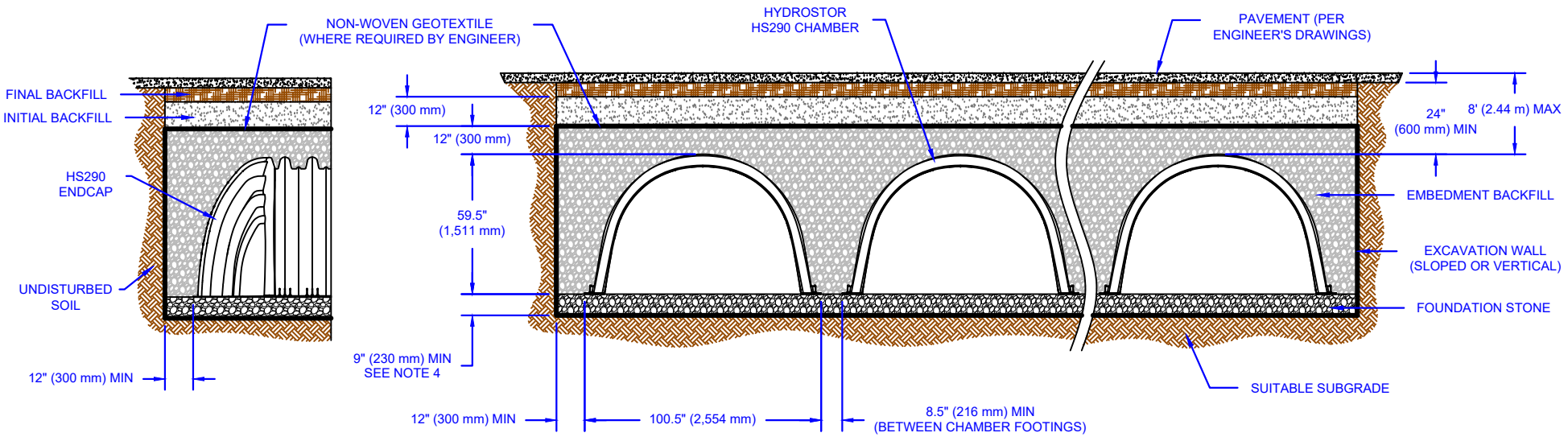

NOTES:

1. HYDROSTOR HS290 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418. HS180 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION GUIDELINES.
2. **SUBGRADE:** TRENCH BOTTOMS WITH UNSTABLE OR UNYIELDING MATERIAL SHALL BE EXCAVATED TO A DEPTH DIRECTED BY THE ENGINEER AND REPLACED WITH SUITABLE MATERIAL. FOR UNSTABLE MATERIALS, GEOTEXTILE MAY BE USED TO STABILIZE THE TRENCH BOTTOM, IF DIRECTED BY THE ENGINEER. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING SUBGRADE SUITABILITY.
3. **GEOTEXTILE:** A 4 oz/yd^2 (136 g/m^2) OR HEAVIER NON-WOVEN GEOTEXTILE FILTER FABRIC SHOULD BE USED FOR EMBEDMENT BACKFILL MATERIAL SIZED 3/4 - 1 1/2 INCH (19 - 38 mm). A 6 oz/yd^2 (203 g/m^2) NON-WOVEN GEOTEXTILE FILTER FABRIC SHOULD BE USED FOR EMBEDMENT BACKFILL MATERIAL SIZED 1 1/2 - 2 INCH (38 - 51 mm). GEOTEXTILE FILTER FABRIC IS PLACED AROUND THE SYSTEM TO PREVENT NATIVE SOIL FROM MIGRATING INTO THE EMBEDMENT BACKFILL MATERIAL. TO ENSURE FABRIC IS SUITABLE WITH IN SITU SOILS, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED.
4. **FOUNDATION STONE:** SUITABLE MATERIAL SHALL BE A 3/4 - 2 INCH (19 - 51 mm), WASHED, CRUSHED ANGULAR STONE, OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57) WITH WASHED, CRUSHED, ANGULAR STONE ADDED TO THE GRADATION, e.g., WASHED, CRUSHED, ANGULAR #3 (AASHTO M43) STONE. MINIMUM FOUNDATION STONE THICKNESS TO BE DETERMINED BY DESIGN ENGINEER. MINIMUM OF 9" (230 mm) RECOMMENDED. REFER TO PRINSCO DESIGN MANUAL FOR ADDITIONAL GUIDANCE. COMPACTION SHOULD BE DONE IN LIFTS OF NO MORE THAN 9 INCHES (230 mm).
5. **EMBEDMENT BACKFILL:** SUITABLE MATERIAL SHALL BE A 3/4 - 2 INCH (19 - 51 mm), WASHED, CRUSHED ANGULAR STONE, OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57) WITH WASHED, CRUSHED, ANGULAR STONE ADDED TO THE GRADATION, e.g., WASHED, CRUSHED, ANGULAR #3 (AASHTO M43) STONE. EMBEDMENT BACKFILL SHALL EXTEND FROM TOP OF BEDDING TO NOT LESS THAN 12 INCHES (300 mm) ABOVE THE TOP OF THE CHAMBER. NO COMPACTION IS REQUIRED BUT AN EFFORT SHOULD BE MADE TO HAND KNIFE STONE IN BETWEEN ALL CORRUGATIONS.
6. **INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE A GRANULAR, WELL GRADED SOIL WITH LESS THAN 35% FINES OR AASHTO M43 SIZES (3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10). MOST PAVEMENT SUBBASE MATERIALS FALL WITHIN THIS GRADING CRITERIA. INITIAL BACKFILL SHALL EXTEND FROM TOP OF EMBEDMENT BACKFILL TO NOT LESS THAN 24 INCHES (600 mm) ABOVE THE TOP OF THE CHAMBER. COMPACT TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.
7. **FINAL BACKFILL:** SUITABLE MATERIALS SHALL BE ANY SOIL DIRECTED BY THE ENGINEER. FINAL BACKFILL SHALL EXTEND FROM TOP OF INITIAL BACKFILL TO NO MORE THAN 8 FEET (2.44 m) ABOVE THE TOP OF THE CHAMBER. COMPACTION LEVELS SHOULD FOLLOW ENGINEERS RECOMMENDATIONS.
8. **MINIMUM COVER:** FOR TRAFFIC APPLICATIONS A MINIMUM COVER OF 24 INCHES (600 mm) IS REQUIRED, MEASURED FROM THE TOP OF THE CHAMBER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR TO THE TOP OF RIGID PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING MAY OCCUR, INCREASE COVER TO 30 INCHES (750 mm) FOR H-20 LOADING. ADDITIONAL COVER MAY BE REQUIRED FOR CONSTRUCTION LOADS.
9. **MAXIMUM COVER:** A COVER HEIGHT OF OVER 8 FEET (2.44 m) IS NOT RECOMMENDED. COVER HEIGHT IS MEASURED FROM THE TOP OF THE CHAMBER TO THE TOP OF THE PAVEMENT.
10. **LOAD RATING:** HS290 CHAMBERS ARE TRAFFIC RATED FOR H-20 VEHICLES WITH ADDITIONAL CONSIDERATION FOR LANE LOADING, COMMONLY REFERRED TO AS HL-93 LOAD RATING (AASHTO DESIGN TRUCK).

PRINSCO
WATER MANAGEMENT SOLUTIONS
1717 16TH ST. NE
WILLMAR, MN 56201
www.prinsco.com

TITLE: HYDROSTOR HS290 - CROSS SECTION			
DRAWN BY: TJW	DATE: 21-Dec-20	DRAWING NUMBER: D-7-500A	
SCALE: NTS	SHEET: 1 OF 1		