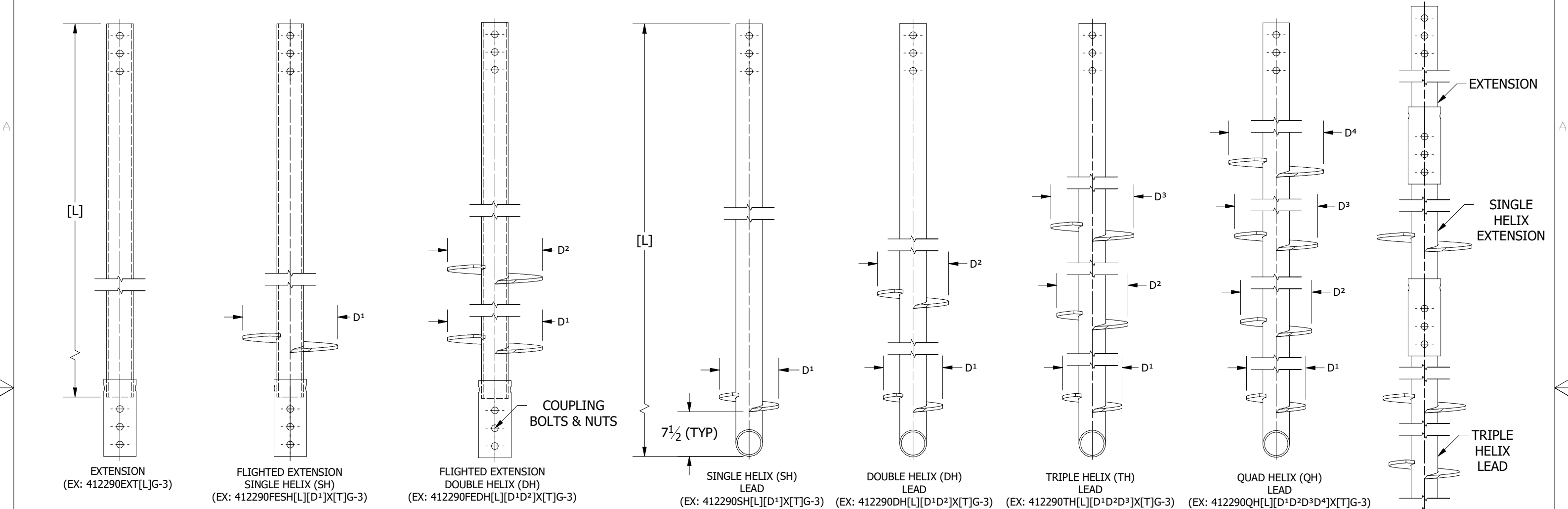


MAXIMUM TORQUE NOT TO EXCEED 33,500 FT-LBS.  
ULTIMATE CAPACITY IS 201 KIPS BASED ON A CAPACITY TO  
TORQUE RATIO OF  $k_t = 6 \text{ FT}^{-1}$

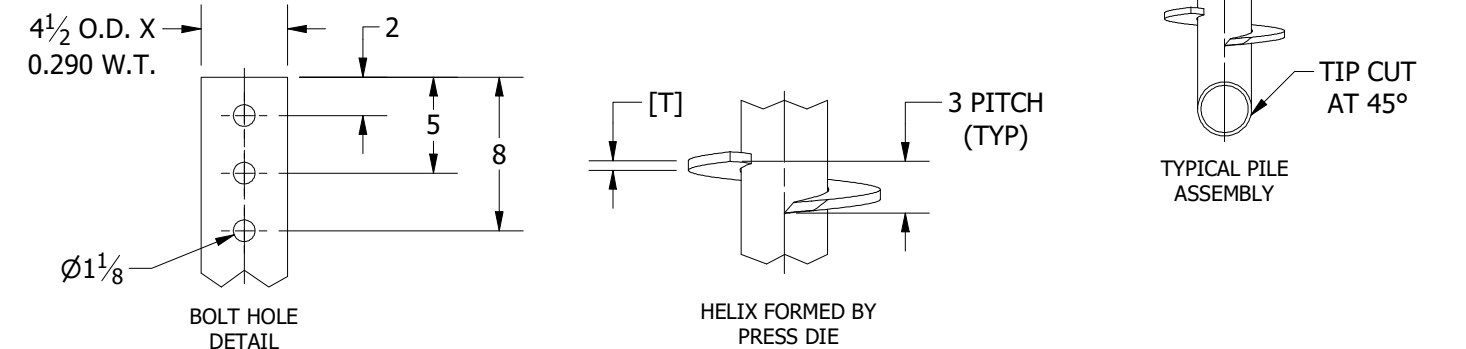
4 1/2" O.D. X 0.290" W.T. HELICAL LEADS & EXTENSIONS



- NOTES:**
- PILE SHAFT TO MEET OR EXCEED 80 KSI.
  - PLATE STEEL TO MEET OR EXCEED REQUIREMENTS OF ATSM A572, GRADE 50.
  - ALL HELICES ARE FORMED BY PRESS DIE. LEADING EDGE OF HELICES ARE TAPERED TO IMPROVE INSTALLATION CAPABILITIES.
  - HELIX SPACING IS THREE (3) TIMES THE DIAMETER OF THE LOWER HELIX. SPACING OF LEADING HELIX ON FLIGHTED EXTENSIONS IS THREE (3) TIMES THE DIAMETER OF THE LAST HELIX ON THE PRECEDING SHAFT.
  - STANDARD HELIX DIAMETERS ARE 8", 10", 12", 14" & 16". STANDARD HELIX THICKNESS IS 1/2".
  - ALL WELDING TO BE PERFORMED BY CERTIFIED WELDOR IN ACCORDANCE WITH AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
  - HOT DIP GALVANIZING PER ASTM A153/ASTM A123. BARE STEEL IS ALSO AVAILABLE.
  - (3) 1" DIAMETER X 7" LONG GALVANIZED HEAVY HEX BOLT ASTM A325 AND (3) 1" GALVANIZED HEAVY HEX NUT ASTM A194 (GRADE 8).
  - HELICAL PILE ASSEMBLIES MANUFACTURED IN ACCORDANCE WITH ICC-ES AC308 ACCEPTANCE CRITERIA FOR HELICAL FOUNDATION SYSTEMS AND DEVICES.

**IDEAL PART # ABBREVIATIONS:**

412 = SHAFT DIAMETER  
290 = SHAFT WALL THICKNESS  
EXT = EXTENSION  
FE = FLIGHTED EXTENSION  
SH, DH, TH, QH = SINGLE, DOUBLE, TRIPLE, OR QUAD. HELIX  
[L] = SHAFT LENGTH IN FEET (EXAMPLE: 7' = 7)  
[D] = HELIX DIAMETER(S) IN INCHES (EXAMPLE: 10" = 10)  
X = X (SEPARATES HELIX DIAMETER(S) AND HELIX THICKNESS)  
[T] = HELIX THICKNESS (EXAMPLE: 1/2" = 12)  
G = GALVANIZED  
-3 = BOLT QUANTITY



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NOT TO SCALE ALL UNITS IN INCHES U.N.O.					