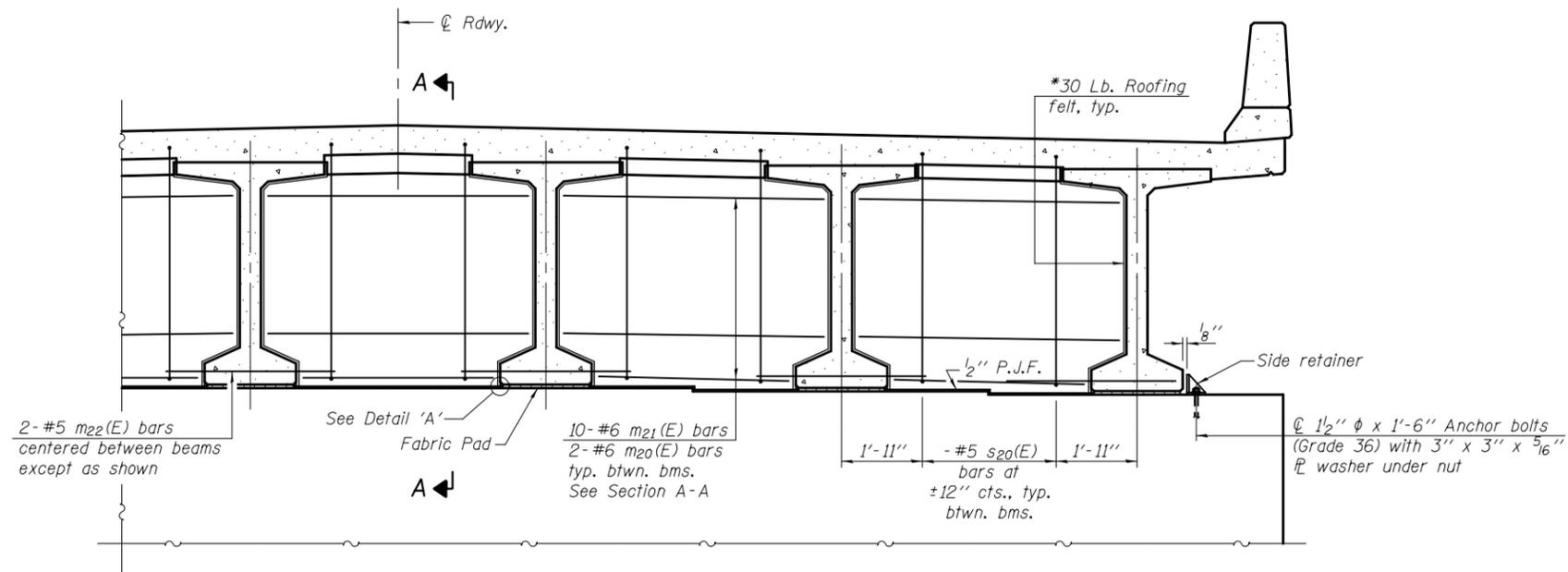
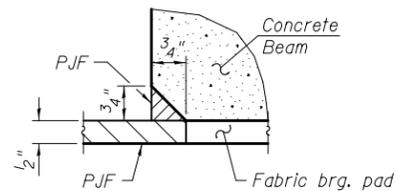


DFP-BT6372-0	Diaphragm Fixed Pier; Bulb T-Beam 63-72 inch beam depth; No skew	7/15/2016
DFP-BT6372-L	Diaphragm Fixed Pier: Bulb T-Beam 63-72 inch beam depth; Left skew	7/15/2016
DFP-BT6372-R	Diaphragm Fixed Pier: Bulb T-Beam 63-72 inch beam depth; Right skew	7/15/2016
DFP-I3642-0	Diaphragm fixed pier; I-Beam 36-42 inch beam depth; No skew	7/15/2016
DFP-I3642-L	Diaphragm fixed pier; I-Beam 36-42 inch beam depth; Left skew	7/15/2016
DFP-I3642-R	Diaphragm fixed pier; I-Beam 36-42 inch beam depth; Right skew	7/15/2016
DFP-I4854-0	Diaphragm fixed pier; I-Beam 48-54 inch beam depth; No skew	7/15/2016
DFP-I4854-L	Diaphragm fixed pier; I-Beam 48-54 inch beam depth: Left skew	7/15/2016
DFP-I4854-R	Diaphragm fixed pier; I-Beam 48-54 inch beam depth; Right skew	7/15/2016
DFP-IL27-0	Diaphragm fixed pier; IL 27 inch beam depth; No skew	7/15/2016
DFP-IL27-L	Diaphragm fixed pier; IL 27 inch beam depth; Left skew	7/15/2016
DFP-IL27-R	Diaphragm fixed pier; IL 27 inch beam depth; Right skew	7/15/2016
DFP-IL36-0	Diaphragm fixed pier; IL 36 inch beam depth; No skew	7/15/2016
DFP-IL36-L	Diaphragm fixed pier; IL 36 inch beam depth; Left skew	7/15/2016
DFP-IL36N-0	Diaphragm fixed pier; IL 36 inch beam depth narrow top; No skew	7/15/2016
DFP-IL36N-L	Diaphragm fixed pier; IL 36 inch beam depth narrow top; Left skew	7/15/2016
DFP-IL36N-R	Diaphragm fixed pier; IL 36 inch beam depth narrow top; Right skew	7/15/2016
DFP-IL36-R	Diaphragm fixed pier; IL 36 inch beam depth; Right skew	7/15/2016
DFP-IL4554-0	Diaphragm fixed pier; IL 45-54 inch beam depth; No skew	7/15/2016
DFP-IL4554-L	Diaphragm fixed pier; IL 45-54 inch beam depth; Left skew	7/15/2016
DFP-IL4554N-0	Diaphragm fixed pier; IL 45-54 inch beam depth narrow top; No skew	7/15/2016
DFP-IL4554N-L	Diaphragm fixed pier; IL 45-54 inch beam depth narrow top; Left skew	7/15/2016
DFP-IL4554N-R	Diaphragm fixed pier; IL 45-54 inch beam depth narrow top; Right skew	7/15/2016
DFP-IL4554-R	Diaphragm fixed pier; IL 45-54 inch beam depth; Right skew	7/15/2016
DFP-IL6372-0	Diaphragm fixed pier; IL 63-72 inch beam depth; No skew	7/15/2016
DFP-IL6372-L	Diaphragm fixed pier; IL 63-72 inch beam depth; Left skew	7/15/2016
DFP-IL6372N-0	Diaphragm fixed pier; IL 63-72 inch beam depth narrow top; No skew	7/15/2016
DFP-IL6372N-L	Diaphragm fixed pier; IL 63-72 inch beam depth narrow top; Left skew	7/15/2016
DFP-IL6372N-R	Diaphragm fixed pier; IL 63-72 inch beam depth narrow top; Right skew	7/15/2016
DFP-IL6372-R	Diaphragm fixed pier; IL 63-72 inch beam depth; Right skew	7/15/2016

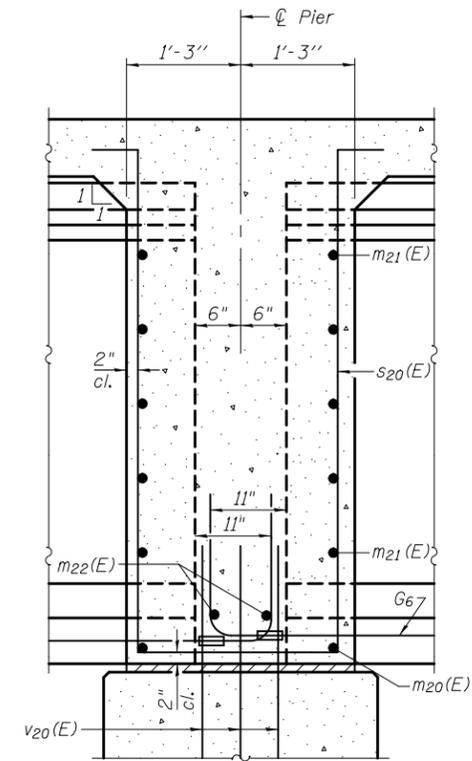


DIAPHRAGM AT PIER

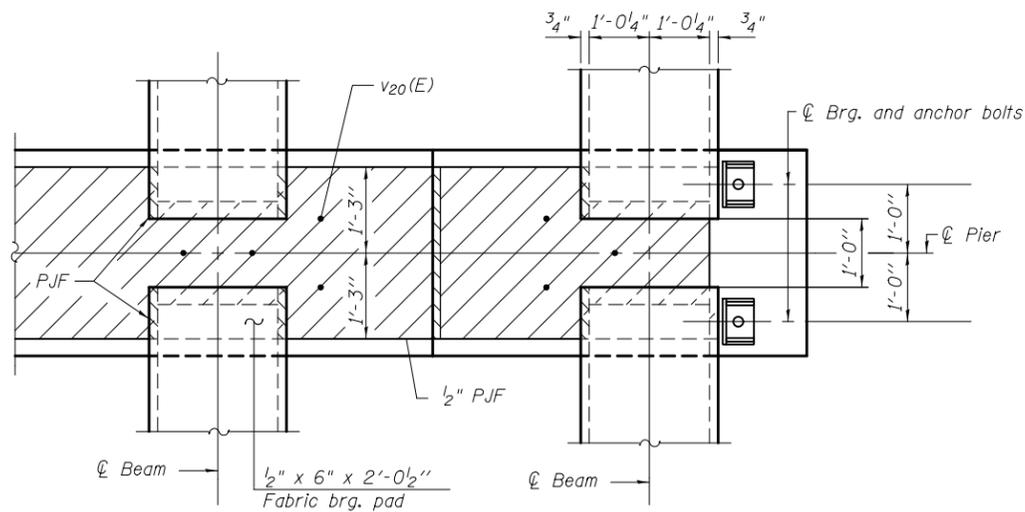
*Bonded to sides of beams embedded into diaphragm.



DETAIL 'A'

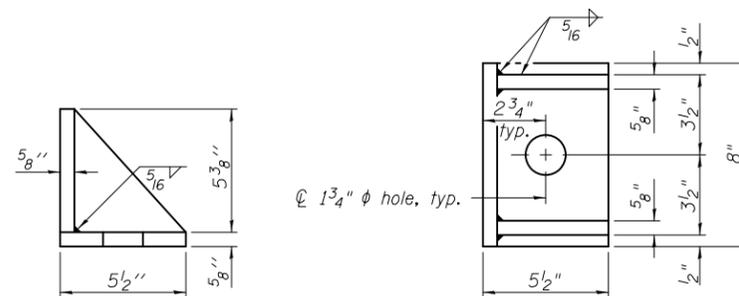


SECTION A-A



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
For details of bar s20(E) see sheet of .
Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-BT6372-0

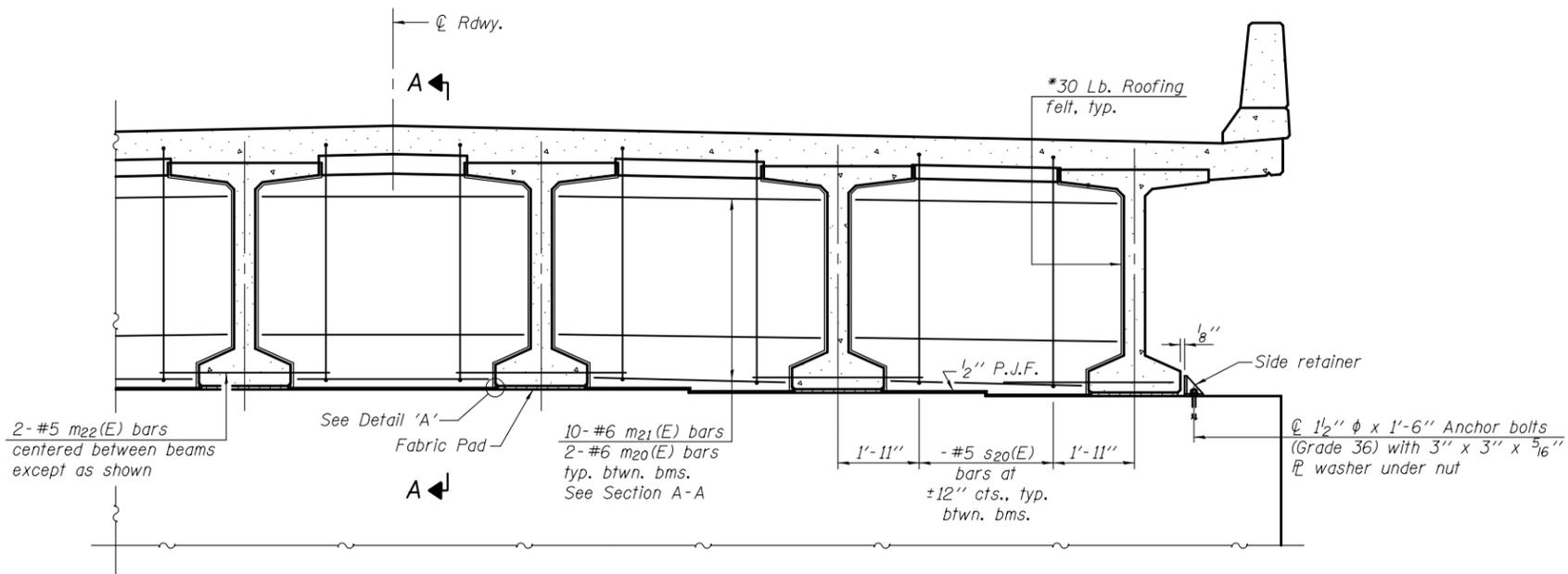
07-15-16

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**STATE OF ILLINOIS
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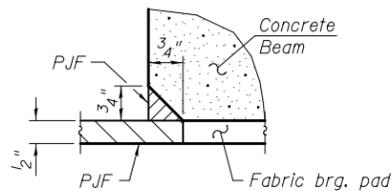
**DIAPHRAGM DETAILS
STRUCTURE NO.**

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

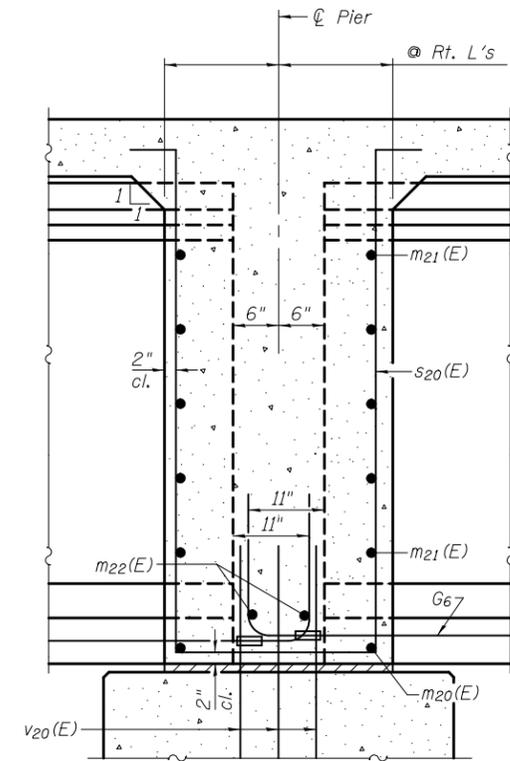


DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

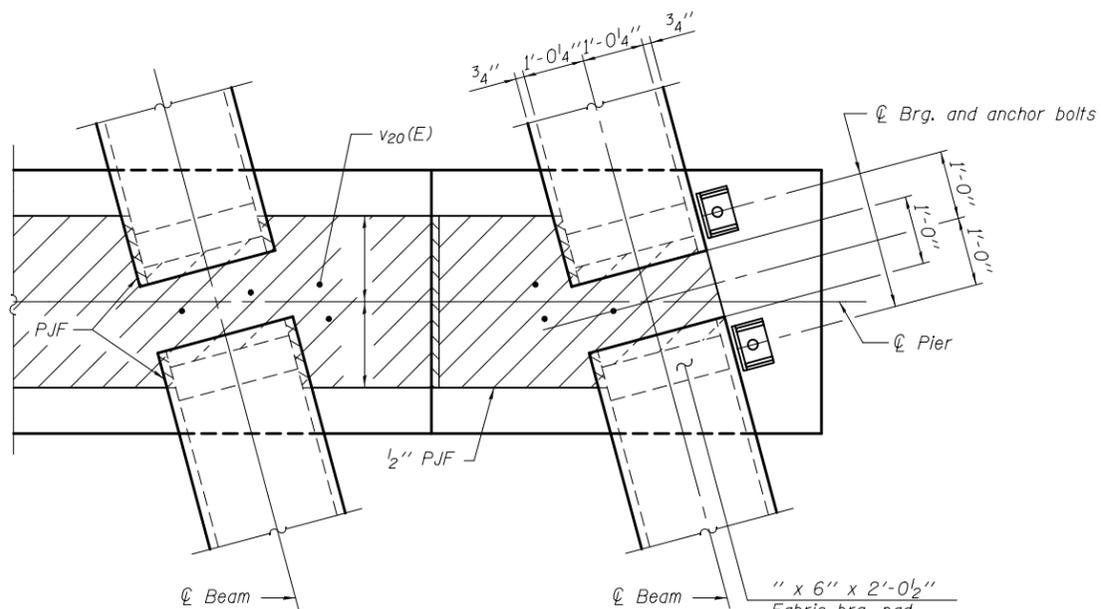


DETAIL 'A'



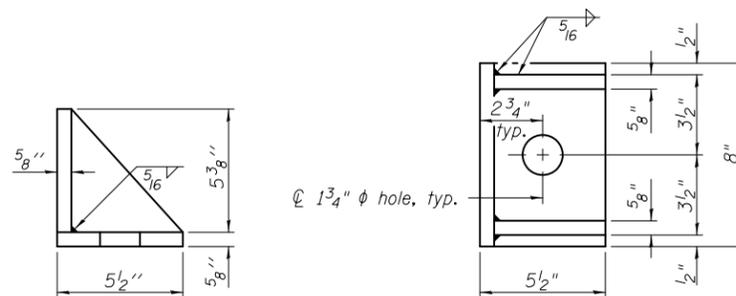
SECTION A-A

(Dimensions along centerline of beam, except as shown)



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- For details of bar s20(E) see sheet of .
- The s20(E) bars shall be placed parallel to the beams.
- Spacing for these bars shall be at right angles to the beams.
- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-BT-6372-L

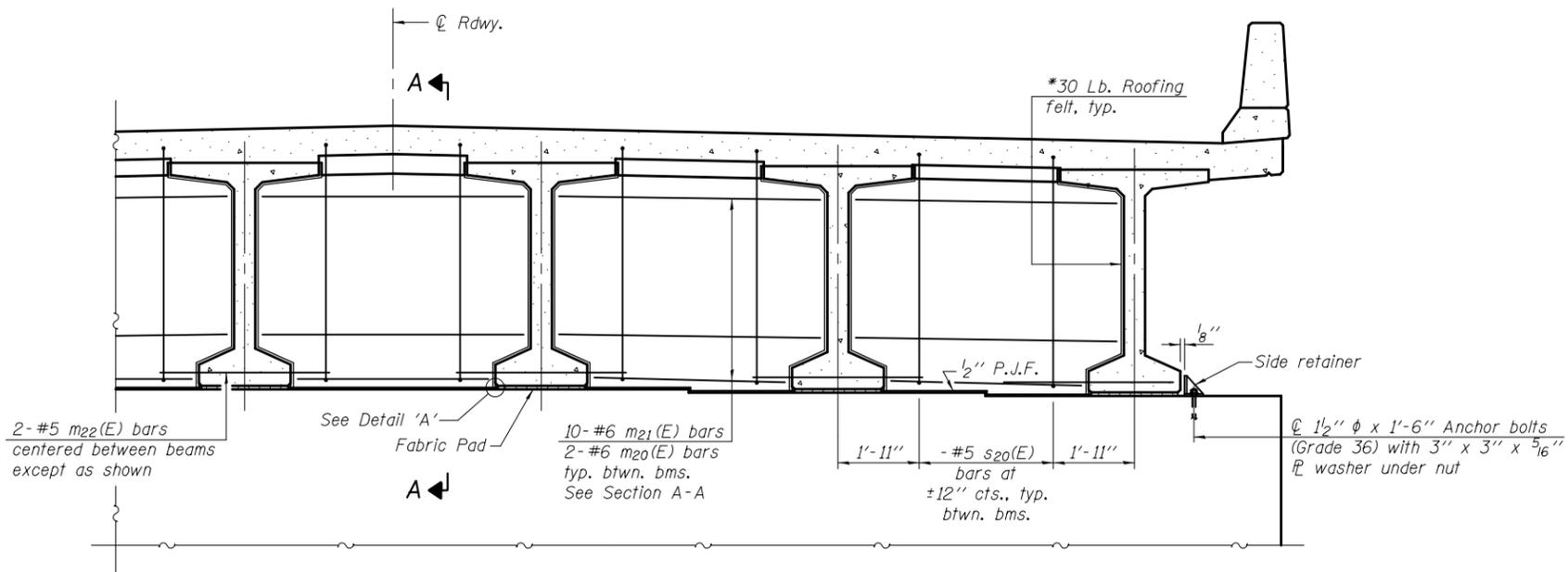
07-15-16

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

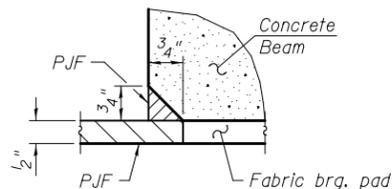
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CONTRACT NO.				
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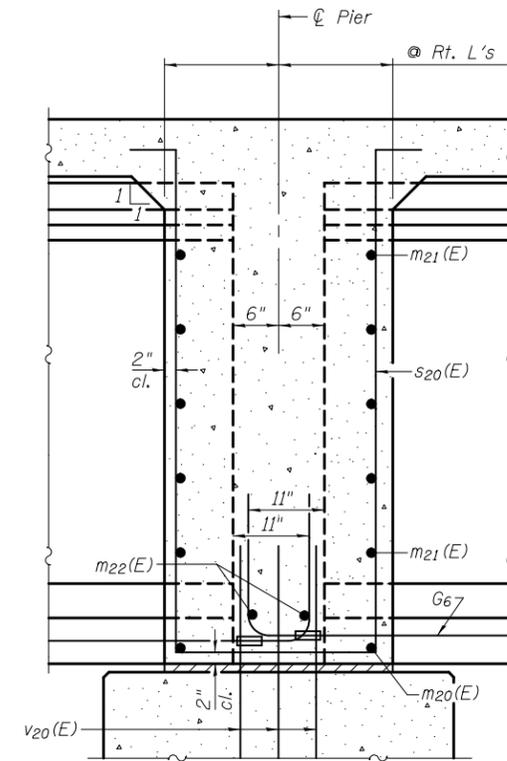


DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

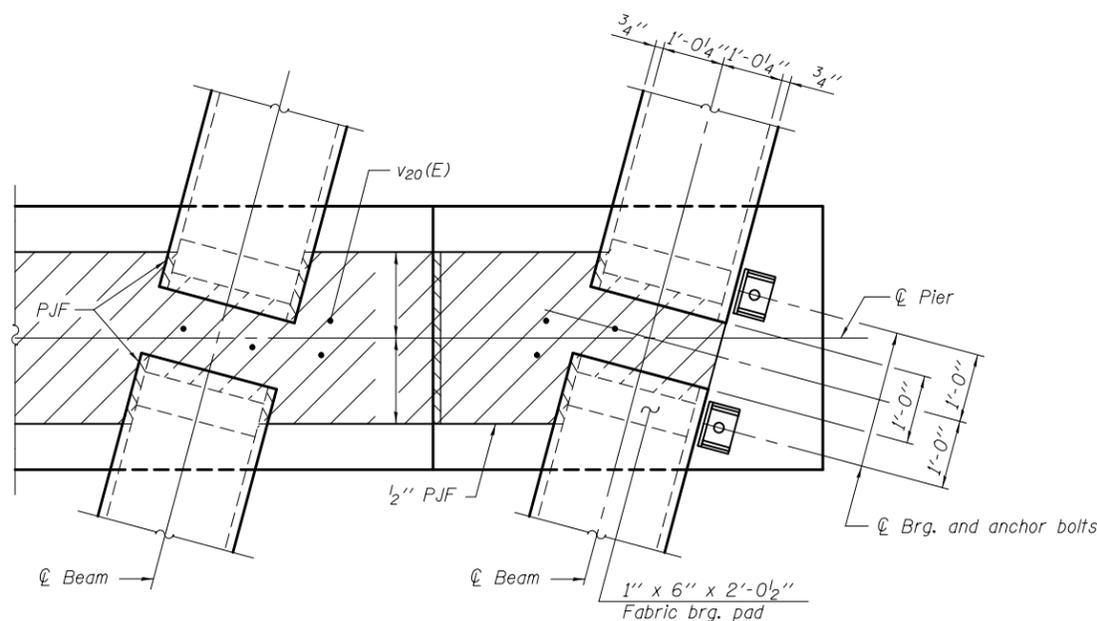


DETAIL 'A'



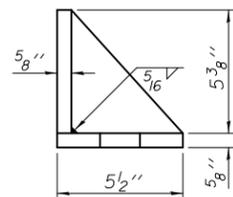
SECTION A-A

(Dimensions along \varnothing of beam, except as shown)



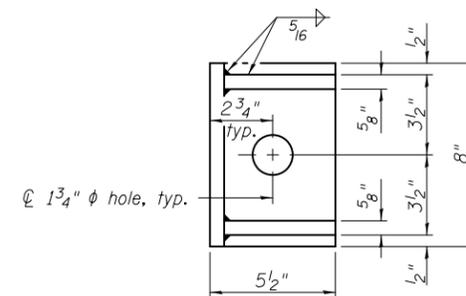
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- For details of bar s20(E) see sheet of .
- The s20(E) bars shall be placed parallel to the beams.
- Spacing for these bars shall be at right angles to the beams.
- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-BT6372-R

07-15-16

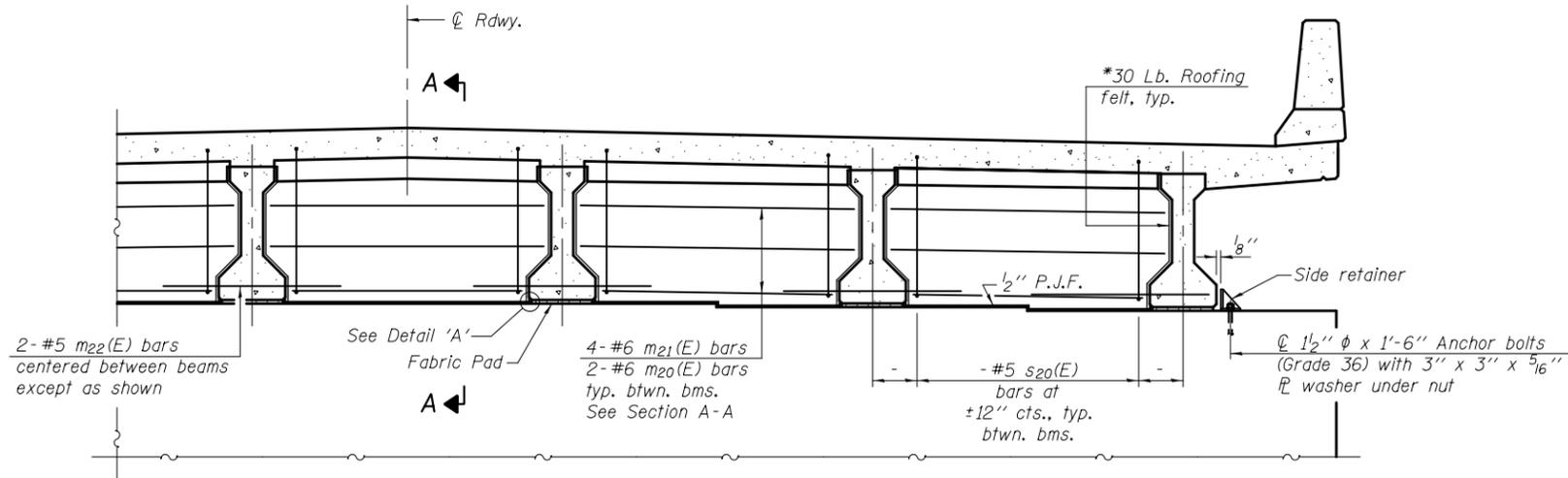
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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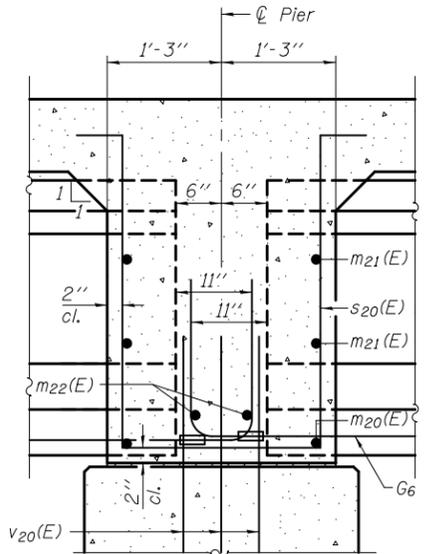
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				

ILLINOIS FED. AID PROJECT

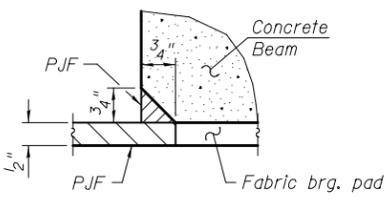


DIAPHRAGM AT PIER

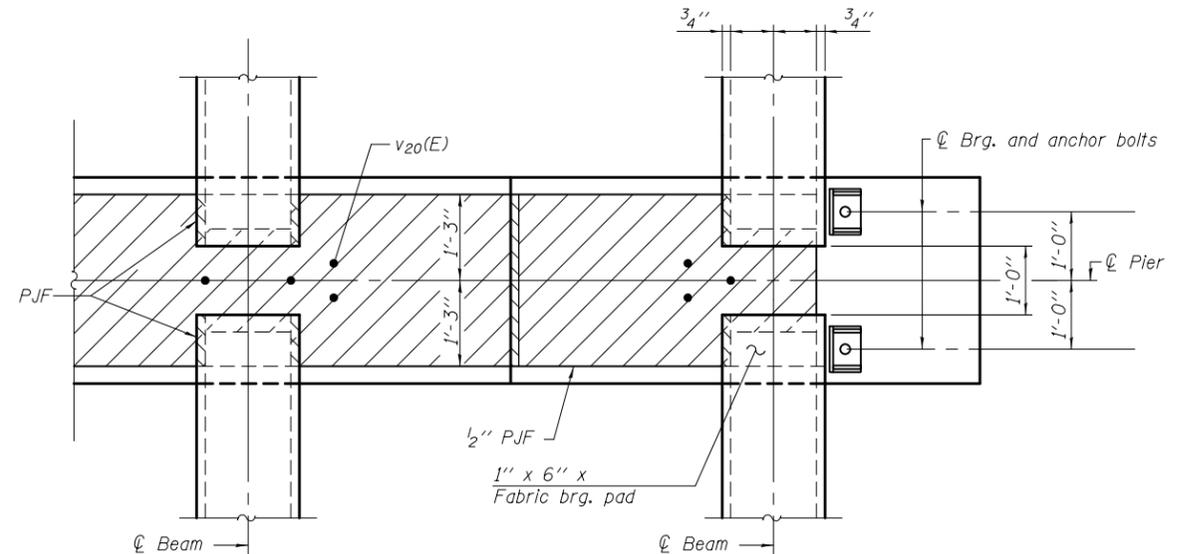
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

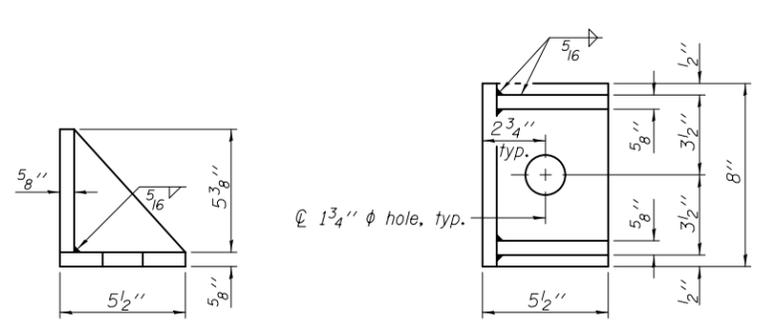


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



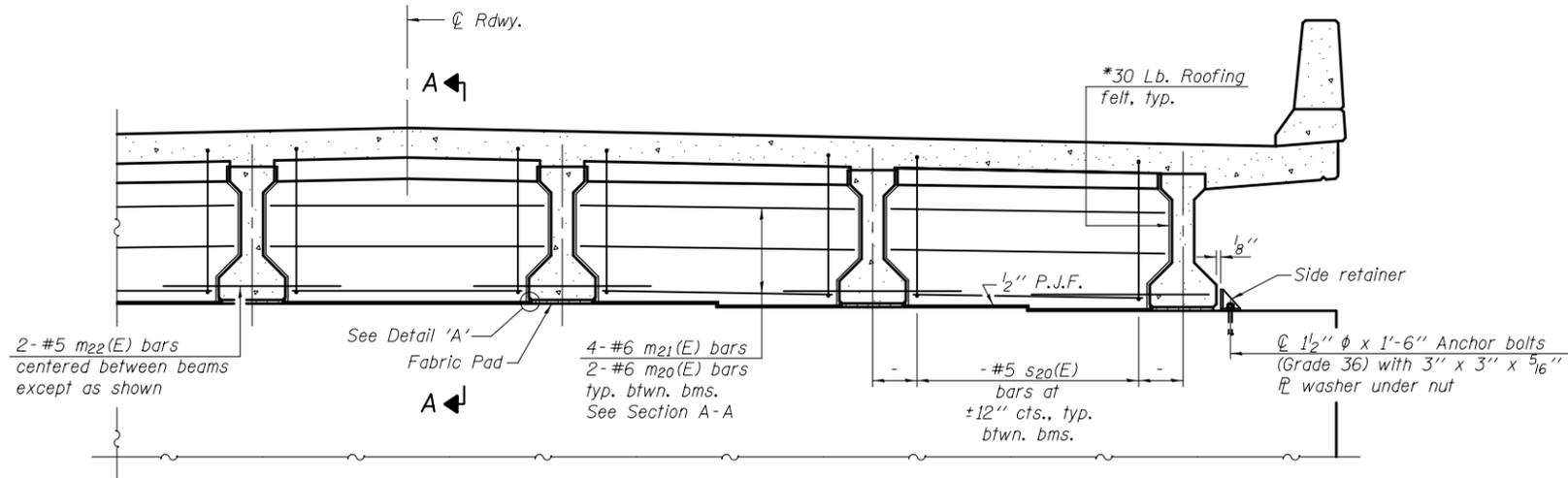
SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
For details of bar s20(E) see sheet of .
Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized. Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

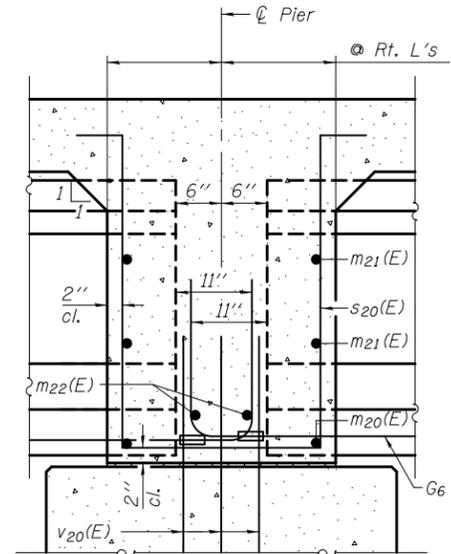
DFP-I3642-0 07-15-16

FILE NAME =	USER NAME =	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DIAPHRAGM DETAILS STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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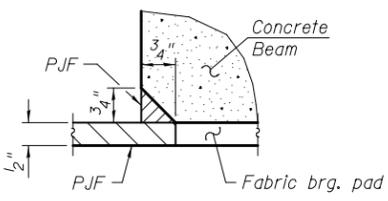
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

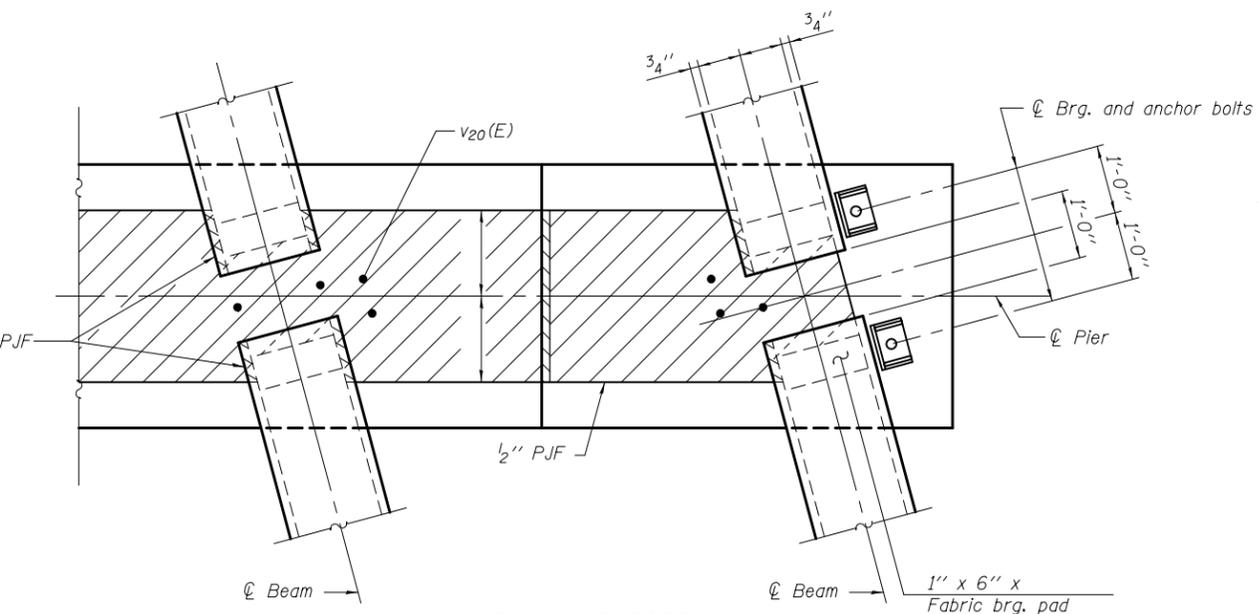


SECTION A-A

(Dimensions along Cl. of beam except as shown)

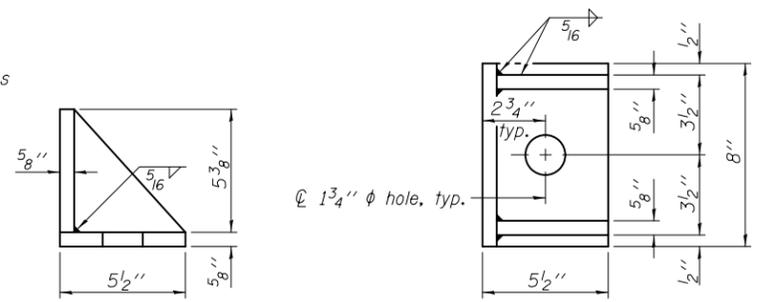


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



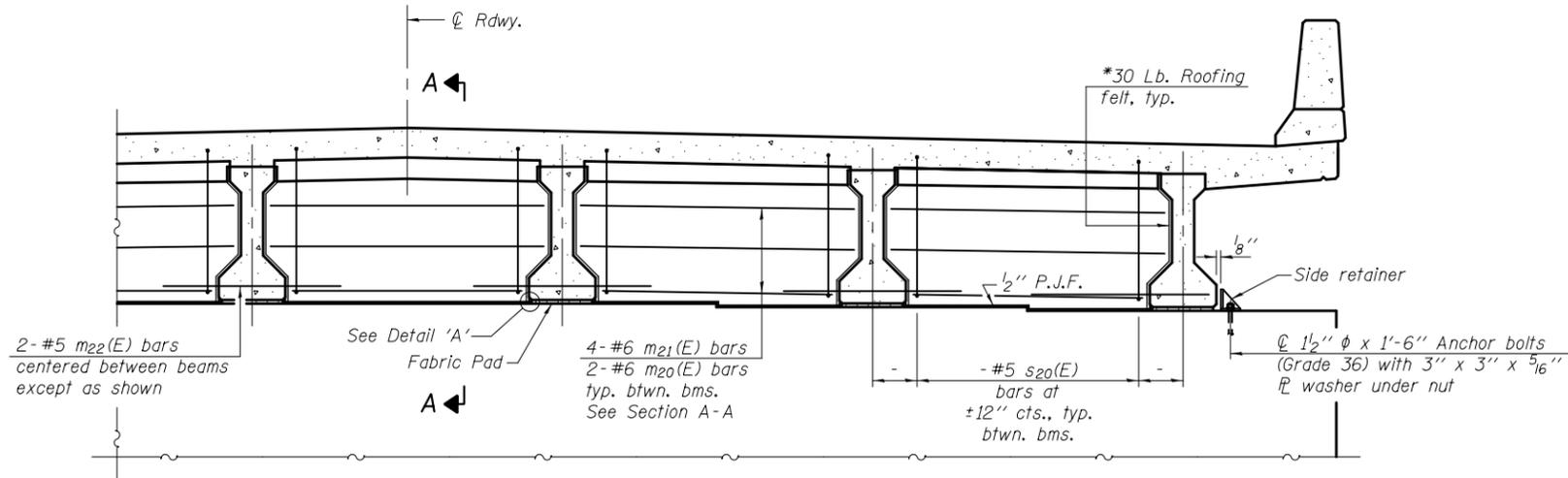
SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

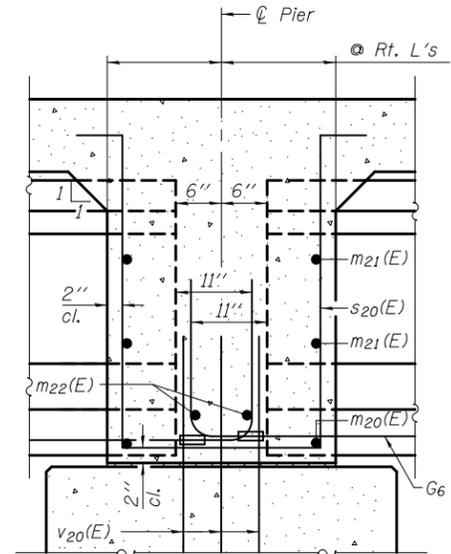
DFP-I3642-L 07-15-16

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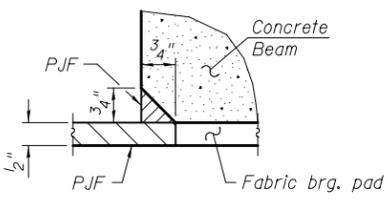
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

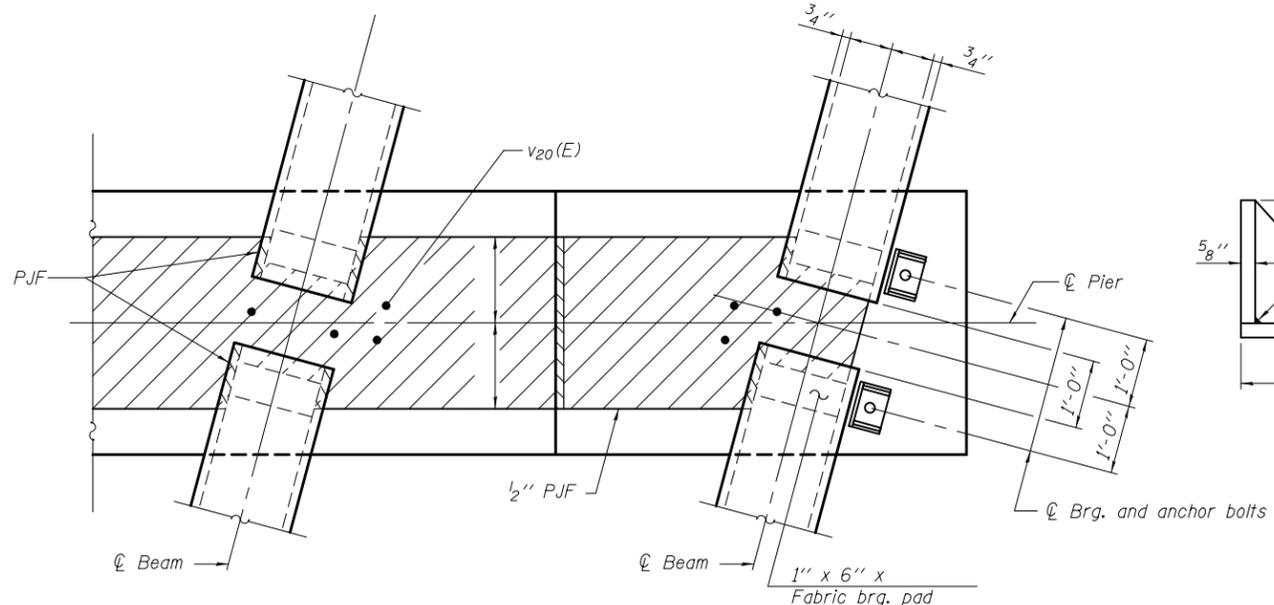


SECTION A-A

(Dimensions along ϕ of beam except as shown)

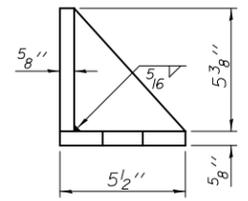


DETAIL 'A'



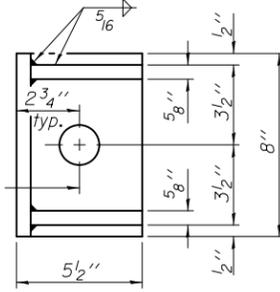
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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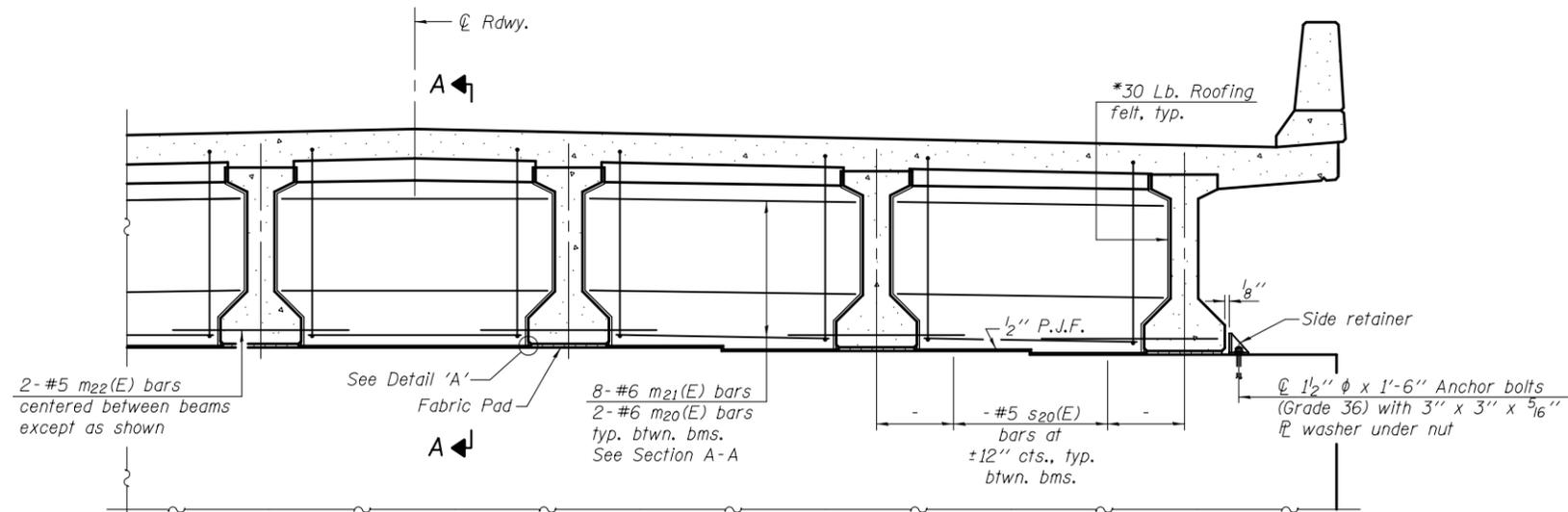
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DEPARTMENT OF TRANSPORTATION**

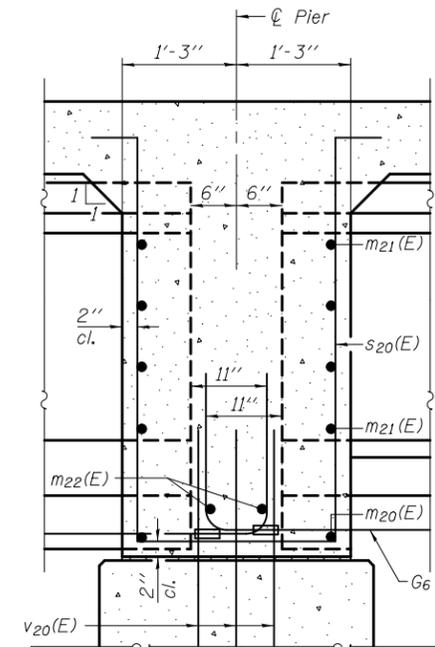
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STRUCTURE NO.**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				

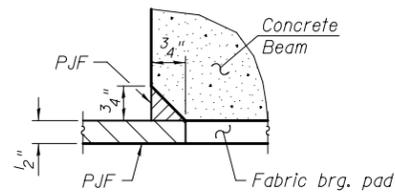


DIAPHRAGM AT PIER

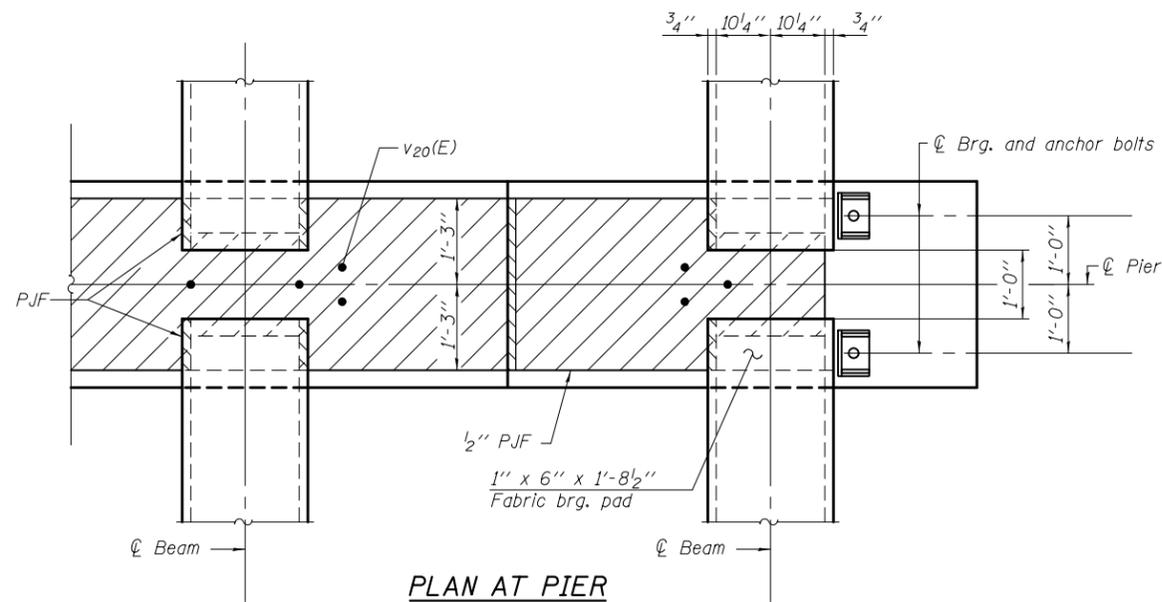
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

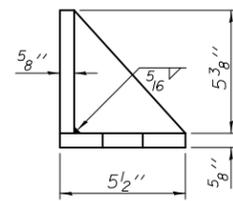


DETAIL 'A'



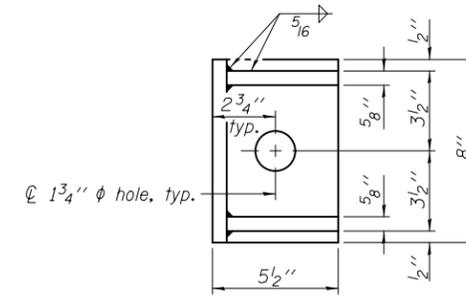
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.



Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
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DFP-I4854-0

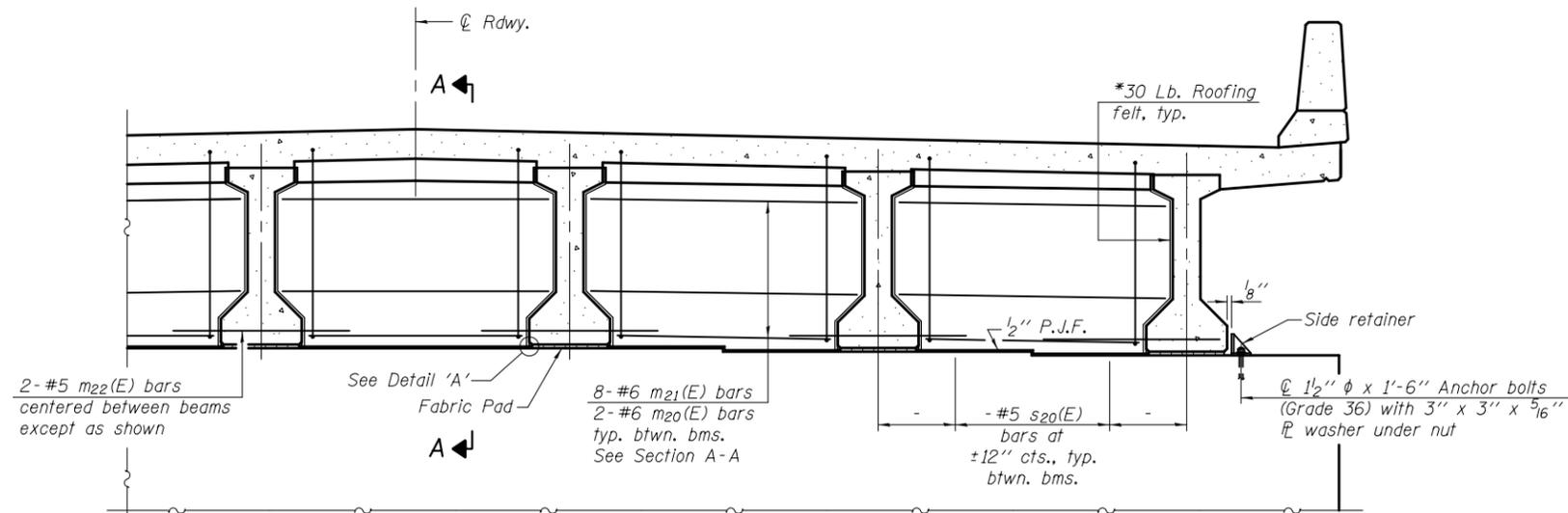
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

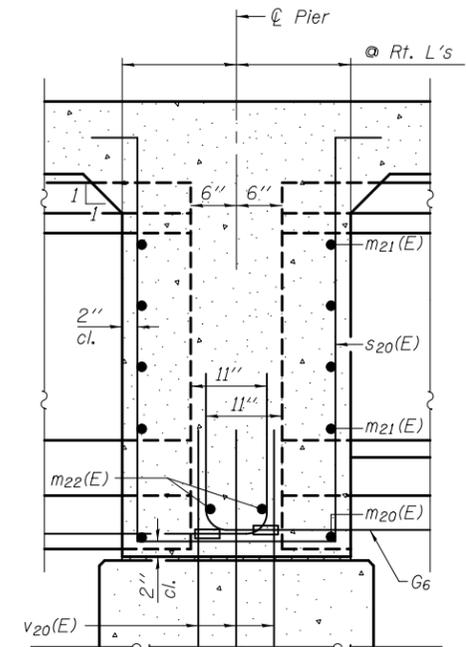
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CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



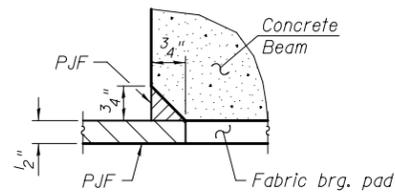
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

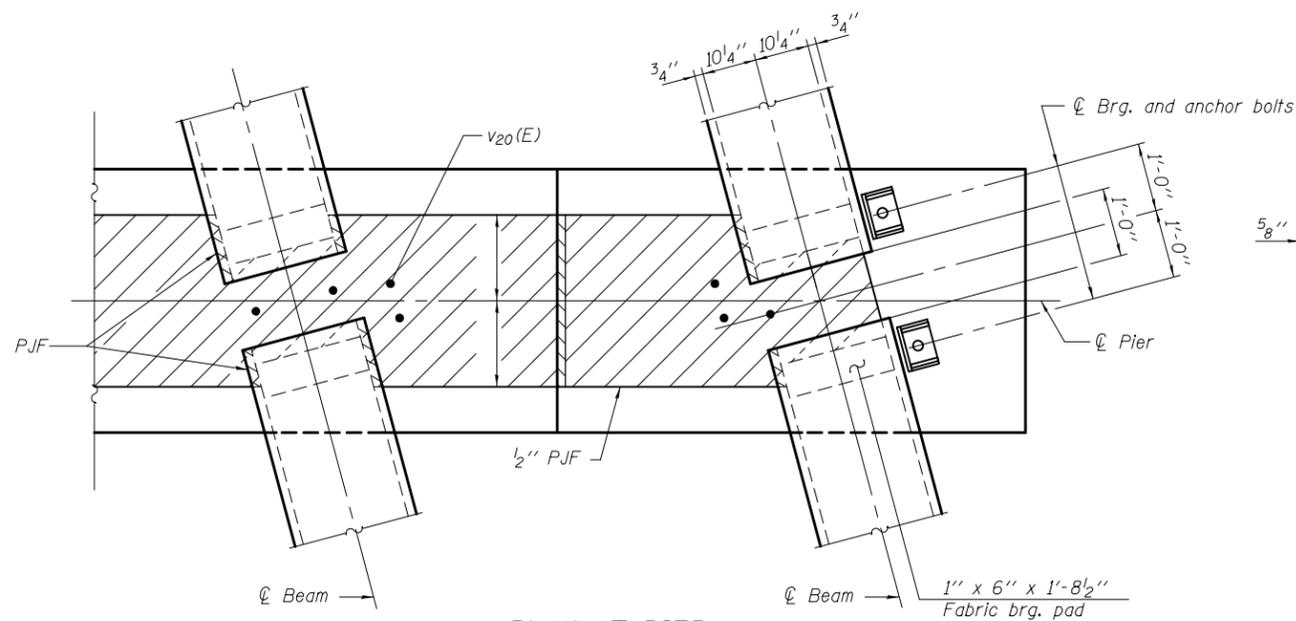


SECTION A-A

(Dimensions along ϕ of beam except as shown)

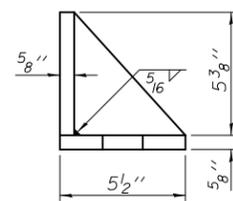


DETAIL 'A'



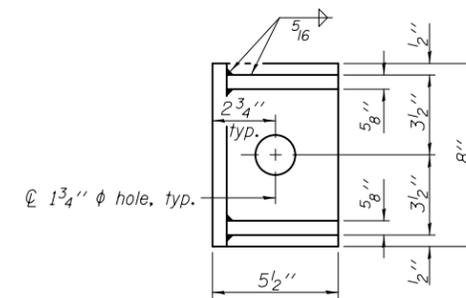
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
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- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-I4854-L

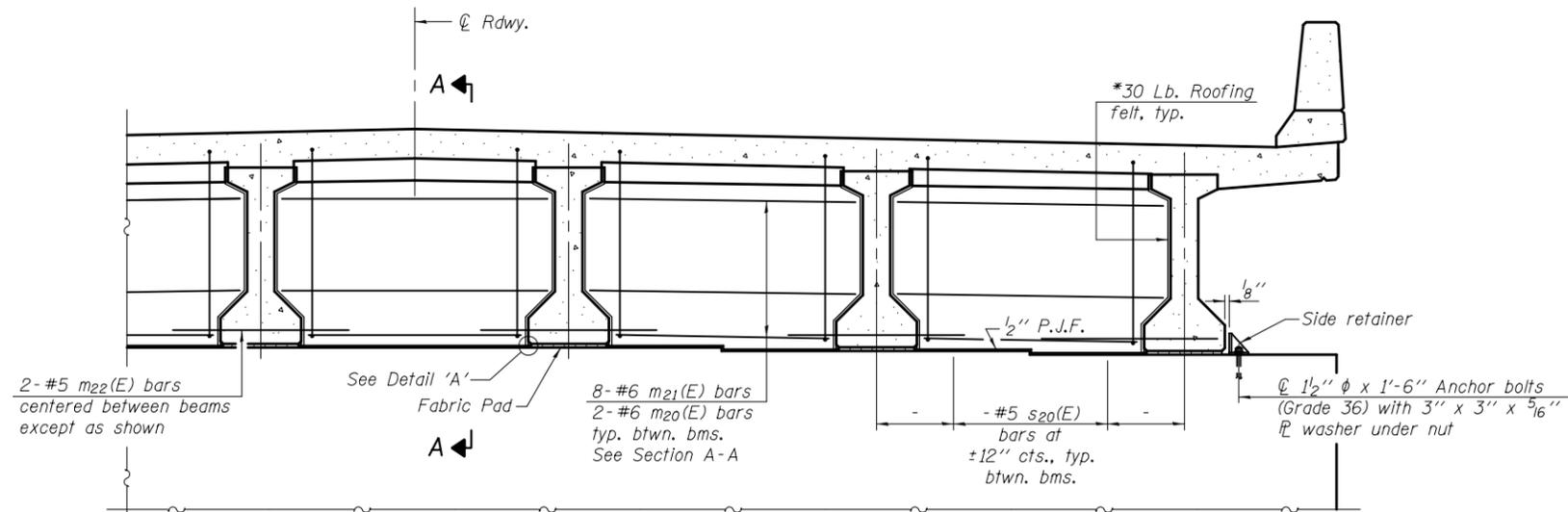
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

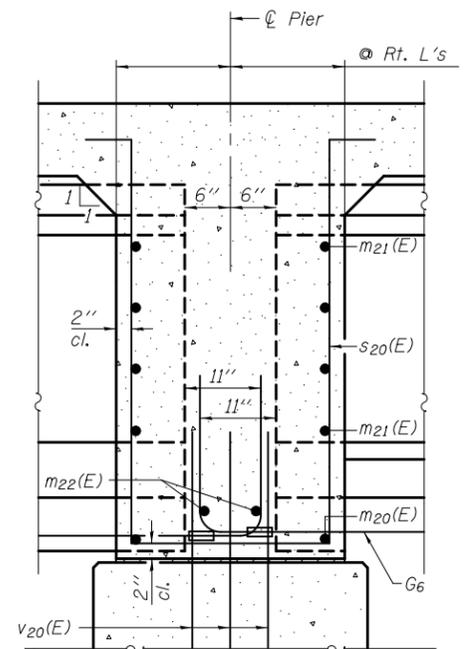
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STRUCTURE NO.**

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



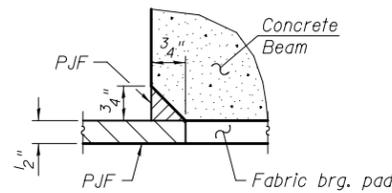
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

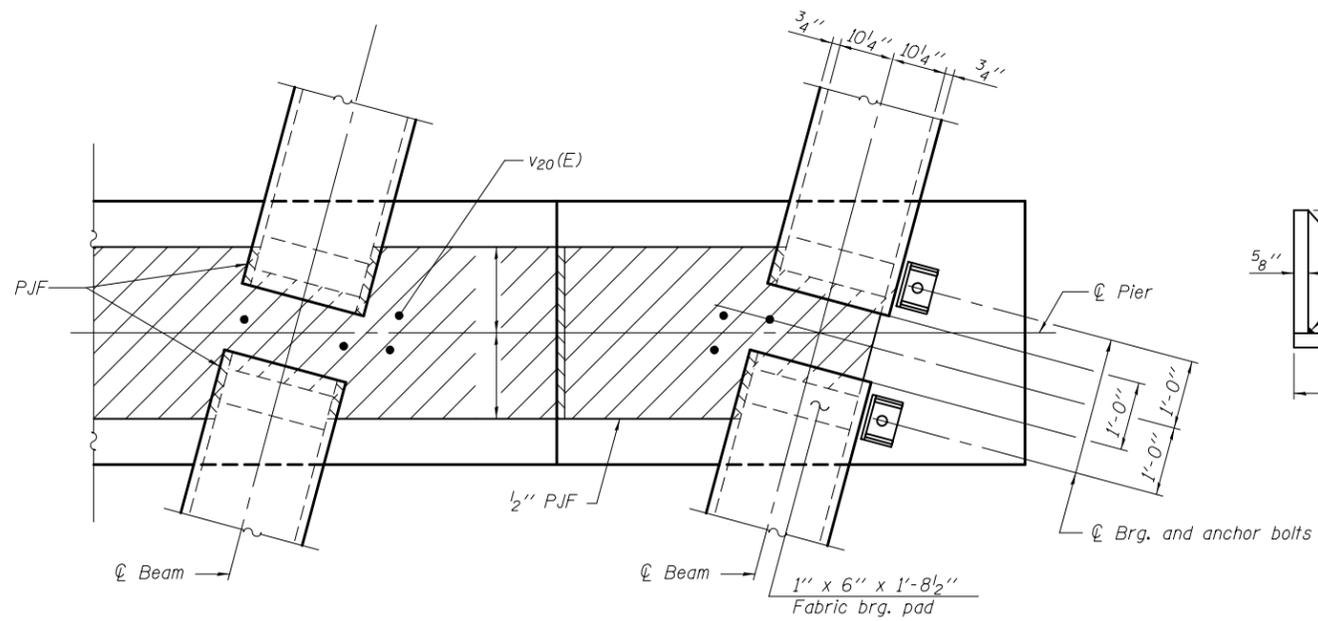


SECTION A-A

(Dimensions along ϕ of beam except as shown)

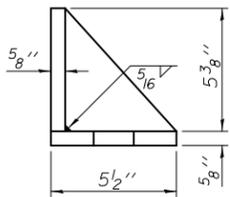


DETAIL 'A'



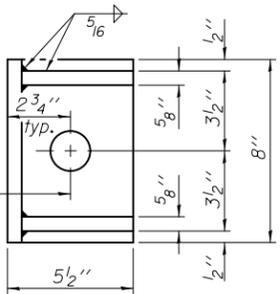
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
For details of bar s20(E) see sheet of .
The s20(E) bars shall be placed parallel to the beams.
Spacing for these bars shall be at right angles to the beams.
Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-I4854-R

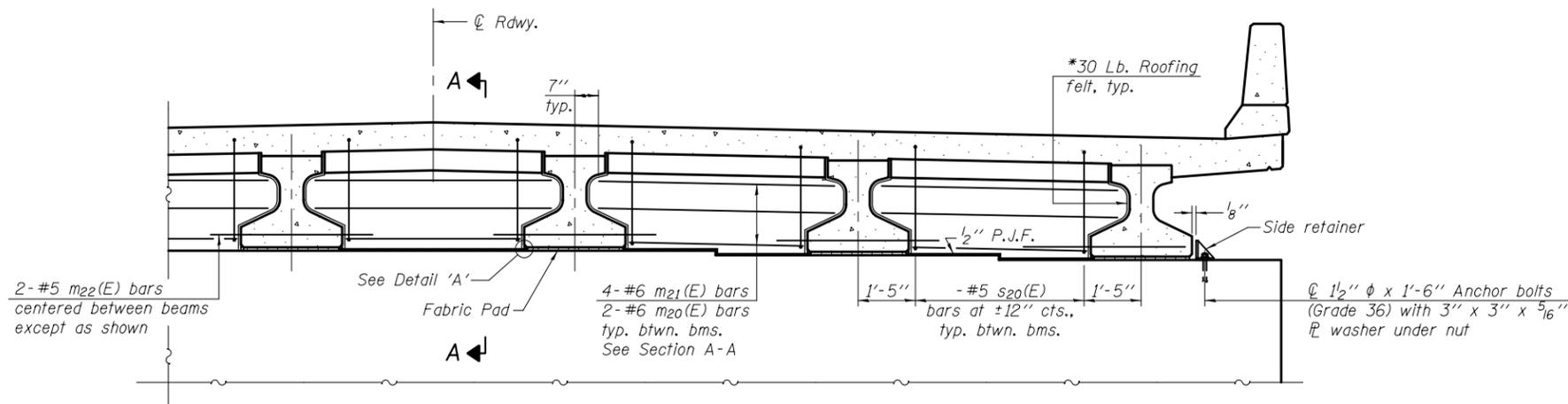
07-15-16

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

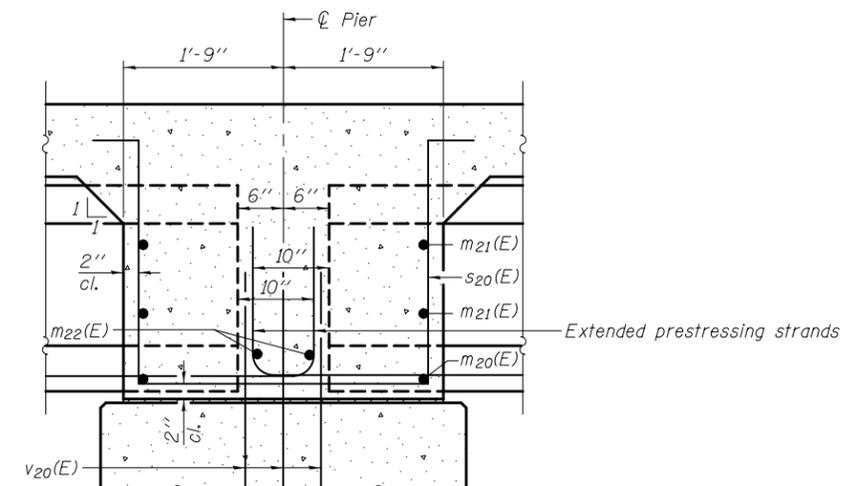
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

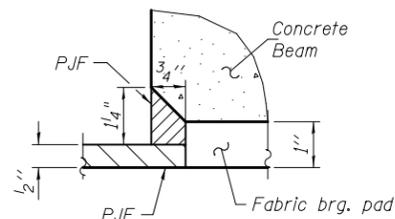


DIAPHRAGM AT PIER

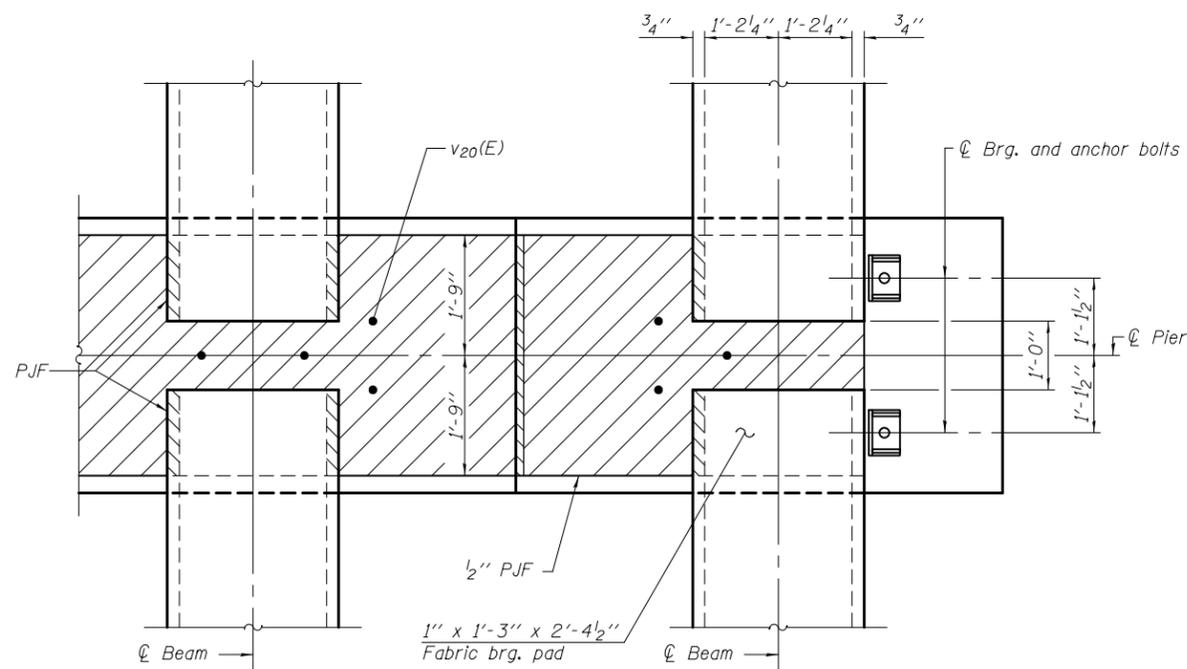
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SECTION A-A

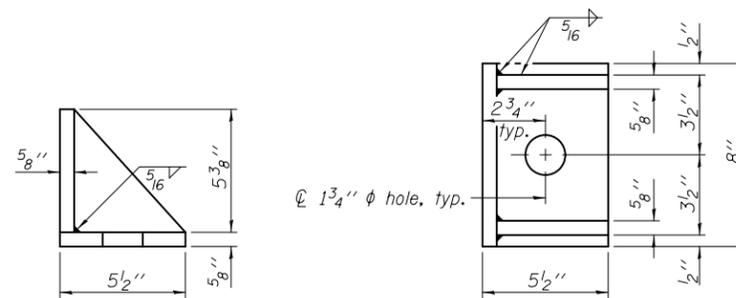


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
For details of bar s20(E) see sheet of .
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Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL27-0

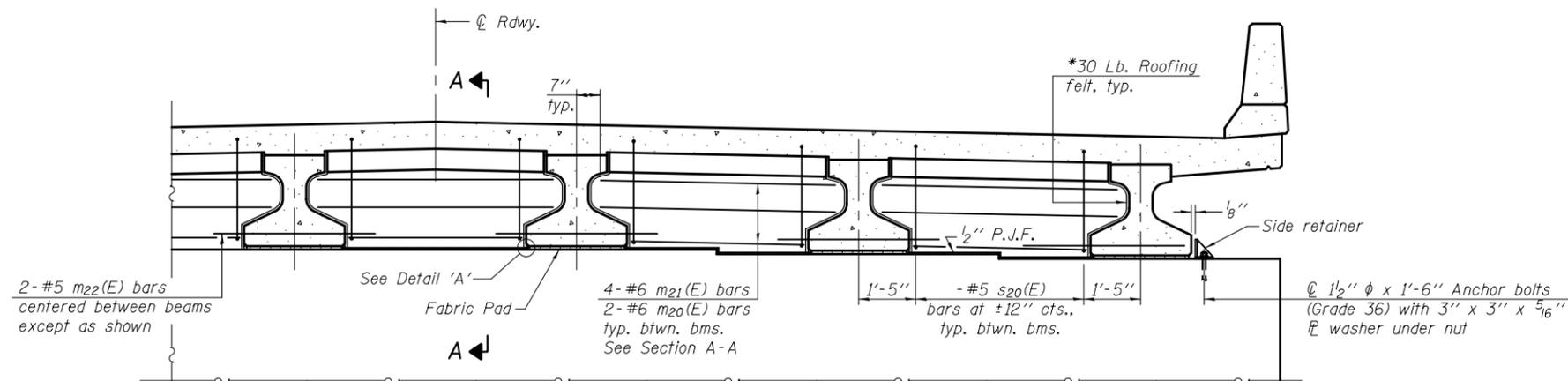
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

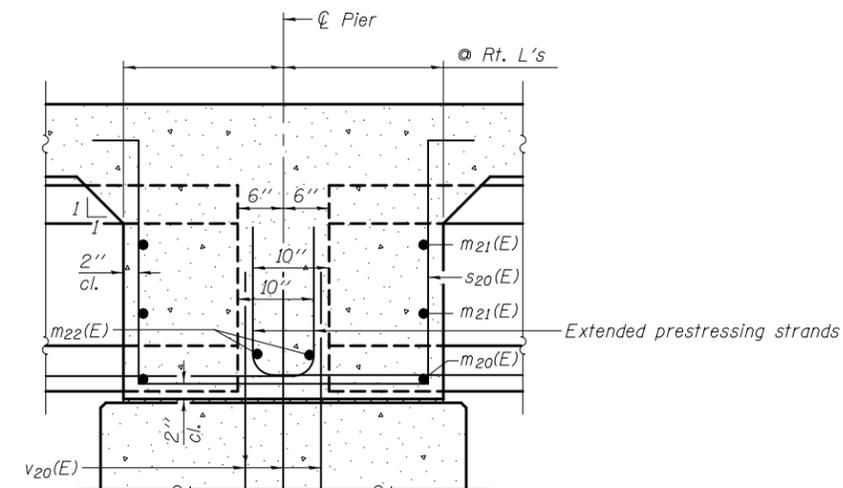
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CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



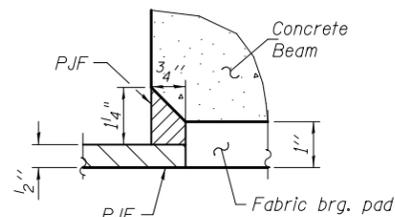
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

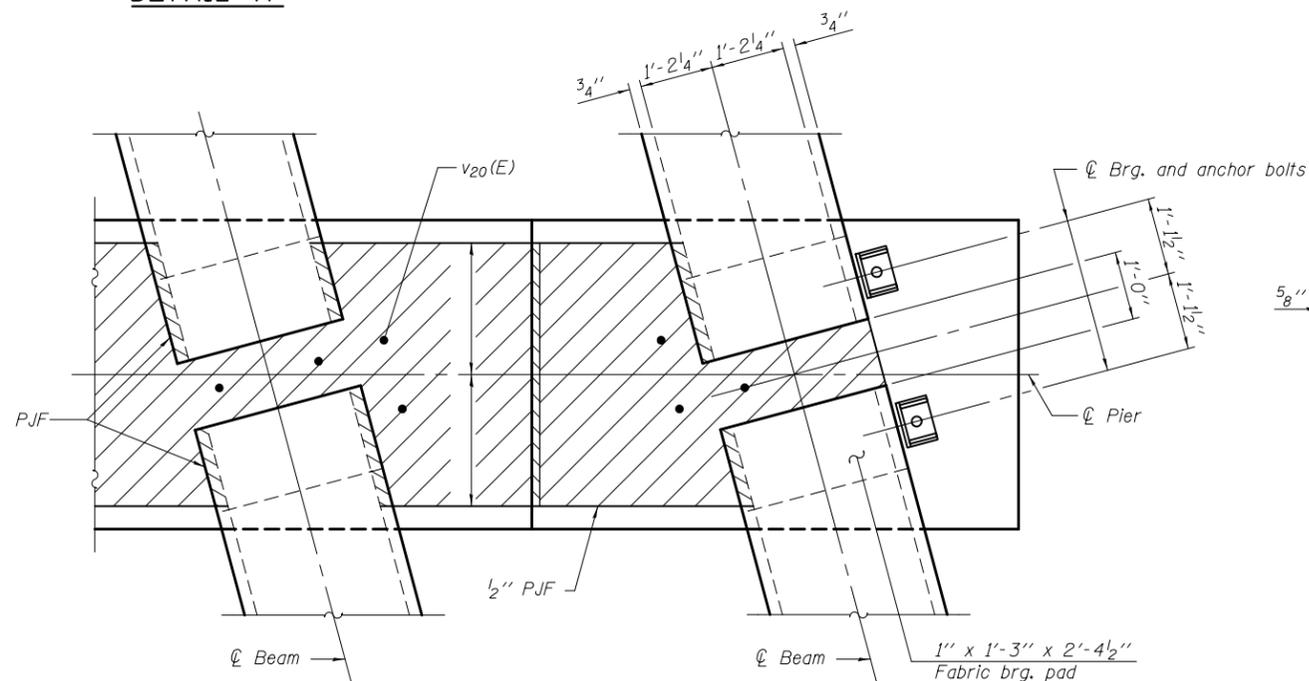


SECTION A-A

(Dimensions along ϕ of beam except as shown)

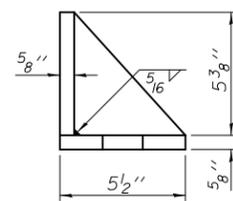


DETAIL 'A'



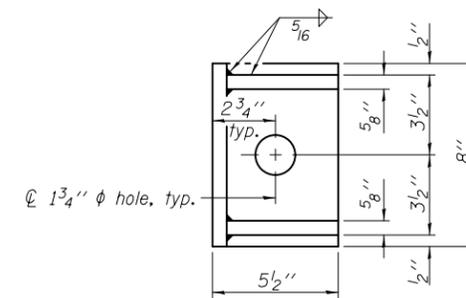
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- For details of bar s20(E) see sheet of .
- The s20(E) bars shall be placed parallel to the beams.
- Spacing for these bars shall be at right angles to the beams.
- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL27-L

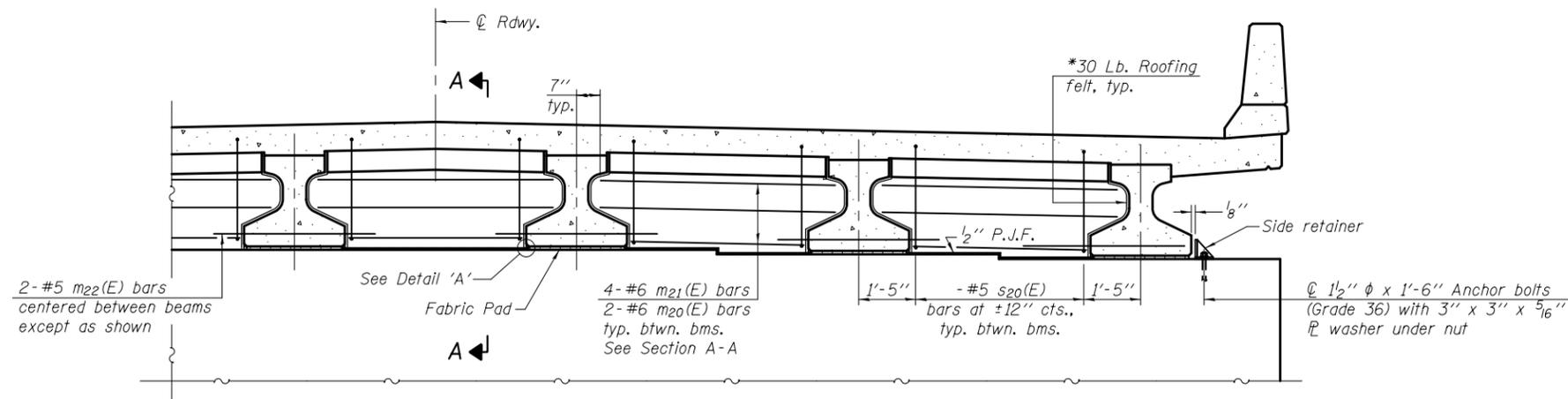
07-15-16

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

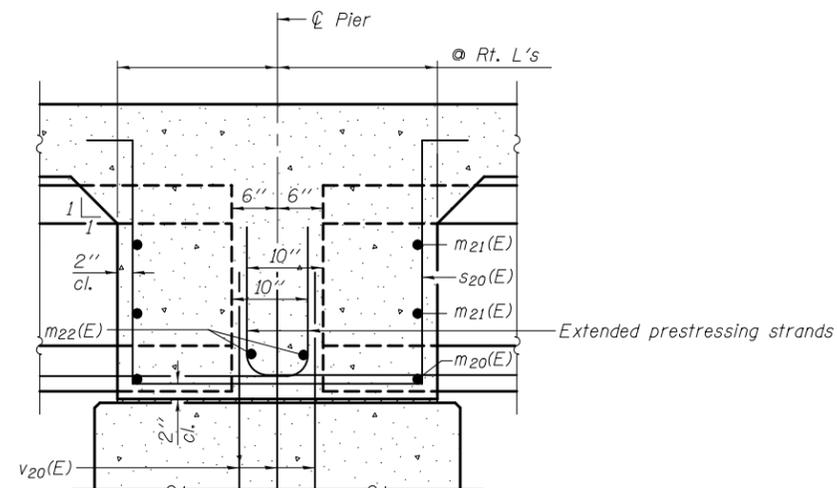
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STRUCTURE NO.**

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CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



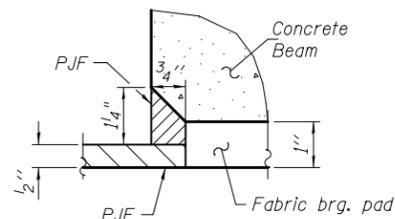
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

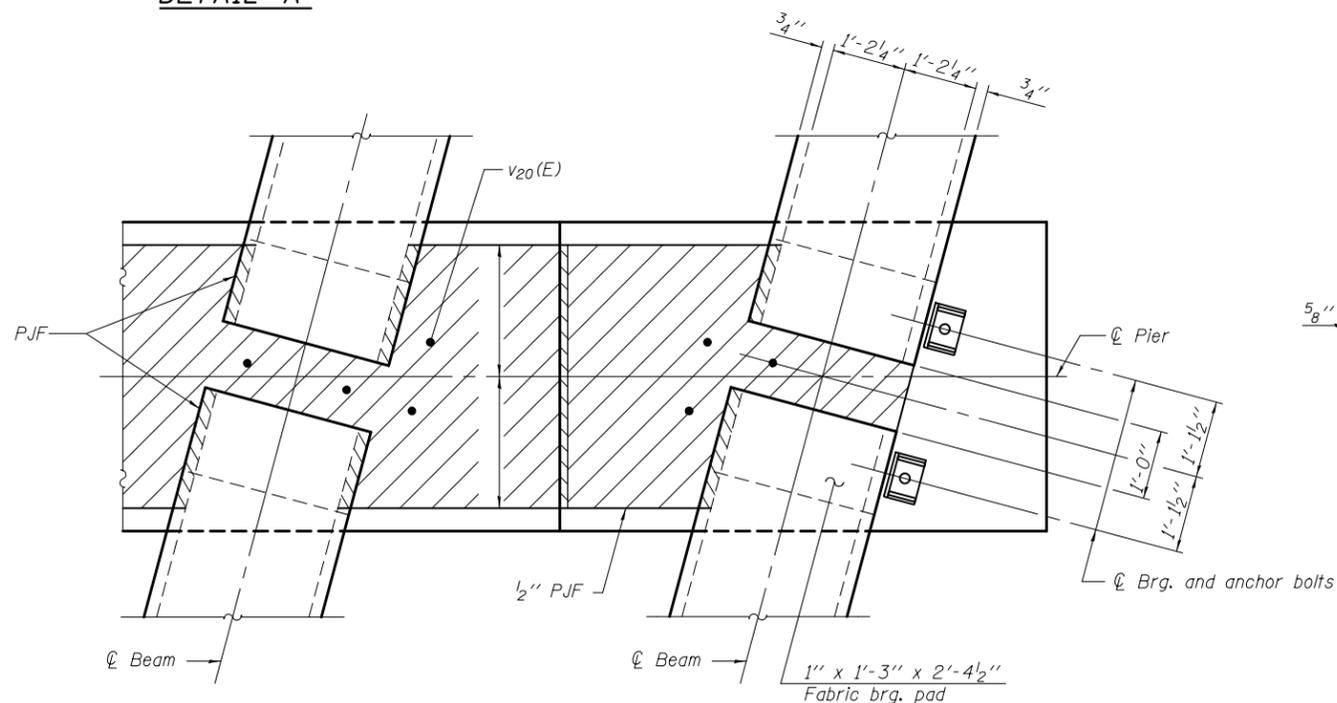


SECTION A-A

(Dimensions along ϕ of beam except as shown)

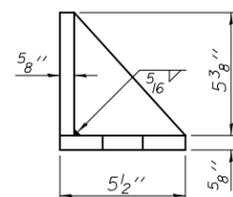


DETAIL 'A'



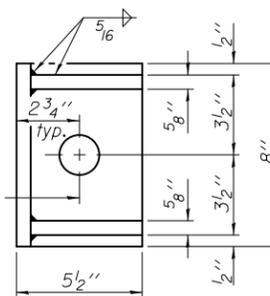
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- For details of bar s20(E) see sheet of .
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- Spacing for these bars shall be at right angles to the beams.
- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL27-R

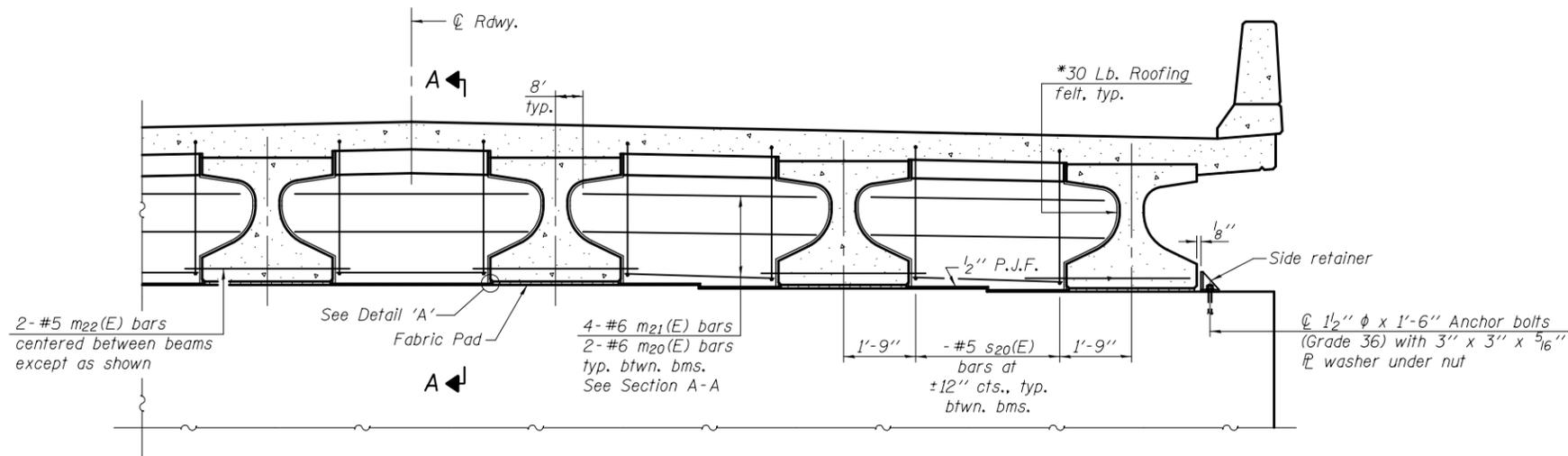
07-15-16

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

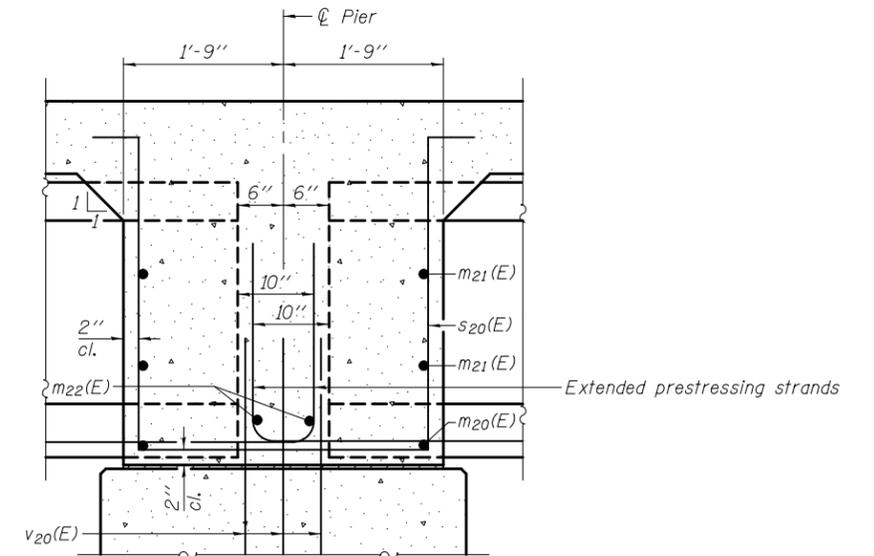
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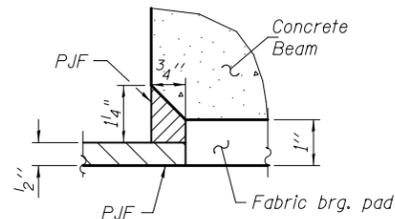


DIAPHRAGM AT PIER

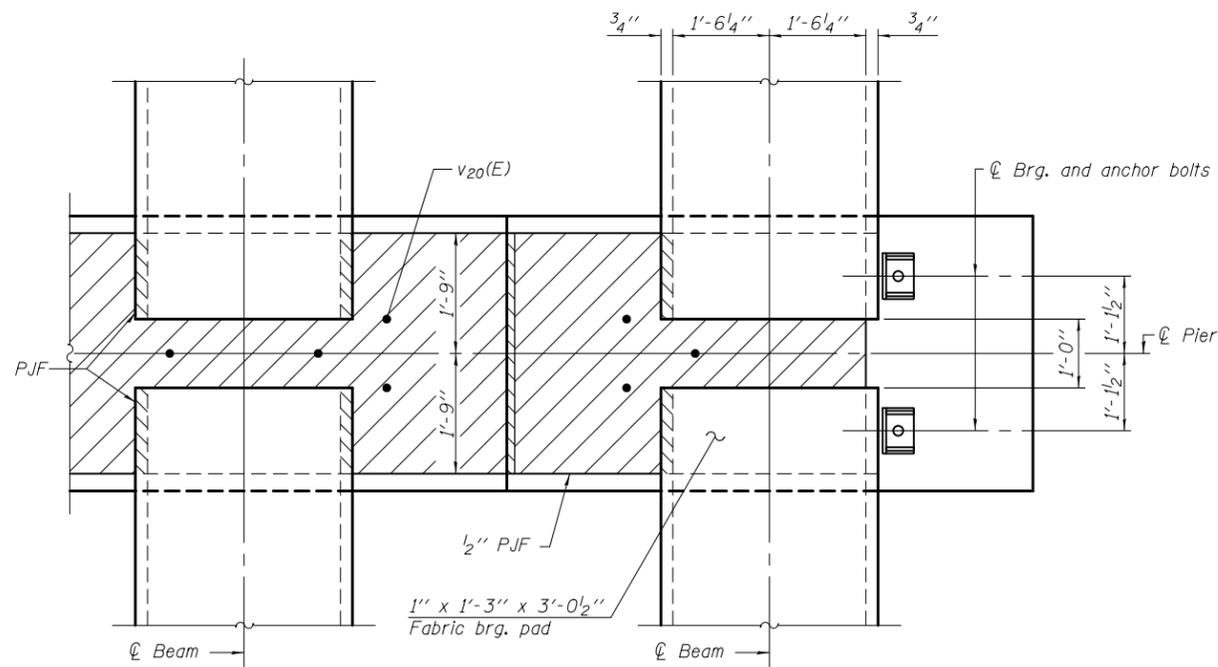
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

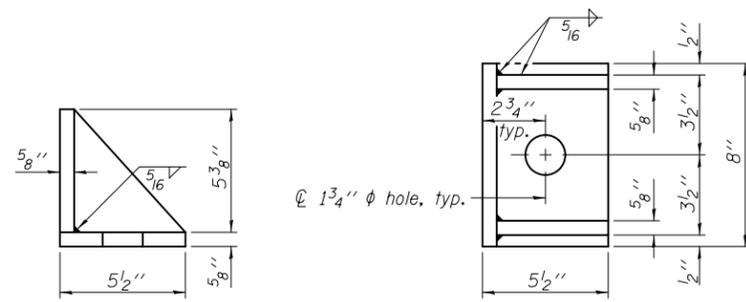


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
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Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL36-0

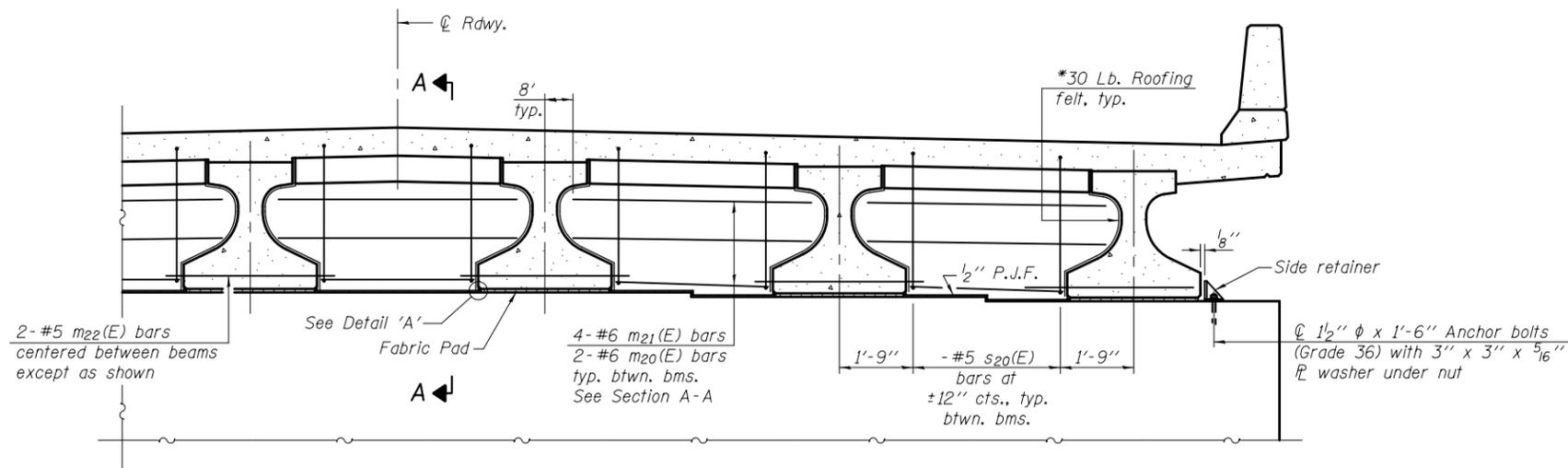
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

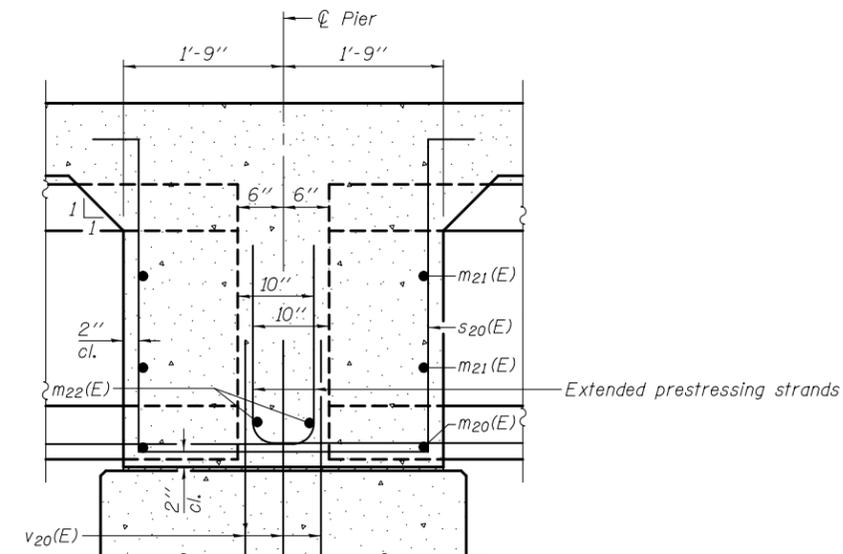
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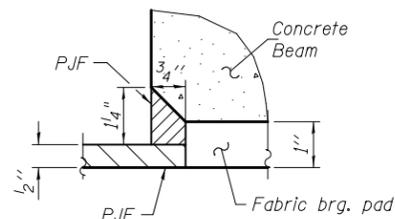


DIAPHRAGM AT PIER

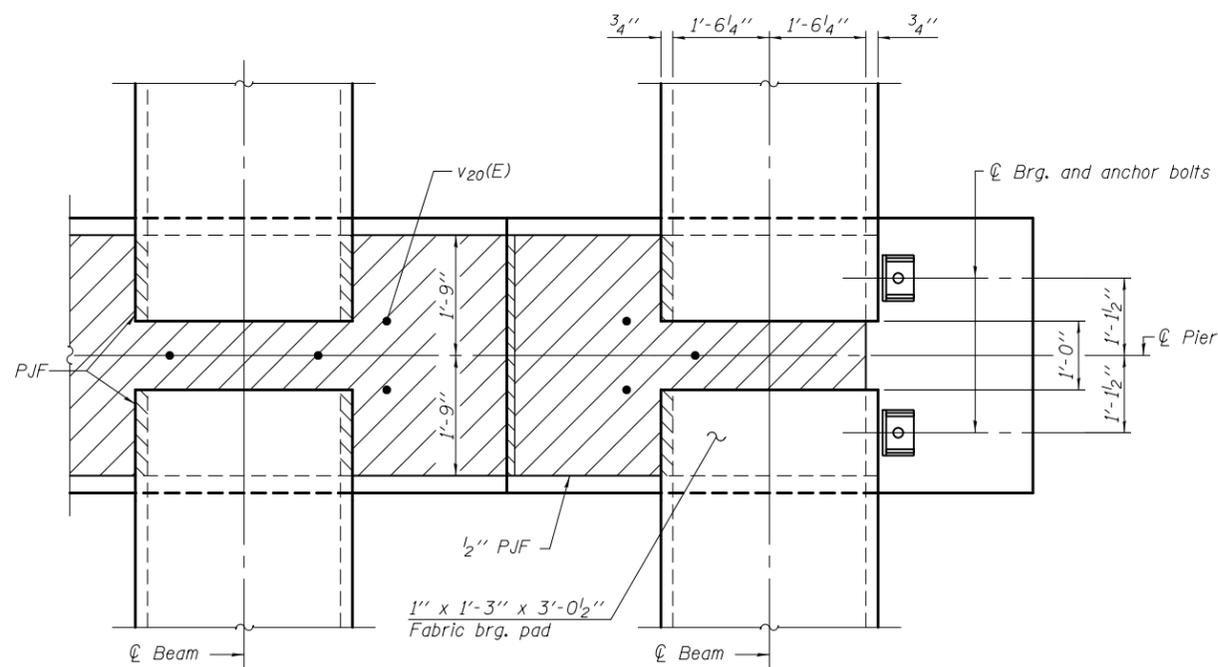
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

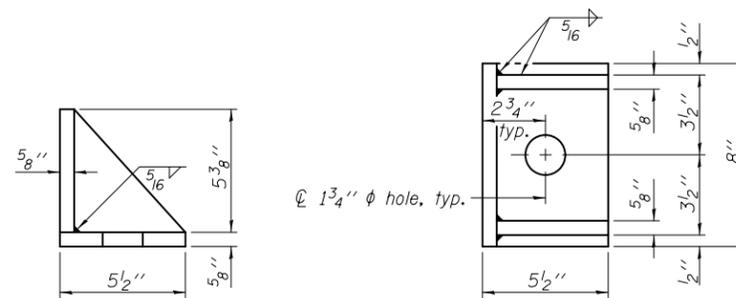


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.

Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL 36N-0

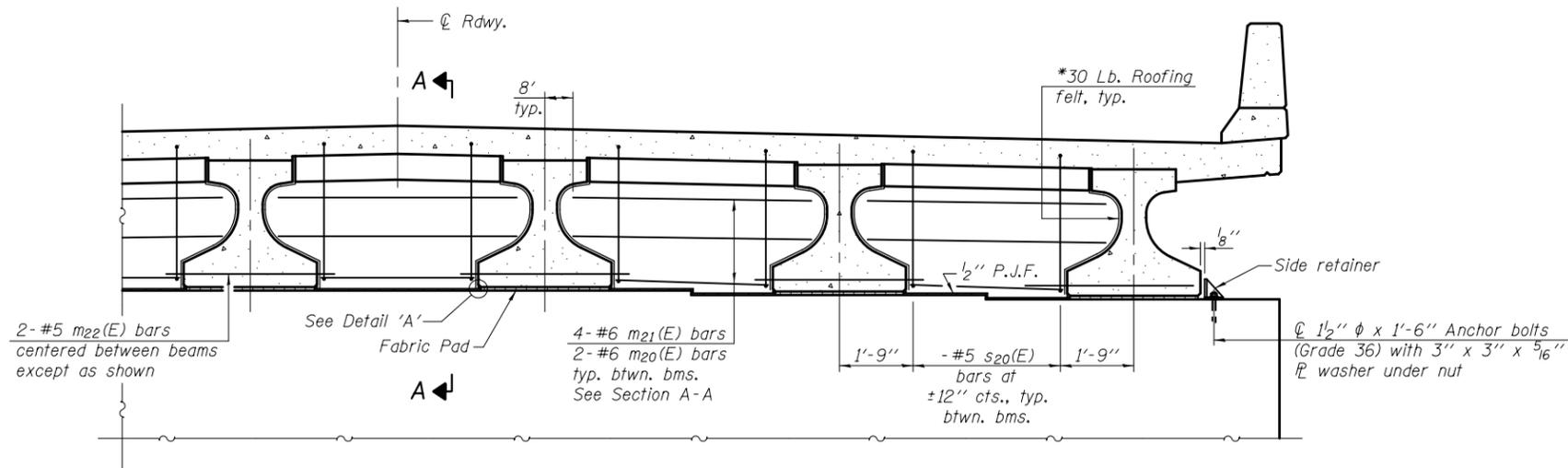
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

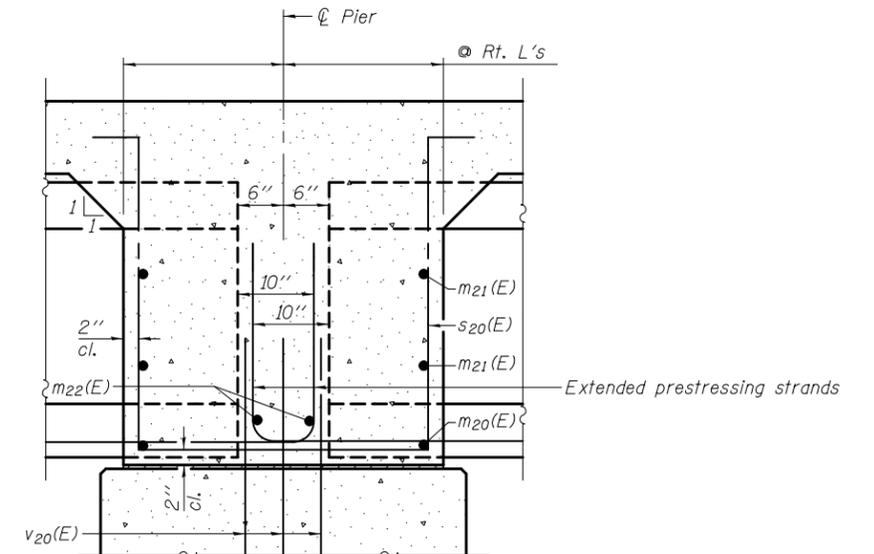
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CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



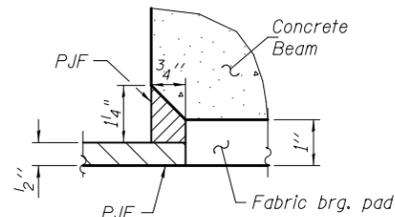
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

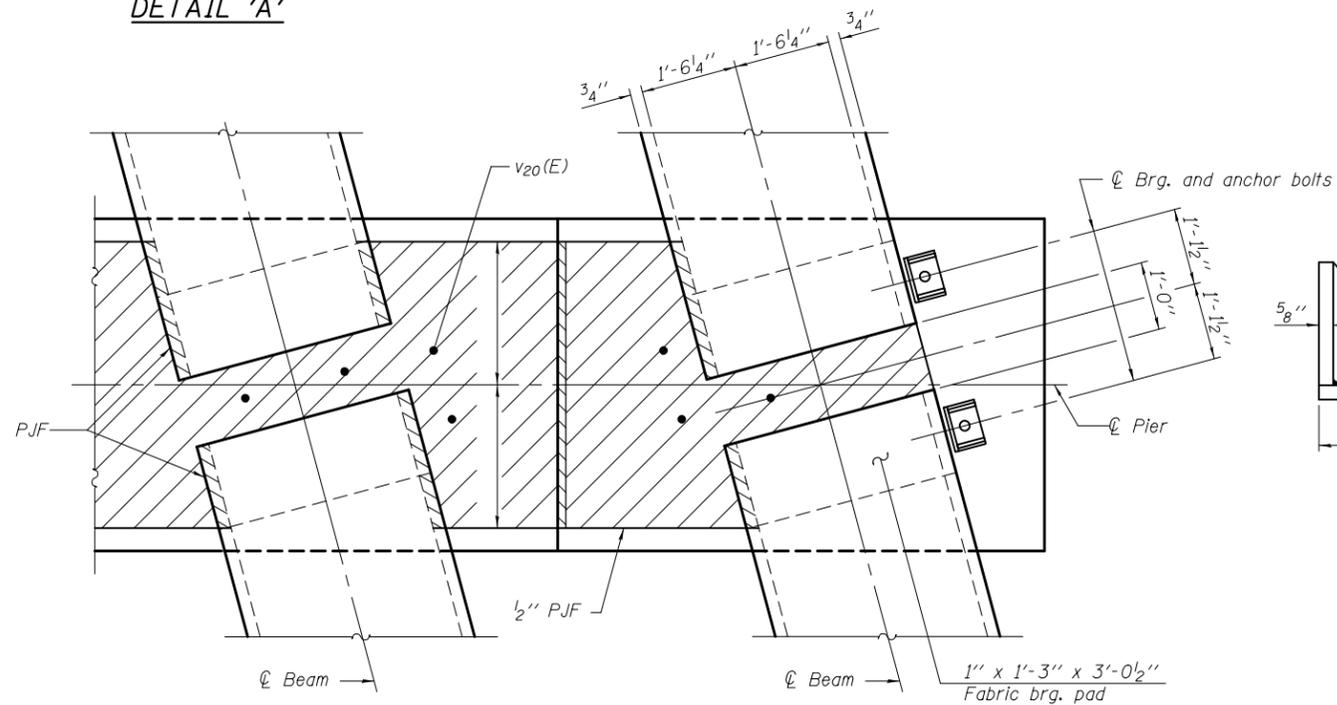


SECTION A-A

(Dimensions along \bar{C} of beam except as shown)

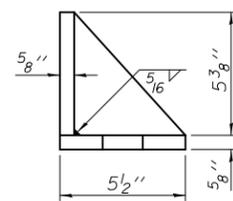


DETAIL 'A'



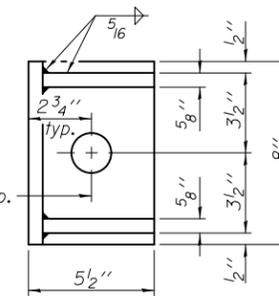
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- For details of bar s20(E) see sheet of .
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- Spacing for these bars shall be at right angles to the beams.
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- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL 36N-L

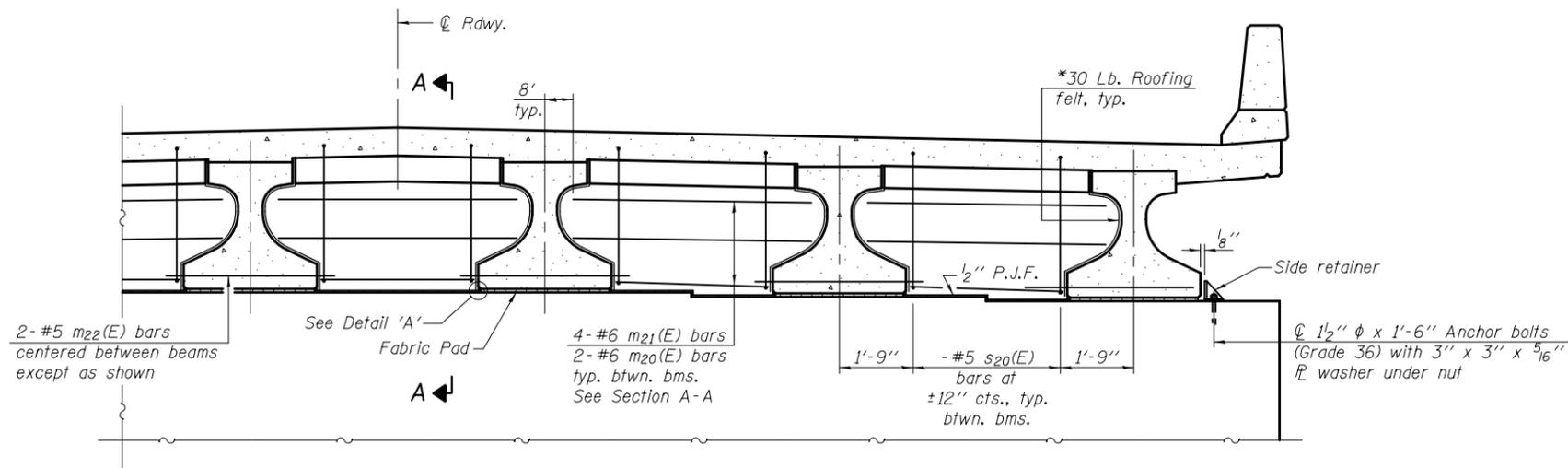
07-15-16

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

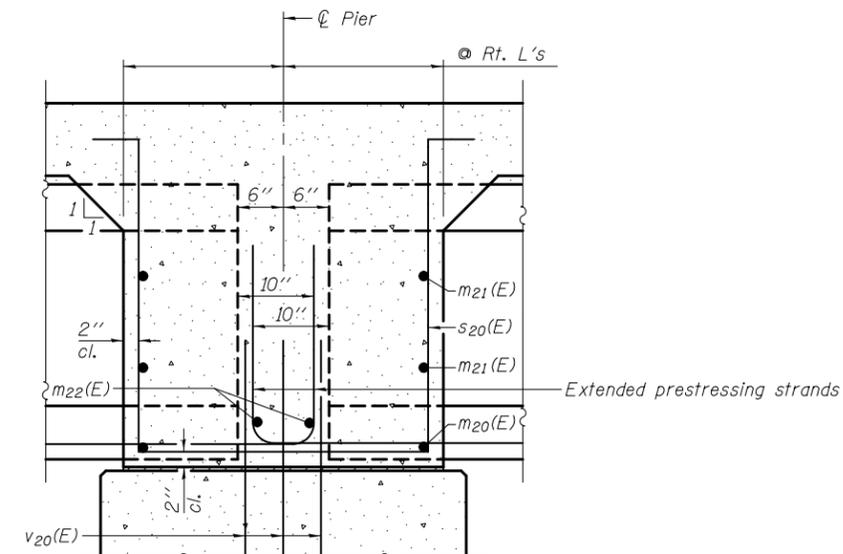
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



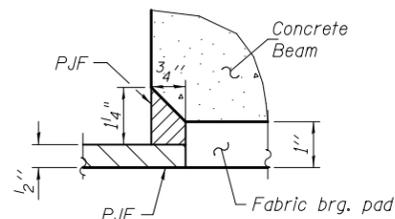
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

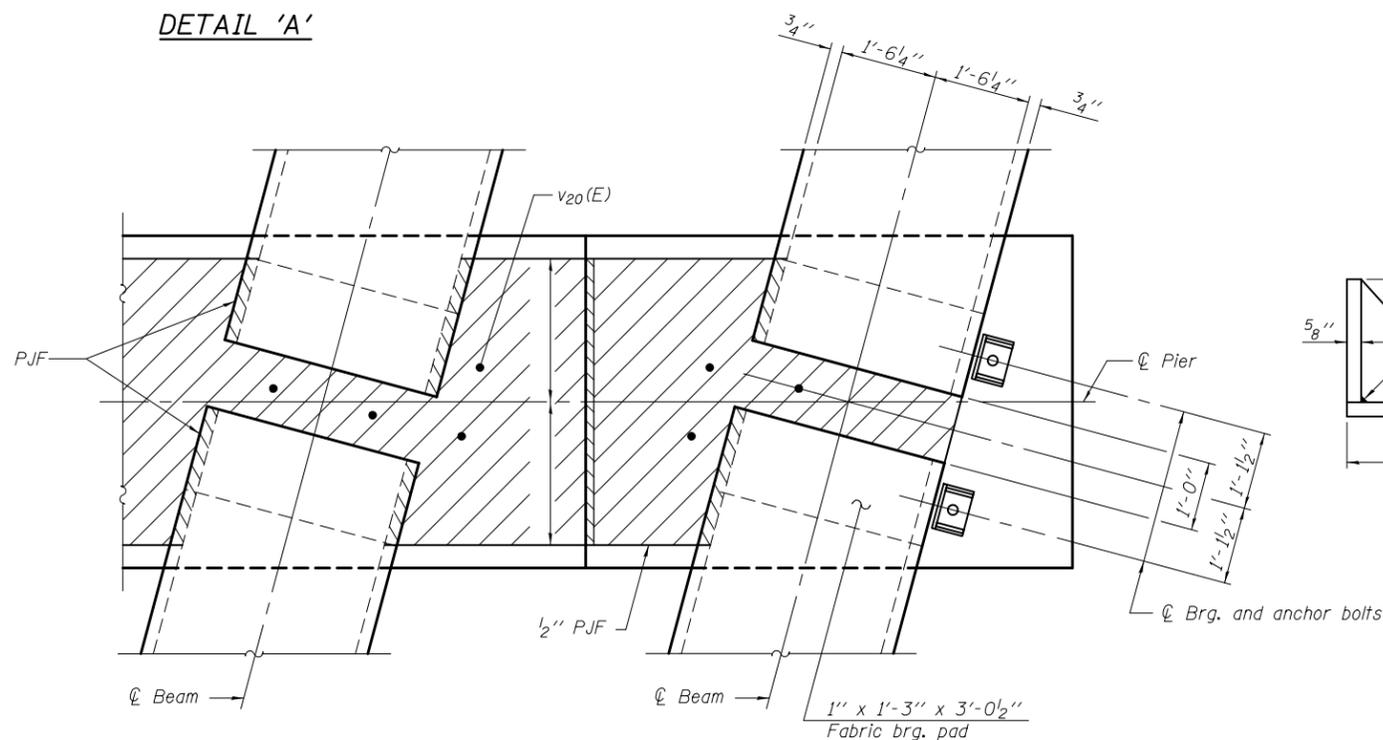


SECTION A-A

(Dimensions along \varnothing of beam except as shown)

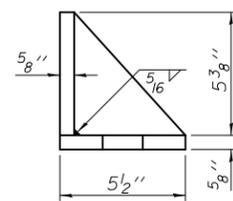


DETAIL 'A'



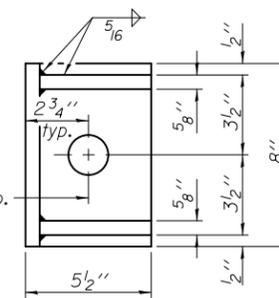
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
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- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
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- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL36N-R

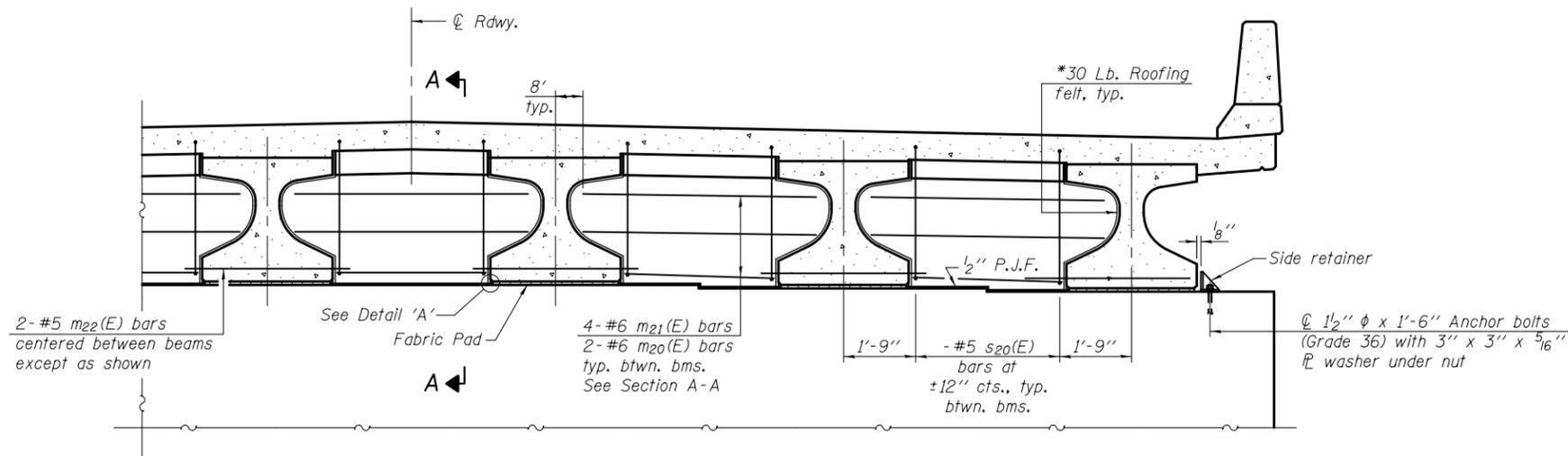
07-15-16

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

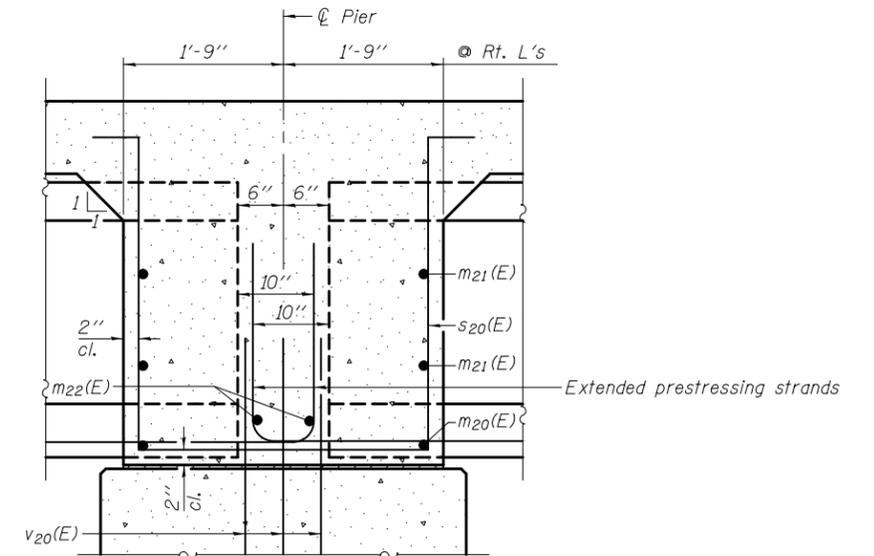
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



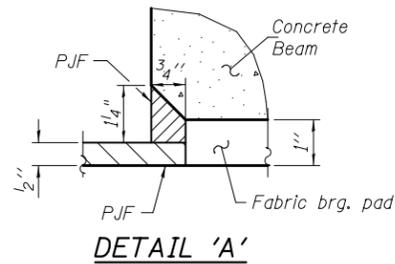
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

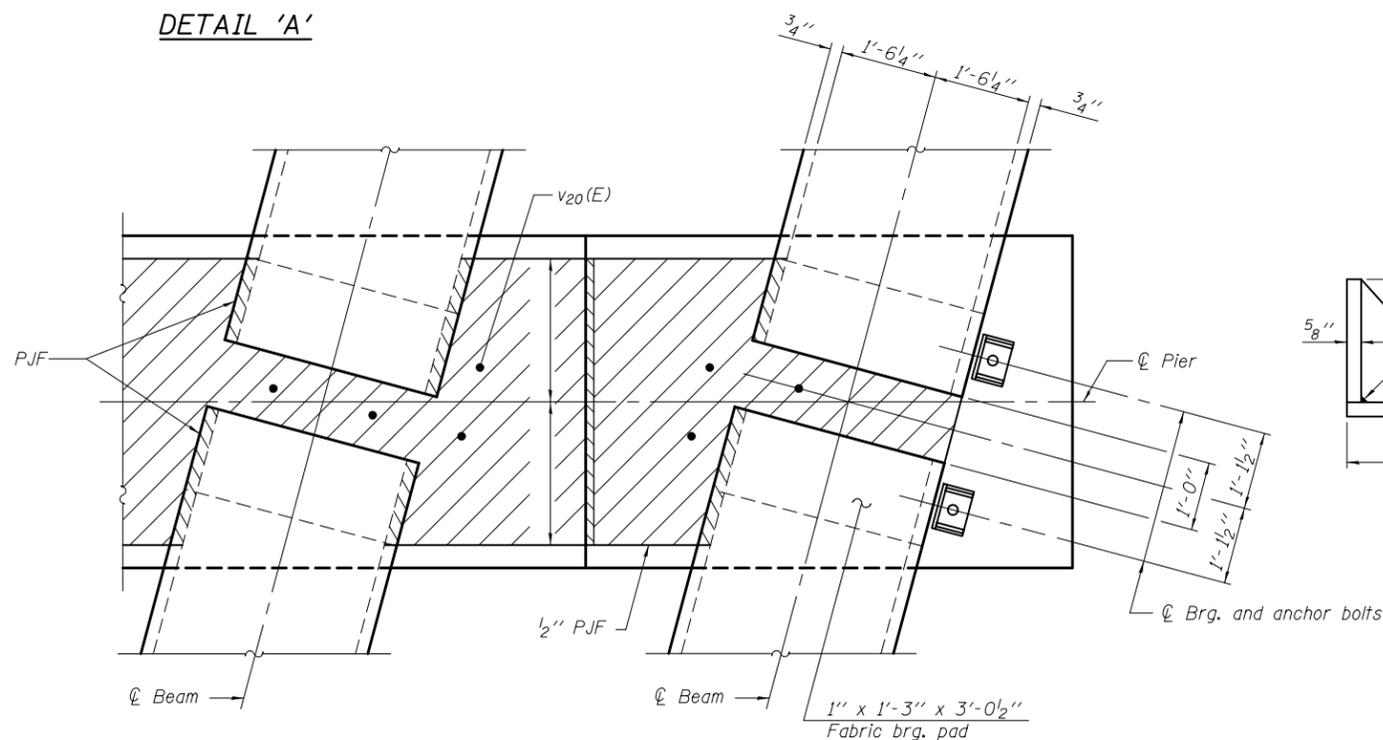


SECTION A-A

(Dimensions along ϕ of beam except as shown)

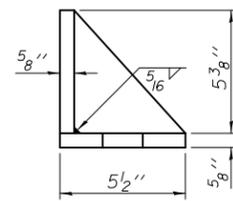


DETAIL 'A'



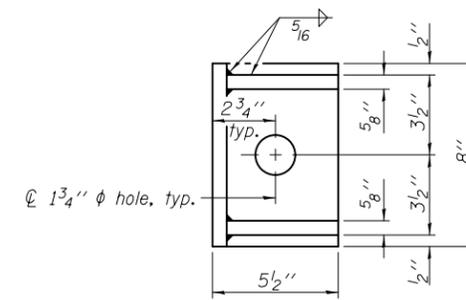
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL36-R

07-15-16

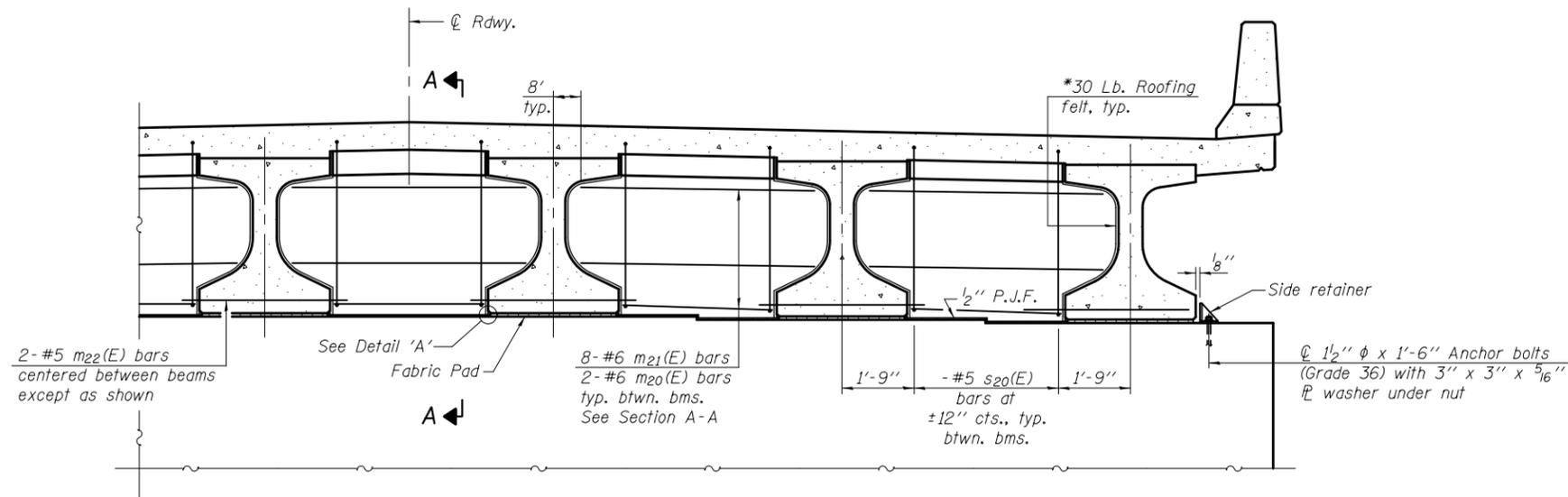
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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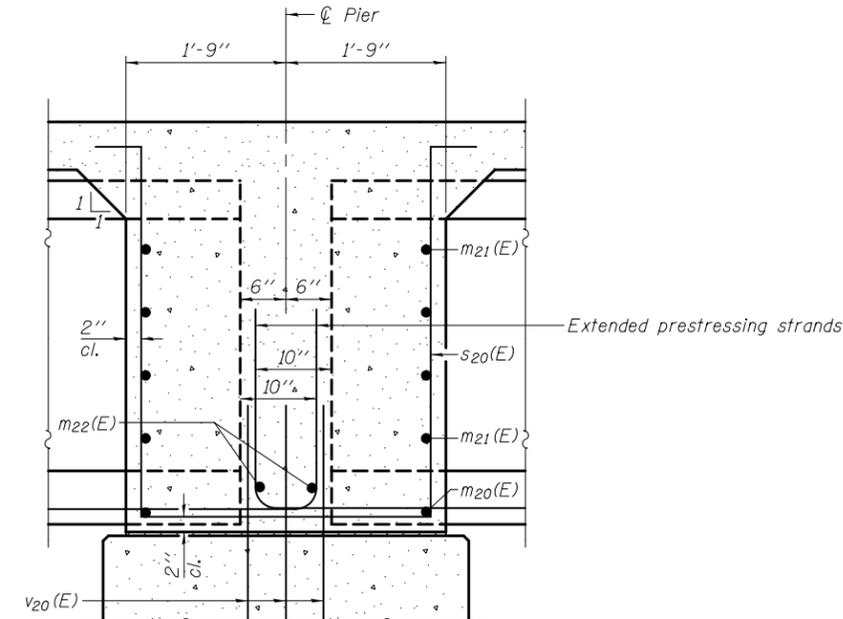
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT

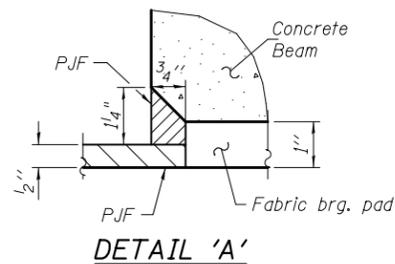


DIAPHRAGM AT PIER

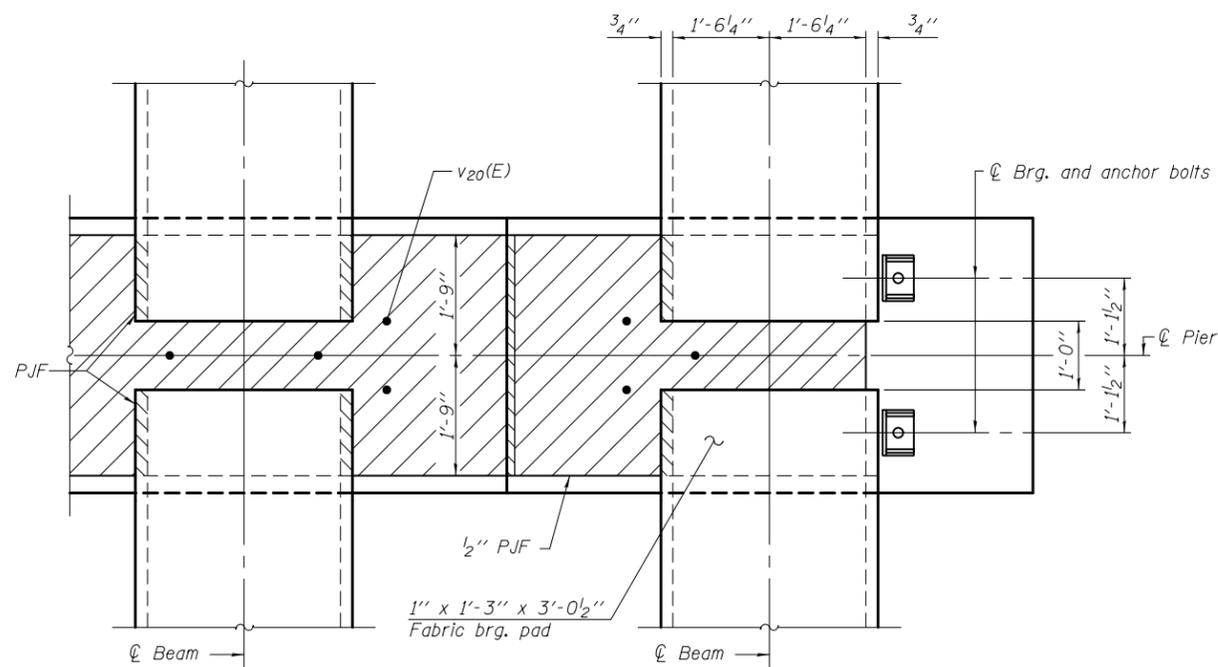
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

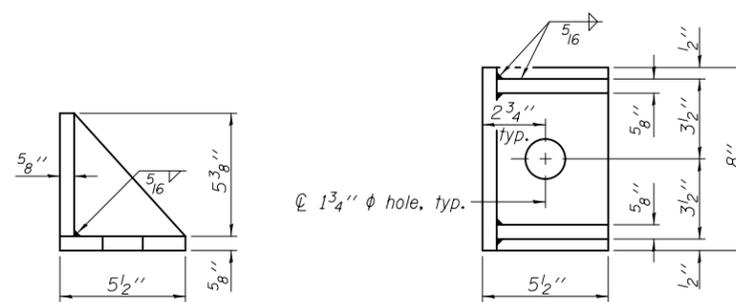


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
For details of bar s20(E) see sheet of .
Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized. Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DFP-IL4554-0

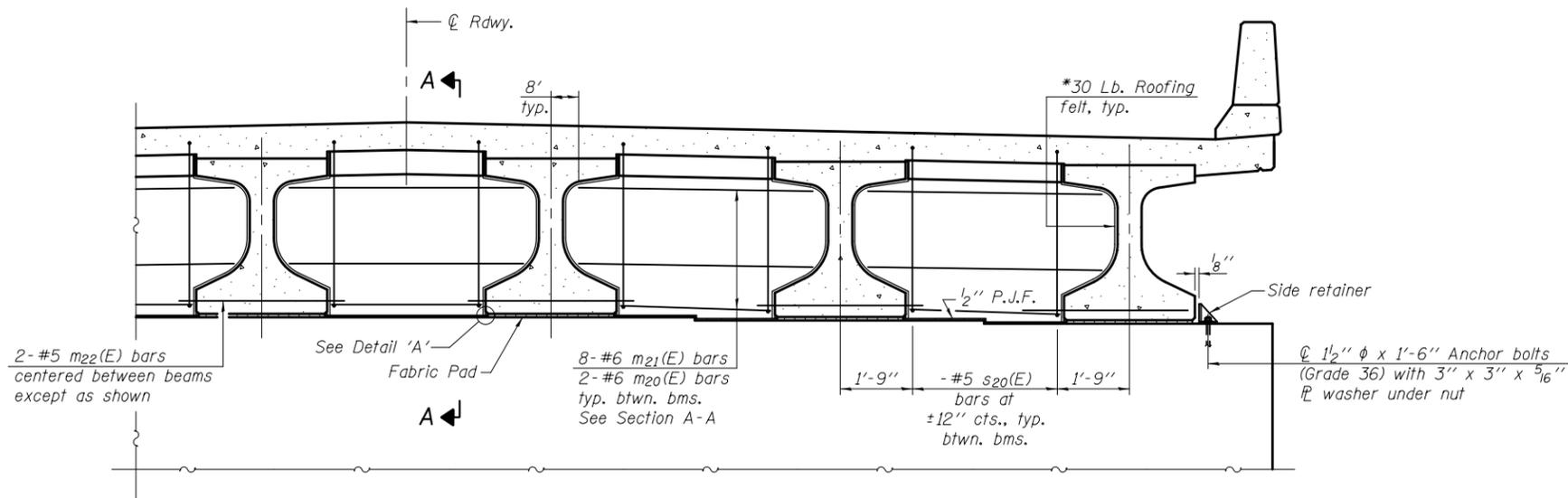
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

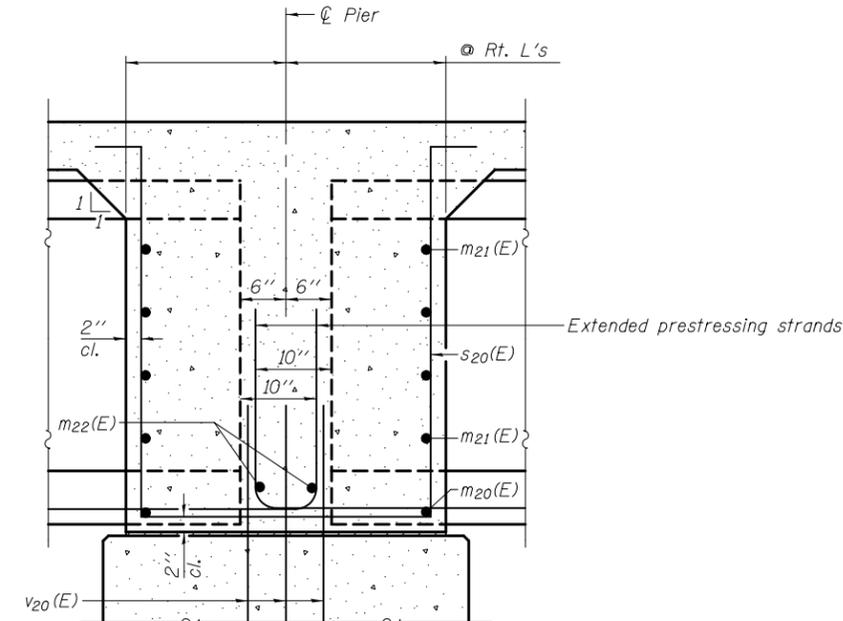
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CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



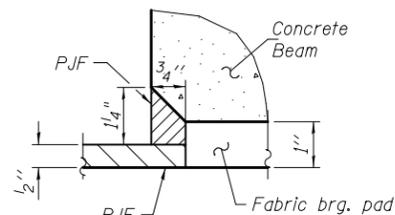
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

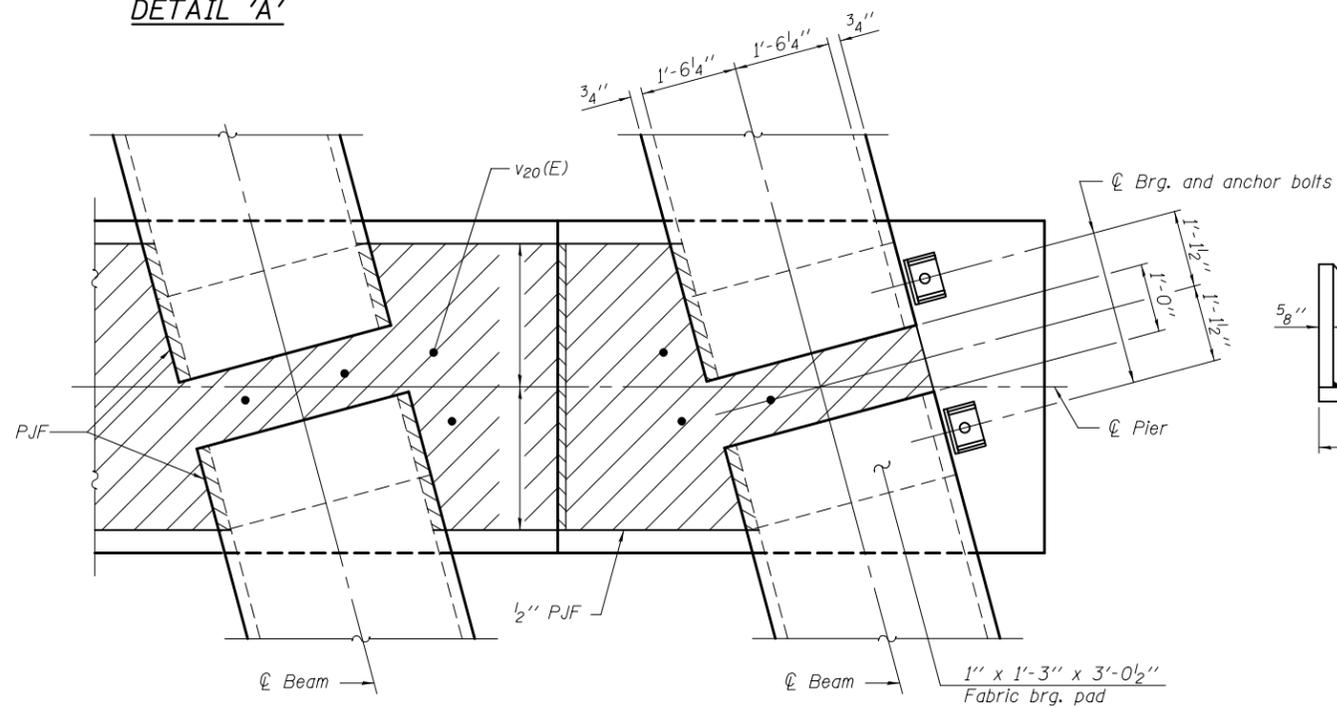


SECTION A-A

(Dimensions along ϕ of beam except as shown)

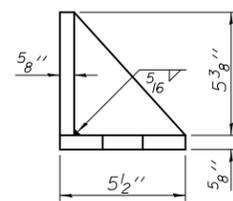


DETAIL 'A'



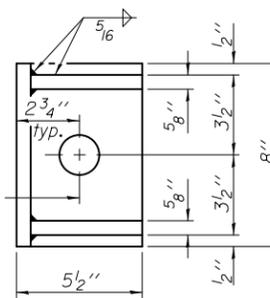
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
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DFP-IL4554-L

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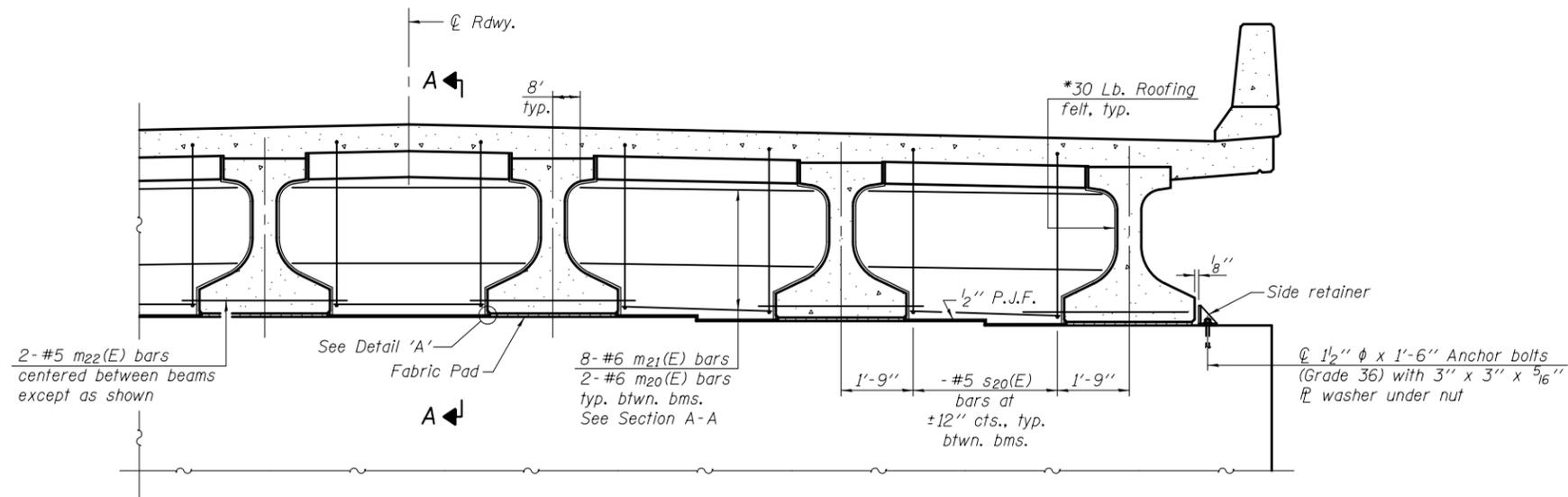
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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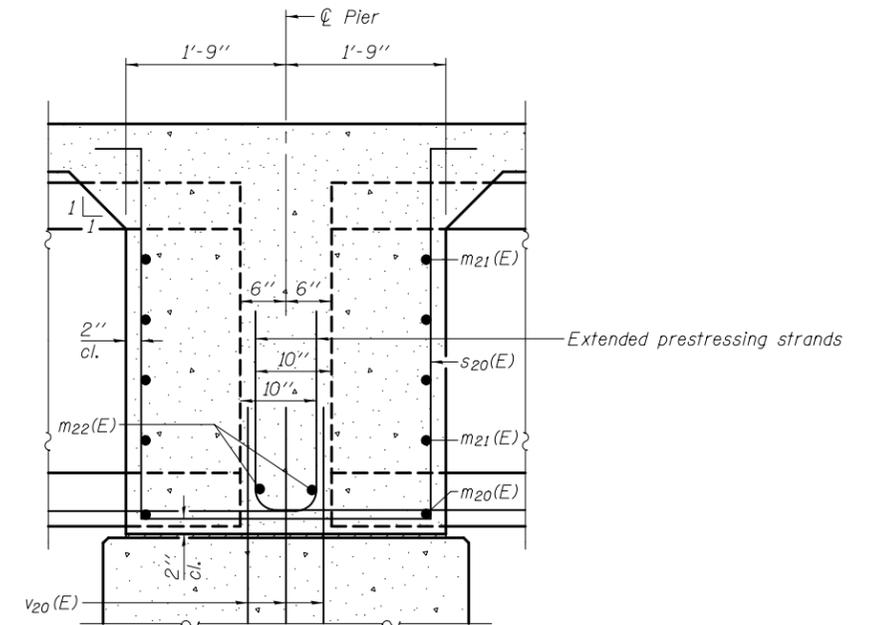
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT

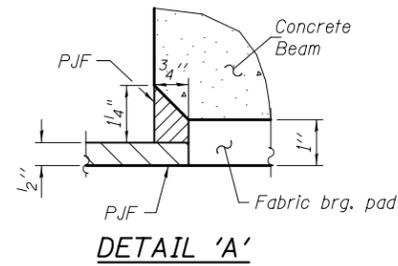


DIAPHRAGM AT PIER

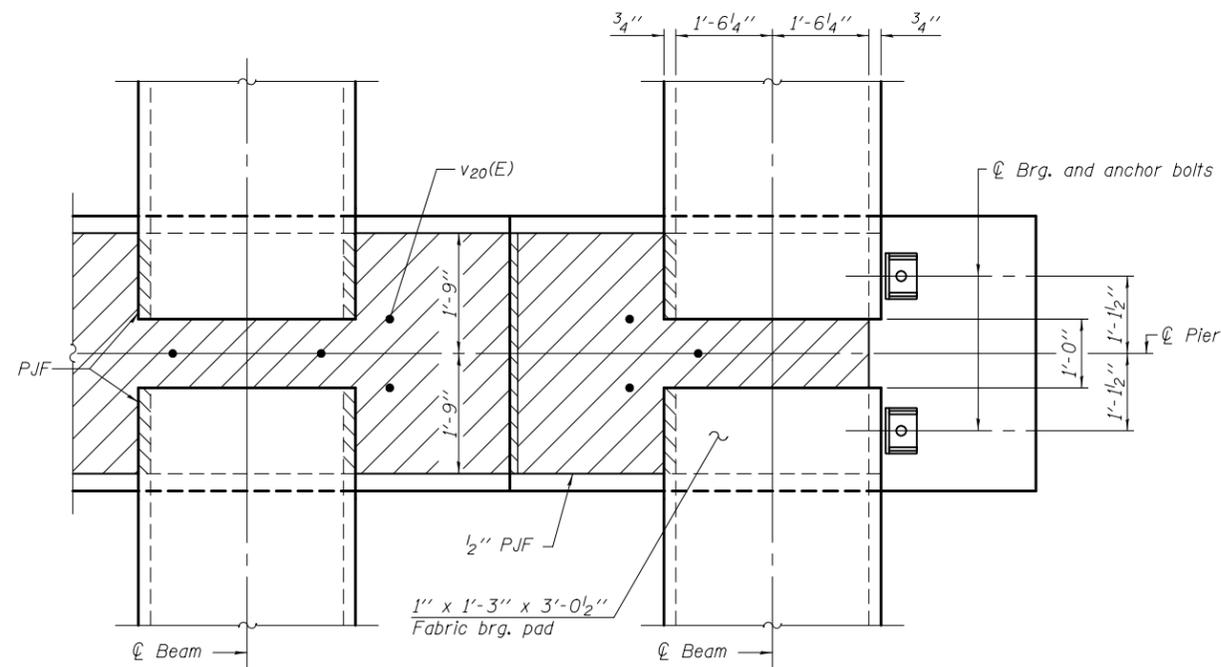
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

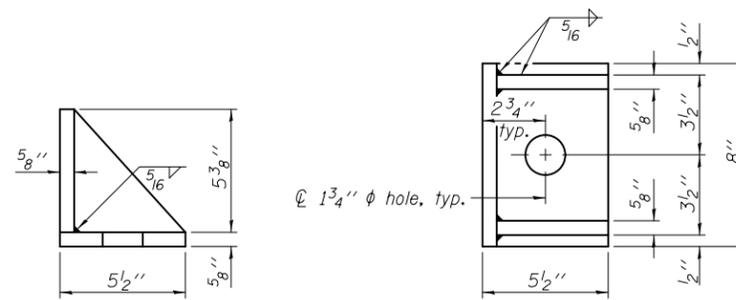


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet of .
Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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DFP-IL4554N-0

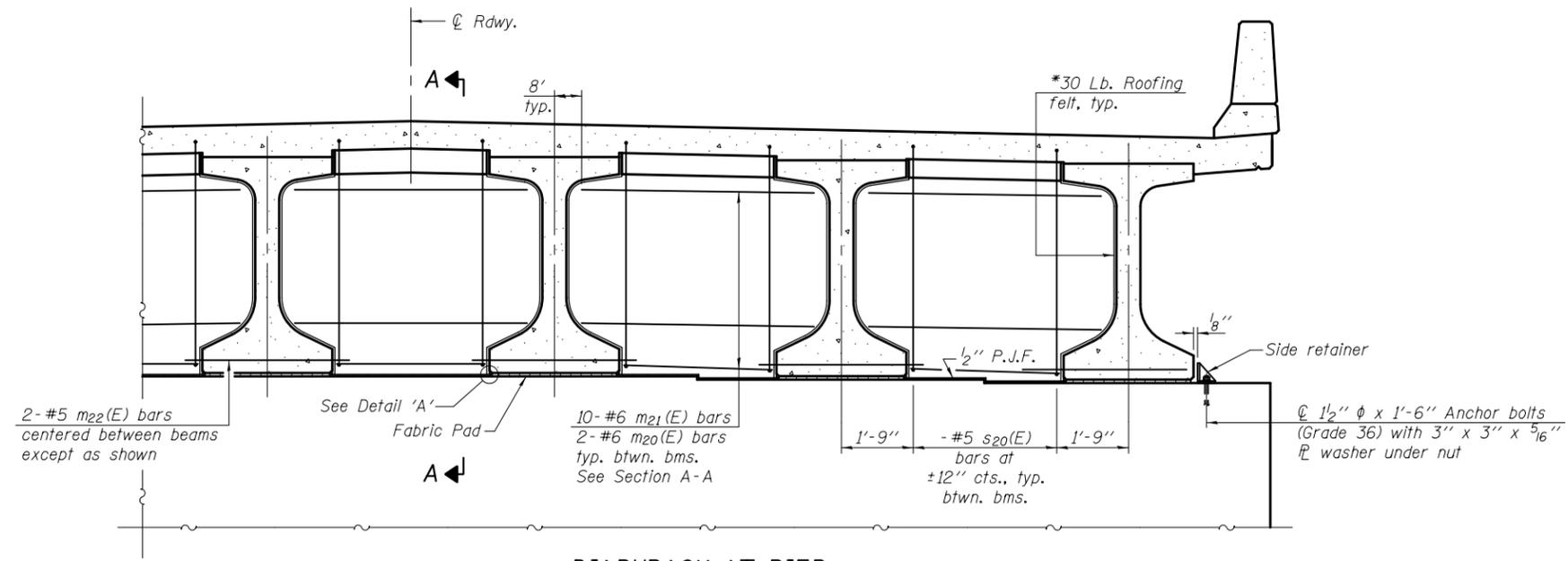
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

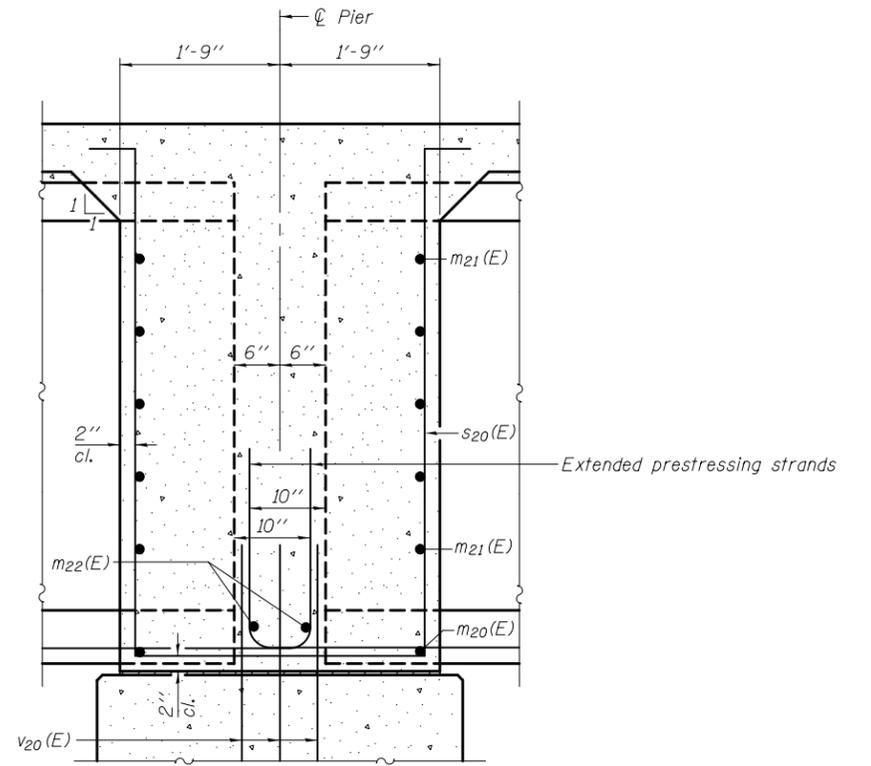
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CONTRACT NO.				
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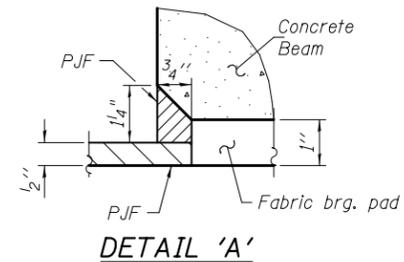


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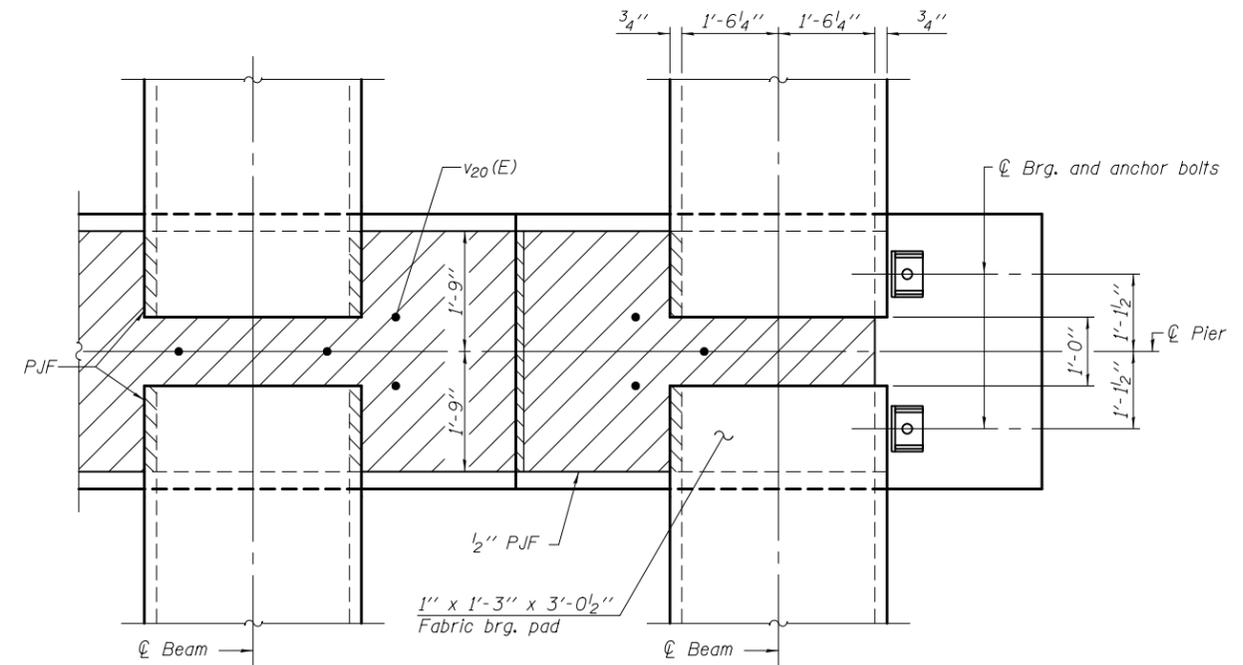
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SECTION A-A

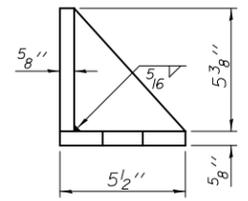


DETAIL 'A'



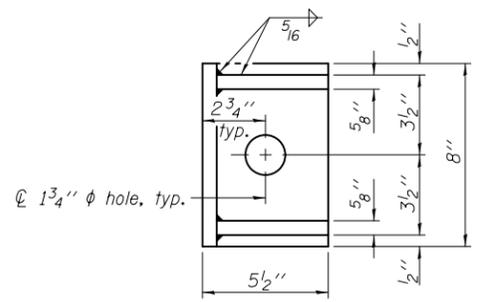
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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DFP-IL6372-0

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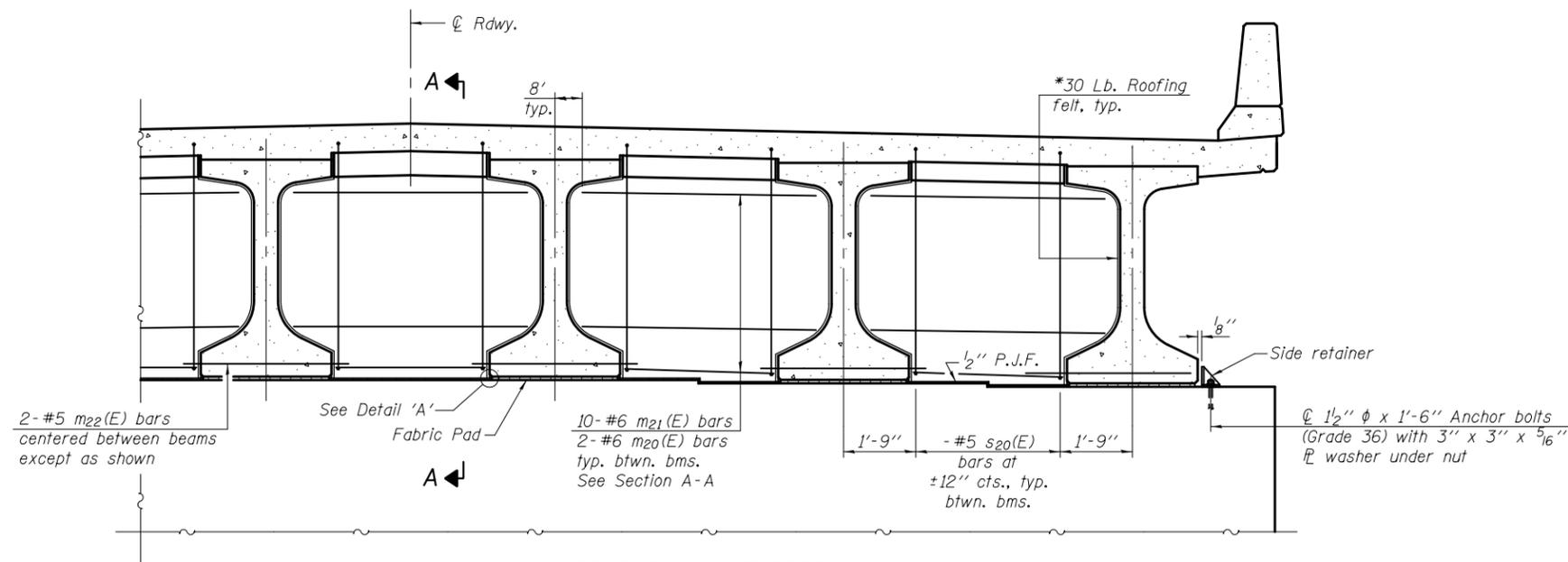
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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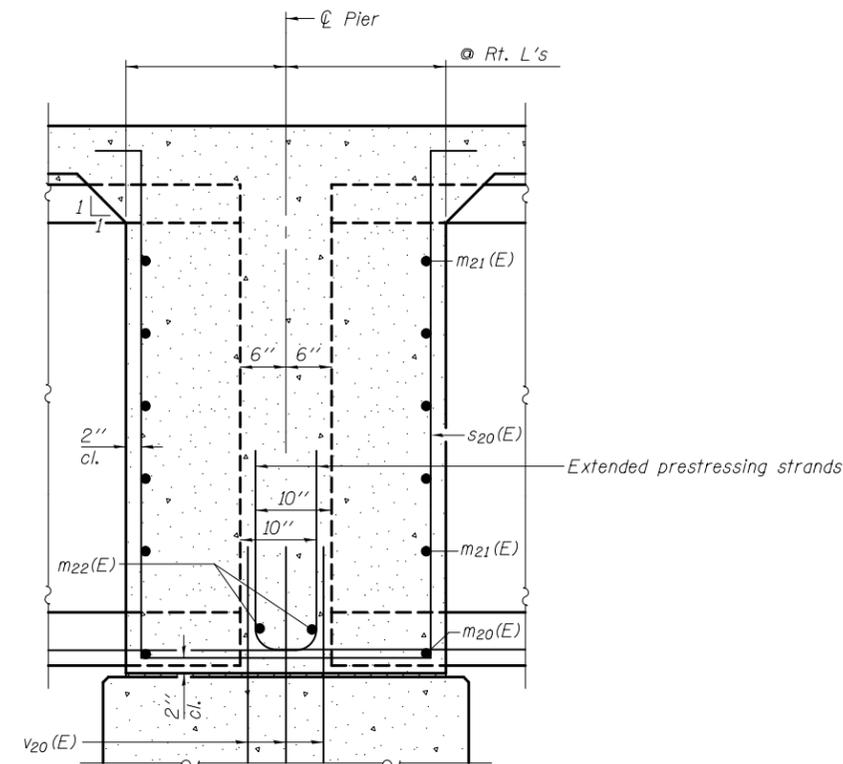
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT



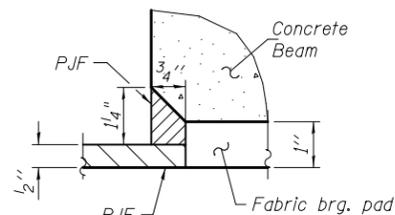
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

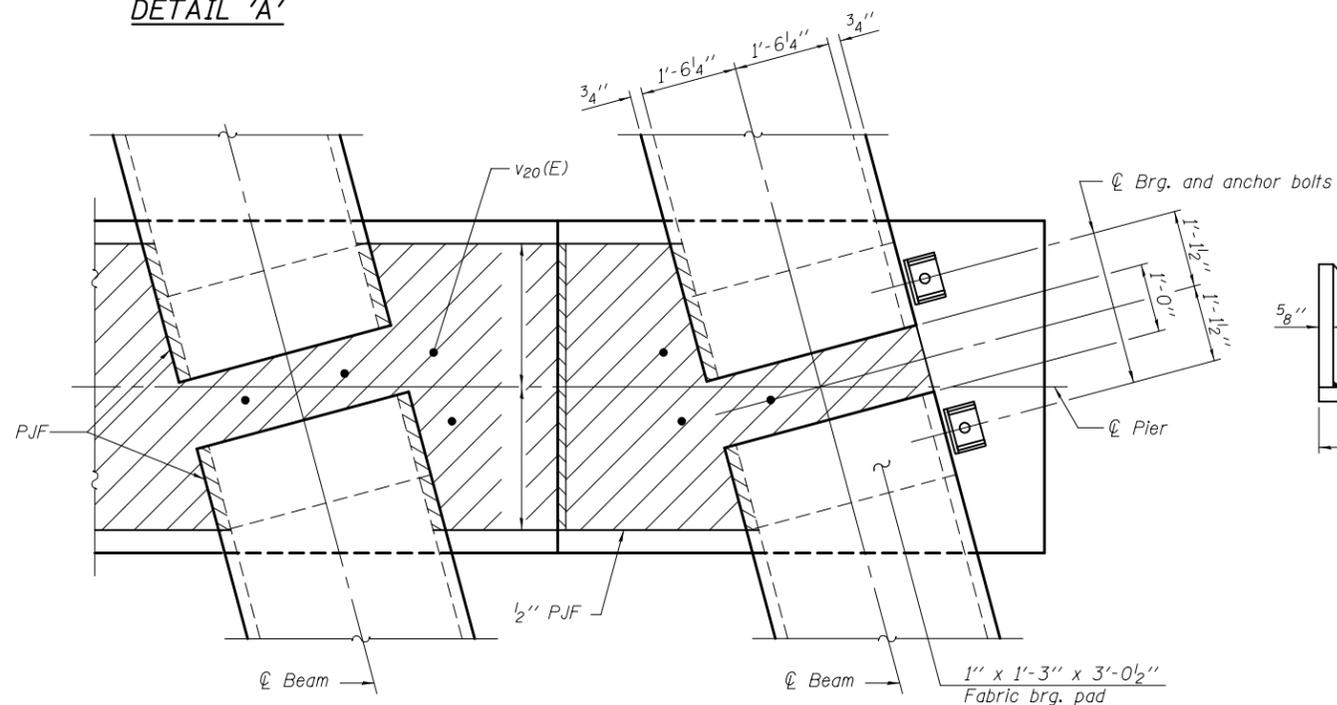


SECTION A-A

(Dimensions along ϕ of beam except as shown)

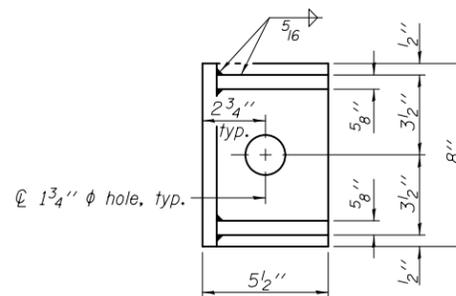


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners
will be allowed in lieu of welded plates.

Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
- Concrete in diaphragm is included with Concrete Superstructure on sheet of .
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DFP-IL6372-L

07-15-16

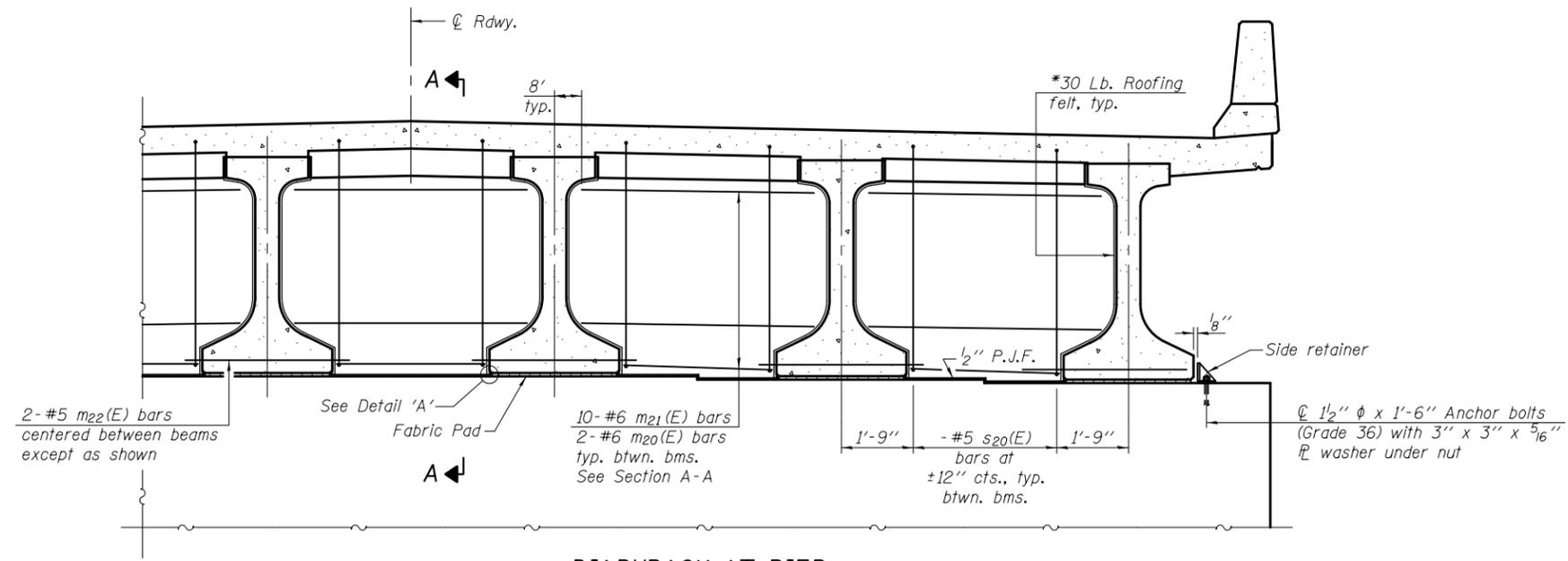
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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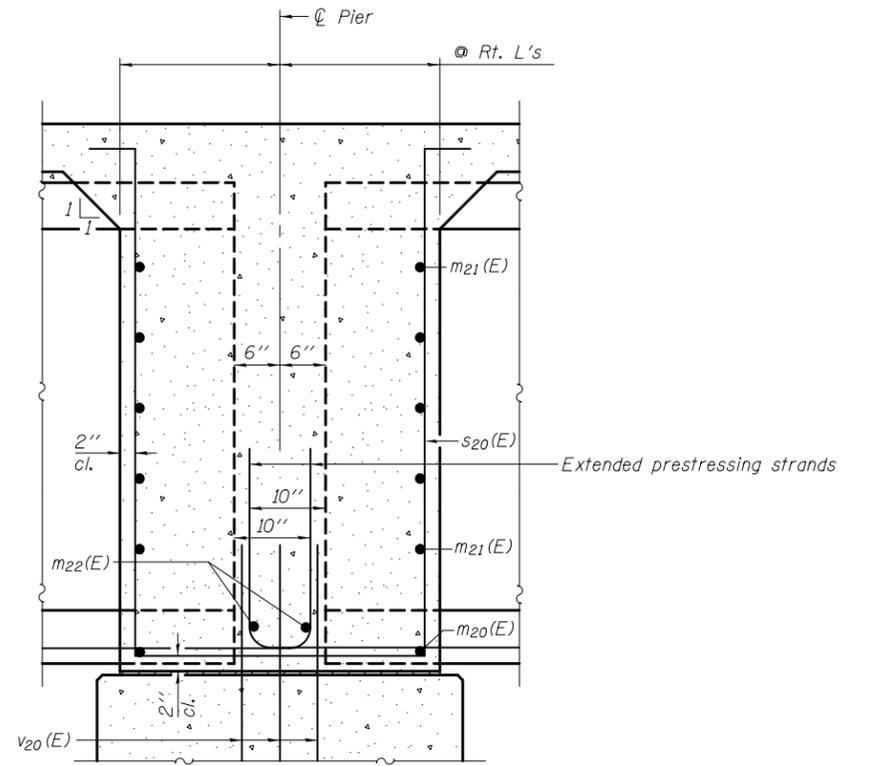
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT



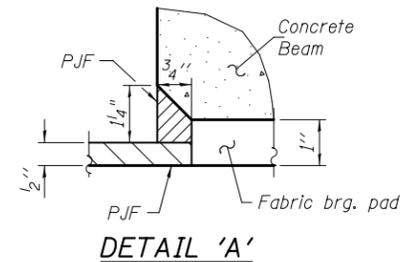
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

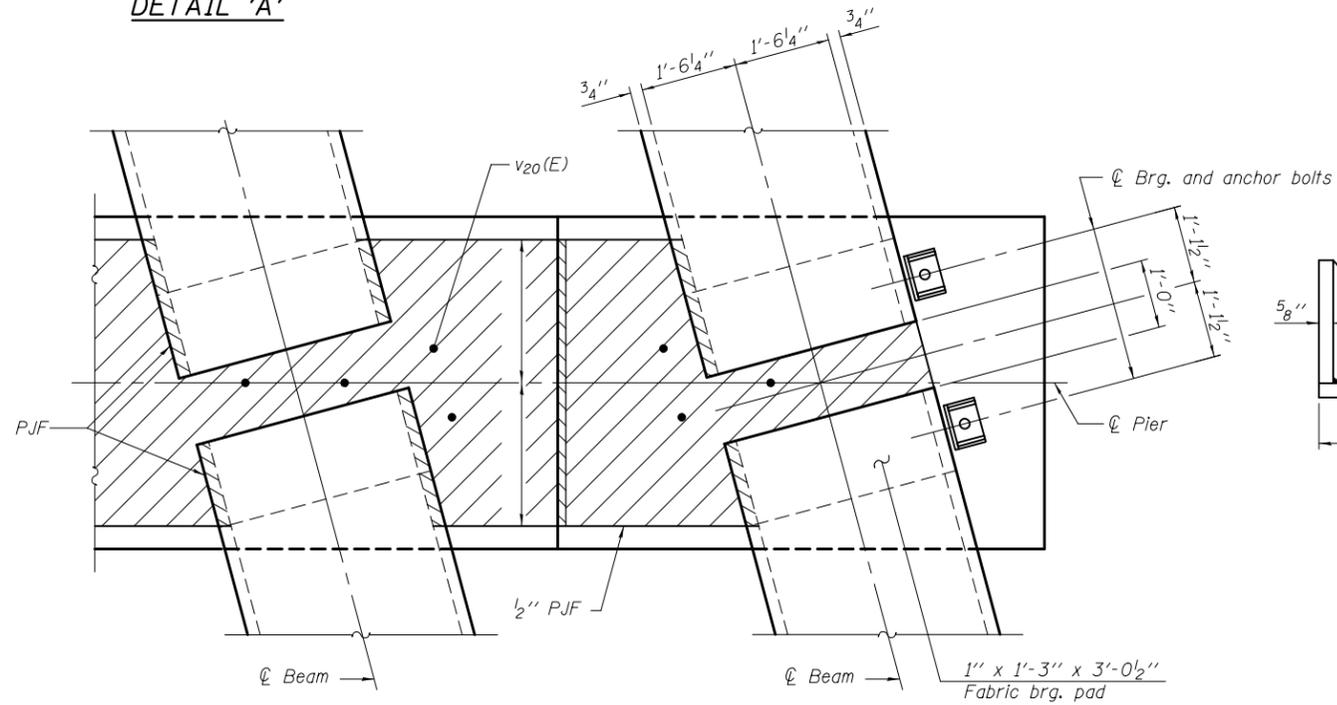


SECTION A-A

(Dimensions along centerline of beam except as shown)

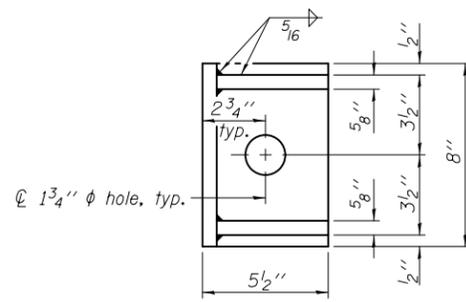


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet of .
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DFP-IL6372N-L

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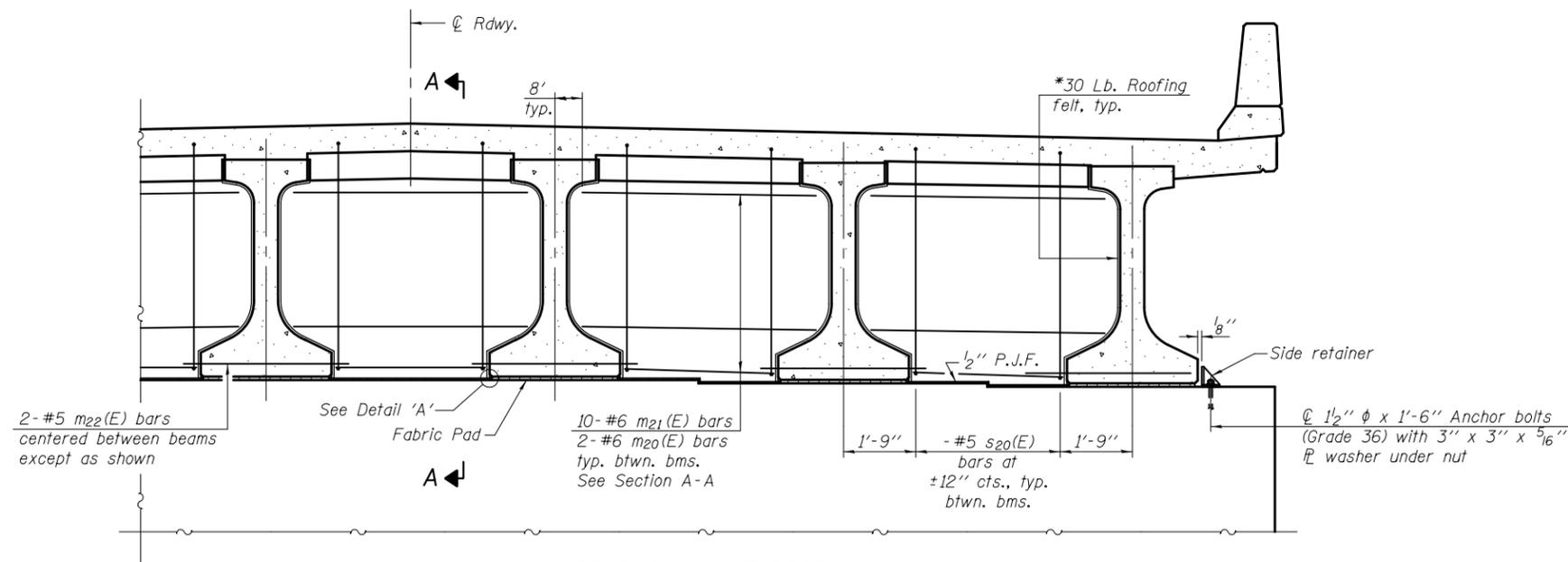
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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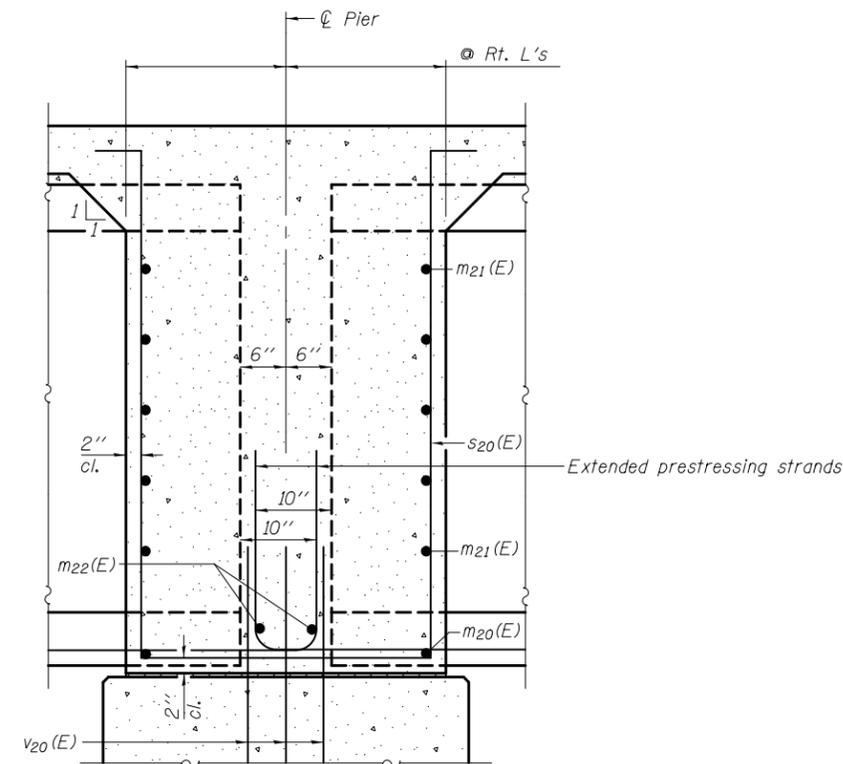
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ILLINOIS FED. AID PROJECT



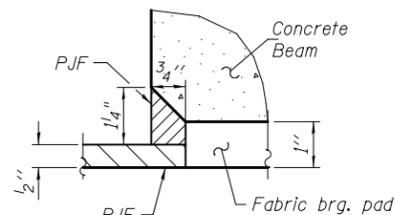
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

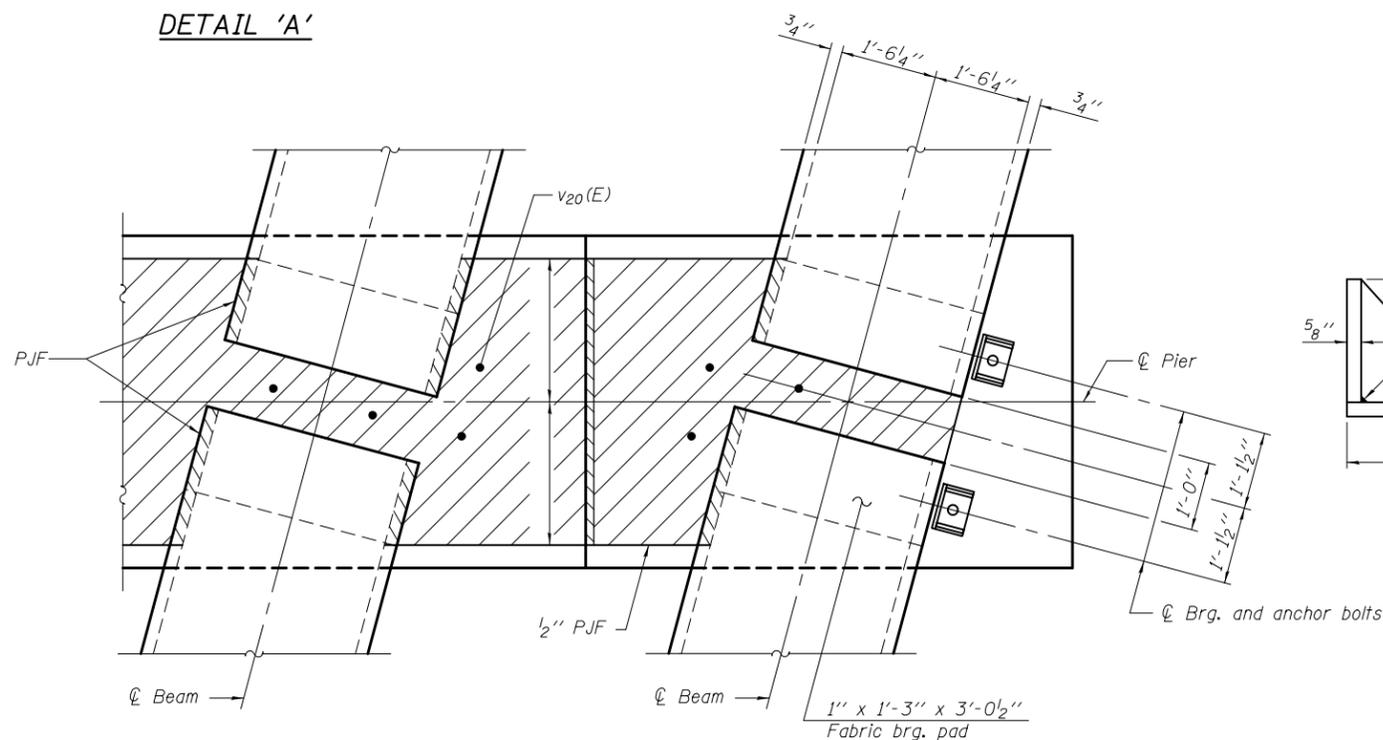


SECTION A-A

(Dimensions along ϕ of beam except as shown)

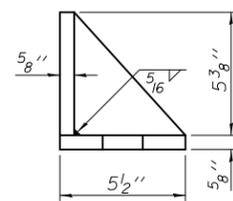


DETAIL 'A'



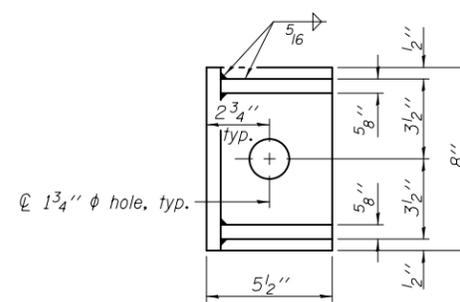
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
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DFP-IL6372N-R

07-15-16

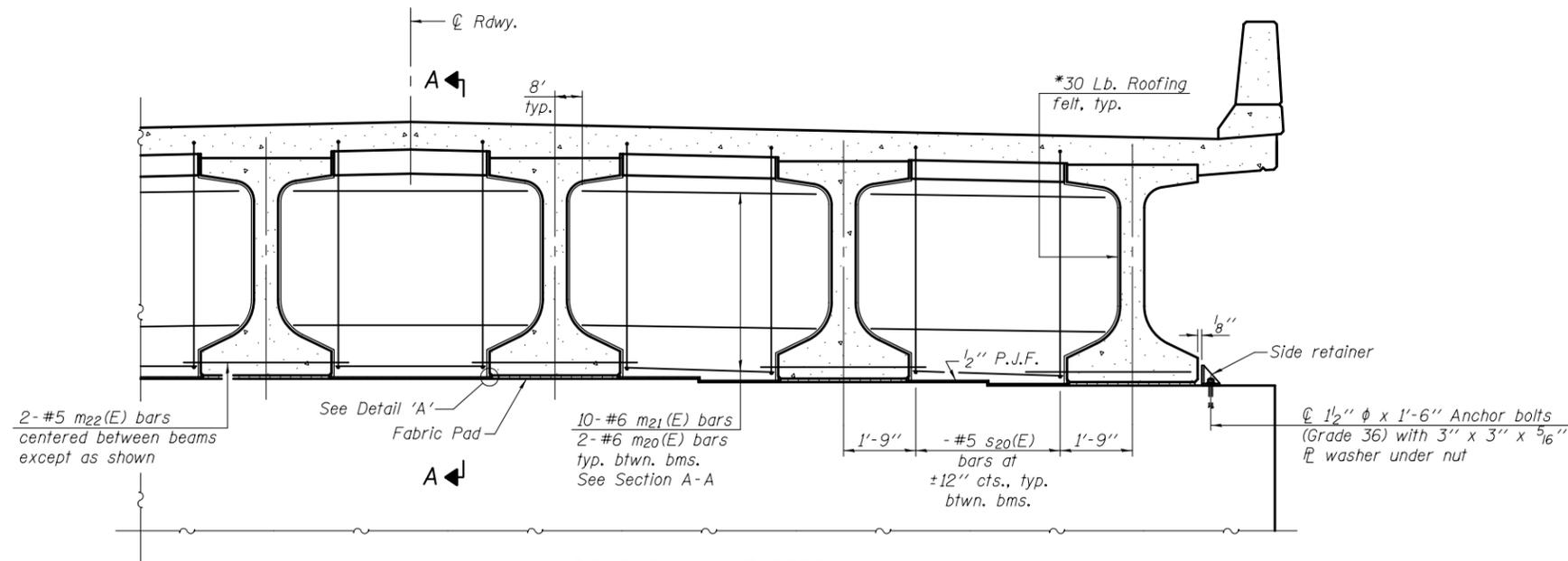
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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STRUCTURE NO.**

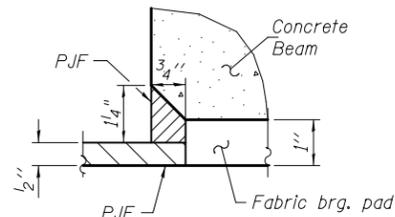
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CONTRACT NO.				

ILLINOIS FED. AID PROJECT

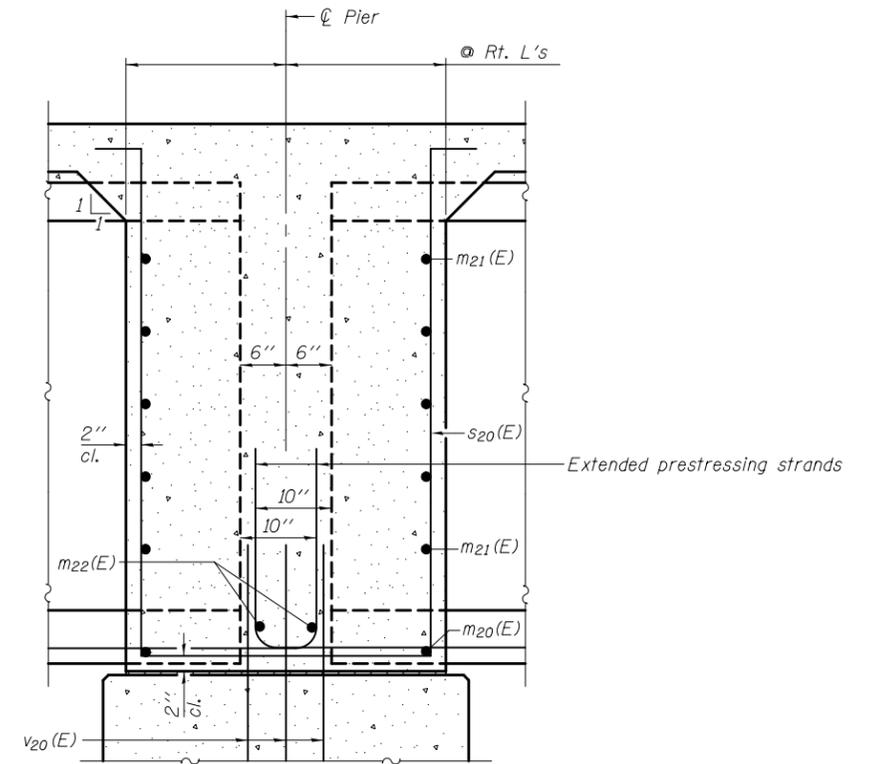


DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.

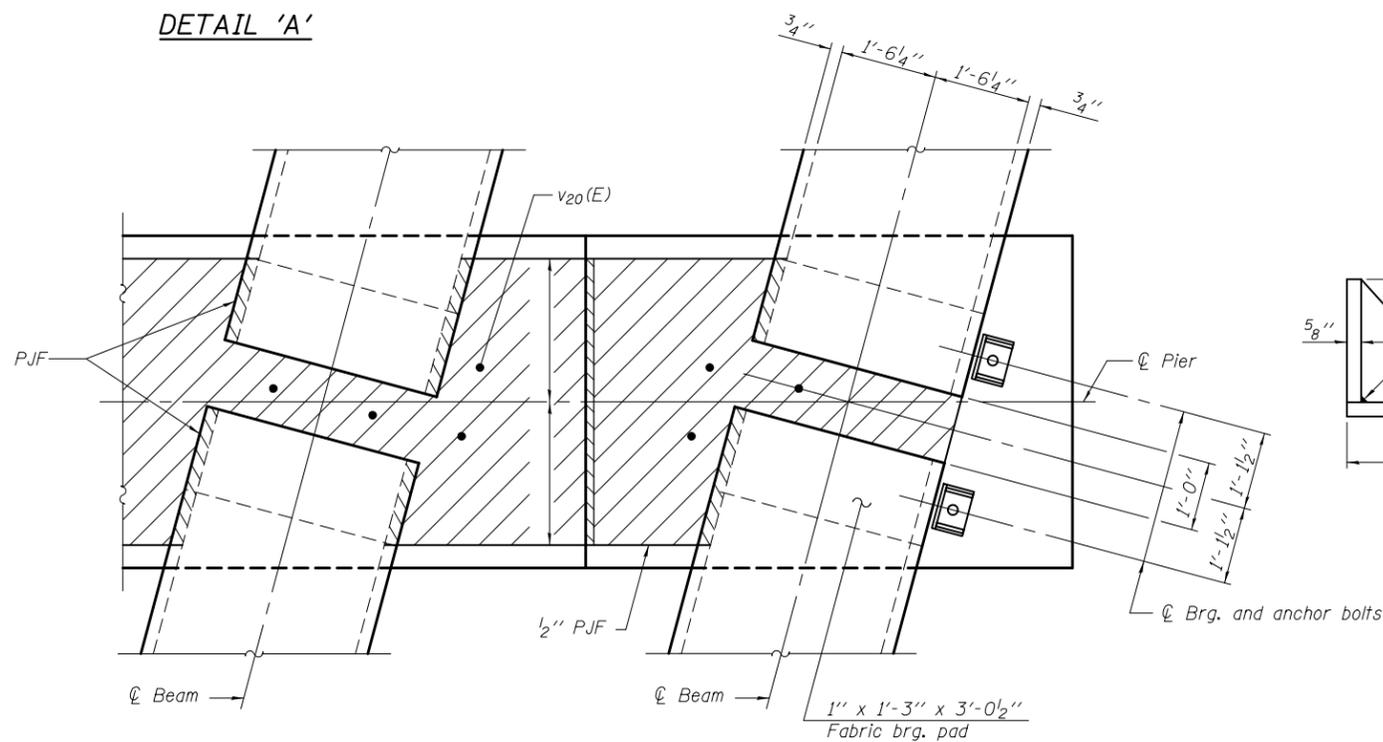


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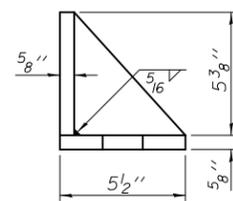
SECTION A-A

(Dimensions along centerline of beam except as shown)



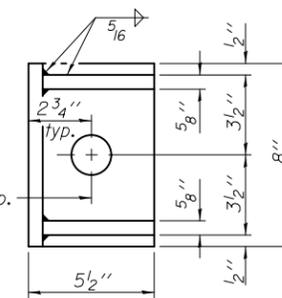
PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



Notes:

- Reinforcement bars in diaphragm are billed with superstructure on sheet of .
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DFP-IL6372-R

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**STATE OF ILLINOIS
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**DIAPHRAGM DETAILS
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