

NORTHWESTERN UNIVERSITY
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JOB # _____

FOR: _____
ISSUED: 11/06/2018

SECTION 2 0100 " HVAC INSULATION

██████████ #GENERAL

1§1 SUMMARY

A. S%&'()* I*&+, -%.: :

1\$ I* ., +/'()* M/'%0(/+.: :

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F. F+1(2+ E+/.') 3%0(&: C+).%-"&+B .5)*6%")0 %15/* -%- "0,22%0 3 /'0(/+.\$ C) 35+? @('8
ASTM C : 7B T?5% I 4)0 ',2,+/0 3 /'0(/+ . / * - T?5% I 4)0 .8%%' 3 /'0(/+.\$

1\$ P0) - , &' .: S ,2;%&' ') &) 35+(/ * &% @('8 0%A, (0%3 %*' .B 50)9(-%) *%)4 '8% 4)++)@(*6:

/\$ A%0)4+%1 USA I* &\$ A%0) &+&\$

2\$ A03 /&+%+ LLCF AP A03 /4+%1 DP0%4%00%-E\$

&\$ RBG C)05)0/'() *F I* . , + "S8%%' 1800 / * - I* . , + "T , 2% 180\$

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1\$ ASJ: W8(1%8 <0/4"5/5%08 4(2%06+/. . "0%(*4)0&%- .&0(3 @('8 /+, 3(*, 3"4)(+ 2/&<(*6F &) 35+?(*6 @('8 ASTM C 11 68 T?5% I\$

2\$ FSH J/&<%': A+, 3(*, 3"4)(8 4(2%06+/. . "0%(*4)0&%- .&0(3 @('8 <0/4"5/5%0 2/&<(*6F &) 35+?(*6 @('8 ASTM C 11 68 T?5% I\$

2\$8 FIELD"APPLIED JACHETS

A. F(%+-"/55+(%- ;/&<%'. .8/++ &) 35+? @('8 ASTM C =218 T?5% IB , *+%..)'8%0@(.% (*-&/'%- \$

B. FSH J/&<%': A+, 3(*, 3"4)(+"4/&%8 4(2%06+/. . "0%(*4)0&%- .&0(3 @('8 <0/4"5/5%0 2/&<(*6\$

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2\$= REMOVABLE INSULATION COVERS

A. A&&5' / 2+ % M / * , 4 / & ' , 0%0 . :

1\$ A-9 / * & % T8%03 / + C) 05\$

2\$ T8%03 / + E * % 06 ? P 0) - , & ' . B I * & \$

\$ T%3 5' % & \$

7\$ R%3 &) T%&8 *) +) 6 ? B I * & \$

B. R%3) 9 / 2+ % & % 0 / 3 (& 2+ / * < % ' ' ? 5 % @ (' 8 V % + & 0) ' / 2 . / * - 2) 1 " . ' (& 8 % - B 1 \$: > @ (- % B D " 0 (* 6 . ' 0 / 5 . B 6 , . . % ' . B 8) ' 4 / & % (* * % 0 ; / & < % ' (* 6 B ' ? 5 % 0 7 . ' / (* + % . . . ' % % + ' / 6 @ (' 8 + / . % 0 % * 6 0 / 9 % - - / / 0 (9 % ' % - ') 2) - ? B) , ' % 0 ; / & < % ' (* 6 B ' ? 5 % 0 7 . ' / (* + % . . . ' % % + A , (+ ' * 6 5 (* . B . 5 % & (4 (& / + ? . 8 / 5 % - / * - &) * . ' 0 , & ' % - 4) 0 (* . , + / ' % - (' % 3 \$

2\$10 TAPES

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2012 CORNER AN#LES

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\$7 #ENERAL PIPE INSULATION INSTALLATION

A. R%A, (0% 3 %*'. (* '8(/0' (&+% 6%*%0/+? /55+?') /++ (* . ,+/') * 3 /'%0(/+. %1&%5' @8%0% 3)0% .5%&(4(& 0%A, (0% 3 %*'. /0% .5%&(4%- (* 9/0() , . 5(5% (* . ,+/') * 3 /'%0(/+ (* .' /++/') * /0' (&+%. \$

2\$ W8%* 4+/*6% /* - ,*() * &)9%0. /0% 3 / -% 40) 3 .%&'() * /+ 5(5% (* . ,+/'() *B %1%'* - (* . ,+/'() *
40) 3 4+/*6% .)0 ,*() * +) *6 /' +%/ . ' '@) '(3% . '8% (* . ,+/'() * '8(&< *% . .)9%0 / - ; /&% *' 5(5%
(* . ,+/'() *) * % /&8 . (-%) 4 4+/*6%)0 ,*() * \$ S%& , 0% 4+/*6% &)9%0 (* 5+ /&% @('8 . ' / (*+ % . . ' . '%%+
)0 /+ , 3 (* , 3 2 / * - . \$ S%+& & ' 2 / * - 3 / ' %0 (/ + &) 3 5 / ' (2+ % @ (' 8 (* . , + / ' () * / * - ; / & < % '\$
\$ C) * . ' 0 , & ' 0% 3) 9 / 2+ % 9 / + 9% (* . , + / ' () * &) 9%0 . (* . / 3 % 3 / * * %0 / . 4) 0 4+/*6% . % 1 & % 5' - (9 (- %
' 8% '@) " 5 / 0' . % & ' () *) * ' 8% 9%0 (& / + & % * ' %0 + (* %) 4 9 / + 9% 2) - ? \$
7\$ W8%* &)9%0. /0% 3 / -% 40) 3 2+) & < (* . , + / ' () * B 3 / < % ' @) 8 / + 9% . B % / & 8 &) * . (. ' * 6) 4 3 (' % 0 % -
2+) & < . @ (0% - ') . ' / (* % . . " . '%%+ 4 / 20 (& \$ S%& , 0% ' 8 (. @ (0% 40 / 3 % B @ (' 8 (' . / ' / & 8% - (* . , + / ' () * B
') 4+/*6% . @ (' 8 ' % @ (0% \$ E 1 % * - (* . , + / ' () * / ' + % / . ' 2 (* & 8% .) 9%0 / - ; / & % * ' 5 (5% (* . , + / ' () *
) * % / & 8 . (-%) 4 9 / + 9% \$ F (+ . 5 / & % 2 % ' @ % % * 4+/*6%) 0 , *() * &) 9%0 / * - 5 (5% (* . , + / ' () * @ (' 8
(* . , + / ' * 6 & % 3 % * ' \$ F (* (. 8 &) 9%0 / . . % 3 2 ? @ (' 8 (* . , + / ' * 6 & % 3 % * ' / 5 5+ (% - (* ' @) &) / ' . \$
A 4 ' % 0 4 (0 . ' &) / ' (. - 0 ? B / 5 5+ ? / * - ' 0) @ % + . % &) * - &) / ' ') / . 3)) ' 8 4 (* (. 8 \$
: \$ U * + % . . / PVC ; / & < % ' (. (* - (& / ' % - (* 4 (% + - " / 5 5+ (% - 4 % &) * - &)

%\$ 135/+% (*.,+/'()*)9%0 5(*. / *- /'/'&8 .5%%- @/.8%0.\$

4\$ C, ' %1&%.. 5)0'()*)4 5(*. %1'%'*-(*6 2%?) * - .5%%- @/.8%0.)0 2%* - 5/0/++@ ('8 (*.,+/'()* .,04/&\$\$ C)9%0 %15).%- 5(*. / *- @/.8%0. @('8 ' /5% 3 /'&8(*6 (*.,+/'()* 4/&(*6\$

7\$ F)0 -, &' / *- 5+%, 3. @('8 .,04/&% '%35%0/' ,0%. 2%+) @ / 3.2(%*B (*.' /+ / &)*(' , , , *20)<%* 9/5)0 2/00(%0\$ C0%/'% / 4/&(*6 +5 4)0 +)*6(' ,-(*/+ .%/3. / *- %* - ;)(*'. @('8 (*.,+/'()* * 2? 0%3)9(*6 2 (*&8%. 40) 3 1 %-6% / *- 1 %* -)4 (*.,+/'()* * .%63%*'\$ S%&,0% +/5. ') /-; /&%* (*.,+/'()* * .%&'()* *\$ I*.' /+ 9/5)0 2/00(%0 &)* .('(*6)4 4/&'()0?")0 4(%+ -"/55+(- ; /&<%B / -8%. (9%B 9/5)0"2/00(%0 3 / . (&B / *- .%/+/' /' ;)(*'. B .%/3. B / *- 50)'0, .() * . \$

/ \$ R%5/0 5, * &' ,0%. B '%/0. B / *- 5%*%'0/'()* * . @('8 ' /5%)0 3 / . (&') 3 / (*' / (' 9/5)0" 2/00(%0 .% / + \$

2\$ I*.' /+ 9/5)0 .')5. 4)0 -, &'@)0< / *- 5+%, 3.)5%0/'(*6 2%+) @ :0 -%6 F / ' 18"4))' (*'%09/+.\$ V/5)0 .')5. .8/++ &)* .(')4 9/5)0"2/00(%0 3 / . (& / 55+(- (* / M". 8/5% - 5 / ''%0*)9%0 (*.,+/'()* * 4/&%B /+)*6 2, '' %* -)4 (*.,+/'()* *B / *-)9%0 '8% .,04/&\$\$ C)9%0 (*.,+/'()* * 4/&% / *- .,04/&%') 2% (*.,+/'% - / @(-'8 %A, /+ ') 2 '(3%. '8% (*.,+/'()* '8(&<%%.. 2, ' *)' +%. . '8/ * (*&8%. \$

: \$ O9%0+/5 , *4/&%- 2+/*<%'. / 3*(3, 3)4 2 (*&8%.) * +)*6(' ,-(*/+ .%/3. / *- %* - ;)(*'. \$ A' %* - ;)(*'. B .%&,0% @('8 .'%%+ 2/ * - . .5/&%- / 3 / 1(3, 3)4 18 (*&8%.)\$&\$

6\$ F)0 B+/*<%' I*.,+/'()* * I*.' /+ (*.,+/'()* *) * 0%&' / *6, +/0 -, &' %+2) @. / *- '0/*.'()* * . @('8 / 4, ++ (*.,+/'()* * .%&'()* * 4)0 %/&8 .,04/&\$\$ I*.' /+ (*.,+/'()* *) * 0, * - / * - 4 / '')9 / + -, &' %+2) @. @('8 (* - (9(-, /+? 3 ('%0% - 6)0%. &, ' ') 4('8% %+2) @\$

! \$ F)0 B) / 0 - I*.,+/'()* *B (*.' /+ (*.,+/'()* *) * 0%&' / *6, +/0 -, &' %+2) @. / *- '0/*.'()* * . @('8 / 4, ++ (*.,+/'()* * .%&'()* * 4)0 %/&8 .,04/&\$\$ #0) 9% / *- .&)0% (*.,+/'()* * ') 4(' / . &). %+? / . 5) . . (2% ') , ' .(-% / * - (* .(-% 0 / -(, .) 4 %+2) @. \$ I*.' /+ (*.,+/'()* *) * 0, * - / * - 4 / '')9 / + -, &' %+2) @. @('8 (* - (9(-, /+? 3 ('%0% - 6)0%. &, ' ') 4('8% %+2) @\$

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0%&) 3 3%*- -2? (*.,+/'() * 3 / *,4/&',0%0\$ S%&,0% ;/&<%' @('8 .' / (*+%..".'%+%+ 2 / * - . 12 (*&8%.)\$&\$ / * - / ' %* - ;)(*'. \$

§8 FINISHES

A. D, &'B EA, (53%*'B / * - P(5% I*.,+/'() * @('8 ASJ)0 O'8%0 P / (*' / 2+% J / &<%' M / '%0 (/+: P / (*' ; / &<%' @('8 5 / (*' . ? . '% 3 (-%*' (4%- 2%+) @ / * - / . . 5%&(4%- (* D(9.(.) * 0= P / (*' (*6 S%&'() * . \$

1\$ F+ / ' A&0?+(& F(*(.8: T@) 4(*(.8 &) / '.)9%0 / 50(3%0 '8 / ' (. &) 35 / '(2+% @('8 ; / &<%' 3 / '%0 (/+ / * - 4(*(.8 &) / ' 5 / (*' \$ A-- 4, *6(&(- / + / 6%*' ') 0%* - %0 4 / 20(& 3 (+-%@ 50))4\$

/ \$ F(*(.8 C) / ' M / '%0 (/+: I*' %0() 0B 4+ / 'B + / '%1" %3 , + . () * . (1%\$

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- 1\$ I* -)) 0B &) * & % / + % - / * - % 15) . % - . , 55 + ? / * -) , ' -)) 0 / (0 \$
- 2\$ I* -)) 0B &) * & % / + % - / * - % 15) . % - 0 % , 0 * +) & / ' % - (* *) * " &) * - (' () * % - *) * " 5 + % * , 3 . 5 / & % \$
- \$ I* -)) 0B % 18 / , . ' 2 % ' @ % % * (.) + / ' () * - / 3 5 % 0 / * - 5 % * % ' 0 / ' () *) 4 2 , (+ - (* 6 % 1 ' % 0 () 0 \$
- 7\$ O , ' -)) 0B % 15) . % - . , 55 + ? / * - 0 % , 0 * \$

B. I' % 3 . N) ' I * . , + / ' % - :

- 1\$ M % ' / + - , & ' . @ (' 8 - , & ' + (* % 0) 4 . , 4 4 (& (% * ' ' 8 (& < * % . . ') &) 3 5 + ? @ (' 8 % * % 0 6 ? &) - % / * -

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1\$ PVC: 0 3(+ '8(&<\$

2\$ A+, 3(*, 3B S3))'8)0 C)00,6/'%-)0 S',&&) E 32)..% -: M(* (3, 3 0\$016 (*&8 '8(&<\$

\$1= REMOVABLE INSULATION COVERS

- A. U.% ') &)9%0 . '%/ 3 9/+9%. B &8(++- @/'%0 9/+9%. B 8%/'(* 6 8)' @/'%0 9/+9%. B . '%/ 3 %15/* .()) * ;)(*'. B &)* -%* . /'% 5, 3 5 5/&</6% 0%&%(9%0 . B 8%/' %1&8/* 6%0 4/&% . B 4+/. 8'/* <. B 8, 0+(* 6'/* <. / * - .(3(+ /0 9% . .%+ . B / * - /@<@/0- . ., 04/&% . *)' &) 9%0%- 2? (* . ,+/'()*\$

\$20 COLD HYDRONIC PUMP INSULATION

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