

## NOTES:

- 1-MATERIALS:
- -PLATE PER CSA G40.21 50W, MIN.FY=60 KSI, ULTIMATE STRENGTH
- -TUBE PER ASTM A500 GR C, FY=60KSI, FU=70KSI
- 2-ANY CHANGE OF MATERIAL IS SUBJECT TO GOLIATHTECH APPROVAL
- 3-WELD PERFORMED IN ACCORDANCE WITH CSA STANDARD W47.1 AND GOLIATHTECH WELDING PROCEDURES. WELDERS ARE ALSO CERTIFIED TO THE AWS STANDARD.

| 3   |                 |            |
|-----|-----------------|------------|
| 2   |                 |            |
| 1   | INITIAL RELEASE | 2023-07-31 |
| REV | MODIFICATION    | DATE       |

## GOLIAŢHITECH

## **GOLIATHTECH VENTURA LINE**

TITLE: 3.5 Foot Screw Pile of 2 7/8 (0.250 wall) with a 13" Helix

| EAL: | DWG. NO:         |
|------|------------------|
|      | VGTPI27813-3.5FT |
|      | DRAWN BY:        |
|      | R.E              |
|      | DESIGN BY:       |
|      | GOLIATHTECH      |
|      | CHECK BY:        |
|      | CPOC             |
|      | APP BY:          |
|      | CPOC             |
|      | OTHER NO:        |

| FORMAT : A | REV.: | DATE :     | PAGE: |  |  |
|------------|-------|------------|-------|--|--|
| SCALE: NTS | 1     | 2023-07-31 | 1 DE  |  |  |

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| l   |   |           |             | MECHANICAL ASD LOAD CAPACITY   |                       |              |              |         |         |                     |                      |
|-----|---|-----------|-------------|--|-----------------------|--------------|--------------|---------|---------|---------------------|----------------------|
| NO. |   | Dimension | Description | d Straft Light   | Compression<br>(kips) |              |              | Tension | Lateral | Bending             | Max Soil<br>Capacity |
| 1   |   | (inches)  |             | Unbraced straft, Lifts   | 0<br>Coupler          | 1<br>Coupler | 2<br>Coupler | (kips)  | (kips)  | Moment<br>(kips.ft) | Comp/Ten * (kips)    |
| l   | Α | 42        |             | 0  | 53.5                  | 53.5         | 53.5         |         |         |                     |                      |
| l   | В | 13        |             | 5  | 24.4                  | 13.1         | 7.1          |         |         |                     |                      |
| l   | С | 4 1/4     |             | 10   | 12.2                  | 8.5          | 5.5          | 21.51   | 14.40   | 3.99                | 34.88                |
| l   | D | PITCH 3   |             | 15   | 6.5                   | 5.3          | 3.9          |         |         |                     |                      |
| l   | Ε | 3/8       |             | 20   | 4.0                   | 3.5          | 2.9          |         |         |                     |                      |
| l   | F | 1         |             | Note: 1. Soil capacity (P4) must be determined per Section 4.1.5 of this report. 2. Maximum ultimate soil capacity is determined from Pult = Kt x T based on the corresponding |                       |              |              |         |         |                     |                      |
| ١   | G | 1 1/2     |             |  |                       |              |              |         |         |                     |                      |

- 2. Maximum ultimate soil capacity is determined from Pult = Kt x T based on the corresponding maximum installation torque rating for the specific pile model. Allowable soil capacity is determined from Pa = Pult /2.0 based on the corresponding maximum installation torque rating for the specific pile model. See Section 4.1.5 for additional information.
- 3. Mechanical torsion rating is the maximum torsional resistance of the steel shaft.
- 4. Maximum Torque Per Soil Tests is the maximum torque achieved during field axial verification testing that was conducted to verify the pile axial capacity related to pile-soil interaction.
- 5. Maximum Installation Torque rating is the lower of the "mechanical torsion rating" and the "maximum torque per soil tests".
- 6. The allowable soil capacity under the IRC must be determined in accordance with Equation 3 of Section 4.1.5 of this report, when applicable.
- \*7. Min required installation depth for tension is 12D where D is the diameter of the uppermost helix.
- 8. Max Soil Capacities based on the tube torsional cpacity.

2 7/8

9/16

1/4

Weld