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The Dallas North Tollway - Design Guidelines and Streetscape Plan was adopted by the City Council, City of Plano, on July 13, 1998 by Resolution No. 98-7-12 (R).
INTRODUCTION

The Dallas North Tollway Design Guidelines/Streetscape Study provides alternative concepts for private development along the Tollway in Plano. These guidelines are intended to supplement the application of the TC and TE zoning districts by providing design approaches to consider in the development process. The Tollway corridor was recently (1997) the subject of a zoning case which consolidated a variety of zoning districts into the new Tollway Commercial (TC) and Tollway Employment (TE) categories.

The study area comprises approximately 830 acres located between the George Bush Tollway and West Spring Creek Parkway, to the north and south, and between Parkwood Boulevard and Communications Parkway, to the east and west. Within the geographic center of the study area is the Dallas North Tollway. The Tollway is one of the most significant economic development corridors in the Dallas/Fort Worth Metroplex in regards to commercial development.

Purpose

This corridor study is a strategic document that will guide city policy and private development decisions. The document recommends planning solutions that respond to the unique conditions that exist in the area. The study addresses various issues such as physical form, regional location, adjacencies and relationships, access, and others.

Development within the Dallas North Tollway corridor will be critical to the future of Plano and North Texas. As a supporting element of the City's Comprehensive Plan, ordinances, and zoning, this study will help the City work with private interests and local neighborhoods to realize future opportunities which benefit all concerned.

Approach

This corridor study identifies physical alternatives which respond to existing conditions along the study area. This study is not intended to provide a complete and final determination of how the corridor should develop in the future. Instead, it provides clear options that respond to established study objectives.

Key Questions

The following are questions addressed in the Dallas North Tollway Design Guideline/Streetscape Study:

1. What are the goals and objectives of individuals concerned with this area?
2. What are the physical constraints to commercial development in the corridor?

Dallas North Tollway Design Guidelines
INTRODUCTION

3. What are the development types on which the study should focus?
4. What alternative solutions for development best achieve the goals for all parties?
6. What physical relationships do these alternatives suggest?

Process

The development of these guidelines involved numerous meetings with City of Plano officials and staff, land developers, and homeowner representatives. Representatives of local electric companies also provided input on utility placement. Open workshops, presentations to the Planning and Zoning Commission, City Council and other interested groups were held to obtain ideas and suggestions.

Application of the Guidelines

This document is intended to provide recommendations for the design and layout of various types of development within the corridor. The examples provided should not be viewed as the only acceptable approaches. Developers and land owners are encouraged to prepare other designs which meet the objectives noted under the section titled Study Objectives.
**STUDY OBJECTIVES**

1. **Minimize impact of buildings facing the residential neighborhoods.**
   - **Examples:**
     - Face building(s) perpendicular to Tollway.
     - Provide generous landscape treatments, with particular concern for surface parking area and perimeter edges.
     - Provide for height and setback gradient for all buildings, including parking structures from residential areas.
     - Provide high-quality building materials with proper and consistent color combinations.

2. **Provide an attractive “front door” image from all adjacent streets.**
   - **Examples:**
     - Extend same design and materials to all building facades exposed to public streets.
     - Orient building(s) where feasible, to place service and loading areas on the interior of a site or building complex.
     - Provide well designed, integrated, and screened service and loading areas.
     - Provide well designed and highly maintained landscaping along all streets.

3. **Create human-scaled environments for pedestrians in private developments.**
   - **Examples:**
     - Include architectural elements such as arcades, loggias, porticos, and porte cochères.
     - Create inviting gathering places such as plazas, courtyards, and gardens.
     - Provide safe and attractive pedestrian connections between buildings.
4. **Balance access and circulation to manage traffic flow and address street capacities**

*Examples:*
- Provide clear and identifiable access points from thoroughfares.
- Limit through access routes in commercial developments to reduce speed and cut-through traffic.
- Offset vehicular access from residential streets to discourage neighborhood cut-through traffic.
- Design appropriate cross access connections between sites within the corridor.

5. **Improve the visual image of Dallas North Tollway corridor through landscape/streetscape treatments.**

*Examples:*
- Create a green landscaped street environment through the planting of quality street trees.
- Provide individual entry accents through the use of small ornamental trees, shrub beds, and flower beds.
- Provide an architectural image by installing District Monuments at appropriate locations. (Public)

6. **Create a high-quality business corridor.**

*Examples:*
- Enhance the quality of all properties within and adjacent to the corridor through consistent design criteria.
- Enhance public and private environments through the implementation of a streetscape program. (Public & Private)
URBAN DESIGN ANALYSIS

Physical features, land use relationships, zoning impacts, and development opportunities for the corridor study area were identified and analyzed. The following urban design factors and their relationship to proposed developments were noted:

- Development site parameters
  There are some unique physical conditions that exist within the study area for this particular project. The factors below require a special focused development. Typical development patterns and forms do not address these factors.

  **Exposure from 360 degrees**
  Most of the proposed development within the study area will have a 360 degree exposure from adjacent streets. The existing street locations in the Tollway corridor, including the parallel north-south streets (Parkwood Boulevard & Communications Parkway) increases both accessibility and visibility to developments.

  **Long narrow typical tracts**
  Most of the proposed development within the study area will have to address the condition of long narrow parcels. The same thoroughfare system that increases visibility and access also affects the size and dimension of parcels within the corridor.

- Activity nodes
  These are locations where transportation access is the greatest and higher density development is more appropriate. Activity nodes can also provide opportunities for a mix of land uses, taller structures, and increased retail development.

- Proposed developments
  **Commercial land use**
  Land uses that include office, retail, hotel, motel, and mixed-use developments. This land use type does not include residential units, unless they are a part of a mixed use development.

  **Limited assembly land use**
  Land uses that include high-tech assembly and distribution developments.

- Future thoroughfares
  Roadways that are identified on the City of Plano’s Thoroughfare Plan.

- Views from Tollway and other streets
  Views of commercial developments should be enhanced to improve marketing and identity.

Dallas North Tollway Design Guidelines
GENERAL PLANNING CONCEPTS

The following outlines the general planning concepts for the Dallas North Tollway Design Guidelines study. These planning concepts define physical conditions for developers to follow to achieve the study objectives.

Building Orientation/Massing

Building orientation should respond to two different determining factors: exposure to the Dallas North Tollway and the relationship to the existing and/or proposed residential neighborhoods. Because of these factors, the typical development orientation and massing may not be appropriate. A better response may be to orient commercial buildings perpendicular to the Tollway, and maximize exposure from the Tollway. This also limits views from adjacent residential neighborhoods.

Greater density and taller development should generally be located close to the Dallas North Tollway. Buildings near the residential neighborhoods should be in scale with single-family homes and pedestrian scaled streets.

Urban Design and Pedestrian Amenities

Special urban design amenities and pedestrian treatments are essential to creating a prominent and inviting atmosphere. These amenities should be located within each development and along public streets. The streetscape should include: special light standards for roadways and pedestrians, wide pedestrian sidewalks, opportunities for banners, and landscape plantings such as street trees, shrubs, and flower beds.

Access and Circulation

Vehicular circulation and access should be carefully designed to minimize the impact of planned operation for the surrounding street system. Vehicular and pedestrian circulation should be coordinated to minimize conflicts while providing ease of access between sites. The principal access for service vehicles should be to the frontage roads or east/west arterials to minimize noise and visual impacts on residential neighborhoods.

Site Grading

Site grading should be sensitive to existing topography. Grading should create a gradual transition to surrounding street grades, while reducing the potential for erosion. Site grading should be compatible with the surrounding drainage system.

Architectural Elements

Proposed development should create pedestrian-scaled environments with the use of several types of architectural elements. These elements can help large buildings provide a more comfortable and inviting transition between interior and exterior spaces. These architectural elements include integrated building arcades, entry porte cocheres, loggias, and planting areas.
OFFICE Multi-Story with East/West Arterial Orientation

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which includes: study objectives, prototypical property location, and prototypical land use relationships. The corresponding diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the building(s) in a group and/or pattern, with primary focus to the east/west arterial.
- Provide ceremonial vehicular circulation to these buildings from the east/west arterial.
- Provide major vehicular access from the east/west arterial and Tollway Frontage Road.
- Locate surface parking in the front and sides of the development. Structured parking should generally be located at the back of the site and screened from adjacent residential areas.
- Construct buildings as close as possible to the minimum front set back line of the Tollway.
- Integrate loading docks and service areas with buildings to minimize views from residential areas and other developments within the corridor.

Additional Recommendations

Building Orientation / Massing:
Office building siting should take advantage of exposure to the east/west arterial and Tollway Frontage Road. With this equal exposure to two primary roadways a strong anchor is created for the corner.

Building Materials / Treatment:
The architectural character of the building(s) should help establish the Tollway as a high quality development corridor. Attractive and durable materials (reference Zoning Ordinance Section 2-825 & 2-826) such as; brick, stone, cast stone, and granite. Building features should include arcades, porte cochere's, loggias, and planters which help office buildings transition to a pedestrian-scaled environment.
Multi-Story with East/West Arterial Orientation

Parking / Access / Circulation:
Provide parking for short-term visitor, delivery, and other special users to the front of the building, nearest the buildings’ primary entry. Employee parking should be provided in the rear of the site, in surface lots and/or structured parking garages.

Service Locations/Design:
Loading docks and services areas should be screened using an architectural integrated screen wall and/or landscape buffers (reference Zoning Ordinance on TC and TE Districts regarding special district requirements). Where possible, these areas should be screened by using special architectural features such as wing walls, coves, or screen walls.

Landscape / Hardscape:
In addition to landscape treatment at the perimeter of office parcels. Generous plantings of shade and ornamental trees, shrubs, and flowerbeds should also be extended to surface parking lots. Primary drop-offs and entry courts should have major planting treatments as well as areas of special paving to encourage pedestrian activity. Earthen berms and similar treatments should be used to help screen surface parking and other undesirable site elements.

Signage:
Provide one building mounted sign for anchor retail developments, to be located on the building façade which is most parallel to the Tollway. Additional signage may depend on the position of a building. Building signs are generally not appropriate along the residential sides of the corridor. A primary monument sign may be located adjacent to Tollway Frontage Road in accordance with height requirements. Accent, or wash lighting, should be used on building facades parallel to the Tollway and east/west arteries and avoided on facades facing Parkwood Boulevard and Communications Parkway.

Lighting:
Orient parking lot lighting away from adjacent residential neighborhoods to avoid excessive overspill and glare. Light fixtures for site development should be of the type which shield or reflect light to intended locations. Fixtures which allow lamps to be in direct view should be avoided. High-pressure sodium lamps are discouraged, due to the red and yellow colors which they project.

Pole heights adjacent to residential neighborhoods should be lower to reduce spillover. Pole heights for typical automobile areas (parking and traffic lanes) should be no higher than 35’, in areas within 150’ of residential neighborhoods a pole height of less than 28’ should be used. Pole heights lighting pedestrian walkways should be in pedestrian scale and have a pole height between 18’ and 24’.

Special Features:
Public art is encouraged and should be integrated into the development of a site where pedestrian activity is high.
TOLLWAY DESIGN GUIDELINES
City of Plano, Texas
OFFICE  Mid-Rise with Tollway Orientation

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the building with primary focus to the Tollway. This organization helps to create a pedestrian scaled environment at ground floor levels and entry locations.
- Establish building(s) orientation with long dimension perpendicular to Tollway.
- Provide ceremonial vehicular circulation to office component of the complex from the Tollway.
- Locate surface parking in the front and sides of the development.
- Construct buildings as close as possible to the minimum front set back line of the Tollway.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.
- Integrate loading docks and service areas with buildings to minimize visibility from nearby residential areas, other development within the corridor, and surrounding streets.

Additional Recommendations

The initial office development type provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.

Building Orientation / Massing:
Building sites should take direct advantage of exposure to the Dallas North Tollway. Given image and the higher traffic volumes of the Tollway, the primary architectural gesture should be towards the Tollway.
Central Garden Orientation

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Planning Concepts

- Organize the buildings in a group and/or cluster with primary focus to an inward landscaped courtyard, secondary focus would be to the Tollway. This organization helps to create an enclosed pedestrian scaled environment at ground floor levels.

- Provide ceremonial vehicular circulation to these buildings from the Tollway.

- Locate surface parking in the front and sides of the development. Any structured parking would be located to the back of the site and screened from residential neighborhoods.

- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

- Construct buildings as close as possible to the minimum front setback line of Tollway.

- Integrate loading docks and service areas with buildings to minimize views from residential areas and other developments within the corridor.

Additional Recommendations

The initial office development type provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.

Building Orientation / Mapping:
Building sites should take direct advantage of exposure to a central courtyard and Dallas North Tollway. Given image and the higher traffic volumes of the Tollway, the primary exterior architectural gesture should be towards the Tollway.

Dallas North Tollway Design Guidelines
HOTEL Corner Site with Tollway Orientation

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include; study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the building(s) in a group and/or cluster, with primary focus to the intersection of the Tollway and the east/west arterial. This organization creates a dual urban design response to both major adjacent roadways.
- Provide dual ceremonial vehicular circulation to the hotel facility from the Tollway and the east/west arterial.
- Locate surface parking in the front and sides of the development. Structured parking should be located to the rear of the site and screened from residential neighborhoods.
- Provide primary parking garage access from the interior of the site, as opposed to direct access to surrounding streets.
- Construct buildings as close as possible to the minimum front setback line. This provides maximum exposure of the taller hotel building footprint from the Tollway and frontage roads.
- Integrate loading docks and service areas with hotel facilities so objectionable views are screened from adjacent streets and properties.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

Previous additional recommendations for buildings, access, service, landscape, signage, and lighting are included for this office development type. Reference the Study Objectives section in this report to gain a perspective on desired goals for private development guidelines. All development types and sites require specific attention regarding design appropriateness, quality, and relationship to market.

Building Orientation / Massing:

Building sitting should take direct advantage of exposure to an east/west arterial and Dallas North Tollway. With this equal exposure to both primary roadways, a strong anchor is created for the corner.
HOTEL Tollway Orientation

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the buildings in a group and/or cluster, with primary focus to the Tollway. Given image and the higher traffic volumes of the Tollway, the primary architectural gesture should be towards the Tollway.

- Provide ceremonial vehicular access to the hotel facility from the Tollway.

- Locate surface parking in the front and sides of the development. Any structured parking would be located to the back of the site and screened from all concerned.

- Provide primary parking garage access from the interior of the site with secondary access being direct off the Dallas North Tollway and frontage road.

- Construct the building as close as possible to the minimum front set back line. This provides maximum exposure of the hotel while surface parking can be screened from adjacent users.

- Integrate loading docks and service areas with hotel facilities so viewing is not allowed from residential neighborhoods.

- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

Previous additional recommendations for buildings, access, service, landscape, signage, and lighting are included for this office development type. Reference the Study Objectives section in this report to gain a perspective on desired goals for private development guidelines. All development types and sites require specific attention regarding design appropriateness, quality, and relationship to market.

Building Orientation / Massing:

Building sites should take direct advantage of exposure to the Dallas North Tollway. The hotel auto-court should have a strong presence in the layout of the site plan.

Dallas North Tollway Design Guidelines
HOTEL/CONFERENCE CENTER with Tollway Orientation

The corresponding diagram suggests a physical layout for this particular development type and location, several criteria which include; study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the building(s) in a group and/or cluster, with primary focus to the Tollway. Given image and the higher traffic volumes of the Tollway, the primary architectural gesture should be towards the Tollway.

- Provide ceremonial vehicular circulation to the hotel and conference facility from the Tollway.

- Locate surface parking in the front and sides of the development. Conference hotels have a higher total parking demand.

- Any structured parking would be located to the back of the site and screened from residential neighborhoods. The impact of structured parking should be minimized through "stepped" parking trays, high quality façade materials, façade openings being non-sloping, and generous buffering.

- Provide primary parking garage access from the interior of the site with secondary access at the Dallas North Tollway and it's Frontage Road.

- Construct buildings as close as possible to the minimum front setback line. This provides maximum exposure of the taller hotel footprint, while the parking garage can be screened from adjacent users.

- Integrate loading docks and service areas with hotel facilities so visibility is screened from adjacent streets and properties.

- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

Previous additional recommendations for buildings, access, service, landscape, signage, and lighting are included for this office development type. Reference the Study Objectives section in this report to gain a perspective on desired goals for private development guidelines. All development types and sites require specific attention regarding design appropriateness, quality, and relationship to market.

Building Orientation / Massing:

Building siting should take direct advantage of exposure to the Dallas North Tollway. Given image and the higher traffic volumes of the Tollway, the primary architectural gesture should be towards the Tollway.

Dallas North Tollway Design Guidelines
23.

*Dallas North Tollway Design Guidelines*
RETAIL “Big Box Village” Organization

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which includes; study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail buildings in a group and/or cluster, with dual focus to the Tollway and the internal “Main Streets”.
- Village pattern with big box anchors and inline retail(single story) provides:
  - Tollway orientation to big box retailers.
  - Village pattern creates unified pedestrian and vehicular environment.
  - Smaller retail shops front on “Main Street” within the development.
  - “Main Street” provides opportunity for shoppers to preview stores.
  - Limited back-of-house exposure from adjacent neighborhoods and residential serving streets.
  - Parking decks or garages created with dense development.
  - Greater retail use by adjacent residential community due to “Main Street” relationship.
- Primary vehicular access should be from the Tollway with direct through vehicular access.
- Surface parking should be in the front of retail stores and shops. Structured parking should be located internal to a development and/or above retail shops and screened from surrounding properties and streets.
- Construct retail buildings as close as possible to the minimum front set back line.
- Integrate loading docks, service areas, and trash pick-up into service courts to minimize visibility.
- Develop an integrated pedestrian arcade to shelter pedestrians and help create a more pedestrian scale environment.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

Building Orientation / Massing:

Building sites should take direct advantage of exposure to the Dallas North Tollway. Retail developments can create building orientation that is not parallel to the Tollway by providing clear visibility and accessibility. An anchor tenant or special use can assist with this non-parallel development pattern.
RETAIL  "Big Box Village" Organization

Parking / Access / Circulation:
Provide customer parking at the front of retail buildings in surface lots, nearest the buildings' primary entry. Employee parking should be provided in the rear of the site.

Building Materials / Treatment:
Create an architectural character for the building(s) that help establish the Tollway as a high quality development corridor. Attractive and durable materials which includes; brick, stone, cast-iron, and granite should be used. Building features should include; arcades, porte cocheres, loggias, and planters which help retail buildings transition to a pedestrian-scaled environment.

Service Locations/Design:
Screen loading docks and services areas by using an architectural integrated screen wall and/or landscape buffers.

Landscape / Hardscape:
Provide landscape treatments at the perimeter of retail parcels, generous plantings of shade and ornamental trees, shrubs, and flower beds should also be extended to surface parking lots.

Signage:
Provide one building mounted sign for anchor retail developments, to be located on the building façade which is most parallel to the Tollway. Additional signage may depend on the position of a building. Building signs are generally not appropriate along the residential sides of the corridor. A primary monument sign may be located adjacent to Tollway Frontage Road in accordance with height requirements. Accent, or wash lighting, should be used on building façades parallel to the Tollway and east/west arterials and avoided on facades facing Parkwood Boulevard and Communications Parkway.

Lighting:
Orient parking lot lighting away from adjacent residential neighborhoods to avoid excessive glare and glare. Light fixtures for site development should be of the type which shield or reflect light to intended locations. Fixtures which allow lamps to be in direct view should be avoided. High pressure sodium lamps are discouraged, due to the red and yellow colors which they project. Pole heights adjacent to residential neighborhoods should be lower to reduce spillover. Pole heights for typical automobile areas (parking and traffic lanes) should be no higher than 36', in areas within 150' of residential neighborhoods a pole height of less than 28' should be used. Pole heights for walkways should be in pedestrian scale and have a pole height between 18' and 24'.

Special Features:
Public art is encouraged and should be integrated into the development of a site and located where pedestrian activity is high.

25.

Dallas North Tollway Design Guidelines
RETAIL  U-Shaped Organization

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail buildings with a U-shape, with a primary focus to the Tollway.
- Inline retail (single story) with U-shaped orientation provides:
  - Limited backdoor exposure from adjacent neighborhoods and residential serving streets.
  - Concentrated retail development.
  - Greater retail use by adjacent residential community due to increased storefront exposure.
- Primary vehicular access is from the Tollway with no direct through vehicular access to discourage cut-through traffic. Secondary access should be planned from other perimeter roads.
- Locate entries to the development from the secondary roads that are off-set from adjacent neighborhoods streets.
- Locate surface parking in the front of all retail development.
- Construct retail buildings as close as possible to the minimum front setback line. This provides good views of the development and limits surface parking.
- Integrate loading docks and service areas with buildings to minimize visibility from nearby residential areas, other development within the corridor, and surrounding streets. This is key, due to the fact that retail developments require more deliveries and create more trash.
- Develop an integrated pedestrian arcade to shelter pedestrians and help create a more pedestrian scale environment.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

The initial retail development type provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.

27.

Dallas North Tollway Design Guidelines
RETAIL  U-Shaped with Street Organization

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regard to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail buildings with a U-shape, with a dual focus to the Tollway and the internal "Main Street".
- Inline retail (single story) with U-shaped orientation and street provides:
  - Tollway orientation to inline retailers.
  - Street provides opportunity for shoppers to preview (retailfaction).
  - Limited rear building exposure from adjacent neighborhoods and residential serving streets.
  - Concentrated retail development.
  - Increased access and exposure of retail to residential areas.

- Primary vehicular access is from the Tollway via internal Main Street.

- Offset commercial access points along Communications Parkway and Parkwood Boulevard from residential streets.

- Locate surface parking in the front of all retail development.

- Construct retail buildings as close as possible to the maximum front set back line. This provides good views of the development and limits the exposure of surface parking.

- Integrate loading docks, service areas, and trash pick-up into service courts so viewing is not allowed from residential neighborhoods. Service courts help contain noise and trash associated with these activities.

- Develop an integrated pedestrian arcade to shelter pedestrians and help create a more pedestrian scale environment.

- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

The initial retail development type provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design-appropriateness, quality, and economic market.

Dallas North Tollway Design Guidelines

29.
RETAIL  Big Box Corner Organization

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail buildings in a group and/or cluster, with dual focus to the Tollway and the east/west arterial.
- Corner pattern with big box anchors and inline retail (single story) provides:
  - Tollway and east/west arterial orientation for big box retailers.
  - Big box retailers provide orientation for inline retailers.
  - Layout provides previewing (retail function) of retail shops.
  - Limited back-of-house exposure from all concerned with future adjacent development.
  - Greater retail use by adjacent residential community with corner relationships.
- Design parking and circulation to prevent direct through vehicular access.
- Locate surface parking so that it is readily accessible from all storefronts.
- Provide retail pad development as close as possible to the setback line to lessen surface parking visibility from off site.
- Integrate loading docks, service areas, and trash pick-up into service courts so viewing is not allowed from residential neighborhoods. Service courts help to contain noise and trash associated with these activities.
- Develop an integrated pedestrian arcade to shelter pedestrians and help create a more pedestrian scale environment.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

The initial retail development types provides recommendations for building sites, access, service, landscape, signage, and lighting development. The Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.
The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include; sturdy objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail buildings in a group and/or cluster, with dual focus to the Tollway and the east/west arterial.
- Corner pattern with big box anchor @ 45 degrees and inline retail (single story) provides:
  - Equal Tollway and east/west arterial orientation for big box retailers.
  - Layout provides opportunity for shoppers to preview stores/retail function.
  - Limited back-of-house exposure from all concerned with future adjacent development.
  - Greater retail use by adjacent residential community with corner relationship.
- Primary vehicular access is from the Tollway and east/west arterial with no direct through vehicular access.
- Locate surface parking so that it is readily accessible from all storefronts.
- Provide retail pad development as close as possible to the set back line to lessen surface parking image from off site.
- Integrate loading docks, service areas, and trash pick-up into service courts so viewing is not allowed from all residential neighborhoods. Service courts help to contain noise and trash associated with these activities.
- Develop an integrated pedestrian arcade to shelter pedestrians and help create a more pedestrian scale environment.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.

Additional Recommendations

The initial retail development types provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.

33.

Dallas North Tollway Design Guidelines
The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the retail mall complex with a typical inward focus for retail shops. An exterior focus will be to the Tollway.
- Multi-level retail mall organization provides:
  - Internal shopping experience.
  - Parking surrounds development with a combination of surface and garage lots.
  - Limited back-of-house exposure from adjacent neighborhoods and residential serving streets.
  - Concentrated and dense commercial development.
- Provide vehicular access points to effectively distribute traffic to surrounding streets. Use interior "ring roads" to minimize unnecessary access to surrounding streets while distributing traffic to all the mall entrances.
- Locate entries to the development from Communications and Parkwood that are off-set from adjacent neighborhoods streets.
- Integrate loading docks, service areas, and trash pick-up into service courts so viewing is not allowed from residential neighborhoods. Service courts help to contain noise and trash associated with these activities.
- Any structured parking will be designed to minimize impact on adjacent residential neighborhoods. Design components should include: "stepped" trays away from residential, high quality building facades, façade opening to be non-sloping, and generous landscape buffering.

Additional Recommendations

Previous additional recommendations for buildings, access, service, landscape, signage, and lighting are included for this retail development type. Reference the Study Objectives section in this report to gain a perspective of desired goals for private development guidelines. All development types and sites require specific attention regarding design appropriateness, quality, and relationship to market.

Dallas North Tollway Design Guidelines
Multi-Level Mall Organization

Building Orientation / Massing:
The building siting should take direct advantage of exposure to the Dallas North Tollway. Massing for this complex should provide clear vehicular circulation, mall retail anchor identification, and potential office tower identification.

Building Materials / Treatment:
Create an architectural character for the building(s) that help establish the Tollway as a high quality development corridor. Attractive and durable materials which includes; brick, stone, cast stone, and granite should be used. Building features should include: arcades, porte cocheres, loggias, and planters, which help retail buildings transition to a pedestrian-scaled environment.

Parking / Access / Circulation:
Provide handicapped, and other special parking users nearest the buildings’ primary entry. Additional parking will ring the development with an organization defined by anchor tenants.
HIGH TECHNOLOGY  Assembly/Office

The corresponding diagram suggests a physical layout for this particular development type and location. The site and building layout responds to several criteria which include: study objectives, prototypical property location, and prototypical land use. This diagram is not exclusive in regards to successfully responding to the study objectives.

Specific Planning Concepts

- Organize the building with primary focus to the Tollway. This organization helps to create a pedestrian-scaled environment at ground floor levels and entry locations.
- Establish building(s) orientation with long dimension parallel to Tollway.
- Provide ceremonial vehicular circulation to office component of the complex from the Tollway.
- Locate surface parking in the front and sides of the development.
- Construct buildings as close as possible to the minimum front set back line of the Tollway.
- Develop cross access to adjacent commercial parcels for vehicles and pedestrians.
- Integrate loading docks, service areas, and trash pick-up into service courts to minimize visibility. This is a key, due to the increased amount of truck traffic with this development type.

Additional Recommendations

The initial technology development type provides recommendations for building sites, access, service, landscape, signage, and lighting development. Also the Study Objectives section in this report provides a perspective on desired goals for private development guidelines. All development types and sites require specific attention to design appropriateness, quality, and economic market.

Building Orientation / Massing:
Building sites should take direct advantage of exposure to the Dallas North Tollway. Given image and the higher traffic volumes of the Tollway, the primary architectural gesture should be towards the Tollway.
**Building Materials / Treatment:**
Create an architectural character for the building(s) that help establish the Tollway as a high quality development corridor. Attractive and durable materials which include: brick, stone, cast stone, and granite should be used. Building features should include: arcades, porte cocheres, loggias, and planters which help retail buildings transition to a pedestrian-scaled environment.

**Service Locations/Design:**
Screen loading docks and services areas by using an architectural integrated screen wall and / or landscape buffers.

**Landscape / Landscaping:**
Provide landscape treatments at the perimeter of the site, generous plantings of shade and ornamental trees, shrubs, and flowerbeds should also be extended to surface parking lots.

**Signage:**
Provide one building mounted sign per developments, to be located on the building façade which is most parallel to the Tollway. Additional signage may depend on the position of a building. Building signs are generally not appropriate along the residential sides of the corridor. A primary monument sign may be located adjacent to Tollway Frontage Road in accordance with height requirements. Accent, or wash lighting, should be used on building facades parallel to the Tollway and east/west arterials and avoided on facades facing Parkwood Boulevard and Communications Parkway.
CONCLUSIONS

Use of Guidelines

These design guidelines have been prepared to provide a better understanding of the City's expectations for development along the Dallas North Tollway. More specifically, they will function as follows:

- As part of the development review process.
- To supplement and support Tollway Employment and Tollway Commercial zoning.
- Intended to provide diagrams or conceptual layouts which meet the stated objectives.
- Developers and/or designers should be encouraged to explore additional design alternatives which are consistent with the stated objectives.
- Developers should provide an explanation of how their plans meet the stated objectives.

Acknowledgements

Many groups participated in the success of this study and the related streetscape document. Many citizens of the City of Plano and local home owner association and developer representatives assisted in the final recommendations. The document received detailed input from the City Council and Planning & Zoning Commission that proved invaluable to the process. Numerous City Staff personnel also provided input and direction toward the success of this study. The consultant team for the project was Hellmuth, Obata & Kassabaum, Inc. (HOK) along with Wallace Roberts & Todd (WRT) of Dallas.