

**7/22/2018**

**Summary White Paper on RUSD STEM High School on the campus of the University of California, Riverside**

**Background**

The Riverside STEM Academy (RSA) started in 2011 with 200 students at a site close to Riverside City College (RCC) and met with a very positive response from the community. The school doubled enrollment within a year. RSA then moved to the Hyatt elementary site, one mile from UCR, and the middle school organically expanded into the high school grades, adding portable classrooms to accommodate growth. From the outset, RSA has had a strong partnership with UCR faculty and departments, particularly in CNAS.

With Chancellor Wilcox's arrival in 2013, discussions ensued about a mutually-beneficial, interactive relationship between our university and the Riverside Unified School District (RUSD). On September 1, 2015 a strategic partnership was announced between RUSD UCR, and RCC to expand STEM educational opportunities, increase early access to hands-on experience in laboratories, and specialized STEM guidance at UCR and RCC. This partnership was intended to build upon the current success of RSA, which is part of RUSD. In addition to the enhanced curriculum, the MOU (Appendix A) signed in July 2015 by Chancellor Wilcox and RUSD superintendent David Hanson allowed the future possibility for RUSD to develop additional academy space on the UCR campus to accommodate student enrollment growth.

In early 2016, RUSD convened the STEM Center Design Team to provide input into the design principles for a new STEM high school. Funding for the school would come from Measure O, a \$392 million bond passed by RUSD voters in November to build and fix schools. The initial design principles included:

- Equitable access ensures a rich community of learners
- Flexibility and adaptability are keys to our success
- Learning labs are shared and well-equipped
- Partnerships are vital
- Creative and collaborative experiences foster 21<sup>st</sup> century learning.

The participants on this Design Team (Appendix B) included RUSD staff and school board members, community partners, and UCR representatives: Richard Cardullo, David Cocker, Mary Droser, Cindy Larive, Bahram Mobasher, Maria Simani, and Tom Smith. The group met through Spring 2016 and discussed ways in which the STEM Center could provide access to an innovative STEM curriculum for a diverse group of Riverside students, broadly benefit students in Riverside beyond those enrolled full-time in the school, and leverage the UCR-RUSD partnership through teacher professional development, joint grant proposals, project-based instruction including expert mentorship by community members and/or UCR faculty and students, and serve as an exemplar for other districts. The STEM Center could also serve a site for an innovative teacher training partnership between the UCR Graduate School of Education and the STEM Center faculty. Members of the Design Team visited STEM (and STEAM) schools within our region and considered well-established and successful models involving STEM High

Schools partnering with a four-year university such as MC2 STEM High School (Cleveland State and others), The Metro School (Ohio State), and Tech Valley High School (SUNY Polytechnic Institute's Albany Nanotech Complex). The team found many examples of mutually beneficial relationships between school districts and universities to improve STEM learning.

During the 2016-17 academic year, RUSD discussions focused more closely on outlining the curricular and pedagogical goals of the STEM Center. Appropriately, these discussions involved a smaller and more focused STEM Areas of Study working group (Appendix C) that included UCR representatives Mark Hoddle, Mike McKibben, Bahram Mobasher, Rosibel Ochoa and Tom Smith. To explore what teaching labs can look like, Dr. McKibben led the working group on a tour of the Medical Patient Simulation ICU lab, Campbell Science Learning Lab (DNA sequencing), Math Emporium, Schroeder Computational Physics Lab, Mathaudhu Nanocrystalline Metallic and Composite Materials Lab, and the Kisailus Biomimetic and Nanostructured Materials Lab. The workgroup also discussed the value of building lab space in the STEM Center, that might be used by UCR students when the high school is not in session.

### **Potential Sites for the STEM Center**

In parallel with these discussions about the educational aspects of the STEM Center, various locations on the UCR campus were explored as possible sites.

#### **Site Option #1 – Parking Lot 13**

There was an extensive (and successful) outreach effort to UCR faculty and staff made in 2015 as part of the campus Physical Master Plan update. That plan identified Parking Lot 13 as the future site for the STEM school.

In open public forums associated with the Physical Master Plan update, there was some feedback from faculty and staff about that location and possible impacts on parking. Public feedback was not considered extraordinarily pejorative against the project and campus staff expressed that long-term parking plans may mitigate the loss of parking via new surface lots, possible parking structures, better access to mass-transit at the Mobility Hub, etc...

The Physical Master Plan was endorsed and approved in 2016, which included this location for the STEM high school.

After conducting due diligence on the Parking Lot 13 offer, RUSD rejected Parking Lot 13 as a feasible site. The lot configuration is oddly shaped and bounded by existing physical development challenges (a drainage mini-arroyo to the north, a substantial slope to the south, and an access easement to the Salinity Lab to the west) which restrained the STEM facility site development zone.

RUSD was unable to fit their program into the lot 13 site, given the constraints, and requested alternative site options. This led to additional reviews of potential sites by UCR, and specifically the Iowa/Everton location on the West Campus.

### Site Option #2 – West Campus Land

Note: at this particular time the assumption was that the LRDP of UCR could accommodate significant redevelopment of the West Campus north of MLK. After more due diligence by RUSD staff and UCR Agricultural Operations staff, it was later determined that the Iowa/Everton location had a “fatal-flaw”: pesticide spraying in adjacent agricultural fields and changing California state regulations prohibited the location of a public school at this site.

Very recently it was discovered that the 1990 LRDP (and carried over to the 2005 LRDP) assumed that the development of the West Campus was predicated on UCR purchasing large amounts of agricultural land in relative close proximity to the UCR campus, to allow the relocation of west campus Agricultural Operations activities relatively close to campus and allow West Campus to develop as an extension of the main campus activities. Unfortunately, UCR never purchased this additional land and it is likely the opportunity that existed in this regard in 1990 no longer exists. When the Chancellor was made aware of this critically important planning assumption, which was contrary to the information he had previously been given, he called for a hiatus in any additional development planning for West Campus that was not consistent with its current use or considered necessary for the long-term needs of the campus.

### Site Option #3 – Student Recreation Fields North of Glen Mor

With the previous two sites invalidated, UCR reviewed additional options to site the high school on campus controlled land. Two possible sites were identified: 1) the current site of three existing student recreation fields, under consideration, north of the Glen Mor residential hall and 2) the softball fields leased from City of Riverside at Canyon Crest and Blaine. RUSD had a negative disposition toward the Canyon Crest site due to existing easements (e.g. the Gage Canal, electrical easements) and legal entanglements with the City via the lease. They chose the Glen Mor site as their preferred site and communicated this desire to UCR.

Given this preferred site, which currently supports three (3) heavily used campus intramural fields, UCR initiated action to identify options for replacing these intramural fields on other UCR land. An initial focus for this development of new intramural fields was on the West Campus, as there remained an assumption that such development was consistent with the LRDP back to 1990. When the campus discovered the key baseline assumption for West Campus redevelopment away from Agricultural Operations activities had not been implemented (e.g. the purchase of other agricultural land new campus for relocation of these critically important Agricultural Operations activities), there was no further evaluation of West Campus for

intramural fields. The campus has been evaluating other options to replace the loss of these intramural fields on land at the East Campus, including options on the SW corner of the North District.

RUSD is still engaged in their “due diligence” phase to validate site feasibility north of Glen Mor. There are no fatal flaws discovered to date, however there may be significant traffic impacts and mitigations RUSD has to resolve with the City of Riverside. UC Riverside’s position is that RUSD vehicular traffic will not be allowed along Linden. All RUSD traffic must ingress and egress from Watkins and RUSD must satisfy City of Riverside traffic engineering concerns per normal City processes. There are no plans to allow RUSD to park on UC Riverside surface lots or structures.

Current discussions between RUSD and UCR are related to milestones including the completion of site planning, traffic planning, and CEQA as summarized in the appended draft document (Appendix D). Final approval of the location of the school on UCR property requires approval by the University of California Office of the President and the Board of Regents.

### **STEM High School Potential Impacts on UC Riverside Campus Services**

- The initial commitments summarized in the July 2015 MOU continue to evolve as conversations progress; UCR is committed to building robust opportunities for partnerships, in consultation with faculty, staff, and community.
- Regarding parking – there are no plans to allow RUSD to park on UC Riverside property, surface lots, or parking structures. There should be zero impact on UC Riverside parking supplies on UC Riverside property.
- Regarding policing – – this coverage will be determined as it has for other activities on UCR land with UCRPD having first consideration to provide that service, for a fee (so no subsidy by us) or then they would work out something with Riverside police.
- Regarding traffic – RUSD is required to satisfy all City of Riverside traffic engineering and mitigation requirements per normal processes as a condition of new curb-cuts along Watkins to provide ingress and egress to the site.
- Regarding food services – it is unclear if RUSD will permit RUSD students to leave their facility during school hours. If they do, students, just like any other member of the public community, would be free to walk onto the UC Riverside campus (as a public institution) and enjoy the privileges and benefits offered to any member of the visiting public, including whatever food services are offered to the public. The high school will, however, have its own dining services similar to offerings at other high schools.

- Regarding classroom space – There is no current plan to have RSA use UCR space.
- Regarding UCR classes – There is no plan for RSA students, in particular, to have special access to regular UCR classes. There are currently in place, mechanisms for high school students to take summer classes at UCR. Many RSA students take advantage of this.
- Access to UCR laboratories – There is no plan to pressure UCR faculty to have RSA students in their labs. Many RSA high school students currently do work in UCR labs but it is a mutually arranged agreement. There are a number of faculty at UCR who choose to have RSA high school students do capstone projects in their labs. There is a very straight forward insurance and EH&S system already set-up and in use for having high school students work in faculty labs.

### **Advantages of the STEM Academy Partnership to UCR**

- The Riverside Stem Academy is a highly sought after educational option in the RUSD district. With the high school on the UCR campus, UCR will benefit from designated slots for children of UCR faculty and staff members. UCR already receives 10 slots/year as part of the good faith arrangement for pursuing the location of the high school on the UCR campus. RUSD is working with the board to develop a plan for increasing the number of slots if/when UCR becomes home to the high school. Furthermore, locating the school right on the UCR campus saves time for drop-off, pick-up, and other logistics, improving daily quality of life for parents employed at UCR.
- Following on that, Riverside STEM Academy is a school of choice in RUSD, as outlined in the Riverside Stem High School Fact Sheet (Appendix E). Great accessibility to the school – both in terms of physical location as well as UCR slots is both a recruitment and retention advantage for UCR. There are current UCR faculty who have opted to join our campus, and some who have opted to stay because of RSA.
- RUSD will allow a specified number of UCR students and/or faculty to conduct research, participate as student teachers, or other activities in the STEM program each academic year. All UCR student teachers and researchers will comply with applicable Education Code requirements for entry onto a K-12 premises, including but not limited to Education Code section 45125.1.
- It is anticipated that UCR will have the right to access and use the STEM High School space at times when RUSD is not using the STEM High School, at no cost to UCR, pursuant to a separately negotiated “Access Agreement” for programs to be determined at a later date. The form of Access Agreement shall be attached to the Ground Lease as an exhibit.

- The RSA high school is ranked 27<sup>th</sup> in California (schooldigger – based on test scores), well ahead of any other RUSD high school. The STEM high school draws students from across the diverse population of the City of Riverside and prepares all students to be successful STEM majors in college. UCR staff and faculty working directly with this school will have an advantage in identifying and attracting exceptional students to UCR.
- Stronger Broader Impacts – The National Science Foundation (NSF), National Institutes of Health (NIH), and other granting agencies put significant emphasis on the “broader impacts” requirement of grant applications. Outreach to K-12 education is one of the better broader impact statements that researchers use; however, these statements often lack specificity and credibility. With a STEM high school on campus, UCR faculty can conveniently establish deep and meaningful broader impacts through collaboration with the high school.
- Greater Scope for Grant Opportunities – UCR is known for its diversity and is able to apply for special grants based on this quality. Riverside STEM Academy is also diverse when compared to other STEM high schools and may also be eligible for special grants targeting STEM education to underrepresented populations. The combination of the STEM high school on the UCR campus could provide a synergy that elevates grant applications from UCR and the high school above grants from other institutions. Note there are several larger federal grants that focus on STEM education for underrepresented populations in particular for college readiness and success at college—for example, Race to the Top grants (ED-GRANTS-072909-002), CTE grants (ED-GRANTS-051818-001) and private foundation grants such as the Bill & Melinda Gates Foundation Bright Spots in Middle Years Math grants.
- Community engagement is an important mission of the UCR 2020 strategic plan. As the only Land-grant university in the region, UCR has “a social imperative to contribute to the well-being of its community including to “foster academically-focused partnerships the benefit the university and community” (UCR 2020 Strategic Plan). The potential UCR home for the STEM High School is a concrete and visible way of achieving this aspiration.
- The UCR School of Education would benefit immensely from a high school on the UCR campus because it would increase the opportunities to place student teachers in classrooms with good teachers. Much of what influences one as a teacher is that initial placement. This high school would be the best model for teaching future teachers’ problem-based learning and inquiry pedagogies. It is the optimal site for potential education students and student teachers and the proximity is key for facilitating interactions, including for a possible professional development program for teachers. The UCR School of Education has developed a new undergraduate major in Education, Society and Human Development that includes requirements for research and service. Having the high school on campus will also provide opportunities for service learning projects for undergraduate students and facilitate classroom observation, mentorship, tutoring, and participation in research.

- The potential connection between CHASS and the STEM academy present a unique opportunity for CHASS to explore different ways to connect with the sciences. Juliette Levy (History) suggests for example, that one can imagine organizing special research projects with STEM students on the History of Computing, or a research project on Gender and Science, or Public Health Policy and Pharmaceuticals that could be taught /co-taught by UCR graduate students or faculty in the summer.
- UCR's Science/Mathematics Initiative (SMI) program would also benefit from the proximity of the high school. The goal of SMI is to build a pipeline for science and mathematics teachers in California by providing early pedagogical training, pre-service advising and mentoring, and student internships. Having the RSA school on the UCR campus would provide UCR undergraduates with access to strong role models and would save the program money as they currently reimburse student transport to other schools.

## Appendix A. RUSD-UCR MOU

### PARNTERSHIP AGREEMENT

This Agreement, dated Thursday, July 30, is made by and between The Regents of the University of California, on behalf of the University of California, Riverside (hereinafter referred to as "University"), and Riverside Unified School District (hereinafter referred to as "District"), on behalf of its Riverside STEM Academy (hereinafter referred to as "RSA"); collectively the Parties.

#### BACKGROUND AND PURPOSE

**WHEREAS**, the Riverside STEM Academy (RSA) provides an educational option for students who are interested in pursuing their interests and aptitudes in the areas of science, technology, engineering and mathematics; and

**WHEREAS**, RSA provides students with accelerated and concentrated experiences in an environment that is conducive to individual exploration, innovation, and problem solving; and

**WHEREAS**, Educational partners, like the University, play an important role in helping the RSA reach these goals; and

**WHEREAS**, University and District are interested in forging a partnership that will promote, foster, and enrich the pre-college math and science environment, and stimulate greater student interests in math, science, and engineering at the Riverside STEM Academy.

**NOWHEREFORE**, in collaboration, both University and the District shall provide the services described in Exhibit "A," which is attached hereto and made a part of this Agreement. Additional services may be provided but only if authorized in advance by written amendment to this Agreement and executed by both parties.

#### TERMS AND CONDITIONS

1. **TERM.** The term of this Agreement shall be from March 1, 2015 to June 30, 2020.
2. **TERMINATION.** This Agreement shall be subject to termination by either party at any time upon 30 days written notice to the other party.
3. **INDEMNIFICATION.**
  - A. District shall defend, indemnify and hold University, its officers, agents, and employees harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of District, its officers, agents, or employees.
  - B. University shall defend, indemnify and hold District, its officers, agents, and employees harmless from and against any and all liability, loss, expense (including reasonable attorneys' fees), or claims for injury or damages arising out of the



performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys' fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of University, its officers, agents, or employees.

4. INSURANCE

Each Party, at its sole cost and expense, shall insure its activities in connection with this Agreement by maintaining programs of self-insurance as follows:

- A. General Liability, Sexual Abuse Liability, Employer's Liability, Professional Liability and Automobile Liability Insurance. General Liability (including broad form property damage and contractual liability) insurance on a per occurrence basis with a single limit of not less than One Million Dollars (\$1,000,000); Sexual Abuse Liability insurance on a per occurrence basis with a single limit of not less than One Million Dollars (\$1,000,000); Employer's Liability insurance on a per occurrence basis with a single limit of not less than One Million Dollars (\$1,000,000); Professional Liability insurance on a per occurrence basis with a single limit of not less than One Million Dollars (\$1,000,000); and automobile liability insurance for owned, hired and non-owned vehicles on a per occurrence basis with a combined single limit of not less than One Million Dollars (\$1,000,000).
- B. Workers' Compensation, as required under California State law.
- C. Such other insurance in such amounts which from time to time may be reasonably required by the mutual consent of District and University against other insurable risks relating to performance of this Agreement.
- D. It should be expressly understood, however, that the coverages and limits required under this Section shall not in any way limit the liability of either Party.
- E. Additional insured endorsements are required for general, property damage, sexual abuse and automobile liability policy coverage. Such a provision, however, shall only apply in proportion to and to the extent of the negligent acts or omissions of the other Party, its officers, agents, or employees. Each Party, upon the execution of this Agreement, shall furnish the other Party with Certificates of Insurance evidencing compliance with all requirements. Certificates shall provide for thirty (30) days advance written notice to District of any material modifications, change or cancellation of the above insurance coverages.

5. RELATIONSHIP OF THE PARTIES. The parties to this Agreement shall be and remain at all times Independent Contractors, neither being the employee, agent, representative, or sponsor of the other in their relationship under this Agreement.

6. USE OF NAME AND LOGO. Neither Party shall imply the endorsement of the other or use publicly for publicity, promotion or otherwise, any logo, name, trade name, service mark or trademark (including music and colors) of the other Party, or any simulation, abbreviation, or adaptation of the name, or the name of any employee or agent of the other Party, without the other Party's prior written, express consent. Each Party may withhold such consent in its

sole and absolute discretion. Violation of this provision is a material breach of this Agreement.

7. WHOLE AGREEMENT. This Agreement states the entire contract between the parties in respect to the subject matter of this Agreement. This Agreement supersedes any written or oral agreements, negotiations, discussions, or promises. This Agreement cannot be modified except by a written instrument executed by both parties.

8. NOTICE. Any notice required hereunder shall be in writing, addressed as follows:

University: University of California  
Attn: Provost Paul D'Anieri  
900 University Avenue  
Riverside, CA 92521

District: Riverside Unified School District  
Attn: David Hansen  
3380 14<sup>th</sup> Street  
Riverside, Ca 92501

9. ASSIGNMENT. This Agreement is not assignable and any attempt by District to assign any of its interests herein shall immediately terminate this Agreement.

10. APPLICABLE LAW. This Agreement shall be governed by the laws of the State of California.

11. WARRANTY OF AUTHORITY. The persons whose signatures appear below warrant they are duly authorized to execute this Agreement on behalf of District and University, respectively.

The conditions in this Agreement are hereby accepted.

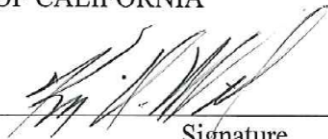
DISTRICT:

UNIVERSITY:

RIVERSIDE UNIFIED SCHOOL DISTRICT

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: \_\_\_\_\_  
Signature  
David Hansen  
Print Name  
Superintendent  
Title  
\_\_\_\_\_  
Date

By:  \_\_\_\_\_  
Signature  
Kim Wilcox  
Print Name  
Chancellor  
Title  
7/30/15  
Date

## **Exhibit “A”**

University agrees to:

1. Serve as mentors, instructional assistants, lab assistants, speakers and/or coaches from the College of Natural and Agricultural Sciences and School of Medicine (CNAS), Marlan and Rosemary Bourns College of Engineering (BCOE), and College of Humanities, Arts, and Social Sciences (CHASS) for projects and clubs (e.g., Wednesday Symposiums, Science Olympiad, etc.).
2. Provide field trips to laboratories and other pertinent University facilities and programs (e.g., CE-CERT and Geology and Engineering programs).
3. Provide protocols and procedures for donating equipment and materials to RSA.
4. Provide access to auditorium/large classroom facilities, when available.
5. Provide College of Natural and Agricultural Sciences and School of Medicine (CNAS), Bourns College of Engineering (BCOE), and College of Humanities, Arts, and Social Sciences (CHASS)
6. Provide/offer professional development opportunities to designated RSA teachers in order to strengthen content knowledge and pedagogical skill for reaching a diverse population. Special attention will be given to hands on motivation learning: interdisciplinary/integrated instruction; and developing “thinking skills” which will allow learners to thrive in a global knowledge based economy. RSA teachers will be included in existing University programs and will collaborate on future efforts which address new needs as they arise. Specifically RSA teachers will be:
  - (a) Invited to participate in summer enrichment programs in mathematics, science and engineering. Beyond information, teachers will receive instructional materials and access to “units of credit” for their participation. Samples include the Mathematics Academy for Teaching Excellence, Scientific Teaching and the Inland Area Science Project.
  - (b) Invited to participate in the annual Science Technology Education Partnership STEP conference.
  - (c) Guided by select University personnel in the development of course offerings and classroom enrichment activities with respect to contemporary content.

District, through RSA, agrees to:

1. Promote University in RSA newsletters, on the RSA webpage, on RSA banners displayed at the school and with other relevant media.
2. Provide University with promotional opportunities at Back to School Night, PTSA and other RSA events.

3. Allow select University faculty, contingent upon approval by the District Research Request Review Committee, to conduct research in mathematics/science education on issues related to curriculum and instruction.
4. Function as a partner on University faculty grants requiring an education/outreach requirement.
5. Work with student teachers, enrolled at University, and under the Student Teacher Agreement between District and University, to further their skills and help them reach their goals of becoming a teacher.

The Parties agree to:

1. Support the curriculum and program elements described above; as well as have continued conversations about expanding the RSA program, including a long-term facility, lab and/or land lease on the University campus, fixed number of RAS enrollment lottery slots dedicated to University faculty, etc.

## Appendix B. STEM Center Design Team

Name	Title
Acharya, Lalit	Representative for Mayor Bailey, City of Riverside
Allavie, Kathy	Board Member - RUSD
Angulo, Jamie	Principal, Ramona High School - RUSD
Bergsagel, Victoria	<b>Architects of Achievement, Consultant</b>
Bourns, Gordon	CEO Bourns Engineering
Calhoun, Hayley	Director, Planning Development, Facilities - RUSD
Cardullo, Richard	Howard H. Hays Jr. Chair, University Honors/Faculty Dir. - UCR
Carmen Day, Lynn	Chief Academic Officer - RUSD
Cocker, David	Bourns College of Engineering, UCR/Parent, Riv. STEM Academy
Costlow, Dianne	Deputy Division Tech. Director, Naval Surface Warfare
Cowder, Gloria	Director, Program Development - RUSD
Donaldson, Anthony	Dean/Professor of the College of Engineering - CBU
Droser, Mary	Professor of Geology, Earth Science - UCR
Dunlap, Steven	Director, Inst. Tech., Innovation and Learner Engagement - RUSD
Fulmer, Ashley	Teacher, Sierra Middle School - RUSD
Garcia, Antonio	Assistant Superintendent, Curriculum and Instruction - RUSD
Herrera, Alex	Student, Riverside STEM Academy - RUSD
Herrick, Scott	RCC Biology Professor/Parent, Riverside STEM Academy - RUSD
Johnson, Sue	Johnson Tractor/Former UCR Regents
Larive, Cindy	Divisional Dean, Natural & Agricultural Science, Chemistry Prof. - UCR
Lock-Dawson, Patricia	Board Member - RUSD
Martin, Mike	Teacher, Martin Luther King High School - RUSD
Martin, Tim	RCTA Representative - RUSD
Massa, Steve	Economic Development Coordinator, City of Riverside
Mayhew, Eric	Teacher, Riverside STEM Academy - RUSD
Mobasher, Azin	Parent, Riverside STEM Academy - RUSD
Mobasher, Bahram	UCR Professor / Parent, Riverside STEM Academy - RUSD
Montgomery, Anne Marie	Assistant Principal, Arlington High School - RUSD
Morehead, Charles	Teacher, Riverside STEM Academy - RUSD
Murray, Catherine	Teacher, Riverside STEM Academy - RUSD
Ridley, Marcus	Manager, Grants and Project Development - RUSD
Robertson, John	Instructional Services Specialist, Instruction - RUSD
Simani, Maria	California Science Project Executive Director - UCR
Smith, Thomas	Dean, Graduate School of Education - UCR
Speerstra, Seth	Student, Arlington High School - RUSD
Standefer, Jeremy	Teacher on Special Assignment, Riverside STEM Academy - RUSD
Ybarra, Steven	Principal, Sierra Middle School - RUSD

**Appendix C. STEM Areas of Study Workgroup**

<b>Name</b>	<b>Title</b>
Acharya, Lalit	Representative for Mayor Bailey, City of Riverside
Christopher, Linda	RUSD Manger Grants and Contracts
Clarke, Ruhnau	Ruhnau Clarke Architects
Reno-Fausto, Kiersten	RUSD Strategic Initiatives & Program Development
Hawley, Brian	Luminex Software
Hoddle, Mark	UCR Extension Specialist, Entomology
Lewis, Ryan	RUSD Assistant Superintendent, Curriculum and Instruction K-12
McKibben, Michael	UCR CNAS Divisional Dean for Student Academic Affairs, Professor of Earth Sciences
Mobasher, Bahram	UCR Professor of Physics and Astronomy / Parent, Riverside STEM Academy
Ochoa, Rosibel	UCR Associate Vice Chancellor for Technology Partnerships
Robertson, John	RUSD Instructional Services Specialist, Instruction
San Martin, Sergio	RUSD Assistant Superintendent for Operations
Smith, Thomas	UCR Dean, Graduate School of Education
Standefer, Jeremy	RUSD Teacher on Special Assignment, Riverside STEM Academy

## Appendix D.

### DRAFT AGREEMENT TO RECOMMEND PROJECT APPROVAL

This Agreement to Recommend Project Approval (“Agreement”), effective \_\_\_\_\_, 2018 is entered into between Riverside Unified School District (“RUSD”) and University of California, Riverside (“UCR”) to demonstrate RUSD’s and UCR’s commitment to the successful planning and completion of an RUSD Science, Technology, Engineering and Mathematics (“STEM”) High School project (“Project”). When finished, the Project will provide STEM educational instruction for grades 9 through 12, on land located within the UCR campus, owned by the Regents of the University of California (“UC”), the governing board for the UC system (“Regents”). Pursuant to the terms of this Agreement, UCR Chancellor commits to submit and recommend the Project to the Finance and Capital Strategies (“FCS”) committee of the Regents, in order to ultimately obtain Project approval from the Regents, provided RUSD successfully accomplishes key activities (“Milestones”) for the Project to timely proceed to the appropriate FCS committee meeting(s). RUSD and UCR both anticipate the Project to open for educational instruction by summer of 2022.

Both RUSD and UCR acknowledge and accept that UCR has no authority to convey or construct significant improvements on UC land in any way, unless a specific project has received an approval to do so by the Regents. As such, RUSD is committed to achieve the following Milestones in a reasonable and timely manner, in order for UCR to submit and recommend approval(s) for the Project, as described below. As part of this commitment, RUSD agrees to pay the costs for a UCR Architects & Engineers (“A&E”) Project Manager and the costs for the UCR Designated State Fire Marshal.

Based on RUSD accomplishing the first three milestones on Exhibit A for the Project, UCR’s Chancellor would then approve UCR staff to submit and recommend a Discussion Item to the University of California, Office of the President (“UCOP”), for presentation at a future Regents Meeting to the FCS committee. UCR must submit the Discussion Item to UCOP no later than 60 days prior to any scheduled Regents Meeting.

For purposes of this Agreement, a “Discussion Item” shall mean a presentation of the Project to the Regents FCS committee for the purposes of providing general information about the Project (e.g., Project location, project program, estimated project gross square footage, anticipated project timeline, explanation of how the Project fulfills UC’s mission, etc.).

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Once RUSD accomplishes the fourth milestone in Exhibit A for the Project, UCR’s Chancellor would then approve UCR staff to submit and recommend a Business Terms Approval Item to UCOP, for presentation at a future Regents Meeting to the FCS committee. UCR must submit the Business Terms Approval Item to UCOP no later than 60 days prior to any scheduled Regents Meeting.

Once RUSD accomplishes the fifth milestone in Exhibit A for the Project, UCR’s Chancellor would then approve UCR staff to submit and recommend a Design/CEQA Approval Item to UCOP, for presentation at a future Regents Meeting to the FCS committee. UCR must submit the Design/CEQA Approval Item to UCOP no later than 60 days prior to any scheduled Regents Meeting.

Based on the successful approval of the CEQA and Design Approval Item with Regents, the Chancellor will approve staff to work with RUSD, UCOP and University of California, Office of General Counsel (“OGC”) (collectively referred to as the “Parties”) to initiate the ground lease and other transaction documents (collectively referred to as the “Transaction Documents”). Upon successful completion and mutual agreement by the Parties of the Transaction Documents, UCR’s Chancellor will approve for UCR to submit the Transaction Documents to UCOP with a recommendation that the UC President (“President”) or the President’s appropriated delegated authority sign the agreed upon Transaction Documents, subsequent to RUSD signing the aforementioned Transaction Documents.

**Accepted by University of California, Riverside:**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Dated: \_\_\_\_\_



**DRAFT**

**Accepted by Riverside Unified School District:**

By: \_\_\_\_\_

Its: \_\_\_\_\_

Dated: \_\_\_\_\_

**DRAFT**

<b>EXHIBIT A</b>			
<b>Schedule of Performance</b>			
No.	Action	<b>Estimated</b> Project Date	<b>Estimated</b> Completion Date
1.	<u>Submission - Evidence of Adequate Financing.</u> RUSD shall submit evidence of financing, including budget of total development costs, and a sources and uses of funds table in a form and/or with conduct acceptable to the University.	<b>[Month] [Day],</b> 2018	Within 30 days after the execution of the term sheet.
2.	<u>Submission – Site Plan showing building location, ingress and egress and circulation, etc., in a form and/or with conduct acceptable to the University</u>	August 1, 2018	
3.	<u>Submission - Traffic Plan to service the Project and that demonstrates no negative impacts to UCR in a form and/or with conduct acceptable to the University.</u>	September 5, 2018	
4.	<u>Submission - Schematic design documents with exterior design and finishes that RUSD shall prepare and submit schematic design documents and supporting information to UCR to commence the CEQA process in a form and/or with conduct acceptable to the University.</u>	October 1, 2018 (CEQA September, 2019)	
5.	<u>Submission - Schematic design documents and final CEQA (EIR) documents.</u> RUSD shall prepare and submit schematic design documents to the Regents for review and approval in a form and/or with conduct acceptable to the University.	October 15, 2019 (CEQA November 13, 2019)	Materials for all Regents items need to be submitted to the University of California, Office of the President at least 60 days before the intended Regents meeting. CEQA documents need to be submitted approximately three weeks prior

## Appendix E.

### Riverside STEM High School FACT SHEET

- The Riverside STEM Academy opened in the fall of 2011 with grades 5-7 and 200 students
- The Mission: To foster the joy of discovery, creativity, and the life-long pursuit of knowledge through a collaborative, technological and innovative structure for deep scientific and mathematical literacy, emphasizing critical thinking, problem-solving, and effective communication skills.
- Move to its current site 0.5 miles from UCR in the fall of 2012
- The Riverside STEM High School opened in the fall of 2013 with its first 9<sup>th</sup> grade and continued to add one grade each year
- RSA has been one of the top five schools in California in 2016 and 2017 in the California Assessment of Student Performance and Progress (CAASPP) which is the statewide student assessment system given annually
- RSA High School is ranked 27<sup>th</sup> in CA (of 2021) by SchoolDigger, which calculates school rankings based on test scores released by the California Department of Education.
- The Class of 2017 was RSHS first graduating class with the ceremony held on the UCR's Geology Courtyard
- RSA has worked with many UCR departments since the school's opening in 2011
- UCR faculty have provided coaches for academic teams such as Science Olympiad
- UCR supported science and engineering capstone projects with UCR scientists and engineers
- Have had many UCR Symposium speakers since 2011
- First graduating class statistics:
  - ✓ 85% of 2017 graduating class UC-AG accepted
  - ✓ 80% of 2017 graduating class enrolled in a STEM major
  - ✓ 95% of 2017 of first graduating class attending University or City College
  - ✓ RSA currently has 8 students attending UCR
  - ✓ RSA received a 6-year WASC Accreditation without a 3-year visit
  - ✓ California Gold Ribbon School
  - ✓ One of 31 schools this year to be invited to apply for the National Blue Ribbon School
- Selection of Universities accepting students in the RSA classes of 2017 and 2018:  
UC Riverside, UCLA, UC San Diego, UC Davis, UCLA, UC Irvine, UC Santa Cruz, UC Berkeley, Cal Tech, MIT, Reed College, Rensselaer Poly Tech, University of Arizona, ASU, University of Washington, Brown University, Norte Dame, USC, Texas A&M, Davison College, New York University, Tohoku University Japan, Harvey Mudd, George Washington University, Cal Poly Pomona, Penn State, Cal State Fullerton, Cal State San Diego, Humboldt State, Cal State Long Beach, University of Portland, University of Michigan, Oregon State