```
0123(*+2$4!56!)5#$%!785*29'!
:588(;(!56!<9#='$251!
!/(>'*$&(1$!56!?('=%21;!'19!@('*121;!!
ABCB!<.!75D8(*!E3(.,!!
</OFCG!!
?'&>',!7@!HHIBC!!
!

J 662=(K!</O!HCLM!
-%51(K!!LFHNOPANBFPBQ5662=(R!
GPHNBHONGHBA!!Q=(88R!!!!!
<&'28K!!"#$%&'('&!() "(*+', "!!
```

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< / 0 : E ? SJ T!!
.//01-./2.--
                              3456'!(5#7-8*-95((8"!5:-: 8<"%=5&:-95((8"!5-
                              >8?#8!-8*-@$5<8(8A$7-54-;"!!5?"<"%-&4,-B4(#!"?#584-C-
                              !''#$\%\&'\%(\&)\%*+,\%+, -\&).\#/\&)\%$0,123$&)\%*+,
.//D1.//E-----
                              B4,5&4&-3456'!(5#7:-F<88%54G#84:-B4,5&4&--
                              H-9&(#'!-8*-I?5'4?'-54-J,"?&#584-C--
                              ! "#$%&"\(&)\\*+,\\+, - &). #/&)\\$0,123$&)\\*+-
2KKK-C-.//.----
                              L$'-;8<'G'-8*-L$'-F&$&%&(:-M&((&":-F&$&%&(-
                              H-F&?$'<8!-8*-J,"'?&#584-N5#$-&-I'?84,&!7-; '!#5*5?&#584-C--
                              ! "#$%& %(&)%*+,%+, - &). #/&)$0,123$&)%*+,,
2KKO-C-.//2----
                              L$'-;8<'G'-8*-L$'-F&$&%&(:-M&((&":-F&$&%&(-
                              H4-H((8?5&#'-8*-H!#(-> 'G!' '-54- 9 &#$ '% &#5?(-N5#$-I#&#5(#5?(-
?<E:USTV!<W-<''S<T:<!
. /2.1-@!'('4#-----
                              3456'!(5#7-8*-18"#$-P<8!5, &:-L&% A&:-P<8!5, &-
                              B-&%-&4-&((8?5&#'-A!8*'((8!-54-#$'-> 'A&!#%'4#-8*-L'&?$54G-&4,-
                              Q'&!454G+-B-#'&?$-"4, '!G!&, "&#'-&4, -G!&, "&#'-('?84, &!7-
                              %&#$'%&#5?(-',"?&#584-?8"!('(-RL'&?$54G-9&#$'%&#5?(-*8!-95,,<'-
                              S!&,'(:-L'&?$54G-I'458!-T5G$-I?$88<-9 &#$'%&#5?(:-L8A5?(-54-
                              L'&?$54G-S'8%'#!7U:-&4,-&4-54#!8,"?#8!7-%&#$'%&#5?(-?8"!('-
                              RB4#'!%',5&#'-H<G'=!&U+--H,,5#584&<<7:-B-#'&?$-#$'-,8?#8!&<-?8"!('-
                              84-; "!!5?"<"%-T5(#8!7-&4,-V'('&!?$-54-9 &#$'%&#5?(-J, "?&#584+-
                              98!'86'!:-B-?88!,54&#'-#$'-B4#!8,"'?#584-#8-9&#$'%&#5?(-&4,-
                              B4#'!%',5&#'-H<G'=!&-?8"!('(-&4,-#$'-"4,'!G!&,"&#'-&4,-9&(#'!(-
                              , 'G!' '-A!8G!&% (+--B4-./2W:-B-N!8#'-#$'-,8?#8!&<-A!8G!&%-('<*1(#",7-
                              !'A8!#-*8!-%&#$'%&#5?(-',"?&#584+-
```

?84(5, '!(-#\$'-54*<"'4?'-8*-#\$'-N!5##'4-?"!!5?"<"%-R#']#=88Z(U:-#\$'-4&#"!'-8*-#\$'-'4&?#',-

?"!!5?"<"%:-&4,-54,565,"&<(\-A'!(A'?#56'(-&4,-='<5'*(-&=8"##\$'5!-&=5<5#7-#8-'4G&G'-54-!'&(8454G-

! V"ET?!YJ"Z!! -(1921;!!

&4,-A!88*+!

H"G"(#-./.2-1./.E

) ? < X! - *5; * ' &+!7 '=282\$ '\$251!56!019(*; * '9#'\$(!)#==(++![4! S1\$(; * '\$21;!J>>5*\$#12\$2(+!65*!T(\$D5*\21;!Q70)\$JTR!65*!
?*'1+6(*!)\$#9(1\$+!'19!7'=#8\$4!'\$!\$%(!0123(*+2\$4!56!)5#\$%!
785*29'!

P8!-#\$5(-TT 9 B-A!8A8(&<:-B-N5<<-('!6'-&(-#\$'-A!54?5A&<-546'(#5G!:-*8!-#\$'-3 456'!(5#7-8*-I8"#\$-P<8!5, &-R(54?'-84<7-84'-A!8A8(&<-5(-&<-8N',-A'!-54(#5#"#584+!L\$'-G8&<(-*8!-#\$5(-A!8A8(&<-5(-#8-R2U-!'?!"5#-&4,-!'#&54-&-%8!'-,56'!('-#!&4(*'!-(#",'4#-=8,7-54-ILJ 9-A!8G!&%(-

HA!5<-C-a"4':-./2K-----

- - &4%+5,,6#&', 7 *8'2, - &). #/&)\\$0,9*++#\$)*+0,*+, - \\22'#,&+2,
: ""#8,;\\5.,!\$.**', - &). #/&)\\\$0,9388\\\$3'3/,&),<&/"&,=8#"&8&)*8>,
!\$.**'?,L&\%A&:-P<8!5,&+---L\$'-!'('&!?\$'!(-&!'-V"#\$\%&'-I'&!(:I&4G\$884-@&!Z:-&4,--95<'-b!&c?'6(Z5+--B-('!6'-&(-#\$'-<'&,-?84("<#&4#-#8-!'65'N-#\$'5!-(?\$88<-\%&#\$'\%?(-?"!!5?"<"\%+--L\$'-#8#&<-*"4,',-5(-`.:///+--

!

H''G''(#-./20-1./.2-

!

P'=!"&!7-./20-

a&4"&!7-./20----

: 0%+5, - &+%"3'&)%A#0,&+2,9&'\$3'&)*80,)*, I&\$%'%)&)#,!

```
a&4"&!7-.//K-1->'?'%='!-./22!9*/"&8%+5,T")%*+0,%+, /#$*+2&8>, -&).#/&)%$0B,,
                               ,P+A#0)%5&)%+5,9388%$3'3/,R9T!-P9S,
                               B-&((5(#',-N5#$-,&#&-&4&<7(5(:-N!5#54G-!'('&!?$-A&A'!(:-&4,-
                               ?84*'!'4?'-A!'('4#&#584(-!'<&#56'-#8-%&#$'%&#5?(-#'&?$'!(\-"('-8*-
                               #5% ':-8AA8!#"45#7-#8-<'&!4-54-%&#$ '%&#5?(:-&4,-?"!!5?"<"%-5% A&?#-
                               84-(#", '4#(-<'&!454G+!
I'A#'%='!-.//01-9&7-.//K--6#0#&8$.\h\+5,!$\\\\+$\,&\+2,-&\).\\\$0,<\\&\$.\\\8,F\\\&8+\\\+5,\\\+,
                               C')#8+&)%A#, 9#8)%J%$&)%*+, - *2#',R61! - C6U<S-
                               B-?8,',-,&#&:-?84,"?#',-%&#!5]-"'!5'(-"(54G-#$'-Mh568-(8*#N&!':-
                               N!8#'-A!8*5<'(-8*-A&!#5?5A&4#(:-&4,-65, '8-!'?8!, ',-?<&((!88%-65(5#(+--
-01@S:E?SJT)!
"(6(*((9!E*$2=8(+!-*21$(9,!S1!-*(++,!5*!E==(>$(9!
Males, L., Sears, R., Lawler, B. (2020). Equity and justice in the preparation of secondary
       mathematics teachers. B4-L$'-H((8?5&#584-8*- 9 &#$'\% &#5?(-L'&?$'!-J."?&#8!(-RH 9 LJU-
       @!8*'((584&<-',5#',-=88Z-('!5'(:--Y+-S+-9&!#54:-F+-V+-Q&N<'!:-H+-J+-Q5(?$Z&:-XY+9-+-
        1%5#$-RJ,(U+--&).#/&)\\$0,<#&$.#8,123$&}\\*+,=&8\)+#80.\\",<.#,=*E#8,*J,&,H#)E*84#2.
       P/"8*A#/#+), 9*//3+%)>,)*, <8&+0J*8/,!#$*+2&8>, - &). #/&)%$0, <#&$. #8, =8#"&8&)%*+i-+-
        : $&!<8##':-M: g--B4*8!%&#584-HG'-@"=<5?&#584(+-
-I#!"#?$'4(:-9+-J+:-)('*+,!".!X-j'<Z8N(Z5-R././U+-P/"8*A\\+5,9\\+\\$&',1D\\\8\\\#+$\\\9,J*\8,
       !#$*+2&8>, - &).#/&)\\$0,<#&$.#8,9&+2\\2&)\#0+-B4-L$'-H((8?5&\#584-8\*-9 &\#$'\% &\#5?(-
       L'&?$'!-J,"?&#8!(-RH9LJU-@!8*'((584&<-',5#',-=88Z-('!5'(:--Y+-S+-9&!#54:-F+-V+-Q&N<'!:-
       H+-J+-O5(?$Z&:-XY+9-+-I%5#$-RJ.(U+--&).#/&\\$0.<#&$.#8.123$&\\*+.=&8\)+#80.\\".<.#.
       = *E\#8, *J, \&, H\#)E *84\#2, P / "8*A\# / \#+), 9* / /3+\%)>, )*, <8&+0J*8 / ,! #$*+2&8>, - &). # / &)\\$0,
       <#&$.#8,=8#"&8&)%*+i-+;$&!<8##':-M;g--B4*8!%&#584-HG'-@"=<5?&#584(+-
 I#!"#?$'4(:-9+J+:-J!5?Z(84:->+:-)('*+,!".-X-j'<Z8N(Z5:-a+R././U+:<545?&<-J]A'!5'4?'(-*8!-4.5)
       I'?84,&!7-9&#$'%&#5?(-L'&?$'!-;&4,5,&#'(+-B4-L$'-H((8?5&#584-8*-9&#$'%&#5?(-
       L'&?$'!-J,"?&#8!(-RH9LJU-@!8*'((584&<-',5#',-=88Z-('!5'(:--Y+-S+-9&!#54:-F+-V+-Q&N<'!:-
       H+J+Q5(?$Z\&:-XY+9+-I\%5\#\$-RJ,(U+-\&).\#/\&)\%90,<\#\&\$.\#8,123\$\&)\%*+,=\&8)+\#80.\%",<.\#,
       = *E\#8, *J, \&, H\#)E*84\#2, P/"8*A\#/\#+), 9*//3+\%)>, )*, <8&+0J*8/, !\#$*+2&8>, - &). #/&)\\$0,
        <#&$.#8,=8#"&8&)%*+i-+-;$&!<8##':-M;g--B4*8!%&#584-HG'-@"=<5?&#584(+-
Grady, M., Sears, R., Stone, J., & Biagetti, S. (2020). Using co-planning and co-teaching
       strategies to transform secondary mathematics clinical experiences. B4-L$'-H((8?5&#584-
       8*- 9 &#$'%&#5?(-L'&?$'!-J,"?&#8!(-RH9LJU-@!8*'((584&<-',5#',-=88Z-('!5'(:--Y+-S+-
        9 &!#54:-F+-V+-O&N<' !:-H+-J+-O5(?$Z&:-X Y+9-+-I%5#$-RJ,(U+--&).#/&)//$0,<#&$.#8,
        123$&)\\\*+,=\&8)+\(\#80.\\''\,<.\#,=\*E\(\#8\,\*J\,\&\,H\(\#)E\(\*84\(\#2\,P)''\)8\(\*A\(\#+\)\,9\(\*/3+\\)\)>,\\\*,<8\(\&+0J\(\*8\/\,)\)
        !#$*+2&8>, -&).#/&}\$0,<#&$.#8,=8#''&8&}\**+i-+-;$&!<8##':-M;g--B4*8!%&#584-HG'-
       @"=<5?&#584(+
b!&c?'6(Z5:-9+:-X-)('*+,!''.-R-./2KU-+-;8%%84-65("&<-!'A!'('4#&#584(-&(-&-(8"!?'-*8!-
       %5(?84?'A#584(-8*-A!'('!65?'-#'&?$'!(-54-&-G'8%'#!7-?844'?#584-?8"!('+--P+)#8+&)\%*+&',
       V*38+&',J*8, - &).#/&)\\$0,<\#&\$.\\+5,&\+2,F\\&8+\\+5\\,UXR2U\\,H6\&5\\&=<\-84\\54\-
       \#A(gkkNNN+?5\% \mathbb{Z}(N) - 0.200 \text{ s ccNk}
```

```
!'A!'('4#54G-?84#'4#-8!G&45[&#584-8*-#N8-#7A'(+-V*38+&',J*8,6#0#&8$.,%+, - &).#/&)\\$0,
       123$&)\%*+:-aaR.U:-D2E1DE^+----
E*$2=8(+!#19(*!*(32(D!!
)('*+,!''.---j'\Z8N(Z5:-a+:-J,N&!,(:-F+:-Y&\<'!:-@+:-;84N&7:-F+:-1\8**10'N5(:-a+:-a"48!-;\&!Z':-@+:-
I#84':-a+:-X-I&='<<&:-Q+-R34,'!-V'65'NU-P&?5<5#&#54G-;<545?&<-J]A'!5'4?'(-14<54'->"!54G-&-
@&4, '%5?g-34A&?Z54G-@!8G!&%%&#5?-J**8!#(:-@8<5?5'(:-&4,-P&?#8!(-#$&#-I$8"<,-='-;84(5,'!',i+!
! "#$%&' ( )**+, "*!"!!-./0"1+22"./3-./4/#$%&'"!( )/56*7+\(\)/8+9)+::-/8+<&\(\)+/
! &22"1&%"$)&*/
=+2>\&:#>)./?-./#$%&'"!()"/?@*&%/!2"%>+./A-/56*7+%/8+9)+:;-/B+:/("$,+<"$)C#/D+"C,+%/
E*7@C$\&*/"#/"/8+#@2$/&F/!GHEI'JK/E*$+\\@L$\&*#/&F/O$@7+*$/D+"C.)*M-
0"1+22"./3-./#$%&'"!()"/4/!"#$%&'()**+."*/56*7+%/8+9)+::-/E*$+%%@L$+7/0$@7+*$'
D+"C,)*M/NOL+\%)+*C+\#P/O/D)L\#/\%\&/R+\$/\%\&/\$,+/S)*)\#,/3)*+/-//
!! &*: "T./U-./V"22+%./A-/4/#$%&'"! (-/56*7+%/8+9)+::-/I+9+2&L)*M/("$,+<"$)C"2/
! &*C+L$@"2/6*7+\\#$"*7)*M/)*/$,+/H)\\$@"2/OL"C+-
? (=%12='8!''(>5*$+!!
Q"=5'4#8:-a+:-X-)('*+,!".-R./20U+-97Q&=-9&#$-N5#$-97Q&=(@<"(-', "?&#8!-(#", 7-']&%54'(-
       Y 8!Z(A&?'-&((5G4%'4#-5%A&?#-54-54#'!%',5&#'-&<G'=!&-&#-3456'!(5#7-8*-18"#$-P<8!5,&+-
       =#&80*+,123$&)*8,1)32>+--V'#!5'6',-*!8%-$##AgkkNNN+A'&!(84',+?8%k!'("<#(k%7<&=1
       %&#$1%7<&=(1A<"(1', "?&#8!1(#", 71']&%54'(1N8!Z(A&?'1&((5G4%'4#15%A&?#154#'!%', 5&#'1
       &<G'=!&1"456'!(5#71(8"#$1*<8!5,&k--
T8A*:-P+:-)('*+.!''+:-L8!!'(:-H+:-9 &$'!:-9+:-X-9?Y&#'!:-9+R./2DU+-3456'!(5#7-8*-18"#$-P<8!5.&-
       97<&=(@<"(-C-'%A8!5"%-%8, '<+-=#&80*+, 7. \\)#, =&"#8,6#"*8)\\,V'\\!5'6',-\!8%-
       $##AgkkNNN+A'&!(84%7<&=&4,%&(#'!54G+?8%k48!#$&%'!5?&k!'("<#(k*5<'(k3q8*qIqP-Q+A,*-
)('*+,!"+:-T8A*:-P+:-9 &$'!:-9 -X-L8!!'(:-H+-R./2DU+-;8<'G'-(#", '4#(\-A'!(A'?#56'(-8*-#$'-r$'<A-
       %'-(8<6'-#$5(i-#88<-84-#$'5!-<'&!454G-8*-%&#$'%&#5?(+--=#&80*+,1JJ\$&$>,6#''*8)+V'#!5'6',-
       *!8%--$##AgkkNNN+A'&!(84%7<&=&4,%&(#'!54G+?8%k48!#$&%'!5?&k!'("<#(k*5<'(k3q8*q18"#$
       qPQq > '?q20+A,*n62D.220^.^0-
```

&4,-5%A<'%'4#Ɉ-'**'?#(-84-\$5G\$1(?\$88<-(#", '4#(\-%&#\$'%?(-<'&!454G-*!8%-?"!!5?"<&-

Y([!]85;+!

- L8!!'(:-H+:!)('*+,!''.,!T8A*:-P+:-Y5<<5&%(:-;+!R./20U+!<.#,@#+#J%)0,*J,%+)#82%0\$%''%+&8>,
 \$*+A#80&)%*+0,%+,)8&+0J*8/%+5,/&).#/&)%\$0,\$*380#0+--V'#!5'6',-*!8%\$##AgkkNNN+A'&!(84',+?8%k',"?ᛑ=<8Gk?846'!(Ɉ(1%&#\$'%?(1(#",'4#1A'!*8!%&4?'k--
-) ('*+,!''.,-T8A*:-P+:-L8!!' (:-H+:-X-b!&c'6(Z5:-9?,R./2EU+,:)\\"\(\%+5,->-&\). <\#0),)*,\#+038\#, \\"8\#0\#8A\\\$\#,0\\\$*+2&8>,)\#&\\$.\#80,&8\#,"8\#"\&\#2,J*8,0)&\)\#,\\$\#8)\\J\\\$\&*+,\#D&/0\+-V'\#!5'6',-*!8\%-\\$\#AgkkNNN+A'&!(84',+?8\%k',"?\\#5841

)('*+,!''.,-X-; \$&6'[:-1+-R./2W:-P'=!"&!7:-D10U+-I#", '4#(-8*-#N81?"!!5?"<"%-#7A'(-A'!*8!%&4?'-84-&-A!88*-*8!-?84G!"'4#-#!5&4G<'(+-=8*\$##2%+50,*J,).#-H%+)., 9*+58#00,*J, 138*"#&+,6#0#&8\$.,%+,-&).#/&)%\$0,123\$&)%*+,R; JV 9 J-KU+-@!&G"':-; ['?\$-V'A"=<5?+-b&!&, '45[:-B+:-)('*+,!''+:-X-; 8<&Z:-H+-R./2^:-P'=!"&!7-D1

; &7 #84:-; +:-S !&, 7:-9 +:-@!'(#84:-V+-h+:-)('*+,!''-,-1 < 8**1Q'N5(:-a+:-X-F!8(4&4:-@+-R./20:-1?#8='!-W1)) = 1 < 8**1Q'N5(:-a+:-X-F!8(a+

F"#<'!:-b+:-X-)('*+.!".!R./2W:-P'=!"&!7-.E1.0U.-L'?\$48<8G7-54-54#'!%',5&#'-&<G'=!&g--J**'?#(-84-&4]5'#7-&4,-8AA8!#"45#7-#8-<'&!4+--=8*\$##2%+50,*J,).#,6#0#&8\$.,9*3+\$%',J*8,-&).#/&)%\$0,
F#&8+%+5-RV; 9 QU+-Q&(-h 'G&(:-Mh+--

YJ"Z)UJ-)!ET/!-"<)<T?E?\$JT)!!

S1\$(*1'\$251'8!

-) ('*+,!''.,-X-@54, '!:-; +--R. /2K:-HA!5<-DU+---C))#+2%+5,)*, IG3%)>,%+, &). #/&)%\$0B, = *'%\$%#0W, =8&\$)%\$#0, &+2,O#'\#J,!>0)#/0+--@!'('4#', -&#-#\$'-MɈ&<-; 8"4?5<-8*-L'&?\$'!(-8*-9 \ \#54G+-1&4->5'G8:-; &<5*8!45&+--
-)('*+,!''+:-1<8**1Q'N5(:-a+:-V5GG(:-Q+:-F!8(4&4:-@+:-S!&,7:-9+:-X-I#84':-a+-R./2K:-P'=!''&!7-01KU+-C))#+2%+5,)*,#G3%)>,%+,\$'%+%&',#D''#8%#+\$#0,A%&,\$*N'''&++%+5,&+2,\$*N)#&\$. %+5,0)8&)#5%#0?--@!'('4#Ɉ-&#-#\$'-&44''&<-%''#54G-*8!-#\$'-H((8?5Ɉ-8*-9 &#\$''%?(-L'&?\$'!-J,"'?!(+-1!<&4,8:-PQ+--

-)('*+,!''.,-X-@54, '!:-; +-R. /20:-HA!5<-20U+-3(54G-97Q&=(@<"(-Y8!Z(A&?'-#8-"4A&?Z-(#", '4#(\-%&#\$'%&#\$?&<-'!!8!(-&4, #8-, '6'<8A-!'&(8454G-(Z5<(+--Y'=54&!-*8!-@'&!(84-T5G\$'!-J, "?Ɉ+-V'#!5'6', -*!8%-

)('*+**,!''.,**-S!&,7:-9+:-;&7#84:-;+:-F!8(4&4:-@+:-I545?!8A':-V+:-@!'(#84:-V+:-X-I#!"#?\$'4(:-9+--

&4,-B4_"5!7-F&(',-Q'&!454G-?84*'!'4?'+-H"(#54:-Lv+-V'#!5'6',-*!8%--

)('*+,!''.:-F&((5<&:-H+:-X-F"#<'!:-b+-R./2E:-a"<7-.EU+-:0%+5,HC!C,8#0*38\$#0,)*,"8*/*)#,%+G3%8>, @&0#2,'#&8+%+5?,@!'('4#Ɉ-&#-#\$'-P<8!5,&-H((8?5Ɉ-*8!-;&!''!-&4,-L'&?\$'!-J,"?Ɉ-R

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1 ?#8='!:/2E	P<8!5, &-H((8?5Ɉ-8*-9 &#\$'%?(-L'&?\$'!-J, "?!(-RPH 9 L J U19 &#\$'%?(-L'&?\$'!-J, "?!-8*-#\$'-s'&!-HN&!,/2E-</td></tr><tr><td>9 &!?\$-20:/2W</td><td>3 456'!(5#7-8*-18"#\$-P<8!5, &d(-; \$&A#'!-8*-#\$'-MɈ&<-; 8"4?5<-8*-M'G!8-Y 8%'4-1F<&?Z-S5!<(-V8?Z-T848!''</td></tr><tr><td>! !</td><td></td></tr><tr><td>):UJ@E")US-)!ET/!7</td><td><@@JY)US-)!</td></tr><tr><td>: -a"4'/./</td><td>MIP1*"4, ',-H(A5!'-H<5&4?'\(-B4(#5#"#584&<-; \$&4G'-M'#N8!Z-RB; \$&4G'U-BH(A5!'-Q'&,'!(\$5A-H?&,'%7w-B-N&(r('<'?#',-&(-84'-8*-#\$'-\$5G\$<7"&<5*5',-&AA<5?&4#(-?\$8('4-*!8%-&?!8((-#\$'-345#',-I#&#'(-#8-#&Z'-A&!#-54-#\$5(-#!&4(*8!%8'-<'&,'!(\$5A-,'6'<8A%'4#-']A'!5'4?'iRV8?\$'<<'-I&AA:-a"4'-0:././-J%&5<U+B-&%-&*'<<8N-8*-#\$'-('?84,-?8\$8!#+</td></tr><tr><td>>'?'%='!/2K</td><td>MɈ&<-; 8"4?5<-8*-L'&?\$'!(-8*- 9 &#\$'%?(-RM; L 9 U-1MɈ&<-I?5'4?'-P8"4, Ɉ-RMIPU-#!&6'<-G!&4#-&N&!, -*8!#\$'2D#\$-B4#'!4Ɉ&<-; 84G!'((-84- 9 &#\$'%?&<-J, "?Ɉ-RB; 9 J12DU-54-F'5c54G-; \$54&-Ra"<7-2212K:/./U+-L\$5(-&N&!, -A!865, '(-`.:0W/-#8N&!, (-#\$'-?8(#-8*-8!-!'G5(#!Ɉ:-&5!*&!':-<8, G54G:-&4, -%'&<(-</td></tr><tr><td>! 9 &!?\$/2</td><td>2.#\$-B4#'!4Ɉ&<-; 84G!'((-84-9 &#\$'%?&<-J, "'?Ɉ-RB; 9 J1 2.U-L!&6'<-S!&4#-HN&!,:-N\$5?\$-N&56',-#\$'-?84*'!'4?'-!'G5(#!Ɉ- *''-&4,-A!865,',-`D//+//-*8!-#!&6'<-!'5%="!('%'4#+</td></tr><tr><td>.//01./2</td><td>; '4#'!-*8!-#\$'-I#",7-8*-9 &#\$'%?(-; "!!5?"<"%-R; I 9; U-P'<<8N(\$5A-HN&!,:-N\$5?\$-A!865,',-&-*8"!17'&!-G!&,"&#'-&((5(#&4#(\$5A-N5#\$-#"5#584-N&56'!-&#-#\$'-3456'!(5#7-8*-95((8"!5+</td></tr><tr><td>9 &7 /22</td><td>b&AA&->'<#&-@51-T8<<5(-Q-; &(N'<->8?#8!&<-HN&!,:-N\$5?\$-&N&!,',- `D:///+//-#8-&((5(#-N5#\$-']A'4('(-!'<8'-#8-%7-,5(('!#Ɉ- (#",5'(+</td></tr><tr><td>./2/1./2</td><td>3 456'!(5#7-8*- 9 5((8"!5- 9 &#\$'% ?(-J, "?Ɉ-I?\$8<&!(\$5A:-N\$5?\$-&N&!, ',-`W:///-&44"&<<7:-*8!-#N8-7'&!(+-</td></tr><tr><td>.//01./22</td><td>Q7*8!,-;&7-P8"4,Ɉ-S!&,"&#'-I#</td></tr></tbody></table>

B-('!6',-&(-&-!'65'N'!-*8!-#\$'-,!&*#-(#&#'-(#&4,&!,(-*8!-%&#\$'%?(-*8!-%<?"<"(:-G'8%'#!7:-&<G'=!&:-A!8=&=5<5#7-&4,-(#(#5?(+-L\$'-,8?"%'4#-N&(-!'<'&(',-54-a&4"&!7-././+-
HA!5<-./2K1-@!'('4#
3456'!(5#7-8*-18"#\$-P<8!5,&-C-;8<'G'-8*-J,"?Ɉ-1-P&?"<#7-@8<5?7-;8"4?5<B-N&(-'<'?#',-#8-!'A!'('4##\$'->'A&!#%'4-8*-L'&?\$54G-&4,-Q'&!454G+-B-&<(8-('!6'-&(-#\$'-?\$&5!-8*-#\$'-&,1\$8?-?8%%5##''-*8!-#\$'-P&?"<#7-;84(#5#"#584-;8%%5##''-#8-("AA8!#--#\$'-"456'!(5#7-?84(8<5,Ɉ-'**8!#(+-
B-('!6'-&(-#\$'-3456'!(5#7-8*-18"#\$-P<8!5,&-V'A!'('4#8'-*8!-#\$'-B-('!6'-&(-#\$'-3456'!(5#7-8*-18"#\$-P<8!5,&-V'A!'('4#8'-*8!-#\$'-B-('!6'-&(-#\$'-3456'!(5#7-8*-18"#\$-P<8!5,&-V'A!'('4#8'-*8!-#\$'-

a&4"&!7:/2E-1-@!'('4#	L\$'-3456'!(5#7-8*-I8"#\$-P<8!5, &-ILJJV-L!&4(*8!% Ɉ-B%A<'%'4#Ɉ-Q'&,'!(\$5A-L'&%-RLBQLU+B-A&!#5?5A&#'-54-(#!&#'G5?-A<&4454G-*8!-#\$'-"456'!(5#7-ILJ9-',"?Ɉ-545#58'(+</th></tr><tr><td>9 &7/2W-1-@!'('4#</td><td>9 &!(\$&<<-&#-3456'!(5#7-8*-I8"#\$-P<8!5,&-;8%%'4?'%'4#-;'!'%847- B-&((5(#-N5#\$-#\$'-(%88#\$-*<8N-8*-G!&,"&#'(-N&<Z54G-&?!8((-#\$'-(#&G'-#8-8=#&54-#\$'5!-,5A<8%&(+</td></tr><tr><td>HA!5<-2/2W-1-@!'('4#</td><td>I#&#'-I?5'4?'-X-J4G54''!54G-P&5!-8*-P<8!5,&</td></tr><tr><td>1 ?#8='!/21-@!'('4#</td><td>P<8!5, &-H((8?5Ɉ-8*- 9 &#\$'%?(-L'&?\$'!-J, "?!(B-N&(-'<'?#', -54-1?#8='!/2D-&(-#\$'-('?!'#&!7-*8!-#\$'-8!G&45[Ɉ+-</td></tr><tr><td>H"G"(#/2D-1-@!'('4#</td><td>H%'!5?&4-J,"?Ɉ&<-V'('&!?\$-H((8?5Ɉ B-!'65'N-&!#5?<'(-*8!-HJVH-&44"&<-%''#54G(-*8!-#\$'-%&#\$'%?(- ',"?Ɉ-&4,-#'&?\$54G-&4,-#'&?\$'!-',"?Ɉ-IA'?5&<-B4#'!'(#- S!8"A(-RIBS(U+</td></tr><tr><td>H"G"(#/2D-1-@!'('4#</td><td>MɈ&<-; 84*'!'4?'-8*-L'&?\$'!(-8*-9 &#\$'%?(-@"=<5?Ɉ(-B-!'65'N-=88Z(-&4,-8#\$'!-', "?Ɉ&<-!'(8"!?'(-*8!-&-b12E-%&#\$'%?(-&",5'4?'+</td></tr><tr><td>- HA!5</2D-1-@!'('4#</td><td>9 &#\$'%?(-L'&?\$'!-J,"?Ɉ-@&!#4'!(\$5A-R 9 LJ@UB-('!6'-&(-#\$'-L&%A&-F&7-!'A!'('4#8':-&4,-#\$'-<'&,'!-8*-#\$'-("=1G!8"A-!'('&!?\$-&?#584-?<"(#'!-,'68#',-#8-%&#\$'%?(-?81#'&?\$54G-&4,-?81A<&4454G-,"!54G-?<545?&<-']A'!5'4?'(+-;"!!'4#<7:-N'-\$&6'-!'*54',-#!&5454G-%8,"<'(-*8!-?81#'&?\$54G-&4,-?81A<&4454G-&4,-\$&6'-("=%5##',-&4-MIP1-B3IJ-G!&4#-A!8A8(&<+H,,5#584&<7:-B-A&!#5?5A&#',-54-#\$'-;&!4'G5'-M'#N8!Z-P8"4,Ɉ-B%A!86'%'4#-;8%%"45#7+</td></tr><tr><td>9 &!?\$/2D-1-@!'('4#</td><td>P<8!5, &-h J v-V8=8#5?(-I#&#'-; \$&%A584(\$5A- B-c", G'-('?84, &!7-(#", '4#(\-!8=8#5?(-("=%5((584(+</td></tr><tr><td>P'=!"&!7/2D-1-@!'('4#</td><td> T5<<(=8!8"G\$-V'G584&<-I?5'4?'-P&5!-</td></tr></tbody></table>
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I 'A#'%='!-./2.-1-a"4'-./2D--9 &#\$'%?(-J,"?Ɉ-; 8<<8_"5"%-
B-*&?5<5#&#',-%84#\$<7-%''#54G(-54-N\$5?\$-*&?"<#7-&4,-(#",'4#(,5(?"((',-#\$'5!-!'('&!?\$-545#58'(+
I 'A#'%='!-./2.-1-HA!5<-./20-9 &#\$'%?(-J,"?Ɉ-I'&!?\$-; 8%%5##''-
B-('!6'-84-#\$'-(?!''454G-?8%%5##''-#8-!'65'N-&AA<5?&4#(+-
H"G"(#-./2.-1-@!'('4#----
MɈ&<-; 8"4?5<-8*-L'&?\$'!(-8*-9 &#\$'%?(-RM; L 9 U-C-V'('&!?\$-@!'1('(584B-!'65'N-?84*'!'4?'-A!8A8(&<(-&4,-%&Z'-!'?8%%'4,Ɉ(-&(-#8-

. /2^-% ' '#54G+---

N\$'#\$'!-A!8A8(&<(-8"G\$#-#8-='-&??'A#',-8!-!'c'?#',+---H,,5#584&<<7:-B-A!'(5,',-86'!-&-('((584-A'!#54'4#-#8-!'&(8454G-&4,-A!88*-&#-#\$'-

H"G"(#-./2.-1-@!'

48%54''-*8!-; 8<"%=5&-95((8"!5+--H#-#\$'-V9T; -54-L&%A&-=&7-B-&%-&-(\$5*#-68<"4#''!-&#-#\$'-\$8%'+--

>'?'%='!-.//0-1-9&7-./2.--39;-I74#\$'(5(-@!8c'?#(-*8!-T5G\$-I?\$88<-9&#\$'%?(+--B-'6&<"&#',-A!'1('!65?'-#'&?\$'!(\-(74#\$'(5(-A!8c'?#(-54-&<5G4%'4#-

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                         >!+-@'<&G5&-b5<G8!'-1-; 8%%5##''-9'%='!-
./2W-1-./20- -
                         Q&Z'(5&->"A!''-C-; 81; $&5!A'!(84-
./2W-1-@!'('4#-- -
                         ; &!''-@54, '!-C-; $&5!A'!(84--
. /201-@!'('4#- -
. /201-@!'('4#--
                - x " ' ($84, &-b ", &5(5-C-; $&5!A ' !(84-
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                          @!&#$5%&-S8G"%"<<&1-;8%%5##''-%'%='!--
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                         ; 74#$5&-; &(#!81 9 544 '$&41-; $&5!A'!(84-
./2K-C-@!'('4#-- 9 &##$'N-1\F!5'4-C-;$&5!A'!(84--
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./2D-1-./2W-- -
                - ; &((&4,!&-S&!#84-1-; 81; $&5!A'!(84-
./2E-1-./20- - I$56&45-I88Z?$&4,-1-;81;$&5!A'!(84-
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                         H==5-V54\&<,5-C-;81;$\&5!A'!(84--
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9 HJ-E^.K-C-S'8%'#!7-&4,-9'&("!'%'4#-*8!-95,,<'-S!&,'(-L'&?$'!(-
-
9 HJ-E^01L8A5?(-54-L'&?$54G-S'8%'#!7-
-
9 HJ-EKDW-C-@!&?#5?"%-54-9 &#$'%&#5?(-J,"?&#584-
-
9 HJ-02DE-C-;"!!5?"<"%-T5(#8!7-&4,-V'('&!?$-54-9 &#$'%&#5?(-J,"?&#584-
-
9 HJ-0K2/-C->5!'?#',-V'('&!?$-54-9 &#$'%&#5?(-J,"?&#584-
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9 HJ-0KDW-C-@!&?#5?"%-54-9 &#$'%&#5?(-J,"?&#584-
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9 HJ-0KDW-C-@!&?#5?"%-54-9 &#$'%&#5?(-J,"?&#584--
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