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PILE DRIVING

BRIDGES

SUBMARINE PIPELINES

SUBMITTAL

Submitted To:

Client: J.A. McDonald, Inc.
Attention: Marc Boudreau

Date: 2/8/2016
Project: Clarendon BRO 1443(48)
Location: Clarendon, VT

Subject: Pile Driving Criteria

H.B. Fleming Proposes to use the following driving criteria for the piles to be installed at the above location.

Values for D19 differ from equipment sheet

Hammer

- Either an APE D19-42 single acting open ended diesel pile hammer or an MKT DE-42 single acting open ended diesel pile hammer will be used to drive the piles. The D19 has a ram weight of 4,200 Lbs, a max stroke of 10'-6", and a rated energy of 42,000 ft-lbs. The DE-42 has a ram weight of 4,200 lbs, a max stroke of 10'-6" and a rated energy of 42,000 ft-lbs.
- The D19 will be operated on fuel setting 3
- Both hammers use Monocast MC 901 pile cushions

D19 and DE-42 analysis does not include weight of helmet

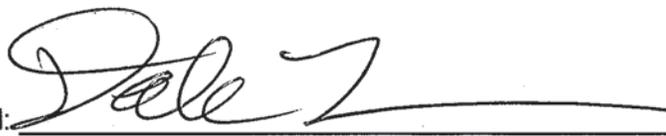
Pile

- HP12X63 ASTM A572 Gr. 50 steel piles
- The nominal capacity which we based our analysis on is 310 kips (155 tons)
- Piles will be fitted with cast steel driving points

Specify blow count and min. stroke for each hammer

Results

- Piles will be driven until a blow count of 5 for three consecutive inches is obtained
- If abrupt refusal is encountered, piles will be driven for 5 blows for 1/2 inch of movement or 3 blows for no movement
- These criteria are based upon the output generated from the WEAP analysis that follows.

Signed: 

Dale Lawrence