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/\$# .+, \$(%4560\$\$ / (+&' \$#&! '+6&!5(-&+6&7(56, !5(899)(, : \*

;"#!<-!'\$/ '-<\$&' /=

>?@A

/BC:BADB?(EF7(G9GG

:H?@IJH

/BC:BADB?(E87(G9G8







B!K<:7;B9P7!<7KB<C:9K!567!C:=P6B<K7!HM!B! ' % ) & 2 !MH<!9H9YBPBC7L:P!PH9CJP5A!H<!B! 2 9:H9!  
K<:7;B9P7!B007K:9K!B!P0B==YV:C7! ; :H0B5:H9!HM!56:!=!&K<77L795A!V:00!S7!N<HP7==7C!B5!%57N!\_I!

/:BC(E0(

O :56:9!M:M5779!4TF@!CB>=!HM!567!7;795!K: ; :9K!<:=7!5H!567!K<:7;B9P7!H<!BM57<!567! ' % ) & 2 !  
<7B=H9BS0>! =6HJ0C!6B;7!X9HV9!HM!567!7;795!K: ; :9K!<:=7!5H!567!K<:7;B9P7A!567!BKK<:7;7C! ' % ) & 2 !  
H<!567!2 9:H9!LB>! =JSL :5!B!V<:5579!K<:7;B9P7!5H!567! , 7NB<5L795! 1 6B:<!H<!BCL :9:=5<B5: ;7!  
C7=:K977! :9!567! ' % ) & 2 W=!P6B:9!HM!PHL LB9CA!V:56!B!PHN>!5H!567!&===:5B95! 3 :P7!D<7=:C795!HM!  
# JLB9! ( 7=HJ<P7=! - MM:P7<!B9C!567!2 9:H9! " 67! , 7NB<5L795! 1 6B:<!H<!BCL :9:=5<B5: ;7!C7=:K977!  
V:00! =P67CJ07!B!L775:9K!V:56!567! ' % ) & 2 !5H!S7!670C!V:56:9!579!4TG@!CB>=!HM!<7P7:N5!HM!567!  
V<:5579!K<:7;B9P7! " 67! , 7NB<5L795! 1 6B:<!H<!BCL :9:=5<B5: ;7!C7=:K977!V:00! =JSL :5!B!V<:5579!  
B9=V7<!5H!567!BKK<:7;7C! ' % ) & 2 !H<! 2 9:H9!V:56:9!M:M5779!4TF@!CB>=!HM! =JP6!L775:9KA!V:56!B!  
PHN>!5H!567!&===:5B95! 3 :P7!D<7=:C795!HM! # JLB9! ( 7=HJ<P7=!B9C!567!2 9:H9!

/:BC(G0(

\$9!567!7;795!567!K<:7;B9P7!:=!9H5! =B5: =MBP5H<:0>!BC]J=57C!B5!%57N!TA!567!BKK<:7;7C!  
' % ) & 2 !H<!567!2 9:H9A!V:56:9!M:M5779!4TF@!CB>=!BM57<!<7P7:N5!HM!567!%57N!T!B9=V7<A!LB>! =JSL :5!B!  
V<:5579!BNN7B0!HM!567!%57N!T!B9=V7<!5H!567! , 7B9!:9!567! ' % ) & 2 W=!P6B:9!HM!PHL LB9CA!H<!6: =!H<!  
67<!C7=:K977A!V:56!B!PHN>!5H!567!&===:5B95! 3 :P7!D<7=:C795!HM! # JLB9! ( 7=HJ<P7=! " 67! , 7B9A!H<!  
C7=:K977A!V:00! =P67CJ07!B!L775:9K!V:56!567!BKK<:7;7C! ' % ) & 2 !B9C!<7N<7=795B5: ;7!HM!567!2 9:H9A!  
5H!S7!670C!9H5!LH<7!56B9!MHJ<5779!4Td@!CB>=!BM57<!<7P7:N5!HM!567!%57N!\_!BNN7B0! " 67! , 7B9A!H<!  
C7=:K977A!V:00! =JSL :5!B!V<:5579!B9=V7<!5H!567!BKK<:7;7C! ' % ) & 2 !V:56:9!M:M5779!4TF@!CB>=!BM57<  
567!%57N!\_!L775:9KA!V:56!B!PHN>!5H!567!&===:5B95! 3 :P7!D<7=:C795!HM! # JLB9! ( 7=HJ<P7=!B9C!567!  
2 9:H9!

/:BC(U0(

\$9!567!7;795!56B5!567!K<:7;B9P7!:=!9H5! =B5: =MBP5H<:0>!BC]J=57C!B5!%57N!\_!A!567!BKK<:7;7C!  
' % ) & 2 !H<!567!2 9:H9A!V:56:9!M:M5779!4TF@!CB>=!BM57<!<7P7:N5!HM!567!%57N!\_!B9=V7<A!LB>! =JSL :5!B!  
V<:5579!K<:7;B9P7!BNN7B0!5H!567!D<H;H=5A!H<!C7=:K977A!V:56!B!PHN>!5H!567!&===:5B95! 3 :P7!  
D<7=:C795!HM! # JLB9! ( 7=HJ<P7=!B9C!567!2 9:H9! " 67!D<H;H=5A!H<!C7=:K977A!V:00! =P67CJ07!B!  
L775:9K!V:56!567!BKK<:7;7C! ' % ) & 2 !B9C!<7N<7=795B5: ;7!HM!567!2 9:H9A!5H!S7!670C!9H5!0B57<!56B9!  
M:M5779!4TF@!CB>=!BM57<!<7P7:N5!HM!567!%57N!U!BNN7B0! " 67!D<H;H=5A!H<!C7=:K977A!V:00! =JSL :5!B!  
V<:5579!B9=V7<!5H!567!BKK<:7;7C! ' % ) & 2 !V:56:9!M:M5779!4TF@!CB>=!BM57<! =JP6!L775:9KA!V:56!B!  
PHN>!5H!567!2 9:H9!

!%# \* ?N::B2(4?BSB2:1:N@20(

&00!K<:7;B9P7! =N<7=7957C!B5!%57N! =T!56<HJK6!U!HM!56:!=!7P5:H9!dIT!V:00!S7!:9!V<:5:9K!H9!B!  
MH<L!BK<77C!5H!S>!567!NB<5:7=!B9C!N<H; :C7C!S>! \* B9BK7L795A! =:K97C!S>!567!BKK<:7;7C! ' % ) & 2 A!  
B9C! =75!MH<56!567! =N7P:M:P!N<H; ; :=:H9! =HM!567!&K<77L795!B007K7C!5H!6B;7!S779! ; :H0B57C!B9C!567!  
 =N7P:M:P!<70:7M! =HJK65!S>!567!BKK<:7;7C! ' % ) & 2 A!H<!567!K<:7;B9P7!V:00!S7!C77L7C!5H!6B;7!S779!  
VB: ;7CI!

!&# - 2N@2(#BC?BSB2:1:N@20(

!'# ,@CNBS(@P( \* ?N::B2(' ?NBT12MBS0(

2 NH9!<7P7:N5!HM!B!V<:5579!K<:7 ; B9P7!H<!V<:5579!BNN7B0!=JSL :557C!S>!B! ' % ) & 2!:9!  
BPPH<CB9P7!V:56!567!N<HP7CJ<7!=75!MH<56!:9!%57N=!T!56<HJK6!U!HM!56:=%!7P5:H9!dIT! \* B9BK7L795!  
V:00!MJ<9:=-6!B!PHN>!HM!=BL7!5H!567!29:H9! &!PHN>!HM!B9>!V<:5579!B9=V7<!HM! \* B9BK7L795!J9C7<!  
%57N=!T!56<HJK6!U!HM!56:=%!7P5:H9!dIT!V:00!S7!MH<VB<C7C!5H!567!29:H9!:=: L J05B97HJ=0>!V:56!:5=  
=JSL:==:H9!5H!567!BKK<:7 ; 7C! ' % ) & 2!!

!(# #BC?BSB2:1:N@2(1:( ' ?NBT12MB(%BB:N2JS0(

&! ' % ) & 2 !LB>!S7!<7N<7=7957C!B5!567!L775:9K=!670C!NJ<=JB95!5H!%57N=!T!56<HJK6!U!HM!  
567!N<HP7CJ<7!=75!MH<56!:9!56:=%!7P5:H9!dIT!S>!B!29:H9!<7N<7=795B5: ; 7I!

/BM:N@2(V0G(K(!?DN:?1:N@20(

!'# \$RBM:N@2(@P(!?DN:?1:N@20(

" 67!29:H9A!V:56!567!V<:5579!PH9PJ<<79P7!HM!567!BKK<:7 ; 7C!7LN0H>77A!LB>!=JSL :5!B!  
K<:7 ; B9P7!56B5!6B=!S779!N<HN7<0>!N<HP7==7C!56<HJK6!567!N<HP7CJ<7!=75!MH<56!:9!%7P5:H9!dIT!HM!  
56:=%!&<5:P07!5H!M:9B0!B9C!S:9C:9K!B<S:5<B5:H9! " 67!707P5:H9!HM!B<S:5<B5:H9!=6B00!S7!LBC7!S>!  
=JSL:55:9K!V<:5579!9H5:P7!HM!=JP6!:95795A!:=:K97C!S>!B!29:H9!<7N<7=795B5: ; 7A!5H!567!&==:=5B95!  
3 :P7!D<7=:C795!HM! # JLB9! ( 7=HJ<P7=!H<!C7=:K977!V:56:9!M:MS779!4TF@!CB>=!BM57<!<7P7:N5!HM!567!  
B9=V7<B5!%57N!U!HM!%7P5:H9!dIT4 . @!HM!56:=%!&<5:P07! &!29:H9!K<:7 ; B9P7!=JSL :557C!5H!B<S:5<B5:H9!  
CH7=!9H5!<7aJ:<7!7LN0H>77!PH9=795!

!\$# /BRBM:N@2(@P(!?DN:?1:@?0(

\* B9BK7L795!B9C!567!29:H9!BK<77!5H!LB:95B:9!B5!B00!5:L7=A!B!NB970!HM!56<77!4U@!9BL7C!  
B<S:5<B5H<=A!H97!4T@!HM!V6HL!=6B00!S7!BNNH:957C!5H!67B<!7BP6!K<:7 ; B9P7!56B5!:=!BNN7B07C!5H!  
B<S:5<B5:H9!NJ<=JB95!5H!%7P5:H9!dI\_4&@!HM!56:=%!&K<77L795! ( H5B5:H9!HM!B<S:5<B5:H9!PB=7=!BLH9K!  
=JP6!B<S:5<B5H<=!6B00!S7!:9!B0N6BS75:PB0!H<C7<!S>!567!B<S:5<B5H<W=!0B=5!9BL7I! &=!HM!567!7MM7P5: ; 7!  
CB57!HM!56:=%!&K<77L795A! \* B9BK7L795!B9C!567!29:H9!6B ; 7!=707P57C! ( :P6B<C! . 0HP6A!\$<B!`BMM7!B9C!  
`H=7N6!%6B<9HMM!B=!L7LS7<=!HM!B=C!NB970I! \$M!H97!JP6!B<S:5<B5H<=!9H!0H9K7<!BS07!5H!:=7< ; 7A!  
\* B9BK7L795!B9C!567!29:H9!=6B00!:LL7C:B570>!9BL7!B!<7N0BP7L795!B<S:5<B5H<! " 67!  
<7N0BP7L795!B<S:5<B5H<=!6B00!B==JL7!567!H<C7<:9!567!<H5B5:H9!670C!S>!567!B<S:5<B5H<!56B5!67!H<  
=67!:=!<7N0BP:9KI!

)RP7N5!:9!567!PB=7!HM!567! ; H0J95B<>!<7=:K9B5:H9!HM!B!9BL7C!B<S:5<B5H<A!9H!B<S:5<B5H<!LB>!  
S7!<7LH ; 7C!S>! \* B9BK7L795!H<!567!29:H9A!7RP7N5!S>!LJ5JB0!BK<77L795!HM! \* B9BK7L795!B9C!  
567!29:H9A!H<!MH<!PB!J=7I! \$M! \* B9BK7L795!H<!567!29:H9!BNN7B0=!567!C7P:=-:H9!B9C!BVB<C!HM!B9!  
B<S:5<B5H<!5H!B!PHJ<5!HM!BNN<HN<:B57!J!<=:C:P5:H9A!56B5!B<S:5<B5H<=!6B00!S7!J=N79C7C!M<HL!  
BNNH:95L795=!J9C7<!56:=%!&K<77L795!N79C:9K!JP6!BNN7B0!B9C!6B00!S7!<7LH ; 7C!M!567!C7P:=-:H9!



N<HK<7==; ;70>!C:=P:N0:97CA!SJ5! \* B9BK7L795!LB>!9!:5=!C:=P<75:H9!VB<9A!<7N<:LB9CA!5<B9=M7<A!  
C7LH57A!:=J=N79CA!H<C:=P6B<K7!B! ' % ) & 2 !V:56HJ5!M:<=5!N<H; :C:9K!N<HK<7==; ;7!C:=P:N0:97!M!567!  
P:<PJL=5B9P7=!H!VB<<B95! \$9!56:=!&<5:P07!FA!8C:=P6B<K7?!B9C!8C:=P:N0:97?!L7B9!H90>!567!  
57<L:9B5:H9!HM!B! ' % ) & 2 W=!B==:K9L795!H<!B!:=J=N79=:H9!V:56HJ5!NB>!MH<!9H9YBPBC7L:P!PH9CJP5A!  
B9C!:=6B00!9H5!:=9P0JC7!B9>!BC; ;7<=7!BP5:H9!SB=7C!JNH9!BPBC7L:P!N7<MH<LB9P7I!

/BM:N@2(80G(K(' B?AN21:N@2(<IB:@(ZI1RN:Y@P( \* @?[(4?@3IM:0(

!"# ' B?AN21:N@2(P@?(!M13BANM(ZI1RN:Y0(

&==7==L795!HM!567!aJB0:5>!HM!B! ' % ) & 2 W=!VH<X!N<HCJP5!:=!SB=7C!JNH9!BPBC7L:P!  
JJCKL795I!

ZB:0J<7!HM!B! ' % ) & 2 W=!VH<X!N<HCJP5!5H!L775!7RN7P57C!:=5B9CB<C=!HM!BPBC7L:P!aJB0:5>!:=!  
B9!BNN<HN<:B57!<7B=H9!5H!57<L:9B57!B! ' % ) & 2 W=!7LN0H>L795! \$9!:=JP6!PB=7=A!567!57<L:9B5:H9!:=!  
9H5!:=JS]7P5!5H!567!]J=5!PBJ=7!:=5B9CB<C!N<H; :C7C!9!56:=!&<5:P07!F!B9C!567!N<H; :=:H9=!HM!&<5:P07!d!  
CH!9H5!BNN0>I!

!\$# #BTNB \ (@P(' B?AN21:N@2(<BMNSN@20(

' % ) & 2=!9H5:M:7C!56B5!567:<!7LN0H>L795!:=!57<L:9B57C!NJ<=JB95!5H!%7P5:H9!FI\_4&@!HM!  
56:=!&<5:P07!F!LB>!<7aJ7=5!B!<7; ;7V!HM!567!57<L:9B5:H9!C7P:=:H9!5H!567! , 7B9!HM!567!%P6HH0!H<!  
1H007K7!:9!V6:P6!567! ' % ) & 2 !:=!79<H007C!V:56:9!579!4TG@!PB079CB<!CB>=!HM!9H5:M:PB5:H9!HM!567!  
57<L:9B5:H9!C7P:=:H9! )BP6! , 7B9!V:00!B99JB00>!9BL7!B!DB970!HM!56<77!MBPJ05>!L7LS7<=!4B9C!  
H97!B057<9B57@!MH<!56:=!NJ<NH=7A!SJ5!B! , 7B9!6B=!567!C:=P<75:H9!5H!BNNH:95!C:MM7<795!H<!BCC:5:H9B0!  
MBPJ05>!L7LS7<=!5H!B; H:C!B!NH5795:B0!PH9M0:P5!HM!:957<7=5!H<!V679!NB<5:PJ0B<!BPBC7L:P!7RN7<5:=7!  
:=!97P7==B<>!5H!BCC<7==!567!:=J74=@!9; H0; 7CI! " 67!29:H9!V:00!S7!9MH<L7C!HM!567!PHLNH=:5:H9!  
HM!567!DB970A!B9C!567! , 7B9!V:00!PH9=:C7<!PH9P7<9=<B:=7C!S>!567!29:H9!<7KB<C:9K!567!DB970W=!  
L7LS7<=I! &! ' % ) & 2 !LB>!<7aJ7=5!56B5!B!29:H9!<7N<7=795B5; ;7!S7!N<7=795!B5!B!L775:9K!B5!V6:P6!  
567! ' % ) & 2 !N<7=795!6:=!H<!67<!PB=7!5H!567!DB970I! " 67!DB970!V:00!B==7==!H90>!V67567<!567!  
57<L:9B5:H9!C7P:=:H9!VB=!SB=7C!H9!BPBC7L:P!]JCKL795!H<!VB=!MH<!9H9YBPBC7L:P!PH9CJP5A!B9C!  
N<H; :C7!56B5!B==7==L795!5H!567! , 7B9!HM!567!%P6HH0!H<1H007K7!:9!V6:P6!567! ' % ) & 2 !:=!79<H007C!  
"BX:9K!:95H!BPPHJ95!567!DB970W=!<7PHLL79CB5:H9A!567! , 7B9!V:00!C7P:C7!M!567!57<L:9B5:H9!  
C7P:=:H9!VB=!SB=7C!H9!BPBC7L:P!]JCKL795!H<!VB=!MH<!9H9YBPBC7L:P!PH9CJP5I! " 67! , 7B9!V:00!  
9H5:M>!567! ' % ) & 2 !HM!6:=!H<!67<!C7P:=:H9!V:56:9!579!4TG@!PB079CB<!CB>=!HM!567!DB970W=!  
<7PHLL79CB5:H9! \$M!567! , 7B9W=!B==7==L795!:=!56B5!567!57<L:9B5:H9!C7P:=:H9!VB=!MH<!9H9Y  
BPBC7L:P!PH9CJP5A!567! ' % ) & 2 !LB>!M:07!B!K<7; B9P7!NJ<=JB95!5H!&<5:P07!d!HM!56:=!&K<77L795I!  
" 67!C7P:=:H9!HM!567! , 7B9!:=!M:9B0I!

/BM:N@2(80U(K(>1NRI?B:@(#B:1N2(12(!SSNJ2AB2:0(

)BP6!B==:K9L795!P7B=7=!B5!567!79C!HM!567!C7=:K9B57C!B==:K9L795!N7<:HCI! " 67!7RN:<B5:H9!  
HM!B9!B==:K9L795A! \* B9BK7L795W=!MB:0J<7!5H!HMM7<!B9!B==:K9L795A!<7B==:K9L795A!H<!B! ' % ) & 2 W=!  
0H==!HM!<7LJ97<B5:H9!MH<!<7< ;:P7=!N<H; ;C7C!CJ7!5H!NHH<!BPBC7L:P!N7<MH<LB9P7!:=!9H5!  
PH9=:C7<7C!C:=P:N0:97!H<C:=P6B<K7!B9C!:=!9H5!:=JS]7P5!5H!567!]J=5!PBJ=7!:=5B9CB<C!N<H; ;C7C!9!56:=!





B<7!9H5!C:<7P50>!<7=NH9=:S07!MH<!567!HJ5PHL7!HM!567!<7=7B<P6I!!\$9!=HL7!PB=7=A!B! ' % ) & 2 !LB>!  
<7P7:;7!B9!BNNH:95L795!56B5!:=!B!PHLS:9B5:H9!HM!SH56!<7=7B<P6!B9C!57BP6:9K!CJ5:7=I!!#HV7;7<A!B!  
' % ) & 2 !PB99H5!S7!<7aJ:<7C!5H!VH<X!LH<7!6HJ<=!56B9!56H=7!MH<!V6:P6!567>!<7P7:;7!  
PHLN79=B5:H9I!!\$9!567!7;795!B! ' % ) & 2 !:=!B=X7C!5H!VH<X!LH<7!6HJ<=!56B9!56H=7!MH<!V6:P6!567>!  
B<7!PHLN79=B57CA!567>!LB>!PH95BP5!567! ' <BCJB57!&==HP:B57! , 7B9!V:56:9!567:<!%P6HH0!H<  
1H007K7I!

!\$# <I:NBS('H1:(! ?B(&@:(! CC?@C?N1:B0(

"67!VH<X!N7<MH<L7C!S>!B! ' % ) & 2 !=6HJ0C!S7!S797M:P:B0!5H!SH56!567! ' % ) & 2 !B9C!567!  
BPBC7L:P!H<!57BP6:9K!J9:5!CJ5:7=!6HJ0C!S7!0:L:57C!5H!5B=X=!56B5!S797M:5!SH56!567!BPBC7L:P!J9:5!  
B9C!BC;B9P7!567!N<HM7==:H9B0!C7;70HNL795!HM!567! ' % ) & 2 !I! 0 H<X!B==:K9L795=!V:00!S7!LH<7!  
BPBC7L:PB00>!JS=5B95:;7!56B9!BCL:9:=5<B5:;7A!SJ5!LB>!9;H0;7!BCL:9:=5<B5:;7!5B=X=!56B5!B==:5!  
:9!567!H;7<B00!BPBC7L:P!79C7B;H<I! " &W=!B9C! ( &W=!B<7!9H5!7RN7P57C!5H!N<H;:C7!N7<=H9B0!  
=7<;:P7=!MH<!B!=JN7<;:=H<I!

/BM:N@2(F08(K(#1NSN2J(, @2MB?2S(!D@I:(HB(/M@CB(@P(#BSC@2SNDNRN:NBS0(

' % ) & 2 !=JN7<;:=H<=!6HJ0C!PH9M7<!V:56! ' % ) & 2 !=7B<0>!9!B!7L7=57<!5H!<7;:7V!  
B==:K9L795=!B9C!7=5:L B57!6HJ<0>!7RN7P5B5:H9=!MH<!567!=JPP7==MJ0!PHLN075:H9!HM!B==:K9L795=I!

&! ' % ) & 2 !LB>!<B:=7!PH9P7<9=!BSHJ5!567!=PHN7!HM!<7=NH9=:S:0:5:7=!HM!B9!BNNH:95L795!5H!  
567! ' % ) & 2 W=!JN7<;:=H<A!PHH<C:9B5H<A!H<!, 7B9I!

/BM:N@2(F0F(K(4@S:N2J(@P(-21SSNJ2B3(!T1NR1DRB(!CC@N2:AB2:S0(

\*B9BK7L795!V:00!PH95:9J7!567!NH=5:9K!HM!J9B==:K97C!B;B:0BS07!BNNH:95L795=!H9!567!  
29:;7<=:5>!V7S=:57I!

!# '+, 5\$(J(K(!//+' '&%\$&' / (

/BM:N@2(J0E(K(!SSNJ2AB2:S0(

2907==!N7P:M:PB00>!0:L:57C!S>!56:=!&<5:P07!^A!C7P:=:H9=!<7KB<C:9K!B==:K9L795=!N<H;:C7C!  
5H! ' % ) & 2 !=!9;H0;7!BPBC7L:P!JCKL795!B9C!=6B00!S7!LBC7!9!\*B9BK7L795W=!H07!C:=P<75:H9I!

/BM:N@2(J0G(K(4B?P@?A12MB(@P(!SSNJ2AB2:S0(

' % ) & 2 !=V6H!B<7!N<H;:C7C!B9!B==:K9L795!9!<7J<9!MH<!B!M:9B9P:B0!B:C!BVB<CA!=5:N79C!  
H<!VBK7=!V:00!S7!N<H;:C7C!V:56!K797<B0!KJ:C70:97=!B9C!7RN7P5B5:H9=!<7KB<C:9K!567!N7<MH<LB9P7!  
HM!B9!B==:K9L795I!&! ' % ) & 2 !LB>!





V:56!567! ' % ) & 2 W=!HS0:KB5:H9!5H!=B5:=-MBP5H<:0>!N7<MH<L!B00!57<L=!B9C!PH9C:5:H9=!HM!6:=-!H<!67<! B==:K9L795!B=!B! ' % ) & 2 I! \$M!567!H567<!7L N0H>L795!:=!B5!&L7<:PB9!29: ; 7<=:5>A!567!5H5B0!9JLS7<! HM!6HJ<=!VH<X7C! :9!B!VH<XV77X!PB99H5!7RP77C!5V795>!4\_G@!J907==!B9!7RP7N5:H9!:=!BJ56H<:Q7C! :9! V<:5:9K!S>!567!3 :P7!D<H; H=5!MH<! ( 7=7B<P6!B9C! , 7B9!HM! ' <BCJB57!%5JC:7=I!

! # ' + , 5 \$ (^ ( K ( , 6 % 4 \$ & / ! ' + 6 & ( ! & < ( ) \$ & \$ > + ' / (

/BM:N@2(^0E(K(41Y(#1:B0(

" 67! 1HLN79=B5:H9!%P67CJ07!MH<! ' % ) & 2 !=!75!MH<56!:9!&NN79C:R! - 97!5H!56:=-!&K<77L795! :=!NB<5!HM!56:=-!&K<77L795!B9C!V:00!S7!567!NB>!<B57!MH<! ' % ) & 2 !=!V6H!B<7!PHLN79=B57C! :9!56B5! LB997<I!

/BM:N@2(^0G(K(41Y(4B?N@3S0(

' % ) & 2 !=!V6H!<7P7: ; 7!<7LJ97<B5:H9!:9!567!MH<L!HM!:=5:N79C=!H<!VBK7=!V:00!S7!NB:C!H9!B! 5:L70>!SB=:=!9!BPPH<CB9P7!V:56!567!29: ; 7<=:5>W=!9H<L B0!SJ=:97==!HN7<B5:H9=I!

/BM:N@2(^0U(K(LB1R:H() B2BPN:S0(

ZH<!567!0:M7!HM!56:=-!&K<77L795A! \* B9BK7L795!V:00!PH95:9J7!5H!LBX7!B; B:0BS07!67B056! S797M:5=!9!567!:=BL7!LB997<!B=!56H=7!S797M:5=!V7<7!LBC7!B; B:0BS07!5H! ' % ) & 2 W=!9!567!\_G\_TY \_G\_!&PBC7L:P! / 7B<I! \* B9BK7L795!V:00!N<H; :C7!B!VB>!9!V6:P6! ' % ) & 2 !=!PB9!BPP7==! :9MH<LB5:H9!<7KB<C:9K!567!67B056!S797M:5=A!:9P0JC:9K! ; :=:H9!B9C!C795B0!S797M:5=A!56B5!B<7! B; B:0BS07!5H!567LI!

/BM:N@2(^0V(K(4?@PBSSN@21R(<BTBR@CAB2:0(

!"# "B2B?1R0(

' % ) & 2 !=!V:00!6B; 7!BPP7==!5H!567!<7=HJ<P7=!B9C!B==:=5B9P7!N<H; :C7C!S>!&L7<:PB9! 29: ; 7<=:5>W=!17957<!HM!" 7BP6:9KA! ( 7=7B<P6!B9C!E7B<9:9KA!7RP7N5!:9!PB=7=!V67<7!BPP7==!5H! NB<5:PJ0B<!<7=HJ<P7=!:=!7RN0:P:50>!0: L:57CI!

!\$# 4?@PBSSN@21R(<BTBR@CAB2:(>I23(P@?(4H0<0(/:I3B2:( ' / \$ ! - S0(

, J<:9K!567!57<L!HM!567!&K<77L795A! \* B9BK7L795!V:00!P<7B57!B!D<HM7==:H9B0! , 7; 70HNL795!ZJ9C!HM!e\_GAGGGA!56<HJK6!V6:P6!B!D6I , I!:=5JC795! ' % ) & 2 !LB>!BNN0>!5H!567! &==HP:B57!3 :P7!D<H; H=5!MH<!&PBC7L:P!&MMB<:=!MH<!<7:L SJ<=7L795!MH<!7RN79=7=!9PJ<<7C! :9! N<HM7==:H9B0!C7; 70HNL795!HNNH<5J9:5:7=!9!V6:P6!567! ' % ) & 2 !:=!B9!BP5: ; 7!NB<5:P:NB95!B9C!6B=! <7P7: ; 7C!BNN<H; B0!M<HL!567! ' % ) & 2 W=!C7NB<5L795!H<N<HK<BLA!B9C!:=P6HH0!H<!PH007K7!C7B9W=! HMM:P7I! &! ' % ) & 2 !V6H=7!BNN0:PB5:H9!:=!BPP7N57C!V:00!S7!<7:L SJ<=7C!B9!BLHJ95!56B5!LB5P67=!

567!BLHJ95!N<H;:C7C!S>!567! ' % ) & 2W=!C7NB<5L795A!N<HK<BL!H<!P6HH0A!9H5!5H!7RP77C!eFGGI!  
\$9!7RP7N5:H9B0!P:<PJL=5B9P7=!B9C!9! \* B9BK7L795W=!H07!C:=P<75:H9A!M!B!C7NB<5L795A!  
N<HK<BL!H<!P6HH0!BNN<H;7C!SJ5!MB:07C!5H!N<H;:C7!B9>!MJ9C:9K!MH<!567! ' % ) & 2W=!NB<5:P:NB5:H9!  
:9!567!N<HM7==:H9B0!C7;70HNL795!BP5;:5>A!567!LB5P6:9K!<7aJ:<7L795!HM!56:=!%7P5:H9!fId4 . @!LB>!  
S7!VB;:7C!S>!567!D<H;H=5!H<!6:=!H<!67<!C7=:K977I!

/BM:N@2(^08(K(5B1TB0(

\* B9BK7L795!V:00!PHLN0>!V:56! , I1I!B9C!Z7C7<B0!0BV!:9!N<H;:C:9K!07B;7!5H! ' % ) & 2W=!  
V6H!L775!567!70:K:S:0:5>!<7aJ:<7L795=!MH<!07B;7!J9C7<!HM!56H=7!0BV=A!B9C!V:00!9H5!<7CJP7!567!  
07B;7!B;B:0BS07!5H!70:K:S07! ' % ) & 2=!CJ<:9K!567!57<L!HM!56:=!&K<77L795!

/BM:N@2(^0F(K() ?B1S:PBB3N2J(/ ICC@?:0(

' % ) & 2W=!6B;7!BPP7==!5H!0BP5B5:H9!<HHL=!N<H;:C7C!S>! \* B9BK7L795A!5H!S7!J=7C!MH<!56B5!  
NJ<NH=7I!

/BM:N@2(^0)(K(/ I A AB?( \* @?[(6CC@?:I2N:NBS0(

\* B9BK7L795!V:00!N<H;:C7!B!VB>!



PH95<:SJ5:H9=IB=IP7<5:M:7C!9!V<:5:9K!S>!567!D<7=:C795!H<! ) R7PJ5: ; 7! , :<7P5H<!HM!567!29:H9!B9C!  
<7L:5!=JP6!CJ7=A!M77=H<!PH95<:SJ5:H9=5H!567!29:H9!DB><H00!C7CJP5:H9=PB9!S7!PB9P7007C!S>!B!  
' % ) & 2 W=! :9C: ; :CJB0!V<:5579!9H5:P7!5H!567!29:H9! ; :B!P7<5:M:7C!LB:0I! " 67! ' % ) & 2 W=!P7<5:M:7C!  
LB:0!:=5H!S7!BCC<7==7C!5H\! ) R7PJ5: ; 7! , :<7P5H<!Y % ) \$ 2 A!EHPB0!FGGA!T\_! " BM5! 1 HJ<5A! ( HPX ; :007A!  
\* B<>0B9C!\_GfFGI! " 67!29:H9!V:00!5679!9H5:M>! \* B9BK7L795!HM!B9>!PB9P7007C!L7LS7<=6:N=IB9C!  
N<H ; :C7!567! ' % ) & 2 W=!H<:K:9B0!9H5:P7=!HM!<7=:K9B5:H9!5H!567!&===:5B95!3 :P7!D<7=:C795!HM! # J L B9!  
( 7=HJ<P7=!V:56:9!579!4TG@!CB>=!HM!<7P7:N5I!

!\$# >@?A@P(<B3IM:N@2(! I:H@?Na1:N@20(

\* B9BK7L795!V:00!6H9H<!C7CJP5:H9!BJ56H<:QB5:H9=!J=:9K!MH<L=!56B5!B<7!MJ<9:=67C!5H!  
7LNOH>77=!S>!567!29:H9I!!\$9!567!7 ; 795!567!29:H9!B057<=!567!BJ56H<:QB5:H9!MH<L! :9!B9>!L B997<A!  
:5!BK<77=!5H!=JSL:5!567!<7 ; :=7C!MH<L!5H!567!29 ; 7<=:5>!MH<!:5=!<7 ; :7V!B5!07B=5!56:<5>!4UG@!PB079CB<!  
CB>=!N<:H<!5H!567!7MM7P5: ; 7!CB57!HM!=JP6!97V!MH<L!

!%# 41YAB2:@P(! JB2MY(>BB0(

1HL L79P:9K!JNH9!567!7MM7P5: ; 7!CB57!HM!56:=!&K<77L795!B9CA!J907==!7R7LN57C!S>!  
%7P5:H9!gIh4 , @!HM!56:=!&K<77L795A!B9>! ' % ) & 2 !V6H!S7PHL7=!BMM:0:B57C!V:56!&L7<:PB9!  
29 ; 7<=:5>!9!B!K<BCJB57!C7K<77!N<HK<BL !MH<!567!M:<=:5!5: L7!H9!H<BMS7<! , 7P7LS7<!\_GA!\_GTf!4B9C!  
V6H!CH7=!9H5!707P5!5H! ; H0J95B<:0>!6B ; 7!CJ7=!C7CJP57C!NJ<=JB95!5H!%7P5:H9!gIh4&@!HM!56:=!  
&K<77L795@!=6B00A!V:56:9!56:<5>YH97!4UT@!CB>=!BM57<!6:=!H<!67<! :9:5:B0!CB57!S7PHL:9K!B!L7LS7<!  
HM!567!SB<KB:9:9K!J9:5!=JSJ7P5!5H!











0 B=6:9K5H9!1 H007K7!HM!EBV!Z700HV=!6HJ<0>!<B57\

)MM7P5:;7!` J0>!TA!\_G\_\_A!567!L:9:L J L!6HJ<0>!<B57!=6B00!S7!eThITG!N7<!6HJ<I

- 9!` J0>!TA!\_G\_U!567!6HJ<0>!<B57!=6B00!9P<7B=7!S>!eGI\_F!N7<!6HJ<!H<!5H!567!97V! , 1!  
L:9:L J L!VBK7A!V6:P67;7<!:=!K<7B57<I

**Side Letter – Support for Ph.D. Students**

During the life of this Agreement (2022-2025), the parties agree to discuss, in the Labor

Management Committee, the relative priority that should be given to different types of support for Ph.D. students going forward, including the amount of the annual stipend, extending financial support for an additional year, and waiver of the maintain matriculation fees for the first year after

