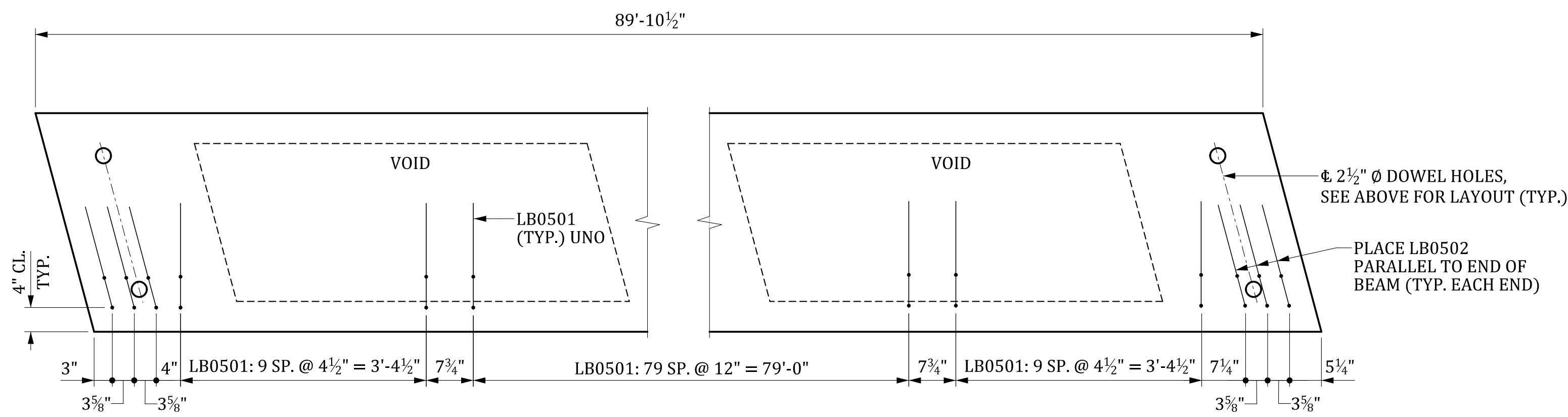


⌘ LONG LEG AT TOP OF BEAM  
 ⌘ FOR REINFORCEMENT, SEE "PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 2 OF 2" SHEET.

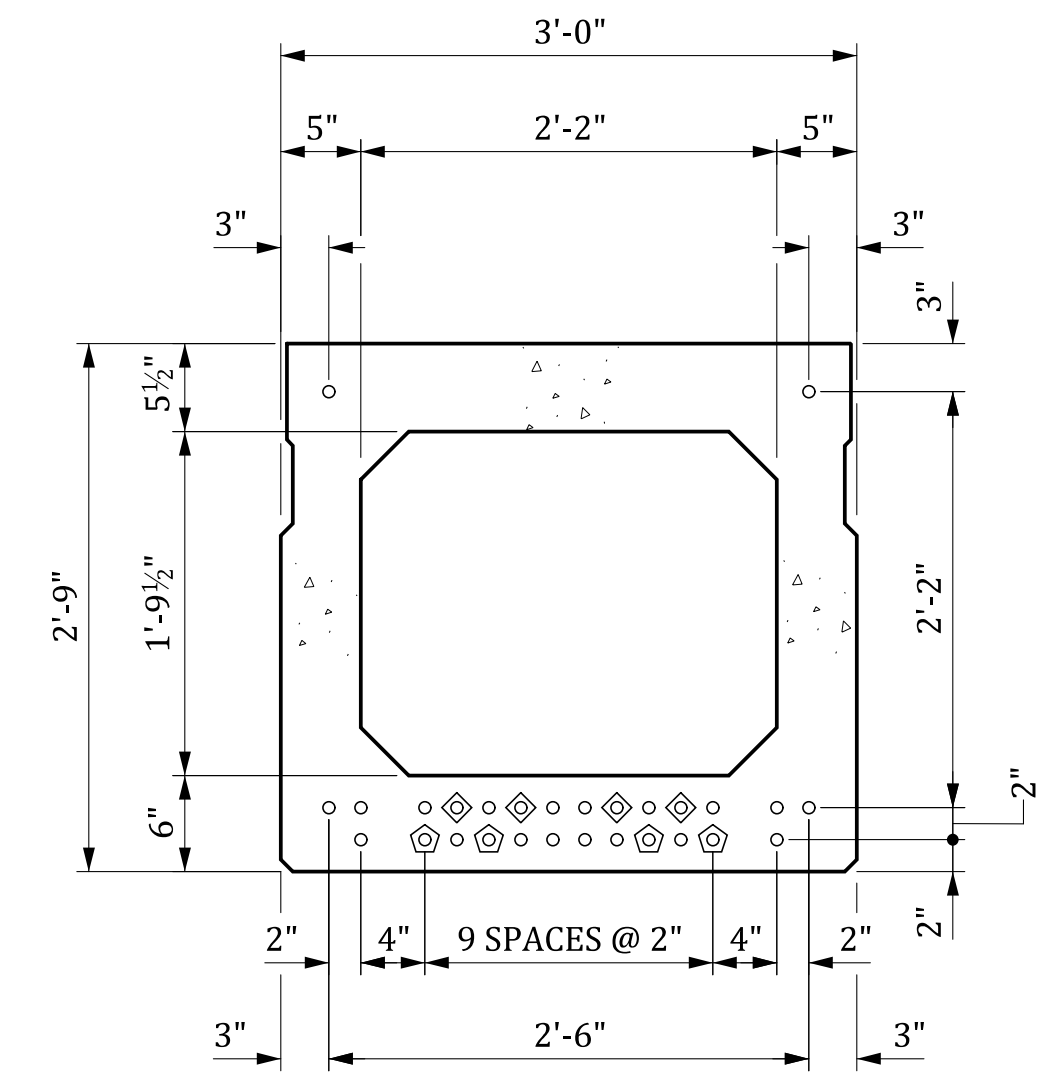
### PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.  
 INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



### PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF "LB05" BARS FOR MASH BARRIER PARAPET.  
 "LB05" BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



### STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

DESIGN DATA	
STRANDS:	0.6" Ø LOW RELAX. GRADE 270 AREA=0.217 SQ. IN. TENSIONING LOAD = 43.9 KIPS
CONCRETE:	f'c = 7.0 KSI f'ci = 5.0 KSI

- FULLY BONDED STRANDS
  - ◇ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
  - ⊗ DEBONDED STRANDS FOR 12'-0" FROM END OF BEAM
- NOTE:  
 BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

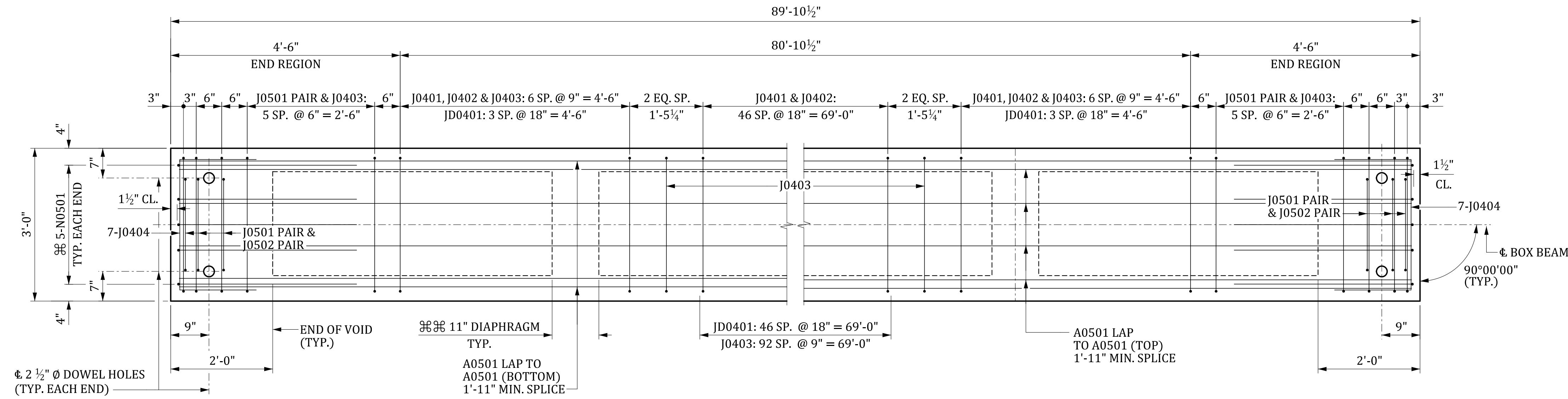
REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 1 OF 2 (-15° SKEW)	
COUNTY: ####	ROUTE: ####

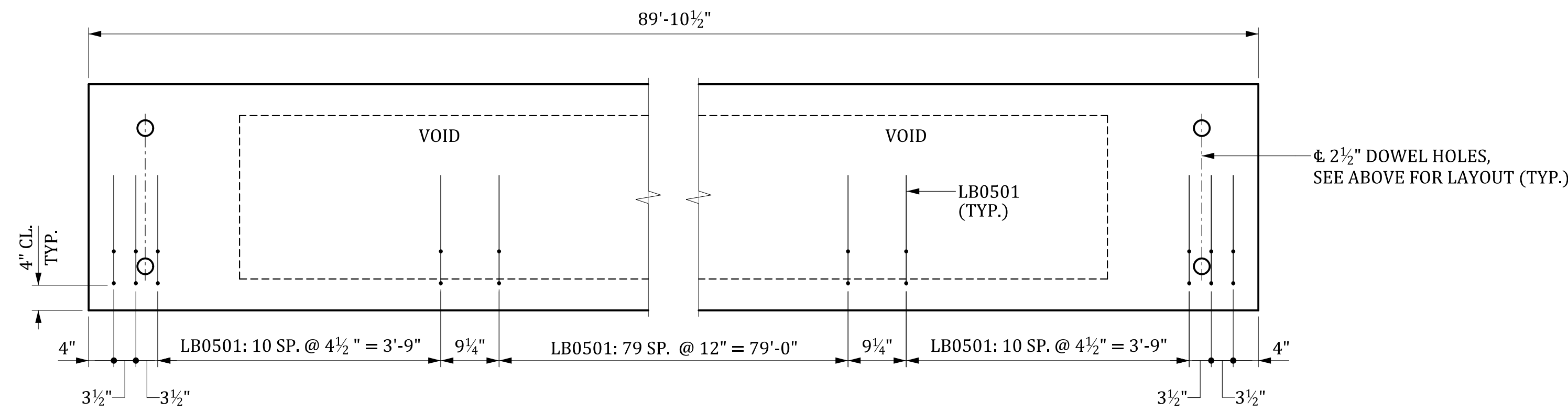
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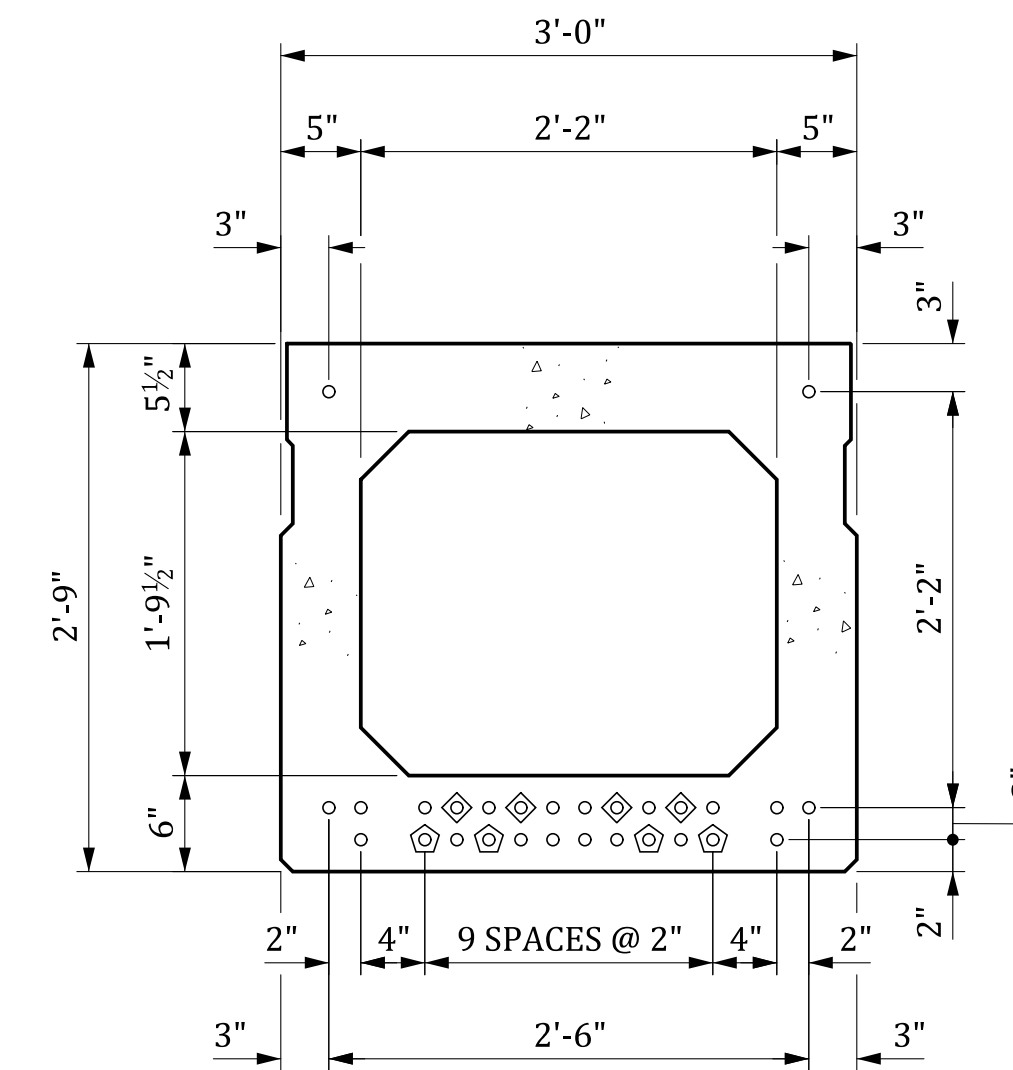
### PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.  
INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



### PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF LB0501 BARS FOR MASH BARRIER PARAPET.  
LB0501 BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



### STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

### DESIGN DATA

STRANDS:  
0.6"  $\phi$  LOW RELAX. GRADE 270  
AREA=0.217 SQ. IN.  
TENSIONING LOAD = 43.9 KIPS

CONCRETE:  
 $f_c$  = 7.0 KSI  
 $f_{ci}$  = 5.0 KSI

- FULLY BONDED STRANDS
- ◇ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
- ⊗ DEBONDED STRANDS FOR 12'-0" FROM END OF BEAM

NOTE:  
BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

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REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

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CONSULTANT NAME/LOGO

SOUTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

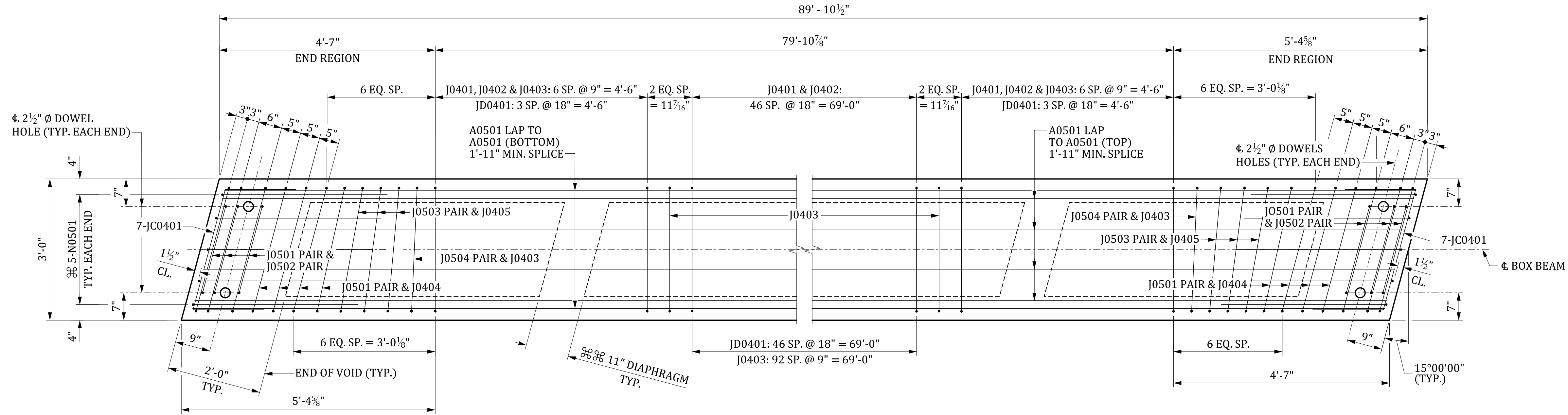
**PRESTRESSED CONCRETE BOX BEAM**  
**90' SPAN - DETAILS 1 OF 2**  
**(0° SKEW)**

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COUNTY: ###

ROUTE: ###

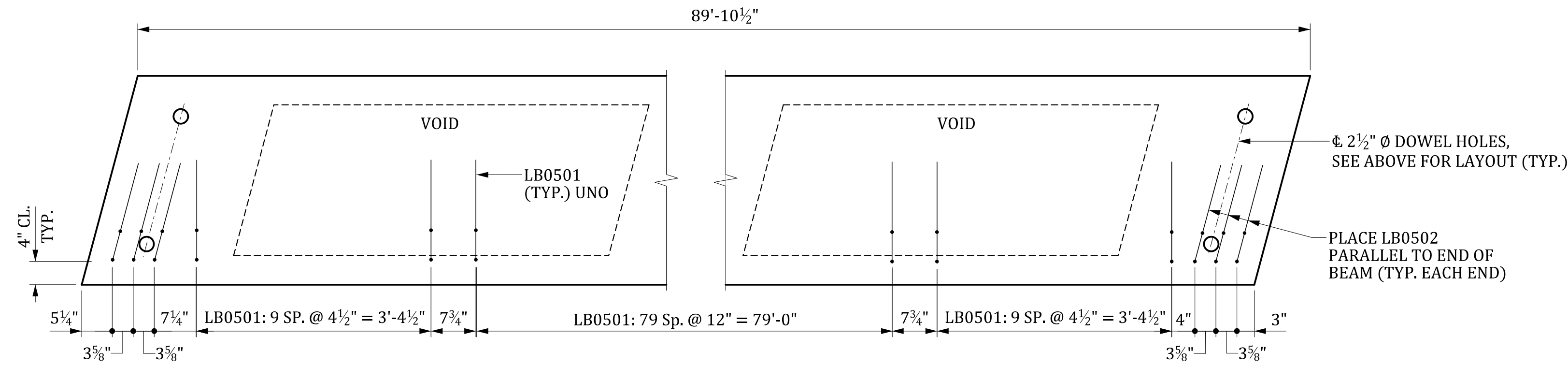
DRAWING NUMBER: 704-ABB.S090.SK000.D01



⌘ LONG LEG AT TOP OF BEAM  
 ⌘ FOR REINFORCEMENT, SEE "PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 2 OF 2" SHEET.

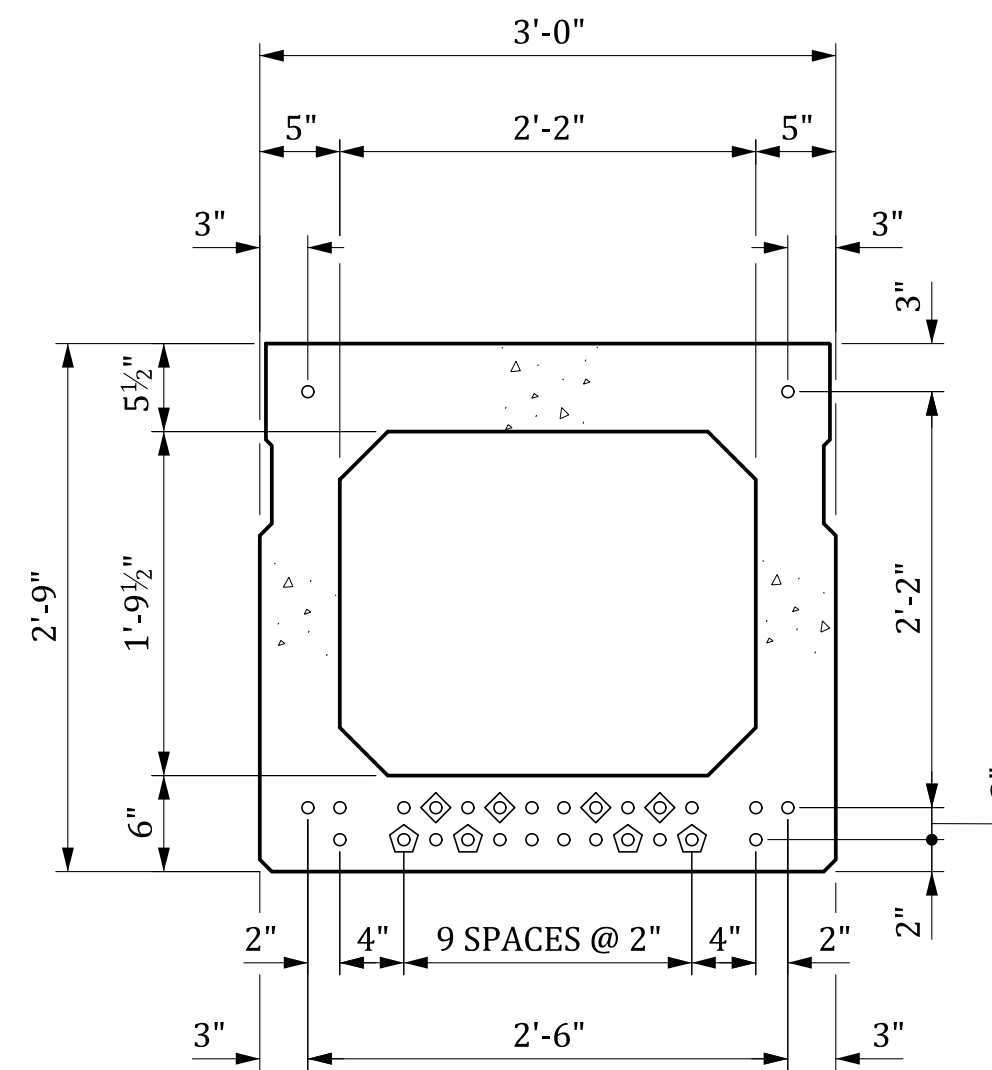
### PARTIAL PLAN OF BEAM

STRANDS NOT SHOWN.  
 INTERIOR BEAM SHOWN, EXTERIOR BEAM SIMILAR EXCEPT BARRIER REINFORCEMENT. SEE BELOW.



### PARTIAL PLAN OF EXTERIOR BEAM

SHOWING PLACEMENT OF "LB05" BARS FOR MASH BARRIER PARAPET.  
 "LB05" BARS MAY BE SHIFTED SLIGHTLY TO AVOID STIRRUPS.



### STRAND LAYOUT

INTERIOR BEAM SHOWN - EXTERIOR BEAM SIMILAR EXCEPT SHEAR KEY LOCATION.

### DESIGN DATA

STRANDS:  
 0.6"  $\phi$  LOW RELAX. GRADE 270  
 AREA=0.217 SQ. IN.  
 TENSIONING LOAD = 43.9 KIPS

CONCRETE:  
 $f_c$  = 7.0 KSI  
 $f_{ci}$  = 5.0 KSI

- FULLY BONDED STRANDS
- ◇ DEBONDED STRANDS FOR 4'-0" FROM END OF BEAM
- ⊗ DEBONDED STRANDS FOR 12'-0" FROM END OF BEAM

NOTE:  
 BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE NOTES ON "PRESTRESSED CONCRETE BOX BEAM TYPICAL SUPERSTRUCTURE SECTION" SHEET.

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

CONSULTANT NAME/LOGO

SOUTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION

**PRESTRESSED CONCRETE BOX BEAM**  
**90' SPAN - DETAILS 1 OF 2**  
 (+15° SKEW)

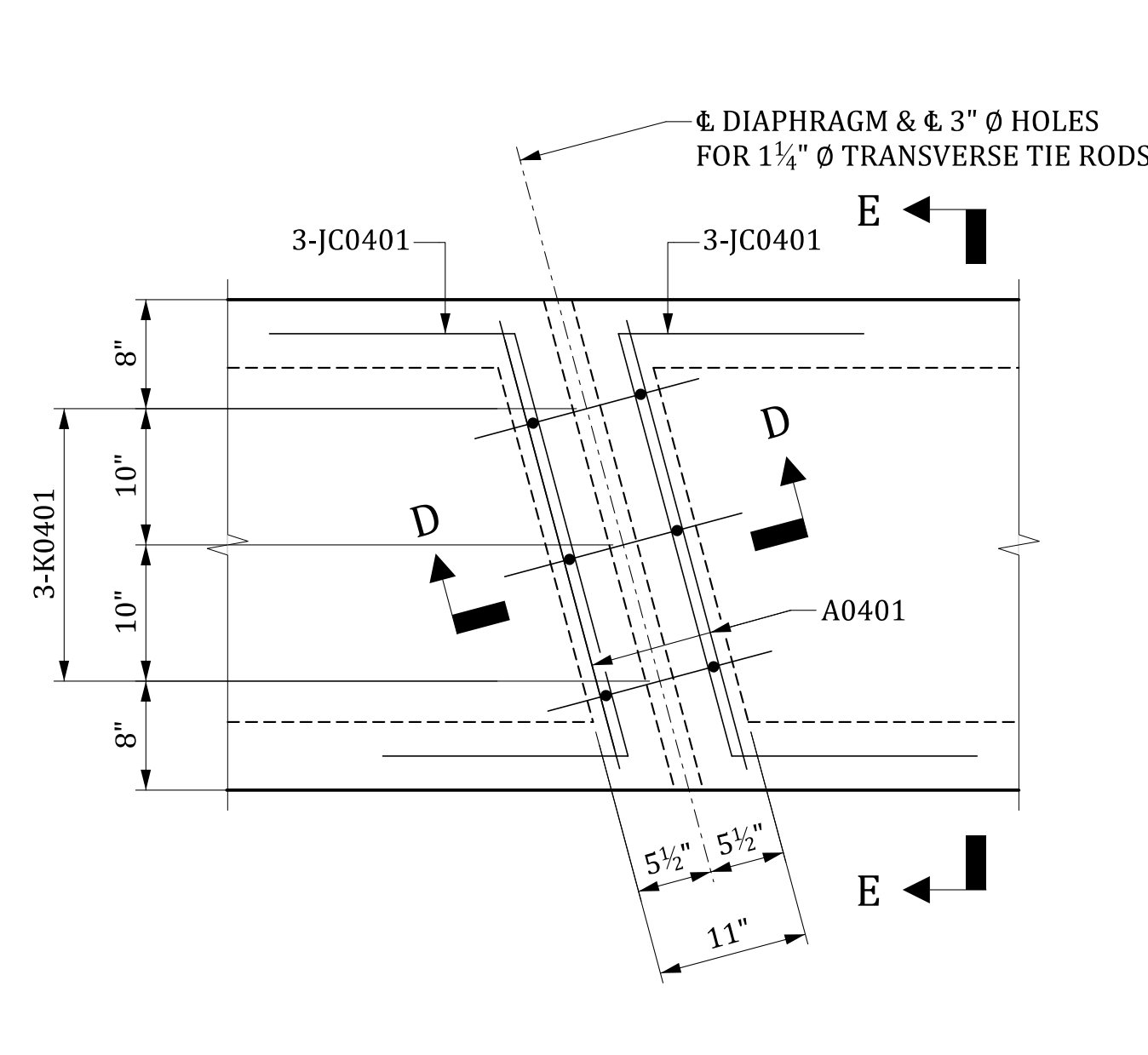
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COUNTY: ###

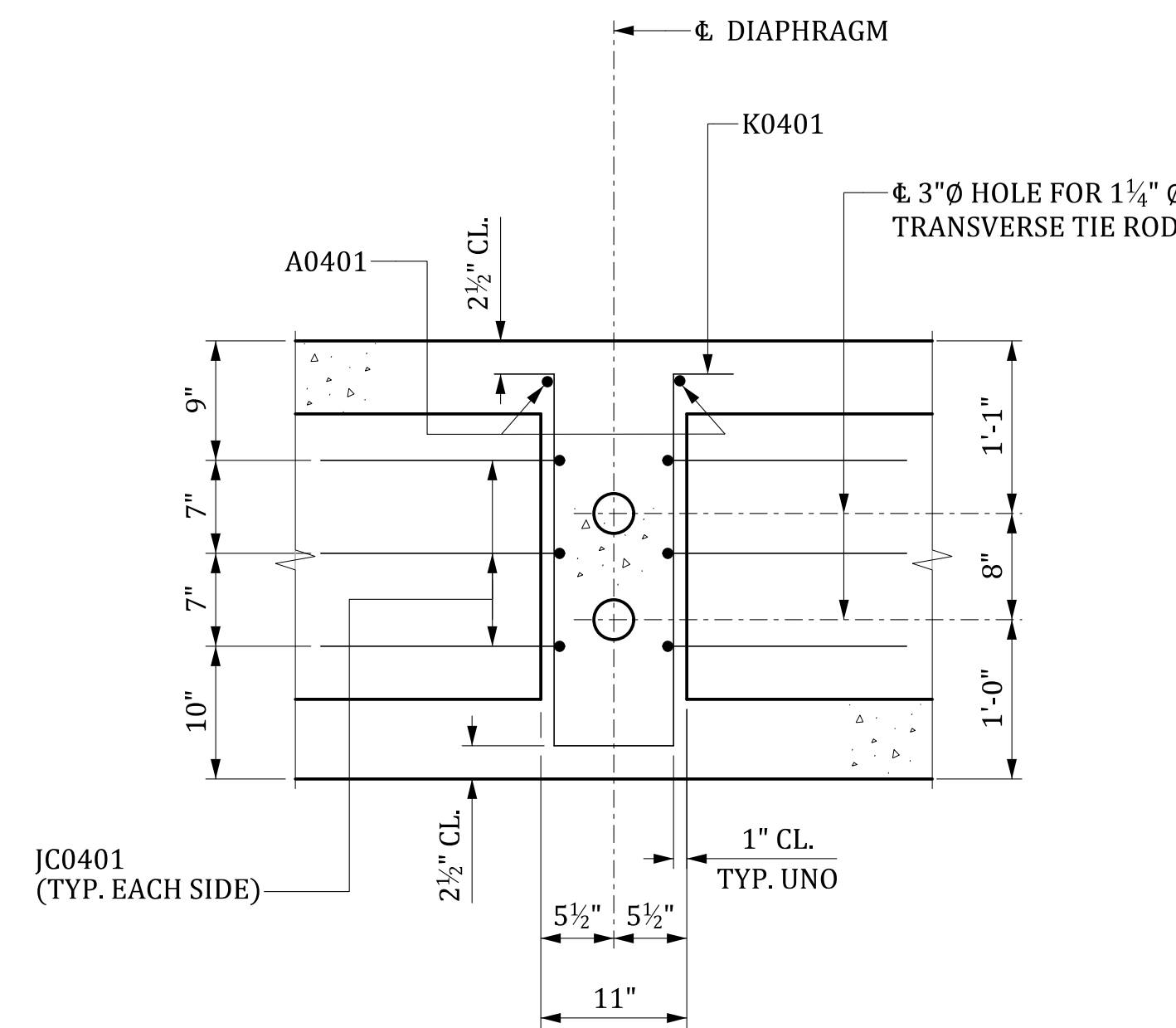
ROUTE: ###

DRAWING NUMBER: 704-ABB.S090.SK015.D01

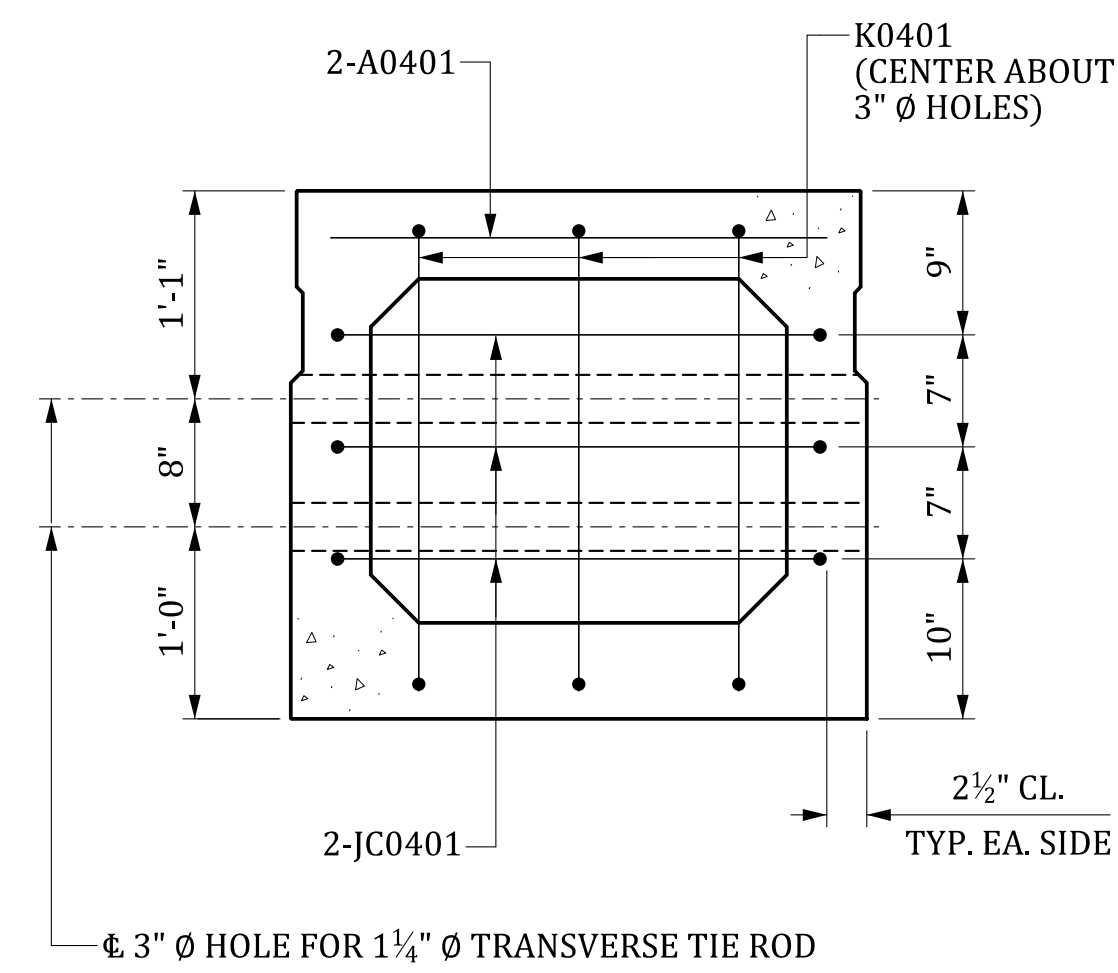
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PLAN



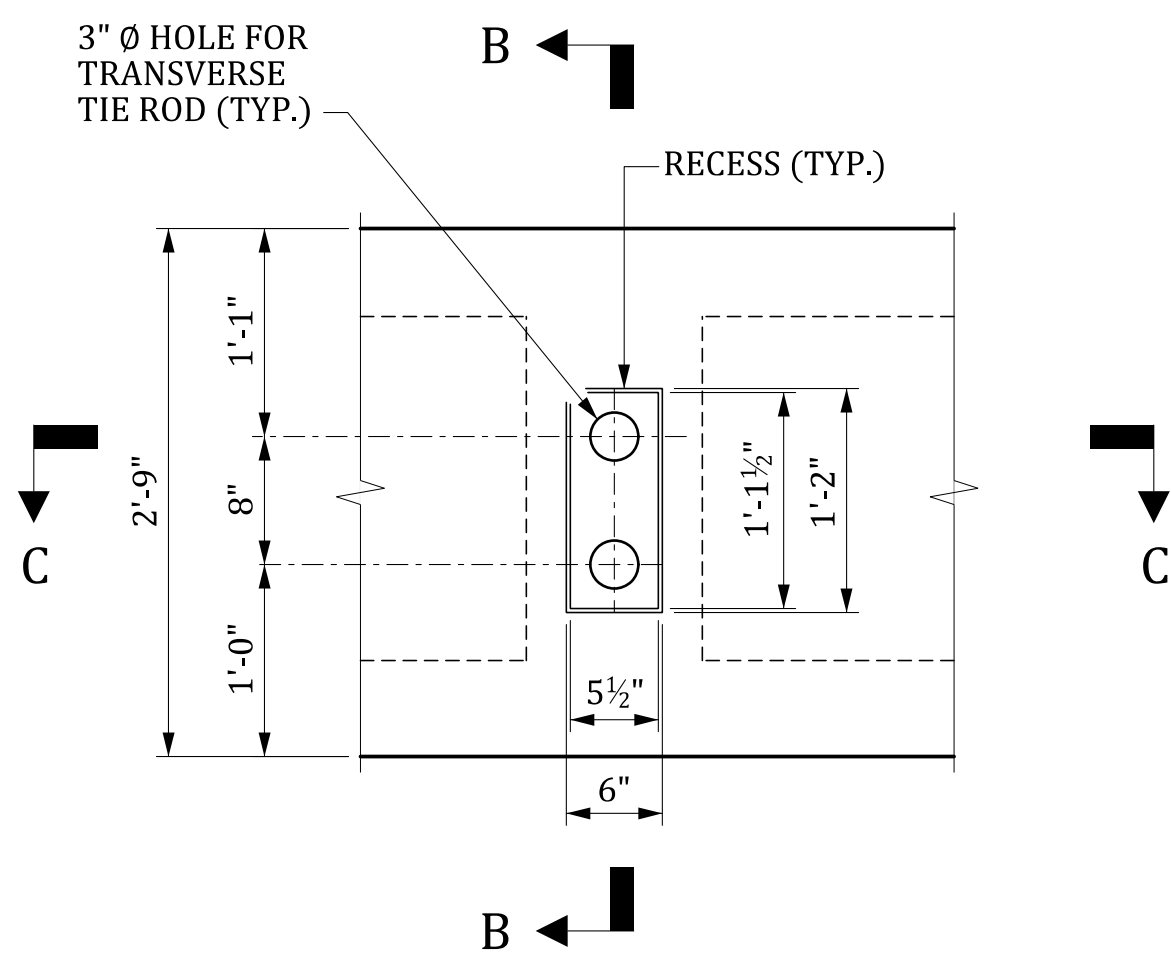
SECTION D-D



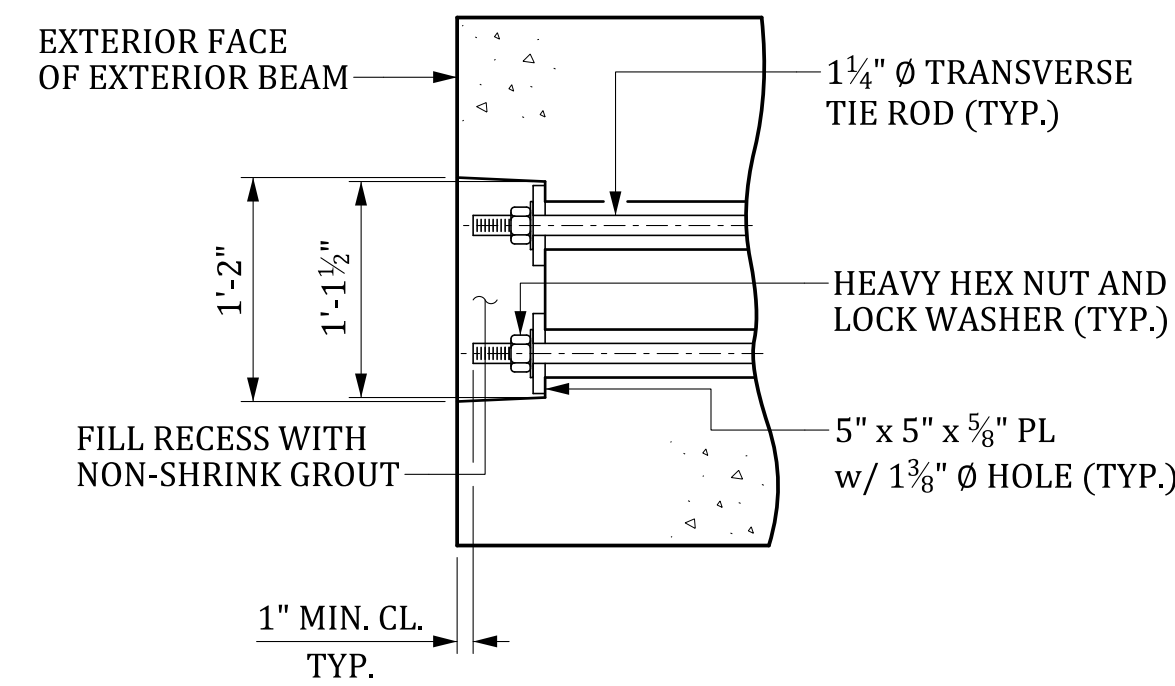
SECTION E-E

**DIAPHRAGM DETAILS**

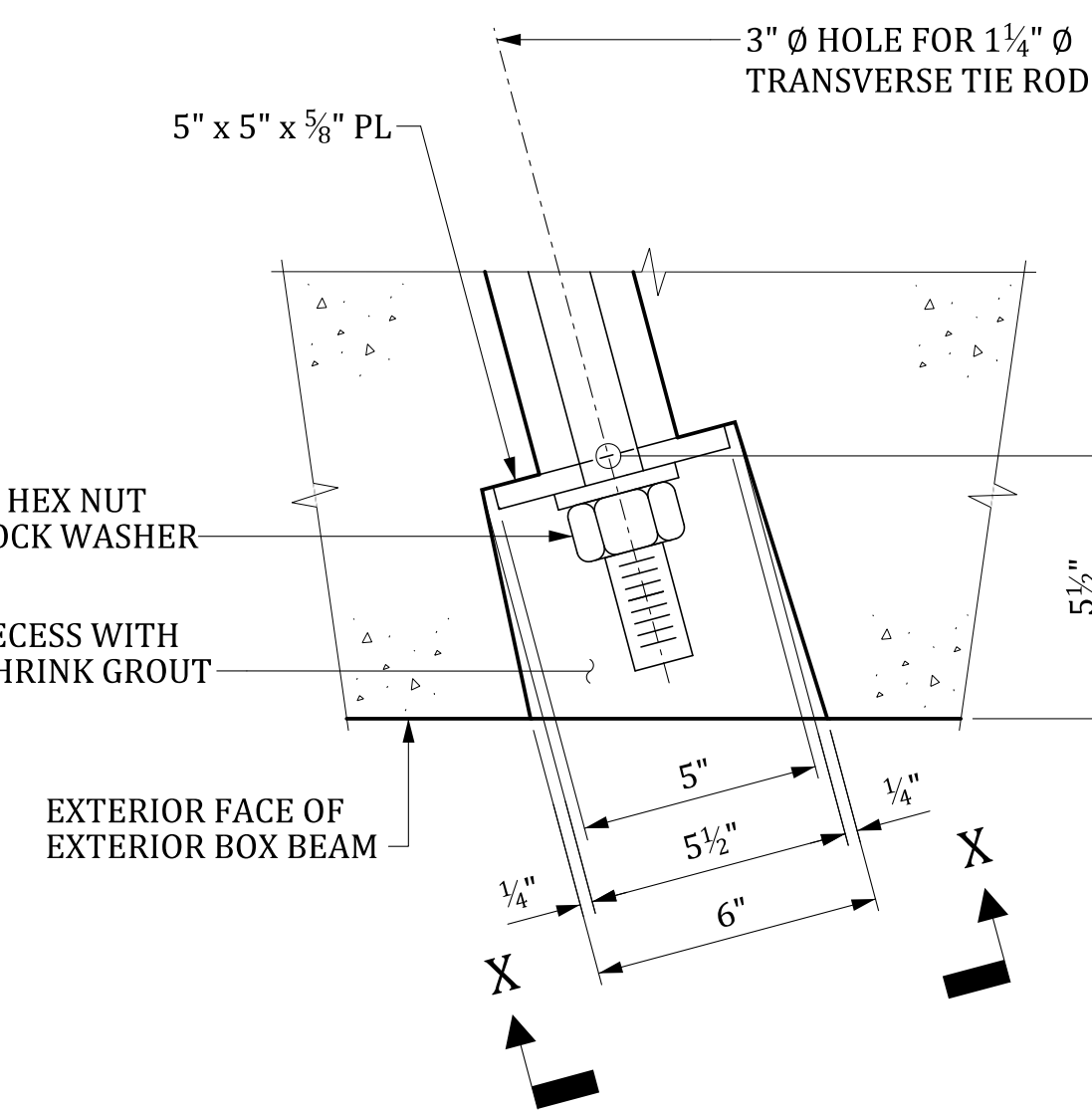
INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



VIEW X-X  
TIE ROD ASSEMBLIES NOT SHOWN



SECTION B-B



SECTION C-C

**TIE ROD POCKET DETAIL**

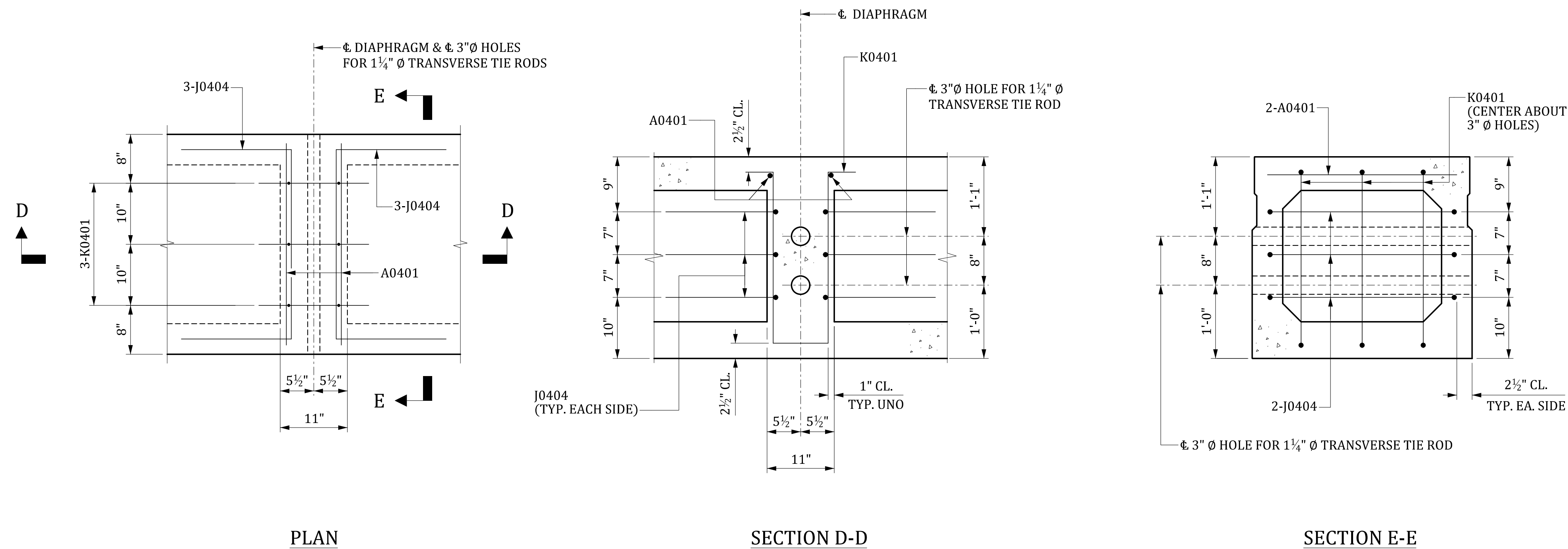
EXTERIOR FACE OF EXTERIOR BEAM

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

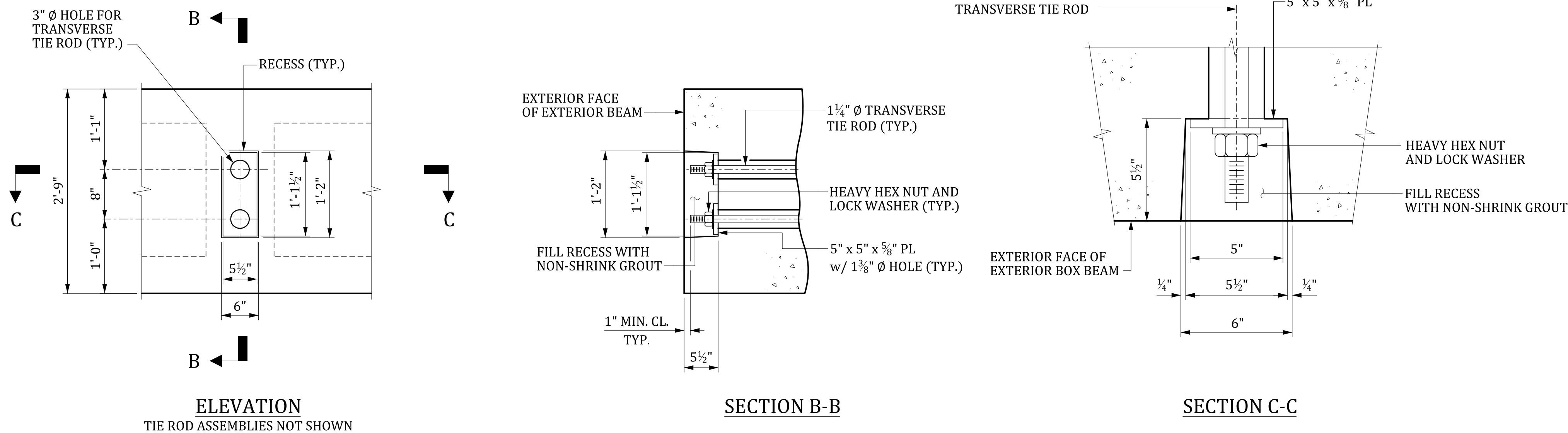
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CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 2 OF 2 (-15° SKEW)	
COUNTY: ####	ROUTE: ####



### DIAPHRAGM DETAILS

INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



### TIE ROD POCKET DETAIL

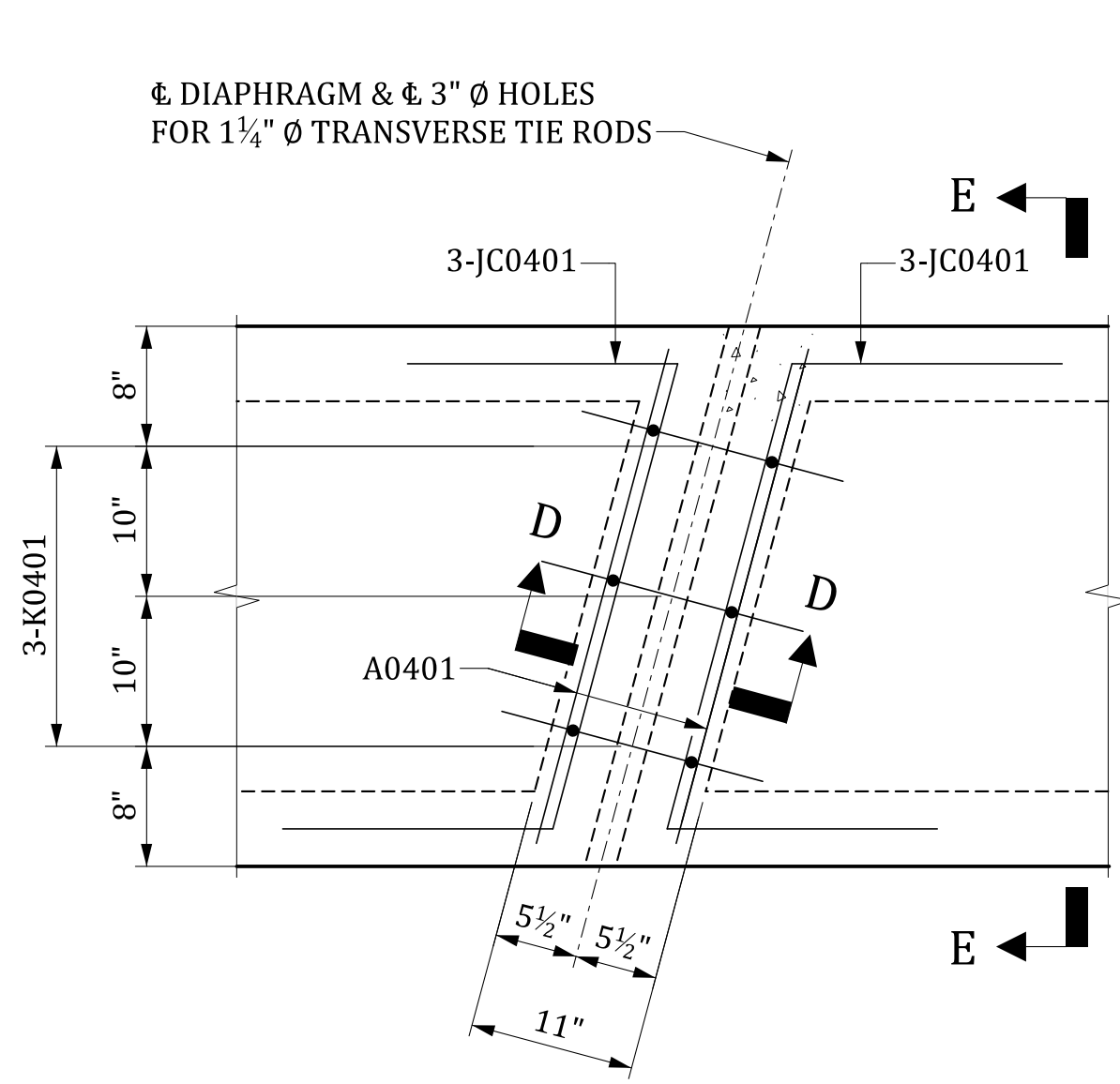
EXTERIOR FACE OF EXTERIOR BEAM

REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

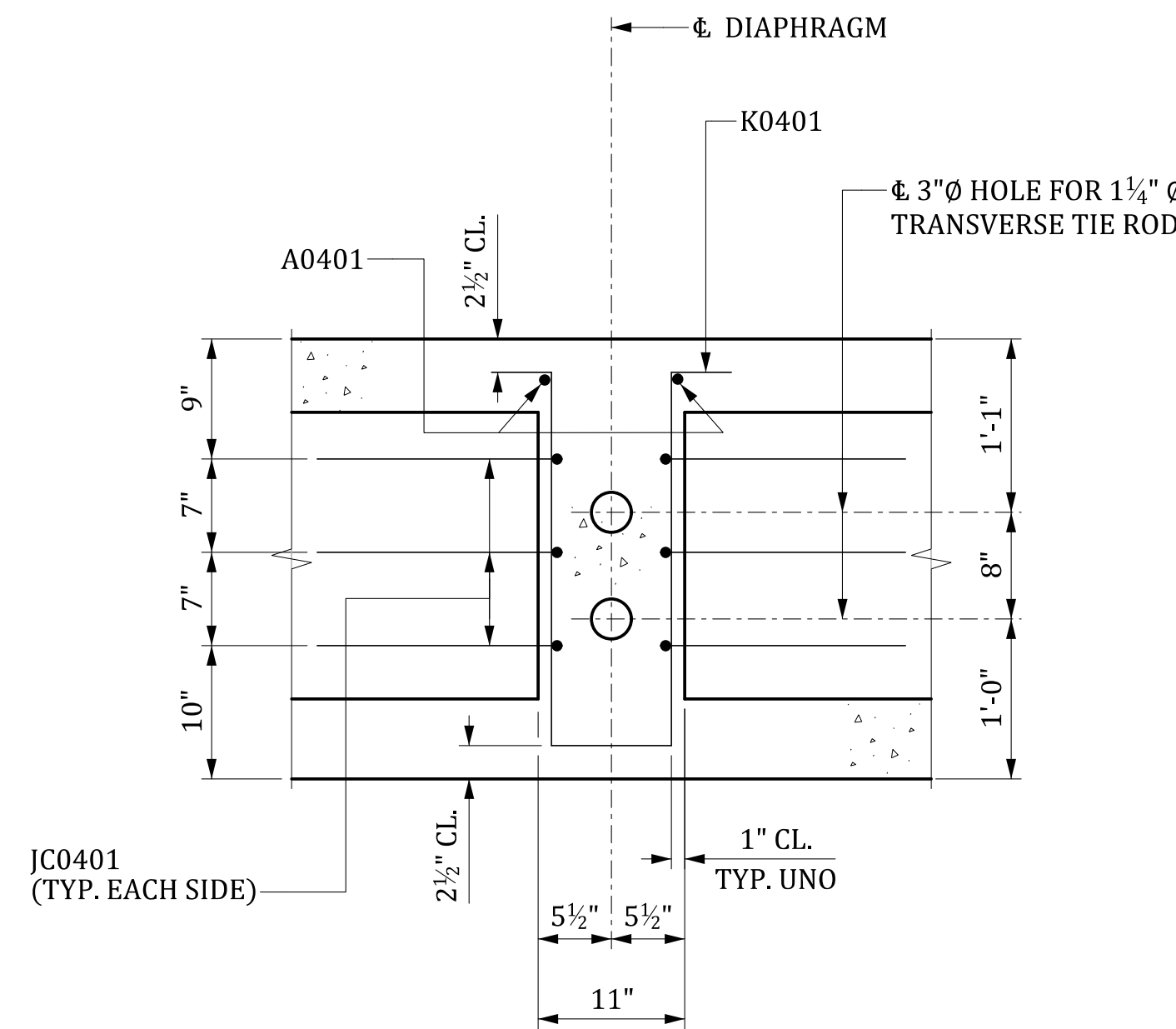
REVIEWED	QUAN.	DR.	DES.	GCM	OP	BY	CHK.	DATE

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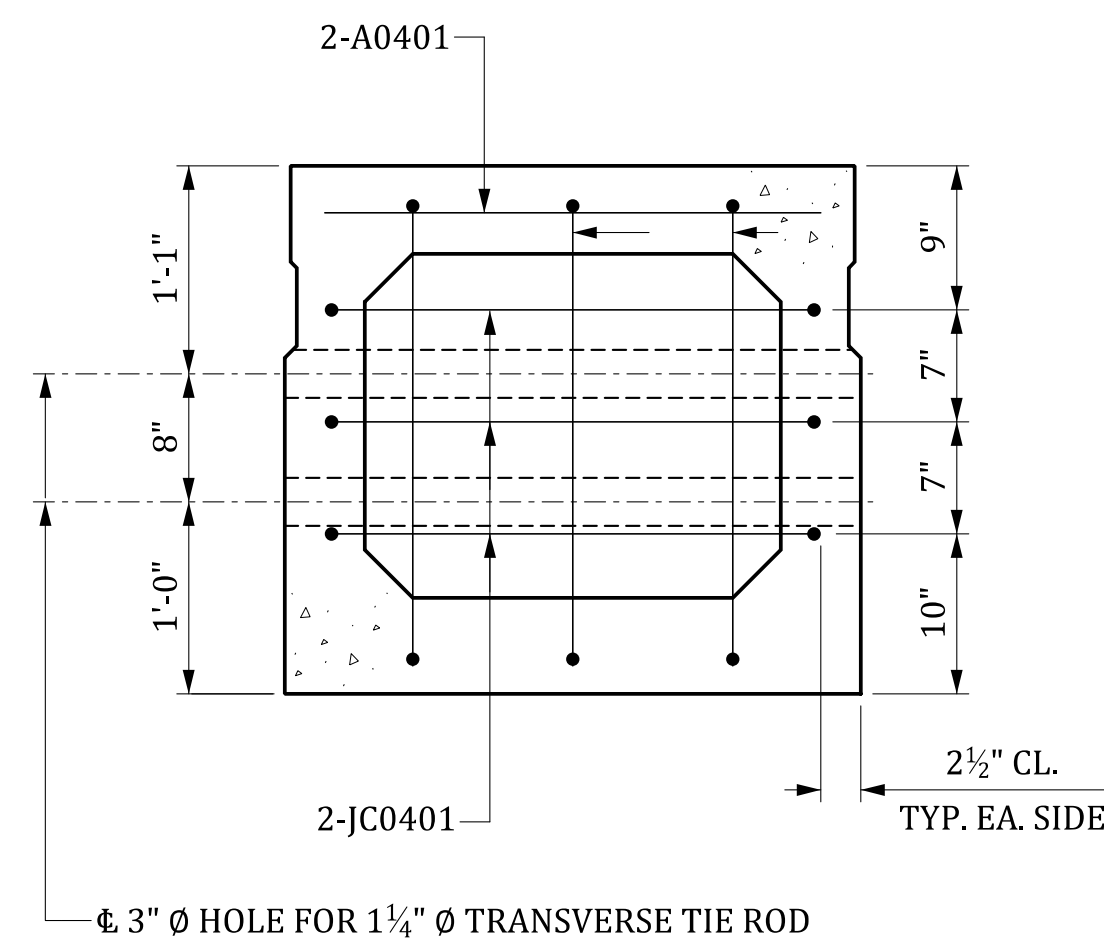
CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 2 OF 2 (0° SKEW)	
COUNTY: ###	ROUTE: ###



PLAN



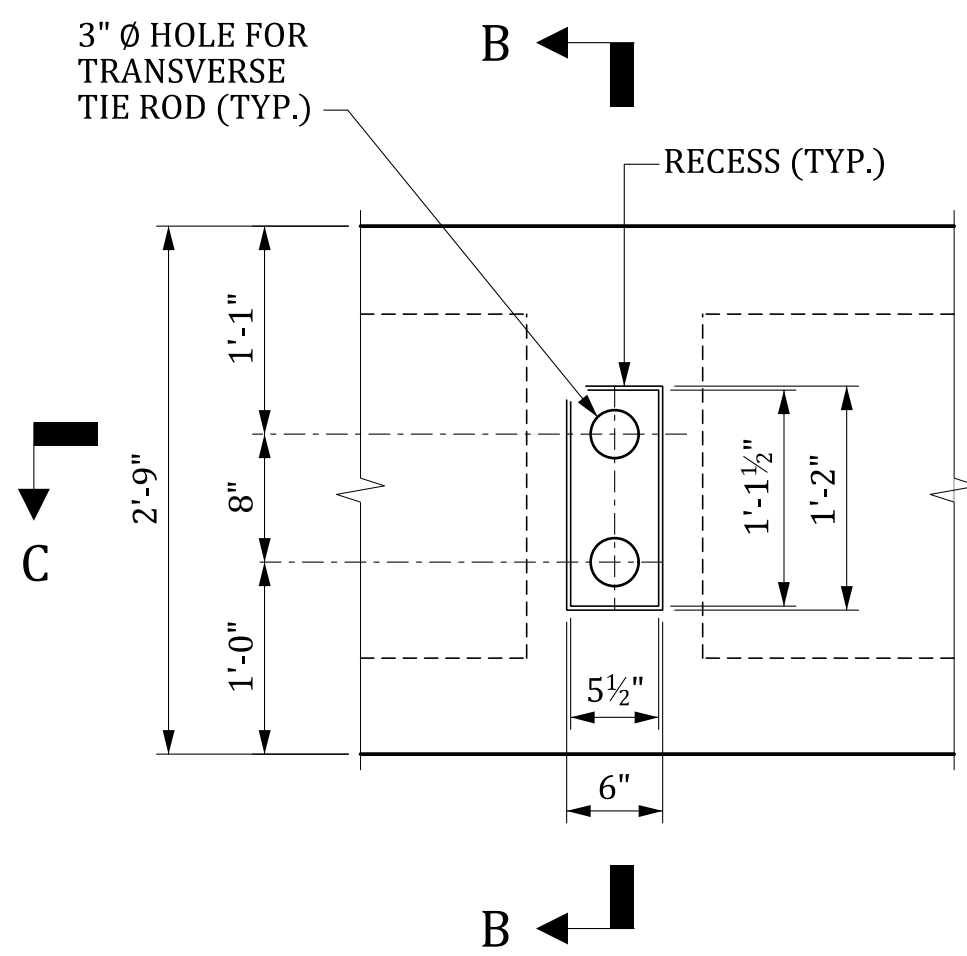
SECTION D-D



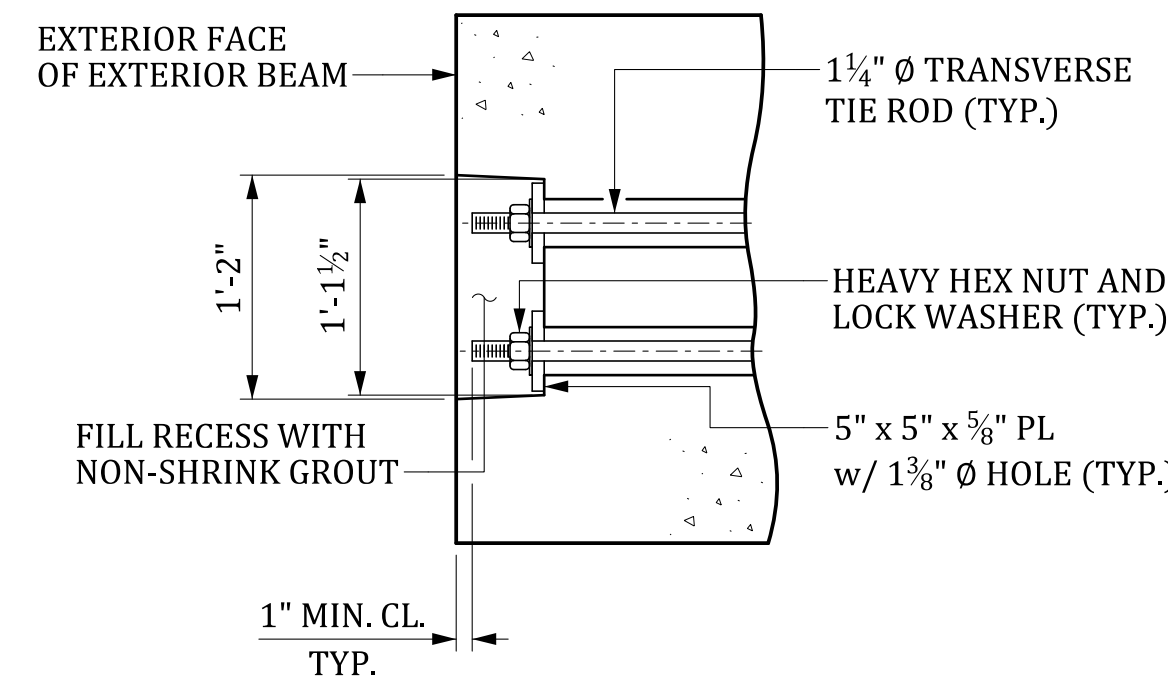
SECTION E-E

**DIAPHRAGM DETAILS**

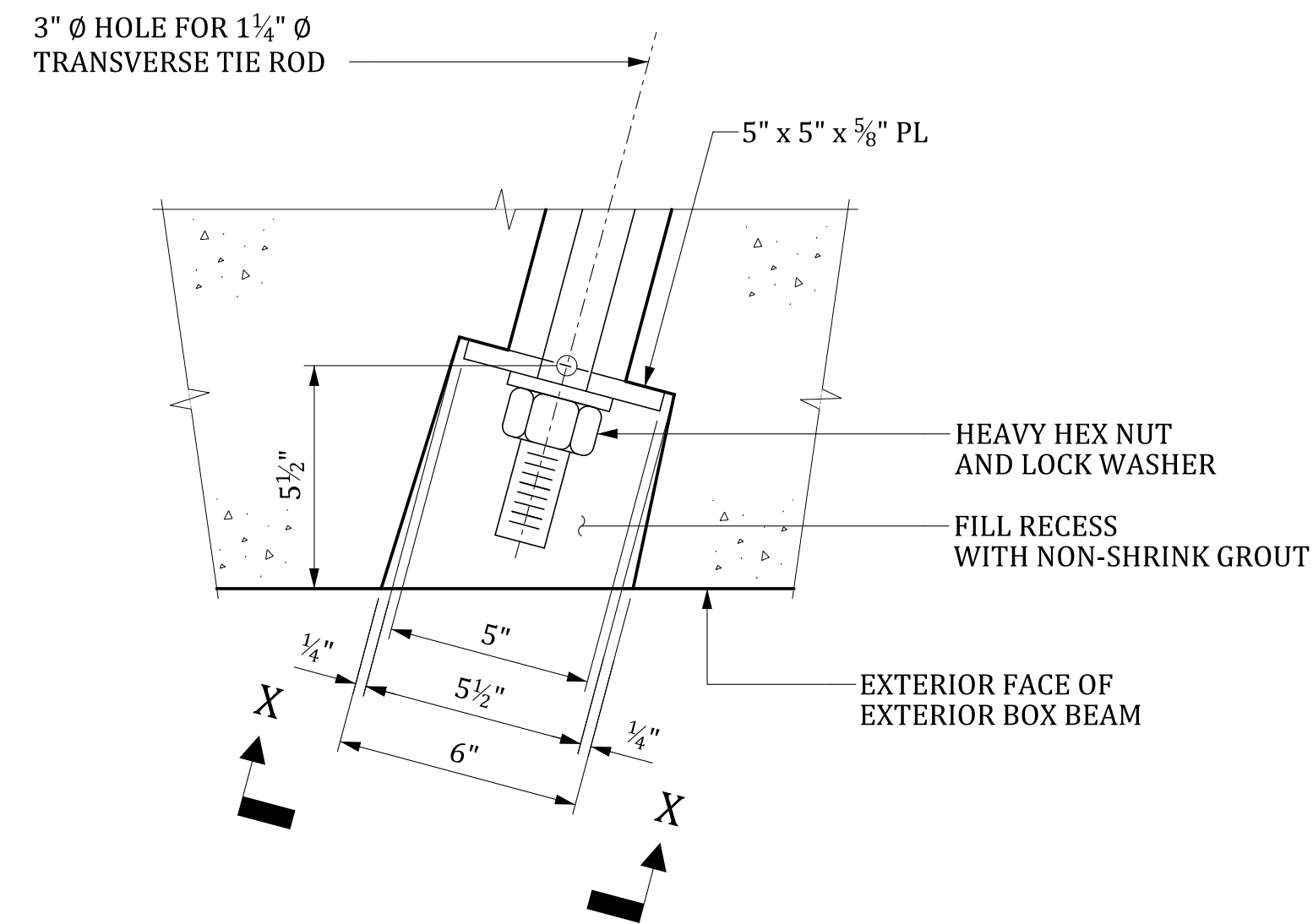
INTERIOR BOX BEAM SHOWN. SEE "TIE ROD POCKET" DETAIL BELOW FOR EXTERIOR FACE OF EXTERIOR BOX BEAM.



VIEW X-X  
TIE ROD ASSEMBLIES NOT SHOWN



SECTION B-B



SECTION C-C

**TIE ROD POCKET DETAIL**

EXTERIOR FACE OF EXTERIOR BEAM

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REV.	BY	CHK.	DATE	DESCRIPTION OF REVISION

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CONSULTANT NAME/LOGO	
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
PRESTRESSED CONCRETE BOX BEAM 90' SPAN - DETAILS 2 OF 2 (+15° SKEW)	
COUNTY: ####	ROUTE: ####