

- NOTES:
- 1 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 - 2 FOR ADDITIONAL INSTALLATION REQUIREMENTS REFER TO VESSEL AND COMPONENTS INSTALLATION SPECIFICATION 2346182.
 - 3 THE THERMAL SLEEVE IS SUPPLIED BY THE VESSEL MANUFACTURER.
 - 4 THE THERMAL SLEEVE MUST BE TRIMMED TO THE CORRECT LENGTH WITH ADJUSTMENT TO WELD SHRINKAGE (TWO WELD SHRINKAGE FOR THE THERMAL SLEEVE). TO DETERMINE THE CORRECT THERMAL SLEEVE LENGTH, THE END BRACKETS SHALL BE ATTACHED TO THE SPARGER BUT NOT WELDED TO IT, AND THE SPARGER IS POSITIONED SO THAT THE SPARGER ARMS ARE AS CLOSE AS POSSIBLE TO THE MIDPOINT OF THE ENVELOPE RANGE.
 - 5 THE THERMAL SLEEVE WHEN WELDED TO THE SAFE END SHALL HAVE EQUAL GAP TO THE NOZZLE BORE WITHIN 3.2 mm AT 4 EQUALLY SPACED LOCATIONS JUST INSIDE THE NOZZLE BLEND RADIUS.
 - 6 THE THERMAL SLEEVE MAY HAVE TO BE MITERED TO SATISFY THE ENVELOPE REQUIREMENT.
 - 7 MISMATCH OF CENTER LINES OF WELD PREPS SHALL BE LESS THAN 0.8 DIAMETER BEFORE WELDING.
 - 8 DO NOT SLING BY NOZZLE ELBOWS OR CONTACT ELBOWS WHEN LIFTING AND HANDLING.
 - 9 GRINDING OF THE HEADER END PLATE IS PERMITTED IF REQUIRED TO MEET THIS REQUIREMENT (EXCEPT NOT WITHIN 6 mm OF THE BRACKET WELD OR OF THE HEADER TO SPARGER END PLATE). GRINDING OF THE SPARGER TO MEET THIS REQUIREMENT IS PROHIBITED.
 - 10 CONTACT OF THE TOP OF THE END BRACKET TO THE WASHER AND CONTACT OF THE PIN TO BACK (TOWARD REACTOR PRESSURE VESSEL WALL) OF THE SLOT IN THE END BRACKET ARE REQUIRED. AFTER THE SPARGER TO SAFE END WELDING, MAXIMUM HORIZONTAL COLD SPRING MEASURED AT THE END PIN AFTER WELDING TO BE 3.2 mm, MAXIMUM VERTICAL COLD SPRING MEASURED AT THE WASHER AFTER WELDING TO BE ALSO 3.2 mm.
 - 11 ALL WELDS ARE AUSTENITIC SST TO AUSTENITIC SST UNLESS OTHERWISE SPECIFIED.
 - 12 TIGHTEN NUT, ITEM 4, UNTIL IT HAS BOTTOMED AGAINST SHOULDER OF PIN, ITEM 3, BEFORE PLACING WELD ON END OF THREAD.
 - 13 THIS WELD HAS TO BE COMPATIBLE WITH THE MATERIAL OF THE WELD PREP OR WELD BUTTER.
 - 14 THE CONFIGURATION OF THE THERMAL SLEEVE WELD PREP MUST MATCH THAT OF THE SAFE END.

Figure 20.3.4-5a Low Pressure Core Flooder Sparger (Sheet 1)

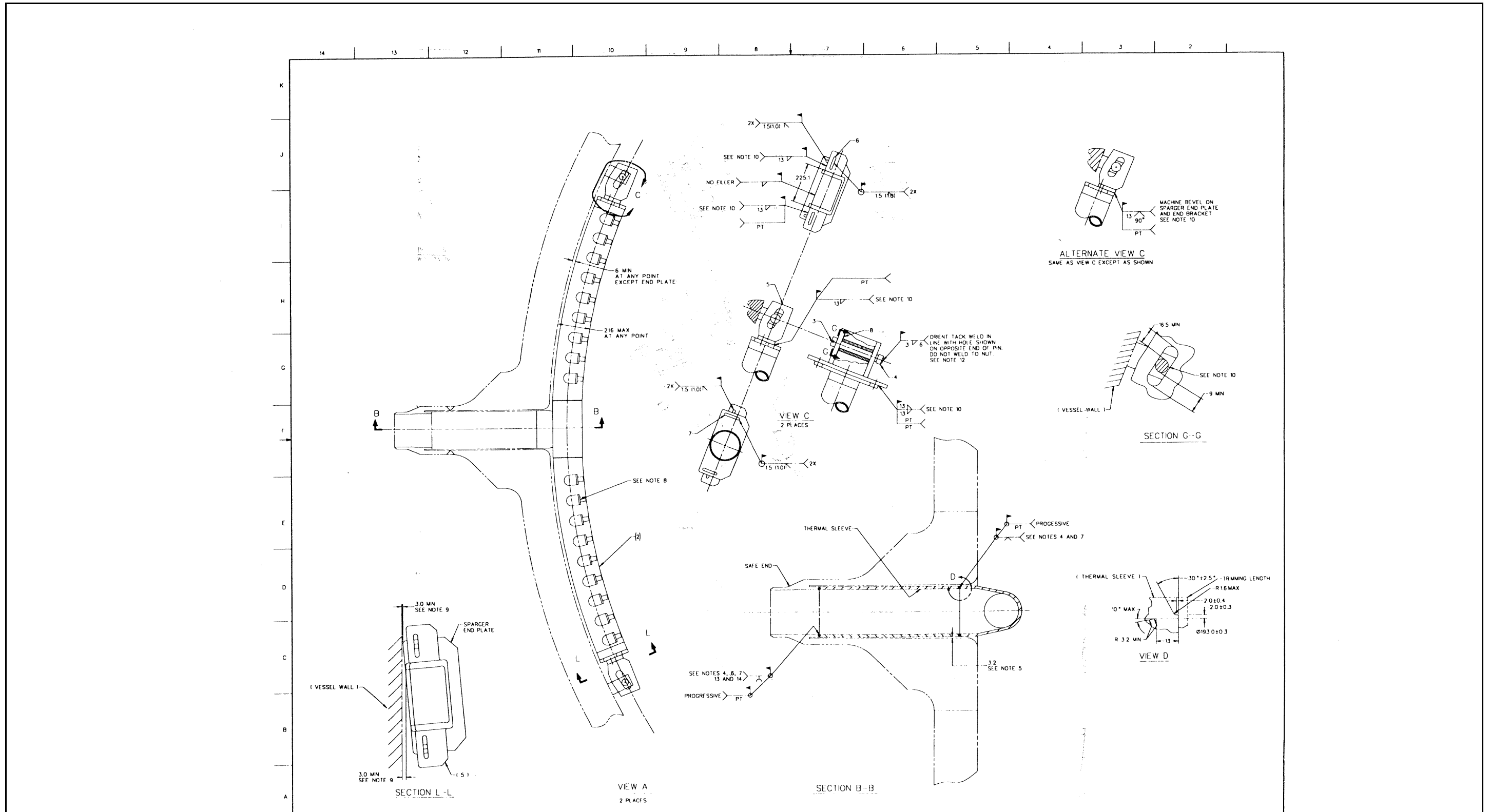


Figure 20.3.4-5b Low Pressure Core Flooder Sparger (Sheet 2)

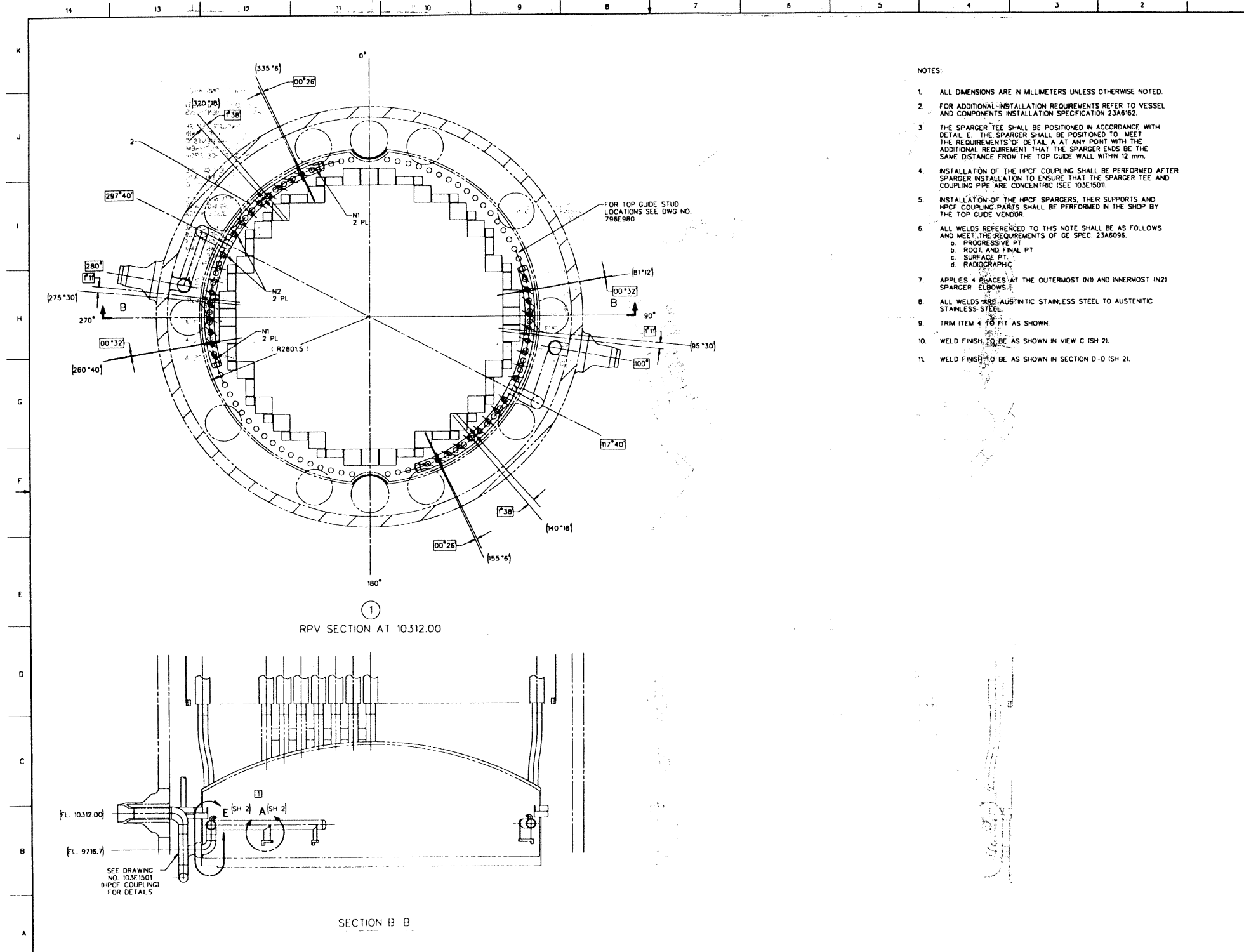


Figure 20.3.4-5c High Pressure Core Flooder Sparger