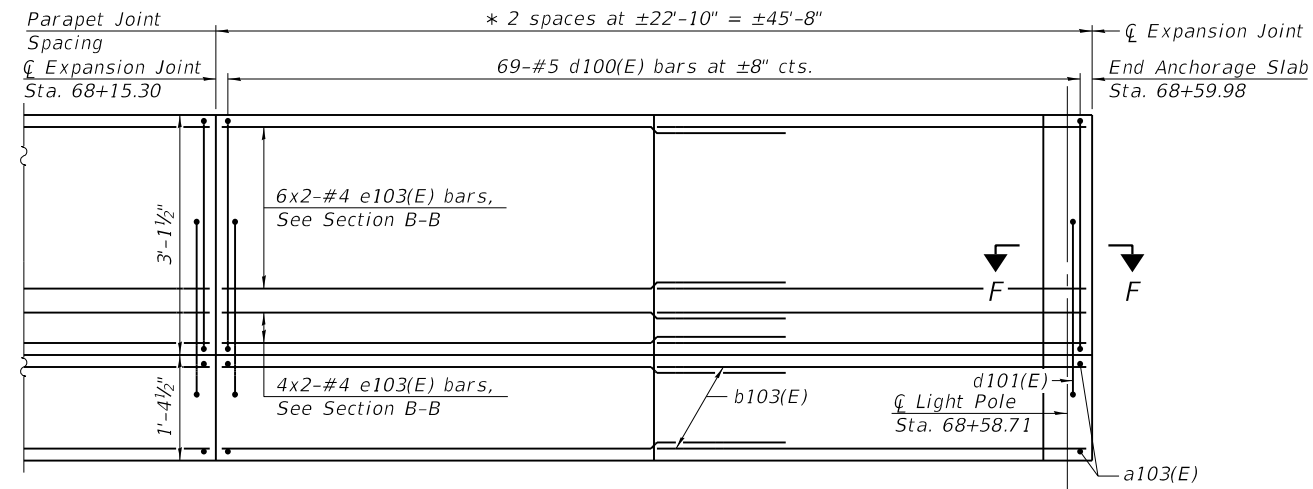
ILLINOIS FED. AID PROJECT



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_20_Moment_Slab - E6.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' = 1/4" in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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OUTSIDE ELEVATION OF EAST PARAPET
 (East Anchorage Slab)

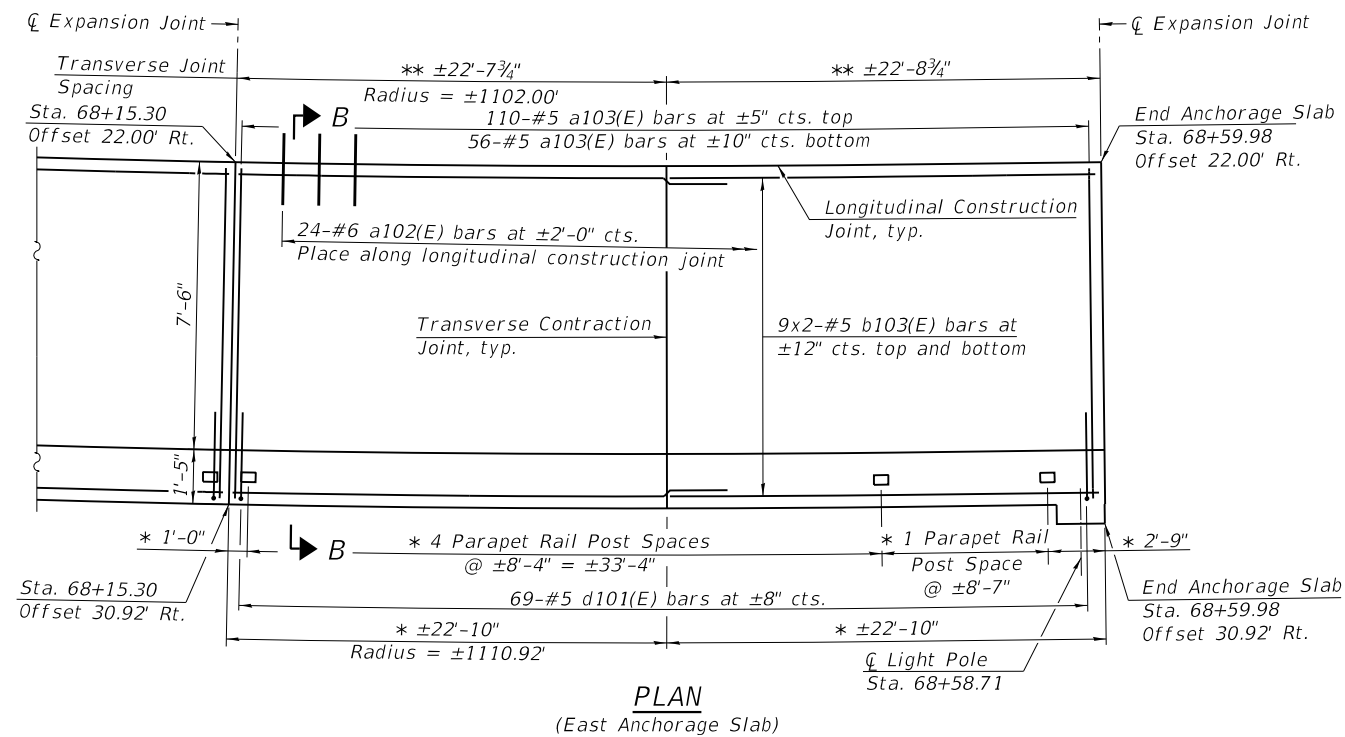
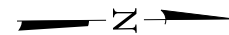
* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Portion of Anchorage Slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specifications.
3. Bars indicated thus 5x4-#5 etc. indicates 5 lines of bars with 4 lengths per line.
4. Stations and offsets are measured from Brush College Road.
5. For Section B-B see sheet SB-24 and for Section F-F see sheet SB-25.
6. For Anchorage Slab Details, light pole details, joint details, bar bend details and Bill of Material, see sheets SB-24, SB-25 and SB-26 of SB-35.
7. For light pole and junction box details, see Electrical Plans.
8. For drainage details, see sheets SB-24 and SB-25 of SB-35 and Drainage Plans.

MINIMUM BAR LAP

#4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN
 (East Anchorage Slab)



| | | |
|-------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 00603202_058-W004_21_Moment Slab - E7.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' = 1/4" = 1/4" | DRAWN - LMC | REVISED - |
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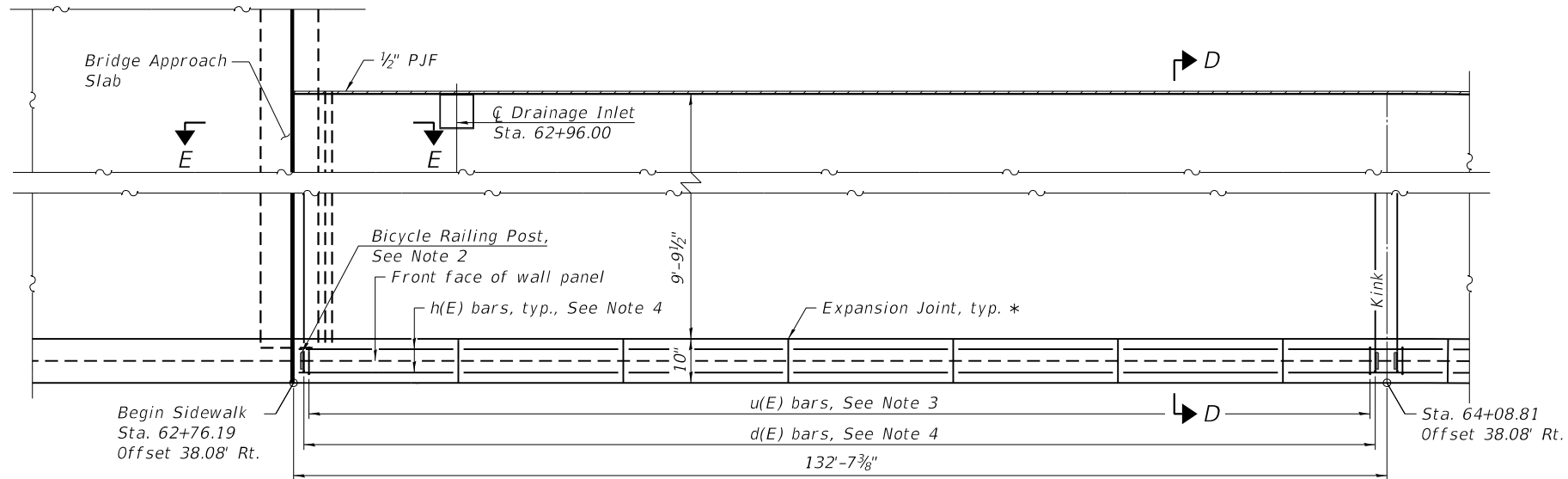
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ANCHORAGE SLAB (7 OF 7)
STRUCTURE NO. 058-W004

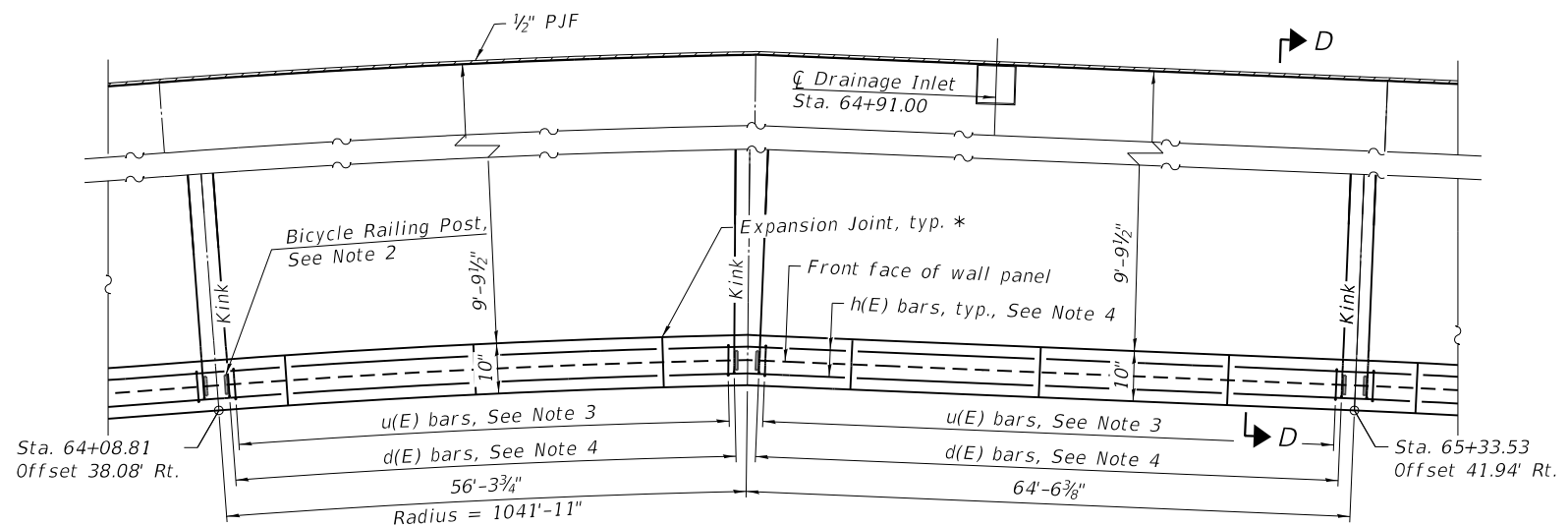
SHEET SB-21 OF SB-35 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 615 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

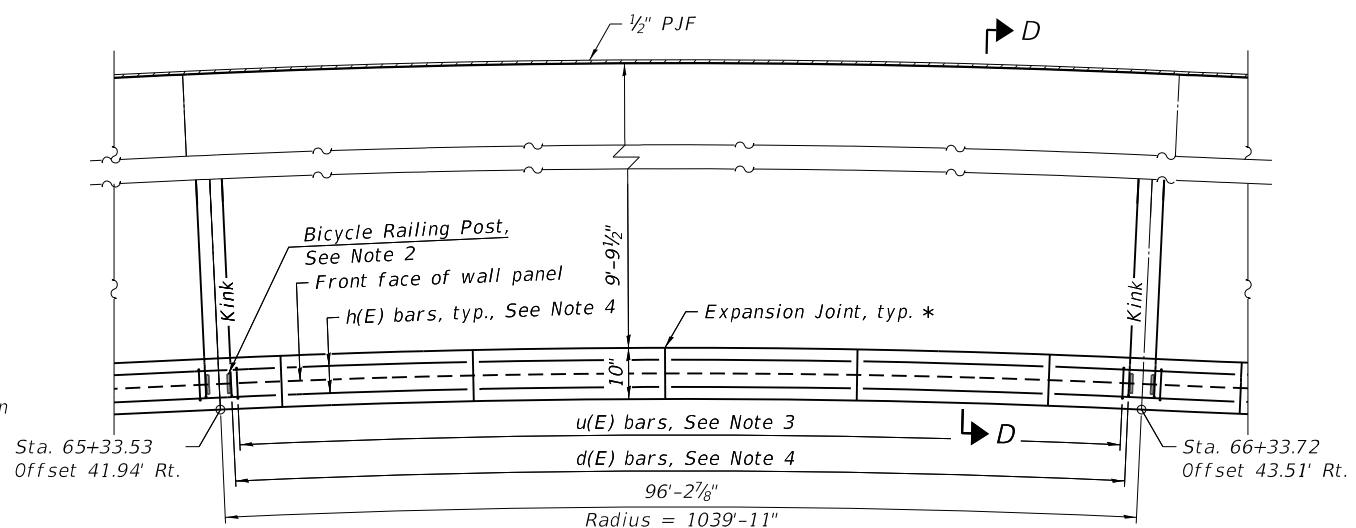
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PARTIAL PLAN



PARTIAL PLAN



PARTIAL PLAN

* Location to be determined by supplier of MSE Wall

Note:

1. See Sheet SB-24 for Section D-D and Section E-E.
2. Bicycle Railing post spacing shall be 10'-0" max. and coordinated with the supplier of the Mechanically Stabilized Earth Retaining Wall to avoid joints in the coping.
3. Place u(E) bars at MSE wall panel dowel locations. See Section D-D on Sheet SB-24.
4. The Mechanically Stabilized Earth retaining wall supplier shall design the coping and attachment to wall facing for the Bicycle Rail posts. The d(E) bar shown between the coping and sidewalk can be included if required. See Sheet SB-24.
5. Station and offsets are measured from Brush College Rd.



| | | |
|---------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_22_Sidewalk - 1.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 20:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
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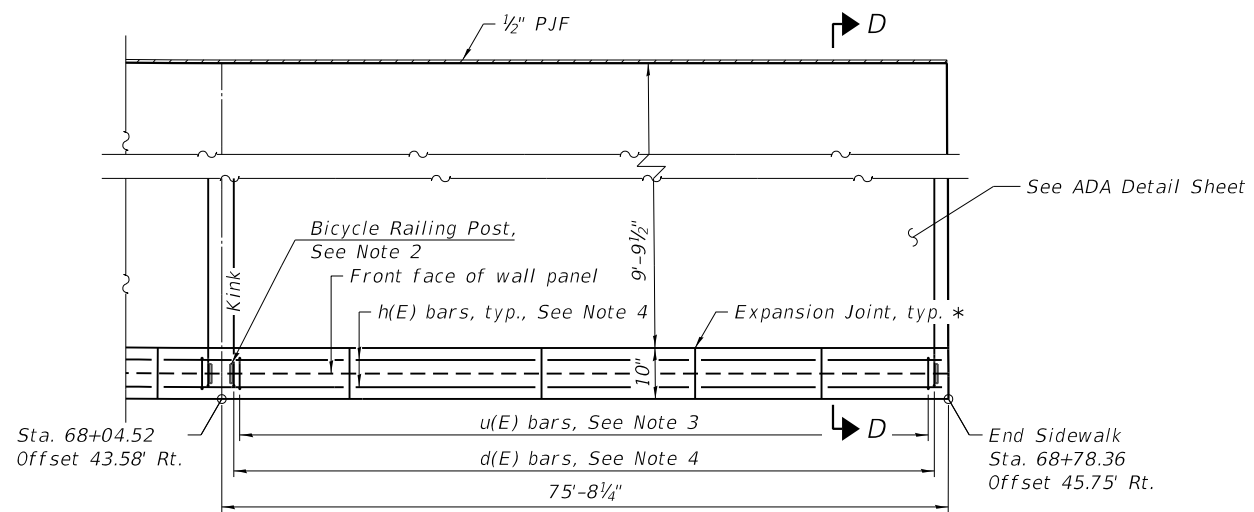
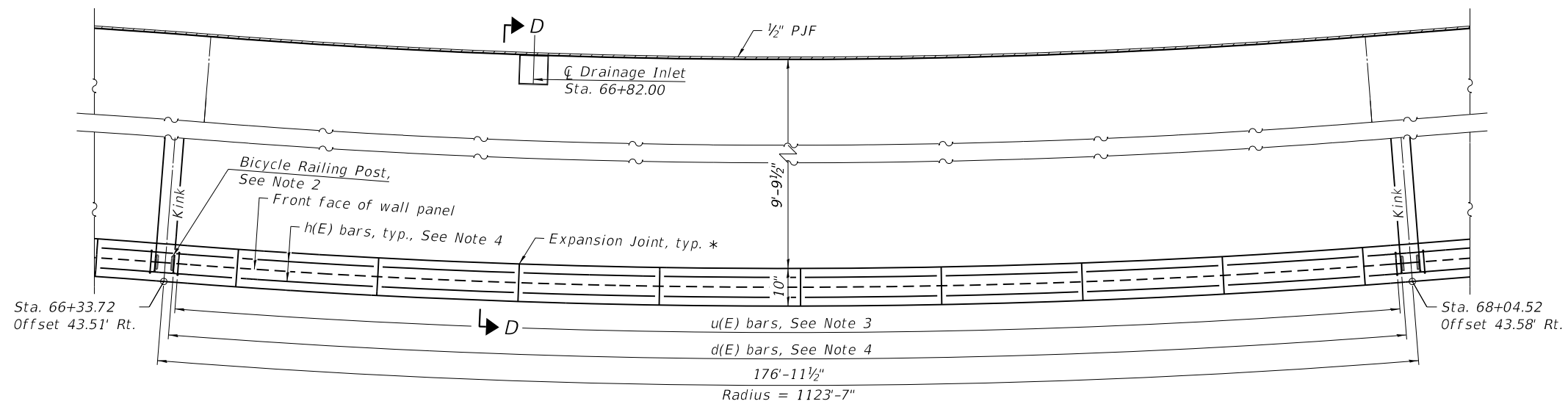
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SIDEWALK (1 OF 2)
 STRUCTURE NO. 058-W004

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 616 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET SB-22 OF SB-35 SHEETS

MODEL: Default
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* Location to be determined by supplier of MSE Wall

Note:

1. See Sheet SB-24 for Section D-D
2. Bicycle Railing post spacing shall be 10'-0" max. and coordinated with the supplier of the Mechanically Stabilized Earth Retaining Wall to avoid joints in the coping.
3. Place u(E) bars at MSE wall panel dowel locations. See Section D-D on Sheet SB-24.
4. The Mechanically Stabilized Earth retaining wall supplier shall design the coping and attachment to wall facing for the Bicycle Rail posts. The d(E) bar shown between the coping and sidewalk can be included if required. See Sheet SB-24.
5. Stations and offsets are measured from B Brush College Rd.



| | | |
|---------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W004_23_Sidewalk - 2.dgn | CHECKED - KFO | REVISED - |
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| PLOT DATE = | CHECKED - MDC | REVISED - |

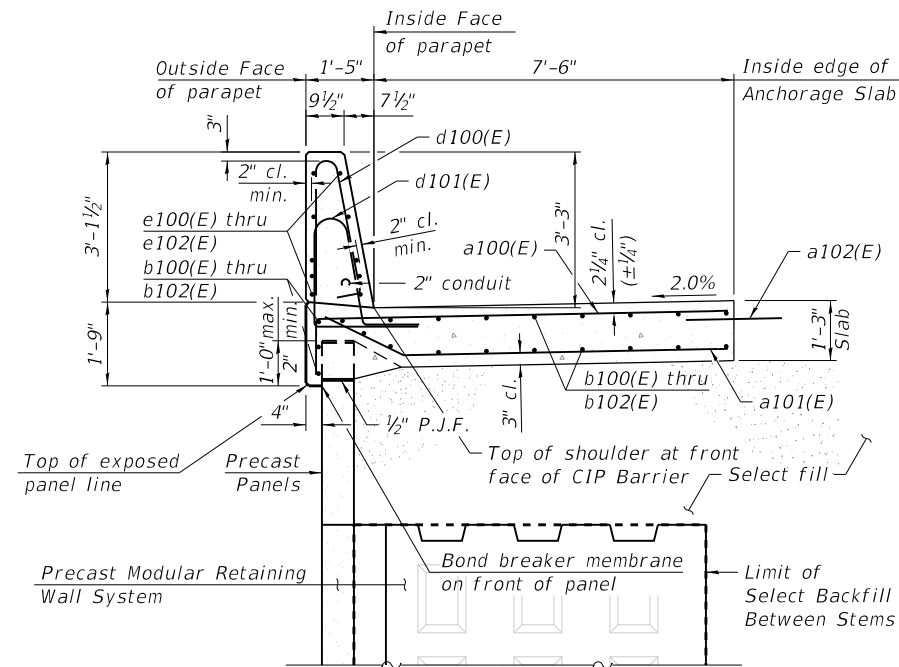
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SIDEWALK (2 OF 2)
 STRUCTURE NO. 058-W004

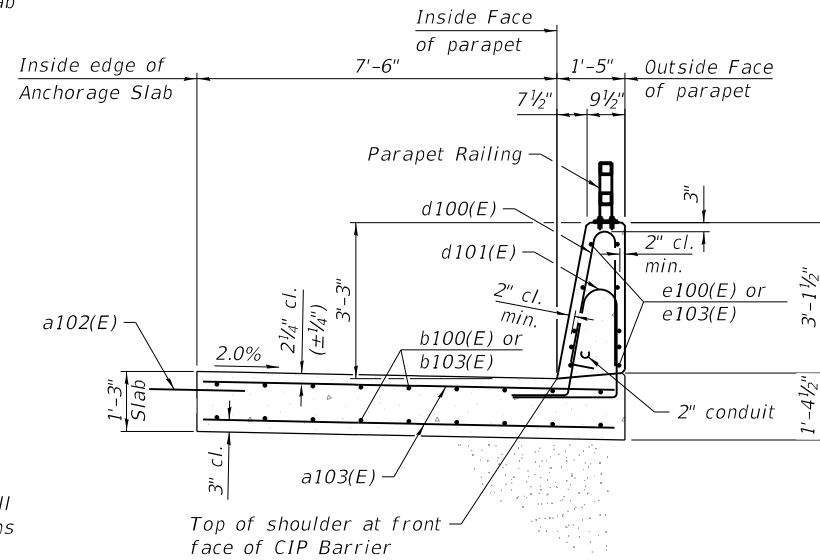
SHEET SB-23 OF SB-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 617 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

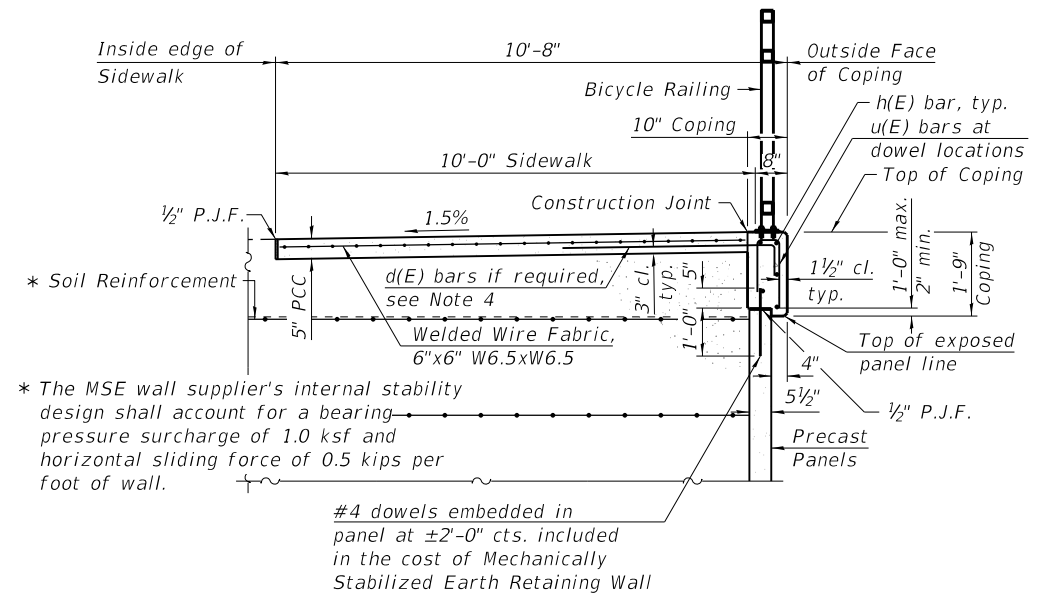
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 4/5/2023 12:36:20 PM



SECTION A-A



SECTION B-B



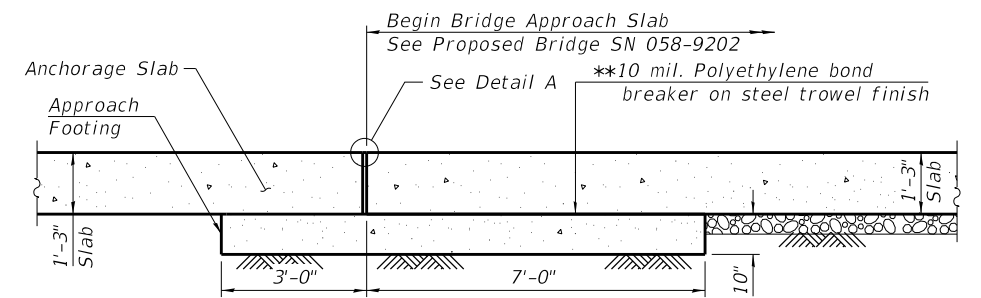
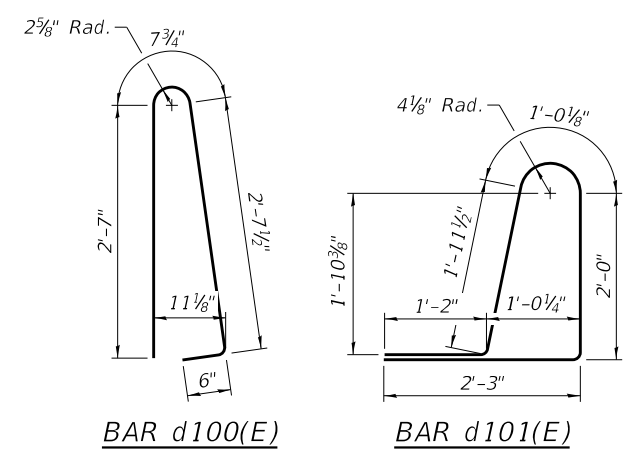
SECTION D-D
(See Note 4)

BILL OF MATERIAL

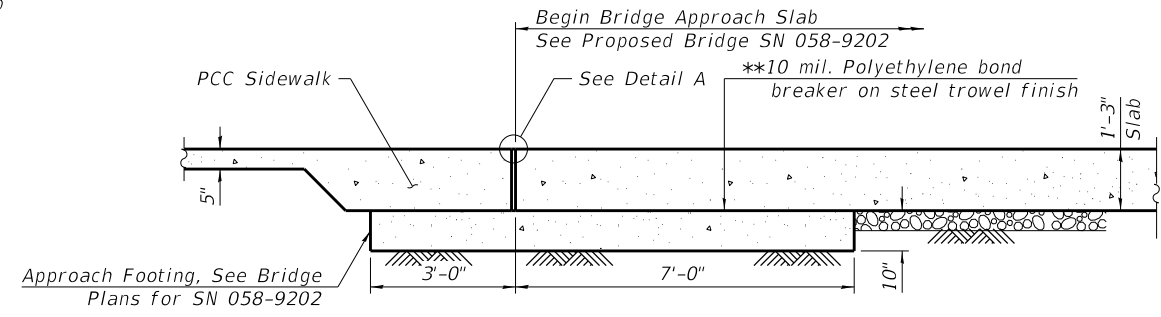
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|---------------------------------------------------|---------|---------|---------|----------|
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| a101(E) | 789 | #5 | 8'-7" | [Symbol] |
| a102(E) | 633 | #6 | 2'-0" | [Symbol] |
| a103(E) | 2122 | #5 | 8'-7" | [Symbol] |
| a104(E) | 56 | #5 | 2'-0" | [Symbol] |
| b100(E) | 936 | #5 | 24'-11" | [Symbol] |
| b101(E) | 63 | #5 | 22'-2" | [Symbol] |
| b102(E) | 42 | #5 | 26'-11" | [Symbol] |
| b103(E) | 36 | #5 | 24'-4" | [Symbol] |
| d100(E) | 1864 | #5 | 6'-5" | [Symbol] |
| d101(E) | 1864 | #5 | 8'-5" | [Symbol] |
| d102(E) | 24 | #6 | 4'-10" | [Symbol] |
| d103(E) | 60 | #6 | 8'-11" | [Symbol] |
| d104(E) | 12 | #6 | 5'-3" | [Symbol] |
| d105(E) | 12 | #6 | 8'-3" | [Symbol] |
| d106(E) | 12 | #6 | 7'-0" | [Symbol] |
| d107(E) | 36 | #4 | 5'-6" | [Symbol] |
| e100(E) | 480 | #4 | 24'-5" | [Symbol] |
| e101(E) | 30 | #4 | 21'-8" | [Symbol] |
| e102(E) | 20 | #4 | 26'-7" | [Symbol] |
| e103(E) | 20 | #4 | 24'-0" | [Symbol] |
| h100(E) | 30 | #4 | 9'-0" | [Symbol] |
| Item | Unit | Total | | |
| Reinforcement Bars, Epoxy Coated | Pound | 111,340 | | |
| Concrete Superstructure | Cu. Yd. | 679.1 | | |
| Protective Coat | Sq. Yd. | 2,301 | | |
| Portland Cement Concrete Sidewalk 5 inch, Special | Sq. Ft. | 5,900 | | |

- Notes:
- Cost of concrete, welded wire fabric, and P.J.F. for the PCC sidewalk shall be included in the cost of Portland Cement Concrete Sidewalk 5", Special.
 - Cost of concrete and reinforcing steel required for coping under the bicycle railing shall be included in the cost of Mechanically Stabilized Earth Retaining Wall.
 - Bicycle Railing post spacing shall be 10'-0" max. and coordinated with the supplier of the Mechanically Stabilized Earth Retaining Wall to avoid joints in the coping.
 - The Precast Mechanically Stabilized Earth retaining wall supplier's design of the coping and attachment to the wall facing shall account for the following service loads applied at the base of the Bicycle Rail posts. Horizontal sliding force of 0.7 kips and overturning moment of 3.1 kip-ft.

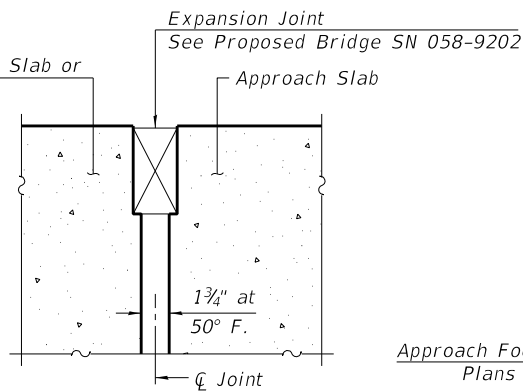
** Cost included with Concrete Superstructure. See Bridge Plans.



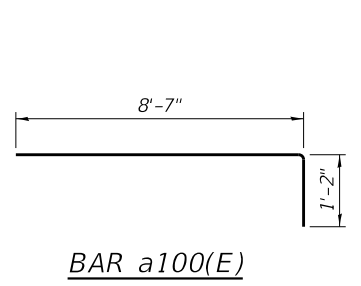
SECTION C-C



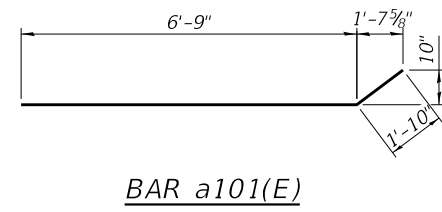
SECTION E-E



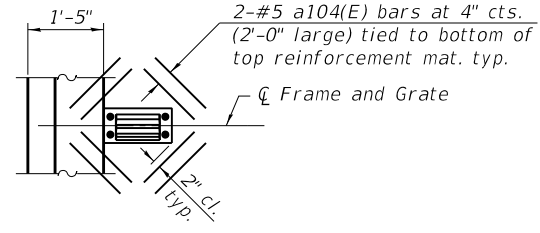
DETAIL A



BAR a100(E)



BAR a101(E)



DRAINAGE INLET

For location of drainage inlets, see Roadway Plans.

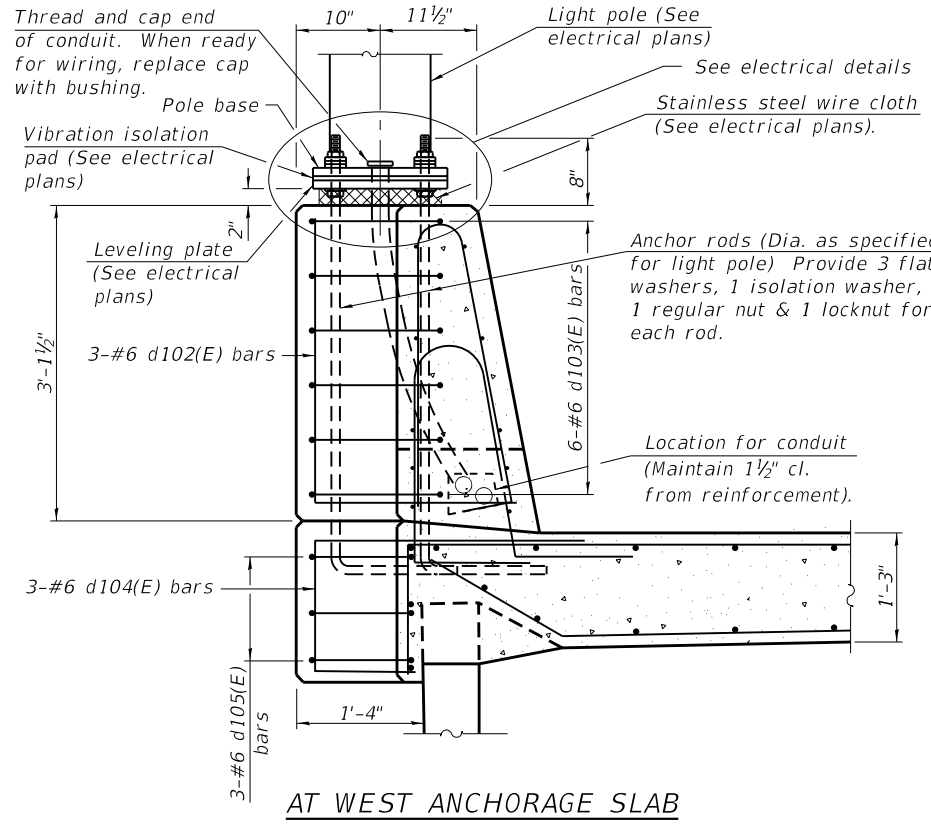
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 DEPARTMENT OF TRANSPORTATION**

**ANCHORAGE SLAB & WALL DETAILS (1 OF 3)
 STRUCTURE NO. 058-W004**

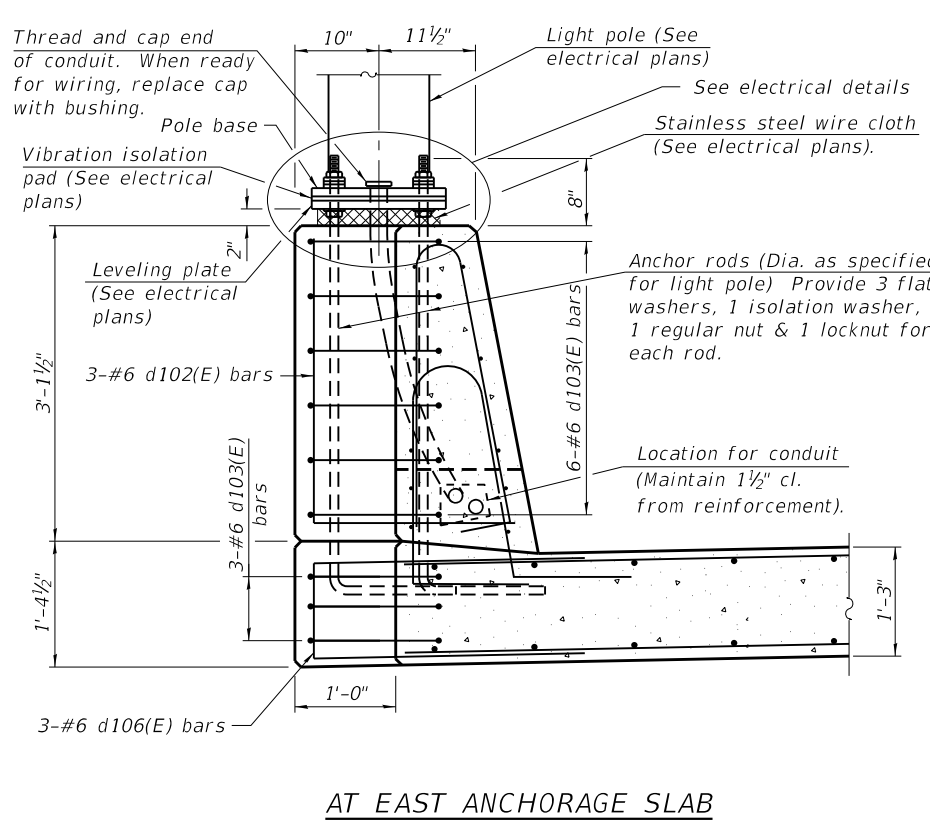
SHEET SB-24 OF SB-35 SHEETS

| | | | | |
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

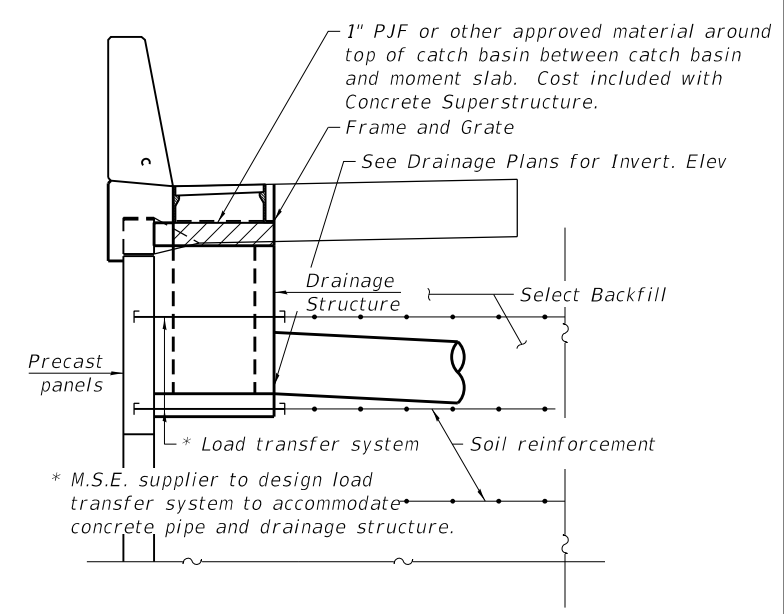
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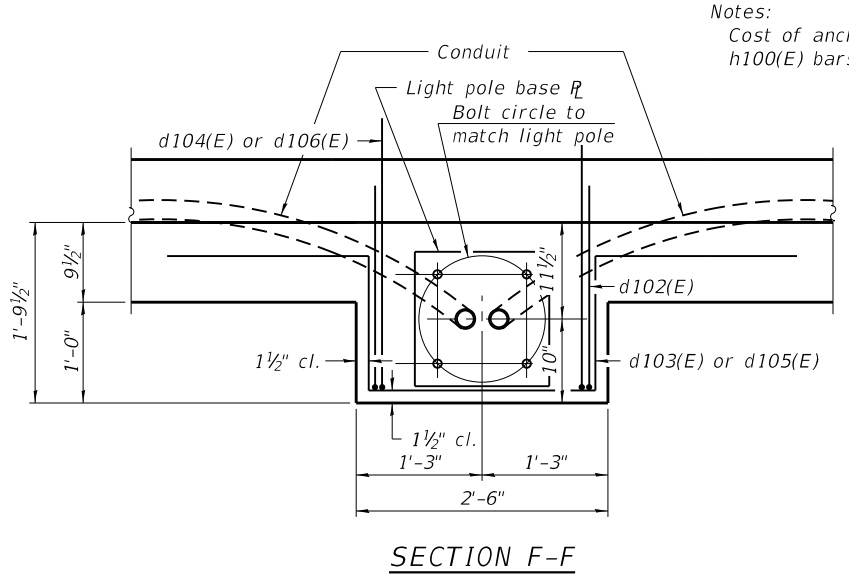
AT WEST ANCHORAGE SLAB



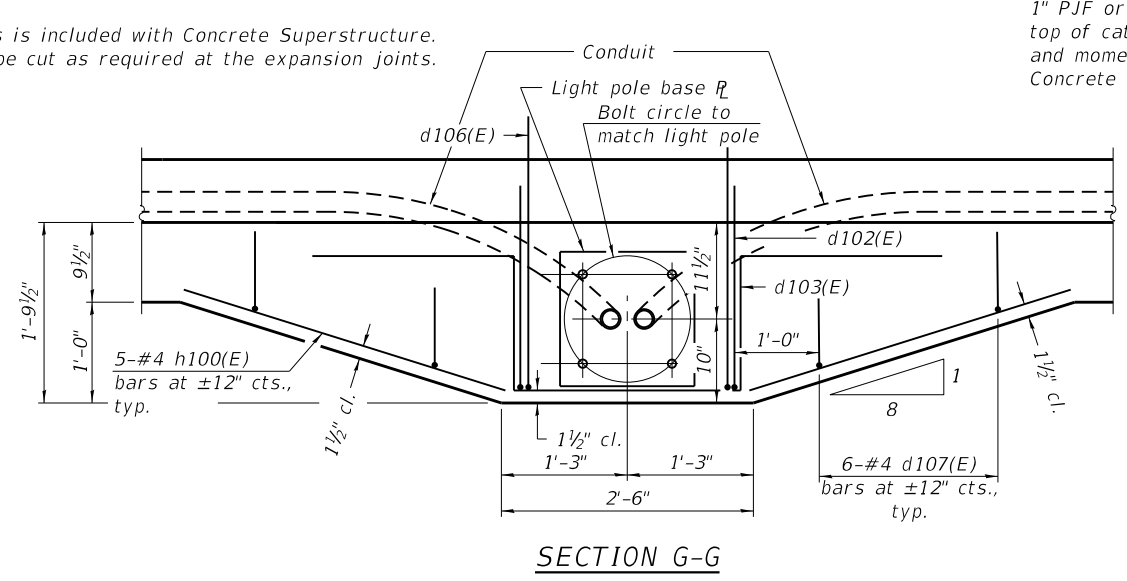
AT EAST ANCHORAGE SLAB



ANCHORAGE SLAB INLET SECTION



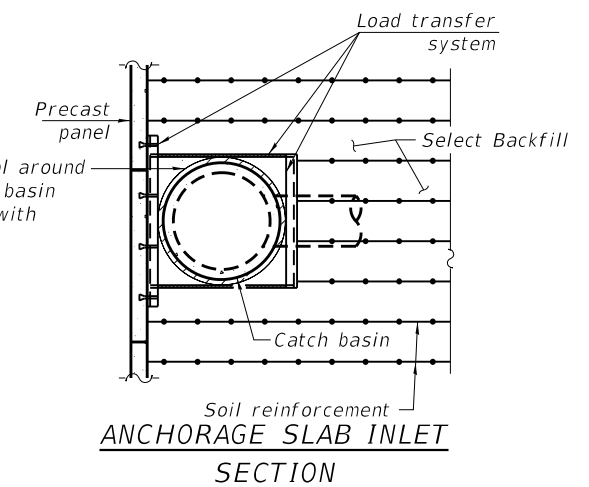
SECTION F-F



SECTION G-G

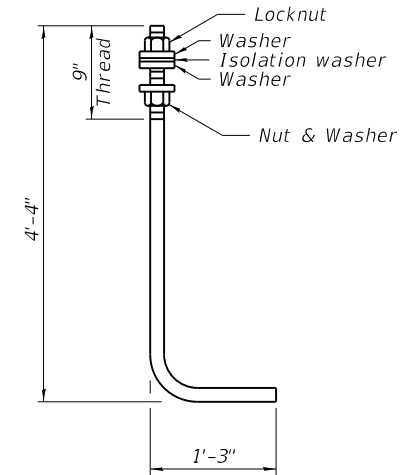
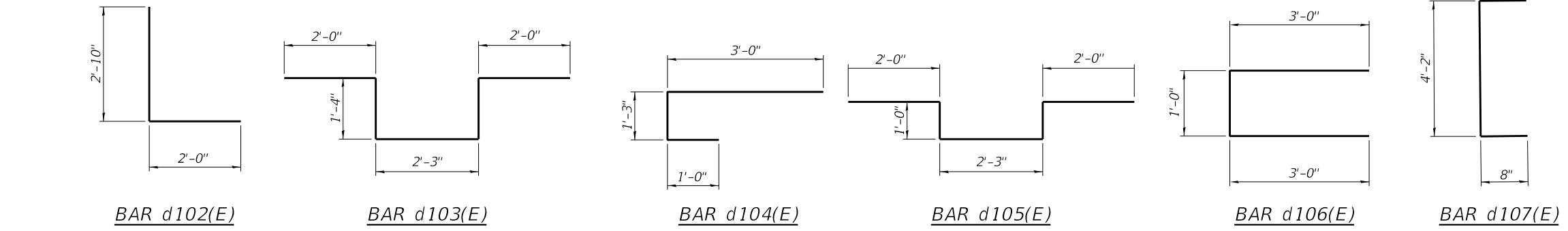
Notes:
 Cost of anchor rods is included with Concrete Superstructure.
 h100(E) bars shall be cut as required at the expansion joints.

1" PJF or other approved material around top of catch basin between catch basin and moment slab. Cost included with Concrete Superstructure.



ANCHORAGE SLAB INLET SECTION

LIGHT POLE PEDESTAL DETAILS



ANCHOR ROD
 Diameter as specified for light poles.
 (ASTM F 1554 Grade 105) Full length hot dipped galvanized



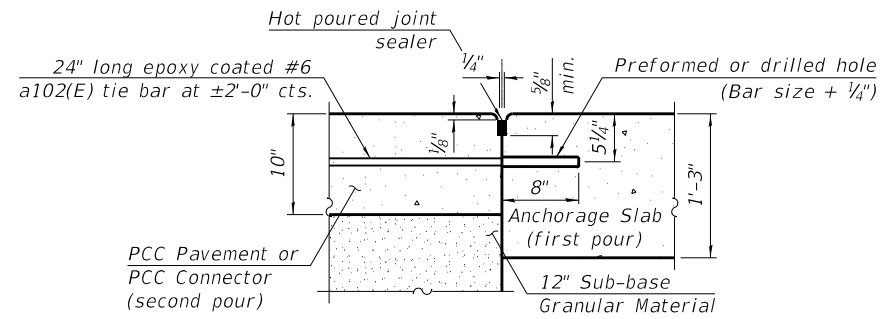
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

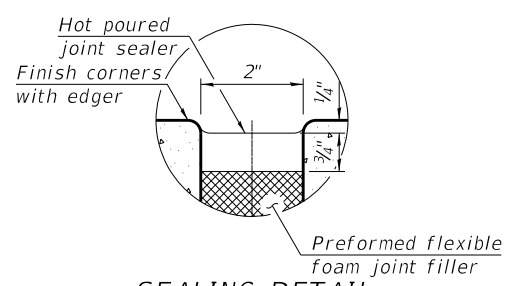
**ANCHORAGE SLAB & WALL DETAILS (2 OF 3)
 STRUCTURE NO. 058-W004**

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|---------------------------|------------------------|--------------|-------------------|---------------|
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

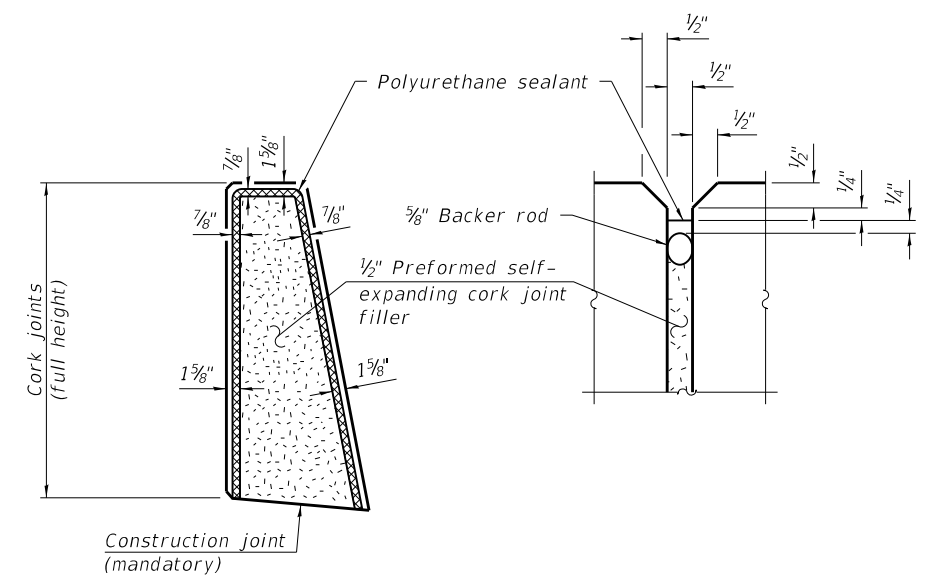
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**LONGITUDINAL CONSTRUCTION
 JOINT GROUTED-IN-PLACE
 TIE BAR**

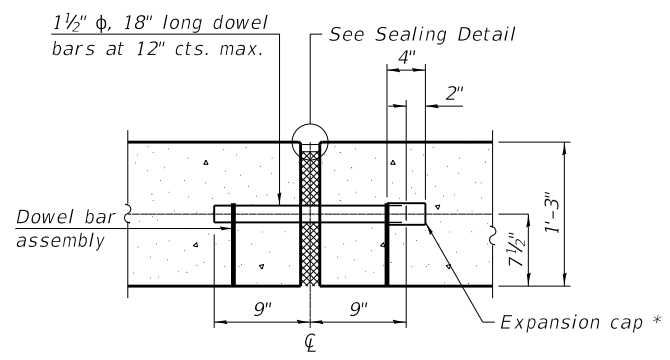


SEALING DETAIL



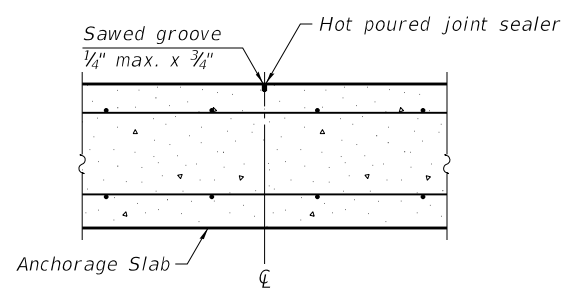
PARAPET EXPANSION JOINT DETAILS

Note:
 The polyurethane sealant shall be according to Article 1050.04 of the Standard Specifications and the color shall be gray.



* Expansion caps shall be installed on the exposed end of each dowel bar once the header has been removed and the joint filler material has been installed.

ANCHORAGE SLAB EXPANSION JOINT
 Expansion joint and dowel bars included in the cost of Concrete Superstructure



TRANSVERSE CONTRACTION JOINT

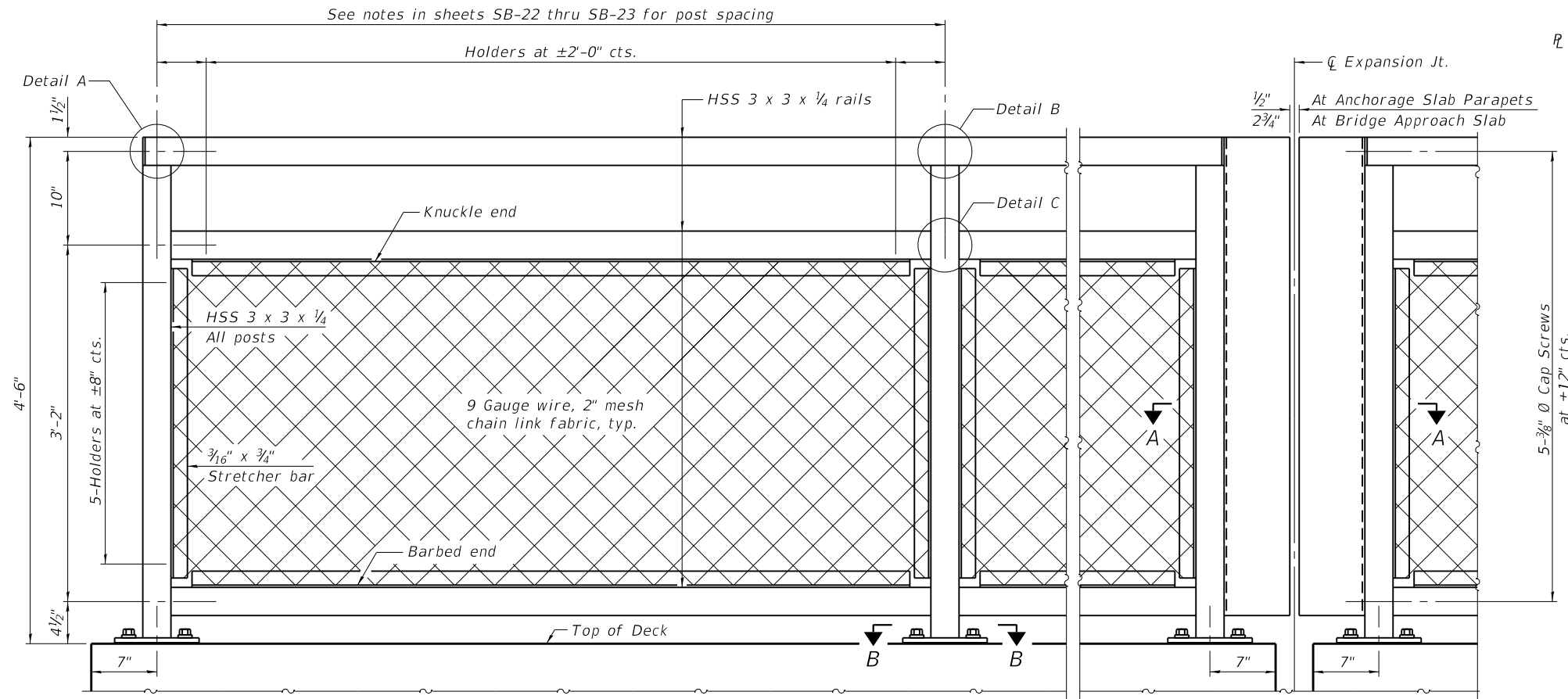


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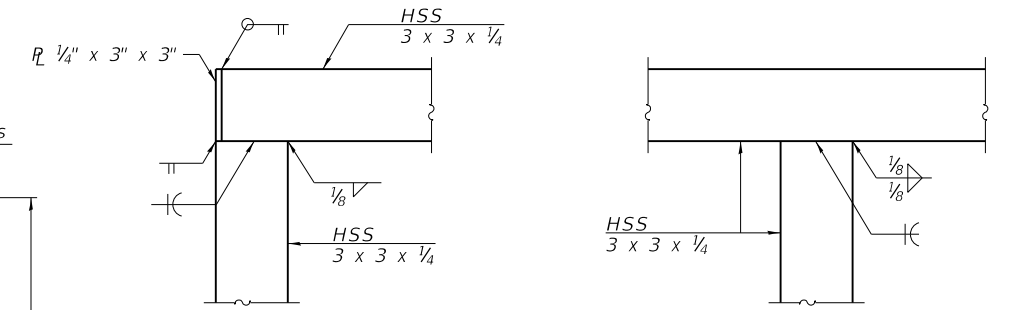
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ANCHORAGE SLAB & WALL DETAILS (3 OF 3)
 STRUCTURE NO. 058-W004**

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 620 |
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| ILLINOIS FED. AID PROJECT | | | | |

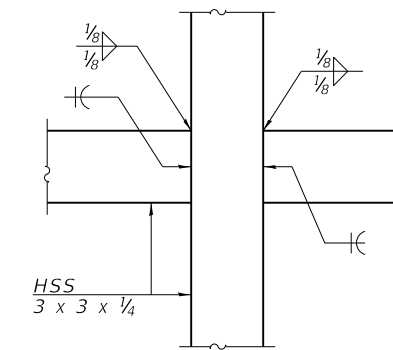


ELEVATION BICYCLE RAILING
(Inside face)

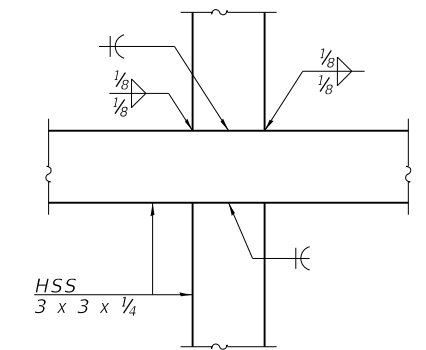


DETAIL A

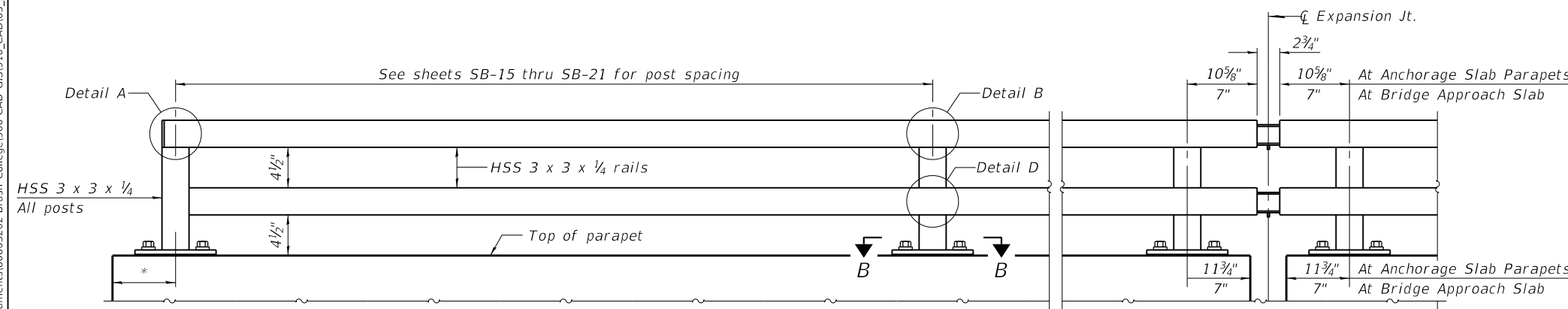
DETAIL B



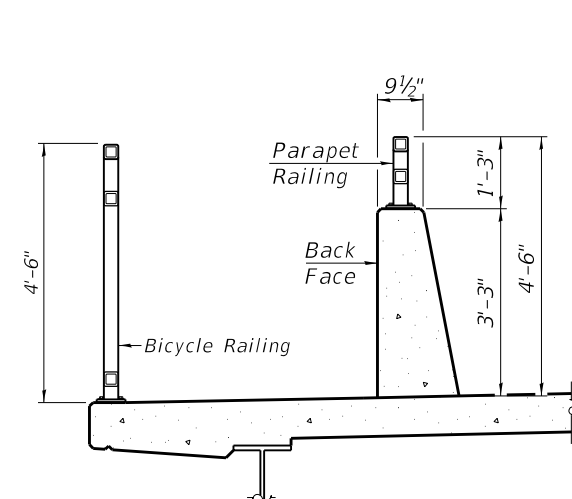
DETAIL C



DETAIL D



ELEVATION PARAPET RAILING
(Inside face)



SECTION THRU DECK

* See sheets SB-15 thru SB-21 for post end distances.

RAILING CRITERIA

| | |
|------------------------------|--------|
| MASH 2016 Test Level | 4 |
| Parapet Railing Weight (plf) | 25 |
| Bicycle Railing Weight (plf) | 50 |
| Max Post Spacing | 10'-0" |

Note:
1. Parapet and bicycle railing shall be horizontally curved to accommodate the geometry of the parapet and coping.

(Sheet 1 of 2)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

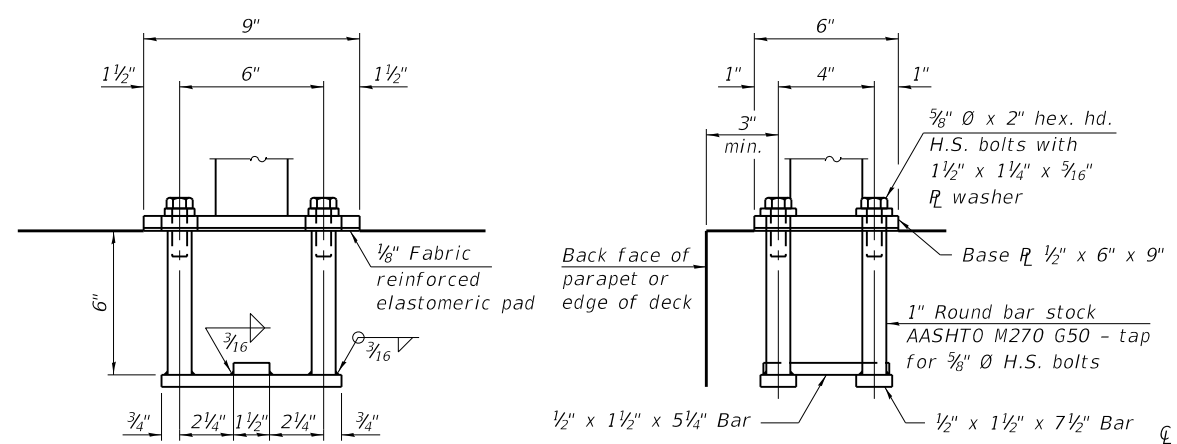
**BICYCLE RAILING AND PARAPET RAILING
STRUCTURE NO. 058-W004**

SHEET SB-27 OF SB-35 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 621 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

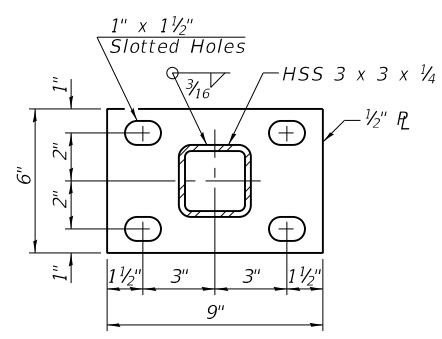
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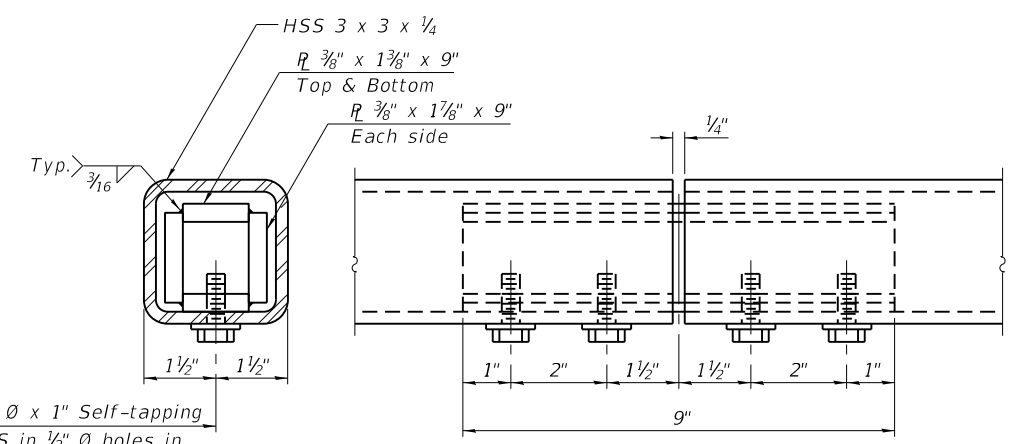


ANCHORAGE ASSEMBLY

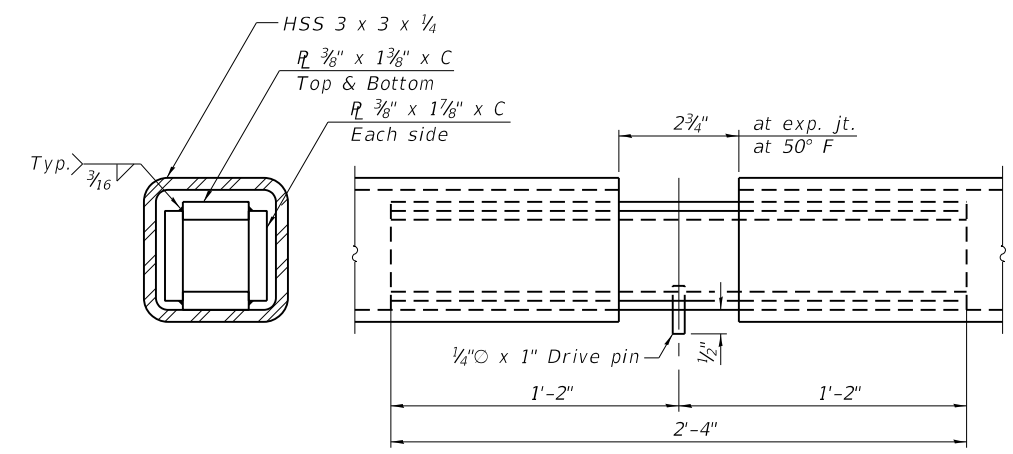
The Bicycle Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



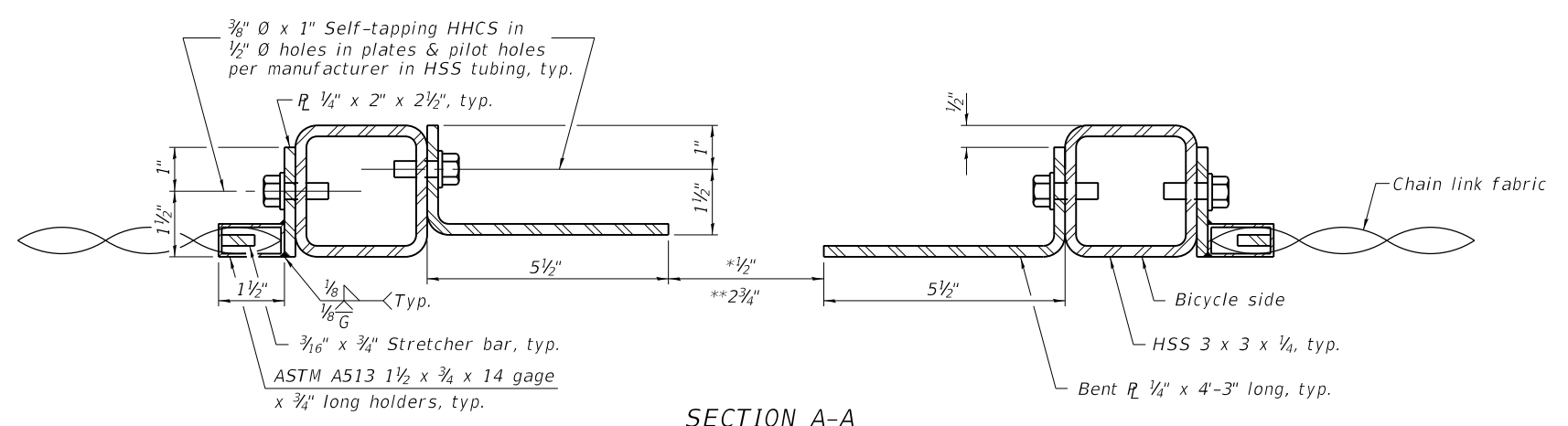
SECTION B-B



MATERIAL SPLICE



EXPANSION SPLICE



SECTION A-A

* At Anchorage Slab Parapets
 ** At Bridge Approach Slab

Notes:
 Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing.
 All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.
 All base plates used for the Parapet Railing shall be AASHTO M270 grade 50.
 All heavy hex nuts shall be according to ASTM A 563 grade DH. All fully threaded anchor rods shall be ASTM F1554 grade 105. The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 See sheet SB-24 and SB-26 of SB-35 for dimensions of concrete openings at expansion joints.

BILL OF MATERIAL

| Item | Unit | Quantity |
|-----------------|------|----------|
| Bicycle Railing | Foot | 603 |
| Parapet Railing | Foot | 584 |

(Sheet 2 of 2)

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING AND PARAPET RAILING
 STRUCTURE NO. 058-W004

SHEET SB-27A OF SB-35 SHEETS

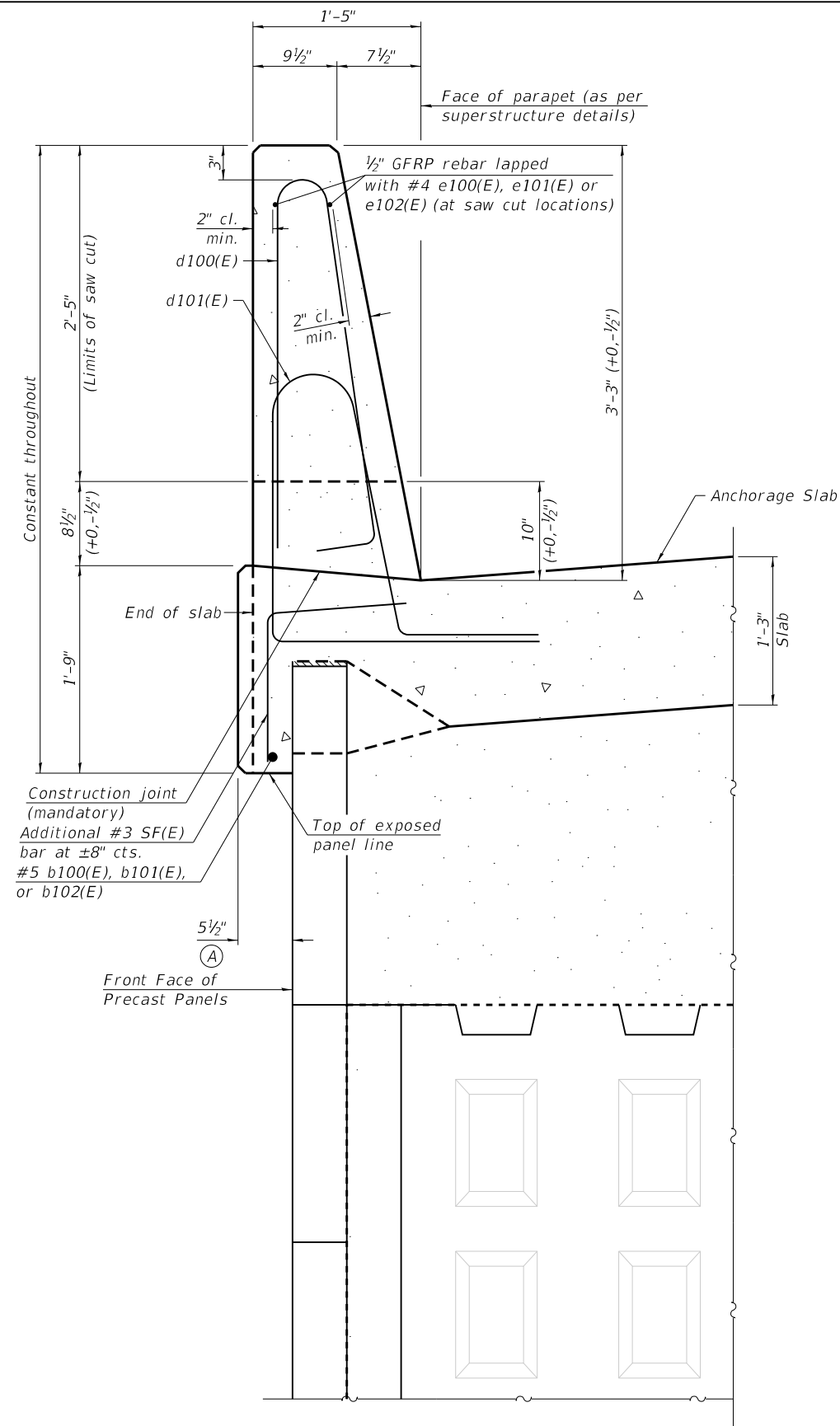
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



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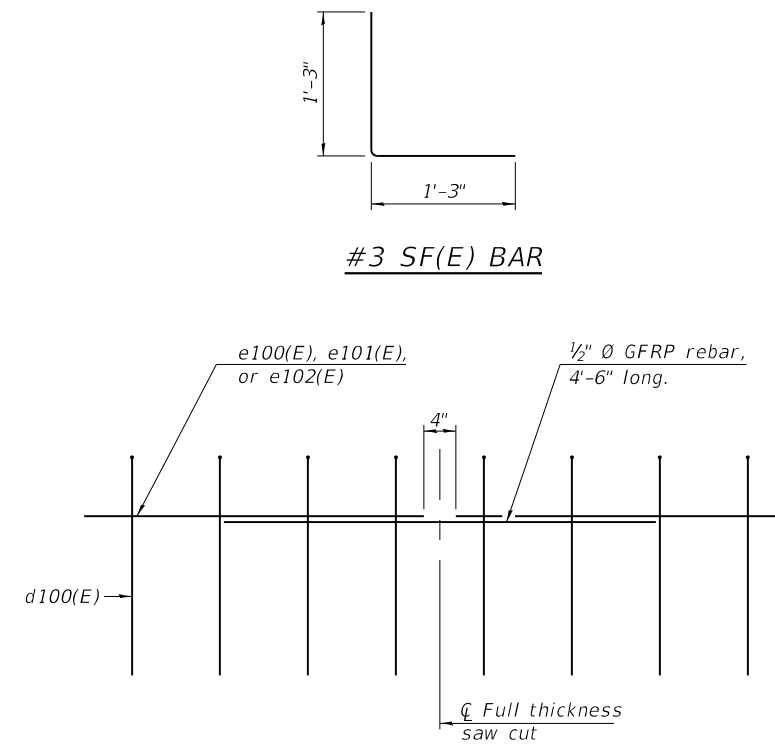
GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.01 cu. yds./ft.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.
 Slipforming of parapets along the east anchorage slab is not allowed.



**39" CONSTANT-SLOPE
PARAPET SECTION**

(Showing dimensions, d100(E), d101(E) and 1/2" Ø GFRP rebar)
 (Showing reinforcement clearances for slip forming and additional reinforcement)



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 058-W004**

SHEET SB-28 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 622 |
| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE
SECTION _____ LOCATION DECATUR, ILLINOIS
COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-26 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOS | UCS | MOS | Surface Water Elev. _____ (ft.) | | ELEV | DEPTH | BLOS | UCS | MOS |
|--------------------------------------------------------------------|-------|-------|------|-------|------|---------------------------------|-----------------------------|-------|-------|-------|-----|-----|
| | | | | | | Groundwater Elev. _____ (ft.) | First Encounter _____ (ft.) | | | | | |
| Offset _____ | | | | | | | | | | | | |
| Ground Surface Elev. <u>673.794</u> (ft.) | | | | | | | | | | | | |
| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | |
| 17" CONCRETE | | | | | | | | | | | | |
| CLAY A-6 | | 3 | | | 15.7 | | | | | | | |
| Dark Brown, moist, stiff, low plasticity, trace sand, trace gravel | | 6 | | | | | | | | | | |
| CLAY A-6 | | 2 | | | 27.5 | | | | | | | |
| Brown, very moist, firm, medium plasticity, trace sand | | 3 | | | | | | | | | | |
| SAND A-1-a | | 2 | | | 16.7 | | | | | | | |
| Brown, moist, medium dense, fine-medium, trace silt -Shelby Tube | | 5 | | | | | | | | | | |
| | | 6 | | | | | | | | | | |
| | | 10 | | | | | | | | | | |
| | | 4 | | | 14.0 | | | | | | | |
| | | 9 | | | | | | | | | | |
| | | 11 | | | | | | | | | | |
| | | 15 | | 1.24 | | | | | | | | |
| | | 4 | | | | | | | | | | |
| | | 9 | | 2.89 | 14.9 | | | | | | | |
| CLAY LOAM A-6 | | 8 | | | | | | | | | | |
| Brown, moist, very stiff, low plasticity, with sand trace gravel | | 10 | | | | | | | | | | |
| | | 20 | | 1.65 | 15.5 | | | | | | | |
| | | 7 | | | | | | | | | | |
| | | 13 | | | | | | | | | | |
| -hard | | 8 | | 4.36 | 15.0 | | | | | | | |
| | | 10 | | | | | | | | | | |
| | | 23 | | | | | | | | | | |
| | | 25 | | | | | | | | | | |
| | | 16 | | 5.36 | 13.3 | | | | | | | |
| | | 23 | | | | | | | | | | |
| | | 24 | | | | | | | | | | |
| 647.794 | | | | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE
SECTION _____ LOCATION DECATUR, ILLINOIS
COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-27 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOS | UCS | MOS | Surface Water Elev. _____ (ft.) | | ELEV | DEPTH | BLOS | UCS | MOS |
|----------------------------------------------------------------------------------------|-------|-------|------|-------|------|---------------------------------|-----------------------------|-------|-------|-------|-----|-----|
| | | | | | | Groundwater Elev. _____ (ft.) | First Encounter _____ (ft.) | | | | | |
| Offset _____ | | | | | | | | | | | | |
| Ground Surface Elev. <u>673.567</u> (ft.) | | | | | | | | | | | | |
| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | |
| 15" CONCRETE | | | | | | | | | | | | |
| CLAY A-6 | | 11 | | 4.0 | 18.6 | | | | | | | |
| Dark Brown, very moist, very stiff, low plasticity, trace sand | | 12 | | | | | | | | | | |
| SILTY CLAY A-4 | | 2 | | 1.03 | 25.3 | | | | | | | |
| Gray-Mottled-Brown, very moist, firm, low plasticity, trace sand | | 5 | | | | | | | | | | |
| | | 2 | | | | | | | | | | |
| | | 5 | | 2.27 | 22.1 | | | | | | | |
| CLAY A-6 | | 3 | | | | | | | | | | |
| Gray-Mottled-Brown, very moist, stiff, low plasticity, trace sand | | 5 | | 2.27 | 22.1 | | | | | | | |
| | | 8 | | | | | | | | | | |
| | | 10 | | 0.87 | 28.5 | | | | | | | |
| | | 3 | | | | | | | | | | |
| | | 6 | | | | | | | | | | |
| CLAY A-6 | | 4 | | 1.90 | 17.3 | | | | | | | |
| Mottled Brown, very moist, stiff, medium plasticity, little sand (*)free water @ 12.0' | | 6 | | | | | | | | | | |
| | | 8 | | | | | | | | | | |
| | | 15 | | 3.92 | 15.0 | | | | | | | |
| CLAY LOAM A-6 | | 4 | | | | | | | | | | |
| Mottled Brown, very moist, stiff, low plasticity, some sand, trace gravel -Shelby Tube | | 7 | | | | | | | | | | |
| | | 7 | | | | | | | | | | |
| | | 20 | | 2.27 | 12.9 | | | | | | | |
| CLAY LOAM A-6 | | 5 | | | | | | | | | | |
| Gray, moist, very stiff, low plasticity, with sand trace gravel | | 9 | | | | | | | | | | |
| | | 10 | | | | | | | | | | |
| | | 15 | | 3.92 | 10.7 | | | | | | | |
| | | 50 | | | | | | | | | | |
| | | 10-2 | | | | | | | | | | |
| | | 25 | | | | | | | | | | |
| | | 17 | | | | | | | | | | |
| SAND A-1-a | | 33 | | | | | | | | | | |
| Brown, moist, very dense, fine-medium, trace gravel, trace clay | | 26 | | | | | | | | | | |
| 647.567 | | | | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL: Sheet
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| | | |
|-----------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 060603202_058-W004_34_B-26 and B-27.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 " / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (B-26 & B-27)
STRUCTURE NO. 058-W004

SHEET SB-34 OF SB-35 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 628 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE
SECTION _____ LOCATION DECATUR, ILLINOIS
COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-28 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOW | UCS | MOS | Surface Water Elev. _____ (ft.) | | | | | | | | | | | |
|-------------------------------------------------------------------------|-------|-------|------|-------|------|---------------------------------|-------|-------|-----|-------|-----|--|--|--|--|--|--|
| | | | | | | GROUND SURFACE | DEPTH | BLOW | UCS | MOS | | | | | | | |
| Offset _____ | | | | | | | | | | | | | | | | | |
| Ground Surface Elev. <u>673.092</u> (ft.) | | | | | | | | | | | | | | | | | |
| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | | | | | | |
| 18" CONCRETE | | | | | | | | | | | | | | | | | |
| CLAY LOAM A-6 | | 8 | | | 11.2 | | | | | | | | | | | | |
| Dark Brown, moist, hard, low plasticity, with sand trace gravel | | 15 | | | | | | | | | | | | | | | |
| SILTY CLAY A-4 | | 20 | | 1.24 | 29.5 | | | | | | | | | | | | |
| Dark Brown, very moist, stiff, low plasticity, trace sand | | 5 | 4 | | | | | | | | | | | | | | |
| SILTY CLAY A-4 | | 6 | | 0.41 | 26.5 | | | | | | | | | | | | |
| Gray-Mottled-Brown, very moist, stiff, low plasticity, trace sand -firm | | 2 | | | | | | | | | | | | | | | |
| -very moist, soft-firm | | 4 | | 0.41 | 18.6 | | | | | | | | | | | | |
| SILTY CLAY LOAM A-4 | | 7 | | 0.82 | 18.7 | | | | | | | | | | | | |
| Brown, very moist, very stiff, low plasticity, little sand | | 10 | | | | | | | | | | | | | | | |
| SILT A-4 | | 3 | | | 19.8 | | | | | | | | | | | | |
| Brown, very moist, hard, low plasticity, little sand | | 4 | | | | | | | | | | | | | | | |
| (*)free water @ 19.5' | | 7 | | | | | | | | | | | | | | | |
| CLAY LOAM A-6 | | 14 | | 1.24 | 14.9 | | | | | | | | | | | | |
| Gray, moist, very stiff, low plasticity, with sand trace gravel | | 17 | | | | | | | | | | | | | | | |
| CLAY LOAM A-6 | | 20 | | 3.50 | 14.3 | | | | | | | | | | | | |
| Brownish Gray, moist, hard, low plasticity, with sand trace gravel | | 31 | | | | | | | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | 23 | | | | | | | | | | | | | | | |
| | | 25 | | | | | | | | | | | | | | | |
| | | 8 | | | | | | | | | | | | | | | |
| | | 12 | | | | | | | | | | | | | | | |
| | | 20 | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE
SECTION _____ LOCATION DECATUR, ILLINOIS
COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-29 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOW | UCS | MOS | Surface Water Elev. _____ (ft.) | | | | | | | | | | | |
|----------------------------------------------------------------------------------|-------|-------|------|-------|------|---------------------------------|-------|-------|-----|-------|-----|--|--|--|--|--|--|
| | | | | | | GROUND SURFACE | DEPTH | BLOW | UCS | MOS | | | | | | | |
| Offset _____ | | | | | | | | | | | | | | | | | |
| Ground Surface Elev. <u>672.128</u> (ft.) | | | | | | | | | | | | | | | | | |
| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | | | | | | |
| 13" CONCRETE | | | | | | | | | | | | | | | | | |
| CLAY A-6 | | 4 | | 1.0 | 24.2 | | | | | | | | | | | | |
| Dark Brown, very moist, stiff, low plasticity, trace sand, trace gravel -firm | | 4 | | | | | | | | | | | | | | | |
| -stiff | | 7 | | 0.62 | 25.8 | | | | | | | | | | | | |
| SILTY CLAY A-6 | | 5 | 2 | | | | | | | | | | | | | | |
| Brown-Mottled-Gray, very moist, soft, medium plasticity, trace sand -Shelby Tube | | 2 | | 0.4 | 31.6 | | | | | | | | | | | | |
| -firm-stiff | | 4 | | 1.07 | 24.7 | | | | | | | | | | | | |
| SILTY CLAY A-6 | | 3 | | 1.98 | 20.3 | | | | | | | | | | | | |
| Brown, very moist, very stiff, low plasticity, trace sand | | 5 | | | | | | | | | | | | | | | |
| SAND A-1-a | | 12 | | | | | | | | | | | | | | | |
| Brown, wet, medium dense, fine-medium, trace gravel (*)free water @ 21.0' -dense | | 20 | | | | | | | | | | | | | | | |
| SAND A-3 | | 16 | | 1.31 | 18.0 | | | | | | | | | | | | |
| Gray, saturated, dense, fine, trace silt | | 11 | | | | | | | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | 25 | | | | | | | | | | | | | | | |
| | | 21 | | | | | | | | | | | | | | | |
| | | 25 | | | | | | | | | | | | | | | |
| | | 30 | | | | | | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

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| | | |
|----------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 06063202_058-W004_35_B-28 and B-29.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 " = 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

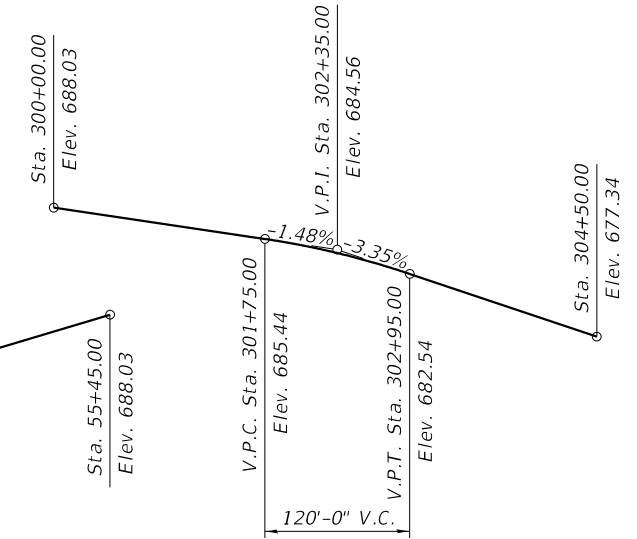
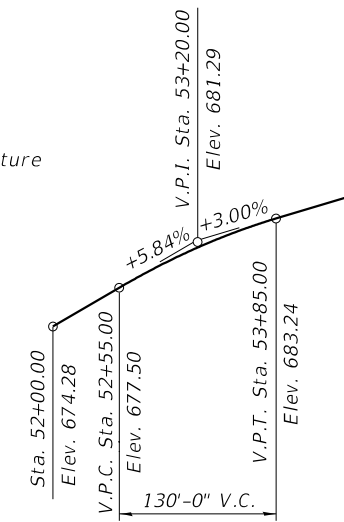
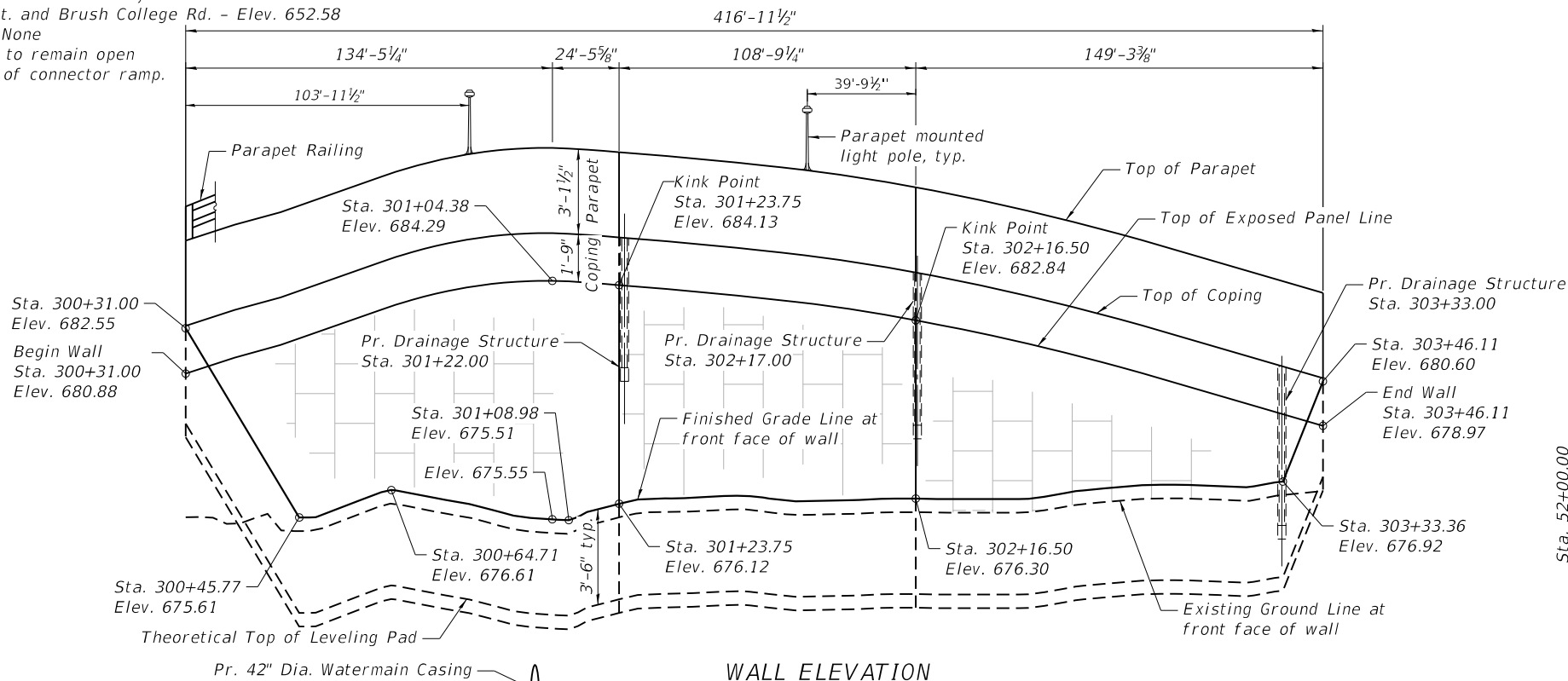
SOIL BORING LOGS (B-28 & B-29)
STRUCTURE NO. 058-W004

SHEET SB-35 OF SB-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 629 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Benchmark: "M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Rd. - Elev. 652.58

Existing Structure: None
Brush College Road to remain open during construction of connector ramp.



PROFILE GRADE
(Along Brush College Road)

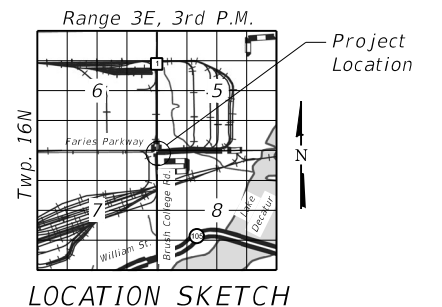
DESIGN SPECIFICATIONS
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

PROP. CURVE P-JUG-1
P.I. Sta. = 304+26.10
 $\Delta = 82^\circ 24' 11"$ (LT)
 $D = 14^\circ 19' 26"$
 $R = 400.00'$
 $T = 350.19'$
 $L = 575.28'$
 $E = 131.63'$
 $e = NC$ (30 MPH)
 $T.R. = N/A$
 $S.E. Run = N/A$
P.C. Sta. = 300+75.91
P.T. Sta. = 306+51.19

DESIGN STRESSES
FIELD UNITS
 $f'_c = 4,000$ psi
 $f_y = 60,000$ psi (Reinforcement)

PRECAST UNITS
 $f'_c = 4,500$ psi (Precast Panels)

ALLOWABLE BEARING PRESSURE
 $q_a = 2,673$ psf



"I certify that to the best of knowledge, information, and belief, this structure design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO 'Standard Specifications for Highway Bridges'."



Keith W. Benting, Illinois S.E. 081-004777
Expires 11/30/2024

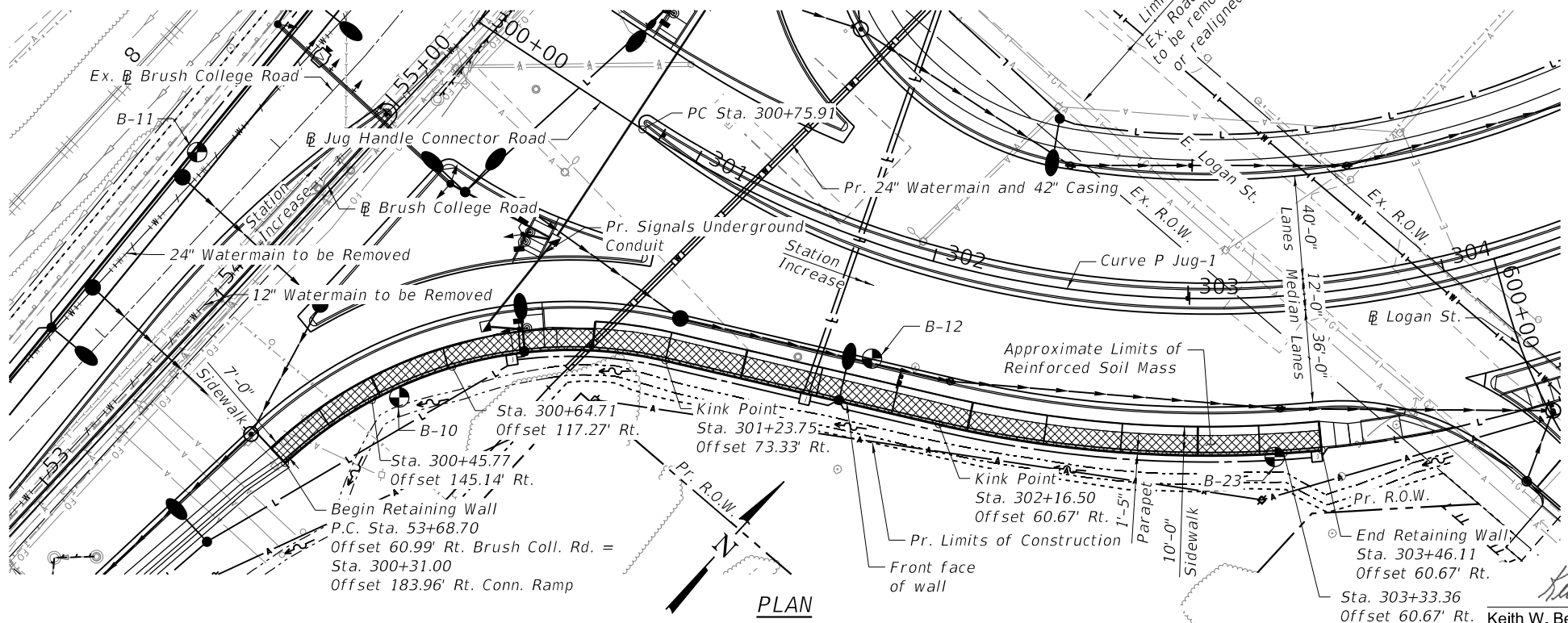
Date 4/17/2023

GENERAL PLAN & ELEVATION
JUG HANDLE CONNECTOR ROAD
F.A.U. 7448 - SECTION 09-00933-01-BR
MACON COUNTY
STA. 300+31.00 TO STA. 303+46.11
STRUCTURE NO. 058-W006

LEGEND

- G — Ex. Gas Line
- W — Ex. Water Main
- T — Ex. Underground Telephone Line
- A — Ex. Aerial Line
- S — Ex. Storm Sewer
- SS — Ex. Sanitary Sewer
- E — Ex. Easement
- RR — Ex. RR Track
- G — Pr. Gas Line
- W — Pr. Water Main
- T — Pr. Temporary Easement
- L — PR. Buried Lighting Cable
- S — Pr. Storm Sewer
- SS — Pr. Above Ground Lighting
- [Hatched] — Approximate Limits of Reinforced Soil Mass

- Notes:**
- Wall offsets are measured from Brush College Rd. or Jug Handle Connector Rd to the front face of precast panels.
 - Existing drainage and utilities in conflict with proposed construction will be abandoned or relocated. See Drainage or Utility Plans.



MODEL: Sheet
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| PLOT SCALE = 60,000' / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET SC-1 OF SC-12 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 630 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Wall stations and offsets are given to the front face (FF) of the wall and are measured from R Jug Connector Road, except as noted. FF of the wall is to be considered edge of panel or form liner.
3. Slipforming of the parapet will not be allowed.
4. Protective coat shall be applied to top of Anchorage Slab and top and traffic face of barrier rail.
5. Fill type retaining walls (MSE and Precast Modular) shall be detailed and constructed to allow for proposed roadway drainage to be placed properly and as shown in the plans. Any requests for modification to drainage structure locations to accommodate wall reinforcing or details shall be submitted to the engineer in writing for review. Any changes approved by the engineer in writing will be coordinated by the contractor at no additional cost.

INDEX OF SHEETS

- SC-1. General Plan & Elevation
- SC-2. General Notes & Bill of Material
- SC-3. Typical Section
- SC-4. Anchorage Slab (1 of 4)
- SC-5. Anchorage Slab (2 of 4)
- SC-6. Anchorage Slab (3 of 4)
- SC-7. Anchorage Slab (4 of 4)
- SC-8. Anchorage Slab & Wall Details (1 of 2)
- SC-9. Anchorage Slab & Wall Details (2 of 2)
- SC-10. Parapet Railing (Sheet 1 of 2)
- SC-10A. Parapet Railing (Sheet 2 of 2)
- SC-11. Soil Boring Logs (B-10 & B-11)
- SC-12. Soil Boring Logs (B-12 & B-23)

STATION 301+31.00 TO 303+46.11
 BUILT BY
 CITY OF DECATUR
 F.A.U. 7448
 SEC. 09-00933-01-BR
 STR. NO. 058-W006

NAME PLATE
 See Std. 515001

TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|----------------------------------------------|---------|--------|
| Structure Excavation | Cu. Yd. | 505 |
| Concrete Superstructure | Cu. Yd. | 260.0 |
| Protective Coat | Sq. Yd. | 612 |
| Reinforcement Bars, Epoxy Coated | Pound | 41,560 |
| Parapet Railing | Foot | 417 |
| Name Plates | Each | 1 |
| Mechanically Stabilized Earth Retaining Wall | Sq. Ft. | 3,855 |



| | | |
|-----------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_02_General Data and BOM.dgn | CHECKED - KFO | REVISED - |
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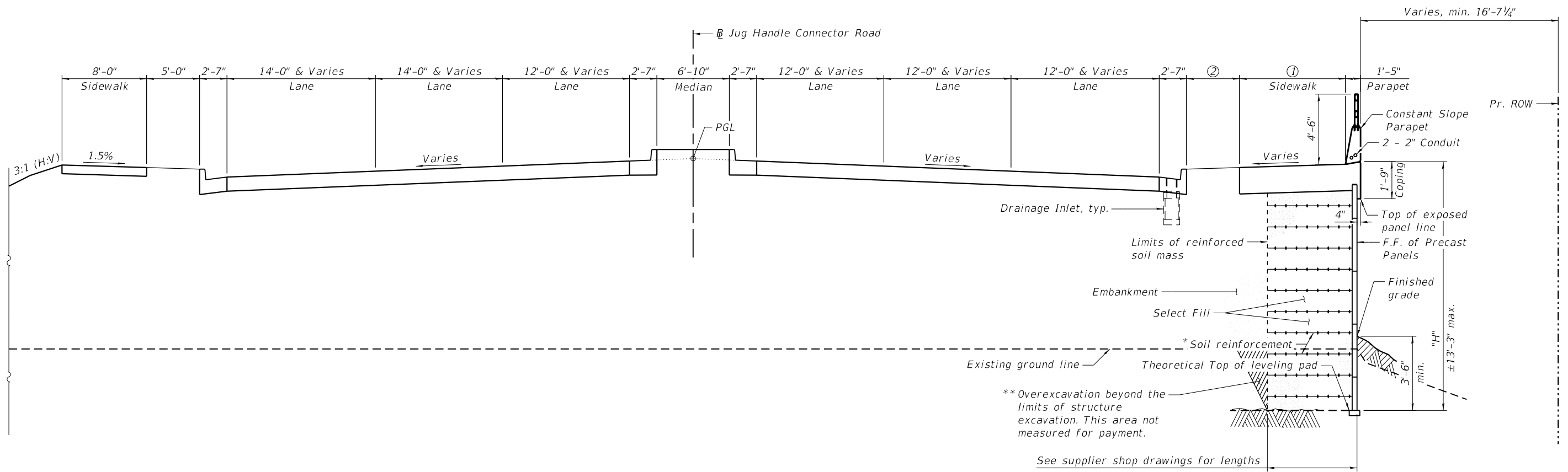
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & BILL OF MATERIAL
 STRUCTURE NO. 058-W006**

SHEET SC-2 OF SC-12 SHEETS

| | | | | |
|--------------------|------------------------|------------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 631 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

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ROADWAY DIMENSION TABLE

| Start Station | End Station | ① | ② |
|---------------|-------------|--------|-------|
| 300+31.00 | 301+01.33 | 7'-0" | 8'-0" |
| 301+01.33 | 303+46.11 | 10'-0" | 5'-0" |

TYPICAL SECTION
(Looking East)

* The MSE Wall supplier's interval stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.67 kips/ft. of wall.
 ** Backfill overexcavation with same material as used for select fill.



| | | |
|------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_03_Typical Section.dgn | CHECKED - KFO | REVISED - |
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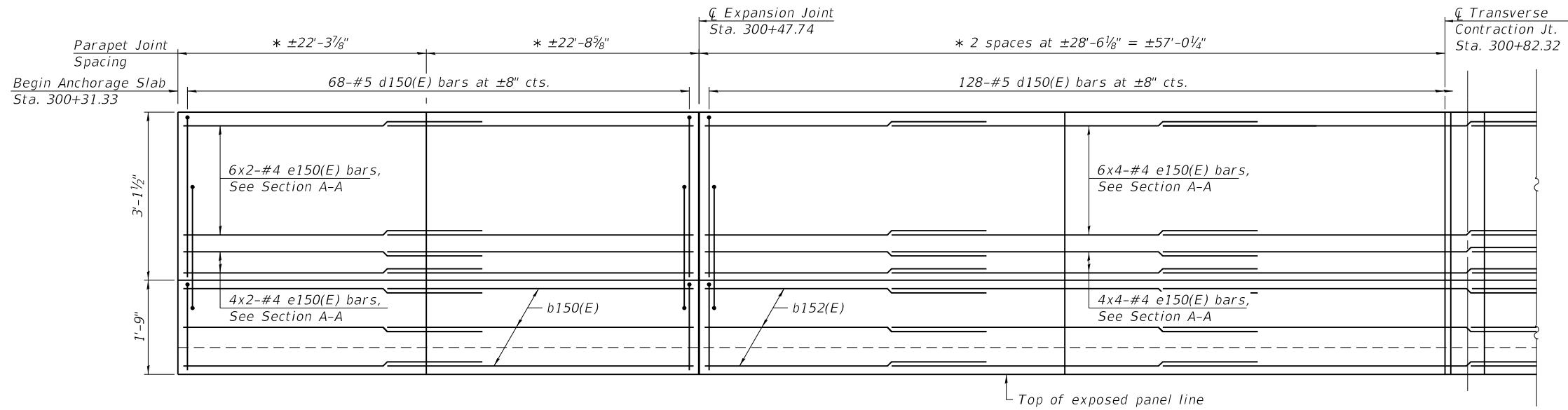
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION
 STRUCTURE NO. 058-W006

SHEET SC-3 OF SC-12 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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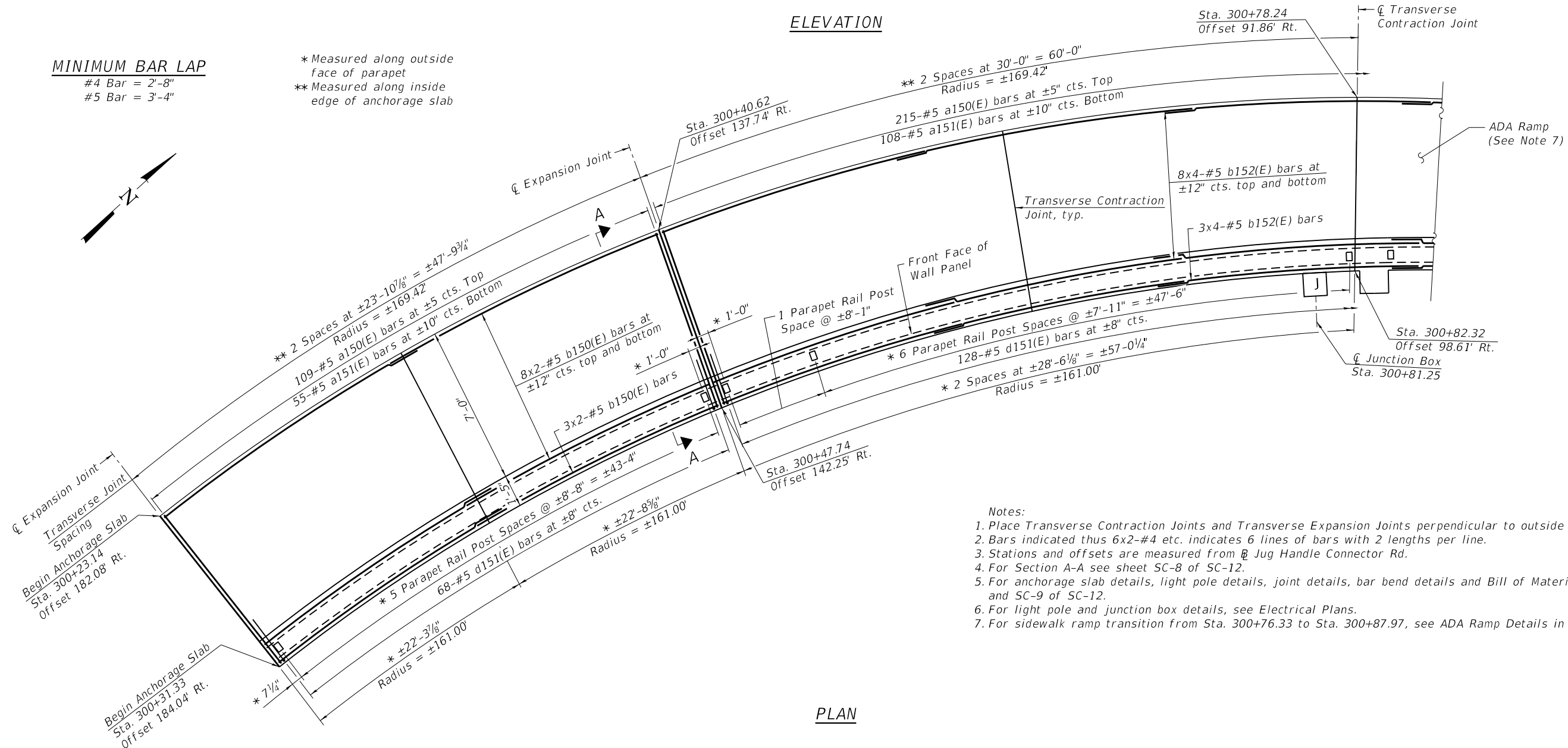
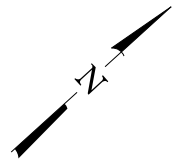


ELEVATION

MINIMUM BAR LAP

#4 Bar = 2'-8"
 #5 Bar = 3'-4"

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab



PLAN

- Notes:
1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
 2. Bars indicated thus 6x2-#4 etc. indicates 6 lines of bars with 2 lengths per line.
 3. Stations and offsets are measured from Jug Handle Connector Rd.
 4. For Section A-A see sheet SC-8 of SC-12.
 5. For anchorage slab details, light pole details, joint details, bar bend details and Bill of Material, see sheets SC-8 and SC-9 of SC-12.
 6. For light pole and junction box details, see Electrical Plans.
 7. For sidewalk ramp transition from Sta. 300+76.33 to Sta. 300+87.97, see ADA Ramp Details in Roadway Plans.



USER NAME = kortega
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 PLOT DATE =

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 CHECKED - KFO
 DRAWN - LMC
 CHECKED - MDC

REVISED -
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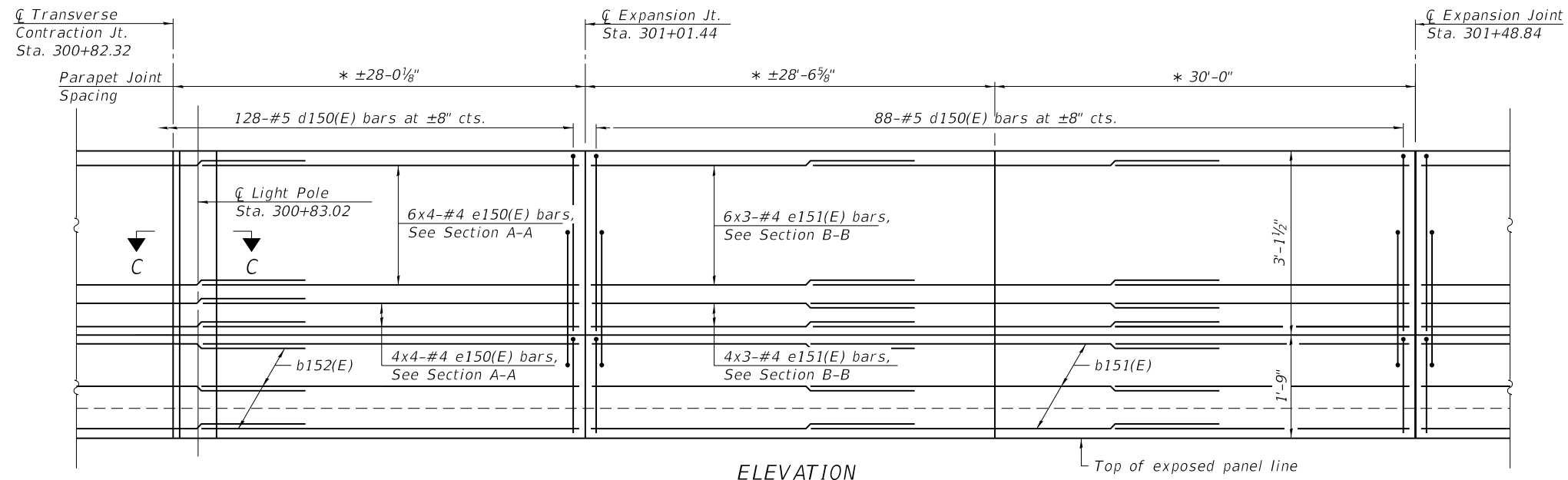
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ANCHORAGE SLAB (1 OF 4)
 STRUCTURE NO. 058-W006

SHEET SC-4 OF SC-12 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
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| CONTRACT NO. 95893 | | | | |

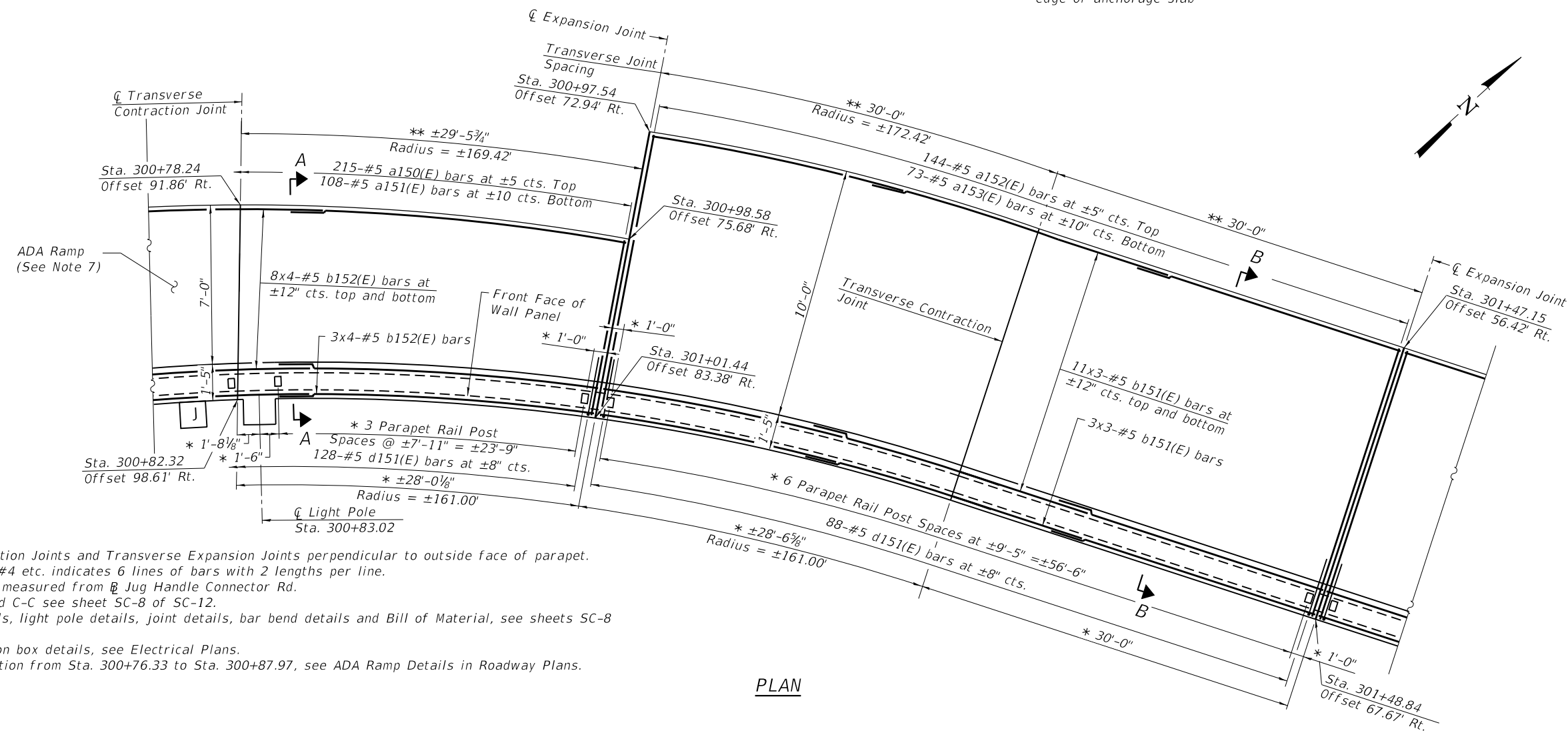
ILLINOIS FED. AID PROJECT



ELEVATION

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
 #4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN

- Notes:
1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
 2. Bars indicated thus 6x2-#4 etc. indicates 6 lines of bars with 2 lengths per line.
 3. Stations and offsets are measured from Jug Handle Connector Rd.
 4. For Sections A-A, B-B and C-C see sheet SC-8 of SC-12.
 5. For anchorage slab details, light pole details, joint details, bar bend details and Bill of Material, see sheets SC-8 and SC-9 of SC-12.
 6. For light pole and junction box details, see Electrical Plans.
 7. For sidewalk ramp transition from Sta. 300+76.33 to Sta. 300+87.97, see ADA Ramp Details in Roadway Plans.

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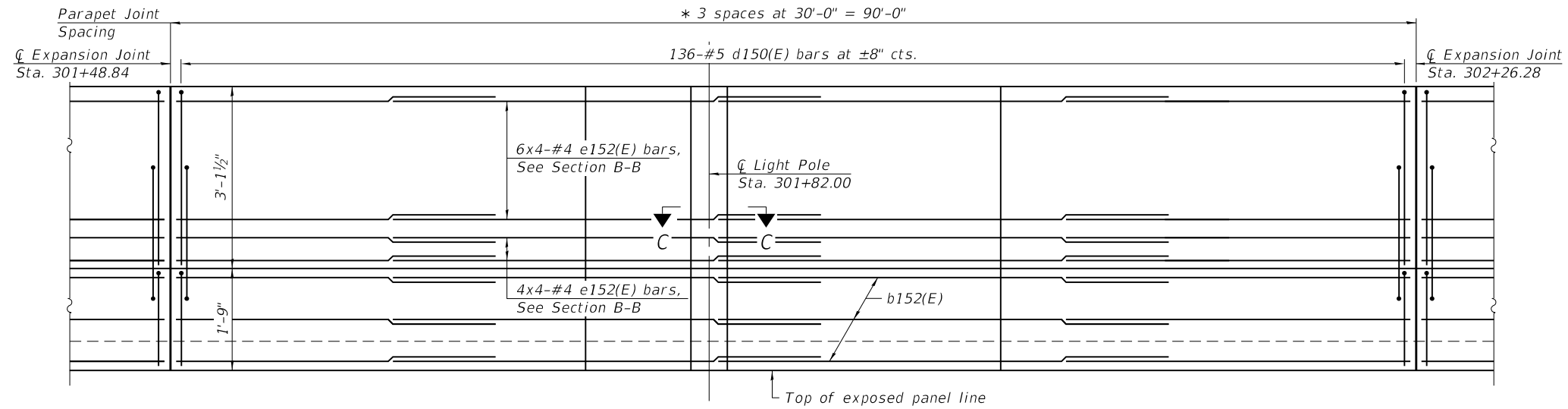
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|------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_05_Moment Slab - 2.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000 '":' / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ANCHORAGE SLAB (2 OF 4)
 STRUCTURE NO. 058-W006

SHEET SC-5 OF SC-12 SHEETS

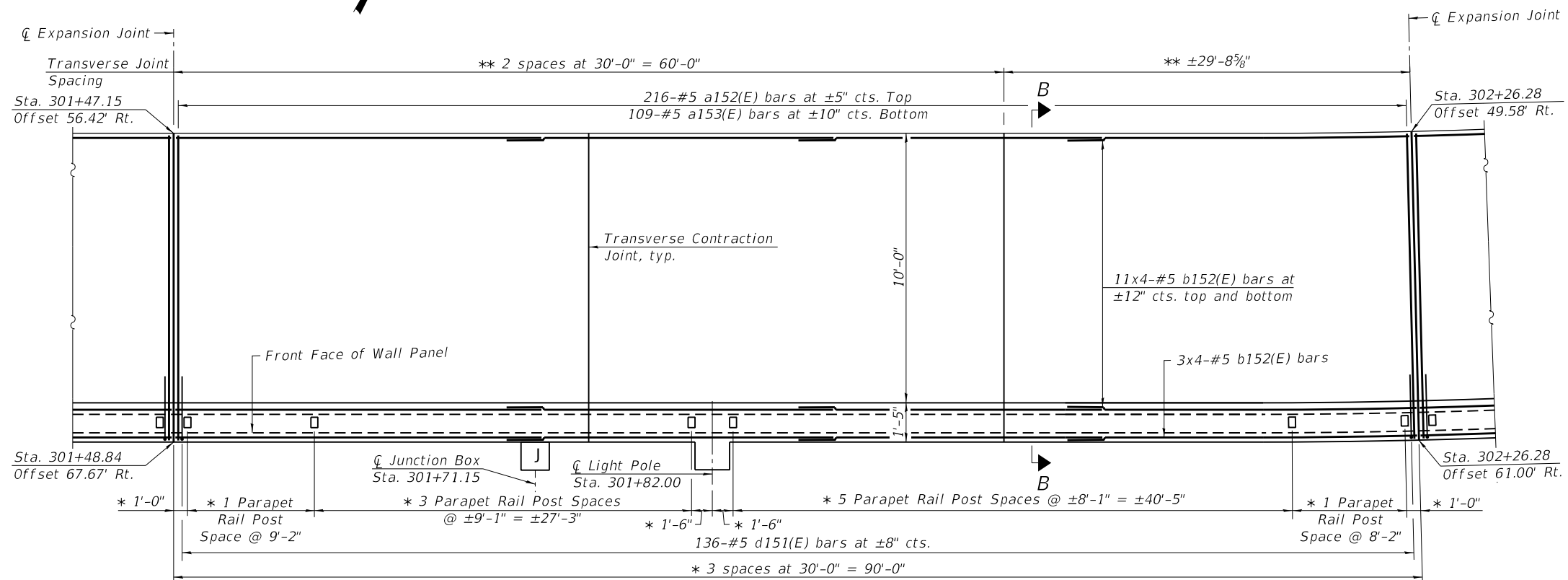
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 634 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



ELEVATION

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
 #4 Bar = 2'-8"
 #5 Bar = 3'-4"



PLAN

Notes:

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
2. Bars indicated thus 6x2-#4 etc. indicates 6 lines of bars with 2 lengths per line.
3. Stations and offsets are measured from Jug Handle Connector Rd.
4. For Sections B-B and C-C see sheet SC-8 of SC-12.
5. For anchorage slab details, light pole details, joint details, bar bend details and Bill of Material, see sheets SC-8 and SC-9 of SC-12.
6. For light pole and junction box details, see Electrical Plans.

MODEL: Sheet
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| | | |
|------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_06_Moment Slab - 3.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000 " = 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

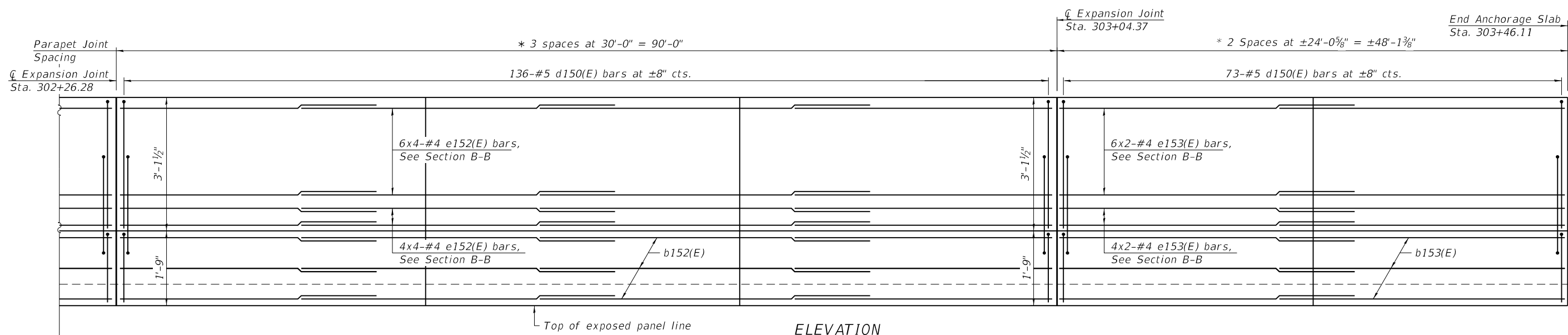
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ANCHORAGE SLAB (3 OF 4)
 STRUCTURE NO. 058-W006**

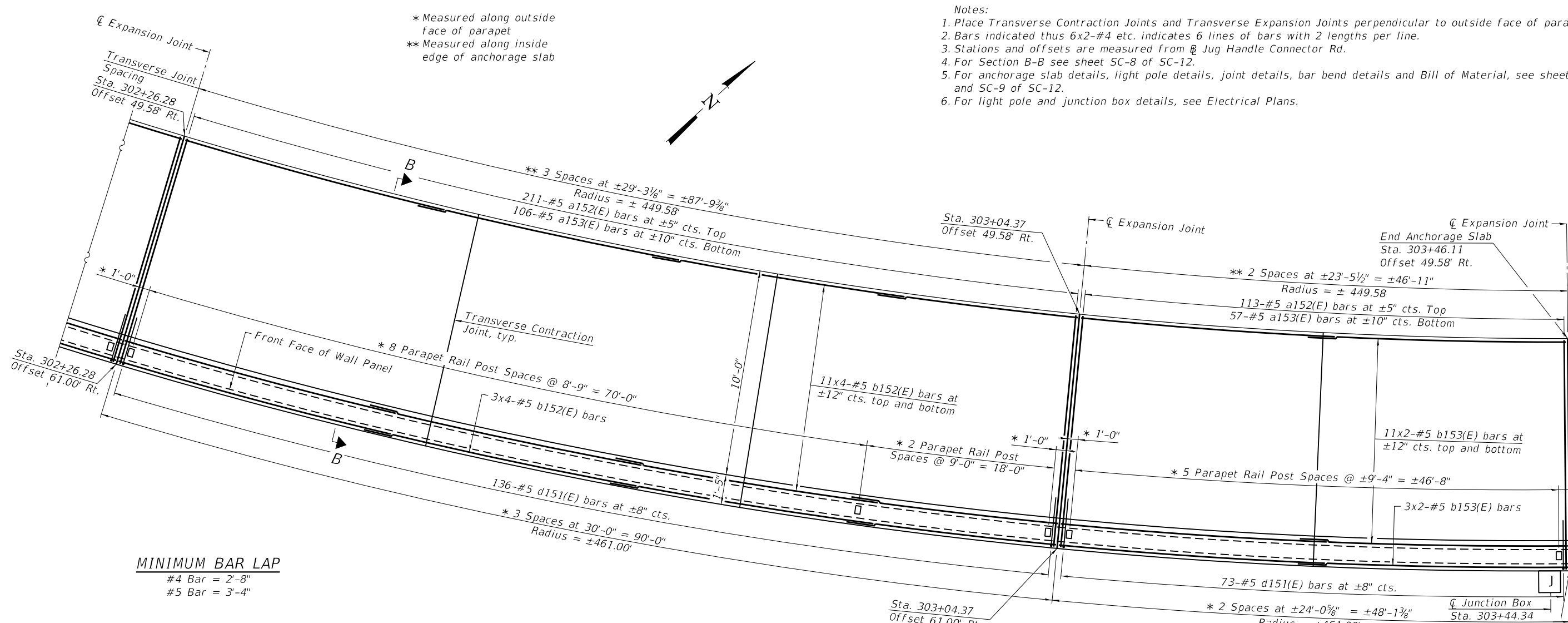
SHEET SC-6 OF SC-12 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 635 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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ELEVATION

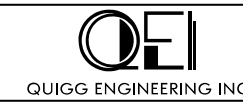


PLAN

- Notes:
1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to outside face of parapet.
 2. Bars indicated thus 6x2-#4 etc. indicates 6 lines of bars with 2 lengths per line.
 3. Stations and offsets are measured from \emptyset Jug Handle Connector Rd.
 4. For Section B-B see sheet SC-8 of SC-12.
 5. For anchorage slab details, light pole details, joint details, bar bend details and Bill of Material, see sheets SC-8 and SC-9 of SC-12.
 6. For light pole and junction box details, see Electrical Plans.

* Measured along outside face of parapet
 ** Measured along inside edge of anchorage slab

MINIMUM BAR LAP
 #4 Bar = 2'-8"
 #5 Bar = 3'-4"



| | | |
|-----------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 6063202_058-W006_07_Moment Slab - 4.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 10:0.0000' : 1 in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

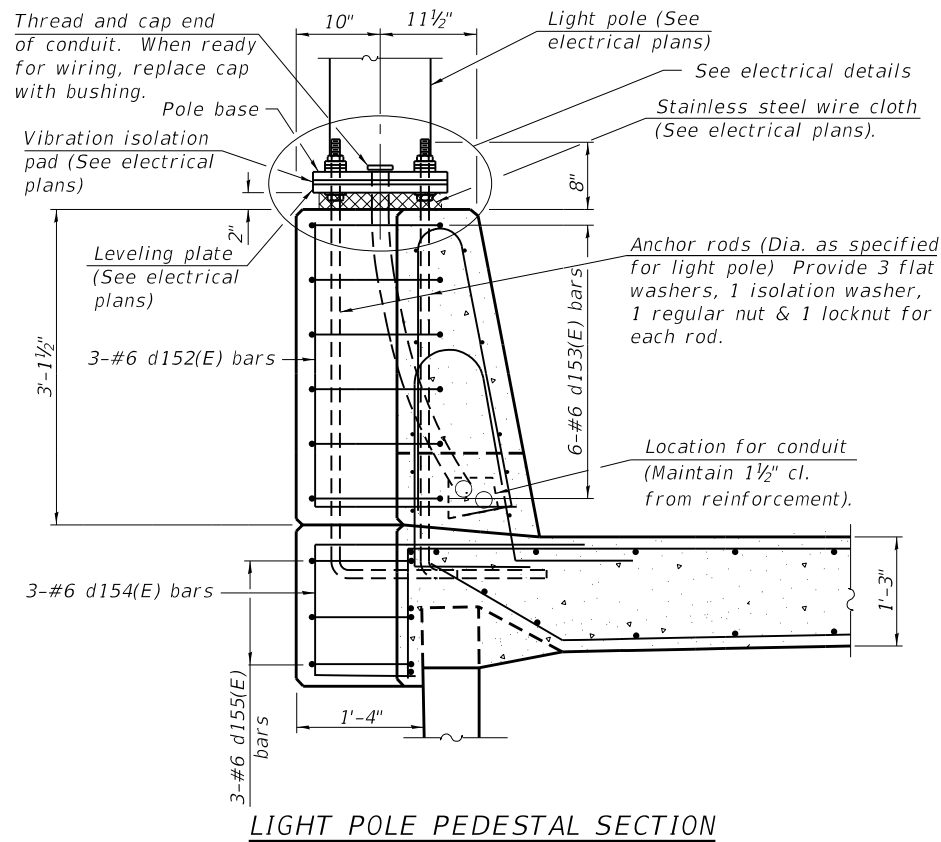
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ANCHORAGE SLAB (4 OF 4)
 STRUCTURE NO. 058-W006**

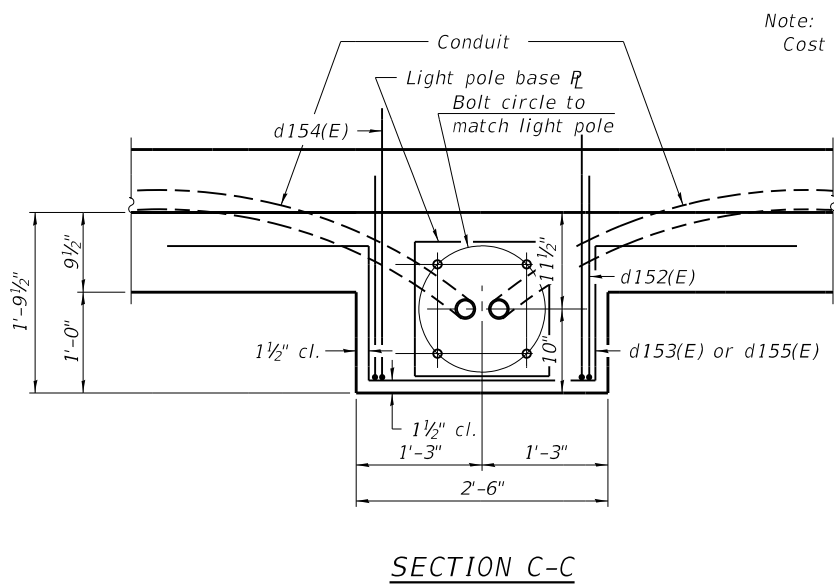
SHEET SC-7 OF SC-12 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 636 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

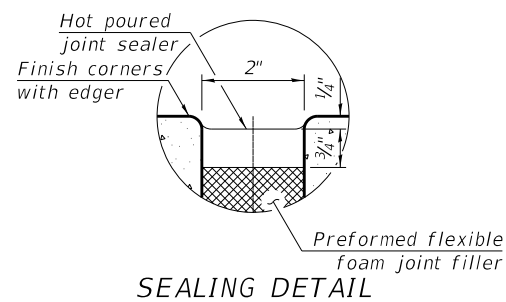
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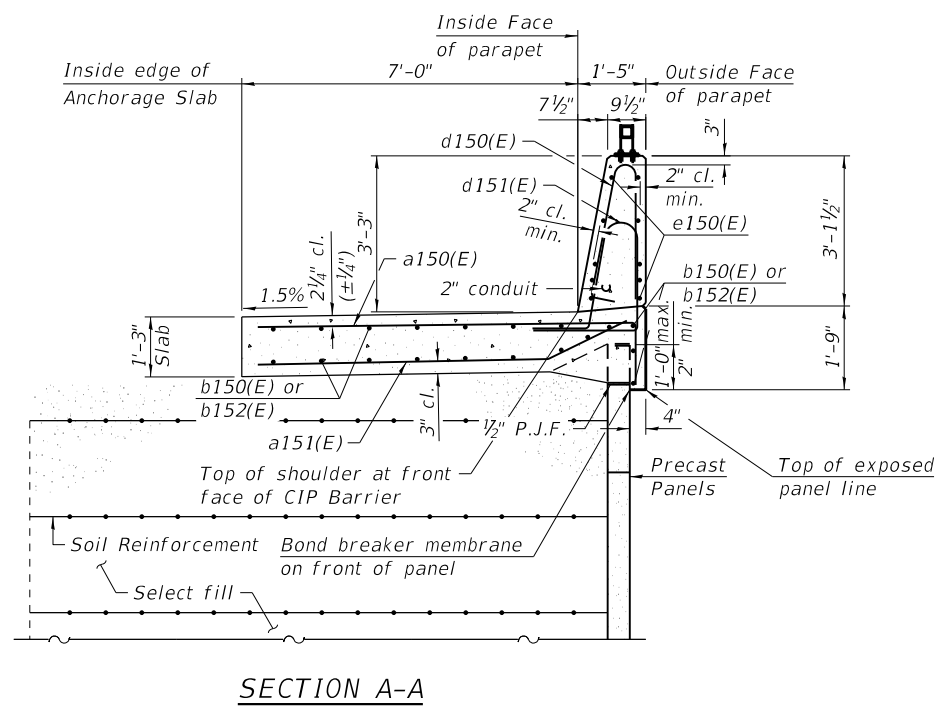
LIGHT POLE PEDESTAL SECTION



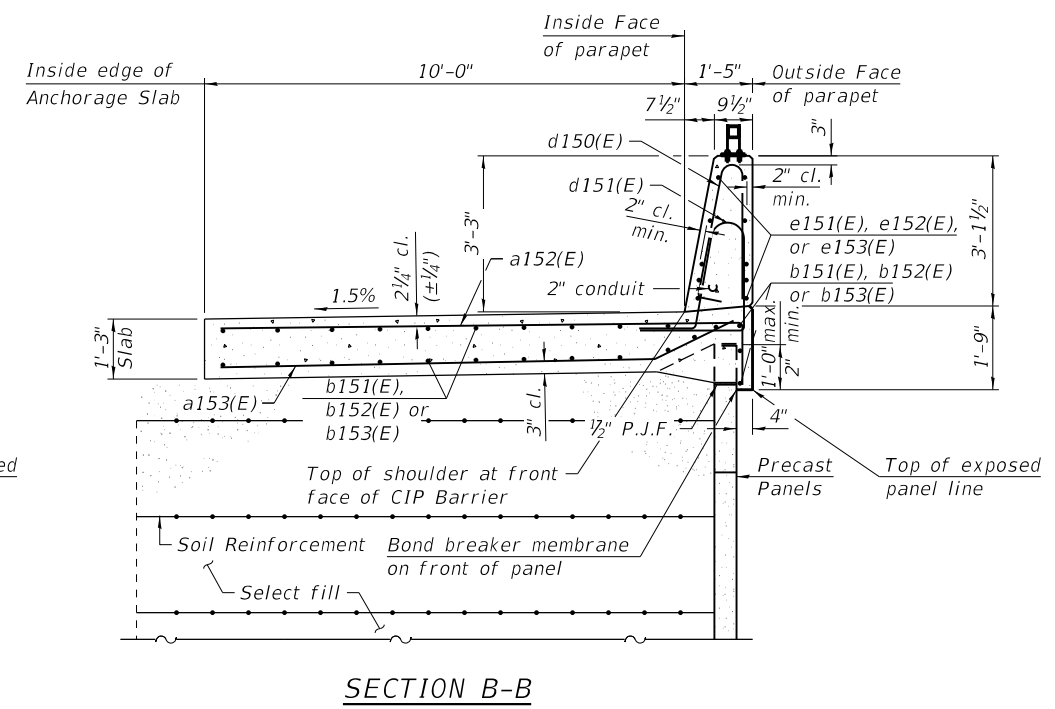
SECTION C-C



SEALING DETAIL

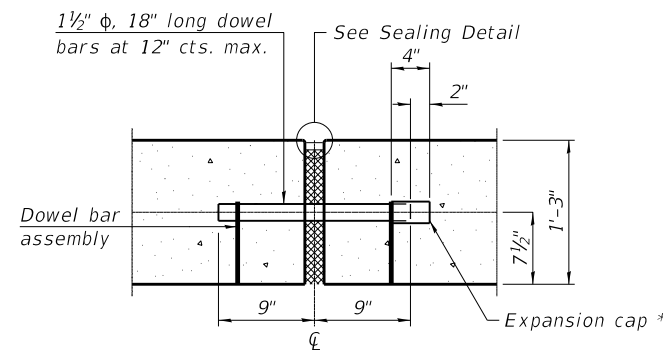


SECTION A-A



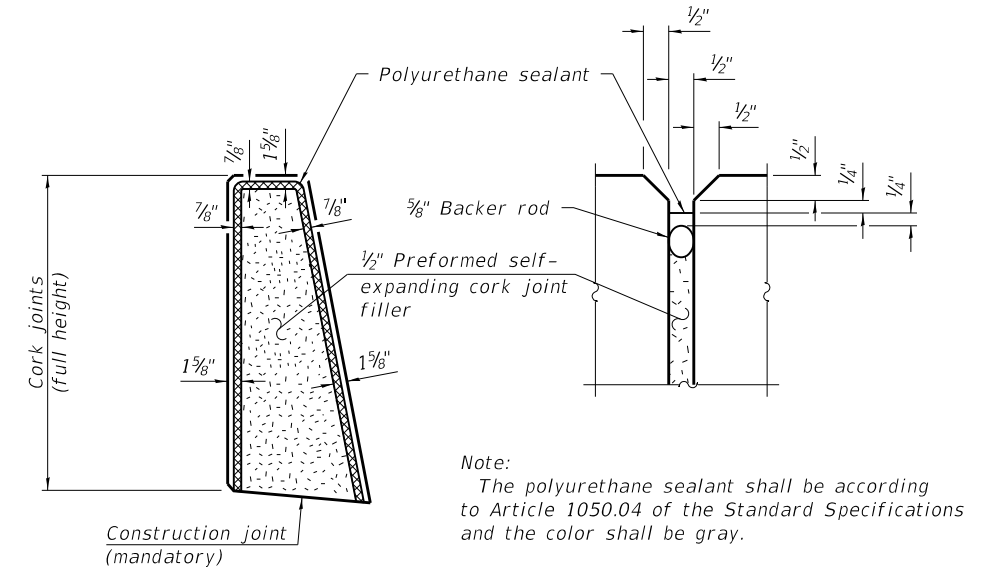
SECTION B-B

* Expansion caps shall be installed on the exposed end of each dowel bar once the header has been removed and the joint filler material has been installed.



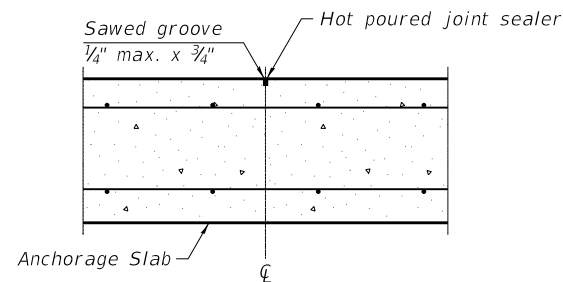
ANCHORAGE SLAB EXPANSION JOINT

Expansion joint and dowel bars included in the cost of Concrete Superstructure



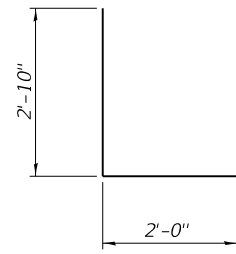
PARAPET EXPANSION JOINT DETAILS

Note: The polyurethane sealant shall be according to Article 1050.04 of the Standard Specifications and the color shall be gray.

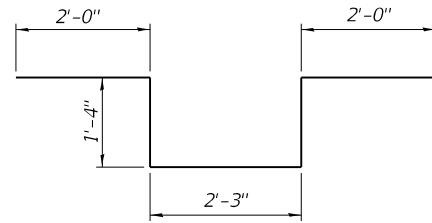


TRANSVERSE CONTRACTION JOINT

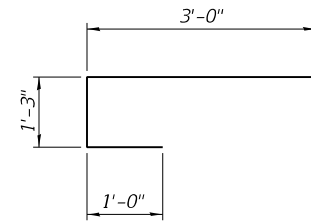
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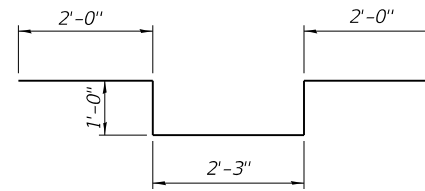
BAR d152(E)



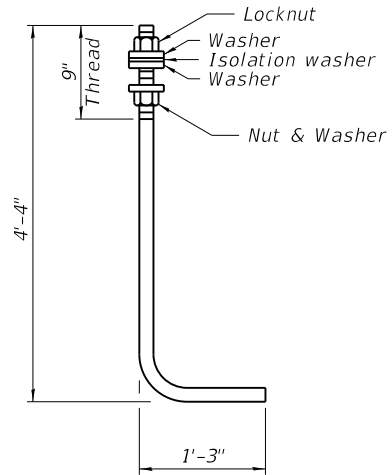
BAR d153(E)



BAR d154(E)

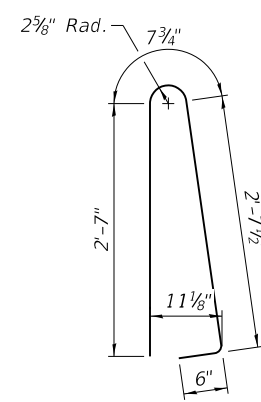


BAR d155(E)

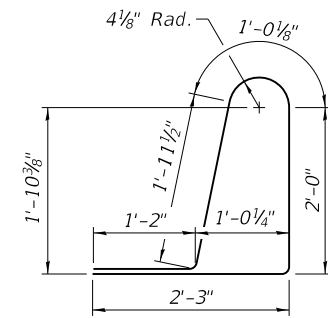


ANCHOR ROD

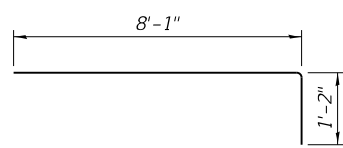
Diameter as specified for light poles.
 (ASTM F 1554 Grade 105) Full length
 hot dipped galvanized



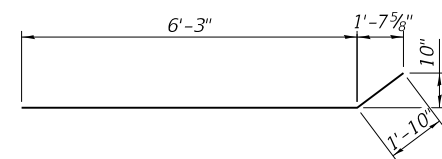
BAR d150(E)



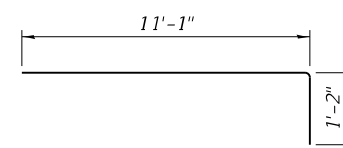
BAR d151(E)



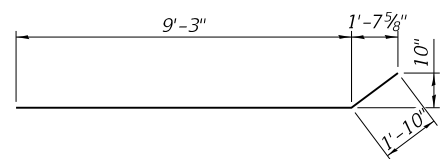
BAR a150(E)



BAR a151(E)



BAR a152(E)



BAR a153(E)

Note:
 Cost of concrete and reinforcing steel required for coping shall be included in the cost of Concrete Superstructure and Reinforcement Bars, Epoxy Coated.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape | |
|----------------------------------|-----|------|---------|---------|--------|
| a150(E) | 324 | #5 | 9'-3" | └─┘ | |
| a151(E) | 163 | #5 | 8'-1" | └─┘ | |
| a152(E) | 684 | #5 | 12'-3" | └─┘ | |
| a153(E) | 345 | #5 | 11'-1" | └─┘ | |
| b150(E) | 38 | #5 | 25'-5" | — | |
| b151(E) | 75 | #5 | 22'-2" | — | |
| b152(E) | 276 | #5 | 24'-11" | — | |
| b153(E) | 50 | #5 | 25'-7" | — | |
| d150(E) | 629 | #5 | 6'-5" | └─┘ | |
| d151(E) | 629 | #5 | 8'-5" | └─┘ | |
| d152(E) | 6 | #6 | 4'-10" | └─┘ | |
| d153(E) | 12 | #6 | 8'-11" | └─┘ | |
| d154(E) | 6 | #6 | 5'-3" | └─┘ | |
| d155(E) | 6 | #6 | 8'-3" | └─┘ | |
| e150(E) | 60 | #4 | 23'-9" | — | |
| e151(E) | 30 | #4 | 20'-8" | — | |
| e152(E) | 80 | #4 | 24'-5" | — | |
| e153(E) | 20 | #4 | 25'-3" | — | |
| Item | | | | Unit | Total |
| Reinforcement Bars, Epoxy Coated | | | | Pound | 41,560 |
| Concrete Superstructure | | | | Cu. Yd. | 260.0 |
| Protective Coat | | | | Sq. Yd. | 612 |



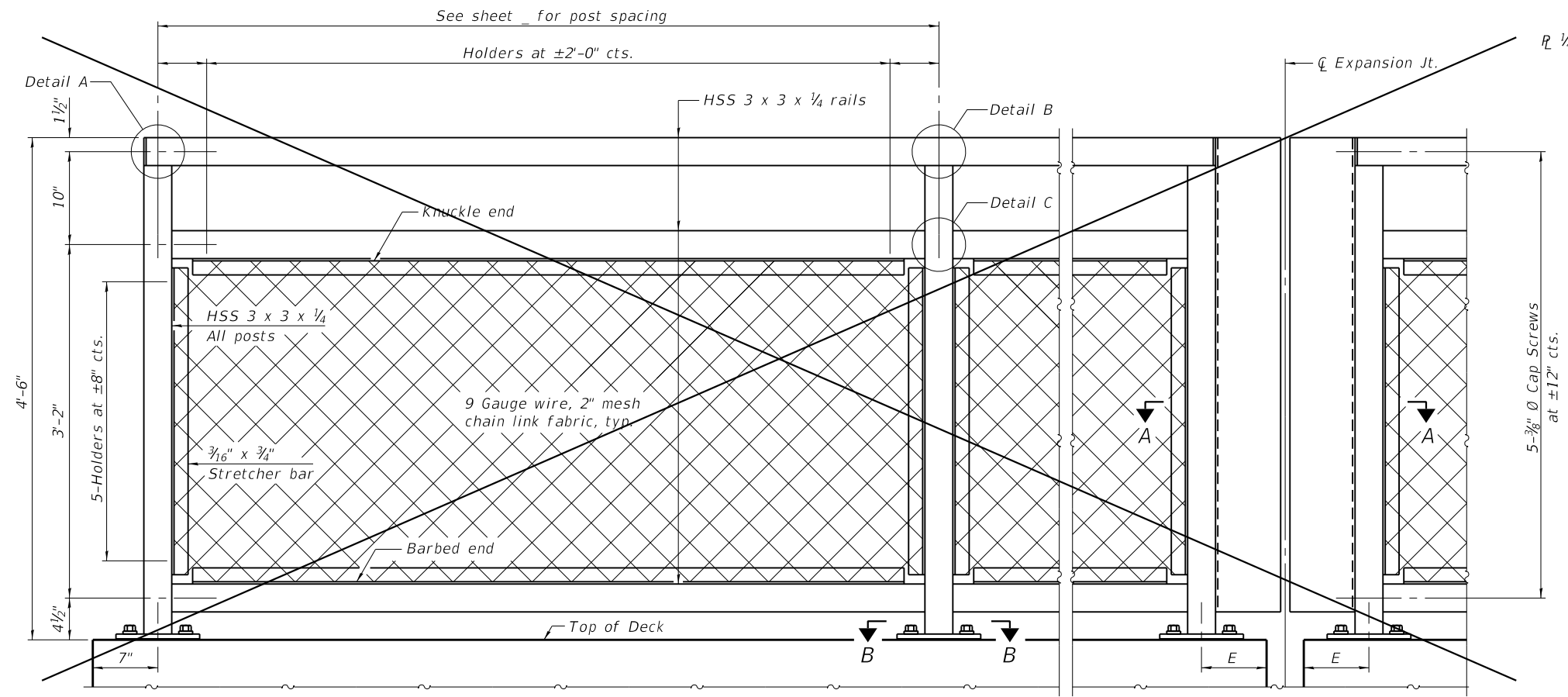
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| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_09_Details - 2.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 "/> | | |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

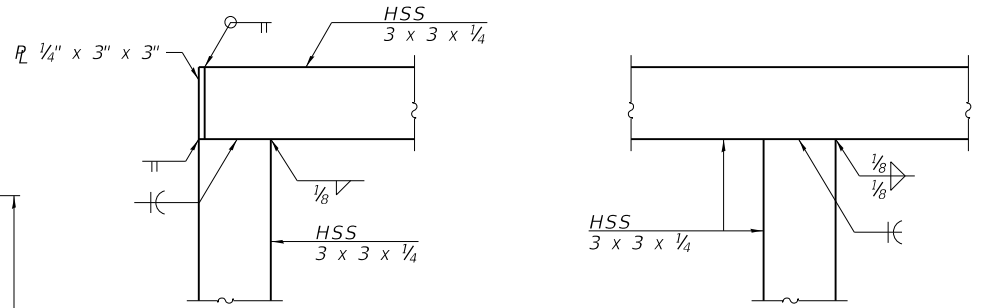
ANCHORAGE SLAB & WALL DETAILS (2 OF 2)
 STRUCTURE NO. 058-W006

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 638 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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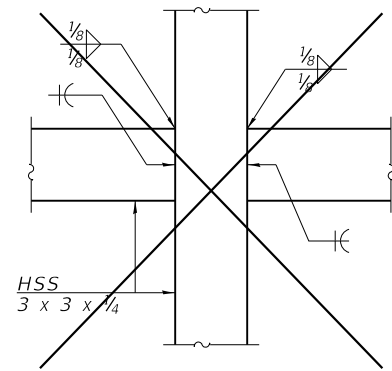


ELEVATION BICYCLE RAILING
(Inside face)

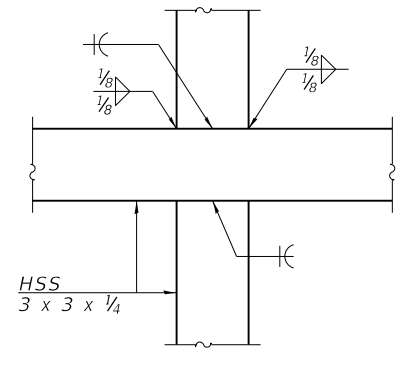


DETAIL A

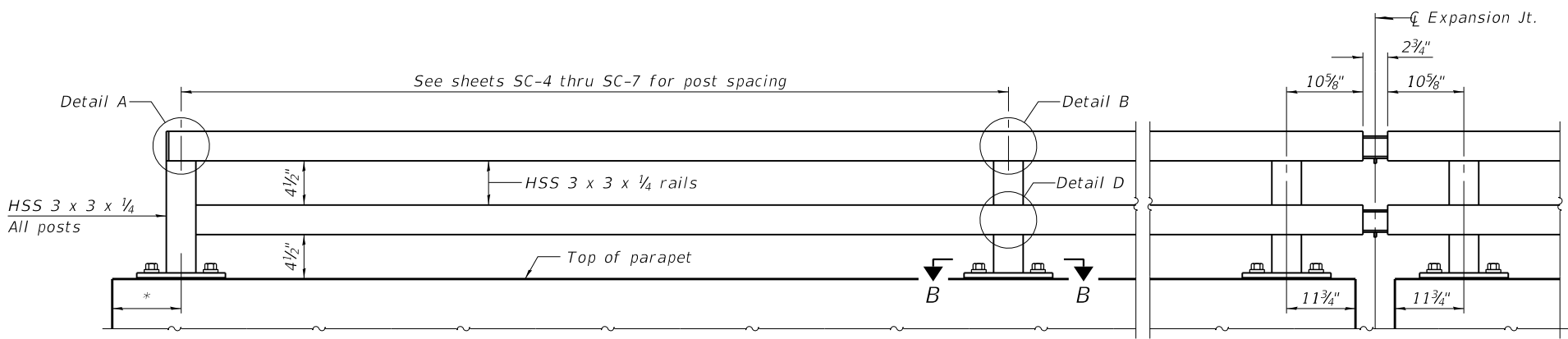
DETAIL B



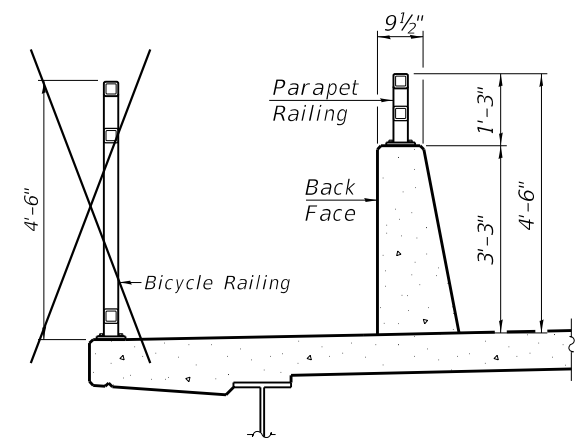
DETAIL C



DETAIL D



ELEVATION PARAPET RAILING
(Inside face)



SECTION THRU DECK

* See sheets SC-4 thru SC-7 for post end distances.

RAILING CRITERIA

| | |
|------------------------------|--------|
| MASH 2016 Test Level | 4 |
| Parapet Railing Weight (plf) | 25 |
| Bicycle Railing Weight (plf) | 50 |
| Max Post Spacing | 10'-0" |

Note:
 1. Parapet railing shall be horizontally curved to accommodate the geometry of the parapet and coping.

(Sheet 1 of 2)



| | | |
|------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_10_Parapet Railing.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 "/ in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

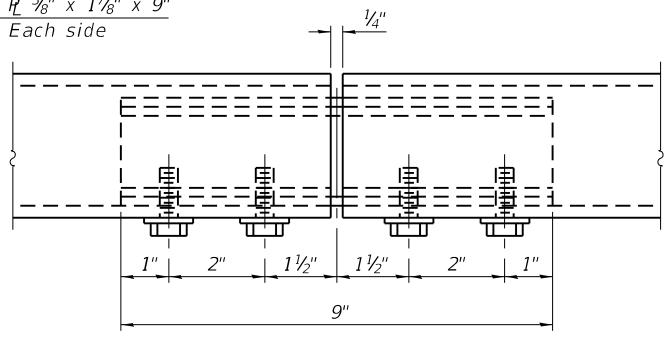
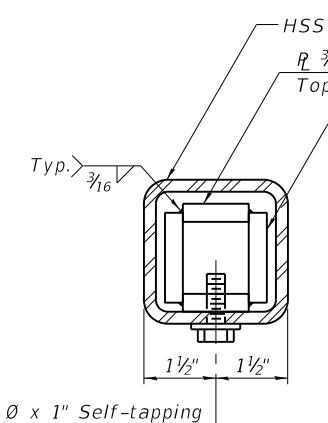
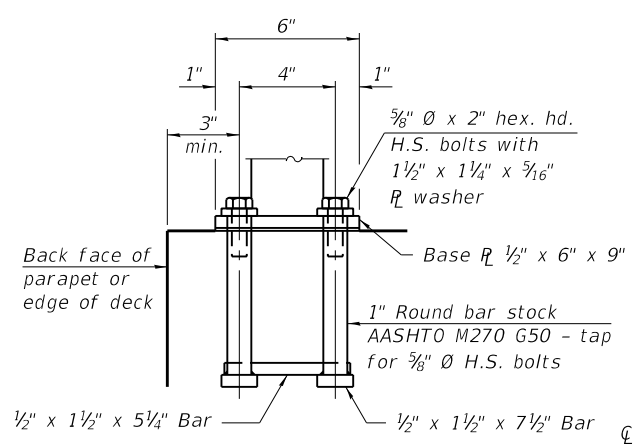
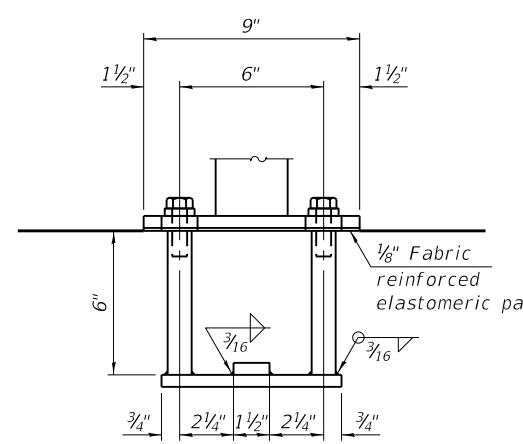
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING AND PARAPET RAILING
STRUCTURE NO. 058-W006

SHEET SC-10 OF SC-12 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 639 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

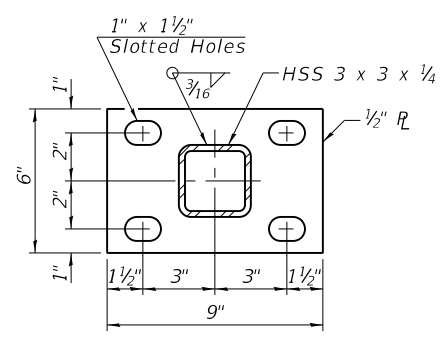
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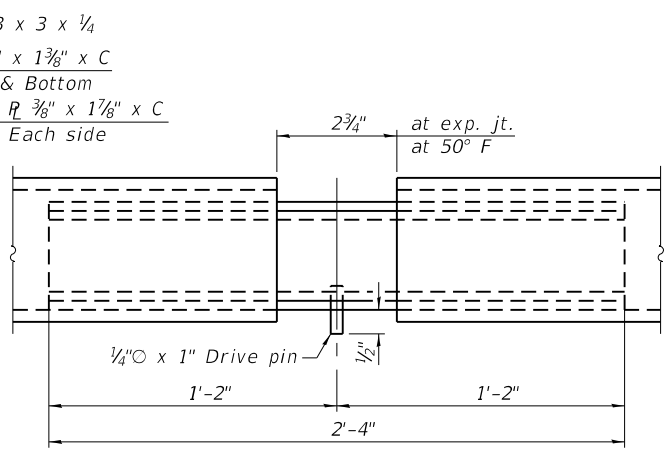
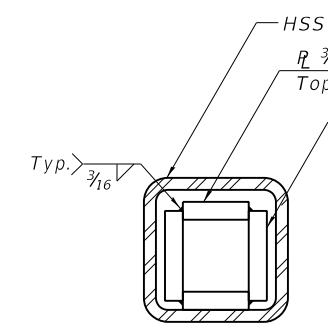
Notes:
 Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing.
 All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.
 All base plates used for the Parapet Railing shall be AASHTO M270 grade 50.
 All heavy hex nuts shall be according to ASTM A 563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105. The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 See sheet SC-8 of SC-12 for dimensions of concrete openings at expansion joints.

ANCHORAGE ASSEMBLY

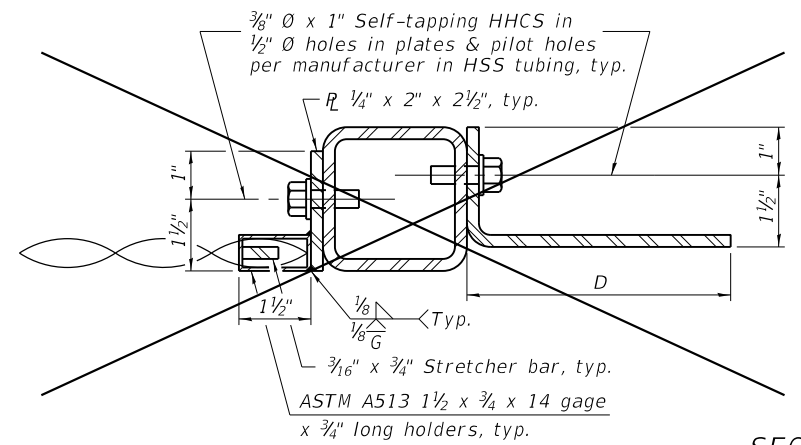
The Bicycle Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



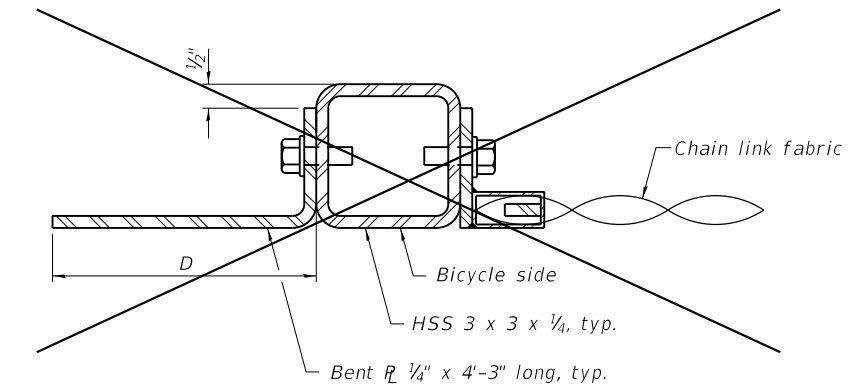
SECTION B-B



EXPANSION SPLICE



SECTION A-A



BILL OF MATERIAL

| Item | Unit | Quantity |
|-----------------|------|----------|
| Bicycle Railing | Foot | |
| Parapet Railing | Foot | 417 |

(Sheet 2 of 2)



| | | |
|--------------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_10_Parapet Railing_A.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 "/in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BICYCLE RAILING AND PARAPET RAILING
 STRUCTURE NO. 058-W006**

SHEET SC-10A OF SC-12 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 639A |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY CH, CM
SECTION _____ LOCATION DECATUR, IL
COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-10 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | By URS | ELEV | DEPTH | BLOW | UCS | M O I S T | Surface Water Elev. | ELEV | DEPTH | BLOW | UCS | M O I S T |
|----------------------------------------------------------------------------------------------------------------|---------|---------|-------|------|-------|-----------|---------------------|-------|-------|------|-------|-----------|
| Offset | By URS | (ft.) | (ft.) | /6" | (tsf) | (%) | (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) |
| Ground Surface Elev. | 674.992 | (ft.) | | | | | - | | | | | |
| SOIL DESCRIPTION | | | | | | | | | | | | |
| SILTY CLAY - A-6 Gray-Mottled-Brown, moist, stiff, low plasticity | | | | | | | | | | | | |
| | | | 6 | | | 31.6 | | | | | | |
| | | | 8 | | | | | | | | | |
| | | | 5 | | 1.5 | 14.7 | | | | | | |
| CLAY LOAM - A-4 Brown, moist, low plasticity | | | | | | | | | | | | |
| | | | 6 | | 1.5 | 15.2 | | | | | | |
| | | | 9 | | | | | | | | | |
| | | | 10 | | 1.8 | 13.6 | | | | | | |
| SILTY CLAY LOAM - A-4 Brown, moist, very stiff, low plasticity, trace gravel | | | | | | | | | | | | |
| | | | 10 | | 1.3 | 14.1 | | | | | | |
| | | | 11 | | | | | | | | | |
| | | | 13 | | 2.3 | 12.5 | | | | | | |
| | | | 15 | | | | | | | | | |
| | | | 12 | | | | | | | | | |
| | | | 13 | | | | | | | | | |
| -hard 13" seam SAND- Brown, fine-coarse (*free water @ 18.5' | | | | | | | | | | | | |
| | | | 23 | | | | | | | | | |
| | | | 38 | | | | | | | | | |
| | | | 22-4 | | | | | | | | | |
| -hard | | | | | | | | | | | | |
| | | | 20 | | 6.6 | 12.2 | | | | | | |
| | | | 27 | | | | | | | | | |
| | | | 23 | | | | | | | | | |
| SILT - A-4 Gray, moist, hard, low plasticity, trace sand, trace gravel | | | | | | | | | | | | |
| | | | 14 | | 2.1 | 14.3 | | | | | | |
| | | | 26 | | | | | | | | | |
| | | | 21 | | | | | | | | | |
| | | | 25 | | 2.5 | | | | | | | |
| CLAY - A-6 Gray, moist, very stiff, low plasticity, trace sand, trace gravel END OF BORING @ 26.0 FT. | | | | | | | | | | | | |
| | | 648.992 | 11 | | | | | | | | | |
| | | | 14 | | | | | | | | | |
| | | | 30 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY CM, JM
SECTION _____ LOCATION DECATUR, IL
COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-11 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | By URS | ELEV | DEPTH | BLOW | UCS | M O I S T | Surface Water Elev. | ELEV | DEPTH | BLOW | UCS | M O I S T |
|-------------------------------------------------------------------------------------|---------|---------|-------|------|-------|-----------|---------------------|-------|-------|------|-------|-----------|
| Offset | By URS | (ft.) | (ft.) | /6" | (tsf) | (%) | (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) |
| Ground Surface Elev. | 674.629 | (ft.) | | | | | - | | | | | |
| SOIL DESCRIPTION | | | | | | | | | | | | |
| 12" CONCRETE | | | | | | | | | | | | |
| | | | 3 | | 1.9 | 30.7 | | | | | | |
| | | | 6 | | | | | | | | | |
| SILTY CLAY - A-6 Gray-Mottled-Brown, moist, stiff, medium plasticity | | | | | | | | | | | | |
| | | | 5 | | | 23.4 | | | | | | |
| | | | 4 | | | | | | | | | |
| | | | 5 | | | | | | | | | |
| SILTY CLAY LOAM - A-4 Brown, moist, low plasticity, little sand, trace gravel | | | | | | | | | | | | |
| | | | 10 | | 1.3 | 18.0 | | | | | | |
| | | | 2 | | 1.2 | 15.7 | | | | | | |
| | | | 5 | | | | | | | | | |
| | | | 7 | | | | | | | | | |
| -very stiff | | | | | | | | | | | | |
| | | | 6 | | 2.6 | 14.6 | | | | | | |
| | | | 10 | | | | | | | | | |
| | | | 11 | | | | | | | | | |
| | | | 15 | | 3.2 | 13.5 | | | | | | |
| | | | 11 | | | | | | | | | |
| | | | 15 | | | | | | | | | |
| | | | 21 | | 12.0 | 9.8 | | | | | | |
| | | | 33 | | | | | | | | | |
| | | | 27 | | | | | | | | | |
| CLAY - A-6 Gray, moist, hard, low plasticity, little sand, trace gravel | | | | | | | | | | | | |
| | | | 20 | | | 9.7 | | | | | | |
| | | | 15 | | | | | | | | | |
| | | | 21 | | | | | | | | | |
| | | | 15 | | | | | | | | | |
| | | | 18 | | | | | | | | | |
| | | | 23 | | | | | | | | | |
| | | | 25 | | 7.1 | 10.5 | | | | | | |
| | | | 15 | | | | | | | | | |
| | | | 19 | | | | | | | | | |
| | | | 22 | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | | |
| | | 648.629 | 30 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL: Sheet
FILE NAME: p:\vaecom-na-pw\benitey.com\AECOM_D5116_NA\Documents\60603202-Brush College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE Walls_Sheets\60603202_058-W006_11_B-10 and B-11.dgn



| | | |
|----------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_11_B-10 and B-11.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 " / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (B-10 & B-11)
STRUCTURE NO. 058-W006

SHEET SC-11 OF SC-12 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|------------------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 640 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY CH, CM
SECTION _____ LOCATION DECATUR, IL
COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-12 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | By URS | E | D | B | U | M | Surface Water Elev. | (ft.) | E | D | B | U | M |
|---------------------------------------------------------------------------------------|---------------|-------|-------|---------|-------|------|---------------------|-------------|-------|-------|-----|-------|-----|
| Offset | By URS | L | P | L | C | O | Groundwater Elev. | (ft.) | L | P | L | C | O |
| Ground Surface Elev. | 675.845 (ft.) | V | H | S | Qu | S | First Encounter | 17.0' (ft.) | V | H | S | Qu | S |
| | | (ft.) | (ft.) | /6" | (tsf) | (%) | Upon Completion | 10.2' (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) |
| | | | | | | | After Cl Hrs. | 0 (ft.) | | | | | |
| SOIL DESCRIPTION | | | | | | | | | | | | | |
| SILTY CLAY - A-6 Gray-Mottled-Brown, moist, stiff, low plasticity | | | | | | | | | | | | | |
| | | | | 6 | | | | | | | | | |
| | | | | 7 | 1.5 | 26.2 | | | | | | | |
| | | | | 8 | | | | | | | | | |
| | | | 5 | 13 | | | | | | | | | |
| SILTY CLAY - A-6 Brown, moist, hard, low plasticity, trace gravel | | | | | | | | | | | | | |
| | | | | 14 | | 12.5 | | | | | | | |
| | | | | 17 | | | | | | | | | |
| | | | | 8 | | | | | | | | | |
| SILTY CLAY LOAM - A-4 Brown, moist, very stiff, low plasticity, little sand | | | | | | | | | | | | | |
| | | | | 10 | | 15.1 | | | | | | | |
| | | | | 14 | | | | | | | | | |
| | | | | 10 | | | 2.3 | 12.5 | | | | | |
| SILTY CLAY LOAM - A-4 Brown, moist, very stiff, low plasticity, little sand | | | | | | | | | | | | | |
| | | | | 8 | | | | | | | | | |
| | | | | 13 | 2.0 | 14.3 | | | | | | | |
| | | | | 16 | | | | | | | | | |
| | | | | 15 | | | | | | | | | |
| | | | | 15 | 3.6 | 14.1 | | | | | | | |
| | | | | 29 | | | | | | | | | |
| SAND - A-1-a Brown, moist, very dense, fine-coarse (*free water @ 17.0') | | | | | | | | | | | | | |
| | | | | 60 | | | | | | | | | |
| | | | | 20 | 21 | | | | | | | | |
| | | | | 36 | | 11.4 | | | | | | | |
| | | | | 24-5 | | | | | | | | | |
| SILTY CLAY LOAM - A-6 Gray, moist, hard, low plasticity, little sand, trace gravel | | | | | | | | | | | | | |
| | | | | 60 | | | | | | | | | |
| SAND - A-1-a Brown, moist, very dense, fine-coarse, trace gravel | | | | | | | | | | | | | |
| | | | | 25 | | | | | | | | | |
| | | | | 60 | | 10.8 | | | | | | | |
| | | | | 649.845 | | | | | | | | | |
| CLAY - A-6 Gray, moist, hard, low plasticity END OF BORING @ 26.0 FT. | | | | | | | | | | | | | |
| | | | | 30 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE
SECTION _____ LOCATION DECATUR, ILLINOIS
COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)
BORING NO. B-23 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | By URS | E | D | B | U | M | Surface Water Elev. | (ft.) | E | D | B | U | M |
|------------------------------------------------------------------------------------|---------------|-------|-------|---------|-------|------|---------------------|--------------|-------|-------|-----|-------|-----|
| Offset | By URS | L | P | L | C | O | Groundwater Elev. | (ft.) | L | P | L | C | O |
| Ground Surface Elev. | 675.958 (ft.) | V | H | S | Qu | S | First Encounter | 668.46 (ft.) | V | H | S | Qu | S |
| | | (ft.) | (ft.) | /6" | (tsf) | (%) | Upon Completion | - (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) |
| | | | | | | | After Hrs. | - (ft.) | | | | | |
| SOIL DESCRIPTION | | | | | | | | | | | | | |
| SILTY CLAY A-4 Brown, very moist, stiff, low plasticity, trace sand | | | | | | | | | | | | | |
| | | | | 4 | | | | | | | | | |
| | | | | 6 | 1.1 | 15.9 | | | | | | | |
| | | | | 2 | | | | | | | | | |
| | | | | 3 | 0.6 | 22.5 | | | | | | | |
| SILTY CLAY A-6 Brown, very moist, firm, low plasticity, trace gravel | | | | | | | | | | | | | |
| | | | | 5 | 1 | | | | | | | | |
| | | | | 2 | 0.6 | 26.8 | | | | | | | |
| | | | | 2 | | | | | | | | | |
| SILTY CLAY A-6 Mottled Brown, very moist, soft-firm, low plasticity, trace sand | | | | | | | | | | | | | |
| | | | | 2 | 0.4 | 18.3 | | | | | | | |
| | | | | 3 | | | | | | | | | |
| | | | | 10 | | | | | | | | | |
| (*free water @ 7.5' | | | | | | | | | | | | | |
| | | | | 3 | 0.99 | 12.9 | | | | | | | |
| | | | | 7 | | | | | | | | | |
| CLAY LOAM A-6 Brown, moist, stiff, low plasticity, with sand trace gravel | | | | | | | | | | | | | |
| | | | | 4 | | | | | | | | | |
| | | | | 6 | 0.95 | 23.7 | | | | | | | |
| | | | | 10 | | | | | | | | | |
| SILT A-4 Brown, very moist, stiff-very stiff, low plasticity, trace sand | | | | | | | | | | | | | |
| | | | | 15 | | | | | | | | | |
| CLAY LOAM A-6 Gray, moist, hard, low plasticity, with sand trace gravel | | | | | | | | | | | | | |
| | | | | 60-6 | | 13.7 | | | | | | | |
| | | | | 20 | 46 | | | | | | | | |
| | | | | 60-3 | 0.44 | 21.5 | | | | | | | |
| SILT A-4 Gray, very moist, hard, low plasticity, trace sand | | | | | | | | | | | | | |
| | | | | 36 | | | | | | | | | |
| | | | | 40 | 8.66 | 10.3 | | | | | | | |
| | | | | 20-2 | | | | | | | | | |
| CLAY LOAM A-6 Gray, moist, hard, low plasticity, with sand trace gravel | | | | | | | | | | | | | |
| | | | | 25 | | | | | | | | | |
| | | | | 26 | | | | | | | | | |
| | | | | 23 | 6.1 | 10.7 | | | | | | | |
| | | | | 31 | | | | | | | | | |
| | | | | 649.958 | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | | | |
| | | | | 30 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL: Sheet
FILE NAME: p:\vaecom-na-pw\benitey.com\AECOM_D5116_NA\Documents\60603202-Brush College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE_Walls_Sheets\60603202_058-W006_12_B12_and_B-23.dgn



| | | |
|---------------------------------------|----------------|-----------|
| USER NAME = kortega | DESIGNED - KWB | REVISED - |
| 60603202_058-W006_12_B12_and_B-23.dgn | CHECKED - KFO | REVISED - |
| PLOT SCALE = 0:2.0000 " = 1" | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

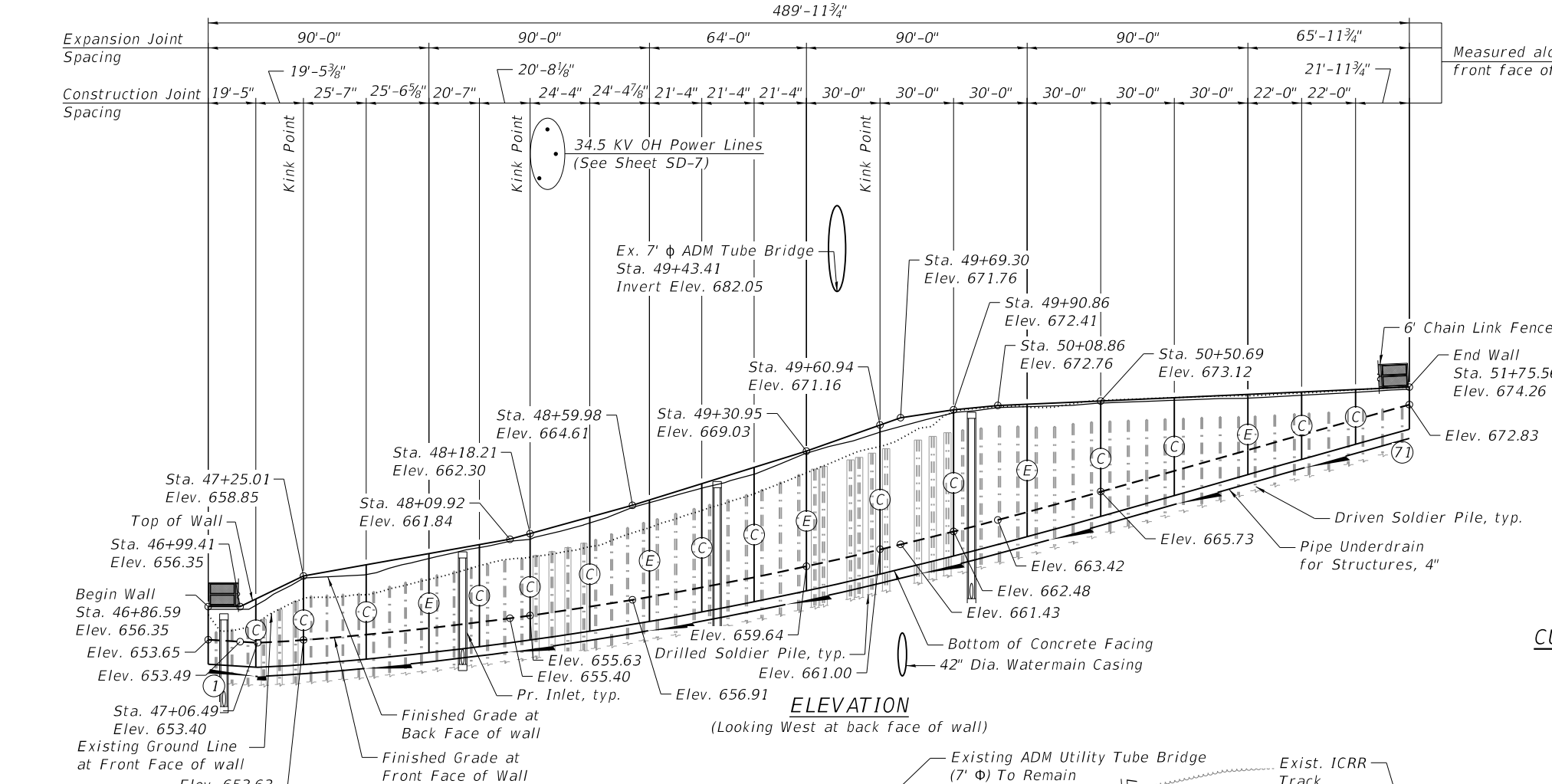
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (B-12 & B-23)
STRUCTURE NO. 058-W006

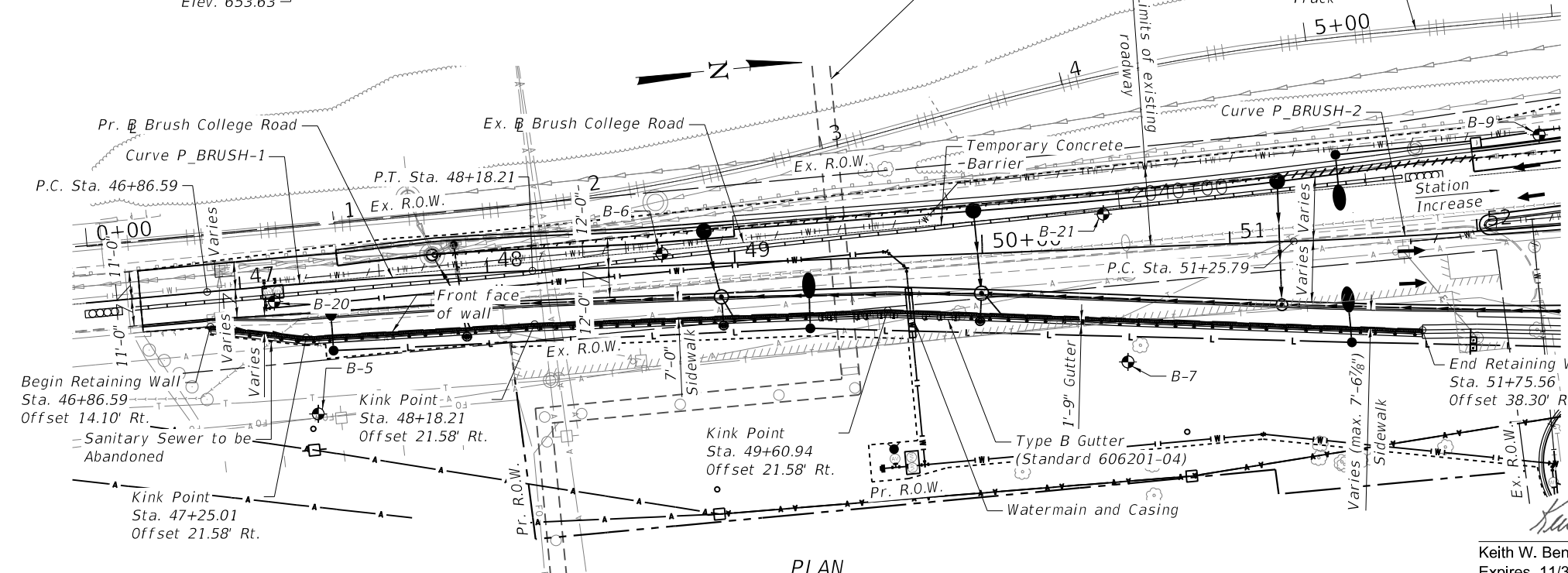
SHEET SC-12 OF SC-12 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 641 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

Benchmark: "M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Rd. - Elev. 652.58
 Existing Structure: None
 New soldier pile retaining wall to be constructed to support existing embankment.
 NB lane of Brush College Road to be closed during construction of retaining wall.



ELEVATION
 (Looking West at back face of wall)

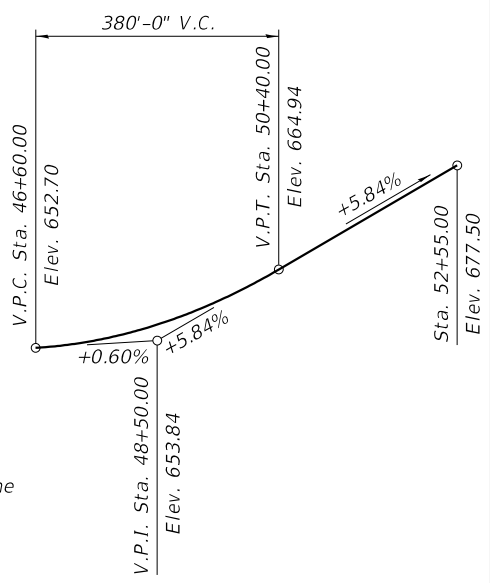


PLAN

Note:
 Wall offsets are measured from the Brush College Road to the front face of wall.

LEGEND

- G — Ex. Gas Line
- W — Ex. Water Line
- Ab. — Ab. Water Line
- T — Ex. Underground Telephone Line
- FO — Ex. Fiber Optic
- A — Ex. Aerial Line
- S — Ex. Storm Sewer
- SS — Ex. Sanitary Sewer
- E — Ex. Easement
- RR — Ex. RR Track
- UTL — Ex. Underground Transmission Line
- V — Ex. Vegetation Line
- G — Ex. Guardrail
- M — Ex. Manhole
- I — Ex. Inlet
- Pr. — Pr. Fence
- Pr. — Pr. Limits of Construction
- Pr. — Pr. Buried Lighting Cable
- Pr. — Pr. Water Line
- Pr. — Pr. Storm Sewer
- Pr. — Pr. Above Ground Lighting
- Pr. — Pr. Sign
- SBL — Soil Boring Location
- Pr. — Pr. Inlet
- Pr. — Pr. Manhole
- Pr. — Pr. Catch Basin
- C — Construction, Expansion Joints



PROFILE GRADE

(Along Brush College Road)

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

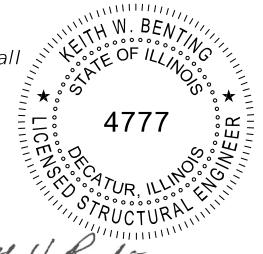
FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50, Soldier Pile)

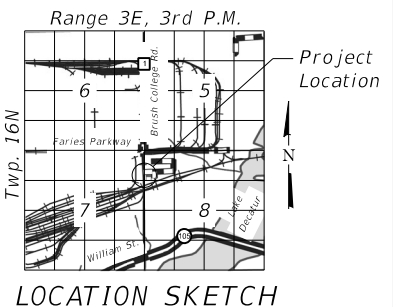
CURVE P BRUSH-1 CURVE P BRUSH-2

| Curve P BRUSH-1 | Curve P BRUSH-2 |
|----------------------------------|----------------------------------|
| P.I. Sta. = 47+52.41 | P.I. Sta. = 51+91.51 |
| $\Delta = 3^\circ 00' 59''$ (RT) | $\Delta = 3^\circ 00' 41''$ (LT) |
| $D = 2^\circ 17' 31''$ | $D = 2^\circ 17' 31''$ |
| $R = 2,500.00'$ | $R = 2,500.00'$ |
| $T = 65.82'$ | $T = 65.72'$ |
| $L = 131.62'$ | $L = 131.40'$ |
| $e = 0.87'$ | $e = 0.86'$ |
| $e = NC$ (40 MPH) | $e = NC$ (40 MPH) |
| T.R. = N/A | T.R. = N/A |
| S.E. Run = N/A | S.E. Run = N/A |
| P.C. Sta. = 46+86.59 | P.C. Sta. = 51+25.79 |
| P.T. Sta. = 48+18.21 | P.T. Sta. = 52+57.19 |

"I certify that to the best of knowledge, information, and belief, this structure design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO 'Standard Specifications for Highway Bridges.'"



Keith W. Bunting, Illinois S.E. 081-004777
 Expires 11/30/2024
 Date 4/17/2023



LOCATION SKETCH

GENERAL PLAN & ELEVATION
BRUSH COLLEGE ROAD
 F.A.U. 7448 - SECTION 09-00933-01-BR
 MACON COUNTY
 STA. 46+86.59 TO STA. 51+75.56
 STRUCTURE NO. 058-W007

MODEL: Sheet
 FILE NAME: p:\vaecom-na-pw\benitley.com\AECOM_DS16_NA\Documents\60603202-Brush College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE Walls_Sheets\60603202_058-W007_01_GPE.dgn
 4/13/2023 4:25:57 PM



| USER NAME | DESIGNED | REVISIONS |
|------------------------------|----------|-----------|
| zavidson | KWB | - |
| 60603202_058-W007_01_GPE.dgn | RPW | - |
| PLOT SCALE = 0.1687' / in. | LMC | - |
| PLOT DATE = | MDC | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET SD-1 OF SD-23 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 642 |

CONTRACT NO. 95893
 ILLINOIS FED. AID PROJECT

INDEX OF SHEETS

- SD-1. General Plan & Elevation
- SD-2. General Data & Bill of Material
- SD-3. Plan & Elevation - 1
- SD-4. Plan & Elevation - 2
- SD-5. Plan & Elevation - 3
- SD-6. Plan & Elevation - 4
- SD-7. Plan & Elevation - 5
- SD-8. Plan & Elevation - 6
- SD-9. Concrete Facing - 1
- SD-10. Concrete Facing - 2
- SD-11. Concrete Facing - 3
- SD-12. Concrete Facing - 4
- SD-13. Typical Section Thru Wall at Driven Soldier Pile
- SD-14. Typical Section Thru Wall at Drilled Soldier Pile
- SD-15. Wall Details
- SD-16. Chain Link Fence Detail
- SD-17. HP Pile Details
- SD-18. Soil Boring Logs (B-5)
- SD-19. Soil Boring Logs (B-6)
- SD-20. Soil Boring Logs (B-7)
- SD-21. Soil Boring Logs (B-20)
- SD-22. Soil Boring Logs (B-21)
- SD-23. Soil Boring Logs (B-22)

GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Wall stations and offsets are measured from $\frac{1}{2}$ Brush College Road to the front face of the cast in place concrete facing.
3. The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
4. All construction joints shall be bonded.
5. Concrete Sealer shall be applied to all exposed areas of the concrete facing.
6. All exposed concrete edges shall have a $\frac{3}{4}$ "x45 degrees chamfer, U.N.O. The chamfer on vertical edges shall continue a minimum of 1'-0" below finished grade.
7. Soldier piles are a combination of driven piles and drilled piles as shown in the Pile Summary Table. Refer to Section 516.05 and Section 522.08(b)(1) of the Standard Specifications for shaft excavation and bracing requirements. A pile shall not be driven within four shaft diameters center-to-center of a drilled pile until the concrete encasement has reached a minimum compressive strength of 1500 psi.

PILE SUMMARY TABLE

| Pile No. | Pile Size | Station | Offset (ft.) | Top of Pile Elev. | Btm of Pile Elev. | Pile Length (ft.) | Shaft Dia. (in.) | Shear Studs | Pile No. | Pile Size | Station | Offset (ft.) | Top of Pile Elev. | Btm of Pile Elev. | Pile Length (ft.) | Shaft Dia. (in.) | Shear Studs |
|----------|-----------|----------|--------------|-------------------|-------------------|-------------------|------------------|-------------|----------|-----------|----------|--------------|-------------------|-------------------|-------------------|------------------|-------------|
| 1 | HP14x73 | 46+89.44 | 16.28 | 654.68 | 636.47 | 18.21 | - | 4 | 37 | W14x159 | 49+27.78 | 23.21 | 667.16 | 626.21 | 40.96 | - | 10 |
| 2 | HP14x73 | 46+95.85 | 17.56 | 654.68 | 636.16 | 18.52 | - | 4 | 38 | W24x131 | 49+34.43 | 23.60 | 667.61 | 625.55 | 42.06 | 36.00 | 10 |
| 3 | HP14x73 | 47+02.28 | 18.83 | 654.99 | 635.16 | 19.84 | - | 4 | 39 | W24x131 | 49+37.93 | 23.60 | 667.86 | 630.60 | 37.27 | 36.00 | 11 |
| 4 | HP14x73 | 47+08.64 | 20.07 | 655.61 | 636.55 | 19.07 | 24.00 | 5 | 40 | W24x131 | 49+48.93 | 23.60 | 668.64 | 630.51 | 38.14 | 36.00 | 11 |
| 5 | HP14x73 | 47+15.07 | 21.30 | 656.24 | 635.50 | 20.75 | 24.00 | 5 | 41 | W24x131 | 49+52.43 | 23.60 | 668.89 | 624.65 | 44.24 | 36.00 | 11 |
| 6 | HP14x73 | 47+21.51 | 22.52 | 656.87 | 634.48 | 22.39 | 24.00 | 6 | 42 | W24x131 | 49+58.18 | 23.60 | 669.30 | 627.54 | 41.77 | 36.00 | 11 |
| 7 | HP14x73 | 47+28.05 | 23.20 | 657.29 | 630.57 | 26.72 | - | 6 | 43 | W24x131 | 49+63.28 | 23.79 | 669.67 | 632.23 | 37.45 | 36.00 | 11 |
| 8 | HP14x73 | 47+34.61 | 23.31 | 657.52 | 630.19 | 27.33 | - | 6 | 44 | W24x131 | 49+76.25 | 24.76 | 670.30 | 632.25 | 38.05 | 36.00 | 11 |
| 9 | HP14x73 | 47+41.17 | 23.40 | 657.75 | 630.11 | 27.65 | - | 6 | 45 | W24x131 | 49+82.23 | 25.21 | 670.48 | 629.41 | 41.07 | 36.00 | 11 |
| 10 | HP14x73 | 47+47.73 | 23.47 | 657.98 | 630.27 | 27.72 | - | 7 | 46 | W24x131 | 49+88.21 | 25.66 | 670.66 | 628.73 | 41.93 | 36.00 | 11 |
| 11 | HP14x73 | 47+53.86 | 23.52 | 658.20 | 630.24 | 27.96 | - | 7 | 47 | W14x211 | 49+94.48 | 25.77 | 670.81 | 627.21 | 43.61 | - | 11 |
| 12 | HP14x73 | 47+60.42 | 23.56 | 658.43 | 629.81 | 28.62 | - | 7 | 48 | W14x211 | 50+01.96 | 26.33 | 670.96 | 628.24 | 42.72 | - | 11 |
| 13 | HP14x73 | 47+66.98 | 23.58 | 658.66 | 629.73 | 28.93 | - | 7 | 49 | W14x211 | 50+09.44 | 26.89 | 671.10 | 629.26 | 41.84 | - | 10 |
| 14 | HP14x73 | 47+73.54 | 23.58 | 658.89 | 629.93 | 28.96 | - | 7 | 50 | W14x211 | 50+16.91 | 27.46 | 671.16 | 630.56 | 40.60 | - | 10 |
| 15 | HP14x73 | 47+79.91 | 23.57 | 659.11 | 629.13 | 29.99 | - | 7 | 51 | W14x211 | 50+24.39 | 28.02 | 671.22 | 631.86 | 39.37 | - | 10 |
| 16 | HP14x73 | 47+86.98 | 23.53 | 659.36 | 628.74 | 30.62 | - | 7 | 52 | W14x211 | 50+31.87 | 28.58 | 671.29 | 633.17 | 38.13 | - | 9 |
| 17 | HP14x73 | 47+94.04 | 23.48 | 659.61 | 628.92 | 30.69 | - | 7 | 53 | W14x211 | 50+39.35 | 29.15 | 671.35 | 634.46 | 36.89 | - | 9 |
| 18 | HP14x89 | 48+00.74 | 23.42 | 659.85 | 628.81 | 31.05 | - | 7 | 54 | W14x211 | 50+46.83 | 29.71 | 671.42 | 635.77 | 35.65 | - | 9 |
| 19 | HP14x89 | 48+07.80 | 23.33 | 660.09 | 628.47 | 31.62 | - | 7 | 55 | W14x211 | 50+54.31 | 30.27 | 671.48 | 637.10 | 34.38 | - | 8 |
| 20 | HP14x89 | 48+14.87 | 23.22 | 660.44 | 628.52 | 31.92 | - | 8 | 56 | W14x211 | 50+61.79 | 30.83 | 671.55 | 638.41 | 33.14 | - | 8 |
| 21 | HP14x89 | 48+20.63 | 23.16 | 660.76 | 631.83 | 28.94 | 30.00 | 8 | 57 | W14x211 | 50+69.27 | 31.40 | 671.62 | 639.75 | 31.87 | - | 7 |
| 22 | HP14x89 | 48+27.13 | 23.16 | 661.12 | 632.67 | 28.45 | 30.00 | 8 | 58 | W14x211 | 50+76.75 | 31.96 | 671.69 | 641.06 | 30.64 | - | 7 |
| 23 | HP14x89 | 48+33.63 | 23.16 | 661.48 | 632.51 | 28.97 | 30.00 | 8 | 59 | W14x159 | 50+84.23 | 32.49 | 671.76 | 642.28 | 29.48 | - | 7 |
| 24 | HP14x89 | 48+40.13 | 23.16 | 661.84 | 631.35 | 30.49 | 30.00 | 8 | 60 | W14x159 | 50+91.71 | 33.06 | 671.82 | 643.59 | 28.24 | - | 6 |
| 25 | W14x159 | 48+45.00 | 23.21 | 662.11 | 629.92 | 32.19 | - | 8 | 61 | W14x159 | 50+99.18 | 33.62 | 671.89 | 644.93 | 26.96 | - | 6 |
| 26 | W14x159 | 48+51.50 | 23.21 | 662.47 | 628.43 | 34.04 | - | 8 | 62 | W14x159 | 51+06.66 | 34.18 | 671.96 | 646.24 | 25.72 | - | 6 |
| 27 | W14x159 | 48+58.00 | 23.21 | 662.83 | 628.25 | 34.59 | - | 9 | 63 | HP14x73 | 51+13.40 | 34.63 | 672.02 | 647.46 | 24.56 | - | 5 |
| 28 | W14x159 | 48+64.50 | 23.21 | 663.22 | 629.42 | 33.80 | - | 9 | 64 | HP14x73 | 51+21.38 | 35.23 | 672.09 | 647.87 | 24.22 | - | 5 |
| 29 | W14x159 | 48+70.12 | 23.21 | 663.57 | 627.34 | 36.23 | - | 9 | 65 | HP14x73 | 51+29.30 | 35.83 | 672.17 | 650.30 | 21.87 | - | 5 |
| 30 | W14x159 | 48+77.62 | 23.21 | 664.04 | 626.26 | 37.78 | - | 9 | 66 | HP14x73 | 51+35.20 | 36.30 | 672.22 | 651.35 | 20.88 | - | 4 |
| 31 | W14x159 | 48+85.12 | 23.21 | 664.51 | 627.07 | 37.44 | - | 9 | 67 | HP14x73 | 51+43.06 | 36.94 | 672.29 | 651.91 | 20.39 | - | 4 |
| 32 | W14x159 | 48+90.95 | 23.21 | 664.87 | 627.35 | 37.52 | - | 9 | 68 | HP14x73 | 51+50.91 | 37.61 | 672.37 | 654.19 | 18.18 | - | 4 |
| 33 | W14x159 | 48+98.95 | 23.21 | 665.37 | 625.03 | 40.34 | - | 10 | 69 | HP14x73 | 51+56.79 | 38.13 | 672.42 | 655.24 | 17.18 | - | 3 |
| 34 | W14x159 | 49+06.95 | 23.21 | 665.86 | 627.04 | 38.83 | - | 10 | 70 | HP14x73 | 51+64.64 | 38.84 | 672.49 | 655.94 | 16.55 | - | 3 |
| 35 | W14x159 | 49+12.78 | 23.21 | 666.23 | 626.49 | 39.75 | - | 10 | 71 | HP14x73 | 51+72.48 | 39.58 | 672.56 | 658.07 | 14.49 | - | 3 |
| 36 | W14x159 | 49+20.28 | 23.21 | 666.70 | 625.34 | 41.36 | - | 10 | | | | | | | | | |

TOTAL BILL OF MATERIAL

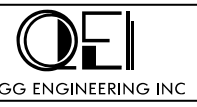
| ITEM | UNIT | TOTAL |
|----------------------------------------------|---------|--------|
| Structure Excavation | Cu. Yd. | 404 |
| Stud Shear Connectors | Each | 544 |
| Reinforcement Bars, Epoxy Coated | Pound | 14,900 |
| Pile Shoes | Each | 55 |
| Name Plates | Each | 1 |
| Furnishing Soldier Piles (HP Section) | Foot | 824 |
| Furnishing Soldier Piles (W Section) | Foot | 1,407 |
| Driving Soldier Piles | Foot | 1,689 |
| Drilling and Setting Soldier Piles (In Soil) | Cu. Ft. | 3,328 |
| Untreated Timber Lagging | Sq. Ft. | 3,016 |
| Concrete Structures (Retaining Wall) | Cu. Yd. | 159.4 |
| Concrete Sealer | Sq. Ft. | 3,773 |
| Geocomposite Wall Drain | Sq. Yd. | 227 |
| Chain Link Fence, 6' Attached to Structure | Foot | 490 |
| Pipe Underdrains for Structures 4" | Foot | 494 |

STATION 46+86.59 TO 51+75.56
BUILT BY
CITY OF DECATUR
F.A.U. 7448
SEC. 09-00933-01-BR
STR. NO. 058-W007

NAME PLATE
See Std. 515001

Note:
The pile station is to the center of the pile and shaft measured along the proposed $\frac{1}{2}$ of Brush College Road.
The pile offset is to the center of the pile and shaft from the proposed $\frac{1}{2}$ of Brush College Road.

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4/5/2023 2:10:59 PM



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| PLOT DATE = | CHECKED - MDC | REVISED - |

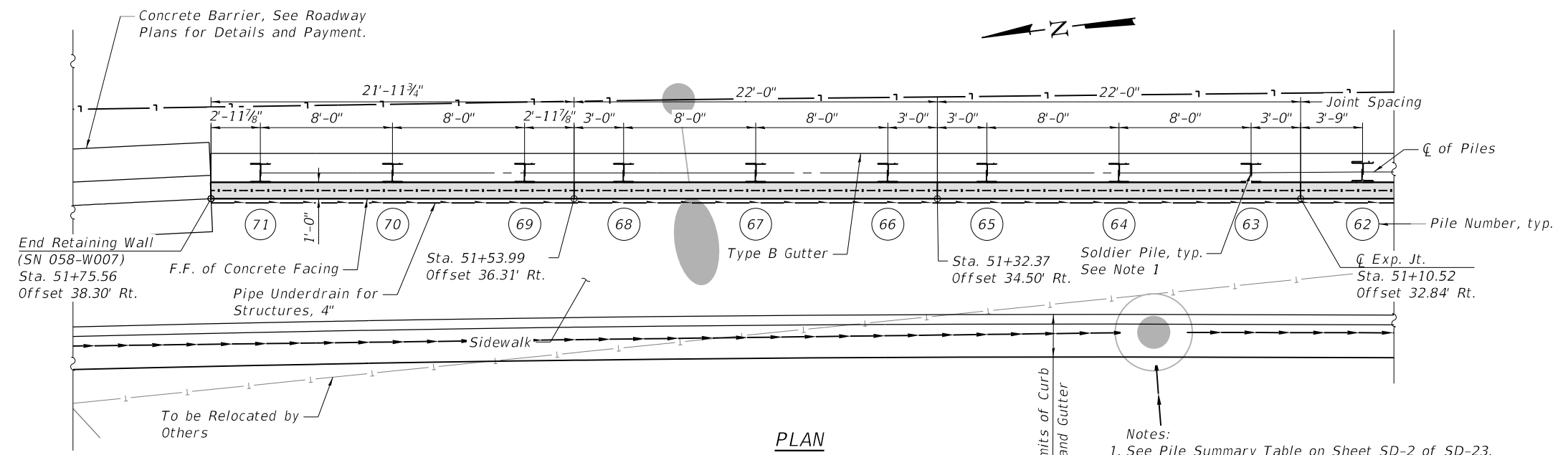
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA & BILL OF MATERIAL
STRUCTURE NO. 058-W007**

SHEET SD-2 OF SD-23 SHEETS

| | | | | |
|--------------------|------------------------|------------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 643 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

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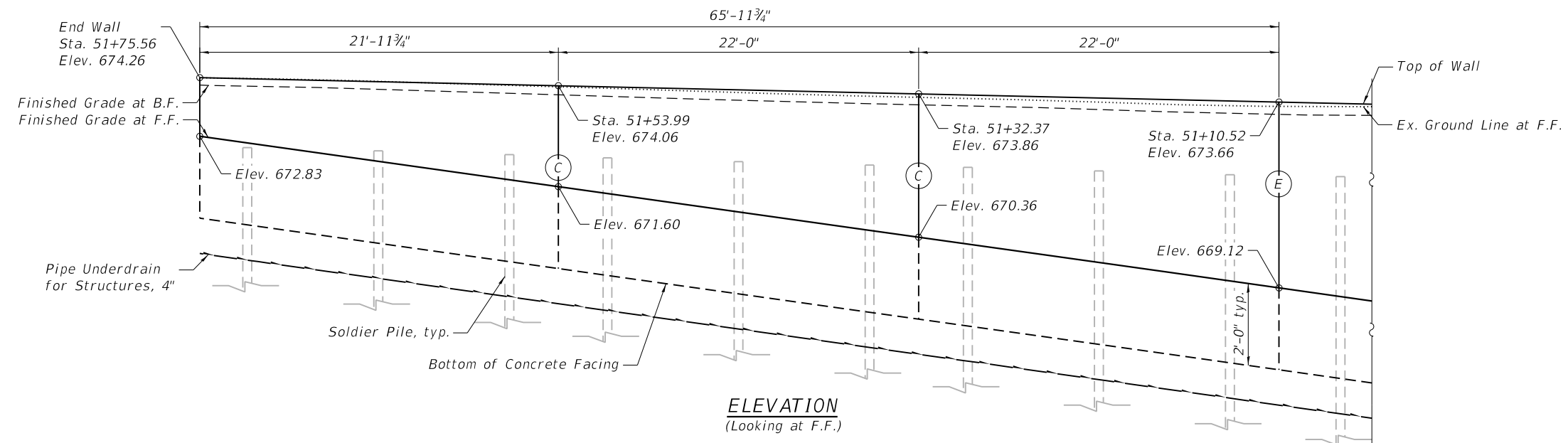


PLAN

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.
 5. Coordinate drainage structure installation with wall construction.

LEGEND

- T — Ex. Underground Telephone Line
- A — Ex. Aerial Line
- - - - - Ex. Sanitary Sewer
- — — — — Ex. ROW
- Pr. Catch Basin
- · - · - · Pr. Fence
- L — Pr. Buried Lighting Cable
- W — Pr. Water Main
- S — Pr. Storm Sewer
- · - · - · Pr. ROW
- Pr. Above Ground Lighting
- Pr. Manhole
- Pr. Inlet
- (E) Construction, Expansion Joints



ELEVATION
 (Looking at F.F.)



| | | | | | |
|-------------------------------------------------|------------------|------------|-----------|-----------|--|
| USER NAME = | zdavison | DESIGNED - | KWB | REVISED - | |
| 06063202_058-W007_03_Plan and Elevation - 1.dgn | CHECKED - | RPW | REVISED - | | |
| PLOT SCALE = | 8:4.0000 " / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

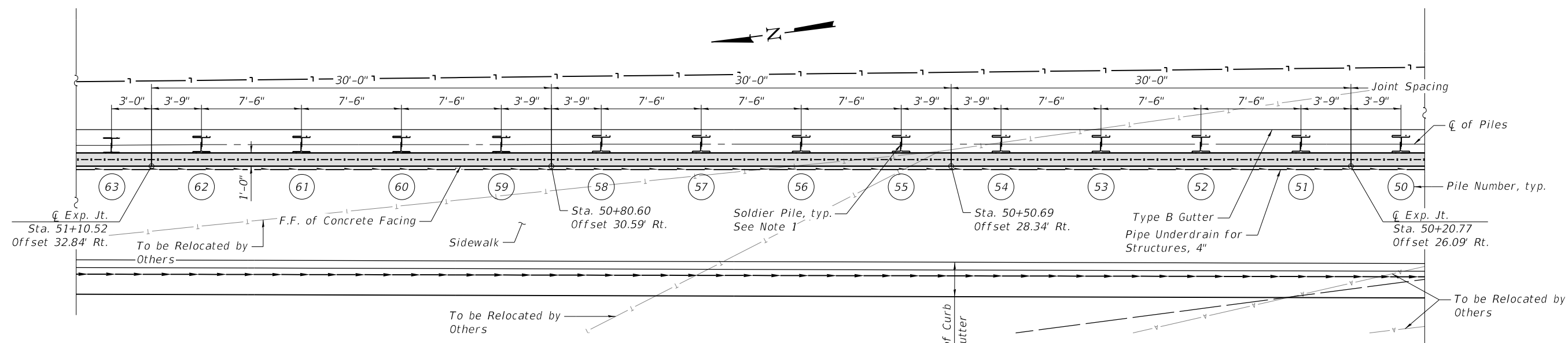
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION (1 OF 6)
 STRUCTURE NO. 058-W007

SHEET SD-3 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 644 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

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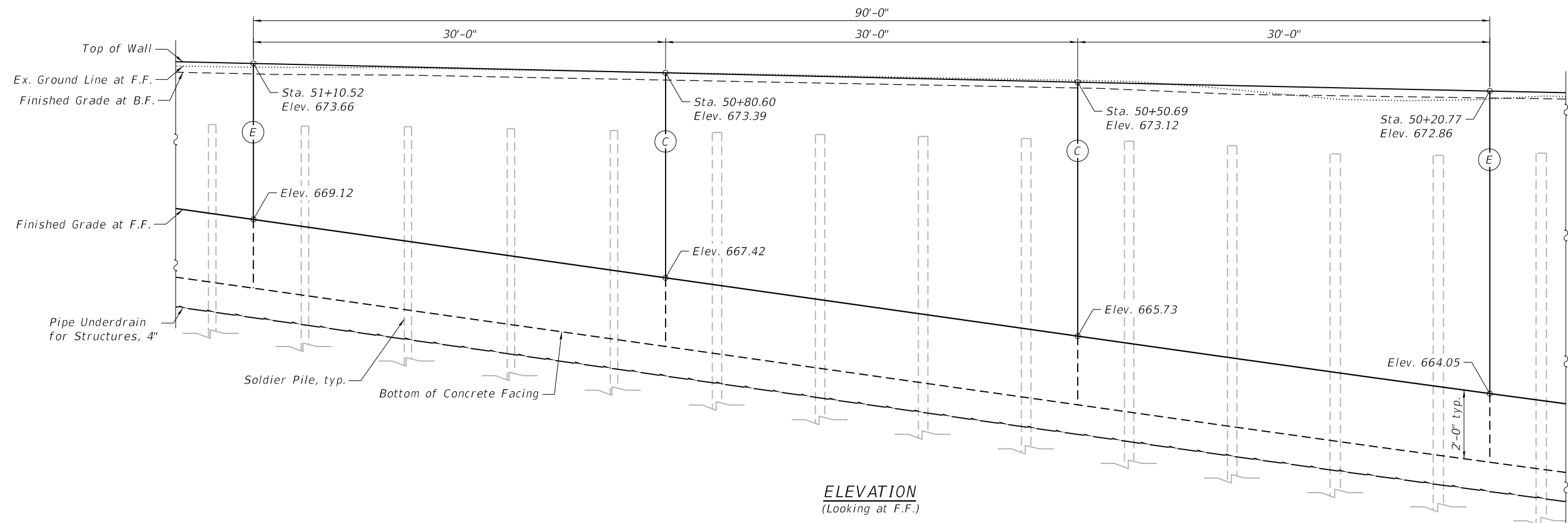


PLAN

LEGEND

- T— Ex. Underground Telephone Line
- A— Ex. Aerial Line
- <-<-<-<-<- Ex. Sanitary Sewer
- Ex. ROW
- Pr. Catch Basin
- Pr. Fence
- L— Pr. Buried Lighting Cable
- Pr. Water Main
- Pr. Storm Sewer
- Pr. ROW
- Pr. Above Ground Lighting
- Pr. Manhole
- Pr. Inlet
- (C)(E) Construction, Expansion Joints

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.



ELEVATION
(Looking at F.F.)



| | | |
|-------------------------------------------------------------------|----------------|-----------|
| USER NAME = zdavidson | DESIGNED - KWB | REVISED - |
| 60603202_058-W007_04_Plan and Elevation - 2.dgn | CHECKED - RPW | REVISED - |
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| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

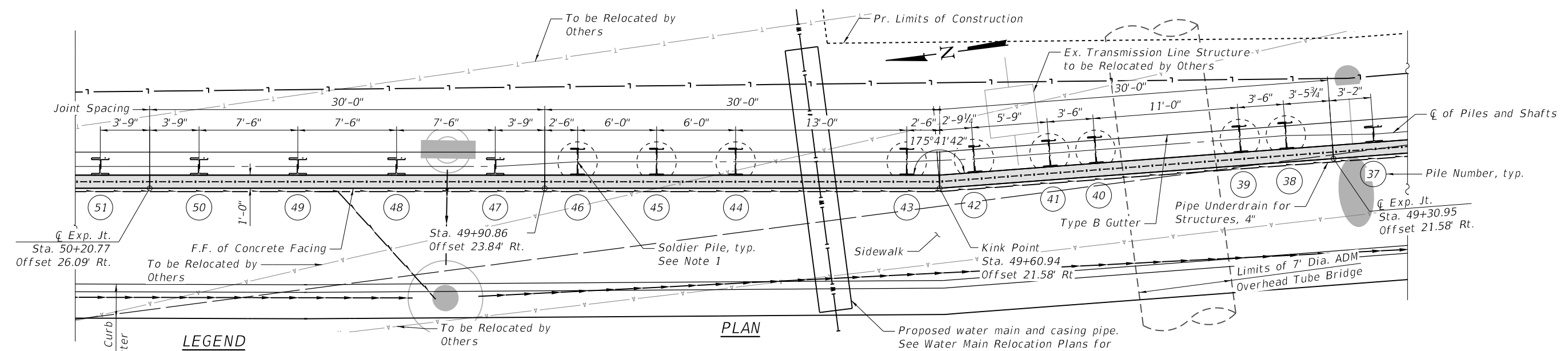
PLAN & ELEVATION (2 OF 6)
STRUCTURE NO. 058-W007

SHEET SD-4 OF SD-23 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 645 |
| CONTRACT NO. 95893 | | | | |

ILLINOIS FED. AID PROJECT

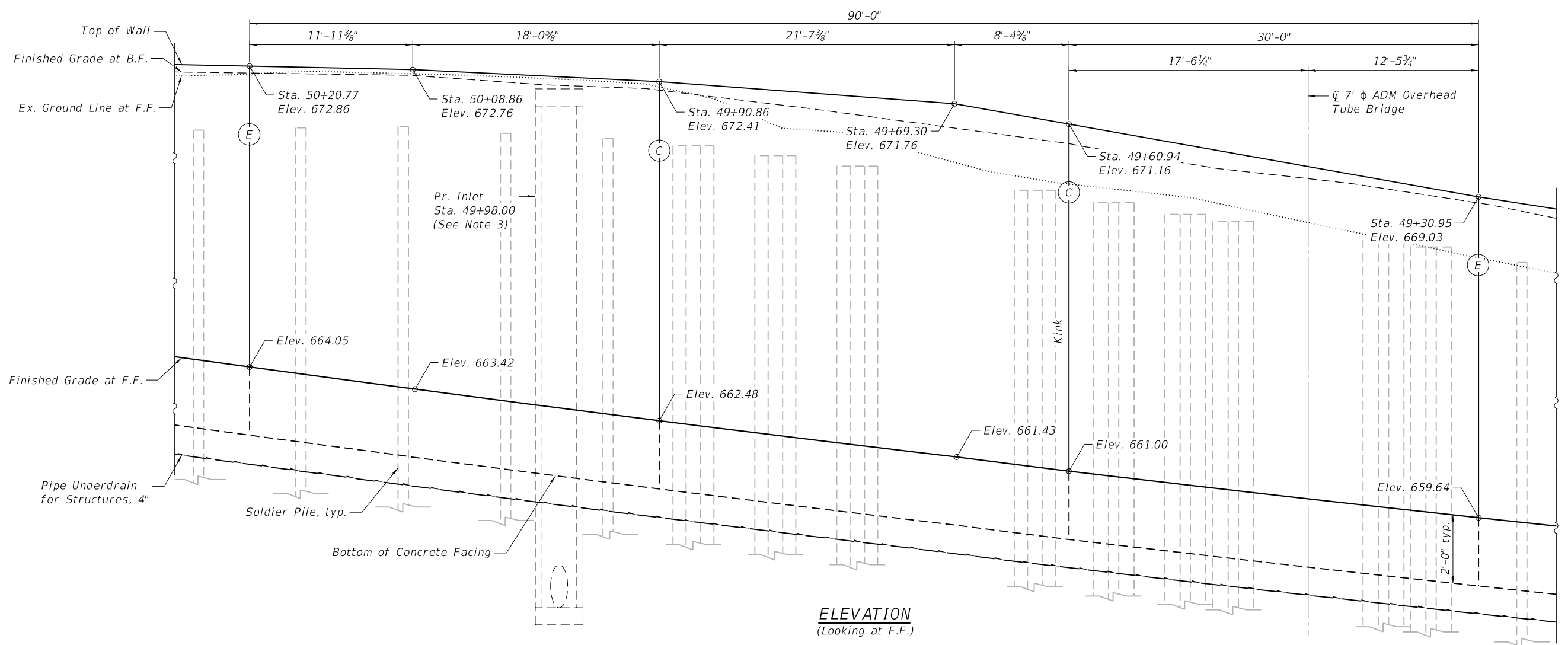
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LEGEND

| | | | |
|--|--------------------------------|--|--------------------------------|
| | Ex. Underground Telephone Line | | Pr. Water Main |
| | Ex. Aerial Line | | Pr. Storm Sewer |
| | Ex. Sanitary Sewer | | Pr. ROW |
| | Ex. ROW | | Pr. Above Ground Lighting |
| | Pr. Catch Basin | | Pr. Manhole |
| | Pr. Fence | | Pr. Inlet |
| | Pr. Buried Lighting Cable | | Construction, Expansion Joints |

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.
 5. Coordinate drainage structure installation with wall construction.



ELEVATION
 (Looking at F.F.)



| | | |
|-------------------------------------------------------------------|----------------|-----------|
| USER NAME = zdavidson | DESIGNED - KWB | REVISED - |
| 60603202_058-W007_05_Plan and Elevation - 3.dgn | CHECKED - RPW | REVISED - |
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| PLOT DATE = | CHECKED - MDC | REVISED - |

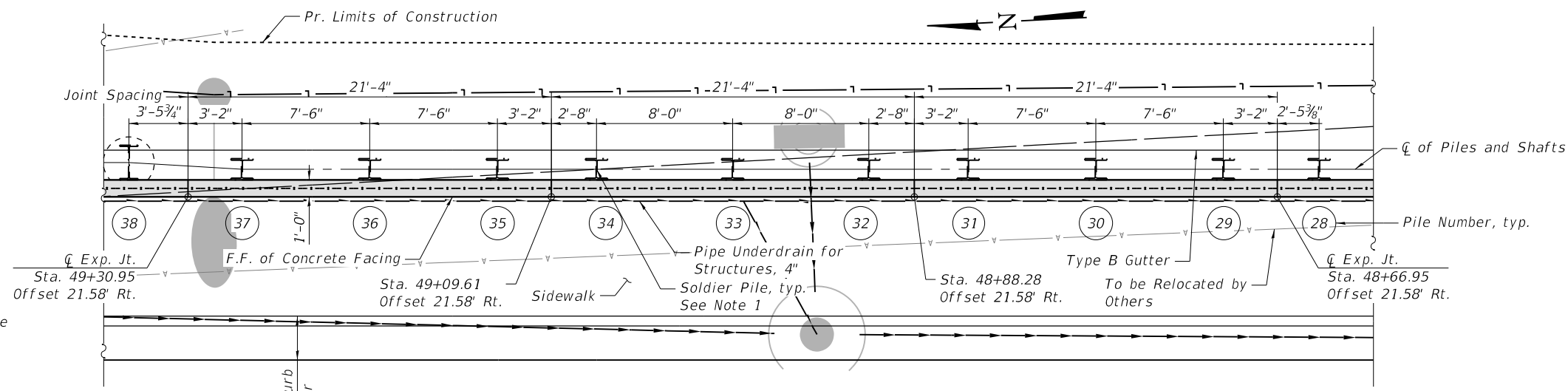
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION (3 OF 6)
STRUCTURE NO. 058-W007

SHEET SD-5 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 646 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

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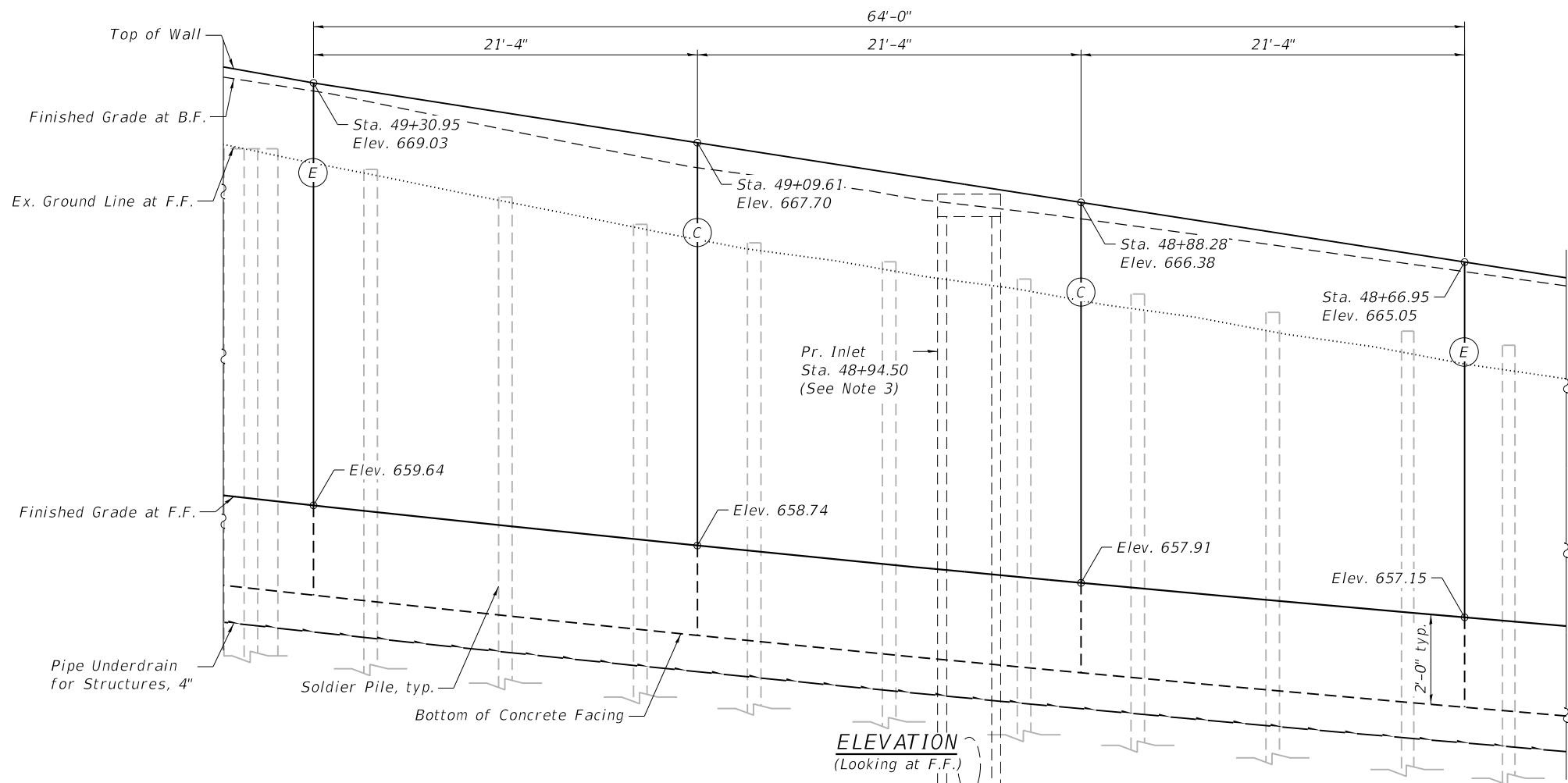


PLAN

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.
 5. Coordinate drainage structure installation with wall construction.

LEGEND

| | |
|--|--------------------------------|
| | Ex. Underground Telephone Line |
| | Ex. Aerial Line |
| | Ex. Sanitary Sewer |
| | Ex. ROW |
| | Pr. Catch Basin |
| | Pr. Fence |
| | Pr. Buried Lighting Cable |
| | Pr. Water Main |
| | Pr. Storm Sewer |
| | Pr. ROW |
| | Pr. Above Ground Lighting |
| | Pr. Manhole |
| | Pr. Inlet |
| | Construction, Expansion Joints |



ELEVATION
 (Looking at F.F.)



| | | | | | |
|-------------------------------------------------|----------------|------------|-----------|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
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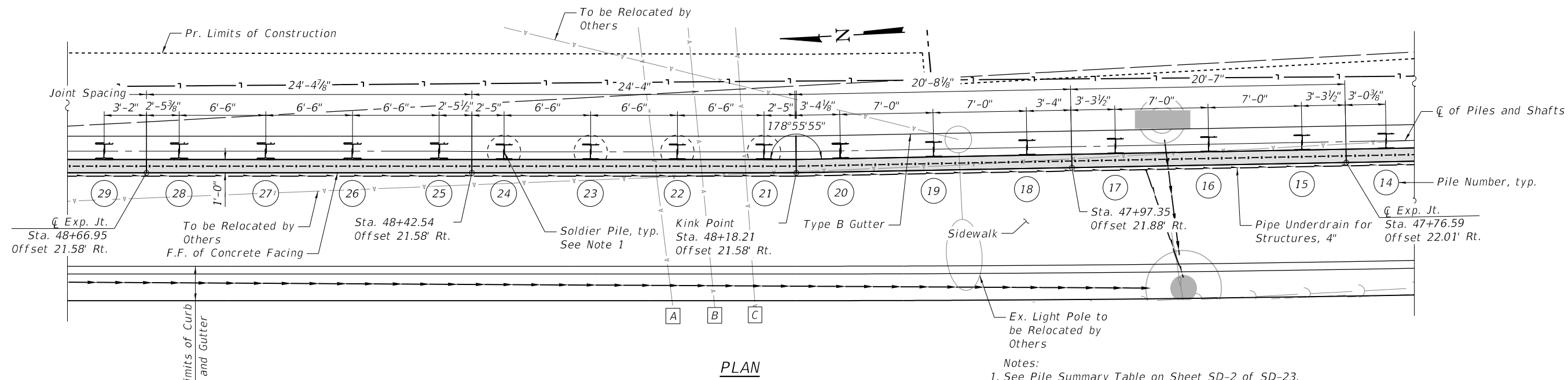
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION (4 OF 6)
 STRUCTURE NO. 058-W007

SHEET SD-6 OF SD-23 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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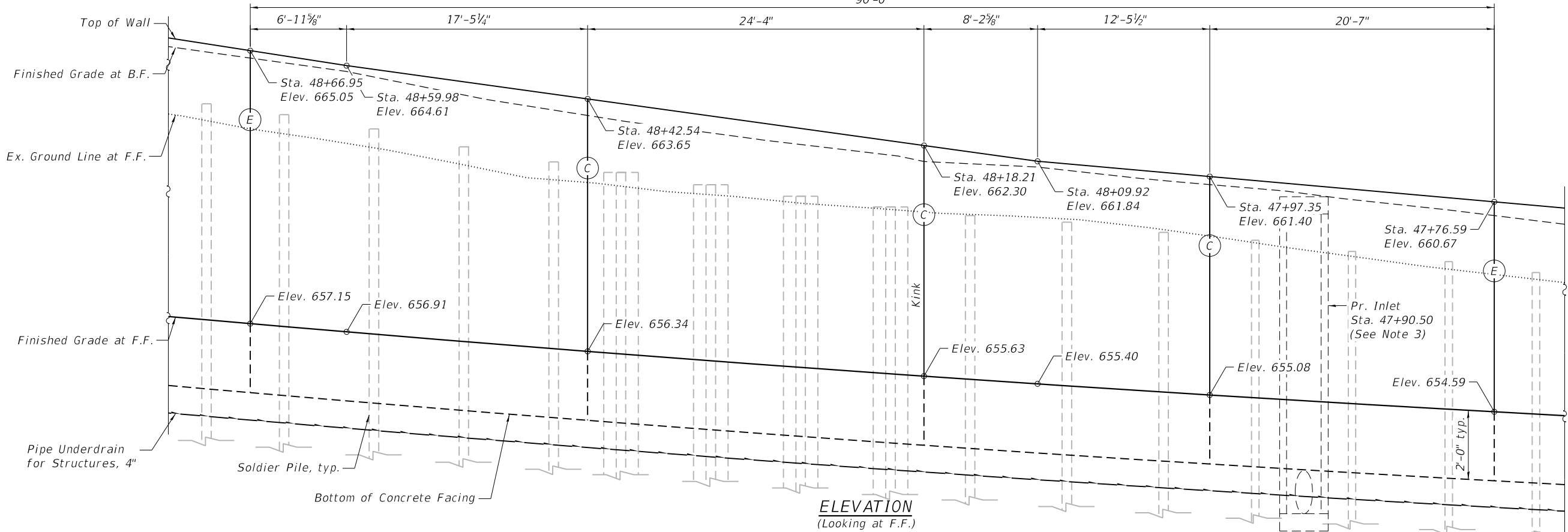
LEGEND

- T — Ex. Underground Telephone Line
- A — Ex. Aerial Line
- - - - - Ex. Sanitary Sewer
- — — — — Ex. ROW
- Pr. Catch Basin
- · - · - Pr. Fence
- L — Pr. Buried Lighting Cable
- ■ — Pr. Water Main
- — — — — Pr. Storm Sewer
- - - - - Pr. ROW
- Pr. Above Ground Lighting
- Pr. Manhole
- Pr. Inlet
- (C)(E) Construction, Expansion Joints

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.
 5. Coordinate drainage structure installation with wall construction.
 6. Equipment for drilling and setting soldier piles shall be kept a minimum of 10'-6" from overhead power lines. Lines cannot be de-energized. Piles may be spliced as required. Cost included with Drilling and Setting Soldier Piles (In Soil).

ELEVATIONS OF 34.5 KV OH POWER LINES
 (See Note 5)

| Line | Elevation |
|------|-----------|
| A | 715.99 |
| B | 717.99 |
| C | 714.00 |



ELEVATION
 (Looking at F.F.)



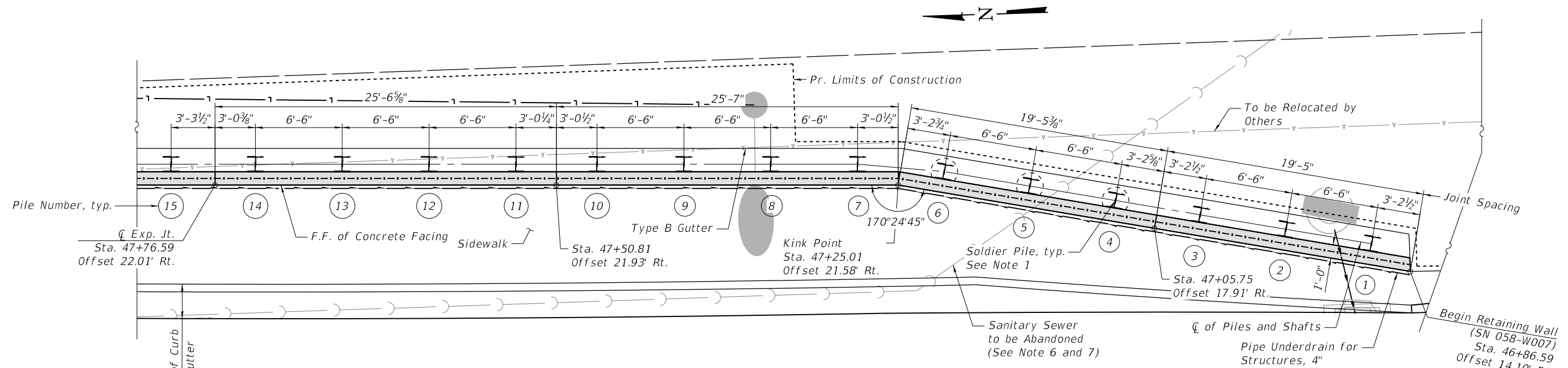
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| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION (5 OF 6)
STRUCTURE NO. 058-W007

SHEET SD-7 OF SD-23 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 648 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

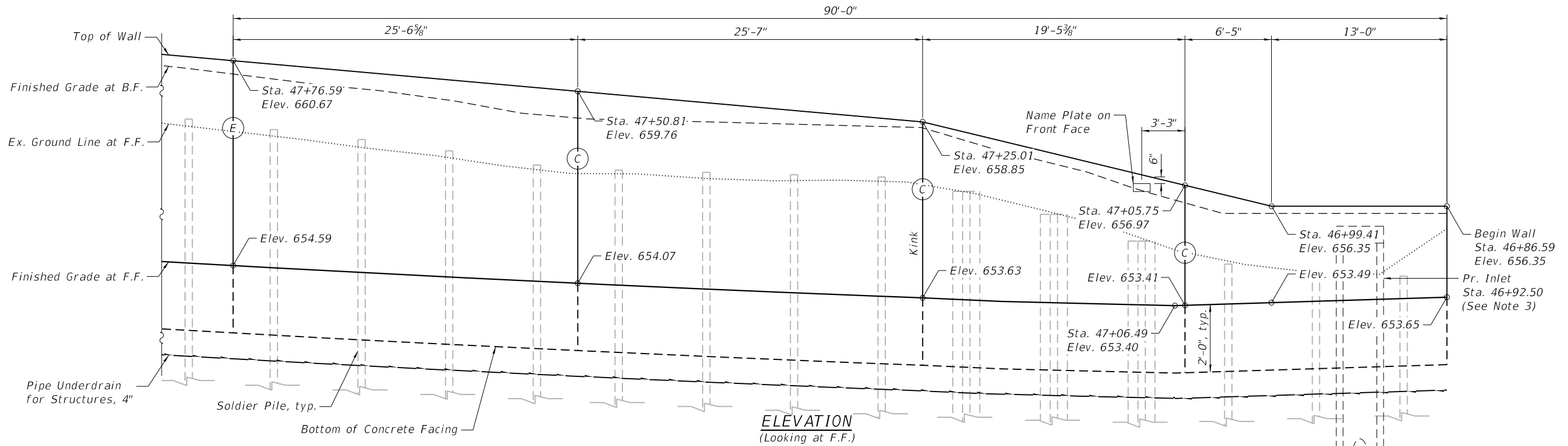


PLAN

- Notes:
1. See Pile Summary Table on Sheet SD-2 of SD-23.
 2. All dimensions are measured along F.F. of Concrete Facing.
 3. See Drainage Plans for details.
 4. Chain Link Fence not shown in Elevation view for clarity. See Sheets SD-9, SD-10, and SD-11 for post spacing.
 5. Coordinate drainage structure installation with wall construction.
 6. Sanitary Sewer to be located using Exploration Trench, Special. See Special Provisions.
 7. With the approval of the Engineer, Pile 5 may be shifted up to 1'-0" in either direction along the wall to avoid conflicts with the abandoned sanitary sewer.

LEGEND

- T — Ex. Underground Telephone Line
- A — Ex. Aerial Line
- - - - - Ex. Sanitary Sewer
- — — — — Ex. ROW
- Pr. Catch Basin
- · - · - · Pr. Fence
- L - Pr. Buried Lighting Cable
- | - Pr. Water Main
- | - Pr. Storm Sewer
- - - - - Pr. ROW
- Pr. Above Ground Lighting
- Pr. Manhole
- Pr. Inlet
- Construction, Expansion Joints



ELEVATION
(Looking at F.F.)

MODEL: Sheet
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| | | | | | |
|-------------------------------------------------|-----------------|------------|-----------|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 60603202_058-W007_08_Plan and Elevation - 6.dgn | CHECKED - | RPW | REVISED - | | |
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| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & ELEVATION (6 OF 6)
STRUCTURE NO. 058-W007

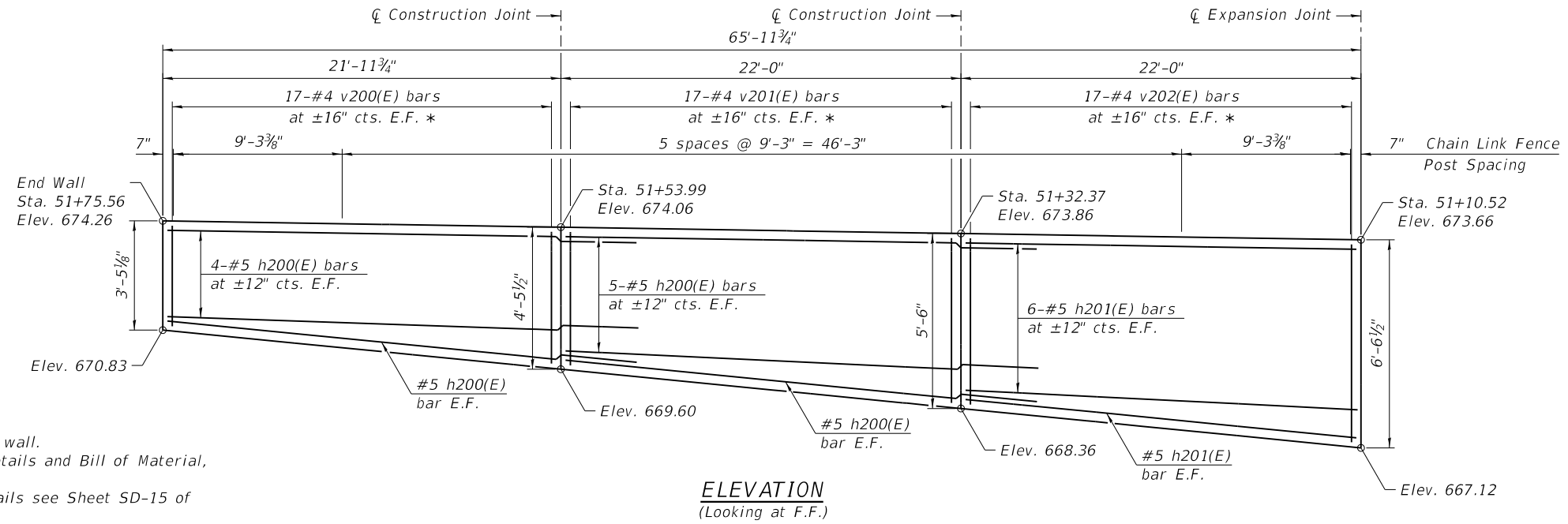
SHEET SD-8 OF SD-23 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

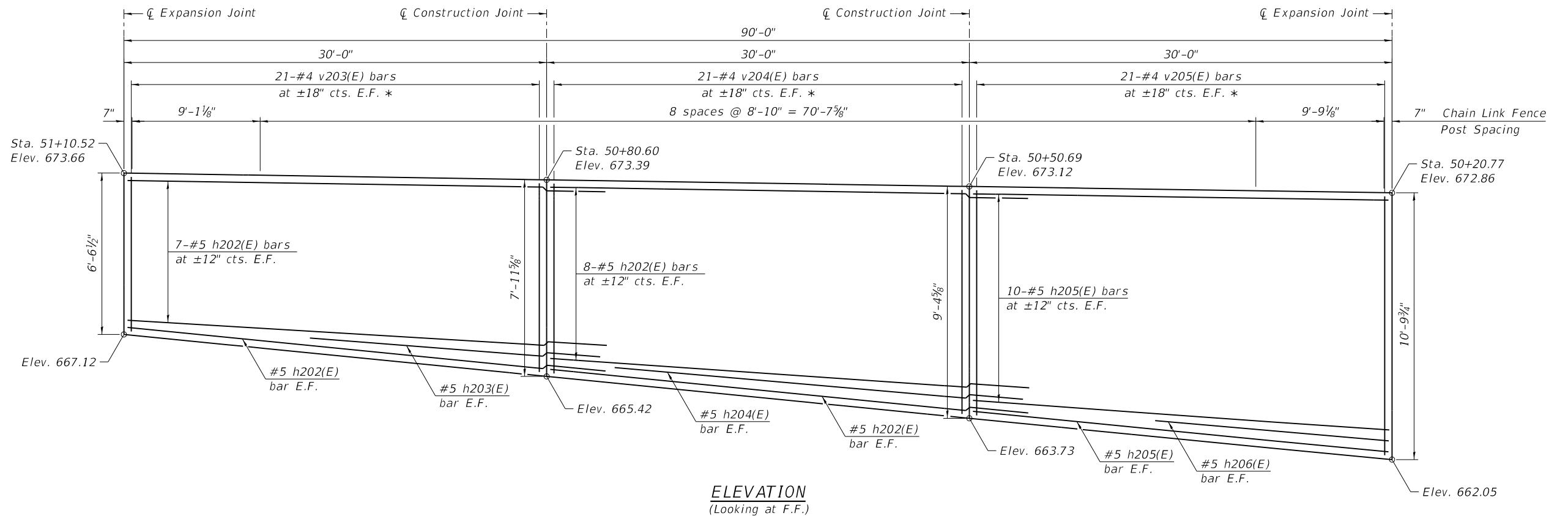
MINIMUM BAR LAP

#5 bar = 3'-7"

* See Field Cutting Diagram on Sheet SD-12 of SD-23



Notes:
 Dimensions measured along front face of wall.
 For Section Thru Concrete Facing, Bar Details and Bill of Material, see Sheet SD-12 of SD-23.
 For Construction and Expansion Joint details see Sheet SD-15 of SD-23.



MODEL: Sheet
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| | | |
|----------------------------------------------|----------------|-----------|
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CONCRETE FACING (1 OF 4)
 STRUCTURE NO. 058-W007

| | | | | |
|--------------------|------------------------|--------------|-------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 650 |
| CONTRACT NO. 95893 | | | | |

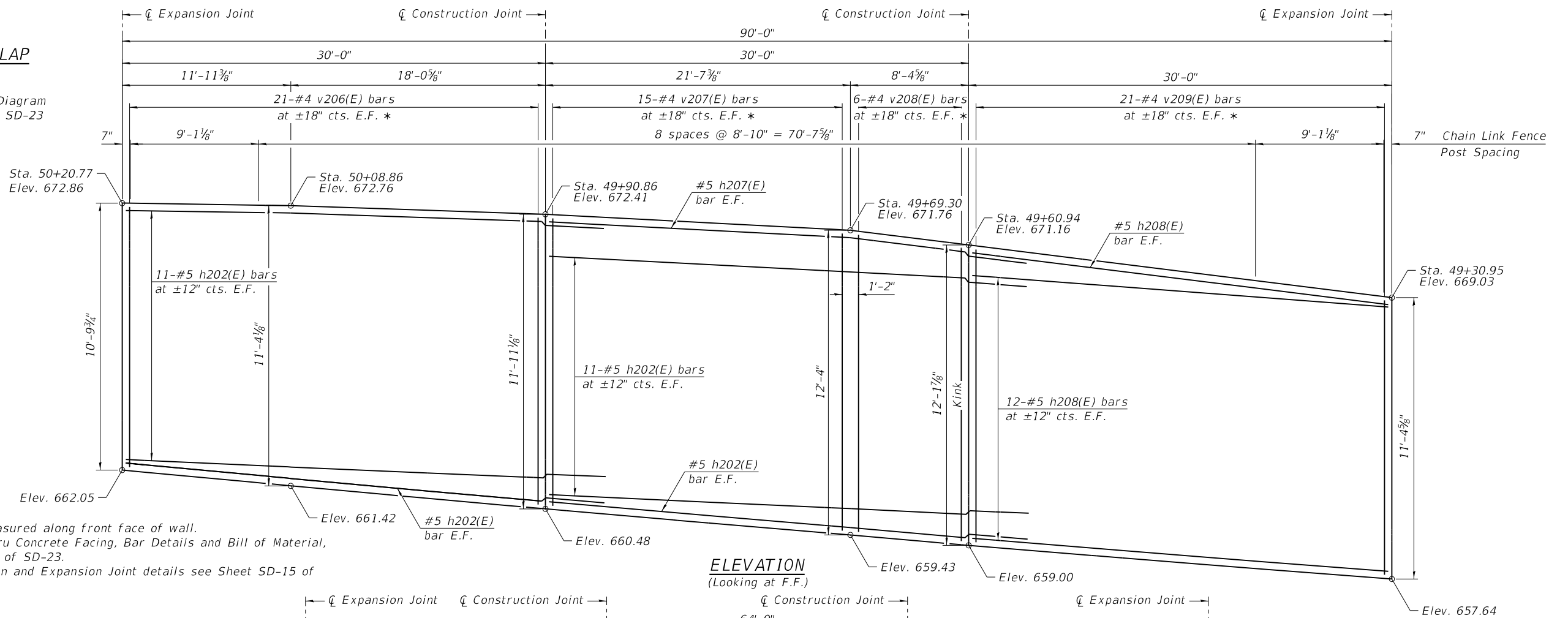
SHEET SD-9 OF SD-23 SHEETS

ILLINOIS FED. AID PROJECT

MINIMUM BAR LAP

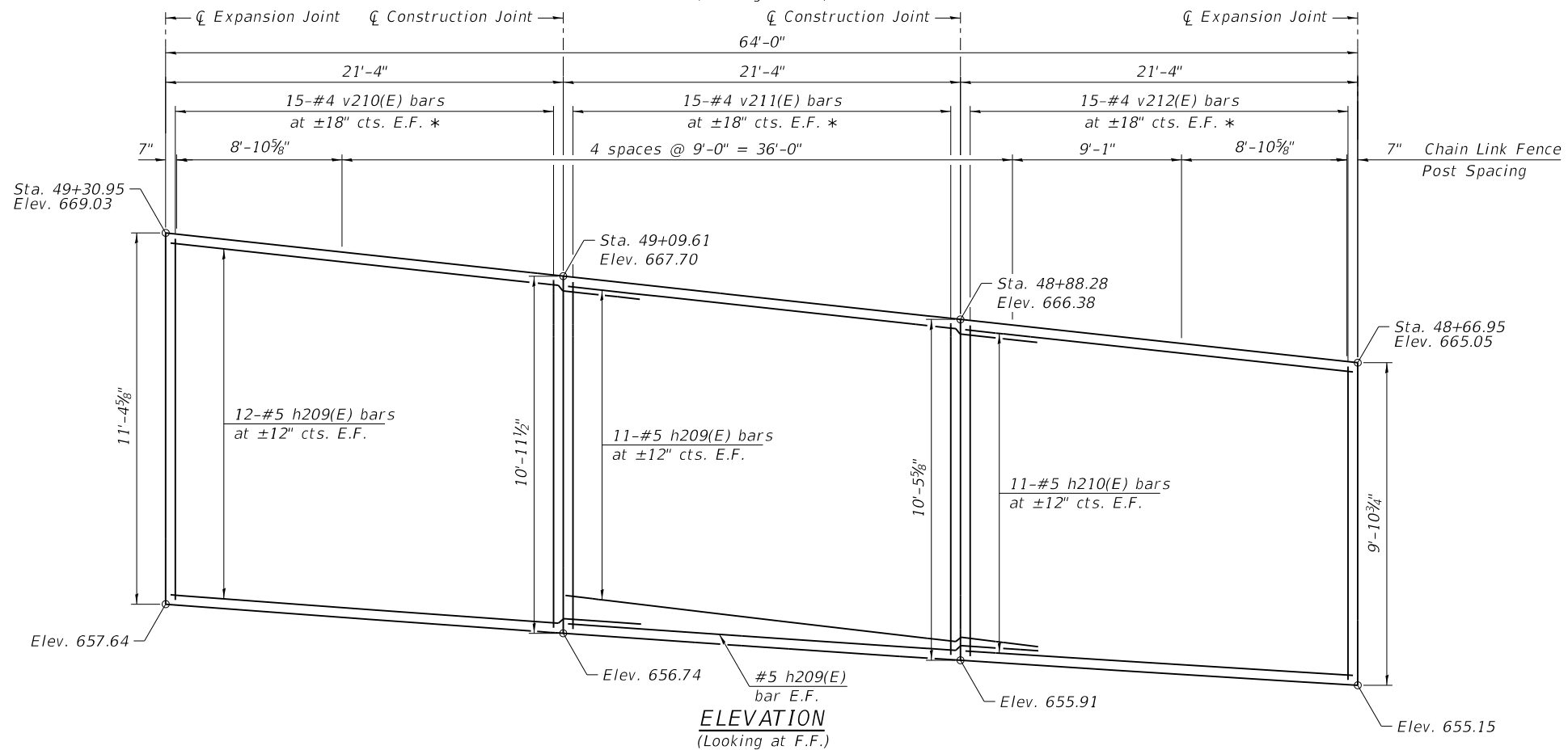
#5 bar = 3'-7"

* See Field Cutting Diagram on Sheet SD-12 of SD-23



Notes:
 Dimensions measured along front face of wall.
 For Section Thru Concrete Facing, Bar Details and Bill of Material, see Sheet SD-12 of SD-23.
 For Construction and Expansion Joint details see Sheet SD-15 of SD-23.

ELEVATION
(Looking at F.F.)



ELEVATION
(Looking at F.F.)

MODEL: Sheet
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 4/5/2023 2:11:54 PM



| | | | | | |
|----------------------------------------------|-----------------|------------|-----------|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 60603202_058-W007_10_Concrete Facing - 2.dgn | CHECKED - | RPW | REVISED - | | |
| PLOT SCALE = | 8:4.0001" / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE FACING (2 OF 4)
STRUCTURE NO. 058-W007

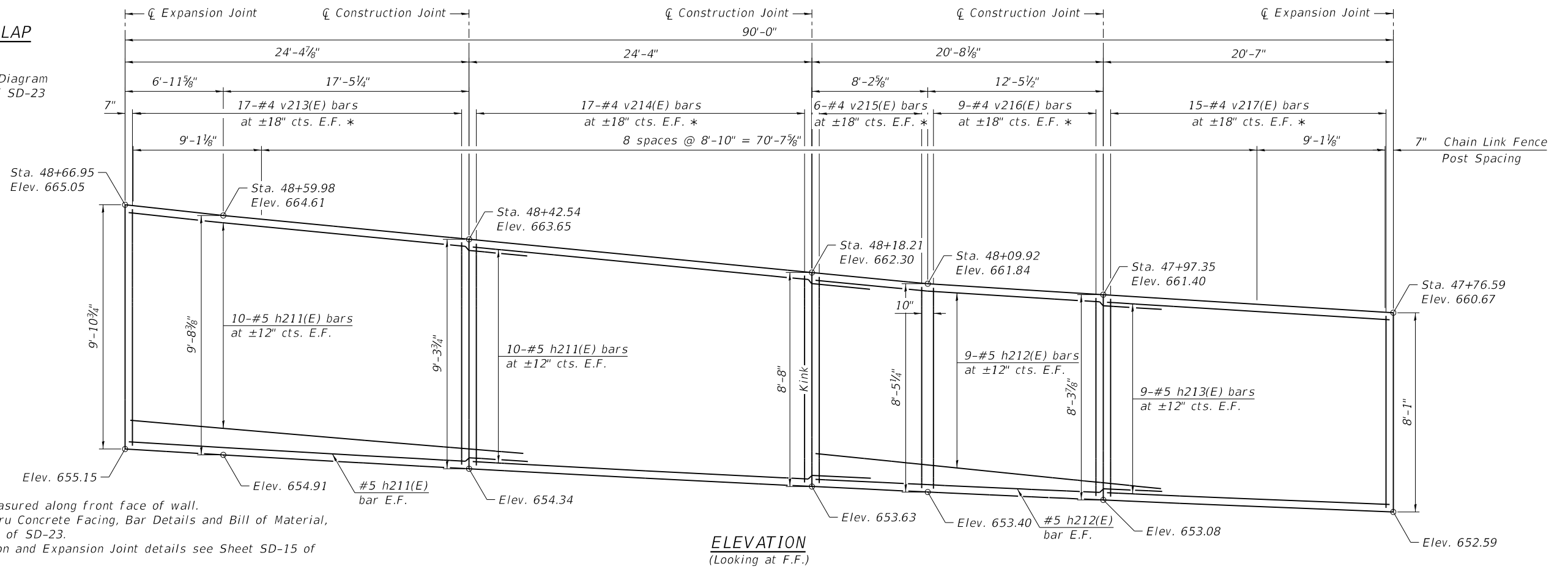
SHEET SD-10 OF SD-23 SHEETS

| | | | | |
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 651 |
| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |

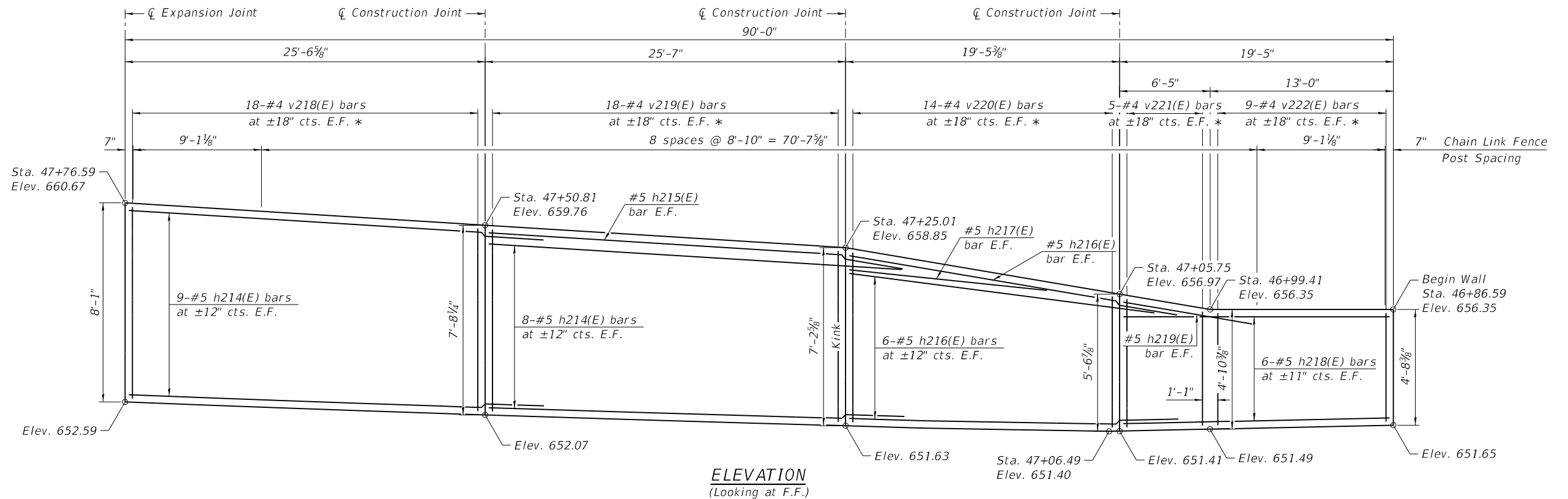
MINIMUM BAR LAP

#5 bar = 3'-7"

* See Field Cutting Diagram on Sheet SD-12 of SD-23



Notes:
 Dimensions measured along front face of wall.
 For Section Thru Concrete Facing, Bar Details and Bill of Material, see Sheet SD-12 of SD-23.
 For Construction and Expansion Joint details see Sheet SD-15 of SD-23.



MODEL: Sheet
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| | | | | | |
|----------------------------------------------|--------------|------------|-----------|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 60603202_058-W007_11_Concrete Facing - 3.dgn | CHECKED - | RPW | REVISED - | | |
| PLOT SCALE = | 8:4,0000 "/> | | | | |
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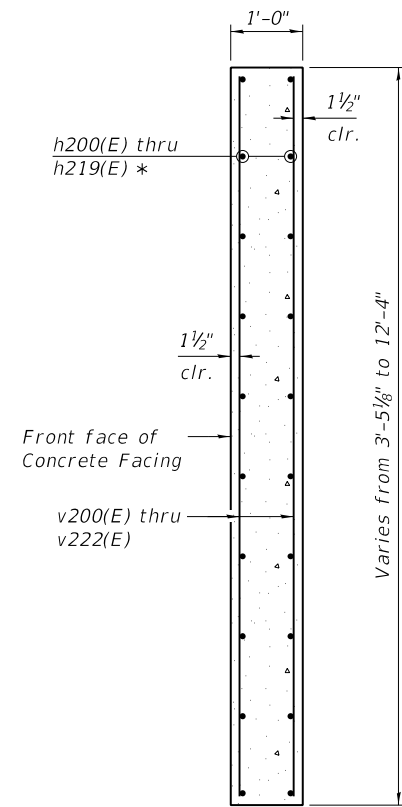
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE FACING (3 OF 4)
STRUCTURE NO. 058-W007

SHEET SD-11 OF SD-23 SHEETS

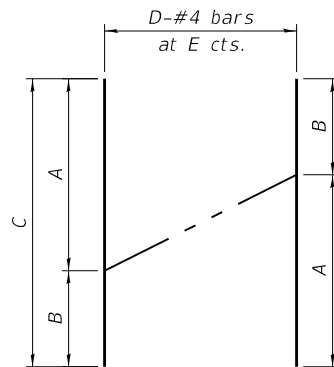
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |

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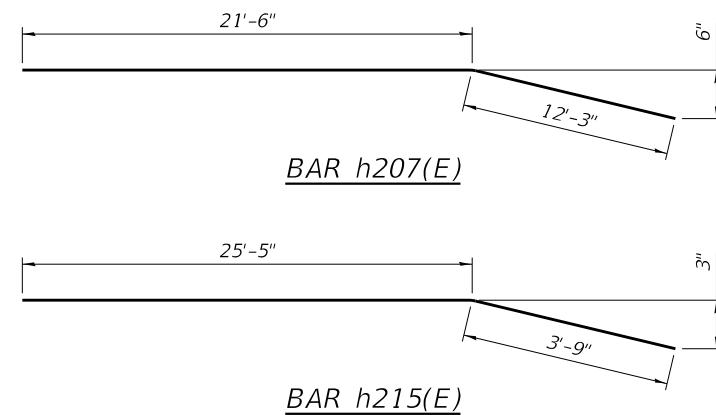


**SECTION THRU
 CONCRETE FACING**

* See elevation views for actual location of bars



CUTTING DIAGRAM



BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|--------------------------------------|-----|---------|----------|-------|
| h200(E) | 22 | #5 | 25'-7" | — |
| h201(E) | 14 | #5 | 21'-8" | — |
| h202(E) | 82 | #5 | 33'-7" | — |
| h203(E) | 2 | #5 | 18'-7" | — |
| h204(E) | 2 | #5 | 28'-7" | — |
| h205(E) | 22 | #5 | 29'-8" | — |
| h206(E) | 2 | #5 | 13'-0" | — |
| h207(E) | 2 | #5 | 33'-9" | — |
| h208(E) | 26 | #5 | 29'-8" | — |
| h209(E) | 48 | #5 | 24'-11" | — |
| h210(E) | 22 | #5 | 21'-0" | — |
| h211(E) | 42 | #5 | 28'-0" | — |
| h212(E) | 20 | #5 | 24'-4" | — |
| h213(E) | 18 | #5 | 20'-3" | — |
| h214(E) | 34 | #5 | 29'-2" | — |
| h215(E) | 2 | #5 | 29'-2" | — |
| h216(E) | 14 | #5 | 23'-1" | — |
| h217(E) | 2 | #5 | 12'-0" | — |
| h218(E) | 12 | #5 | 19'-1" | — |
| h219(E) | 2 | #5 | 10'-0" | — |
| v200(E) | 17 | #4 | 7'-2" | — |
| v201(E) | 17 | #4 | 9'-4" | — |
| v202(E) | 17 | #4 | 11'-4" | — |
| v203(E) | 21 | #4 | 13'-9" | — |
| v204(E) | 21 | #4 | 16'-8" | — |
| v205(E) | 21 | #4 | 19'-6" | — |
| v206(E) | 21 | #4 | 22'-1" | — |
| v207(E) | 15 | #4 | 23'-7" | — |
| v208(E) | 6 | #4 | 23'-10" | — |
| v209(E) | 21 | #4 | 22'-11" | — |
| v210(E) | 15 | #4 | 21'-7" | — |
| v211(E) | 15 | #4 | 20'-9" | — |
| v212(E) | 15 | #4 | 19'-7" | — |
| v213(E) | 17 | #4 | 18'-6" | — |
| v214(E) | 17 | #4 | 17'-4" | — |
| v215(E) | 6 | #4 | 16'-5" | — |
| v216(E) | 18 | #4 | 8'-0" | — |
| v217(E) | 15 | #4 | 15'-9" | — |
| v218(E) | 18 | #4 | 15'-1" | — |
| v219(E) | 18 | #4 | 14'-2" | — |
| v220(E) | 14 | #4 | 12'-1" | — |
| v221(E) | 5 | #4 | 9'-8" | — |
| v222(E) | 18 | #4 | 4'-5" | — |
| Item | | Unit | Quantity | |
| Reinforcement Bars, Epoxy Coated | | Pound | 14,900 | |
| Concrete Structures (Retaining Wall) | | Cu. Yd. | 159.4 | |
| Geocomposite Wall Drain | | Sq. Yd. | 227 | |
| Pipe Underdrains For Structures, 4" | | Foot | 494 | |

| Bar | A | B | C | D | E |
|---------|---------|---------|---------|----|-----|
| v200(E) | 3'-1" | 4'-1" | 7'-2" | 17 | 16" |
| v201(E) | 4'-2" | 5'-2" | 9'-4" | 17 | 16" |
| v202(E) | 5'-2" | 6'-2" | 11'-4" | 17 | 16" |
| v203(E) | 6'-2" | 7'-7" | 13'-9" | 21 | 18" |
| v204(E) | 7'-8" | 9'-0" | 16'-8" | 21 | 18" |
| v205(E) | 9'-1" | 10'-5" | 19'-6" | 21 | 18" |
| v206(E) | 10'-6" | 11'-7" | 22'-1" | 21 | 18" |
| v207(E) | 11'-7" | 12'-0" | 23'-7" | 15 | 18" |
| v208(E) | 12'-0" | 11'-10" | 23'-10" | 6 | 18" |
| v209(E) | 11'-10" | 11'-1" | 22'-11" | 21 | 18" |
| v210(E) | 11'-0" | 10'-7" | 21'-7" | 15 | 18" |
| v211(E) | 10'-7" | 10'-2" | 20'-9" | 15 | 18" |
| v212(E) | 10'-1 | 9'-6" | 19'-7" | 15 | 18" |
| v213(E) | 9'-6" | 9'-0" | 18'-6" | 17 | 18" |
| v214(E) | 9'-0" | 8'-4" | 17'-4" | 17 | 18" |
| v215(E) | 8'-4" | 8'-1" | 16'-5" | 6 | 18" |
| v217(E) | 8'-0" | 7'-9" | 15'-9" | 15 | 18" |
| v218(E) | 7'-9" | 7'-4" | 15'-1" | 18 | 18" |
| v219(E) | 7'-4" | 6'-10" | 14'-2" | 18 | 18" |
| v220(E) | 6'-10" | 5'-3" | 12'-1" | 14 | 18" |
| v221(E) | 5'-2" | 4'-6" | 9'-8" | 5 | 18" |



| | | | | | |
|-----------------------------------------------|------------------|------------|-----------|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 060603202_058-W007_12_Concrete Facing - 4.dgn | CHECKED - | RPW | REVISED - | | |
| PLOT SCALE = | 0:2.0000 " / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

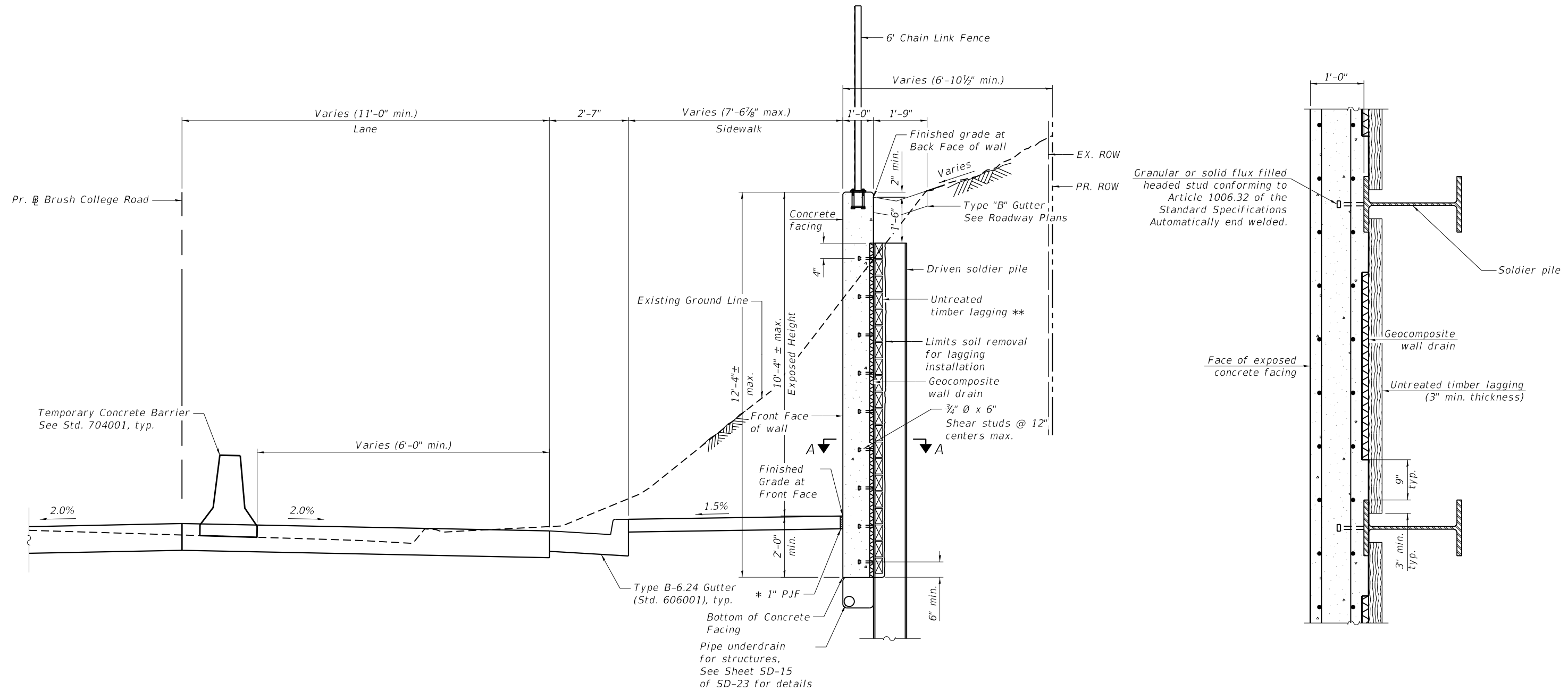
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CONCRETE FACING (4 OF 4)
 STRUCTURE NO. 058-W007**

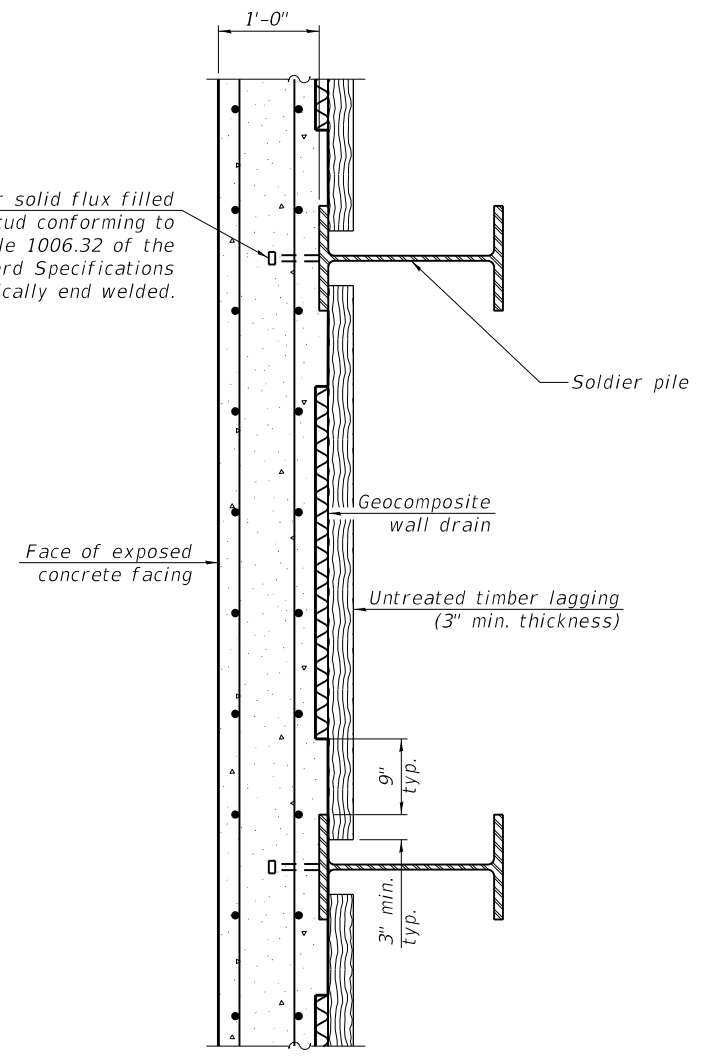
SHEET SD-12 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 653 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |

MODEL: Sheet
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TYPICAL SECTION THROUGH DRIVEN SOLDIER PILE WALL
 (Looking North)



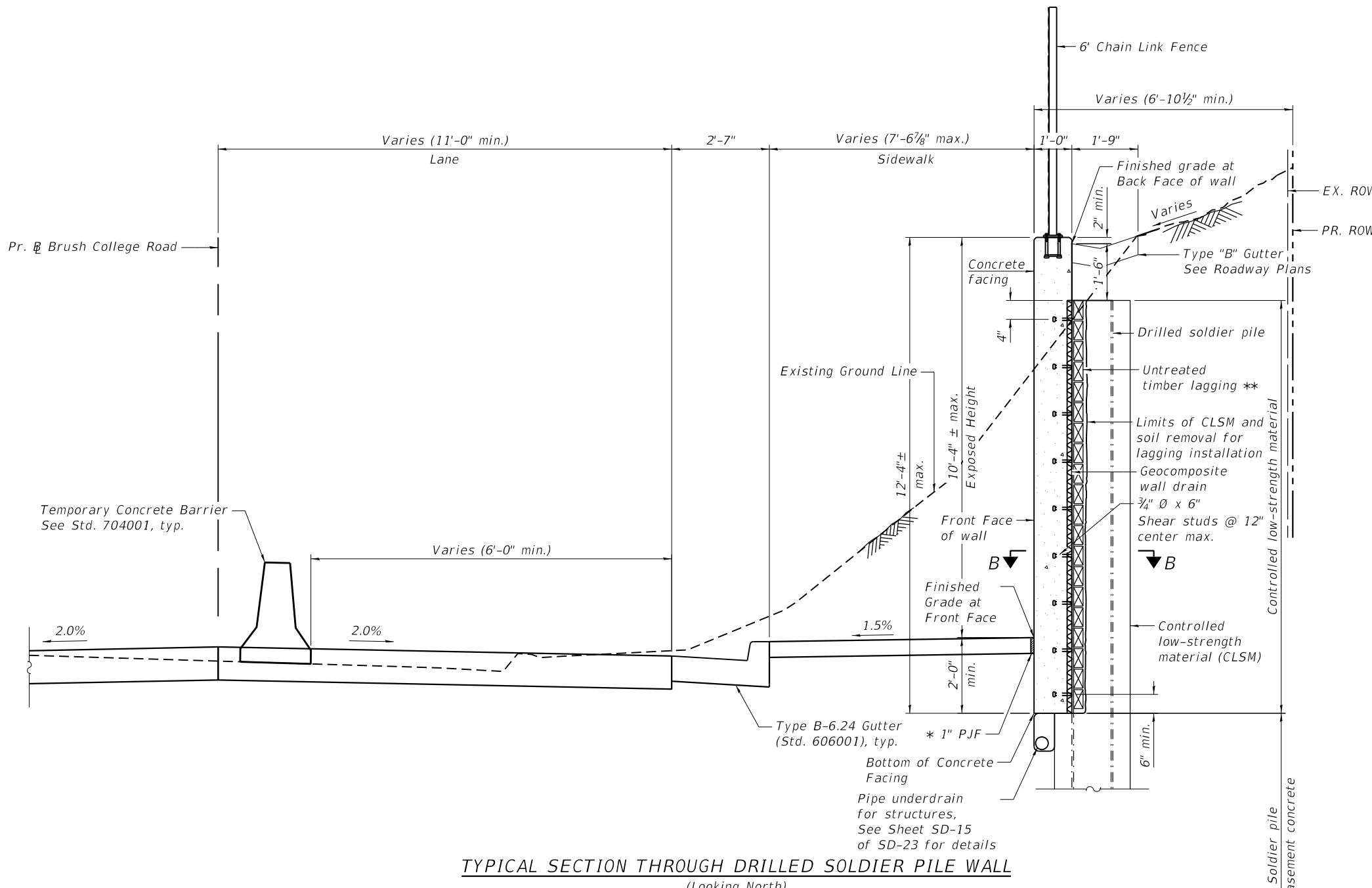
SECTION A-A

* Cost included with Concrete Structures (Retaining Wall)
 ** The Contractor is responsible for the design and performance of the lagging using no less than 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.

| | | | | | |
|------------------------------------------------|------------------|------------|-----|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 60603202_058-W007_13_Typical Section at Driven | | CHECKED - | RPW | REVISED - | |
| PLOT SCALE = | 0:2.0000 " / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

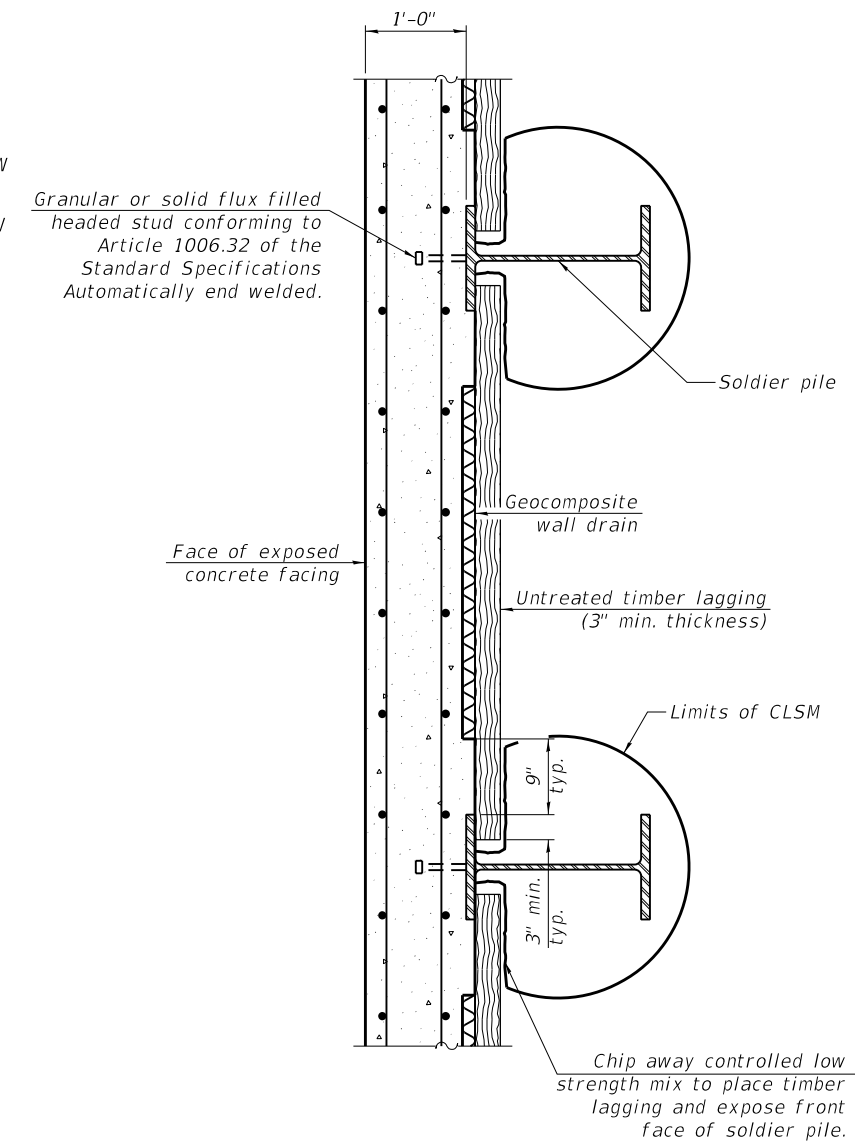
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |

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 4/5/2023 2:12:18 PM



TYPICAL SECTION THROUGH DRILLED SOLDIER PILE WALL
 (Looking North)

* Cost included with Concrete Structures (Retaining Wall)
 ** The Contractor is responsible for the design and performance of the lagging using no less than 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.



SECTION B-B



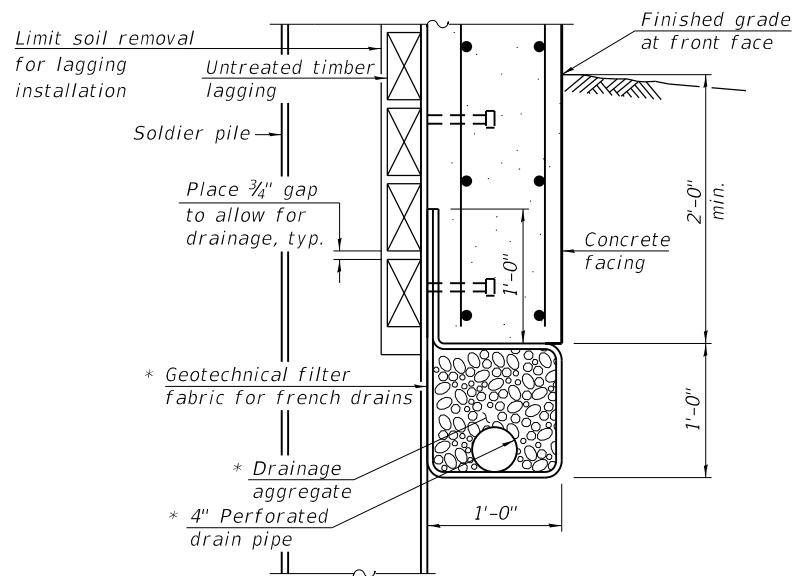
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

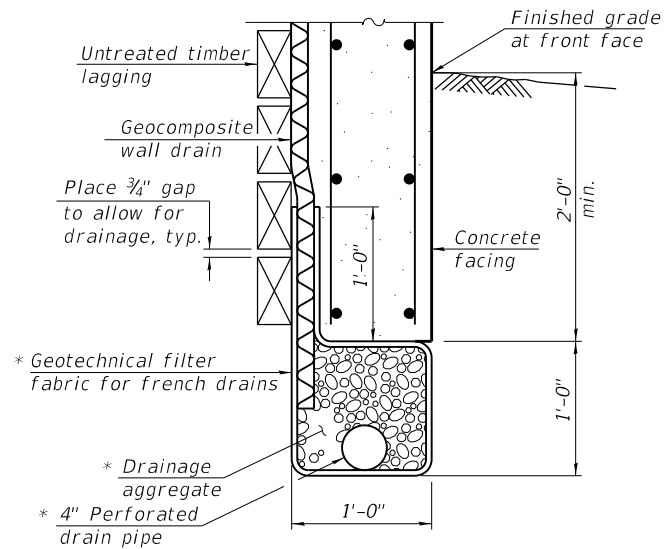
TYPICAL SECTION THRU WALL AT DRILLED SOLDIER PILE
STRUCTURE NO. 058-W007

SHEET SD-14 OF SD-23 SHEETS

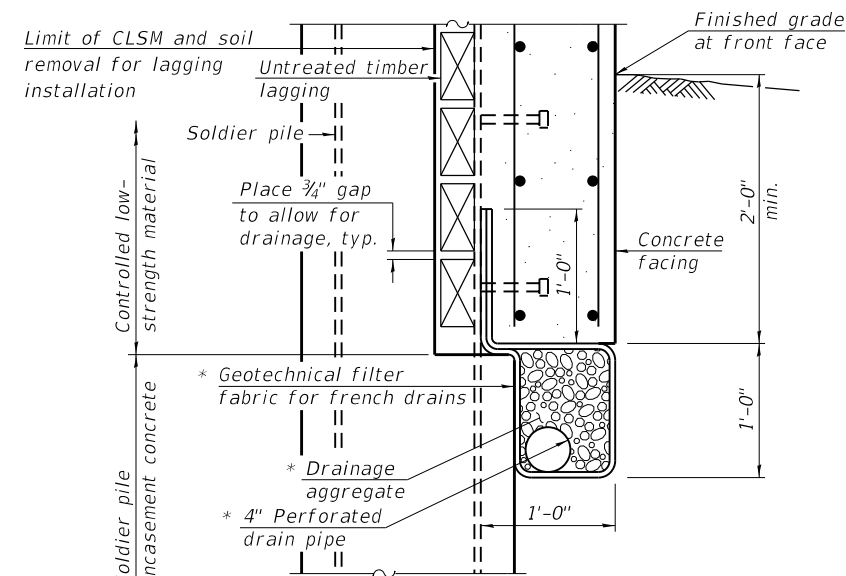
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 655 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



AT DRIVEN SOLDIER PILES



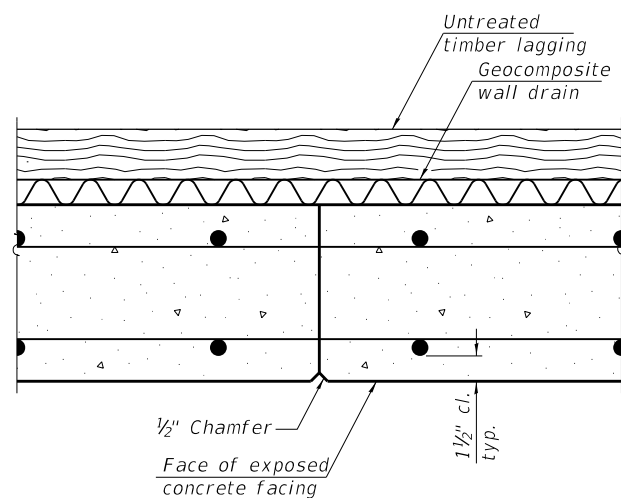
BETWEEN SOLDIER PILES



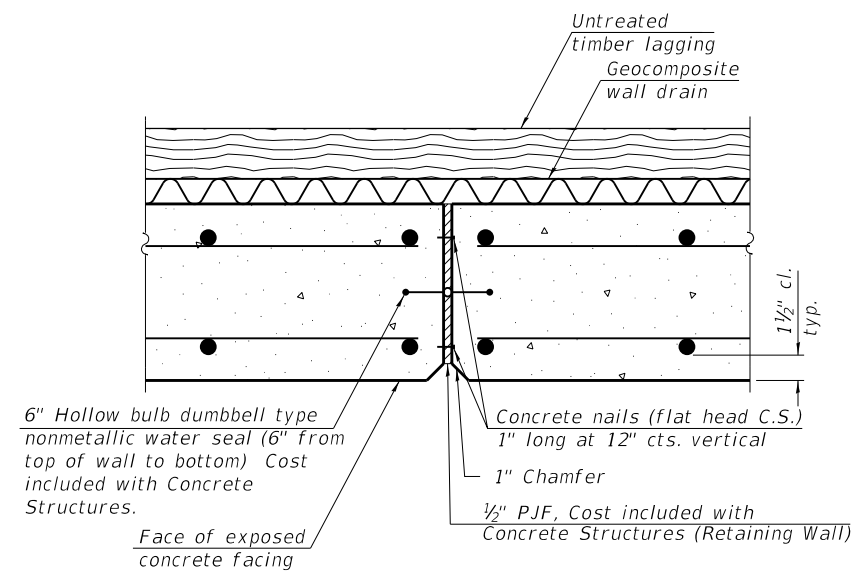
AT DRILLED SOLDIER PILES

* Included in the cost of Pipe Underdrains for Structures.

PIPE UNDERDRAIN FOR STRUCTURES



CONSTRUCTION JOINT



EXPANSION JOINT

MODEL: Sheet
FILE NAME: pw:\aecom-na-pw\benitey.com\AECOM_DS16_NA\Documents\60603202-Brush_College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE Walls_Sheets\60603202_058-W007_15_Wall_Details.dgn



| | | | | | |
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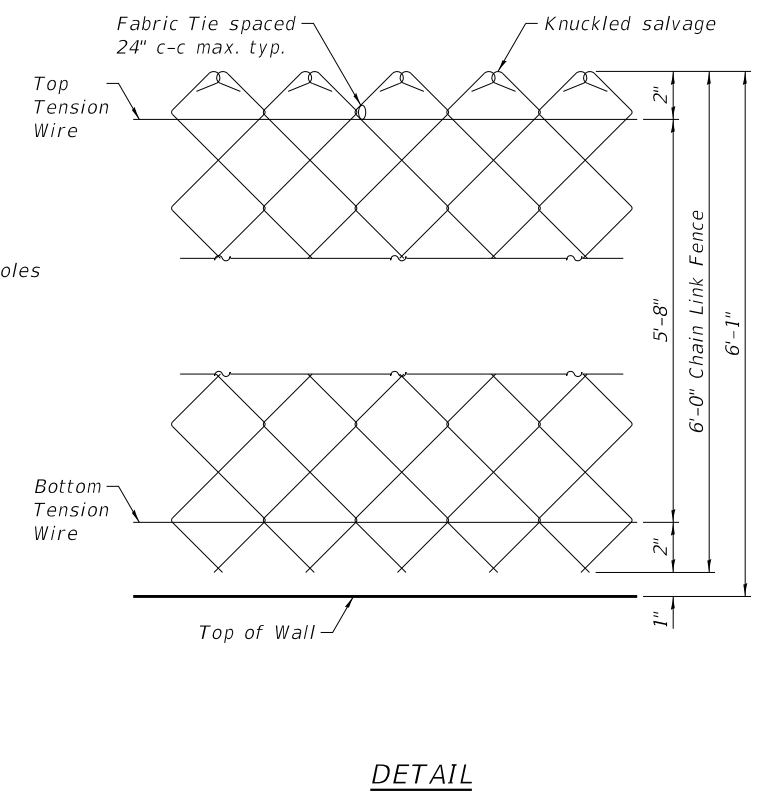
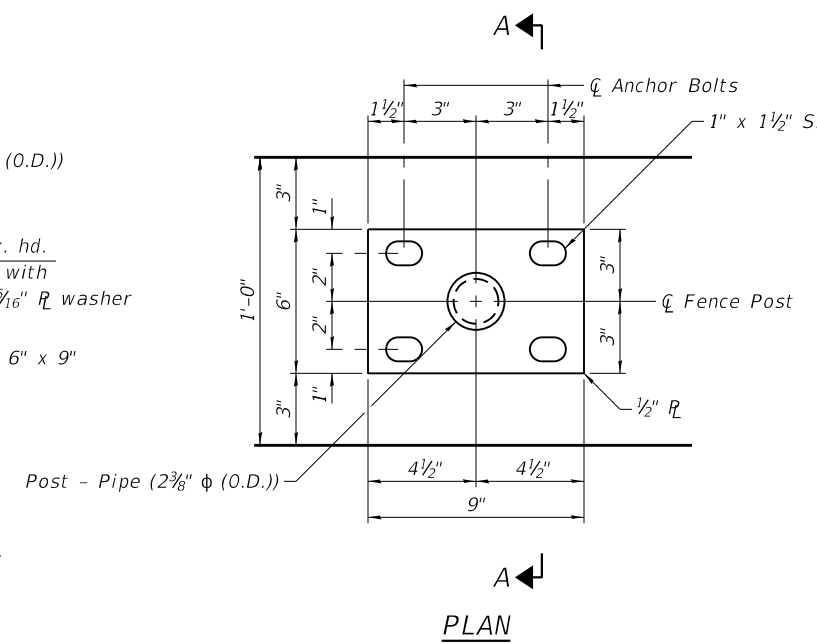
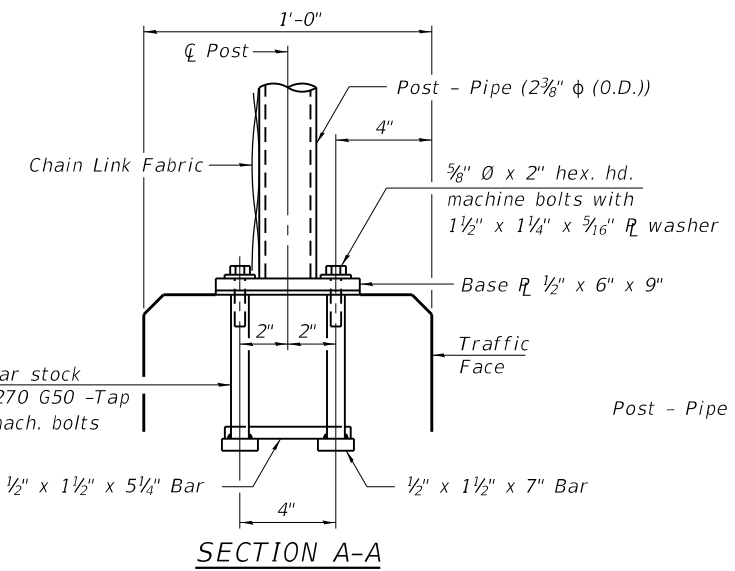
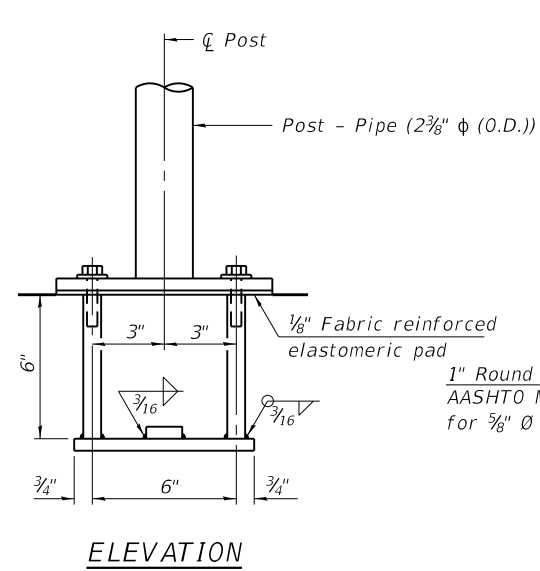
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS
STRUCTURE NO. 058-W007

SHEET SD-15 OF SD-23 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 656 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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 4/5/2023 2:12:28 PM



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting $\frac{5}{8}$ " ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications. Place reinforcement bars to miss anchor rod locations.



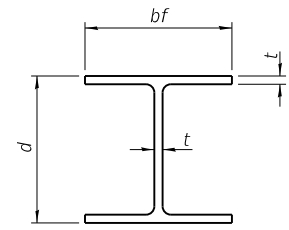
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| PLOT SCALE = | 0:2.0000 " / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CHAIN LINK FENCE DETAILS
 STRUCTURE NO. 058-W007**

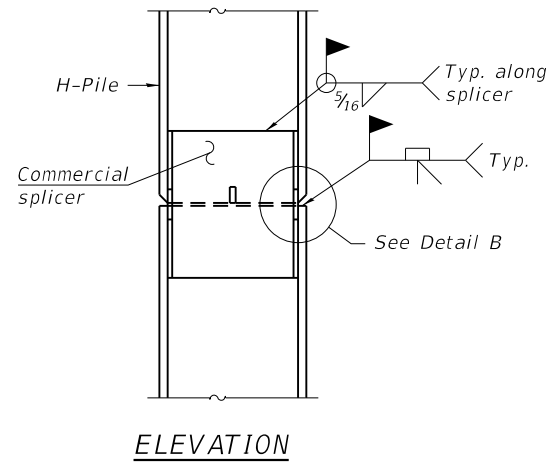
SHEET SD-16 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|----------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| | | ILLINOIS | FED. AID PROJECT | |

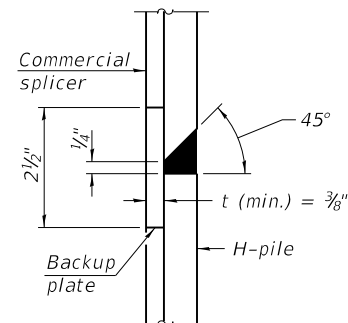


STEEL PILE TABLE

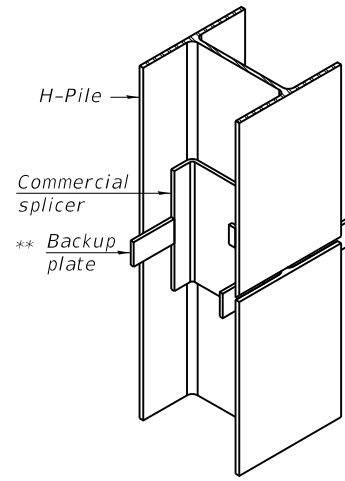
| Designation | Depth d | Flange width bf | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 3/16" | 30" |
| x102 | 14" | 14 3/4" | 1 1/16" | 30" |
| x89 | 13 7/8" | 14 3/4" | 5/8" | 30" |
| x73 | 13 3/8" | 14 3/8" | 1/2" | 30" |
| HP 12x84 | 12 1/4" | 12 1/4" | 1 1/16" | 24" |
| x74 | 12 1/8" | 12 1/4" | 5/8" | 24" |
| x63 | 12" | 12 1/8" | 1/2" | 24" |
| x53 | 11 3/4" | 12" | 7/16" | 24" |
| HP 10x57 | 10" | 10 1/4" | 9/16" | 24" |
| x42 | 9 3/4" | 10 1/8" | 7/16" | 24" |
| HP 8x36 | 8" | 8 1/8" | 7/16" | 18" |



ELEVATION

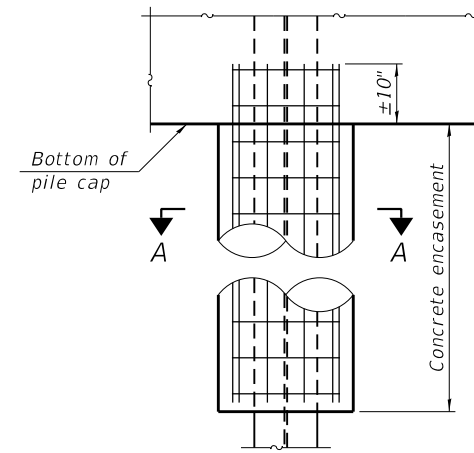


DETAIL "B"

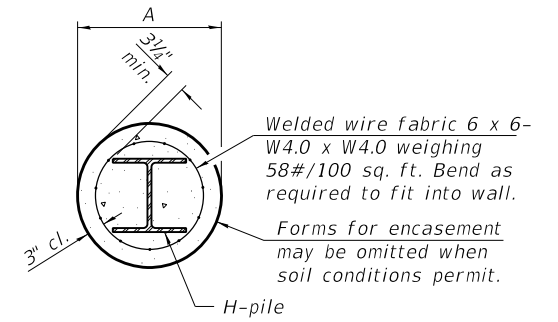


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

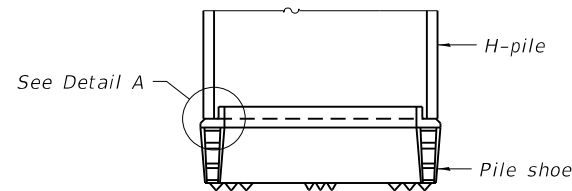


ELEVATION

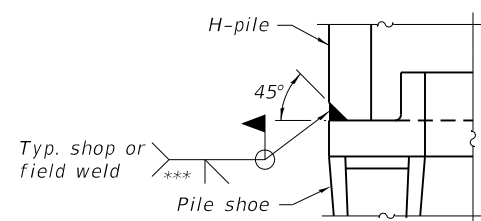


SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASUREMENT
(when specified)



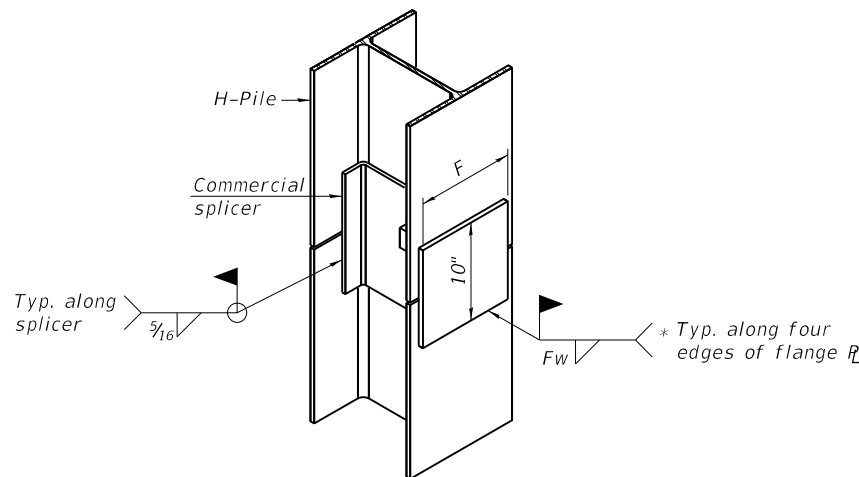
ELEVATION



DETAIL A

SHOE ATTACHMENT

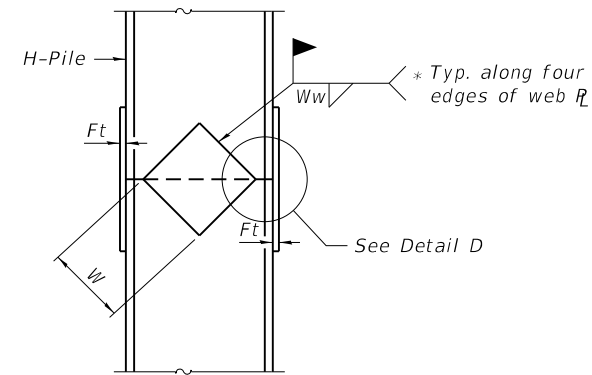
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



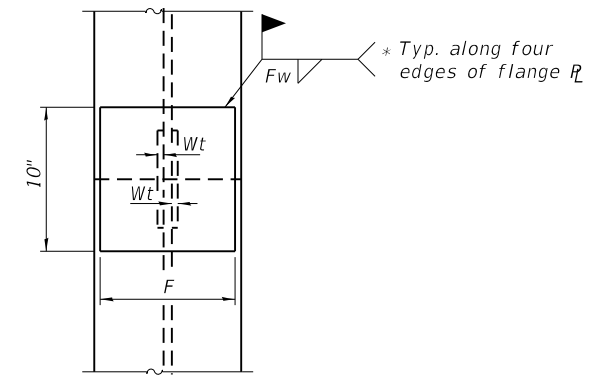
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

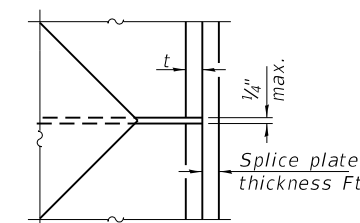
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

| Designation | F | Ft | Fw | W | Wt | Ww |
|-------------|---------|------|---------|--------|------|------|
| HP 14x117 | 12 1/2" | 1" | 7/8" | 7 3/4" | 5/8" | 1/2" |
| x102 | 12 1/2" | 7/8" | 3/4" | 7 3/4" | 5/8" | 1/2" |
| x89 | 12 1/2" | 3/4" | 1 1/16" | 7 3/4" | 5/8" | 1/2" |
| x73 | 12 1/2" | 5/8" | 9/16" | 7 3/4" | 5/8" | 1/2" |
| HP 12x84 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x74 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5/8" | 1/2" |
| x63 | 10" | 5/8" | 1/2" | 6 1/2" | 1/2" | 3/8" |
| x53 | 10" | 5/8" | 1/2" | 6 1/2" | 1/2" | 3/8" |
| HP 10x57 | 8" | 3/4" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| x42 | 8" | 5/8" | 9/16" | 5 1/4" | 1/2" | 3/8" |
| HP 8x36 | 7" | 5/8" | 7/16" | 4 1/4" | 1/2" | 3/8" |

MODEL: Sheet
FILE NAME: p:\vaecom-na-pw\beniley.com\AECOM_DS16_NA\Documents\60603202-Brush_College\900-CAD_GIS\910_CAD\03_SHEETS\03_QUIGGWSE Walls_Sheets\60603202_058-W007_17_HP_Pile_Details.dgn

SOIL BORING LOG

Page 1 of 2
Project #: 012017
Date 06/30/11

ROUTE _____ DESCRIPTION BRUSH COLLEGE RD BRIDGE (SKS #012017) LOGGED BY RC
SECTION _____ LOCATION DECATUR, IL
COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.) _____
BORING NO. B-7 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | Offset | Ground Surface Elev. (ft.) | ELEVATION (ft.) | DEPTH (ft.) | BLOW COUNT (/6") | UCS (tsf) | MOISTURE (%) | SOIL DESCRIPTION | ELEVATION (ft.) | DEPTH (ft.) | BLOW COUNT (/6") | UCS (tsf) | MOISTURE (%) | SOIL DESCRIPTION |
|----------|------------|----------------------------|-----------------|-------------|------------------|-----------|--------------|-------------------------------------------------------------------------------------------------------|-----------------|-------------|------------------|-----------|--------------|------------------|
| | | | | | | | | | | | | | | |
| 50+22.21 | 38.50' RT. | 673.0 | | | | | | | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Dark Brown, moist, low-medium plasticity, trace sand, trace gravel, organics | | | | | | |
| | | | | | | | | - concrete rubble - FILL | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Brown, moist, stiff, low plasticity, trace sand, trace gravel | | | | | | |
| | | | | | | | | SILT - A-4 Gray, moist, stiff, low plasticity, trace sand (*free water @ 12.0') | | | | | | |
| | | | | | | | | CLAYEY SAND - A-2-6 Brown, wet, medium dense, fine-coarse, trace gravel | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Brown, moist, hard, low plasticity, trace sand, trace gravel | | | | | | |
| | | | | | | | | - sand seam | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Gray, moist, hard, low plasticity, trace sand, trace gravel | | | | | | |
| | | | | | | | | - sand seam | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Dark Gray, moist, very stiff, low plasticity, trace sand, trace gravel | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Greenish Gray, moist, hard, low plasticity, trace sand, trace gravel | | | | | | |
| | | | | | | | | SILTY CLAY LOAM - A-6 Gray moist, low plasticity, trace sand, trace gravel | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

SOIL BORING LOG

Page 2 of 2
Project #: 012017
Date 06/30/11

ROUTE _____ DESCRIPTION BRUSH COLLEGE RD BRIDGE (SKS #012017) LOGGED BY RC
SECTION _____ LOCATION DECATUR, IL
COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.) _____
BORING NO. B-7 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | Offset | Ground Surface Elev. (ft.) | ELEVATION (ft.) | DEPTH (ft.) | BLOW COUNT (/6") | UCS (tsf) | MOISTURE (%) | SOIL DESCRIPTION | ELEVATION (ft.) | DEPTH (ft.) | BLOW COUNT (/6") | UCS (tsf) | MOISTURE (%) | SOIL DESCRIPTION |
|----------|------------|----------------------------|-----------------|-------------|------------------|-----------|--------------|--------------------------|-----------------|-------------|------------------|-----------|--------------|------------------|
| | | | | | | | | | | | | | | |
| 50+22.21 | 38.50' RT. | 673.0 | | | | | | | | | | | | |
| | | | | | | | | END OF BORING @ 71.0 FT. | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

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| | | | | | |
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| PLOT SCALE = | 0:2.0000 " = 1 in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (B-7)
STRUCTURE NO. 058-W007

SHEET SD-20 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 661 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | FED. AID PROJECT | | |



SOIL BORING LOG

Page 1 of 1

Project #: 916780

Date 02/21/20

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE

SECTION _____ LOCATION DECATUR, ILLINOIS

COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)

BORING NO. B-20 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOW | UCS | MOS | Surface Water Elev. | ELEV | DEPTH | BLOW | UCS | MOS |
|----------------------------------------------------|---------|-------|------|-------|------|-----------------------------|-------|-------|------|-------|-----|
| Offset | V | T | S | Qu | T | (ft.) | V | H | S | Qu | T |
| Ground Surface Elev. 652.606 (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) | Groundwater Elev. DRY (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) |
| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) |
| 2" ASPHALT PAVEMENT | | | | | | | | | | | |
| 6" CONCRETE | | | | | | | | | | | |
| -Shelby Tube Sample | | | | | | | | | | | |
| | 5 | 19 | | | 9.8 | | | | | | |
| CLAY LOAM A-6 | | 20 | | | | | | | | | |
| Gray, moist, hard, low plasticity, with sand | | 24 | | | | | | | | | |
| trace gravel | | | | | | | | | | | |
| | | 11 | | 10.3 | 10.8 | | | | | | |
| | | 17 | | | | | | | | | |
| | | 20 | | | | | | | | | |
| | 10 | 10 | | 7.42 | 10.0 | | | | | | |
| | | 17 | | | | | | | | | |
| | | 23 | | | | | | | | | |
| | | 13 | | 7.21 | 9.6 | | | | | | |
| | | 18 | | | | | | | | | |
| | | 20 | | | | | | | | | |
| | 15 | 10 | | | 10.0 | | | | | | |
| | | 15 | | | | | | | | | |
| | | 19 | | | | | | | | | |
| | | 15 | | 8.9 | 15.9 | | | | | | |
| | | 60-6 | | | | | | | | | |
| | 20 | 28 | | | | | | | | | |
| SAND A-3 | | 60-6 | | | | | | | | | |
| Gray, moist, very dense, fine, trace gravel, | | | | | | | | | | | |
| trace silt | | | | | | | | | | | |
| | | 22 | | | | | | | | | |
| | | 43 | | | | | | | | | |
| | | 17-5 | | | | | | | | | |
| | 25 | 11 | | 3.71 | 12.4 | | | | | | |
| CLAY LOAM A-6 | 626.606 | 13 | | | | | | | | | |
| Gray, moist, very stiff, low plasticity, with sand | | 16 | | | | | | | | | |
| trace gravel | | | | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | |
| | | 30 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL: Sheet
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|-------------------------------|----------------|-----------|
| USER NAME = z davidson | DESIGNED - KWB | REVISED - |
| 60603202_058-W007_21_B-20.dgn | CHECKED - RPW | REVISED - |
| PLOT SCALE = 0:2.0000 " / in. | DRAWN - LMC | REVISED - |
| PLOT DATE = | CHECKED - MDC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (B-20)
STRUCTURE NO. 058-W007

SHEET SD-21 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|--------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 662 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | | FED. AID PROJECT | |

SOIL BORING LOG

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE

SECTION _____ LOCATION DECATUR, ILLINOIS

COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.) _____

BORING NO. B-21 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

| Station | ELEV | DEPTH | BLOW | UCS | MOS | Surface Water Elev. | ELEV | DEPTH | BLOW | UCS | MOS |
|---------------------------------------------------------------------|---------|-------|------|-------|------|---------------------|-------|-------|------|-------|-----|
| Offset | V | T | W | S | S | (ft.) | V | H | S | Qu | T |
| Ground Surface Elev. <u>665.771</u> (ft.) | (ft.) | (ft.) | /6" | (tsf) | (%) | _____ | (ft.) | (ft.) | /6" | (tsf) | (%) |
| 11" CONCRETE | | | | | | | | | | | |
| SILTY CLAY A-6 | | | 2 | 1.4 | 15.6 | | | | | | |
| Brown, very moist, stiff, low plasticity, little sand, trace gravel | | | 5 | | | | | | | | |
| Shelby Tube | | | | | | | | | | | |
| CLAY LOAM A-6 | | | 6 | | 10.7 | | | | | | |
| Brown, moist, hard, low plasticity, with sand trace gravel | | | 13 | | | | | | | | |
| CLAY LOAM A-6 | | | 12 | | 7.6 | | | | | | |
| Gray, moist, hard, low plasticity, with sand trace gravel | | | 22 | | | | | | | | |
| SAND A'-a | | | 10 | | | | | | | | |
| Gray, saturated, very dense, fine-medium, trace gravel | | | 25 | | | | | | | | |
| (*free water @ 12.5') | | | 33 | | | | | | | | |
| CLAY LOAM A-6 | | | 15 | | 10.0 | | | | | | |
| Gray, moist, hard, low plasticity, with sand trace gravel | | | 22 | | | | | | | | |
| | | | 36 | | | | | | | | |
| | | | 16 | | 11.4 | | | | | | |
| | | | 21 | | | | | | | | |
| | | | 30 | | | | | | | | |
| | | | 20 | | | | | | | | |
| | | | 21 | | | | | | | | |
| | | | 28 | 7.83 | 10.5 | | | | | | |
| | | | 32-4 | | | | | | | | |
| | | | 18 | | | | | | | | |
| | | | 38 | 6.18 | 9.8 | | | | | | |
| | | | 22-2 | | | | | | | | |
| | | | 25 | | | | | | | | |
| | | | 23 | | | | | | | | |
| | 639.771 | | 28 | 14.42 | 9.8 | | | | | | |
| | | | 32-6 | | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | |
| | | | 30 | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
 The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL: Sheet
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| | | | | | |
|-------------------------------|------------------|------------|-----|-----------|--|
| USER NAME = | z davidson | DESIGNED - | KWB | REVISED - | |
| 60603202_058-W007_22_B-21.dgn | | CHECKED - | RPW | REVISED - | |
| PLOT SCALE = | 0:2.0000 " / in. | DRAWN - | LMC | REVISED - | |
| PLOT DATE = | | CHECKED - | MDC | REVISED - | |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

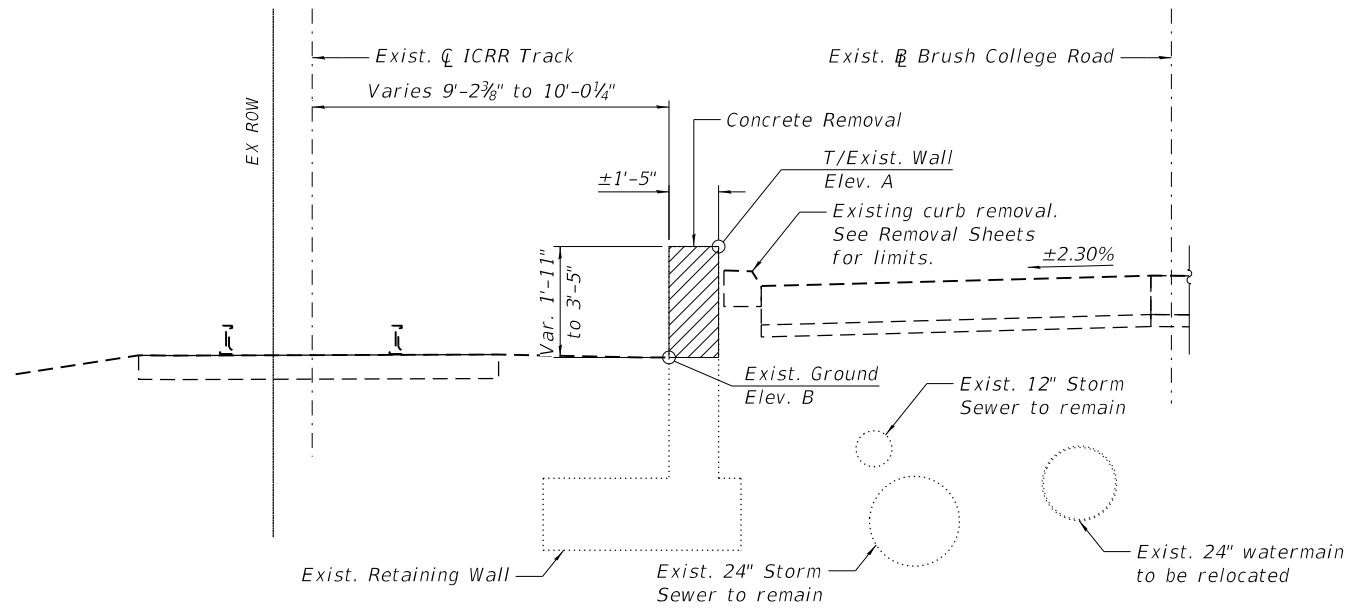
SOIL BORING LOGS (B-21)
 STRUCTURE NO. 058-W007

SHEET SD-22 OF SD-23 SHEETS

| | | | | |
|--------------------|----------------|--------|------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 663 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS | | | FED. AID PROJECT | |

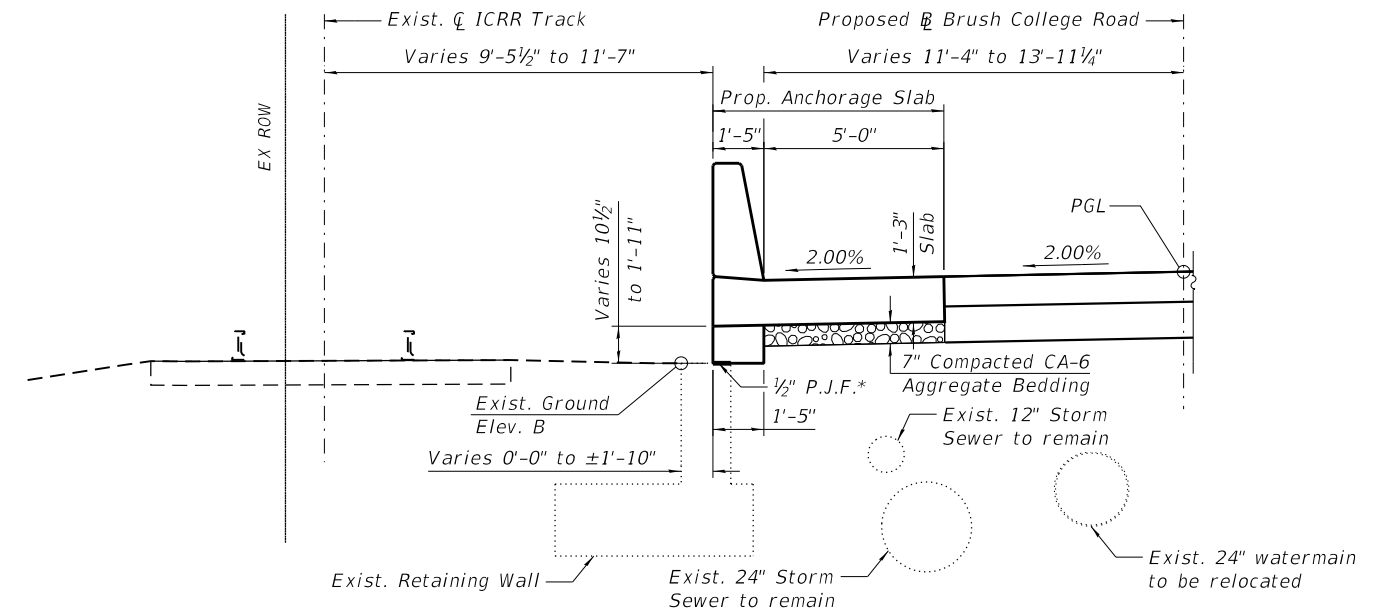
GENERAL NOTES

- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The Contractor shall field verify the location of all underground utilities. The Contractor shall take precautions to protect existing underground utilities that are to remain in service during construction of the wall. Any damage to underground utilities will be the responsibility of the Contractor. For locations and elevations of utilities, see Utility Plans.
- Dimensions for concrete removal are estimated. The actual area of removal should be determined by Engineer at the time of construction.
- Wall stations provided are at the front face of the anchorage slab parapet and are measured from the proposed \square Brush College Road.
- Required strength of concrete for the wall and parapet shall be 4,000 psi.
- Expansion joints shall be constructed in the anchorage slab at locations as shown on the plans. The maximum joint spacing allowed by design is 90 feet.
- The forming of contraction joints shall be done with an approved finishing tool or by sawing at the discretion of the Engineer subject to the satisfactory control of cracking.
- No construction joints except those shown on the plans will be allowed unless approved by the Engineer.
- Protective coat shall be applied to the interior, top and back faces of parapet and the exposed face of anchorage slab.
- Reinforcement bars designated (E) shall be epoxy coated.
- Reinforcement bars shall conform to the requirements of AASHTO M-31 (ASTM A706), Grade 60, deformed bars.
- Reinforcement bar bending details shall be in accordance with the latest "Manual of Standard Practice for Detailing Reinforced Concrete Structures", ACI 315.
- Reinforcement bar bending dimensions are out to out.
- Cover from the face of concrete to face of reinforcement bars shall be 3" for the surfaces formed against earth and 2" for all other surfaces unless otherwise shown.
- Compacted CA-6 aggregate bedding stone shall be paid for at the contract unit price per cubic yard as Granular Backfill for Structures.



PARTIAL REMOVAL OF EXISTING CONCRETE WALL

Sta. 47+39.57 to Sta. 48+20.00

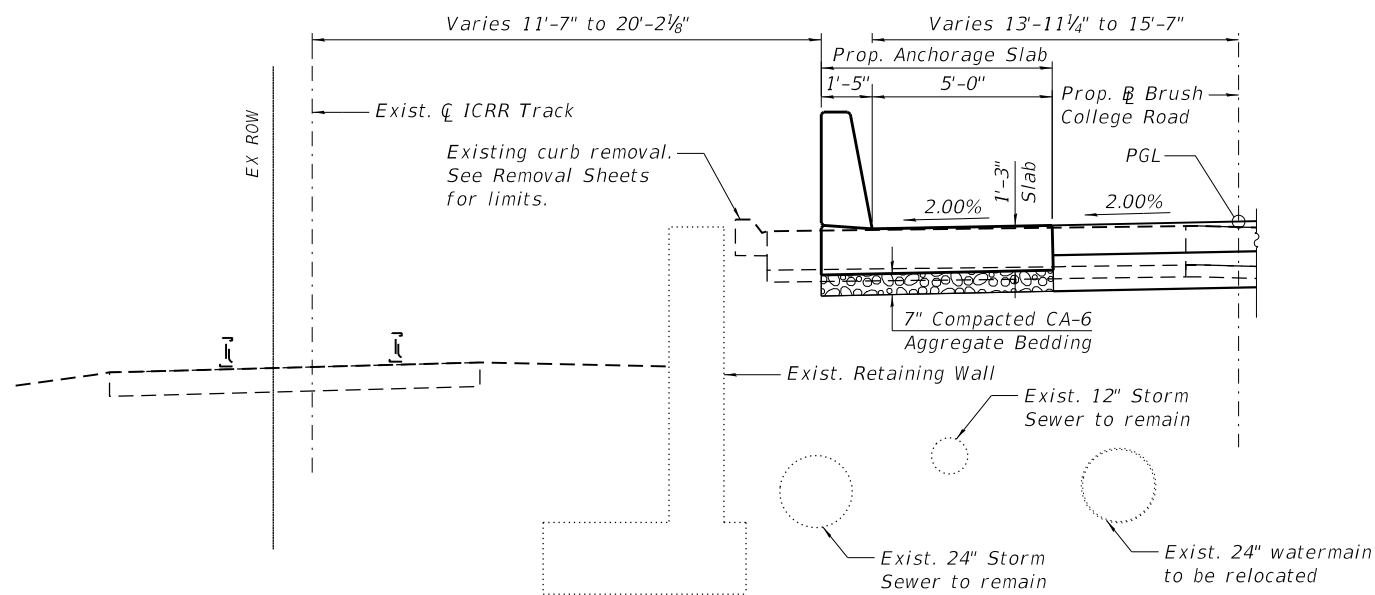


PROPOSED ANCHOR SLAB

Sta. 47+39.57 to Sta. 48+20.00

* Cost included in Concrete Superstructure

| Station | Elev. A | Elev. B |
|----------|---------|---------|
| 47+39.57 | 654.17 | 651.27 |
| 47+50.00 | 654.34 | 651.26 |
| 47+75.00 | 654.68 | 651.36 |
| 48+00.00 | 655.02 | 651.80 |
| 48+20.00 | 655.41 | 651.98 |



EXISTING AND PROPOSED CONDITIONS

Sta. 48+20.00 to Sta. 49+00.00

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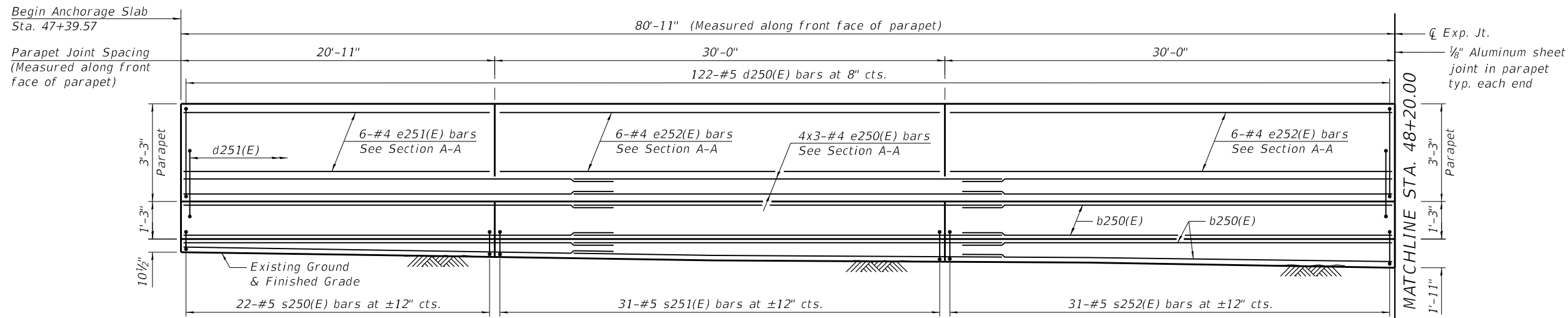
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|----------------------------|---------------|-------------|
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| PLOT DATE = 4/28/2021 | DRAWN - BD | REVISIONS - |
| | CHECKED - MK | REVISIONS - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

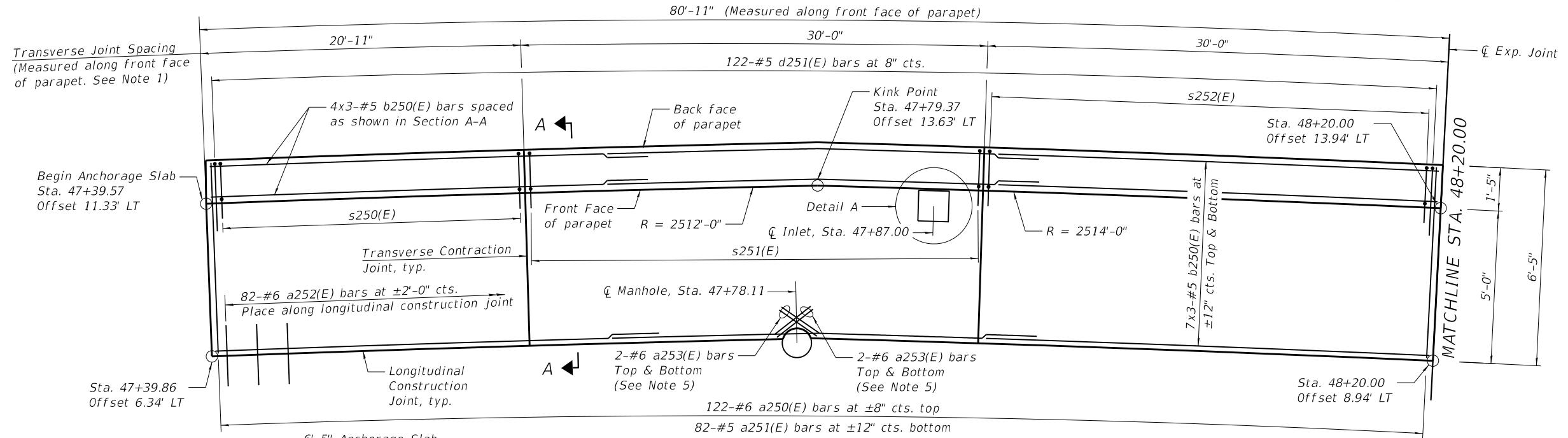
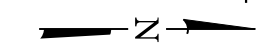
**GENERAL DATA & TYPICAL SECTIONS
SOUTH ANCHORAGE SLAB**

SHEET NO. SE-2 OF SE-6 SHEETS

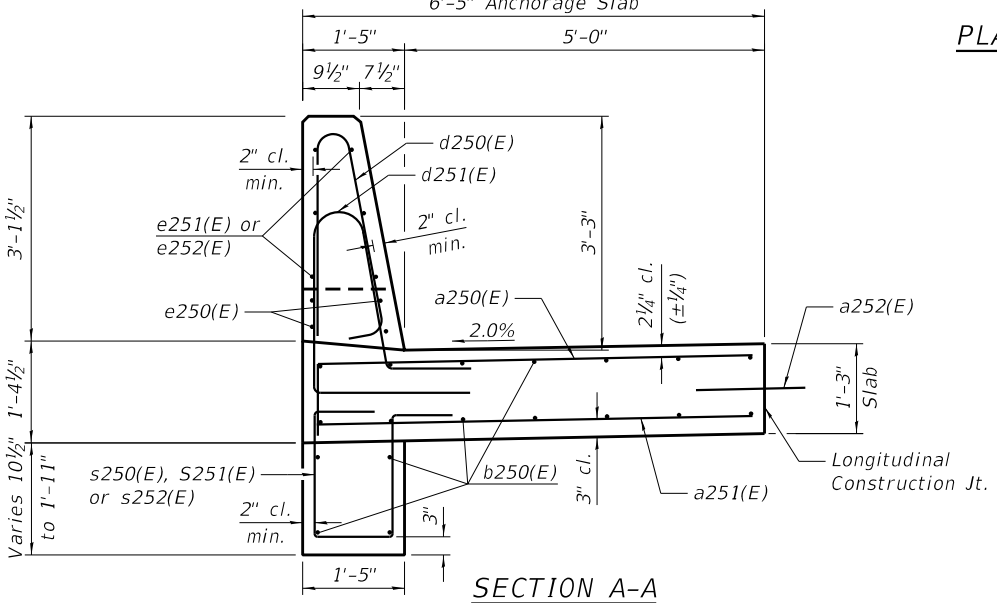
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 666 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



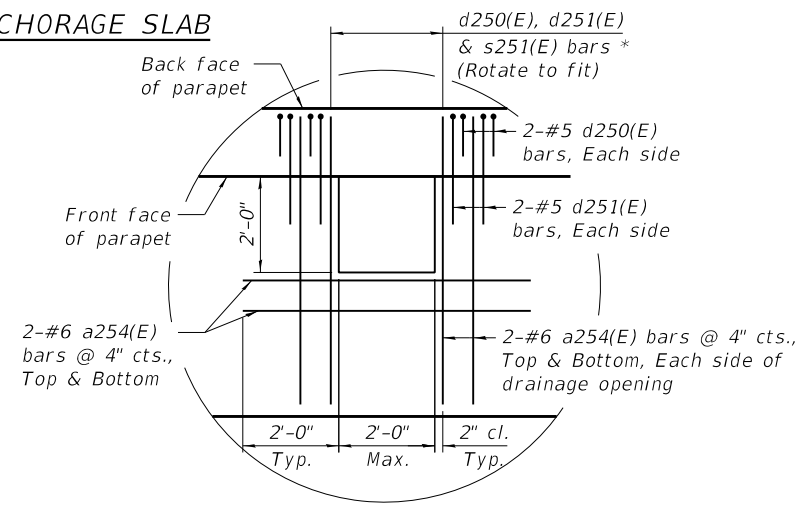
INSIDE ELEVATION OF PARAPET & ANCHORAGE SLAB
(Looking West)



PLAN - PARAPET AND ANCHORAGE SLAB



SECTION A-A



DETAIL A

* s251(E) bars @ Sta 47+87.00 only

MINIMUM BAR LAP

- #4 bar = 2'-8"
- #5 bar = 3'-4"

NOTES

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to the inside face of parapet.
2. Stations and offsets are measured from Brush College Road.
3. Portion of the anchorage slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specification.
4. Bars indicated thus 7x3-#5 etc. indicated 7 lines of bar with 3 lengths per line.
5. Tie a253(E) bars to top and bottom reinforcement mats.
6. For joint details, bar details and Bill of Material, see Sheet SE-5.
7. For drainage details, see drainage plans.

MODEL Sheet FILE NAME: p:\aecom\pw\benley.com\AECOM_0512_MIA\Documents\60603202-Brush_College\00-CAD_GIS\03_SHEETS\01_AECOM\Structural\60603202_SE-3_Wall_Details.dgn



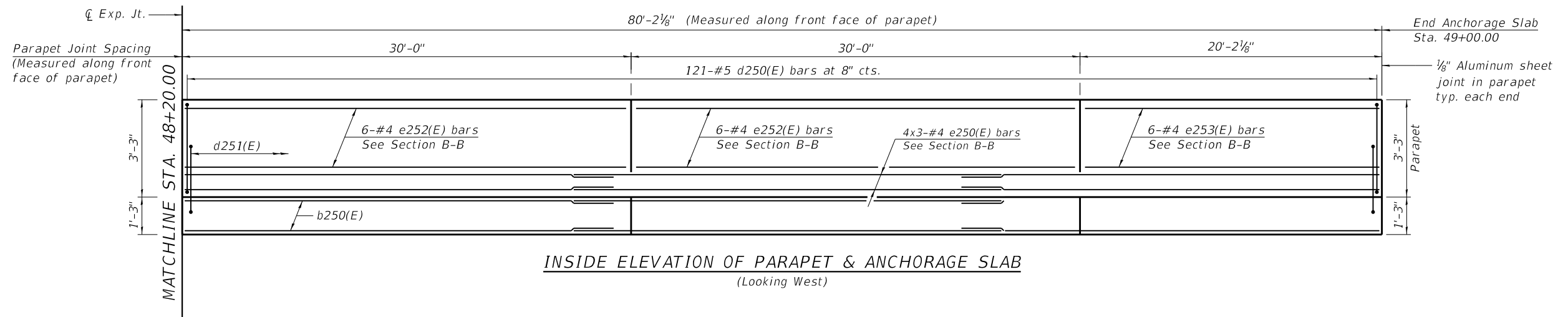
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| PLOT DATE = 4/28/2021 | DRAWN - MCC | REVISED - |
| | CHECKED - MK | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

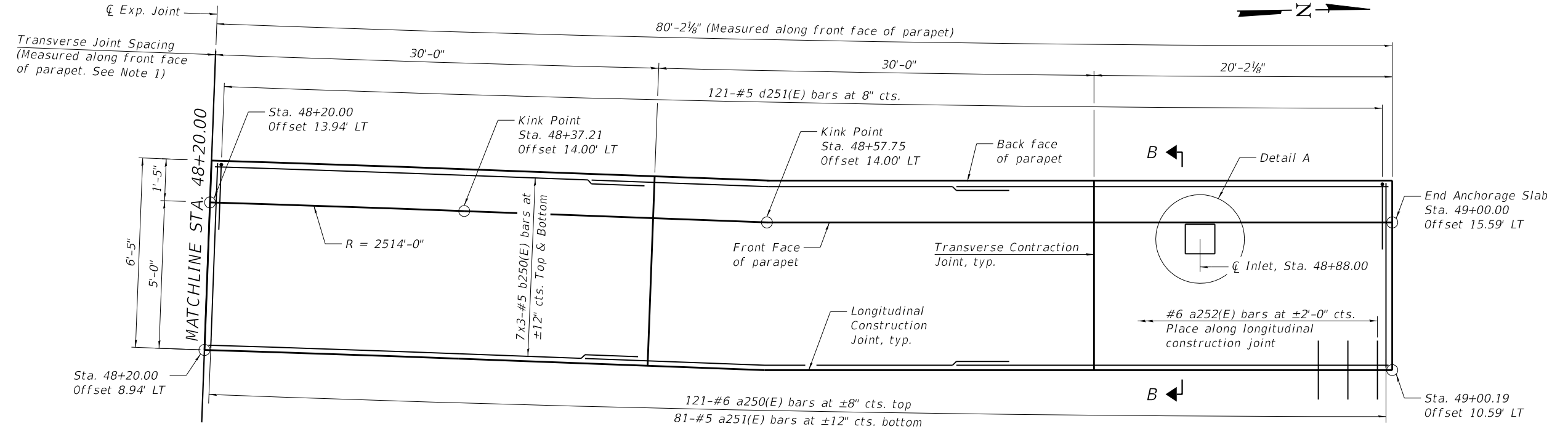
**SLAB DETAILS I
SOUTH ANCHORAGE SLAB**

SHEET NO. SE-3 OF SE-6 SHEETS

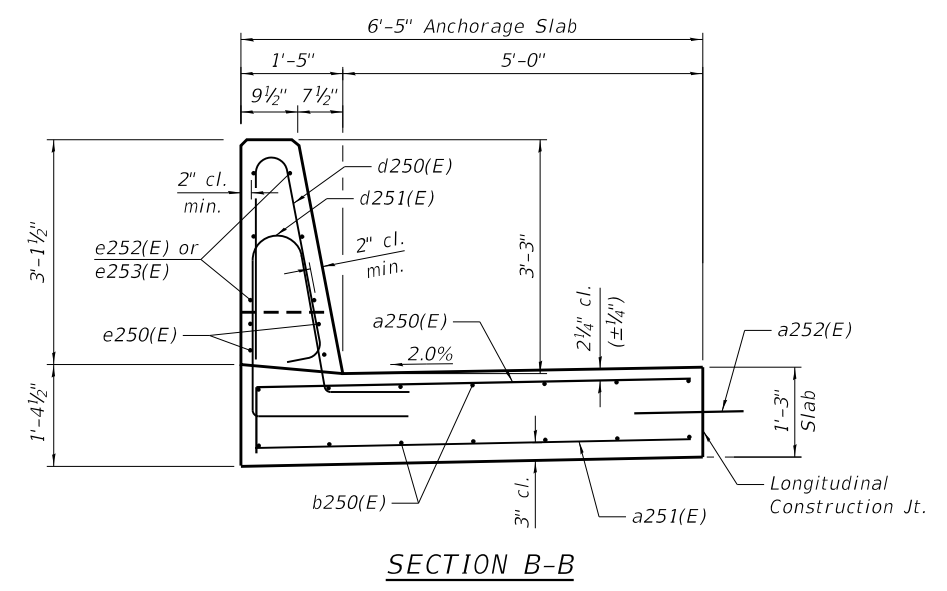
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 667 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



INSIDE ELEVATION OF PARAPET & ANCHORAGE SLAB
(Looking West)



PLAN - PARAPET AND ANCHORAGE SLAB



SECTION B-B

MINIMUM BAR LAP
 #4 bar = 2'-8"
 #5 bar = 3'-4"

NOTES

1. Place Transverse Contraction Joints and Transverse Expansion Joints perpendicular to the inside face of parapet.
2. Stations and offsets are measured from Brush College Road.
3. Portion of the anchorage slab within the traveled way shall be finished to match PPC pavement finish according to Section 420.09 of the Standard Specification.
4. Bars indicated thus 7x3-#5 etc. indicated 7 lines of bar with 3 lengths per line.
5. For Detail A, see Sheet SE-3.
6. For joint details, bar details and Bill of Material, see Sheet SE-5.
7. For drainage details, see drainage plans.

MODEL Sheet
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| | | |
|----------------------------|---------------|-----------|
| USER NAME = monica.crinion | DESIGNED - BD | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/28/2021 | DRAWN - MCC | REVISED - |
| | CHECKED - MK | REVISED - |

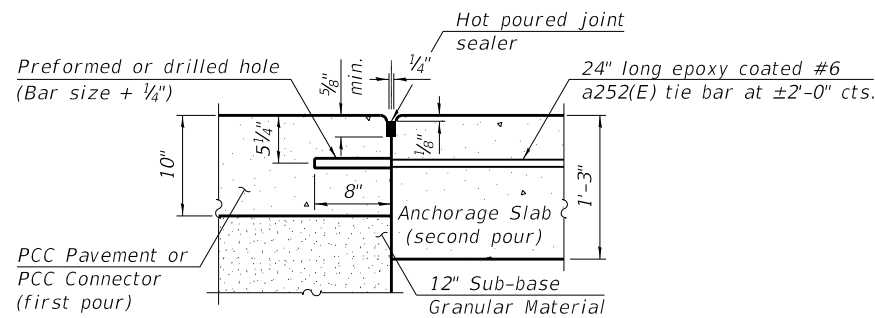
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SLAB DETAILS II
SOUTH ANCHORAGE SLAB**
SHEET NO. SE-4 OF SE-6 SHEETS

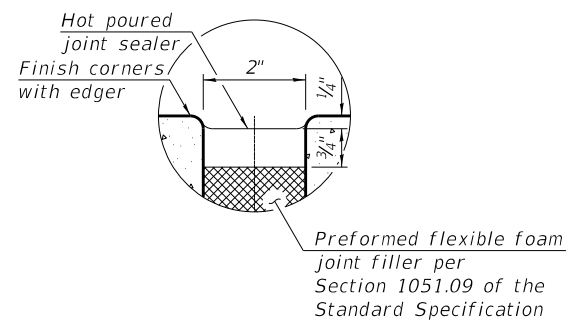
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 668 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

**SOUTH ANCHORAGE SLAB
BILL OF MATERIAL**

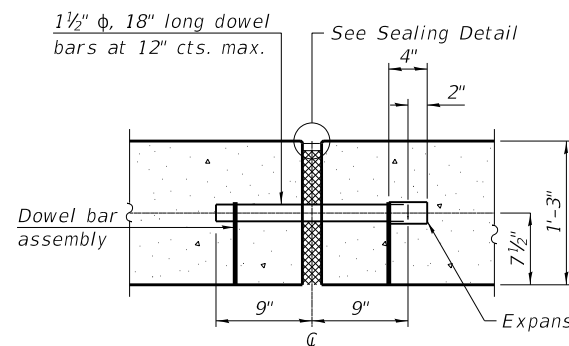
| Bar | No. | Size | Length | Shape |
|-------------------------------------|-----|------|---------|--------|
| a250(E) | 243 | #6 | 7'-0" | ┌ |
| a251(E) | 163 | #5 | 6'-1" | ┌ |
| a252(E) | 82 | #6 | 2'-0" | ┌ |
| a253(E) | 8 | #6 | 4'-0" | ┌ |
| a254(E) | 24 | #6 | 6'-0" | ┌ |
| b250(E) | 96 | #5 | 29'-1" | ┌ |
| d250(E) | 251 | #5 | 6'-5" | ┌ |
| d251(E) | 251 | #5 | 8'-6" | ┌ |
| e250(E) | 24 | #4 | 28'-8" | ┌ |
| e251(E) | 6 | #4 | 20'-7" | ┌ |
| e252(E) | 24 | #4 | 29'-8" | ┌ |
| e253(E) | 6 | #4 | 19'-10" | ┌ |
| s250(E) | 22 | #5 | 5'-9" | ┌ |
| s251(E) | 31 | #5 | 6'-5" | ┌ |
| s252(E) | 31 | #5 | 7'-3" | ┌ |
| Concrete Superstructure | | | Cu. Yd. | 71.5 |
| Protective Coat | | | Sq. Yd. | 235 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 12,590 |



**LONGITUDINAL CONSTRUCTION
JOINT GROUTED-IN-PLACE
TIE BAR**

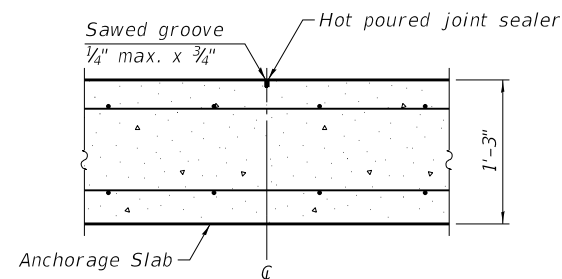


SEALING DETAIL

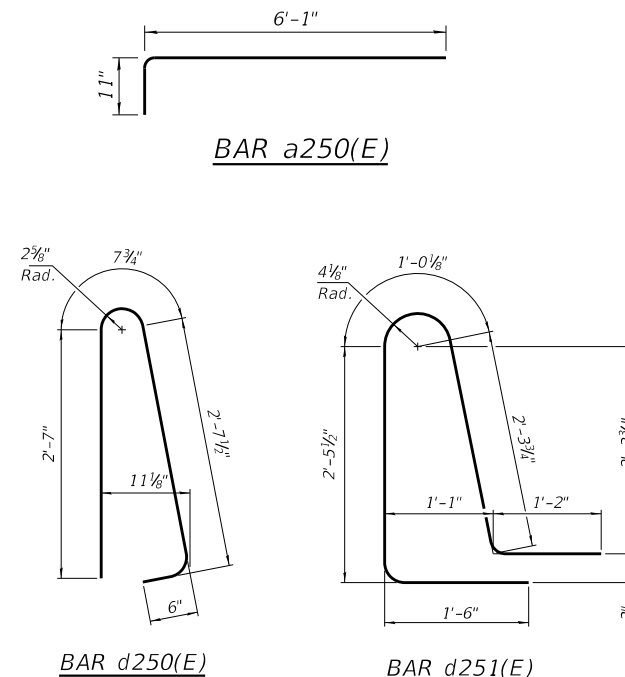


ANCHORAGE SLAB EXPANSION JOINT
Expansion joint and dowel bars included
in the cost of Concrete Superstructure

* Expansion caps shall be installed on the exposed end of each dowel bar once the header has been removed and the joint filler material has been installed.

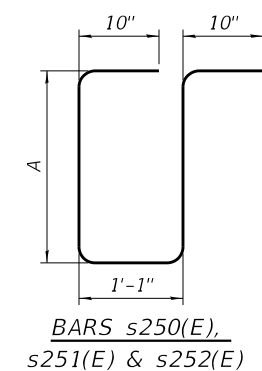


TRANSVERSE CONTRACTION JOINT

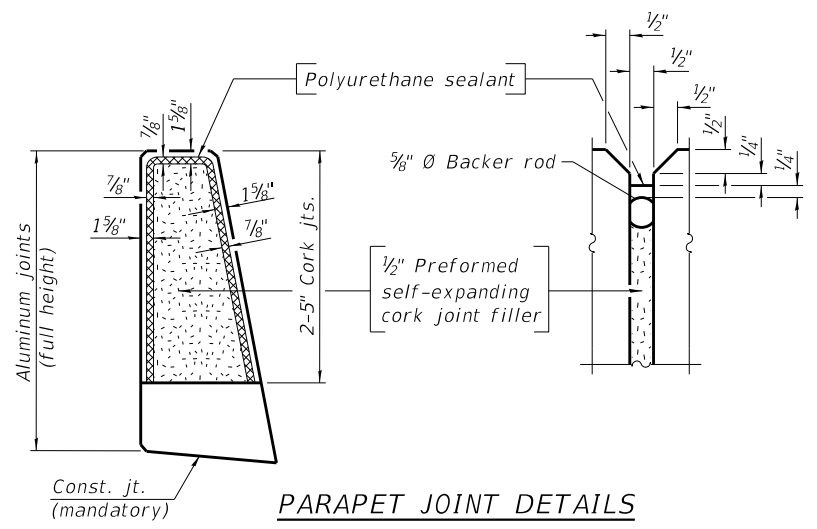


BAR d250(E)

BAR d251(E)



| Bar | A |
|---------|--------|
| s250(E) | 1'-6" |
| s251(E) | 1'-10" |
| s252(E) | 2'-3" |



PARAPET JOINT DETAILS

Notes:
The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

MODEL Sheet
FILE NAME: p:\aecom-np-pw-bentley.com\AECOM_D51E_MIA\Documents\60603202-Brush College\00-CAD GIS\010_CAD\03_SHEETS\01_LAECOM\Structural\60603202_SE-5_Wall_Details_III.dgn



| | | |
|----------------------------|---------------|----------|
| USER NAME = monica.crinion | DESIGNED - BD | REVISD - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISD - |
| PLOT DATE = 4/28/2021 | DRAWN - BD | REVISD - |
| | CHECKED - MK | REVISD - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SLAB DETAILS III
SOUTH ANCHORAGE SLAB**
SHEET NO. SE-5 OF SE-6 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 669 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



SOIL BORING LOG

Page 1 of 2
Project #: 012017
Date 06/29/11

ROUTE _____ DESCRIPTION BRUSH COLLEGE RD BRIDGE (SKS #012017) LOGGED BY EK

SECTION _____ LOCATION DECATUR, IL

COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.)

BORING NO. B-6 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

Station 48+70.24
Offset 16.58' LT.
Ground Surface Elev. 657.14 (ft.)

| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) |
|-------------------------------------------------------------|-------|-------|-----|-------|------|---------------------------------------------------------------------|-------|-------|-----|-------|-----|
| 8" CONCRETE | | | | | | SILT - A-4 | 8 | 10 | 1.6 | 28.2 | |
| | | | | | | Gray, moist, very stiff, low plasticity, trace sand | 35 | 4 | | | |
| SILTY CLAY LOAM - A-6 | 25 | 31 | | 5.3 | | SILTY CLAY LOAM - A-6 | 7 | 7 | .9 | 19.9 | |
| Gray, moist, hard, low plasticity, trace sand, trace gravel | 29.5* | | | | | Gray, moist, stiff, low plasticity, trace sand, trace gravel | 4 | 7 | 2.8 | 17.8 | |
| | 23 | 30 | | 5.8 | | | 40 | 13 | | | |
| - rock | 30 | | | | | SILTY CLAY LOAM - A-6 | 6 | 9 | 1.8 | 15.5 | |
| | 13 | 18 | | 3.4 | | Greenish Gray, very stiff, low plasticity, trace sand, trace gravel | 12 | 7 | 3.0 | 11.6 | |
| | 18 | 26 | | | | | 14 | 21 | | | |
| | 10 | 9 | | 4.2 | 10.0 | SILTY CLAY LOAM - A-6 | 45 | 10 | 2.4 | 10.9 | |
| | 12 | 20 | | | | Gray, moist, hard, low plasticity, trace sand, trace gravel | 17 | 27 | | | |
| | 23 | 50 | | 3.7 | | | 17 | 30 | 2.9 | 10.7 | |
| SAND - A-1-b | 15 | 10-1* | | | | | 50 | 30-5* | 2.8 | 10.3 | |
| Gray, moist, very dense, fine-medium | | | | | | | 17 | 35 | 2.8 | 10.3 | |
| | 13 | 23 | | 3.7 | | | 85 | 25-4* | | | |
| SILTY SAND - A-2-6 | | 26 | | | | | 18 | 26 | 2.6 | 10.7 | |
| Gray, moist, very dense, fine | | | | | | | 55 | 31 | | | |
| SILTY CLAY LOAM - A-6 | 13 | 18 | | 3.4 | 11.5 | | 10 | 22 | 1.6 | 12.1 | |
| Gray, moist, hard, low plasticity, trace sand, trace gravel | 20 | 7 | | | | | 24 | 10 | 3.0 | 12.1 | |
| | | 12 | | | | | 90 | 15 | | | |
| | | 21 | | 15.0 | | | 10 | 18 | | | |
| | | 16 | | 2.9 | 12.6 | | 60 | 8 | | | |
| (*)free water @ 18.5' | | 23 | | | | | 95 | 11 | | | |
| | 25 | 8 | | | | | 11 | 15 | | | |
| SAND - A-1-b | | 16 | | 4.2 | 10.7 | | 7 | 12 | | | |
| Gray, saturated, dense, fine-medium | | 22 | | | | | 65 | 17 | | | |
| | | 8 | | | | | 45 | 60-6* | | | |
| SILTY CLAY LOAM - A-6 | | 13 | | 2.6 | 11.5 | | | | | | |
| Gray, moist, hard, low plasticity, trace sand, trace gravel | | 21 | | | | | | | | | |
| | | 10 | | 5.1 | 11.2 | | | | | | |
| | | 16 | | | | | | | | | |
| | | 23 | | | | | | | | | |
| | | 7 | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)



SOIL BORING LOG

Page 2 of 2
Project #: 012017
Date 06/29/11

ROUTE _____ DESCRIPTION BRUSH COLLEGE RD BRIDGE (SKS #012017) LOGGED BY EK

SECTION _____ LOCATION DECATUR, IL

COUNTY MACON STRUCTURE NO. _____ (Exist) _____ (Prop.)

BORING NO. B-6 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

Station 48+70.24
Offset 16.58' LT.
Ground Surface Elev. 657.14 (ft.)

| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) |
|--------------------------------------|-------|-------|-----|-------|------|------------------|-------|-------|-----|-------|-----|
| SAND - A-1-b | | | | | | | | | | | |
| Gray, wet, medium dense, fine-medium | | | | | | | | | | | |
| | 58.14 | 10 | | 1.0 | 34.2 | | | | | | |
| | | 22 | | 38-3* | | | | | | | |
| END OF BORING @ 71.0 FT. | | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)



SOIL BORING LOG

Page 1 of 1
Project #: 916780
Date 02/21/20

ROUTE _____ DESCRIPTION BRUSH COLLEGE ROAD LOGGED BY GC/EE

SECTION _____ LOCATION DECATUR, ILLINOIS

COUNTY MACON COUNTY STRUCTURE NO. _____ (Exist) _____ (Prop.)

BORING NO. B-20 DRILLING METHOD HOLLOW STEM HAMMER TYPE 140# SAFETY HAMMER

Station _____
Offset _____
Ground Surface Elev. 652.606 (ft.)

| SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) | SOIL DESCRIPTION | (ft.) | (ft.) | /6" | (tsf) | (%) |
|-----------------------------------------------------------------|-------|---------|-----|-------|------|------------------|-------|-------|-----|-------|-----|
| 2" ASPHALT PAVEMENT | | | | | | | | | | | |
| 6" CONCRETE | | | | | | | | | | | |
| -Shelby Tube Sample | | | | | | | | | | | |
| | | 5 | | 19 | | | | | | | |
| | | 20 | | 24 | | | | | | | |
| CLAY LOAM A-6 | | | | | 9.8 | | | | | | |
| Gray, moist, hard, low plasticity, with sand trace gravel | | | | 10.3 | 10.8 | | | | | | |
| | | 10 | | 10 | | | | | | | |
| | | 17 | | 23 | | | | | | | |
| | | 13 | | 18 | | | | | | | |
| | | 18 | | 20 | | | | | | | |
| | | 15 | | 10 | | | | | | | |
| | | 15 | | 19 | | | | | | | |
| | | 15 | | 15 | | | | | | | |
| | | 60-6 | | 8.9 | | | | | | | |
| | | 20 | | 28 | | | | | | | |
| SAND A-3 | | 60-6 | | | | | | | | | |
| Gray, moist, very dense, fine, trace gravel, trace silt | | | | 22 | | | | | | | |
| | | 43 | | 17-5 | | | | | | | |
| | | 25 | | 11 | | | | | | | |
| CLAY LOAM A-6 | | 626.606 | | 13 | | | | | | | |
| Gray, moist, very stiff, low plasticity, with sand trace gravel | | | | 16 | | | | | | | |
| END OF BORING @ 26.0 FT. | | | | | | | | | | | |

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

MODEL Sheet
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| | | |
|----------------------------|---------------|-----------|
| USER NAME = monica.crinion | DESIGNED - | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - | REVISED - |
| PLOT DATE = 4/28/2021 | DRAWN - GF | REVISED - |
| | CHECKED - MCC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
SOUTH ANCHORAGE SLAB

SHEET NO. SE-6 OF SE-6 SHEETS

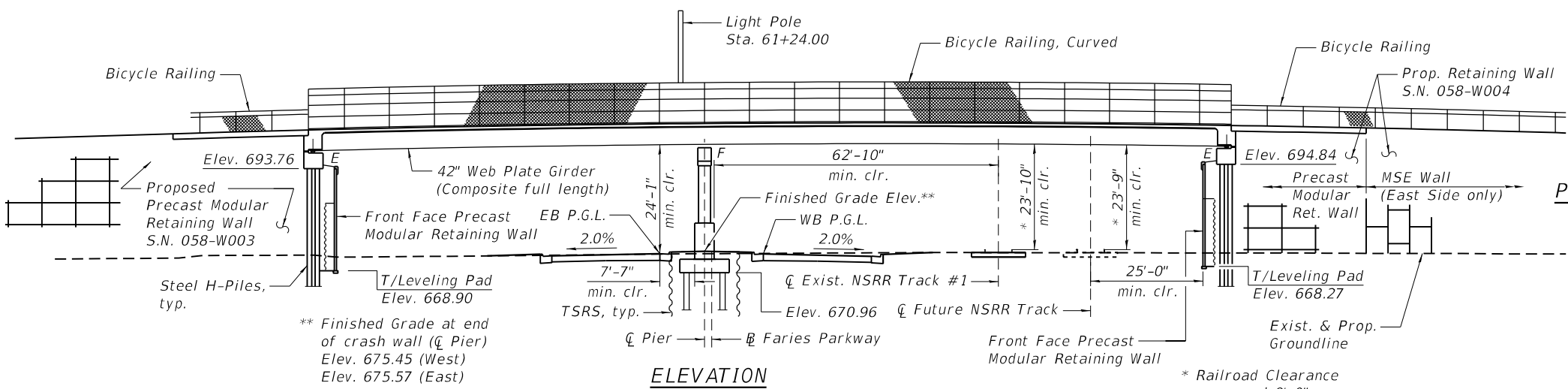
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 670 |
| ILLINOIS | | | CONTRACT NO. 95893 | |
| FED. AID PROJECT | | | | |

Bench Mark: "M" in Mueller on fire hydrant at Southeast corner of Cerro Gordo St. and Brush College Road. Elev. 652.58

Existing Structure: None.

Brush College Road to be closed and traffic to be detoured. Faries Parkway traffic to be maintained utilizing staged construction.

Note:
The permanent vertical and horizontal clearances to the ζ Exist. NSRR Track #1 are shown on this sheet. The temporary clearances shall be 22'-0" minimum vertical clearance and 13'-0" minimum horizontal clearance from ζ of existing track.

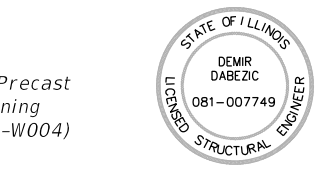
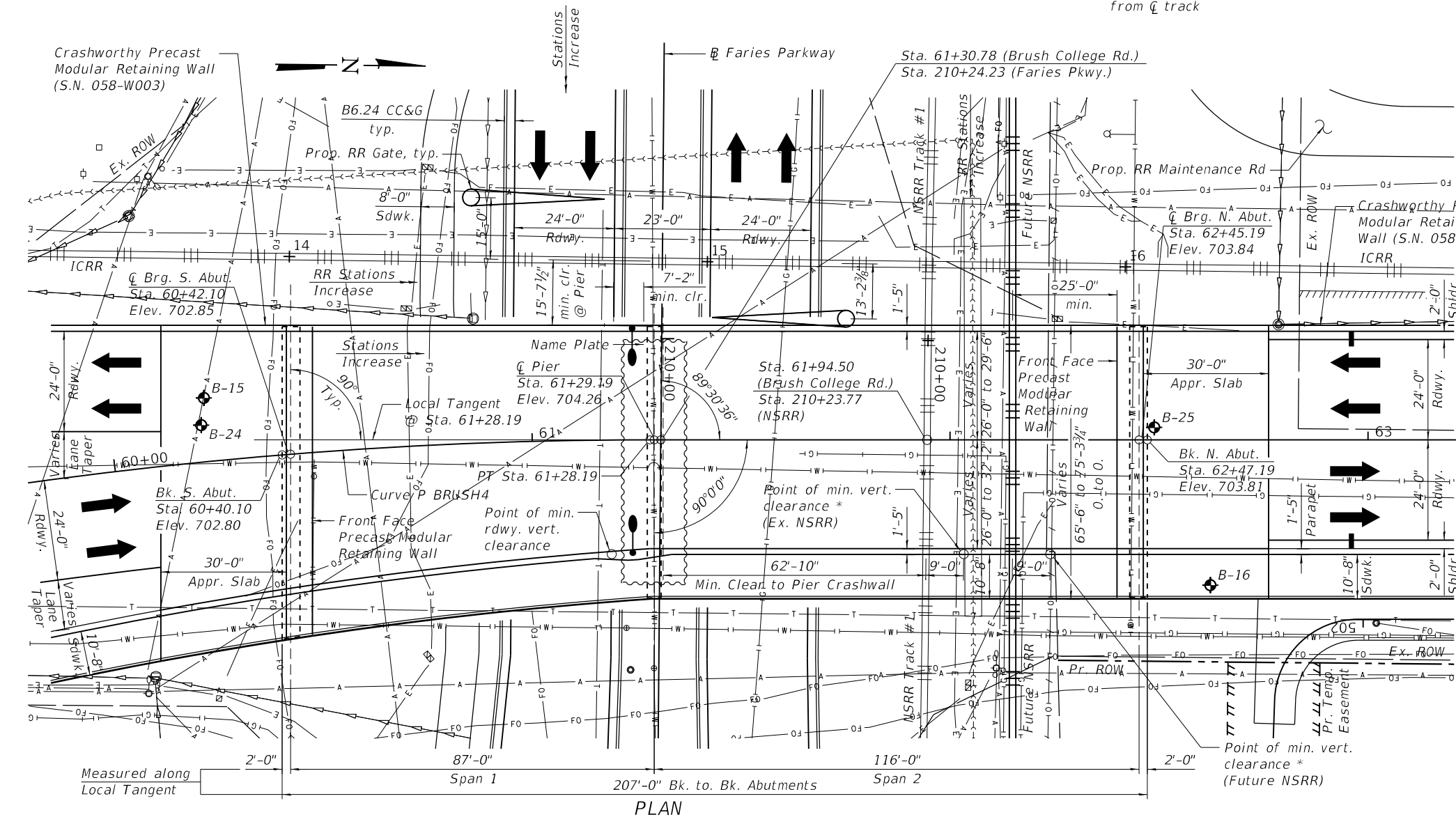
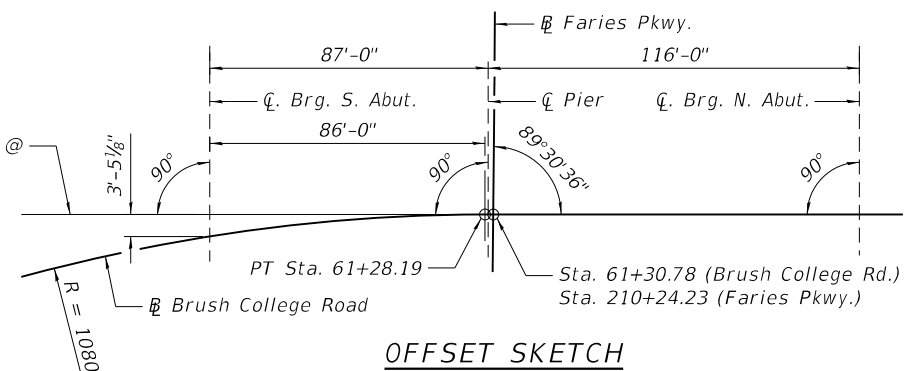


PROP. CURVE P BRUSH4
 P.I. Sta. = 60+18.63
 $\Delta = 11^\circ 39' 57''$ (RT)
 $D = 5^\circ 18' 19''$
 $R = 1,080.00'$
 $T = 110.33'$
 $L = 219.89'$
 $E = 5.62'$
 $e = NC$
 $T.R. = N/A$
 $S.E. Run = N/A$
 $P.C. Sta. = 59+08.30$
 $P.T. Sta. = 61+28.19$

DESIGN SPECIFICATIONS
 2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

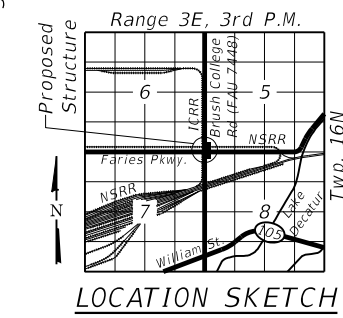
DESIGN STRESSES
FIELD UNITS
 $f'_c = 3,500$ psi
 $f'_c = 4,000$ psi (Superstructure & Appr. Slab)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)



I certify that to the best of knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Bridge Design Specifications".

Demir Dabecic, S.E.
 Expires: November 30, 2024
 4/17/2023.

- LEGEND**
- Ex. ROW
 - Ex. RR Track
 - Ex. Gas Line
 - Ex. Water Line
 - Ex. Underground Telephone Line
 - Ex. Underground Fiber Optic
 - Ex. Aerial Line
 - Ex. Electric
 - Ex. Storm Sewer
 - Ex. Sanitary Sewer
 - - - Pr. ROW
 - TTT Pr. Temp. Easement
 - Future RR Track
 - Pr. Gas Line
 - Pr. Water Line
 - Pr. Underground Sanitary Sewer
 - Pr. Storm Sewer
 - Pr. Above Ground Lighting
 - Pr. Drainage Inlet
 - Soil Boring
 - Temporary Soil Retention System (TSRS)



GENERAL PLAN & ELEVATION
BRUSH COLLEGE ROAD
OVER FARIES PARKWAY
 F.A.U. 7448 SECTION 09-00933-01-BR
 MACON COUNTY
 STA. 61+29.19
 STRUCTURE NO. 058-9202

MODEL: Sheet
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| | | |
|----------------------|----------------|----------|
| USER NAME = DabecicD | DESIGNED - MCC | REVISD - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISD - |
| PLOT DATE = 4/6/2023 | DRAWN - MCC | REVISD - |
| | CHECKED - DD | REVISD - |

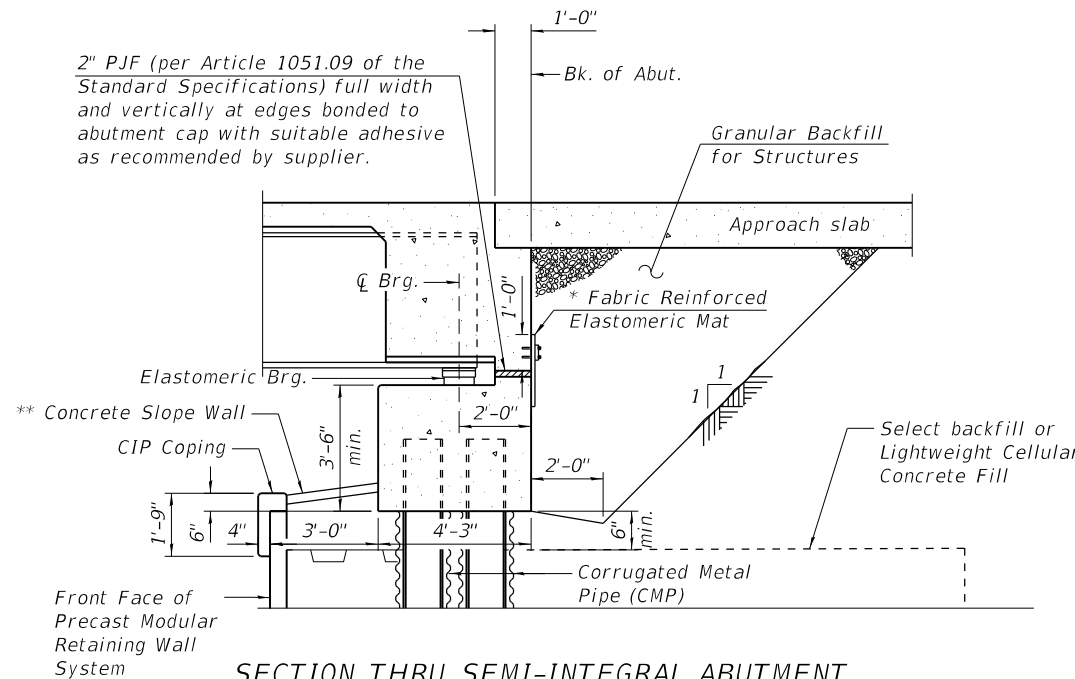
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SHEET NO. SF-1 OF SF-35 SHEETS

| | | | | |
|--------------------|------------------------|--------------|---------------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 671 |
| CONTRACT NO. 95893 | | | ILLINOIS FED. AID PROJECT | |

GENERAL NOTES

- Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts in painted areas. Bolts $\frac{3}{4}$ " \varnothing , holes $\frac{15}{16}$ " \varnothing , unless otherwise noted.
- Calculated weight of Structural Steel
M270 Grade 50 = 436,480 lbs.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the designated areas of the pier.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be gray, Munsell No. 5B 7/1.
- The elevation of the existing NSRR track top-of rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Norfolk Southern Public Projects Engineer.



SECTION THRU SEMI-INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. Z's)

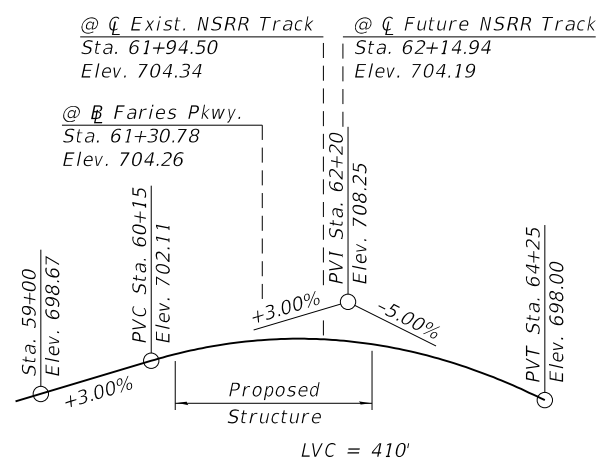
Notes:
 * Fabric Reinforced Elastomeric Mat according to Section 1028 of the Standard Specifications. Fabric mat shall be 24" wide and attached full width and vertically at edges to the abutment cap with a $\frac{3}{8}$ " x 5" steel plate and $\frac{1}{2}$ " \varnothing studs with nuts and washers at 12" cts. Cost included with Concrete Superstructure.
 ** Paid for as Slope Wall 4 Inch. See Sheet SF-28 for Concrete Slope Wall details.

TOTAL BILL OF MATERIAL

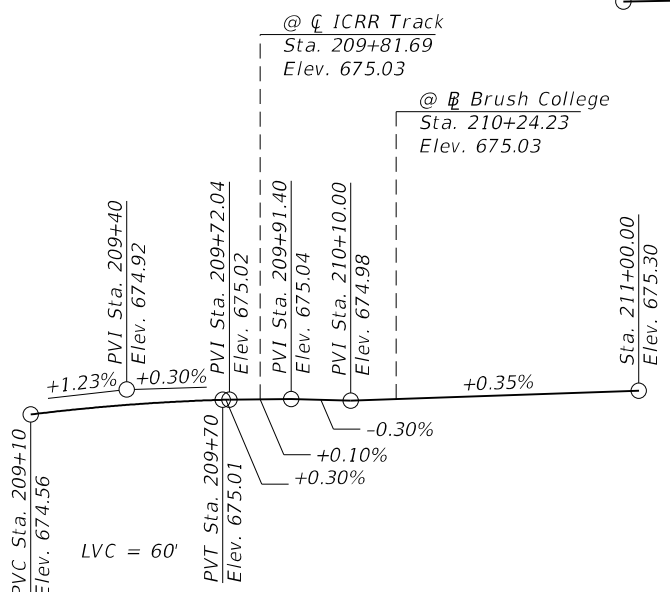
| ITEM | UNIT | SUPER | SUB | TOTAL |
|-------------------------------------------|-------|---------|--------|---------|
| Structure Excavation | Cu Yd | | 129 | 129 |
| Concrete Structures | Cu Yd | | 317.3 | 317.3 |
| Concrete Superstructure | Cu Yd | 509.2 | | 509.2 |
| Bridge Deck Grooving | Sq Yd | 1,518 | | 1,518 |
| Protective Coat | Sq Yd | 2,305 | | 2,305 |
| Concrete Superstructure (Approach Slab) | Cu Yd | 199.9 | | 199.9 |
| Furnishing And Erecting Structural Steel | L Sum | 1 | | 1 |
| Stud Shear Connectors | Each | 6,723 | | 6,723 |
| Reinforcement Bars, Epoxy Coated | Pound | 226,380 | 56,240 | 282,620 |
| Mechanical Splicers | Each | | 112 | 112 |
| Bicycle Railing | Foot | 60 | | 60 |
| Bridge Fence Railing | Foot | 205 | | 205 |
| Bicycle Railing, Curved | Foot | 205 | | 205 |
| Parapet Railing | Foot | 265 | | 265 |
| Slope Wall 4 Inch | Sq Yd | | 36 | 36 |
| Furnishing Steel Piles HP14X89 | Foot | | 4,154 | 4,154 |
| Driving Piles | Foot | | 4,154 | 4,154 |
| Test Pile Steel HP14X89 | Each | | 3 | 3 |
| Pile Shoes | Each | | 62 | 62 |
| Name Plates | Each | 1 | | 1 |
| Elastomeric Bearing Assembly, Type I | Each | 18 | | 18 |
| Anchor Bolts, $\frac{3}{4}$ " | Each | 36 | | 36 |
| Anchor Bolts, $1\frac{1}{2}$ " | Each | 18 | | 18 |
| Temporary Soil Retention System | Sq Ft | | 521 | 521 |
| Granular Backfill For Structures | Cu Yd | | 215.6 | 215.6 |
| Concrete Sealer | Sq Ft | | 2,635 | 2,635 |
| Temporary Soil Retention System (Special) | Sq Ft | | 60 | 60 |

STATION 61+29.19
 BUILT 20__ BY
 CITY OF DECATUR
 F.A.U. 7448 SEC. 09-00933-01-BR
 LOADING HL-93
 STRUCTURE NO. 058-9202

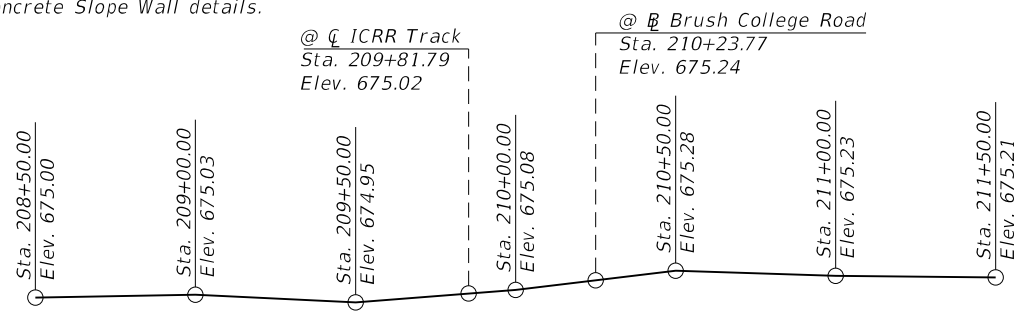
NAME PLATE
See Std. 515001



PROFILE GRADE - BRUSH COLLEGE ROAD
(Along Proposed Roadway)

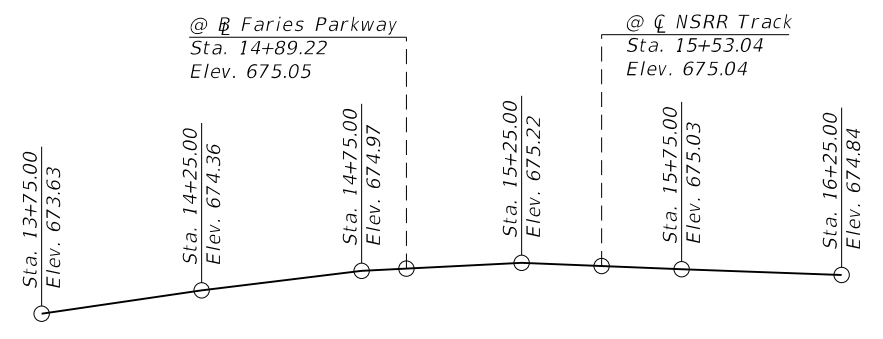


PROFILE GRADE - FARIES PARKWAY
(Along Proposed Roadway)



TOP OF RAIL - NSRR Track

(Looking North)
 Showing existing track. (See Note 9.)
 Future NSRR track profile assumed to match existing NSRR track profile and elevations.



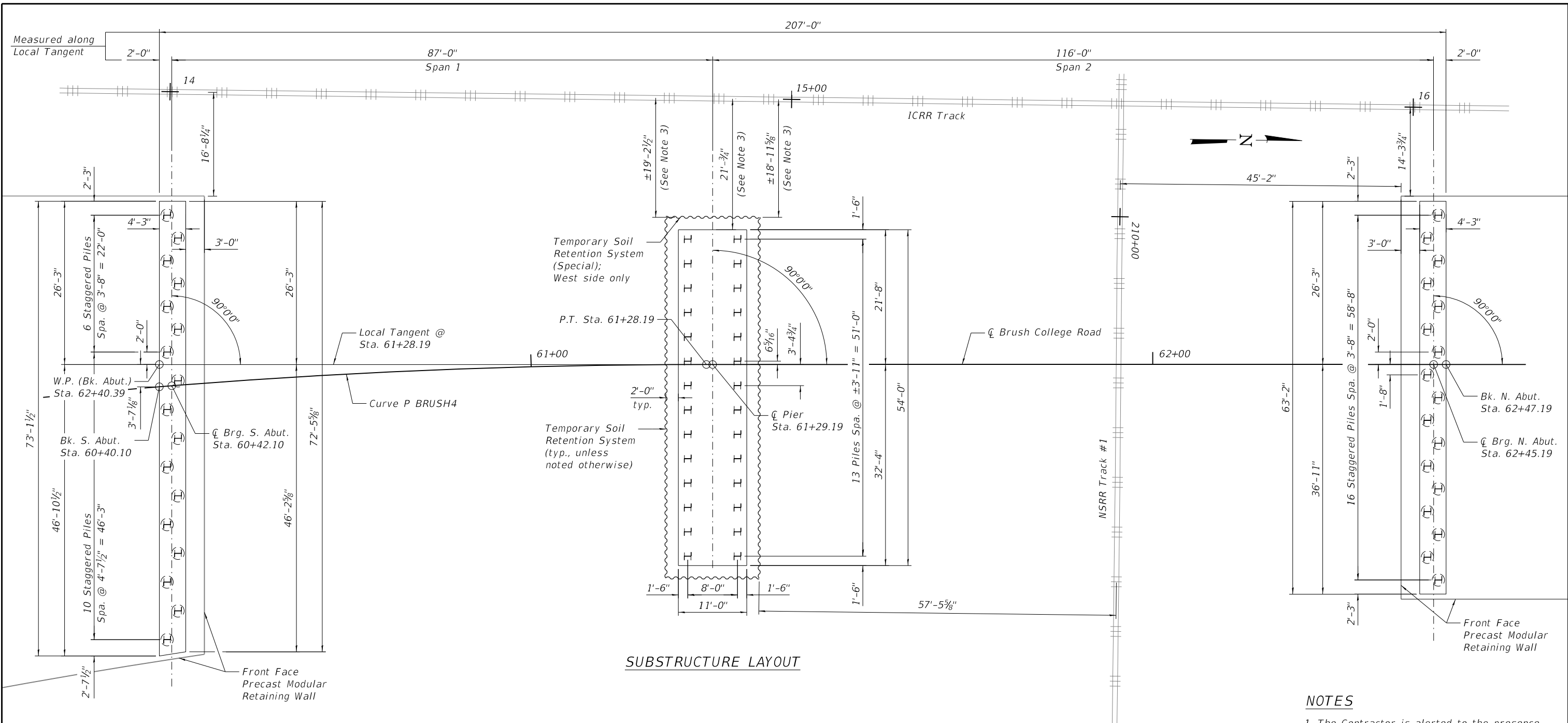
TOP OF RAIL - ICRR Track
(Looking West)

INDEX OF SHEETS

- SF-1 General Plan and Elevation
- SF-2 General Data
- SF-3 Substructure Layout
- SF-4 Top of Slab Elevations I
- SF-5 Top of Slab Elevations II
- SF-6 Top of Slab Elevations III
- SF-7 Top of Approach Slab Elevations I
- SF-8 Top of Approach Slab Elevations II
- SF-9 Superstructure
- SF-10 Superstructure Details I
- SF-11 Superstructure Details II
- SF-12 Superstructure Details III
- SF-13 Concrete Parapet Slipform Option
- SF-14 Diaphragm Details
- SF-15 Bridge Approach Slab Details I
- SF-16 Bridge Approach Slab Details II
- SF-17 Bridge Fence Railing
- SF-17A Bridge Fence Railing
- SF-18 Bicycle Railing and Parapet Railing
- SF-18A Bicycle Railing and Parapet Railing
- SF-19 Bicycle Railing, Curved and Parapet Railing
- SF-19A Bicycle Railing, Curved and Parapet Railing
- SF-20 Framing Plan
- SF-21 Girder Elevations
- SF-22 Girder Moment & Reaction Tables
- SF-23 Girder Camber Diagram
- SF-24 Steel Details
- SF-25 Bearing Details
- SF-26 South Abutment Plan & Elevation
- SF-27 North Abutment Plan & Elevation
- SF-28 Abutment Details
- SF-29 Pier Plan & Elevation
- SF-30 Pier Details
- SF-31 HP Pile Details
- SF-32 Bar Splicer Assembly & Mechanical Splicer Details
- SF-33 Soil Boring Logs I
- SF-34 Soil Boring Logs II
- SF-35 Soil Boring Logs III

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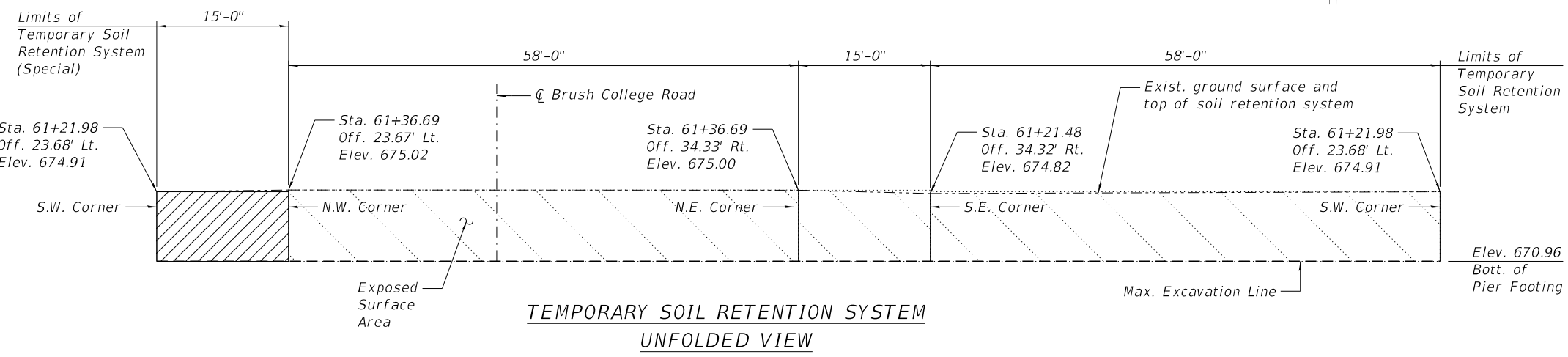
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| | PLOT SCALE = N.T.S. | DRAWN - MCC | REVISED - | | | CONTRACT NO. 95893 | | | | | |
| | PLOT DATE = 4/6/2023 | CHECKED - DD | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |



SUBSTRUCTURE LAYOUT

NOTES

1. The Contractor is alerted to the presence of existing underground watermain to be removed prior to the construction of the bridge pier. See Water Main and Sanitary Sewer Relocation Plan for details and removal limits.
2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
3. Soil retention along west edge of pier excavation shall be paid for as Temporary Soil Retention System (Special). Dimensions are measured from \bar{C} of existing ICRR track to inside face of Temporary Soil Retention System (Special). See Special Provisions.



TEMPORARY SOIL RETENTION SYSTEM UNFOLDED VIEW

MODEL SHEET: AECOM_D51E_MIA\Documents\60603202-Brush_College\00-CAD_GIS\03_SHEETS\01_LAYOUT\Structural\60603202_5-03_Substructure-Layout.dgn
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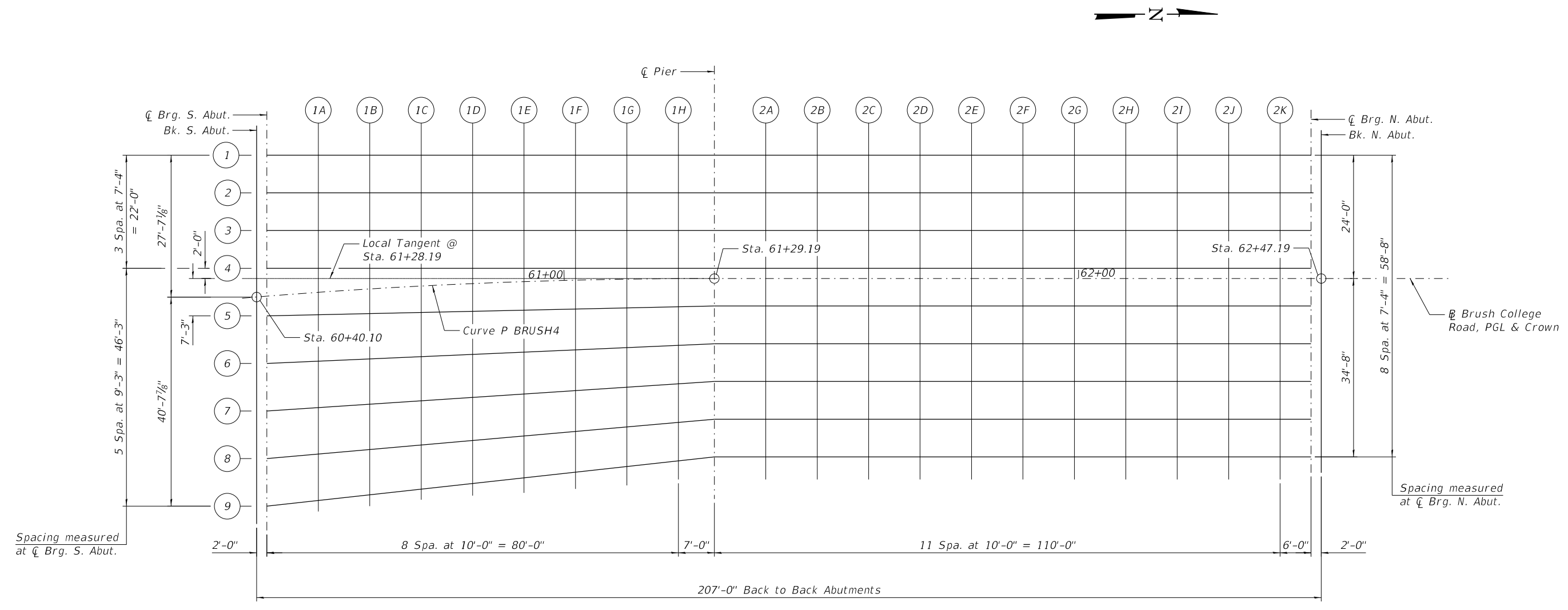
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|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - MCC | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - ATB | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - MCC | REVISED - |
| | CHECKED - ATB | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE LAYOUT
STRUCTURE NO. 058-9202
 SHEET NO. 5F-3 OF 5F-35 SHEETS

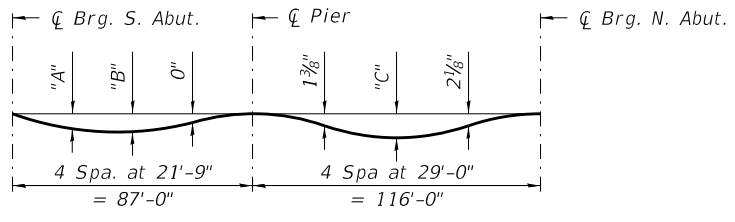
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|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 673 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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DEFLECTION DIAGRAM DIMENSIONS

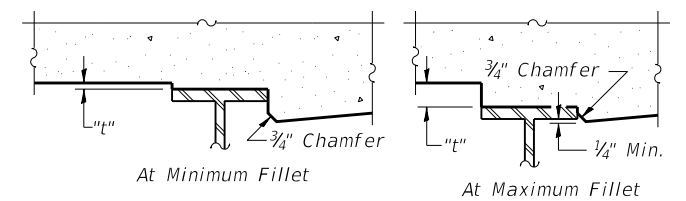
| Girder | Dim. "A" | Dim. "B" | Dim. "C" |
|--------|----------|----------|----------|
| ① | 1/4" | 1/4" | 2 5/8" |
| ② | 3/8" | 1/4" | 2 3/4" |
| ③ | 3/8" | 1/4" | 2 3/4" |
| ④ | 3/8" | 1/4" | 2 3/4" |
| ⑤ | 1/2" | 3/8" | 2 5/8" |
| ⑥ | 1/2" | 3/8" | 2 5/8" |
| ⑦ | 1/2" | 3/8" | 2 5/8" |
| ⑧ | 1/2" | 3/8" | 2 5/8" |
| ⑨ | 1/2" | 3/8" | 2 5/8" |



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets SF-5 and SF-6.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown in the plan view above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown in the tables on sheets SF-5 and SF-6, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - MCC | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS I
STRUCTURE NO. 058-9202**

SHEET NO. SF-4 OF SF-35 SHEETS

| | | | | |
|--------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 674 |
| CONTRACT NO. 95893 | | | | |

ILLINOIS FED. AID PROJECT

GIRDER 1

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

GIRDER 2

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

GIRDER 3

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

GIRDER 4

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

BRUSH COLLEGE ROAD, PGL & CROWN

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

GIRDER 5

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding. Rows include Bk. S. Abut., C Brg. S. Abut., 1A-1H, C Pier, 2A-2K, C Brg. N. Abut., Bk. N. Abut.

Note: Offsets measured perpendicular from the centerline of roadway.

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Table with 4 columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE. Values include monica.crinion, IIP, MCC, N.T.S., 4/29/2021.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS II STRUCTURE NO. 058-9202

SHEET NO. 5F-5 OF 5F-35 SHEETS

Table with 5 columns: F.A.U. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO. Values include 7448, 09-00933-01-BR, MACON, 1019, 675.

ILLINOIS FED. AID PROJECT

GIRDER 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|-----------------|----------|--------|------------------------------|-----------------------------------------------------------------------------|
| Bk. S. Abut. | 60+39.02 | 12.95 | 702.52 | 702.52 |
| ☒ Brg. S. Abut. | 60+41.05 | 13.03 | 702.57 | 702.57 |
| 1A | 60+51.18 | 13.35 | 702.80 | 702.82 |
| 1B | 60+61.31 | 13.57 | 703.02 | 703.06 |
| 1C | 60+71.45 | 13.71 | 703.22 | 703.26 |
| 1D | 60+81.59 | 13.74 | 703.40 | 703.44 |
| 1E | 60+91.72 | 13.69 | 703.56 | 703.59 |
| 1F | 61+01.86 | 13.54 | 703.71 | 703.72 |
| 1G | 61+11.99 | 13.30 | 703.83 | 703.83 |
| 1H | 61+22.12 | 12.96 | 703.94 | 703.94 |
| ☒ Pier | 61+29.19 | 12.67 | 704.01 | 704.01 |
| 2A | 61+39.19 | 12.67 | 704.07 | 704.10 |
| 2B | 61+49.19 | 12.67 | 704.12 | 704.19 |
| 2C | 61+59.19 | 12.67 | 704.15 | 704.26 |
| 2D | 61+69.19 | 12.67 | 704.16 | 704.31 |
| 2E | 61+79.19 | 12.67 | 704.15 | 704.33 |
| 2F | 61+89.19 | 12.67 | 704.12 | 704.32 |
| 2G | 61+99.19 | 12.67 | 704.07 | 704.27 |
| 2H | 62+09.19 | 12.67 | 704.00 | 704.18 |
| 2I | 62+19.19 | 12.67 | 703.91 | 704.06 |
| 2J | 62+29.19 | 12.67 | 703.80 | 703.90 |
| 2K | 62+39.19 | 12.67 | 703.67 | 703.71 |
| ☒ Brg. N. Abut. | 62+45.19 | 12.67 | 703.59 | 703.59 |
| Bk. N. Abut. | 62+47.19 | 12.67 | 703.55 | 703.55 |

GIRDER 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|-----------------|----------|--------|------------------------------|-----------------------------------------------------------------------------|
| Bk. S. Abut. | 60+38.24 | 22.22 | 702.31 | 702.31 |
| ☒ Brg. S. Abut. | 60+40.29 | 22.25 | 702.36 | 702.36 |
| 1A | 60+50.52 | 22.35 | 702.61 | 702.63 |
| 1B | 60+60.75 | 22.37 | 702.83 | 702.87 |
| 1C | 60+70.99 | 22.28 | 703.04 | 703.09 |
| 1D | 60+81.22 | 22.11 | 703.23 | 703.27 |
| 1E | 60+91.44 | 21.83 | 703.40 | 703.43 |
| 1F | 61+01.66 | 21.47 | 703.55 | 703.56 |
| 1G | 61+11.88 | 21.00 | 703.68 | 703.68 |
| 1H | 61+22.08 | 20.45 | 703.79 | 703.79 |
| ☒ Pier | 61+29.19 | 20.00 | 703.86 | 703.86 |
| 2A | 61+39.19 | 20.00 | 703.93 | 703.95 |
| 2B | 61+49.19 | 20.00 | 703.97 | 704.04 |
| 2C | 61+59.19 | 20.00 | 704.00 | 704.11 |
| 2D | 61+69.19 | 20.00 | 704.01 | 704.16 |
| 2E | 61+79.19 | 20.00 | 704.00 | 704.18 |
| 2F | 61+89.19 | 20.00 | 703.97 | 704.17 |
| 2G | 61+99.19 | 20.00 | 703.92 | 704.12 |
| 2H | 62+09.19 | 20.00 | 703.85 | 704.04 |
| 2I | 62+19.19 | 20.00 | 703.76 | 703.91 |
| 2J | 62+29.19 | 20.00 | 703.65 | 703.75 |
| 2K | 62+39.19 | 20.00 | 703.52 | 703.57 |
| ☒ Brg. N. Abut. | 62+45.19 | 20.00 | 703.44 | 703.44 |
| Bk. N. Abut. | 62+47.19 | 20.00 | 703.41 | 703.41 |

GIRDER 8

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|-----------------|----------|--------|------------------------------|-----------------------------------------------------------------------------|
| Bk. S. Abut. | 60+37.45 | 31.48 | 702.11 | 702.11 |
| ☒ Brg. S. Abut. | 60+39.51 | 31.47 | 702.16 | 702.16 |
| 1A | 60+49.85 | 31.36 | 702.41 | 702.44 |
| 1B | 60+60.19 | 31.16 | 702.66 | 702.71 |
| 1C | 60+70.52 | 30.86 | 702.89 | 702.94 |
| 1D | 60+80.84 | 30.47 | 703.10 | 703.14 |
| 1E | 60+91.16 | 29.98 | 703.28 | 703.31 |
| 1F | 61+01.46 | 29.39 | 703.44 | 703.46 |
| 1G | 61+11.76 | 28.71 | 703.58 | 703.58 |
| 1H | 61+22.03 | 27.93 | 703.69 | 703.69 |
| ☒ Pier | 61+29.19 | 27.33 | 703.76 | 703.76 |
| 2A | 61+39.19 | 27.33 | 703.83 | 703.86 |
| 2B | 61+49.19 | 27.33 | 703.87 | 703.94 |
| 2C | 61+59.19 | 27.33 | 703.90 | 704.02 |
| 2D | 61+69.19 | 27.33 | 703.91 | 704.07 |
| 2E | 61+79.19 | 27.33 | 703.90 | 704.09 |
| 2F | 61+89.19 | 27.33 | 703.87 | 704.08 |
| 2G | 61+99.19 | 27.33 | 703.82 | 704.03 |
| 2H | 62+09.19 | 27.33 | 703.75 | 703.94 |
| 2I | 62+19.19 | 27.33 | 703.66 | 703.82 |
| 2J | 62+29.19 | 27.33 | 703.55 | 703.66 |
| 2K | 62+39.19 | 27.33 | 703.42 | 703.47 |
| ☒ Brg. N. Abut. | 62+45.19 | 27.33 | 703.34 | 703.34 |
| Bk. N. Abut. | 62+47.19 | 27.33 | 703.31 | 703.31 |

GIRDER 9

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding |
|-----------------|----------|--------|------------------------------|-----------------------------------------------------------------------------|
| Bk. S. Abut. | 60+36.63 | 40.74 | 702.20 | 702.20 |
| ☒ Brg. S. Abut. | 60+38.73 | 40.69 | 702.26 | 702.26 |
| 1A | 60+49.17 | 40.37 | 702.53 | 702.56 |
| 1B | 60+59.61 | 39.95 | 702.78 | 702.83 |
| 1C | 60+70.04 | 39.44 | 703.01 | 703.06 |
| 1D | 60+80.46 | 38.83 | 703.21 | 703.26 |
| 1E | 60+90.87 | 38.12 | 703.40 | 703.43 |
| 1F | 61+01.26 | 37.32 | 703.56 | 703.57 |
| 1G | 61+11.64 | 36.42 | 703.69 | 703.69 |
| 1H | 61+21.99 | 35.42 | 703.81 | 703.80 |
| ☒ Pier | 61+29.19 | 34.67 | 703.87 | 703.87 |
| 2A | 61+39.19 | 34.67 | 703.94 | 703.97 |
| 2B | 61+49.19 | 34.67 | 703.98 | 704.06 |
| 2C | 61+59.19 | 34.67 | 704.01 | 704.13 |
| 2D | 61+69.19 | 34.67 | 704.02 | 704.18 |
| 2E | 61+79.19 | 34.67 | 704.01 | 704.21 |
| 2F | 61+89.19 | 34.67 | 703.98 | 704.20 |
| 2G | 61+99.19 | 34.67 | 703.93 | 704.15 |
| 2H | 62+09.19 | 34.67 | 703.86 | 704.06 |
| 2I | 62+19.19 | 34.67 | 703.77 | 703.93 |
| 2J | 62+29.19 | 34.67 | 703.66 | 703.77 |
| 2K | 62+39.19 | 34.67 | 703.53 | 703.58 |
| ☒ Brg. N. Abut. | 62+45.19 | 34.67 | 703.45 | 703.45 |
| Bk. N. Abut. | 62+47.19 | 34.67 | 703.42 | 703.42 |

Note: Offsets measured perpendicular from the ☒ of roadway.

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|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - MCC | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - IIP | REVISED - |
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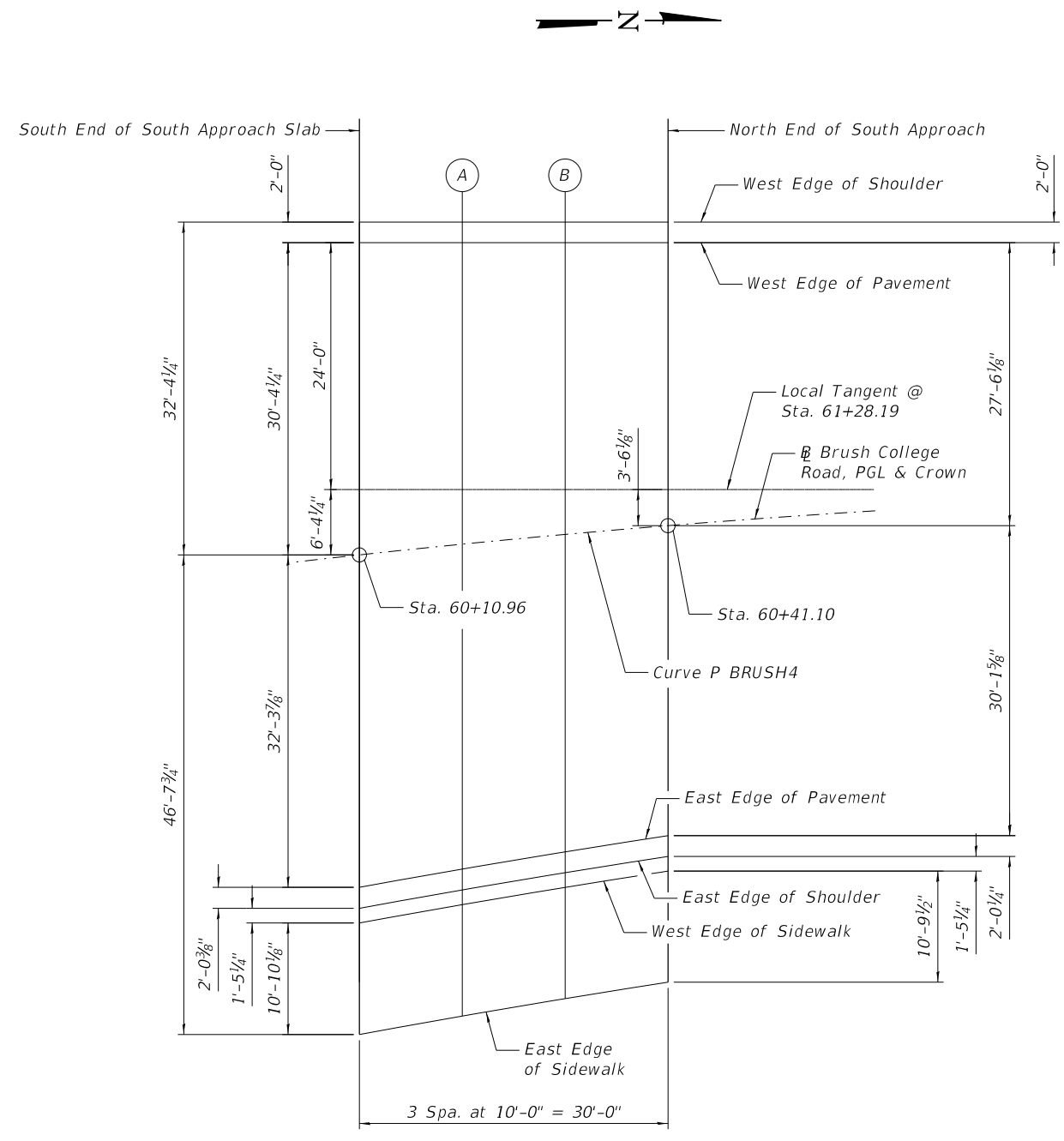
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS III
STRUCTURE NO. 058-9202**

SHEET NO. 5F-6 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 676 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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PLAN
(South Approach)

Note:
 Offsets measured perpendicular from
 the centerline of Brush College Road.

WEST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+14.37 | -32.17 | 701.45 |
| A | 60+24.03 | -31.16 | 701.75 |
| B | 60+33.72 | -30.25 | 702.03 |
| N. End of S. Appr. Slab | 60+43.41 | -29.42 | 702.30 |

EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+07.12 | 34.15 | 701.19 |
| A | 60+17.58 | 33.45 | 701.52 |
| B | 60+28.02 | 32.75 | 701.83 |
| N. End of S. Appr. Slab | 60+38.43 | 32.05 | 702.12 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+14.16 | -30.18 | 701.48 |
| A | 60+23.85 | -29.17 | 701.79 |
| B | 60+33.55 | -28.25 | 702.07 |
| N. End of S. Appr. Slab | 60+43.26 | -27.42 | 702.33 |

WEST EDGE OF SIDEWALK

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+06.95 | 35.58 | 701.21 |
| A | 60+17.43 | 34.88 | 701.54 |
| B | 60+27.88 | 34.18 | 701.85 |
| N. End of S. Appr. Slab | 60+38.31 | 33.48 | 702.14 |

BRUSH COLLEGE ROAD, PGL & CROWN

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+10.96 | 0.00 | 701.99 |
| A | 60+21.02 | 0.00 | 702.29 |
| B | 60+31.06 | 0.00 | 702.57 |
| N. End of S. Appr. Slab | 60+41.10 | 0.00 | 702.83 |

EAST EDGE OF SIDEWALK

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+05.68 | 46.36 | 701.33 |
| A | 60+16.27 | 45.65 | 701.66 |
| B | 60+26.83 | 44.94 | 701.98 |
| N. End of S. Appr. Slab | 60+37.37 | 44.24 | 702.27 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of S. Appr. Slab | 60+07.35 | 32.13 | 701.24 |
| A | 60+17.79 | 31.43 | 701.57 |
| B | 60+28.21 | 30.73 | 701.88 |
| N. End of S. Appr. Slab | 60+38.60 | 30.04 | 702.16 |



| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| CHECKED - MCC | REVISIONS - | |
| PLOT SCALE = N.T.S. | DRAWN - IIP | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - MCC | REVISED - |

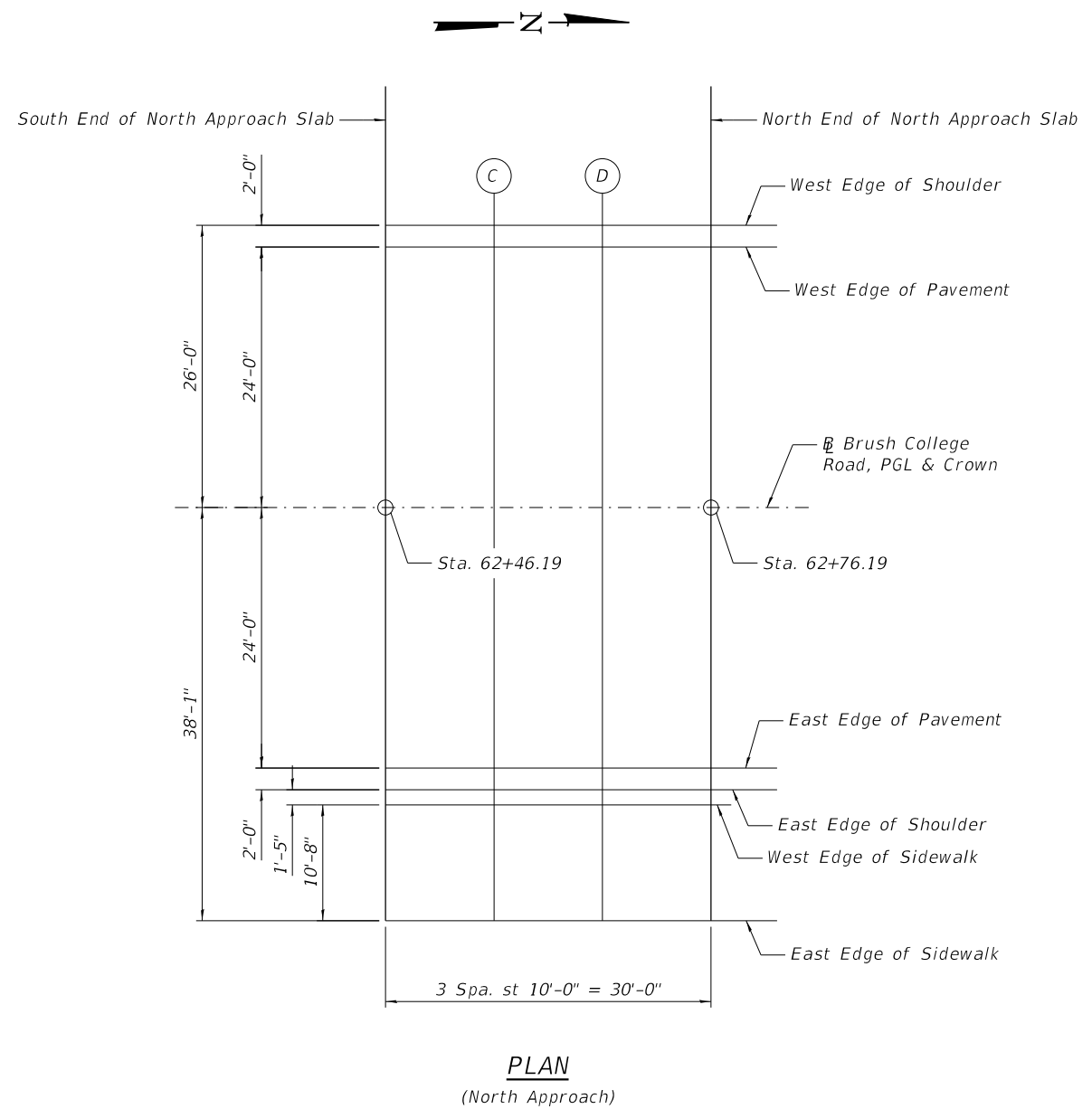
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS I
 STRUCTURE NO. 058-9202

SHEET NO. 5F-7 OF 5F-35 SHEETS

| | | | | |
|-------------|----------------|---------------------------|--------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 677 |
| | | | CONTRACT NO. 95893 | |
| | | ILLINOIS FED. AID PROJECT | | |

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PLAN
(North Approach)

Note:
Offsets measured perpendicular from the \perp of Brush College Road.

WEST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | -26.00 | 703.30 |
| C | 62+56.19 | -26.00 | 703.14 |
| D | 62+66.19 | -26.00 | 702.96 |
| N. End of N. Appr. Slab | 62+76.19 | -26.00 | 702.76 |

EAST EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | 26.00 | 703.30 |
| C | 62+56.19 | 26.00 | 703.14 |
| D | 62+66.19 | 26.00 | 702.96 |
| N. End of N. Appr. Slab | 62+76.19 | 26.00 | 702.76 |

WEST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | -24.00 | 703.34 |
| C | 62+56.19 | -24.00 | 703.18 |
| D | 62+66.19 | -24.00 | 703.00 |
| N. End of N. Appr. Slab | 62+76.19 | -24.00 | 702.80 |

WEST EDGE OF SIDEWALK

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | 27.42 | 703.32 |
| C | 62+56.19 | 27.42 | 703.16 |
| D | 62+66.19 | 27.42 | 702.98 |
| N. End of N. Appr. Slab | 62+76.19 | 27.42 | 702.78 |

BRUSH COLLEGE ROAD, PGL & CROWN

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | 0.00 | 703.82 |
| C | 62+56.19 | 0.00 | 703.66 |
| D | 62+66.19 | 0.00 | 703.48 |
| N. End of N. Appr. Slab | 62+76.19 | 0.00 | 703.28 |

EAST EDGE OF SIDEWALK

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | 38.08 | 703.48 |
| C | 62+56.19 | 38.08 | 703.32 |
| D | 62+66.19 | 38.08 | 703.14 |
| N. End of N. Appr. Slab | 62+76.19 | 38.08 | 702.94 |

EAST EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------------|----------|--------|------------------------------|
| S. End of N. Appr. Slab | 62+46.19 | 24.00 | 703.34 |
| C | 62+56.19 | 24.00 | 703.18 |
| D | 62+66.19 | 24.00 | 703.00 |
| N. End of N. Appr. Slab | 62+76.19 | 24.00 | 702.80 |



| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - IIP | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - MCC | REVISED - |

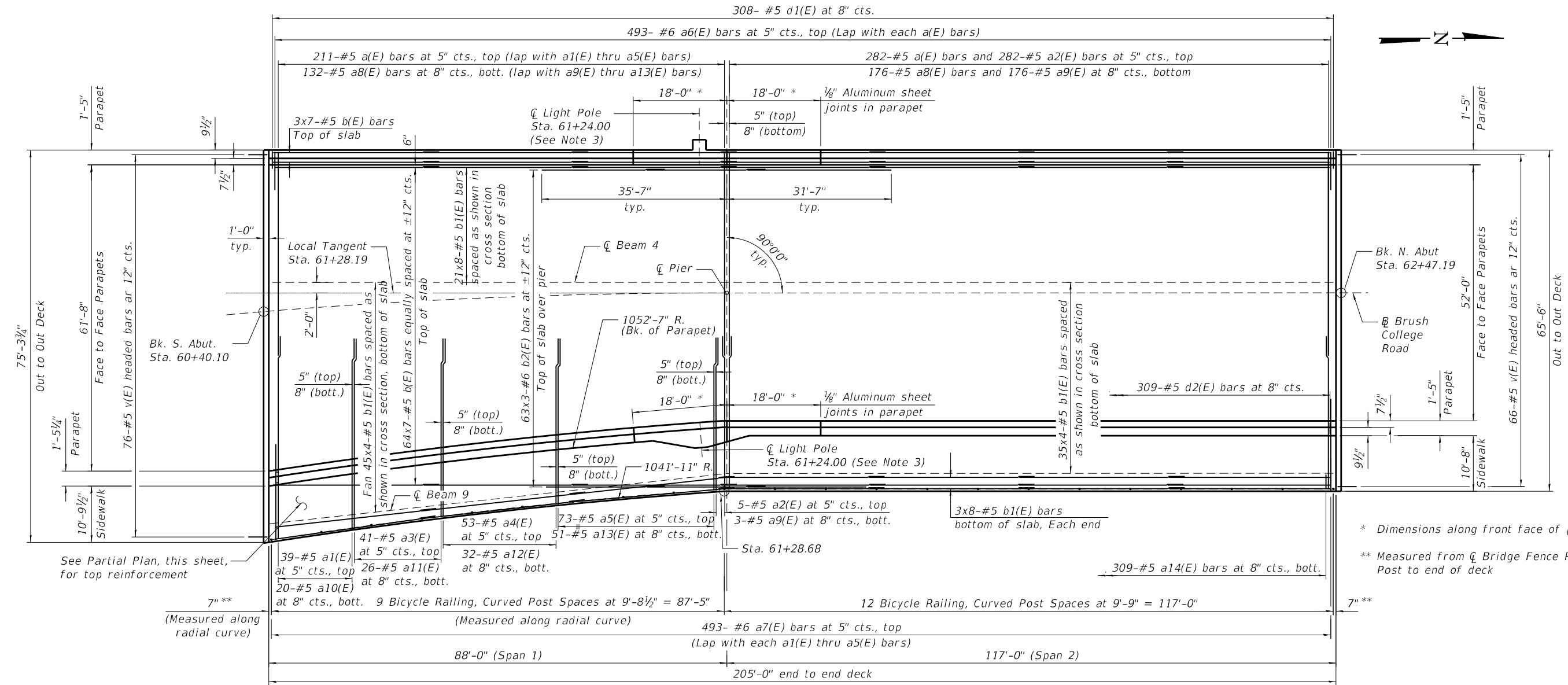
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF APPROACH SLAB ELEVATIONS II
STRUCTURE NO. 058-9202**

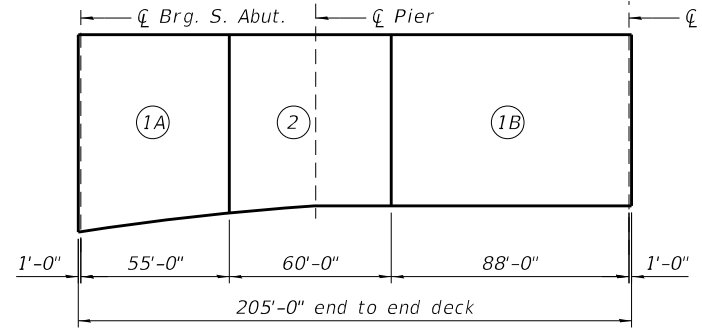
SHEET NO. 5F-8 OF 5F-35 SHEETS

| | | | | |
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| | | | CONTRACT NO. 95893 | |
| | | ILLINOIS FED. AID PROJECT | | |

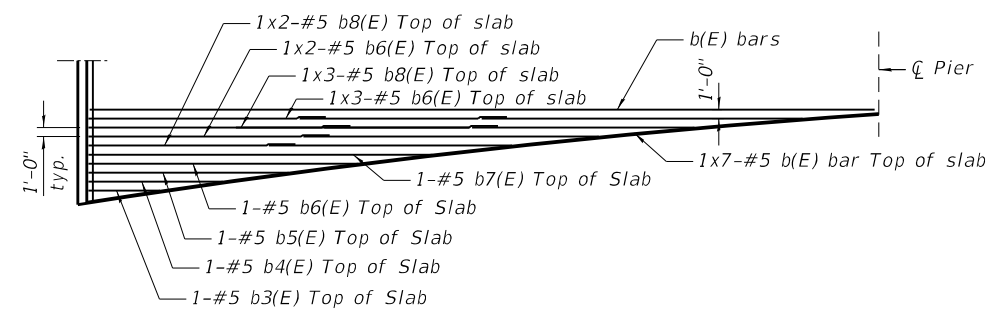
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* Dimensions along front face of parapet
 ** Measured from Center Bridge Fence Railing Post to end of deck



When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 1. At least 72 hours shall have elapsed from the end of the previous pour.
 2. The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4000 psi.
 3. Numbers within the deck pouring sequence indicate the minimum number of group pours required. Letters next to the group pour numbers indicate the order if pour groups are further subdivided into individuals pours.



MINIMUM BAR LAP
 (Unless Noted Otherwise)
 #5 bar = 3'-6"
 #6 bar = 3'-7"

- NOTES:**
- See Sheet SF-10 for deck cross section.
 - For parapet reinforcement and details, see Sheets SF-11 and SF-12.
 - For parapet mounted light pole details, see Sheet SF-12.
 - For bar details and Bill of Material, see Sheets SF-12.
 - Bars indicated thus 34x5-#5 etc. indicates 34 lines of bars with 5 lengths per line.
 - See Sheets SF-19 and SF-19A for Bicycle Railing, Curved details along east edge of bridge deck.



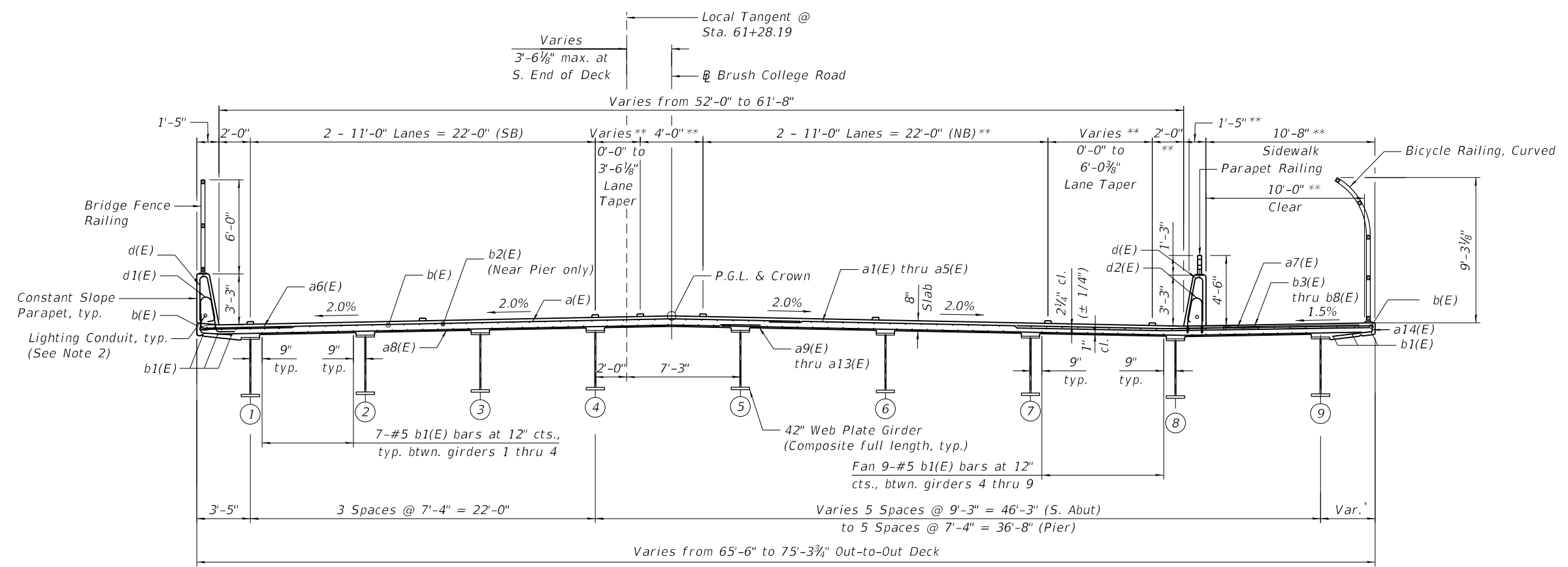
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| CHECKED - DD | CHECKED - DD | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - MK | REVISED - |
| PLOT DATE = 4/14/2023 | CHECKED - DD | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

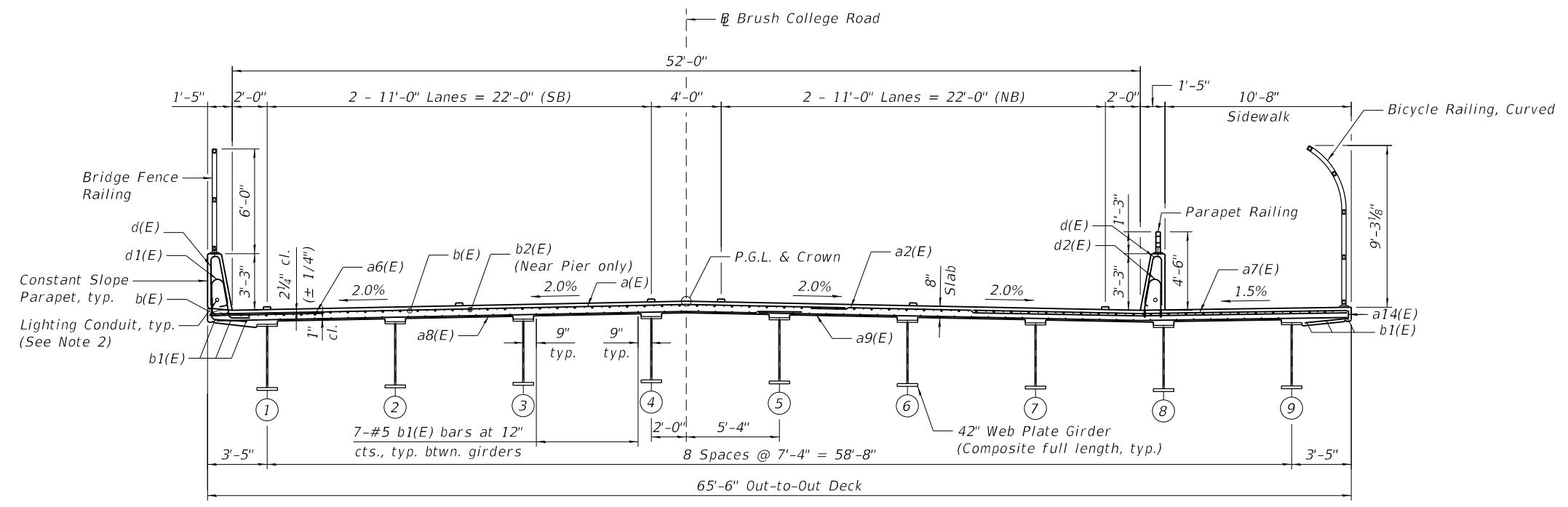
SUPERSTRUCTURE
 STRUCTURE NO. 058-9202
 SHEET NO. SF-9 OF SF-35 SHEETS

| | | | | |
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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CROSS SECTION
 (Looking North)
 Sta. 60+41.10 to Sta. 61+29.19



CROSS SECTION
 (Looking North)
 Sta. 61+29.19 to Sta. 62+46.19

- NOTES:**
- Dimensions shown are measured perpendicular to the Local Tangent unless otherwise noted.
 - For conduit and electrical details see Proposed Lighting Plan sheets.
- * East Parapet overhand varies 2'-6" to 3'-5 7/8" measured at Rt. L's to Brush College Road
- ** Dimensions measured @ Rt. L's to the Brush College Road



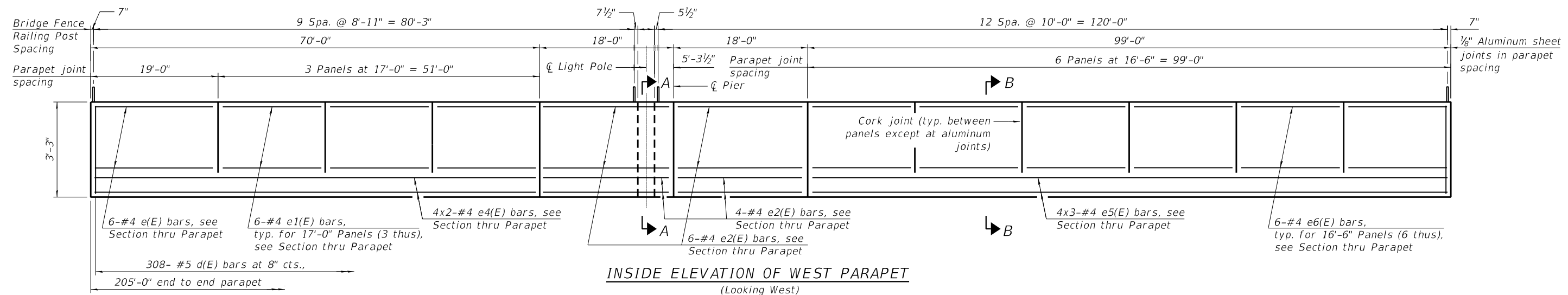
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| USER NAME = DabezicD | DESIGNED - MK | REVISED - |
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

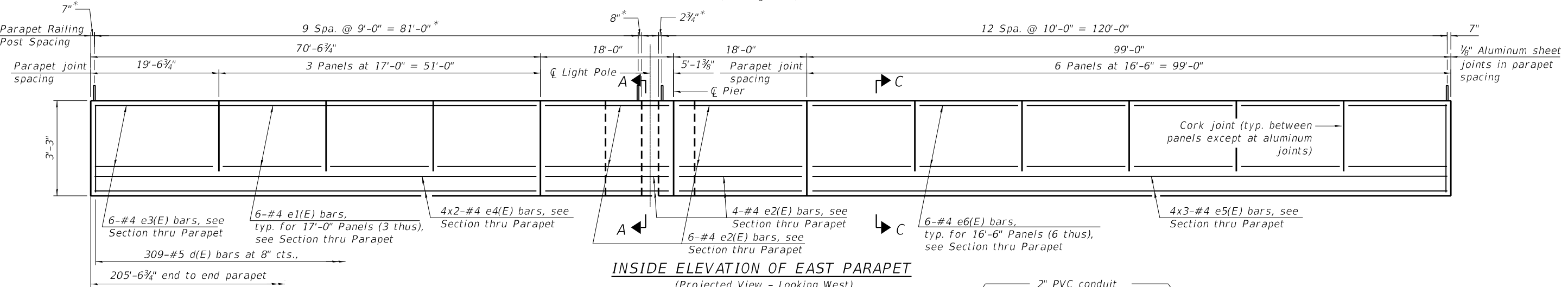
SUPERSTRUCTURE DETAILS I
STRUCTURE NO. 058-9202

SHEET NO. 5F-10 OF 5F-35 SHEETS

| | | | | |
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

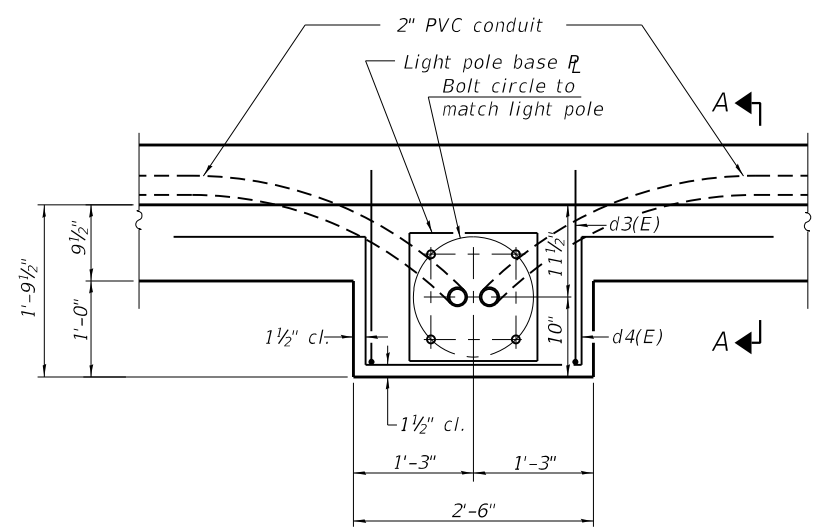


INSIDE ELEVATION OF WEST PARAPET
(Looking West)

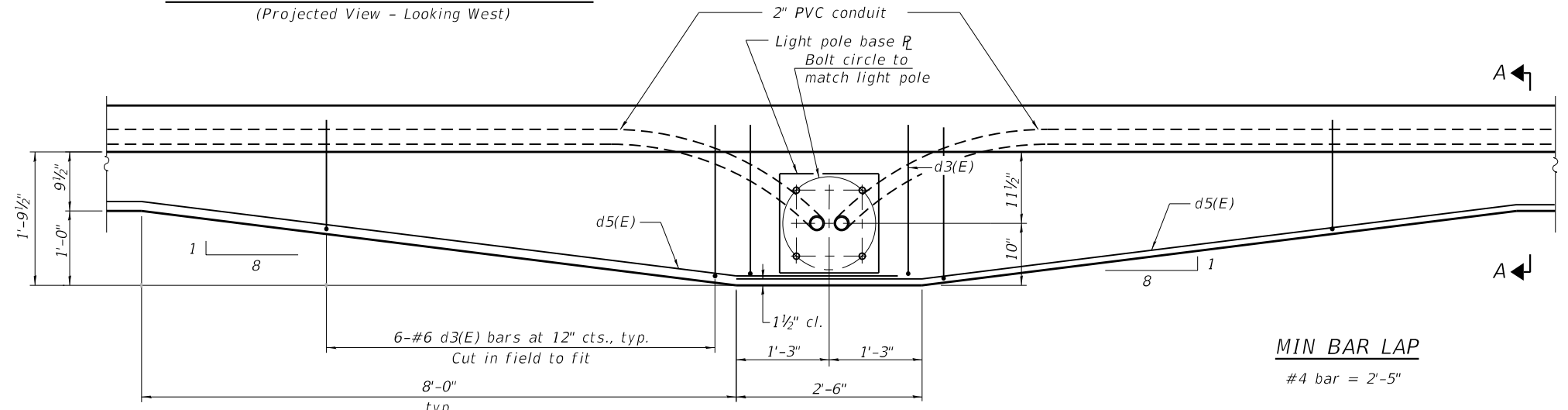


INSIDE ELEVATION OF EAST PARAPET
(Projected View - Looking West)

* Measured along radial curve



WEST LIGHT POLE PLAN



EAST LIGHT POLE PLAN

- NOTES:**
1. See Sheet SF-12 for sections thru parapets.
 2. Parapet joint spacing measured along inside face of parapet.
 3. Bars indicated thus 4x2-#4 etc. indicates 4 lines of bars with 2 lengths per line.
 4. See Sheet SF-12 for bar details and Bill of Material.
 5. Railing post spacing measured along centerline of posts.
 6. See Sheets SF-17 and SF-17A for details of the bridge fence railing mounted on the west parapet.
 7. See Sheets SF-19 and SF-19A for details of the parapet railing mounted on the east parapet.
 8. For conduit and electrical details see Proposed Lighting Plan sheets.

MODEL SHEET
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|-----------------------|---------------|-----------|
| USER NAME = DabezicD | DESIGNED - MK | REVISED - |
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| PLOT DATE = 4/14/2023 | DRAWN - MK | REVISED - |
| | CHECKED - DD | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

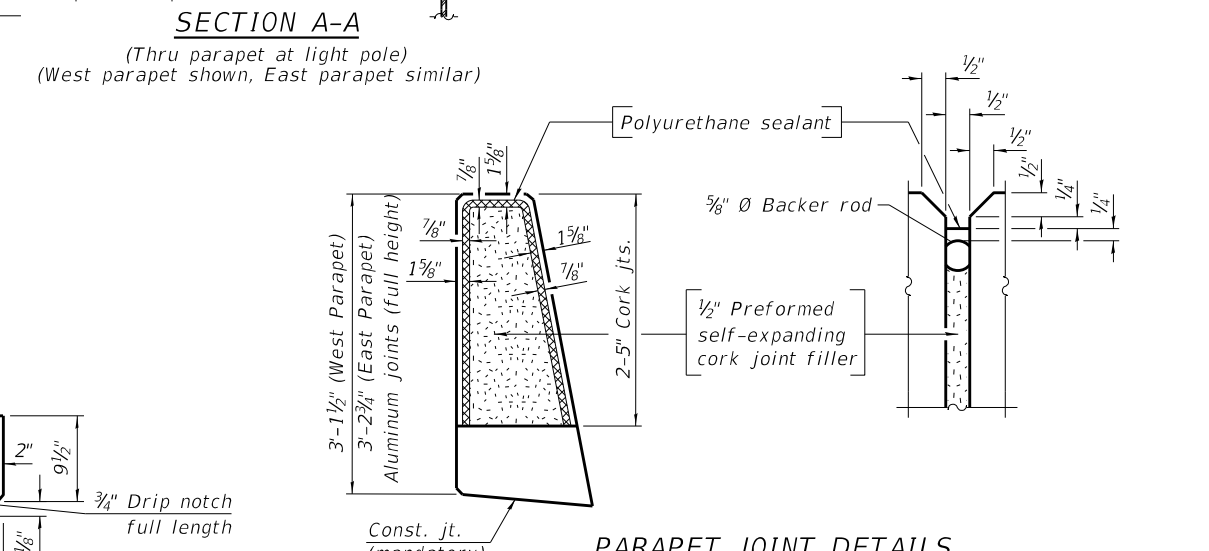
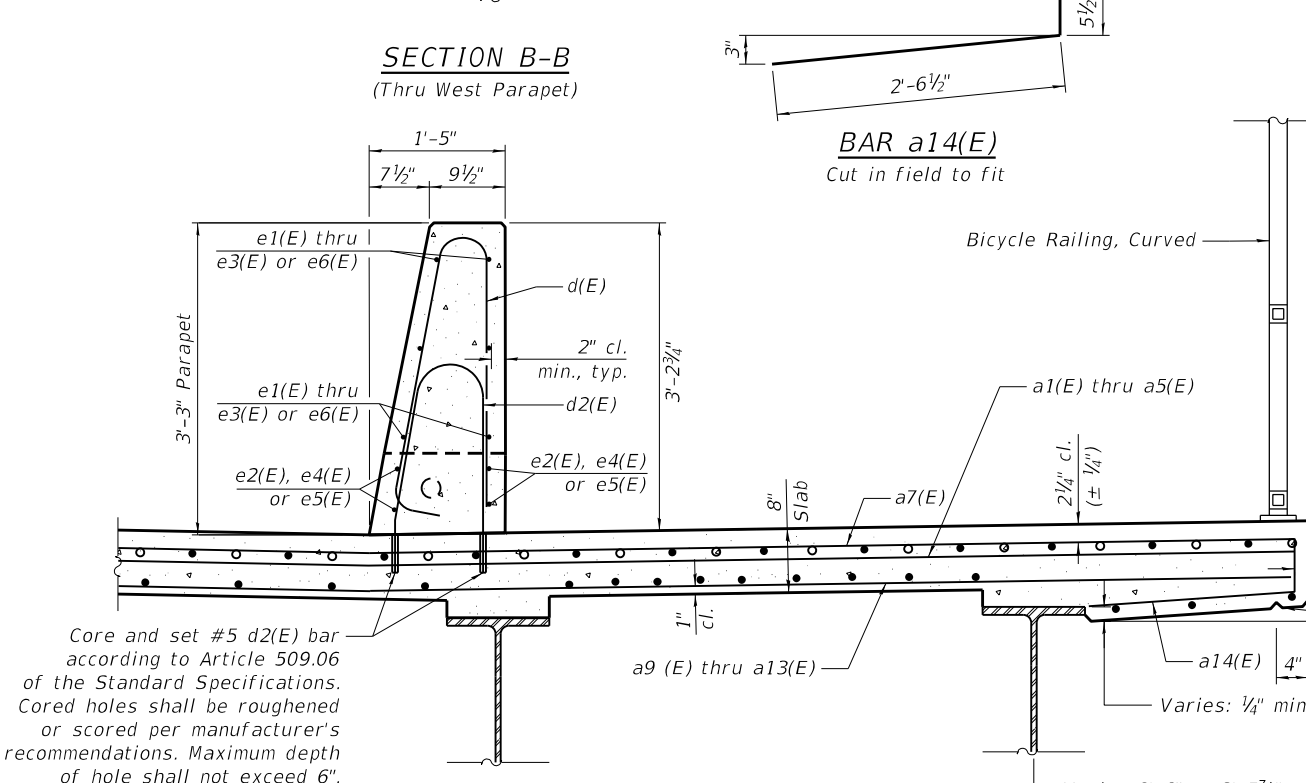
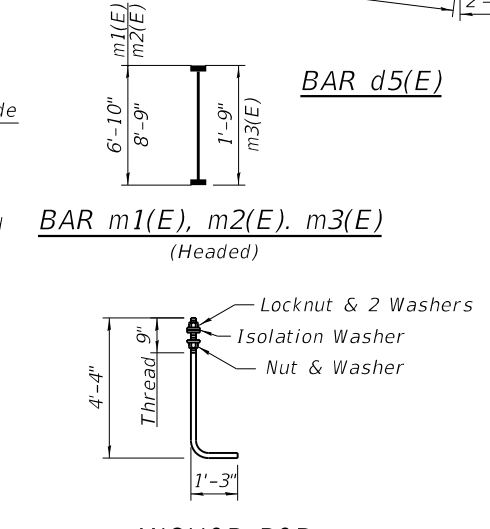
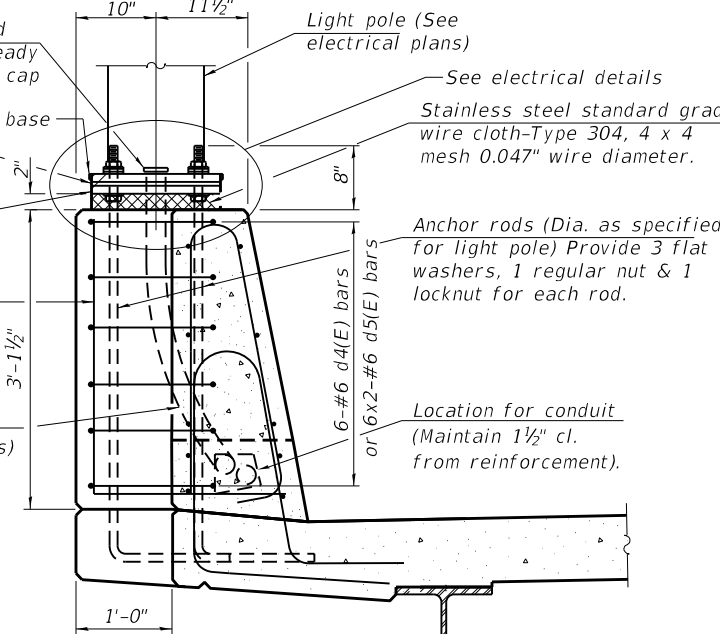
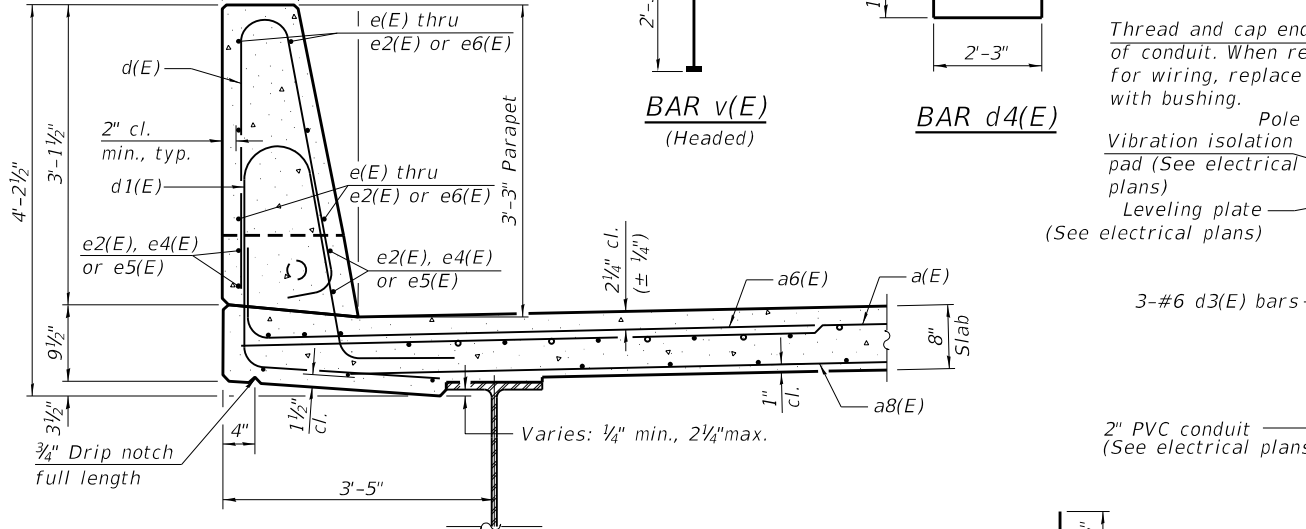
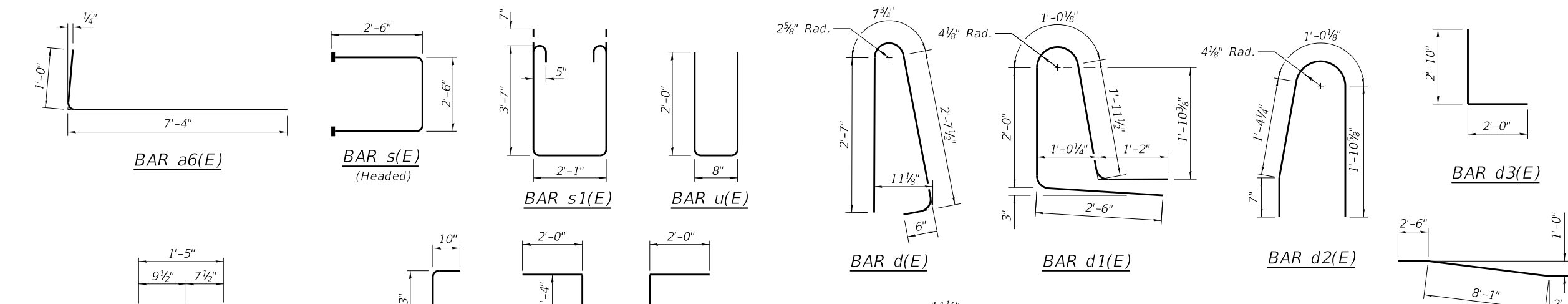
**SUPERSTRUCTURE DETAILS II
STRUCTURE NO. 058-9202**

SHEET NO. SF-11 OF SF-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|--------|--------------|---------------------------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 681 |
| | | | | CONTRACT NO. 95893 |
| | | | | ILLINOIS FED. AID PROJECT |

**SUPERSTRUCTURE
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|---------|---------|-------|
| a1(E) | 493 | #5 | 40'-0" | — |
| a2(E) | 39 | #5 | 38'-6" | — |
| a3(E) | 41 | #5 | 36'-8" | — |
| a4(E) | 53 | #5 | 34'-9" | — |
| a5(E) | 73 | #5 | 32'-4" | — |
| a6(E) | 493 | #6 | 8'-4" | — |
| a7(E) | 493 | #6 | 21'-6" | — |
| a8(E) | 308 | #5 | 35'-0" | — |
| a9(E) | 179 | #5 | 33'-11" | — |
| a10(E) | 20 | #5 | 43'-6" | — |
| a11(E) | 26 | #5 | 42'-0" | — |
| a12(E) | 32 | #5 | 40'-1" | — |
| a13(E) | 51 | #5 | 37'-8" | — |
| a14(E) | 309 | #5 | 3'-0" | — |
| b(E) | 476 | #5 | 32'-4" | — |
| b1(E) | 536 | #5 | 28'-9" | — |
| b2(E) | 189 | #6 | 24'-10" | — |
| b3(E) | 1 | #5 | 8'-0" | — |
| b4(E) | 1 | #5 | 14'-11" | — |
| b5(E) | 1 | #5 | 22'-3" | — |
| b6(E) | 6 | #5 | 30'-1" | — |
| b7(E) | 1 | #5 | 38'-3" | — |
| b8(E) | 5 | #5 | 25'-4" | — |
| d(E) | 617 | #5 | 6'-5" | — |
| d1(E) | 308 | #5 | 8'-8" | — |
| d2(E) | 309 | #5 | 4'-10" | — |
| d3(E) | 18 | #6 | 4'-10" | — |
| d4(E) | 6 | #6 | 8'-11" | — |
| d5(E) | 12 | #6 | 13'-1" | — |
| e(E) | 6 | #4 | 18'-8" | — |
| e1(E) | 36 | #4 | 16'-8" | — |
| e2(E) | 40 | #4 | 17'-8" | — |
| e3(E) | 6 | #4 | 19'-3" | — |
| e4(E) | 16 | #4 | 36'-4" | — |
| e5(E) | 24 | #4 | 26'-6" | — |
| e6(E) | 72 | #4 | 16'-2" | — |
| m(E) | 15 | #6 | 26'-11" | — |
| m1(E) | 22 | #6 | 6'-10" | — |
| m2(E) | 10 | #6 | 8'-9" | — |
| m3(E) | 8 | #6 | 1'-9" | — |
| m4(E) | 22 | #6 | 6'-10" | — |
| m5(E) | 10 | #6 | 8'-9" | — |
| m6(E) | 8 | #6 | 1'-9" | — |
| m7(E) | 10 | #6 | 33'-5" | — |
| m8(E) | 6 | #4 | 26'-1" | — |
| m9(E) | 6 | #4 | 22'-9" | — |
| s(E) | 130 | #5 | 7'-6" | — |
| s1(E) | 130 | #5 | 10'-6" | — |
| u(E) | 130 | #4 | 4'-8" | — |
| v(E) | 142 | #5 | 3'-1" | — |
| Concrete Superstructure | Cu. Yd. | 493.5 | | |
| Bridge Deck Grooving | Sq. Yd. | 1,168 | | |
| Protective Coat | Sq. Yd. | 1,769 | | |
| Reinforcement Bars, Epoxy Coated | Lbs. | 139,250 | | |

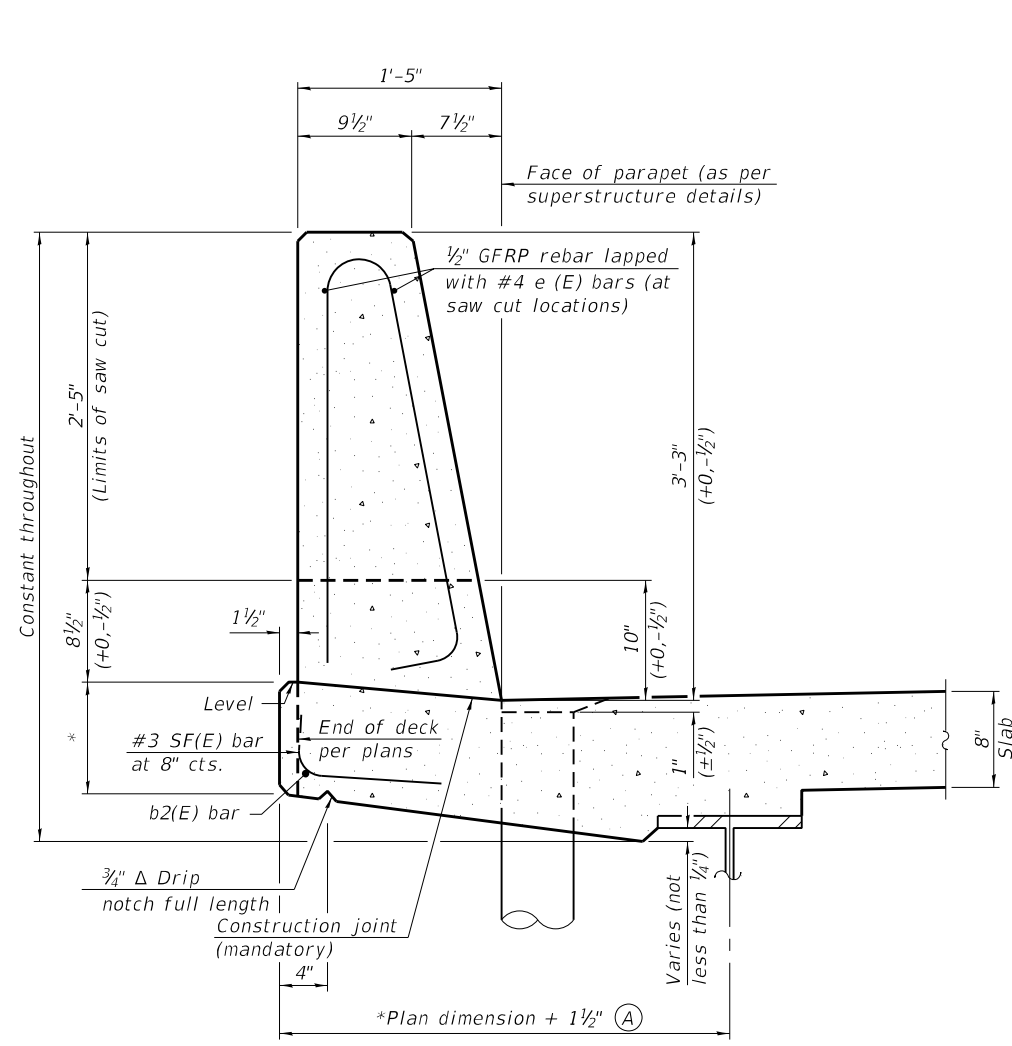


Core and set #5 d2(E) bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

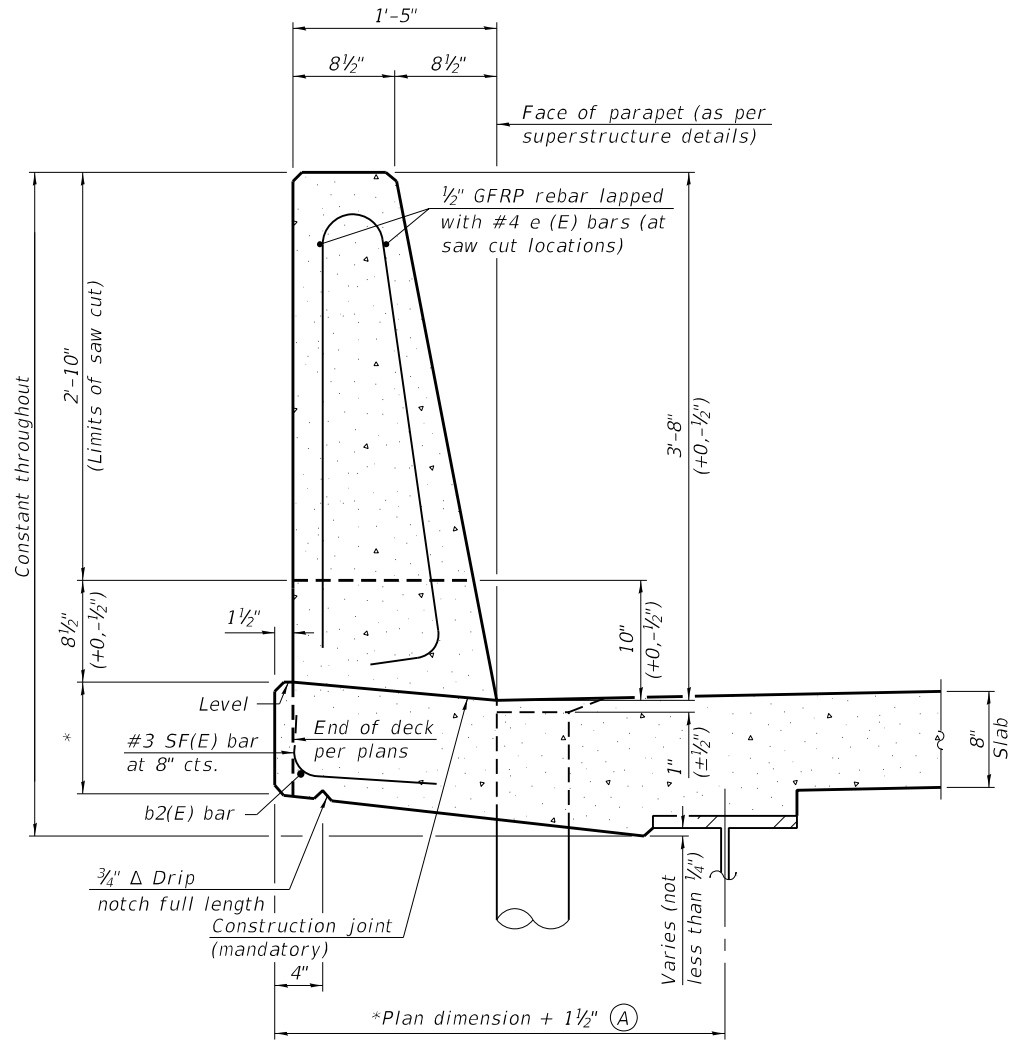
- NOTES:**
- The 1/8" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 - The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 - Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 - Cost of anchor rods for light pole foundation included with Concrete Superstructure.
 - For conduit and electrical details see Proposed Lighting Plan sheets.

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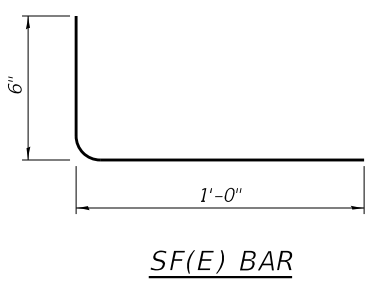


**39" CONSTANT-SLOPE
PARAPET SECTION**
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

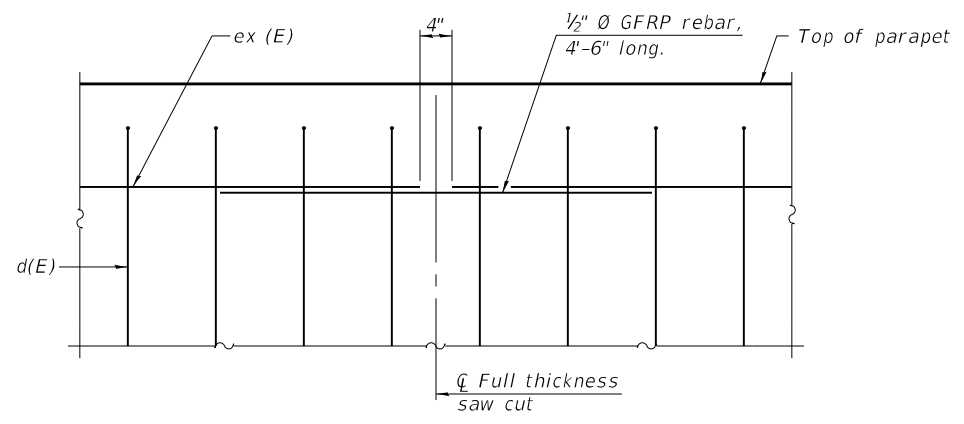


**44" CONSTANT-SLOPE
PARAPET SECTION**
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

*See Superstructure Details.



SF(E) BAR



GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location.)

Notes:
 All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.
 Steel superstructure shown. Other superstructure types similar.

SFP 39-44

11-1-2022



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| USER NAME = DabezicD | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - MCC | REVISED - |
| PLOT DATE = 4/6/2023 | DRAWN - IIP | REVISED - |
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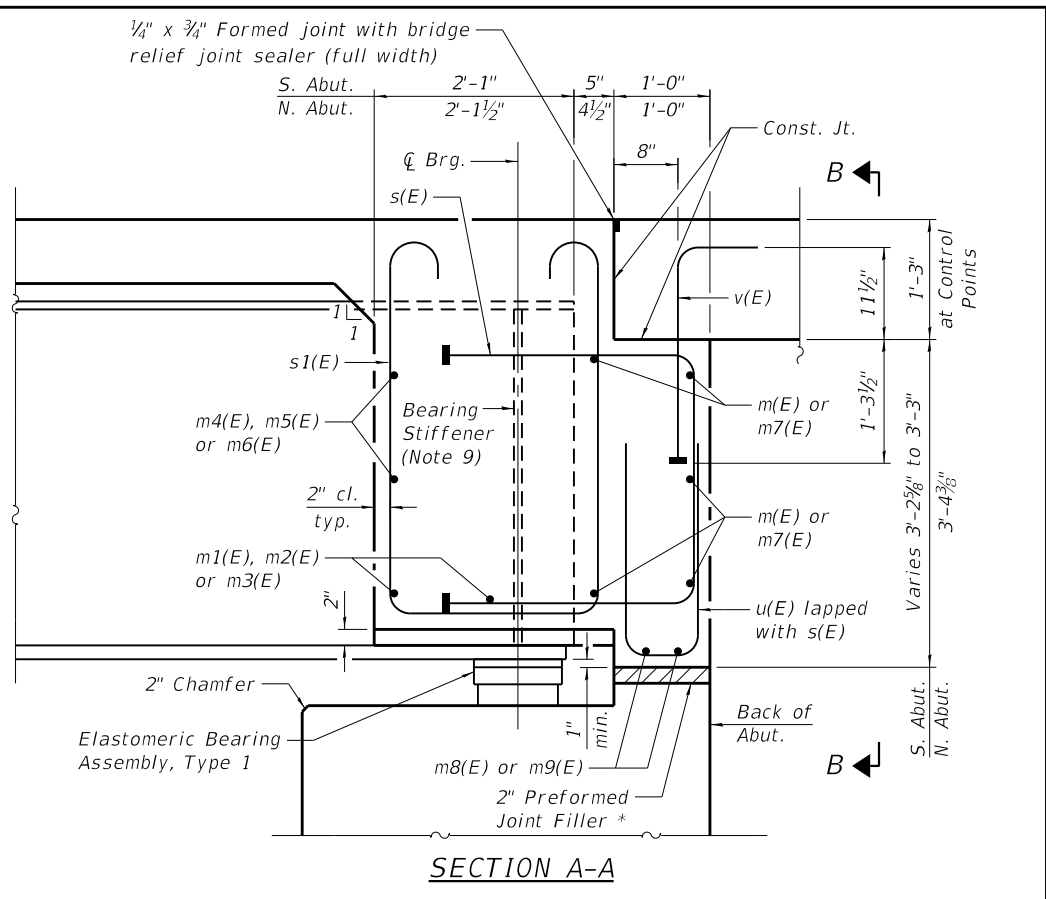
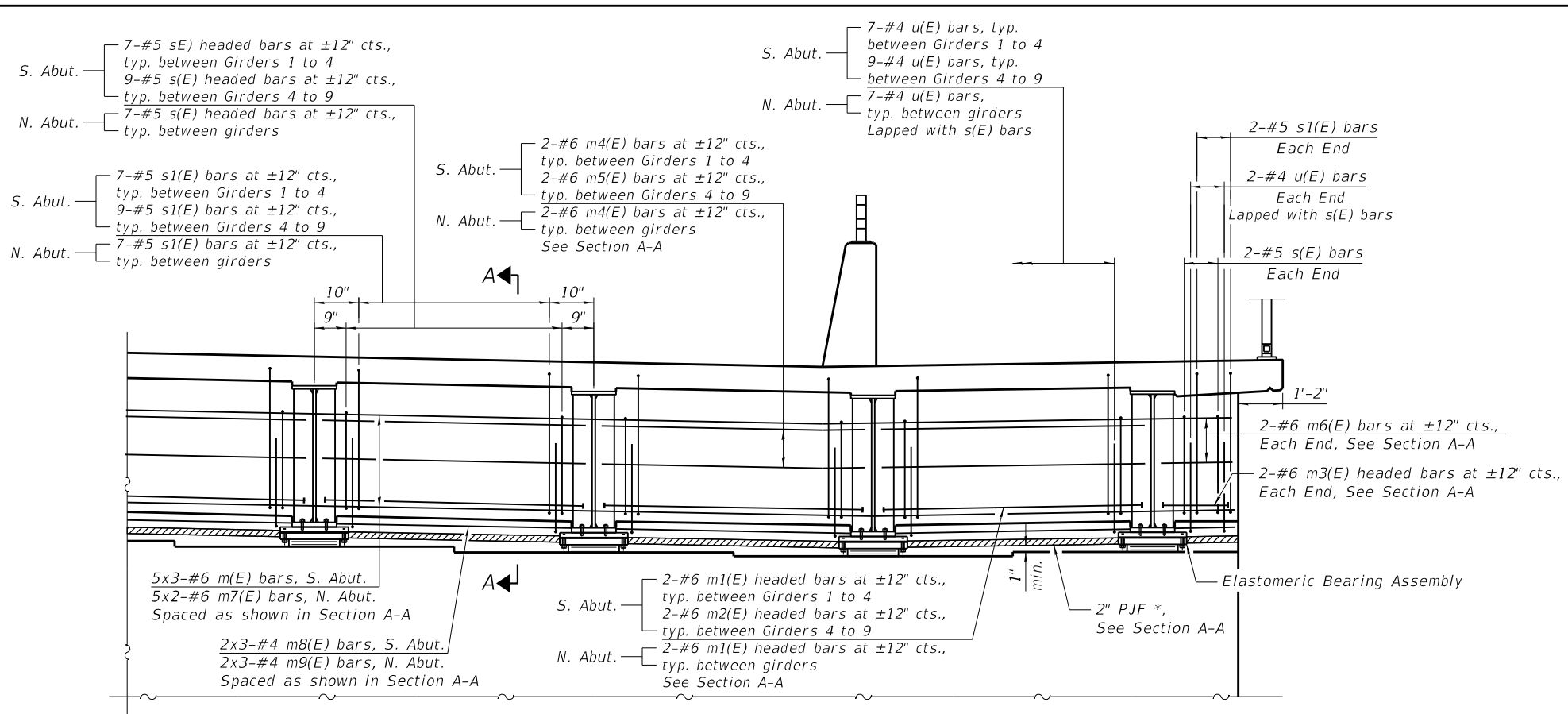
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 058-9202**

SHEET NO. SF-13 OF SF-35 SHEETS

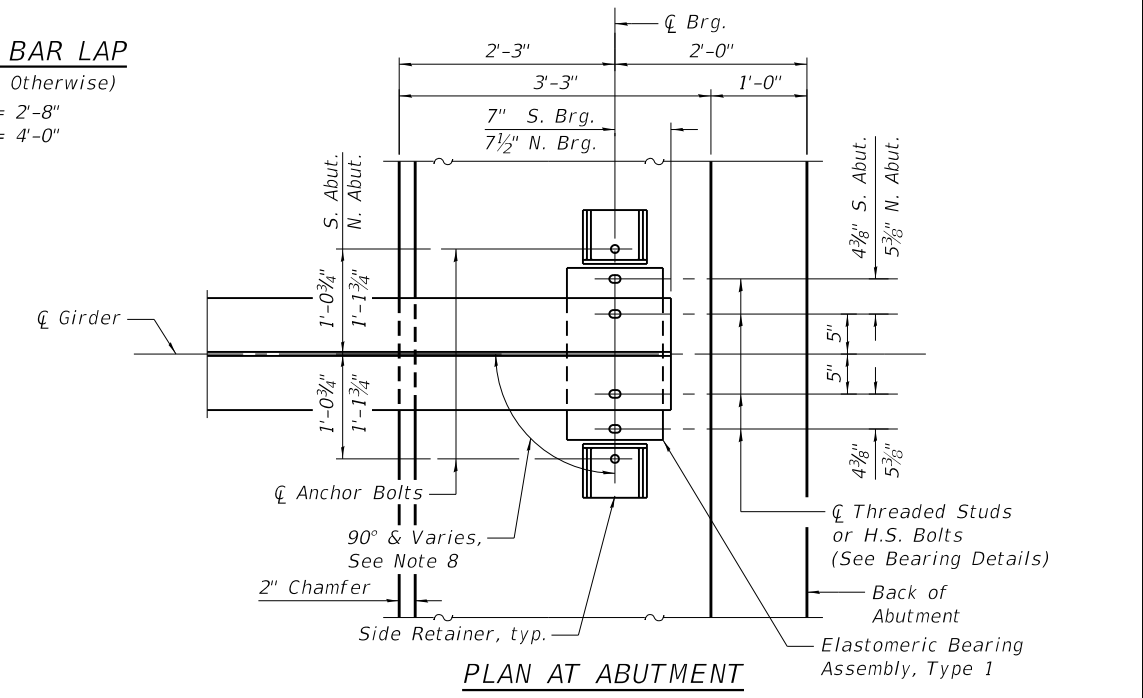
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

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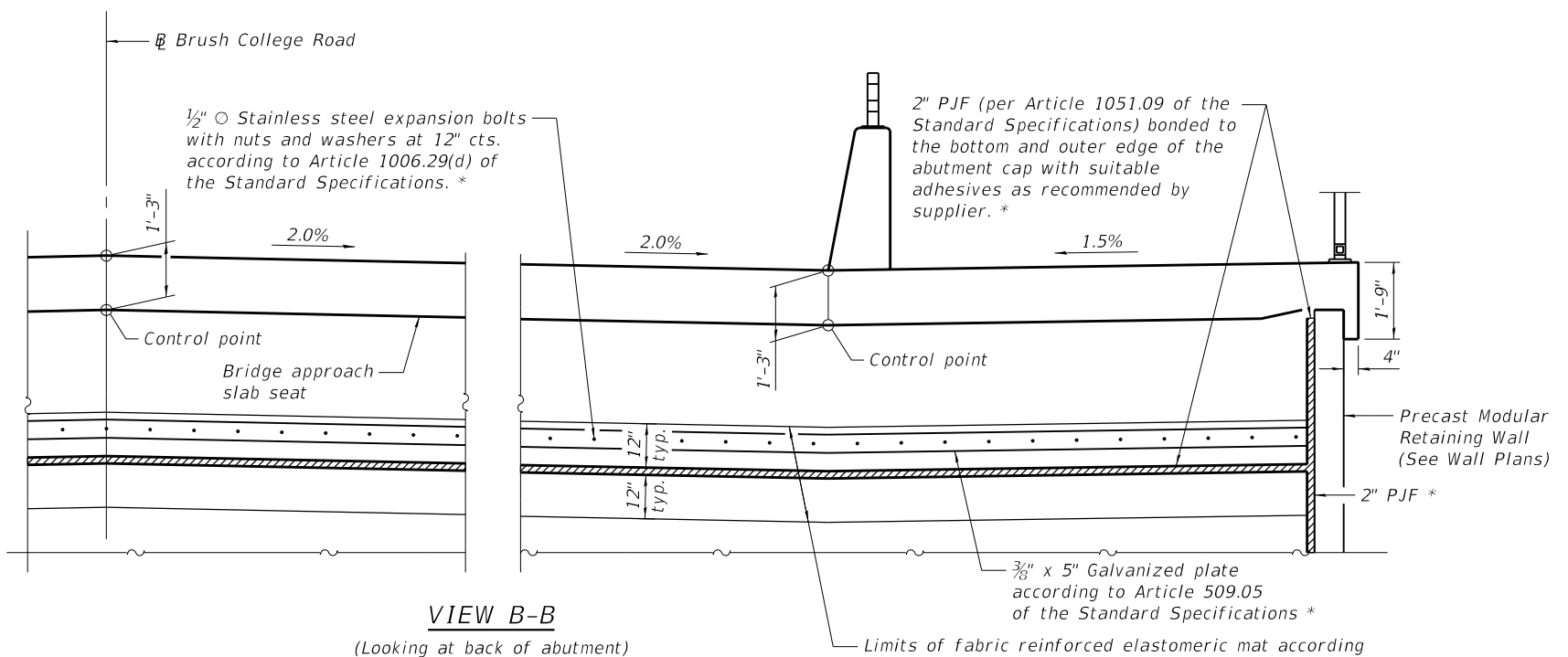
MINIMUM BAR LAP
 (Unless Noted Otherwise)
 #4 bar = 2'-8"
 #6 bar = 4'-0"

* Cost included with Concrete Superstructure



NOTES

1. Reinforcement bars in diaphragm are billed with superstructure on Sheet SF-12.
2. Bars indicated thus 5x3-#6 etc. indicates 5 lines of bars with 3 lengths per line.
3. Concrete in diaphragm is included with Concrete Superstructure on Sheet SF-12.
4. For details of bars s(E), s1(E), u(E) and v(E) see Sheet SF-12.
5. The s(E), s1(E), u(E) and v(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
6. The approach slab seat shall have a constant slope determined from the control points shown.
7. For bearing details see Sheet SF-25.
8. For anchor bolt layout on abutment cap, see Sheets SF-26 & SF-27.
9. Bearing stiffeners placed at right angles to girder web.
10. Girders shall be braced for stability during erection and remain braced until deck is poured and cured.



| | | |
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| USER NAME = monica.crinion | DESIGNED - MCC | REVISED - |
| CHECKED - DD | REVISIONS - | |
| PLOT SCALE = N.T.S. | DRAWN - MCC | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - DD | REVISED - |

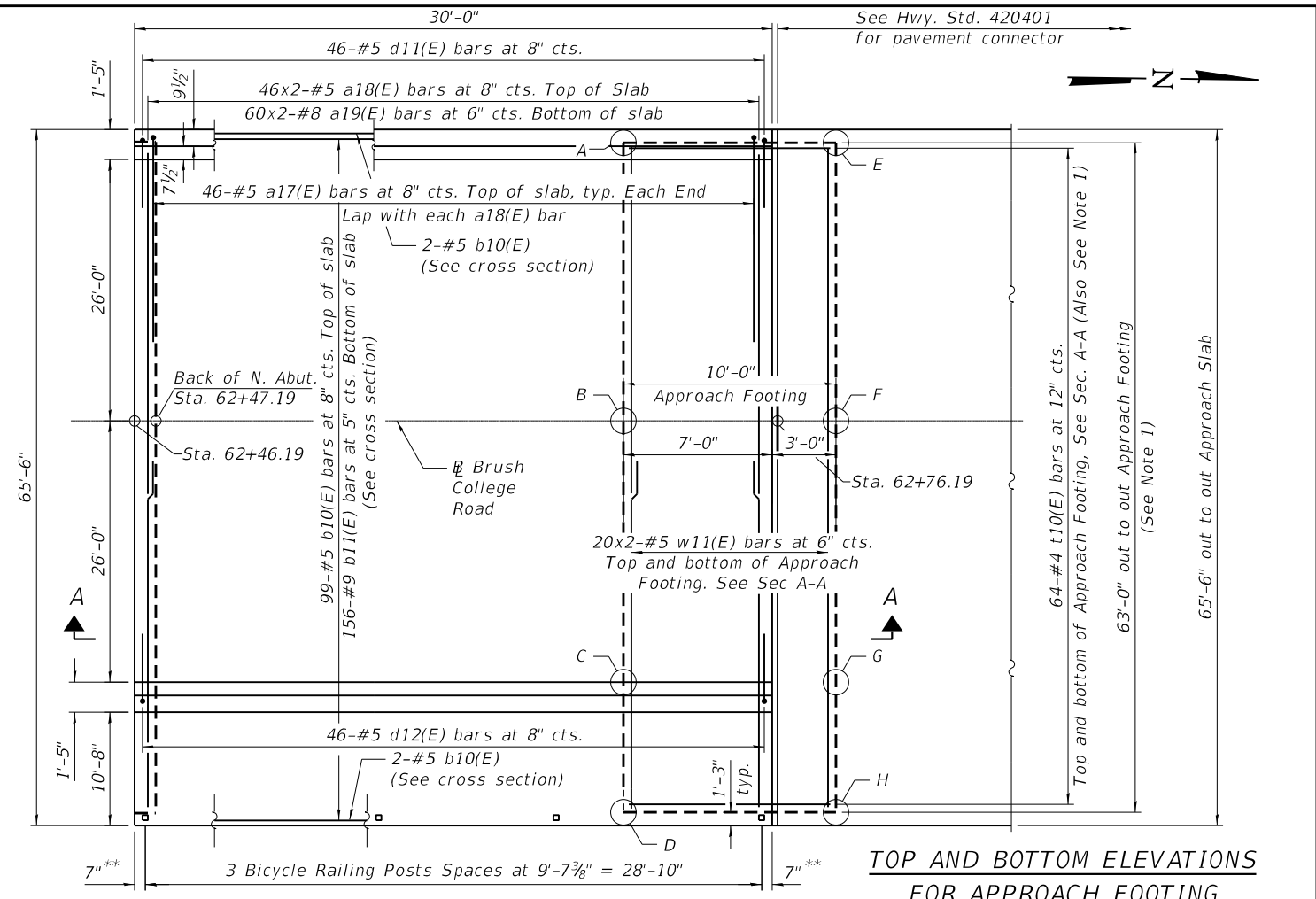
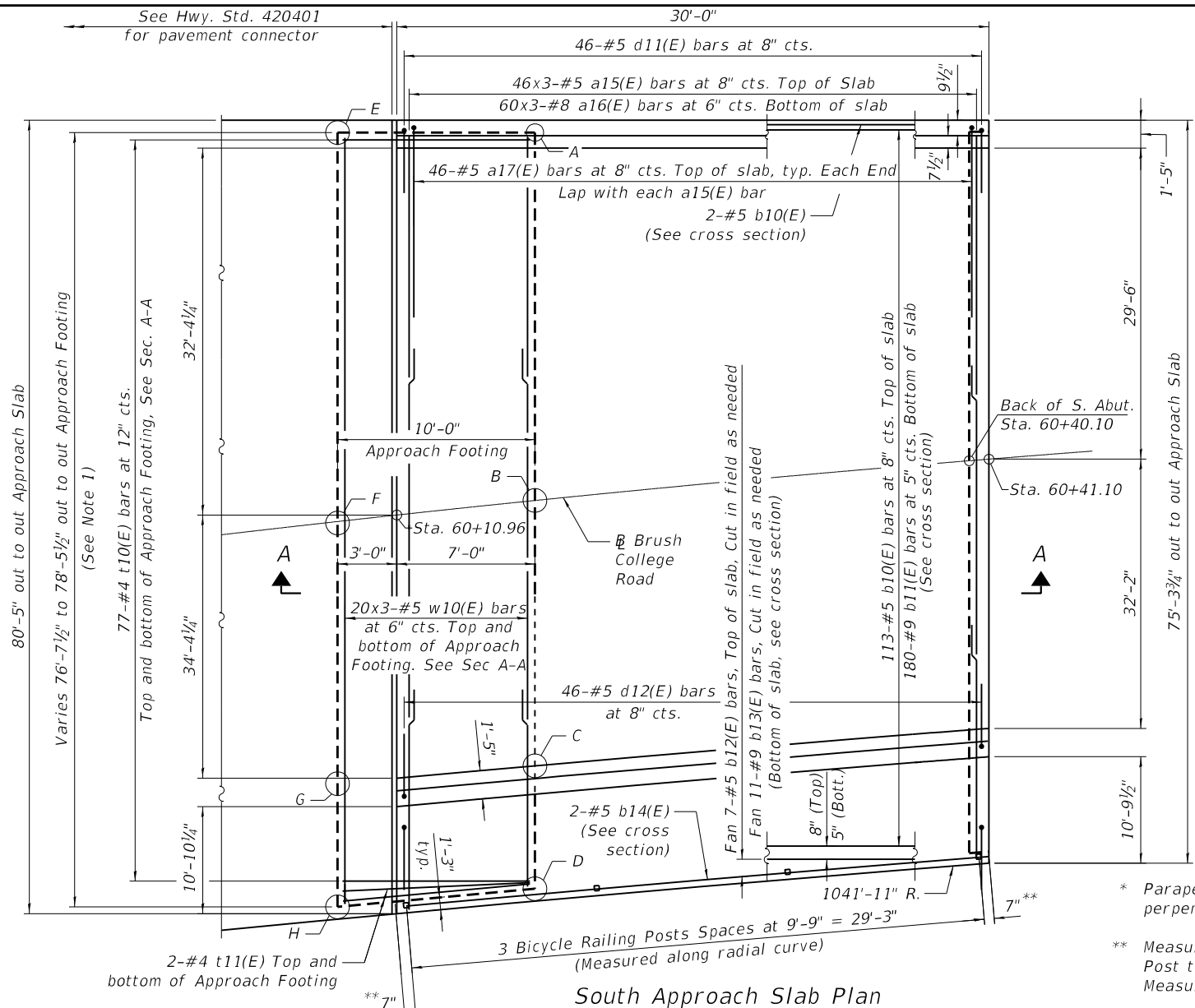
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DIAPHRAGM DETAILS
 STRUCTURE NO. 058-9202**

SHEET NO. SF-14 OF SF-35 SHEETS

| | | | | |
|-------------|----------------|---------------------------|--------------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 684 |
| | | | CONTRACT NO. 95893 | |
| | | ILLINOIS FED. AID PROJECT | | |

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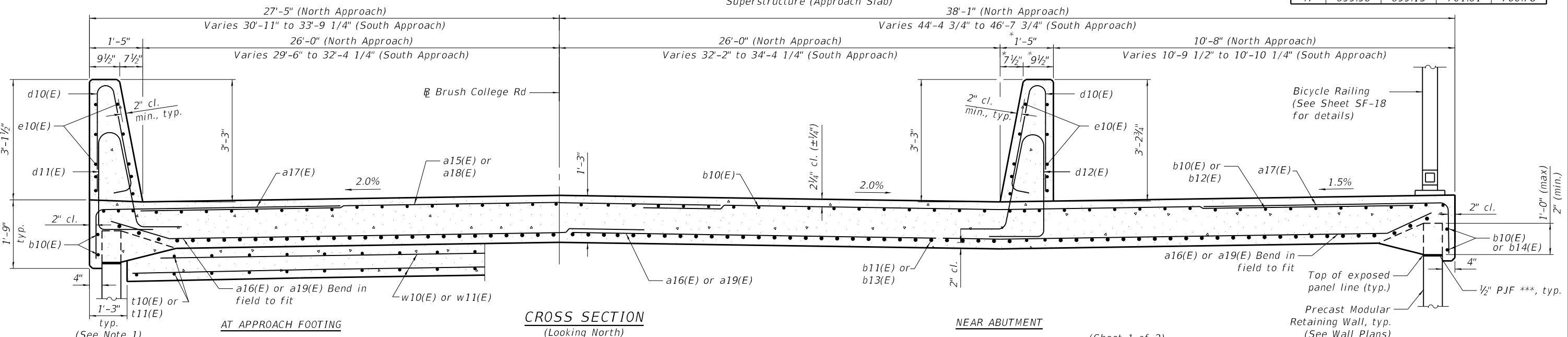


TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

| Point | South Approach | | North Approach | |
|-------|----------------|--------|----------------|--------|
| | Top | Bottom | Top | Bottom |
| A | 700.41 | 699.57 | 701.65 | 700.82 |
| B | 700.95 | 700.12 | 702.17 | 701.34 |
| C | 700.17 | 699.34 | 701.65 | 700.82 |
| D | 700.30 | 699.46 | 701.82 | 700.98 |
| E | 700.10 | 699.27 | 701.44 | 700.61 |
| F | 700.65 | 699.82 | 701.97 | 701.13 |
| G | 699.84 | 699.01 | 701.44 | 700.61 |
| H | 699.96 | 699.13 | 701.61 | 700.78 |

MIN BAR LAP
 #5 bar = 3'-4"
 #8 bar = 4'-9"

* Parapet dimension measured perpendicular to \perp
 ** Measured from \perp Bicycle Railing Post to end of approach slab and Measured along radial curve
 *** Cost included in Concrete Superstructure (Approach Slab)



| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabezicD | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/14/2023 | DRAWN - IIP | REVISED - |
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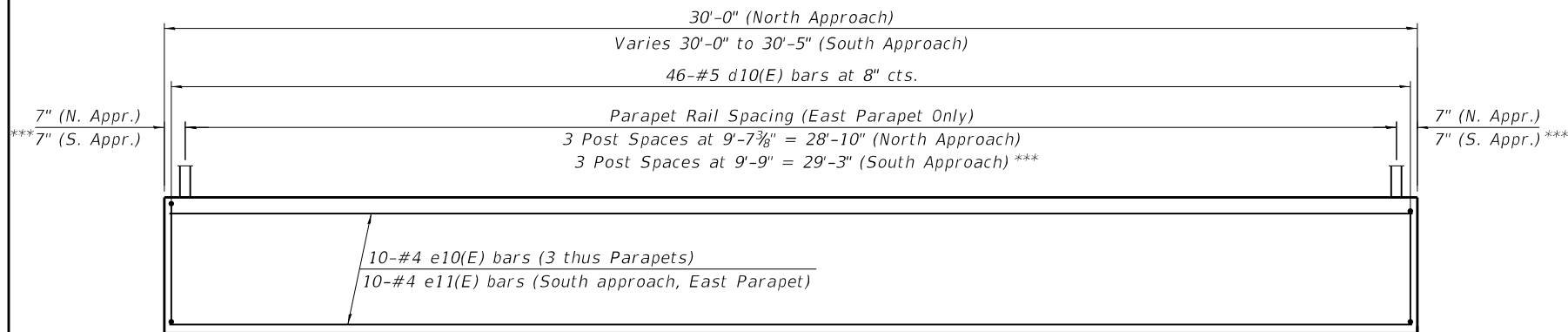
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS I
 STRUCTURE NO. 058-9202**

| | | | | |
|------------------|------------------------|--------------|---------------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 685 |
| | | | CONTRACT NO. 95893 | |
| | | | ILLINOIS FED. AID PROJECT | |

SHEET NO. SF-15 OF SF-35 SHEETS

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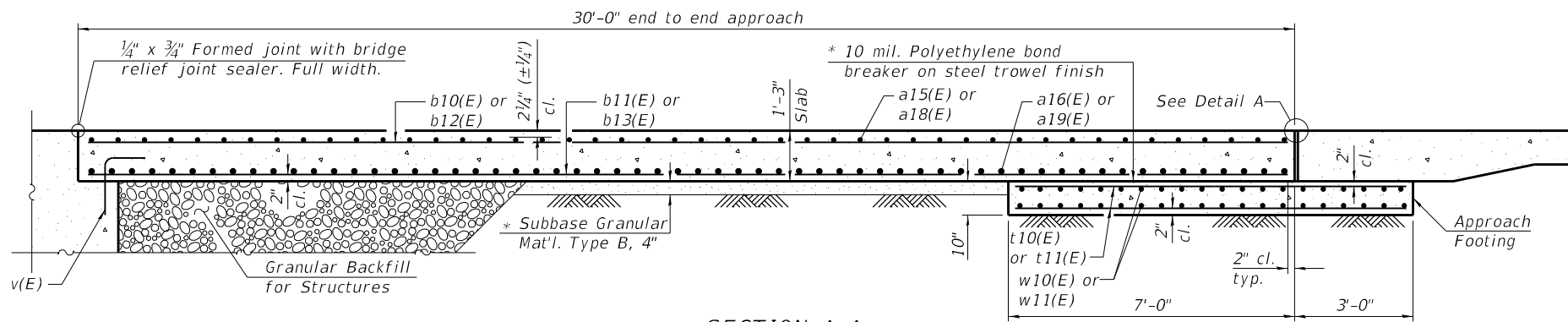


INSIDE ELEVATION OF PARAPET
(Looking East)

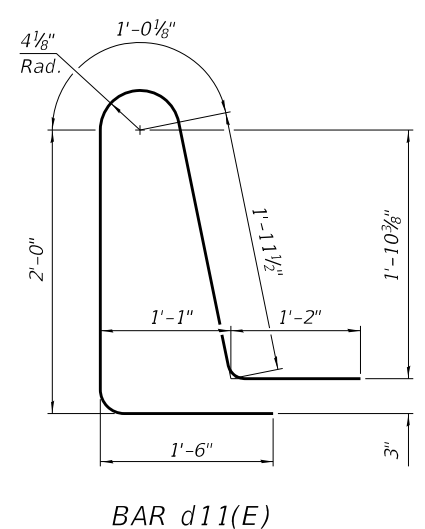
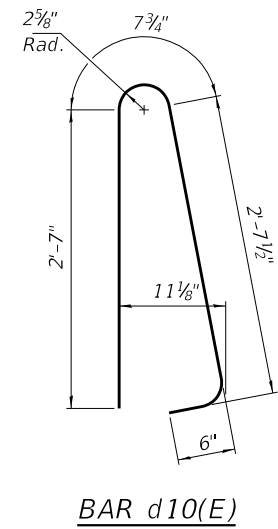
*** Measured along radial curve

NOTES:

1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
2. Parapet concrete shall be paid for as Concrete Superstructure.
3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
4. Approach footing concrete shall be paid for as Concrete Structures.
5. The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
6. Cost of excavation for approach footing included with Concrete Structures.
7. For Granular Backfill for Structures and drainage treatment details, see Sheet SF-2.
8. See Sheet SF-18 for parapet railing details.

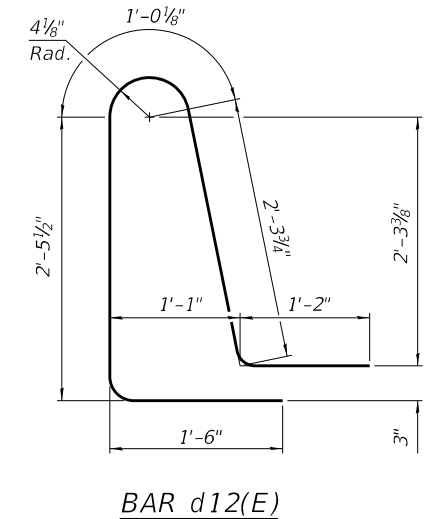


SECTION A-A

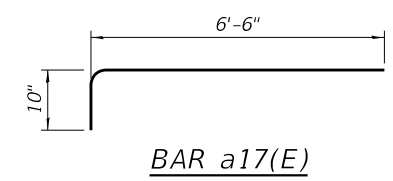


BAR d10(E)

BAR d11(E)



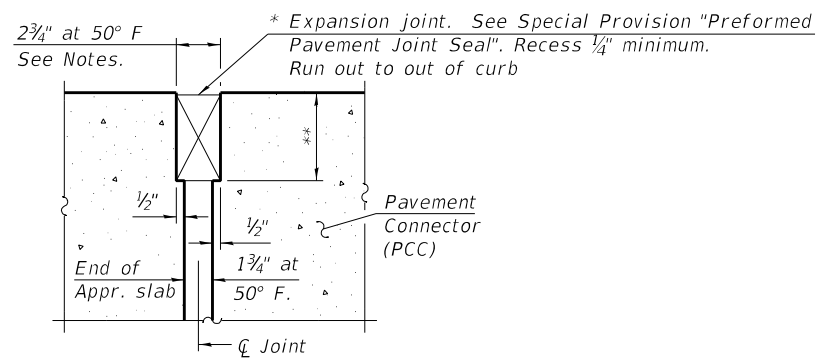
BAR d12(E)



BAR a17(E)

**TWO APPROACHES
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|-----------------------------------------|-----|------|---------|--------|
| a15(E) | 138 | #5 | 28'-1" | — |
| a16(E) | 180 | #8 | 29'-2" | — |
| a17(E) | 184 | #5 | 7'-4" | — |
| a18(E) | 92 | #5 | 33'-0" | — |
| a19(E) | 120 | #8 | 33'-11" | — |
| b10(E) | 218 | #5 | 29'-8" | — |
| b11(E) | 336 | #9 | 29'-8" | — |
| b12(E) | 7 | #5 | 27'-6" | — |
| b13(E) | 11 | #9 | 27'-0" | — |
| b14(E) | 2 | #5 | 30'-1" | — |
| d10(E) | 184 | #5 | 6'-5" | U |
| d11(E) | 92 | #5 | 7'-8" | U |
| d12(E) | 92 | #5 | 8'-6" | U |
| e10(E) | 30 | #4 | 29'-8" | — |
| e11(E) | 10 | #4 | 30'-1" | — |
| t10(E) | 282 | #4 | 9'-8" | — |
| t11(E) | 4 | #4 | 9'-10" | — |
| w10(E) | 120 | #5 | 28'-3" | — |
| w11(E) | 80 | #5 | 33'-0" | — |
| Concrete Superstructure | | | Cu. Yd. | 15.7 |
| Concrete Superstructure (Approach Slab) | | | Cu. Yd. | 199.9 |
| Bridge Deck Grooving | | | Sq. Yd. | 350 |
| Protective Coat | | | Sq. Yd. | 536 |
| Concrete Structures | | | Cu. Yd. | 43.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 87,130 |



DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).
 ** Per manufacturer recommendations

(Sheet 2 of 2)



| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabeziCD | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/18/2023 | DRAWN - IIP | REVISED - |
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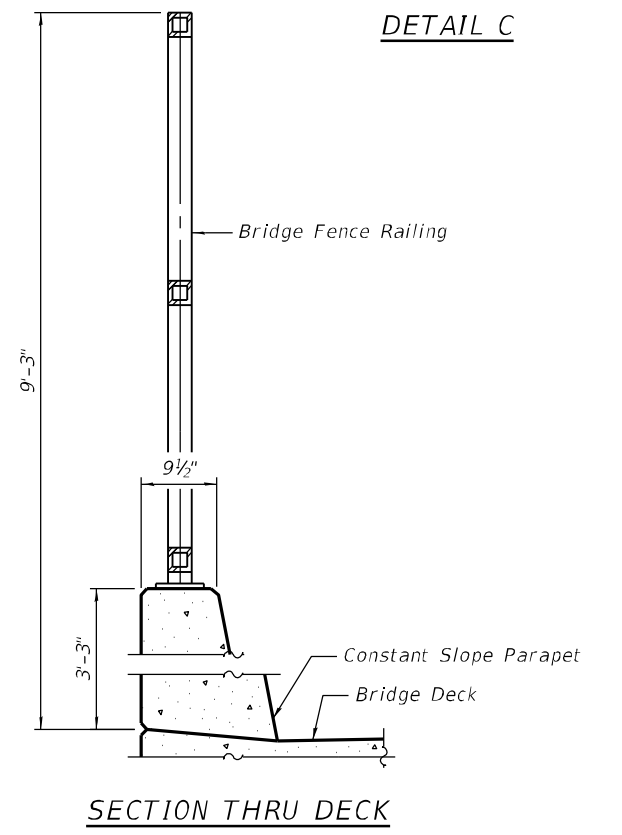
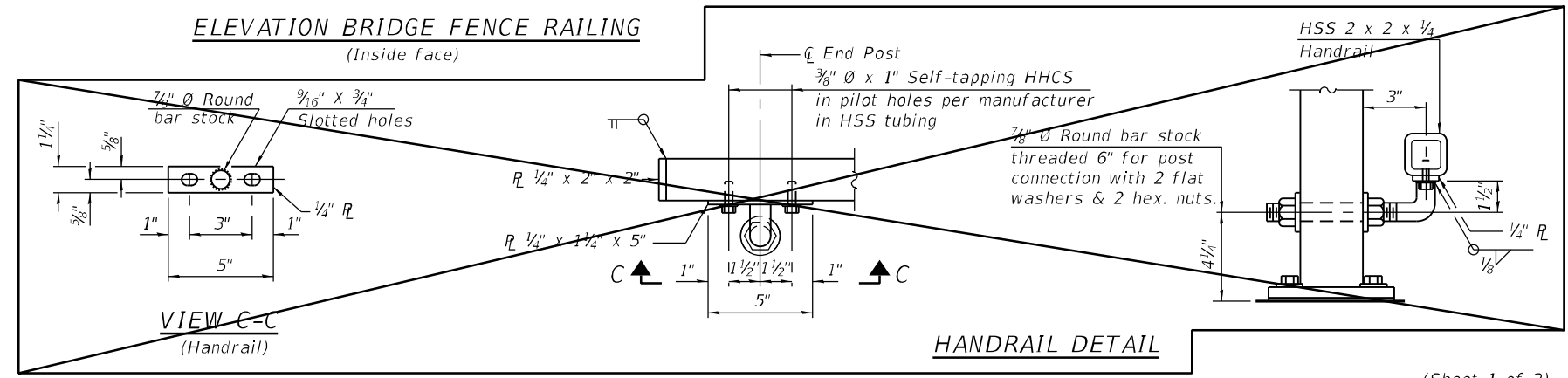
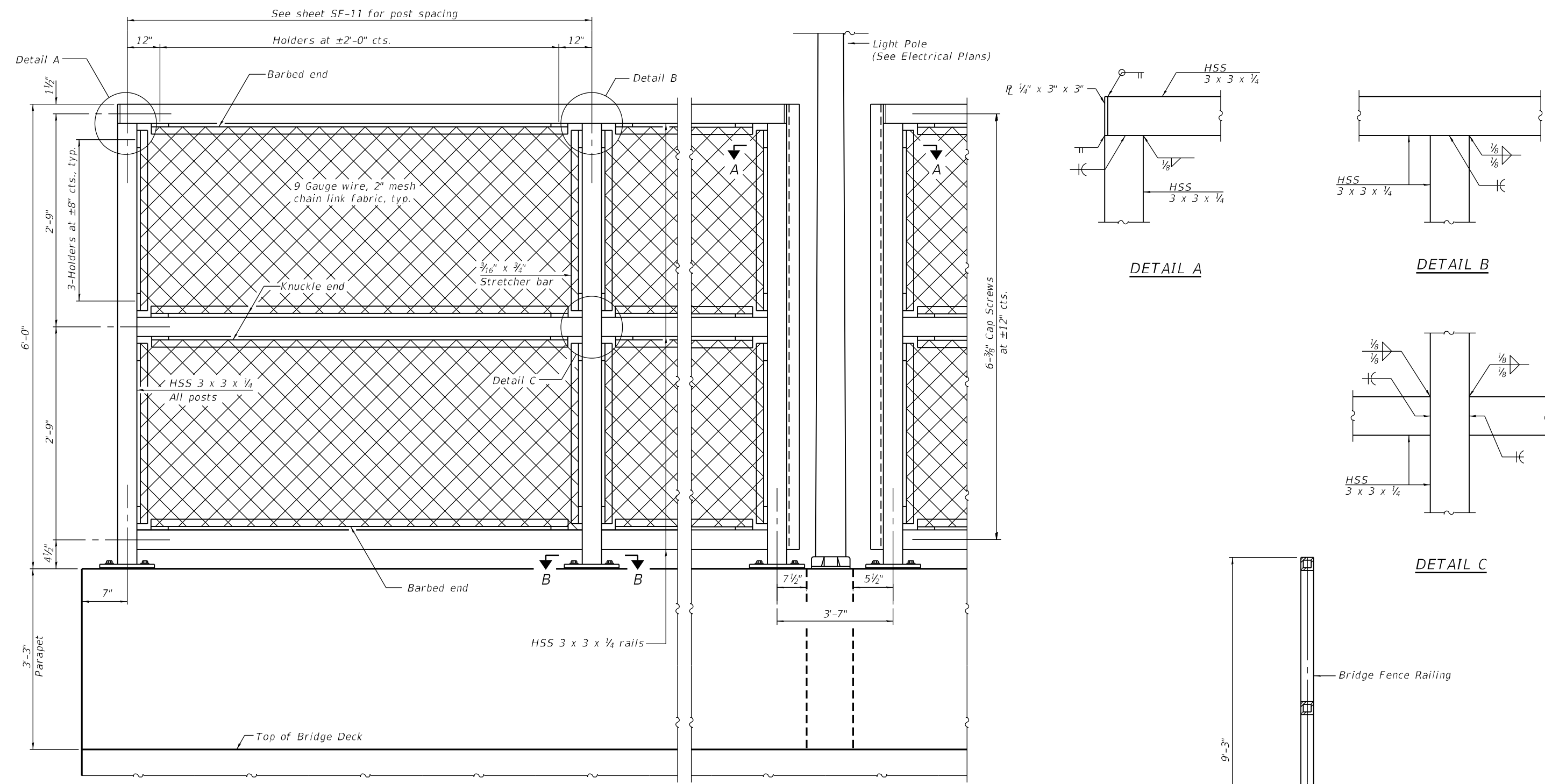
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS II
STRUCTURE NO. 058-9202**

SHEET NO. SF-16 OF SF-35 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|--------------------|---------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 686 |
| | | | CONTRACT NO. 95893 | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL Sheet
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RAILING CRITERIA

| | |
|----------------------|--------|
| NCHRP 350 Test Level | 4 |
| Max Post Spacing | 10'-0" |
| Railing Weight (plf) | 50 |

(Sheet 1 of 2)



| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabozkD | DESIGNED - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - IIP | REVISED - |
| PLOT DATE = 4/14/2023 | CHECKED - MCC | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

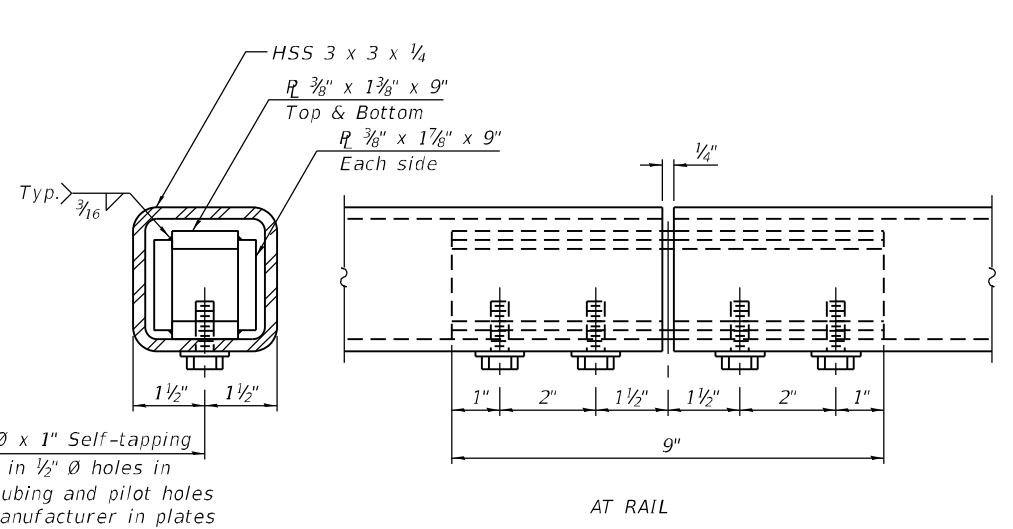
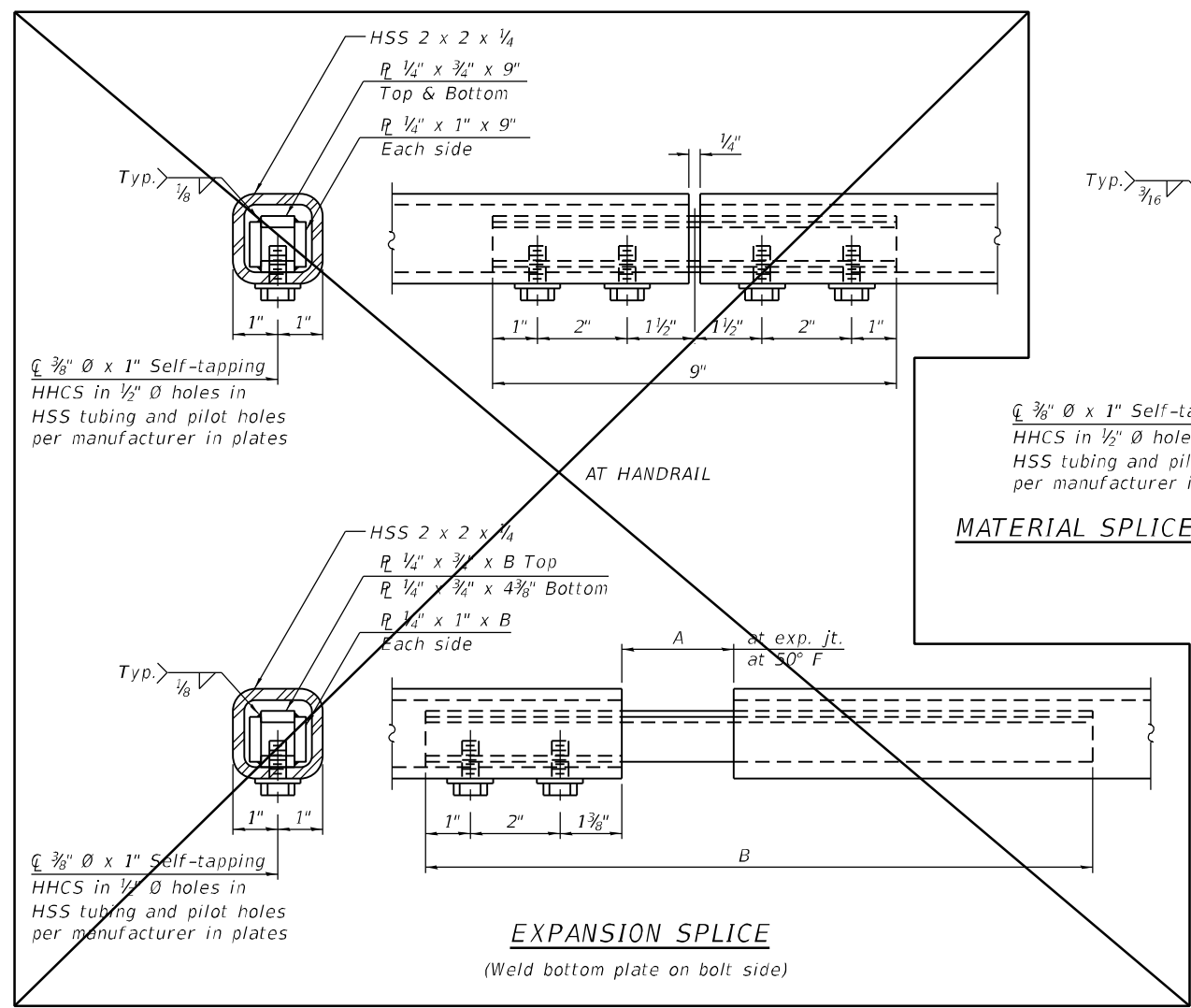
BRIDGE FENCE RAILING
 STRUCTURE NO. 058-9202

SHEET NO. SF-17 OF SF-35 SHEETS

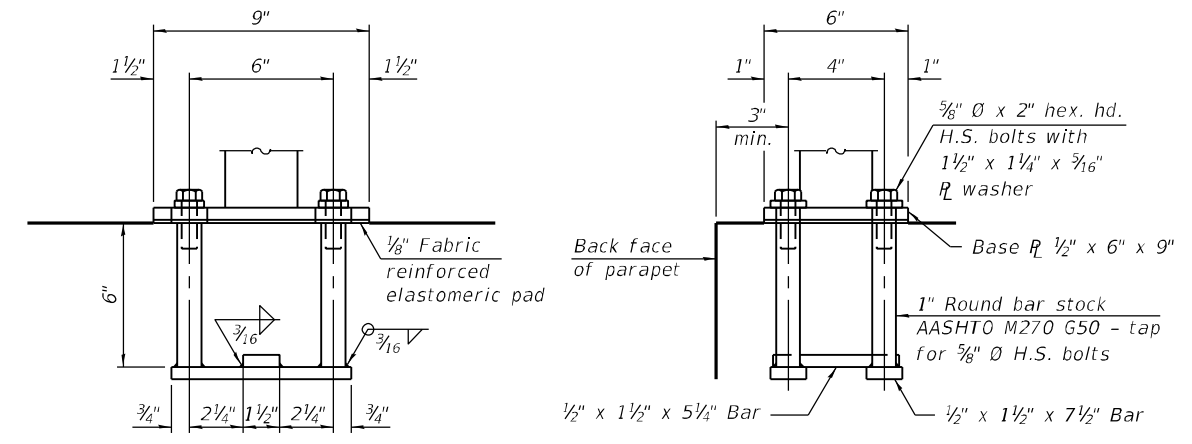
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 744B | 09-00933-01-BR | MACON | 1019 | 687 |
| CONTRACT NO. 95893 | | | | |

ILLINOIS FED. AID PROJECT

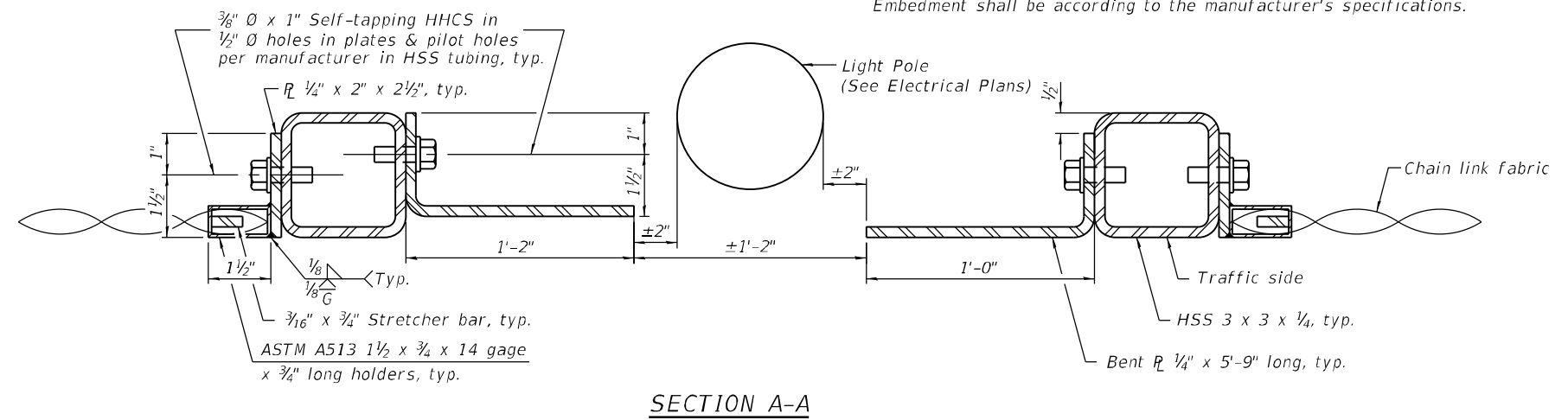
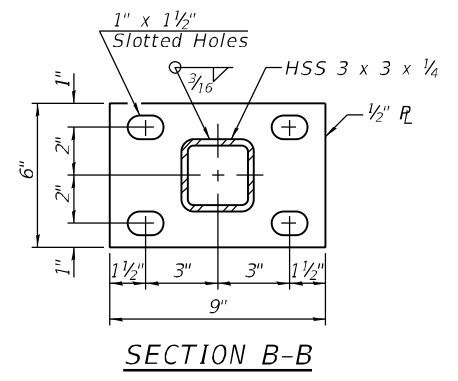
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Notes:
 Place reinforcement bars to miss anchor rod locations.
 CVN testing is not required for the HSS tubing used in the Bridge Fence Railing.
 All HSS tubing used for the Handrail shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 All heavy hex nuts shall be according to ASTM A 563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105.
 The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



ANCHORAGE ASSEMBLY
 The Bridge Fence Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates.
 In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications.
 Embedment shall be according to the manufacturer's specifications.



BILL OF MATERIAL

| Item | Unit | Quantity |
|----------------------|------|----------|
| Bridge Fence Railing | Foot | 205 |

(Sheet 2 of 2)



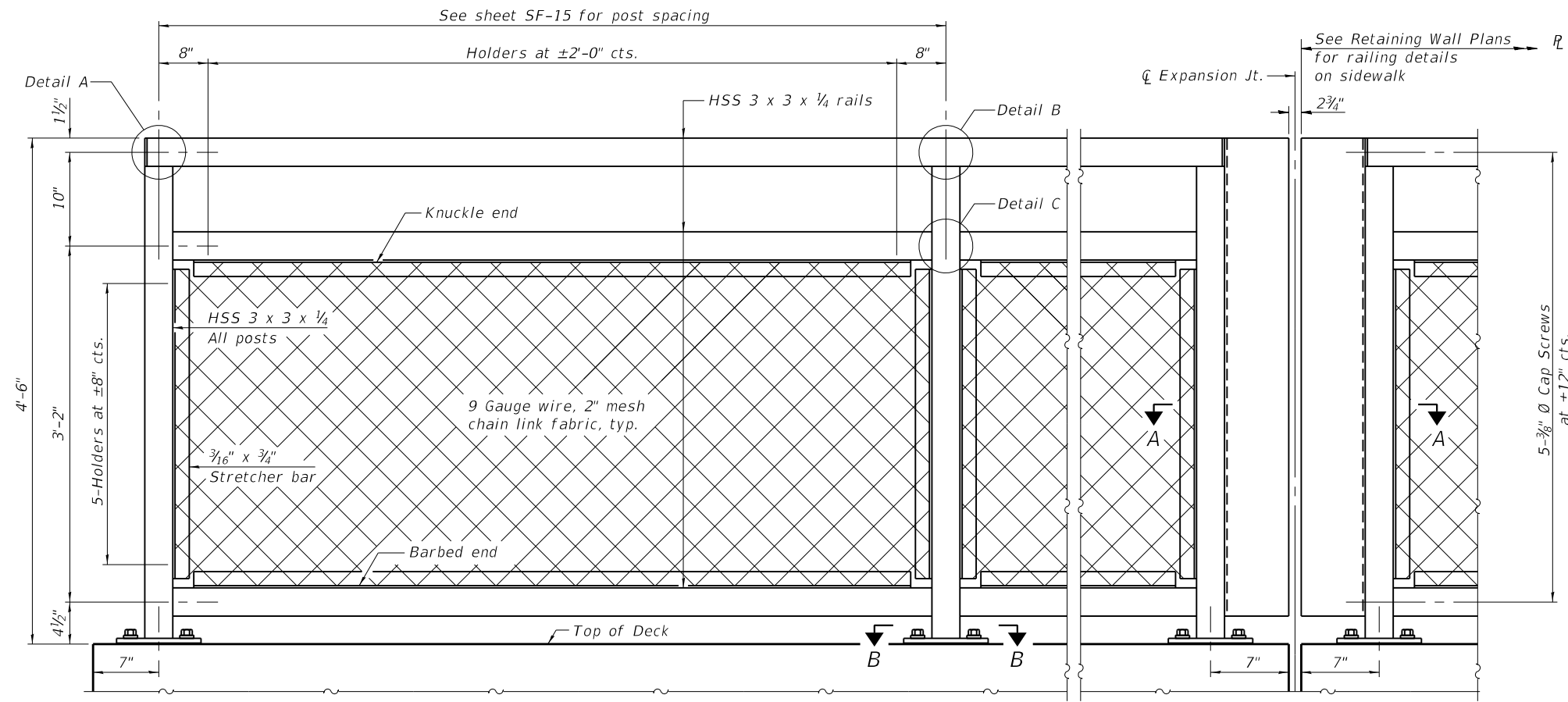
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| USER NAME = Dabozk.D | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - MCC | REVISED - |
| PLOT DATE = 4/14/2023 | DRAWN - IIP | REVISED - |
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

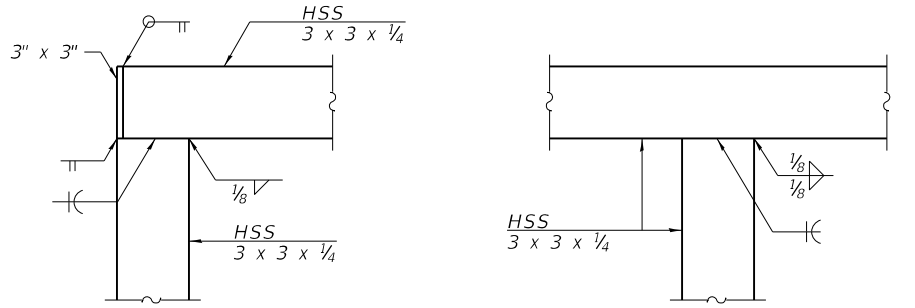
**BRIDGE FENCE RAILING
 STRUCTURE NO. 058-9202**

SHEET NO. SF-17A OF SF-35 SHEETS

| | | | | |
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
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| | | | CONTRACT NO. 95893 | |
| | | ILLINOIS FED. AID PROJECT | | |

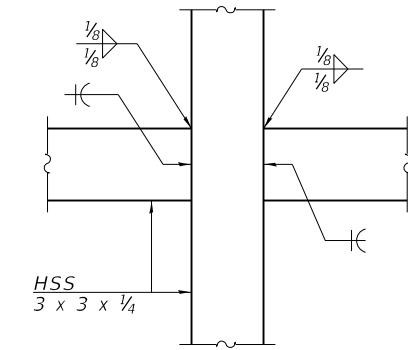


ELEVATION BICYCLE RAILING
(Inside face)

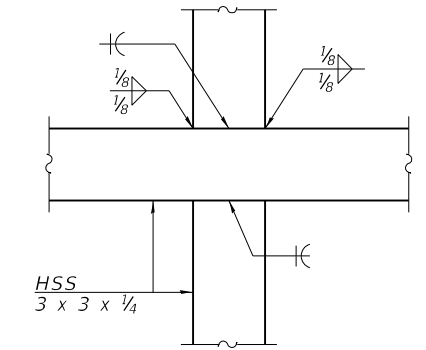


DETAIL A

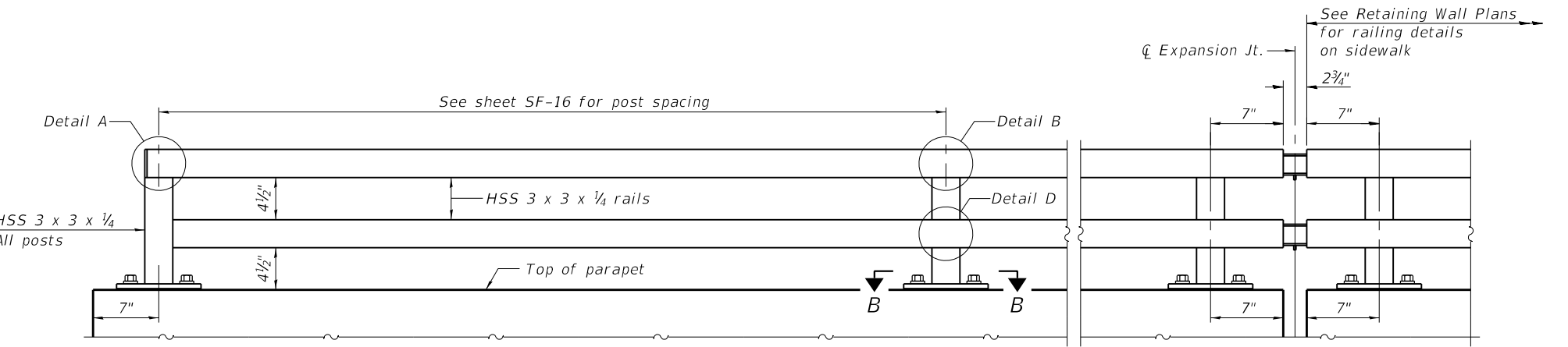
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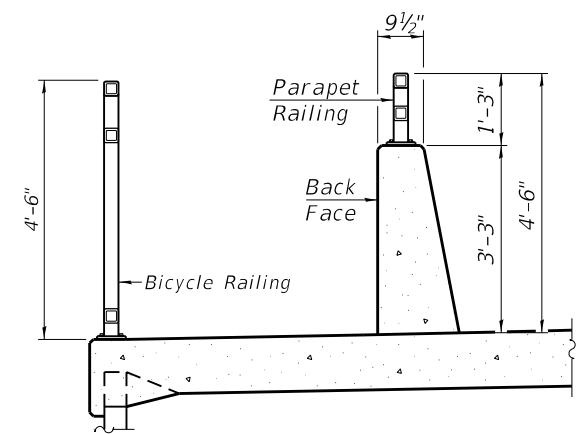
DETAIL C



DETAIL D



ELEVATION PARAPET RAILING
(Inside face)



SECTION THRU APPROACH SLAB

RAILING CRITERIA

| | |
|------------------------------|--------|
| MASH 2016 Test Level | 4 |
| Parapet Railing Weight (plf) | 25 |
| Bicycle Railing Weight (plf) | 50 |
| Max Post Spacing | 10'-0" |

(Sheet 1 of 2)

MODEL SHEET
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| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabericD | DESIGNED - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |
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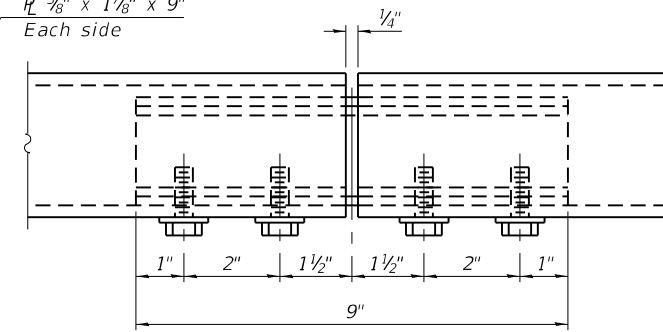
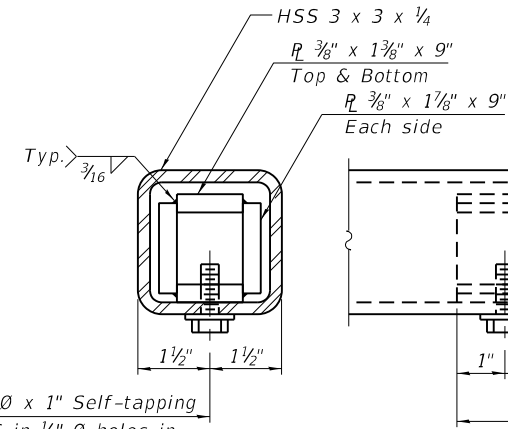
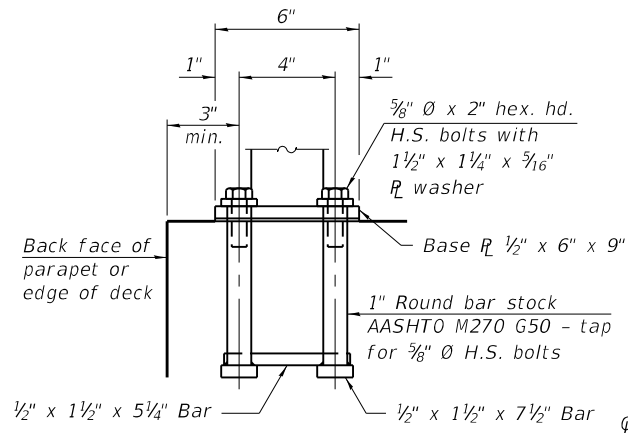
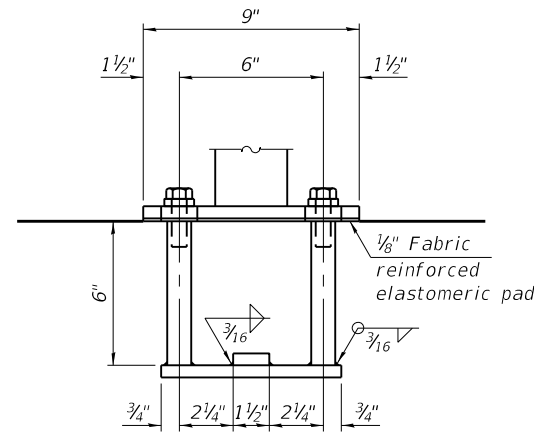
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BICYCLE RAILING AND PARAPET RAILING
STRUCTURE NO. 058-9202**

SHEET NO. SF-18 OF SF-35 SHEETS

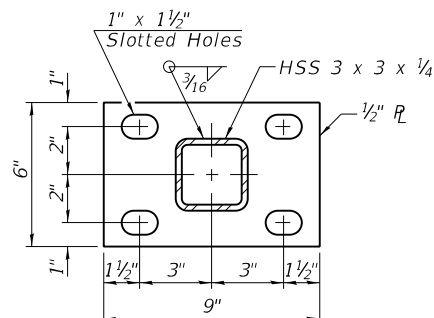
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 688 |
| CONTRACT NO. 95893 | | | | |

ILLINOIS FED. AID PROJECT



ANCHORAGE ASSEMBLY

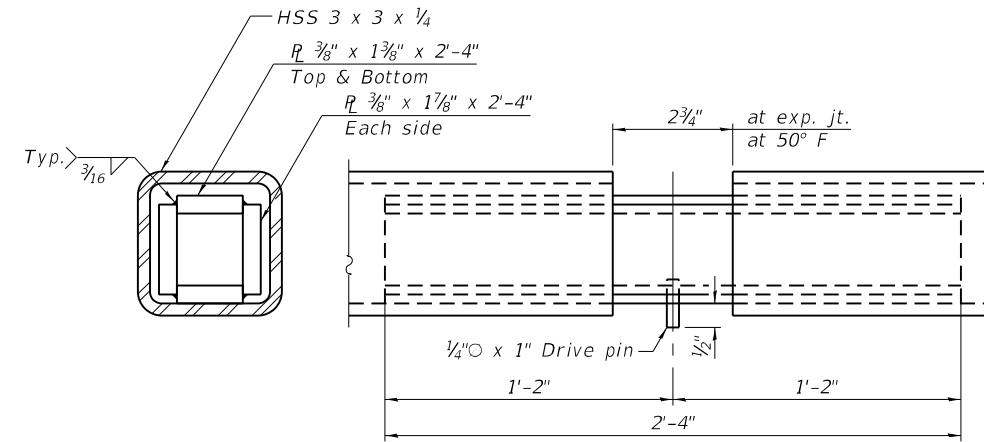
The Bicycle Railing fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



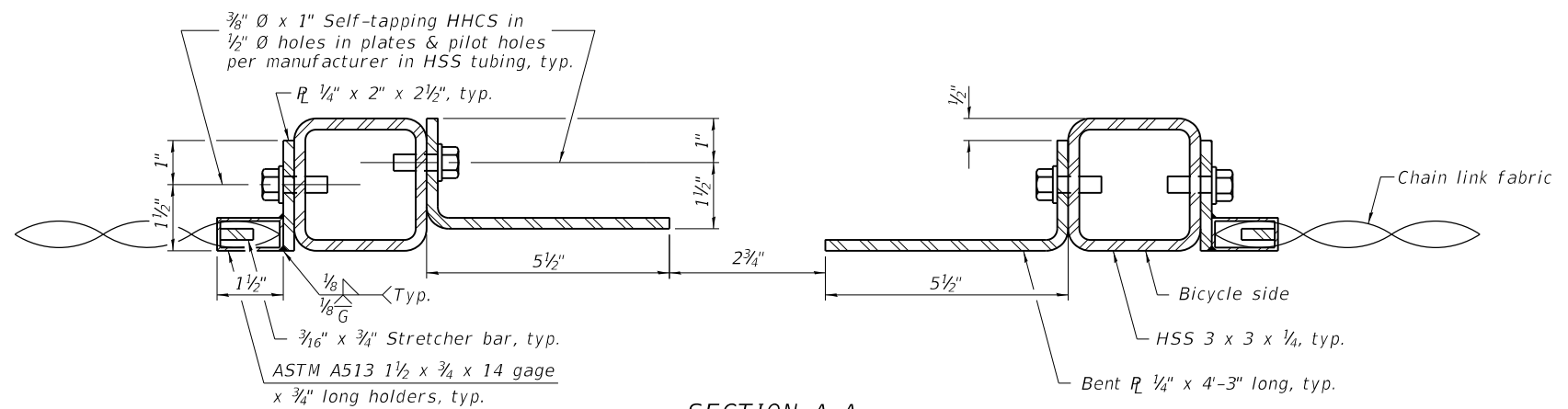
SECTION B-B

3/8" Ø x 1" Self-tapping HHCS in 1/2" Ø holes in HSS tubing and pilot holes per manufacturer in plates

MATERIAL SPLICE



EXPANSION SPLICE



SECTION A-A

Notes:
 Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing.
 All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
 All HSS tubing used for the Parapet Railing shall be ASTM A500 grade C.
 All base plates used for the Parapet Railing shall be AASHTO M270 grade 50.
 All heavy hex nuts shall be according to ASTM A 563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105.
 The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 See sheet SF-16 of SF-35 for dimensions of concrete openings at expansion joints.

BILL OF MATERIAL

| Item | Unit | Quantity |
|-----------------|------|----------|
| Bicycle Railing | Foot | 60 |
| Parapet Railing | Foot | 60 |

(Sheet 2 of 2)

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| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabezicD | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - MCC | REVISED - |
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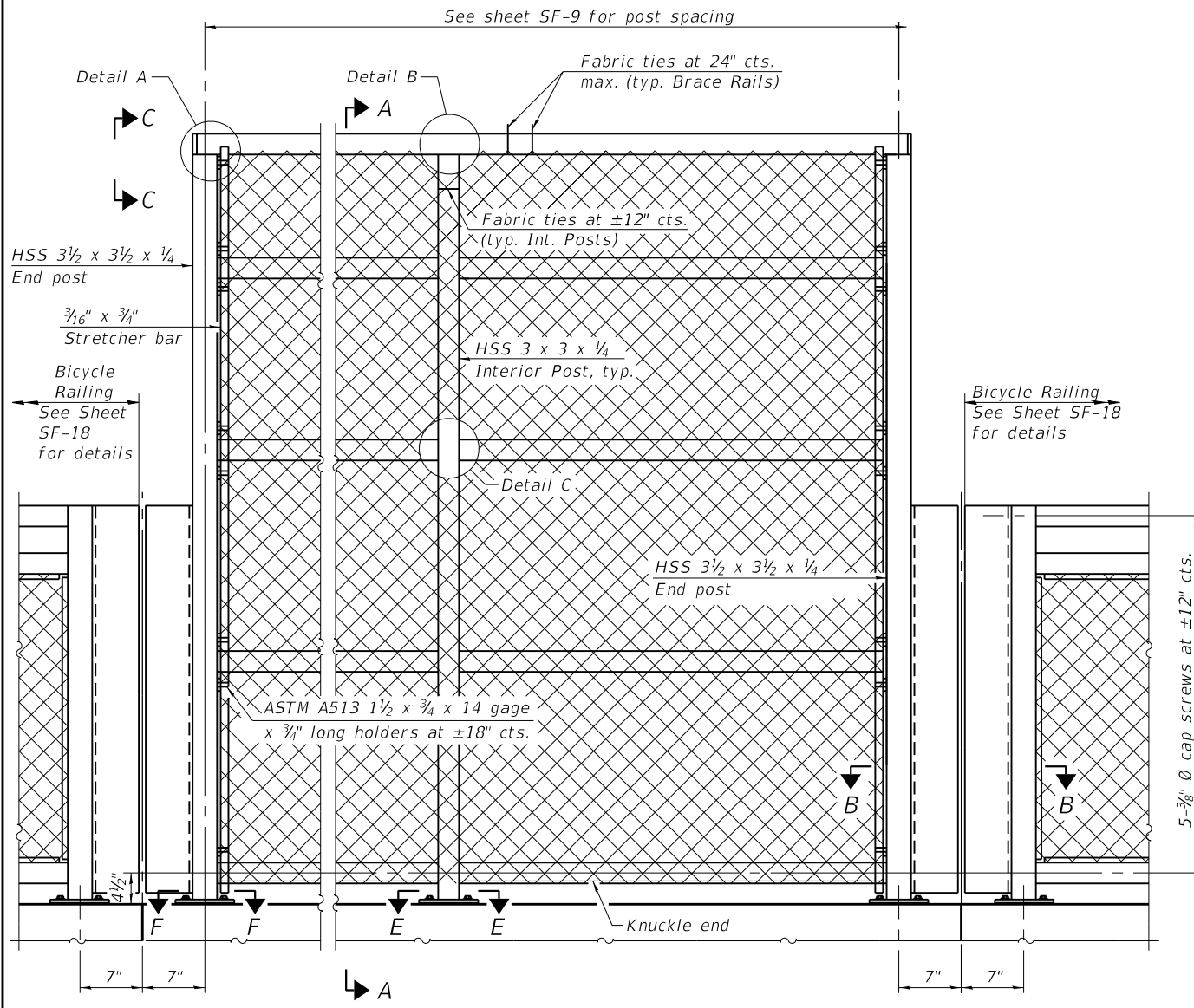
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING AND PARAPET RAILING
STRUCTURE NO. 058-9202

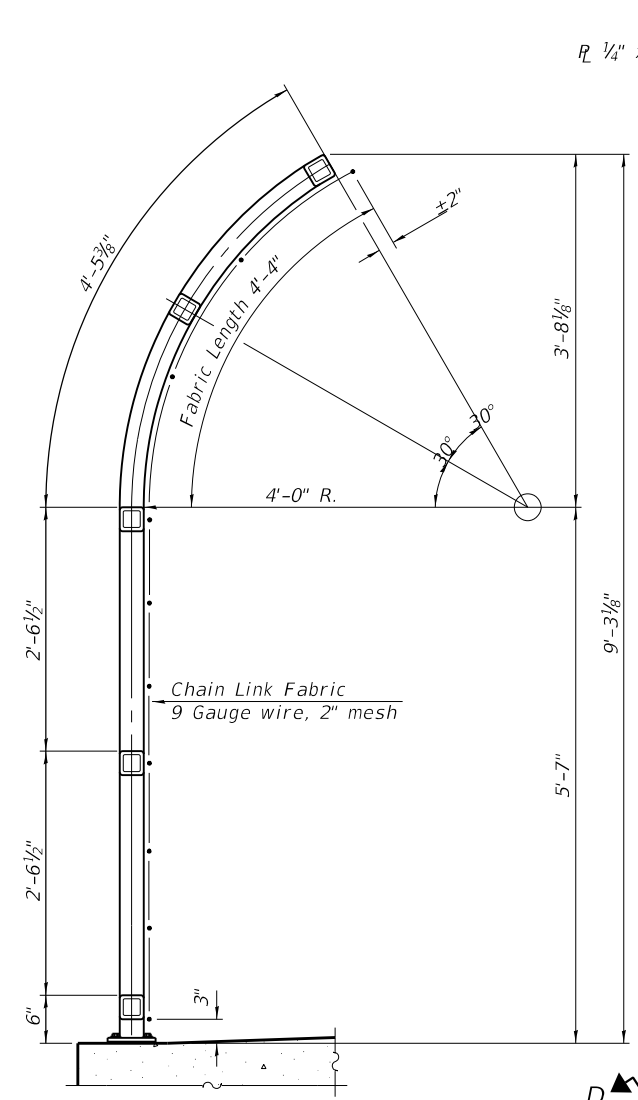
SHEET NO. SF-18A OF SF-35 SHEETS

| | | | | |
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| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 688A |
| | | | | CONTRACT NO. 95893 |
| ILLINOIS FED. AID PROJECT | | | | |

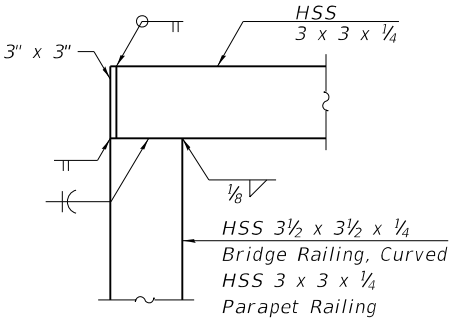
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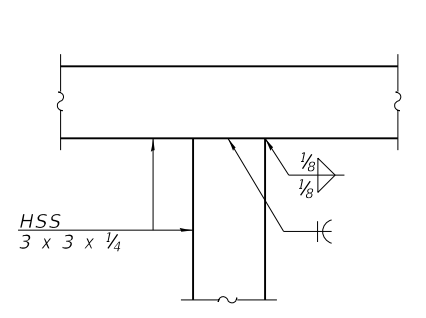
ELEVATION BICYCLE RAILING, CURVED
(Inside face, Looking East)



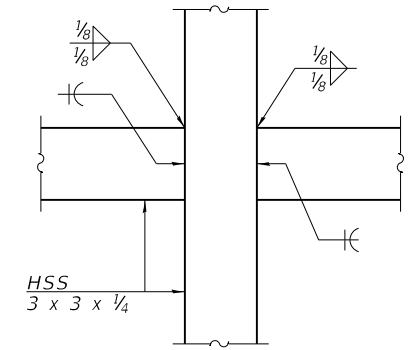
SECTION A-A



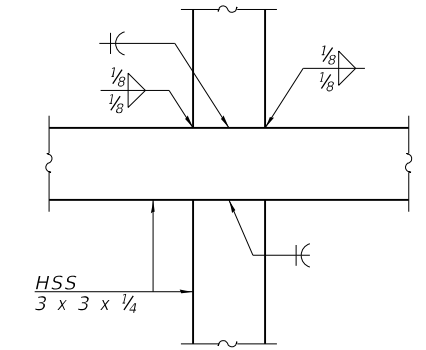
DETAIL A
(Parapet railing shown, bicycle railing similar)



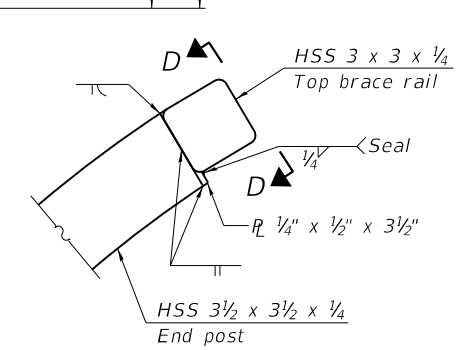
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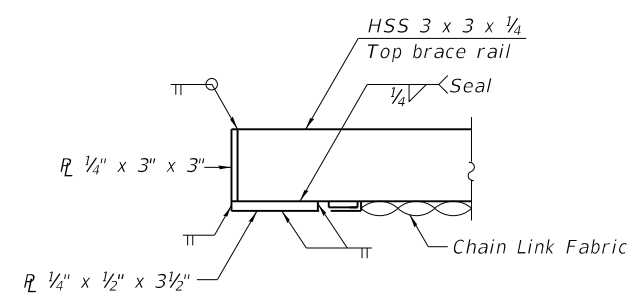
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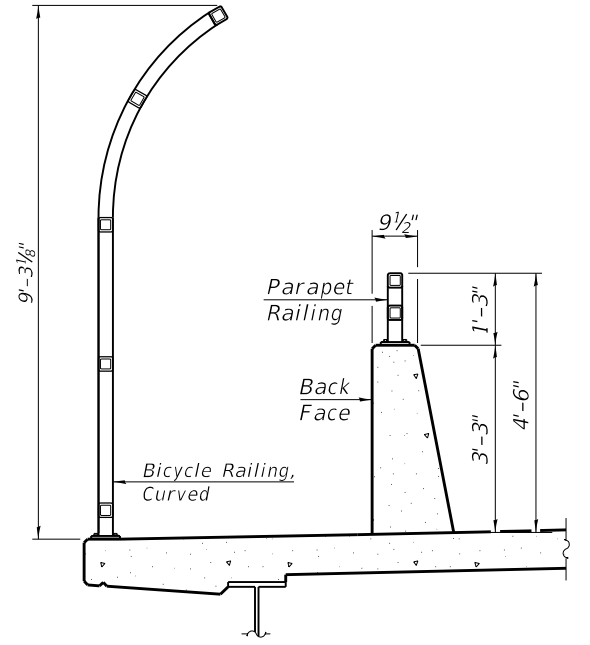
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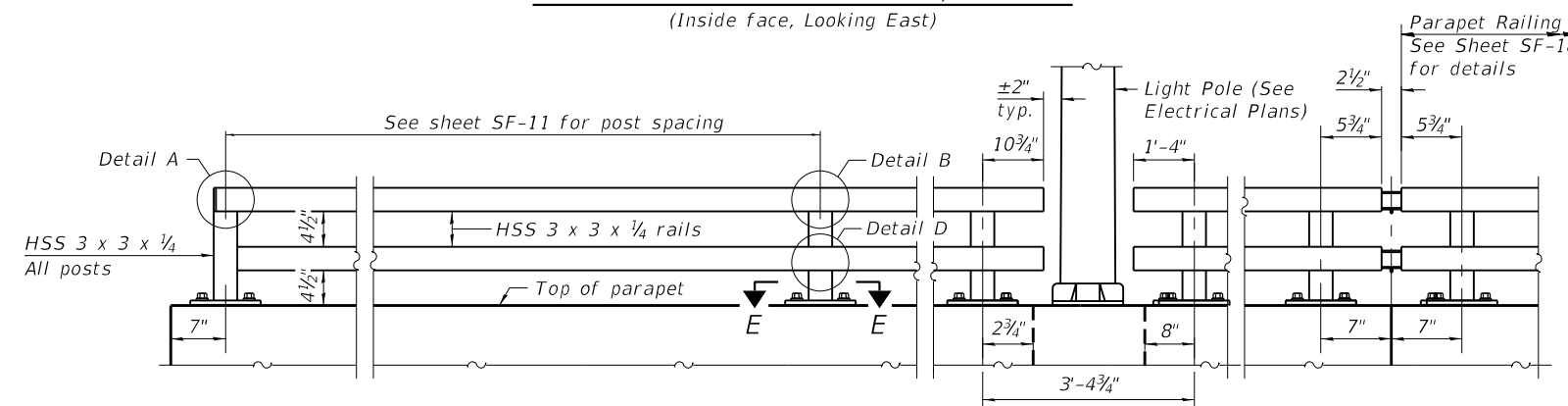
VIEW C-C



VIEW D-D



SECTION THRU DECK



ELEVATION PARAPET RAILING
(Inside face, Looking East)

RAILING CRITERIA

| | |
|------------------------------|--------|
| MASH 2016 Test Level | 4 |
| Parapet Railing Weight (plf) | 25 |
| Bicycle Railing Weight (plf) | 50 |
| Max Post Spacing | 10'-0" |

(Sheet 1 of 2)



| | | |
|-----------------------|----------------|-----------|
| USER NAME = DabericD | DESIGNED - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - IIP | REVISED - |
| PLOT DATE = 4/18/2023 | CHECKED - MCC | REVISED - |

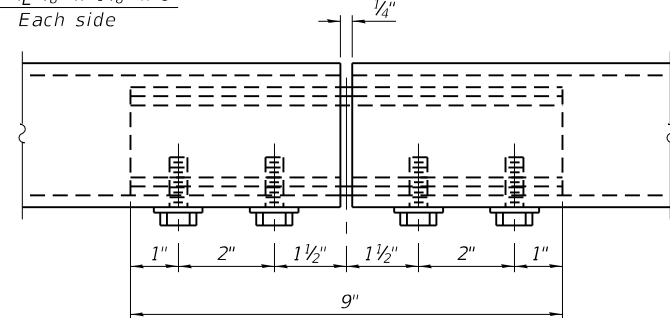
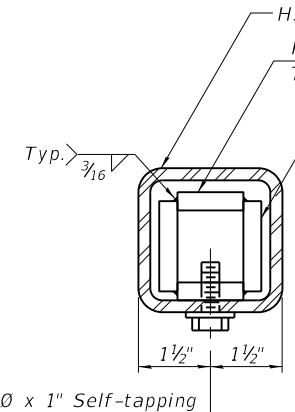
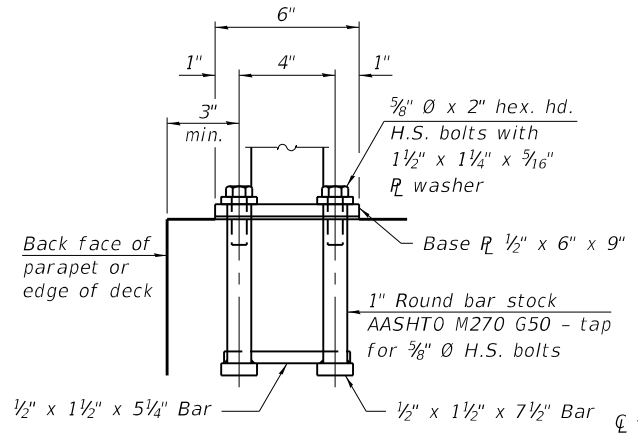
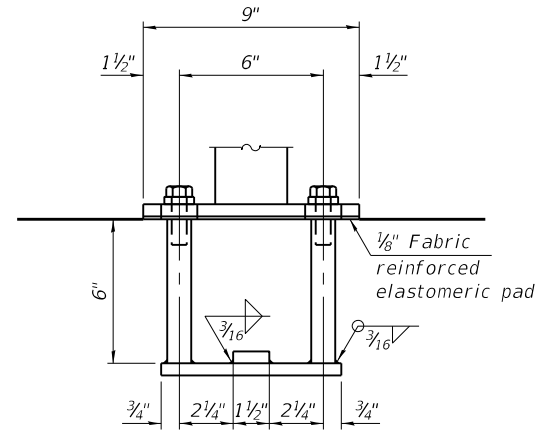
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE FENCE RAILING, SIDEWALK MOUNTED
STRUCTURE NO. 058-9202**

SHEET NO. SF-19 OF SF-35 SHEETS

| | | | | |
|---------------------------|------------------------|--------------|-------------------|--------------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 689 |
| | | | | CONTRACT NO. 95893 |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL: Sheet
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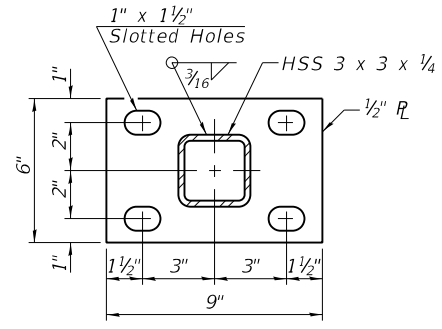


ANCHORAGE ASSEMBLY

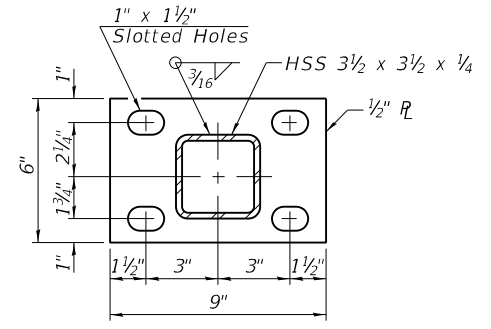
The Bicycle Railing, Curved Fasteners for end posts near expansion joints may need to be installed prior to installing the bent plates. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø fully threaded anchor rods with the same plate washers as specified above and heavy hex lock nuts according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

MATERIAL SPLICE

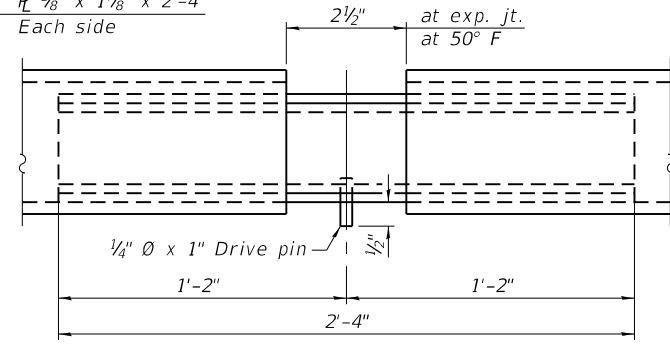
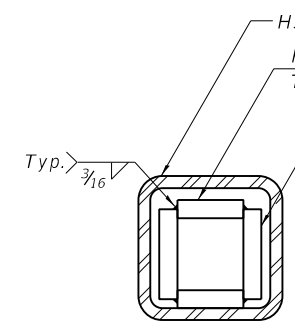
Notes:
 Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing, Curved.
 All heavy hex nuts shall be according to ASTM A 563 grade DH.
 All fully threaded anchor rods shall be ASTM F1554 grade 105. The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
 Rail splice inserts may be built out of bent plates of the same thicknesses and outside geometry limits as the 4 plate rail splice inserts shown.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



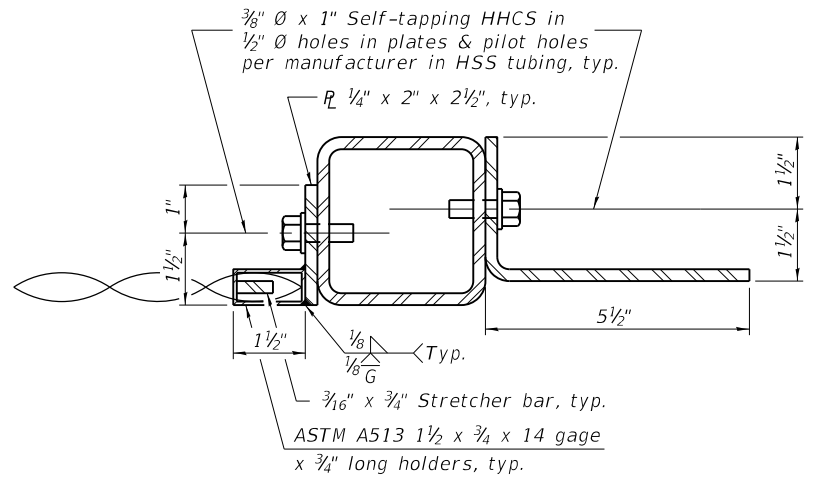
SECTION E-E



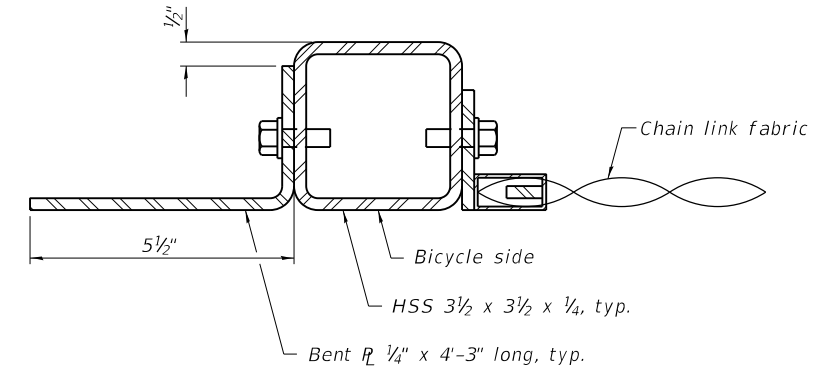
SECTION F-F



EXPANSION SPLICE



SECTION B-B



BILL OF MATERIAL

| Item | Unit | Quantity |
|-------------------------|------|----------|
| Bicycle Railing, Curved | Foot | 205 |
| Parapet Railing | Foot | 205 |

(Sheet 2 of 2)



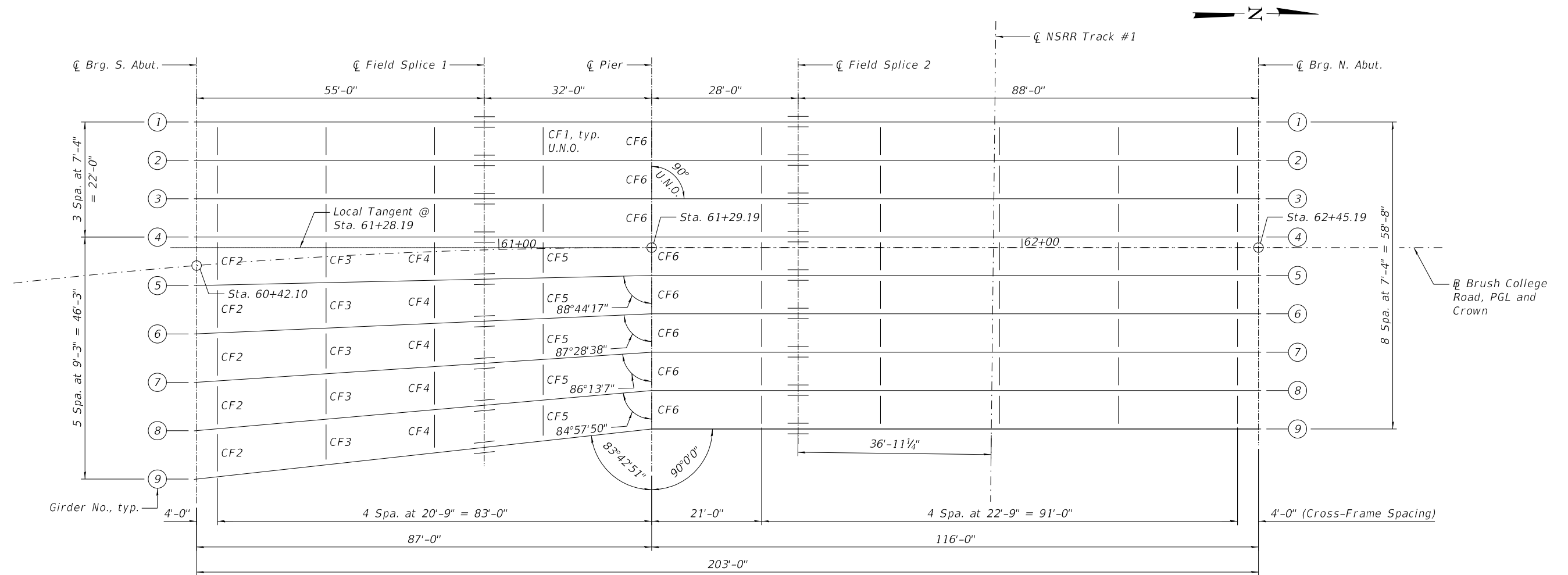
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| PLOT DATE = 4/14/2023 | DRAWN - IIP | REVISED - |
| | CHECKED - MCC | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE FENCE RAILING, SIDEWALK MOUNTED
 STRUCTURE NO. 058-9202**

SHEET NO. SF-19A OF SF-35 SHEETS

| | | | | |
|--------------------|------------------------|--------------|-------------------|---------------------------|
| F.A.U. RTE. 7448 | SECTION 09-00933-01-BR | COUNTY MACON | TOTAL SHEETS 1019 | SHEET NO. 689A |
| CONTRACT NO. 95893 | | | | ILLINOIS FED. AID PROJECT |



FRAMING PLAN

NOTE:
 1. All structural steel shall be AASHTO M270 Grade 50.

MODEL SHEET
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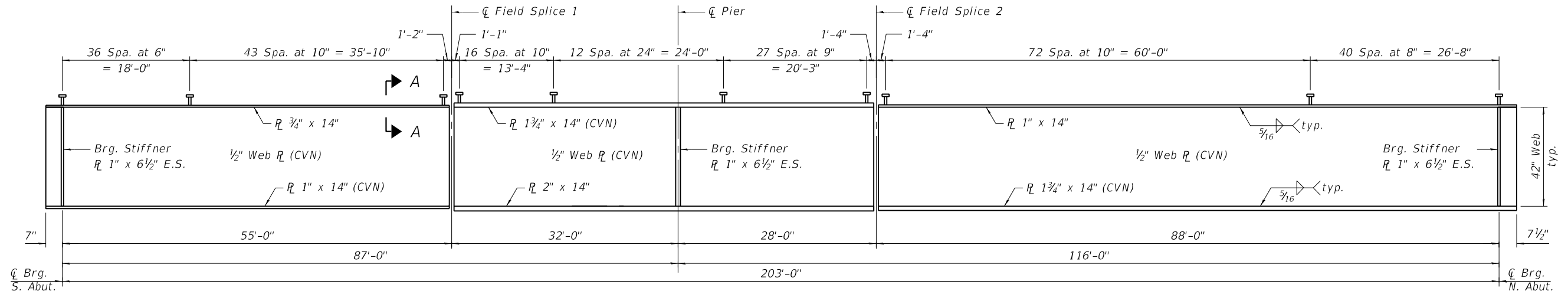


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| | CHECKED - DD | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - MCC | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - DD | REVISED - |

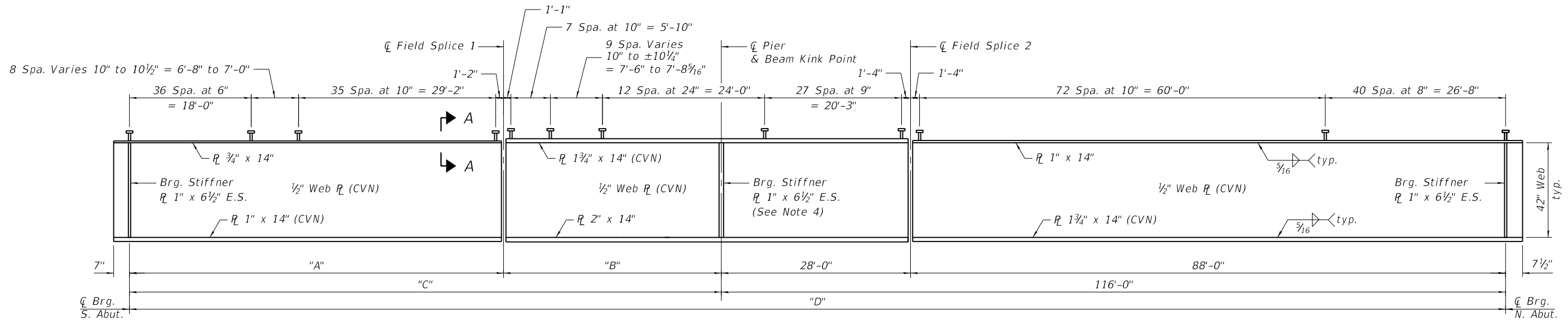
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 058-9202
 SHEET NO. 5F-20 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 690 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



GIRDER ELEVATION - NO. 1 THRU 4



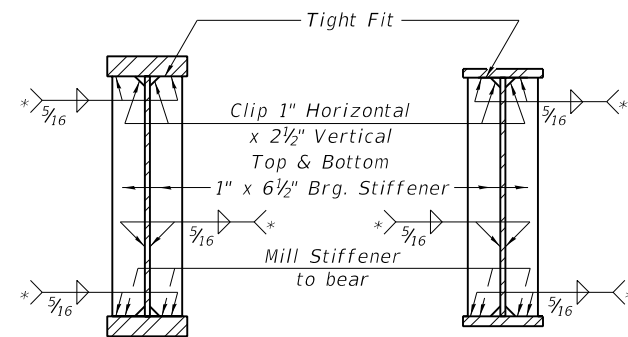
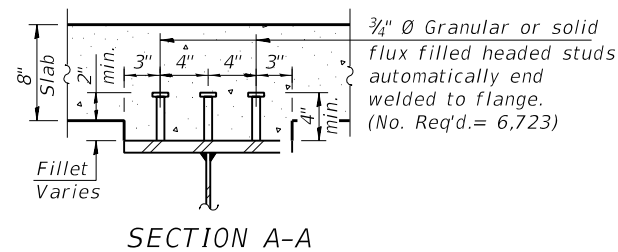
GIRDER ELEVATION - NO. 5 THRU 9

FLARED GIRDER DIMENSIONS

| Girder | Dim. "A" | Dim. "B" | Dim. "C" | Dim. "D" |
|--------|--------------------------------------|--------------------------------------|--------------------------------------|---------------------------------------|
| ⑤ | 55'-0 ¹ / ₈ " | 32'-0 ¹ / ₁₆ " | 87'-0 ¹ / ₄ " | 203'-0 ¹ / ₄ " |
| ⑥ | 55'-0 ⁵ / ₈ " | 32'-0 ³ / ₈ " | 87'-1" | 203'-1" |
| ⑦ | 55'-1 ¹ / ₁₆ " | 32'-0 ³ / ₁₆ " | 87'-2 ¹ / ₄ " | 203'-2 ¹ / ₄ " |
| ⑧ | 55'-2 ¹ / ₁₆ " | 32'-1 ¹ / ₂ " | 87'-4 ¹ / ₁₆ " | 203'-4 ¹ / ₁₆ " |
| ⑨ | 55'-4" | 32'-2 ³ / ₁₆ " | 87'-6 ³ / ₁₆ " | 203'-6 ³ / ₁₆ " |

NOTES:

- "CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.
- All structural steel shall be AASHTO M270 Grade 50.
- E.S. = Each Side
- Place bearing plate on tangent section of girder just north of beam kink point.



SECTION AT PIER

SECTION AT ABUTMENT

* Terminate 1/4" (±1/8") from the end of plate intersects.

MODEL: Sheet
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| | CHECKED - DD | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - MCC | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - DD | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATIONS
STRUCTURE NO. 058-9202

SHEET NO. 5F-21 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 691 |
| CONTRACT NO. 95893 | | | | |

ILLINOIS FED. AID PROJECT

| EXTERIOR GIRDER MOMENT TABLE | | | |
|------------------------------|--------------------|--------|-----------|
| | 0.4 Sp. 1 | Pier | 0.6 Sp. 2 |
| Is | (in ⁴) | 14,229 | 20,362 |
| Ic(n) | (in ⁴) | 39,998 | 56,253 |
| Ic(3n) | (in ⁴) | 29,513 | 40,233 |
| Ic(cr) | (in ⁴) | - | - |
| Ss | (in ³) | 700 | 1,083 |
| Sc(n) | (in ³) | 1,012 | 1,491 |
| Sc(3n) | (in ³) | 928 | 1,371 |
| Sc(cr) | (in ³) | - | - |
| DC1 | (k/') | 0.91 | 1.00 |
| MDC1 | (k) | 261 | 968 |
| DC2 | (k/') | 0.25 | 0.25 |
| MDC2 | (k) | 82 | 258 |
| DW | (k/') | 0.28 | 0.28 |
| MDW | (k) | 93 | 293 |
| LLDF | | 0.576 | 0.554 |
| M _l + IM | (k) | 1,051 | 1,490 |
| Mu (Strength I) | (k) | 2,408 | 4,580 |
| Øf Mn | (k) | 5,264 | 7,041 |
| fs DC1 | (ksi) | 4.5 | 10.7 |
| fs DC2 | (ksi) | 1.1 | 2.3 |
| fs DW | (ksi) | 1.2 | 2.6 |
| fs (l+IM) | (ksi) | 12.5 | 12.0 |
| fs (Service II) | (ksi) | 22.9 | 31.1 |
| 0.95Rh Fyf | (ksi) | 47.5 | 47.5 |
| fs (Total)(Strength I) (ksi) | | 48.9 | - |
| Øf Fn | (ksi) | 50.0 | - |
| Vf | (k) | 63.7 | 59.6 |

| STRAIGHT INTERIOR GIRDER MOMENT TABLE | | | |
|---------------------------------------|--------------------|--------|-----------|
| | 0.4 Sp. 1 | Pier | 0.6 Sp. 2 |
| Is | (in ⁴) | 14,229 | 20,362 |
| Ic(n) | (in ⁴) | 40,308 | 56,757 |
| Ic(3n) | (in ⁴) | 29,836 | 40,696 |
| Ic(cr) | (in ⁴) | - | - |
| Ss | (in ³) | 700 | 1,083 |
| Sc(n) | (in ³) | 1,014 | 1,494 |
| Sc(3n) | (in ³) | 931 | 1,376 |
| Sc(cr) | (in ³) | - | - |
| DC1 | (k/') | 0.96 | 1.00 |
| MDC1 | (k) | 276 | 1,018 |
| DC2 | (k/') | 0.25 | 0.25 |
| MDC2 | (k) | 82 | 258 |
| DW | (k/') | 0.37 | 0.37 |
| MDW | (k) | 120 | 379 |
| LLDF | | 0.582 | 0.559 |
| M _l + IM | (k) | 1,062 | 1,505 |
| Mu (Strength I) | (k) | 2,486 | 4,797 |
| Øf Mn | (k) | 5,259 | 7,084 |
| fs DC1 | (ksi) | 4.7 | 11.3 |
| fs DC2 | (ksi) | 1.1 | 2.3 |
| fs DW | (ksi) | 1.5 | 3.3 |
| fs (l+IM) | (ksi) | 12.6 | 12.1 |
| fs (Service II) | (ksi) | 23.7 | 32.5 |
| 0.95Rh Fyf | (ksi) | 47.5 | 47.5 |
| fs (Total)(Strength I) (ksi) | | - | - |
| Øf Fn | (ksi) | - | - |
| Vf | (k) | 58.7 | 54.9 |

| FLARED INTERIOR GIRDER MOMENT TABLE | | | |
|-------------------------------------|--------------------|--------|-----------|
| | 0.4 Sp. 1 | Pier | 0.6 Sp. 2 |
| Is | (in ⁴) | 14,229 | 20,362 |
| Ic(n) | (in ⁴) | 41,577 | 56,757 |
| Ic(3n) | (in ⁴) | 31,216 | 40,696 |
| Ic(cr) | (in ⁴) | - | - |
| Ss | (in ³) | 700 | 1,083 |
| Sc(n) | (in ³) | 1,023 | 1,494 |
| Sc(3n) | (in ³) | 944 | 1,376 |
| Sc(cr) | (in ³) | - | - |
| DC1 | (k/') | 1.07 | 1.00 |
| MDC1 | (k) | 350 | 999 |
| DC2 | (k/') | 0.25 | 0.25 |
| MDC2 | (k) | 82 | 259 |
| DW | (k/') | 0.42 | 0.37 |
| MDW | (k) | 160 | 373 |
| LLDF | | 0.644 | 0.559 |
| M _l + IM | (k) | 1,181 | 1,502 |
| Mu (Strength I) | (k) | 2,847 | 4,761 |
| Øf Mn | (k) | 5,240 | 7,084 |
| fs DC1 | (ksi) | 6.0 | 11.1 |
| fs DC2 | (ksi) | 1.0 | 2.3 |
| fs DW | (ksi) | 2.0 | 3.3 |
| fs (l+IM) | (ksi) | 13.9 | 12.1 |
| fs (Service II) | (ksi) | 27.1 | 32.3 |
| 0.95Rh Fyf | (ksi) | 47.5 | 47.5 |
| fs (Total)(Strength I) (ksi) | | - | - |
| Øf Fn | (ksi) | - | - |
| Vf | (k) | 65.8 | 54.8 |

| EXTERIOR GIRDER REACTION TABLE | | | |
|--------------------------------|-----------|-------|----------|
| | S. Abut. | Pier | N. Abut. |
| LLDF | 0.709 | 0.709 | 0.709 |
| OCF | 1.000 | - | 1.000 |
| RDC1 | (k) 24.1 | 127.3 | 43.9 |
| RDC2 | (k) 6.7 | 32.7 | 11.4 |
| RDW | (k) 7.6 | 37.0 | 12.9 |
| R _l | (k) 61.4 | 128.4 | 68.4 |
| R _{IM} | (k) 14.6 | 24.8 | 15.1 |
| RTotal | (k) 114.4 | 350.3 | 151.6 |

| STRAIGHT INTERIOR GIRDER REACTION TABLE | | | |
|-----------------------------------------|-----------|-------|----------|
| | S. Abut. | Pier | N. Abut. |
| LLDF | 0.767 | 0.767 | 0.767 |
| OCF | 1.000 | - | 1.000 |
| RDC1 | (k) 25.4 | 133.9 | 46.1 |
| RDC2 | (k) 6.7 | 32.7 | 11.4 |
| RDW | (k) 9.8 | 47.9 | 16.7 |
| R _l | (k) 66.4 | 138.9 | 74.0 |
| R _{IM} | (k) 15.8 | 26.9 | 16.4 |
| RTotal | (k) 124.1 | 380.3 | 164.6 |

| FLARED INTERIOR GIRDER REACTION TABLE | | | |
|---------------------------------------|-----------|-------|----------|
| | S. Abut. | Pier | N. Abut. |
| LLDF | 0.901 | 0.767 | 0.767 |
| OCF | 1.018 | - | 1.000 |
| RDC1 | (k) 30.6 | 137.7 | 45.7 |
| RDC2 | (k) 6.7 | 32.7 | 11.4 |
| RDW | (k) 12.4 | 49.6 | 16.5 |
| R _l | (k) 78.1 | 138.9 | 74.0 |
| R _{IM} | (k) 18.5 | 26.9 | 16.4 |
| RTotal | (k) 146.4 | 385.7 | 164.0 |

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_l + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).

1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_l + IM

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

MDC1/ Ss

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

MDC2/ Sc(3n) or MDC2/ Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

MDW/ Sc(3n) or MDW/ Sc(cr) as applicable.

fs (l+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

M_l + IM / Sc(n) or M_l + IM / Sc(cr) as applicable.

fs (Service II): Sum of stresses as computed below (ksi).

fsDC1 + fsDC2 + fsDW + 1.3 fs(l+IM)

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).

1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(l+IM)

Øf Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

LLDF: Live Load Distribution Factor

OCF: Obtuse Correction Factor

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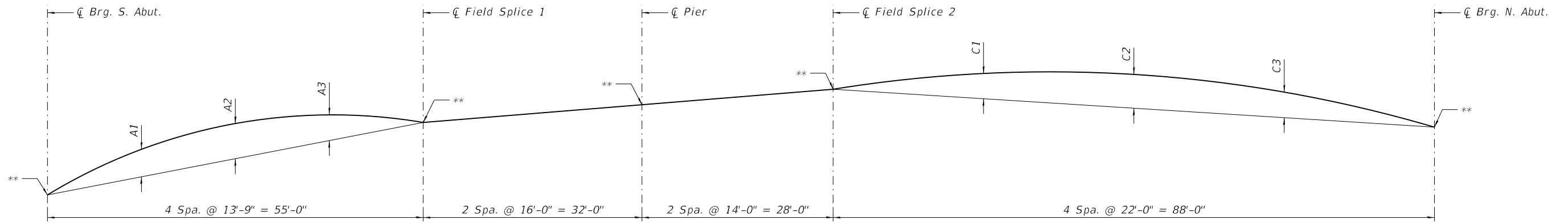
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| | CHECKED - DD | REVISED - |
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| PLOT DATE = 4/29/2021 | CHECKED - DD | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER MOMENT & REACTION TABLES
STRUCTURE NO. 058-9202

SHEET NO. 5F-22 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 692 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

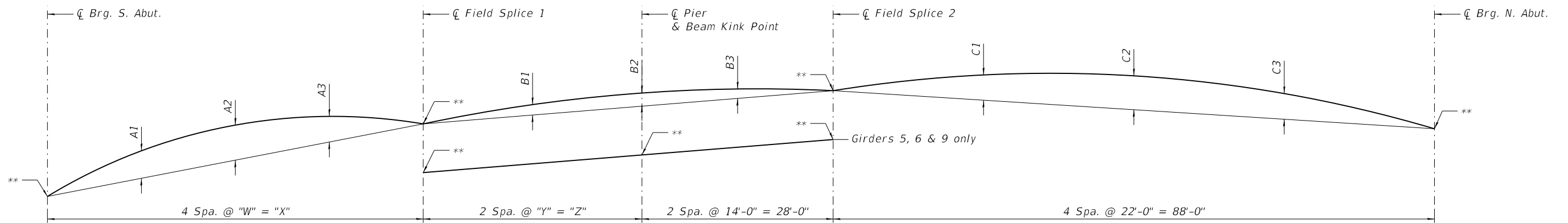


CAMBER DIAGRAM - GIRDERS 1 THRU 4

** Top of Web Elevations

**CAMBER DIMENSIONS
GIRDERS 1 THRU 4**

| Girder | A1 | A2 | A3 | C1 | C2 | C3 |
|--------|--------|--------|--------|--------|--------|--------|
| ① | 1 3/8" | 2 1/8" | 1 1/2" | 4" | 5 3/8" | 3 3/4" |
| ② | 1 3/8" | 2" | 1 1/2" | 4" | 5 1/4" | 3 3/4" |
| ③ | 1 3/8" | 2" | 1 1/2" | 3 7/8" | 5 1/4" | 3 5/8" |
| ④ | 1 3/8" | 2 1/8" | 1 1/2" | 3 7/8" | 5 1/8" | 3 5/8" |



CAMBER DIAGRAM - GIRDERS 5 THRU 9

** Top of Web Elevations

**CAMBER DIMENSIONS
GIRDERS 5 THRU 9**

| Girder | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | C3 | "W" | "X" | "Y" | "Z" |
|--------|--------|--------|--------|------|------|------|--------|--------|--------|-------------|-------------|--------------|---------------|
| ⑤ | 1 1/4" | 1 7/8" | 1 3/8" | 0" | 0" | 0" | 3 7/8" | 5 1/8" | 3 3/8" | 13'-9 1/16" | 55'-0 1/8" | ±16'-1/16" | 32'-0 1/16" |
| ⑥ | 1 1/4" | 1 7/8" | 1 3/8" | 0" | 0" | 0" | 3 7/8" | 5 1/8" | 3 3/8" | 13'-9 3/16" | 55'-0 3/8" | 16'-0 3/16" | 32'-0 3/8" |
| ⑦ | 1 1/4" | 1 7/8" | 1 3/8" | 1/2" | 3/4" | 1/2" | 3 7/8" | 5 1/8" | 3 3/8" | ±13'-9 3/8" | 55'-1 1/16" | ±16'-0 1/16" | 32'-0 1 3/16" |
| ⑧ | 1 1/4" | 2" | 1 1/2" | 1/2" | 3/4" | 1/2" | 3 7/8" | 5 1/4" | 3 3/8" | ±13'-9 3/8" | 55'-2 9/16" | 16'-0 3/4" | 32'-1 1/2" |
| ⑨ | 1 3/8" | 2 1/8" | 1 5/8" | 0" | 0" | 0" | 4" | 5 1/4" | 3 3/4" | 13'-10" | 55'-4" | ±16'-1 3/16" | 32'-2 5/16" |

| TOP OF WEB ELEVATIONS * | | | | | |
|-------------------------|-----------------|------------|--------|------------|-----------------|
| Girder | ☐ Brg. S. Abut. | ☐ Splice 1 | ☐ Pier | ☐ Splice 2 | ☐ Brg. N. Abut. |
| ① | 701.55 | 702.51 | 702.84 | 703.13 | 702.53 |
| ② | 701.68 | 702.65 | 702.98 | 703.27 | 702.67 |
| ③ | 701.81 | 702.80 | 703.13 | 703.41 | 702.82 |
| ④ | 701.94 | 702.94 | 703.27 | 703.56 | 702.97 |
| ⑤ | 701.94 | 702.88 | 703.20 | 703.49 | 702.90 |
| ⑥ | 701.73 | 702.72 | 703.05 | 703.34 | 702.75 |
| ⑦ | 701.53 | 702.56 | 702.96 | 703.20 | 702.61 |
| ⑧ | 701.33 | 702.45 | 702.86 | 703.10 | 702.51 |
| ⑨ | 701.42 | 702.57 | 702.91 | 703.21 | 702.62 |

* For fabrication only

MODEL SHEET
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| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - MCC | REVISED - |
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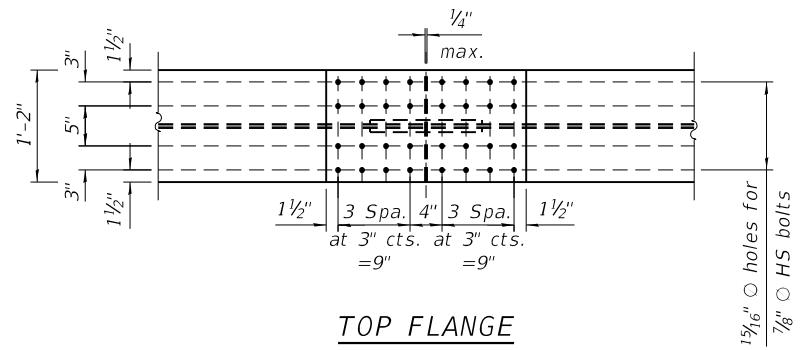
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GIRDER CAMBER DIAGRAM
STRUCTURE NO. 058-9202**

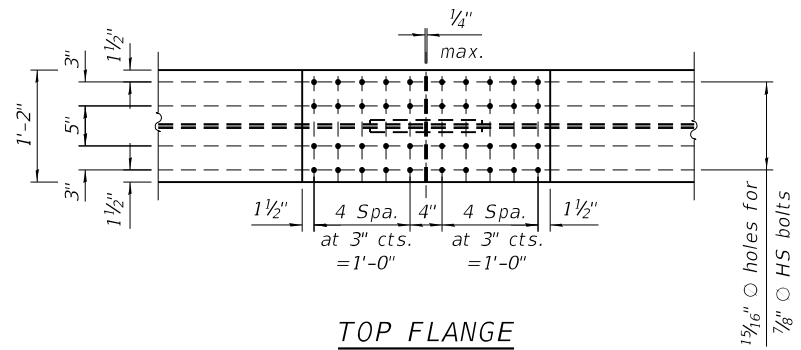
SHEET NO. 5F-23 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 693 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

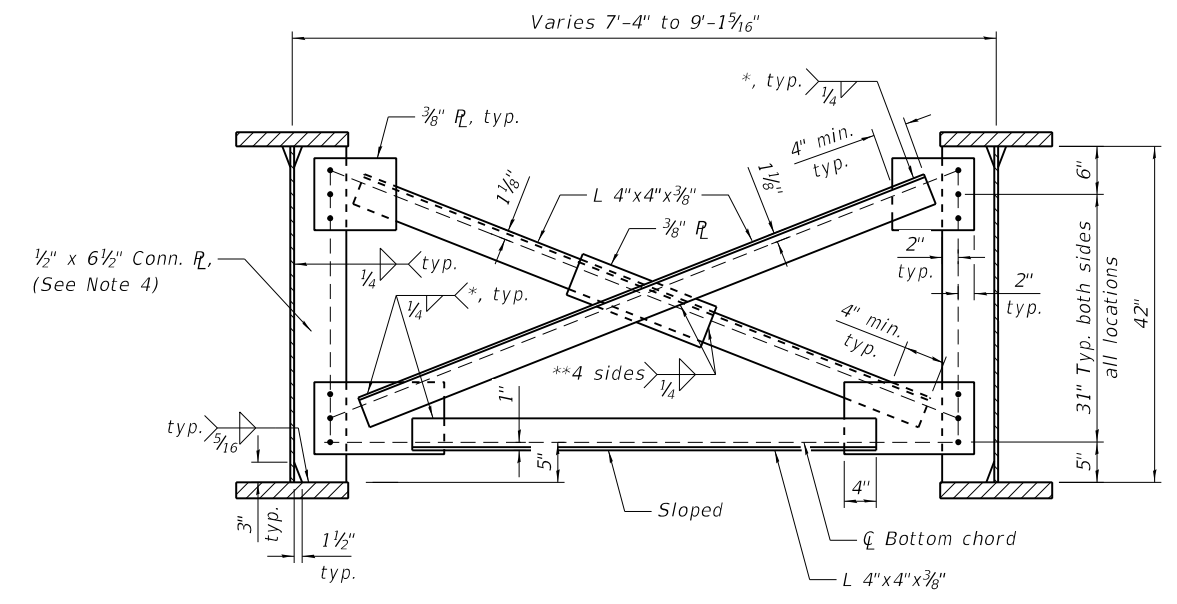
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TOP FLANGE



TOP FLANGE

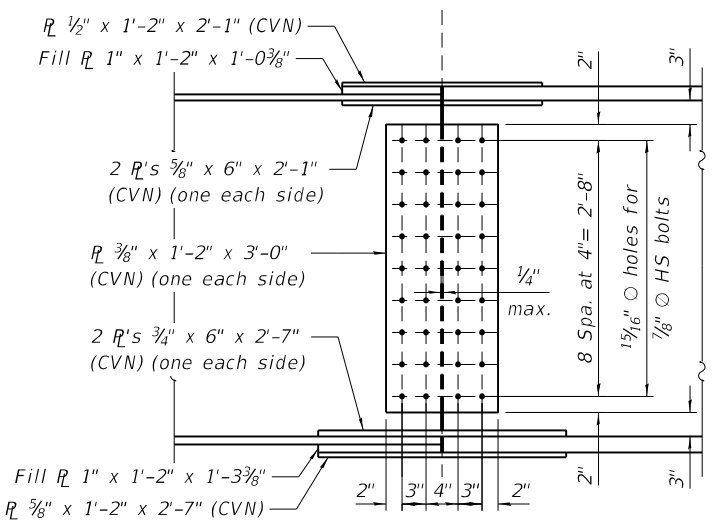


INTERIOR CROSS-FRAMES
(80 Required)

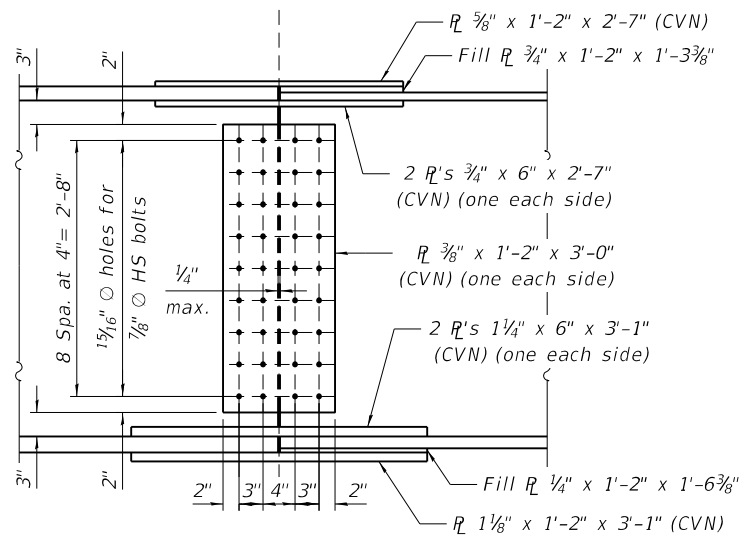
Note: Two hardened washers required for each set of oversized holes.

* Fillet weld angles along 3 sides on one face of gusset plate; however, if cross-frames are galvanized, weld all-around.

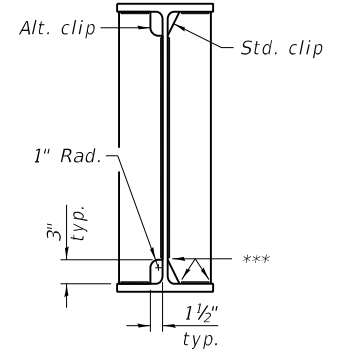
** If cross-frames are galvanized, weld all-around.



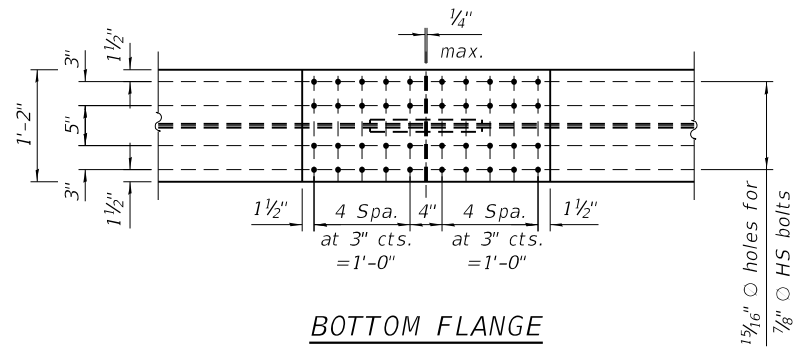
ELEVATION



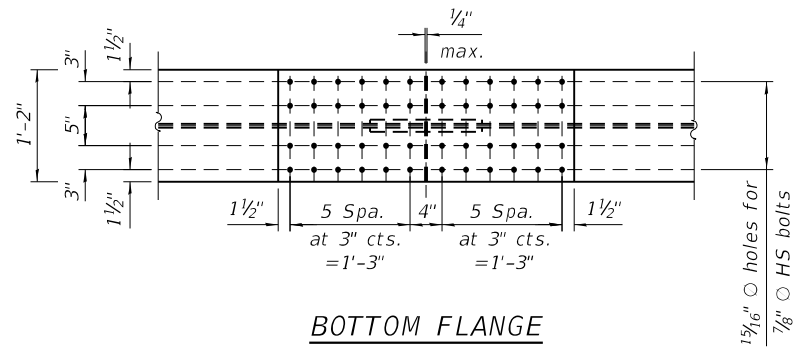
ELEVATION



WELD LIMITS AND CLIP DETAILS
*** Stop welds 1/4" (±1/8") from edges as shown. Typical.



BOTTOM FLANGE
FIELD SPLICE 1 DETAIL
(9 Required)



BOTTOM FLANGE
FIELD SPLICE 2 DETAIL
(9 Required)

- NOTES:**
- "CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.
 - All structural steel shall be AASHTO M270 Grade 50.
 - All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
 - Connection plate for cross-frames CF1 thru CF5. For CF6, connect cross frame members to R 1" x 6 1/2" pier bearing stiffener.



| | | |
|----------------------|----------------|-----------|
| USER NAME = DabericD | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/6/2023 | DRAWN - GF | REVISED - |
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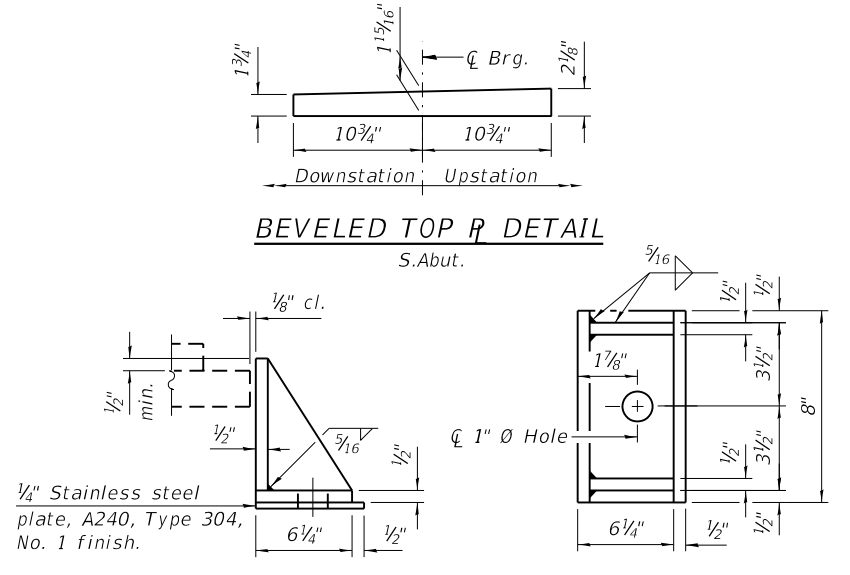
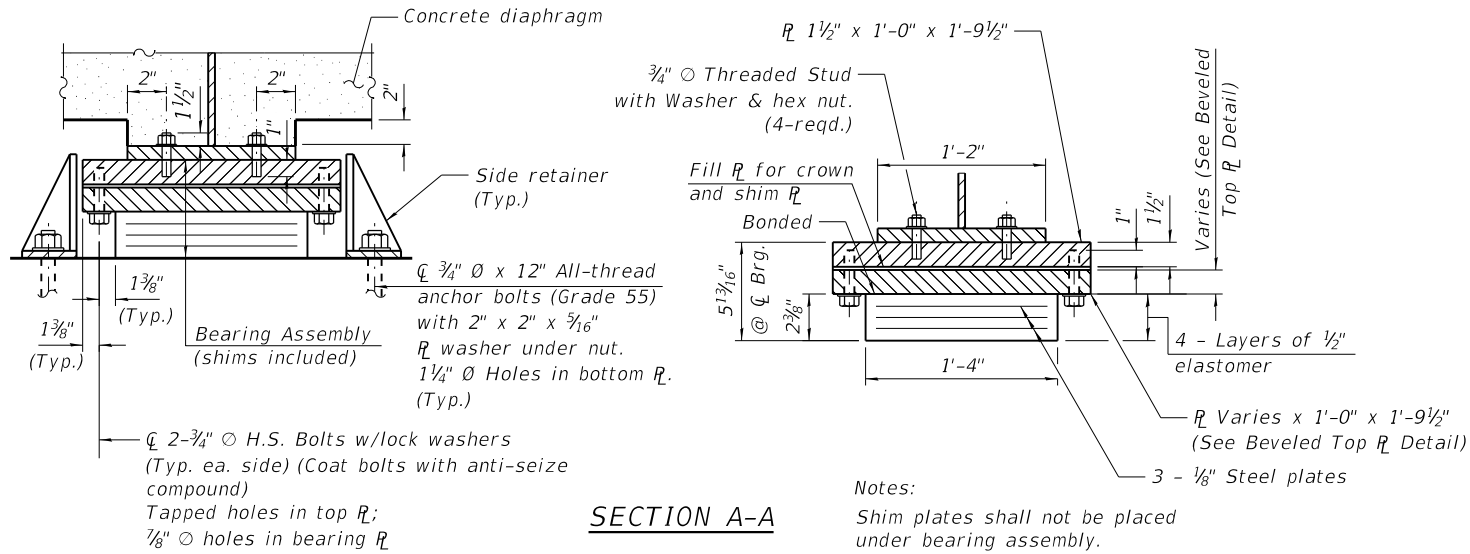
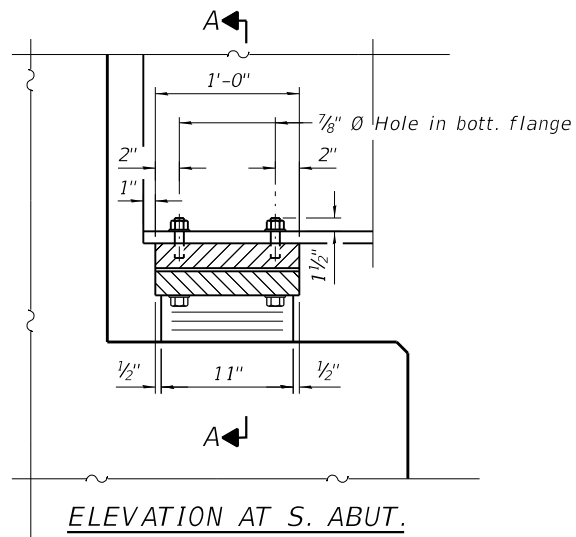
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
STRUCTURE NO. 058-9202

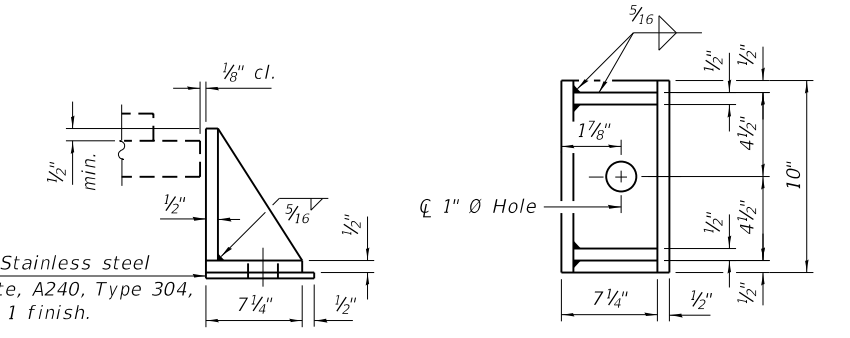
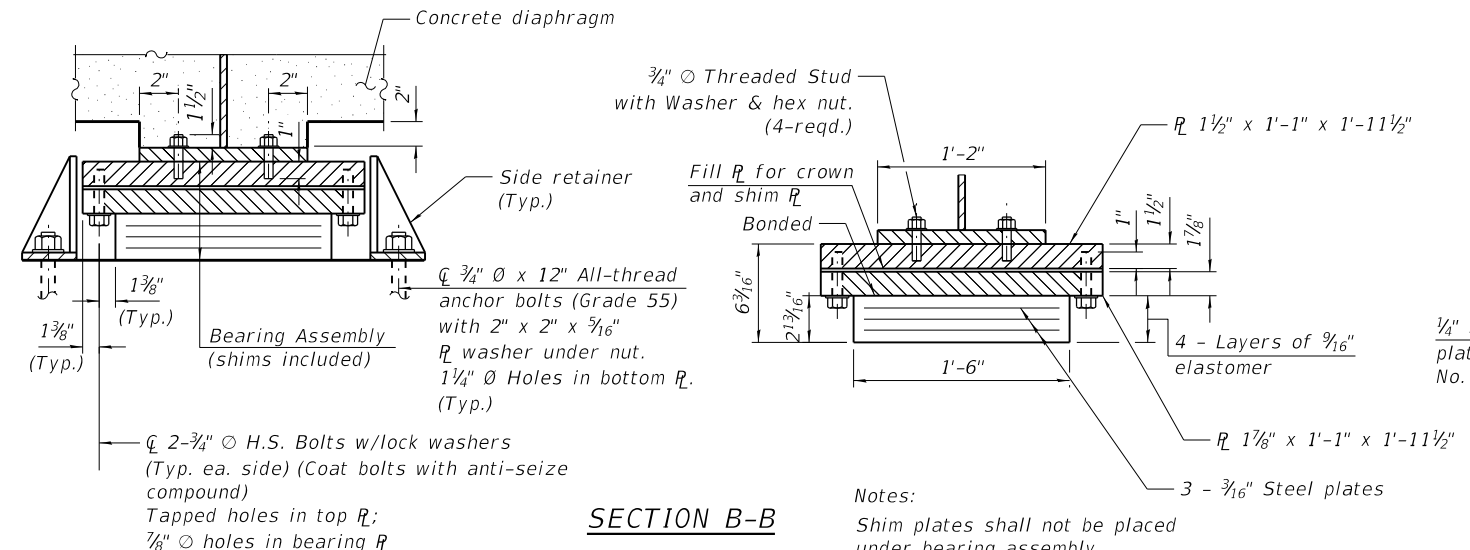
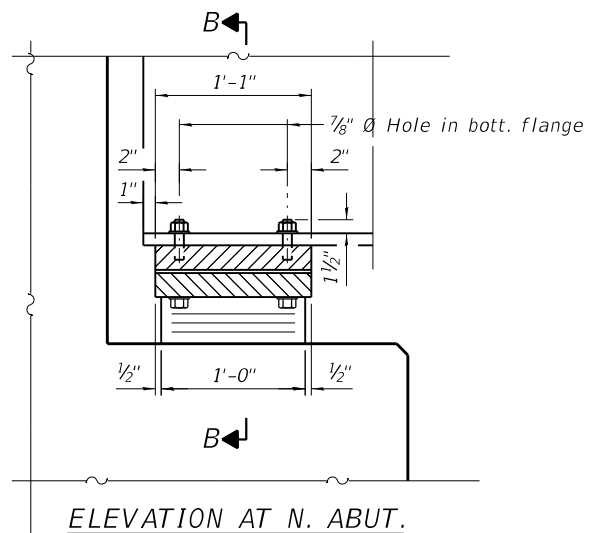
SHEET NO. SF-24 OF SF-35 SHEETS

| | | | | |
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| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 694 |
| CONTRACT NO. 95893 | | | | |

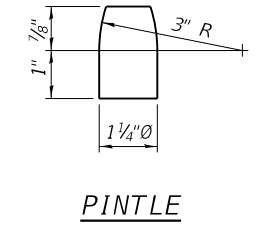
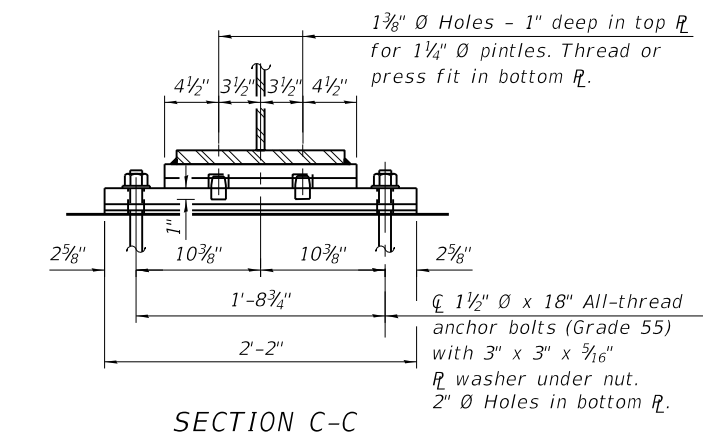
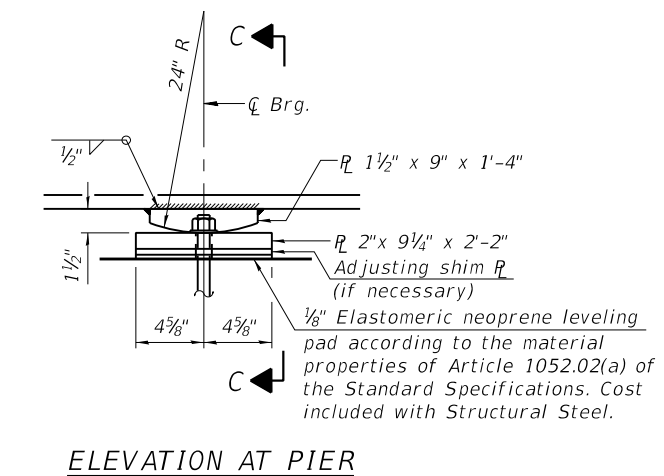
ILLINOIS FED. AID PROJECT



TYPE I ELASTOMERIC EXPANSION BEARING AT SOUTH ABUTMENT



TYPE I ELASTOMERIC EXPANSION BEARING AT NORTH ABUTMENT



SHIM R TABLE

| Location | Girder | Thickness |
|----------|--------|-----------|
| Pier | 9 | 1/2" |

Notes:
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50. Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternative material) of the grades and diameters specified. The corresponding specified grade of AASHTO M 314 anchor bolts may be used in lieu of ASTM F1554. Anchor bolts shall be according to Article 521.06 of the Standard Specifications. Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I. Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used. Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Fixed Bearing Assembly included in "Furnishing and Erecting Structural Steel".

BILL OF MATERIAL

| Item | Unit | Total |
|-------------------------------------|------|-------|
| Elastomeric Bearing Assembly Type I | Each | 18 |
| Anchor Bolts, 3/4" | Each | 36 |
| Anchor Bolts, 1 1/2" | Each | 18 |

MODEL: Sheet
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I-2E-1 6-15-2019

| | | |
|----------------------------|---------------|-----------|
| USER NAME = monica.crinion | DESIGNED - BD | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - DD | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - BD | REVISED - |
| | CHECKED - DD | REVISED - |

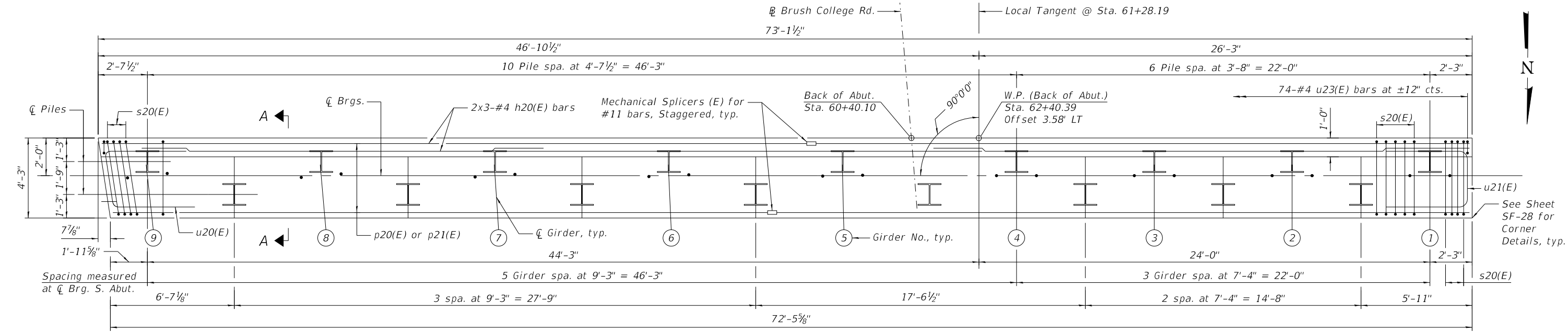
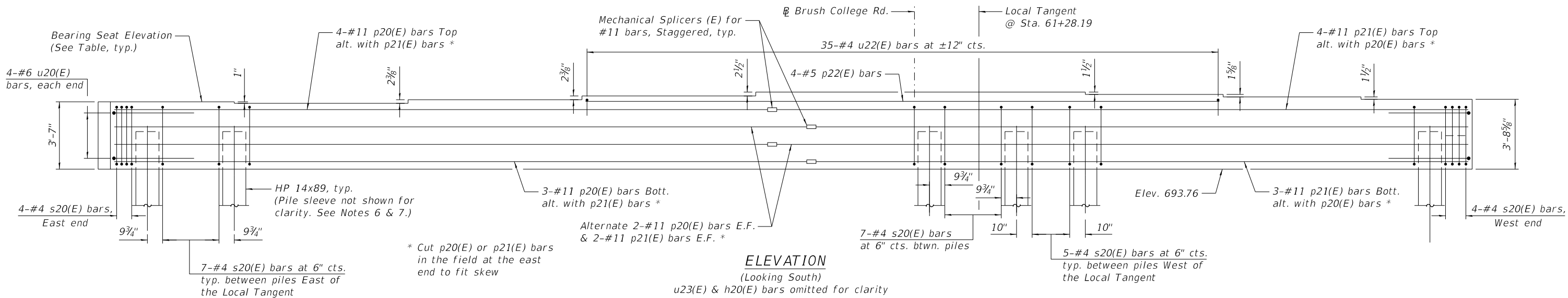
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS
 STRUCTURE NO. 058-9202**

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 695 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. 5F-25 OF 5F-35 SHEETS

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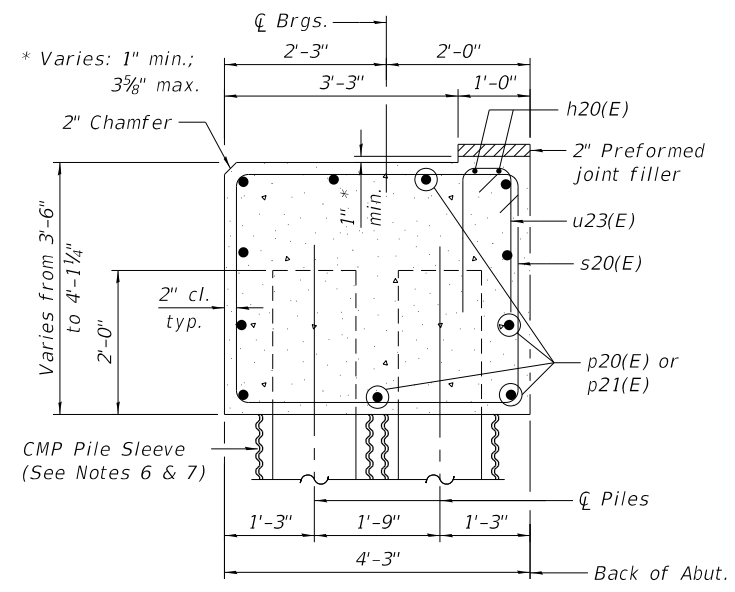


TOP OF SEAT ELEVATION

| Girder No. | Elevation |
|------------|-----------|
| 1 | 697.48 |
| 2 | 697.61 |
| 3 | 697.74 |
| 4 | 697.87 |
| 5 | 697.87 |
| 6 | 697.66 |
| 7 | 697.46 |
| 8 | 697.26 |
| 9 | 697.34 |

PILE DATA

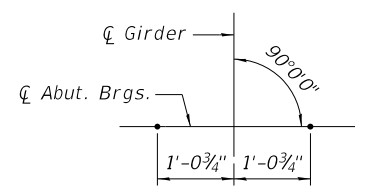
Type: 14x89 w/Pile Shoes
 Nominal Required Bearing: 503 kips
 Factored Resistance Available: 251 kips
 Est. Length: 75 ft.
 No. Production Piles: 16
 No. Test Piles: 1



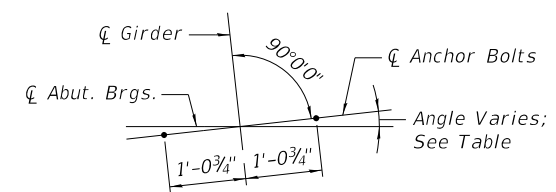
SECTION A-A

Section thru abutment;
Dimensions at right angles to abutment

PLAN



GIRDERS 1 THRU 4 ANCHOR BOLT LAYOUT



GIRDERS 5 THRU 9 ANCHOR BOLT LAYOUT

| Girder No. | Angle |
|------------|----------|
| 5 | 1°15'43" |
| 6 | 2°31'22" |
| 7 | 3°46'53" |
| 8 | 5°2'10" |
| 9 | 6°17'9" |

MINIMUM BAR LAP
(Unless Noted Otherwise)
#4 bar = 2'-11"

NOTES

- See Sheet SF-28 for Bar Lists & Bill of Material.
- Space reinforcements in cap to miss anchor bolts.
- For anchor bolt details, see Sheet SF-25.
- Pour steps monolithically with cap.
- Bars noted thus, 2x3-#4 etc. indicates 2 lines of bars with 3 lengths per line.
- Pile sleeve shall extend from bottom of abutment cap elevation to 1'-0" below Theoretical Top of Leveling Pad of precast modular retaining wall. Cost included in the unit cost of Furnishing Steel Piles, HP14x89.
- For pile sleeve details, see Sheet SF-28.
- Orient pile webs parallel to the Local Tangent.
- For details of piles, see Sheet SF-31.
- For details and quantity of Mechanical Splicers, see Sheet SF-32.

E.F. = Each Face



| | | |
|----------------------------|----------------|-------------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISIONS - |
| PLOT SCALE = N.T.S. | CHECKED - ATB | REVISIONS - |
| PLOT DATE = 4/29/2021 | DRAWN - MCC | REVISIONS - |
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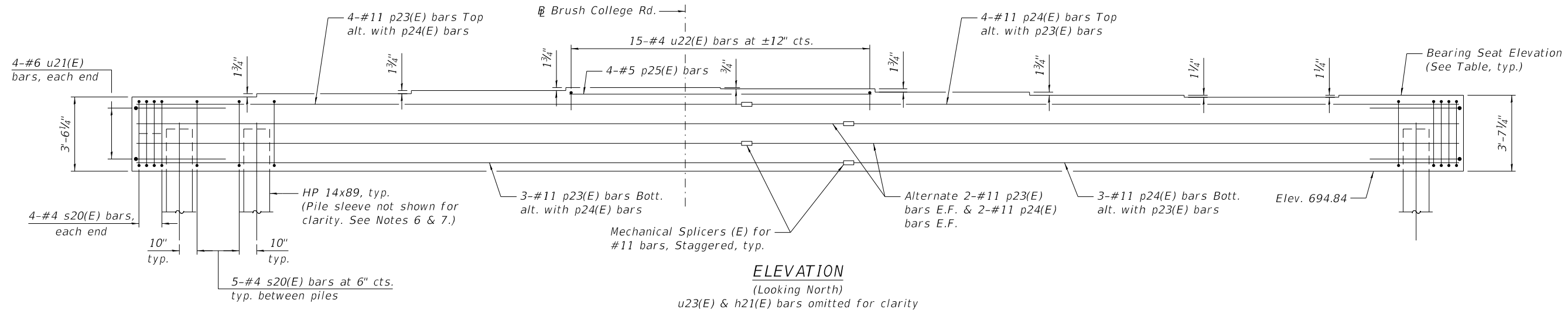
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT PLAN & ELEVATION
STRUCTURE NO. 058-9202

SHEET NO. SF-26 OF SF-35 SHEETS

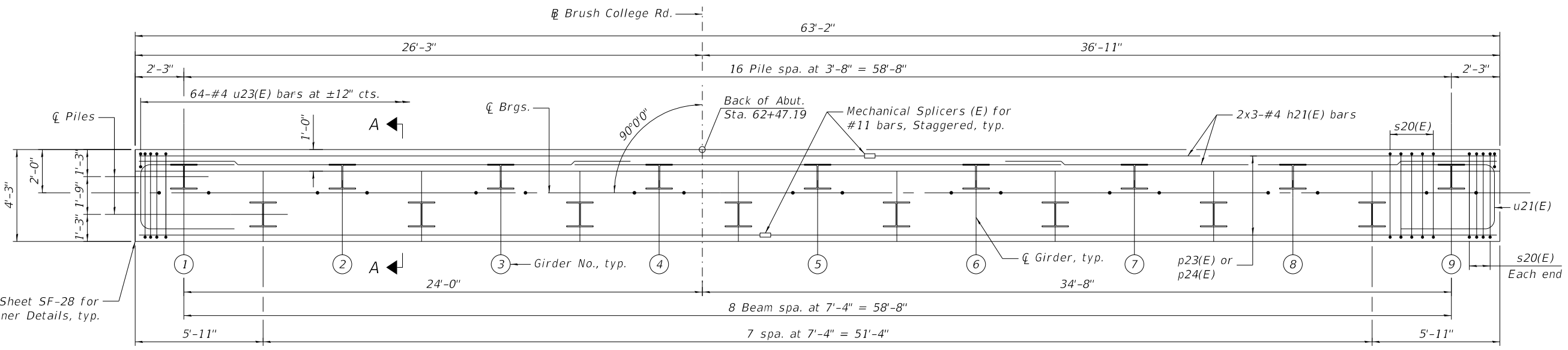
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 696 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL SHEET
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ELEVATION
(Looking North)

u23(E) & h21(E) bars omitted for clarity



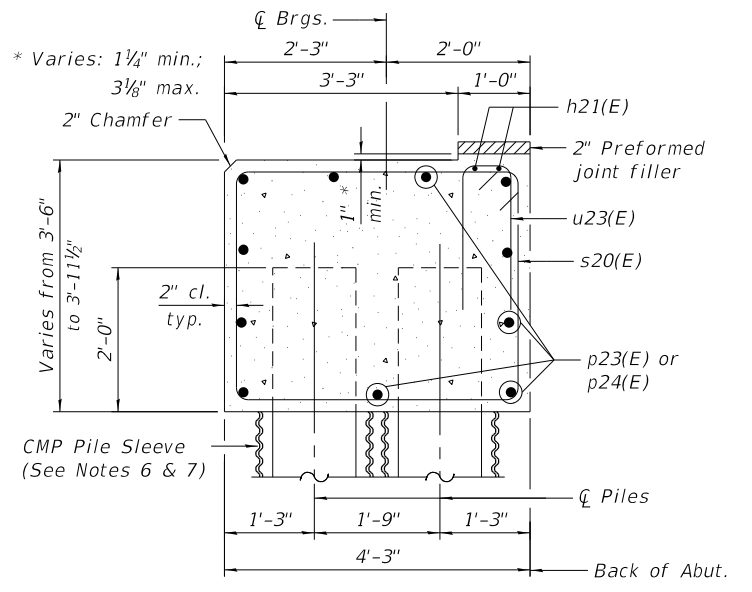
PLAN

TOP OF SEAT ELEVATION

| Girder No. | Elevation |
|------------|-----------|
| 1 | 698.36 |
| 2 | 698.51 |
| 3 | 698.65 |
| 4 | 698.80 |
| 5 | 698.74 |
| 6 | 698.59 |
| 7 | 698.44 |
| 8 | 698.34 |
| 9 | 698.44 |

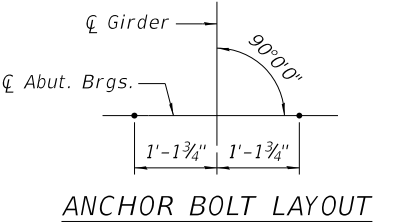
PILE DATA

Type: 14x89 w/Pile Shoes
 Nominal Required Bearing: 526 kips
 Factored Resistance Available: 224 kips
 Est. Length: 80 ft.
 No. Production Piles: 16
 No. Test Piles: 1



SECTION A-A

Section thru abutment;
Dimensions at right angles to abutment



ANCHOR BOLT LAYOUT

MINIMUM BAR LAP

(Unless Noted Otherwise)
#4 bar = 2'-11"

NOTES

- See Sheet SF-28 for Bar Lists & Bill of Material.
- Space reinforcements in cap to miss anchor bolts.
- For anchor bolt details, see Sheet SF-25.
- Pour steps monolithically with cap.
- Bars noted thus, 2x3-#4 etc. indicates 2 lines of bars with 3 lengths per line.
- Pile sleeve shall extend from bottom of abutment cap elevation to 1'-0" below Theoretical Top of Leveling Pad of precast modular retaining wall. Cost included in the unit cost of Furnishing Steel Piles, HP14x89.
- For pile sleeve details, see Sheet SF-28.
- Orient pile webs parallel to the Brush College Rd.
- For details of piles, see Sheet SF-31.
- For details and quantity of Mechanical Splicers, see Sheet SF-32.

E.F. = Each Face



| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - ATB | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - MCC | REVISED - |
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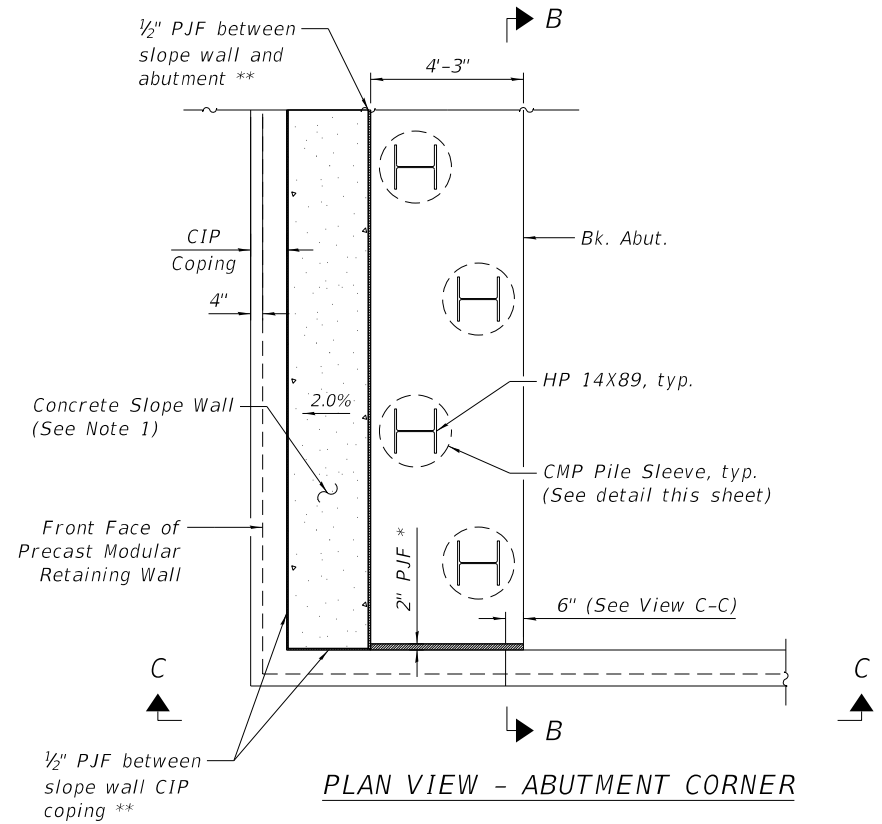
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT PLAN & ELEVATION
STRUCTURE NO. 058-9202

SHEET NO. SF-27 OF SF-35 SHEETS

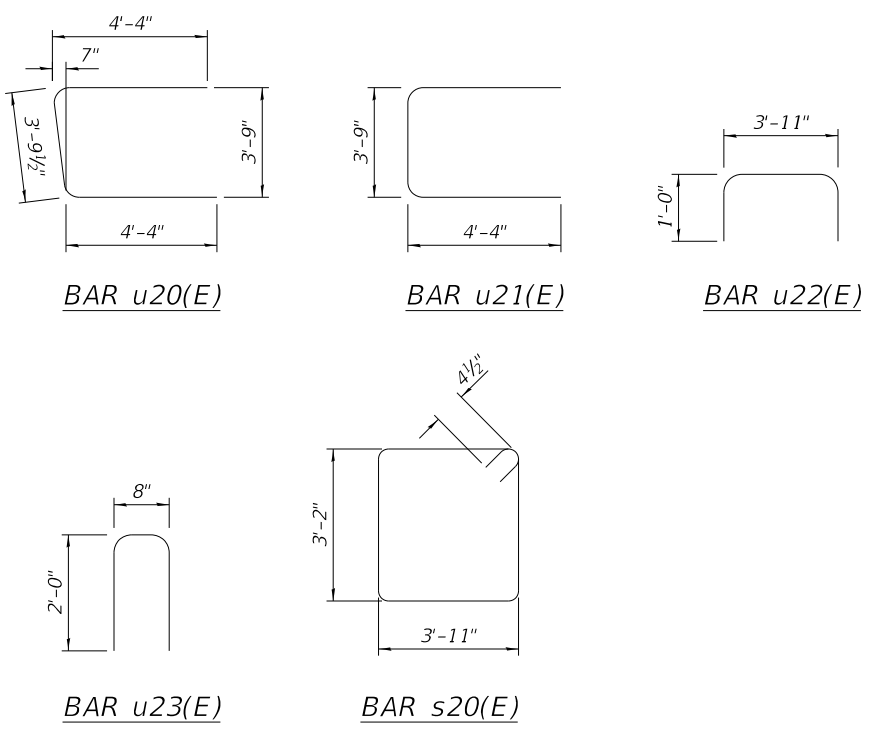
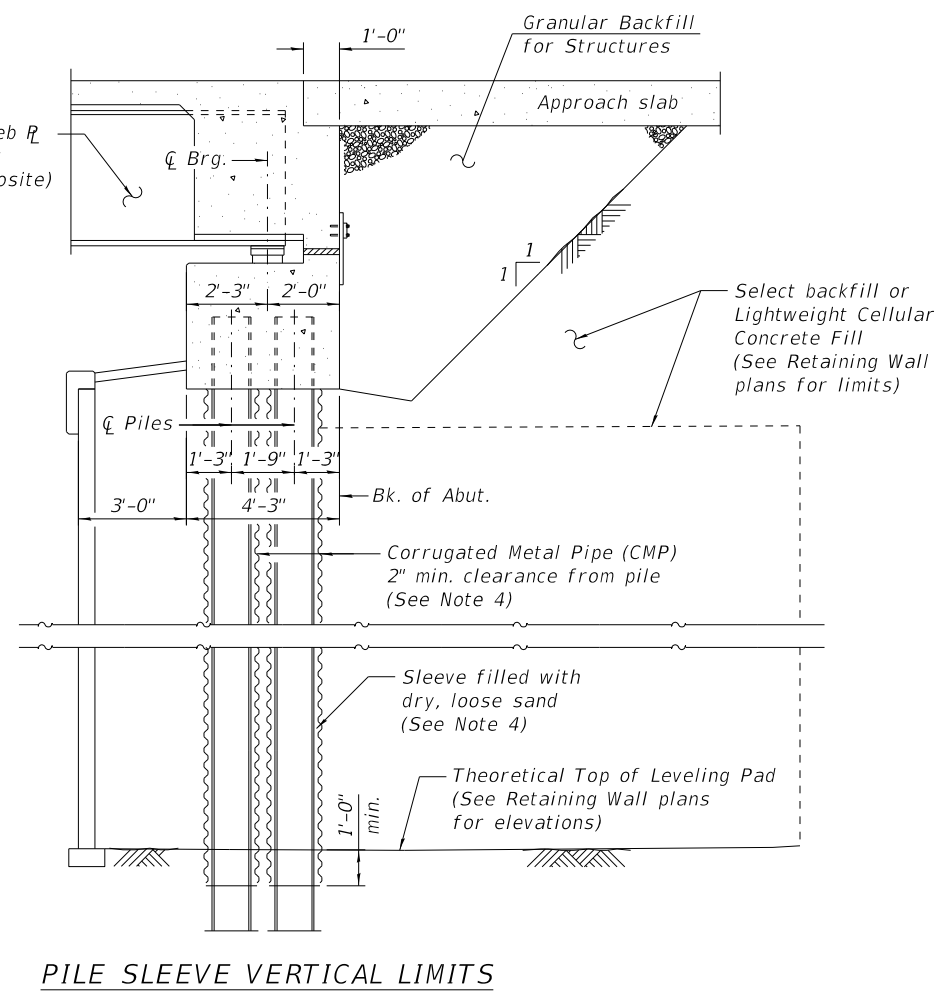
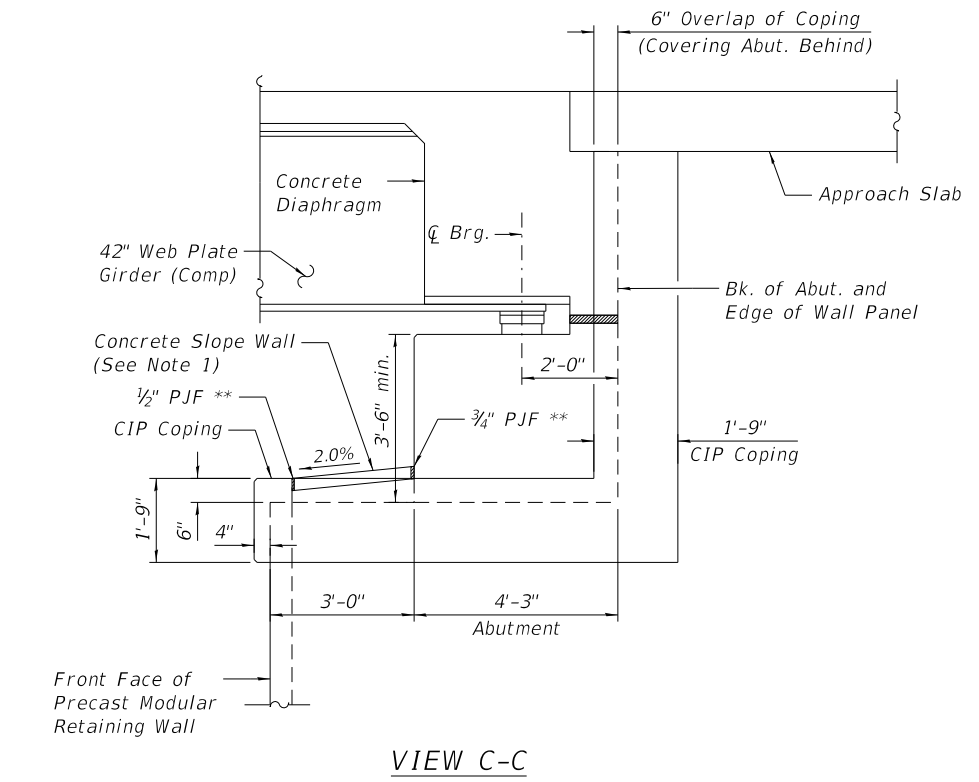
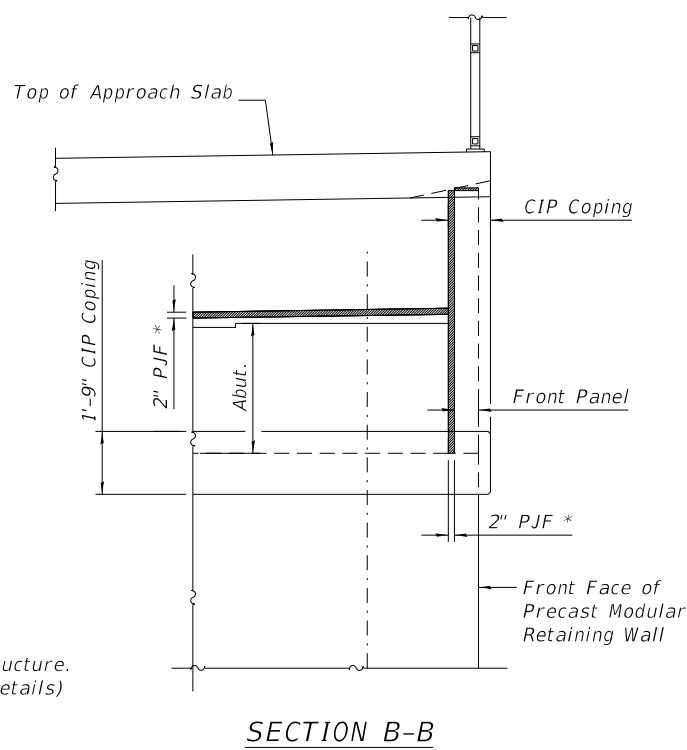
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 697 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MODEL Sheet
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* Cost included in Concrete Superstructure. (See Diaphragm Details)

** Cost included in Slope Wall 4 Inch.



S. ABUT. BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|-------|---------|-------|
| h20(E) | 6 | #4 | 26'-3" | — |
| p20(E) | 11 | #11 | 35'-0" | — |
| p21(E) | 11 | #11 | 37'-10" | — |
| p22(E) | 4 | #5 | 33'-8" | — |
| s20(E) | 108 | #4 | 14'-11" | □ |
| u20(E) | 4 | #6 | 12'-6" | ▭ |
| u21(E) | 4 | #6 | 12'-5" | ▭ |
| u22(E) | 35 | #4 | 5'-11" | ▭ |
| u23(E) | 74 | #4 | 4'-8" | ▭ |
| Concrete Structures | Cu. Yd. | 44.5 | | |
| Reinforcement Bars, Epoxy Coated | Pound | 6,100 | | |
| Furnishing Steel Piles HP 14x89 | Foot | 1,200 | | |
| Driving Piles | Foot | 1,200 | | |
| Test Pile HP14x89 | Each | 1 | | |
| Pile Shoes | Each | 17 | | |

N. ABUT. BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|-------|---------|-------|
| h21(E) | 6 | #4 | 22'-11" | — |
| p23(E) | 11 | #11 | 29'-0" | — |
| p24(E) | 11 | #11 | 33'-10" | — |
| p25(E) | 4 | #5 | 14'-4" | — |
| s20(E) | 88 | #4 | 14'-11" | □ |
| u21(E) | 8 | #6 | 12'-5" | ▭ |
| u22(E) | 15 | #4 | 5'-11" | ▭ |
| u23(E) | 64 | #4 | 4'-8" | ▭ |
| Concrete Structures | Cu. Yd. | 37.3 | | |
| Reinforcement Bars, Epoxy Coated | Pound | 5,110 | | |
| Furnishing Steel Piles HP 14x89 | Foot | 1,280 | | |
| Driving Piles | Foot | 1,280 | | |
| Test Pile HP14x89 | Each | 1 | | |
| Pile Shoes | Each | 17 | | |

- NOTES:**
- Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost included in Slope Wall 4 Inch pay item.
 - See Retaining Wall Plans for CIP coping details.
 - See Sheet SF-14 for diaphragm details.
 - Cost of CMP pile sleeve and filling annulus with dry, loose sand shall be included in cost of Furnishing Steel Piles, HP 14x89.
 - For details of Piles, see Sheet SF-31.
 - See Sheet SF-26 and SF-27 for pile spacing.



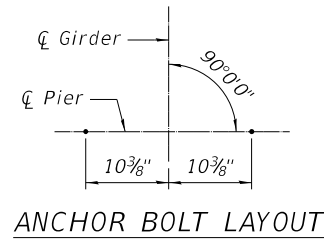
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| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - ATB | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - MCC | REVISED - |
| | CHECKED - ATB | REVISED - |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

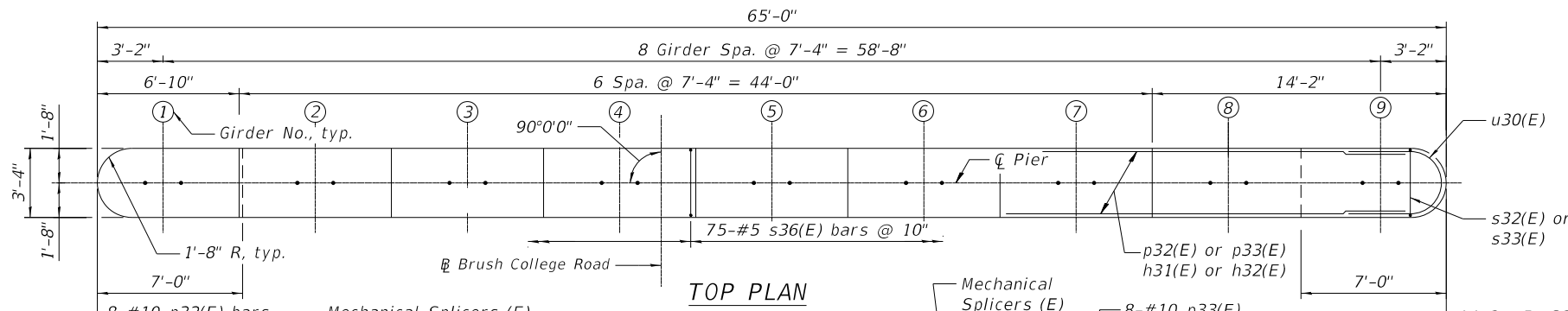
ABUTMENT DETAILS STRUCTURE NO. 058-9202

SHEET NO. 5F-28 OF 5F-35 SHEETS

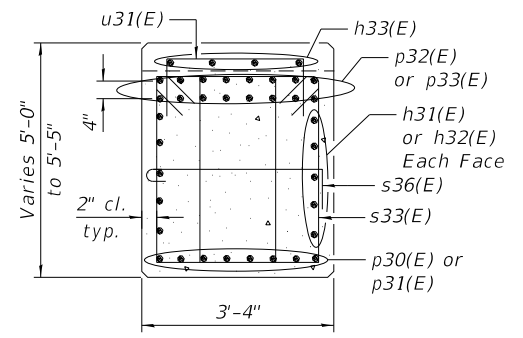
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
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| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



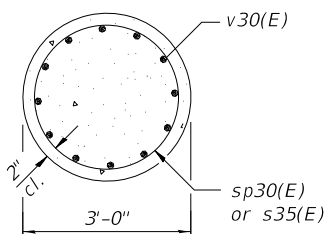
ANCHOR BOLT LAYOUT



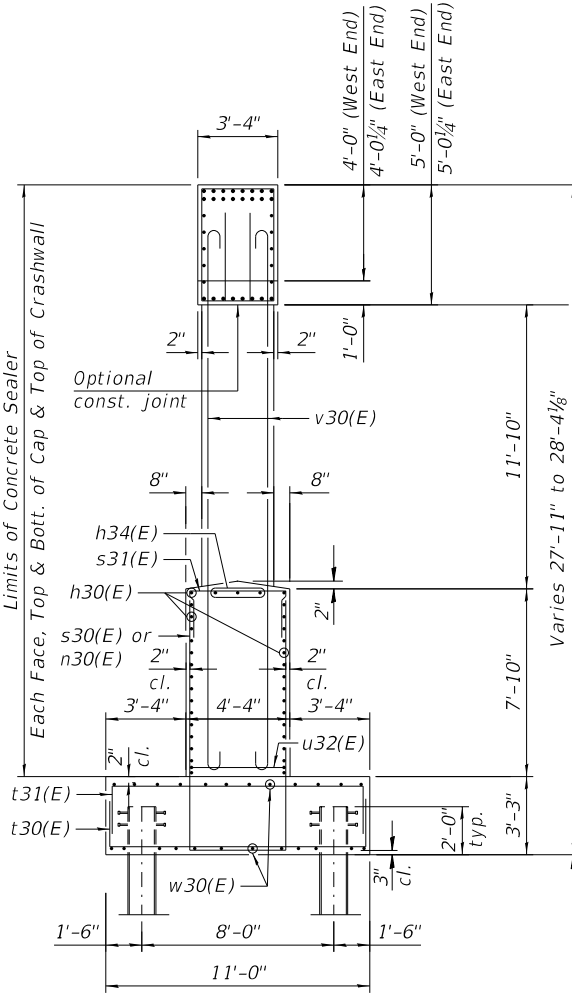
TOP PLAN



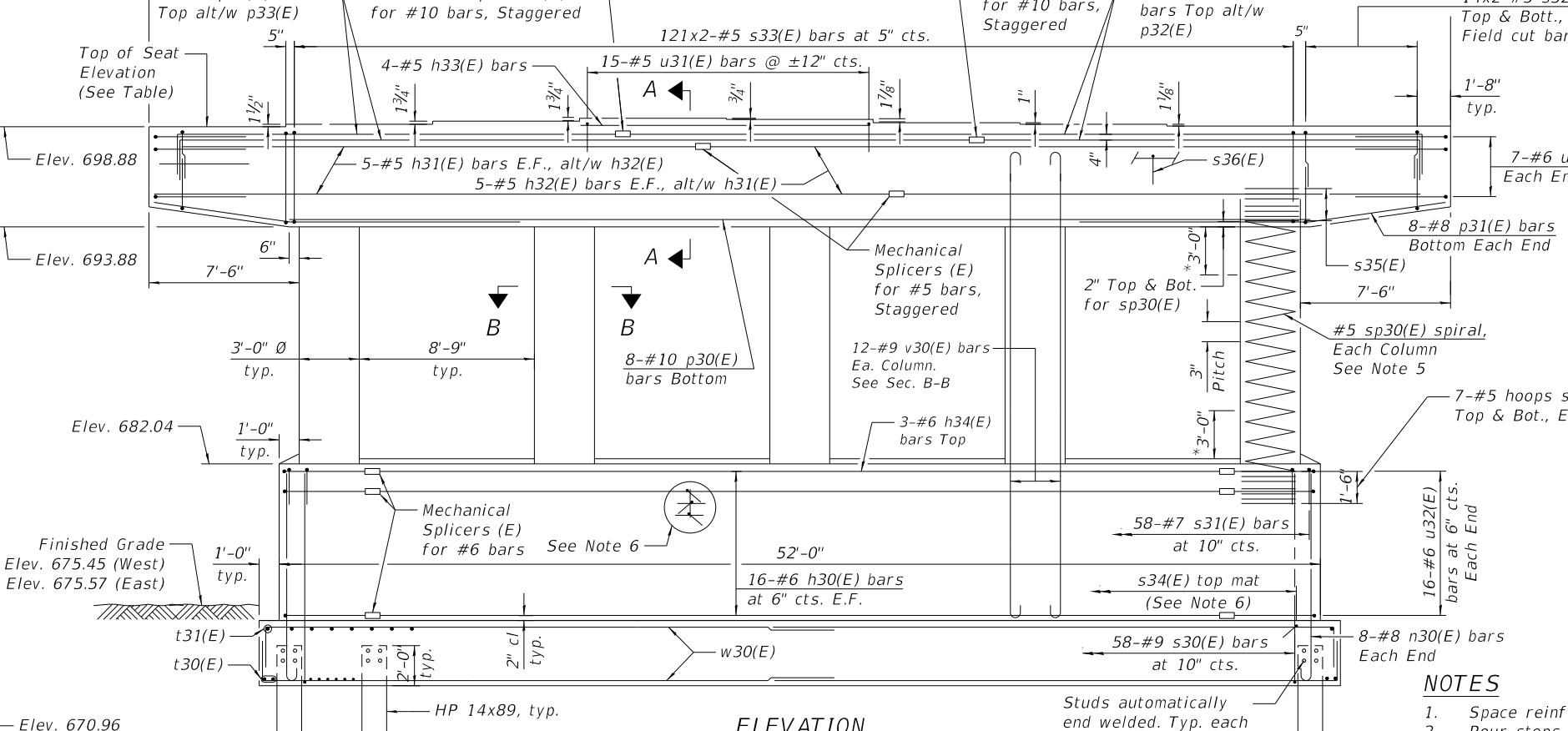
SEC. A-A



SEC. B-B



END VIEW



ELEVATION
(Looking North)

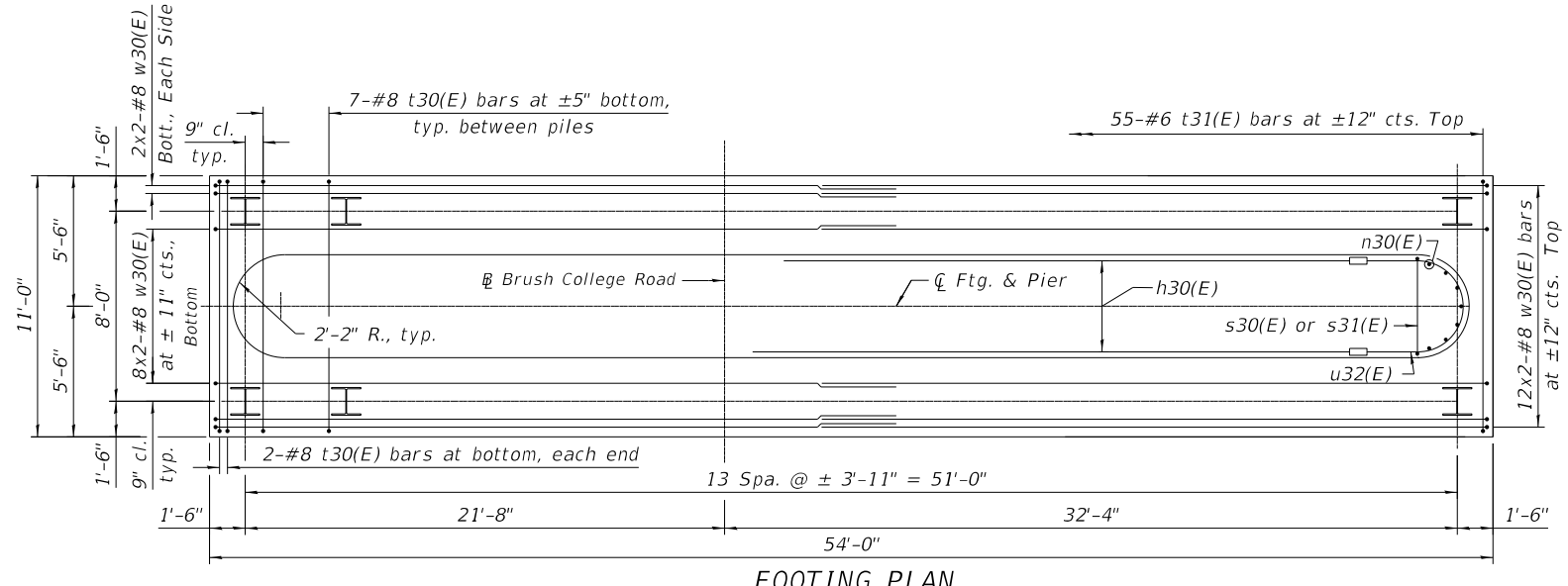
TOP OF SEAT
ELEVATION

| Girder No. | Elevation |
|------------|-----------|
| 1 | 698.88 |
| 2 | 699.01 |
| 3 | 699.15 |
| 4 | 699.30 |
| 5 | 699.23 |
| 6 | 699.08 |
| 7 | 698.99 |
| 8 | 698.90 |
| 9 | 698.90 |

NOTES

- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- Bars noted thus, 8x2-#10 etc. indicates 8 lines of bars with 2 lengths per line.
- For details of piles, see Sheet SF-31.
- #5 sp30(E) spiral, each column
 - Provide 1 1/2 extra turns, shop welded together per AWS D1.4 top and bottom. Extend spiral 2" into pier cap & crashwall. Provide 4-#4 spacers or equivalent.
 - When splicing spiral reinforcement is necessary, the spiral shall be provided with 1 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4. or shall both terminate with a 135° standard hook.
- The s34(E) cross-tie bars shall be placed so that orientation of 180° hook of two successive cross-ties alternate end to end. A single layer of bars shall be provided across top mat of footing reinforcement. Space bars as follows:
 - 16-#5 s34(E) 6" (vert) x 58 @ 10" (horiz)
 - For anchor bolt details, see Sheet SF-25.
 - For Girder 9 shim plate details, see Sheet SF-25
 - For details and quantity of Mechanical Splicers, see Sheet SF-32.

* Splicing of reinforcement will not be allowed in this region.
E.F. Each Face



FOOTING PLAN

MINIMUM BAR LAP
(Unless Noted Otherwise)

- #5 bar = 3'-7"
- #6 bar = 4'-4"
- #8 bar = 5'-9"

PILE DATA

Type: 14x89 w/Pile Shoes
Nominal Required Bearing: 608 kips
Factored Resistance Available: 334 kips
Est. Length: 62 ft
No. Production Piles: 27
No. Test Piles: 1

MODEL: Sheet
FILE NAME: pw:\aecom-nw-bentley.com\AECOM_D51E_MIA\Documents\60603202-Brush_College\09-CAD_GS1910_CAD\03_SHEETS\10_LAECOM\Structural\60603202_5-29_Pier.dgn



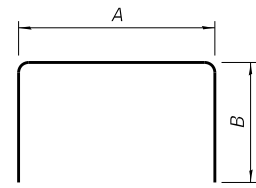
| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| PLOT SCALE = N.T.S. | CHECKED - ATB | REVISED - |
| PLOT DATE = 4/29/2021 | DRAWN - MK | REVISED - |
| | CHECKED - MCC | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER PLAN & ELEVATION
STRUCTURE NO. 058-9202

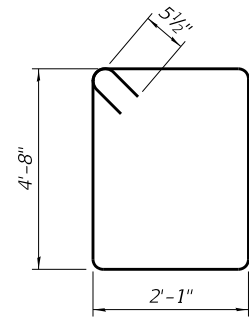
SHEET NO. 5F-29 OF 5F-35 SHEETS

| | | | | |
|---------------------------|----------------|--------|--------------|-----------|
| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 7448 | 09-00933-01-BR | MACON | 1019 | 699 |
| CONTRACT NO. 95893 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

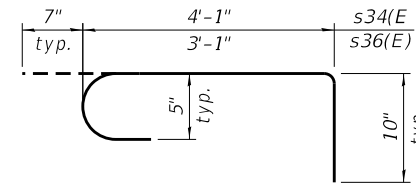


| Bar | A | B |
|--------|--------|--------|
| s30(E) | 4'-0" | 10'-5" |
| s31(E) | 4'-0" | 3'-5" |
| s32(E) | 3'-0" | 4'-2" |
| u31(E) | 3'-0" | 1'-0" |
| t30(E) | 10'-8" | 2'-0" |
| t31(E) | 10'-8" | 2'-0" |

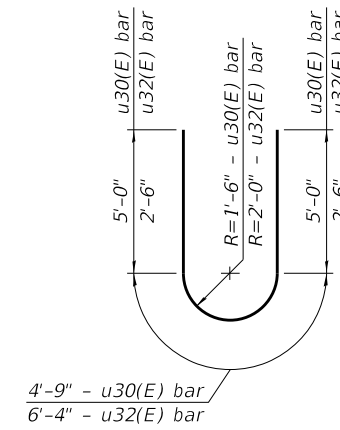
BARS s30(E), s31(E), s32(E),
u31(E), t30(E) & t31(E)



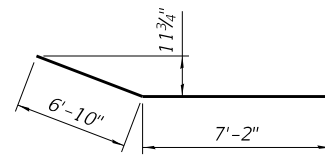
BAR s33(E)



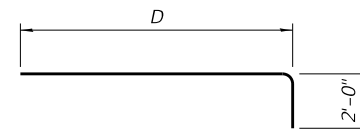
BAR s34(E)
BAR s36(E)



BAR u30(E)
BAR u32(E)

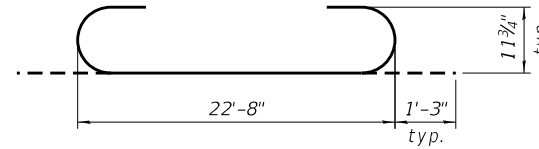


BAR p31(E)

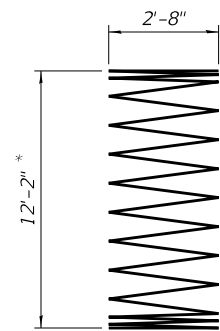


| Bar | D |
|--------|--------|
| p32(E) | 22'-0" |
| p33(E) | 39'-8" |
| w30(E) | 29'-9" |

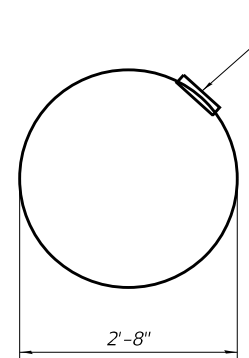
BARS p32(E),
p33(E) & w30(E)



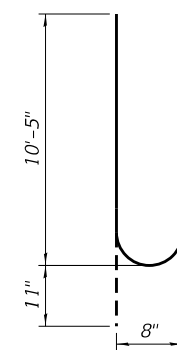
BAR v30(E)



BAR sp30(E)



BAR s35(E)



BAR n30(E)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|---------|--------|---------|-------|
| h30(E) | 32 | #6 | 42'-8" | — |
| h31(E) | 10 | #5 | 26'-0" | — |
| h32(E) | 10 | #5 | 35'-8" | — |
| h33(E) | 4 | #5 | 14'-4" | — |
| h34(E) | 3 | #5 | 47'-4" | — |
| n30(E) | 16 | #8 | 11'-4" | U |
| p30(E) | 8 | #10 | 51'-0" | — |
| p31(E) | 16 | #8 | 14'-0" | — |
| p32(E) | 16 | #10 | 24'-0" | — |
| p33(E) | 16 | #10 | 41'-8" | — |
| s30(E) | 58 | #9 | 24'-10" | □ |
| s31(E) | 58 | #7 | 10'-10" | □ |
| s32(E) | 112 | #5 | 11'-4" | □ |
| s33(E) | 242 | #5 | 14'-5" | □ |
| s34(E) | 928 | #5 | 5'-6" | □ |
| s35(E) | 70 | #5 | 8'-5" | ○ |
| s36(E) | 75 | #5 | 4'-6" | □ |
| * sp30(E) | 5 | #5 | 12'-2" | — |
| t30(E) | 95 | #8 | 14'-8" | □ |
| t31(E) | 55 | #6 | 14'-8" | □ |
| u30(E) | 14 | #6 | 14'-9" | U |
| u31(E) | 15 | #5 | 5'-0" | U |
| u32(E) | 32 | #6 | 11'-4" | U |
| v30(E) | 60 | #9 | 25'-2" | U |
| w30(E) | 48 | #8 | 31'-9" | — |
| Structure Excavation | Cu. Yd. | 129 | | |
| Concrete Structures | Cu. Yd. | 192.1 | | |
| Reinforcement Bars, Epoxy Coated | Pound | 45,030 | | |
| Concrete Sealer | Foot | 2,635 | | |
| Furnishing Steel Piles HP14X89 | Foot | 1,674 | | |
| Driving Piles | Foot | 1,674 | | |
| Test Pile Steel HP14X89 | Each | 1 | | |
| Pile Shoes | Each | 28 | | |

* Length is height of spiral.

MODEL Sheet
FILE NAME: p:\aecom\pw.bentley.com\AECOM_0516_MIA\Documents\60603202-Brush College\00-CAD GIS\010_CAD\03_SHEETS\01_AECOM\Structural\60603202_5-30_Pier-Details.dgn



| | | |
|----------------------------|----------------|-----------|
| USER NAME = monica.crinion | DESIGNED - IIP | REVISED - |
| | CHECKED - ATB | REVISED - |
| PLOT SCALE = N.T.S. | DRAWN - MK | REVISED - |
| PLOT DATE = 4/29/2021 | CHECKED - ATB | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER DETAILS
STRUCTURE NO. 058-9202

SHEET NO. 5F-30 OF 5F-35 SHEETS

| F.A.U. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|----------------|----------|------------------|--------------------|
| 7448 | 09-00933-01-BR | MACON | 1019 | 700 |
| | | | | CONTRACT NO. 95893 |
| | | ILLINOIS | FED. AID PROJECT | |