





# **TABLE OF CONTENTS**

ME	SSAGE FROM LEADERSHIP	Ш
AC	KNOWLEDGMENTS	IV
	RODUCTION	
IIVI	PREFACE	
	PLANNING PROCESS	
	ENGAGEMENT	
$\Box$	NTEXT	
-	PLANNING CONTEXT	
	METROPLEX CONTEXT	
	FRISCO CONTEXT	
	LOCAL CONTEXT	
	THE SITE TODAY	18
CA	MPUS MASTER PLAN	27
	PLANNING PRINCIPLES	30
	CAMPUS FRAMEWORK	34
	MASTER PLAN OVERVIEW	40
SY:	STEM INTEGRATION	57
	MOBILITY	58
	STORMWATER	72
	UTILITIES	73
DEVELOPMENT PLAN		
	SPACE NEEDS ASSESSMENT	86
	FIRST BUILDING	88
	NEAR-TERM GROWTH	90
	MID-TERM GROWTH	92
	LONGER RANGE GROWTH	94
	DEVELOPMENT SUMMARY	96
GU	IDELINES	99
	PLANNING GUIDELINES	100
	ARCHITECTURAL GUIDELINES	
	LANDSCAPE GUIDELINES	
	WAYFINDING GUIDELINES	
	SUSTAINABILITY	
	REVIEW PROCESS	134

# FROM THE CHANCELLOR

For over 120-years, the campuses of the University of North Texas System have grown alongside the communities of the North Texas Region. We are delighted to continue this tradition with the establishment of the University of North Texas Frisco Branch Campus. This campus will bring the innovation and ambition that UNT embodies as one of the nation's 115 Tier One research universities to the City of Frisco.

The establishment of a new campus, an incredibly rare and unique opportunity, is a milestone event in the history of UNT. This opportunity arises from a dynamic partnership between multiple public entities seeking to provide convenient and first-rate higher education choices that respond to a complex, forward-looking community of industries. We would like to extend our sincere thanks to the City of Frisco, the Frisco Economic Development Corporation, Collin County, Collin College and the Frisco Independent School District for collaborating to craft a shared vision for the future of UNT Frisco.

One of the nation's fastest growing communities, Frisco provides students with unique access to Fortune 500 and start-ups companies in Collin County. The UNT Frisco branch campus is especially well positioned to continue and expand our relationship with industry partners to enrich a culture of co-creation with our students that prepares them to be competitive in a fast and ever-evolving workforce.

We look forward to the continued collaboration with our partners in serving the rapidly expanding Frisco region through the evolution of the UNT Frisco branch campus and invite you to be an engaged contributor in the success of our students, the University of North Texas System and the North Texas Region.



Lesa Roe University of North Texas System, Chancellor

# FROM THE PRESIDENT

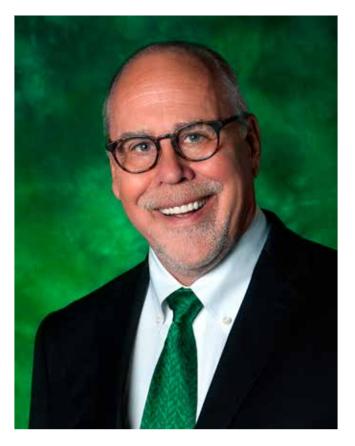
I am excited to share with you our vision for the new University of North Texas Frisco Branch Campus. The Campus Master Plan contained within this report establishes a framework that will guide the growth and development of the new campus for decades to come and support UNT's mission to prepare students to thrive in a rapidly changing world.

Above all, what stands out is the incredible amount of engagement and participation that led to this shared vision. Working together as a team, countless hours were spent listening to each other, deliberating options and sharing big ideas. Collectively, we have crafted a campus environment that will foster an extraordinary sense of place and inspire all who visit.

While this plan provides a clear foundation to build upon, it is also important to recognize that this Campus Master Plan is a living plan, engrained with adaptability that will allow UNT and our partners to remain responsive to the constantly evolving needs, priorities and opportunities presented to us.

With our home in Denton, we've always been the world-class university next door, but now we are the global university available right outside your front porch. We are excited about developing what comes next and look forward to working seamlessly with our partners to ensure that UNT at Frisco graduates are uniquely qualified to become the innovative leaders of tomorrow and meet the creative economy's evolving needs.

This campus will enable UNT to truly integrate into and partner with the Frisco community. I am confident that this foundation will position the University of North Texas, the City of Frisco, and more broadly the entire North Texas region for great success.



Neal J. Smatresk University of North Texas, President

# **ACKNOWLEDGMENTS**

### UNIVERSITY OF NORTH TEXAS SYSTEM BOARD OF REGENTS

**Brint Ryan** 

Chairman

**Laura Wright** 

Vice Chairman

**Mary Denny** 

**Board Member** 

Milton B. Lee

**Board Member** 

A.K. Mago

Board Member

**Carlos Munguia** 

Board Member

**Amanda Pajares** 

Student Regent

**Rusty Reid** 

**Board Member** 

**Gwyn Shea** 

Board Member

B. Glen Whitley

Board Member

### UNIVERSITY OF NORTH TEXAS SYSTEM

Lesa Roe

**UNT System Chancellor** 

**Meredith Butler** 

Associate Director Facilities Planning and Development

Steve Maruszewski

Vice Chancellor for Facilities

Casandra Nash

Associate Vice Chancellor for Facilities Design & Construction

**Teresa Rogers** 

Senior Facilities Planner

Jeannine Vail

Senior Project Architect

### **CONSULTANT TEAM**

**Ayers Saint Gross** 

Master Planning

**Datacom Design Group** 

Technology Consultant

**Depiction Illustration** 

Professional Illustrator

**FocusEGD** 

Wayfinding & Signage Consultant

JQ Infrastructure

Civil & Structural Consultant

**Shah Smith & Associates** 

MEP Consultant

**SWA Group** 

Landscape Consultant

**TreanorHL** 

Associate Architect

Walter P. Moore

Transportation Consultant

### MASTER PLAN COMMITTEE

### UNIVERSITY OF NORTH TEXAS

#### **Bob Brown**

Senior Vice President for Finance and Administration, CPA

#### Allen Clark

Associate Vice President, Information Services

### Jennifer Evans-Cowley

Provost & Vice President of Academic Affairs

### Jonathon Fite

President, Professional Development Institute at the University of North Texas

### **Hope Garcia**

Director, Student Services University of North Texas at Frisco

### **Shannon Goodman**

Vice President, Enrollment

### **Arvind Mallik**

Assistant Dean, Strategy, Planning & Analysis

### Wesley Randall

Dean of New College in Frisco

### **David Reynolds**

Associate Vice President, Facilities

### John Richmond

Dean, College of Music

#### **Erik Trevino**

Grounds Manager

### **Elizabeth With**

Vice President, Student Affairs

### **COLLIN COUNTY**

### Susan Fletcher

Commissioner - Precinct 1

#### CITY OF FRISCO

### **Jeff Cheney**

Mayor

### **Jason Cooley**

Interim Manager of Intergovernmental Relations

### **Henry Hill**

Deputy City Manager

### Shona Huffman

Mayor Pro Tem

### **Shannon Keleher**

Director of Parks and Recreation

### **Ron Patterson**

President, Frisco Economic Development Corporation

### **FRISCO ISD**

### **Kenny Chandler**

Deputy Superintendent of Schools

### **Jamie Flemmer**

Elementary Science Coordinator

### **Katie Kordel**

Chief Academic Officer

### **Allison Miller**

Director of Community
Relations and Frisco Education Foundation

### Michael Waldrip

Superintendent

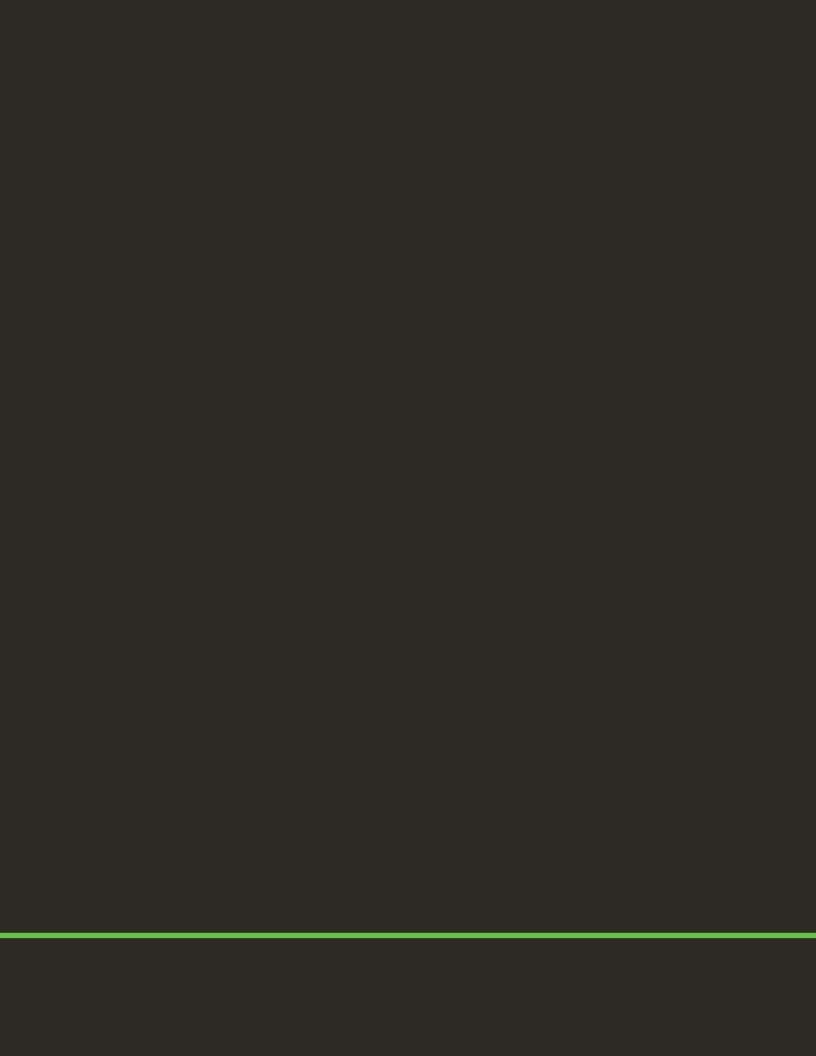
#### **COLLIN COLLEGE**

### **Cameron Neal**

**Associate Provost Instruction** 

### **Don Weasenforth**

Vice President / Provost, Frisco Campus



# INTRODUCTION



# **PREFACE**



### **Campus Master Plan**

The visionary aspirations set forth by the University of North Texas and their diverse partners for a new branch campus in the City of Frisco are expressed in physical form in the following 2019 Campus Master Plan. The development of a greenfield site for a new campus is a rare and special occasion – one acknowledged by the intensively collaborative and inclusive process undertaken to craft this master plan. The results illustrated in this report will guide the growth of the campus as it evolves into the future.

As one of the fastest growing cities in the nation, Frisco is home to a population seeking convenient higher education opportunities that respond to a complex, forward looking community of industries. The UNT Frisco

campus is uniquely positioned to respond to the above needs through the institution's ability to deliver distinct instructional programs, tailored to take advantage of the increasing digital, creative and sports economies in Frisco.

The UNT Frisco campus will be a decisive element in the continued success of the Frisco and the North Texas region. With thoughtful use of its physical assets, engagement of diverse partners and embracement of innovative pedagogy, the campus is set to enhance and expand the legacy of the University of North Texas.

Welcome to the future University of North Texas Frisco Branch Campus!

### **Before the Campus Master Plan**

In late 2017, UNT undertook an evaluation to understand the feasibility of establishing a new branch campus in Frisco, TX. This evaluation included a series of assessments that examined site options, business case models, demographic and market analysis, and program needs along with other pertinent factors to determine the feasibility of the proposed campus.

Having identified a strong need for the campus, an action item was submitted to the University of North Texas System Board of Regents in May 2018 requesting delegation of authority to proceed with the planning and preparation of an application for the branch campus. This action item was unanimously approved by the board.

The next major step occurred with the formation, in mid-2018, of a Master Plan Committee to provide guidance on the creation of the campus master plan illustrated in the following pages. Representing a broad spectrum of stakeholders, the committee was charged with developing aspirational and practical input regarding key considerations that may influence the campus. This critical work by the committee was instrumental in informing the campus master plan effort, begun in the fall of 2018, with its early task of setting Planning Principles.

### **Planning Principles Synopsis**

The six planning principles listed to the right served to guide the process of instilling and embedding the aspirations of the planning participants into the final plan and its supporting documentation. Collaboratively developed by the Master Plan Committee, a series of interactive evaluations and assessment exercises refined the principles to serve as the fundamental reference for the evolution of the campus. Refer to Chapter Three for further details regarding the Planning Principles and their corresponding Foundational Elements.

# 2019 CAMPUS MASTER PLAN PLANNING PRINCIPLES



**IDENTITY** 



**CO-CREATION** 



COLLABORATION



CAMPUS ENVIRONMENT



FLEXIBLE & ADAPTABLE FRAMEWORK



SUSTAINABLE FOUNDATION

### **University of North Texas**

#### UNT's Mission

At the University of North Texas, our caring and creative community prepares students for careers in a rapidly changing world.

### UNT's Vision

As the most comprehensive public research university providing a top quality education in one of the nation's largest, most dynamic regions, UNT will be celebrated for its academics, arts and athletics. UNT will be a diverse and inclusive institution creating knowledge and innovations that will shape the future, while cultivating excellence in the next generation of scholars and leaders for the global community.

### **UNT's Promise**

The University of North Texas' ultimate responsibility is to provide students with the best education possible so they may achieve their goals, succeed at the highest levels and improve their communities, the state of Texas, the nation and the world.

UNT promises to offer students a challenging, rigorous, high-quality education and provide a supportive environment to help them successfully learn and grow.

UNT promises to contribute to the greater good through scholarship, research, creative endeavors and public service.

# University of North Texas Frisco Branch Campus

Recognizing the growth of creative and digital economies will drive the region for the foreseeable future, UNT Frisco will be a link in joining the innovation of the region and its multiple partners with the university to engage students in career preparation and development for jobs that might not even be imaged today.

"With the creation of partnership-based curriculum in degrees designed specifically to integrate with Collin College – UNT Frisco's offerings will be at the forefront of the movement to transform higher education. UNT graduates know how to keep up with a next generation economy, and with businesses, community and civic organizations as our partners in the classroom, our graduates will be even better prepared to define what comes next." - Jennifer Evans-Cowley, Provost and Vice President for Academic Affairs

"As we develop new and more enriching partnerships with industry, we will continue to create programs that ensure our students are prepared to use creativity, deep domain knowledge, and those skills necessary to solve emerging, real-world complex problems that matter. We will be innovative in our curriculum by involving passionate researchers and engaged industry partners to co-create with our students the experiences that prepare them to be competitive in the fast-growing and ever-changing workforce." - Wesley Randall, Dean New College at Frisco

### **Master Plan Report Synopsis**

The following is a brief summary of the content included in each chapter of the report:

### *Introduction:*

Beginning with a general overview of the aspirations of the plan for UNT Frisco, the Introduction contains excerpts and synopsis of key input that informed the final plan including UNT's Mission, Vision and Promise along with Planning Principles developed during the effort. Additional background is provided regarding the planning process and engagement efforts.

### Context:

A range of analysis studies were undertaken at the outset of the planning effort to understand the existing context of the future campus. These observations identified opportunities, such as views, to maximize and constraints, such as easements, to minimze or eliminate that support and integrated plan.

### Campus Master Plan:

The final plan is a synthesis of concepts that were thoroughly discussed, refined, and balanced to meet both the near- and long- term objectives of UNT Frisco. It includes details of the Planning Principles and Framework that will guide the evolution of the campus. Key elements and features of the plan are illustrated and described further.

### Systems Integration:

The necessary infrastructure such as utilities, mobility networks, stormwater management and other systems are described and aligned with the campus master plan to establish a functional and maintainable campus environment.

### Development Plan:

Illustrated at full build-out, the final plan allows for adaptable implementation. This adaptability allows the institution to respond to changing needs or new opportunities that may arise over the duration of the plan. Implementation is informed by a space needs assessment based on potential population growth and is organized in first building, near-, mid-, and long-term phases.

#### Guidelines:

The guidelines, through a series of planning, architectural, landscape, wayfinding and sustainability strategies direct campus development to ensure a consistent, cohesive and high-quality physical environment is achieved across the campus.



Ridge Mall

# PLANNING PROCESS

As outlined in the Introduction Chapter, significant effort occurred prior to the campus master plan effort illustrated in this report. The following provides a summary of the planning effort for the campus master plan itself.

### Schedule & Structure

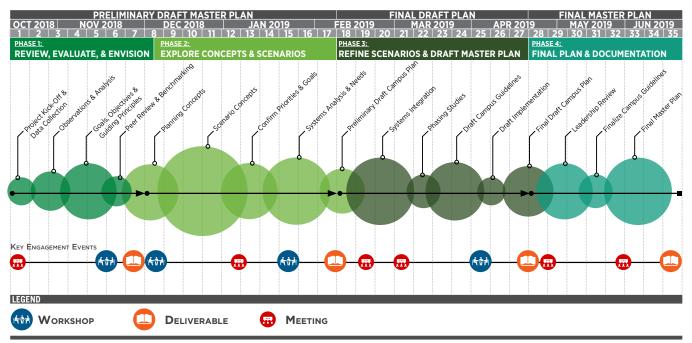
The planning process took place over the course of a 9-month period, beginning in October 2018 and culminating with publication of the final report in June 2019. To coordinate this duration, the Campus Master Plan was organized into four-phases. While there is a clear forward progression between phases, the process was iterative and not strictly linear, with each phase building upon the work of those prior while also re-evaluating data and solutions throughout the entire period. The adjacent page offers a brief description of each phase with the graphic schedule below illustrating the approximate durations and activities of each phase.

### Master Plan Committee

Comprised of a diverse representation of university stakeholders and community partners, the Master Plan Committee included leadership from the University of North Texas and University of North Texas System, along with partners from the City of Frisco, Collin County, Frisco Independent School District (Frisco ISD), and Collin College. This committee met regularly throughout the process and was responsible for setting the overall direction of the plan.

The process was highly collaborative, driven by face-to-face efforts that included formal workshops, technical and topical meetings, open houses, and review sessions.

### **Campus Master Plan Timeline:**



## PHASE 01: Review, Evaluate & Envision

The project was initiated with a kick-off meeting in October 2018 and Workshop 01 in November 2018. The planning team worked with stakeholders to determine the drivers, goals, and objectives for the master plan. Stakeholders were guided through a series of interactive exercises to establish expectations and aspirations which would become the foundation of the master plan. The planning team also toured existing UNT Frisco facilities (Hall and Inspire Park) as well as the future campus site to understand existing conditions, opportunities, and constraints. During this period the planning team reviewed existing data including site surveys, facility inventories, academic program information, and other related planning documents.

# PHASE 02: Explore Concepts & Scenarios

During this phase a set of Planning Principles were developed that would become the basis for evaluating planning decisions. These principles represent a combination of goals and aspirations for the new campus, created to capture the emerging culture and identity of the university.

After reviewing analysis of site opportunities and constraints, the Master Plan Committee and planning team collectively participated in a 3-day, hands-on Planning Charrette that paired stakeholders with planning professionals in groups to create initial concepts and scenarios for the new site. Critical to the overall Master Plan process, this Charrette enabled the shared creation of ideas for the new site and collective ownership of the resulting plan.

## PHASE 03: Refine Scenarios & Draft Master Plan

The planning team refined multiple preferred scenarios, to balance diverse topics including (but not limited to) expected near-term growth, long-term capacity, space utilization and efficiencies, campus experience and environment, and brand and identity.

Workshops 03 and 04 included presentation and in-depth discussion of the scenarios with emphasis placed on evaluation of the campus experience. Feedback led to further refinement and selection of single preferred scenario that became the Draft Campus Master Plan.

This phase also began to study the potential implementation options for the plan along with developing various campus guidelines to direct future development.

# PHASE 02: Final Plan & Documentation

Information and comments from the previous phases were combined into a set of detailed recommendations for the campus. The Development Plan shows how these final recommendations can be realized over time, and will directly guide the new campus' establishment over the near-term. Design guidelines were created to support a codified system for unifying the architectural and landscape elements of the campus.

The final report documents the master plan's story for the campus, community and institutional partners by articulating the university's goals and illustrating a shared long-term vision for its presence in Frisco.

# **ENGAGEMENT**

### Stakeholders & Formats

Planning is both a process and a product, with genuine engagement of stakeholders being critical to each. For the duration of the University of North Texas Frisco Branch Campus Master Plan, the planning team worked collaboratively with a diverse group of institution stakeholders and community partners to establish priorities, scenarios, and solutions to support the current and future needs of UNT.

Planning workshops held on campus were the primary vehicle for engagement. In total, the planning team held 22 workshop sessions at various sites in Frisco that brought together students, staff, faculty, leadership, and partners to provide feedback, expertise, experience, and insight. These sessions occurred in various formats such as presentation and discussion, interactive exercises, opens houses, focus groups and technical meetings. Often, similar topics were addressed in varying ways to solicit feedback to inform the continued refinement of the master plan.

Each workshop was organized to review the work and progress of topics related to the particular phase of the planning process, allowing stakeholders to make informed decisions about the planning direction, and build understanding and consensus around the decisions being made. At the earliest stages, these groups helped to provide information and data that would become the foundation of the plan. At later stages, the outcomes of these workshops led to the final scenarios and solutions that were incorporated into the Campus Master Plan.

The experience of collective analysis and decision-making will help to facilitate the implementation of this shared vision across the campus for years to come.

### **Key Engagement Sessions**

Kick-off Meeting (October 12th, 2018)

• Master Plan Committee

Workshop 01 (November 8th-9th, 2018)

- Master Plan Committee
- Open House: UNT Frisco Campus
- Technical Group: Parking
- Technical Group: Transportation
- Technical Group: Infrastructure

Workshop 02 (Dec. 4th-7th, 2018)

- Master Plan Committee (Planning Charrette)
- Master Plan Committee (Concept Review)

Workshop 03 (Jan. 22-24, 2019)

- Master Plan Committee
- Open House: UNT Frisco Campus
- Technical Group: Parking
- Technical Group: Transportation
- Technical Group: Infrastructure
- Technical Group: Landscape
- Technical Group: Wayfinding & Signage

Interim Meeting (Mar. 4th, 2019)

• Master Plan Committee

Workshop 04 (Apr. 4th-6th, 2019)

- Master Plan Committee
- Open House: UNT Frisco Campus
- Focus Group: Frisco ISD Students

April Technical Meetings (Apr. 30th, 2019)

- Technical Group: Parking & Transportation
- Technical Group: Utilities & Infrastructure
- Technical Group: Landscape & Signage

UNTS Board of Regents (May 23rd, 2019)

• Master Plan Update

UNTS Board of Regents (Aug. 15-16th, 2019)

Master Plan Approval

### Master Plan Committee:





# Planning Charrette:





# Open Houses:





# CONTEXT



# **PLANNING CONTEXT**

### **Texas Context**

By land area and population, Texas is the second largest state within the United States of America and is home to a diverse economy fueled by an educated workforce. Much of the state's population and industry is located within the Mega-Region colloquially known as the Texas Triangle, formed by the approximate boundary that would be created surrounding the San Antonio-Austin, Dallas-Fort Worth, and Houston metropolitan areas.

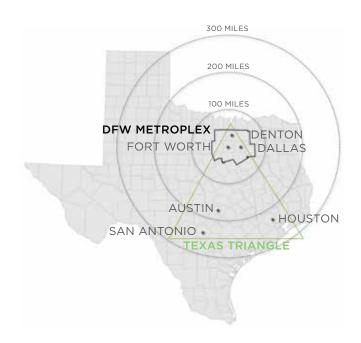
At the top of this triangle is the Dallas-Fort Worth Metroxplex (DFW), the heart of the broader North Texas region which includes more than 30 counties and is home to the University of North Texas System (UNTS)

As of the 2017 5-year American Community Survey (ACS) data published by the United States Census Bureau, the State of Texas is home to 28,304,596 residents. The Dallas-Fort Worth Metroplex (DFW) is the nation's fourth largest metropolitan area, containing over a quarter of the states' total population at just under 7,400,000 total residents.

According to the United States Federal Reserve, DFW added 92,300 jobs in 2018, which accounted for nearly half of the new jobs created within the State of Texas. The growth rate is one of the highest in the nation. Due to its central location, connectivity to transit infrastructure, and proximity to a diversity of industries, federal indicators anticipate this growth to continue for the foreseeable future.

### University of North Texas System

UNTS is the only public university system based in North Texas. Founded in 1890, the system includes three independent universities spread between five major teaching locations across Collin, Denton, Dallas, and Tarrant counties. The system's independent components include the University of North Texas main campus



in Denton, the University of North Texas at Dallas, and the University of North Texas Health Science Center in Fort Worth. Both the UNT Dallas College of Law and the UNT System Administration are located in Downtown Dallas.

The three independent universities have a combined Fall 2017 enrollment of nearly 44,000 students and are among Texas' fastest growing institutions.

Responding to state and regional demand for increased educational opportunities, UNTS has continued to explore ways that it can serve the community. The UNT Frisco campus is the latest expression of that service, offering unique programs aligned with local needs

### University of North Texas Frisco

In 2016, UNT opened a teaching location in Frisco, TX offering programs and courses at its leased Hall Park location. With continuous increase in need, program offerings have expanded to locations at the Collin Higher Education Center in McKinney and the recently (2018) acquired Inspire Park.

### Enrollment & Population

Fall 2018 headcount was just under 500, and the Fall 2019 headcount is expected to be around 1,000. Another 300-400 students take UNT courses at the Collin Higher Education Center in McKinney, intending to matriculate into the programs within UNT Frisco.

### Current Facilities: Hall Park

UNT leased Hall Park in 2015 and completed improvements to the space to provide innovative learning environments supporting their program offerings. The 35,983 GSF facility is located at 2811 Internet Boulevard, half a mile south of the Dallas Cowboys 'Star' facility. Most of the space is dedicated to classrooms, learning, and other student-centric activities, also providing a limited amount of space for student services and offices.

### Current Facilities: Inspire Park

Inspire Park is the University's second location in Frisco, purchased in 2018. The 53,468 GSF facility is located at 6170 Research Road, approximately 5-miles north of Hall Park. Today, the facility is home to a variety of uses. The university operates a business incubator which offers students an opportunity to partner directly with local industry, and also features classrooms and laboratory spaces. Inspire Park is expected to house academic and research functions to supplement learning on the new campus. At just a 2.75 mile drive from the new campus site, Inspire Park is in relatively close proximity which will allow students, staff, and faculty to move between the two with ease.

### Program Model & Partnerships

UNT Frisco offers students an innovative approach to their education. Programs are structured around project-based and partnership-based learning which engage students in collaborative, hands-on, realworld projects that simulate work students will be doing in their chosen career field. Often, these projects are facilitated closely by members of local industry (as adjunct faculty

or visiting instructors) and allow students to form meaningful relationships, deeper sets of knowledge, and directly applicable skills. Today, UNT Frisco offers baccalaureate, masters, and doctoral programs that students can complete entirely in Frisco.

UNT Frisco also works closely with educational partners to provide students with learning tracts that meet their needs. One example is the close relationship with Frisco Independent School District (Frisco ISD) and Collin College. Working together, these three institutions offer local students a stream-lined and customizable educational experience, allowing them to move seamlessly between high school at Frisco ISD, Collin College for an associates degree or core curriculum, and eventual matriculation to UNT Frisco.

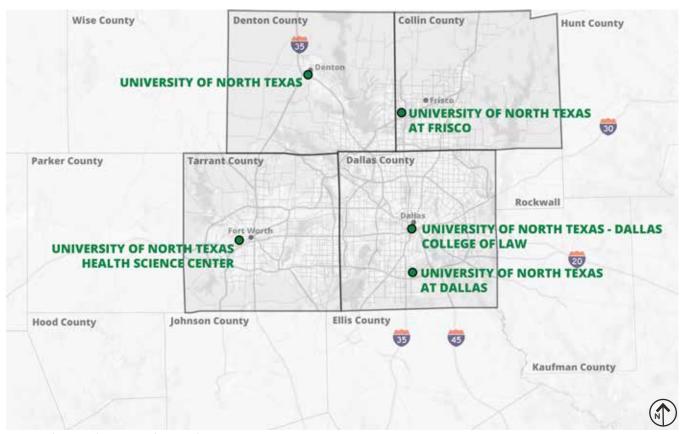


Hall Park



Inspire Park

# METROPLEX CONTEXT



Metroplex and UNT Relationships

University of North Texas Locations

## **DFW Metroplex**

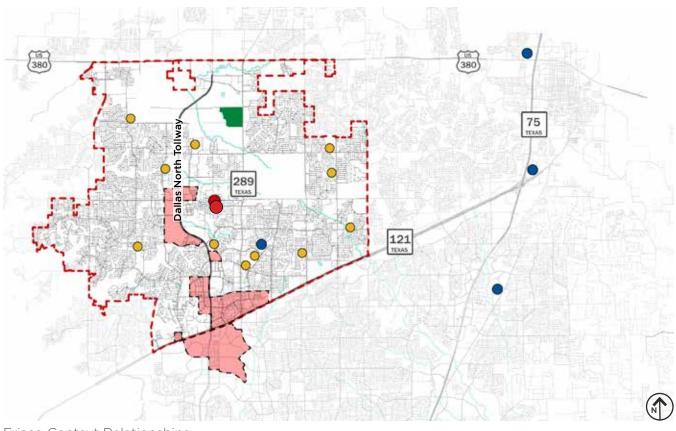
The site for the proposed UNT Frisco Branch Campus is situated approximately twenty miles east of donwtown Denton, thirty miles north of downtown Dallas, and about fifty-five miles northeast of Fort Worth downtown. These proximities provide opportunities for strong partnerships across local, regional and global scales with industry, municipal and educational entities.

### UNT in the Metroplex

With locations in four of the thirteen Metroplex counties (Collin, Denton, Dallas and Tarrant), UNT's campuses and teaching locations serve a significant portion of the area population. These locations illustrated above include:

- University of North Texas in Dention (UNT)
- University of North Texas Health Science Center in Fort Worth (UNTHSC)
- University of North Texas at Dallas (UNTD)
- University of North Texas Dallas College of Law
- University of North Texas Frisco Branch Campus

# FRISCO CONTEXT



Frisco Context Relationships



### City of Frisco

With a history reaching back to the 1840s, Frisco is located along what was once The Shawnee Trail, which later became Preston Road. Following a stint as the former towns of Lebanon and Emerson, the name Frisco emerged in 1902 and the city was eventually incorporated in 1908. The City of Frisco spans 68.8 square miles with a June 2019 estimated population of 188,116. Frisco was the fastest-growing city in the United States in 2017 and also the fastest-growing city in the nation from 2000 to 2009. Growth has remained steady over the past decade with a compound annual growth rate of 5.2%.

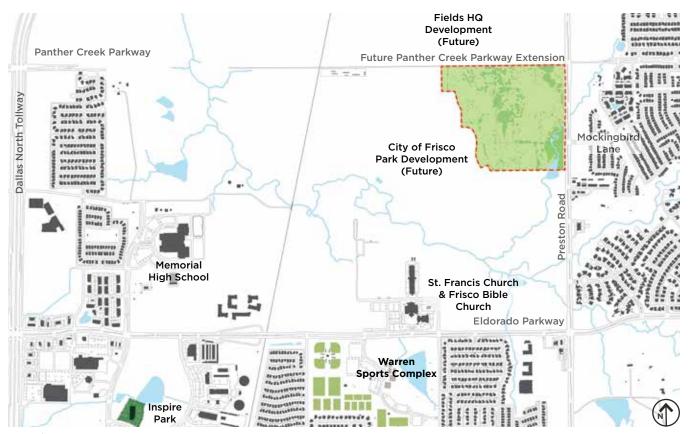
### Frisco ISD & Collin College

Frisco ISD currently operates 11 high schools within Frisco with many locations within 3-miles of the UNT Frisco site. Collin College operates 8 existing campus locations, including the Preston Ridge Campus 4-miles south of the new site.

### Industry Partnership Opportunities

Frisco and the surrounding areas support a strong economy that provides substantial job and partnership opportunities. Major companies include (but are not limited to) Toyota Motor Corporation, JPMorgan Chase, Clsco, HCL, the Dallas Cowboys, and PGA Golf.

# LOCAL CONTEXT



Local Context



UNT Frisco Branch Campus Site

### **Immediate Surroundings**

The blending of the campus edges with adjacent properties and uses help form a distinct sense of place with the surrounding community. They provide an opportunity to engage with the broader community, promote positive institutional identity, create connections, and foster positive pedestrian experiences. Hence, it is essential to understand these relationships and incorporate them into the master plan. Below is a brief synopsis of a few of these key relationships:

### East of Preston Road

Immediately east of the campus site (across Preston Road) are four empty parcels currently zoned for commercial or residential use. Just to the east of these parcels are existing residential neighborhoods consisting primarily of single-family homes and one multi-family complex. An existing public greenbelt which includes hike and bike trails weaves through the neighborhoods. Mockingbird Lane is the neighborhood's single point of entry off Preston Road.

North of Future Panther Creek Parkway
Across the future Panther Creek Parkway
extension is the future 2,554-acre Fields
HQ mixed-use development which extends
northwest from the Preston Road and Panther
Creek Parkway intersection.

UNT and the developer have discussed opportunities to collaborate in order to provide convenient connectivity, shared amenities and additional features to benefit both entities. Of particular interest are opportunities to provide student housing, dining, entertainment, shopping and recreation options available to the campus population and surrounding neighborhood.

### Western and Southern Boundary:

The abutting land along the western and southern site boundary is a large city-owned tract intended to be a future city park. This land comprises a majority of the space between the campus and the Panther Creek riparian zone, half a mile south. Yet to be fully planned, the city has initially indicated that the park may consist of preserved natural features, a mix of recreation fields, hiking trails, bike paths, a dog park, and an ecological education center.

### Warren Sports Complex

The complex provides the closest public access to outdoor recreations facilities and fields pending potential development of the future city park discussed above.

### Frisco Memorial High School

Opened in the Fall of 2018, Frisco Memorial High School is Frisco ISD's 11th high school. Longterm trails through the future City of Frisco park may connect the high school to the campus and provide unique matriculation and brand identity opportunities.

St. Francis Church & Frisco Bible Church
Located adjacent to each other north of El
Dorado Parkway southwest of the campus site,
these two churches share a strong proximate
relationship to the campus along with views to
and from campus.

### **Roadways & Connectivity**

The campus site is located southwest of the Preston Road (SH 289) and Panther Creek Parkway intersection, approximately 2-miles east of the Dallas North Tollway and 2-miles south of University Drive (US 380). Today, the campus can be accessed off Preston Road or the single lane private dirt road that exists in the future Panther Creek Parkway right-of-way.

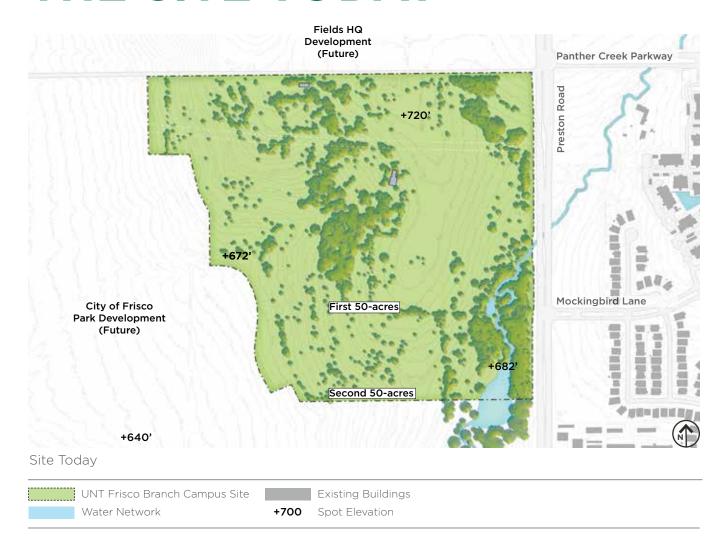
Preston Road is operated and maintained by the Texas Department of Transportation (TxDOT), however, the City maintains the timing of signaled intersections. Today, Preston is 3 lanes in each direction with a center turn lane. No current plans to expand Preston are scheduled.

Intersecting with Preston Road 1,650' south of Panther Creek Parkway is Mockingbird Lane which provides access to the residential neighborhoods east of Preston Road. Today, Panther Creek Parkway does not extend west of Preston Road, but the City of Frisco intends to upgrade the parkway to a 6-lane thoroughfare, exclusive of turn lands and median openings, as shown in the City's Master Plan. This expansion may be phased, first taking Panther Creek Parkway to four lanes near-term, and then to six long-term.



View North Along Preston Road from Mockingbird Lane

# THE SITE TODAY



### **Site History**

The site was once a part of the 5,500 acre Brinkmann Ranch that comprised a significant portion of Frisco. In past years, the ranch was a local landmark and well-known for the breeding of premier halter, race, and cutting horses. The ranch also commercially raised Black Angus cows, Texas Longhorns, and agricultural commodities. In January of 2018 the City of Frisco and Frisco Economic Development Corporation purchased this portion of the ranch and later reached an agreement to convey 100-acres to UNT in two 50-acre parcels.

### **Site Boundaries**

The first 50-acres is approximately square, aligning it's northeast corner to the Preston Road and Panther Creek Parkway intersection. Per agreement, UNT will build on this first parcel before receiving ownership of the second 50-acres. The second 50-acres is less orthogonal in form having an uneven edge against adjacent properties, extending off the west and south sides of the first 50-acres. After UNT begins vertical construction on the first 50-acres, the second 50-acres will convey from the city to UNT.



Existing Site & Natural Features

### **Natural Features**

### Topography

One of the most notable features of the site is the significant topography which ranges between a 718-foot elevation at the north property line to a 662-foot elevation at the south property line. Even with this significant elevation change, the site contains a long ridge which runs from the northeast portion of the site into its center. This ridge is relatively flat, running approximately 1200' in length and 300' in width. On the western edge of the ridge, the site slopes sharply towards the property boundary with an irregular ridge line contour that creates a series of gullies. On the southern and eastern sides of the ridge the contours are more even and less steep, gradually sloping away from the crest.



Significant Topography Change Across the Site



Creek Cutting through Southeast Corner of Site

#### Water Bodies

A unique features of the site is a small creek that crosses the southeast corner of the property. This creek is a collector that feeds into Panther Creek half a mile south. It is heavily vegetated and appears to contain a small flow for a majority of the year, increasing in capacity with storm events from water discharged through a large storm culvert beneath Preston Road. On the southern end of the site is a large shallow basin connected with the creek that will periodically fill with water after storm events and detain it for extended periods of time. The site also contains a free-standing wet pond that is located 25' east of the creek and 600' north of the southern site boundary (roughly in line with Mockingbird Lane).

#### Natural Areas

As undeveloped land, the site's landscape exists as natural and indigenous vegetation. A larger vegetated and brushed area exist along the length of both sides of the creek. The northeast corner of the site and a large area near the center of the site mid-way down the ridge slope are also densely vegetated. Collectively across the site, no trees of specific significance appear to exist that would require special approvals from the city or state to remove or modify.



Shallow Basin on Southeast Site Edge (Full)



Views Looking West from the Ridge (Frisco Memorial High School on Left, UT Southwestern on right)

#### Views from the Site

Areas atop the ridge afford remarkable views that extend for miles south and west. Standing on the edge of the ridge line at ground level, prominent views include the Panther Creek water body, the UT Southwestern hospital, Frisco Memorial High School, St. Francis Church, the Warren Sports Complex, multiple City of Frisco branded water towers, and the Frisco Square development including Toyota Stadium and the Frisco Public Library. Eventually, the campus will have prominent views of the future City of Frisco park planned for the adjacent property. As the campus develops, it is anticipated that buildings may have views as far away as the SH 121 and Dallas North Tollway intersection.

### Views to the Site

Situated near the crest of the topography that flows into Panther Creek watershed, the campus property is one of the highest points in the surrounding area enabling it to be seen from great distances.



Views from the Southern Edge of the Ridge



Views to the Site from the West



Stormwater Drainage Pattern



### Stormwater and Drainage

The topography of the site greatly affects the site drainage patterns, especially storm water flows. The site is divided in two major drainage area basins along the ridge line. The west basin is approximately 66 acres and drains to the south west corner of the property with a peak runoff of 140 cubic feet per second (cfs). The east basin is approximately 34 acres and drains to the south east corner of the property and directly into the on-site creek with a peak runoff of 72 cfs. Both drainage basins discharge into the Panther Creek Watershed located further south of the site. In addition to surface run off, the greenfield site is 100% pervious and is capable of capturing some infiltration.

Based on data provided by the City of Frisco, a 100-year flood zone extends out between 50' and 80' from all sides of the creek. The planning team observed that even during smaller storm events, this area floods due to the microtopography creating numerous areas where water pools. Development in this area will have to consider ways to mitigate drainage issues.

#### Soils

The campus site is composed of two primary soil profiles. The first is a more stable mixture of Burleson, Heiden, and Houston Black clays which compose an estimated 87.2% of the site. The second is Austin silty clay, located primarily around the creek and surrounding the large western gully, which comprises an estimated 12.8% of the site and is more prone to erosion.



## **Existing Utilities**

### Water

An existing 20-inch water main runs along the north-bound side of Preston Road and a proposed 24-inch water main is planned for inclusion along the west-bound side of Panther Creek Parkway. Currently, city officials do not believe that this proposed main will be installed in conjunction with the road extension, but advise that it will likely follow within the next five years.

### Sewer

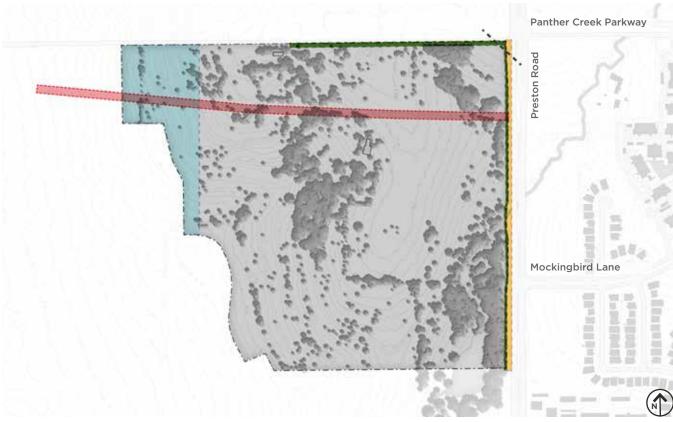
An existing 21-inch waste water main is located along Preston Road at the campus' southeast boundary. An existing waste waster manhole is located approximately 50' southeast of the southeastern corner of the first 50-acres and is recommended as the best initial connection point.

### Electrical Lines

Overhead 25kV pole mounted electrical distribution lines run inside and parallel with the UNT northern and eastern property boundaries and should provide for easy supply to the campus through step-down transformer boxes. The campus may wish to work with the City of Frisco to bury these lines. Near-term opportunity may exist to coordinate burying of the line on the north side of campus as the eventual extension of Panther Creek Parkway may require their removal or relocation.

### Data & Communications

Multiple Telecom connections run near to campus within the adjacent right-of-ways. The University will have choice in providers and connection points.



Easements & Other Restrictions



### **Easements & Other Restrictions**

The UNT Frisco Branch Campus site has multiple easements that will influence how the built environment develops on campus.

Atmos High-Pressure Gas Line Easement
The most impactful of these is the 50' Atmos
Energy easement that runs roughly east-west
through the northern section of the site. The
easement accommodates a 20" high pressure
gas line that connects to a compressor station
one mile west of the site.

High-pressure gas line easements can be very restrictive about what can be built on or around them. The planning team did not have access to the specific executed contract for this easement, but the following are standard restrictions

provided by Atmos Energy, the easement holder, on their website:

- All development is subject to review by Atmos Energy and will require an encroachment agreement
- The owner (Atmos Energy) is entitled to unobstructed access of the property within the easement at all times and is allowed to modify or remove site elements as necessary to maintain, service, and repair their infrastructure at no cost.
- Road crossings are allowed only perpendicular to easement line and are required to be reinforced by fiber mesh instead of steel re-bar (if concrete)
- No hard surface parking over easement.
- Cannot have driveways or sidewalks running substantially inside and along the easement. Exceptions are noted for 'greenbelt' style pathways, but these are still subject to Atmos review and approval.

- Concrete and asphalt sidewalks are limited to 72" within the easement, must be base reinforced with fiber mesh, and contain expansion joints in 10' intervals.
- No trees taller than 48" are allowed inside easement or within 10' from the easement
- No excavation or grading inside the easement without approval. Minimum of 36" cover atop the gas line need to be maintained at all time.
- No retaining walls or other permanent structures.

UNT will have to coordinate with Atmos Energy to approve development within and adjacent to this 50' zone. To ease conflict as the campus develops, the Master Plan recommends UNTS:

- Acquire formal copy of easement provisions, conditions, and restrictions per executed contract (recorded in Volume 3652, page 54 of Real Property Records, Collin County, Texas.)
- Meet with Atmos to review final master plan
- Reach an encroachment agreement with Atmos Energy that enables UNT to develop key elements of master plan by-right.

### Other Existing Easements

The new branch campus site is also subject to a series of additional easements and dedications, none of which should have a significant impact on development. Additional easements include:

- Electrical easements along the northern boundary of the first 50-acres offsetting 10' south into the property.
- Electrical easements along the eastern boundary of the entire 100-acres offsetting 10' west into the property.
- High voltage transmission line easement that clips the northeast corner of the property by 10'
- Sewer easement which runs largely along the eastern property boundary, periodically jumping into the UNT property no more than 3'
- Preston Road Right-of-way dedication which runs largely along the eastern property boundary, periodically jumping into the UNT property no more than 3'
- Water rights dedication to Texas Power & Light (TPL) on the six western-most acres

No vertical development shall take place in these areas, with exception of the TPL water rights dedication which can contain development.

### Anticipated Future Easements

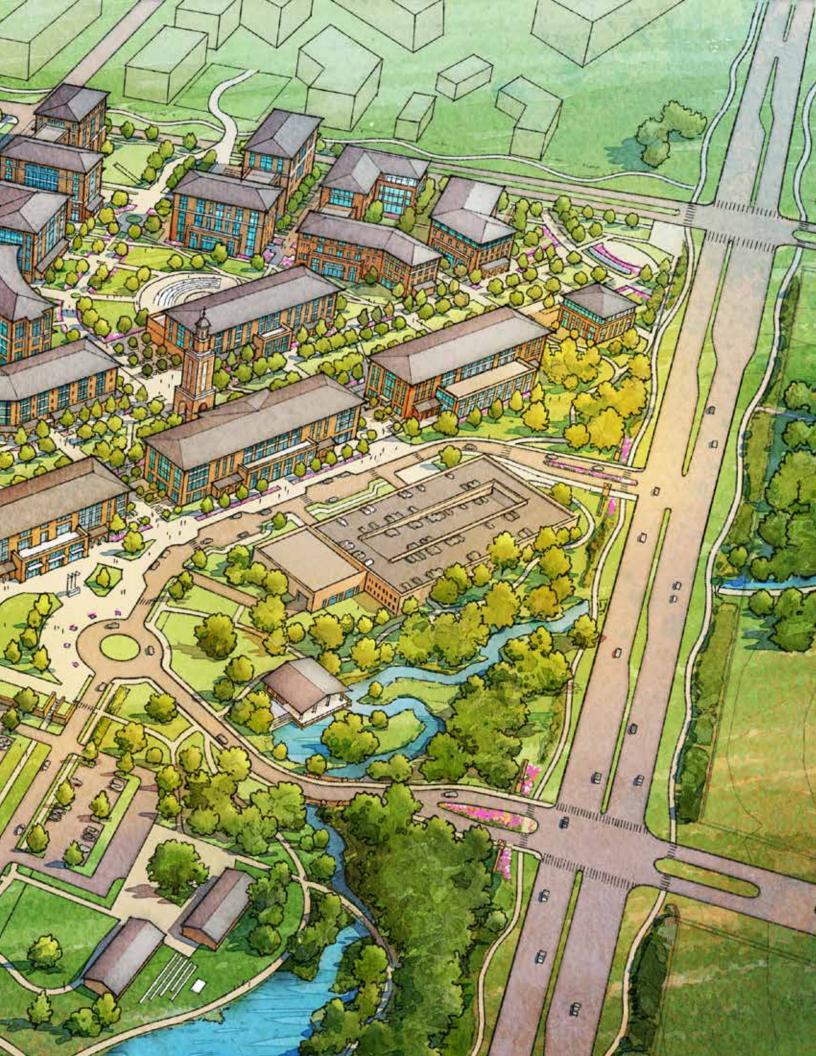
Based on current working knowledge, it is anticipated that the future Panther Creek Parkway extension from Preston Road to the Dallas North Tollway may involve expansion of the roads right-of-way into the University's 100-acres. The Master Plan has anticipated this likelihood and adjusted accordingly, but the University will have to continue to work with the City of Frisco to reach an ultimate agreement.

Per City of Frisco and UNT agreement, a future right-of-way may be negotiated across the parcels to provide access to the potential future park area from Preston Road.

# CAMPUS MASTER PLAN







# PLANNING PRINCIPLES

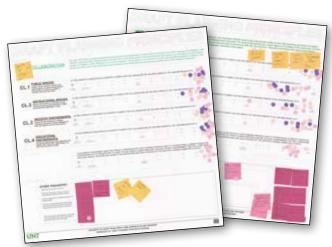
#### Introduction

Active planning must be guided by a consistent set of values and principles against which all concepts and proposed solutions are measured. For the 2019 Campus Master Plan, this guide is the Planning Principles which will oversee the development of the campus plan and serve as a benchmark by which to evaluate outcomes. These Planning Principles serve as a bridge between the aspirations for the new UNT Frisco Branch campus and the physical planning of the campus environment.

Prior to formally engaging the planning team led by Ayers Saint Gross, the Master Plan Committee identified a series of key considerations for the future UNT Frisco Branch Campus. These considerations would eventually be expanded upon and evolve into the final six Planning Principles. Emerging through the planning process with campus stakeholders, these principles grew out of a shared understanding of the characteristics that will make the UNT Frisco campus and community unique. Through a series of interactive exercises, open discussions, and individual review surveys, the principles were refined through multiple iterations. As the planning process progressed, the principles guided the efforts of the planning team and provided a lens for the Master Plan Committee to review and evaluate planning scenarios.

These six principles span a range of aspirations for the future of the campus. Presented with a primary narrative statement that describes the aspirations of the principle, each is also supported by a subset of Foundational Elements which serve as individual goals to measure progress and success of the principles applied to the growth and development of the campus.

While the principles are enduring, over time they too will evolve to meet the changing needs of the campus. The Planning Principles, combined in conjunction with the Framework will guide implementation of the plan to ensure its continued alignment with the needs, mission and vision of the institution.



Principle Interactive Exercise



Principle Review and Discussion



Principle Evaluation Survey



# IDENTITY (ID)



# CO-CREATION (CC)

As a Tier One research institution, the University of North Texas Frisco will provide the North Texas region with proximity and access to higher education, at a nationally distinguished university. The campus will balance the unique legacy and tradition of the University of North Texas with the innovation and advancement synonymous with the College's partners and the City of Frisco. The built environment will capture this identity and vision, ingraining itself into the long-term narrative of the region.

Bring campus and community stakeholders to engage and participate in building a shared vision for the campus. Co-create value with a long-term plan that will forge long-lasting relationships with the community. Campus will be designed to be an asset that brings people and ideas together and fosters interactions through people-centered spaces. As the campus grows, strong connections to neighbors and adjacent resources will be a priority.

#### **Foundational Elements**

#### • ID.1 Brand:

Highlight the UNT brand on campus, along its edges, and out in the community.

#### • ID.2 Legacy:

Reflect and capture UNT's institutional diversity of spirit, culture, tradition, and research interests.

#### • ID.3 Innovation:

Embody the vision of the New College, be a global leader in pedagogy and teaching through applied experiences, and create a campus with enduring competencies, that is nationally recognized for its vision, prominence and achievements.

#### • ID.4 Atmosphere:

Create an inviting and integrated atmosphere that looks and feels like a home campus.

#### **Foundational Elements**

#### CC.1 Engagement:

Craft a shared vision for the UNT Frisco campus together with community stakeholders by engaging in a diversity of campus and educational programs.

#### • CC.2 Community Asset:

Cultivate a welcoming campus that balances space for the campus community and broader community while also identifying opportunities to share physical resources with community partners.

#### CC.3 Events:

Create spaces for events and activities that bring the community to the campus and the campus out into the community and complement the existing community event spaces.

#### CC.4 Physical Connections:

Develop linkages and ease of access to planned adjacent developments - public and private.



# COLLABORATION (CL)



# CAMPUS ENVIRONMENT (CE)

The new UNT Frisco Branch Campus will promote physical and programmatic collaboration throughout its unbuilt and built campus, industry, and with other local partners. Design of the built environment should emphasize the creation of a diversity of collaboration spaces at multiple scales distributed across the campus. These spaces are intended to create strong bonds between students, staff, faculty, and the community partners by fostering the project-based and partnership-based learning, which is fundamental to the campus learning environment.

Design should leverage the existing natural landscape and heritage of the Brinkmann Ranch to create an extraordinary sense of place that inspires students, faculty and the community to become the best versions of themselves. A diversity of multi-functional interior and exterior spaces will create a lively and dynamic environment that supports activity, positive learning experiences, and collaboration. Spaces should be accessible, human-scaled and pedestrian focused.

#### **Foundational Elements**

#### CL.1 Instructional Space:

Remain at the forefront of education through instructional space design that fosters student interaction and collaboration in and out of the classroom, as well as creates strong educational linkages throughout the UNT enterprise

#### • CL.2 Public Spaces:

Create a diverse selection of interior and exterior spaces on campus where students, staff, faculty, community members, and visitors can gather to socialize, work, and share ideas

#### CL.3 Industry Partnerships:

Expand ties with business, industry and other partners to facilitate education and grow the college strategically to align with regional economic opportunities to better prepare the students with relevant training

#### CL.4 Educational Partnerships:

Develop strong physical, programmatic ties and curricular innovation between UNT, Frisco ISD, Collin College, and other local and regional educational entities.

#### **Foundational Elements**

#### • CE.1 Open Space:

Preserve portions of the existing natural landscape and design new exterior spaces that are featured as an integral part of learning activities as well as the overall oncampus experience.

#### CE.2 Experience:

Create a campus experience that inspires all who visit and provides lasting memories through authentic architectural and landscape features.

#### • CE.3 Views:

Capitalize site topography by creating views to- and from- buildings and spaces.

#### • CE.4 Display Activity:

Integrate interior and exterior spaces across the ground floor of buildings and campus site to showcase learning, discovery, and collaboration.



# FLEXIBLE & ADAPTABLE FRAMEWORK (FA)



# SUSTAINABLE FOUNDATION (SF)

Adaptability to evolving and diverse pedological, programmatic, technological, and physical space needs will be integrated into the UNT Frisco campus framework to ensure the campus is future-ready and capable of efficient response. The master plan should be crafted to balance near-term needs and experience with long-term growth opportunities.

The University of North Texas Frisco will strive to be a leader in sustainability by making a commitment to respect, protect, and preserve the economic, cultural, social, and environmental resources that support it and the surrounding community, not only today, but for future generations. The university will to strive balance it's triple bottom line through an emphasis on prudent decision making. Sustainable thinking will be an integral educational component in the campus environment to inculcate long-term holistic values in students.

#### **Foundational Elements**

#### • FA.1 Smart Campus:

Produce assets that integrate intelligent design elements and prudent approaches that will best support evolving campus needs and create operational efficiencies.

#### • FA.2 Technology:

Ingrain technology into interior and exterior teaching, learning, and public environments while simultaneously planning versatile infrastructure capable of responding to future demands.

#### • FA.3 Pedagogy:

Create agile environments that stimulate creative instruction, which evolve with industry, teaching and pedagogy changes.

#### • FA.4 Capacity:

Define a framework for growth that establishes the near-term campus foundation while also accommodating long-term capacity.

#### **Foundational Elements**

#### SF.1 Economic Sustainability:

Make informed financial decisions to maximize investment and create efficiencies within the university's longterm enterprise.

#### • SF.2 Cultural Sustainability:

Foster multi-generational participation in learning and activities to create a strong sense of campus community, which weaves itself into the long-term and evolving narrative of the region.

#### • SF.3 Social Sustainability:

Create a welcoming and inclusive campus for all.

#### • SF.4 Environmental Sustainability:

Craft a campus that strengthens its natural and built environments by utilizing and enhancing resources creatively and efficiently.

# **CAMPUS FRAMEWORK**

#### Introduction

The campus-wide framework is a conceptual strategy and overlay that delineates the hierarchical organization of the connections, open spaces and activities - both within and beyond the campus. In conjunction with the Planning Principles, the Framework is intended to guide the development pattern on campus by framing the future physical environment of the campus.

The existing context, though limited in this case as a greenfield site, and the planning principles both informed the creation of the Framework. While primarily informing the organization of the campus, the framework extends beyond the campus boundaries to support connections to adjacent areas, preserve views and vistas and help define edges and gateways.

As a new greenfield campus, this Framework will serve as an essential foundation to craft an exceptional campus experience both during its initial development, and over its long-term progression. The framework sets the form and pattern of what the campus is to become.

The Framework is comprised of three interrelated and integrated networks that overlay each other to form a whole:

- Connectivity Network the essential linkages that unite the campus together.
- Open Space Network the balance between the built and non-built areas of campus.
- Activity Node Network the programmatic driven use of places and spaces across the campus.

Each is described in more detail on the following pages, framed specifically in relation to the UNT Frisco campus.

### **Connectivity Network**

As the essential linkages that unite the campus together, the connectivity network deals with movement across campus and is commonly manifested in the pathways and means of circulation created for pedestrians, bicyclists and other forms of mobility. These pathways frequently connect significant buildings and open spaces on campus but also occur at a variety of scales to fully knit the campus together. The network seeks to give priority to the pedestrian for reasons of safety and a positive campus experience.

For the UNT Frisco campus, the connectivity network is organized into three sub-networks: the primary, secondary and natural (trail) network.

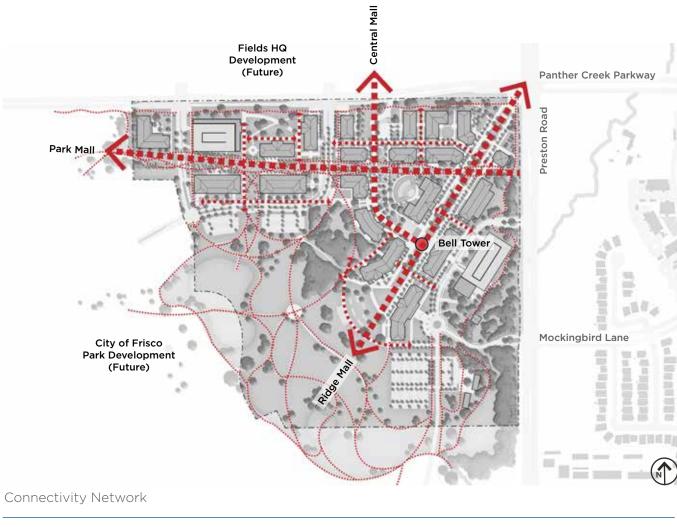
#### Primary Connectivity

The primary connectivity elements are the major organizing and linking components of the framework and direct the high-level organization of the campus.

The most prominent of these is the alignment of the Ridge Mall with the existing sites dominant topographical feature. This mall connects across campus from the northeast corner toward the southwest. Though a major pathway, it also establishes view to and from the campus and defines the major intersection of Preston Road and Panther Creek Parkway.

The second primary connectivity element, the Park Mall, takes advantage of a constraint of the site by utilizing the 50-foot easement to establish a major east-west connection across campus, ultimately linking into the future City of Frisco park.

The final connectivity element, the Central Mall, is anchored at one end by the Bell Tower and at the other end by the pedestrian connector spanning the future Panther Creek Parkway extension.



■ ■ Secondary Connectivity

#### Secondary Connectivity

■ Primary Connectivity

This network occurs at a finer grain across campus, linking at a smaller scale and shorter lengths than the primary connectivity networks. It will commonly establish direct links between buildings and open spaces within zones of the campus with distinct start and ending points. At the campus edges it may extend to connect to adjacent areas, locate smaller entry points to the campus, and align with glimpse views.

#### Natural (Trail) Connectivity

The trail network is a mesh overlay across the campus and extending beyond its boundaries to finely interweave the entirety of the campus. It both encircles the campus with branches

connecting to the future City of Frisco Park and Fields HQ development and crisscrosses through the campus.

•••••• Natural (Trail) Network

While each connectivity network has a role and purpose, they distinctly overlap and connect with one another to form a comprehensive and enjoyable means of circulating the campus.



# **Open Space Network**

The balance between built and non-built areas of campus defines the Open Space Network, resulting in the identity and character of campus that is experienced by its users. As a reflection of the institution, the Open Space Network often sets the tone for an individual's first impression of the campus.

The primary open spaces commonly align with the primary connectivity elements as illustrated by the major Ridge, Central and Park Malls. Linked by the connectivity network are other major open spaces such as the two distinct amphitheaters and both grassed and plaza event spaces.

Smaller courtyards and plazas are distributed across the campus to establish a series of more personally scaled open spaces.

The considerable amount of natural open space that exists on the site to be preserved or enhanced is a distinguishing feature of the UNT Frisco campus. With areas of prairie, woods and creeks a wide variety of experiences can occur.

This array of spaces provides an interactive, functional and aesthetically pleasing set of experiences that serve the campus at different scales and functions.



#### **Nodes**

The activity node network describes programmed gathering places where ideas and views can be exchanged, and collaborative efforts undertaken. Depending on their specific settings, activity nodes can be formal or informal. The activity nodes act as focal points to support learning, discovery, and the social interaction of campus users. Activity nodes include both interior and exterior spaces.

Larger event nodes occur around key open spaces such as the amphitheaters, bell tower and arrival plazas. Secondary nodes are distributed across campus to support individual use, smaller group gathering, and the potential variety of activities occurring in the preserved natural space of the campus.

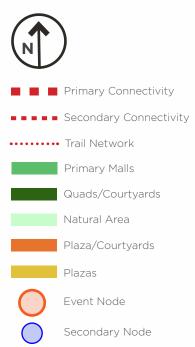
It is intended that the activity node network extend beyond the campus boundaries, particularly to the future City of Frisco park and Fields HQ development, to support the expected collaboration between the campus and the community.

Interior activity nodes align with elements of the opens space network and exterior activity notes to enliven the campus experience.

# FRAMEWORK OVERLAY

Serving as a planning tool - the Connectivity, Open Space and Activity Node networks of the framework - will help to guide siting of buildings, influence their massing, assist with identifying appropriate points of entry, and align activities to enliven the campus experience. The proposed framework guides how the campus should work and creates alignment between the planning principles and the physical campus environment.





Interior Connector



# **MASTER PLAN OVERVIEW**

# **Campus Master Plan Overview**

The 2019 University of North Texas Frisco Branch Campus Master Plan outlines a visionary, flexible, and substantive plan incorporating the development of the campus through time. It synthesizes the existing site assets and limitations along with the planned development to create a truly unique campus experience.

# **Key Components & Features**

- 1. Ridge Mall
- 2. Central Mall
- 3. Park Mall
- 4. Central Amphitheater
- 5. Prairie Amphitheater
- 6. Bell Tower
- 7. Event Plaza
- 8. Pedestrian Connector
- 9. Nature Pavilion
- 10. Trail System
- 11. Preserved / Enhanced Natural Area
- 12. Detention / Retention Ponds
- 13. Campus Gateway / Entry Signage
- 14. Signature Campus Identity Sign & Iconic Portrait Plaza





Campus Buildings



Open Space



Campus Pathways



Roads



Water body



Trees



Parking Lot



Parking Garage



Road Tables





### Ridge Mall (South)

As the focal point of initial campus development, the southern portion of the Ridge Mall contains numerous components and features that will define the campus experience near-term and long-term. The Ridge Mall is created by the proposed first building on it's southeast side and then further defined by future buildings that both enclose and extend the mall. The first building will also be the front door to campus and set the arrival experience.

The Bell Tower, at the intersection of Ridge Mall and Central Mall, provides a vertical landmark for the campus and a backdrop for activities occurring on the Event Plaza.

Tiering down from the Ridge Mall into the preserved natural area, the Prairie Amphitheater provides a transition between the two while creating a significant, informal event space for the campus and the community. Views from the Prairie Amphitheater extend out into the City of Frisco, and reciprocally back into campus.

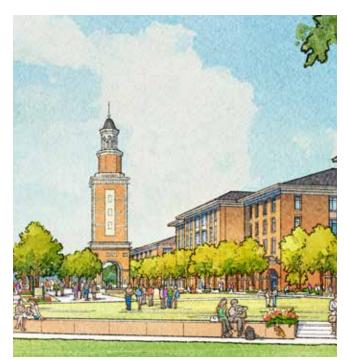
Water body

Campus Buildings

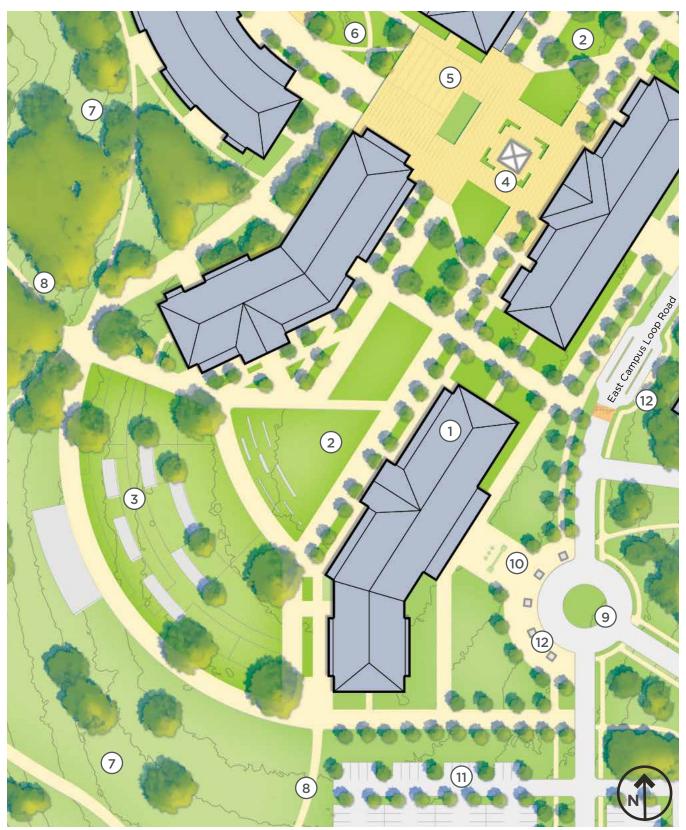
- First Building (Building "A" in Development Plan)
- Ridge Mall
- Prairie Amphitheater
- **Bell Tower**
- Event Plaza
- Central Mall
- Preserved Natural Area
- Trail Network
- Arrival Round-a-Bout
- Interior Identity Signage
- **Parking**
- Drop-off zone







View of Bell Tower & Ridge Mall



Plan Enlargement: Ridge Mall (South)

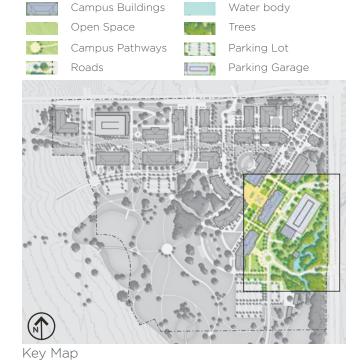
### **East Campus Loop Road**

Visitors entering the campus through the southern campus entry on Preston Road will travel through a bucolic wooded setting, over a bridge spanning the creek, pass by a nature pavilion and pond, and finally end on-axis with the first building as the drive terminates in a traffic circle.

The Nature Pavilion is a campus and community asset that serves social and educational purposes. Situated adjacent to the pond and creek, the pavilion brings users close to nature to work, study, and relax. The pavilion is also intended to host partners, including Frisco ISD who may to hold summer camps in the structure, and other events throughout the year.

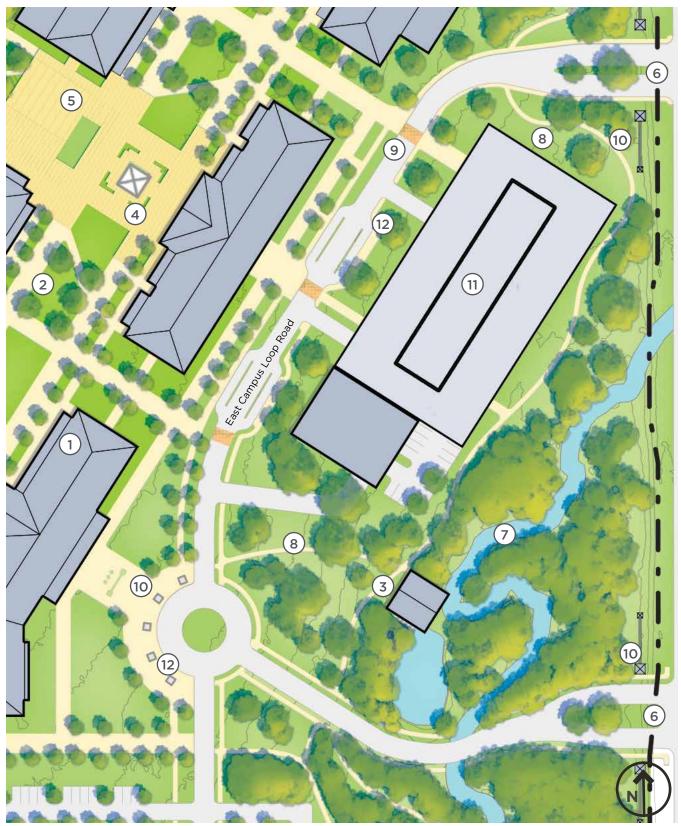
The parking structure shown begins as surface parking that supports the early implementation of the campus, and eventually transforms into structured parking when demand requires. Multiple drop-off points and raised crosswalks are provided along East Campus Loop Road for alternative mobility and pedestrian safety.

- 1) First Building (Building "A" in Development Plan)
- 2 Ridge Mall
- 3 Nature Pavilion
- (4) Bell Tower
- (5) Event Plaza
- (6) Campus Entry Gateway
- 7 Preserved Natural Area
- (8) Trail Network
- (9) Raised Pedestrian Crossing
- (10) Campus Gateway / Entry Signage
- (11) Parking Structure
- (12) Drop-off zone





View of Nature Pavilion



Plan Enlargement: East Campus Loop Road

### Ridge Mall (North)

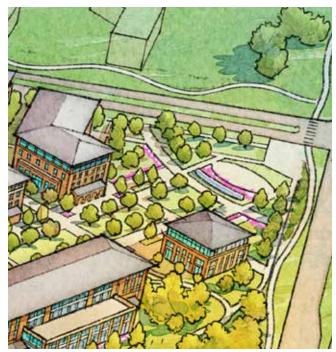
The northern end of Ridge Mall terminates at the campus northeast corner with a prime vista encompassing the length of the mall. The plaza at this corner includes identity signage emphasizing the UNT brand and presents a prime photo opportunity with the mall and tower as the backdrop.

Park Mall follows the path of an existing 50' easement across the campus that contains a high-pressure gas line. Ridge Mall and Park Mall, the primary east-west campus connector, intersect in this area, the transition point between the two main orientations of the campus. The campus-wide trail network weaves through Park Mall connecting through the campus to its boundaries.

The northern buildings in this area frame intimately scaled quads and courtyards, varying the scale of the Open Space Network and the grand malls.

- 1 Portrait Plaza
- 2 Ridge Mall
- 3 Park Mall
- (4) Central Amphitheater
- (5) Event Plaza
- (6) Campus Entry Gateway
- 7 Preserved Natural Area
- (8) Trail Network
- (9) Raised Pedestrian Crossing
- (10) Campus Gateway / Entry Signage
- (11) Quad / Courtyard
- (12) 50' Atmos Energy Gas Easement





Aerial View of Signature Portrait Plaza



Plan Enlargement: Ridge Mall (North)

#### Central Mall

The heart of the campus, the Central Mall is a heavily activated area with multiple pathways intersecting, key programmed open spaces and connections beyond the campus boundaries.

The pedestrian connector links the campus to the proposed Field HQ development north of the future Panther Creek Parkway arterial. This grade-separated connection over Panther Creek Parkway provides safe access across the parkway and terminate in an event plaza and quad on the campus side.

As Central Mall continues south, it intersects Park Mall before passing next to the Central Amphitheater. Ultimately the mall terminates at its southern end with another event plaza at the Bell Tower. Access is readily available from Central Mall to the preserved natural areas. Raised crossings slow traffic along North Campus Loop Road for pedestrians traversing to the western end of the campus.

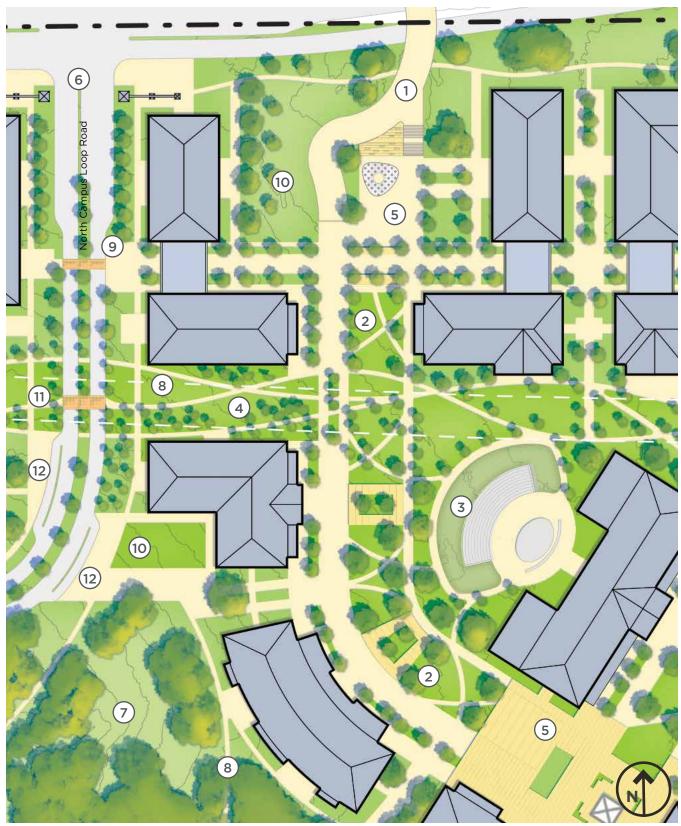
- 1 Pedestrian Connector
- (2) Central Mall
- (3) Central Amphitheater
- (4) Park Mall
- (5) Event Plaza
- (6) Campus Entry Gateway
- 7 Preserved Natural Area
- (8) Trail Network
- (9) Raised Pedestrian Crossing
- (10) Quad / Courtyard / Plaza
- (11) 50' Atmos Energy Gas Easement
- (12) Drop-off zone







View of Central Mall and Amphitheater



Plan Enlargement: Central Mall

### North Campus Loop Road (East)

As the northern entry to campus, the North Campus Loop Road is defined by identity signage at both gateways to reinforce UNT and campus branding. The clearly defined gateways signal one's entry to the campus.

The northern buildings of this area frame a grand event quad for large gatherings appropriate to landscaped areas and service as a buffer between Panther Creek Parkway and the campus.

The buildings just north of North Campus Loop Road have structured parking underneath to assist with transitioning the topography change in this area and to mask parking from view.

Surface parking to the south of the loop road provide ready access to both the campus and the preserved natural area. Future potential exists for these lots to accommodate buildings should the capacity be needed.

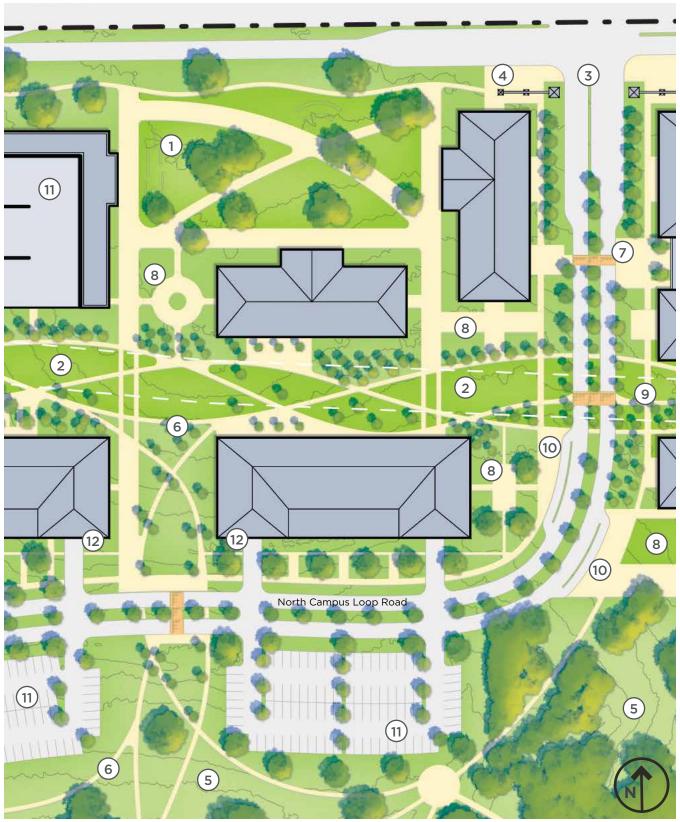
- **Event Quad**
- Park Mall
- Campus Entry Gateway
- Campus Gateway / Entry Signage
- Preserved Natural Area
- Trail Network
- Raised Pedestrian Crossing
- Quad / Courtyard / Plaza
- 50' Atmos Energy Gas Easement
- Drop-off zone
- Parking Lot / Structure
- Integrated Parking







View of Typical Campus Buildings



Plan Enlargement: North Campus Look Road (East)

# North Campus Loop Road (West)

The western most area of campus, may be the last area of campus to be developed. The gateway entry here provides access to a parking structure wrapped in occupiable space, another parking structure beneath the southern building and a surface lot adjacent to the preserved natural area.

Identity signage occurs at both the gateway and at the internal intersection of North Campus Loop Road. Views over this intersection take in the proposed pond area further south.

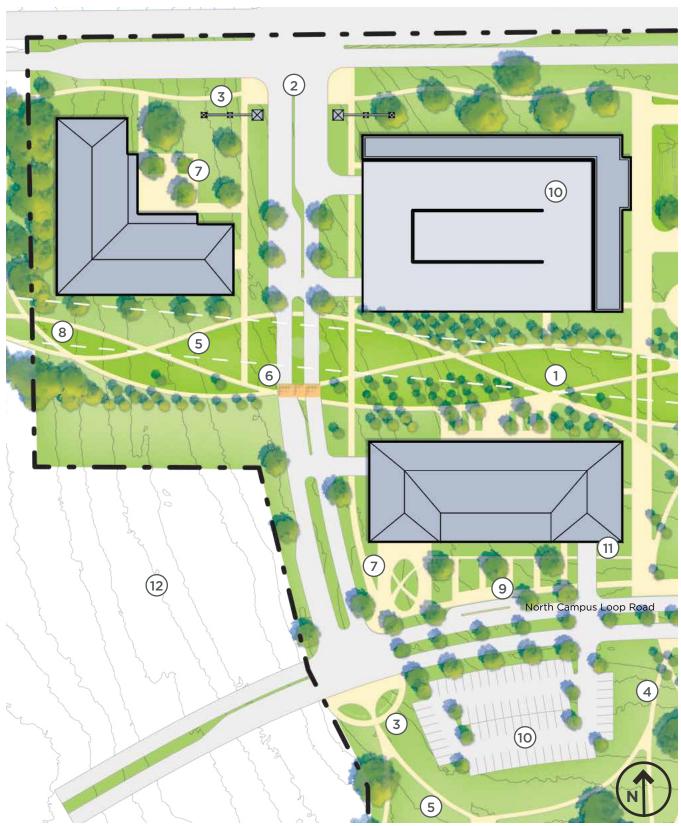
Both pedestrian and vehicular links to the future City of Frisco park are proposed in this location with the pedestrian link occurring along Park Mall and the vehicular link connecting to North Campus Loop Road. This general area may provide an opportunity for shared use facilities or parking.

- 1 Park Mall
- (2) Campus Gateway
- 3 Campus Gateway / Entry Signage
- 4) Preserved Natural Area
- (5) Trail Network
- (6) Raised Pedestrian Crossing
- 7 Quad / Courtyard / Plaza
- 8) 50' Atmos Energy Gas Easement
- 9 Drop-off zone
- (10) Parking Lot / Structure
- (11) Integrated Parking
- (12) Future City of Frisco Park





Aerial View of Northwest Entry



Plan Enlargement: North Campus Loop Road (West)

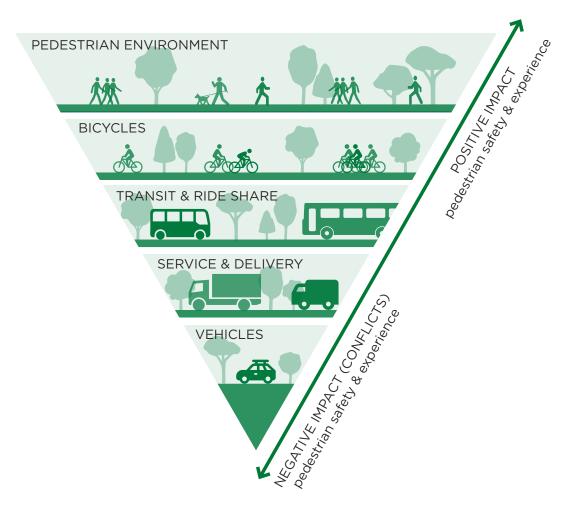




# SYSTEM INTEGRATION



# **MOBILITY**



# **Mobility Hierarchy**

Mobility, how users move around campus, is essential to the operation and function of a university. Legacy campuses often grew with minimal thought to how various mobility systems interact. Today, these campuses are commonly plagued with a host of mobility issues and conflicts, ranging from roads and parking dispersed across campus that create frequent interaction between pedestrians and cars, to poorly located service routes. Presented with the opportunity to create a new campus, thoughtful alignment of these mobility systems was a key aspect of the 2019 Campus Master Plan. The final plan is built upon a hierarchical mobility structure which focuses on maximizing pedestrian safety and creating a positive pedestrian experience

across the entire campus. This is achieved by appropriately layering mobility systems across the campus based on their impact to these goals, striving to minimize pedestrian conflict with these other systems wherever possible.

The primary way this pedestrian-focused vision is achieved is by shifting cars, roads, and parking to the campus edge. Doing this enables the creation of a campus core that is vehicle free with the exception of periodic service vehicles in designated areas.

The diagram above illustrates this hierarchy. The integration of each element is discussed on the subsequent pages.



Central Mall and Central Amphitheater

# **Mobility - Pedestrian Environment**

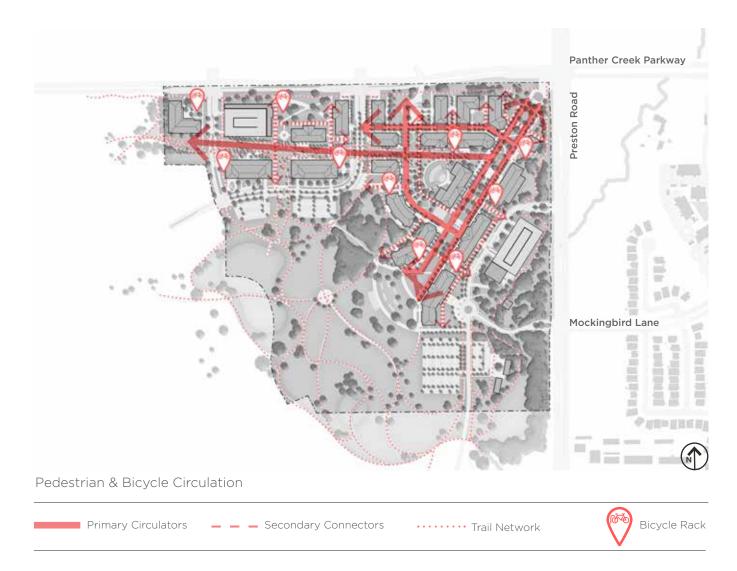
The Master Plan outlines a pedestrian-oriented vision for the campus which creates a strong pedestrian environment within the heart of the campus. Previously described, this environment promotes overall safety and a positive oncampus experience for all visitors. Beyond these benefits, a safe and welcoming pedestrian environment also:

- Promotes overall health and wellness
- Reduces driving and co2 emissions
- Creates more socialization and collaboration opportunities
- Reduce interior barriers and increase the connectivity across campus
- Creates a stronger campus image and brand

#### Framework Integration & Layout

Described in the previous chapter, the master plan Framework organizes pedestrian movement through the campus. This framework guides the placement of pathways, and influences their sizing based on their importance to movement through the campus. Key pedestrian elements to support the framework include the pedestrian connector over Panther Creek Parkway, the Ridge Mall, Central Mall, Park Mall, and campuswide trail network.

More information on the sizing and design of pathways can be found within the Landscape Guidelines sub-section of the Guidelines chapter.



# **Mobility - Bicycles**

#### Bicycle Circulation

As the campus matures, and the surrounding areas continue to develop, bicycles will increasingly become a more common mobility choice for campus users. Bicycle circulation oncampus is handled through two primary systems. First, all roadways should include dedicated bicycle infrastructure and facilities (illustrated later in this chapter) to connect the campus bicycle network to off-campus context. Second, select emergency vehicle access paths through the heart of campus (sized to be 24' or wider) should include a 12' section (two 5' lanes with 1' buffers on each side) marked by paint or material change reserved for bicycle and scooter traffic.

#### Bicycle Parking

Bicycle racks should be distributed across campus, located in close proximity to primary or secondary paths, and appropriately screened. Where possible, racks should be located in locations (such as between two or more buildings) that will allow them to serve an extended area and avoid congesting building entries.

#### Future Off-site Infrastructure

The master plan recommends that UNT advocate for bicycle connections along Panther Creek Parkway to be created by the City of Frisco, and a shared-use path along Preston from TxDOT.

### **Mobility - Transit**

City of Frisco Transit Services

Currently, there are no transit services that offer provision to the campus area. However, in the longer term, the master plan incorporates the possibility of the future transit routes that serve the new branch campus.

The City of Frisco 2015 Comprehensive Plan includes a transit circulator connecting the major points of interest in the city. The proposed route serves the intersection of Panther Creek Parkway and Preston Road. Therefore, the master plan allows for an easy connection to the campus as a part of that loop.

Recently, the City of Frisco partnered with the Denton County Transportation Authority (DCTA) to provide on-demand, curb-to-curb transportation service for disabled and medical needs. This service should be promoted to eligible students, and will be supported through the drop-off and pick-up zones described on the next page.

University of North Texas Transit Services
Throughout the master plan process,
stakeholders in the Transportation Technical
Group identified opportunities for UNT to
operate different campus shuttles as the
need and demand indicates. Identified routes
could include buses to other UNT campuses,
a circulator shuttle to Frisco economic and
business centers, and a circulator shuttle to local

student housing locations. Buses and shuttles can serve campus through the drop-off and pick-up zones described on the next page.

#### Future Transit Opportunities

The Dallas Area Rapid Transit (DART) 2040 Transit System Plan envisions the expansion of future transit options. As a part of the plan, the expansion of the rail line through the Irving-Frisco corridor is a possibility. This rail corridor runs north-south about 1/2 -3/4 mile from the campus, presenting an opportunity for a potential stop on the rail line. The master plan recommends connecting the UNT Frisco Branch Campus to the train stop through multiple options like circulator buses, bicycle pathways, and pedestrian pathways. This creates a strong connection between the campus and the rest of the Dallas-Fort Worth metro area and provides accessibility to a number of population centers.

Additionally, potential transit can include:

- Connections to future Frisco Public Transit routes
- Autonomous ride-share vehicles
- Future transportation technologies



DCTA On-Demand Transit Service



Potential Future Rail Station

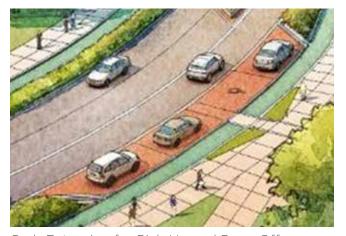


Pick-up/Drop-off diagram



# Mobility - Drop-Off & Pick-Up

As mobility patterns evolve due to user demand and new services, cities are seeing an increase in pick-up and drop-off activity resulting from carpooling and rideshare. For this reason, the master plan incorporates areas along internal loop roads that can accommodate passenger pick-up and drop-off within the campus without creating congestion in central campus pedestrian areas. In addition, these zones increase efficiency by reducing the required parking counts. The master plan recommends different visual and material textures than the travel lanes for the pick-up and drop-off areas to create clear zones. Additionally, the master plan includes a designated area for bus drop-off and pick-up to accommodate events and large groups.



Curb Extension for Pick-Up and Drop-Off



Emergency & Service Vehicle Access

-- --

24' Emergency and Service Vehicle Access



Internal Roadways

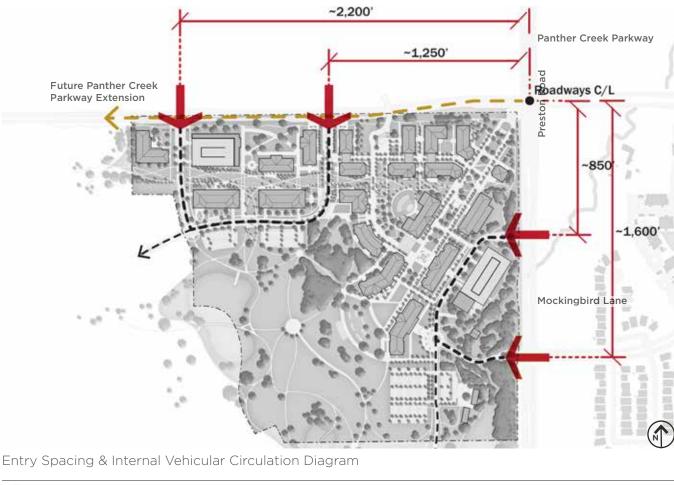
# **Mobility - Emergency & Service**

City of Frisco ordinances require that fire trucks be able to reach a point within 150-feet of all sections of the exterior facade of buildings. Ordinances also require that emergency vehicle access have an unobstructed width of 24' or greater, and vertical clearance of at least 14'.

The master plan incorporates these requirements into the plan by ensuring adequate emergency vehicle access through a system comprised of both roadways and pedestrian pathways rated for emergency vehicle access. The campuses two loop roads act as primary means of access for emergency and service vehicles to enter campus and provide fire and life safety coverage

for perimeter buildings. Interior buildings - and the backsides of perimeter buildings - are covered by a network of pathways that meet the width, clearance, and structural requirements of the city. These paths enable emergency vehicles to enter the campus core at a number of different points, as shown in the diagram. These pathways connect through the Ridge Mall, Central Mall, and the Park Mall enabling service vehicle access to the entire campus.

Service yards and doors should be coordinated between adjacent buildings and clustered together where possible.





# **Mobility - Vehicular Circulation**

Vehicular Access to the Site Access to the new UNT Frisco campus will be facilitated from two arterial corridors.

As identified in the Context chapter, Preston Road is an existing six lane arterial that runs north and south along the eastern boundary of the site. Much of the vehicular traffic to campus will enter off of Preston, especially in the early stages of campus development.

The second arterial corridor that will provide access to the campus site is a planned extension of Panther Creek Parkway that will run along the northern edge of the site. The extension is

currently in the design process by the City of Frisco and is anticipated to be constructed in 2021. Initially, the extension is expected to have two travel lanes in each direction with a central median that will accommodate periodic turn lanes. The plans are for the corridor ultimately to have three travel lanes in each direction and will connect to the Dallas Tollway on the western end. Currently, no precise right-of-way is defined by the city for the extension, but preliminary talks have identified that the 120' right-of-way may center on the property boundary shared by UNT and the parcels immediately north. The master plan assumes for this possible alignment.

New Infrastructure - Authorities Coordination In areas where internal road infrastructure connects to adjacent arterials, such as through new median or driveway cuts, UNT will need to coordinate with several agencies. Below are the agencies having authority over specific topics:

#### Preston Road:

• R.O.W. modifications & connections: TxDOT

• Signal placement: TxDOT

• Signal timing: City of Frisco

#### East Campus Loop Road Creek Crossing:

• Army Corps of Engineers via City of Frisco

#### Panther Creek Parkway:

• All topics: City of Frisco

#### Vehicular Entrances

City of Frisco code requires that all interior roads and parking lots have at least two separate means of egress to the closest arterial. In order to meet this requirement, the master plan identifies two entrances off of each arterial to support the internal road and parking infrastructure essential to the long-term campus build out.

Both entrances indicated along Preston Road in the master plan align with existing median cuts. The northern entry, indicated on the diagram located on the adjacent page, is approximately 850' south of the Panther Creek Parkway intersection.

The second, southern entry, is roughly 1,600' south of the Panther Creek Parkway intersection aligning with the existing Mockingbird Lane intersection to the east. The Master Plan recommends that this intersection be signaled. The intention behind aligning with these existing curb cuts is to streamline the coordination process with TxDOT. This entry necessitates a bridge spanning the existing on site creek which is considered a Waters of the United States (WOTUS) and as such falls under the purview of the Army Corps of Engineers.

The intersections along Panther Creek Parkway are proposed approximately 1,250' and 2,200' west of the Preston Road intersection. As Panther Creek Parkway is designed, UNT should actively coordinate with the City of Frisco to ensure median cuts are created in alignment with the proposed campus entries to minimize future conflict. It is recommended that both entrances off of Panther Creek Parkway be signaled to accommodate anticipated traffic flow. UNT should also prioritize coordination of entries with the developer of the parcels north of the campus to create shared efficiencies.

#### Internal Roadways

Responding to the goal of having minimal vehicular traffic in the heart of campus, vehicular circulation in the master plan is organized around two internal roads, one looping off of Preston Road (the East Campus Loop Road) and one off of Panther Creek Parkway (the North Campus Loop Road). These two loop roads will accommodate all personal vehicle trips within the campus and are laid out in a manner that allows them to server the larger campus without venturing into the campus core. UNT currently plans to own and operate these roadways once constructed, rather than dedicate them to the City of Frisco.

The master plan also identifies future opportunities for these two loop roads to add connections into the adjacent site to the south and west to enhance mobility to adjacent properties once they are developed.

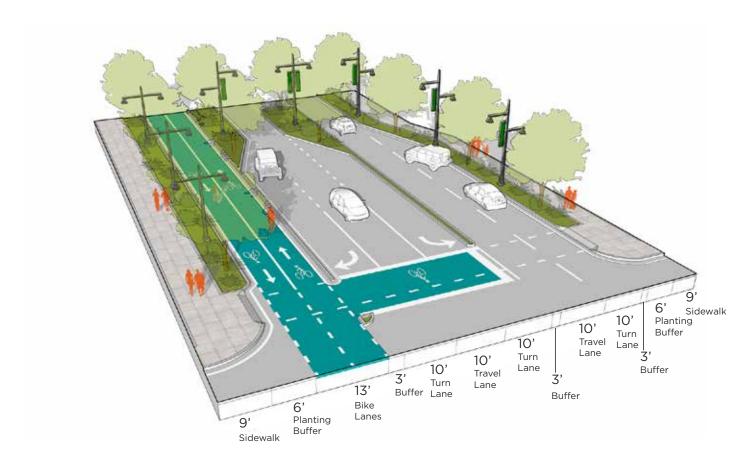
Additional conceptual planning information for internal roadways is contained on the following pages.



Conceptual Illustration of Southern Entry off Preston Road (Signal Recommended - Not Shown)



Conceptual Illustration of Southern Entry off Preston Road (Signal Recommended - Not Shown)



Typical Section through Vehicular Entries



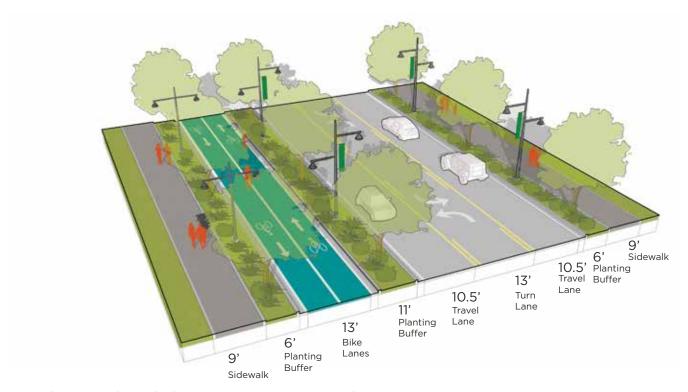
Section Location Diagram

#### Vehicular Entrance Layout

The form and layout of vehicular entrances should be designed to dedicate additional lanes for right and left turns to help traffic clear the intersection more quickly. These additional lanes should extend at least 100' back into campus.

#### Recommended Design Guidelines

- Minimum 100' total right-of-way (R.O.W.) width
- Max 30-mph design speed
- Clear indication of pedestrian crossings, potentially including striping and change in ground surface material
- Alignment with existing (such as Mockingbird Lane) and future roadways (Fields HQ development) when possible to create cross-connections.
- Coordination with City of Frisco to include traffic signals at entries
- Incorporation of gateway signage elements on edge of R.O.W. (not shown above)



Typical Section through the East Campus Loop Road



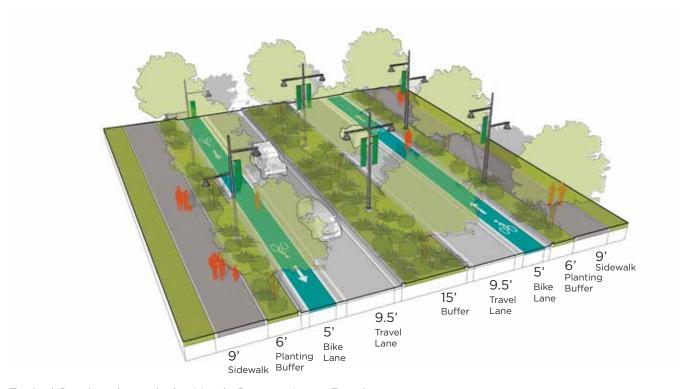
Section Location Diagram

#### East Campus Loop R.O.W. Layout

The East Campus Loop road feeds off of Preston Road at two different points. The proposed roadway is 39-foot curb-to-curb containing one travel lane in each direction and an uninterrupted central turn lane that serves not only ingress into attached parking lots, but also acts as a safety zone to prevent blocking traffic. Bike lanes and pedestrian traffic are both shifted off the road, but within the designated right-of-way, each protected by wide planting strips. The bike lane should be located on the west side of the road bordering campus buildings to prevent bikers from crossing traffic.

#### Recommended Design Guidelines

- Minimum 80' total right-of-way (R.O.W.) width that enables the creation of future lanes if needed
- Max 30-mph design speed
- Raised pedestrian road tables at key pedestrian crossings to slow traffic
- Spaced roadway and pedestrian lighting that includes banner kits for branding



Typical Section through the North Campus Loop Road



Section Location Diagram

#### North Campus Loop R.O.W. Layout

The North Campus Loop road feeds off of Panther Creek Parkway at two different points. The loop contains two one-way roads separated by a central median that contains frequent breaks to become a central turn lane. Travel lanes should be 11-foot including striping. 5-foot one-way bike lanes are located on both sides of the street. These lanes are separated from traffic by a 2' buffer and in ground protective materials. Pedestrians are separated from bikes and cars by a planting strip.

#### Recommended Design Guidelines

- Minimum 80' total right-of-way (R.O.W.) width that enables the creation of future lanes if needed
- Max 30-mph design speed
- Raised pedestrian road tables at key pedestrian crossings to slow traffic
- Spaced roadway and pedestrian lighting that includes banner kits for branding

### **Mobility - Parking**

#### Conceptual Parking Strategy

Balancing broader master plan goals and principles with the reality of anticipated parking needs, the project team crafted a parking strategy that would serve the needs of UNT Frisco Branch Campus from day one, and continue to evolve as the campus grows in the future. The conceptual strategy - table on adjacent page - shows a decreasing parking ratio over time based on expected changes in the campus environment and mobility patterns. However, despite projected decreases in demand overtime, it is critical that the campus provide enough spaces in early phases as there are limited, to no other options to access the site besides personal vehicles.

It is recommended that UNT closely monitor parking occupancy and turnover for at least one year after each new facility in order to ensure demand is adequately met, adjusting as needed.

#### Parking Demand Model

Estimating a precise parking demand number for university campuses is a challenging process due to their unique patterns throughout each day. Turnover of parking spaces on campus is based in large part on class schedules, and can vary between institutions based on the balance of daytime and evening classes. UNT Frisco has a greater number of night-time students than most traditional campuses, which positively impacts the model by decreasing the maximum number of spaces needed to serve peak demand, typically mid-day, as fewer students are scheduled to be on campus at those times.

The "UNT Frisco Parking Demand Model" table on the adjacent page illustrates working assumptions for parking needs at four points in time. The model projects anticipated populations based on student body growth rates, student-to-faculty ratios (1:20), and staff-to-faculty ratios (evolving) and then multiplies these counts by the parking ratios outlined in the "UNT Frisco Conceptual Parking Strategies" table, and finally adjusts it by the anticipated day/night split to reach a recommended parking need for those specific populations.

It is important to recognize that these projections are merely a snapshot, and that the underlying assumptions for how quickly the campus will grow or what the population will look like may change. The model provides a basic formula that can be modified alongside these changing needs to identify the approximate need for parking spaces on campus.

#### Parking Locations

Parking is balanced between the two campus loop roads in a combination of surface parking lots and parking structures of varying sizes. In addition to on-campus parking, it is recommended that the campus work with the City of Frisco to create additional shared parking in the future park planned adjacent to the campus. This potential partnership was identified as a part of the master development agreement.

#### Recommended Design Standards

Based on feedback from UNT technical staff, the below recommendations were compiled to guide implementation of parking on the new campus:

- Use concrete construction (unless a lot is intended to be temporary)
- 9' space width (minimum)
- Integration of technology systems including CCTV, license plate recognition, paperless tickets, and LED lighting
- Space to accommodate future bus stops within parking areas
- Additional ADA spaces (above standard)

Additional Best Practice Recommendations
In addition to the recommended parking supply
numbers and design standards, the project team
developed a list of recommended best practices
based on feedback from stakeholders:

- Design parking lots and garages to accommodate electric vehicle charging stations in the future by placing conduits during construction
- Utilize new technologies, including parking guidance systems, license plate recognition, cash-less entry/exit, and others to ensure an efficient parking system
- Serve future remote parking lots with automated people movers or shuttles
- Set up Travel Demand Management program for faculty, staff, and students to reduce traffic and parking demands from day one



Campus Parking Locations & Counts

Parking Garage	Surface Parking Lot	Below Building Parking	— — Interior Roadways
----------------	---------------------	------------------------	-----------------------

#### UNT Frisco Conceptual Parking Strategy:

Time Period	0-10 Years	11-30 Years	<b>30+ Years</b> .25 to .4	
Recommended Parking Ratio (per population)	.6	.4 to .6		
Rationale	Single Occupancy Vehicles (SOV) is the primary mode	Increased modal options & transit connectivity	Robust multimodal network	
	No proximal housing	More housing nearby	Greatest nearby housing	
	Need to ensure we do not underbuild	Shared parking opportunities	Future transportation modes decrease demand	

#### UNT Frisco Parking Demand Model:

Point in Time (Estimated)	Total On-campus Population (Estimated)	Parking Ratio	Day/Night Population Split	Parking Need (Estimated)
Year 1	3,700	.6	60/40	1,330
10 years	5,500	.6	60/40	1,980
20 years	11,300	.4	65/35	2,940
30+ years	22,650	.25	70/30	3,960

# **STORMWATER**



### **Storm water Management**

At full build-out, it is estimated that the campus will be approximately 55% impervious surfaces which will create increased storm runoff and decreased absorption. To accommodate this new demand, the master plan proposed the creation of pipes and natural channels which will direct runoff into two new detention ponds totaling 515,000 cubic feet of volume. Nearterm, these detention ponds will be dry, but long term, they can be converted into wet ponds for aesthetic and recreation purposes.

Where possible, the campus should develop sustainable approaches to stormwater management including localized bio-swales, storm water capture and re-use infrastructure, detention basins, and larger green spaces. These systems aid in water absorption and help control runoff while also improving water quality. Sustainable stormwater systems provide legibility to advance educational opportunities throughout the campus.

The existing on site creek is considered a Waters of the United States (WOTUS) and as such falls under the purview of the Army Corps of Engineers.

# UTILITY INFRASTRUCTURE

### **Utility Corridors & Loop**

Utilities on the new UNT Frisco Branch Campus will be distributed through consolidated underground utility corridors that connected together will form a campus utility loop. These utility corridors will align chilled water supply and return lines, electrical duct bank, data and communications duct bank, gas, water, sanitary sewer and storm sewer lines into a single cross-section.

Benefits of consolidating and aligning this infrastructure together includes easier tracking and maintenance, reduction in disruption to the campus environment during maintenance, operational and cost efficiencies, and the minimization of having to move and replace infrastructure as the campus develops.

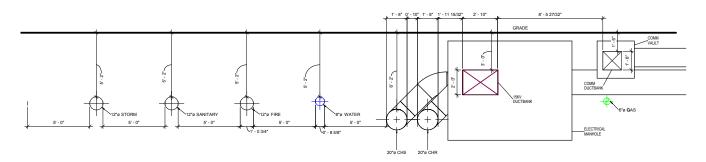
#### Format

Working closely with stakeholders, the planning team has identified a recommended underground layout of infrastructure within this loop, as well as where it should run on campus to optimally serve all phases of development. Utility corridors will be built along the outside perimeter of campus buildings with the central plant acting as a hub for the electric and thermal utilities. Other utilities will originate at their connection points and distribute through the shared corridor. Where necessary, this loop will pass under roadways.

The entire loop will be direct buried and contain isolation valves accessed and operated remotely from ground level. Storm, sanitary, fire supply, and water pipes will be buried 5'2" deep. Chilled water supply and return pipes will be buried roughly 6'2" deep. Each of these pipes will be separated by 5' of spacing (with the exception of the chilled water supply and return which require less spacing). Adjacent to the chilled water infrastructure will be the electrical ducts and communication ducts which vary in depth between 1'6" and 3'. Gas will be located beneath communication lines. In total, the proposed utility corridor cross section is approximately 52'.

Distribution lines may want to be sized to meet demand throughout the long-term development of the campus at installation in order to avoid the need to up-size and replace infrastructure in the future.

The larger utility loop connecting the entire campus will be comprised of two smaller loops, one on the east side of campus support the core and the other on the north side. This arrangement will create a balanced loop at completion that will provide performance benefits and allow flexibility with future campus needs.



Proposed Underground Utility Corridor Cross-section

Building ID	Building (GSF)	GSF/ Ton	Building Tonnage	Air Cooled Chiller	Central Plant	Total Campus Tonnage	Central Plant (GSF)	CT Yard (GSF)	Total Area (GSF)
Α	147,600	350	250	YES	-	250	n/a	n/a	
В	3,025	350	50	YES	-	300	n/a	n/a	***************************************
С	125,700	350	200	YES	-	500	n/a	n/a	
D	121,800	350	200	YES	-	700	n/a	n/a	•••••
E	130,200	350	200	YES	-	900	n/a	n/a	******************
F	98,000	350	150	YES	-	1,050	n/a	n/a	***************************************
G	81,600	350	150	YES	-	1,200	n/a	n/a	••••••
Н	180,450	350	300	-	YES	1,500	5,200	3,200	8,400
Ι	200,700	350	300	-	YES	1,800	-	-	-
J	128,600	350	200	-	YES	2,000	-	-	-
K	221,500	350	350	-	YES	2,350	-	-	-
L	75,000	350	150	-	YES	2,500	-	-	-
M	14,450	350	50	-	YES	2,550	-	-	-
N	11,400	350	50	-	YES	2,600	-	-	-
0	8,000	350	50	-	YES	2,650	-	-	-
Р	8,000	350	50	-	YES	2,700	-	-	-
Q	123,750	350	200	-	YES	2,900	-	-	-
R	123,750	350	200	-	YES	3,100	-	-	-
s	97,200	350	150	-	YES	3,250	-	-	-
Т	125,800	350	200	-	YES	3,450	-	-	-
U	125,800	350	200	-	YES	3,650	-	-	-
V	181,800	350	300	-	YES	3,950	10,300	6,300	16,600

Table of Campus Mechanical Demand (Chilled Water) and Central Plant Trigger Points (Refer to map on pages 96-97 for more information of building sequence)

#### **Central Plant**

Leveraging the technical expertise of UNT staff, it was determined that a central plant model, which includes chilled water and electrical infrastructure, was the best long-term implementation direction for the new campus.

#### Location

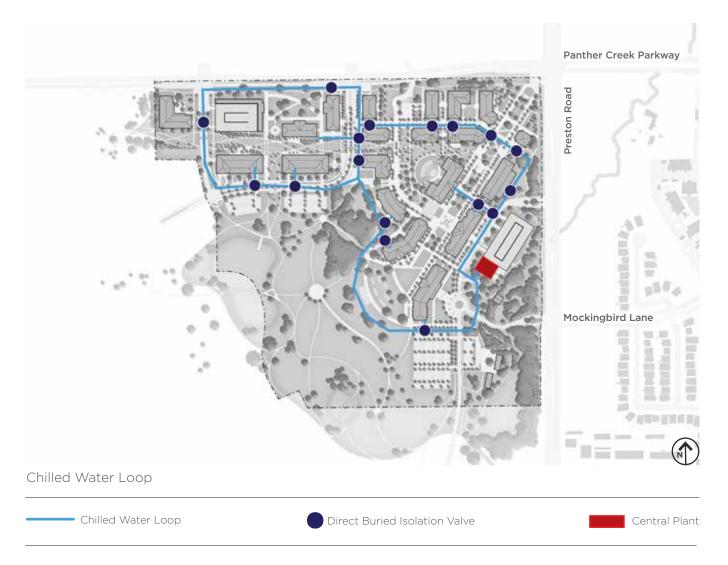
The planning team determined that a central plant located attached to the parking structure inside the East Campus Loop Road provided the best balance of function, operation, and aesthetics. Key factors considered included: proximity to existing local utility connections, the ability to create economical and efficient infrastructure routing through campus, and impact to the campus environment in the form of traffic, noise, and visibility. Despite being in a somewhat prominent location near a campus entry, the central plant will be heavily screened by landscape.

Anticipated Development Time Frame
The master plan recommends that the central

plant be built when the total on-campus tonnage demand reaches approximately 1,500 tons. Based on modeling of multiple potential development scenarios, it is likely that this point will be reached around the time the campus is constructing its eighth building. The above table provides reference to this sequencing.

#### Sizing & Shell Space

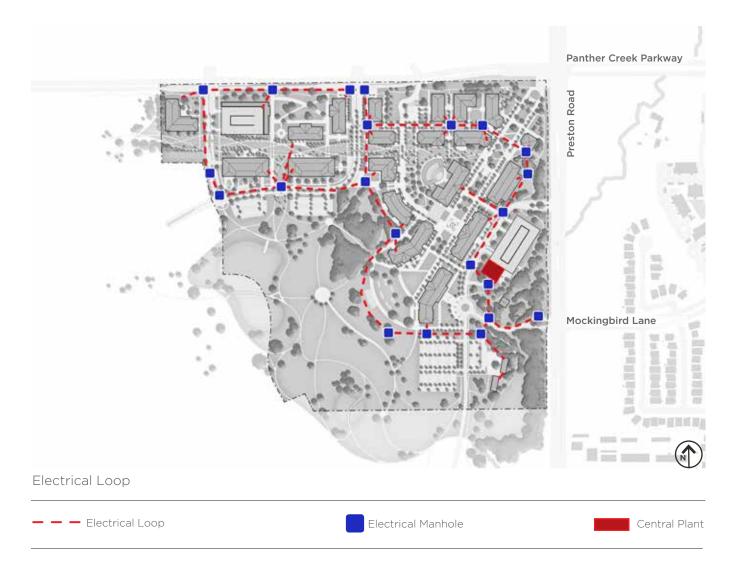
At the point the campus reaches the threshold that makes a central plant economical, a combined 8,400 GSF of space will be needed (plant and yard). This will provide enough capacity to meet current demand plus some future growth. However, the master plan recommends that additional shell space be provided with the central plant at construction to allow for additional equipment to meet demand at full campus build out. At full build out, the plant will require 16,600 GSF of space (plant and yard). The master plan has indicated 17,700 GSF of space to allow for additional UNT Facilities office and storage space.



### **Chilled Water**

Initial development will require chilled water be produced locally at each building, Chilled water will eventually be distributed through the campus utility loop from water cooled centrifugal chillers located in the central plant. These chillers were recommended because of their efficiency and equipment life span compared to air cooled chillers. Total projected chilled water load at the completion of the master plan is roughly 3,550 refrigerant tons. This corresponds to a flow rate of approximately 6,100 gpm requiring a 20" pipe at the central plant exit. The main chilled water lines throughout the corridor should be sized based on final building type and load requirements.

The chillers will be supported by concrete basin field-erected cooling towers to reject the heat absorbed by the condensers in the centrifugal chillers. The towers will be direct contact and use PVC fill. Upon completion of the central plant the cooling towers will require 140 gpm makeup water due to blow down, drift, and evaporation. A 4" domestic water line from the utility corridor to the central plant will provide sufficient capacity to satisfy the water requirements. Chilled water return and supply will both have primary pumps only. Supply and return temperatures will be 44-degrees and 58-degrees Fahrenheit in compliance with UNT Design & Construction guidelines.



#### **Electrical**

The campus will have underground electrical distribution within the campus loop supplied by two 12.47kV services connections to create redundancy. One connection will be located near the Preston Road and Mockingbird Lane intersection to serve early campus development, while the second will connect along Panther Creek Parkway at a later date. These two circuits will route through the campus to 15KV pad mount switches, which will then serve step down transformers from the fused side of the switch. Typical step-down voltage is 12,470-480Y/277V for classroom buildings and central plant chillers.

The 15KV duct banks will be concrete encased with power manholes located no more than 400-feet apart for strait pulls. In areas with bends as large as 90-degree, this spacing will need to be reduced. Nowhere on campus should spacing distances exceed cable pulling tension calculations.

Each of the two campus feeders will have up to 20MVA of capacity. The campus will be set up such that one feeder can support the entire campus. Therefore, the campus capacity will be 20MVA with the intent for each feeder to be half loaded; approximately 10MVA.



#### **Gas Utilities**

A gas line connection will enter campus near the southeastern corner of the campus boundary. A gas meter should be installed near the connection point. The gas line will be connected to individual buildings through pipe infrastructure contained within the campus loop.

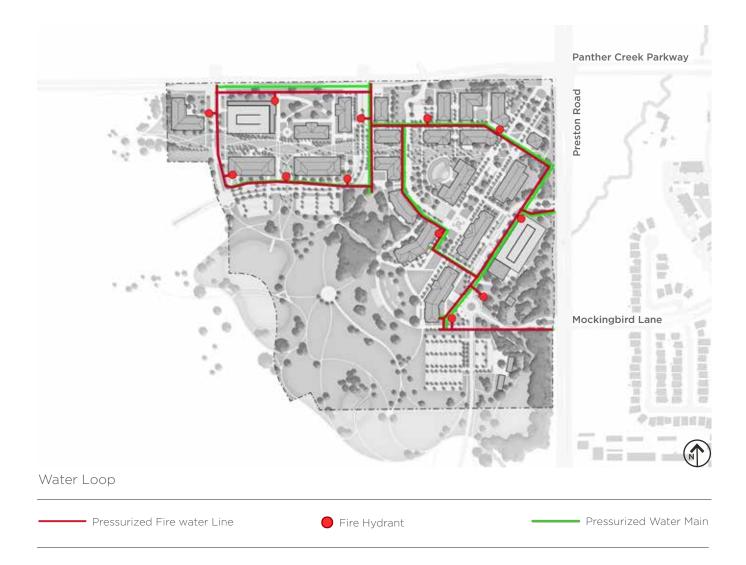
# Hot Water / Thermal Loads

Hot water will be generated individually by standalone gas-fire boilers located in each building.

#### Wastewater

Proposed wastewater mains are sized based on City of Frisco wastewater design and demand requirements coupled with the projected total campus population at build-out. The demand is based on 20 GPD/student (Gallons per day per student) and a peak factor of 4.

The domestic water supply for the campus will run in parallel with the campus utility loop where possible, but may require separate routing in select areas based on grading requirements. Infrastructure is recommended as a pressurized 12-inch diameter, SDR 35 and/or SDR 26 wastewater main at a minimum 0.5% slope. Manholes will be provided for at all changes in grade or direction with a maximum spacing of 500-feet.



#### Water Utilities

#### Water Demand Projections & Sizing

Proposed water mains are sized based on City of Frisco water design and demand requirements coupled with the projected total campus population at build-out. The demand is based on 50 GPD/student.

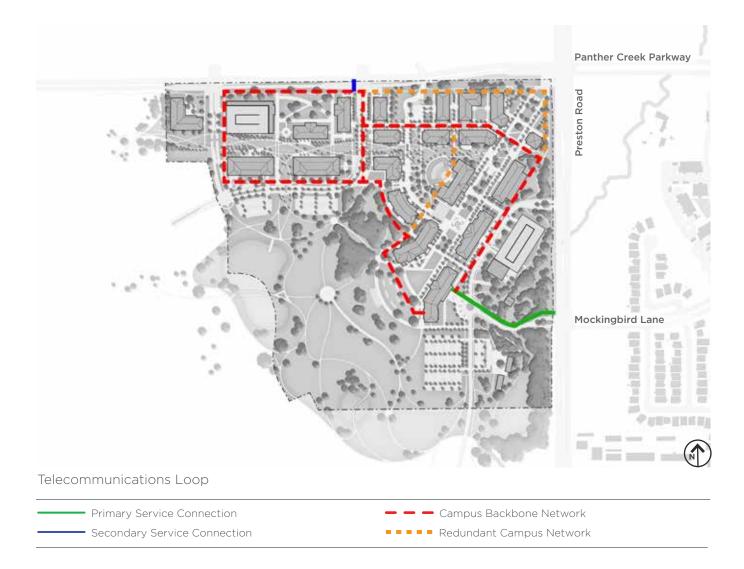
The domestic water supply for the campus will run in parallel with the campus utility loop. It will be provided by a pressurized 8-inch diameter, AWWA C900 DR 14 water loop that has, at minimum, two connections to off-site public water mains for redundancy. An 8-inch domestic water meter will be provided either within the R.O.W. or inside a dedicated water easement at each connection point to the public water line.

#### Fire Coverage

Fire protection for the entire campus will be provided by a stand alone 12-inch diameter, AWWA C900 Dr 18 fire water loop that has, at minimum, two connections to off-site public water main for redundancy. A 12-inch back-flow preventer will be provided within the R.O.W. or inside a dedicated water easement at each connection to the public water main. Hydrants will be distributed to meet city requirements that each building be within a 500 linear foot coverage radius.

#### Irrigation

An irrigation meter and stub out will be provided within the R.O.W. or inside a dedicated water easement.



### **Data & Communication Services**

#### Selection of Service Provider

The University of North Texas will select a communications service provider for the new branch campus. Final utility access design will be determined after the selection, with a preliminary list of providers currently under review.

#### Primary Service Connection

Primary access will likely be off Preston Road and distributed throughout the campus through the campus utility loop via a DMarc/MDF located within the first building. The exact connection point will be determined once the University of North Texas has selected their communications vendor and their service location has been identified.

#### Secondary Service Connection

The university would like to add a secondary communications service in the future for redundancy. This may consist of service from the same vendor or from a second vendor but entering the campus from a different location/direction. The secondary service should enter the campus from the north along Panther Creek.

Once entering the campus, the secondary connection will be routed to the DMarc/MDF in the First Building using the campus backbone conduit system when it is installed.

#### Incoming Utility Duct Bank

The Master Plan recommends a duct bank consisting of four (4) 4" conduits be installed from the utility access point, normally in the right of way of a bordering road, to the DMarc/MDF of the main building on the campus, in this case the First Building. As an alternative, additional or larger conduit may be installed.

The conduits should be concrete encased or at a minimum have a concrete cap. One (1) or more of the conduits should have a multi-cell fabric inner-duct installed. This will allow for easier installation of future cables. All ducts will have pull ropes installed.

The pathway will be installed parallel to the incoming electrical utilities.

#### Campus Backbone Duct Bank

A duct bank consisting of four (4) 4" conduits is recommended to be installed from the First Building in a loop around the campus.

The duct bank should either be encased in concrete or have a concrete cap. One (1) or more of the conduits should have a multicellular fabric inner-duct installed. This will allow for easier installation of future cables. All ducts will have pull ropes installed.

There will be access points (manholes, hand holes, and pull boxes) installed at 150' intervals along the pathway. Appropriately sized enclosures will be installed for each new building.

The backbone system will be connected to an enclosure located just outside the foundation of each building which is in turn connected to the MDF serving that building.

#### Campus-Wide WIFI Goal

The University of North Texas would like to provide WiFi access to all areas of the campus with the intention of providing network access to students. Areas to be covered include:

- Building interiors and adjacent exterior spaces
- Outdoor gathering areas including quads, amphitheaters, walking trails, lawns and lake side
- Parking areas

Campus-wide WIFI Connectivity Options
There are several options for providing
connectivity to the Wireless Access Points
(WAPs) around the campus.

Power over Ethernet (PoE) uses the data cable to transmit power to the remote devices. This is a cost-effective option but is limited to 100m unless an Ethernet Extender is used.

Fiber optic cable may be used but will require a fiber optic to copper transceiver for data transmission and 120V power for the transceiver and to power the WAP. This is not an issue for WAPs located near power sources like light poles, lighted bollards, or attached to buildings. The use of fiber optic cable provides extended distances over copper and isolates the network from damaging voltage from lightening strikes. Cost of this option is more expensive than the copper solution.

A hybrid fiber optic / copper system can be implemented. This system provides data transmission over the fiber and uses the copper cable to provide PoE power to transceivers and devices as necessary. This system will provide connectivity to over 3,000 feet depending on the performance level selected. This solution offers the same benefits as the previous fiber option in a consolidated hardware solution. This option is more expensive and is has limited distance because of the use of PoE.

All of these solutions may also be used for other IP based systems like surveillance cameras and access control.

#### WAP Device Options

WAP devices and antennas may be installed outdoors in a variety of ways to address many situations.

For the exterior of a building a WAP device may be installed on the exterior of the building or inside the building with an antenna installed on the exterior of the building. In most cases the housing mounted to the exterior of the building can be painted to match the buildings finish. Light poles may be used as a location for WAPs. The device may be mounted to the pole or inside the pole with an external antenna for aesthetics. The benefit of this installation is that power is typically installed to the same location for the lights.

Bollards and pedestals are another option. Bollards with integrated lights have the benefits of a light pole. Power will have to be added to a location or PoE utilized for non-lighted locations.

Above ground enclosures are available to house WAPs in a wide variety of form factors. They range from simple wall mounted boxes to enclosures mounted under benches, under stadium seats, or in landscaping.

WAPs may also be installed in underground enclosures or vaults with the use of external antennas.

Campus Security - Surveillance Video
Video surveillance systems for the new campus
will provide electronic surveillance of areas
needing specific monitoring (e.g. building
entrances) and general areas (e.g. parking lots).
Surveillance is used for incident detection,
monitoring, alarm assessment, and forensic
investigations that will provide video data of
activity and identification of persons.

Surveillance systems can be either monitored 24/7 or unsupervised, as data will be recorded upon motion within the field-of-view of the camera and can be viewed any time up to 90 days or depending on campus requirements.

- Internal/primary areas of surveillance will include, but not be limited to first floor entry vestibules, stairwells, internal corridors, and thruways.
- External surveillance will include wall/ corner mounted camera infrastructure to provide views for monitoring of entryways, exit doors, pathways, public gathering areas, and parking areas.

Additional external camera infrastructure (e.g. pole mounted) will be determined by the type of camera required for the location.

Typical external parking-area infrastructure may

include fiber to each camera location or to a predetermined enclosure encompassing fiber converter used to transmit adjacent camera location video streams.

Campus Security – Emergency Communications External campus intercommunications intercom towers will be provided in various predetermine locations on the campus grounds. The intercom devices will be used to provide emergency communications to campus police with one-touch of a button.

- A single blue lamp above each tower will provide easy location of these towers in hours of darkness, as well as during the day.
- Typical external tower infrastructure may include fiber, category rated cables, phone lines, or cellular provisions to each tower location or to a predetermined enclosure and is dependent on the intercom type and location.

### **Emergency Services**

Each building on campus should be individually metered with systems capable of communicating building specific information to a monitored campus network.

Emergency power service will be provided by diesel fired generators at each building. Generator start up times of 10 seconds or less is required to utilize the generator for emergency egress lighting. If these standards are not met, battery operated lights will need to be used for this purpose. Typically, buildings three stories and higher will also require a fire pump. Anticipated generator loads include the fire alarm system, elevators, and emergency egress lighting.

# DEVELOPMENT PLAN



# DEVELOPMENT PLAN

The following chapter depicts an implementation strategy informed by forecasted population growth, space needs and infrastructure requirements to achieve the aspirations of the campus master plan. The campus framework allows the master and development plans to be realized flexibly while accommodating unexpected challenges, changing needs and new opportunities.

For UNT Frisco to deliver its academic enterprise and deepen its community partnerships, the university needs to be able to alter directions as necessary. Growth of the campus may be shaped by multiple factors that can make implementation challenging, hence the need for a resilent framework. Select factors include (but not limited to):

- Evolving student demographics
- Academic market demand, program offerings, and delivery models
- Pedagogical trends
- Significant changes in technology
- Political trends including local, regional, state, and national priorities
- Business cycles and availability of financial resources for capital projects
- Donor and partnership opportunities
- · Community priorities and needs
- Other future opportunities and challenges not anticipated today

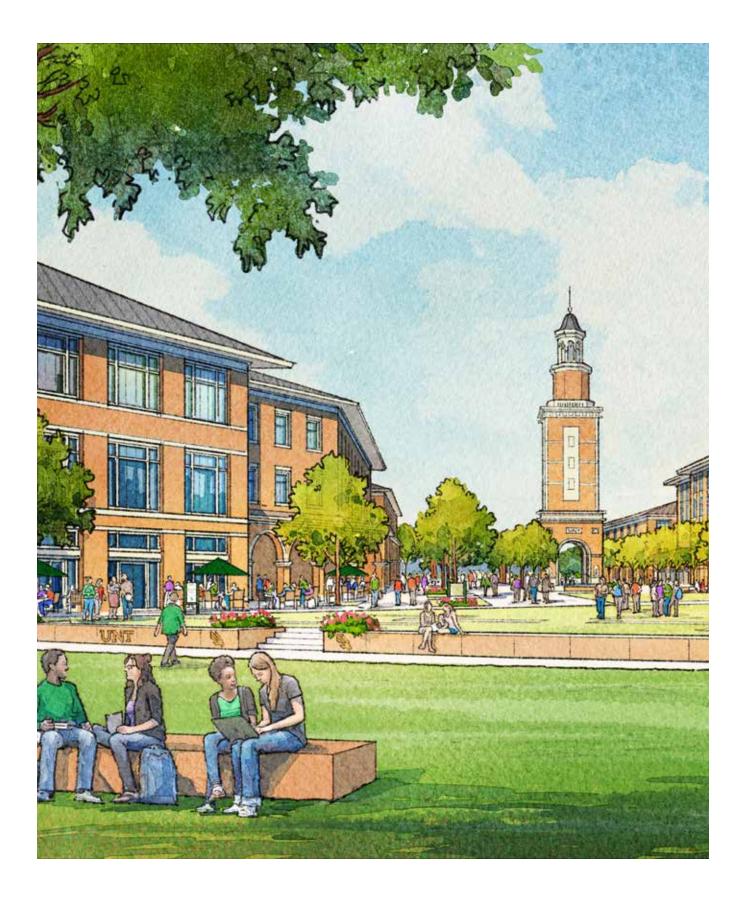
The Development Plan represents campus growth illustrated through four proposed phases, anticipating the development that may be necessary to meet campus needs within each time period. However, the implementation of these phases can be re-ordered and adjusted to address evolving needs and opportunities without compromising the overall framework. Definitions of these time horizons and their associated development assumptions are outlined in the table at the bottom of this page. Greater detail on each phase can be found on the subsequent pages of this chapter.

Throughout the planning process, stakeholders expressed a desire to create a campus feel from initial opening by leveraging site assets such as the incredible views and natural setting, to maximize the experience of campus.

Stakeholders also expressed a desire for future growth to be concentrated adjacent to already completed portions of the campus, when possible, to avoid a disconnected and disjointed campus experience as well as create cost efficiencies, such as minimizing the extension of infrastructure. The campus framework provides a natural progression of growth that will allow the campus to expand over time while preserving the strong campus experience desired by stakeholders.

Development Plan Proposed Phase	Time Period* (Estimated)	Total Phase GSF (Low Range)	Total Phase GSF (High Range)	
First Building	Fall 2022	113,725	150,625	
Near-Term	0-10 years	185,625	247,500	
Mid-Term	10-30 years	761,225	1,157,900	
Long-Term	30+ years	476,800	778,100	
	Total Campus Capacity GSF	1,541,375	2,334,125	

<sup>\*</sup> Estimate years after campus opening



# SPACE NEEDS ASSESSMENT

#### Introduction

The basis of the space needs assessment for the campus is forecasted on five future student headcount population scenarios that identify the amount of various space types, across UNT Frisco locations, necessary to support the population and academic enterprise. While informing the overall capacity of the campus master plan, the assessment is more directly informing the potential development plan with needs approximately correlating to the projected growth phases.

The student headcount population scenarios and approximate corresponding growth phase include:

Population Scenario	Growth Phase
3,400	First Building
5,000	Near-Term
10,000	Mid-Term
15,000	Long-Term
20,000	Long-Term

The population scenarios are further refined to estimate Full-Time Student Equivalent (FTSE) quantities along with Staff and Faculty Headcount (HC) quantities that are utilized in forecasting needs.

# **Assumptions and Exclusions**

The assessment has been tailored to take into account UNT Frisco's unique premise and approach. A number of these factors have a direct impact on the amount and distribution of space between the different types. Some of these key assumptions include:

- A project-based learning pedagogy that entails a higher net assignable square footage (NASF) per student than traditional classroom models
- A higher than common ratio of upper division ungraduated and graduate

- population to support the student transfer and professionals continuing their education. This ratio is expected to become more balanced over time.
- Increased need for open laboratories and collaboration space to support the projectbased and partnership-based learning pedagogies. Instruction and learning will frequently occur outside of formal instruction times and spaces.
- Minimal need, at least through the nearterm, for instructional class laboratories.
   Students will commonly have completed introductory class labs at Collin College or other institutions prior to matriculating to UNT Frisco. Also, the current selection of program offerings at UNT Frisco do not rely on typical wet instructional labs and this is expected to continue.
- Initially, minimal research is expected to occur on campus, alleviating the need for research labs, offices and associated spaces. Research needs may grow over time.
- Inclusion of a Learning Commons or Learning Resource Center versus a traditional library model. This significantly reduces the area need for stack and storage space while better aligning with the project-based learning model of UNT Frisco.

Along with the above assumptions several items that would commonly be included or influence the space needs assessment have been excluded based on UNT Frisco's enterprise model. These include:

- Residential and related spaces have been excluded. The campus is exploring partnership models, particularly with adjacent properties, for the development of residential components necessary to support the campus.
- No competition or club athletics have been included as the campus is a branch of the main UNT campus in Denton.
- Initially, no or minimal space has been provided for dining, recreation/wellness and commercial (retail, entertainment, etc) uses. Similar to residential needs, the campus is seeking to form partnerships for the provision of these types of spaces and amenities.

Student Headcount	3,400	5,000	10,000	15,000	20,000
FTSE	2,550	3,750	8,000	12,750	17,000
Academic Space					
Classroom	39,780	58,500	101,760	149,940	175,440
Class Laboratories	31,097	60,975	162,720	222,041	259,335
Open Laboratories	22,950	26,250	56,000	76,500	85,000
Research Laboratories	2,560	5,120	26,880	60,000	137,280
Learning Commons	5,012	5,012	17,133	17,133	33,688
Collaborative Study	13,600	20,000	40,000	60,000	80,000
Academic Space Total NASF	114,999	175,857	404,493	585,614	770,743
Support Space					
Office & Office Service	43,680	73,360	182,000	232,120	371,280
Assembly & Exhibit	10,000	10,000	40,450	68,950	70,450
Physical Plan	2,093	6,485	33,172	47,437	62,890
Support Space Total NASF	55,773	89,845	255,622	348,507	504,620
Student Space					
Recreation & Kinesiology	10,000	10,000	92,340	137,985	184,774
Student-Centered Space	27,200	50,000	100,000	150,000	160,000
Student Health & Wellness	3,400	5,000	10,000	11,250	15,000
Student Space Total NASF	40,600	65,000	202,340	299,235	359,774
TOTAL NASF	211,372	330,702	862,455	1,233,356	1,635,137
NASF / FTSE	83	88	108	97	96
GSF @ 65% Efficiency	325,187	508,772	1,326,854	1,897,471	2,515,595

### **Summary**

The UNT Frisco space needs will evolve rapidly over the initial growth periods depending on population increases, program offerings and general success of the campus. Regularly reassessment of the above will be critical to ensure that the necessary spaces are being provided or planned for to support the campus.

Generally, the above indicated NASF/FTSE metric aligns with expectation that would see space growth rising continuously with a high-point occurring before starting a slow decline as specific-use facilities have been completed.

# FIRST BUILDING

Beyond constructing the first physical building of the campus, significant infrastructure improvements to the site will be required. This first phase will include the installation of off-campus utility connections, landscaping, grading, roadways and parking, and other necessary improvements to create a functioning and inviting campus.

It is anticipated that the first building will be a multi-purpose academic facility that incorporates teaching and learning spaces, offices, select student services, student support spaces, and other resources. As the first building is unlikely to fulfill the forecasted space needs, assuming enrollment growth targets are realized, it is expected that existing facilities at Hall and Inspire Park will continue to be utilized for the foreseeable future. The size of the first building is estimated to be between 110,700 to 147,600 GSF at 3- to 4-stories.

Stakeholders expressed that fostering a positive campus experience for students and visitors from the initial opening was an important consideration when evaluating what to include in the first phase. Dependent on available funding, a few key features may be considered for inclusion in the first phase. These include:

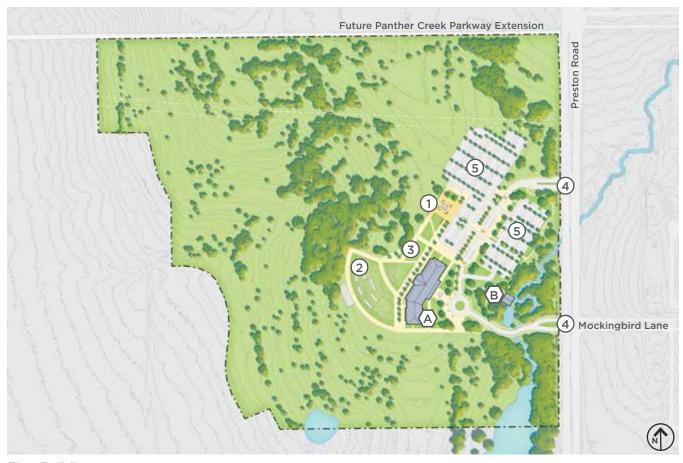
- Bell Tower: Centered on the ridge-line, the multi-story bell tower will be the tallest structure on campus, visible from extended distances and serving as a vertical landmark.
- Nature Pavilion: Positioned adjacent to the existing creek and pond, the proposed pavilion may include a large indoor-outdoor learning and event space that will provide space for campus and community events.

 Prairie Amphitheater: Proposed immediately west of the first building is a large, multi-purpose amphitheater of gradually sloping landscaped tiers with intermixed seating elements to support casual use and larger events.

The site will be accessed through two entry points off Preston Road with a loop road running between them to access campus location. The southern entry is aligned with Mockingbird Lane and is desirable to be a signalized intersection pending coordination with the City of Frisco and TxDOT. Both entry gateways will incorporate UNT branded signage. The loop road will provide access into two surface parking lots northeast of the first building. A future lot immediately south of the first building was also considered as an option, however, it presents a unique set of challenges. Technically, it falls outside of the first 50-acres designated in the master agreement for initial development and it also does not meet city vehicular egress codes at this phase (which will require an additional exit off the site indicated created by a southern connection shown in future phases). It also has more steep topography than the preferred lot shown along the ridge, which creates challenges with providing ADA parking and does not provide enough parking stalls to meet parking demand without expanding out into natural areas identified for preservation. Experientially, the preferred location north of the first building also creates a positive entry sequence for visitors who will park and then walk past the Bell Tower and along the Ridge Mall before entering the building.

Utility connection points are generally available towards the southeast corner of the site and along Preston Road.

Proposed Building	Footprint	Lo	w Range	High Range		
	(GSF)	# of Floors	Building GSF	# of Floors	Building GSF	
Α	36,900	3	110,700	4	147,600	
В	3,025	1	3,025	1	3,025	
		Total Low GSF	113,725	Total High GSF	150,625	

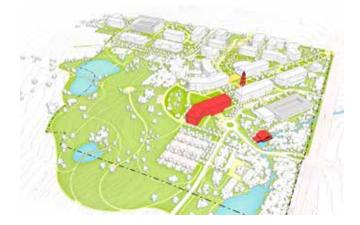


First Building

# **Key Components & Features**

- A First Building
- B Nature Pavilion
- 1 Bell Tower
- 2 Prairie Amphitheater
- 3 Ridge Mall
- (4) Entry Point from Preston Road
- (5) Surface Parking
- Building If not included above, refer to previous page chart for letter designation of proposed building. Sequencing may vary.





# **NEAR-TERM GROWTH**

Projected near-term growth includes two additional buildings, expanded surface parking, extension of the Ridge Mall and the beginning of Central Mall. The development illustrated approximates growth anticipated within 0-10 years after campus opening. Due to a variety of potential internal and external factors that will influence how quickly UNT Frisco grows, the depicted near-term needs could be accelerated or slowed.

Building C is proposed across Ridge Mall from the first building. As illustrated, Building C ranges 94,275 to 125,700 GSF at 3 or 4 stories, but has flexibility to increase in size to accommodate evolving needs.

Building D is northeast of the first building, offering the next phase of incremental growth along the Ridge Mall, replaces a portion of surface parking. At 3 to 4 stories also, Building D adds between 91,350 to 121,800 GSF.

It is expected that buildings along Ridge Mall will be of a consistent height, so the near-term and later buildings will coordinate heights with the first building. Experientially, the biggest change to the campus is the framing of the Ridge Mall by Building C to frame the central campus open space. Building D further extends Ridge Mall northeast, and creates the start of a new connection, Central Mall, which will ultimately link to the pedestrian connecter spanning Panther Creek Parkway.

New trails may begin to connect the developing campus core to preserved natural areas at the base of the hill and link into regional trail networks off-site.

Upon completion of the Panther Creek Parkway extension to Preston Road, it is recommended that the campus install signature gateway signage at the new intersection.

	Proposed Building	Footprint	Lo	w Range	High Range		
		(GSF)	# of Floors	Building GSF	# of Floors	Building GSF	
	С	31,425	3	94,275	4	125,700	
	D	30,450	3	91,350	4	121,800	
• • • •			Total Low GSF	185,625	Total High GSF	247,500	

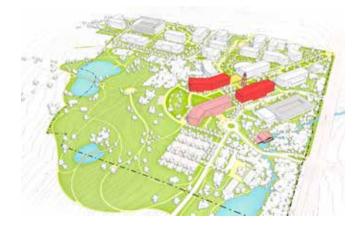


Near-Term Growth

## **Key Components & Features**

- C Building #2
- D Building #3
- 1 Central Mall
- Expanded Surface Parking
- (3) Identity Signage
- (4) Trail Network
- Building If not included above, refer to previous page chart for letter designation of proposed building. Sequencing may vary.





# MID-TERM GROWTH

Expanding north and northeast, additional buildings are added along Ridge Mall and Central Mall, with its accompanying amphitheater, is fully developed. At its completion the Central Mall will stretch from the Bell Tower to the pedestrian connector over Panther Creek Parkway. Park Mall, which runs along the 50' gas easement, begins to be defined, creating the start of the eventual east-west connection across the campus.

The development plan for mid-term growth is highly adaptable as the campus will likely experience significant growth, changes and new opportunities. Illustrated are eight additional multi-purpose buildings that range in approximate size between 60,000 to 200,000 GSF. Additionally, this phase also includes two new smaller stand-alone structures located in southeastern portion of the campus near the creek. These buildings are between 4,000 GSF and 8,000 GSF, each intended to support either partnership programs, science programs, or event space.

In total, between 761,225 to 1,157,900 GSF additional is shown ranging in height of 1- to 6-stories.

As the campus' built area grows northwards, two new entries and a second internal loop road feeding off of Panther Creek Parkway will likely be needed Both new vehicular entries along Panther Creek Parkway should include new permanent campus gateway signs marking the threshold into campus.

At phase build out, the surface lots that provided much of the campus' parking during the nearterm have been redeveloped. To accommodate parking needs, the campus will offer parking areas off both interior loop roads. A new parking structure may be built inside the East Campus Loop Road (with connected central plant) while new surface lots are built inside and surrounding the North Campus Loop Road.

Proposed	Footprint	Lo	w Range	Hi	gh Range
Building	(GSF)	# of Floors	Building GSF	# of Floors	Building GSF
E	32,550	3	97,650	4	130,200
F	24,500	3	73,500	4	98,000
G	20,400	3	61,200	4	81,600
Н	30,075	4	120,300	6	180,450
I	33,450	3	100,350	6	200,700
J	32,150	3	96,450	4	128,600
K	44,300	3	132,900	5	221,500
L	18,750	3	56,250	4	75,000
М	7,225	1	7,225	2	14,450
N	11,400	1	11,400	1	11,400
0	4,000	1	4,000	2	8,000
Р	4,000	1	4,000	2	8,000
		Total Low GSF	761,225	Total High GSF	1,157,900



Mid-Term Growth

# **Key Components & Features**

- Ridge Mall
- 2 Central Mall
- 3 Park Mall
- 4 Central Amphitheater
- (5) North Campus Loop Road
- (6) Campus Entry Gateway
- 7 Parking (Surface / Structured)
- Building If not included above, refer to previous page chart for letter designation of proposed building. Sequencing may vary.





# **LONGER-TERM GROWTH**

The final phase of development within the master plan expands campus west between Panther Creek Parkway and the North Campus Loop Road, replacing surface lots with new buildings, open spaces, and parking structures. Development shown is expected 30+ years in the future, though certain elements could be built earlier if UNT finds alternate opportunities to leverage these sites. In total, longer term growth is expected to add between 476,800 to 778,100 GSF of additional space assuming buildings are between 2- and 6-stories in height.

Two new large open spaces are created along Panther Creek Parkway that are intended to create an open and welcoming feel to the campus edge and offer views further into the campus site. New proposed parking structures will consolidate parking and enable the preservation of natural space at the base of the hill. Two of the garages are located beneath buildings tucked into the grade (minimizing their visibility). The third is a larger central garage located off the western Panther Creek Parkway entry which will accommodate most of the parking demand for the north side of the campus.

Proposed	Footprint	Lov	Low Range		gh Range
Building	(GSF)	# of Floors	Building GSF	# of Floors	Building GSF
Q	20,625	4	82,500	6	123,750
R	20,625	4	82,500	6	123,750
S	16,200	4	64,800	6	97,200
Т	31,450	2	62,900	4	125,800
U	31,450	2	62,900	4	125,800
V	30,300	4	121,200	6	181,800
		Total Low GSF	476,800	Total High GSF	778,100



Long-Term Growth (Full Build-Out)

## **Key Components & Features**

- 1) Park Mall
- ② Quad / Courtyard / Plaza
- 3 Parking Structure
- 4 Parking Lots

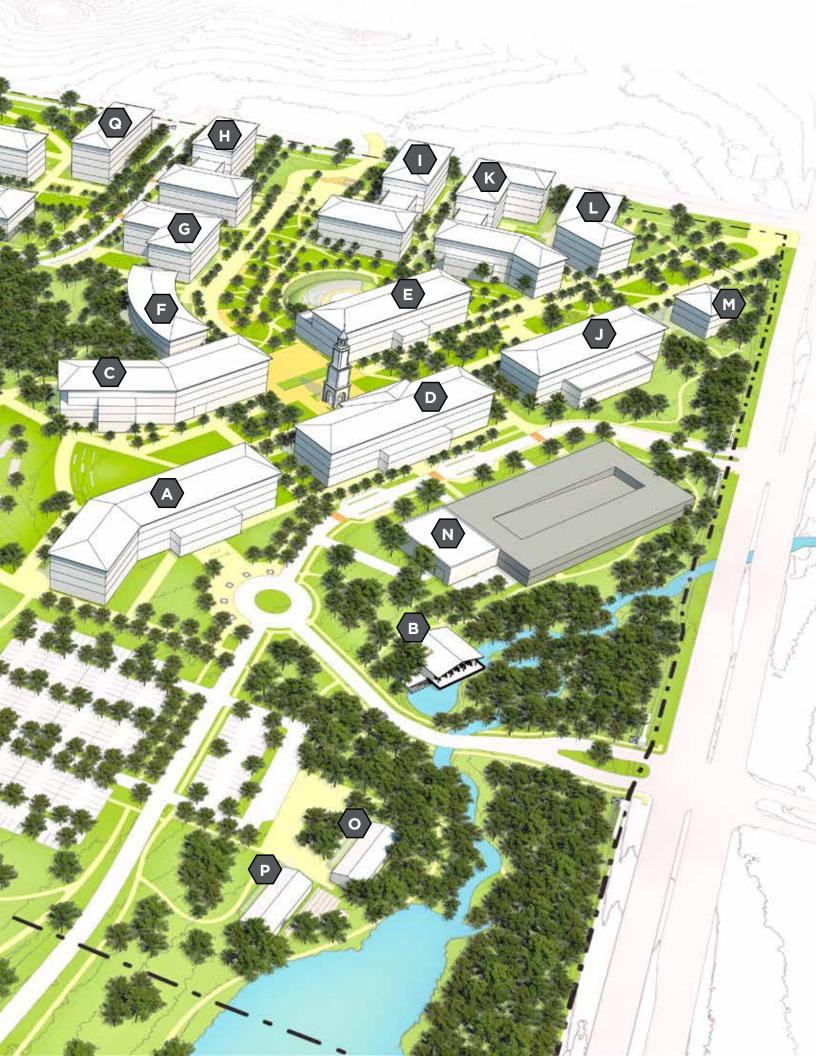




Building - If not included above, refer to previous page chart for letter designation of proposed building. Sequencing may vary.



			Contract of the Contract of th				The second secon	
d	Proposed			Low	Range	High	Range	
	Building	Phase	(GSF)	# of Floors	Building GSF	# of Floors	Building GSF	8
k	Α	First	36,900	3	110,700	4	147,600	
7	В	First	3,025	1	3,025	1	3,025	
	С	Near	31,425	3	94,275	4	125,700	
	D	Near	30,450	3	91,350	4	121,800	1
	E	Mid	32,550	3	97,650	4	130,200	
ř.	F	Mid	24,500	3	73,500	4	98,000	Total Park
	G	Mid	20,400	3	61,200	4	81,600	
	Н	Mid	30,075	4	120,300	6	180,450	į
	I	Mid	33,450	3	100,350	6	200,700	9
ř	J	Mid	32,150	3	96,450	4	128,600	
	K	Mid	44,300	3	132,900	5	221,500	
	L	Mid	18,750	3	56,250	4	75,000	i,
	М	Mid	7,225	1	7,225	2	14,450	
	N	Mid	11,400	1	11,400	1	11,400	Ì
	0	Mid	4,000	1	4,000	2	8,000	
	Р	Mid	4,000	1	4,000	2	8,000	1
j.	Q	Long	20,625	4	82,500	6	123,750	
	R	Long	20,625	4	82,500	6	123,750	
	S	Long	16,200	4	64,800	6	97,200	
į.	Т	Long	31,450	2	62,900	4	125,800	
	U	Long	31,450	2	62,900	4	125,800	
	V	Long	30,300	4	121,200	6	181,800	
	Jr. Jr. 1911	5 5		TOTAL STREET	7 7 7	and the same of		



# GUIDELINES



# **OVERVIEW**

#### Introduction

The Guidelines establish parameters for development of the University of North Texas Frisco Branch Campus to realize the vision and aspirations set forth in the 2019 Campus Master Plan. The guidelines direct the formation of a cohesive built environment that is maintainable, memorable, and distinct in its functional consistency and aesthetic unity. The parameters outlined in the guidelines set a minimum level of performance, subject to review and approval.

### Organization

The Campus Guidelines are organized in five interrelated sets of guidelines related to varying campus systems and scales:

- Planning Guidelines define campus-wide parameters necessary to implement a consistent and cohesive physical environment.
- Architectural Guidelines provide the design vocabulary for the construction of new and renovation of existing buildings.

- Landscape Guidelines establish the design language and material usage at a campuswide and building-level scale to ensure a consistent open space character across the campus.
- Wayfinding Guidelines create a framework for cohesive campus identity though unified signage to clearly communicate information.

### Sustainability

Planning and design of the campus environment will provide for LEED Silver Standards.

#### Review

Individual projects are subject to review and approval for compliance with the Campus Master Plan and Campus Guidelines. Further information regarding this process are included in this chapter in the Planning & Design Review Process section.

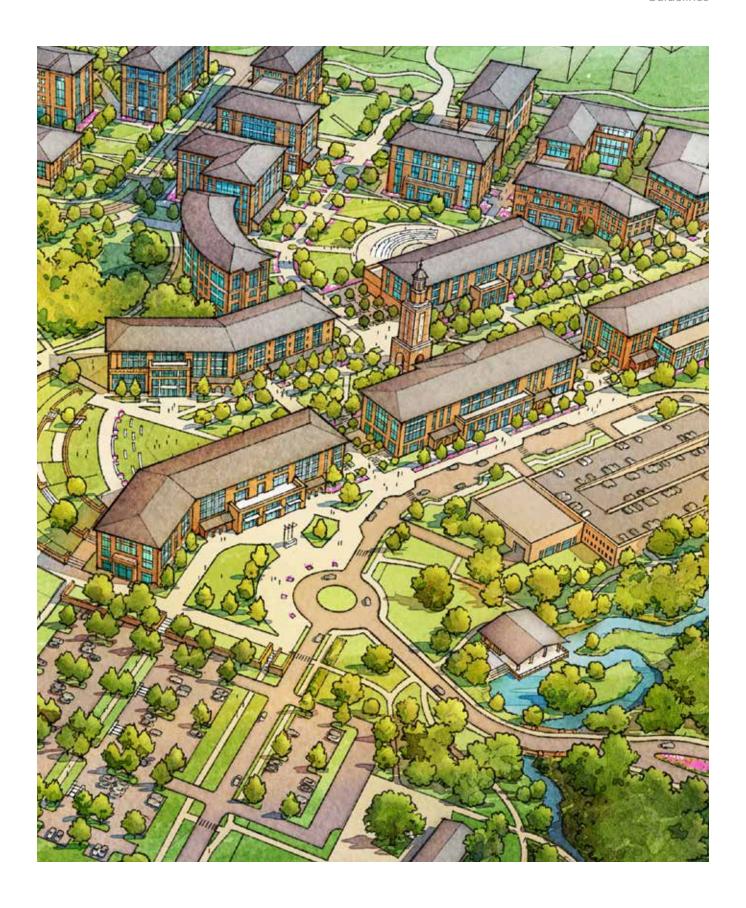
# PLANNING GUIDELINES

#### Overview

The Planning Guidelines define the campuswide parameters necessary to implement a consistent and cohesive physical environment. As a new campus, the Planning Guidelines will serve an immediate and enduring role in steering the initial and ongoing development of campus. These guidelines set the overarching organization that will define the character and legacy of the campus.

Closely aligned with the Campus Framework, these guidelines are both informed and influenced by the Connectivity Network, Open Space Network, and Activity Nodes identified in the Campus Framework. Similarly, the Planning Guidelines should be utilized in conjunction with the other architectural, landscape, and wayfinding guidelines included within this chapter. The Planning Guidelines address the following seven parameters:

- Edges & Thresholds
- Organization & Orientation
- Alignments & Setbacks
- Typology & Character
- Heights & Massing
- Vistas & Views
- Permeability & Visibility





# **Edges & Thresholds**

The campus is bounded by three distinct edge conditions that provide for unique experiences when approaching or entering the campus.

#### Civic Edge

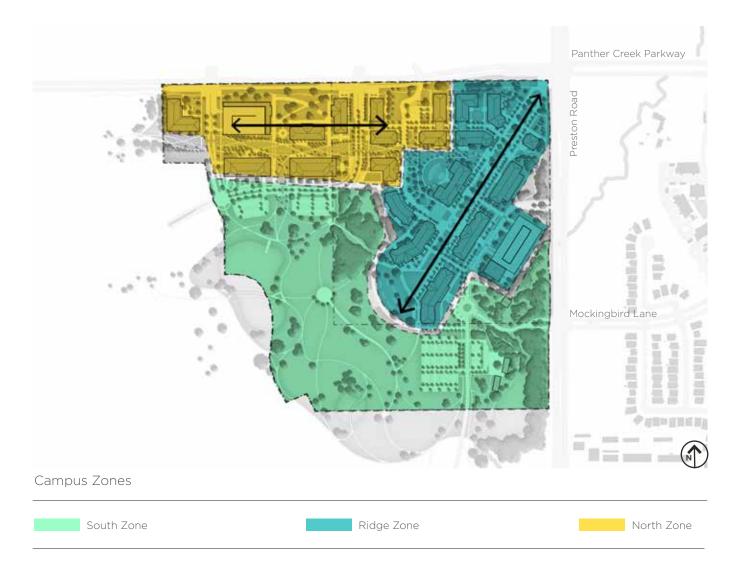
Buildings and open spaces along the Civic Edge will be highly visible along Panther Creek Parkway and should express the identity of the campus through their design while also serving as a buffer for the rest of campus. Landscape and site elements along this edge should provide consistency to establish a clear identify and demarcation of the campus boundary.

#### Natural Edge

The existing Natural Edge along Preston Road should be maintained and enhanced. Building designs should consider visibility of the campus that will occur over the top of vegetation. Landscape and site elements along this edge should be utilized to establish a clear demarcation of the campus boundary and should be appropriately balanced with the natural context.

#### Park Edge

The southern edge of campus will adjoin with future City of Frisco parkland. A significant portion of the campus along this edge is maintained in its natural state and should be blended with the park's edge to provide a seamless transition. Identification of the campus boundary should occur at connection points along the trail network.



# **Organization & Orientation**

The organization and orientation of the campus is primarily defined by the Connectivity and Open Space Network components of the Framework. The campus is organized in three primary zones, two of which should support development of buildings and opens spaces.

#### North Zone

The North Zone approximately parallels the future Panther Creek Parkway and the existing 50' Atmost Energy gas easement. Development in the North Zone should generally be oriented in an east-west direction.

#### Ridge Zone

Development in the Ridge Zone occurs along the existing ridgeline that runs in a southwest from the intersection of Preston Road and Panther Creek Parkway. Development of buildings and open spaces in the Ridge Zone should parallel the existing ridgeline and reinforce this southwestern orientation.

#### South Zone

The South Zone should remain primarily in its natural state with minimal development of buildings. Site amenities and features, such as trails, seating areas, and retention/detention ponds may occur. These elements should be oriented to respond to the natural topography and vegetation.



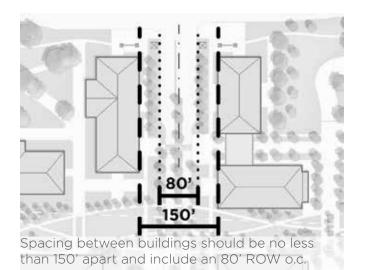
# **Alignments & Setbacks**

Detailed in the Campus Framework, the Open Space and Connectivity Networks establish the primary alignments for future development to create a lasting campus experience. The corresponding diagram identifies building faces where forms should respond to the Framework to ensure a cohesive on-campus experience.

To ensure a consistent physical identity along open space, campus edges and interior roadways, development should align to the designated setbacks illustrated in the corresponding diagram. Key setbacks occur along the following:

- Ridge Mall
- Central Mall
- Park Mall
- North Campus Loop
- East Campus Loop
- Panther Creek Parkway

Some variation in the building face (both encroachments and set-backs) to add focus to entries, places for informal gathering and enhanced landscaping are seen as assets. However, in no case should these variations or encroachments block view corridors or pedestrian pathways.



North Loop Road Alignment & Setback

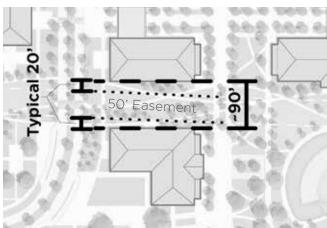


Additional setback of 24 feet (12' for arcades and 12' path) only affects one side of the Central Mall.

C Central Mall Alignment & Setback

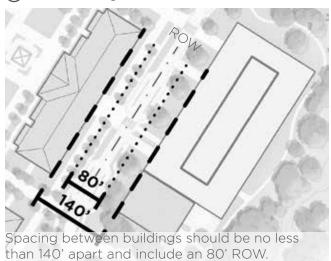


Ridge Mall Alignment & Setback

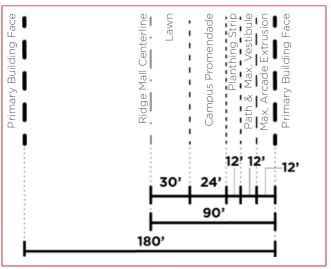


Typical distance of building facade from easement is 20 feet to accomodate paths and entries.

B Park Mall Alignment & Setback



E East Loop Road Alignment & Setback



Detailed dimensions (Ridge Mall)



Building Typology & Character

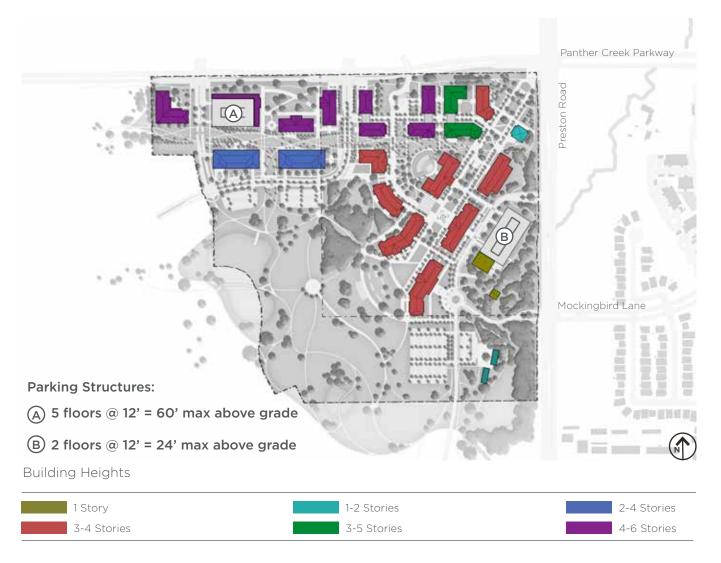
Focus Facades

# **Typology & Character**

Building typology should be based on simple 'bar' buildings as a starting point to allow articulation based on Planning Guidelines and programmatic requirements. The Campus Master Plan illustrates multiple variations of the 'bar' building typology as a benchmark. Additional variations may be considered for review and approval based on appropriateness to the master plan and guidelines.

The character of buildings on campus, along with other design elements, should establish a cohesive aesthetic that creates a campus fabric. This fabric is established with a majority of buildings sharing similar aesthetics accentuated with limited, key, focus facades. Focus facades occur in locations on campus that are highly visibility and play a significant role in setting the overall campus character. Focus facades require careful consideration of program, and context, throughout the design and review process.





# **Massing & Heights**

Building massings should be simple in geometry, avoiding excessive width, length, volume, or overly complex shapes. The mass of buildings should support the human scale through volumetric elements, geometric shifts, and proportions of building elements such as arcades, windows, and entries. Building use and program should suggest appropriate floor plate size and depth, while also supporting daylighting.

The heights of buildings influence both the experience and capacity of the campus. Buildings heights should support defining the human scale and campus open spaces while also taking advantage of view opportunities.

Generally, buildings north of the 50' Atmos Energy gas easement should range in height from 4 - 6 stories (60' to 95' in height), while those south of the 50' easement should range in height from 3 - 4 stories (45' to 65' in height). Buildings parallel to the Ridge Mall should maintain a homogeneous height to establish a consistent datum along the mall's length. The Bell Tower is excluded from the above parameters. The master plan estimates it to be roughly 130' to 150' in height, but additional studies should be undertaken to determine its final design height in relation to campus buildings and views to the tower from off-site.

Parking structures should be built to a height that achieves needed capacity without obstructing sightliness, or making the structure itself a prominent visual element.



#### Vistas & Views

Grand vistas on the campus occur primarily along the three main malls: Ridge Mall, Central Mall, and Park Mall. These vistas should be reinforced by building edges and landscape elements while avoiding interruptions (except in extraordinary circumstances such as with the Bell Tower).

Views occur both externally and internally to campus.

External views to campus should be maintained and enhanced from Preston Road and Panther Creek Parkway to reinforce campus identity.

Additionally, views from the City of Frisco parkland looking upwards to the campus should be maintained and enhanced to create welcoming edge to the campus.

On campus, views comprise both views inside the campus (views internal to campus) and those looking outward to the surrounding context (views from campus). Internal campus views should leverage view corridors through careful consideration of building and landscape elements. Views looking outward should be maintained and enhanced as the campus develops to provide visual connectivity to the surrounding area and create a broader sense of place connected to the local fabric.



Permeability and Visibility

Key Edges

# Permeability & Visibility

As a pedestrian-oriented campus and active ground plane is critical for a successful and energetic experience. Permeability and visibility should be maximized to create an active ground plan through building and landscape design.

Key strategies to achieve an active ground include but are not limited to:

 Locate highly utilized, shared, public spaces within building ground floors adjacent to primary Framework Connectivity and Opens Space Network elements.

- Provide both interior and exterior collaboration spaces including formal and informal, large and small, and hi-tech and low-tech spaces to meet the diverse needs of the campus community.
- Create strong indoor-outdoor connections by showcasing the active public and collaborative spaces contained within through ample transparent glazing.
- Incorporate texture, material change, and other architectural and landscape elements to provide visual interest and promote a human-scaled pedestrian realm.

# ARCHITECTURAL GUIDELINES

#### Overview

The Architectural Guidelines provide the design vocabulary for the construction of new buildings, and the eventual renovation of existing buildings, across the campus. This design vocabulary encompasses architectural elements that are specific to individual building projects, but directly interrelate and complement the Planning Guidelines and Landscape Guidelines.

These guidelines pursue shaping an enduring character that will steward the future of the physical environment without prescribing rigid solutions. The architectural elements in the guidelines create a structure to unify the campus environment while also acknowledging the diversification of building uses and typologies over time.

The architectural guidelines provide guidance toward the overall palette of materials. The architectural guidelines address the following architectural elements:

- Walls Exterior Enclosures
- Openings Windows, Doors & Entries
- Roofs
- Shading
- Screening

While this section avoids defining precise and specific standards, the forthcoming first building will set an on-campus architectural precedent that will influence later buildings. Future buildings should generally reflect the character and materiality of the first building in order to maintain a cohesive character across the campus.

# Hierarchy of Material Use

The architectural guidelines delineate the hierarchy of use of materials for each of the architectural elements. Each level serves a different purpose and offers enhanced and complementary outcomes. The architectural guidelines are intended to direct the material palette while allowing for color and texture as per approval.

#### Primary Materials

Primary materials form the majority of the architectural palette across the campus. They define the language and expression of the buildings and their surrounding spaces.

#### Secondary Materials

Secondary materials are intended to complement the primary materials. They are used to highlight a building feature to offer enhanced architectural expression.

#### Tertiary Materials

Tertiary materials are materials that are required for technical specifications and building performance. They should always complement the color and texture of the primary and secondary materials.

The summary table on the adjacent page provides guidance on the allowable and not allowable use of the materials for different architectural elements.

- The table columns each define one of the hierarchy of material use levels described above. This hierarchy defines an order of importance prominence (Primary -> Secondary -> Tertiary).
- Materials allowed can be used in a lower order within a given architectural element, but they cannot be used in a higher order for that same architectural element than designated.

# **Summary Table**

RoofsMetal Standing SeemAllowedArchitectural ShinglesAllowed		Primary	Secondary	Tertiary	Not Allowable
Brick - Monochromatic Allowed* Stone Allowed* Exposed Metal Allowed*  Openings - Windows, Doors and Entries Clear Glass Allowed* Tinted Glass Allowed*  Metal Allowed Brick Allowed Stone Allowed Wood Allowed Roofs Metal Standing Seem Allowed Tile Not Allowed Stone Allowed Architectural Shingles Allowed Stone Allowed	Walls - Exterior Enclosure				
Stone Allowed*  Exposed Metal Allowed*  Openings - Windows, Doors and Entries  Clear Glass Allowed*  Tinted Glass Allowed*  Metal Allowed Brick Allowed  Stone Allowed Not Allowed  Wood Architectural Shingles Allowed  Tile Not Allowed  Stone Allowed  Architectural Shingles Allowed  Stone Allowed  Metal Standing Seem Allowed  Allowed Allowed  Stone Allowed  Metal Standing Seem Allowed  Metal Allowed  Metal Allowed*  Screening  Brick Allowed	Brick - Polychromatic	Allowed			
Exposed Metal Allowed*  Openings - Windows, Doors and Entries  Clear Glass Allowed*  Tinted Glass Allowed*  Metal Allowed Brick Allowed  Stone Allowed Not Allowed  Wood Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Metal Standing Seem Allowed  Allowed Allowed  Allowed Allowed  Stone Allowed  Allowed Allowed  Metal Standing Seem Allowed  Metal Allowed  Metal Allowed*  Screening  Brick Allowed	Brick - Monochromatic		Allowed*		
Openings - Windows, Doors and Entries Clear Glass Allowed* Tinted Glass Allowed*  Metal Allowed Brick Allowed Stone Allowed Wood Not Allowed Roofs Metal Standing Seem Allowed Tile Not Allowed Stone Allowed Architectural Shingles Allowed Tile Not Allowed Stone Allowed Shading Brick Allowed Metal Standing Seem Allowed Allowed Stone Allowed Metal Standing Seem Allowed Metal Allowed Metal Allowed Brick Allowed Allowed Metal Allowed	Stone		Allowed*		
Clear Glass Allowed*  Tinted Glass Allowed*  Metal Allowed  Brick Allowed  Stone Allowed  Wood Not Allowed  Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Stone Allowed  Allowed  Allowed  Allowed  Allowed  Stone Allowed  Stone Allowed  Metal Standing Seem Allowed  Allowed  Stone Allowed  Metal Standing Seem Allowed  Metal Allowed  Metal Allowed  Metal Allowed  Allowed	Exposed Metal			Allowed*	
Tinted Glass Allowed*  Metal Allowed  Brick Allowed  Stone Allowed  Wood Not Allowed  Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Allowed  Allowed  Stone Allowed  Metal Standing Seem Allowed  Metal Allowed  Metal Allowed  Metal Allowed	Openings - Windows, Doors a	nd Entries			
Metal Allowed Brick Allowed Stone Allowed Wood Not Allowed Roofs Metal Standing Seem Allowed Architectural Shingles Allowed Tile Not Allowed Shading Brick Allowed Stone Allowed Metal Standing Seem Allowed Metal Allowed Metal Allowed Brick Allowed Allowed	Clear Glass	Allowed*			
Brick Allowed  Stone Allowed  Wood Not Allowed  Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Metal Standing Seem Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Screening  Brick Allowed  Allowed  Allowed  Allowed*	Tinted Glass	Allowed*			
Stone Allowed Not Allowed  Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Standing Seem Allowed  Screening  Brick Allowed  Allowed  Allowed  Allowed  Allowed	Metal		Allowed		
Wood  Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Standing Seem Allowed  Screening  Brick Allowed  Allowed  Allowed  Allowed  Allowed  Allowed  Allowed	Brick		Allowed		
Roofs  Metal Standing Seem Allowed  Architectural Shingles Allowed  Tile Not Allowed  Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Screening  Brick Allowed  Allowed  Allowed  Allowed  Allowed  Allowed	Stone		Allowed		
Metal Standing Seem Allowed   Architectural Shingles Allowed   Tile Not Allowed   Shading Stone   Brick Allowed   Stone Allowed   Metal Standing Seem Allowed   Wood Allowed   Metal Allowed*   Screening Brick   Brick Allowed	Wood				Not Allowed
Architectural Shingles Tile Not Allowed  Shading Brick Allowed Stone Allowed Metal Standing Seem Allowed Metal  Metal  Screening Brick Allowed Allowed Allowed Allowed Allowed Allowed Allowed Allowed	Roofs				
Tile Shading Brick Allowed Stone Allowed Metal Standing Seem Allowed Metal Screening Brick Allowed Allowed Allowed Allowed*	Metal Standing Seem	Allowed			
Shading  Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Standing Seem Allowed  Metal Allowed  Metal Allowed*	Architectural Shingles		Allowed		
Brick Allowed  Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Allowed*  Screening  Brick Allowed	Tile				Not Allowed
Stone Allowed  Metal Standing Seem Allowed  Wood Allowed  Metal Allowed*  Screening  Brick Allowed	Shading				
Metal Standing Seem Allowed  Wood Allowed  Metal Allowed*  Screening  Brick Allowed	Brick	Allowed			
Wood         Allowed           Metal         Allowed*           Screening         Brick           Allowed         Allowed	Stone	Allowed			
Metal Allowed*  Screening  Brick Allowed	Metal Standing Seem	Allowed			
Screening Brick Allowed	Wood		Allowed		
Brick Allowed	Metal			Allowed*	
	Screening				
Stone Allowed	Brick	Allowed			
	Stone	Allowed			
Metal Allowed	Metal		Allowed		

### Walls - Exterior Enclosure

As the main exterior enclosure element, walls should consist primarily of brick masonry with stone accents. Variations in brick patterns may occur through adjustment to bond pattern, coursing, banding, or other strategies in limited quantity to articulate massing and scale. Further masonry accents, such as water tables and belt courses, in brick or stone should be utilized to articulate massing and scale.

#### Material Use

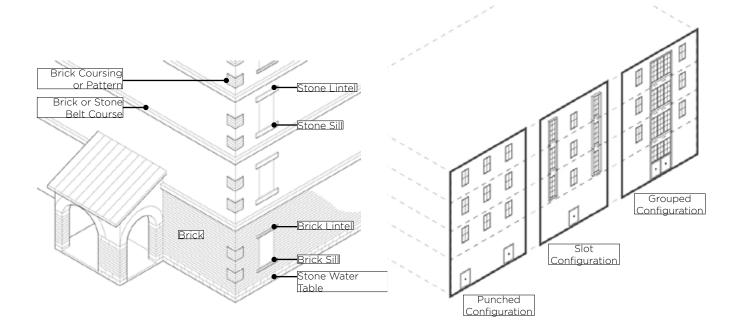
- Primarily polychromatic brick blend with limited areas of corresponding monochromatic as a secondary material.
- Textured Stone for the base of walls (eg. water table).
- Smooth stone for belt courses and other accents.
- Exposed metal should be used in a limited capacity. Where used, it should be a complementary color and texture palette for trims, closures, parapets, and exposed miscellaneous elements.

# Openings - Windows, Doors and Entries

Openings assist articulation of the massing, pattern, and scale of the overall exterior enclosure while allowing permeability – both physical and visual – into the interior of the building. They also provide a sense of arrival and entry. Windows shall be based on a module of punched openings that can be combined vertically into slot configurations, or combined into larger grouped configurations. Doors and entries should follow similar modules and configurations as the windows and align with other velements on the building face above.

#### Material Use

- Clear glass at ground level.
- Tinted glass at upper levels.
- Metal for mullions and framing in a complementary color and tone to the overall building palette.
- Brick or stone (in smooth finish) for opening surrounds, lintels and sills.



### **Roofs**

Buildings should primarily incorporate pitched roofs in a hip or gable configuration. Limited use of flat roofs and parapets is allowable where required by building massing or configuration.

#### Material Use

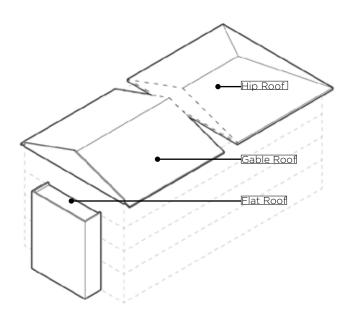
- Metal standing seam configuration, in a complementary color and tone to the overall building palette.
- Roofs colors should match the first building on campus, or their immediate on-campus neighbors, unless otherwise approved by the University
- Architectural shingles in a complementary color and tone to the overall building palette.

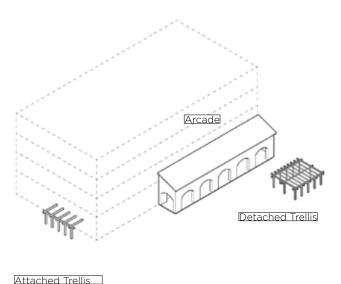
# Shading

Covered walkways, trellises, and building arcades provide a shaded network of pathways to circulate around the campus. Additionally, they serve as intermediate elements between the landscape and buildings. Buildings should encorporate shading elements along or adjacent to their ground floors in appriate areas.

#### Materials Use

- Brick and/or stone similar to wall elements.
- Metal standing seam configuration, for roof of arcades.
- Wood for underside of roof at arcades.
- Metal, for trellises, in a complementary color and tone to the overall building palette.



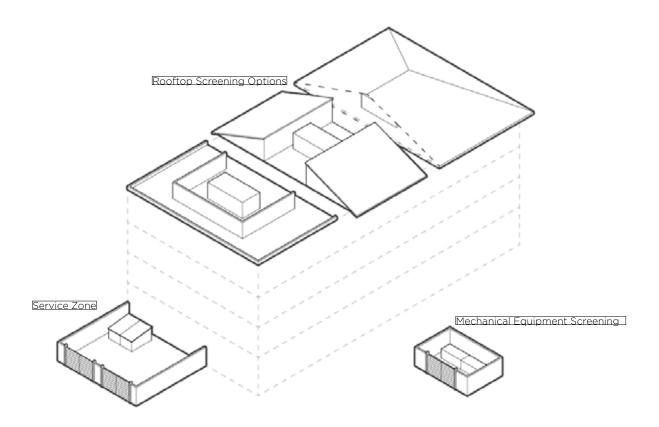


# Screening

Mechanical equipment and service zones should be located, and screened, to limit their impact on the campus experience. Roof or attic located mechanical equipment should be coordinated with pitched roofs, and screened from view at the ground level. Ground mounted mechanical equipment should be located in unobtrusive areas, and screened with enclosure walls and landscape. Similarly, building service areas should be located in unobtrusive areas and screened enclosure walls.

#### Materials Use

- Brick and/or stone for ground level enclosures similar to wall elements.
- Metal for secure (gated) enclosures in a complementary color and tone to the overall building palette.
- Metal for screens on rooftops.



# LANDSCAPE GUIDELINES

#### Overview

The campus Landscape Guidelines provide continuity for a cohesive overall campus character and aesthetic that offers opportunities for design expression at key locations. Likewise, approaches for sustainable landscape design, maintenance and considerations for public safety are incorporated to ensure the long term functionality of the campus environment. The guidelines establish a direction that promotes a strong campus identity for a greenfield campus with projected growth overtime; and ensures that the open space environment exhibits the highest standards of design.

# **Landscape Design Objectives**

The foundation of the guidelines:

- Establishing a consistent design language for a variety of open space types, including but not limited to, campus gateways, corridors, quads, plazas, edges, parking lots and streetscapes - all of which create a strong sense of place and campus community.
- Encouraging a pedestrian focused campus with supporting landscape elements that enhance the pedestrian environment.
- Recognizing UNT's brand and establishing a standard that is both unique to the Frisco campus yet part of the larger UNT narrative.
- Promoting healthy and educational outdoor environments for students and the broader Frisco community that takes advantage of existing site assets through preserved natural areas with the campus and outdoor student spaces that are integrated into the fabric of the campus.
- Demonstrating UNT's commitment to sustainable and ecological practices.

# **Overall Landscape Character**

The overall Landscape Master Plan promotes sustainable and ecological practices by preserving natural assets while reinforcing spacial hierarchy in relation to campus amenities and



buildings. The approach to landscape is reflected in the overall site planning for the campus, dividing the site into two primary character zones that form the foundation for how landscape design is introduced throughout the campus.

#### Structured Zone

Developed portions of the campus incorporate a structured approach to landscape design. The role of landscape within this zone is to provide human comfort, reinforce circulation patterns, amplify gathering spaces and frame key views within the campus. Landscape maintenance for this zone is higher intensity with a focus on year-round use, public safety and the overall 'image' of the campus.

#### Natural Zone

The southwest portion of the campus is generally characterized by gently sloping terrain and low-land natural areas. Development within this zone is focused on recreational access, ecological preservation, storm water mitigation and environmental education. This area emphasizes native vegetation with maintenance programs based around preserving ecological health, and ensuring public safety along access corridors.



# **Landscape Zones**

Defined landscape zones support the overall master plan, creating clear distinctions between organized and formal landscapes versus natural and organic landscapes. These zones are further reinforced by selection of plants, trees, and landscape elements that support their overall character.

#### Green Corridors

Green corridors provide comfortable and distinct connections between key campus destinations, reinforcing the circulation hierarchy of the campus while contributing to the overall campus character. They share a critical role with other public open space in contributing to the social fabric and legibility of the campus.

Ridge Mall - Prominently located within the academic core and on axis with the northeast gateway intersection, the Ridge Mall offers grand views into and from the heart of the campus, acting as the primary processional corridor. Large central lawns flanked by continuous treelined campus promenades provide expansive open space for flexible daily use and event space. Informally organized Live Oaks are located along crossing paths to provide shaded gather points and to frame views of key architectural moments. A planted buffer zone between the edge of the promenades and adjacent building facades integrate seating and lighting, along with ornamental ground covers, grasses and small trees to provide soft transitions between architecture and open space.

Central Mall - This central corridor extends out from the bridge crossing, intersects with the leisure corridor and connects to the main promenade corridor. It is adjacent to several campus courtyards and plazas, offering a distinct informal character with organically organized landscape. Mix of trees along the paths and internal lawns are grouped together to form spatial enclosures and shade. Sculptural seating and elements may be introduced at distant intervals within the corridor's internal spaces.

Park Mall - along the gas line easement, offers open lawn areas for lounging with mix of trees grouped together at permitted intervals. The edges of pathways on both sides of the corridor may contain benches and area lighting at suggested intervals.

#### Courtyards and Plazas

Courtyards and plazas provide open air informal gathering spots for students in between classes. These social interaction spaces should respond to the context, scale and building entries, that naturally began to define the boundaries. These spaces should also be designed with shade provided by grouping of trees with a mix of movable and fixed seating. Clear zones should be defined for circulation versus gathering, through the use of ground materials such as hardscape versus softscape, and through placement of furnishings. Lighting should be integrated as to mark the plazas and courtyards as destination points for evening navigation and wayfinding.

#### Formal Buffer / Perimeter Landscape

The design of the campus perimeter plays an important role in defining the campus edge, as the programmed threshold between the public and campus.

Civic Edge - The campus side edge contains a planting zone from the curb for incorporating trees and plants, a two way bike lane, and a pedestrian sidewalk. The trees are lined formally along this street edge to address the future development across Panther Creek Parkway

Natural Edge - The campus side edge contains a planting zone from the curb for incorporating trees and plants, a two way bike lane, and a pedestrian sidewalk. The trees are arranged informally along this edge to complement the adjacent preserved natural zones of the site.

Park Edge - As part of the master plan, the university site has significant topography with undisturbed natural zones that support the existing ecosystem. Where possible, care should be taken to minimize impact to mature trees and maintain the overall health of the site. These site assets provide the campus with varied experiences that are programmed through a connected green trail network. This trail systems should work with the topography to elevate the experience within the natural ecology of the site.

#### Preserved Outdoor Education Zone

The existing conditions on the southeast portion of the site are optimal for preserving natural assets that can be utilized for educational purposes, reinforcing the university's interest in ecological and sustainable practices. A sequence of outdoor learning rooms can be programmed within the preserved zone for hosting academic and research groups. These opportunities can be open to the broader Frisco academic community of all ages. This area should continue to blend seamlessly into the surrounding site through existing vegetation, connected by a larger trail network that navigates through a broader natural zone at south of the site to the planned campus grounds north of the site.



# **Key Spaces**

#### Prairie Amphitheater

The Prairie Amphitheater is a significant centerpiece for the campus, offering views of the city from an elevated position, with possibility to host campus ceremonies. Subtle grass steps with 1 foot wide concrete edges, should terrace towards the Southeast view, with dispersed trees that do not block the view of the horizon. Lighting should be kept to a minimum to allow opportunities to observe the sky and the city beyond.

#### Central Amphitheater

The Central Amphitheaters provide students an open-air venue for campus performances that

contribute towards building a strong community. The amphitheater should be designed along a gradual slope that terraces towards the stage, with a thick tree lined backdrop of trees. Terraced seating should be designed to face towards the East, to avoid sunset glare in late evenings. Adequate amount of buffer should be provided between adjacent academic programs and stage performances to avoid conflicts in noise disturbances.

Main Campus Campus Gateway - Portrait Plaza
The main campus gateway is an opportunity
to create an iconic marker at a highly visible
intersection, that is emblematic of UNT and
unique to the Frisco campus. The campus' main
corner provides the opportunity for a vibrant

gateway, with the use of strategic signage, landscape and lighting. Signage should be placed at the center of the corner with views on axis from the street intersection. The foreground lawn should host approximately 4-5 mature Live Oaks marking a grand entrance, while continuing to provide views to the Ridge Mall view corridor via the underside of the tree canopy. A grove of trees will serve as the backdrop to the main sign while controlling views down the Ridge Mall to the main Bell Tower. Lighting should highlight the signage supported by tree up-lighting at the grove and Live Oaks to create a grand entrance ambiance. Opportunities exist for integration of a flag behind the main sign.

#### Bell Tower

Visible from miles away, bell towers often become landmark symbols for campuses. They also serve as a backdrop to major campus ceremonies and become highly photographed elements. The landscape around the UNT Bell Tower should be simple and elegant to allow the architecture of the tower to remain prominent. A buffer of tall grasses around the base of the Bell Tower can discourage students from climbing the tower at off-hours, and forcing circulation to occur at a safe distance from and around it. A combination of open lawn and plaza paving near the Bell Tower is encouraged for hosting ceremonies.

Connected Green Network - Campus Malls
The three primary malls programmed within the
central campus are designed to connect a larger
open space network. This connected green
network promotes healthy lifestyle and enhances
the natural environment.

#### Pedestrian Bridge Gateway

The Pedestrian Bridge and associated gateway provides an opportunity to safely and seamlessly connect the campus to the larger community, while advertising the university to commuters. To maximize its benefit and usage, the bridge structure should provide opportunities to integrate lighting and signage. The descent of the bridge offers a significant opportunity to integrate a sloping/terraced lawn that looks onto an academic building, offering visual interest and creating a unique gathering space with terraced steps. This sloped/terraced lawn can

host a mix of trees to provide shade and frame views. The arrival point onto the campus, at the bridge landing, should be designed with a plaza that offers seating and shade. The bridge landing plaza space should have ample open space to allow flow of traffic by pedestrians and alternative micro-mobilities.

# **Space Types**

Parking Lots and Drop Off/Pick Up Locations Parking Lots, Drop Off and Pick Up points on campus serve a critical role in providing students and faculty access to and from campus. These areas should be designed with student safety in mind, while incorporating sustainable design practices. Parking areas should provide ample shade for parked vehicles and pedestrian traffic, while incorporating low-level planting to help buffer the visual impact of cars. Islands reserved for tree plantings should provide ample soil volume for healthy tree growth (minimum 100 sf landscape area/per tree). Pedestrian routes should provide direct connections to primary campus circulation routes with clear lines of sight, adequate lighting and appropriate identity markings. Parking lot lighting should provide uniform coverage and incorporate appropriate types of distribution and cut-off to reduce light pollution and Dark-Sky impacts.

Landscaping and hardscape design should incorporate sustainable solutions with provisions for enhancing storm water-quality, absorption and detention as required. Permeable paving and bio-swales with resilient native plantings should be considered to mitigate run-off and improve storm water quality. Even distribution of canopy trees will provide both comfort for users and help mitigate effects from urban heat islands.

#### Campus Arboretum

Tree plantings and botanical landscape gardens within the campus should be considered as part of an overall Campus Arboretum which promote educational opportunities with potential ties with curriculum based studies. Both specimen tree plantings and botanical garden collections can be utilized for plant identification, understanding of regional ecologies and related scientific research collections should be represented by species that are both suitable to the local climate of Frisco while contributing to specific campus design objectives. Over time this collection will contribute to the overall character of the campus while adding resilience to the landscape through species diversity.

#### Campus Gateways

Gateways overtime contribute towards the collective memory of the campus, symbolizing the community's aspirations. They are iconic markers usually expressed through physical structures, signage, and lighting that is supported by landscape design.

The UNT Frisco campus has several opportunities for gateways:

- The main gateway at the northeast corner of the campus.
- Arrival streets that serve as major entries into the campus.
- Bridge crossing at Panther Creek.

These gateways are described individually under 'key spaces' and 'space types'.

#### View Corridors

Framed views to iconic architecture, open spaces and natural features facilitate orientation. Where possible, landscape should support this through use of trees and plantings to create both a sense of grandeur and arrival. The natural topography of the site offers opportunities to site buildings and landscape that maximize the full potential of view corridors.

### **Landscape Systems**

#### Landscape Intention

The goal of sustainable design is to significantly reduce negative impacts of development and improve the surrounding environment. Sustainable strategies offer an opportunity to work with the existing landscape and environmental assets on site to achieve a more resilient campus with reduced demands on natural resources, preservation of ecological systems and reduced carbon footprint from maintenance protocols. Sustainable practices should be integrated and programmed with overall design of the campus to enhance the university's overall character and aspirations, blending science of ecology with art of design. The master plan considers how to integrate these assets seamlessly with campus activities to create healthy and productive environments that reflect both the values and educational mission of the institution.

#### Landscape

Sustainability in landscape design must consider selection of plants that are adaptable to local climate conditions and soil types. Native planting should be used where possible to limit irrigation demands, enhance site ecology and provide a resilient landscape. Special considerations should be made to avoid invasive planting species, particularly within close proximity to natural areas within the campus. Irrigation should integrate smart control systems and distribution that targets planting root zones to reduce water usage.

#### Storm Water

Stormwater management methods, such as bioswales, storm water capture/re-use infrastructure, detention basins and natural preserves also aid in responsible landscape design by slowing down and absorbing the flow of runoff. In conjunction with native landscape design strategies, these systems serve to improve storm water quality and protect sensitive ecologies both on and off-site.

These facilities reinforce the overall campus character and provide unique amenities that are

rooted in the ecological vernacular and functions of the site. Detention ponds, bioswales and landscape preserves provide valuable amenities, strengthening the overall campus image and provide iconic focal points. Likewise, sustainable storm water systems provide legibility to advance educational opportunities throughout the campus.

#### Public Art

The role of public art on campus facilitates multiple means of engagement, creating opportunities for conversations. Art can be either observational or participatory while marking iconic destinations on campus. Public art also contributes to the history of a campus as the collection grows overtime. Opportunities should exist for partnering with the broader Frisco community in introducing public art on campus.

Public Art should contribute to the ethos of the campus:

- Reflect on what is being taught on campus
- Inspire innovation and collaboration
- Unite the community and create opportunities for debate

Public Art general guidelines:

- It should be visible within the specific campus destination, as a place making opportunity.
- If it involves participation, it should be accessible for all users.

### **Landscape Systems**

Principles of Planting Design

A selective plant palette contributes greatly to the character of the campus while defining hierarchy of spaces and circulation. Planting design must consider its use and purpose first, such as screening versus directing views, in order to determine sequencing, grouping and heights of the plants.

Selection and groupings of plants throughout the campus serve to contribute to spacial definition and scale, as well as reinforce the overall campus character. Practical considerations for mitigating seasonal micro climates, including provisions for shade, winter solar exposure and wind corridors should be incorporated into design and selection of plant materials to maximize comfort and extend seasonal use of outdoor spaces throughout the campus.

Trees and shrubs should be selected based on their suitability for climate, soils, drainage conditions and growth habit. Where practical, vegetation should be selected and spaced to allow for full mature growth with minimal maintenance. Likewise, trees should be planted to avoid conflict between building foundations and the tree's drip line at maturity.

Landscape planting selection should also consider public safety to ensure clear lines of sight throughout the campus. Trees and shrubs should be selected and/or maintained to ensure visibility between 36" and 96" above finish grade. Likewise trails through natural areas should be clear of middle-story vegetation within 6' of trails or as required to provide clear lines of sight around bends.

Ordered rows of bosques or trees should be utilized where required to achieve desired repetition and spacial definition, but with consideration to viability based on growth rates and related factors associated with long-term health.

Informal plantings should be purposeful and contribute to the desired design goals for the campus. Specimen trees should be given adequate spacing and light to achieve balanced and full growth while becoming integral components of the Campus Arboretum.

Plantings in or near ecological preserves and related natural areas should be selected based on their regional suitability and localized soil conditions. Location and groupings of key species should be considered to emphasize legibility of significant native landscape communities for educational purpose.

Seasonal variation throughout the campus should be integrated to maintain the overall structure of the landscape and provide seasonal interest. Landscape displays of flowering trees and shrubs, as well as fall color and winter form, should be choreographed throughout the campus to provide seasonal interest. Perennial and annual plantings should be reserved for high visibility locations only and with consideration to maintenance resources.

Turf lawns should be utilized purposefully for public gathering spaces and related architecturally defined spaces. Ensure adequate surface drainage for all lawn areas (minimum slopes of 1.5% or greater). Event lawns should incorporate subsurface drainage systems as required to reduce maintenance.

Natural areas and ecological preserves should utilize native grasses and related habitat plantings suitable for the conditions of the site. Avoid use of non-native vegetation within these zones. Invasive plant species should not be utilized anywhere on the campus.

Select Trees Species for Different Campus Spaces
Trees serve both aesthetic and functional needs
of the campus environment. Arrangement
and selection of tree species should consider
reinforcing the architectural framework of the
campus, with consideration of views and creating
a sense of arrival and place. Concurrently
trees can also help to moderate micro-climatic
conditions by providing shade or allowing for
solar exposure based on seasonal conditions.

Campus Streets should utilize rows of trees to provide continuous shade for pedestrians and frame views into the campus. Tree selection should provide an over-story canopy with adequate clearance for emergency vehicles and views into building entry points. Typical tree spacing should fall within 25'-40' o.c. depending on species selection and site conditions.

Tree selection for plazas and courtyards should consider scale and shade provided by adjoining buildings, as well as intended use of the space. Tree plantings should address potential high traffic from pedestrians through tree grates or other forms of protected planting beds.

Campus pedestrian corridors should utilize either informal or formal rows of trees depending on the location of walk and proximity to adjacent buildings. Trees should be planted at least 6' from the edge of walks.

Ornamental tree plantings should be choreographed related landscape gestures to emphasize form, foliage, and seasonal displays. Avoid planting low-branched trees adjacent to walks or obstructing viewing corridors.

#### **Master Plant List**

#### Introduction

The following lists contain the set of plants recommended to populate the new campus. While these lists are intended to guide visual continuity, character, and landscape health on the new campus, it is not all-inclusive. Designers wishing to incorporate vegetative material not on this list must consult with the University of North Texas System Office of Facilities Planning & Construction before including it in their design.

Items marked with a **(L)** are intended to be limited use and subject to University approval.

#### Shade Trees

Celtis Occidentalis - Hackberry (L - male only) Liquidambar Styraciflua - Sweetgum Quercus Polyphorma - Monterey Oak Quercus Virginiana - Live Oak Pistacia Chinensis - Chinese Pistache Quercus Bukleyi - Red Oak Native Shade Trees

Carya Illinoinensis - Pecan
Fraxinus Texensis - Texas Ash
Magnolia Gradiflora - Magnolia (L)
Proposis Glandulosa - Honey Mesquite
Quercus Fusiforms Escarpment - Live Oak
Quercus Macrocarpa - Bur Oak
Quercus Muhlenbergii - Chinquapin Oak
Quercus Shumardii - Shumard Red Oak
Ulmus Crassifolia - Cedar Elm

#### Riparian Shade Trees

Platanus Occidentalis - American Sycamore Taxodium Distichum - Bald Cypress **(L)** 

#### Ornamental Trees

Acacia Wrightii - Sweet Acacia Aesculus Pavia - Red Buckeye Aquifoliaceae - Nellie R Stevens Holly Cercis Canadensis Var Texensis - Texas Redbud Cercis Canadensis - Eastern Redbud Chilopsis Linearis - Desert Willow Cotinus Obovatus - Texas Smoke Tree Diospyros Texana - Texas Persimmon Llex Decisua - Possumhaw Llex Vomitoria - Yaupon Holly Lagerstroemia Indica - Crepe Myrtle Myrica Cerifera - Wax Myrtle Pistacia Texana - Texas Pistachio Prunus Mexicana - Mexican Plum Prunus Caroliana - Cherry Laurel Quercus Glaucoides - Lacey Oak Rhamnus Caroliniana - Carolina Buckthorn Rhus Lanceolata - Prairie Flameleaf Sumac Rhus Anacardiaceae - Evergreen Sumac

Styphnolobium Affine - Eve's Necklace (L)

Ungnadia Speciose - Mexican Buckeye

Vitex Angus-Castus - Vitex

#### Shrubs

Callicarpa Americana - American Beautyberry (L)
Hesperaloe Parviflora - Red Yucca
Ilex Cornuta 'Burfordii' - Burford + Dwarf Holly
Illex Vomitorai 'Nana' - Dwarf Yaupon Holly
Myrica Pusilla - Dwarf Wax Myrtle (L)
Punica Granatum - Pomegranate (L)
Rhapiolepsis Indica - Indian Hawthorn
Rhus Aromatica - Fragrant Sumac (L)
Sophora Secundiflora - Texas Mountain Laurel (L)
Viburnum
Nandina
Abelia

Groundcover and Perennials (sparingly)
Echinacea Purpurea – Purple Coneflower
Euonymus Fortunei – Purple Wintercreeper
Liriope Muscari – Lily Turf (Liniope)
Rudbeckia Hirta – Black Eyed Susan
Salvia Leucantha – Mexican Bush Sage
Salvia Farinacea – Mealy Blue Sage
Salvia Greggii – Autumn Sage
Scabiosa Misc. – Scabiosa
Thelypteris Fern – Holy Fern
Thrachelospermum Asiaticum – Asian Jasmin
Variegated Liriope

#### Wildflowers (Meadow Areas)

Amblyolepsis Setigera - Huisache Daisy Gaillardia Pulchella - Indian Blanket Lupinus Texensis - Texas Bluebonnet Thelsperma Filifolium - Greenthread Solidago Altissima - Tail Goldenrod Winecup Indian Paintbrush Texas Star Engelmann Daisy Primrose Blackland Prairie Mix by Native American See

#### Grasses (Meadow Areas)

Andropogon Gerardii - Big Bluestem
Bouteloua Curtipendula - Sideoats Grama
Bouteloua Gracilis - Blue Grama
Buchloe Dactyloides - Buffalo Grass
Leptochloa Dubia - Green Sprangletop
Panicum Virgatum - Switch Grass
Schizachyrium Scoparium - Little Bluesterm
Sorghastrum Nutans - Indiangrass
Sporobolus Asper - Tall Dropseed
Tripsacum Dactyloides - Eastern Gamagrass
Purple Three Awn

#### Grasses (Beds & Gardens)

Muhlenbergiacaapillaris – Gulf Muhly Muhlenbergi Lindheimeri – Lindheimer Muhly Pennisetum Alopecuroides – Dwarf Fountain Grass Schizachyrium Scoparium – Little Bluestern Mexican Feather Grass Giant Liriope

#### Vines

Bignonia Capreolate - Cross Vine **(L)** Campsis Radicans - Trumpet Vine **(L)** Lonicera Sempervirens - Honeysuckle **(L)** Passiflora Incamata - Virginia Creeper **(L)** 

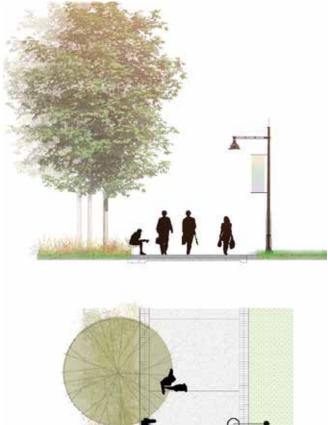


### Site Circulation

Circulation Widths, Program, and Finishes
A pedestrian-focused campus is the driver for generating various circulation types that support a walkable and healthy campus. The hierarchy of paths and materials outlined on the next few pages will help to facilitate movement and orientation within the campus.

Where necessary to support the emergency vehicle access requirements outlined in the Systems chapter, pedestrian paths should be designed with adequate thicknesses to accommodate emergency and service vehicles at designated access points. Alternatively, turf reinforced with structural systems can be used as an alternative subject to UNT approval.

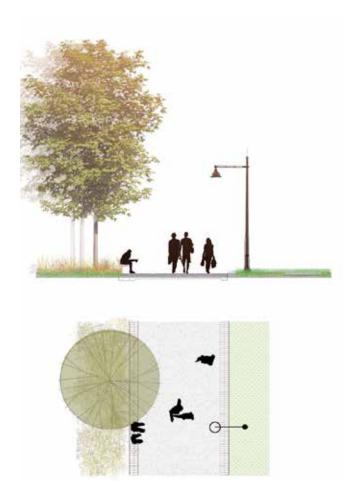
# **Path Typologies:**



Campus Promenade (24+ Feet)

Campus promenades are the symbolic circulation systems that line campus malls. They should be 24-foot minimum to allow service and emergency vehicles to access central parts of the campus. The edges of the path should be defined by clear landscape design that contributes to the overall character and identity of the campus. Site elements such as seating and lighting should line one or both sides in a uniform spacing. The zone from the edge of the promenades to the building facades should be landscaped with tall grasses and plants that are integrated with landscape elements such as benches and area lights.

Concrete paving is recommended with sawcut joints, topcast finish, and bands of pavers at edges.

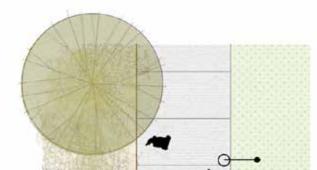


Primary Paths (15-18 Feet)

Primary walking paths are the largest pedestrian connectors that branch off campus malls. Edges of these paths should be defined by clear landscape design that contributes to the overall character and identity of the campus. Site elements such as seating and lighting should line one or both sides in a uniform spacing. Concrete paving is recommended with sawcut joints and topcast finish.

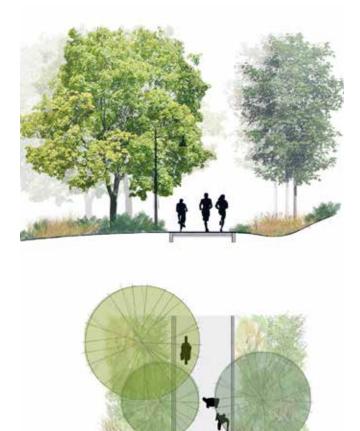
Some of these paths may also be shared-use paths with bike lanes. Bike lanes can be marked with paint or subtle changes in materiality or finish.





Secondary Paths (8-12 Feet)

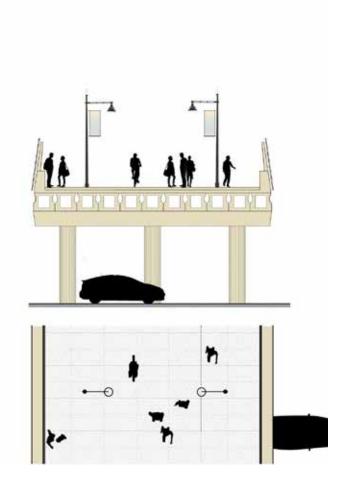
Secondary walking paths help facilitate pedestrian traffic in between primary circulation paths. Concrete paving is recommended with tooled joints and broom finish. Edges of the paths should be defined by simple landscape design such grass and include periodic site elements such as lighting.



Trails (5-10 Feet)

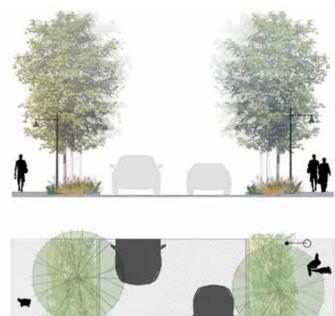
Trails connect the natural open space with the campus circulation paths. Trails are suggested to be constructed with decomposed granite or asphalt, with concrete header.

Multi-use paths must be 10' to adequately accommodate their needs.





The Pedestrian Bridge over Panther Creek Parkway is both an iconic and a functional structure. Because of its prominent role in the campus' environment, its design should represent the University's identity. The width of the bridge should allow for ample pedestrian and micro-mobility circulation, and integration of streetscape elements such as lighting. The bridge should utilize the lowest slope possible to invite and encourage use.

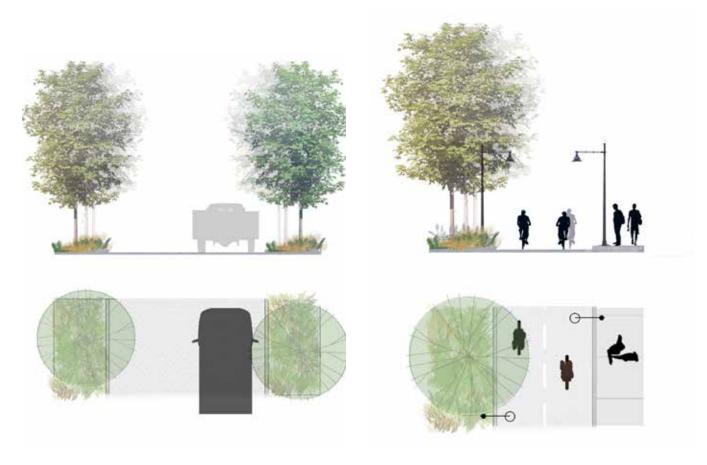


# Internal Campus Streets - Fire Lane (24 Feet)

Internal campus streets should provide clear circulation for vehicles, micro-mobility, and emergency vehicles while considering pedestrian safety, and reinforcing the overall character of the campus with streetscape elements, such as lighting and benches. Widths of the campus streets should be minimal to discourage speeding. Sides of the streets should be treelined where possible to provide clear definition of the edges and to mitigate heat-island effect.

Arrival streets that serve as major entries into the campus should offer formal tree-lined corridors, tree alles', to create a sense of arrival while framing views to the campus.

Crosswalks should be marked with special paving at intersections to emphasize pedestrian traffic and to facilitate pedestrian safety.



# Service Drives (24 Feet)

Primary service areas should maintain the surrounding landscape character to avoid calling attention to these areas. Major service drives should be buffered with landscape as to limit views into the service zone.

Bike Paths (8-12 Feet)

Bike paths offer the campus users the ability to use alternative transportation for navigating and arriving to the campus. Adequate lighting should be provided along the bike paths to facilitate safe riding at night.

# **Site Components**

Lighting

Lighting on campus should be thoughtfully integrated to provide a safe environment for the students and faculty. This need is especially critical to the UNT Frisco campus because of the high number of nighttime courses offered.

Lighting design on campus should incorporate a range of elements. Pathway lighting should link academic buildings and other campus destinations together. Landscape lighting should provide an indirect and subtle illumination of pathways, vegetation, and open spaces through the use of tree up-lighting, lawn area lighting, bollard lights, accent lighting, and feature lighting. Architectural facade lighting and signage lighting create campus lanterns that mark destinations and aid in wayfinding. Parking lot and drop off location lighting provide a safe environment for efficient movement at night.

Light poles should reflect a campus identity and character that is of a timeless and established aesthetic, and that will stand the test of time. The campus should maintain a consistent palette of light fixtures across the campus and avoid deviating from the fixture standards set by the first building unless approved by UNT. Light poles should also be able to accommodate banners for campus messaging and branding.

LED fixture color temperature for the campus should range from 3,000-3,500 Kelvin to maintain uniform campus lighting coloration.

Lighting Design

Campus Streets:

24' height, 200' spacing, LED fixtures, 1 fc

<u>Campus Boulevards and Drives:</u> 22' height, 120' spacing, LED fixtures, 1 fc

Parking Lots:

30-35' height, 180' spacing, LED fixtures, 5 fc

<u>Pedestrian Circulation / Gathering spaces:</u> 12-14' height, 80' spacing, LED Fixtures, 1 fc

Building Entries: LED fixtures, 5 fc

#### Seating

Seating should be designed and laid out to facilitate social interactions on campus while also providing choices for individuals to have privacy. Fixed seating can be categorized into systems-based and site-based options. Each of these has distinct ways in which they support activities such as dining, lounging, studying, performances, and other events. Seating related to dining, lounging, and studying should be supported by vegetation and trees that provide natural shade, create privacy, and moderate the temperature.

- Systems-based seating includes movable benches, tables, chairs. These are repetitive elements used throughout the campus within plazas and courtyards, and selectively along promenades. These components should reflect the identity of the campus and be of a robust material designed to withstand wear and tear.
- Site-based seating includes seat-walls integrated with planters and wall edges, terraced lawn seating with concrete edges, and seating steps. These are site specific solutions that enhance the overall experience of the space and integrate with the surrounding context and environment.

Sculptural seating provides opportunities to punctuate the landscape by creating iconic and memorable gathering spots. These should be used in limited areas to support special moments on the campus.

Maximizing the natural topography of the site, sloped lawn seating should be incorporated where appropriate. These elements provide serene opportunities for students to gather and lounge.

In addition, lounge options, such as hammocks and swings, can be integrated in limited areas to provide students with playful relaxation options that create memorable moments and a connected community.

#### Site Elements

A careful selection of site elements creates a refined aesthetic that blends with the established character and identity of the campus. These elements should be of a similar palette to assist in building the overall character of the campus. This includes, but is not limited to, traffic bollards, drinking fountains, bicycle racks, trash receptacles, tree grates, and donor plates.

#### Paving Materials

Paving materials define specific zones and assist in creating a sense of place. Selection of materials should be based consideration of cost, maintenance, and the established campus vernacular.

Primary campus walks should incorporate architecturally finished concrete paving with proper cross-slopes for drainage (max. 2%). Paving should avoid staggered joints to resist cracking. Depth and reinforcement of paving should be suitable for maintenance vehicles and, where required, emergency access vehicles.

Places such as plazas and courtyards should incorporate unit pavers to identify them as special zones. They should use finishes that complement the architecture of adjacent buildings. Proper sub-grade preparation and/or sub-slabs should be incorporated to ensure long-term stability of pavers.

Paving design at building entries should complement both facade and interior design materials. Where possible, their patterning and layout should align with architectural features to create strong relationships.

Large gathering spaces should be designed with use and adjacency in mind. A gathering space near the Bell Tower should utilize unit pavers, while a gathering space near the preserved natural zone should utilize loose walking surfaces such as decomposed granite. Highuse campus trails should utilize asphalt or other flexible surface materials.

# WAYFINDING GUIDELINES

# **Purpose & Objectives**

Wayfinding & Sigange plays a critical role in creating a strong, user-friendly campus environments. It supports positive experiences, ease of navigation, brand visibility, and a cohesive built environment.

The information presented in this section represents a consolidated set of recommendations to implement future signage on the Frisco Branch Campus. It is intended to provide a framework that will create this strong and cohesive identity throughout campus by outlining an effective, attractive, and unified "family" of signage that will communicate information clearly. These guidelines aim to achieve five key objectives:

 Design aesthetics that parallel the architecture, landscape, and broader atmosphere of the UNT Frisco Branch Campus

- Enhances the overall experience of campus and the UNT brand as a whole
- Assist in providing directional information to one's destination
- Clearly identify buildings, landmarks and parking areas
- Convey regulatory information

The first phase of campus development will establish the design precedent for all subsequent wayfinding and signage. Future sign types and elements are expected to utilize this precedent to maintain a consistent and coordinate campus aesthetic.

# **Terminology**

The terms "wayfinding" and "signage" are often linked together and perceived to be interchangeable. While they are interrelated, the two terms describe different elements that support ease of navigation and positive experiences while on campus. They are not interchangeable.

#### Signage

The term refers to the system of signs on campus that directly help users navigate through the environment. Signage performs both directional and identification functions, and is successful when it adequately provides users with the information they need or helps them reach their intended destination.

#### Wayfinding

The term is broader reaching, it is an action that occurs between a user and a place, and is affected by all visual and informational cues that help users understand where they are. Wayfinding for the university begins well before a guest arrives. Tools such as the website, print collateral, and even personal conversations help audiences understand the totality of the campus as a place. It establishes an attitude and tone.

#### **Audiences**

To achieve these goals, design and placement of the new branch campus' wayfinding and signage elements should equally consider how they interact with and meet the needs of three key audiences.

#### First-Time Visitors

Users who are visiting the campus for the first time. This could include prospective students, parents, conference attendees, members of other UNT campuses, corporate partners, community members, or new faculty and staff. Their initial experiences will form a lasting impression of the campus, so creating positive experiences is critical. First-time visitors will rely on a simple, highly visible, and straightforward message system to direct them to destinations, minimize confusion, and make them feel welcome.

#### Regular Visitors

Individuals who have been to the campus previously, but are not as intimately familiar as those who visit it more frequently. This group includes everything from neighbors, community members, former students, and others. This group likely has a general impression of where they need to go and how the campus is organized, but relies heavily on the specific details of signage to help them reach their ultimate destinations.

#### Familiar Visitors

This group includes current students, faculty, staff, and other users who regularly spend time on campus. While these users rely less on the high-level navigational aspects of signage, wayfinding & sigange still plays a critical role in their understanding and use of campus and reinforcing a strong, clear, campus brand and identity.

### Character, Content & Materiality

In general, the guidelines for the signage are to build upon the characteristics of the campus and create a unified sense of place and set a collegiate tone. Materials and styles should relate to those found in the architecture and landscaping while being conscious of and maintaining the integrity of the UNT brand and sign standards.

Contents shall follow UNT graphic standards pertaining to colors, logos, nomenclature and type styles and be easily updateable. The use of seals, logos and typestyles will follow university policies and standards.

Generally, signs are recommended to be of a post and panel/cap construction, in painted or powder-coated aluminum with vinyl graphics. Signs will be mounted in concrete footings.

Exceptions to the above content and material are indicated for specific sign types in subsequent sections.

# **Conceptual Hierarchy**

Key to a successful signage experience is hierarchy of location, content, message, and detail of information. These guidelines establish that hierarchy of signs that will present a clear and consistent brand while guiding visitors onto and through campus.

- Signature Campus Identification
- Campus Entry Gateway
- Directional
- Building Identification
- Campus Map Displays
- Traffic & Regulatory
- Interpretive Signs

# **Parameters of Sign Types**

Signature Campus Identification

This signage introduce the viewers to the brand and establish the presence of the campus. Situated at the corner of Panther Creek Parkway and Preston Road, this element should be timeless and reflect a feeling of collegiance and permanency. A lower sweeping profile will allow those passing to have incredible views down the Ridge Mall and to the open vista beyond. The signature sign should be constructed of masonry or stone that matches the campus building materials and details.

Coordination with the landscape is important. The Signature Gateway sign may conceptually integrate site elements such as a berm, or integrated seating on the backside. It is also encouraged that perennial and seasonal plantings be incorporated as a key part of the overall aesthetic. Other elements, such as flagpoles, could also be incorporated into the design as a backdrop element that reinforce the UNT branding and identity.

Limited, additional Signature Campus Identification signage may be appropriate as the campus develops.

#### Campus Entry Gateways

Entry and gateway signage creates a sense of orientation and arrival to the campus while assiting in the definition of the campus edge. Formal gateways are planned along both Panther Creek Parkway and Preston Road as the primary vehicular campus entrances. These gateways act as a threshold, marking the arrival onto campus, and acting as a primary directional indicator for entry to campus. Due to views shortened by road configurations that align to site conditions and trees, these guidelines encourage gateway elements that may be higher and more compact with consideration given to the masking of necessary infrastructure at campus entries. Materials should follow those used at the Signature Identity Sign.

Coordination with the landscape and hardscape is important to delineate the campus edge, leading the eye to the gateways and inviting visitors into campus. Use of perennial and seasonal plantings should be incorporated into the gateway base areas that will not obstruct the signage.

#### Directional

Once on campus, this signage introduces the visitors to the campus nomenclasture and helps visitors find their way to their destination. Brand extension is also be part of the sign's purpose.

Directional signs consist of both vehicular and pedestrian types. This signage is to be placed at strategic decision-making points that offer full, unobstructed views and that best deliver directional information to primary destinations. Locations should be coordinated with the campus circulation routes and be perpendicular to the path of travel.

For vehicular directional signs, messaging should be kept to primary destinations and parking options with a maximum of five (5) destinations per sign. For pedestrian directional signs, locations along pedestrian pathways may display up to ten (10) destinations and be of a smaller scale due to closer viewing distances.

#### Building Identification

Building Identification Signs orients the viewer to where they are on campus, and when they have arrived at their destination or should continue on their journey.

Identification signage should be located near the primary entrance to each building with appropriately sized text for pedestrians. Locations should be coordinated with the landscape and be placed with planter beds if possible, to avoid lawnmower / weed-eater conflicts.

#### Traffic & Regulatory

This category consists of traffic signage and postings of regulatory information. Designs shall follow the characteristics of the campus Building and Directional signs, with similar post and panel / cap assemblies and be constructed of painted or powder-coated aluminum, mounted in concrete footings.

Contents shall follow the Texas Manual on

Uniform Traffic Control Devices (TxMUTCD) standards for signs such as "STOP", "YIELD", "Reserved Handicap" and the like using the reflective vinyl sheeting.

Other such signs whose content support the university functions such as parking, permit regulations, reserved university vehicles parking, etc., should follow UNT graphic standards pertaining to colors, logos, nomenclature and typestyles. These signs are part of the unified campus sign family.

#### Campus Map Displays

Campus Map Displays are intended to be primarily pedestrian in nature and be located at initial pedestrian access points to the campus such as the pedestrian connector across Panther Creek Parkway, trail connections to the greater Frisco Trail System, at parking locations and periodically along the quad paths. These signs must be easy and economically update-able as well as durable.

Campus Map Displays are useful tools for orientation, providing "big picture" information, but only if kept current. Map changeability is paramount. Displays should be constructed to be durable and weather-resistant, using

painted or powder-coated aluminum to match or complement the directional sign detailing, with the display portion no less than three feet (3'-0") and no higher than seven feet (7'-0") to remain in the pedestrian's optimal cone of vision for small typography and map details. The map portion should be a panel system of resin embedded graphic on a weather resistant substrate.

#### Interpretive

Interpretive signs are used to communicate unique aspects of both the natural and built environments of the campus. Interpretive signage should be displayed to educate campus users about sustainable features, energy consumption, campus history, academic and research initiatives and other relevant aspects of the campus.

Signage should be placed directly adjacent to the feature it is illustrating.

Changeability of display materials is require to accomodate periodic information updates. Displays should be constructed to be durable and weather-resistant, using painted or powder-coated aluminum to match or complement the directional sign detailing.

# **SUSTAINABILITY**

One of the Planning Principles of the 2019 Campus Master Plan is the overarching desire to incorporate sustainability into the enterprise of the new campus. This includes a commitment to foster sustainable practices as they relate to the economic, cultural, social, and environmental resources of the university and community.

UNT has made the commitment that the buildings on the new campus will be designed to a minimum of LEED Silver standards. Above and beyond this, when appropriate, UNT should also consider other sustainable design standards such as Energy Star, Living Building Challenge, WELL, SITES, and others in order to promote and showcase sustainable design in the campus' built environment.

This master plan, amongst other things, advocates for the incorporation of sustainable solutions that include smart building siting, solar efficient building massing and orientations, energy-efficient systems, resilient landscaping, and natural stormwater management systems. Additionally, when budgets allow, the university should explore incorporation of other elements, features, and fixtures that will positively impact the university's triple bottom line and provide educational value to the campus community.

# **REVIEW PROCESS**

The Campus Master Plan, including the Guidelines, is the fundamental tool to guide the physical development of the campus in a manner consistent with the direction, goals, and aspirations of the University and the System. Accordingly, the integrity of the architecture and landscape character is protected through the application of understandable and enforceable standards.

The master plan is intended to govern the location of new facilities, and the guidelines and design standards govern the details of placement and design of new buildings and site improvements consistent with the campus master plan. Further, they are intended to assist in outlining the key design elements of future buildings that will create a hierarchy of campus open spaces and unify the architectural expression of the campus, with the orderly development of the campus open space and landscape-hardscaped places.

The process of reviewing and approving proposed campus improvements and new buildings and landscapes to assure compliance with the intent of the master plan, guidelines and design standards, should be in accordance to System and University policies. While each new building must function for the intended uses and program, all buildings ultimately owned by the System and University must be considered a part of the campus as a whole. The System and University policies provide the framework to ensure the civic, campus and urban design mission of a project, not its functional or individual mission.

Issues to be considered in the review process are the quality of public open space and landscape; a building's relationship and connection to the entrance and primary interior lobby and circulation space; exterior appearance and architectural form; contributions to the larger campus context and the space in which it is sited. Each project should be reviewed according to primary goals as follows:

- To interpret the Campus Master Plan and determine compliance with the policies, principles, guidelines and design standards
- To recommend modifications to proposed projects as appropriate to ensure compliance

 To evaluate projects to ensure that they meet UNT qualitative standards, including the University's goals and polices for sustainability

The review process is not intended to provide for the design of the building or site, but to provide clear direction to the project team (architects, landscape architects, and other project representatives) through comments and suggestions.

# Criteria for Project Design Review

A review is prompted by any new building project as described in the System and University policies. In general, any project changing building appearance through replacement, repair or restoration; and any improvement or construction project affecting any campus exterior public space; and all major buildings and landscape improvements should be reviewed.

Smaller projects should also be considered for review, although an abbreviated administration process may be utilized at the direction of the Vice Chancellor for Facilities. In some cases, smaller projects may be an opportunity to initiate a planned transformation of an existing space.

In general, review is triggered by projects that impact the quality and appearance of the campus, exterior public space, and building.

# **Exceptions or Modifications**

Certain sites at the perimeter of the campus or at major gateways may require modifications of the guidelines in order to establish an appropriate public face for the campus or establish an individual identity for a specific gateway project while still integrating and advancing the overall campus character and composition.

The goal is to establish the appropriate flexibility in the application of the guidelines for these special projects through an exemption process at a level appropriate for the project and the degree of deviation from normal guidelines. The process may involve the Vice Chancellor for Facilities, President, Chancellor, and in some cases the Board of Regents.

During the review process, exceptions to the master plan and guidelines occur only after serious deliberation. But granting exceptions or modifications is the sole responsibility of the Vice Chancellor for Facilities, who is responsible for the campus master plan and establishing and approving guidelines based on the campus master plan goals, planning principles, and guiding values. Exceptions or modifications may require review and approval of the System Chancellor and Board of Regents

# Administrative Integration of the Design Review Process

The success of the design review process is predicated on the integration into the existing University administration and policies, especially as they relate to campus development and project initiation.

The development process involves many different individuals and departments whose contributions will be more effective with clear delineation of appropriate roles, responsibilities, and interrelationships. It is expected that the Office of the Vice Chancellor of Facilities will define the specific roles and relationships of the following parties in the administration of the design review process:

- Design Review Committee
- Office of Facilities
- User Committees
- Architect Selection Committee
- Project Architect and Consultants

Selection of architects and other design professionals may be the most important factor in the successful implementation of the Campus Master Plan. The intentions of the master plan should be referenced in all solicitations for design professionals. Selection criteria should include an understanding and demonstrated familiarity with the campus master plan, guidelines, and design standards.

While design professionals are selected based on qualifications and experience with the specific building and program type, they should have demonstrable understanding of the intent of the university as manifested in the Campus Master Plan. The architects should confirm their willingness to work within the UNT design language and vocabulary.

### **Design Review Procedures**

Design Review meetings should be scheduled as required by project volume and schedule. Projects will be presented as outlined in the System and University policies by the participating user committee and the project design team, which might include architects, landscape architects, engineers and professional consultants. After every project review, written comments should be provided to the project design team with copies sent to the Office of the Chancellor and the President.

The sequence of actions/reviews will include, but not be limited to the following:

- Providing a complete copy of the master plan with the guidelines and design standards to the project design team
- Require an initial meeting with the architect or designer to clarify the intent of the proposed project
- Require that the architect or professional obtain site development approval as part of the initial approval process for a new project. The proposed site plan will be compared to the master plan to demonstrate conformity with setbacks, alignments, axial view lines, service access, and other obvious context items at both immediate and larger campus scales
- Establish a schedule of reviews during the concept, schematic design and design development phases; if there are significant changes or unresolved issues, additional reviews of construction documents may be necessary
- Conduct post-construction assessment of the project.

A determination may be made at the outset of the review process that fewer steps may be undertaken if the scale or the impact of the project on the campus is deemed to be insignificant.

