

DDM GROUP-TEXAS CONSORTIUM

DISCOVERY CENTER

Design Team Work Session_09.17.2013





INTRODUCTION

OVERVIEW

TEAM

DESIGN

DEVELOPMENT SCHEDULE

SUMMARY

DIALOG



INTRODUCTION

OVERVIEW

TEAM

DESIGN

DEVELOPMENT SCHEDULE

SUMMARY

DIALOG

EXECUTIVE SUMMARY

Based upon the previous master plan concept, RFP submission and clarifications the Discovery Center project is proceeding well. The major milestones include:

- *TAMU Ground Lease Approved 09.07.2013.*
- *TAMU Tenants: 3 Scientific Groups to fill Research Bldg 2*
 - First Level (35,265 Gross SF)*
 - *Nano Laboratory (16,000 Net SF)*
 - *MCF Laboratory (6,000 Net SF)*
 - Second Level (15,622 SF)*
 - *Chemistry Office/ Lab: (10,000 Net SF)*
- *Industry Tenants*
 - *TAMU in discussion with three or more to fill the Office Bldg. 1*

Interaction Leads to Innovation



d r d s



EXECUTIVE SUMMARY

The new Discovery Center will provide much needed office and research laboratory space for collaboration between TAMU researchers and industry partners. This needed space is currently not available on the main campus with the necessary infrastructure and amount of square footage. The Discovery Center will be located on a tract of raw ground on the south side of the NCTM facility and to the west of the T.I.P.S. building. This tract is located on the northwest corner of Discovery Drive and University Drive, north of the Research Park.

The purpose of this project is to fill the acute need for Wet labs and Clean rooms for Engineering Nano Technology and Materials Characterization, a technologically advanced data center to centralize TAMU research computation, office space for TAMU researchers and industry partners to exist together in a multi-collaborative environment, incubator space in lab and office formats for new start-up companies.

This facility will provide the amenities of dining and fitness which supply the need for an environment on the west side of the campus conducive to collaboration for research, industry partners and companies located within the One Health Plus Bio-Corridor. Currently, The University does not currently have a facility located on the west side of the campus which provides these needs in a centralized area.

The Discovery Center is a Public Private Partnership between TAMU and the DDM Group - Texas, a privately held development company. A ground lease will be issued to the developer in early September 2013. Construction will commence during the fourth week of September 2013. The developer will then lease space to TAMU entities and industry partners for the sole purpose of multi-collaborative research. The development will consist of four buildings; a 90,000 sf, four story office building, a 64,000 sf, two story lab building dedicated for two specific determined entities, a 9,500 sf commons area building which will include a cafe, fitness center, redundancy for the TAMU Data Center and a future Phase II lab building which will house start-up companies and additional space as needed for other TAMU research entities.

Estimated completion time for the dedicated lab building will be mid-August 2013 while the estimated completion time for the office building and common area building will be mid-October 2013. The remaining lab building will be completed in late November 2013.

Construction type for these buildings will be poured in place concrete structural system with a glass and metal louver curtain wall. All of the buildings will be linked together by an enclosed walkway. The total project amount is \$85 million dollars, funded by the DDM Group - Texas.

PROJECT SITE

The site located on the west TAMU Campus is approximately 12.45 acres with primary street frontage on University Blvd. and access off of Discovery Drive. As a result, the project will have strong visibility and presence within the west TAMU campus.

Future development of the adjacent Research Park and the extension of Research Parkway will provide additional access to the site. As a result the Discovery Center Complex will become a symbolic gateway to the Science and Research Park.



DDM GROUP - TEXAS CONSORTIUM

drds

Laboratory Building
Design Consultants

PG&L

SHoP
BATTERFIELD & MONTGOMERY
CONSTRUCTION, INC.



FLOOD PLAIN

The project site does have some significant issues related to soils and floodplain. Approximately 50% of the site falls within Floodplain Zone A. The Research Park master plan illustrates multiple watershed areas within the general site area. Our design and engineering team has created a master plan for this specific site that minimizes the flood plain impact, provides a sustainable approach to accommodate this issue while enhancing the site with a water feature adjacent to the Commons Building.

AERIAL

The site is currently heavily landscape with native vegetation, consisting of trees, shrubs and ground cover. The master plan will attempt to retain as many large growth trees as possible. This is very possible on the north and south portions of the site as designed. The existing stream-bed in the floodplain area will be maintained and enhanced with rock and vegetation. The master plan proposes a small water feature or pond area near the Commons Pavilion as a landscape amenity, as well as, flood control element.



REGIONAL ANALYSIS

The site is located on the TAMU campus, nearby is the town of Bryan. The property is at the corner of University and Discovery Drive, minutes away from the main part of the campus. The best view corridor from the office building is either east towards the campus, or west over the pedestrian mainstreet and onto the future Research Park.

Primary vehicular access to the site is off of Discovery Drive, with secondary access from the expanded Research Parkway to the west.

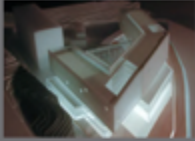


COMPLEX MASTER PLAN

The front door to the Discovery Center is off Discovery Drive near the intersection with University Drive where the main collaborative office building is located. Both visitor and VIP staff parking is provided at this location while staff parking is provided on the western portion of the site. The Office is linked via a "pedestrian mainstreet" to the Engineering Research Building, future Building 3, as well as the Commons Pavilion, with Café, Fitness Center, and Conference Center, and Staff Parking to the west. The Commons Pavilion will also house the emergency power/UPS plant for the Critical Data Center. The spine planning allows for ease of phasing of the complex facilities, as well as, a highly interactive pedestrian environment.

Avoiding research silos, the multi-tenant facility is design for both formal and informal interaction throughout the complex. In the morning tenant staff move along the pedestrian spine from the parking area, to the café for a cup of coffee or to the fitness center in the morning before continuing onto their offices or research facilities. Through-out the day tenants are supported by the Commons Pavilion Café and Fitness Center. In addition the Commons Pavilion includes a Conference Center with multi-purpose conference and exhibition space for the complex. Service is provided via a landscape drive to the south portion of the site access to service bays between each building in a screen courtyard. In addition to the Café, there is a full service restaurant located on the top floor of the office building.

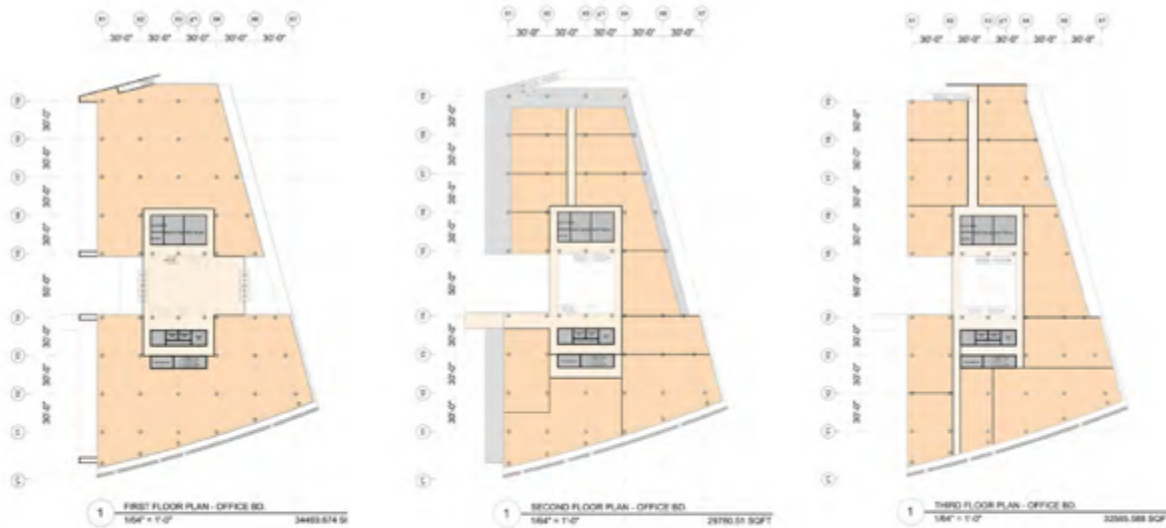




COLLABORATIVE OFFICE BUILDING (BUILDING 1)

The 90,000 SF Office Complex is designed as a three-story atrium office building. The floor plate configuration allows for maximum flexibility from single to multi-tenant leasing scenarios. The atrium design with intercommunicating stairs and elevator and restroom core off the atrium circulation space creates a highly interactive environment. The ground floor of the atrium is on axis with the "pedestrian mainstreet" and provides seem-less flow of movement throughout

the complex. The office building has premium floor-to-floor height at 15 feet. The office is planned to incorporate a fourth floor with covered outdoor terrace restaurant for tenants, guests, and TAMU campus visitors. The restaurant benefits from views of the TAMU campus to east, the Research Park to the south, and the overall complex to the west.



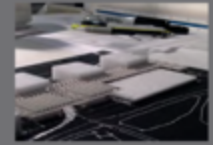
DDM GROUP - TEXAS CONSORTIUM

drds

Laboratory Building
Design Consultants

PGAL

307
NATTSFELDE & PARTNERS
CONSULTING ENGINEERS, INC.

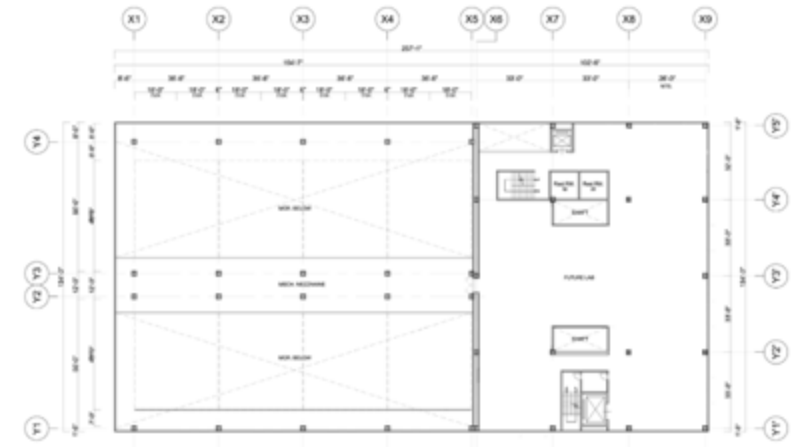


ENGINEERING RESEARCH BUILDING (BUILD 2)

The second building is a stand-alone, two story, 45,000 SF research building. The first floor houses the for the vibration sensitive NANO facility (within a high-bay) including the Aggie Fab, while the remainder of the first and all of the second floor remains in a shell and core space ready to be finished to meet the requirements of expansion, future tenants or even an Incubator Lab.

The existing NANO facility is divided into multiple locations between the Zachary and Jack E. Brown engineering buildings, many of the locations don't meet the requirements and environmental conditions for testing procedures. To meet both the current and future requirements, DDM has proposed a Modular Clean

Room (MCF) system, similar to the existing NCTM building. The MCF concept is a pre-fabricated clean room, complete with all mechanical, electrical, and process systems built into the modular units at an off-site manufacturing plant. The computer controlled HVAC system can be programmed for ISO 5, 6 or 7, providing TAMU the flexibility to adapt to changing clean room environments.





FUTURE BUILDING 3 (BUILDING 3)

The 45,000 SF Phase II future building is design as three-story flex space with 15' floor-to-floor ceiling heights and can serve as a lab or office space. The building is planned to support multi-tenant configurations either as lab or office space on each floor.

Connected to the "pedestrian mainstreet spine" the building will become part of a highly interactive environment. The basis-of-design for the facility will support both wet and dry lab tenants or office users.



Van Andel Institute, Michigan

DDM GROUP - TEXAS CONSORTIUM

drds

Laboratory Building
Design Consultants

PGAL

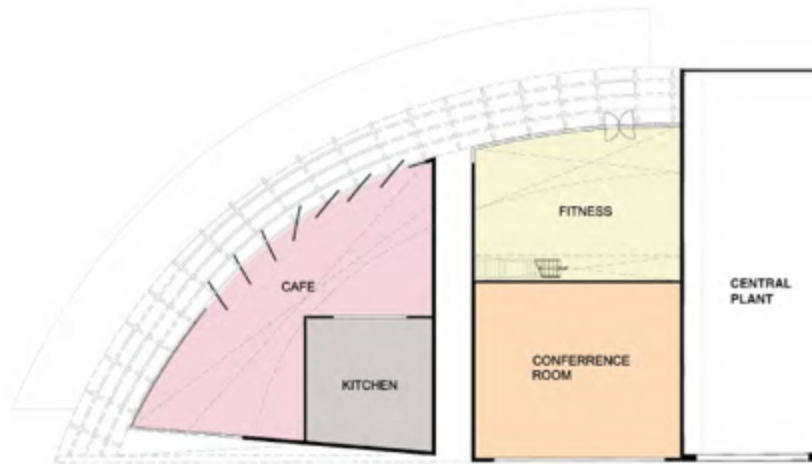
WATTSVILLE & PARTNERS
CONSULTING, INC.



COMMONS PAVILION (BUILDING 4)

The Discovery Center Complex benefits by the incorporation of the Commons Pavilion with 9,500 SF for the Café, Fitness Center and Multi-Purpose Conference Center. The Café is envisioned as a coffee/juice bar with light snacks and pastries for the tenants. Both indoor and outdoor seating overlook the water feature and natural outdoor tree lined landscape area. A pedestrian bridge provides access to the adjacent Kalon Biotherapeutic Facility, as well as, a landscape lawn

area that is bermed to screen cars that are located in the staff parking area. The fitness center facilities are envisioned to be operated by a fitness lease tenant and will provide state of the art facilities. The Conference Center is envisioned as a multi-use facility to support large conferences, exhibitions, events, and smaller activities for the tenants.



1

GROUND FLOOR PLAN - PAVILION

1/32" = 1'-0"



INTRODUCTION

OVERVIEW

TEAM

DESIGN

DEVELOPMENT SCHEDULE

SUMMARY

DIALOG

MASTER PLAN CONCEPT

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the CURRENT development program is as follows:

- *TAMU Ground Lease Approved: 12.45 Acres ~ grown from 8- 10 Acres*
- *TAMU Buildings:*
 - *Office Building 1 (90,000 SF)*
 - *Research Building 2 (51,000 SF ~ grown from 45,000 SF)*
 - *Future Research Building 3 (45,000 SF)*
 - *Commons Pavilion (9,500 SF)*
 - *Parking 500 Stalls*

Interaction Leads to Innovation



d r d s



TAMU Discovery Center

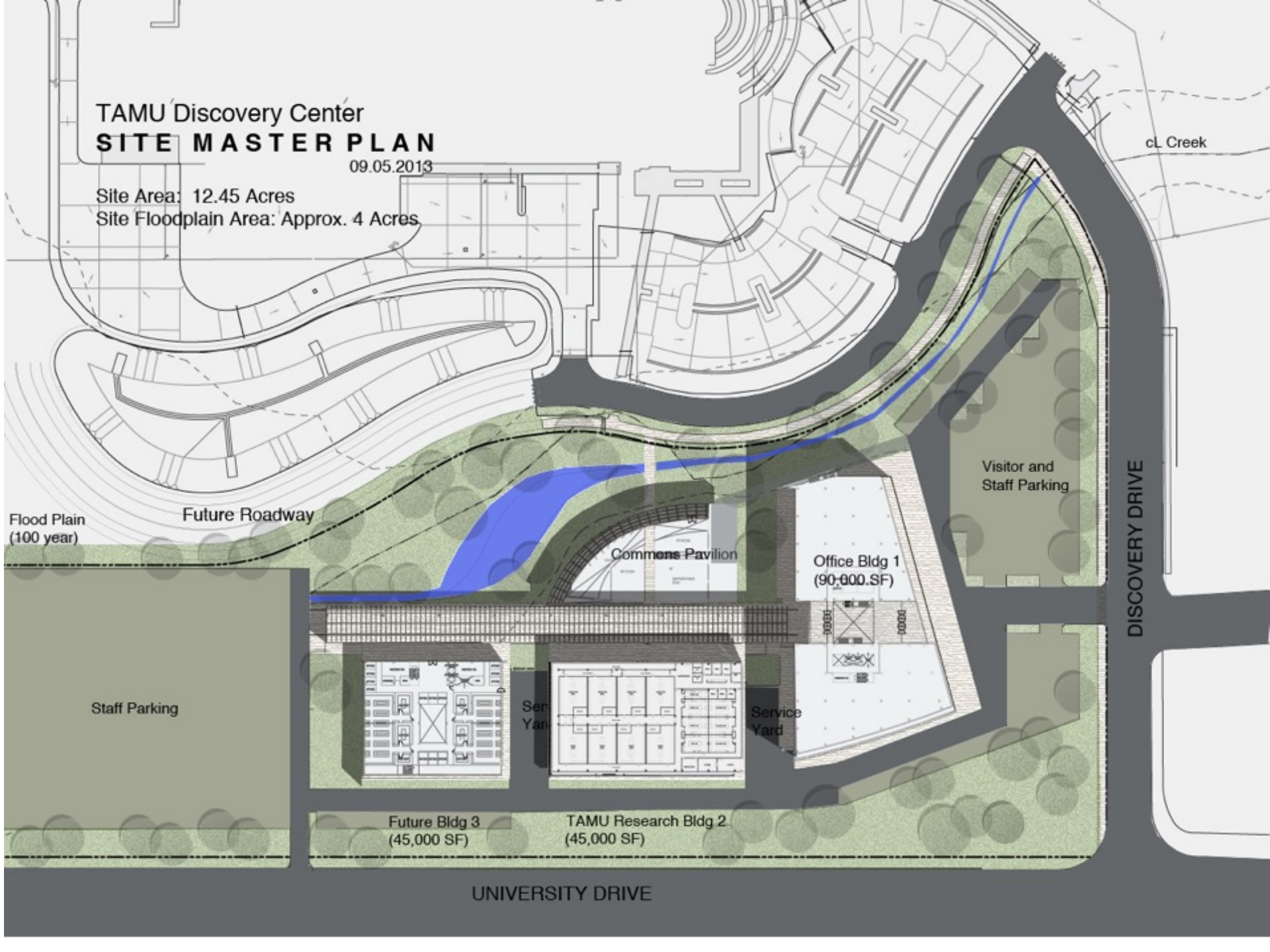
(Design Concept 04.23.2013)

TAMU Discovery Center SITE MASTER PLAN

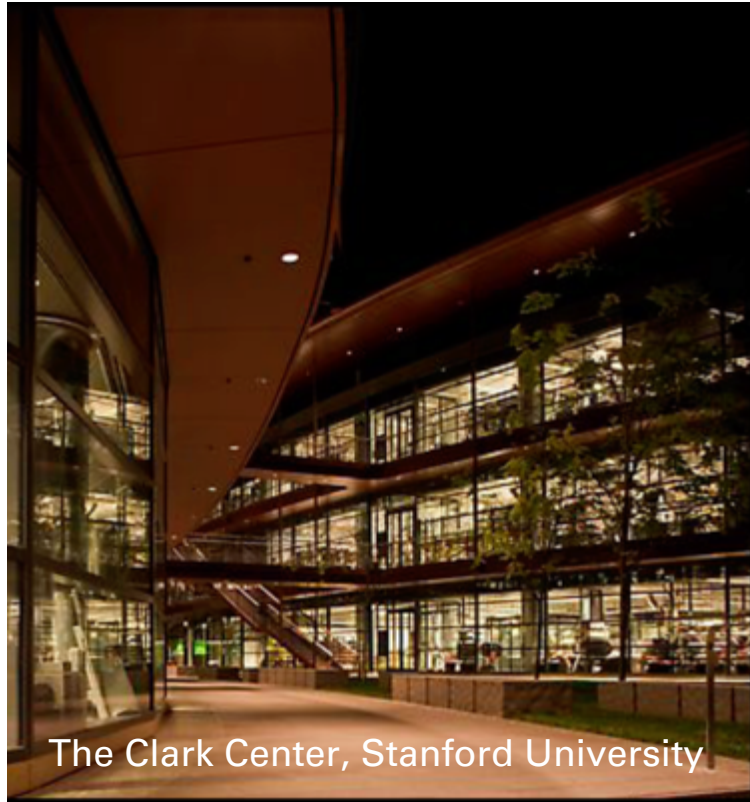
09.05.2013

Site Area: 12.45 Acres

Site Floodplain Area: Approx. 4 Acres



a world-class r + d center...



...with creative environment for innovation.



Innovative architecture...



...with flexibility in planning to fosters collaboration...



The Clark Center, Stanford University

...and interaction through quality public spaces.



Center of Clinical Science Research



J. David Gladstone Institutes,
CA



Genomics Institute, La Jolla, CA

Create a place that inspires!



CCRC

The award winning design-build Childrens Cancer Research Center is located on the University of Texas Health Sciences new North Campus. The project includes laboratories, support core, and support office space organized around a central atrium. **Separation of research laboratories and support office space provides economy and efficiency of building systems.** The design features a south facing double facade with limestone screen wall over glass curtain wall to provide a sustainable solution to the extreme solar exposure in Texas. The atrium provides abundant natural light for the public space and open offices while creating a cooling effect for the facility.

Use: Academic Research
Concept: 2003
Design: DRDS Principal **Steven Ryder** while at NBBJ
Location: San Antonio, Texas
Gross Floor Area: 20,000 SM







GNF

The award winning Genomics Institute of the Novartis Research Foundation, located adjacent to the University of California San Diego, is one of the largest research institutes devoted to functional genomics created by the sequencing of the human genome. As a series of 6 buildings connected by a central circulation spine the architectural design capitalizes on the mild climate and dominant natural features of the site. The multi-building planning is a function of maximizing the building coverage on a long and narrow site. The result is a unique environment that both fosters interaction as well as divisions within the community setting.

Use: Research
Construction: 2002
DRDS Principal Steven Ryder while at NBBJ
Location: La Jolla, California
Gross Floor Area: 25,000 SM













UCSD CALIT2

The award winning University of California San Diego Calit2 academic research facility was commissioned as a new building type with the goal of redefining collaborative research on ubiquitous broadband wireless communication. Calit2 provides some of the most advanced multidisciplinary facilities in the United States including nanotechnology-based clean rooms, micro-electronic-mechanical labs, immersive virtual reality and ultrahigh-definition digital cinema focused on information and telecommunications study. This public-private campus facility is taking ideas beyond theory into practice, accelerating innovation and shortening the time of product development and job creation. The innovative exterior composite material, Trespa, minimizes blocking of electromagnetic waves. As many as 900 faculty, graduate and undergraduate researchers work in collaboration in this world-class facility.

Use: Academic Research

Construction: 2007

DRDS Principal: Steven Ryder while at NBBJ

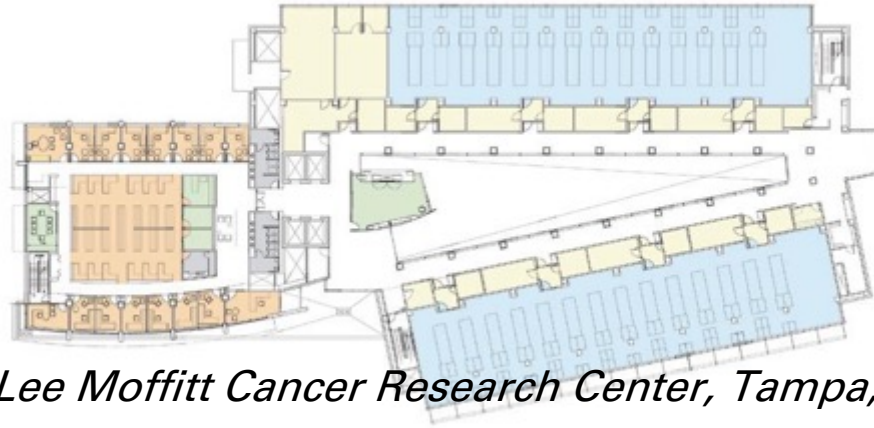
Location: La Jolla, California

Gross Floor Area: 20,500 SM

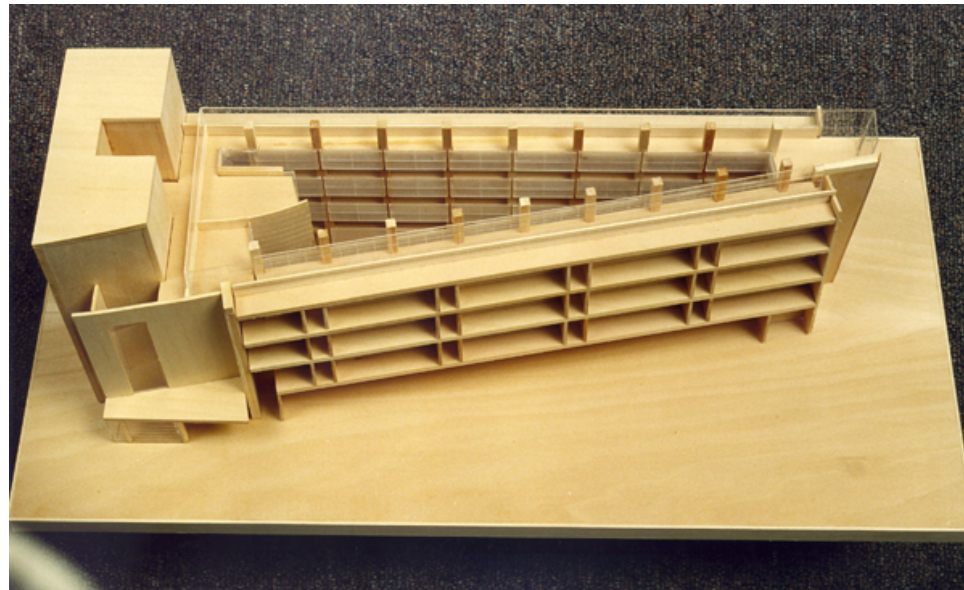




Lab Planning Case Studies



H. Lee Moffitt Cancer Research Center, Tampa, Florida







Wellcome Trust Sanger Institute

The project is the Morgan Building which is part of a world-class genome campus that helps the Sanger Institute recruit top talent globally. **It is one of a diverse and technically challenging group of buildings that fit harmoniously in a rural village setting, creating a progressive symbol for the scientific community.** State-of-the-art biosciences labs ensure a high degree of collaboration and personal safety for researchers and staff. Transparency reveals the supercomputing data center, which is the nerve center of IT-based bioinformatics research projects. The Sanger Institute has contributed more genetic code to the Human Genome Project than any organization in the world.

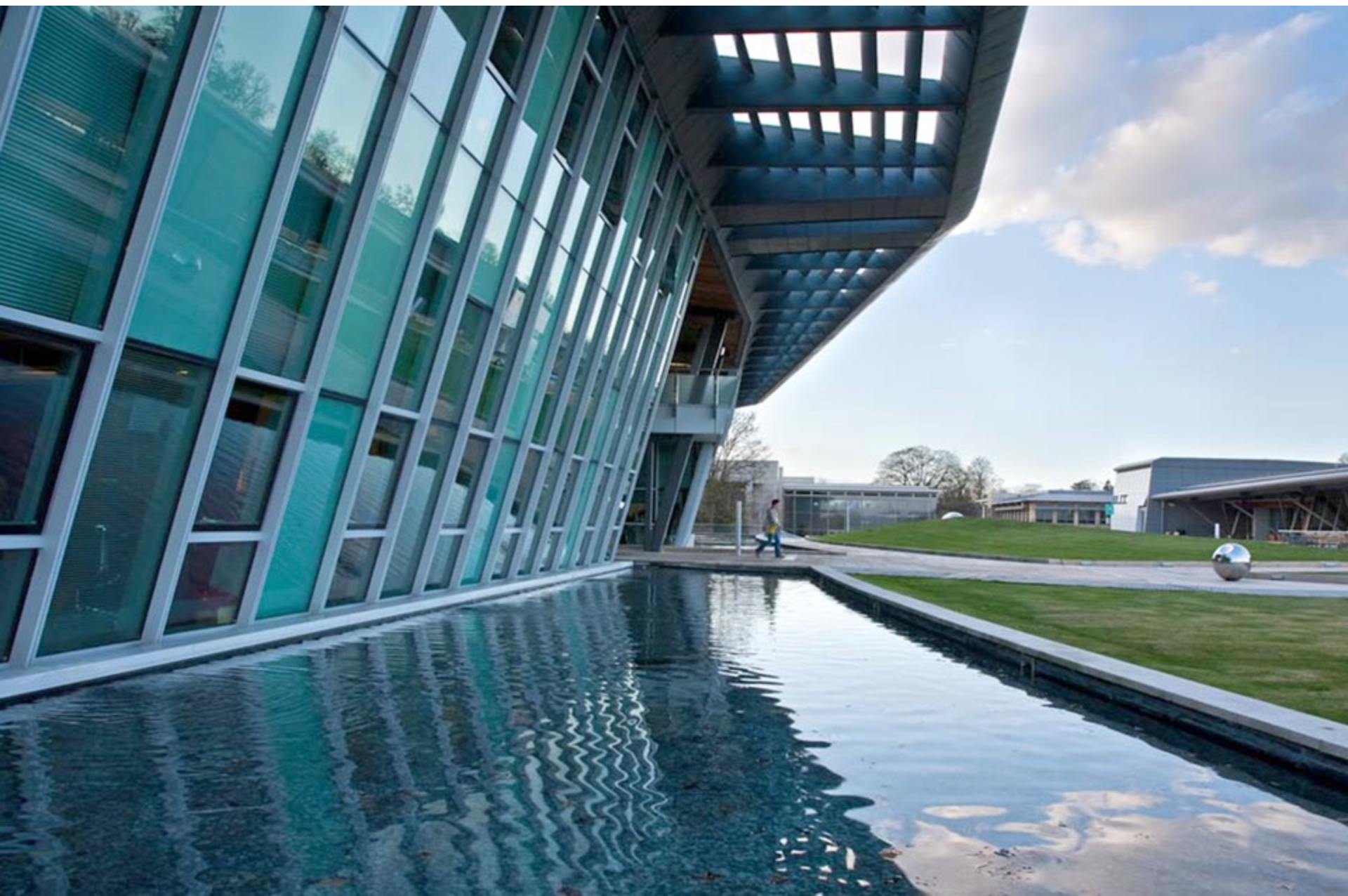
Use: Data Center/IT Suites/R+D Lab Facility/Offices
Completed: 2004

Project Designer: **Paul Quinn Davis** while with NBBJ
Location: Cambridgeshire, United Kingdom
Gross Floor Area: 21,000 SM









Infinity Forum R+D Center

With intensifying competition between countries to attract R+D centers of world-leading businesses, Gyeonggi Province is working with the Ministry of Knowledge Economy and focusing on high design to garner global attention. They have designated the region as a foreign investment zone with diverse incentive programs. The project is positioned at the gateway to the Pangyo Techno-Valley Campus. It is a landmark building that invigorates research facilities through design for companies specializing in high tech industries like Biotechnology (BT), Information Technology (IT) and Green Technology (GT). The primary programmatic component is 19,800SM of R+D labs that serve as company rental and research lab facilities. The project also has wet lab facilities that require specific lab planning modules, floor-plate configuration and heavy mechanical support. As a multi-tenant research facility, the building is designed to optimize plan flexibility with smart office space and raised-floor technology. Researchers are connected by multiple atriums and connecting walkways, creating chance opportunities for communication. **The idea is to promote synergy through cross pollination of various tenants triggering spontaneous brainstorming that increases opportunities for ideation and discovery.** This is a proactive solution that supports wide range goals of achieving greater education/R+D outcomes with related domestic companies and research institutes throughout the region.

Use: R+D Center
Construction Completion: 2012
Location: Pangyo Techno Valley - Seoul, Korea
Gross Floor Area: 45,750 SM

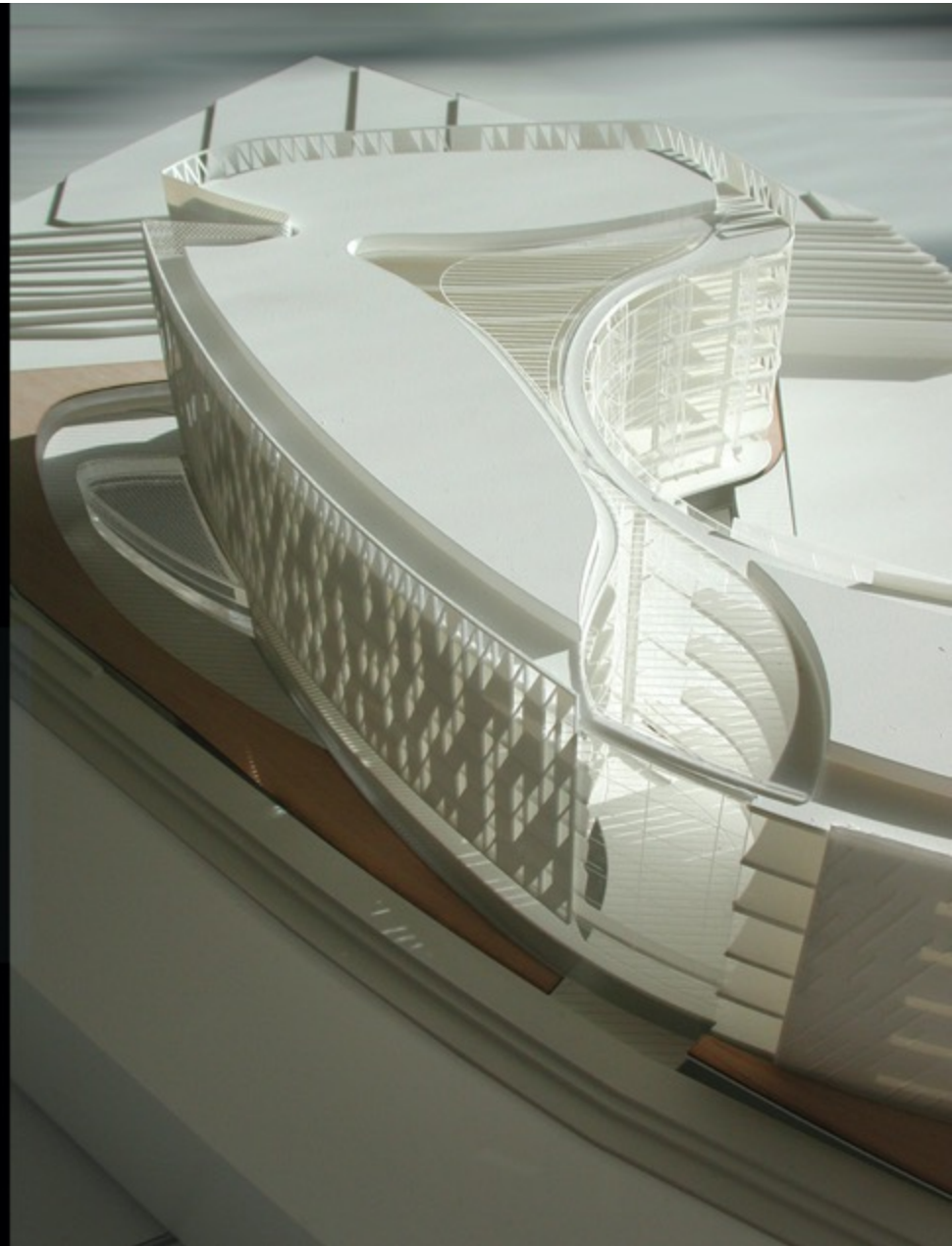
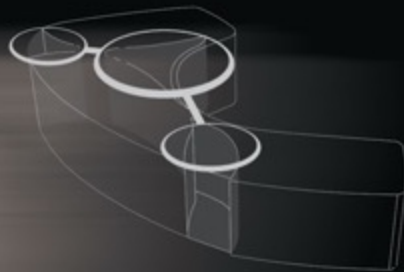


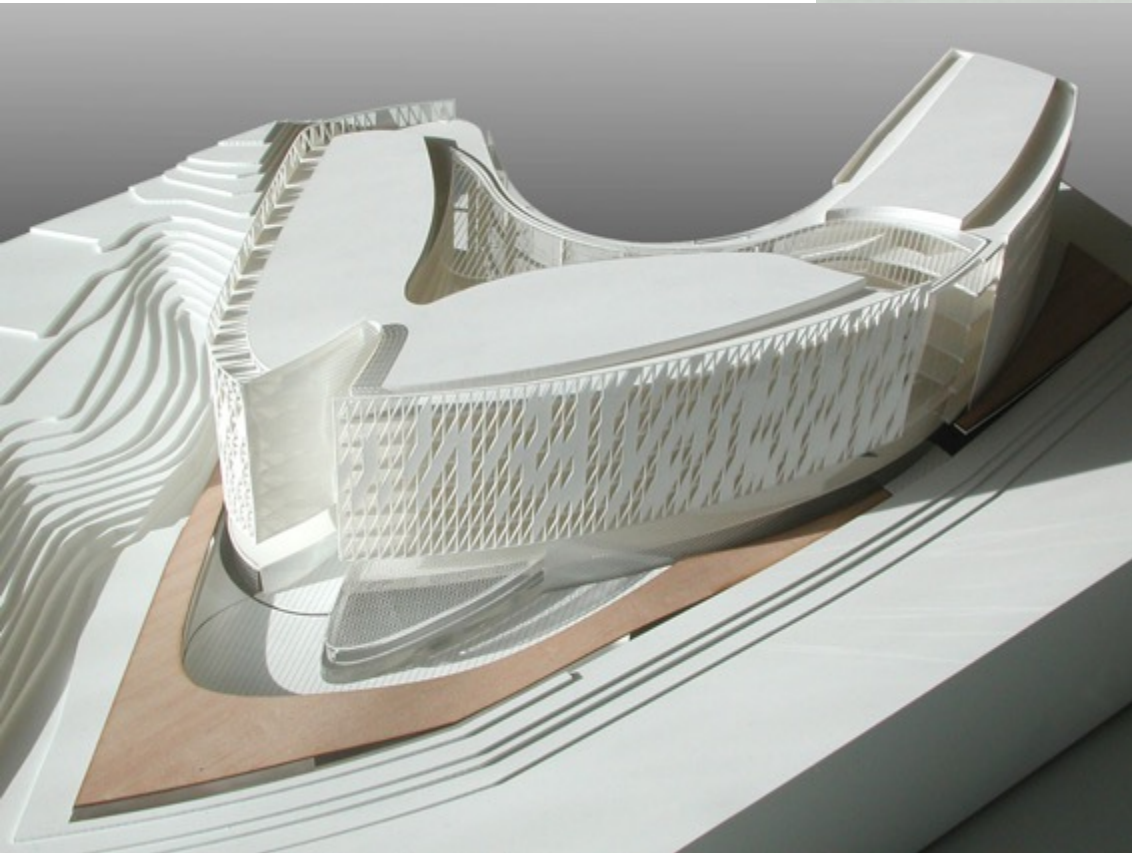
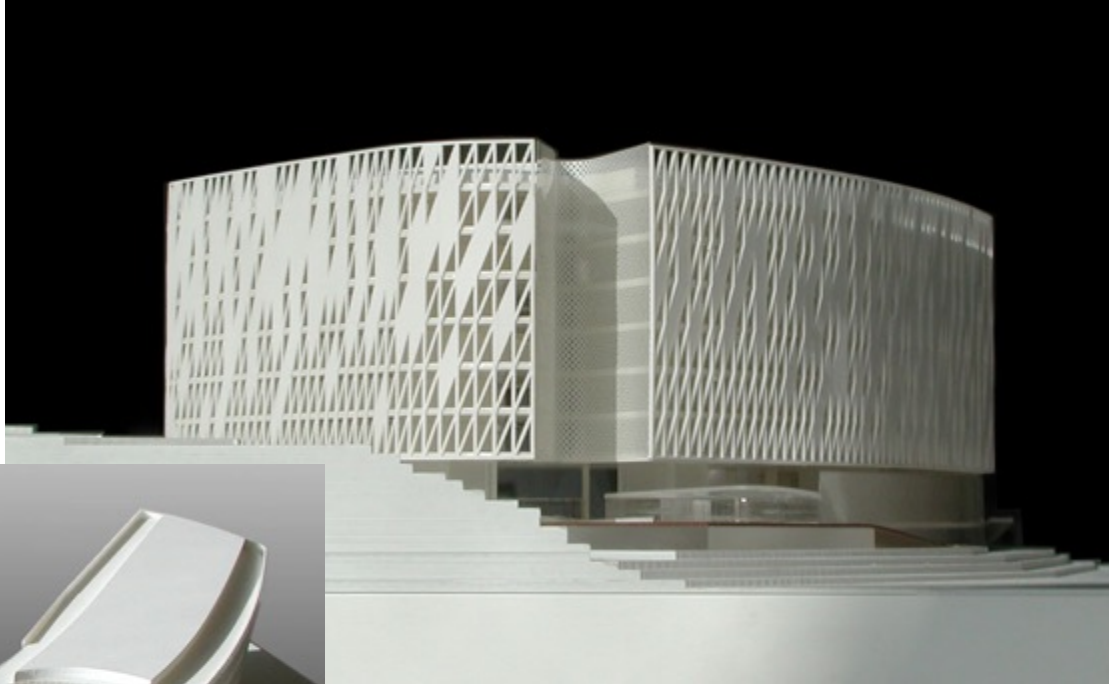




The buildings are connected by multiple atriums and connecting walkways, creating chance opportunities for communication between researchers. **The idea is to promote synergy through cross pollination** of various tenants. The hope is that **spontaneous brainstorming can occur, increasing opportunities for ideation and discovery.** This is a proactive solution that supports wide range goals of achieving greater education/R+D outcomes with domestic related companies and other research institutes throughout the region.

3-Atria Structure











SITE DEVELOPMENT C

SITE DEVELOPMENT ISSUES

Based upon the receipt of the final site survey, TAMU utilities master plan, and initial site topo documentation the site presents the following design issues:

- *Water Floodplain Control + Retentions Strategy*
 - *Creek Development and Management*
 - *Water Retention Strategy*
 - *Design Feature for Commons Pavilion Area*
- *Building Location and Configuration*
- *Structural Design for Foundations: Buildings and Parking Deck*
- *Geotechnical Soils TBD*
- *Site Landscape Clearing and Preservation Mature Trees*

Interaction Leads to Innovation





Raymond Stotzer Parkway

View looking East on Univ Drive

©2010 Google

© 2013 Google
© 2013 Google

30°36'30.28" N 96°21'26.07" W elev. 105 m

Eye alt 105 m

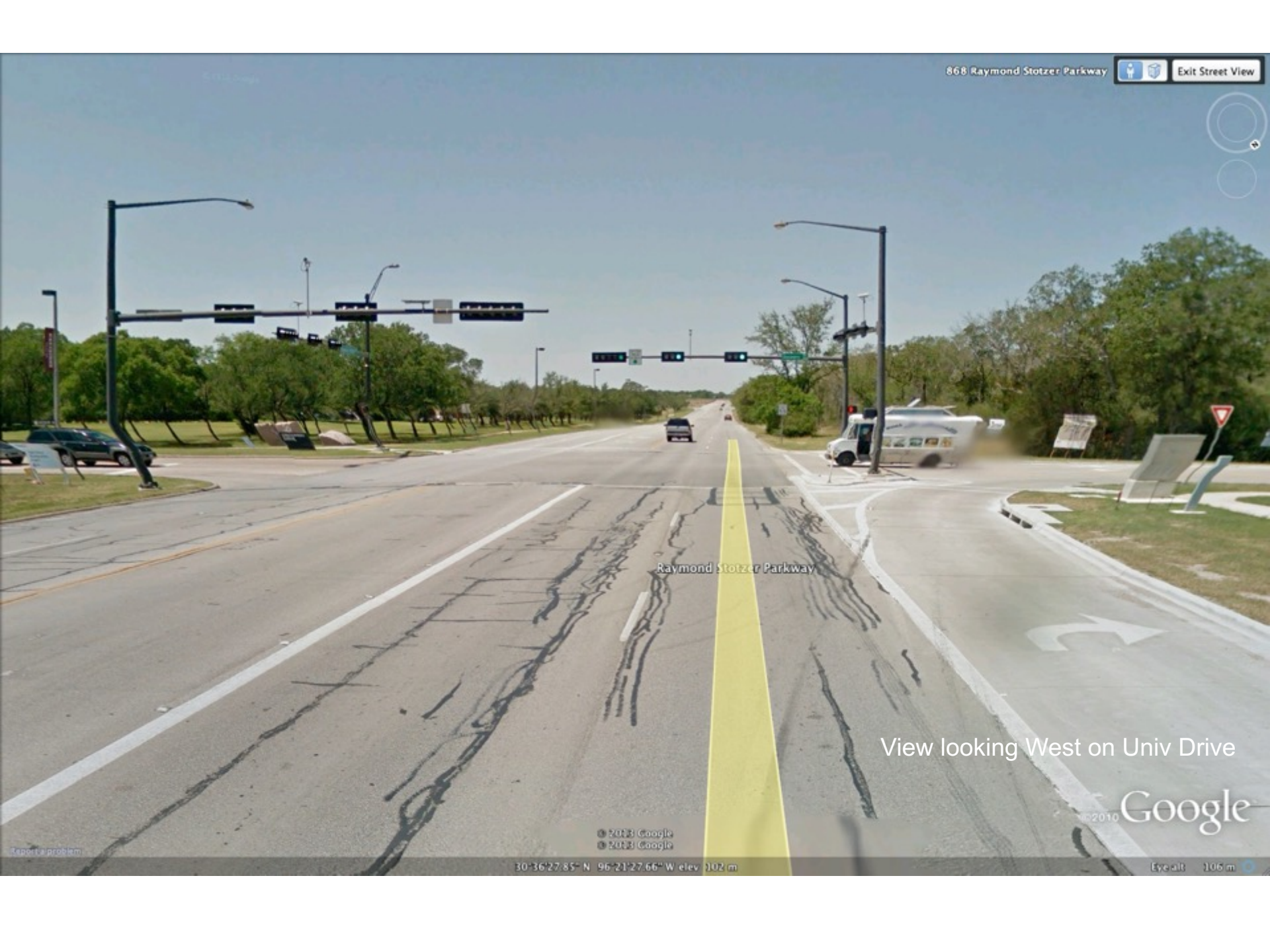


View looking Northwest on Univ Drive
at Discovery Drive

© 2013 Google

868 Raymond Stotzer Parkway

Exit Street View



Raymond Stotzer Parkway

View looking West on Univ Drive

© 2010 Google

© 2013 Google
© 2013 Google

30°36'27.85" N 96°21'27.66" W elev 102 m

Eye alt 106 m

Map data problem

949 Raymond Stotzer Parkway

Exit Street View

Raymond Stotzer Parkway

View looking West on Univ Drive

©2010 Google

© 2013 Google
© 2013 Google

30°36'24.42" N 96°21'34.12" W elev: 111 m

Eye alt: 104 m

3776 Raymond Stotzer Parkway



Exit Street View



View looking East on Univ Drive

Google

©2010

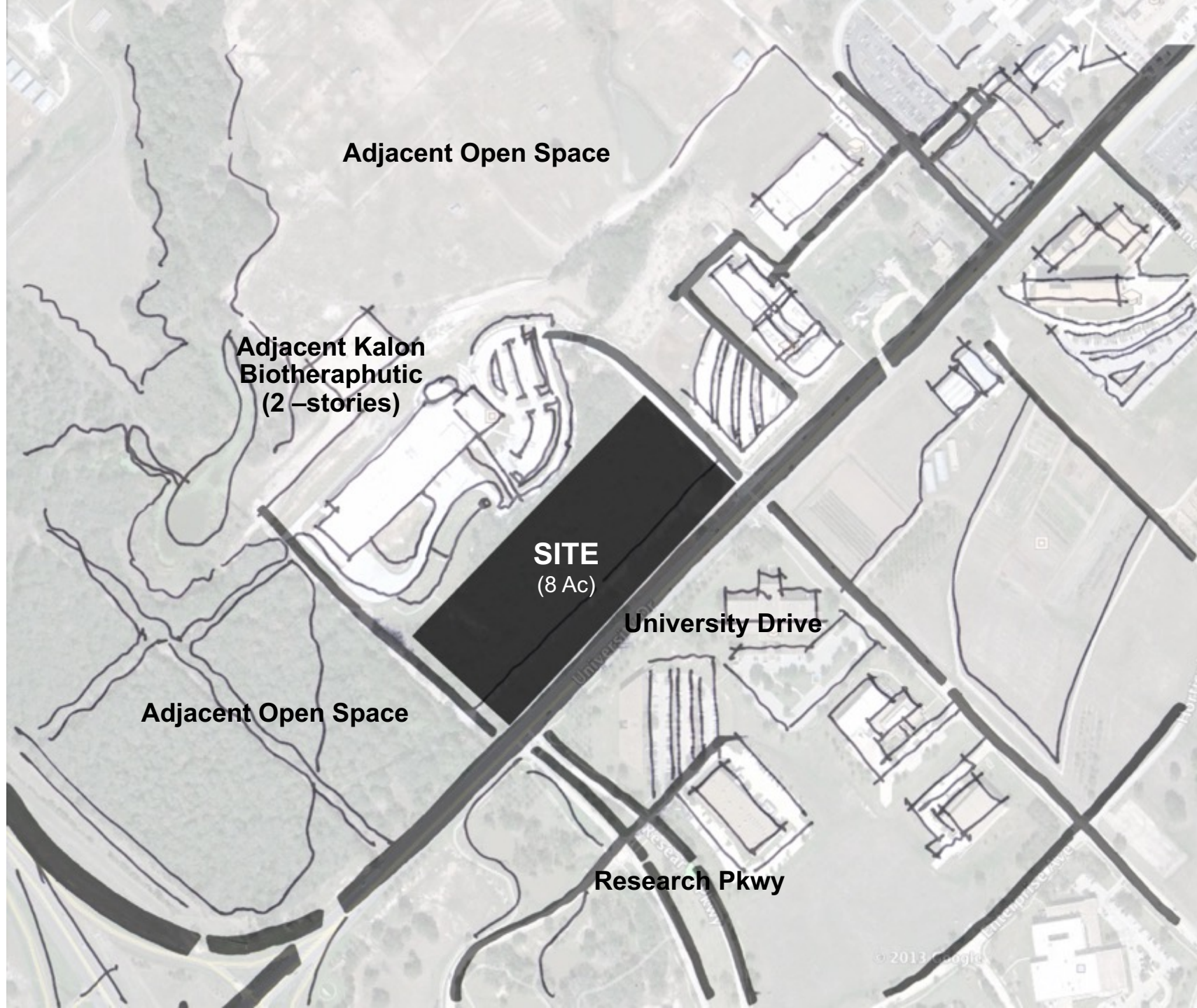
Raymond Stotzer Parkway

© 2013 Google
© 2013 Google

30°36'09.89" N 96°21'50.49" W elev. 111 m

Eye alt. 103 m

Report a problem



Adjacent Open Space

**Adjacent Kalon
Biotheraphutic
(2 -stories)**

**SITE
(8 Ac)**

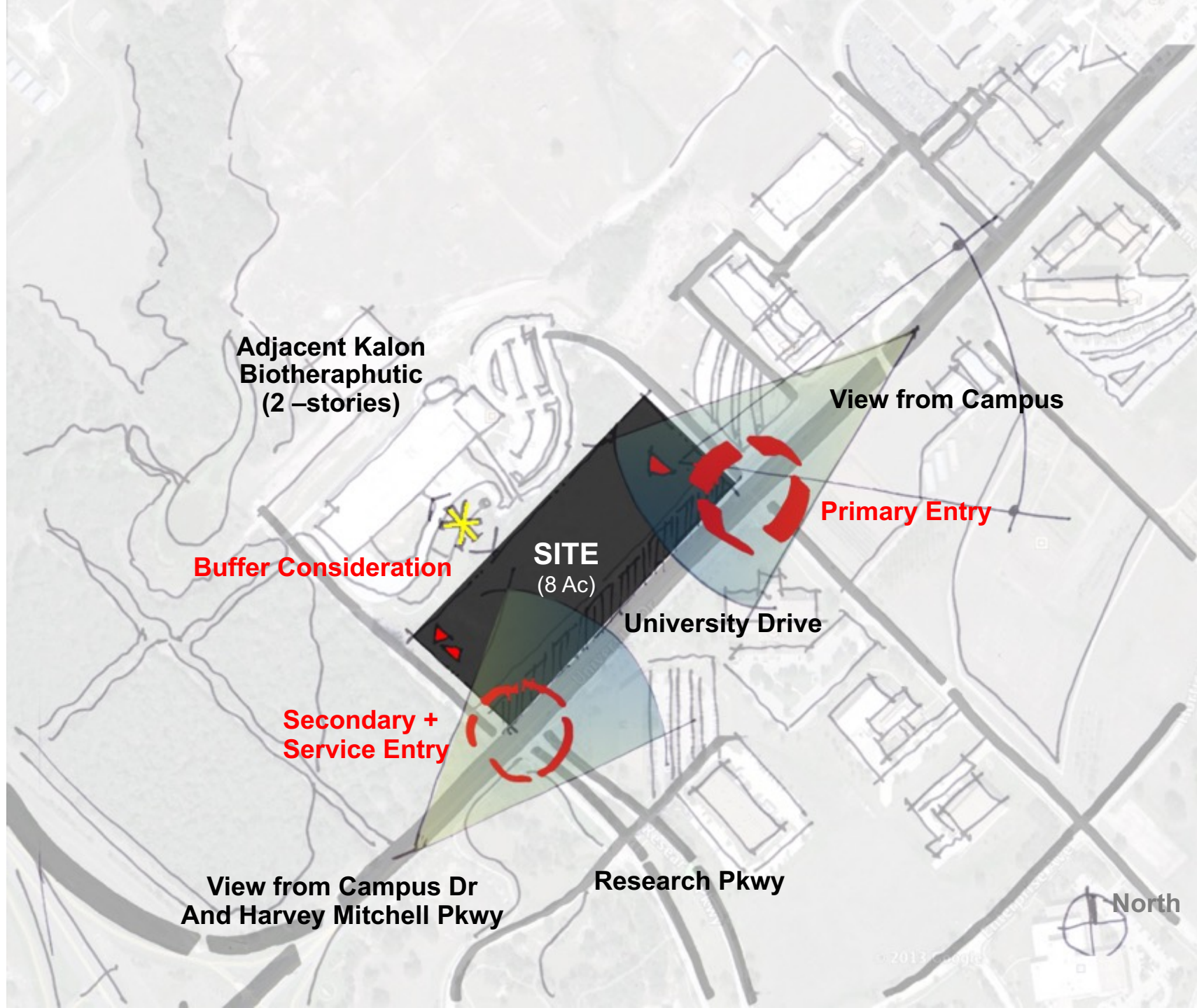
University Drive

Adjacent Open Space

Research Pkwy

Adjacent Kalon Biotheraphutic





**Adjacent Kalon
Biotheraphutic
(2 -stories)**

Buffer Consideration

**SITE
(8 Ac)**

View from Campus

Primary Entry

University Drive

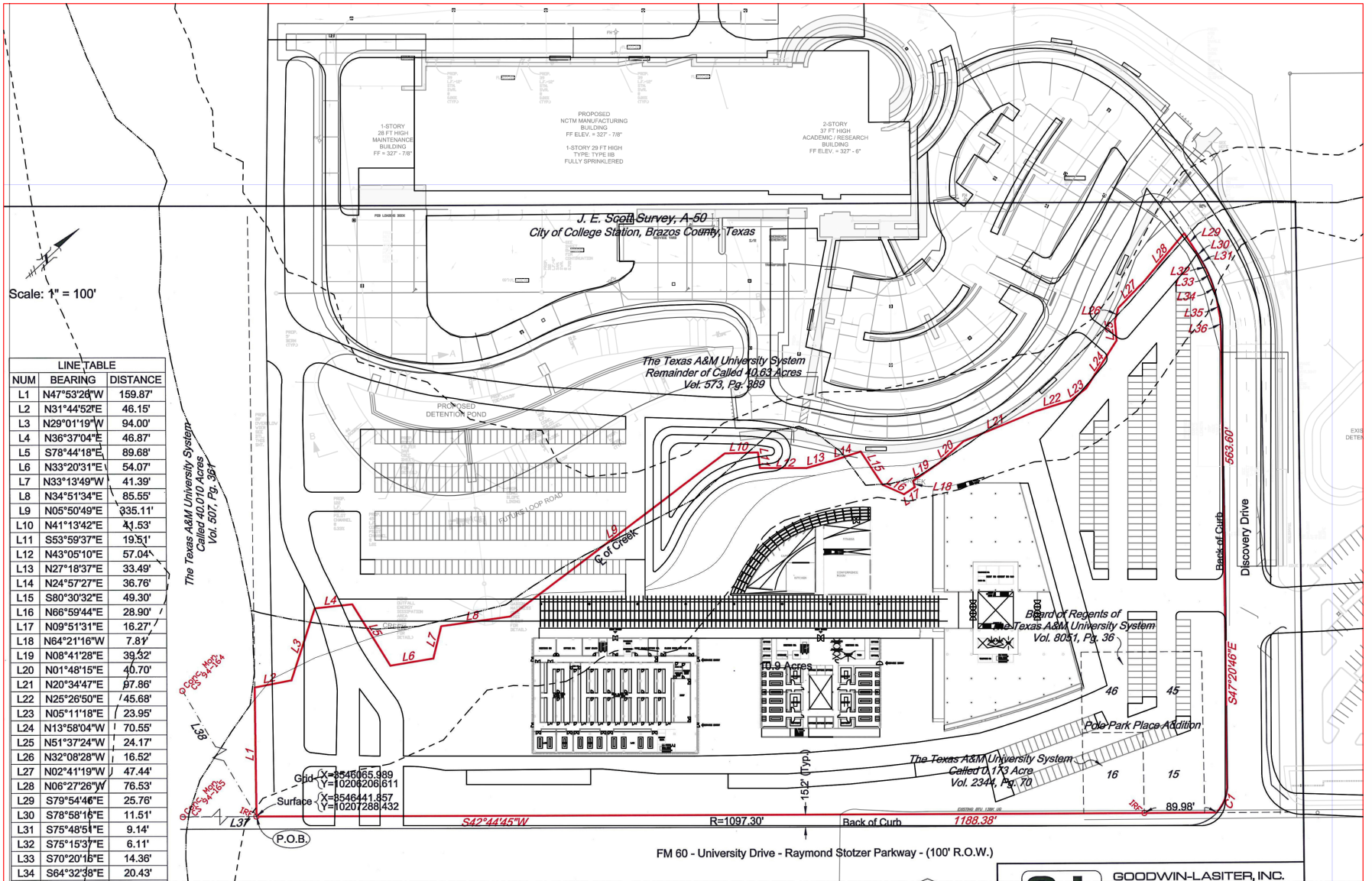
**Secondary +
Service Entry**

**View from Campus Dr
And Harvey Mitchell Pkwy**

Research Pkwy

North

© 2013 Google



PROPOSED SITE BOUNDRY



Scale: 1" = 100'

J. E. Scott Survey, A-50
City of College Station, Brazos County, Texas

LINE TABLE		
NUM	BEARING	DISTANCE
L1	S87°26'23"E	5.57'
L2	S82°47'11"E	14.12'
L3	S80°38'34"E	13.36'
L4	S79°54'48"E	50.10'
L5	S78°58'16"E	11.51'
L6	S75°48'51"E	9.14'
L7	S75°15'37"E	6.11'
L8	S70°20'16"E	14.36'
L9	S64°32'38"E	20.43'
L10	S57°36'48"E	26.46'
L11	S50°06'30"E	16.73'
L12	S42°27'16"W	4372.26'
L13	N77°33'13"W	4929.15'

CURVE TABLE		
NUM	DELTA	LENGTH/RADIUS
C1	29°14'00"	153.06' / 300.00'
	LC: N27°29'34"E	151.41'
C2	07°10'44"	102.74' / 820.00'
	LC: N09°17'12"E	102.68'
C3	50°33'14"	227.20' / 257.50'
	LC: N30°58'27"E	219.90'
C4	84°39'17"	467.63' / 316.50'
	LC: N13°55'26"E	426.24'
C5	27°12'25"	118.71' / 250.00'
	LC: N14°48'01"W	117.60'
C6	43°28'33"	37.17' / 48.98'
	LC: S25°34'46"E	36.28'

Notes:

Bearings are based on Texas Central Zone Values and are related to City of College Station G.P.S. control monuments CS 94-164 & CS 94-165. All distances are surface and have had a combined scale factor of 1.000105996 applied.

Revised Plat (8-20-13) to reflect numbering for Lot 14.
Revised Plat (8-23-13) to reflect boundary changes.

Legend

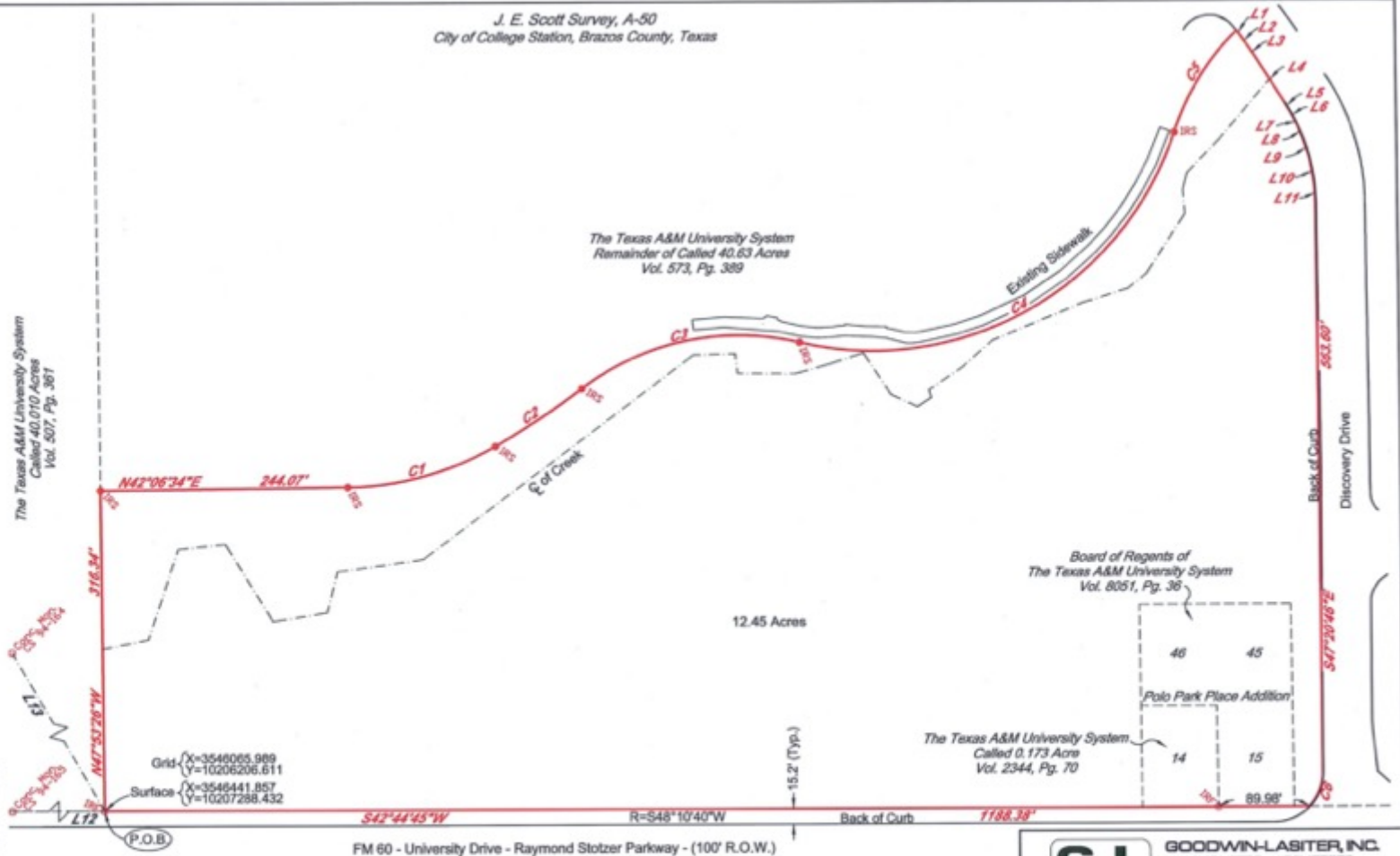
- IRS Set 1/2" Iron Rod
- IRF Found Iron Rod
- Conc. Mon. Found Concrete Monument
- R = Record Measurement

I, Michael Cuzzo, certify that this survey represents the results of an on the ground survey made by me or under my supervision during August 2013.

Michael Cuzzo
Michael Cuzzo, R.P.L.S. 5693

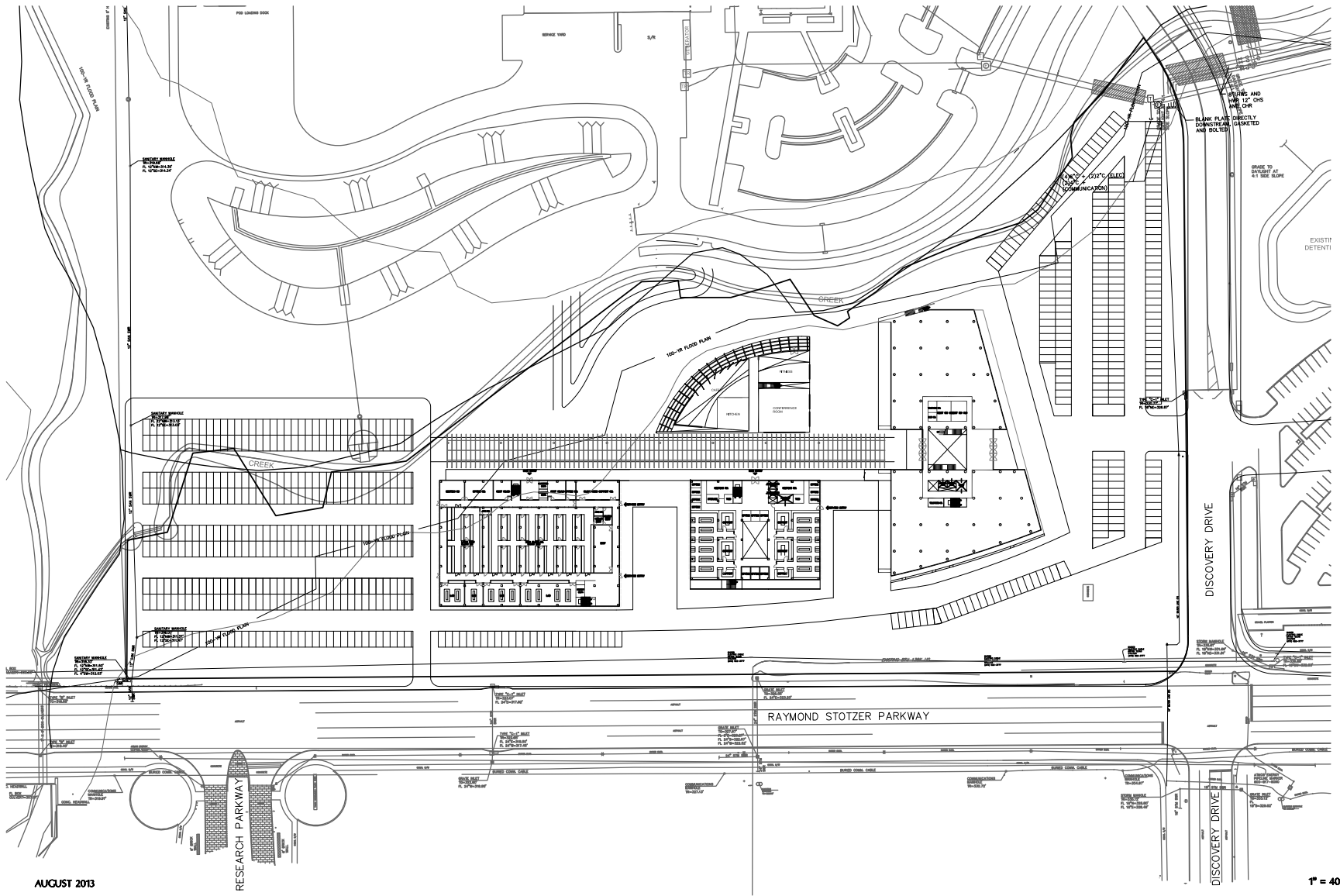
See attached fieldnotes

Title information was not provided at the time of survey



G-L		GOODWIN-LABITER, INC.	
ENGINEERS & ARCHITECTS		SURVEYORS	
1017 DODD PARK DRIVE, SUITE 204 • NACOGDOCHES, TEXAS 77860 • (409) 776-5700			
DAB & DENTON, L.L. BATE, JR. • LUFKIN, TEXAS 77601 • (409) 437-4500			
© 2013 ALL RIGHTS RESERVED BY GOODWIN-LABITER, INC. UNAUTHORIZED USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN CONSENT FROM GOODWIN-LABITER, INC.			
Date: 08-23-13	Drawn By: CKE	App'd By: MC	Client: SSC Service Solutions
Survey Plat of a 12.45 Acre Tract in the J. E. Scott Survey, Abstract No. 50, City of College Station, Brazos County, Texas.			Job Number: 899249 Sheet No.
			1 of 1

FINAL SITE BOUNDRY



AUGUST 2013

1" = 40'

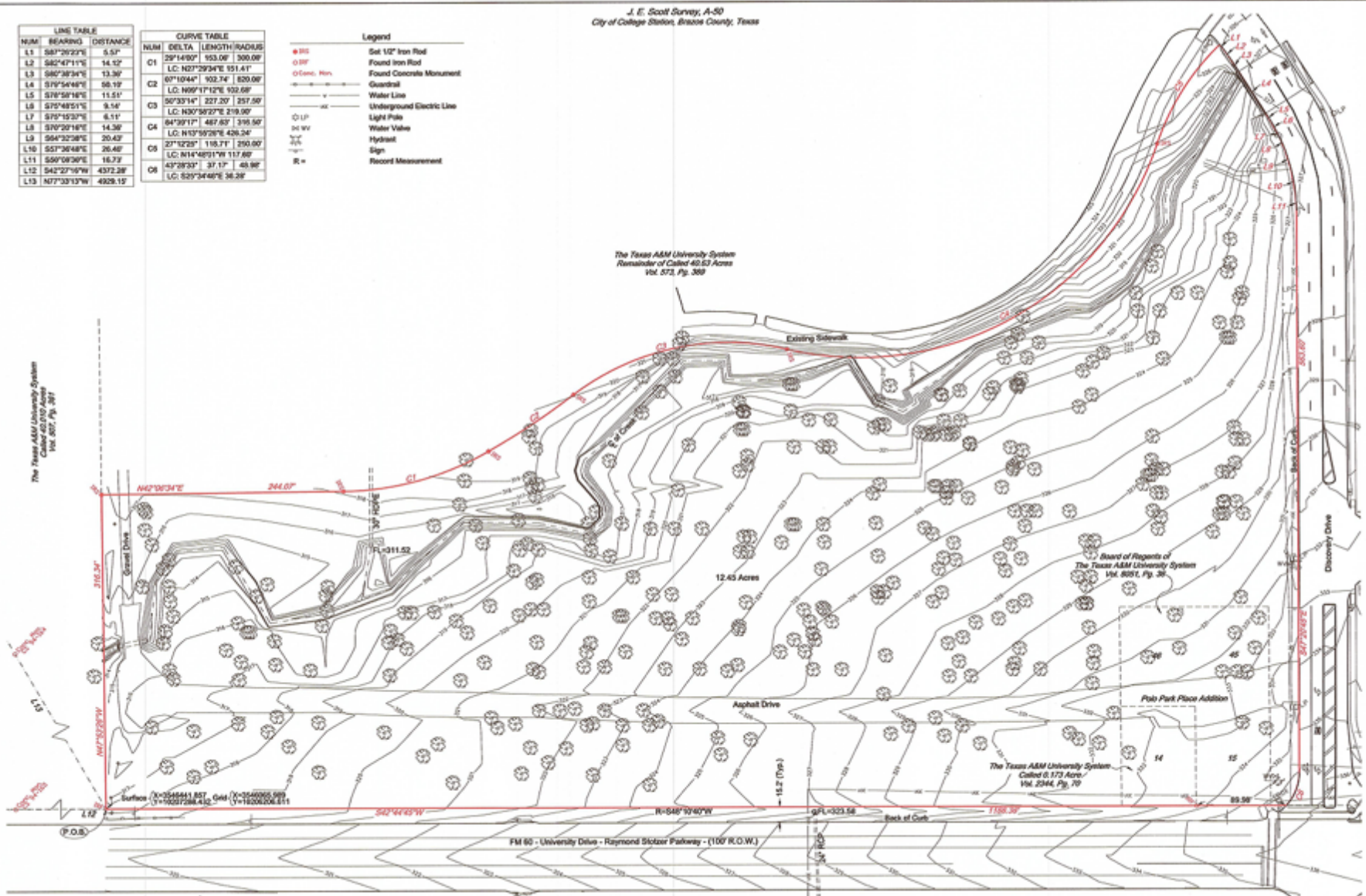
SITE PLAN
DISCOVERY PARK CENTER
COLLEGE STATION, TEXAS

UTILITY INFRASTRUCTURE
PG&L
Copyright

LINE	BEARING	DISTANCE
L1	S87°29'22"E	5.57'
L2	S42°47'11"E	14.12'
L3	S60°38'34"E	13.36'
L4	S77°54'48"E	56.19'
L5	S78°59'18"E	11.51'
L6	S75°48'51"E	9.54'
L7	S75°15'32"E	6.11'
L8	S70°30'18"E	14.36'
L9	S64°32'38"E	20.62'
L10	S57°36'48"E	26.46'
L11	S59°08'28"E	16.73'
L12	S42°22'19"W	4372.28'
L13	N77°33'13"W	4928.19'

CURVE	DELTA	LENGTH/RADIUS
C1	29°14'00"	193.06' / 300.00'
	LC: N23°29'34"E 151.41'	
C2	60°10'44"	102.74' / 820.00'
	LC: N09°11'12"E 132.68'	
C3	50°35'14"	227.20' / 257.50'
	LC: N30°59'27"E 219.99'	
C4	84°39'17"	487.62' / 376.50'
	LC: N13°59'26"E 426.24'	
C5	27°12'28"	118.71' / 290.00'
	LC: N14°48'11"W 117.89'	
C6	43°28'30"	37.17' / 48.88'
	LC: S25°34'48"E 36.28'	

Legend	
● IRG	Set 1/2" Iron Rod
○ IRF	Found Iron Rod
○ C&M, H&M	Found Concrete Monument
—	Guardrail
—	Water Line
—	Underground Electric Line
○ LP	Light Pole
W	Water Valve
H	Hydrant
S	Sign
R	Record Measurement



Notes:

1. Bearings are based on Texas Central Zone Values and are related to City of College Station G.P.S. control monuments CS 94-104 & CS 94-165. All distances are



G-L

GOODWIN-LASITER, INC.
ENGINEERS - ARCHITECTS
SURVEYORS

PRELIMINARY TOPOGRAPHY PLAN

PARKING ANALYSIS

Required Stalls:

Office 90,000 SF @ 4/1,000	360 Stalls
Research Bldg 2 45,000 @ 2.5/1,000	112 Stalls
Research Bldg 3 45,000 @ 2.5/1,000	112 Stalls
Commons Pavilion 9,500 SF	0 Stalls
Subtotal	584 Stalls

Shared Parking Diversity 85% less

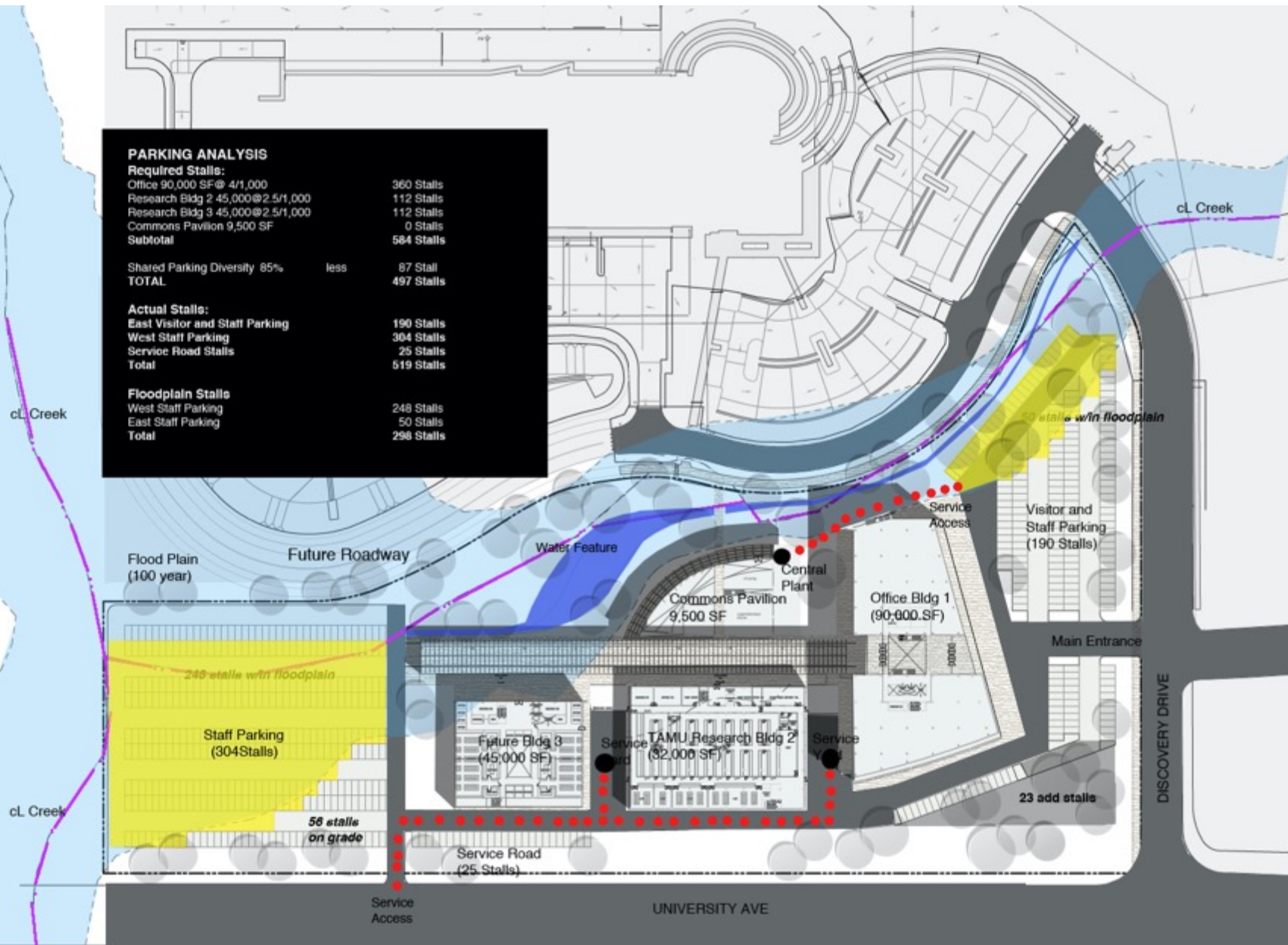
TOTAL 497 Stalls

Actual Stalls:

East Visitor and Staff Parking	190 Stalls
West Staff Parking	304 Stalls
Service Road Stalls	25 Stalls
Total	519 Stalls

Floodplain Stalls

West Staff Parking	248 Stalls
East Staff Parking	50 Stalls
Total	298 Stalls



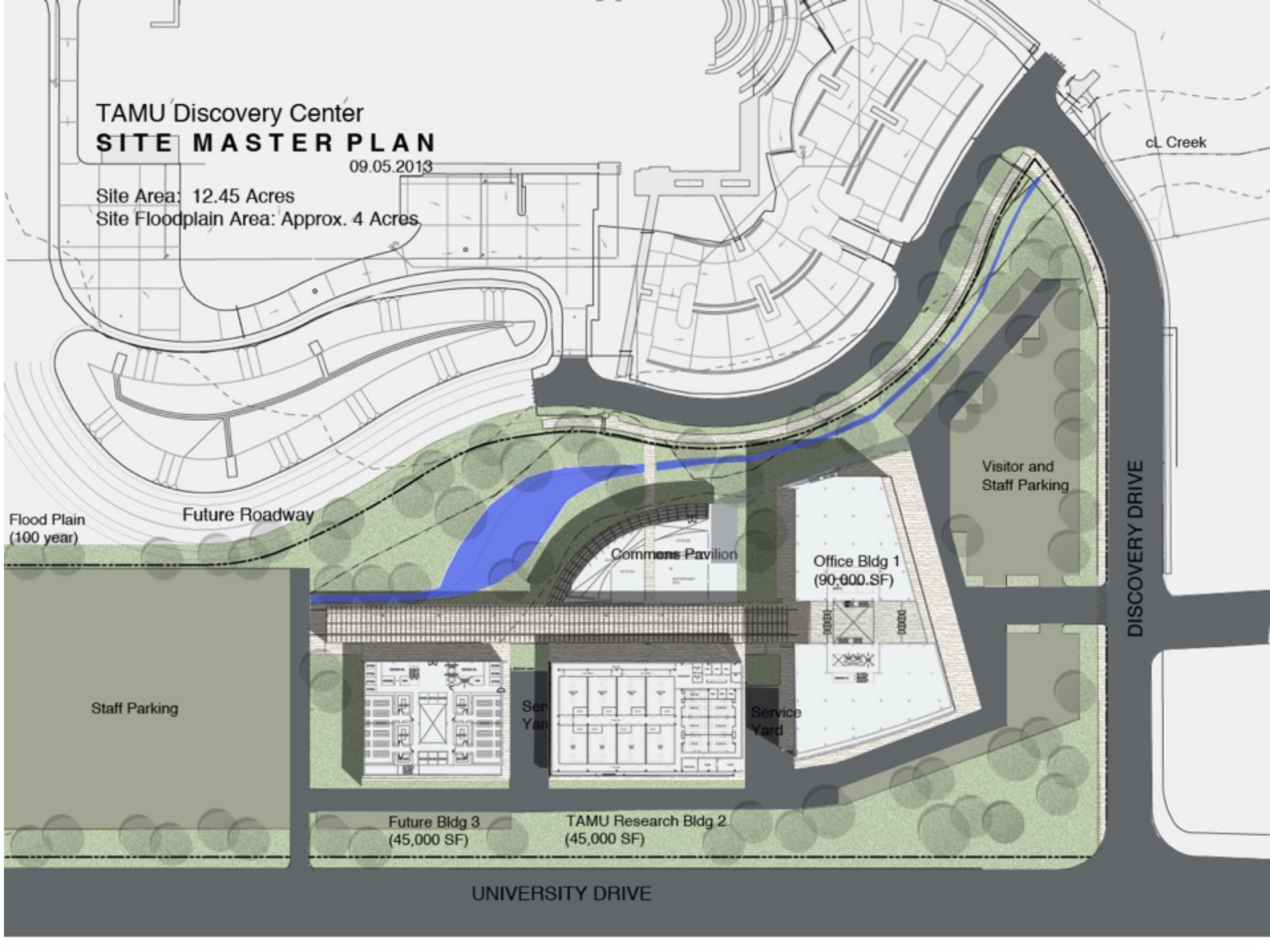
SITE ANALYSIS

TAMU Discovery Center SITE MASTER PLAN

09.05.2013

Site Area: 12.45 Acres

Site Floodplain Area: Approx. 4 Acres



OFFICE BUILDING 1

OFFICE BUILDING 1

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the concept design is as follows:

CONCEPT

- *Interactive multi-tenant office building for TAMU and Industry Partners; 90,000 SF*
- *Atrium Lobby provide a common interactive environment for Discovery*
- *Site placement provides strong “front door” and high profile image for the Discovery Center*
- *Incorporate Faculty Restaurant, Bar, and Conference Facility*

Interaction Leads to Innovation



OFFICE BUILDING 1

Based Upon the RFP Submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the concept design is as follows:

PLANNING

- *Level 1:* *Front Door with Visitor Parking*
Prospective TI with Visualization Center and Data Center * *TI Confirmation*
Wed
Consideration of depressed slab for Data Cabling
Connectivity to the Main Street Spine
Service and Restaurant Access
- *Level 2/3:* *Multi-Tenant Space; Dry Lab Capability*
15' Floor-to-Floor; Open Areas with OVHD Cable Tray
Incubator Office w Access to Research Labs in Bldg 2 & 3
- *Level 4* *Roof Top Restaurant; Conference Center; Mechanical* * *Height Limit*

Interaction Leads to Innovation



OFFICE BUILDING 1

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the concept design is as follows:

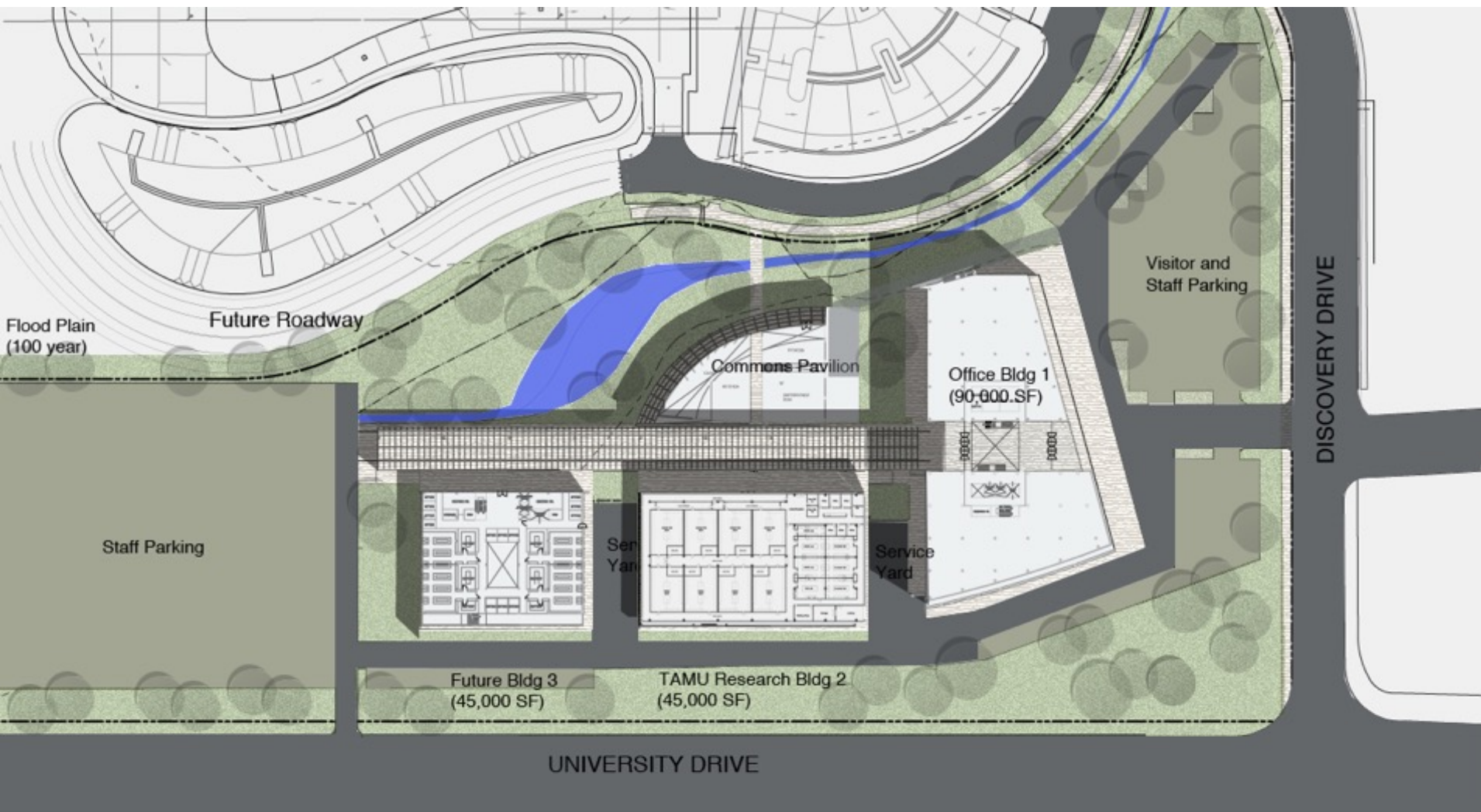
DESIGN ISSUES

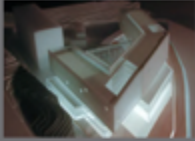
General:

- *Number of Levels; Three vs. Four Levels*
- *Structural System and Grid*
- *Core Location: Elevator and Restrooms*
- *MEP System Support Space; Distribution and Closets*
- *IT System Support Space; Distribution and Closets*
- *Grounding System*
- *UPS Capabilities*

Interaction Leads to Innovation







COLLABORATIVE OFFICE BUILDING (BUILDING 1)

The 90,000 SF Office Complex is designed as a three-story atrium office building. The floor plate configuration allows for maximum flexibility from single to multi-tenant leasing scenarios. The atrium design with intercommunicating stairs and elevator and restroom core off the atrium circulation space creates a highly interactive environment. The ground floor of the atrium is on axis with the "pedestrian mainstreet" and provides seem-less flow of movement throughout

the complex. The office building has premium floor-to-floor height at 15 feet. The office is planned to incorporate a fourth floor with covered outdoor terrace restaurant for tenants, guests, and TAMU campus visitors. The restaurant benefits from views of the TAMU campus to east, the Research Park to the south, and the overall complex to the west.



DDM GROUP - TEXAS CONSORTIUM

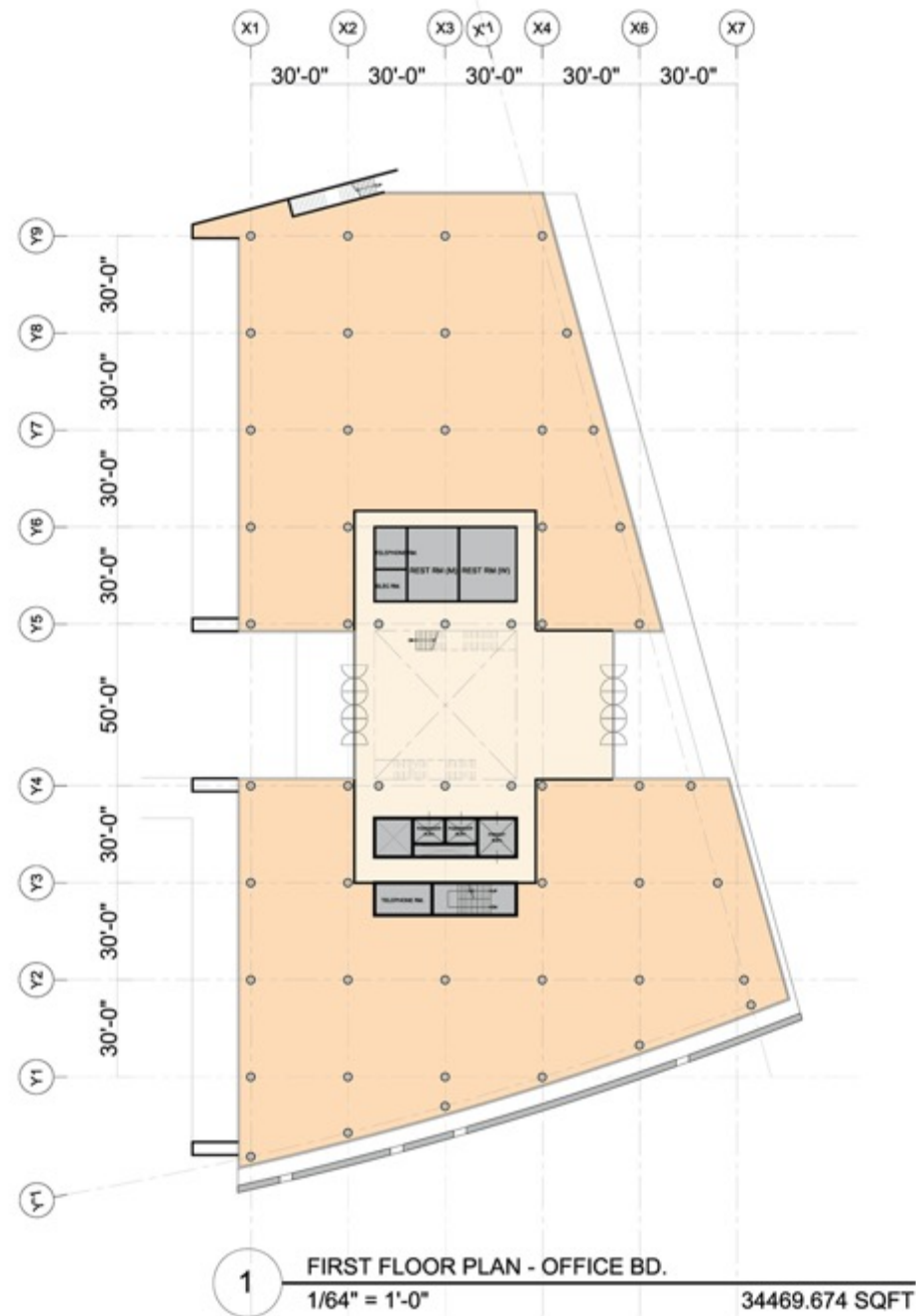
drds

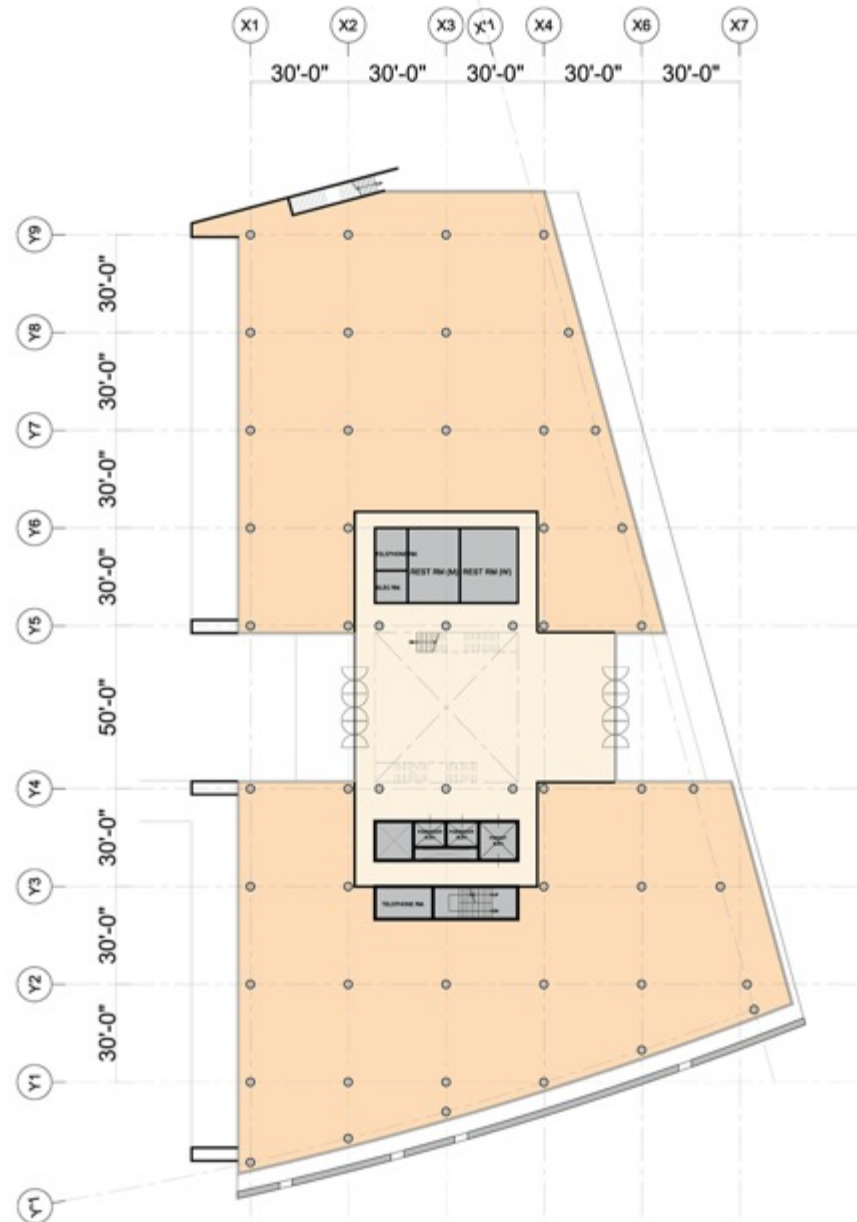
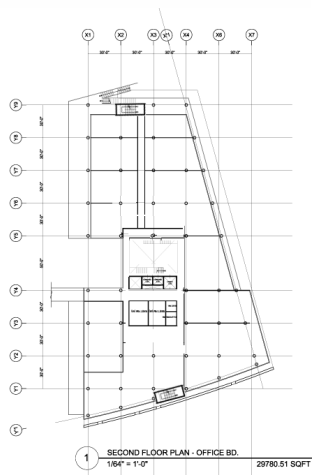
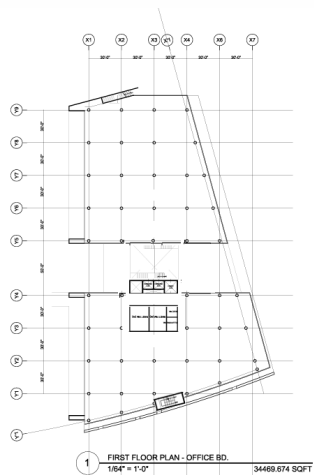
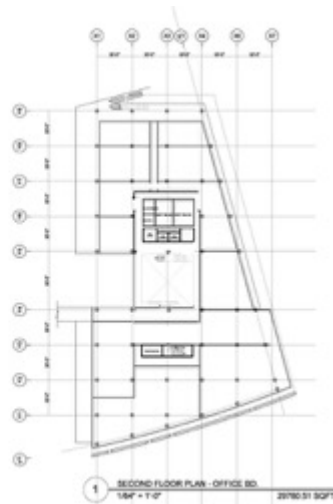
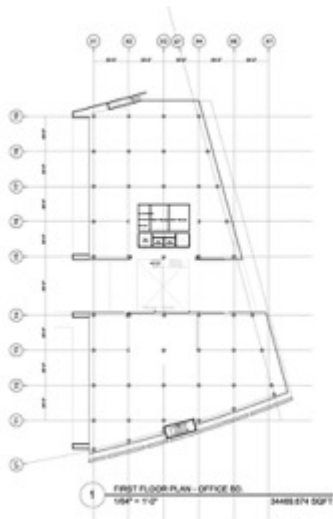
Laboratory Building
Design Consultants

PGAL

507
NATTSFELDE & PARTNERS
CONSULTING ENGINEERS, INC.

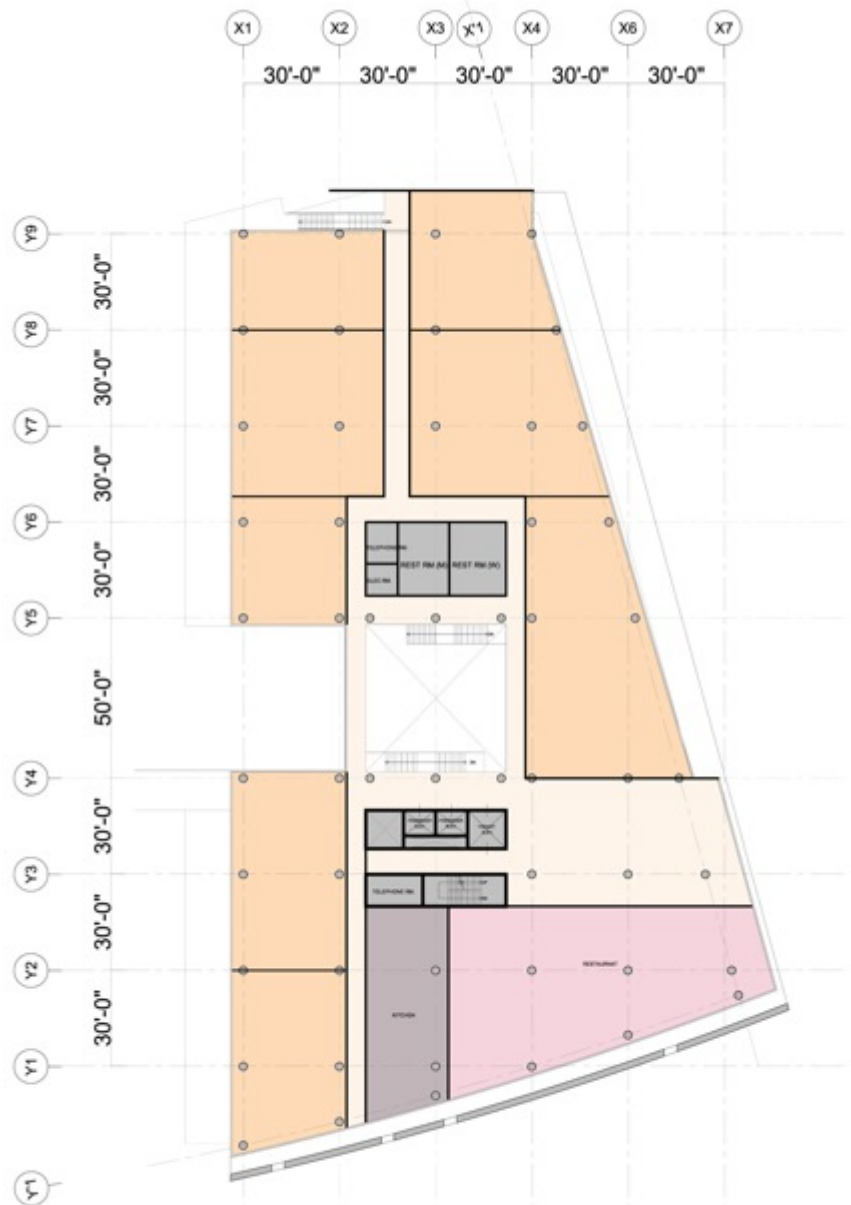






CORE STUDIES



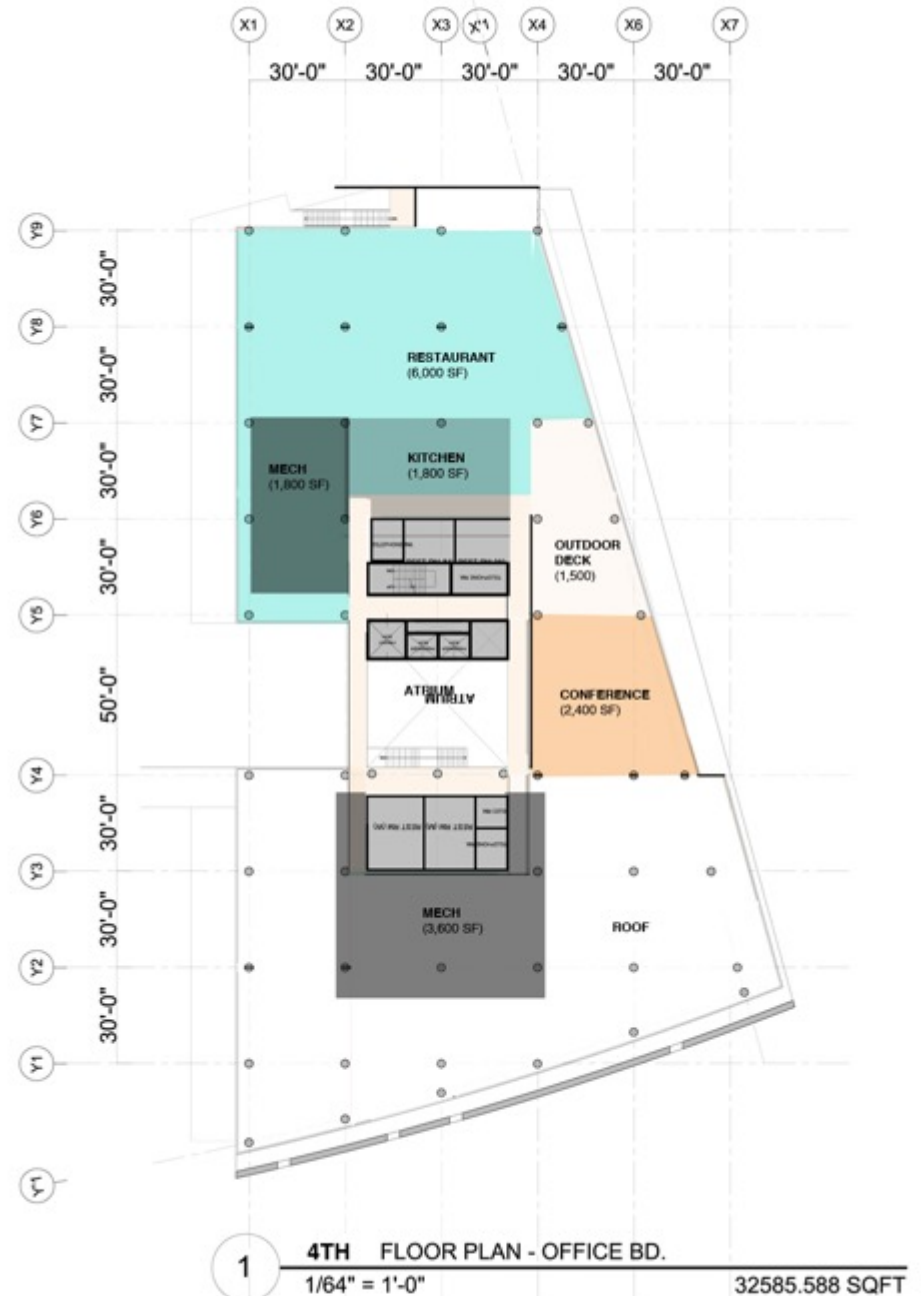
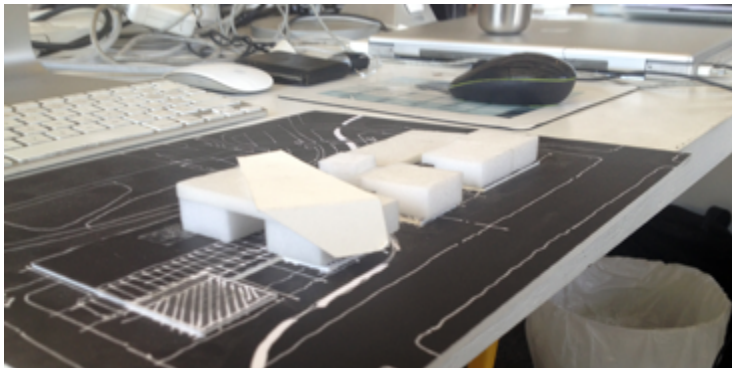


1

THIRD FLOOR PLAN - OFFICE BD.

1/64" = 1'-0"

32585.588 SQFT





Perspective View of “Mainstreet” and Research Buildings

RESEARCH BUILDING 2

RESEARCH BUILDING 2

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

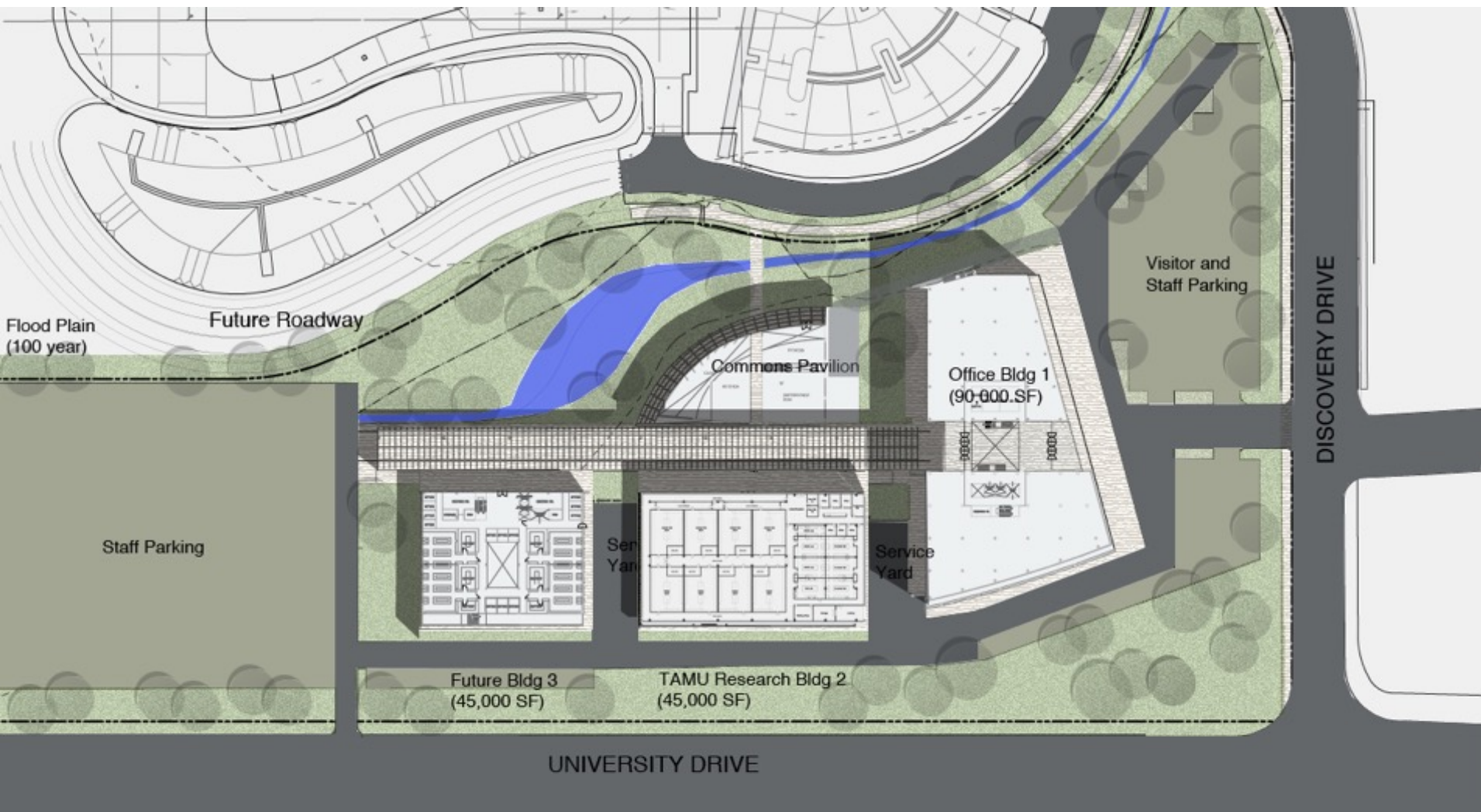
CONCEPT

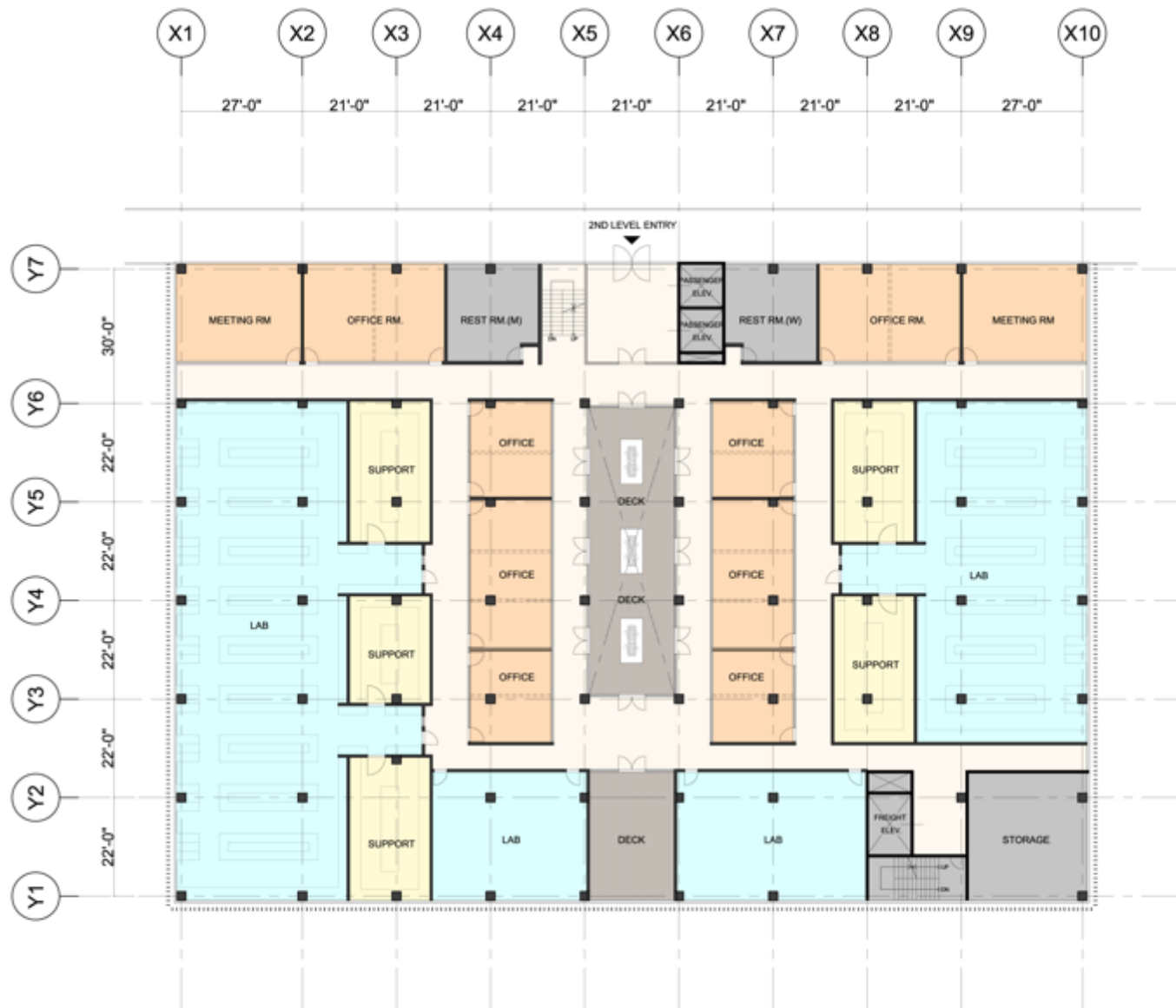
- *Interactive multi-tenant research building for TAMU and Industry Partners; 45,000 SF*
- *Lab Building under 30 years lease and required flexibility for wet and dry labs*
- *Master Plan Concept as a “campus building” linked to Mainstreet Pedestrian Spine*
- *Flexibility during design process to establish optimal footprint, configuration, height*
- *Plan building, where possible, on pure lab module 11' x 33'*

Interaction Leads to Innovation



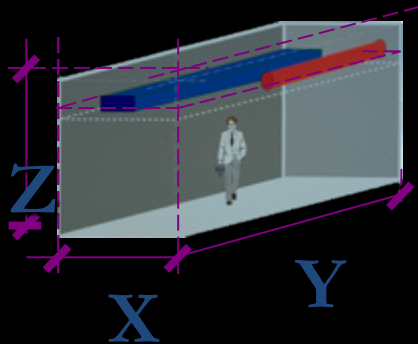
d r d s





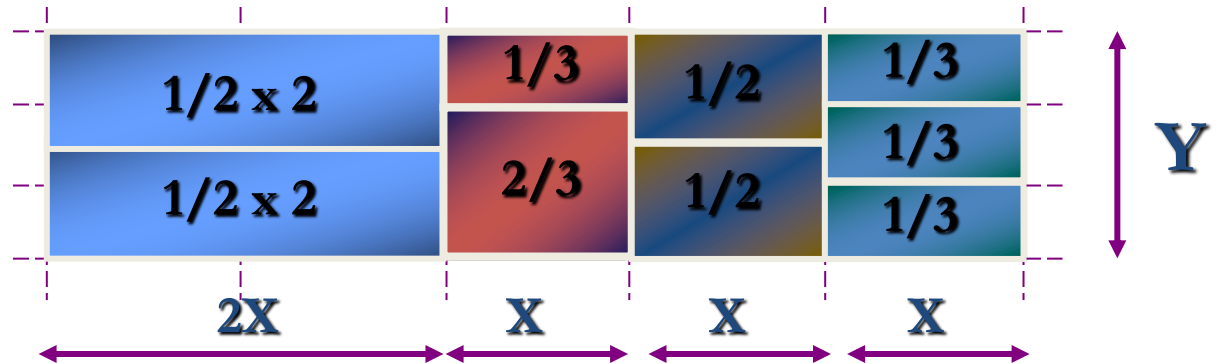
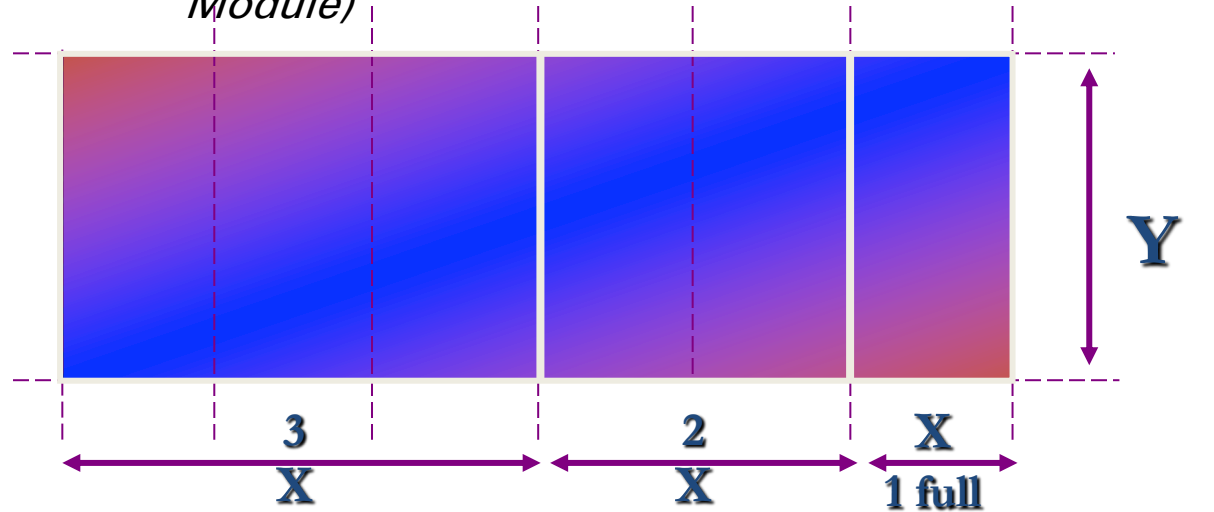
2nd Floor Plan - Research Building 03
approx. 30,000 Sqft

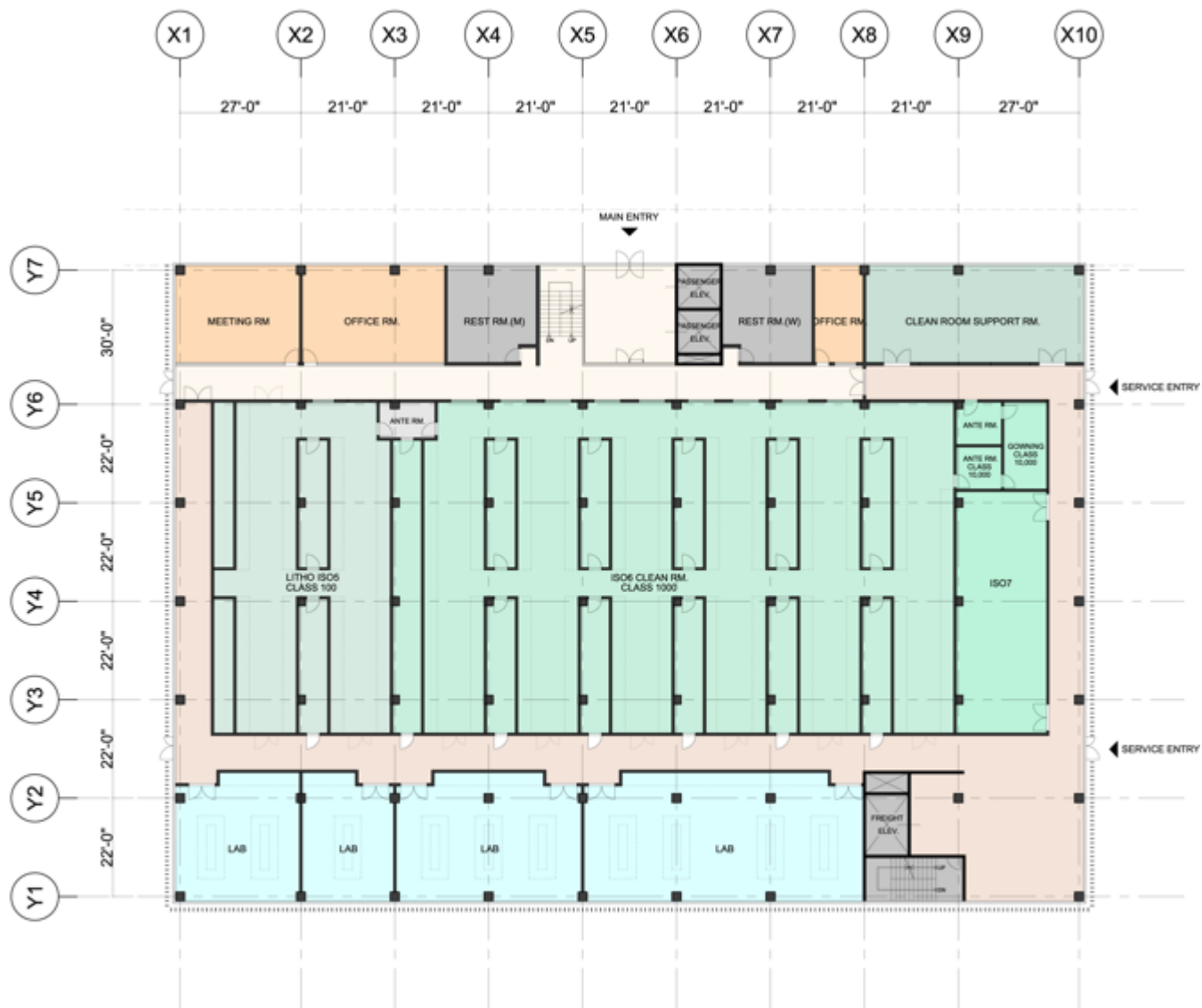




Lab Planning Module

- *Module Arrangement (Divisibility 11' x 11' Module)*





1st Floor Plan - Research Building 03
approx. 30,000 Sqft



RESEARCH BUILDING 2

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

INITIAL PROGRAMMING: TAMU Tenant 1

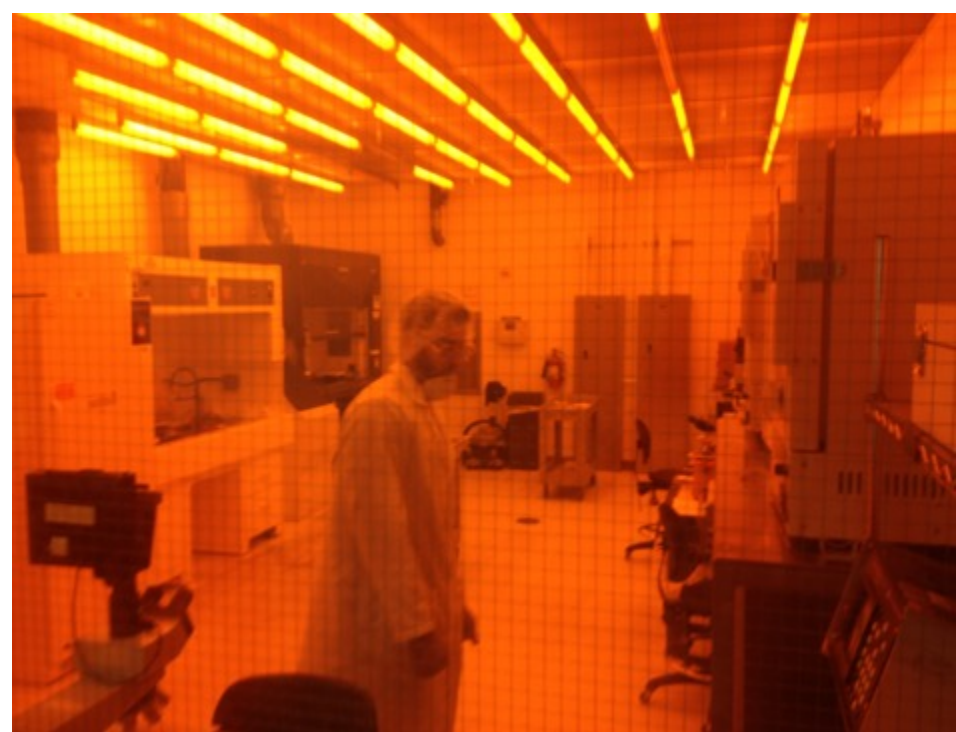
- *NANO LABORATORY (16,000 SF Net)*
 - *12,000 SF Clean Room; ISO 5,6 & 7 (Class 100, 1,000 % 10,000 Clean Rooms); 7,000 SF Aggie Fab & 5,000 SF Nano*
- *4,000 SF Support*
 - *Nano Labs*
 - *Wet Lab (Shared w MCF User 2)*
 - *Welding Shop*
 - *Chemical & Bottle Storage*
 - *Support Offices & Staff*

Interaction Leads to Innovation









RESEARCH BUILDING 2

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

INITIAL PROGRAMMING: TAMU Tenant 1
MCF LABORATORY (13,500 SF Net)

- *5,000 SF Clean Room;*
- *Shared Wet Lab*
- *7,500 SF Support*

Interaction Leads to Innovation



RESEARCH BUILDING 2

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

INITIAL PLANNING

- *NANO LABORATORY (16,000 SF Net)*
 - *Clean Room Alternative: Conventional and MCR (Modular Clean Room)*
 - *Tour Kalon Facility; Walker MCR Standard 18' x 46'*
 - *MCR Opportunity*
 1. *Schedule;*
 2. *Commissioning;*
 3. *User Future Clean Room Class Flexibility*

Interaction Leads to Innovation

Design Team

Design	DRDS
Drawn	
Checked	
Project No.	

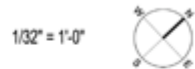
Drawing Notes

Legends

Revisions

NO.	DATE	DESCRIPTION

Scale: 1/32" = 1'-0"



Date:

09. 04. 2013

Sheet Title / Number

GROUND LEVEL PLAN
RESEARCH BLDG.2



1

GROUND LEVEL PLAN - RESEARCH BLDG.2
1/32" = 1'-0"

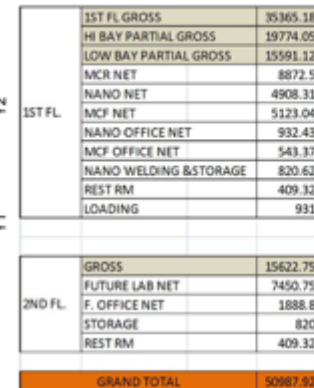
RESEARCH BUILDING 2

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

CONCEPT DESIGN

- *NANO LABORATORY (16,000 SF Net)*
 - *MCR or Equivalent in Single-Story High Bay Steel Structure w Mechanical Mezzanine*
 - *Nano and MCF Labs on Two-Story Concrete Structure*
- *MCF LABORATORY (6,000 SF Net)*
- *Chem LABORATORY (10,000 SF Net) on Second Floor*

Interaction Leads to Innovation



Design Team

Design DRDS
Drawn
Checked
Project No.

Drawing Notes

Legends

Revisions

NO.	DATE	DESCRIPTION

Scale: Plan North

1/32" = 1'-0"

Date

09.10.2013

Sheet Title / Number

2DN FLOOR PLAN
RESEARCH BLDG.2



1ST FL.	1ST FL GROSS	35365.18
	HI BAY PARTIAL GROSS	19774.05
	LOW BAY PARTIAL GROSS	15591.12
	MCR NET	8872.5
	NANO NET	4908.31
	MCF NET	5123.04
	NANO OFFICE NET	932.43
	MCF OFFICE NET	543.37
	NANO WELDING & STORAGE	820.62
	REST RM.	409.32
2ND FL.	LOADING	931
	GROSS	15622.75
	FUTURE LAB NET	7450.75
	F. OFFICE NET	1888.8
	STORAGE	820
	REST RM.	409.32
GRAND TOTAL		50987.93

1

2DN FL PLAN - RESEARCH BLDG.2
1/32" = 1'-0"

TEXAS A&M
DISCOVERY CENTER

drds

2404 Wilshire BLVD, Suite 1C
Los Angeles, USA, 90057
1-213-382-4118, www.drds-studio.com

Design Team

Design	DRDS
Drawn	
Checked	
Project No.	

Drawing Notes

Legends

Revisions

NO.	DATE	DESCRIPTION

Scale Plan North

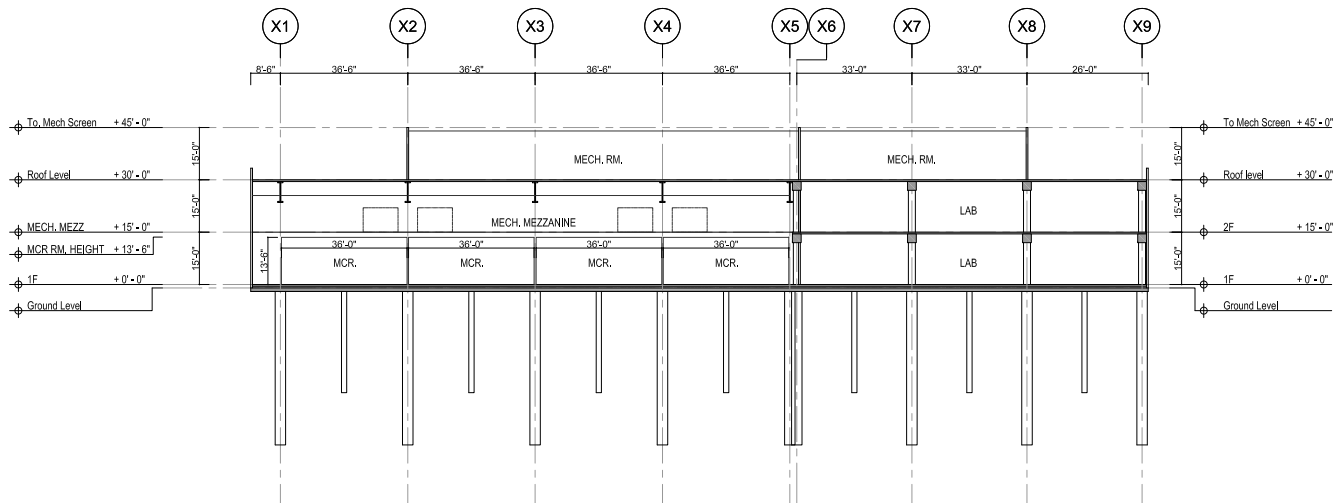
1/32" = 1'-0"

Date

09. 05. 2013

Sheet Title / Number

LONGITUDINAL SECTION
RESEARCH BLDG.2



1

Longitudinal Section - Research Building 2

1/32" = 1'-0"

RESEARCH BUILDING 3

RESEARCH BUILDING 3

Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

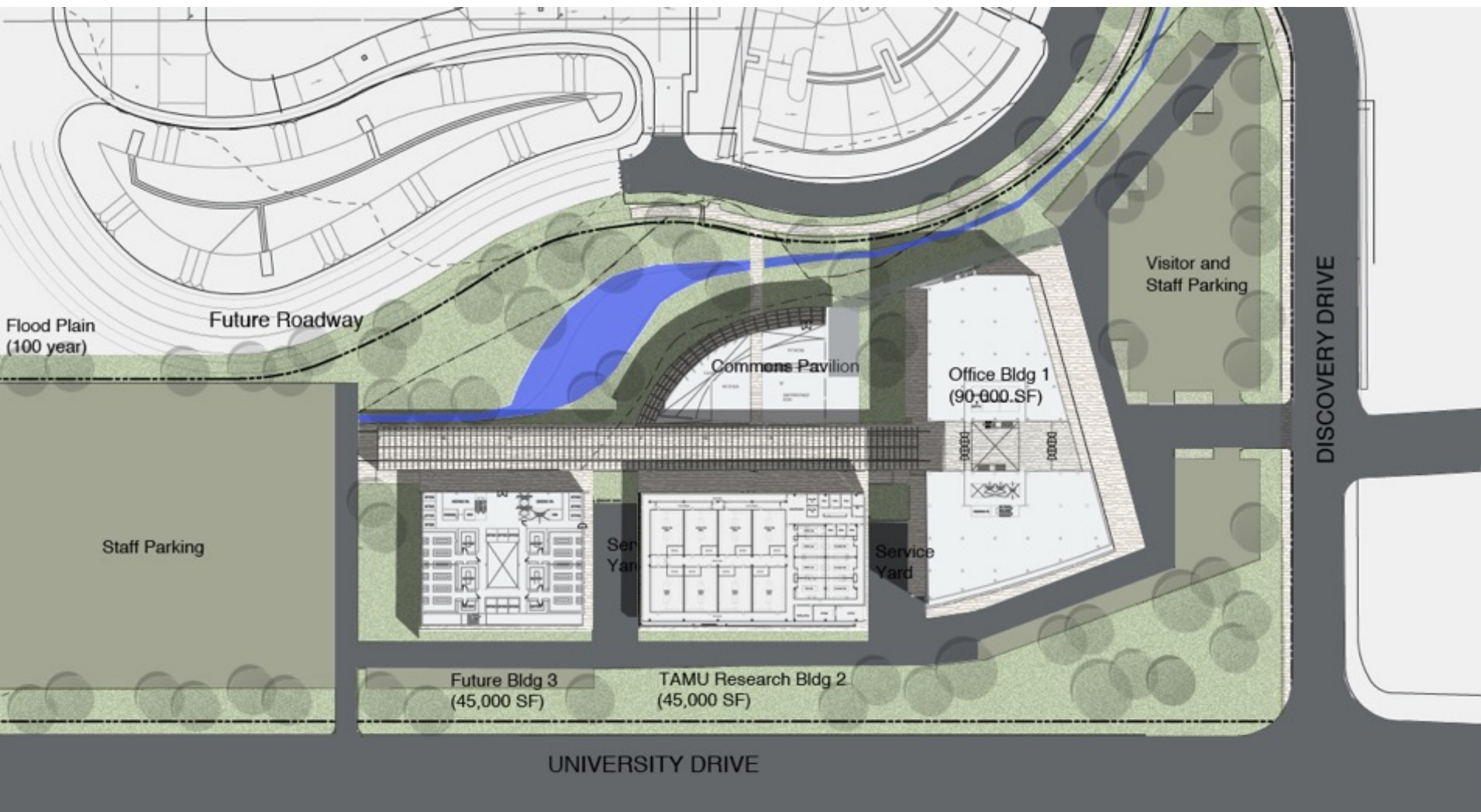
CONCEPT

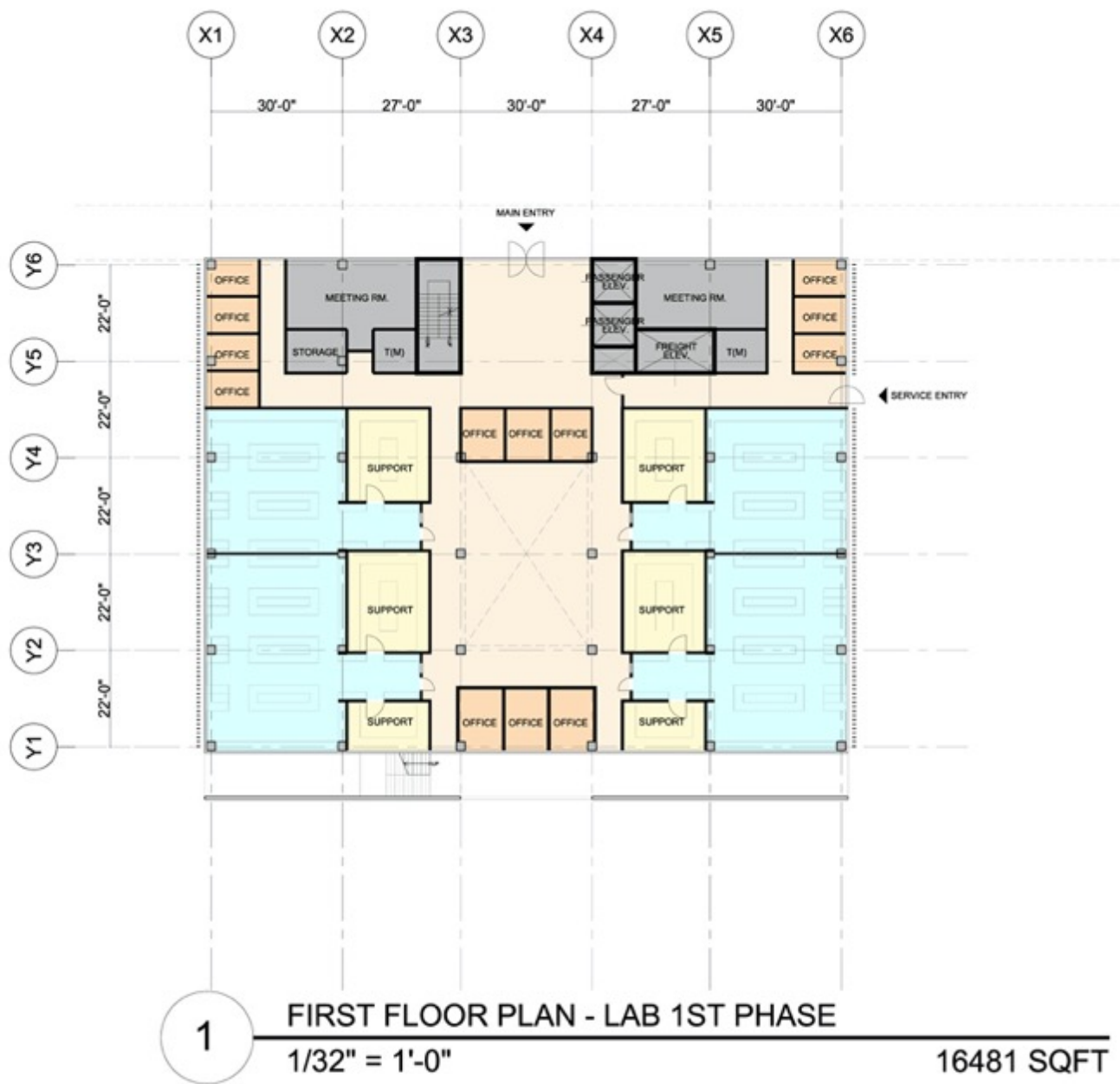
- *Interactive multi-tenant research building for TAMU and Industry Partners; 45,000 SF*
- *Lab Building under 30 years lease and required flexibility for wet and dry labs*
- *Master Plan Concept as a “campus building” linked to Mainstreet Pedestrian Spine*
- *Flexibility during design process to establish optimal footprint, configuration, height*
- *Plan building, where possible, on pure lab module 11' x 33'*

Interaction Leads to Innovation



d r d s







Perspective View of "Mainstreet" at Research Building 3

COMMONS PAVILION 4

COMMONS PAVALION

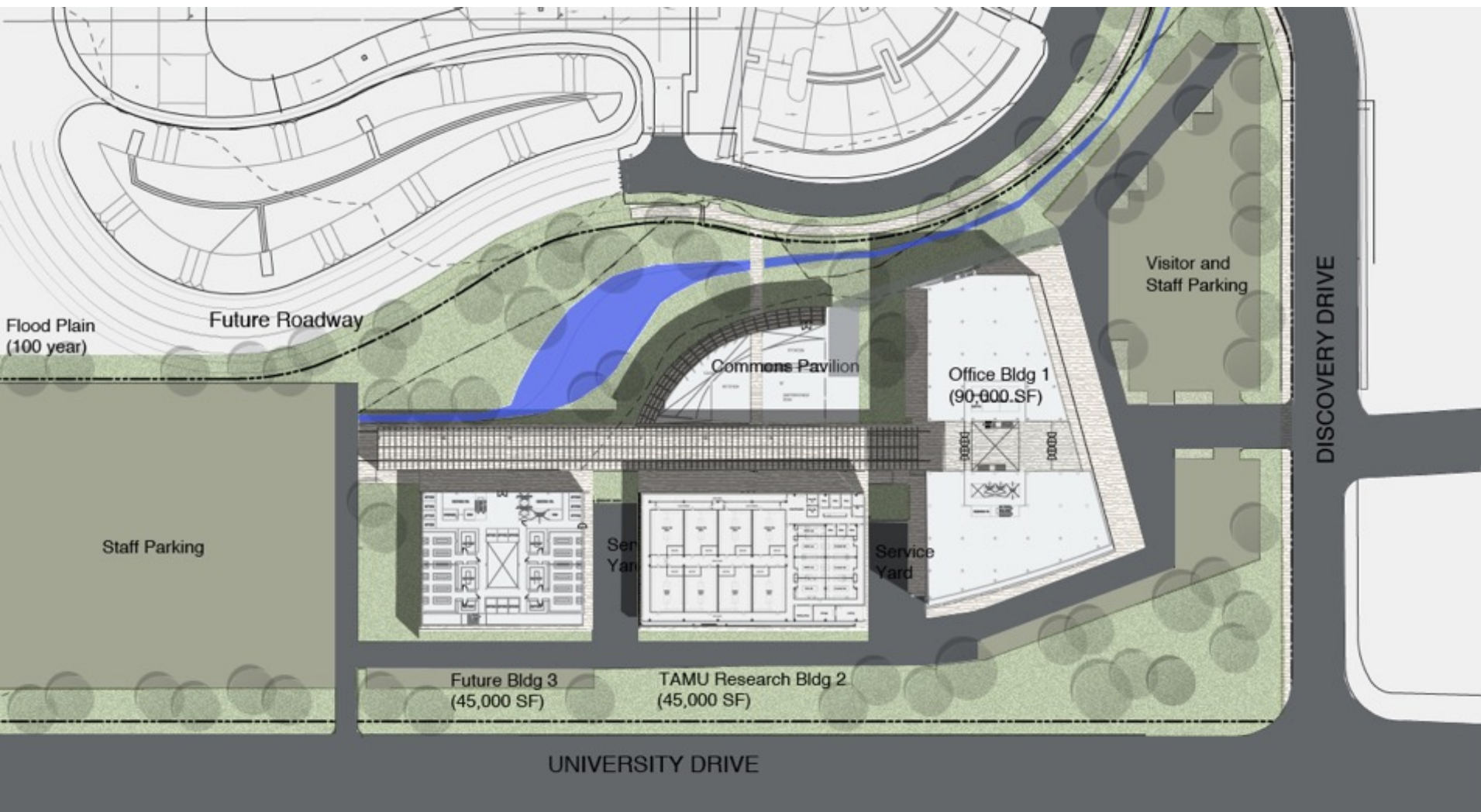
Based upon the RFP submission on April 21, 2013 the Discovery Center Master Plan the project has resubmitted for consideration June 27, 2013 and received TAMU Board of Regents approval on Sept 7, 2013. A summary of the Initial Programming and Concept Design is as follows:

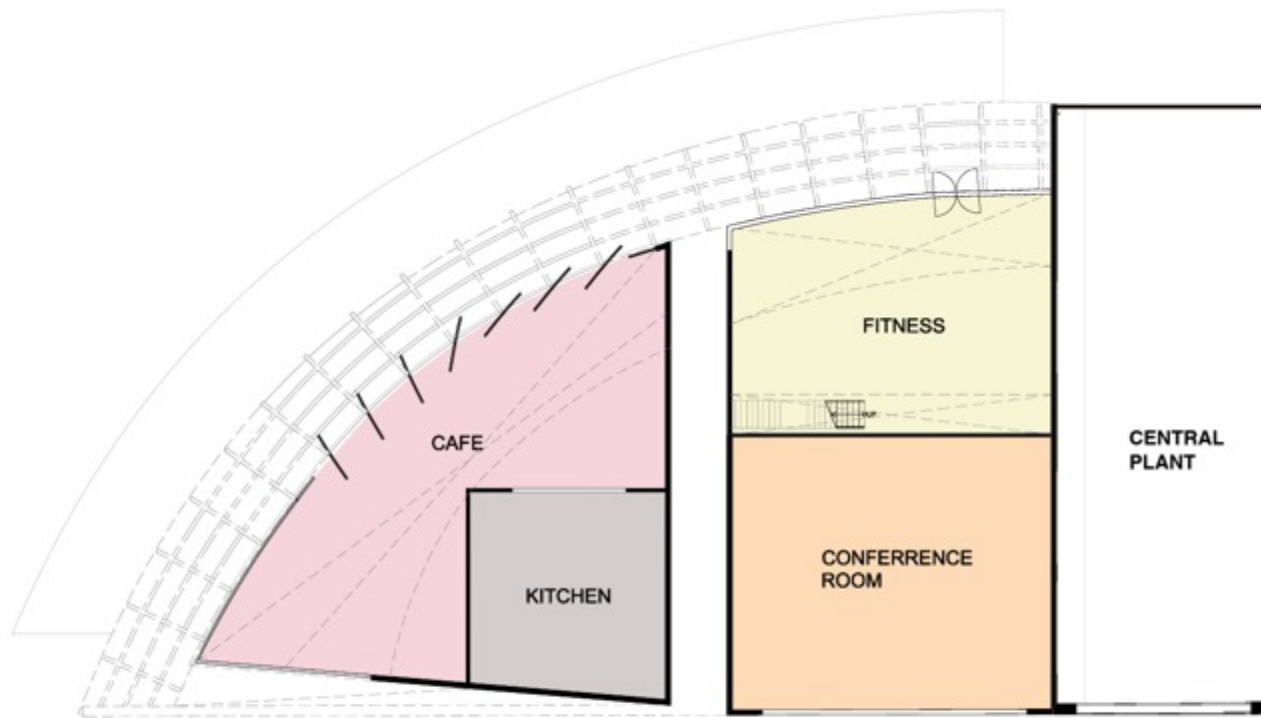
CONCEPT

- *9,500 SF Amenity Building with Café, Fitness, and Conference/ Exhibition Facilities*
- *Add Central Plant Mechanical (UPS, Other; no Chilled Water; ??? Hot water.*

Interaction Leads to Innovation







1

GROUND FLOOR PLAN - PAVILION

1/32" = 1'-0"



Perspective View of Commons Pavilion



INTRODUCTION

OVERVIEW

TEAM

DESIGN

DEVELOPMENT SCHEDULE

SUMMARY

DIALOG

CRITICAL PATH: SHORT + MID-TERM

Based upon the current ground lease and lease negotiation for the Tenant Improvement the Critical Path issues are summarized as follows:

DEVELOPMENT

- *TAMU Ground Lease Approved 09.07.2013.*
- *TAMU Resarch Bldg 2: Lease Negotiations (Occupancy Aug 2014)*
- *TAMU Office Building 1: Lease Negotiations (Occupancy Sept/Oct 2014)*
- *TAMU Commons Pavilion: Completion Sept/Oct 2014.*
- *Financial Design Package: Completion Sept 30, 2013*
- *Project Financing in place: November 1, 2013*

Interaction Leads to Innovation





INTRODUCTION
OVERVIEW
TEAM
DESIGN
DEVELOPMENT SCHEDULE
S U M M A R Y
DIALOG



CRITICAL PATH: SHORT + MID-TERM

Based upon the current ground lease and lease negotiation for the Tenant Improvement the Critical Path issues are summarized as follows:

DESIGN

TAMU Master Plan

- *Civil Engineering*
 - *Initial Site Clearing*
 - *Grading*
 - *Utilities*
 - *Water Retention*
- *Geotechnical (Soils Report)*

Interaction Leads to Innovation



CRITICAL PATH: SHORT + MID-TERM

Based upon the current ground lease and lease negotiation for the Tenant Improvement the Critical Path issues are summarized as follows:

DESIGN

TAMU Resarch Bldg 2

- *Programming/ Concept Design*
 - *Finalize Tenant Spaces*
 - *Finalize Building Size, Configuration, and Footprint*
- *Schematic Design*
 - *Fix Column Grid*
 - *Structural*
 - *MEP/ IT Concept*
 - *Exterior Façade*

Interaction Leads to Innovation



CRITICAL PATH: SHORT + MID-TERM

Based upon the current ground lease and lease negotiation for the Tenant Improvement the Critical Path issues are summarized as follows:

DESIGN

TAMU Office Building 1: Lease Negotiations (Occupancy Sept/Oct 2014)

- *Confirm Prospective Anchor Tenant*
- *Three or Four Levels*
- *Schematic Design*
 - *Coordination of Bldg Systems*
 - *Core location and configuration*
 - *Roof top Mech Penthouse*
 - *Structural*
 - *Exterior Facade*

Interaction Leads to Innovation



CRITICAL PATH: SHORT + MID-TERM

Based upon the current ground lease and lease negotiation for the Tenant Improvement the Critical Path issues are summarized as follows:

DESIGN

TAMU Commons Pavilion: Completion Sept/Oct 2014.

- *Confirm Program*
 - *Size of Café; Kitchen Type*
 - *Fitness Center Ops*
 - *Conferencing Facilities Capabilities*
- *Confirm Mezz in our Out*
- *Planning for Central Plan*
- *Coordination with Landscape Water Feature and Retention*

Interaction Leads to Innovation





INTRODUCTION
OVERVIEW
TEAM
DESIGN
DEVELOPMENT SCHEDULE
SUMMARY
DIALOG

